# FSC FOREST STEWARDSHIP STANDARD FOR CHINA

FSC-STD-CHN-02-2026 EN

FSC FORESTS FOR ALL FOREVER™

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**NOTE ON THIS ENGLISH VERSION:**

This is the official version of the FSC Forest Stewardship Standard that is approved by FSC International, and it is available at ***connect.fsc.org***. Any translation of this version is not an official translation approved by FSC International. If there is any conflict or inconsistency between the approved English version and any translated version, the English version shall prevail.

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| **Title:** | FSC Forest Stewardship Standard for China |
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## Version control

| Version | Description | Final Approval Date |
|---|---|---|
| **V1.0** | Initial version based on P&C V5-2: The FSC National Forest Stewardship Standard of the People's Republic of China (FSC-STD-CHN-01-2016), conditionally approved by the Policy and Standards Committee (PSC) at their 25th Meeting on 8 July 2016, and finally approved by the Performance and Standards Unit on August 2018. | August 2018 |
| **V1.1** | Partial editorial revision based on the inclusion of indicators related to NTFPs: The FSC National Forest Stewardship Standard of the People's Republic of China (FSC-STD-CHN-01.1-2021), finally approved by the Policy and Standards Committee (PSC) at their 48th Meeting on 12 October 2021. | 12/10/2021 |
| **V2.0** | Second version based on P&C V5-3: FSC Forest Stewardship Standard for China 9FSC-STD-CHN-02-2025), conditionally approved by the Policy and Standards Committee (PSC) at their 61st Meeting on 12 December 2025, and finally approved by the Policy and Performance Unit on 30 April 2025. | 30/04/2025 |

This standard is subject to the review and revision requirements as described in FSC-STD-60-006 (V1-2) EN.

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# A FOREWORD

(Informative section)

## A.1 The Forest Stewardship Council (FSC)

The Forest Stewardship Council A.C. (FSC) was established in 1993, as a follow-up to the United Nations Conference on Environment and Development (the Earth Summit at Rio de Janeiro, 1992) with the mission to promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests.

FSC provides a system for voluntary accreditation and independent third-party certification. This system allows certificate holders to market their products and services as the result of environmentally appropriate, socially beneficial and economically viable forest management. FSC also sets standards for the development and approval of locally adapted Forest Stewardship Standards (FSS) which are based on the FSC Principles and Criteria. In addition, FSC sets standards for the accreditation of conformity assessment bodies (also known as certification bodies) that certify conformance with FSC's standards.

Environmentally appropriate forest management ensures that the production of timber, non-timber products and ecosystem services maintains the forest's biodiversity, productivity, and ecological processes.

Socially beneficial forest management helps both local people and society at large to enjoy long term benefits and also provides strong incentives to local people to sustain the forest resources and adhere to long-term management plans.

Economically viable forest management means that forest operations are structured and managed so as to be sufficiently profitable, without generating financial profit at the expense of the forest resource, the ecosystem, or affected communities. The tension between the need to generate adequate financial returns and the principles of responsible forest operations can be reduced through efforts to market the full range of forest products and services for their best value.

## A.2 The FSC Principles and Criteria

FSC first published the FSC Principles and Criteria in November 1994 as a performance-based, outcome-orientated, worldwide standard. The Principles and Criteria focus on field performance of forest management rather than on the management systems for delivering that field performance.

There is no hierarchy between the Principles or between Criteria. They share equal status, validity and authority, and apply jointly and severally at the level of the individual Management Unit.

The FSC Principles and Criteria together with the International Generic Indicators (IGI) provide the basis for the development of Forest Stewardship Standards (FSS) and Interim Forest Stewardship Standards (IFSS).

## A.3 Descriptive statement of the FSC National Office

The FSC National Office of the People's Republic of China (in the following referred to as FSC National Office) was legally registered on June 8th 2015. The FSC National Office is a legally established and independent FSC partner organization promoting responsible management of the world's forest on behalf of FSC at the national level.

The FSC National Office represents FSC in the People's Republic of China to stakeholders, governmental institutions and communicates important viewpoints of national stakeholders to FSC International. In addition, FSC certification is enhanced and consistent, rigorous, trans-parent and participative application of the FSC system is assisted. The FSC National Office coordinates the development of and manages the FSC Forest Stewardship Standard for China.

Further information can be obtained from https://cn.fsc.org/cn-zh.

# B PREAMBLE

## B.1 Objective

(Informative section)

The objective of this standard is to provide a set of requirements for:

1. The Organization to implement responsible forest management within their Management Unit and to demonstrate conformity.
2. FSC accredited certification bodies (CBs) to determine conformity against this standard as the basis for granting, maintaining and renewing forest management certification.

## B.2 Scope

(Normative section)

This standard shall be applied in the following scope:

| | |
|---|---|
| **Geographic region** | People's Republic of China |
| **Forest types** | All forest types |
| **Ownership types** | All types of ownership, including public, private and others |
| **Scale and intensity categories (according to section 6 of FSC-STD-60-002)** | All categories of Management Units, including provisions for small scale forests (SSF), large scale forests (LSF), and high intensity forests (HIF) |
| Forest products **(according to FSC-STD-40-004a)** | Rough wood<br>NTFPs included within the scope of FSS are N1 (Barks), N3 (Cork and articles of cork), N4 (Straw, wicker, rattan and similar), N5 (Bamboo and articles of bamboo), N6 (Plants and parts of plants), N7 (Natural gums, resins, oils and derivatives), N8 (Chemical, medicinal and cosmetic products), N9 (Food, except N9.7, Game),. Additional requirements with respect to NTFPs are set out in Annex 8 and shall be applied for certification (in addition to all other requirements of this Standard). |

## B.3 Responsibility for conformity

(Normative section)

The requirements in this standard cover all of The Organization's management activities that are related to the Management Unit, whether within the Management Unit or outside; whether directly undertaken or contracted out.

In terms of geographical space, the requirements in this standard apply generally to the entire geographic space inside the boundary of the Management Unit which is being submitted for (re)certification. However, some of the Criteria and indicators apply beyond the boundary of the Management Unit. This would include those infrastructural facilities that are part of the Management Unit, as defined by the FSC Principles and Criteria.

This standard is to be used in conjunction with international, national and local laws and regulations.

Where there might be situations of conflict between the requirements in this standard and laws, specific FSC procedures will apply.

Responsibility for ensuring conformity with the requirements in this standard lies with the person(s) or entities that is/are the certificate applicant or holder. For the purpose of FSC certification, this person(s) or entities are referred to as 'The Organization'.

The Organization is responsible for decisions, policies and management activities related to the Management Unit.

The Organization is also responsible for demonstrating that other persons or entities that are permitted or contracted by The Organization to operate in, or for the benefit of the Management Unit, conform with the requirements in this standard.

The Organization is required to take corrective actions in the event of such persons or entities not being in conformity with the requirements in this standard.

## B.4 Note on the use of indicators, annexes and verifiers

(Normative section)

Normative elements in the standard are:

Scope, effective date, validity period, Glossary of Terms, Principles, Criteria, indicators, tables and Annexes (except Annex 9.4, Annex 9.5 and Annex 9.6). Click or tap here to enter text.

Non-normative elements in the standard that can be used for guidance only, are:

Verifiers, notes, Annexes 9.4, 9.5, and 9.6, and examples which are attached to some of the indicators .

Organizations managing Management Units qualifying as SSF (small scale forest(s)) or LSF (Large scale forest(s)) shall conform with all indicators in the standard. Where specific SSF indicators or LSF indicators (e.g. marked as "SSF 2.6.1", "LSF 6.1.4"), the Organization shall conform with those instead. Organizations using high intensity management activities (high intensity forest(s), or HIF) shall conform with specific HIF (high intensity forest(s)) indicators (e.g. marked as "HIF 10.10.2.1" in the standard). Non-SSF Indicators apply to all Management Units with the exception of those qualifying as SSF (small-scale forests). For public welfare forests or nature reserves forests, all indicators in this standard apply, except when marked with PWF NRF - then they shall conform with those instead. Where specific sub-indicators (e.g. marked as "SSF 8.5.1.1", "HIF 6.1.2.1"), the organization shall conform with both the

main indicators and the additional requirements of sub-indicators. Requirements at the group entity level shall be met on the basis of <FSC-STD-30-005 Forest Management Groups>.

| Scale | Thresholds (Area of Management Units) |
|---|---|
| **Small Scale** | ⩽ 500 ha |
| **Medium Scale** | Between 500ha and 50,000ha |
| **Large Scale** | ⩾ 50,000 ha |
| **Intensity** | **Thresholds** |
| **Low intensity** | The rate of harvesting is less than 20% of the mean annual increment (MAI) within the total production forest area of the unit, AND<br>EITHER the annual harvest from the total production forest area is less than 5000 cubic meters,<br>OR the average annual harvest from the total production forest is less than 5000 m3 / year during the period of validity of the certificate as verified by harvest reports and surveillance audits.<br>OR only collect NTFPs.<br>For bamboo forest management: The annual average number of bamboo harvested should be less than 15% of the annual average number of newly grown trees. |
| **Medium intensity** | Exceed the low intensity thresholds above but not use the high intensity management activities |
| **High intensity** | The management activities includes below items:<br>○ Intensive site preparations (burning the grass on waste hills and conducting whole reclamation for soil preparation);<br>○ Application of chemicals or biological agents;<br>○ Clear cutting where more than 50% of wood stock in the sub compartment is harvested. |

Organizations including NTFPs in their certification scope shall conform with specific NTFP indicators in Annex 8, along with all other applicable indicators in the standard.

| Verbal forms for the expression of provisions<br>[Adapted from *ISO/IEC Directives Part 2: Rules for the structure and drafting of International Standards*] | |
|---|---|
| **"shall"** | : indicates requirements strictly to be followed in order to conform with the standard; 'shall not' indicates a prohibition. |
| **"should"** | : indicates that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily re-quired. The Organization can meet these requirements in an equivalent way provided this can be demonstrated and justified. |
| **"may"** | : indicates a course of action permissible within the limits of the standard; 'need not' indicates that a specified course of action is not a requirement. |
| **"can"** | : is used for statements of possibility and capability, whether mate-rial, physical or causal. |

The text of the Principles and the Criteria under section F contain terms that are formatted in italics and marked with an *asterisk**. These terms are defined in the annex of Glossary of Terms. The terms that have been marked with an *asterisk** and formatted in italics in the indicators' text are local terms which have been added to apply to the local circumstances for this standard only. These local terms are defined in the Annex of Glossary of Terms.

## B.5 Interpretations and disputes

(Normative section)

Interpretation requests regarding the FSC Forest Stewardship Standards are submitted through the National Offices and in case there is no National Office, directly to FSC for processing and approval. Approved interpretations are published in the international FSC website (see: INT-STD-60-006_01).

Disputes between stakeholders concerning certification requirements are managed by FSC dispute resolution procedure (see: <FSC-PRO-01-008 Processing Complaints in the FSC Certification Scheme>).

## B.6 Stakeholder engagement methodology

The concept of stakeholder engagement is essential for the application of this standard. It is embedded in the following management activities:

1) Dispute resolution processes (Criterion 1.6, 2.6, 4.6);
2) Definition of living wages (Criterion 2.4);
3) Identification of rights (Criterion 3.1, 4.1), sites (Criterion 3.5, 4.7) and impacts (Criterion 4.5);
4) Local communities' socio-economic development activities (Criterion 4.4); and
5) High Conservation Value assessment, management and monitoring (Criterion 9.1, 9.2, 9.4).

It is important to conduct stakeholder engagement in a way that it might result in free, prior and informed consent where this standard is required to comply with specific requirements of this standard, especially for the right of Indigenous People or traditional communities. Accordingly, Organizations must develop a method for stakeholder engagement similar to these steps:

1) Determine appropriate representatives and contact points (including where appropriate, local institutions, organizations and authorities);
2) Determine mutually agreed communication channels allowing for information to flow in both directions;
3) Ensure all actors (women, youth, elderly, minorities) are represented and engaged equally equitably;
4) Ensure all meetings, all points discussed and all agreements reached are recorded;
5) Ensure the content of meeting records is approved; and
6) Ensure the results of all culturally appropriate engagement activities are shared with those involved.
7) Last but not least, stakeholder engagement has to be done in a culturally appropriate way to ensure fair and reliable agreements are in place.

**Culturally appropriate** refers to the consideration of cultural differences, such as communities' preferences for direct or indirect negotiation; attitudes toward competition, cooperation, and conflict; the desire to preserve relationships among complainants; authority, social rank, and status; ways of understanding and interpreting the world; concepts of time management; and/or attitudes toward third parties.

# C CONTEXT

(Informative section)

## C.1 General description of the forestry sector

The People's Republic of China, abbreviated as China, was founded in 1949 and is located in eastern Asia, on the west coast of the Pacific Ocean. The common language is Mandarin, and the capital is Beijing. It is a unified multi-ethnic country composed mainly of the Han ethnic group and other 55 ethnic minorities.

China is one of the most populous developing countries in the world, with a land area ranking third in the world. It is the second largest economy in the world and continues to be the largest contributor to global economic growth. At the end of 2023, the national population (including the population of 31 provinces, autonomous regions, municipalities directly under the central government, and active military personnel) was 1409.67 million, a decrease of 2.08 million compared to the end of the previous year. The trend presented is a decrease in the total population and a continuous increase in urbanization rate.

China has a land area of approximately 9.6 million square kilometres, with over 18000 kilometres of coastline in the eastern and southern continents, and a total sea area of approximately 4.73 million square kilometres. The terrain of China is high in the west and low in the east, with a complex and diverse range. The proportion of various terrains in the country's land area is: mountainous 33 3%, plateau 26%, basin 18.8%, plain 12%, hills 9 9%.

Southeast Tibet, northwest Yunnan, China Myanmar border, western Sichuan, southeastern Qinghai, and southern Gansu are representative regions of 34 biodiversity hotspots worldwide.

The climate in China is complex and diverse, including temperate monsoon climate, subtropical monsoon climate, tropical monsoon climate, temperate continental climate, and plateau mountain climate, spanning from south to north across tropical, subtropical, warm temperate, temperate, and cold temperate temperature zones.

### Description of the forestry sector

As of 2018, according to the 9th national forest resources inventory, China's forest cover extended over 220.45 million hectares, constituting 22.96% of the national territory. This forest cover is diverse in its composition, including 3% bamboo forest, 64% natural forest (including bamboo), and 36% plantations. In recent years, five key trends have been observed in Chinese forests: a growth in gross forest resources; steady improvement in forest quality; an increase in the total area of natural forests; a rapid expansion in plantation areas in recent decades; and an increase in timber production predominantly from plantations.

China features a great diversity of bamboo species and has the largest bamboo forest cover in the world. The subfamily Bambusoidae is diverse, and bamboo species can be found in a wide range of climatic conditions and geographic divisions. Growth patterns range from herbaceous and small to woody and

tall. Those woody and tall bamboo species, including sympodial and monopodial growth patterns, have functions and utilities similar to those of tree species. Therefore, the standard considers this group of bamboo species as being similar to tree species that can be managed in the context of natural forests and plantations.

In China, forest ownership and use-rights, as delineated by the Constitution and Forestry Law, encompass forest, timber, and forest land. This ownership is categorized into three types: state-owned forest, timber, and forest land; collectively owned forest, timber, and forest land; and individually owned timber and use rights to forest land. State-owned forests are principally located in the Northeast and Southwest and are primarily managed by either state-owned forestry enterprises or state forest farms, while collectively owned forests, mainly plantations, are situated in the south. Since 2014, China has been progressively phasing out the commercial harvesting of natural forests, aiming for complete cessation by 2017 under the National Forest Protection Programme (NFPP). The harvesting of commercial forests, and natural forests (while still permitted), requires a harvesting permit issued by forestry authorities at or above the county level, in line with the harvest quota. China has established a comprehensive system to regulate the harvesting, transportation, and processing of wood, which includes:

The Forestry Law mandates that the central government controls annual forest harvests, ensuring consumption does not exceed growth. The harvest quota is revised every five years. Based on this quota, an annual timber production plan is formulated and approved by the state, aligning with the annual harvest quota**.** The Forestry Law requires a harvesting permit for forest harvesting activities, which must adhere to the terms and conditions of the permit. The State Council mandates forestry authorities to verify the origin of wood materials used by timber traders. The procurement and use of wood materials without a harvesting permit or other legal origin documents are prohibited.

These systems collectively ensure sustainable and legally compliant management of forest resources in China, reflecting the country's commitment to environmental conservation and sustainable forestry practices.

Forest land cover in China has grown for the last 25 years, with a gain of around 1.1% forest cover per year, as a result of the Natural Forest Protection Program, which reduced timber production from natural forests, together with a tree planting programme.

China currently has the highest afforestation rate of any country in the world, increasing its forest cover from 12% thirty years ago to almost 23% in 2018. The country is continuing to implement policy measures to increase the quality and quantity of its forests.

### Bamboo forests and plantations

China features a great diversity of bamboo species and has the largest bamboo forest cover in the world. The 9th national forest resource inventory (2014 – 2018) revealed that bamboo forests cover approx. 6.41 million hectares, which resembles 2.9% of national forest cover.

The country has a long history of bamboo management and its production as well as its export statistics are highest in the world. Accordingly, bamboo is an essential natural resource that not only contributes to

the development of provincial and rural economies, but also provides an important source of farmers' income. Major product groups include building materials, charcoal, furniture and bamboo shoots for consumption purposes.

The subfamily Bambusoidae is diverse, and bamboo species can be found in a wide range of climatic conditions and geographic divisions. Growth patterns range from herbaceous and small to woody and tall. Those woody and tall bamboo species, in addition to sympodial and monopodial growth patterns, have functions and utilities similar to those of tree species. Therefore, the standard considers this group of bamboo species as being similar to tree species that can be managed in the context of natural forests and plantations.

Under the premises that all requirements of this standards are applied, woody and tall bamboo species are eligible for FSC certification in the context of natural forest and plantations, whereas other forms may be certified as non-timber forest products.

## C.2 Members of the Standard Development Group

The Chinese Standard Development Group (SDG) is an independent chamber balanced group, composed of members of the environmental, economic and social chambers. The SDG's objective is to develop and maintain the FSC Forest Stewardship Standard according to FSC International's standards and procedures. The Standard development Group is coordinated by Ms. Wang Yanyan (FSC National Office, wang.yanyan@fsc.org). Mrs. Hu Yanjie is appointed as the Standard Development Group Chair.

The SDG consists of the following members:

| Chamber | Name | Organization |
|---|---|---|
| Social | Mr.Wang Aimin | Wildlife Conservation Society |
| | Hong Liwei | Oxfam |
| | Ms. Bai Yali | Beijing Common Justice Foundation |
| Environmental | Mr. Zhang Xiaoquan | The Nature Conservancy |
| | Mr. Chen Junqi | Beijing Forestry Society |
| | Ms. Li Yejing | World Wide Fund for Nature |
| Economic | Ms. Ding Yiwei | IKEA Trading Service Co., Ltd (China) |
| | Ms. Cui Yajun | China Jilin Forest Industry Group |
| | Mr. Zhong Zhaoquan | Fujian Shunchang Forest Bureau |

## C.3 Experts advising the Standard Development Group

Dr. Xiao Jianmin Dr.Zhao Jie and Dr. Zhao Linxuan from the Chinese Academy of Forestry, and professor Gao Zongjun from Shandong Academy of Agricultural Sciences provided the drafting services. Dr. Xu Bin from the Chinese Academy of Forestry for providing essential advice and proof reading during the standard development process.

## C.4 Background Information on the Development of the Standard

### Overview

This standard was developed according to the rules and regulations laid out in FSC-STD-60-006 V1-2 in the period from 25 January 2022 to 12 May 2023. Two stakeholder consultation(s) were conducted. The first consultation was conducted from 18 August 2022 to 18 October 2023. The second consultation was conducted from 12 January 2023 to 12 March 2023.

### Full Description

The standard development process (FSC-STD-CHN-1-2016) was registered by the FSC Policy and Performance Unit in December 2013 (then known as Policy and Standards Unit). The process included the development of three subsequent draft standards, with each having undergone a period of public consultation with a duration of 2 months. The draft standard 1.0 was released on August 19, 2014, the draft standard 2.0 was released on January 28, 2015 and the draft standard 3.0 was released on September 28, 2015.

The Standard Development Group had a total of 4 face-to-face meetings during the standard development process. These meetings were followed up via email, telephone calls and online meetings as necessary. Each public consultation included a physical stakeholder meeting during which key stakeholders received progress updates and were asked to provide their opinions and general feedback. In addition, draft standards were distributed via email and other means to receive specific feedback on draft national indicators.

The draft standard 2.0 was field tested in March 2015 for two different forest management types at different locations. This included a large-scale forest management unit in the north of China and a small-scale group certification scheme.

The draft standard 3.0 was based on the final version of the International Generic Indicators (IGIs), which became effective on September 1 2015, and incorporated the comments received from key stakeholders during public consultations and field testing. The draft standard 3.0 was send to FSC International for approval in April 2016 and was approved on July 7, 2017.

The Forest Stewardship Standard in China (FSC-STD-CHN-1-2016), based on the Principles and Criteria Version 5 (FSC-STD-01-001 V5), was approved on July 11, 2018, and became effective on October 1, 2018. However, Non-Timber Forest Products (NTFP) were not included in the scope of the

Standard. The FSC China office and SDG submitted the proposal to add the NTFP in FSS on July 30, 2020. The process was formally registered by PSU on August 19, 2020.

The NTFP indicators are based on the Generic NTFP standard (an informal guidance document developed by PSU) and developed according to the requirements of FSC-STD-60-002 and FSC-STD-60-006. The Advice Note FSC-ADV-20-007-05 (Non-Timber Forest Products) was also used by the SDG.

After discussions at the SDG meeting in October 2020, the first draft was released for the public consultation from November 20, 2020 to January 20, 2021.

After the public consultation, the SDG gathered to discuss the opinions submitted, and developed the final draft of the NTFP and incorporated it into FSS in February 2021. After this, the draft was submitted to the FSC Performance and Standard Unit for approval.

The FSC China Forest Stewardship Standard (FSC-STD-CHN-01.1-2021) was approved by PSC on 12 October 2021, and became effective on 01 January 2022.

According to the requirements of <FSC-STD-60-006 Process requirements for the development and maintenance of Forest Stewardship Standards>, FSC China did the FSS review to assess whether the revision was needed. The conclusion was that the revision of the FSS was necessary, as both the policy of FSC international and the local context have changed. Specifically, it was established that the following identified points should be subject to the revision:

1) Adaptation to version 2.1 of the IGIs (FSC-STD-60-004);
2) Adaptation of new pesticide indicators in the IGIs;
3) Improvement of indicators based on stakeholders' feedback;
4) Consideration of the newly revised Forest Law of the People's Republic of China (effective since July 1, 2020);
5) Development of a High Conservation Value Framework; and
6) Development of indicators which explicitly address the issue of climate change, focusing on forest adaptation.

The FSC China's FSS Revision process was registered by the FSC Policy and Performance Unit on 25 January 2022. The process included the development of two subsequent draft standards, which each have been publicly consulted for a period of 2 months:

- A draft standard 1.0 was released on August 18, 2022.
- A draft standard 2.0 was released on January 12, 2023.

The Standard Development Group had 2 face-to-face meetings during the standard revision process. Both meetings were followed up via email, telephone calls and online meetings as necessary.

Detailed feedback on indicators was solicited during each public consultation, a physical key stakeholder workshop, a webinar directed at all affected and interested stakeholders, and one face-to-face SDG meeting. Outstanding feedback from the public consultation and workshop were extracted and discussed

during the SDG meeting, and solutions were developed by the SDG. When the next draft was finished, the formal document was published on FSC website and WeChat official platform to the stakeholders to describe how their comments were addressed on the next draft, and/or the reasons that their comments were not accepted. During the next public consultation, a document named comments analysis & comparison of two drafts were also public released together with the next draft.

The draft standard 1.0 was field tested in November 2022 for two different forest management types at different locations. This included a large-scale forest management unit in the southwest of China and a small-scale bamboo group certification scheme.

The draft standard 2.0 incorporated the comments received from key stakeholders during first public consultations and field testing.

The final draft was adjusted according to the comments received from the second public consultation and adopted the updated International Generic Indicators (FSC-STD-60-004 V2-1, which was released on 14 April, 2023).

The draft was submitted to FSC Policy and Performance Unit for approval in May 2023 and was approved by PSC on 12 December 2024, and becomes effective on 1 January 2026.

**NOTE:** Further information is available from P&P upon request.

# D REFERENCES

(Informative section)

The following referenced documents are relevant for the application of this standard.

For references without a version number, the latest edition of the referenced document (including any amendments) applies.

| | |
|---|---|
| **FSC-POL-20-003** | *FSC Policy on the Excision of Areas from the Scope of Certification* |
| **FSC-POL-30-001** | *FSC Pesticides Policy* |
| **FSC-POL-30-602** | *FSC Interpretation on GMOs: Genetically Modified Organisms* |
| **FSC-STD-20-007** | *Forest Management Evaluations* |
| **FSC-STD-30-005** | *FSC Standard for Group Entities in Forest Management Groups* |
| **FSC-PRO-01-008** | *Processing Complaints in the FSC Certification Scheme* |
| **FSC-PRO-30-006** | *Ecosystem Services Procedure: Impact Demonstration and Market Tools* |
| **FSC-DIR-20-007** | *FSC Directive on FSC Forest Management Evaluations* |
| **FSC-GUI-30-003** | *FSC Guidelines for the implementation of the right to Free, Prior and Informed Consent (FPIC)* |

**NOTE:** When applying this standard, consider relevant interpretations by inquiring with local FSC representatives (e.g., National Offices or representatives, or FSC's Policy and Performance Unit, if no national FSC presence exists), or your certification body. International interpretations are available through the FSC Document Centre (https://fsc.org/en/document-centre).

# E ABBREVIATIONS

(Informative section)

| | |
|---|---|
| **FSC** | Forest Stewardship Council |
| **FSS** | Forest Stewardship Standard |
| **NF** | Normative Framework |
| **NRA** | National Risk Assessment |
| **NTFP** | Non-Timber Forest Products |
| **P&P** | Policy and Performance Unit (formerly known as Performance and Standards Unit- PSU) |
| **QMS** | Quality Management System |

# F *PRINCIPLES*, CRITERIA* AND INDICATORS*

(Normative section)

## *PRINCIPLE** 1: COMPLIANCE WITH LAWS

***The Organization*** **shall comply with all *applicable laws**, regulations and *nationally-ratified** international treaties, conventions and agreements.**

**1.1. *The Organization*** **shall be a legally defined entity with clear, documented and unchallenged *legal registration**, with written authorization from the *legally competent** authority for specific activities.**

1.1.1 Legal registration to carry out all activities within the scope of the certificate is documented and unchallenged.

**Guidance note:** Organizations may be unincorporated entities or a natural person who is not less than 18 years old and has full capacity for civil conduct. (Refer to Civil Code - General Provisions: Chapters 2, 3, and 4).

1.1.2 Legal registration is granted by a legally competent authority according to legally prescribed processes.

**1.2. *The Organization*** **shall demonstrate that the *legal** status of the *Management Unit**, including *tenure** and *use rights**, and its boundaries, are clearly defined.**

1.2.1 Legal tenure to manage and use resources within the scope of the certificate is documented.

**Verifiers:** Real estate licence, forest tenure licence, lease contract, collective members voting record with signatures.

1.2.2 Under forest tenure transfer models, such as subcontract or lease, The Organization provides a copy of forest tenure licence (issued by government or competent authority) or other related legal evidence that proves rights of resource management and usage within the scope of the certificate.

**Verifiers:** Copy of forest tenure licence, commercial contract, lease contract, copy of collective members voting record with signatures.

1.2.3 Legal tenure is granted by a legally competent authority according to legally prescribed processes.

1.2.4 The boundaries of all Management Units within the scope of the certificate are clearly marked or documented and clearly shown on maps.

**1.3. *The Organization** shall have *legal** rights to operate in the *Management Unit**, which fit the *legal** status of *The Organization** and of the *Management Unit**, and shall comply with the associated *legal** obligations in *applicable national* and *local laws** and regulations and administrative requirements. The *legal** rights shall provide for harvest of products and/or supply of *ecosystem services** from within the *Management Unit**. *The Organization** shall pay the legally prescribed charges associated with such rights and obligations.**

1.3.1 All activities undertaken in the Management Unit are carried out in compliance with:

1) Applicable laws and regulations and administrative requirements,

2) Legal and customary rights; and

3) Obligatory codes of practice.

**Guidance note:** See Annex 1 List of applicable laws, regulations and nationally ratified international treaties, conventions and agreements.

1.3.2 Complete payment is made in a timely manner of all applicable legally prescribed charges connected with forest management.

**Guidance note:** Charges connected with forest management may include value added tax, urban maintenance and construction tax, education surtax, and the land lease fee.

1.3.3 Activities covered by the management plan are designed to comply with all applicable laws.

**1.4. *The Organization** shall develop and implement measures, and/or shall engage with regulatory agencies, to systematically protect the *Management Unit** from unauthorized or illegal resource use, settlement and other illegal activities.**

Non-SSF 1.4.1 Measures are implemented to provide protection from unauthorized or illegal harvesting, hunting, fishing, trapping, collecting, settlement, and other unauthorized activities.

**Guidance note:** Measures such as regular patrols and joint prevention mechanisms established with local residents and/or government departments may be taken to control illegal activities.

1.4.2 Where protection is the legal responsibility of regulatory bodies, a system is implemented to work with these regulatory bodies to identify, report, control and discourage unauthorized or illegal activities.

1.4.3 If illegal or unauthorized activities are detected, measures are implemented to address them.

1.4.4 The illegal use of fire does not take place in the forest.

Non-SSF 1.4.5 Patrol and fire prevention propaganda are carried out regularly during the fire prevention period.

**1.5. *The Organization**** **shall comply with the *applicable national laws**, local laws, *ratified** international conventions and *obligatory codes of practice**, relating to the transportation and trade of forest products within and from the *Management Unit**, and/or up to the point of first sale.**

1.5.1 Compliance with applicable national laws, local laws, ratified international conventions and obligatory codes of practice relating to the transportation and trade of forest products up to the point of first sale is demonstrated.

1.5.2 The organization provides CITES licences when harvesting or trading CITES species.

**1.6. *The Organization**** **shall identify, prevent and resolve *disputes** over issues of statutory or *customary law**, which can be settled out of court in a *timely manner**, through *engagement* with *affected stakeholders**.**

Non-SSF 1.6.1 A publicly available dispute resolution process is in place, developed through culturally appropriate engagement with affected stakeholders.

SSF 1.6.1 Disputes are resolved through local legal aid or mediation.

1.6.2 Disputes regarding legal and customary rights, including but not limited to forest ownership, land ownership, and timber ownership, are documented.

1.6.3 In addition to Indicator 1.6.2, disputes cover:

1) Forest land rental rate adjustments:
2) Compensation for damage resulting from forest management activities;
3) Non-timber forest products (NTFP) collection;
4) Environmental impacts resulting from forest management activities.

1.6.4 Disputes that can be settled out of court are responded to in a timely manner, and are either resolved or are in the dispute resolution process.

1.6.5 Up-to-date records of disputes related to issues of applicable laws or customary law are held including:

1) Steps taken to resolve disputes;
2) Outcomes of all dispute resolution processes; and
3) Unresolved disputes, the reasons they are not resolved, and how they will be resolved.

1.6.6 Operations cease in areas where disputes exist:

1) of *large scale** (equal or greater than 500 ha or 10% or more of the forest management unit, whichever is smaller); or
2) of substantial duration (12 months or more); or
3) involving a significant number of interests (more than 10 families or 5 non-family members); or

4) of *substantial magnitude** (see definition in glossary of terms)

**Guidance note:** “Operations” refer to those closely related to major economic interests, such as land preparation, afforestation, tending, logging, collection, road construction, etc. and do not include patrol, fire prevention, wildlife protection, beekeeping, etc.

**1.7. *The Organization** shall publicize a commitment not to offer or receive bribes in money or any other form of corruption, and shall comply with anti-corruption legislation where this exists. In the absence of anticorruption legislation, *The Organization** shall implement other anti-corruption measures proportionate to the *scale** and *intensity** of management activities and the *risk** of corruption.**

1.7.1 A policy is implemented that includes a commitment not to offer or receive bribes of any description.

SSF 1.7.1.1 The Organization demonstrates a commitment not to offer or receive bribes of any description through means feasible to them.

**SSF guidance note**: A written or oral commitment to not offer or received bribes can be accepted as the evidence.

Non-SSF 1.7.2 The Organization establishes an internal procedure which includes information disclosure and procedural transparency, that prevents corruption.

Non-SSF 1.7.3 The Organization establishes specific control measures for those operations that are especially vulnerable to corruption.

1.7.4 The policy is publicly available at no cost.

1.7.5 Bribery, coercion and other acts of corruption do not occur.

1.7.6 Corrective measures are implemented if corruption does occur.

**1.8. *The Organization** shall demonstrate a *long-term** commitment to adhere to the FSC *Principles** and *Criteria** in the *Management Unit**, and to related FSC Policies and Standards. A statement of this commitment shall be contained in a *publicly available** document made freely available.**

1.8.1 A written policy, endorsed by an individual from top management with authority to implement the policy, includes a long-term commitment to forest management practices consistent with FSC Principles and Criteria and related Policies and Standards.

1.8.2 The policy is publicly available at no cost.

## *PRINCIPLE** 2: *WORKERS'** RIGHTS AND EMPLOYMENT CONDITIONS

***The Organization**** **shall maintain or enhance the social and economic wellbeing of *workers**.**

**2.1. *The Organization**** **shall *uphold**** **the principles and rights at work as defined in the *ILO Declaration on Fundamental Principles and Rights at Work**** **(1998) based on the eight *ILO Core Labour Conventions**.**

2.1.1 The Organization shall not use child labour.

2.1.1.1 The Organization shall not employ workers below the age of 16, except the cases listed in 2.1.1.2.

2.1.1.2 If the workers under the age of 16 are employed in light work, The Organization shall comply with the relevant requirements of regulations and laws. Such employment should not interfere with schooling nor be harmful to their health or development. Notably, where children are subject to compulsory education laws, they shall work only outside of school hours during normal daytime working hours.

**Guidance note:** The relevant regulations and laws include, but are not limited to:

- Law of the People's Republic of China on the Protection of Minors,
- The Law of the People's Republic of China on Compulsory Education,
- The Regulations on the Administration of Internship of Students in Vocational Schools, and
- The Regulations on the Special Protection of Juvenile Workers.

Extracts from those laws can be found on the FSC China Website.

2.1.1.3 No person under the age of 18 is employed in hazardous or heavy work.

**Guidance note:** The related regulations and laws include but are not limited to: The Regulations on the Special Protection of Juvenile Workers. Law on the Protection of Minors, Article 61. Extracts from those laws can refer to the FSC China Website.

2.1.1.4 Student internships are 16 years of age or more.

**Guidance note**: The Regulation "Secondary vocational school students practice management approach" applies to these cases.

2.1.1.5 The Organization shall prohibit the worst forms of child labour.

2.1.2 The Organization shall eliminate all forms of forced and compulsory labour.

2.1.2.1 Employment relationships are voluntary and based on mutual consent, without threat of a penalty.

2.1.2.2 There is no evidence of any practices indicative of forced or compulsory labour, including, but not limited to, the following:

1) Physical and sexual violence;
2) Bonded labour;
3) Withholding of wages /including payment of employment fees and or payment of deposit to commence employment;
4) Restriction of mobility/movement;
5) Retention of passport and identity documents;
6) Threats of denunciation to the authorities.

2.1.3 The Organization shall ensure that there is no discrimination in employment and occupation.

**Guidance note:** The types of discrimination include but are not limited to: gender, age, height, political identity, qualification, curriculum vitae, surname, hepatitis B virus carriers, physical disability (unless affecting normal work), etc.

2.1.3.1 *Employment and occupation** practices are non-discriminatory.

2.1.4 The Organization shall respect freedom of association and the right to collective bargaining.

2.1.4.1 Workers are able to establish or join worker organizations of their own choosing.

2.1.4.2 The Organization respects the rights of workers to engage in lawful activities related to forming, joining or assisting a workers' organization, or to refrain from doing the same; and will not discriminate or punish workers for exercising these rights.

2.1.4.3 The Organization negotiates with lawfully established workers' organizations and/ or duly selected representatives in good faith and with the best efforts to reach a collective bargaining agreement.

2.1.4.4 Collective bargaining agreements are implemented where they exist.

**2.2. *The Organization** shall promote *gender equality** in employment practices, training opportunities, awarding of contracts, processes of *engagement** and management activities.**

2.2.1 Systems are implemented that promote gender equality and prevent gender discrimination in employment practices, training opportunities, awarding of contracts, processes of engagement and management activities.

**Verifiers:** Employment criteria, labour contracts, meeting and training records.

2.2.1.1 The Organization makes efforts to provide employment opportunities to all workers including female workers.

2.2.1.2 Employment opportunities are not only appropriate to employment conditions, but are also compatible with the role of women in family and society.

2.2.2 Job opportunities are open to both women and men under the same conditions, and women are encouraged to participate actively in all levels of employment.

**Guidance note**: Refer to Special provisions on labour protection for women workers.

2.2.3 Work typically carried out by women (silviculture, non-timber forest products harvesting, weighing, packing, etc.) is included in training and health & safety programs to the same extent as work typically carried out by men.

2.2.4 Women and men are paid the same wage when they do the same work.

2.2.5 Women are paid directly and using mutually agreed methods (e.g. direct bank transfer, direct payments for school fees, etc.) to ensure they safely receive and retain their wages.

2.2.6 Maternity leave is no less than a six-week period after childbirth.

**Guidance note:** Refer to China's Population and Family Planning Management Regulations.

2.2.7 Paternity leave is available and there is no penalty for taking it.

**Guidance note:** Refer to China's Population and Family Planning Management Regulations.

2.2.8 Meetings, management committees and decision-making forums are organized to include women and men, and to facilitate the active participation of both.

2.2.9 Confidential and effective mechanisms exist for reporting and eliminating cases of sexual harassment and discrimination based on gender, marital status, parenthood or sexual orientation.

**2.3. *The Organization** shall implement health and safety practices to protect *workers** from occupational safety and health hazards. These practices shall, proportionate to *scale, intensity and risk** of management activities, meet or exceed the recommendations of the ILO Code of Practice on Safety and Health in Forestry Work.**

2.3.1 Health and safety practices are developed and implemented that meet or exceed the ILO Code of Practice on Safety and Health in Forestry Work.

2.3.2 Workers have personal protective equipment appropriate to their assigned tasks.

**Guidance note 1:** In this indicator, “appropriate” means personal protective equipment as listed in Annex 2B.

**Guidance note 2:** If the employer provides enough evidence that other equipment not listed in Annex 2B attains similar protection effects or even better, The Organization may use this equipment. Evidence may include:

1) historical records of safety accidents;

2) performance index of labour protection equipment;

3) workers' feedback, etc.

2.3.3 Use of personal protective equipment is enforced.

2.3.4 Records are kept on health and safety practices including accident rates and lost time to accidents.

2.3.5 The frequency and severity of accidents are consistently low compared to national forest industry averages.

**Guidance note:** The Organization may learn the frequency and severity of safety accidents in the local forestry industry by consulting the local forestry and labour safety management department.

2.3.6 The health and safety practices are reviewed and revised as required after major incidents or accidents.

**Guidance note:** As reflected in the "National accidents classification standard, Annex 1," a "major accident" is a disabling injury with lost working days exceeding or equal to 105 days.

**2.4. *The Organization** shall pay wages that meet or exceed minimum *forest** industry standards or other recognized *forest** industry wage agreements or *living wages**, where these are higher than the *legal** minimum wages. When none of these exist, *The Organization** shall through *engagement** with *workers** develop mechanisms for determining *living wages**.**

2.4.1 Wages paid by The Organization in all circumstances meet or exceed legal minimum wage rates.

**Guidance note:** Legal minimum wage does not include payment owed on account of:

1) Overtime;

2) Special allowances paid by reason of a particular work environment or condition (e.g. shift duties, working in mines, working at high altitudes etc.);

3) Statutory employee welfare benefits;

4) Travel-related expenses; or

5) Protective clothing or equipment.

2.4.2 Wages paid meet or exceed:

1) Minimum forest industry standards; or

2) Other recognized forest industry wage agreements; or

3) Living wages that are higher than legal minimum wages.

**Guidance note:** In the absence of applicable forestry industry wage standards, forest industry wage agreements, and recognized living wages, the provisions of Indicator 2.4.1 apply.

2.4.3 Wages, salaries and contracts are paid on time.

**2.5. *The Organization** shall demonstrate that *workers** have job-specific training and supervision to safely and effectively implement the *Management Plan** and all management activities.**

2.5.1 Workers have job-specific training consistent with Annex 2A and supervision to safely and effectively contribute to the implementation of the management plan and all management activities.

2.5.2 Up-to-date training records are kept for all relevant workers.

SSF 2.5.2: The Organization provides verification that trainings are provided in a manner reasonable for The Organization's circumstances.

**SSF Verifiers:** Interviews with workers, interviews with stakeholders.

**2.6. *The Organization** through *engagement** with *workers** shall have mechanisms for resolving grievances and for providing *fair compensation** to *workers** for loss or damage to property, *occupational diseases**, or *occupational injuries** sustained while working for *The Organization**.**

2.6.1 A publicly available dispute resolution process is in place, developed through culturally appropriate engagement with workers.

SSF 2.6.1 As soon as a dispute arises, a dispute resolution process is established that is agreed to by both parties.

2.6.2 Workers' grievances are identified and responded to and are either resolved or are in the dispute resolution process.

2.6.3 Up-to-date records of workers' grievances related to workers' loss or damage of property, occupational diseases or injuries are maintained including:

1) Steps taken to resolve grievances;
2) Outcomes of all dispute resolution processes including fair compensation; and
3) Unresolved disputes, the reasons they are not resolved, and how they will be resolved.

2.6.4 Fair compensation is provided to workers for work-related loss or damage of property and occupational disease or injuries.

**Guidance note:** National minimum requirements are reflected in "Regulation on Work-Relate Injury Insurances" (2010) and "Law of the People's Republic of China on Prevention and Control of Occupational Diseases" (2018).

## *PRINCIPLE** 3: *INDIGENOUS PEOPLES'** RIGHTS

***The Organization*** **shall identify and *uphold** *Indigenous Peoples' * legal** and *customary rights** of ownership, use and management of land, *territories** and resources affected by management activities.**

**Guidance note:** In this standard, "*Indigenous People**" refers to:

1) Those who are officially recognized or self-identified as a group different from the Han; and
2) Those who established the earliest settlements in an area or migrated before 1949.

Indigenous Peoples include those who have affirmed their rights to land, forests and other resources based on long-established use, and also those who have not yet done so (due for example, to a lack of awareness or empowerment).

The identification of *Indigenous Peoples** in the settlement area of minorities is based on the proportion of the total population of groups different from the Han, which should be no less than 20% of people with registered residence; if the proportion is less than 20%, such groups should be officially recognized as minority administrative units (such as autonomous counties (banners), towns and villages). The minimum unit to determine whether an area is considered a 'settlement' should be the *natural village**.

**3.1.** ***The Organization*** **shall identify the *Indigenous Peoples** that exist within the *Management Unit** or those that are affected by management activities. *The Organization** shall then, through *engagement** with these Indigenous Peoples, identify their rights of *tenure**, their rights of access to and use of *forest** resources and *ecosystem services**, their *customary rights** and *legal** rights and obligations, that apply within the *Management Unit**. *The Organization** shall also identify areas where these rights are contested.

3.1.1 *Indigenous Peoples** that may be affected by management activities are identified.

3.1.2 Through culturally appropriate engagement with the *Indigenous Peoples** identified in 3.1.1, the following are documented and/or mapped:

1) Their customary and legal rights of tenure;
2) Their customary and legal access to, and use rights of the forest resources and ecosystem services;
3) Their legal and customary rights and obligations that apply;
4) The evidence supporting these rights and obligations;
5) Areas where rights are contested between *Indigenous Peoples**, governments and/or others.
6) Summary of the means by which the legal and customary rights and contested rights, are addressed by The Organization;
7) The aspirations and goals of *Indigenous Peoples** related to management activities, Intact Forest Landscapes and Indigenous cultural landscapes.

**Guidance note for SSF:** SSF may choose to not provide documents and/or maps.

**3.2. *The Organization** shall recognize and *uphold** the *legal** and *customary rights** of *Indigenous Peoples** to maintain control over management activities within or related to the *Management Unit** to the extent necessary to protect their rights, resources and *lands* and *territories**. Delegation by Indigenous Peoples of control over management activities to third parties requires *Free, Prior and Informed Consent**.**

3.2.1 Through culturally appropriate engagement, *Indigenous Peoples** are informed when, where and how they can comment on and request modification to management activities to the extent necessary to protect their rights, resources and lands.

3.2.2 The legal and customary rights of *Indigenous Peoples** are not violated by The Organization.

3.2.3 Where evidence exists that legal and customary rights of *Indigenous Peoples** related to management activities have been violated the situation is corrected, if necessary, through culturally appropriate engagement and/or through the dispute resolution process as required in Criteria 1.6 or 4.6.

3.2.4 Free, prior and informed consent is granted by *Indigenous Peoples** prior to management activities that affect their identified rights through a process that includes:

1) Ensuring *Indigenous Peoples** know their rights and obligations regarding the resource;

2) Informing the *Indigenous Peoples** of the value of the resource, in economic, social and environmental terms;

3) Informing the *Indigenous Peoples** of their right to withhold or modify consent to the proposed management activities to the extent necessary to protect rights, resources and lands; and

4) Informing the *Indigenous Peoples** of the current and future planned forest management activities.

3.2.4.1 The FPIC process includes:

1) Defining the decision-making process to be used by the community and the Organization;

2) Defining the fair negotiation of consent agreements including fair compensation for the use of the resource through culturally appropriate engagement with the *Indigenous Peoples**, and if needed with the assistance of neutral advisors;

3) Ensuring any agreement reached is documented and formally acknowledged;

4) Monitoring that the agreement is being upheld by all parties;

5) Periodically re-negotiating the terms of the consent agreement to take into account changing conditions and grievances; and

6) Traditional knowledge and *intellectual property** is identified, recognized and documented if feasible, while respecting the confidentiality of that knowledge and the *protection** of *intellectual property** rights.

3.2.5 Where the process of Free Prior and Informed Consent has not yet resulted in an FPIC agreement, The Organization and the affected *Indigenous Peoples** are engaged in a mutually agreed FPIC process that is advancing, in good faith and with which the community is satisfied.

**3.3. In the event of delegation of control over management activities, a *binding agreement** between *The Organization** and the *Indigenous Peoples** shall be concluded through *Free, Prior and Informed Consent**. The agreement shall define its duration, provisions for renegotiation, renewal, termination, economic conditions and other terms and conditions. The agreement shall make provision for monitoring by Indigenous Peoples of *The Organization**'s compliance with its terms and conditions.**

3.3.1 Where control over management activities has been granted through Free Prior and Informed Consent based on culturally appropriate engagement, the binding agreement contains the duration, provisions for renegotiation, renewal, termination, economic conditions and other terms and conditions.

**Guidance note:** Binding agreements are not limited to written agreements. They may be based on oral and honour systems, to be applied in cases where written agreements are not favoured by *Indigenous Peoples**, either for practical reasons or in principle.

3.3.2 Records of binding agreements are maintained.

3.3.3 The binding agreement contains the provision for monitoring by *Indigenous Peoples** of The Organization's compliance with its terms and conditions.

**3.4. *The Organization** shall recognize and *uphold** the rights, customs and culture of *Indigenous Peoples** as defined in the United Nations Declaration on the Rights of Indigenous Peoples (2007) and ILO Convention 169 (1989).**

3.4.1. The rights, customs and culture of *Indigenous Peoples** as defined in UNDRIP and ILO Convention 169 are not violated by The Organization.

3.4.2 Where evidence that rights, customs and culture of *Indigenous Peoples** as defined in UNDRIP and ILO Convention 169, have been violated by the Organization the situation is documented including steps to restore these rights, customs and culture of *Indigenous Peoples** to the satisfaction of the rights holders.

**3.5.** ***The Organization****, **through** ***engagement**** **with** ***Indigenous Peoples****, **shall identify sites which are of special cultural, ecological, economic, religious or spiritual significance and for which these Indigenous Peoples hold** ***legal**** **or** ***customary rights****. **These sites shall be recognized by** ***The Organization**** **and their management, and/or** ***protection**** **shall be agreed through** ***engagement**** **with these Indigenous Peoples.**

3.5.1 Sites of special cultural, ecological, economic, religious or spiritual significance for which *Indigenous Peoples** hold legal or customary rights are identified through culturally appropriate engagement.

3.5.2 Measures to protect such sites are agreed, documented and implemented through culturally appropriate engagement with *Indigenous Peoples**. When *Indigenous Peoples** determine that physical identification of sites in documentation or on maps would threaten the value or protection of the sites, then other means will be used.

3.5.3 Wherever sites of special cultural, ecological, economic, religious or spiritual significance are newly observed or discovered, management activities cease immediately in the vicinity until protective measures have been agreed to with the *Indigenous Peoples**, and as directed by local and national laws.

**3.6.** ***The Organization**** **shall** ***uphold**** **the right of** ***Indigenous Peoples**** **to** ***protect**** **and utilize their traditional** ***knowledge**** **and shall compensate** ***local communities**** **for the utilization of such knowledge and their** ***intellectual property****. **A** ***binding agreement**** **as per** ***Criterion**** **3.3 shall be concluded between** ***The Organization**** **and the Indigenous Peoples for such utilization through** ***Free, Prior and Informed Consent**** **before utilization takes place, and shall be consistent with the** ***protection**** **of** ***intellectual property**** **rights.**

3.6.1 Traditional knowledge and intellectual property are protected and are only used when the acknowledged owners of that traditional knowledge and intellectual property have provided their Free, Prior and Informed Consent formalized through a binding agreement.

3.6.2 *Indigenous Peoples** are compensated according to the binding agreement reached through Free, Prior and Informed Consent for the use of traditional knowledge and intellectual property.

## *PRINCIPLE** 4: COMMUNITY RELATIONS

***The Organization**** **shall contribute to maintaining or enhancing the social and economic wellbeing of *local communities**.**

**4.1.** ***The Organization**** **shall identify the *local communities**** **that exist within the *Management Unit**** **and those that are affected by management activities. *The Organization**** **shall then, through engagement* with these *local communities**, identify their rights of *tenure**, their rights of access to and use of *forest** resources and *ecosystem services**, their *customary rights**** **and *legal**** **rights and obligations, that apply within the *Management Unit**.**

4.1.1 Local communities that exist in the Management Unit and those that may be affected by management activities are identified and claims related to the management unit are recorded.

4.1.2 Through culturally appropriate engagement with the local communities identified in 4.1.1, the following are documented and/or mapped:

1) Their legal and customary rights of tenure;
2) Their legal and customary access to, and use rights, of the forest resources and ecosystem services;
3) Their legal and customary rights and obligations that apply;
4) The evidence supporting these rights and obligations;
5) Areas where rights are contested between local communities, governments and/or others.
6) Summary of the means by which how the legal and customary rights, and contested rights are addressed by The Organization; and
7) The aspirations and goals of local communities related to management activities.

**Guidance note for SSF:** SSF may choose to not provide documents and/or maps.

**4.2.** ***The Organization**** **shall recognize and *uphold**** **the *legal**** **and *customary rights**** **of *local communities**** **to maintain control over management activities within or related to the *Management Unit**** **to the extent necessary to protect their rights, resources, *lands and territories**. Delegation by *traditional peoples**** **of control over management activities to third parties requires *Free, Prior and Informed Consent**.**

4.2.1 Through culturally appropriate engagement, local communities are informed of when, where and how they can comment on and request modification to management activities to the extent necessary to protect their rights.

4.2.2 The legal and customary rights of local communities to maintain control over management activities are not violated by The Organization.

4.2.3 Where evidence exists that legal and customary rights of local communities related to management activities have been violated the situation is corrected, if necessary, through culturally appropriate engagement and/or through the dispute resolution process described in Criteria 1.6 or 4.6.

4.2.4 Free, Prior and Informed Consent is granted by traditional peoples prior to management activities that affect their identified rights through a process that includes:

1) Ensuring traditional peoples know their rights and obligations regarding the resource;

2) Informing traditional peoples of the value, in economic, social and environmental terms, of the resource over which they are considering delegation of control;

3) Informing traditional peoples of their right to withhold consent to the proposed management activities to the extent necessary to protect rights and resources; and

4) Informing traditional peoples of the current and future planned forest management activities.

4.2.4.1 This process includes:

1) Defining the decision-making process to be used by the community and The Organization;

2) Defining the fair negotiation of consent agreements, including fair compensation for the use of the resource, through practicing culturally appropriate engagement with traditional peoples, and if needed with the assistance of neutral advisors;

3) Ensuring any agreement reached is documented and formally acknowledged;

4) Monitoring that the agreement is being upheld by all parties;

5) Periodically re-negotiating the terms of the consent agreement to take into account changing conditions and grievances; and

6) Traditional knowledge and intellectual property are identified, recognized and documented if feasible, while respecting the confidentiality of that knowledge and the protection of intellectual property rights.

4.2.5 Where the process of Free Prior and Informed Consent has not yet resulted in an FPIC agreement, the Organization and the affected local communities are engaged in a mutually agreed FPIC process that is advancing, in good faith and with which the community is satisfied.

**4.3. *The Organization** shall provide *reasonable** opportunities for employment, training and other services to *local communities**, contractors and suppliers proportionate to *scale** and *intensity** of its management activities.**

4.3.1 Reasonable opportunities are communicated and provided to local communities, local contractors and local suppliers for:

1) Employment,
2) Training, and
3) Other services.

**4.4. *The Organization** shall implement additional activities, through *engagement** with *local communities**, that contribute to their social and economic development, proportionate to the *scale**, *intensity** and socio-economic impact of its management activities.**

4.4.1 Opportunities for local social and economic development are identified through culturally appropriate engagement with local communities and other relevant organizations.

**Guidance note for SSF:** The Organization may engage in community services in order to meet this indicator.

4.4.2 Projects and additional activities are implemented and/or supported that contribute to local social and economic benefit and are proportionate to the socio-economic impact of management activities.

4.4.2.1 Projects and additional activities include the following aspects:

1) Requested by free and collective decisions of the local communities;
2) Priorities for the communities;
3) Sustainable in the long term;
4) Beneficial to the local communities as a whole;
5) Relevant to the poverty status of the local communities;
6) Distributed equitably within the local communities

SSF 4.4.2 Small organizations engage in community services in order to contribute to local social and economic benefits.

**4.5.** ***The Organization****, **through** ***engagement**** **with local** ***communities****, **shall take action to identify, avoid and mitigate** ***significant**** **negative social, environmental and economic impacts of its management activities on affected communities. The action taken shall be proportionate to the** ***scale, intensity and risk**** **of those activities and negative impacts.**

4.5.1 Through culturally appropriate engagement with local communities, measures are implemented to identify avoid and mitigate significant negative social, environmental and economic impacts of management activities.

**Guidance note 1:** Small-scale, low-intensity and community forests may implement measures according to FSC technical materials for small, low-intensity and community forests (respectively). See Annex 7.

**Guidance note 2:** For details regarding the assessment of environmental economic and social impacts, see Annex 7.

**4.6.** ***The Organization****, **through** ***engagement**** **with** ***local communities****, **shall have mechanisms for resolving grievances and providing** ***fair compensation**** **to** ***local communities**** **and individuals with regard to the impacts of management activities of** ***The Organization****.**

4.6.1 A publicly available dispute resolution process is in place, developed through culturally appropriate engagement with local communities.

SSF 4.6.1 The Organization is not required to establish a dispute resolution process in advance. As soon as a dispute arises, a dispute resolution process is established that is agreed by both parties.

4.6.2 Grievances related to the impacts of management activities are responded to in a timely manner, and are either resolved or are in the dispute resolution process.

4.6.3 An up-to-date record of grievances related to the impacts of management activities is held including:

1) Steps taken to resolve grievances;
2) Outcomes of all dispute resolution processes including fair compensation to local communities and individuals; and
3) Unresolved disputes and the reasons why they are not resolved and how they will be resolved.

4.6.4 Operations cease in areas where disputes exist:

1) Of large scale (equal or greater than 500 ha or 10% or more of the forest management unit, whichever is smaller); or
2) Of substantial duration (12 months or more); or
3) Involving a significant number of interests (10 families or more); or
4) Of substantial magnitude (see definition in Glossary of Terms).

**Guidance note**: The operations referred to here are those which are closely related to major economic interests, such as land preparation, afforestation, tending, logging, collection, road construction, etc. and do not include patrol, fire prevention, wildlife protection, beekeeping, etc.

**4.7. *The Organization**, through *engagement** with *local communities**, shall identify sites which are of special cultural, ecological, economic, religious or spiritual significance, and for which these *local communities** hold *legal** or *customary rights**. These sites shall be recognized by *The Organization**, and their management and/or *protection** shall be agreed through *engagement** with these *local communities**.**

4.7.1 Sites of special cultural, ecological, economic, religious or spiritual significance, for which local communities hold legal or customary rights and measures to protect them are identified through culturally appropriate engagement and are recognized by The Organization.

4.7.2 Measures to protect such sites are agreed, documented and implemented through culturally appropriate engagement with local communities. When local communities determine that physical identification of sites in documentation or on maps would threaten the value or protection of the sites, then other means will be used.

4.7.3 Whenever sites of special cultural, ecological, economic, religious or spiritual significance are newly observed or discovered, management activities cease immediately in the vicinity until protective measures have been agreed to with the local communities, and as directed by local and national laws.

**4.8. *The Organization** shall *uphold** the right of *traditional peoples** to *protect** and utilize their *traditional knowledge** and shall compensate *traditional peoples** for the utilization of such knowledge and their *intellectual property**. A *binding agreement** as per *Criterion** 3.3 shall be concluded between *The Organization** and the *traditional peoples** for such utilization through *Free, Prior and Informed Consen*t* before utilization takes place, and shall be consistent with the *protection** of *intellectual property** rights.**

4.8.1 Traditional knowledge and intellectual property of traditional peoples are protected and are only used when the owners of that traditional knowledge and intellectual property have provided their Free, Prior and Informed Consent formalized through a binding agreement.

4.8.2 Traditional peoples are compensated according to the binding agreement reached through Free, Prior and Informed Consent for the use of traditional knowledge and intellectual property.

## *PRINCIPLE** 5: BENEFITS FROM THE *FOREST**

***The Organization**** **shall efficiently manage the range of multiple products and services of the *Management Unit**** **to maintain or enhance *long-term** economic viability**** **and the range of social and environmental benefits.**

**5.1.** ***The Organization**** **shall identify, produce, or enable the production of, diversified benefits and/or products, based on the range of resources and *ecosystem services**** **existing in the *Management Unit**** **in order to strengthen and diversify the local economy proportionate to the *scale**** **and *intensity**** **of management activities.**

5.1.1 The range of resources and ecosystem services that could strengthen and diversify the local economy are identified.

Non-SSF 5.1.2 Consistent with management objectives, the identified benefits and products are produced by the Organization and/or made available for others to produce, to strengthen and diversify the local economy.

**Guidance note:** The Organization is not required to engage in the commercial use of products and benefits of the Management Unit if such use would have negative impacts on the primary objectives of conservation or protection. This includes but is not limited to:

1) Activities that lead to NTFP over-exploitation
2) Activities that may have a serious negative impact on the environment;
3) Activities that may have a serious negative impact on local communities.

5.1.3 When The Organization uses FSC Ecosystem Services Claims, The Organization shall comply with applicable requirements in FSC-PRO-30-006.

**5.2.** ***The Organization**** **shall normally harvest products and services from the *Management Unit**** **at or below a level which can be permanently sustained.**

5.2.1 Timber harvesting levels are based on an analysis of current Best Available Information on growth and yield; inventory of the forest; mortality rates; and maintenance of ecosystem functions.

5.2.2 Based on the timber harvesting level analysis, a maximum allowable annual cut for timber is determined that does not exceed the harvest level that can be permanently sustained including by ensuring that harvest rates do not exceed growth.

5.2.3 The Organization ensures that the rate of harvest for large, regionally dispersed FMUs does not allow concentrating the annual harvest in one sub-unit.

5.2.4 The Organization ensures that the rate of harvest for large, regionally dispersed FMUs does not allow concentrating on any one species in a way that compromises The Organization's ability to meet all other aspects of the standard.

5.2.5 Actual annual harvest levels for timber products are recorded and the harvest over a defined period does not exceed the allowable cut determined in 5.2.2 for the same defined period.

5.2.5.1 In a defined management period (5 or 10 years), special circumstances in a given year may allow for the harvest rate to exceed the annual growth rate, providing that all other requirements of this standard are met and that the following conditions are met:

1) The organization provides a clear rationale;

2) The organization develops a harvesting plan for the management period (5 or 10 years) which ensures that the average harvest rate does not exceed annual growth rate.

5.2.6 For extraction of commercially harvested services and non-timber forest products under The Organization's control, a sustainable harvest level is calculated and adhered to. Sustainable harvest levels are based on Best Available Information*.

**Guidance note:** Best Available Information includes production data and high-yield and low-yield years of non-timber forest products.

**5.3. *The Organization** shall demonstrate that the positive and negative *externalities** of operations are included in the *management plan**.**

Non-SSF 5.3.1 Costs related to preventing, mitigating or compensating for negative social and environment impacts of management activities are quantified and documented in the management plan.

5.3.2 Benefits related to positive social and environment impacts of management activities are identified and included in the management plan.

**5.4. *The Organization** shall use local processing, local services, and local value adding to meet the requirements of *The Organization** where these are available, proportionate to *scale, intensity and risk**. If these are not locally available, *The Organization** shall make *reasonable** attempts to help establish these services.**

5.4.1 Where cost, quality and capacity of non-local and local options are at least equivalent, local goods, services, processing and value-added facilities are used.

**Guidance note:** "Local" has different meanings in this indicator depending on the size of the organization.

1) For large scale forests, "local" covers the range within the province, including the provincial capital. Goods, services, processing and value-added facilities of non-local origin may be used in small amounts in order to spread risk.

2) For small scale forests, "local" covers the range within the county.

3) For medium-sized forest, "local" covers the range within the county as well as neighbouring counties. Prefecture-level cities are included for every county.

Non-SSF 5.4.2 Reasonable attempts are made to establish and encourage capacity where local goods, services, processing and value-added facilities are not available.

**5.5. *The Organization**** **shall demonstrate through its planning and expenditures proportionate to *scale, intensity and risk**, its commitment to *long-term** *economic viability**.**

5.5.1 Sufficient funds are allocated to implement the Management Plan in order to meet this standard and to ensure long-term economic viability.

5.5.2 Expenditures and investments are made to implement the Management Plan in order to meet this standard and to ensure long-term economic viability.

**Guidance note for SSF:** Expenditures and investments may be documented by other means than accounting or balance sheets. This may include sales invoices and transfer or cash receipts.

PRINCIPLE* 6: ENVIRONMENTAL VALUES* AND IMPACTS

***The Organization*** **shall maintain, *conserve** and/or *restore** *ecosystem services** and *environmental values** of the *Management Unit**, and shall avoid, repair or mitigate negative environmental impacts.**

**6.1.** ***The Organization** shall assess *environmental values** in the *Management Unit** and those values outside the *Management Unit** potentially affected by management activities. This assessment shall be undertaken with a level of detail, scale and frequency that is proportionate to the *scale, intensity and risk** of management activities, and is sufficient for the purpose of deciding the necessary *conservation** measures, and for detecting and monitoring possible negative impacts of those activities.**

6.1.1 Best Available Information is used to assess environmental values within, and, where potentially affected by management activities, outside of the Management Unit.

**Guidance note:** Best Available Information includes:

1) Representative Sample Areas, showing environmental values in their natural state;
2) Field Surveys;
3) Databases relevant to the environmental values, for example, local forestry archives and natural reservation strategic information at the level of municipality above;
4) Consultation with local and regional experts;
5) Culturally appropriate engagement with Indigenous Peoples, local communities, affected stakeholders and interested stakeholders

6.1.2 The contents of environmental value assessment include (but are not limited to) the following kinds of information:

1) Biodiversity: animal diversity, plant diversity;
2) Water resources: basin and river bank;
3) Soil: soil type, soil erosion, soil organic matter;
4) Atmosphere: carbon storage and carbon flux;
5) Landscape value: natural ecosystem type and area, community succession stage, human landscape, etc.

HIF 6.1.2.1 The Organization updates soil data annually.

6.1.3 Assessments of environmental values are conducted with a level of detail and within a period of 5 years (prior to certification and at least once within each subsequent five year period), so that:

1) Impacts of management activities on the identified environmental values can be assessed as per Criterion 6.2;
2) Risks to environmental values can be identified as per Criterion 6.2;

3) Necessary conservation measures to protect values can be identified as per Criterion 6.3; and,

4) Monitoring of impacts or environmental changes can be conducted as per Principle 8.

HIF 6.1.4 Organizations use quantitative methods to assess environmental values. The applied methods are based on scientific sampling designs and statistical analysis.

HIF 6.1.4.1 The Organization provides a clear rationale if a quantitative method cannot be applied.

**6.2. Prior to the start of site-disturbing activities, *The Organization** shall *identify* and assess the *scale, intensity and risk** of potential impacts of management activities on the identified *environmental values**.**

6.2.1 An environmental impact assessment identifies potential present and future impacts of management activities on environmental values, from the stand level to the landscape level.

**Guidance note for SSF:** Organizations that do not apply high-intensity management activities may implement measures according to FSC technical materials for small, low intensity and community forests (respectively). See Annex 7 Briefing Note 2: Assessment of Environmental Impacts for details.

HIF 6.2.1.1 Organizations use quantitative methods to assess environmental impacts and illustrate the scientific basis of utilized methods.

6.2.2 The environmental impact assessment identifies and assesses the impacts of the management activities prior to the start of site-disturbing activities.

Non-SSF 6.2.3 The Organization assesses the amount of carbon emissions (and/or other greenhouse gas emissions) that are directly caused by high-intensity management activities.

**Guidance note 1:** High-intensity management activities may include, but are not limited to: burning grass, land reclamation, fertilization, logging, road construction, etc.

**Guidance note 2:** Direct greenhouse gas emissions refer to greenhouse gas emissions directly caused by management activities. Take fertilization as an example: the greenhouse gas emissions caused by weeding before fertilization, the use of oil in the process of fertilization and the decomposition of fertilizer in the later stage are all direct greenhouse gas emissions. However, the greenhouse gas emissions caused by the production progress of fertilizer are not the direct greenhouse gas emissions of management activities.

**6.3. *The Organization**** **shall identify and implement effective actions to prevent negative impacts of management activities on the *environmental values**, and to mitigate and repair those that occur, proportionate to the *scale, intensity and risk**** **of these impacts.**

6.3.1 Management activities are planned and implemented to prevent negative impacts and to protect environmental values.

6.3.2 Management activities prevent or mitigate negative impacts to environmental values.

6.3.3 Where negative impacts to environmental values occur, measures are adopted to prevent further damage, and negative impacts are mitigated and/or repaired.

**6.4. *The Organization**** **shall protect *rare species**** **and *threatened species**** **and their *habitats**** **in the *Management Unit**** **through *conservation zones**, *protection areas**, *connectivity**** **and/or (where necessary) other direct measures for their survival and viability. These measures shall be proportionate to the *scale, intensity and risk**** **of management activities and to the *conservation**** **status and ecological requirements of the *rare and threatened species**. The *Organization**** **shall take into account the geographic range and ecological requirements of *rare and threatened species**** **beyond the boundary of the *Management Unit**, when determining the measures to be taken inside the *Management Unit**.**

6.4.1 Best Available Information is used to identify rare and threatened species and their habitats, including Class I and II national protected species listed in the List of China National Key Protected Wild Animals (2021) and List of China National Key Protected Wild Plants (2021), CITES species (where applicable), and critically endangered (CR) and endangered (EN) species listed on the China Red List of biodiversity that are present or likely to be present within and adjacent to the Management Unit.

**Guidance note 1:** Best Available Information includes:

1) CITES list and China Red List of Biodiversity, and List of China National Key Protected Wild-animals（2021）and List of China National Key Protected Wild-plants (2021);

2) Field surveys;

3) Databases relevant to the environmental values; for example, local forestry archives and natural reservation planning information at and above the municipal level;

4) Consultation with local and regional experts;

5) Culturally appropriate engagement with Indigenous Peoples, local communities, affected stakeholders and interested stakeholders.

**Guidance note 2:** See Annex 3 for the sources of the China Biodiversity Red List, the List of China national key protected wild animals (2021) and the List of China national key protected wild plants (2021).

6.4.2 Potential impacts of management activities on rare and threatened species and their conservation status and habitats are identified and management activities are modified to avoid negative impacts.

6.4.3 The rare and threatened species and their habitats are protected, including through the provision of conservation zones, protection areas, connectivity, and other direct means for their survival and viability, such as the species' recovery programs.

6.4.4 Hunting, fishing, trapping and collection of rare or threatened species is prevented.

Non-SSF 6.4.4.1 The Organization implements the following measures:

1) Establishes written rules to prohibit workers, local communities and others from hunting, fishing, trapping, collecting and selling rare or endangered species. The rules are based on applicable legislation in section 3.2 of Annex 1;
2) Establishes education and patrolling programs for the protection of rare and threatened species;
3) Cooperates with local forestry administration and reports incidences of hunting, fishing, trapping or gathering of rare or threatened species. In case the Organization has legal authority, it may take legal action based on applicable legislation;
4) Maintains records about incidences of hunting fishing, trapping or gathering of rare or threatened species;
5) Increases education and patrolling efforts or establishes other relevant measures when incidences of hunting, fishing, trapping or gathering of rare or threatened species increase.

SSF 6.4.4.1 The Organization ensures that:

1) There is no fishing, trapping or collection of rare or threatened species happened in the organization;
2) Communicate with the people in their surroundings not to fish, trap or collect rare or threatened species.

**6.5.** ***The Organization**** **shall identify and protect representative sample areas of native *ecosystems**** **and/or *restore**** **them to more *natural conditions**. Where *representative sample areas**** **do not exist or are insufficient, *The Organization**** **shall *restore**** **a proportion of the *Management Unit**** **to more *natural conditions**. The size of the areas and the measures taken for their protection or restoration, including within plantations, shall be proportionate to the *conservation**** **status and value of the *ecosystems**** **at the *landscape**** **level, and *the scale, intensity and risk**** **of management activities. (C6.4 and 10.5 P&C V4 and Motion 7:2014).**

**Guidance note 1:** Representative sample areas represent the native ecosystem in local context, and thus serve as a reference for an ecosystem that exists or could be present in the management unit, for the purposes of assessing 6.1.1.

**Guidance note 2:** Informing forest management, including regeneration, within the Management Unit in order to maintain or enhance environmental values.

**Guidance note 3:** Forming part of the Conservation Areas Network within the Management Unit. In order to protect and conserve environmental values, it may be necessary to designate and restore Representative Sample Areas within the Management Unit. Protection Areas, Conservation zones, Representative Sample Areas and High Conservation Value Areas, may overlap spatially where they meet the same criteria to form the Conservation Area Network.

6.5.1 Best Available Information is used to identify native ecosystems that exist, or would exist under natural conditions within the Management Unit.

**Guidance note 1:** Best Available Information includes:

1) Field surveys;
2) Databases relevant to the environmental values, for example, local forestry archives and natural reservation strategic information at or above the municipal level;
3) Consultation with local and regional experts;
4) Culturally appropriate engagement with Indigenous Peoples, local communities, and affected stakeholders and interested stakeholders.

**Guidance note 2:** Native ecosystems may include the following types of natural characteristics: forests, grasslands, wetlands, deserts, etc.

6.5.2 Representative sample areas of native ecosystems are protected, where they exist.

6.5.3 Representative Sample Areas in combination with other components of the conservation areas network comprise a minimum 10% area of the Management Unit.

**Guidance note:** The Conservation Area Network refers to those portions of the Management Unit for which conservation is the primary and, in some circumstances, exclusive objective; such areas include representative sample areas, conservation zones, protection areas, connectivity areas and High Conservation Value Areas.

SSF 6.5.3 If there are insufficient or no representative samples areas within the MU, The Organization meets requirements for the 10% minimum set-aside area for the Conservation Area Network outside of the Management Unit (MU) only providing they meet the following conditions:

1) The MU is smaller than 50 ha;
2) The Organization identifies all rare and threatened species and their habitats in the MU, and implements measures for their survival and viability even in cases of low population size;
3) The outside area is in the same forest landscape;
4) Sites which are to be conserved outside of the MU are representative samples of existing ecosystems;
5) The area which falls outside the Management Unit is not commercially harvested and is under a legal protection status, OR there is a binding contract between the Organization and the owner of the outside area to:
    a) Protect the area in its natural stage;
    b) Mark the boundaries of the area in the field and on maps; and/or
    c) Allow certification bodies to access area for inspection.

6.5.4 Where Representative Sample Areas do not exist, or where existing areas inadequately represent native ecosystems, or are otherwise insufficient, a proportion of the Management Unit is restored to more natural conditions.

**Guidance Note:** For auditing purposes, 'landscape' is defined as the quaternary water catchment area. Financial assistance alone does not constitute compliance with the requirements of Criterion 6.5. Some conservation efforts have to be demonstrated within the MU. Other examples of conservation efforts may be presented to PSU for evaluation on a case-by-case basis.

6.5.5 The size of the Representative Sample Areas and/or restoration areas is proportionate to the conservation status and value of the ecosystems at the landscape level, the size of the Management Unit and the intensity of forest management. The area of each Representative Sample Area is 1ha or more.

LSF 6.5.5.1 The total size of the Representative Sample Areas and/or restoration areas does not fall below the following thresholds:

| Intensity | Minimum Representative Sample Area (RSA) Size |
|---|---|
| **High intensity** | 100ha |
| **Medium intensity** | 50ha |
| **Low intensity** | 10ha |

6.5.6 The Organization considers the ecosystem value at the landscape level, considers establishment of wildlife corridors between Representative Sample Areas, and prevents fragmentation from occurring.

**6.6. *The Organization** shall effectively maintain the continued existence of naturally occurring *native species** and *genotypes**, and prevent losses of *biological diversity**, especially through *habitat** management in the *Management Unit**. *The Organization** shall demonstrate that effective measures are in place to manage and control hunting, fishing, trapping and collecting.**

6.6.1 Management activities maintain the plant communities and habitat features found within native ecosystems in which the Management Unit is located.

6.6.2 Where past management has eliminated plant communities or habitat features, management activities aimed at re-establishing such habitats are implemented.

**Guidance note 1:** For *natural forests**, the Organization is recommended to apply artificial regeneration methods or manually accelerates natural regeneration, such as supplemental seeding, replanting, partial soil preparation, cutting, irrigation or mowing.

**Guidance note 2:** For plantations, the Organization is recommended to apply regeneration measures along waterbodies, roads and/or establishes other relevant buffer zones.

6.6.3 Management activities maintain, enhance, or restore habitat features associated with native ecosystems, to support the diversity of naturally occurring species and their genetic diversity.

Non-SSF 6.6.3.1 The restoration scope, area, management objectives and measures for restoration are determined and implemented.

NRF PWF 6.6.3.1 Effective measures are taken to promote the transformation of the plantation to a more natural state and restore their natural characters according to the protection objectives.

6.6.4 The Organization maintains or restores complexity of forest communities.

**Guidance note:** Complexity refers to the following attributes:

1) Old-growth or mature commercial and non-commercial trees;

2) Trees with special ecological value;

3) Vertical and horizontal stand structure;

4) Forest canopy.

6.6.5 The Organization retains the following special habitats:

1) Standing dead trees and fallen trees;

2) Small wetlands, bogs, fens;

3) Small non-forest open areas; and

4) Animal hibernation sites.

6.6.6 Effective measures are taken to manage and control hunting, fishing, trapping and collecting activities to ensure that naturally occurring native species, their diversity within species and their natural distribution are maintained.

6.6.7 The Organization identifies the species for which hunting, fishing, trapping and collecting are allowed, and the species for which these are forbidden, according to related national laws and international conventions.

6.6.8 If The Organization is allowed to hunt, fish, trap and collect, The Organization demonstrates that a written procedure is developed and implemented according to applicable laws.

6.6.9 The Organization possesses, manufactures, sells, transports, rents, lends and uses firearms in line with the related national laws and regulations.

**Guidance note:** The applicable national law is the “People’s Republic of China Firearms Law" (1996).

6.6.10 The Organization develops and implements written procedures to prohibit and punish the use of a company’s vehicle to transport, trade and use of protected wildlife and firearms.

6.6.11 The Organization establishes effective mechanisms to prohibit workers to hunt, trap or capture wild animals or wild fish.

**6.7. *The Organization** shall *protect** or *restore** natural water courses, *water bodies**, *riparian zones** and their *connectivity**. The Organization* shall avoid negative impacts on water quality and quantity and mitigate and remedy those that occur.**

6.7.1 Protection measures are implemented to protect natural watercourses, water bodies, riparian zones and their connectivity, including water quantity and water quality.

**Guidance note 1:** This includes that The Organization marks watercourses and water bodies in their harvesting design maps, except for watercourses with a stream bed width of less than 2 meters.

**Guidance note 2:** Stream bed width is the distance between vegetation zones on both sides of the river.

**Guidance note 3:** The requirements of Indicator 6.7.1 are based on the Code of Forest Harvesting (LY/T 1646-2005), Page 19, item 7.2.

6.7.2 The Organization sets up buffer zones along watercourses and water bodies according to the following thresholds:

1) If watershed width is greater than 50 meters, unilateral minimum width of the buffer zone is 30 meters or more;

2) If watershed width is between 20 and 50 meters, unilateral minimum width of the buffer zone is 20 meters or more;

3) If watershed width is between 10 and 20 meters, unilateral minimum width of the buffer zone is 15 meters or more;

4) If watershed width is lesser than 10 meters, unilateral minimum width of the buffer zone is 8 meters or more.

6.7.2.1 If species, habitats or ecosystems exist that require protection, The Organization enhances the width of buffer zones accordingly.

**Guidance note 1:** Watershed width is the distance between vegetation zones on both sides of the river.

**Guidance note 2:** The requirements of Indicator 6.7.2 are based on the Code of Forest Harvesting (LY/T 1646-2005), Page 19, item 7.2.1.

6.7.3 The Organization manages buffer zones for protection purposes.

6.7.3.1 This involves the following management activities:

1) Protection of natural vegetation;

2) No tree cutting without a licence;

3) Prevention of construction or other machinery to enter buffer zones, except for the construction of bridges and/or culverts;

4) Implementation of environmental impact assessments and mitigation measures prior to construction of bridges and/or culverts;

5) No dumping of logging residues, other debris and rubbish;

6) No use of pesticides and fertilizers in buffer zones.

6.7.3.2 The Organization does not plant trees in nature river courses.

6.7.4 Where implemented protection measures do not protect watercourses, water bodies, riparian zones and their connectivity, water quantity and water quality from the impacts of forest management, restoration activities are implemented.

6.7.5 Where natural watercourses, water bodies, riparian zones and their connectivity, or water quantity and water quality have been damaged by past activities on land and water by The Organization, restoration activities are implemented.

6.7.6 Where continued degradation exists to watercourses, water bodies, water quantity and water quality caused by previous managers and the activities of third parties, measures are implemented that prevent or mitigate this degradation.

**6.8. *The Organization** shall manage the *landscape** in the *Management Unit** to maintain and/or *restore** a varying mosaic of species, sizes, ages, spatial *scales** and regeneration cycles appropriate for the *landscape values** in that region, and for enhancing environmental and economic *resilience**.**

6.8.1 A varying mosaic of species, sizes, ages, spatial scales, and regeneration cycles is maintained appropriate to the landscape.

**Guidance note 1:** Landscape features include those shaped by natural processes and and/or modified by human activities.

**Guidance note 2:** "Appropriate to the landscape" means that management aims at maintaining the continuity of natural characteristics of the FMU and the surrounding area, and maintaining the traditional culture and activities which contribute to such continuity.

6.8.2 The mosaic of species, sizes, ages, spatial scales, and regeneration cycles is restored where it has not been maintained appropriate to the landscape.

**6.9. *The Organization** shall not convert *natural forest** or *High Conservation Value Areas** to plantations* or to non-forest land-use*, nor transform plantations* on sites directly converted from *natural forest** to *non-forest land-use**, except when the conversion*:**

**a) Affects a *very limited portion** of the *Management Unit**, and**

**b) Will produce clear, substantial, *additional**, secure long-term *conservation** and social benefits in the *Management Unit**, and**

**c) Does not damage or threaten *High Conservation Values**, nor any sites or resources necessary to maintain or enhance those *High Conservation Values** (C6.10 P&C V4 and Motion 2014#7).**

6.9.1 There is no conversion of natural forest* or High Conservation Value Areas to plantations, or to non-forest land-use, nor transformation of plantations on sites directly converted from natural forest* to non- forest land-use, except when it:

1) Affects a very limited portion of the Management Unit, and
2) Will produce clear, substantial, additional, secure, long-term conservation and social benefits in the Management Unit, and
3) Does not damage or threaten High Conservation Values, nor any sites or resources necessary to maintain or enhance those High Conservation Values.

6.9.2 The Organization informs the responsible authorities prior to actual conversion (under the limited instances identified in Indicator 6.9.1), and provides an evaluation of environmental and social impacts.

6.9.3 The Organization informs the Certification Body and FSC prior to the actual conversion including information about size, usage, high conservation values of the forest area. This information is made publicly available.

**6.10. *Management Units** containing *plantations** that were established on areas converted from *natural forest** between 1 December 1994 and 31 December 2020 shall not qualify for certification, except where:**

**a) The conversion affected a *very limited portion** of the *Management Unit** and is producing clear, substantial, *additional**, secure long-term *conservation** benefits in the *Management Unit**, or**

**b) *The Organization** which was *directly** or *indirectly** involved in the conversion demonstrates *restitution** of all *social harms** and *proportionate** *remedy** of *environmental harms** as specified in the applicable FSC Remedy Framework, or**

**c) *The Organization** which was not involved in the conversion but has acquired *Management Units** where conversion has taken place demonstrates *restitution** of *priority social harms** and partial *remedy** of *environmental harms** as specified in the applicable FSC Remedy Framework.**

6.10.1 Based on Best Available Information, accurate data is compiled on all conversions between 1 December 1994 and 31 December 2020 within the Management Unit.

6.10.2 Areas converted from *natural forest** to plantation between 1 December 1994 and 31 December 2020 are not certified, except where:

1) The conversion affected a very limited portion of the Management Unit and is producing clear, substantial, additional, secure long- term conservation benefits in the Management Unit, or

2) The Organization which was directly or indirectly involved in the conversion demonstrates restitution of all social harms and proportionate remedy of environmental harms as specified in the applicable FSC Remedy Framework, or

3) The Organization which was not involved in conversion but has acquired Management Units where conversion has taken place demonstrates restitution of priority social harms and partial remedy of environmental harms as specified in the applicable FSC Remedy Framework, or

4) The Organization qualifies as a small-scale smallholder.

**6.11 *Management Units** shall not qualify for certification if they contain *natural forests** or *High Conservation Value Areas** converted after 31 December 2020, except where the *conversion**:**

**a) Affected a *very limited portion** of the *Management Unit*,* and**

**b) Is producing clear, substantial, *additional*,* secure *long-term** *conservation** and social benefits in the *Management Unit*,* and**

**c) Did not threaten *High Conservation Values*,* nor any sites or resources necessary to maintain or enhance those *High Conservation Values*.***

6.11.1 Based on Best Available Information, accurate data is compiled on all conversions of *natural forests** and High Conservation Value Areas after 31 December 2020 within the Management Unit.

6.11.2 Areas where *natural forests** or High Conservation Value Areas have been converted after 31 December 2020 are not certified, except where the conversion:

1) Affected a very limited portion of the Management Unit, and
2) is producing clear, substantial, additional, secure long-term conservation and social benefits in the Management Unit, and
3) did not threaten High Conservation Values, nor any sites or resources necessary to maintain or enhance those High Conservation Values.

## *PRINCIPLE** 7: MANAGEMENT PLANNING

***The Organization**** **shall have a *management plan**** **consistent with its policies and *objectives**** **and proportionate to *scale, intensity and risks**** **of its management activities. The *management plan**** **shall be implemented and kept up to date based on monitoring information in order to promote *adaptive management**. The associated planning and procedural documentation shall be sufficient to guide staff, inform *affected stakeholders**** **and *interested stakeholders**** **and to justify management decisions.**

**7.1.** ***The Organization**** **shall, proportionate to *scale, intensity and risk**** **of its management activities, set policies (visions and values) and *objectives**** **for management, which are environmentally sound, socially beneficial and economically viable. Summaries of these policies and *objectives**** **shall be incorporated into the *management plan**, and publicized.**

7.1.1 Policies (vision and values) that contribute to meeting the requirements of this standard are defined.

7.1.2 Specific, operational management objectives that address the requirements of this standard are defined.

7.1.2.1 Management objectives follow forest management policies, and are specific, targeted actions or goals that comprise management policies.

Non-SSF 7.1.3 Summaries of the defined policies and management objectives are included in the management plan and publicized.

**Guidance note for SSF:** The Organization may choose to not publicize policies and management objectives, but rather may communicate policies and management objectives in the manner of a written statement or similar.

**7.2.** ***The Organization**** **shall have and implement a *management plan**** **for the *Management Unit**** **which is fully consistent with the policies and *management objectives**** **as established according to *Criterion**** **7.1. The *management plan**** **shall describe the natural resources that exist in the *Management Unit**** **and explain how the plan will meet the FSC certification requirements. The *management plan**** **shall cover *forest**** **management planning and social management planning proportionate to *scale**, *intensity**** **and *risk**** **of the planned activities.**

7.2.1 The management plan includes management actions, procedures, strategies and measures to achieve the management objectives.

7.2.2 The management plan addresses the elements listed in Annex 4A, and is implemented.

**7.3.** **The *management plan**** **shall include *verifiable targets**** **by which progress towards each of the prescribed *management objectives**** **can be assessed.**

1.3.1 Verifiable targets, and the frequency that they are assessed, are established for monitoring the progress towards each management objective.

**Guidance note:** Verification targets are the further breakdown of management objectives. The realization of the verifiable targets helps to achieve a certain management objective.

**7.4. *The Organization** shall update and revise periodically the management planning and procedural documentation to incorporate the results of monitoring and evaluation, stakeholder *engagement** or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.**

7.4.1 The management plan is revised and updated periodically to incorporate:

1) Monitoring results, including results of certification audits;
2) Evaluation results;
3) Stakeholder engagement results;
4) New scientific and technical information, and
5) Changing environmental, social, or economic circumstances

**Guidance note:** The template provided in Annex 4B is an example and may be used when adapted to the specific circumstances of the organization.

**7.5. *The Organization** shall make *publicly available** a summary of the *management plan** free of charge. Excluding *confidential information**, other relevant components of the *management plan** shall be made available to *affected stakeholders** on request, and at cost of reproduction and handling.**

7.5.1 A summary of the management plan in a format comprehensible to stakeholders including maps and excluding confidential information is made publicly available at no cost.

**Guidance note:** The Organization may choose to provide the entire management plan.

SSF 7.5.1 The Organization provides a summary of the management plan in a format comprehensible to stakeholders.

**Guidance note for SSF:** The summary of the management plan may or may not include maps.

7.5.2 Relevant components of the management plan, excluding confidential information, are available to affected stakeholders on request at the actual costs of reproduction and handling.

**Guidance note:** Confidential information may include (but is not limited to):

1) Information relevant to investment decisions;
2) Content related to intellectual property rights;
3) Client's confidential information;
4) Information that is confidential under the law;
5) Disseminate information that may endanger wildlife species and habitat conservation; and

6) Sites of special cultural, ecological, economic, religious or spiritual significance for which indigenous peoples or local communities, as required by relevant groups (see Criteria 3.5 and 4.7).

**7.6. *The Organization** shall, proportionate to *scale, intensity and risk** of management activities, proactively and transparently engage *affected stakeholders** in its management planning and monitoring processes, and shall engage *interested stakeholders** on request.**

7.6.1 Culturally appropriate engagement is used to ensure that affected stakeholders are proactively and transparently engaged in the following processes:

1) Dispute resolution processes (Criterion 1.6, Criterion 2.6, Criterion 4.6);
2) Definition of Living wages (Criterion 2.4);
3) Identification of rights (Criterion 3.1, Criterion 4.1), Indigenous cultural landscapes (Criterion 3.1) sites (Criterion 3.5, Criterion 4.7) and impacts (Criterion 4.5);
4) Local communities' socio-economic development activities (Criterion 4.4); and
5) High Conservation Value assessment, management and monitoring (Criterion 9.1, Criterion 9.2, Criterion 9.4).

**Guidance note for SSF:** "Affected stakeholders" refers to local communities and local authorities.

7.6.2 Culturally appropriate engagement is used to:

1) Determine appropriate representatives and contact points (including where appropriate, local institutions, organizations and authorities);
2) Determine mutually agreed communication channels allowing for information to flow in both directions;
3) Ensure all actors (women, youth, elderly, minorities) are represented and engaged with equitably;
4) Ensure all meetings, all points discussed and all agreements reached are recorded;
5) Ensure the content of meeting records is approved; and
6) Ensure the results of all culturally appropriate engagement activities are shared with those involved.

7.6.3 Affected rights holders and affected stakeholders are provided with an opportunity for culturally appropriate engagement in monitoring and planning processes of management activities that affect their interests.

**Guidance note for SSF:** "Affected stakeholders" refers to local communities and local authorities.

7.6.4 On request, interested stakeholders are provided with an opportunity for engagement in monitoring and planning processes of management activities that affect their interests.

## *PRINCIPLE** 8: MONITORING AND ASSESSMENT

***The Organization**** **shall demonstrate that, progress towards achieving the *management objectives**, the impacts of management activities and the condition of the *Management Unit**, are monitored and evaluated proportionate to the *scale, intensity and risk** of management activities, in order to implement *adaptive management**.

**8.1.** ***The Organization**** **shall monitor the implementation of its *Management Plan**, including its policies and *management objectives**, its progress with the activities planned, and the achievement of its *verifiable targets**.

8.1.1 Procedures are documented and executed for monitoring the implementation of the Management Plan, including its policies and management objectives and achievement of verifiable targets.

SSF 8.1.1 The Organization demonstrates that the implementation of the management plan is monitored in a way that is feasible to them.

**8.2.** ***The Organization**** **shall monitor and evaluate the environmental and social impacts of the activities carried out in the *Management Unit**, and changes in its environmental condition.**

8.2.1 The social and environmental impacts of management activities are monitored consistent with Annex 5.

8.2.2 Changes in environmental conditions are monitored consistent with Annex 5.

**8.3.** ***The Organization**** **shall analyze the results of monitoring and evaluation and feed the outcomes of this analysis back into the planning process.**

8.3.1 Adaptive management procedures are implemented so that monitoring results feed into periodic updates to the planning process and the resulting management plan.

8.3.2 If monitoring results show non-conformities with the FSC Standard then management objectives, verifiable targets and/or management activities are revised.

**8.4.** ***The Organization**** **shall make *publicly available** a summary of the results of monitoring free of charge, excluding *confidential information**.**

8.4.1 A summary of the monitoring results consistent with Annex 5, in a format comprehensible to stakeholders including maps and excluding confidential information, is made publicly available at no cost.

**Guidance note for SSF:** Small organizations may provide monitoring results upon request.

**8.5. *The Organization** shall have and implement a tracking and tracing system proportionate to *scale, intensity and risk** of its management activities, for demonstrating the source and volume in proportion to projected output for each year, of all products from the *Management Unit** that are marketed as FSC certified.**

8.5.1 A system is implemented to track and trace all products that are marketed as FSC certified. As part of that:

1) *Transaction verification** is supported by providing FSC transaction data, as requested by the certification body;

2) *Fibre testing** is supported by surrendering samples and specimens of materials and information about species composition for verification, as requested by the certification body.

LSF 8.5.1.1 The Organization implements a system sufficient to control and inventory all harvested materials from the cut block or coupe to the first point of sale.

SSF 8.5.1.1 The Organization keeps sales invoices and compatible logging records as described in 8.5.2.

8.5.2 Information about all products sold is compiled and documented, including:

1) Common and scientific species name (Latin name);

2) Product name or description;

3) Volume (or quantity) of product;

4) Information to trace the material to the source of origin logging block (except for twigs and branches smaller than 8 cm in diameter);

5) Logging date (except for twigs and branches smaller than 8 cm in diameter);

6) If basic processing activities take place in the forest, the date and volume (or quantity) produced; and

7) Whether or not the material was sold as FSC certified (If yes, record the CoC certificate number and contact information of the customer.)

8.5.3 Sales invoices or similar documentation are kept for a minimum of five years for all products sold with an FSC claim, which identify at a minimum, the following information:

1) Name and address of purchaser;

2) The date of sale;

3) Common and scientific species name (Latin name);

4) Product description;

5) The volume (or quantity) sold;

6) Forest Management/Chain of Custody certificate code; and

7) FSC claim Product Group;

8) The FSC Claim “FSC 100%” identifying products sold as FSC certified.

## *PRINCIPLE* 9: HIGH CONSERVATION VALUES**

**The *Organization** shall maintain and/or enhance the *High Conservation Values** in the *Management Unit** through applying the *precautionary approach**.**

**9.1.** ***The Organization**, through *engagement** with *affected stakeholders**, *interested stakeholders** and other means and sources, shall assess and record the presence and status of the following *High Conservation Values** in the *Management Unit**, proportionate to the *scale, intensity and risk** of impacts of management activities, and likelihood of the occurrence of the *High Conservation Values**:

**HCV 1 – Species diversity. Concentrations of *biological diversity** including endemic species, and *rare**, *threatened** or endangered species, that are *significant** at global, regional or national levels.

**HCV 2 – *Landscape**-level *ecosystems** and mosaics*. Intact Forest Landscapes** and 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.

**HCV 3 – *Ecosystems** and habitats*. *Rare*, threatened*, or endangered ecosystems*, habitats** or *refugia*.*

**HCV 4 – *Critical* ecosystem services**. Basic *ecosystem services** in *critical** situations, including *protection** of water catchments and control of erosion of vulnerable soils and slopes.

**HCV 5 – Community needs. Sites and resources fundamental for satisfying the basic necessities of *local communities** or *Indigenous Peoples** (for livelihoods, health, nutrition, water, etc.), identified through *engagement** with these communities or *Indigenous Peoples**.

**HCV 6 – 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**.

9.1.1 The assessment of High Conservation Value is completed based on FSC National High Conservation Values (HCV) Framework of China (Annex 6), and the location and status of High Conservation Value Categories 1-6 defined in Criterion 9.1, the High Conservation Value Areas they rely upon, and their condition are recorded.

LSF 9.1.1.1 The Organization implements on-site HCV assessments.

**Guidance note for SSF:** The Organization may use FSC guidance and technical materials for small, low intensity and community forests (respectively) to carry out the HCV assessment:

1) Briefing Note 4: High Conservation Values;
2) Briefing Note 5: Simple monitoring methods;
3) FSC step-by-step guide.

See Annex 7 for details.

9.1.2 HCV assessments include identification of Intact Forest Landscapes, as of January 1, 2017.

9.1.3. The assessment uses results from culturally appropriate engagement with affected rights holders and affected and interested stakeholders with an interest in the conservation of the High Conservation Values.

**9.2. *The Organization** shall develop effective strategies that maintain and/or enhance the identified *High Conservation Values**, through *engagement** with *affected stakeholders**, *interested stakeholders** and experts.**

9.2.1 Threats to High Conservation Values are identified using Best Available Information.

9.2.2 Management strategies and actions are developed to maintain and/or enhance the identified High Conservation Values and to maintain associated High Conservation Value Areas prior to implementing potentially harmful management activities.

**Guidance note for SSF:** The Organization may use FSC guidance and technical materials for small, low intensity and community forests (respectively) to develop strategies:

1) Briefing Note 4: High Conservation Values;
2) Briefing Note 5: Simple monitoring methods;
3) FSC step-by-step guide.

See Annex 7 for details.

9.2.3 Affected rights holders, affected and interested stakeholders, and experts are engaged in the development of management strategies and actions to maintain and/or enhance the identified High Conservation Values.

9.2.4 Management strategies are developed to protect core areas.

9.2.5 More than 90% of each Intact Forest Landscape within a Management Unit is designated as core area.

9.2.6 The strategies developed are effective to maintain and/or enhance the High Conservation Values.

9.2.7 Management strategies allow limited industrial activity within core areas only if all effects of industrial activity including fragmentation:

1) Are restricted to a very limited portion of the core area;

2) Do not reduce the core area below 50,000 ha, and

3) Will produce clear, substantial, additional, long-term conservation and social benefits.

**9.3. *The Organization** shall implement strategies and actions that maintain and/or enhance the identified *High Conservation Values**. These strategies and actions shall implement the *precautionary approach** and be proportionate to the *scale, intensity and risk** of management activities.**

9.3.1 The High Conservation Values and the High Conservation Value Areas on which they depend are maintained and/or enhanced, including by implementing the strategies developed.

9.3.2 The strategies and actions prevent damage and avoid risks to High Conservation Values, even when the scientific information is incomplete or inconclusive, and when the vulnerability and sensitivity of High Conservation Values are uncertain.

**Guidance note:** The strategies and actions may include, where appropriate, the cancelation of planned activities and the cessation of ongoing activities.

9.3.3 Core areas are protected consistent with Criterion 9.2.

9.3.4 Limited industrial activity in core areas is consistent with Indicator 9.2.7.

9.3.5 Activities that harm High Conservation Values cease immediately and actions are taken to restore and protect the High Conservation Values.

**9.4. *The Organization** shall demonstrate that periodic monitoring is carried out to assess changes in the status of *High Conservation Values**, and shall adapt its management strategies to ensure their effective *protection**. The monitoring shall be proportionate to the *scale, intensity and risk** of management activities, and shall include *engagement** with *affected stakeholders**, *interested stakeholders** and experts.**

9.4.1 A program of periodic monitoring assesses:

1) Implementation of strategies;

2) The status of High Conservation Values including High Conservation Value Areas on which they depend; and

3) The effectiveness of the management strategies and actions for the protection of High Conservation Values to fully maintain and/or enhance the High Conservation Values.

**Guidance note for SSF:** The Organization may use FSC guidance and technical materials for small, low intensity and community forests (respectively) to design monitoring programs:

1) Briefing Note 4: High Conservation Values;
2) Briefing Note 5: Simple monitoring methods;
3) FSC step-by-step guide.

See Annex 7 for details.

9.4.2 The monitoring program includes engagement with affected rights holders, affected and interested stakeholders and experts.

SSF 9.4.2 The monitoring program includes engagement with affected rights holders and affected and interested stakeholders.

9.4.3 The monitoring program has sufficient scope, detail and frequency to detect changes in High Conservation Values relative to the initial assessment and status identified for each High Conservation Value.

LSF 9.4.3.1 The Organization designs and implements monitoring programs that measure the effectiveness of all of their management activities, including those that require data collection.

**Guidance note for SSF:** Small Organizations may use FSC guidance and technical materials for small, low intensity and community forests (respectively) to design monitoring programs:

1) Briefing Note 4: High Conservation Values;
2) Briefing Note 5: Simple monitoring methods;
3) FSC step-by-step guide.

See Annex 7 for details.

9.4.4 Management strategies and actions are adapted when monitoring or other new information shows that these strategies and actions are ineffective to ensure the maintenance and/or enhancement of High Conservation Values.

## *PRINCIPLE** 10: IMPLEMENTATION OF MANAGEMENT ACTIVITIES

**Management activities conducted by or for *The Organization** for the *Management Unit** shall be selected and implemented consistent with *The Organization**'s economic, environmental and social policies and *objectives** and in compliance with the *Principles** and *Criteria** collectively.**

**10.1. After harvest or in accordance with the *management plan**, *The Organization** shall, by natural or artificial regeneration methods, regenerate vegetation cover in a timely fashion to pre-harvesting or more *natural conditions**.**

10.1.1 Harvested sites are regenerated in a timely manner that:

1) Protects affected environmental values; and

2) Is suitable to recover overall pre-harvest or *natural forest** composition and structure.

10.1.2 Regeneration activities are implemented in a manner that:

1) For harvest of existing plantations, regenerate to the vegetation cover that existed prior to the harvest or to more natural conditions using ecologically well-adapted species;

2) For harvest of *natural forests**, regenerate to pre-harvest or to more natural conditions; or

3) For harvest of degraded *natural forests**, regenerate to more natural conditions.

**10.2. *The Organization** shall use species for regeneration that are ecologically well adapted to the site and to the *management objectives**. *The Organization** shall use *native species** and local *genotypes** for regeneration, unless there is clear and convincing justification for using others.**

10.2.1 Species chosen for regeneration are ecologically well-adapted to the site, are native species and are of local provenance, unless clear and convincing justification is provided for using non-local genotypes or non-native species.

**Guidance note:** Rationales for the use of non-local genotypes or non-native species may include:

1) Growth rates not meeting management objectives;

2) Yields not being viable for the local species;

3) Native species and/or local genotypes becoming extinct;

4) Native species and/or local genotypes not being resistant to disease and pests;

5) Site stresses such as water;

6) Climate change adaptation;

7) Capacity to stock carbon, or

8) Afforestation of degraded agriculture and range lands

10.2.2 Species chosen for regeneration are consistent with the regeneration objectives and with the management objectives.

**10.3. *The Organization** shall only use *alien species** when knowledge and/or experience have shown that any invasive impacts can be controlled and effective mitigation measures are in place.**

10.3.1 Alien species are used only when direct experience and/or the results of scientific research demonstrate that invasive impacts can be controlled.

10.3.2 Alien species are used only when effective mitigation measures are in place to control their spread outside the area in which they are established.

10.3.3 The spread of invasive species introduced by The Organization is controlled.

10.3.4 Management activities are implemented, preferably in cooperation with separate regulatory bodies where these exist, with an aim to control the invasive impacts of alien species that were not introduced by the Organization.

**10.4. *The Organization** shall not use *genetically modified organisms** in the Management Unit*.**

10.4.1 Genetically modified organisms are not used.

10.4.1.1 The Organization does not use either of the two varieties of genetically modified trees are officially approved for purposes of commercial planting; namely, *Populus nigra* (poplar-12) and *Populus alda tomentosa* cv.741 (poplar-741) for insect resistance.

**10.5. *The Organization** shall use *silvicultural** practices that are ecologically appropriate for the vegetation, species, sites and *management objectives**.**

10.5.1 Silvicultural practices are implemented that are ecologically appropriate for the vegetation, species, sites and management objectives.

**10.6. *The Organization** shall minimize or avoid the use of *fertilizers**. When *fertilizers** are used, *The Organization** shall demonstrate that use is equally or more ecologically and economically beneficial than use of *silvicultural** systems that do not require fertilizers, and prevent, mitigate, and/or repair damage to *environmental values**, including soils.**

10.6.1 The use of fertilizers is minimized or avoided.

10.6.2 When fertilizers are used, their ecological and economic benefits are equal to or higher than those of silvicultural systems that do not require fertilizers.

10.6.2.1 Environmental and social impact assessments of fertilizer use are conducted.

10.6.2.2 When conducting an environmental impact assessment, indicators of negative impacts of fertilizer use on the following are included:

1) soil;

2) greenhouse gas emissions;

3) water bodies.

10.6.3 When fertilizers are used, their types; rates, and frequencies; and site of application are documented.

10.6.4 When fertilizers are used, environmental values are protected, including through implementation of measures to prevent damage.

10.6.5 The use of fertilizers in buffer zones of rare plant communities, riparian zones, watercourses and water bodies is forbidden.

10.6.6 Damage to environmental values resulting from fertilizer use is mitigated or repaired.

**10.7. *The Organization** shall use integrated pest management and *silviculture** systems which avoid, or aim at eliminating, the use of chemical *pesticides**. *The Organization** shall not use any chemical *pesticides** prohibited by FSC policy. When *pesticides** are used, *The Organization** shall prevent, mitigate, and/or repair damage to *environmental values** and human health.**

10.7.1 Integrated pest management, including selection of silviculture systems, is used to avoid, or aim to eliminate the frequency, extent, and amount of chemical pesticide applications, and result in non-use or overall reductions in applications.

10.7.2 When selecting integrated pest management options, preference is given, as a matter of principle, to:

1) Management strategies to avoid pest problems;

2) Non-chemical methods over chemical pesticides;

3) Non-FSC HHPs over FSC HHPs;

4) FSC restricted HHPs over FSC highly restricted HHPs.

10.7.2.1 If the use of highly hazardous pesticides is unavoidable, only the pesticides which are listed in Annex 9.2 and 9.3 can be used.

10.7.3 The decision-making process for selecting pest management options is formulated according to the principle of integrated pest management.

10.7.4 If chemical pesticides are determined to be used, the *Environmental and Social Risk Assessment** at the management unit level are carried out before use, and the assessment results are incorporated in the site operational plan.

**Guidance note:** Annex 3 of the FSC Pesticides Policy specifies the procedure for the use of prohibited highly hazardous pesticides in emergency situations or by government orders.

10.7.4.1 *Environmental and Social Risk Assessment** shall meet the requirements of FSC-POL-30-001 V3-0 FSC Pesticides Policy clause 4.12. Organizations can refer to *Environmental and Social Risk Assessment** Template (See Annex 9.4-9.6).

**Guidance note:** Annex 9.4 provides an example for conducting ESRA to a non-FSC HHP. Annex 9.5 provides an example for conducting ESRA to a FSC Restricted Highly Hazardous Pesticides. Annex 9.6 provides an example for conducting ESRA to a FSC Restricted Hazardous Pesticides.

10.7.4.2: All the necessary information for establishing the *Environmental and Social Risk Assessment** shall be collected from http://www.chinapesticide.org.cn/.

**Guidance note 1:** The necessary information includes but is not limited to:

1) Risk description: Hazard group, GHS risk type, control measures.
2) Application place
3) Control object
4) Dosage
5) Application method
6) Technical requirements

**Guidance note 2:** Pesticide use guidance provides the guide on collecting necessary information to establish ESRA.[1]

Refer to Registration and use of FSC HHPs in China to get more information of each pesticide listed on Annex 9.2 and 9.3. [2]

10.7.5 *Affected rights holders** and affected and interested stakeholders are provided with an opportunity for engagement in the development of the *Environmental and Social Risk Assessment** in a culturally appropriate manner.

10.7.6 The *Environmental and Social Risk Assessment** is reviewed and, if necessary, revised at least every 5 years.

10.7.7 The decision-making process is in place for selecting options for integrated pest management considers strategies that present the least social and environmental damages, more effectiveness, and equal or greater social and environmental benefits.

10.7.8 Records of pesticide usage are maintained, including trade name, active ingredient, quantity of active ingredient used, period of use, location and area of use, and reason for use.

[1] (农药使用指南（含示例）-FSC 国家办公室-2023.09.10 (Pesticide Use Guide Including Examples – FSC National Office – 2023.09.10)).

[2] (FSC 高危农药清单中农药在中国的使用情况 (Usage of Pesticides from FSC's Highly Hazardous Pesticides List in China))

10.7.9 The use of pesticides complies with the ILO document “Safety in the use of chemicals at work” regarding requirements for the transport, storage, handling, application and emergency procedures for cleanup following accidental spillages.

10.7.10 If pesticides are used, application methods minimize quantities used, while achieving effective results, and provide effective protection to surrounding landscapes.

10.7.11 Damage to environmental values or human health from pesticide use is prevented and mitigated or repaired where damage occurs.

10.7.12 When pesticides are used:

1) The selected pesticide, application method, timing and pattern of use offers the least risk to humans and non-target species; and

2) Objective evidence demonstrates that the pesticide is the only effective, practical and cost-effective way to control the pest.

**10.8. *The Organization** shall minimize, monitor* and strictly control the use of *biological control agents** in accordance with *internationally accepted scientific protocols**. When biological control agents* are used, *The Organization** shall prevent, mitigate, and/or repair damage to *environmental values**.**

10.8.1 The use of biological control agents is minimized, monitored and controlled.

10.8.2 Use of biological control agents complies with internationally accepted scientific protocols.

**Guidance note:** Internationally accepted scientific protocols include but are not limited to:

1) FSC Guide To Integrated Pest, Disease and Weed Management in FSC certified forests and plantations (2009);

2) FAO Code of Conduct for the Import and Release of Exotic Biological Control Agents.

10.8.3 The use of biological control agents is recorded including type, quantity, period, location and reason for use.

10.8.4 Damage to environmental values caused by the use of biological control agents is prevented and mitigated or repaired where damage occurs.

**10.9. *The Organization** shall assess *risks** and implement activities that reduce potential negative impacts from *Natural Hazards** proportionate to *scale, intensity, and risk**.**

**Guidance note:** Natural hazards common in China include flooding, landslides, storms, fire, pest diseases, etc.

10.9.1 Potential negative impacts of natural hazards on infrastructure, forest resources and communities in the Management Unit are assessed.

10.9.2 Management activities mitigate these impacts.

10.9.3 The risk for management activities to increase the frequency, distribution or severity of natural hazards is identified for those hazards that may be influenced by management.

10.9.4 Management activities are modified and/or measures are developed and implemented that reduce the identified risks.

10.9.5 In the area where the management unit is located, The Organization considers trends in climate change and the benefits and losses due to climate change, and develops measures to prevent and mitigate the negative environmental, economic and social impacts of climate change.

**Guidance note:** Due to the impact of climate change, the original climate characteristics of the local area may change; for example, areas that previously had a rainy season in the area which are have now or have been experiencing drought. If the organization knows this information, it can make preparations and adjust its management activities in advance.

Non-SSF 10.9.6 The Organization establishes and implements a system of forest fire prevention.

LSF 10.9.6: Forest fire belts are set in the Management Unit and surrounding area according to local fire risk level and other factors.

10.9.7 In case of forest fire, the Organization cooperates with local government departments to carry out forest fire fighting.

**10.10. *The Organization** shall manage *infrastructural development**, transport activities and *silviculture** so that water resources and soils are protected, and disturbance of and damage to *rare and threatened species*, habitats*, ecosystems** and *landscape values** are prevented, mitigated and/or repaired.**

10.10.1 Development, maintenance and use of infrastructure, as well as transport activities, are managed to protect environmental values identified in Criterion 6.1.

**Guidance note:** Written technical regulations can be established for forest road construction to reduce water and soil erosion and waste of forest land resources.

10.10.2 Silviculture activities are managed to ensure protection of the environmental values identified in Criterion 6.1.

HIF 10.10.2.1 The management activities of burning land for afforestation, excessive soil preparation, multiple generations of continuous planting, large amount of fertilizer use, and rotation periods that are too short should be reduced.

10.10.3 Disturbance or damages to water courses, water bodies, soils, rare and threatened species, habitats, ecosystems and landscape values are prevented, mitigated, repaired and restored in a timely manner, and management activities modified to prevent further damage.

10.10.3.1 Appropriate remedial measures are taken in order to prevent significant water and soil erosion during the forest road construction and soil preparation.

**10.11.** ***The Organization**** **shall manage activities associated with harvesting and extraction of timber and** ***non-timber forest products**** **so that** ***environmental values**** **are conserved, merchantable waste is reduced, and damage to other products and services is avoided.**

10.11.1 Harvesting and extraction practices for timber and non-timber forest products are implemented in a manner that conserves environmental values as identified in Criterion 6.1 and High Conservation Values identified in Criteria 9.1 and 9.2.

10.11.2 Harvesting practices optimize the use of forest products and merchantable materials.

10.11.3 Amounts of dead and decaying biomass and forest structure are retained to conserve environmental values.

10.11.4 Harvesting practices avoid damage to standing residual trees, residual woody debris on the ground and other environmental values.

10.11.5 High-grading harvesting of forest resources does not take place.

**Guidance note:** High grading is a selective type of timber harvesting that removes the highest grade of timber (i.e. the most merchantable stems) in a particular forest area.

**10.12.** ***The Organization**** **shall dispose of** ***waste materials**** **in an environmentally appropriate manner.**

10.12.1 Collection, clean up, transportation and disposal of all waste materials is done in an environmentally appropriate way that conserves environmental values as identified in Criterion 6.1.

**Guidance note:** Waste products include:

1) Hazardous waste, including chemical waste and batteries;
2) Containers;
3) Motor and other fuels and oils;
4) Rubbish including metals, plastics and paper;
5) Abandoned buildings, machinery and equipment; and
6) Domestic waste.

# G ANNEXES

(Normative section)

## Annex 1 Minimum list of applicable laws, regulations and nationally ratified international treaties, conventions and agreements (Principle 1)

The following is the minimum list of applicable laws, regulations and nationally ratified international treaties, conventions and agreements, in FSC-STD-60-004 (International Generic Indicators). This is not an exhaustive list. If additional legislation exists, CHs shall also comply with it.

**NOTE:** For the laws, regulations and nationally-ratified treaties, conventions and agreements without a version number or invalid, the latest edition of the referenced document (including any amendments) applies.

| Category | Law/ Regulation |
|---|---|
| **1. Legal rights to harvest** | |
| **1.1. Land tenure and management rights** | Legislation covering land tenure rights, including customary rights as well as management rights, that includes the use of legal methods to obtain tenure rights and management rights. It also covers legal business registration and tax registration, including relevant legally required licences.<br>o Forest Law of the People's Republic of China (2019)<br>o Land Management Law of the People's Republic of China (2019)<br>o Company Law of the People's Republic of China (2018)<br>o Enterprise Income Tax Law of People's Republic of China (2018)<br>o Rural Land Contract Law of the People's Republic of China (2018)<br>o Regulation on the Implementation of the Forestry Law of the People's Republic of China (2018)<br>o Regulation on the Implementation of the Land Management Law of the Peoples Republic of China （2021）<br>o Processing Measures for the Disputes of Forest Trees and Forest Land Tenure and Ownership (1996)<br>o Administration Measures for Forest and Forestland Tenure Registration (2011)<br>o Property Law of the People's Republic of China (2007)<br>o Regulations Governing Examination and Approval of Using Forest Land in Construction Projects (2016) |
| **1.2. Concession licences** | Legislation regulating procedures for issuing forest concession licences, including the use of legal methods to obtain concession licences. Bribery, corruption and nepotism are particularly well-known issues that are connected with concession licences. |

| Category | Law/ Regulation |
|---|---|
| | ○ Forest Law of the People's Republic of China (2019)<br>○ Regulation on the Implementation of the Forestry Law of the People's Republic of China (2018)<br>○ Processing Measures for the Disputes of Forest Trees and Forest Land Tenure and Ownership (1996)<br>○ Administration Measures for Forest and Forestland Tenure Registration (2011)<br>○ Law of the People's Republic of China on the Mediation and Arbitration of Rural Land Contract Disputes (2009) |
| **1.3. Management and harvesting planning** | Any national or sub-national legal requirements for Management Planning, including conducting forest inventories, having a forest management plan and related planning and monitoring, impact assessments, consultation with other entities, as well as approval of these by legally competent authorities.<br>○ Forest Law of the People's Republic of China (2019)<br>○ Regulation on the Implementation of the Forestry Law of the People's Republic of China (2018)<br>○ Management Rules of Felling and Regeneration of Forest （2011）<br>○ Stock-breeding Law of the People‘s Republic of China（2015）(Only for NTFPs)<br>○ Seed Law of the People’s Republic of China（2021）(Only for NTFPs)<br>○ Management Measures for Edible Fungi Spawn（2015）(Only for NTFPs)<br>○ Management Measures for Beekeeping（2011）(Only for NTFPs)<br>○ Regulations on Quality and Safety of Forest Products in Jiangxi Province（2019）(Only for NTFPs)<br>○ Regulations on Quality and Safety of Forest Products in Hunan Province（2020）(Only for NTFPs)<br>○ Administrative Measures on Quality and Safety of Forest Products in Gansu Province （2013）(Only for NTFPs) |
| **1.4. Harvesting permits** | National or sub-national laws and regulations regulating procedures for issuing harvesting permits, licences or other legal documents required for specific harvesting operations. This includes the use of legal methods to obtain the permits. Corruption is a well-known issue that is connected with the issuing of harvesting permits.<br>○ Forest Law of the People's Republic of China (2019)<br>○ Regulation on the Implementation of the Forestry Law of the People's Republic of China (2018)<br>○ Management Rules of Felling and Regeneration of Forest（2011）<br>○ Convention on International Timber Agreement |

| Category | Law/ Regulation |
|---|---|
| | ○ Regulations on Protection and Administration of Wild Herbs Resources（1987）(Only for NTFPs)<br>○ Management Measures for Edible Fungi Spawn（2015）(Only for NTFPs)<br>○ Management Measures for Beekeeping（2011）(Only for NTFPs) |
| **2. Taxes and fees** | |
| **2.1. Payment of royalties and harvesting fees** | Legislation covering payment of all legally required forest harvesting specific fees such as royalties, stumpage fees and other volume-based fees. This includes payments of the fees based on the correct classification of quantities, qualities and species. Incorrect classification of forest products is a well-known issue that is often combined with bribery of officials in charge of controlling the classification.<br>○ Forest Law of the People's Republic of China (2019)<br>○ Regulation on the Implementation of the Forestry Law of the People's Republic of China (2018)<br>○ Management Rules of Felling and Regeneration of Forest（2011）<br>○ Tax Collection and Administration Law of the People's Republic of China（2015）<br>○ Enterprise Income Tax Law of People's Republic of China （2018） |
| **2.2. Value added taxes and other sales taxes** | Legislation covering different types of sales taxes which apply to the material being sold, including the sale of material as growing forest (standing stock sales).<br>○ Enterprise Income Tax Law of People's Republic of China (2018) |
| **2.3. Income and profit taxes** | Legislation covering income and profit taxes related to profit derived from the sale of forest products and harvesting activities. This category is also related to income from the sale of timber and does not include other taxes generally applicable for companies and is not related to salary payments.<br>○ Enterprise Income Tax Law of People's Republic of China (2018) |
| **3. Timber harvesting activities** | |
| **3.1. Timber harvesting regulations** | Any legal requirements for harvesting techniques and technology including selective cutting, shelter wood regenerations, clear felling, transport of timber from the felling site, seasonal limitations, etc. Typically this includes regulations on the size of felling areas, minimum age and/or diameter for felling activities, and elements that shall be preserved during felling, etc. Establishment of skidding or hauling trails, road construction, drainage systems and bridges, etc., shall also be considered as well as the planning and monitoring of harvesting activities. Any legally binding codes for harvesting practices shall be considered.<br>○ Forest Law of the People's Republic of China (2019) |

| Category | Law/ Regulation |
|---|---|
| | ○ Regulation on the Implementation of the Forestry Law of the People's Republic of China (2018)<br>○ Regulations on Protection and Administration of Wild Herbs Resources（1987）(Only for NTFPs) |
| **3.2. Protected sites and species** | International, national, and sub national treaties, laws, and regulations related to protected areas, allowable forest uses and activities, and/or rare, threatened, or endangered species, including their habitats and potential habitats.<br>○ Convention on Biological Diversity<br>○ United Nations Framework Convention on Climate Change<br>○ Convention on Wetlands of International Importance<br>○ International Convention for the Protection of new Varieties of Plants<br>○ United Nations Convention on the Prevention and Control of Desertification in the Countries with Severe Drought and / or Desertification<br>○ Forest Law of the People's Republic of China (2019)<br>○ Law of the People's Republic of China on the Protection of Wildlife (2018)<br>○ Lists of Wildlife under Special State Protection (2021)<br>○ China's Red List of Biodiversity - Higher Plant Volume (2013)<br>○ China's Red List of Biodiversity - Vertebrate Volume (2015)<br>○ Chinese Rare and Endangered Animal List<br>○ Regulations of the People's Republic of China for the Implementation of the Protection of Terrestrial Wildlife (2016)<br>○ Regulations of the People's Republic of China on the Protection of Wild Plants (2017)<br>○ Regulations of the People's Republic of China on Natural Reserves (2017)<br>○ Environmental Protection Law of the People's Republic of China (2014)<br>○ Law of the People's Republic of China on Environmental Impact Assessment (2018)<br>○ Regulation on the Implementation of the Forestry Law of the People's Republic of China (2018)<br>○ Measures for the Administration of the Nature Reserves of Forest and Wild Animal Types<br>○ Measures for the Division of the National Public Welfare Forest (2017) |

| Category | Law/ Regulation |
| --- | --- |
| **3.3. Environmental requirements** | National and sub national laws and regulations related to the identification and/or protection of environmental values including but not limited to those relating to or affected by harvesting, acceptable levels for soil damage, establishment of buffer zones (e.g., along water courses, open areas and breeding sites), maintenance of retention trees on the felling site, seasonal limitations of harvesting time, environmental requirements for forest machineries, use of pesticides and other chemicals, biodiversity conservation, air quality, protection and restoration of water quality, operation of recreational equipment, development of non-forestry infrastructure, mineral exploration and extraction, etc.<br>○ Environmental Protection Law of the People's Republic of China (2014)<br>○ Law of the People's Republic of China on Combating Desertification (2018)<br>○ Law of the People's Republic of China on Water and Soil Conservation (2010)<br>○ Water Law of the People's Republic of China (2016)<br>○ Law of the People's Republic of China on the Prevention and Control of Water Pollution (2017)<br>○ Law of the People's Republic of China on the Prevention and Control of Soil Pollution (2018)<br>○ National Defence Flood Law of the people's Republic of China (2016)<br>○ Regulations of the People's Republic of China on Flood Prevention and Control (2011)<br>○ Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution (2018)<br>○ Law of the People's Republic of China on the Prevention and Control of Solid Waste Pollution (2020)<br>○ Law of the people's Republic of China on Environmental Impact Assessment (2018)<br>○ Measures for the Administration of Environmental Impact Assessment Qualifications for Construction Projects (2015)<br>○ Regulations of the People's Republic of China on Natural Reserves (2017)<br>○ Regulations of the People's Republic of China on the Prevention and Control of Forest Diseases and Insect Pests (1989)<br>○ Rules for the Implementation of the Law of the People's Republic of China on Water and Soil Conservation (2011)<br>○ Regulations of the People's Republic of China on the Protection of New Varieties of Plants (2014)<br>○ The Detailed Rules for the Implementation of the People's Republic of China on the Protection of New Varieties of Plants (Forestry part) (2011) |

| Category | Law/ Regulation |
|---|---|
| | ○ Regulations for Returning Farmland to Forests (2016)<br>○ Pesticide Management Regulations (2017)<br>○ Regulations on the Safety Administration of Hazardous Chemicals (2013)<br>○ Standard for Pollution Control on the Landfill Site for Domestic Waste (GB16889-2008)<br>○ Measures for the Administration of the Nature Reserves of Forest and Wild Animal Types (1985)<br>○ Measures for the Division of the National Public Welfare Forest (2017)<br>○ Ecological Forest Construction Guide (GBT18337.1-2001)<br>○ Vienna Convention for the Protection of the Ozone Layer<br>○ Stockholm Convention on Persistent Organic Pollutants<br>○ Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade<br>○ Montreal Protocol on Substances that Deplete the Ozone Layer<br>○ Administrative Measures for the Recycling and Treatment of Pesticide Packaging Wastes (2020)<br>○ Measures for the Administration of Veterinary Drug Labels and Instructions (2007)<br>○ Regulations on Quality and Safety of Forest Products in Jiangxi Province（2019）(Only for NTFPs)<br>○ Regulations on Quality and Safety of Forest Products in Hunan Province（2020）(Only for NTFPs)<br>○ Administrative Measures on Quality and Safety of Forest Products in Gansu Province （2013）(Only for NTFPs) |
| **3.4. Health and safety** | Legally required personal protection equipment for persons involved in harvesting activities, implementation of safe felling and transport practices, establishment of protection zones around harvesting sites, safety requirements for machinery used, and legally required safety requirements in relation to chemical usage. The health and safety requirements that shall be considered relevant to operations in the forest (not office work, or other activities less related to actual forest operations).<br>○ China Ratified ILO conventions (C11, C14, C16, C19, C22, C23, C26, C27, C32, C45, C80, C100, C111, C122, C138, C144, C150, C155, C159, C167, C172 and C182)<br>○ Code of Practice on Safety in the Use of Chemicals at Work<br>○ Labour Law of the People's Republic of China (2018)<br>○ Law of the People's Republic of China on Trade Unions (2021)<br>○ Law of the People's Republic of China on Safe Production (2021) |

| Category | Law/ Regulation |
|---|---|
| | ○ Forest Fire Prevention Act (2008)<br>○ Pesticide Management Regulation (2017)<br>○ Regulation on the Safety Administration of Hazardous Chemicals (2013)<br>○ Health and safety in ILO Forest Work (1998)<br>○ Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases (2018)<br>○ Measures for the Administration of Pesticide Labels and Instructions (2017) |
| **3.5. Legal employment** | Legal requirements for employment of personnel involved in harvesting activities including requirements for contracts and working permits, requirements for obligatory insurance, requirements for competence certificates and other training requirements, and payment of social and income taxes withheld by the employer. Also covered are the observance of minimum working age and minimum age for personnel involved in hazardous work, legislation against forced and compulsory labour, and discrimination and freedom of association.<br>○ China Ratified ILO conventions (C11, C14, C16, C19, C22, C23, C26, C27, C32, C45, C80, C100, C111, C122, C138, C144, C150, C155, C159, C167, C172 and C182)<br>○ Labour Law of the People's Republic of China (2018)<br>○ Labour Contract Law of the People's Republic of China（2012）<br>○ Insurance Law of the People's Republic of China (2015)<br>○ Law of the People's Republic of China on Trade Unions (20219)<br>○ http://www.docin.com/p-1162034.htmlNotice of the Ministry of Labour on the Implementation of the Minimum Wage Guarantee System (1994)<br>○ Law of the People's Republic of China on the Guarantee of the Rights and Interests of Women (2018)<br>○ Special Provisions on the Labour Protection of Female Employees (2012) |
| **4. Third parties' rights** | |
| **4.1. Customary rights** | Legislation covering customary rights relevant to forest harvesting activities, including requirements covering the sharing of benefits and indigenous rights.<br>○ Law of the People's Republic of China on Regional National Autonomy (2001)<br>○ Rural Land Contract Law of the People's Republic of China (2018)<br>○ Law of the People's Republic of China on the Mediation and Arbitration of Rural Land Contract Disputes (2009)<br>○ Regulations of the People's Republic of China on the Implementation |

| Category | Law/ Regulation |
|---|---|
| | of the Land Administration Law (2021)<br>o Processing Measures for the Disputes of Forest Trees and Forest Land Tenure and Ownership (1996)<br>o Administration Measures for Forest and Forestland Tenure Registration (2011) |
| **4.2. Free Prior and Informed Consent** | Legislation covering “free prior and informed consent” in connection with the transfer of forest management rights and customary rights to The Organization in charge of the harvesting operation.<br>o Law of the People's Republic of China on Regional National Autonomy (2001)<br>o Rural Land Contract Law of the People's Republic of China (2018)<br>o Law of the People's Republic of China on the Mediation and Arbitration of Rural Land Contract Disputes (2010)<br>o Regulations Governing Examination and Approval of Using Occupation and Requisition of Forest Land in Construction Projects (2016)Processing Measures for the Disputes of Forest Trees and Forest Land Tenure and Ownership (1996)<br>o Administration Measures for Forest and Forestland Tenure Registration (2011)<br>o Villager Committee Organization Law of P.R. China (2018) |
| **4.3. Indigenous Peoples’ rights** | Legislation that regulates the rights of Indigenous Peoples as far as it is related to forestry activities. Possible aspects to consider are land tenure, and rights to use certain forest related resources and practice traditional activities, which may involve forest lands.<br>o Law of the People's Republic of China on Regional National Autonomy (2001)<br>o Rural Land Contract Law of the People's Republic of China (2018)<br>o Regulations of the People’s Republic of China on the Implementation of the Land Administration Law（2021）<br>o Processing Measures for the Disputes of Forest Trees and Forest Land Tenure and Ownership (1996)<br>o Administration Measures for Forest and Forestland Tenure Registration (2011) |
| **5. Trade and transport**<br>**NOTE**: This section covers requirements for forest management operations and NTFPs management operations as well as processing and trade. | |
| **5.1. Classification of species, quantities, qualities** | Legislation regulating how harvested material is classified in terms of species, volumes and qualities in connection with trade and transport. Incorrect classification of harvested material is a well-known method to reduce or avoid payment of legally prescribed taxes and fees. |

| Category | Law/ Regulation |
|---|---|
| | ○ Measures for the Management of Forest Seed Quality (2006)<br>○ Measures for the Management of Forest Seed Packaging and Labelling (2016) |
| **5.2. Product Safety** | Including the quality and safety of NTFPs, pesticide residue detection, etc.<br>○ Law of the People's Republic of China on the Quality and Safety of Agricultural Products（2018）(Only for NTFPs)<br>○ Food Safety Law of the People's Republic of China（2021）(Only for NTFPs)<br>○ Law of the People's Republic of China on Product Quality（2018）(Only for NTFPs)<br>○ Stock-breeding Law of the People's Republic of China（2015）(Only for NTFPs)<br>○ Regulations on Quality and Safety of Forest Products in Jiangxi Province（2019）(Only for NTFPs)<br>○ Regulations on Quality and Safety of Forest Products in Hunan Province（2020）(Only for NTFPs)<br>○ Administrative Measures on Quality and Safety of Forest Products in Gansu Province （2013）(Only for NTFPs)<br>○ Notice of the General Office of the Ministry of Agriculture on Printing and Distributing the Inspection Catalogue of 37 Kinds of Pollution-free Agricultural Products, such as Solanaceous Vegetables (NBZ [2012] No. 8) (2012) (including honey) (Only for NTFP)<br>○ Maximum Residue Limits of Veterinary Drugs in Animal Food (No.235 of the Ministry of Agriculture of the People's Republic of China) (2002) (Only for NTFP) |
| **5.3. Trade and transport** | All required trading and transport permits shall exist as well as legally required transport documents which accompany the transport of wood from forest operations.<br>○ Forest Law of the People's Republic of China (2019)<br>○ Regulation on the Implementation of the Forestry Law of the People's Republic of China (2018)<br>○ Measures for quarantine examination and approval and supervision of imported forest and grass seeds and seedlings（2020） |
| **5.4. Offshore trading and transfer pricing** | Legislation regulating offshore trading. Offshore trading with related companies placed in tax havens, combined with artificial transfer prices is a well-known way to avoid payment of legally prescribed taxes and fees to the country of harvest and is considered to be an important source of funds that can be used for payment of bribery to the forest operations and personnel involved in the harvesting operation. Many countries have established legislation covering transfer pricing and offshore trading. It should be noted that only transfer pricing and offshore trading, as far as it is legally prohibited in the country, can be included here. |

| Category | Law/ Regulation |
|---|---|
| | ○ Customs Law of the People's Republic of China (2021)<br>○ Foreign Trade Act of the People's Republic of China (2016)<br>○ Measures for the Administration of Export Licence of Goods (2019)<br>○ Import and Export Commodity Inspection Law of the People's Republic of China (2021)<br>○ Regulations on the Administration of Import and Export of Goods (2001)<br>○ Entry and Exit Animal and Plant Quarantine Law of the People's Republic of China (2009)<br>○ Regulations on the Administration of Import and Export of Endangered Species of Wild Animals and Plants (2019)<br>○ Administrative Measures on Inspection and Quarantine of Honey for Export（2018）<br>○ Regulations on the Filing Management of Export Food Manufactory（2018） |
| **5.5. Custom regulations** | Custom legislation covering areas such as export/import licences and product classification (codes, quantities, qualities and species).<br>○ Entry and Exit Animal and Plant Inspection and Quarantine Law（2009）<br>○ Regulations of the People's Republic of China on the Implementation of the Entry and Exit Animal and Plant Quarantine Law (1996)<br>○ Measures for quarantine examination and approval and supervision of imported forest and grass seeds and seedlings（2020） |
| **5.6. CITES** | CITES permits (the Convention on International Trade in Endangered Species of Wild Fauna and Flora, also known as the Washington Convention).<br>○ Convention on International Trade in Endangered Species of Wild Fauna and Flora<br>○ Law of the People's Republic of China on the Protection of Wildlife (2018)<br>○ Regulations of the People's Republic of China for the Implementation of the Protection of Terrestrial Wildlife (2016)<br>○ Regulations of the People's Republic of China on the Protection of Wild Plants (2017)<br>○ Measures for the Administration of the Nature Reserves of Forest and Wild animal Types (1985)<br>○ China Biodiversity Red List - Higher Plant Volume (2013)<br>○ China Biodiversity Red List - Vertebrate Volume (2015)<br>○ Chinese Rare and Endangered Animal List |

| Category | Law/ Regulation |
|---|---|
| **6. Due diligence / due care** | |
| **6.1. Due diligence / due care procedures** | Legislation requiring due diligence/due care procedures, including, e.g., due diligence/due care systems, declaration obligations, and/or the keeping of trade related documents, etc.<br>○ Specific legislation covering due diligence requirements does not exist. Please refer to section 5 ,Trade and Transport' for trade related obligations. |
| **7. Ecosystem Services** | |
| | Legislation covering ecosystem services rights, including customary rights as well as management rights that include the use of legal methods to make claims and obtain benefits and management rights related to ecosystem services. National and subnational laws and regulations related to the identification, protection and payment for ecosystem services. Also includes legal business registration and tax registration, including relevant legal required licences for the exploitation, payment, and claims related to ecosystem services (including tourism).<br>○ Specific legislation covering ecosystem services and associated rights does not exist. |

## Annex 2A Training requirements for workers (Principle 2)

This list of training requirements is intended for those workers with specific job responsibilities related to the implementation of this standard.

Workers are able to:

1) Implement forest activities to comply with applicable legal requirements (Criterion 1.5);
2) Understand the content, meaning and applicability of the eight ILO Core Labour Conventions (Criterion 2.1);
3) Recognize and report on instances of sexual harassment and gender discrimination (Criterion 2.2);
4) Safely handle and dispose of hazardous substances to ensure that use does not pose health risks (Criterion 2.3);
5) Carry out their responsibilities for particularly dangerous jobs or jobs entailing a special responsibility (Criterion 2.5);
6) Identify where Indigenous Peoples have legal and customary rights related to management activities (Criterion 3.2);
7) Identify and implement applicable elements of UNDRIP and ILO Convention 169 (Criterion 3.4);
8) Identify sites of special cultural, ecological, economic, religious or spiritual significance to Indigenous Peoples and implement the necessary measures to protect them before the start of forest management activities to avoid negative impacts (Criterion 3.5 and Criterion 4.7);
9) Identify where local communities have legal and customary rights related to management activities (Criterion 4.2);
10) Carry out social, economic and environmental impact assessments and develop appropriate mitigation measures (Criterion 4.5);
11) Implement activities related to the maintenance and/or enhancement of declared ecosystem services when FSC Ecosystem Services Claims are used (Criterion 5.1);
12) Handle, apply and store pesticides (Criterion 10.7); and
13) Implement procedures for cleaning up spills of waste materials (Criterion 10.12).

## Annex 2B Personal protective equipment for workers

(Source: ILO Safety and health in forestry work, page 37)

✓ **means required to wear**

**Work clothing and protective equipment**

**Table 1. Personal protective equipment (PPE) appropriate for forestry operations**

| Parts of the body to be protected: | Feet | Legs | Trunk, arms, legs | Hands | Head | Eyes | Eyes/face | Hearing |
|---|---|---|---|---|---|---|---|---|
| PPE normally appropriate: | Safety boots or shoes[1] | Safety trousers[2] | Close-fitting clothing | Gloves | Safety helmet | Goggles | Visor (mesh) | Ear muffs[3] |
| **Operation** | | | | | | | | |
| *Planting*[4] | | | | | | | | |
| Manual | ✓ | | | ✓[5] | | | | |
| Mechanized | ✓ | | ✓ | | | | | ✓[6] |
| *Weeding/cleaning* | | | | | | | | |
| Smooth-edged tools | ✓ | | | ✓ | | ✓ | | |
| Handsaw | ✓ | | | ✓ | | | | |
| Chain-saw | ✓[7] | ✓ | ✓ | ✓[8] | ✓ | ✓ | ✓ | ✓ |
| Brush saw | | | | | | | | |
| - with metal blade | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| - with nylon filament | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| Rotating knife/flail | ✓ | | ✓ | ✓ | | | | ✓[6] |
| *Pesticide application* | To comply with those specified for the particular substance and application technique | | | | | | | |
| *Pruning*[*] | | | | | | | | |
| Hand tools | ✓[9] | | | ✓ | ✓[10] | ✓ | | |
| *Felling*[11] | | | | | | | | |
| Hand tools | ✓ | | ✓ | ✓[12] | ✓ | | | |
| Chain-saw | ✓[7] | ✓ | ✓ | ✓[8] | ✓ | | ✓ | ✓ |
| Mechanized | ✓ | | ✓ | | ✓ | | | ✓ |
| *Debarking* | | | | | | | | |
| Manual | ✓ | | | ✓ | | | | |
| Mechanized | ✓ | | ✓ | ✓ | | ✓ | | ✓[6] |
| *Splitting* | | | | | | | | |
| Manual | ✓ | | | ✓ | | ✓ | | |
| Mechanized | ✓ | | ✓ | ✓ | | ✓ | | ✓ |
| *Extraction* | | | | | | | | |
| Manual | ✓ | | | ✓ | ✓[13] | | | |
| Chute | ✓ | | | ✓ | ✓[13] | | | |
| Animal | ✓ | | | ✓ | ✓[13] | | | |
| Mechanized | | | | | | | | |
| - skidder | ✓ | | ✓ | ✓[14] | ✓ | | | ✓[6] |
| - forewarder | ✓ | | ✓ | | ✓ | | | ✓[6] |
| - cable crane | ✓ | | ✓ | ✓[14] | ✓ | | | ✓[6] |
| - helicopter | ✓ | | ✓[15] | ✓[14] | ✓[16] | ✓ | | ✓ |
| *Stacking/loading* | ✓ | | ✓ | ✓ | ✓ | | | ✓[6] |
| *Chipping* | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓[6] |
| *Tree climbing*[17] | | | | | | | | |
| Using a chain-saw | ✓[7] | ✓ | ✓ | ✓[8] | ✓[18] | ✓ | | ✓ |
| Not using a chain-saw | ✓ | | | | ✓ | | | |

Notes: [*] If pruning involves tree climbing above 3 m, a fall restricting device should be used. [1]With integrated steel toe for medium or heavy loads. [2]Safety trousers incorporating clogging material, in hot climates/weather chain-saw leggings or chaps may be used. Safety trousers and chap contain fibres that are inflammable and melt, and should

## Annex 3 Endangered Species Register

1) The organization shall refer to the China Biodiversity Red List issued by Ministry of Environmental Protection.
    - China Biodiversity Red List - higher plant volume: http://www.mep.gov.cn/gkml/hbb/bgg/201309/W020130917614244055331.pdf
    - China Biodiversity Red List – vertebrate volume: http://www.mep.gov.cn/gkml/hbb/bgg/201505/W020150526581939212392.pdf
2) List of China national key protected wild animals (2021): http://www.forestry.gov.cn/html/main/main_3954/20210225160347342521589/file/20210225160401102702964.pdf
3) List of China national key protected wild plants (2021): https://www.forestry.gov.cn/c/www/gkml/11057.jhtml

## Annex 4A Elements of the Management Plan

The development of management plan should aim to cultivate a healthy, stable, and efficient forest ecosystem, emphasizing the equal of protection, development, and utilization of forest resources; The implementation of management plan should be conducive to optimizing the structure of forest resources, improving forest productivity, maintaining the stability of forest ecosystems, and improving the overall function of forest ecosystems.

The annex lists all possible elements of the management plan. Different management units with different scale, intensity and risk shall determine the applicability according to the requirements in the corresponding indicators.

1) The results of assessments, including:
    i. Natural resources and environmental values, as identified in Principle 6 and Principle 9;
    ii. Social, economic and cultural resources and condition, as identified in Principle 6, Principle 2 to Principle 5 and Principle 9;
    iii. Intact Forest Landscapes and core areas, as identified in Principle 9
    iv. Indigenous cultural landscapes, as identified with affected rights holders in Principle 3 & Principle 9;
    v. Major social and environmental risks in the area, as identified in Principle 6, Principle 2 to Principle 5 and Principle 9; and
    vi. The maintenance and/or enhancement of ecosystem services for which promotional claims are made as identified in Criterion 5.1.
2) Programs and activities regarding:
    i. Workers' rights, occupational health and safety, gender equality, as identified in Principle 2;
    ii. Indigenous Peoples, community relations, local economic and social development, as identified in Principle 3, Principle 4 and Principle 5;
    iii. Stakeholder engagement and the resolution of disputes and grievances, as identified in Principle 1, Principle 2 and Principle 7;
    iv. Planned management activities and timelines, silvicultural systems used, typical harvesting methods and equipment, as identified in Principle 10;
    v. The rationale for harvesting rates of timber and other natural resources, as identified in Principle 5.
3) Measures to conserve and/or restore:
    i. Rare and threatened species and habitats;
    ii. Water bodies and riparian zones;
    iii. Landscape connectivity, including wildlife corridors;

iv. Declared ecosystem services as identified in Criterion 5.1;

v. Representative Sample Areas, as identified in Principle 6; and

vi. High Conservation Values, as identified in Principle 9.

4) Measures to assess, prevent, and mitigate negative impacts of management activities on:

i. Environmental values, as identified in Principle 6 and Principle 9;

ii. Declared Ecosystem services as identified in Criterion 5.1;

iii. Social Values and Indigenous cultural landscapes, as identified in Principle 2 to Principle 5 and Principle 9.

iv. Intact Forest Landscapes and core areas, as identified in Principle 9

5) A description of the monitoring program, as identified in Principle 8, including:

i. Growth and yield, as identified in Principle 5;

ii. Declared Ecosystem services as identified in Criterion 5.1;

iii. Environmental values, as identified in Principle 6

iv. Operational impacts, as identified in Principle 10;

v. High Conservation Values, as identified in Principle 9;

vi. Monitoring systems based on stakeholder engagement planned or in place, as identified in Principle 2 to Principle 5 and Principle 7;

vii. Maps describing the natural resources and land use zoning on the Management Unit.

viii. Description of the methodology to assess and monitor any development and land use options allowed in Intact Forest Landscapes and core areas including their effectiveness in implementing the precautionary approach;

ix. Description of the methodology to assess and monitor any development and land use options allowed in Indigenous cultural landscapes including their effectiveness in implementing the precautionary approach; and

x. Global Forest Watch map, or more accurate national or regional map, describing the natural resources and land use zoning on the Management Unit, including the Intact Forest Landscapes core areas.

## Annex 4B Framework for Planning and Monitoring (example)

The annex lists possible documents and monitoring elements. Different management units with different scale, intensity and risk shall determine the applicability according to the requirements in the corresponding indicators.

| Sample Management Plan Document<br>NOTE: These will vary with SIR and jurisdiction | Management Plan Revision Periodicity | Element Being Monitored (Partial List) | Monitoring Periodicity | Who Monitors This Element?<br>NOTE: These will vary with SIR and jurisdiction | FSC Principle / Criterion |
|---|---|---|---|---|---|
| **Site Plan (Harvest Plan)** | Annual | Creek crossings | When in the field and annually | Operational staff | P10 |
| | | Roads | When in the field and annually | Operational staff | P10 |
| | | Retention patches | Annually sample | Operational staff | P6, P10 |
| | | Rare Threatened and Endangered species | Annually | Consulting Biologist | P6 |
| | | Annual harvest levels | Annually | Woodlands Manager | C5.2 |
| | | Insect disease outbreaks | Annually, sample | Consulting Biologist / Ministry of Forests | |
| **Budgeting** | Annual | Expenditures | Annually | Chief Financial Officer | P5 |
| | | Contribution to local economy | Quarterly | General Manager | P5 |

| Sample Management Plan Document<br>NOTE: These will vary with SIR and jurisdiction | Management Plan Revision Periodicity | Element Being Monitored (Partial List) | Monitoring Periodicity | Who Monitors This Element?<br>NOTE: These will vary with SIR and jurisdiction | FSC Principle / Criterion |
|---|---|---|---|---|---|
| **Engagement Plan** | Annual | Employment statistics | Annually | General Manager | P3, P4 |
| | | Social Agreements | Annually, or as agreed in Engagement Plan | Social Coordinator | P3, P4 |
| | | Grievances | Ongoing | Human Resources Manager | P2, P3, P4 |
| **Management plan** | 5 or 10 years | Wildlife populations | To be determined | Ministry of Environment | P6 |
| | | Coarse Woody Debris | Annually | Ministry of Forests | P10 |
| | | Free growing / regeneration | Annually, sample | | |
| | | Age class distribution<br>Size class distribution | Ten years | Ministry of Environment | P6 |
| | | 10 year Allowable Annual Cut | Annually, ten years | Ministry of Forests / Woodlands manager | C5.2 |
| **Ecosystem Services Certification Document** | 5 years | Prior to validation and verification | Prior to validation and verification | General Manager | C5.1 |

## Annex 5 Monitoring Requirements

The annex lists all possible monitoring elements. Different management units with different scale, intensity and risk shall determine the applicability according to the requirements in the corresponding indicators.

1) Monitoring in 8.2.1 is sufficient to identify and describe the environmental impacts of management activities, including where applicable:
   i. The results of regeneration activities (Criterion 10.1);
   ii. The use of ecologically well adapted species for regeneration (Criterion 10.2);
   iii. Invasiveness or other adverse impacts associated with any alien species within and outside the Management Unit (Criterion 10.3);
   iv. The use of genetically modified organisms to confirm that they are not being used (Criterion 10.4);
   v. The results of silvicultural activities (Criterion 10.5);
   vi. Adverse impacts to environmental values from fertilizers (Criterion 10.6);
   vii. Adverse impacts from the use of pesticides (Criterion 10.7);
   viii. Adverse impacts from the use of biological control agents (Criterion 10.8);
   ix. The impacts from natural hazards (Criterion 10.9);
   x. The impacts of infrastructural development, transport activities and silviculture to rare and threatened species, habitats, ecosystems, landscape values, water and soils (Criterion 10.10);
   xi. The impacts of harvesting and extraction of timber on non-timber forest products, environmental values, merchantable wood waste and other products and services (Criterion 10.11); and
   xii. Environmentally appropriate disposal of waste materials (Criterion 10.12).
2) Monitoring in 8.2.1 is sufficient to identify and describe social impacts of management activities, including where applicable:
   i. Evidence of illegal or unauthorized activities (Criterion 1.4);
   ii. Compliance with applicable laws, local laws, ratified international conventions and obligatory codes of practice (Criterion 1.5);
   iii. Resolution of disputes and grievances (Criterion 1.6, Criterion 2.6, Criterion 4.6);
   iv. Programs and activities regarding workers' rights (Criterion 2.1);
   v. Gender equality, sexual harassment and gender discrimination (Criterion 2.2);
   vi. Programs and activities regarding occupational health and safety (Criterion 2.3);
   vii. Payment of wages (Criterion 2.4);
   viii. Workers' training (Criterion 2.5);

ix. Where pesticides are used, the health of workers exposed to pesticides (Criterion 2.5 and Criterion 10.7);

x. The identification of Indigenous Peoples and local communities and their legal and customary rights (Criterion 3.1 and Criterion 4.1);

xi. Full implementation of the terms in binding agreements (Criterion 3.2 and Criterion 4.2);

xii. Indigenous Peoples and community relations (Criterion 3.2, Criterion 3.3 and Criterion 4.2);

xiii. Protection of sites of special cultural, ecological, economic, religious or spiritual significance to Indigenous Peoples and local communities (Criterion 3.5 and Criterion 4.7);

xiv. The persistence of Indigenous cultural landscapes and associated values of significance to Indigenous Peoples (Criterion 3.1, Criterion 3.5)；

xv. The use of traditional knowledge and intellectual property (Criterion 3.6 and Criterion 4.8);

xvi. Local economic and social development (Criterion 4.2, Criterion 4.3, Criterion 4.4, Criterion 4.5);

xvii. The production of diversified benefits and/or products (Criterion 5.1);

xviii. The maintenance and/or enhancement of ecosystem services (Criterion 5,1);

xix. Activities to maintain or enhance ecosystem services (Criterion 5.1);

xx. Actual compared to projected annual harvests of timber and non-timber forest products (Criterion 5.2);

xxi. The use of local processing, local services and local value added manufacturing (Criterion 5.4);

xxii. Long term economic viability (Criterion 5.5); and

xiii. High Conservation Values 5 and 6 identified in Criterion 9.1.

3) Monitoring procedures in 8.2.2 are sufficient to identify and describe changes in environmental conditions including where applicable:

i. The maintenance and/or enhancement of ecosystem services (Criterion 5.1) (when The Organization makes FSC promotional claims regarding the provision of ecosystem services, or receives payment for the provision of ecosystem services);

ii. Environmental values and ecosystem functions including carbon sequestration and storage (Criterion 6.1); including the effectiveness of actions identified and implemented to prevent, mitigate and repair negative impacts to environmental values (Criterion 6.3);

iii. Rare and threatened species, and the effectiveness of actions implemented to protect them and their habitats (Criterion 6.4);

iv. Representative sample areas and the effectiveness of actions implemented to conserve and/or restore them (Criterion 6.5);

v. Naturally occurring native species and biological diversity and the effectiveness of actions implemented to conserve and/or restore them (Criterion 6.6);

vi. Water courses, water bodies, water quantity and water quality and the effectiveness of actions implemented to conserve and/or restore them (Criterion 6.7);

vii. Landscape values and the effectiveness of actions implemented to maintain and/or restore them (Criterion 6.8);

viii. Conversion of natural forest to plantations or conversion to non-forest (Criterion 6.9);

ix. The status of plantations established after 1994 (Criterion 6.10); and

x. High Conservation Values 1 to 4 identified in Criterion 9.1 and the effectiveness of actions implemented to maintain and/or enhance them.

# Annex 6 High Conservation Value (HCV) Framework

## HCV Framework Contents

## Foreword

### i. The Evolution of the HCV Concept

The predecessor of "High Conservation Value" (HCV) is "High Conservation Value Forest" (HCVF). It was first introduced in 1999 by the Forest Stewardship Council (FSC) in Principle 9 of the FSC Principles and Criteria for Forest Stewardship, which only refers to the forests that have significant environmental and social values. The concept has become a tool to identify socially, culturally and environmentally significant sites, and to maintain their ecological and social values to ensure the sustainable use of forest resources.

The formalization of the six categories of the HCV approach and guidance for interpretation and application was elaborated in 2003 by Proforest (UK-based forestry consultancy) in its HCV global toolkits.

In 2005, the newly established HCV Resource Network (HCVRN) adopted the basic ideas of the HCV toolkit in its founding Charter and widened their scope from “HCV Forest” to “HCV Areas”, which means these values should apply to all landscapes, not just for forests.

Between 2009 and 2011, the HCVRN and FSC worked together to revise the HCV definitions, involving experts and stakeholders from other sustainability schemes. This process resulted in the term "High Conservation Value Forest (HCVF)" evolved to "High Conservation Value (HCV)", which means that what should be protected is no longer limited to forests, but extends to all ecosystems (forests, grasslands, wetlands, etc.) within the management unit and in a larger range of influence. Identifying these important values and ensuring that they are maintained or enhanced will help forest managers make the management decisions consistent with the conservation goals of the forest's environmental and social values.

### ii. How to use this document?

This document was developed based on the content of "Principle 9 High Conservation Value" of the FSC National Forest Stewardship Standard of the People’s Republic of China (FSC-STD-CHN-01.1-2021), and is an explanation of the specific application of Principle 9 in practice. The purpose of this document is to provide guidance for the identification, management and monitoring of HCV in China.

This document is divided into 6 chapters: Chapter 1 presents an overview of HCV , Chapter 2 discusses the assessment of HCV, Chapter 3 covers HCV identification, Chapter 4 covers HCV management, Chapter 5 covers HCV monitoring, and Chapter 6 covers HCV adaptive management. The High Conservation Value identification thresholds provides the basic definition for identifying potential High Conservation Value areas. The final High Conservation Value identification needs to be adjusted to local conditions and be made based on consultation with stakeholders and experts.

FSC certificate holders, certification bodies, and others shall use this National HCV Framework as part of meeting the requirements of Principle 9. However, the methodologies listed in this document are based on best practices; it is not mandatory to comply with particular sets of practices.

# 1. Overview of HCV

## 1.1 Requirements for HCV in FSC standard

Maintaining and conserving High Conservation Value is one of the most important requirements of the FSC Forest Management Standard, and Principle 9 specifically defines High Conservation Values and detailed indicators under criterion 9.1 to 9.4.

In the “Policy for the Association of Organizations with FSC” (FSC-POL-01-004), the policy of prohibiting association with organizations suspected of involvement in "unacceptable activities" was included. “Destruction of High Conservation Values in forestry operations "is one of the six unacceptable activities” which were listed by FSC.

In the “FSC controlled wood standard for forest management enterprises” (FSC-STD-30-010 (Version 2-0) EN), FSC specifies that 5 categories of wood cannot be supplied as "controlled wood", including the requirement that "Wood [not be] harvested from forests where High Conservation Values are threatened.”

## 1.2 Working principles of HCV conservation

### 1.2.1 Principles of stakeholder participation

High Conservation Values may involve a wide range of stakeholders. When identifying the High Conservation Value and formulating conservation strategies, appropriate methods should be adopted to obtain the opinions and suggestions from stakeholders. Stakeholder participation is particularly important as for the identification and management of FSC High Conservation Values standard 5 and 6. The culturally appropriate methods are applicable for the whole process of communication with the stakeholders.

### 1.2.2 Risk-based principles

When identifying the High Conservation Value and formulating the conservation strategies, the scale, intensity and risk of the activities of the management unit must be taken into account, and preventive methods should be used to ensure that clear and important High Conservation Value is effectively considered and conserved.

### 1.2.3 Principles of Adaptability

High Conservation Value areas may be a small part of a larger area, such as a riparian forest, or the whole management unit area.

The local environments, social and economic status, availability of information, and the scale, intensity and risk of the management unit should be considered when identifying what is a High Conservation Value or not, and the local identification threshold should be adapted to the indicators related to the identification of HCV 1-6 provided in this document. If the threshold is too high, some High Conservation Values will be missed and all local High Conservation Values cannot be fully protected. On the contrary,

if the threshold value is too low, the area of High Conservation Value will be too large, which will bring unnecessary burden to the conservation work and affect the effectiveness of protection.

### 1.2.4 Principles of maintaining or enhancing the HCV

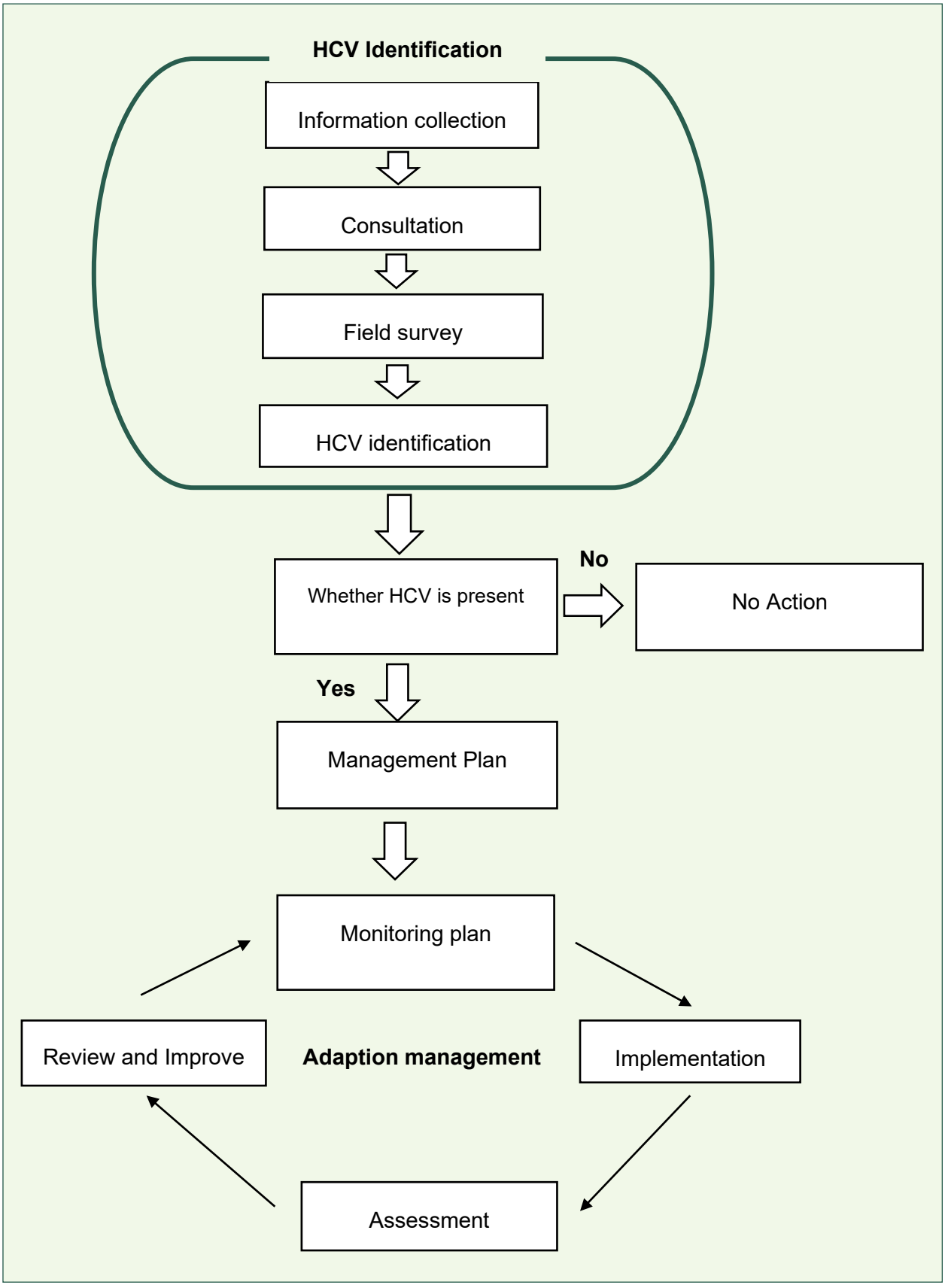
It does not mean that management activities such as timber harvesting are directly prohibited in these areas when an area has determined existing a certain type of High Conservation Value. It should be emphasized that management activities in these areas must be properly planned and that these management activities are implemented in a way that maintains or enhances the High Conservation Values.

### 1.2.5 Precautionary Principle

The precautionary principle means that when information indicates that operations pose a serious threat or cause irreversible damage to the environment, or pose a threat to human well-being, the Organization will take clear and effective measures to prevent damage and avoid endangering human well-being, even though scientific information is incomplete or inconclusive and the vulnerability and sensitivity of environmental values are unclear. The precautionary principle is now widely applied in all areas of biodiversity conservation. The ecological, social, and cultural significance of HCVs requires that HCV work must also be based on the precautionary principle to avoid serious or irreversible damage to HCVs. HCV conservation work includes HCV assessment, management, monitoring, as well as iterative review and improvement of HCV management plans. According to the scale, intensity and risk, HCV assessment can be categorized into two types: simple and intensive HCV assessment.

### 1.3 HCV Working Process

Figure 1. HCV Working Process



## 2. HCV Assessment

The scope of the HCV assessment should be the area that the Organization has the right to operate or manage. The assessment work does not necessarily extend to the management unit's jurisdiction. However, it is worth noting that when collecting information in the HCV assessment process, it is not only necessary to collect the information on the scale of the management unit (e.g., forest farm), but also to consider the landscape situation on a larger scale (e.g., the presence of nature reserves in adjacent areas, landscape types in adjacent areas, adjacent river systems, activities in adjacent areas, etc.).

### 2.1 Scale, intensity and risk

The HCV assessments should be proportionate to the scale, intensity and risk of the management activities of the management unit and The Organization.

**Table 1. HCV assessment based on activity scale, intensity and risk**

| | Simple HCV assessment | Intensive HCV assessment |
|---|---|---|
| **Scale** | **Small-scale**<br>Management unit area ≦**500 ha** | **Larger-scale**<br>Management unit area＞**500 ha** |
| **Intensity** | **Low-intensity**<br>The rate of harvesting is less than 20% of the mean annual increment (MAI) within the total production forest area of the unit, AND<br>EITHER the annual harvest from the total production forest area is less than 5000 cubic meters,<br>OR the average annual harvest from the total production forest is less than 5000 m3 / year during the period of validity of the certificate as verified by harvest reports and surveillance audits.<br>OR only collect NTFPs.<br>For bamboo forest management: The annual average number of bamboo harvested should be less than 15% of the annual average number of | **Higher-intensity**<br>The management activities includes below items:<br>○ Intensive site preparations (burning the grass on waste hills and conducting whole reclamation for soil preparation);<br>○ Application of chemicals or biological agents;<br>○ Clear cutting where more than 50% of wood stock in the sub compartment is harvested. |

| | Simple HCV assessment | Intensive HCV assessment |
|---|---|---|
| | newly grown trees. | |
| **Risk** | **Low risk**<br>○ Based on the literature, prior assessments, expert opinion, and comments from stakeholders, there is a low probability that HCV is included in activity site or in the broader area affected by it.<br>○ Organization assumptions about the presence of HCV are based on available literature, expert and stakeholder assessment. | **Higher risk**<br>○ Based on the literature, prior assessments, expert opinion, and comments from stakeholders, HCV may be included in activity site or in the broader area affected by it:<br>○ Some HCVs are particularly vulnerable.<br>○ -Some hunted animals are considered to be key pollinators or seed disperser;<br>○ -Some RTE species are highly dependent on undisturbed habitat;<br>○ -Natural habitats in the area have been fragmented;<br>○ -Soils are susceptible to erosion. |

**Table 2. Comparison of simple HCV assessment and intensive HCV assessment tasks**

| | Simple HCV assessment | Intensive HCV assessment |
|---|---|---|
| **Information collection** | Can be combined with stakeholder consultation; | The assessment should be carried out on the basis of extensive information collection; |
| **Stakeholder consultation** | Can be used as the main step and can be combined with information collection; Consultation should be conducted mainly with relevant local government departments and local communities; | Extensive stakeholder consultation should be conducted; |
| **Field survey** | Mainly based on field inspection and verification; | Mainly conducted in sublot by professional investigators, and records of the survey are kept; |
| **Research institutions or Expert participation** | optional | Necessary; |
| **Database mapping of HCV distribution areas** | optional | Necessary. |

### 2.2 Information collection

HCV assessment must be carried out based on the collection of sufficient information. It is not only necessary to collect the information on the scale of the management unit (such as forest farms), but also to consider the larger-scale landscape conditions outside the management unit. Some HCVs exist at the landscape level (e.g., landscape-scale ecosystems, large catchments), while others rely on the existence of appropriate habitat mosaics in the larger scale landscape (e.g., populations of some key water source values, rare, threatened or endemic species). As a result, large-scale landscapes or ecological processes are often at greater risk from habitat fragmentation.

**Information that should be collected before conducting an HCV assessment includes:**

- Sub-compartment forest inventory database
- Forest map or forest distribution map
- Local natural conditions, socioeconomic situation, forestry resources situation, latest resource data and information on state-owned forest farms, nature reserves, forest parks, and World Natural Heritage sites
- Major ecosystems, fauna and flora
- Local endangered and key protected species, national key protected species, IUCN Red List species, CITES Appendix I, II and III species
- Distribution map of rivers, water systems and reservoirs
- The investigation results and literatures of local wildlife and flora and fauna
- Latest boundary map of forest management units and villages and towns

**Sources of this information include:**

- Government departments
- Publicly released plans, management plans, reports, papers
- Websites, statistics
- Environmental NGOs
- Industry associations
- Experts and scholars
- Local residents

### 2.3 Determination of the identification threshold

A threshold needs to be defined for each value to determine when it becomes into High Conservation Value.

Chapter 3 of this document provides the “base thresholds” for the assessment of High Conservation Values in China. These indicators were developed by experts and determined after extensive stakeholder consultation, and can be used as a reference for high conservation value assessment activities nationwide. Although not mandatory, the base thresholds provide a “baseline” or guide for the development of High Conservation Value identification thresholds in each region of the country. The management unit can develop specific thresholds suitable for the management unit based on the basic thresholds, and can also directly apply the basic thresholds to carry out the assessment work.

### 2.4 Consultation

Communication with experts and stakeholders is a necessary condition for HCV identification. Based on the collected information, serious and rigorous consultation should be conducted in areas where HCV

may exist. Full communication and consultation with local residents and Indigenous Peoples is particularly important for determining HCV 5 and HCV 6.

**The object of consultation should be determined first. Generally, include:**

- Relevant departments of local governments
- NGOs
- Industry associations
- Scientists from research institutions and universities
- Technical staff or volunteers involved in nature conservation
- Local residents and/or individuals familiar with local conditions
- Indigenous peoples

Consultation can be conducted in various ways. Generally, include:

- Face-to-face interviews
- Distribution of questionnaires
- Phone and email consulting
- Organizing related parties to discuss together
- Participatory fieldwork
- Send the written report to the relevant people and listen to their opinions and suggestions

### 2.5 Field survey

After identifying the potential scope of HCV based on the collected information and consultation results, it is necessary to conduct field surveys of these areas to determine whether they HCV are present. Field surveys are important for HCV determination, boundary delineation, development of protection and management measures, and monitoring. The results of HCV field surveys can also be used as a baseline for subsequent monitoring.

# 3 HCV identification

## 3.1 HCV 1 identification

**HCV 1** – Species diversity. Concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels.

### 3.1.1 National designations

1) The key conservation areas of national parks, national nature reserves, nationally and internationally important wetlands can be considered as areas of potential High Conservation Value.
2) Areas containing IUCN Red List species of endangered species, CITES Convention Appendix 1 species, Rare, endangered or threatened animal habitats or plant communities under national Class I can be considered as areas of potential High Conservation Value.
3) Areas containing any endemic species can be as areas of potentially High Conservation Value.
4) Any area with important temporary enrichment of species can be considered as an area with potential High Conservation Value, including:
    a) Critical areas for breeding and feeding of migratory birds;
    b) key breeding areas for migratory or migrating beasts, reptiles and amphibians;
    c) Key breeding areas for migratory aquatic animals.

### 3.1.2 Explanation

As outlined in the Glossary of Terms, National Parks are specific land or marine areas which are approved and managed by the state, with clear boundaries and with the main purpose of protecting a large area of national representative natural ecosystems, and realizing scientific protection and rational utilization of natural management.

Similarly, a nature reserve is an area of land, water or sea where representative natural ecosystems, natural concentrated distribution of rare and endangered wildlife species, natural relics of special significance and other protection objects are located, and a certain area is set aside by law for special protection and management. According to the main objects of protection, nature reserves can be divided into three categories: ecosystem type reserves, biological species reserves and natural heritage reserves. Regardless of the type of protected areas, the general requirement is that they are conservation-oriented and essential for the protection of regional and global biodiversity values.

The following areas may also have High Conservation Value, and appropriate local identification thresholds should be determined based on scale, intensity and risk in accordance with local circumstances:

- General control areas of national parks and national nature reserves;
- Provincial, municipal and county-level nature reserves; and
- Biodiversity hotspots, ecological areas and important bird areas determined by international organizations.

Endemic species are those species which are distributed only in a specific geographical area. If their distribution area is limited, these species are important for nature conservation because the limited range increases the vulnerability of the species to further habitat degradation, and the enrichment of endemic species is evidence of the existence of certain specific evolutionary processes.

The Red List of Threatened Species is compiled by the International Union for Conservation of Nature (IUCN) . The endangerment level of species is divided into 7 level according to the degree of endangerment, which are:

- Extinct (EX,
- Extinct in the Wild (EW),
- Critically Endangered (CR),
- Endangered (EN),
- Vulnerable (VU),
- Near Threatened (NT) and
- Least Threatened (LC).

CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international convention signed to prevent the over exploitation and extinction of endangered species due to international trade. CITES Appendix 1 includes all species that are and may be at risk of extinction due to the effects of trade. Appendix II includes species that are not necessarily at risk of extinction, but whose international trade must be managed and controlled to prevent human exploitation from threatening their survival or that of related species. Appendix III includes species that are protected in at least one country and whose trade is expected to be controlled by other parties.

Many species use a wide variety of habitats at different times or at different stages of their life histories. These habitats may be different geographic areas or different ecosystems or habitats within the same area, and they may be used only seasonally, or only in extreme years, yet are critical to the survival of populations. Such habitats include important breeding sites, migration sites, migration routes or corridors, and areas that contain seasonal enrichment of species of global significance.

### 3.1.3 Information sources

- National Parks Directory: http://www.forestry.gov.cn/main/5497/20220114/095737981894680.html
- List of nature reserves in China: http://www.gov.cn/guoqing/2019-04/09/content_5380702.htm
- List of national key protected wild animals (2021): http://www.forestry.gov.cn/main/5461/20210205/122418860831352.html
- List of national key protected wild plants (2021): http://www.forestry.gov.cn/main/5461/20210908/162515850572900.html
- Red list of biodiversity in China - higher plants volume: https://www.mee.gov.cn/gkml/hbb/bgg/201309/t20130912_260061.htm
- Red list of biodiversity in China -vertebrate volume: https://www.mee.gov.cn/gkml/hbb/bgg/201505/t20150525_302233.htm
- Biodiversity hotpots: https://www.cepf.net/our-work/biodiversity-hotspots
- Internationally important wetlands: https://www.ramsar.org/document/the-list-of-wetlands-of-international-importance-the-ramsar-list
- Birds International: https://www.birdlife.org/papers-reports/important-bird-and-biodiversity-areas-a-global-network-for-conserving-nature-and-benefiting-people-2014/
- IUCN Red Book Endangered Species List: http://www.iucnredlist.org/
- World Heritage Sites: whc.unesco.org

- WWF Global 200 ecoregions: https://www.worldwildlife.org/publications/global-200
- Primeval forest landscape: https://www.globalforestwatch.org/
- Last Frontier Forests: www.wri.org/publication/last-frontier-forests-ecosystems-and-economies-edge
- "hotspots" of Conservation International Foundation (CI): http://www.conservation.org
- CITES Annex 1 species: http://www.forestry.gov.cn/html/bwwz/bwwz_2790/20191202101942901794339/file/20191202102502527120782.pdf

## 3.2 HCV 2 identification

**HCV 2 –** Landscape-level ecosystems and mosaics.

Intact forest landscapes and 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.

### 3.2.1 National designations

1) A High Conservation Value type-2 area in an area that displayed a distribution of native ecosystems, has an area of more than 5,000 hectares and no significant human disturbance in 50 years.
2) It can be considered as a potential High Conservation Value of an area, which plays the role of ecological connection for the aforementioned High Conservation Value landscape (ecological corridor) .
3) All Intact Forest Landscapes (IFL) as defined by the Global Forest Watch Intact Forest Landscapes maps (as of January 1, 2017) shall be considered as HCV 2..However, IFL may also be updated using other forms of best available information, such as historical harvesting documentation, maps and external data provided by independent organizations, scientists and experts.

### 3.2.2 Explanation

The objective of HCV 2 is to provide explicit protection for large (and to a certain degree, the integrity of) forests (or other ecosystems), as well as for species that depend on large areas of natural forests for survival. HCV 2 aims to protect large-scale landscapes, both for their intrinsic values and for the surviving populations of species that depend on them for their livelihoods.

The native ecosystem is a relatively stable ecosystem formed by long-term adaptation to the natural environment without significant human interference and basically in the pristine state. In the native ecosystem, material circulation and energy flow are carried out according to the laws of nature, and human influence and control are very small.

China's native ecosystems are mainly located in the northeast, southwest and parts of Tibet. This document recommends that native ecosystem distribution areas with an area of more than 5,000 hectares and no significant human disturbance in 50 years be identified as of HCV.

Ecological corridors are also called biological corridors. The biological corridor is defined in Terms of Nature Reserve, a standard of the Chinese forestry industry, as a channel connecting fragmentation habitats and suitable for living, moving or spreading of organisms.

### 3.2.3 Information sources

- Intact Forest Landscape: www.intactforests.org
- Global Forest Watch: www.globalforestwatch.org
- WWF Global 200 Ecoregions: https://www.worldwildlife.org/publications/global-200
- Biodiversity hotspots: https://www.cepf.net/our-work/biodiversity-hotspots
- The Tropical Rain Forest Information Centre: http://www.bsrsi.msu.edu/trfic
- Terms of Nature Reserve (GB/T 31759-2015): http://c.gb688.cn/bzgk/gb/showGb?type=online&hcno=27A29AF152CF13CE0AD2A773772E128C

### 3.3 HCV 3 identification

**HCV 3** – Ecosystems and habitats

Rare, threatened, or endangered ecosystems, habitats or refugia.

#### 3.3.1 Rare, endangered and threatened ecosystems and habitats can be considered as potential areas of High Conservation Value

The following rare, endangered and threatened ecosystems and habitats can be considered as potential areas of High Conservation Value.

1) Local rare, endangered and threatened ecosystems and habitats determined by government departments;
2) Local rare, endangered and threatened ecosystems and habitats determined by scientific research literature or research reports of relevant institutions;
3) Wild plants with minimal populations and their habitats;

#### 3.3.2 Explanation

The objective of HCV 3 is to ensure that threatened or endangered ecosystems are maintained, including those that were once widespread or typical over larger areas, as well as some rare ecosystem consisting of widely distributed or currently unthreatened species. The identification of rare, threatened or endangered ecosystems, habitats or species sanctuaries is based on actual national survey results or findings by local experts in the field of scientific research. When conducting HCV 3 assessment, institutions should obtain relevant data for reference.

"Wild plants with minimal population" includes the following types: first, wild plants with minimal population in the wild, which are critically endangered and in danger of extinction at any time; second, wild plants with unique habitat requirements and narrow ecological range; and third, relatively small populations of wild plants whose potential genetic value is unclear, whose extinction would result in gene loss, reduced biodiversity, and significant loss of socio-economic value.

#### 3.3.3 Information sources

- IUCN Ecosystem Red List: www.iucnrle.org
- WWF Global 200 Ecoregions: https://www.worldwildlife.org/publications/global-200
- Biodiversity Hotspots: https://www.cepf.net/our-work/biodiversity-hotspots
- Global Forest Watch: www.globalforestwatch.org

### 3.4 HCV 4 identification

**HCV 4** – Critical ecosystem services. Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.

#### 3.4.1 National designations

The following areas that are critical to the catchment area can be considered as potential areas of High Conservation Value:

1) National ecological public welfare forest areas at the source of major rivers and on both sides of major rivers;
2) National ecological public welfare forest areas around important wetlands and reservoirs.

The following areas that are critical to erosion control can be considered as potential areas of High Conservation Value.

1) National ecological public welfare forest areas in areas with serious desertification and soil erosion;
2) Coastal shelter forest, basic trunk forest belt, mangrove, the national ecological public welfare forest area of the first ridge on both sides of the Strait facing the sea.
3) Areas of biologically fire-resistant forest stands that are critical barriers to destructive fires can serve as potential High Conservation Value areas.

#### 3.4.2 Explanation

Ecosystem services refer to various benefits that humans obtain from ecosystems, including providing food and water supply services, regulating floods, droughts and land degradation and other services, supporting soil formation and nutrient cycling and other supporting services, as well as recreation and leisure, spiritual culture, cultural services such as religion, and other intangible interests. The determination of HCV 4 indicators is mainly based on two aspects: one is whether the state of HCV 4 can be characterized as a "critical situation", and the other is whether it provides ecosystem services. Only when both aspects are satisfied, it can be identified as HCV 4. The "**critical situation**" is clearly defined and the basis for determination is given in the HCVRN's High Conservation Value Determination Guidelines:

**The definition of critical situation** is that when ecosystem services are interrupted, it endangers the well-being, health or life of local communities, the normal operation of important infrastructure (roads, dams, reservoirs, hydropower plants, irrigation systems, buildings, etc.) or other HCVs, and causes serious, catastrophic or multiple negative impacts on them; in these instances, the ecosystem services are considered to be in a “critical situation”.

**Key situations are defined as the following:**

- The loss of or major damage to ecosystem services will seriously damage the interests and/or produce suffering for those whom rely on such services, immediately or in a certain period of time (such as regulating water supply during extreme dry seasons); or
- In the absence of such services, there are no other viable, readily available or affordable alternatives available (e.g., pumps and wells).

The supporting and regulating functions of ecosystems in catchment protection, prevention of soil erosion, and establishment of barriers to destructive fires are critical and irreplaceable. As a result, ecosystem services in critical situations are generally considered to include critical parts of catchments, critical areas for erosion prevention, and barrier areas for destructive fires.

China started to build national ecological public welfare forests in the early 21st century. National ecological public welfare forests are protected forests and special-purpose forests that are of great ecological importance or in extremely fragile ecological condition, and which play an important role in the ecological security of the country, conservation of biodiversity, and sustainable economic and social development, with the main management purpose of performing the ecological and social services of forests. The construction of national ecological public welfare forests embodies an important value in the functioning of ecosystem services, the livelihood of residents, and the safety of life and property. National ecological public welfare forest areas are considered to be HCV 4, as these safeguard key parts of the catchment area and are vital to controlling flooding and retaining both soil and water.

Special firebreaks act as a natural ecosystem barrier to effectively prevent destructive fires; therefore, areas of bio-firebreaks that are considered critical barriers to destructive fires are also considered to be HCV 4.

### 3.4.3 Information sources

- National ecological public welfare forest:http://www.gov.cn/gongbao/content/2017/content_5230292.htm
- Relevant documents and data from local forestry department

### 3.5 HCV 5 identification

**HCV 5** – Community needs. Sites and resources fundamental for satisfying the basic necessities of local communities or Indigenous Peoples (for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or Indigenous Peoples.

#### 3.5.1 Evaluation Criteria

If the local community obtains the necessary fuel, food, feed, medicinal materials or building materials from a specific natural resource, and there are no other alternative sources, the area where such resource is distributed can be considered as a potential High Conservation Value area. These areas must be identified through culturally appropriate engagement with Indigenous Peoples and local communities. Particular attention should be given to areas where whole communities or significant portions of them are heavily dependent on forest ecosystems for their livelihoods, or where Indigenous Peoples and local communities are dependent on Indigenous or traditionally managed ecosystems.

#### 3.5.2 Explanation

The objective of HCV 5 is to protect the basic livelihood and security of local communities - not only those communities that are completely dependent on local natural resources, but also those that derive a large amount of irreplaceable income, food or other benefits from natural resources. If the services provided by some sites or resources cannot be replaced (i.e., there are no other options at present or beyond the scope of affordability), or the loss or damage of sites or resources will cause serious damage or suffering to the affected stakeholders, then these sites or resources have important value, which reflects the degree of dependence on resources.

The basic needs of the community include:

- Hunting and fishing grounds for local communities, traditional communities and Indigenous Peoples;
- Nuts, berries, mushrooms and medicinal plants;
- Fuel for household cooking, lighting and heating;
- Provision of building materials (poles, thatch, timber);
- Fodder for livestock and (seasonal) grazing;
- Water for drinking and sanitation facilities; and/or
- Materials to exchange for other necessities or to sell for cash to buy necessities (including medicine or clothing), or materials to pay for school fees.

The following forests should not be considered as areas of High Conservation Value:

- Areas which provide useful, but not essential, resources for local communities.
- Resources provided by these areas can be easily obtained from other places or can be replaced by other supplies.

#### 3.5.3 Information sources

- Interviews with local communities
- Interviews with traditional communities
- Interviews with Indigenous Peoples
- Interviews with other stakeholders, such as local government departments

### 3.6 HCV 6 identification

**HCV 6** – 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.

#### 3.6.1 National designations

1) Areas of cultural value of global or national significance can be identified as potential areas of High Conservation Value, such as world heritage, national heritage (agricultural culture, forestry culture, water conservancy, etc.), historical sites, and revolutionary memorial sites;
2) Areas of vital value to local residents, traditional residents and Indigenous Peoples can be identified as potential High Conservation Value areas, such as religious shrines, sites for traditional ceremonies, feng shui forests and other plant or animal resources with totem value or used in traditional ceremonies.

#### 3.6.2 Explanation

The objective of HCV 6 is to conserve cultural values of global or national significance or of considerable importance to local populations. The cultural significance of sites, resources and habitats must be identified through culturally appropriate engagement with Indigenous Peoples and local communities.

Globally or nationally important places, resources, habitats or landscapes usually have recognized historical, religious or spiritual and cultural values, and are usually officially designated as special areas by national or international organizations such as UNESCO. Areas of considerable value to the local population include places not protected by law but of recognized historical or cultural value, religious or sacred sites, cemeteries, or places where traditional ceremonies of significance to the local or Indigenous peoples are held, or animal and plant resources with totem value or used in traditional ceremonies.

Participatory consultation must be conducted with all affected neighbourhoods and communities, with particular attention to the affected Indigenous Peoples. If it can be proved that the community agrees (unanimously, overwhelmingly or by the legal representative) that some places or resources are of great cultural significance or extremely important to them, it can be used as a strong basis for its identification as HCV 6. In the process of communication, trust should be established with local residents as much as possible, and seek the cooperation and help of experts.

#### 3.6.3 Information sources

- World Heritage Site: whc.unesco.org
- National Ethnic Affairs Site: https://www.neac.gov.cn/seac/ztzl/zgmzjs/index.shtml
- National Heritage (agricultural culture, forestry culture, water conservancy, etc.)
- National Agricultural Heritage: www.moa.gov.cn
- China's World Irrigation Engineering Heritage List (中国的世界灌溉工程遗产名录): http://www.360doc.com/content/22/1107/16/30072915_1054954264.shtml
- Consultation with local authorities
- Information at scenic spots and historical sites
- Consultation with local management department
- Consultation with local communities, traditional communities, residents and Indigenous Peoples

## 4 HCV Management

The general goal of HCV management is to maintain and, when possible, enhance the HCVs. The Organization needs to develop management strategies for HCVs identified as a result of the HCV assessment, and transform the strategies into a management plan that can be implemented. The management plan must be implemented via dynamic adaptive management cycle of planning, action, monitoring and improvement.

### 4.1 Management Plan

In order to manage HCVs effectively based on the result of HCV assessment, an HCV management plan shall be developed. As the extent of detail depends on the scale, intensity and the risk of management activities, the following elements shall be included:

1. Description and location of each type of HCV

Describe the value, significance, nature and category of each type of HCV. To avoid the negative impact of management activities, management unit should determine the boundary of HCV area, map the HCV location and HCV management area before the commencement of operation.

2. Baseline establishment

Baseline is usually the condition of the initial assessment. Sufficient details should be included so that the condition of HCV can be comparable with changes over time.

3. HCV management strategies and objectives

In addition to the general HCV management objectives defined by each HCV category, more specific, quantitative and measurable objectives that are directly linked to management activities and monitoring indicators should be established. If detailed baseline data are available, it is easy to set a specific objective; or, a broader objective could be set based on the precautionary principle.

4. Assessment of threats to HCVs

For each type of HCV, threats should be identified, and the level of threat should be evaluated. The identification and evaluation of the threats can be conducted together with HCV assessment. In the process of evaluation, direct and indirect, internal and external threats should be taken into account to determine the priorities.

5. Stakeholders and Experts Consultation

Communicate with stakeholders and consult with experts in order to gain their understanding of HCV management and seek cooperation, while ensuring that the management activities are in line with the latest scientific findings.

6. Development and implementation of effective management strategies

Management strategies and measures should be developed based on stakeholder and expert consultation. See section 4 for details.

7. Development and implementation of the monitoring plan

The monitoring plan should be developed to observe and study the condition of HCVs, the surrounding environment and impact of management activities, and to evaluate their changes. See section 5 for details.

8. Adaptive management

The monitoring results should be incorporated into management process to maintain or improve HCVs in a changing environment and society. See section 5 for details.

### 4.2 Risk-based approach

Risk refers to the likelihood or probability of an event with negative consequences, and also the seriousness of those consequences. Within the FSC system, risk refers especially to the probability of an unacceptable negative impact, caused by any activity in the MU, sufficiently serious to result in non-compliance at the Criterion level.

Risk is inherent in forest management generally. The key is to identify risks with potentially unacceptable negative impacts. An activity's risk is based on the likelihood of negative impacts combined with the consequence of negative impacts. This means that the higher the probability of negative impact, the greater the risk. Likewise, this means that the more severe the potential consequence, the greater the risk.

The Organization should take into account the proximity of management activities to HCVs as well as the inherent vulnerability, resilience and sensitivity to disturbance of HCVs. The identification of uncertainties and the adequacy of data and information used in setting risk thresholds should also be considered. Where significant uncertainties exist, risk determinations should be guided by the precautionary approach. Table 1 provide the examples of potential risks to HCV 1 to 6.

**Table 3 Potential risks to HCVs**

**NOTE:** The "X" symbol in the table indicates that the impact elements poses a potential risk to a specific HCV.

| Impact elements | HCV1 | HCV2 | HCV3 | HCV4 | HCV5 | HCV6 |
|---|---|---|---|---|---|---|
| **Forest fragmentation** | X | X | X | X | | |
| **Illegal hunting** | X | | X | | X | X |
| **Inappropriate harvesting practices** | X | X | X | X | X | X |
| **Waste pollution** | X | X | X | X | | |
| **Usage of chemicals** | X | | X | X | X | X |
| **Excessive collection of NTFPs** | | | | | X | X |
| **Insufficient natural regeneration** | X | | X | X | | |
| **Forest fire** | X | X | X | X | X | X |
| **Burning and site preparation** | X | | X | X | | |
| **Exploitation of mineral deposits** | X | X | X | X | X | X |
| **Indigenous People and traditional people not identified** | X | X | X | X | X | X |
| **Large precipitation and steep slopes** | | | | X | X | |

### 4.3 Consultation

It is very important to communicate with stakeholders and experts who are able to ensure that management activities are technically sound and in line with the latest scientific findings. The stakeholders which are listed in Section 2.3 should be considered as the potential targets for consultation and communication.

When HCV 1-3 are identified, it is essential to consult with experts from researchers, environmental NGOs and relevant administrative departments. Similarly, the management of HCV 5 and HCV 6 cannot be accomplished without the cooperation of local Indigenous Peoples and local communities.

Consultation can be conducted through participatory mapping. Through this process, operators and local people can work together to verify the area where Indigenous Peoples and local communities declare their traditional rights, and document them on the map. Or, this could be conducted through visiting the site together or recording the location through GPS and smartphones.

### 4.4 Management strategies

In order to maintain HCVs, the development of specific management strategies and control measures is crucial. It is vital that HCV management strategies and control measures should be integrated within the whole management system, ensuring that HCV management activities do not conflict with other management activities and are implemented effectively.

When developing management strategies and measures, two following elements need to be considered:

1. Spatial planning for management (Zoning) : Determine the necessary areas to support HCVs, and divide the areas into different management measure zones.
2. Management measure: Define the specific management activities to be implemented in each management zone.

It should be noted that the management measures, even forest harvesting, can also be reasonable in HCV management areas. For example, in plantation forests, tending is necessary to improve the services the forest provides to the watershed; additionally, small-scale clear cutting may be also appropriate to create a hunting ground for raptors.

Simple, straightforward and realistic measures could make it is easier for HCV management to be implemented. It is also necessary to take measures to mitigate the impact of the identified threats; not only against direct, visible threats, but also against hidden, fundamental problems.

**Examples of Management Measures for HCV 1-3**

**Items To Be Considered:**

- Protection zones, harvest prescriptions, and/or other strategies to protect threatened, endangered, endemic species, or other concentrations of biological diversity and the ecological communities and habitats upon which they depend, sufficient to prevent reductions in the extent, integrity, quality, and viability of the habitats and species occurrences. Where enhancement is identified as the objective, measures to develop, expand, and/or restore habitats for such species are in place.
- Strategies that fully maintain the extent and intactness of the forest ecosystems and the viability of their biodiversity concentrations, including plant and animal indicator species, keystone species, and/or guilds associated with large intact natural forest ecosystems. Examples include protection zones and set-aside areas, with any commercial activity in areas that are not set-aside being limited to low-intensity operations that fully maintain forest structure, composition, regeneration, and disturbance patterns at all times. Where enhancement is identified as the objective, measures to restore and reconnect forest ecosystems, their intactness, and habitats that support natural biological diversity are in place.
- Strategies that fully maintain the extent and integrity of rare or threatened ecosystems, habitats, or refugia. Where enhancement is identified as the objective, measures to restore and/or develop rare or threatened ecosystems, habitats, or refugia are in place.

**Examples of Management Measures**

- Establish protected areas appropriate to the ecology of the species of concerned.
- Establishment of wildlife corridors to connect fragmented habitats
- Habitat management of protected species (Ban governed, forbid human activities)
- Control of information on habitats of species to be protected
- Management and control of natural enemy, competitive species, pests and disease
- control of invasive exotic species
- Restriction of forestry activities and change the operation methods (including adjusting timing of operations, limiting the operational area, no logging and no control burning)
- Boundary management (including control of access)
- Establishing and managing buffer zones
- Restricting use (e.g. control hunting and gathering)
- Campaigns to raise awareness (including eco-tourism)
- Academic research in collaboration with research institutions such as universities.
- Creation of diverse landscape that hosts diverse species (diversification of stand age and species)
- Restoration of degraded areas

In addition, it is also very important to involve the stakeholder in HCV management. Better outcome can be expected by sharing the problems with local governments, research institutions, local people, environment protection organizations among other stakeholders and seeking their joint efforts.

**HCV 4 Examples of management measures for HCV 4**

**Items To Be Considered**

- Soil properties
- Type and nature of natural disturbance

**Examples of Management Measures**

- Water and Soil conservation and sediment-related disaster prevention
- Compliance with the code requirements of protection forests
- Proper thinning of plantation
- Restoration in degrade ecosystem (Ban to access, artificial acceleration of natural regeneration, replanting)
- Control of pest animals (e.g. wild boar)
- Prevention and mitigation of damage by pest and disease
- Forestry operation that minimizes impact of forests (no continuous clear cutting, no control burning, avoid construction in rainy season, etc.)
- Road construction considering vulnerability of site (steep slope, drainage, geology)
- Conservation of understory vegetation
- Maintenance of vegetation in steep slope and riparian zones
- Restriction of management activities in bad weather

**Water conservation**

- Control of waste dumping
- Control of wastewater inflow
- Restriction on use of pesticides and fertilizers
- No use of pesticide and fertilizers along watercourses
- Prevention of water pollution

**Soil, sediment-related disaster prevention**

- Proper construction of hillside and riverbanks
- Prevent and control erosion and sediment-related disaster with consideration for the environment and ecosystem

**HCV 5-6 Examples of management measures for HCV 5-6**

**Items To Be Considered**

- Current status of use of forest resources by local communities and Indigenous peoples
- Changes in the circumstances surrounding local communities and Indigenous peoples (ecological and socioeconomic)
- Nature of value to be protected (historical, religious, spiritual etc.)
- Customs of local community and Indigenous peoples and their aspiration in using nature resources

**Examples of Management Measures**

- Zoning and mapping the nature resources through culturally appropriate engagement with right holders
- Harvesting NTFPs at a sustainable level
- Regular patrol through engagement with local communities and Indigenous peoples
- Provision of substitutes, place or compensation (if possible, use FPIC policy)
- Transfer of HCV (if possible, use FPIC policy)
- Limit access of management unit's staff for purpose other than monitoring
- Limit the use by external parties (control of hunting, harvest of plants, control of access)
- Restoration of degraded ecosystem and its monitoring through engagement with rights holders
- Proactive management by local people and Indigenous peoples
- Establishing local resources usage rule through engagement with stakeholders
- Continuous engagement with local communities, sharing information and conducting consultation
- Restriction of forestry activities and changing the operation methods (including adjusting timing of operations, limiting the area of operation and no logging)
- Establishment and management of buffer zones
- Defining of boundaries on maps and on site
- Management of archaeological site

## 5 Monitoring of HCV

Monitoring is the necessary step to confirm whether HCV management strategies and measures are implemented properly. Although specific HCV monitoring results may not indicate the cause of HCV changes, continuous monitoring is crucial to understand the status of HCVs, their changes and long-term trends.

### 5.1 Types of Monitoring

#### 5.1.1 Operational monitoring

The purpose of operation monitoring is to evaluate the implementation of the management plan. For example, operation monitoring of infrastructure construction, harvesting operations, waste management and maintenance, and the standard operation procedures of maintenance of HCV area boundaries. Operational monitoring should be conducted frequently to identify areas of concern for more targeted monitoring.

#### 5.1.2 Effectiveness monitoring

The aim of effectiveness is to assess whether management objectives which set out in the management plan are being met, and whether management measures are effective in maintaining the HCVs. The point of effective monitoring is to assess the status of HCVs and long-term trends. Flora and fauna surveys and community interviews are two examples of effective monitoring techniques.

#### 5.1.3 Threat monitoring

The aim of threat monitoring is to assess internal and external threats identified during an initial threat assessment process, and to assess whether new threats have emerged. The targeted monitoring of threat indicators can be carried out, such as water quality monitoring.

### 5.2 Monitoring Plan

Monitoring plan should elaborate what is being monitored, how those elements should be monitored, the personnel involved in monitoring and their roles, when and where monitoring will be conducted, and the process for reviewing monitoring data.

The monitoring plan should be robust, standardized, and repeatable, while using resources (time and money) effectively. The frequency and intensity of monitoring depends on the risks to HCV. Extensive and time-consuming monitoring is not required unless there is a considerable risk.

#### 5.2.1 Choosing indicators

When developing a monitoring plan, it is important to identify effective indicators that are relatively easy to measure and directly linked to management objectives. Improperly selected indicators may result in it becoming difficult or expensive to conduct monitoring, and may betray the whole purpose of monitoring.

Indicators can be direct or indirect. Direct indicators measure the status of HCV itself and the progress toward the management objective, whilst indirect indicators can be used to assess the status of HCVs. For example, direct observations of HCV 1 species, water quality parameters of HCV 4 and the quantity of forest products collected by communities are examples of direct monitoring indicators. For indirect indicators, keystone or indicator species that are indicative of certain ecosystem types or habitat quality can be used.

#### 5.2.2 Baseline data

Monitoring should be initiated prior to management activities being implemented in order to establish baseline conditions, which provides a reference level against which subsequent monitoring data and be compared. Baseline data could be derived from an HCV assessment. Wherever feasible, monitoring

plans should use similar methods, sample frequencies, and intensities as in baseline surveys, so that the results are comparable. Continuous monitoring is vital for assessing the trends of HCVs.

#### 5.2.3 Responsibilities

HCV monitoring can be carried out by Organization staff, internal or external experts and in collaboration with academics or NGOs. The monitoring of HCV 5 and 6 should always be conducted in consultation with community representatives. A specific manager of the Organization should be responsible for the overall monitoring plan, who can ensure that the data are properly collected and analysed, and the results can be used for adaptive management. The manager needs to be aware of both their internal capacity to conduct HCV monitoring as well as available external resources, and to consider the costs and complexity of monitoring in order to implement effective monitoring.

#### 5.2.4 Stakeholder engagement

Engaging local communities is a very effective approach to monitoring. It not only helps to access unique information regarding their local life and tradition, but also helps to keep the process of HCV management transparent and builds cooperative relationships and trust with local communities.

Methods of monitoring HCV 5 and HCV 6 should pay special attention to culturally appropriate practices, and the monitoring results should be communicated with communities. Engaging local communities in biodiversity and ecosystem monitoring may also allow access to information that would not otherwise be available.

Monitoring of HCV 1-3 may require botanical or zoological knowledge. If related expertise is lacking, then consultation with experts is recommended when developing a monitoring plan. Hiring an expert to help design a cost-effective monitoring process in the early stage of monitoring is a good choice. It would be also good to foster internal capacity by organize training of staff by relevant experts. As monitoring data are collected, the results should be transferred to experts, who can help interpret findings and support adaptive management decisions.

### 5.3 Monitoring methods

In order to collect the comparable date, monitoring needs to be conducted regularly using the same method. Methods of monitoring can be varied, such as inspection, observation, quantitative measurement using professional equipment, etc. The monitoring method does not have to be scientific or quantitative. Considering the threat to HCV, the pace of the change of surrounding environment, cost, and an Organization’s capacity, it is better to choose the most effective, convenient and sustainable method. The ease of analysis should also be taken into consideration.

Records of monitoring must be kept. It is necessary to keep not only the summary of the collected information, but also the raw records from data collection (e.g., patrol logs and recording forms filled out by hand in the field.) In particular, when conducting interviews, the content should be reviewed and confirmed by the interviewees.

#### 5.3.1 Monitoring of HCV 1-3

**Patrols:** Inspection includes routine patrols as well as special patrols. Regarding to animal sighting information, following information should be recorded: details about the animal (species, gender, age, size, behaviour etc.), location of the animal found (geographical coordinates, vegetation and characteristic of surrounding environment), date and time, and photo (if possible), traces and signs of animals (faeces, footprints, food, nest, burrows, shelters, rubbing mark, scratch marks, etc.).

**Faunal and floral surveys:** Surveys are the main type of monitoring for studying the status of specific species under threat, and it does not have to be conducted as frequently as patrols. The surveys require standardized and repeated methods so that the data can be reliably compared. In order to monitor HCV 1 animal species, managers should ensure that monitoring takes into account various conditions, such as life history of the species, daily and seasonal variations in species activities and climate. For

monitoring of HCV 2 and 3, it would be effective to carefully select a small set of indicators that can indicate the whole ecosystem and habitat are healthy. For monitoring of rare, threatened and endangered species, cooperate with academic and researchers are recommended.

**Remote sensing:** Remote sensing is a very effective tool which contains of aerial and photographic, which is especially used to monitor the large ecosystem and habitat areas of HCV 2 and HCV 3.

### 5.3.2 Monitoring of HCV 4

The items to be monitored and indicators to be used vary widely depending on the type of ecosystem services. Possible monitoring indicators include water quality and quantity, soil cover, frequency of sediment-related disasters and flood, and frequency of forest fire. The effectiveness of erosion controls can be monitored by measuring water quality and sediment loads in the catchments.

Possible measures of monitoring include monitoring of unauthorized activities and water quality, surveys of designated sites and areas for sediment-related disasters, patrol for disaster prevention in cooperation with relevant local stakeholders, etc. The general condition of the forest can also be monitored by remote sensing techniques.

### 5.3.3 Monitoring of HCV 5 and 6

Regarding socio-cultural values, the participation of local people and Indigenous Peoples, affirming their monitoring methods in advance and discussing the conditions of HCVs monitoring regularly are necessary. As with assessments, the consultation or engagement should be conducted in an appropriate manner that is culturally acceptable, such as interviews and group discussions, and the records should be shared by both parties. When interviews are conducted, consideration must be given to the inclusion of the voices of socially marginalized people. Information from interviews and consultations are often subjective; therefore, it is important to verify the information with different type of interviews with other stakeholders. Generally, it is difficult to monitor HCV 5 and HCV 6 quantitatively. Efforts should be made to make records comparable, for example, by standardizing the format with checklist, or using photographs to anchor records.

## 6 Adaptive Management

The Organization should take a precautionary approach to minimize risk to HCVs, and to improve management practices through adaptive management as experiences are gained and lessons are learned. When reviewing management effectiveness, some important questions need to be considered as follows:

- What changes have taken place in the HCVs, and what caused them?
- Are the planned management strategies and measures being implemented?
- Have the risks and threats facing HCVs changed?
- How effective are the management strategies?
- Are monitoring strategies effectively identifying threats to HCVs and changes in HCV status?

### 6.1 Reviewing

Managers need to interpret monitoring data to decide what kind of management changes lead to changes in HCVs or monitoring indicators. Accumulation of data over a long period of time would also make it easier to identify the margin of error and reveal long-term trends and abnormal change. If the results of monitoring remain unclear, it will be good to consult relevant experts for their interpretation and advice on the development of new, more definitive indicators.

If the status of an HCV requires special attention and is likely to decrease rapidly, more frequent monitoring may be required. A proactive adaptive management approach can avoid more costs resulting from overall HCV recovery.

### 6.2 Management improvement

Appropriate management changes can be made after understanding the causes of HCV decrease. For example, the adaptive management response to a decline caused by weak management implementation may require more stringent operational monitoring, whereas addressing new threats may require entirely new management strategies. For example, in case where monitoring shows that production activities have caused a significant decline in HCV then rehabilitation strategies (e.g., forest restoration) should be conducted to restore the HCV to its baseline level.

It is highly likely that the status of HCVs and threats to them will continue to change over time. Adaptive management and monitoring process should also be ongoing throughout the lifetime of the production activities, and appropriate to the scale, intensity and risk of the threats to HCVs.

## 7 HCV Information Communication

### 7.1 Objective

The purpose of HCV information communication is to promote the understanding, supporting and protecting of HCVs by all stakeholders, so as to achieve the effective maintenance and improvement of HCVs. Management units should actively communicate HCV information with stakeholders and develop proper channels for information communication.

### 7.2 Methods

HCV information can be generally communicated by publishing HCV report summaries or providing HCV related information as required by stakeholders. The management unit may publish the report on its official website or provide contact information for stakeholders to consult or further contact. The communication of information should generally be free of charge. If a printed version of HCV related reports is made available to stakeholders, the fees charged should not exceed their reasonable costs.

### 7.3 Contents

HCV information communication should generally cover the type, scope, distribution map and management measures of HCVs, etc. The communication of information should not lead to negative impacts on HCVs. For the sake of effective protection of HCVs, the operator may exclude the information that should be kept confidential from the information needing to be communicated; for examples, the specific habitats of rare species that are identified as HCV 1, the distribution areas of rare ecosystems that identified as HCV 3, and other similar kinds of information or maps.

## Annex 7 Guidance Documents for Small Organizations

1) FSC Briefing Note1: Group Certification
2) FSC Briefing Note 2: Assessment of Environmental Impacts
3) FSC Briefing Note 3: Evaluating and Monitoring Social Impacts
4) FSC Briefing Note 4: High Conservation Values
5) FSC Briefing Note 5: Simply monitoring
6) FSC step-by-step guide: Good practice guide to meeting FSC certification requirements for biodiversity and High Conservation Value Forests in Small and Low Intensity Managed Forests (SLIMFs)
7) https://cn.fsc.org/cn-zh/zhengceyubiaozhun

## Annex 8 Additional indicators for non-timber forest products (NTFPs)

The following indicators shall be applied to NTFPs that are included in the certificate scope to be sold/provided by the Organization. They are not applicable to those that are not included in the certificate scope. In case of any doubt regarding the scope of certification, the standard development group or FSC China shall be contacted for clarification.

For FSC certification of NTFPs, The Organization shall comply with all the indicators of this standard, including the specific indicators of this annex.

NTFPs included within the scope of this FSS are N1 (Barks), N3 (Cork and articles of cork), N4 (Straw, wicker, rattan and similar), N5 (Bamboo and articles of bamboo), N6 (Plants and parts of plants), N7 (Natural gums, resins, oils and derivatives), N8 (Chemical, medicinal and cosmetic products), N9 (Food, except N9.7, Game), according to FSC-STD-40-004a.

Note: If NTFPs are cultivated, at least 60% of their lifetime shall have been spent in respective FSC certified Management Unit.

| NTFP indicator number | NTFPs indicators | |
|---|---|---|
| 1 | 1.1.1 | NTFP activities within the scope of the certificate are documented and unchallenged. |
| 2 | 1.2.1 | The Organization provides legal tenure or other related evidence that proves rights of resource management and usage of NTFPs within the scope of the certificate. |
| 3 | 1.3.1 | The management and use of NTFPs comply with all applicable laws, mandatory normative requirements and customary rights. |
| 4 | 1.3.1a | When NTFPs are intended for human or animal consumption, all applicable legal and administrative requirements for hygiene and food safety are complied with. |
| 5 | 1.4.1 | Measures are implemented to provide protection from unauthorized or illegal NTFPs harvesting, collecting and other unauthorized activities. |
| 6 | 1.4.2 | Where protection is the legal responsibility of regulatory bodies, a system is implemented to work with these regulatory bodies to identify, report, control and discourage unauthorized or illegal NTFPs activities. |
| 7 | 1.4.3 | If illegal or unauthorized NTFPs harvesting is detected, measures are implemented to address it. |

| NTFP indicator number | NTFPs indicators | |
|---|---|---|
| 8 | 1.5.1 | Compliance with applicable national laws, local laws, ratified international conventions and obligatory codes of practice relating to the transportation and trade of NTFPs up to the point of first sale is demonstrated. |
| 9 | 1.5.2 | The organization provides CITES licences when harvesting or trading CITES NTFPs. |
| 10 | 1.5.2a | The Organization conforms with all requirements of the applicable Forest Stewardship Standard and the national NTFPs indicators. See relevant parts of Annex 1 for legislation and codes related to NTFPs |
| 11 | 2.3.1 | Health and safety risks associated with NTFPs management and harvest are identified and evaluated, and the health and safety practices appropriate to the risk are implemented. |
| 12 | 2.3.2 | Appropriate protective equipment is used for NTFPs management and harvest operations. |
| 13 | 2.3.3 | Use of personal protective equipment that is appropriate to the risk is enforced. |
| 14 | 2.5.1 | Workers receive job training for the management and harvesting of NTFPs. |
| 15 | 3.3.1 | Where control over management activities has been granted by Indigenous Peoples through Free Prior and Informed Consent based on culturally appropriate engagement, the binding agreement with Indigenous Peoples on NTFPs contains the duration, provisions for renegotiation, renewal, termination, economic conditions and other terms and conditions.<br><br>**Guidance note:** Binding agreements are not limited to written agreements. They may be based on oral and honour systems, to be applied in cases where written agreements are not favoured by Indigenous Peoples, either for practical reasons or in principle. |
| 16 | 3.6.1 | Indigenous Peoples are compensated according to the binding agreement reached through Free, Prior and Informed Consent for the use of traditional knowledge and intellectual property leading to commercial use of NTFPs. |
| 17 | 4.1.2 | Agreements on methods, time, area and quantity of harvest of NTFPs are established through culturally appropriate manner with local communities, |

| NTFP indicator number | NTFPs indicators | |
|---|---|---|
| | | documented and/or mapped, and are adhered to by the Organization. |
| **18** | 4.5.1 | Through culturally appropriate engagement with local communities, measures are implemented to identify, avoid and mitigate significant negative social, environmental and economic impacts of NTFPs management and harvesting activities. |
| **19** | 5.1.1 | The Organization identifies NTFPs that could strengthen and diversify the local economy. |
| **20** | 5.1.2 | The Organization promotes NTFP harvesting (within sustainable limits), processing, product diversification at local level and exploration of new markets for the products. |
| **21** | 5.2.4 | NTFPs sustainable harvest levels are based on an analysis of current Best Available Information on growth and yield. |
| **22** | 5.3.1 | Costs related to preventing, mitigating or compensating for negative social and environment impacts of NTFPs management activities are quantified and documented in the management plan.<br>**Guidance note for SSF:** Small organizations may not quantify or document those costs. |
| **23** | 5.3.2 | Benefits related to positive social and environment impacts of NTFP management activities are identified and included in the management plan. |
| **24** | 5.4.1 | Whenever possible, priority is given to processing the NTFP in local value-added facilities. |
| **25** | 5.4.2 | Reasonable attempts are made to establish and encourage capacity where local NTFP-related goods, services, processing and value-added facilities are not available. |

| NTFP indicator number | NTFPs indicators |
|---|---|
| 26 | 6.1.1 Best Available Information is used to identify NTFPs environmental values within, and, where potentially affected by management activities, outside of the Management Unit.<br><br>**Guidance note:** Best Available Information includes:<br><br>1) Representative Sample Areas showing environmental values in their natural state.<br>2) Field surveys;<br>3) Databases relevant to the environmental values, for example, local forestry archive and natural reservation strategic information of municipal or above level;<br>4) Consultation with local and regional experts;<br>5) Culturally appropriate engagement with indigenous peoples, local communities and affected stakeholder and interested stakeholder. |
| 27 | 6.1.2 Assessments of NTFPs environmental values are conducted with a level of detail and at least once within a period of 5 years, so that:<br><br>1) Impacts of management activities on the identified environmental values can be assessed as per Criterion 6.2;<br>2) Risks to environmental values can be identified as per Criterion 6.2;<br>3) Necessary conservation measures to protect values can be identified as per Criterion 6.3; and,<br>4) Monitoring of impacts or environmental changes can be conducted as per Principle 8.<br><br>**Guidance Note for SSF**: Small organizations that do not apply high intensity management activities may decrease assessment frequency to 10 years. |
| 28 | 6.2.1 An environmental impact assessment identifies potential present and future impacts of NTFPs management and harvest activities on environmental values, from the stand level to the landscape level.<br><br>**Note 1**: Assessment at stand level includes the following attributes:<br><br>1) Plant species diversity;<br>2) Provenance and mother tree;<br>3) Existence of invasive species. |
| 29 | 6.2.2 Prior to the start of significant NTFPs management and harvesting |

| NTFP indicator number | NTFPs indicators | |
|---|---|---|
| | | activities, the impact of the activities on the environment is assessed. |
| **30** | 6.3.1 | The Organization develops and implements effective actions to prevent or mitigate negative impacts of NTFPs management, harvesting and processing activities in the management unit. |
| **31** | 6.3.3 | Where negative impacts of commercial harvesting of NTFPs to environmental values occur, measures are adopted to prevent further damage, and negative impacts are mitigated and/or repaired. |
| **32** | 6.4.2 | Potential impacts of NTFPs management activities on rare and threatened species and their conservation status and habitats are identified and management activities are modified to avoid negative impacts. |
| **33** | 6.4.4 | NTFPs on either local and/or international endangered or threatened species lists (e.g., CITES Appendix 1, “critically endangered” IUCN list, critically endangered (CR) and endangered (EN) species listed on the China biodiversity Red List) as well as NTFPs within the habitats of rare and endangered species are not harvested. |
| **34** | 6.6.1 | NTFP harvest and management takes into account the ecological role and requirements of the target NTFPs and other associated species, e.g. food for frugivorous birds and mammals, animal dispersal of seeds, maintenance of specific ecological interdependencies, etc. |
| **35** | 6.6.3 | NTFP management or harvesting doesn’t lead to the significant simplification of forest species composition from the level of management unit to the level of separate forest stands. |
| **36** | 6.6.4 | Effective measures are taken to manage and control NTFPs harvesting activities to ensure that naturally occurring native species, their diversity within species and their natural distribution are maintained. |
| **37** | 7.1.1 | NTFPs Policies (vision and values) that contribute to meeting the requirements of this standard are defined. |
| **38** | 7.1.2 | The Management Plan defines specific operational objectives for the management of NTFP. |

| NTFP indicator number | NTFPs indicators | |
|---|---|---|
| 39 | 7.2.2 | The management plan of NTFPs, includes at least the following items:<br>○ Management objectives;<br>○ NTFPs usage rights and socio-economic conditions of harvesters;<br>○ Exploitation areas (identified in a map, if possible);<br>○ Description of how the objectives will be reached, NTFPs harvesting and processing methods and the system to ensure the management in a long term;<br>○ Description and justification of NTFPs quantity harvested, implemented technique of exploitation and equipment used;<br>○ Information resources that support NTFPs management activities (e.g. field data for specific site, local knowledge or published regional forest research and governmental requirements);<br>○ Environmental and social impacts of the plan;<br>○ • Plan duration. |
| 40 | 7.3.1 | Verifiable targets, and the frequency that they are assessed, are established for monitoring the progress towards each management objective related to NTFPs. |
| 41 | 7.4.1 | The NTFPs management plan is revised and updated periodically to incorporate:<br>1) Monitoring results, including results of certification audits;<br>2) Evaluation results;<br>3) Stakeholder engagement results;<br>4) New scientific and technical information, and<br>5) Changing environmental, social, or economic circumstances. |
| 42 | 7.6.3 | *Affected rights holders** and affected stakeholders are provided with an opportunity for culturally appropriate engagement in monitoring and planning processes of NTFPs management activities that affect their interests. |
| 43 | 7.6.4 | On request, interested stakeholders are provided with an opportunity for engagement in monitoring and planning processes of NTFPs management activities that affect their interests. |
| 44 | 8.1.1 | Procedures are documented and executed for monitoring the |

| NTFP indicator number | NTFPs indicators | |
|---|---|---|
| | | implementation of the NTFPs management plan including its policies and management objectives and achievement of verifiable targets. |
| **45** | 8.2.1 | Monitoring program includes following items with regards to NTFPs:<br>1) Amount of harvest (e.g. number, volume, weight);<br>2) Condition of resources for NTFPs production (including condition of regeneration);<br>3) Impact of the NTFPs management activities on other forest products and the environment;<br>4) Social impact of the management activities (e.g. engagement with local communities and stakeholders). |
| **46** | 8.3.1 | Adaptive management procedures for NTFPs are implemented so that monitoring results feed into periodic updates to the planning process and the resulting NTFPs management plan. |
| **47** | 8.5.1 | A system is implemented to track and trace all NTFP products that are marketed as FSC certified. |
| **48** | 8.5.2 | (only applicable for honey and other bee collection products and exudates):<br>It is demonstrated based on best available information or pollen analysis that at least 50% of the collected pollen originates from within the FSC certified MU before the honey (and/or all other bee collection products and exudates) can be sold with FSC claim: FSC 100%. |
| **49** | 8.5.3 | Information about all NTFPs sold is compiled and documented, including:<br>1) Common and scientific species name;<br>2) Product name or description;<br>3) Volume (or quantity) of product;<br>4) Information to trace the material to the source of origin logging block;<br>5) Collecting date;<br>6) If basic processing activities take place in the forest, the date and volume produced; and<br>7) Whether or not the NTFP(s) was sold as FSC certified. If yes, record the CoC certificate No. and contact information of the customer.<br>**Guidance note for SSF**: Small organizations are exempt from items 4 and 5. |

| NTFP indicator number | NTFPs indicators | |
|---|---|---|
| 50 | 8.5.4 | Sales invoices or similar documentation are kept for a minimum of five years for all NTFPs products sold with an FSC claim, which identify at a minimum, the following information:<br>1) Name and address of purchaser<br>2) The date of sale;<br>3) Common and scientific species name;<br>4) Product type;<br>5) The volume (or quantity) sold;<br>6) Forest Management / Chain of Custody certificate code; and<br>7) The FSC Claim “FSC 100%” identifying products sold as FSC certified. |
| 51 | 10.1.2 | Measures are taken to maintain the natural composition and structure of NTFPs populations (e.g. management of natural regeneration, enrichment planting, selection and protection of seed trees). |
| 52 | 10.2.1 | NTFP species chosen for regeneration are ecologically well adapted to the site, are native species and are of local provenance, unless clear and convincing justification is provided for using non-local genotypes or non-native species. |
| 53 | 10.3.1 | When the NTFPs are alien species, they are used only when direct experience and / or the results of scientific research demonstrate that invasive impacts can be controlled. |
| 54 | 10.3.2 | When the NTFPs are alien species, they are used only when effective mitigation measures are in place to control their spread outside the area in which they are established. |
| 55 | 10.3.3 | When the NTFPs are alien species, the spread of invasive species introduced by The Organization is controlled. |
| 56 | 10.3.4 | Management activities are implemented, preferably in cooperation with separate regulatory bodies where these exist, with an aim to control the invasive impacts of alien NTFP species that were not introduced by The Organization. |
| 57 | 10.4.1 | Genetically modified NTFP organisms are not used. |

| NTFP indicator number | NTFPs indicators |
|---|---|
| 58 | 10.5.1 Silvicultural practices are implemented that are ecologically appropriate for the vegetation, species, sites and NTFP management objectives. |
| 59 | 10.6.1 The use of fertilizers (for the production of NTFPs) is minimized or avoided. |
| 60 | 10.6.2 When fertilizers are used (for the production of NTFPs), their ecological and economic benefits are equal to or higher than those of silvicultural systems that do not require fertilizers. |
| 61 | 10.6.3 When fertilizers are used (for the production of NTFPs), their types, rates, frequencies and site of application are documented. |
| 62 | 10.6.4 When fertilizers are used (for the production of NTFPs), environmental values are protected, including through implementation of measures to prevent damage. |
| 63 | 10.6.5 Damage to environmental values resulting from fertilizer use (for the production of NTFPs) is mitigated or repaired. |
| 64 | 10.7.1 Integrated pest management (when producing NTFPs), including selection of silviculture systems, is used to avoid, or aim to eliminate, the frequency, extent and amount of chemical pesticide applications, and result in non-use or overall reductions in applications.<br>10.7.2 (only applicable for honey and other bee collection products and exudates) Sickness of the bees is treated physically such as with steam or fire to disinfect the beehives. For treatment of varroa mites, the following substances are used:<br>o formic acid, lactic acid, acetic acid and oxalic acid.<br>o - menthol, eucalyptol and camphor. |
| 65 | 10.7.4 Records of pesticide usage (when producing NTFPs) are maintained, including trade name, active ingredient, quantity of active ingredient used, period of use, location and area of use and reason for use. |
| 66 | 10.7.5 The use of pesticides (when producing NTFPs) complies with the ILO document “Safety in the use of chemicals at work” regarding requirements for the transport, storage, handling, application and emergency procedures for cleanup following accidental spillages. |

| NTFP indicator number | NTFPs indicators |
|---|---|
| 67 | 10.7.6 If pesticides are used (when producing NTFPs), application methods minimize quantities used, while achieving effective results, and provide effective protection to surrounding landscapes. |
| 68 | 10.7.7 Damage to environmental values and human health from pesticide use (when producing NTFPs) is prevented and mitigated or repaired where damage occurs. |
| 69 | 10.7.8 When pesticides are used (for production of NTFPs):<br>1) The selected pesticide, application method, timing and pattern of use offers the least risk to humans and non-target species; and<br>2) Objective evidence demonstrates that the pesticide is the only effective, practical and cost effective way to control the pest. |
| 70 | 10.8.1 The use of biological control agents (when producing NTFPs) is minimized, monitored and controlled. |
| 71 | 10.8.2 Use of biological control agents (when producing NTFPs) complies with internationally accepted scientific protocols.<br>**Guidance note:** Internationally accepted scientific protocols include but are not limited to:<br>1) FSC Guide To integrated pest, disease and weed management in FSC certified forests and plantations (2009);<br>2) FAO Code of Conduct for the Import and Release of Exotic Biological Control Agents. |
| 72 | 10.8.3 The use of biological control agents (when producing NTFPs) is recorded including type, quantity, period, location and reason for use. |
| 73 | 10.8.4 Damage to environmental values caused by the use of biological control agents (when producing NTFPs) is prevented and mitigated or repaired where damage occurs. |
| 74 | 10.9.2 Management activities mitigate the negative impacts of natural hazards on NTFPs.<br>10.9.3 (only applicable for honey and other bee collection products and exudates): Feeding of bees only takes place in cases of lack of natural food sources, due to climatic conditions or alike, i.e. during winter periods. When bee |

| NTFP indicator number | NTFPs indicators |
|---|---|
| | families are fed, a log book is kept for each bee family/beehive, including:<br>a) food product fed, i.e. sugar<br>b) amount fed<br>c) date fed. |
| **75** | 10.10.2 NTFP-related silviculture activities are managed to ensure protection of the environmental values identified in Criterion* 6.1. |
| **76** | 10.10.3 Disturbance or damages to water courses, water bodies, soils, rare and threatened species, habitats, ecosystems and landscape values are prevented, mitigated and repaired in a timely manner, and NTFP management activities modified to prevent further damage. |
| **77** | 10.11.1 Harvesting and extraction practices for NTFPs are implemented in a manner that conserves environmental values as identified in Criterion 6.1 and High Conservation Values identified in Criteria 9.1 and 9.2. |
| **78** | 10.11.2 Harvesting practices optimize the use of NTFPs and merchantable materials. |
| **79** | 10.11.4 NTFPs harvesting practices avoid damage to standing residual trees, residual woody debris on the ground and other environmental values. |

## Annex 9 Highly Hazardous Pesticides (HHP) Indicators

Using the indicators in Annex J of FSC-STD-60-004 v2-1 "International Generic Indicators" as a starting point, the indicators for the use and risk management of FSC highly hazardous pesticides (HHP) in China are developed, with reference to the recommended documents in Annex J and in combination with the relevant laws, regulations and normative documents of pesticide management and forest management in China.

This document contains personal protective equipment (Annex 9.1) specified in national standard GB 12475 " Antitoxic regulations for storage-transportation, marketing and use of pesticides ", list of FSC HHP registered in forestry in China (Annex 9.2), and list of FSC restricted HHP registered in forestry in China (Annex 9.3). The ESRA templates of non-highly hazardous pesticides, FSC restricted HHP and FSC highly restricted HHP are listed as Annex 9.4 -9.6.

For each specific pesticide which is listed on Annex 9.2 and 9.3, in addition to meet the general indicators in Annex 9, the organization can check the pesticide label information on China Pesticide Information Network (http://www.chinapesticide.org.cn/) in order to use the pesticide according to the methods described in the label information, including wearing the proper personal protective equipment, following the prescribed storage and transportation methods, and setting up appropriate buffer zones.

**10.7 The Organization shall use integrated pest management and silviculture systems which avoid, or aim at eliminating, the use of chemical pesticides. The Organization shall not use any chemical pesticides prohibited by FSC policy. When pesticides are used, The Organization shall prevent, mitigate, and/or repair damage to environmental values and human health.**

10.7.13 If the use of highly hazardous pesticides is unavoidable, the trend of reduction, replacement and/or removal of highly hazardous pesticides over time is demonstrated, or continued use is justified.

10.7.14 The best available information is used to identify and quantify the likely impacts of the targeted pest, and control measures are proactively considered and/or implemented to avoid unacceptable impacts on economic, environmental or social values.

**Guidance note:** The best available information includes, but is not limited to, the medium and long-term forecast of the occurrence trend of forest diseases and pests or the dynamic notification of diseases and pests issued by the competent forestry administrative department, pesticide labels, safety data sheets, and relevant literature.

10.7.15 Programmes are in place that have specific actions, timelines, targets and resources allocated to conduct, or support, research to identify and test less hazardous alternatives to replace FSC highly restricted highly hazardous pesticides and restricted highly hazardous pesticides.

**Guidance note :** Less hazardous alternatives may include changes to management practices, species choice and tree breeding, biological control agents, biological pesticides or non-FSC highly hazardous pesticides.

**Guidance note for SSF:** The less harmful alternatives could be obtained by consulting the forest pest control institutions of forestry administrative department or relevant experts.

10.7.16 Risk mitigation measures prioritize avoiding exposure of workers, affected stakeholders or environmental values to highly hazardous pesticides.

10.7.17 Risk mitigation measures for workers include the use of appropriate personal protective equipment consistent with the national standard GB 12475 “Antitoxic regulations for storage-transportation, marketing and use of pesticides” (see Annex 9.1).

10.7.18 According to the relevant requirements of labels, safety data sheets or regulations, a pesticides buffer zone is established where a highly hazardous pesticide or application method requires one to ensure the protection of environmental values and social values.

**Guidance note:** The examples where buffer zones need to be established include but are not limited to water body, wetlands, sensitive crops, aquaculture areas, bee farms, schools, hospitals and communities.

10.7.19 According to the relevant requirements of the label, safety data sheets or regulations, an exclusion zone is established where a highly hazardous pesticide or application method requires one to avoid workers and affected stakeholders from being exposed to harm.

**Guidance note:** The relevant requirements include, hazards identification, re-entry interval, toxicological information, ecological information, exposure controls and personal protection.

10.7.20 The location and duration of such an exclusion zone is communicated in a culturally appropriate manner.

10.7.21 The Organization develops and implements training programmes on the use of highly hazardous pesticides, including informing workers of known risks to human health and environmental values, and mitigation measures identified in the *Environmental and Social Risk Assessment*.*

10.7.21.1 The training contents include but are not limited to the transportation, storage, handling, application and accident emergency measures of highly hazardous pesticides.

10.7.22 The implementation of risk mitigation measures, including alternative measures, is monitored.

10.7.23 The exposure of individual workers to highly hazardous pesticides is monitored.

**Guidance note:** Monitoring approaches can include records of highly hazardous pesticide applications, personal protective equipment use and reported or observed health effects, and medical biological monitoring.

10.7.24 Environmental impacts caused by the use of highly hazardous pesticides listed on the basis of their environmental toxicity (hazard criteria 7 and 8) and changes in environmental condition are monitored.

**Guidance note:** Monitoring approaches can include records of highly hazardous pesticide applications and reported or observed environmental effects, and environmental biological monitoring.

10.7.25 *Environmental and Social Risk Assessment(s*)*, site operational plans, and site-specific risk mitigation and monitoring measures are consistent with safety data sheets (MSDS) and chemical label instructions of highly hazardous pesticides.

**Guidance note:** Monitoring approaches may focus on checking the compliance of risk mitigation and monitoring measures with hazards identification, first aid measures, firefighting measures, accidental release measures, handling and storage, exposure controls and personal protection, toxicological information, ecological information, disposal considerations and other information.

10.7.26 Based on monitoring results, corrective action is taken where mitigation measures are not implemented as appropriate, or are not effective in managing risks to human health and environmental values.

10.7.27 Harm caused to workers and affected stakeholders by overexposure to highly hazardous pesticide is treated. When treatment is not possible, fair compensation is provided.

10.7.28 Damage caused to environmental values by highly hazardous pesticides listed on the basis of their environmental toxicity (hazard criteria 7 and 8) is repaired. When repairing damage is not possible, fair compensation is provided.

10.7.29 When highly hazardous pesticides are used in an emergency or by government order, use conforms with the procedure for the exceptional use of prohibited highly hazardous pesticides in Annex 3 of FSC-POL-30-001 FSC Pesticides Policy.

**Guidance note:** While Annex 3 of the FSC Pesticides Policy addresses the use of prohibited highly hazardous pesticides in emergency situations or by government orders, this indicator allows certificate holders to apply the same procedure to restricted highly hazardous pesticides and highly restricted highly hazardous pesticides in these situations, providing a window of thirty (30) days after starting the use of the chemical pesticide in which to complete a site-specific *Environmental and Social Risk Assessment**.

## Annex 9.1 Personal protective equipment specified in the national standard GB 12475 "Antitoxic regulations for storage-transportation, marketing and use of pesticides"

| Protective part | Operation item | Necessary protective equipment |
|---|---|---|
| **Respiratory organ** | 1. Exposure to or use of highly toxic and deadly poisonous pesticides. | Gas mask conforming to GB 2890 or GB 6220 (if there is irritation and damage to eyes and face caused by pesticides, a full-face gas mask should be used). |
| | 2. Medium toxic and low toxic pesticides are used as aerosol or fumigant in closed places (such as greenhouse, warehouse, etc.) | |
| | 3. Exposure to or use of non-volatile pesticide powder dust with medium toxicity and low toxicity. | Anti-particulate respirator conforming to GB 2626. |
| | 4. Exposure to or use of medium toxic and low toxic volatile pesticides. | Suitable gas mask. |
| | 5. Exposure to or use of medium toxic and low toxic volatile pesticides when the dosage and the vapor concentration is large. | Gas mask conforming to GB 2890. |
| | 6. Exposure to or use of pesticides when toxic vapor and smoke exist at the same time. | Gas mask + canister with smoke filter. |
| **Skin** | 1. Pesticide application. | |
| | a) Opening containers, diluting or mixing, filling from one container to another, washing equipment (including aircraft) | Breathable work clothes[1] and rubber apron (or rubber and PVC film protective clothing), rubber shoes, rubber gloves and protective glasses. |
| | b) Field or greenhouse crop spraying and aircraft spraying. | Breathable work clothes, and protective hat. |
| | c) Pesticide application for climbing plants, trees and shrubs. | Breathable work clothes, rubber protective clothing, and protective cap. |
| | 2. Apply granules or powder. | |

| Protective part | Operation item | Necessary protective equipment |
|---|---|---|
| | a) Open container. | Breathable dustproof clothes[2] rubber (or plastic) apron, rubber gloves and rubber shoes. |
| | b) Application by hand or by hand-held equipment. | Breathable dust-proof clothes (or adhesive protective clothing), rubber gloves, and rubber shoes. |
| | c) Mechanical application. | Breathable dust-proof work clothes (or adhesive protective clothing), and gloves. |
| | d) Aircraft spraying. | Breathable dust-proof work clothes (or adhesive protective clothing), and protective hat. |
| | 3. Ground spraying or soil application. | Breathable work clothes, rubber apron, rubber gloves, and rubber shoes. |
| | 4. Seed soaking. | Breathable work clothes, rubber (or plastic) aprons, rubber gloves, rubber shoes, and protective hat. |
| | 5. Fumigation. | Breathable work clothes, rubber protective clothing, rubber gloves, and rubber shoes. |
| | 6. Loading and unloading pesticides. | Breathable work clothes, rubber apron, rubber gloves, protective gloves, and protective shoes. |
| | 7. Weighing and compounding pesticides. | Breathable work clothes (or rubber gloves). |

## Annex 9.2 List of FSC highly restricted highly hazardous pesticides registered in forestry in China

*The hazard criterion is based on <FSC-POL-30-001a FSC Lists of Highly Hazardous Pesticides>.

| Number | Pesticide active ingredient | Hazard Criterion* | Extract of registration information in China |
|---|---|---|---|
| **1** | Bifenthrin | 2.1b, 6.1b, 7.1a | Hygienic insecticide for controlling termites in wood (1. Application period: when needed. 2. Application dosage of formulation: 80-200 times solution. 3. Application method: evenly brush the wood surface or soak the wood for 24 hours.) |
| **2** | Abamectin | 2.1b, 2.1c, 7.1a | Nematicide for controlling pine wood nematodes (1. Application period: before or at the early stage of nematodes occurrence. 2. Application dosage of formulation: 2.6-3.6 ml/cm DBH. 3. Application method: injection of trunk perforation. 4. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour, and be treated once a year at most for each pine tree.).<br>Insecticide for pine caterpillar（1. Application period: young larval stage. 2. Application dosage of formulation: 10000-15000 times solution. 3. Application method: spray evenly. 4. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |
| **3** | Chlorfenapyr | 2.1b, 7.1a | Insecticide for controlling fall webworms of poplar (1. Application period: occurrence peak period of larvae before the 4th instar. 2. Application dosage of formulation: 1667-3300 times solution. 3. Application method: spray evenly. 4. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |
| **4** | Beta-Cypermethrin | 2.1b, 7.1a | Insecticide for controlling long-horned beetles of trees (1. Application period: supplementary nutrition period or peak emergence period of adults. 2. Application dosage of formulation: 400-1000 times solution. 3. Application method: spray evenly in the morning or evening. 4. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |

| Number | Pesticide active ingredient | Hazard Criterion* | Extract of registration information in China |
|---|---|---|---|
| **5** | Dichlorvos; DDVP | 2.1a, 2.1b, 2.1c, 7.1a | Insecticide for controlling common lackey moths, bamboo locusts, pine caterpillars, willow moths of trees (1. Application period: 2nd-3rd instar larval stage. 2. Application dosage of formulation: 500-1000 g/mu for smoke generator, and 178-356 ml/mu for oil miscible liquid. 3. Application method: releasing smoke for smoke generator, and ultra-low volume spray for oil miscible liquid. 4. Attention points: when the wind speed in the forest is 0.3-1m/s and the airflow is increasing reversely, it is advisable to smoke in the evening or one hour before sunrise. In the key drought fire prevention area or key fire prevention period, the surface with a diameter of 60 cm should be cleared in the smoking area, and a pit with a depth of more than 20 cm should be dug in the center.). |
| **6** | Phoxim | 2.1b, 7.1a | Insecticide for controlling defoliators of trees (1. Application period: incubation peek stage or young larval stage. 2. Application dosage of formulation: 500-1000 ml/mu. 3. Application method: spray evenly. 4. Attention points: because the pesticide is easy to decompose when exposed to light, it is suitable to use in the morning or evening, and can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |
| **7** | lambda-Cyhalothrin | 2.1b, 2.1c, 6.1b, 7.1a | Insecticide for controlling fall webworms of trees (1. Application period: occurrence peak period of larvae before the 4th instar. 2. Application dosage of formulation: 3000-5000 times solution. 3. Application method: spray evenly. 4. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |
| **8** | Malathion | 3.1a, 7.1a | Insecticide for controlling locusts of trees (1. Application period: egg stage or initial stage of nymphs. 2. Application dosage of formulation: 65-90 g/mu. 3. Application method: ground ultra-low volume spray. 4. Attention points: can't be used under the conditions of strong sunshine, strong wind or rainy weather, and can’t be mixed with strong alkali agents.). |
| **9** | Deltamethrin | 2.1b, 6.1b, 7.1a | Insecticide for controlling forest pine caterpillars (1. Application period: larval stage. 2. Application dosage of formulation: 3571-6250 times solution for emulsifiable concentrate, and 625-1250 g/mu for dustable powder. 3. Application method: spray evenly for emulsifiable concentrate and powder injection for dustable powder. 4. |

| Number | Pesticide active ingredient | Hazard Criterion* | Extract of registration information in China |
|---|---|---|---|
| | | | Attention points: avoid to be used under the conditions of strong sunshine, strong wind or rainy weather.). |
| **10** | Esfenvalerate | 2.1b, 7.1a | Insecticide for controlling forest pine caterpillars (1. Application period: incubation peek stage or young larval stage. 2. Application dosage of formulation: 6250-10000 times solution. 3. Application method: spray evenly. 4. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |
| **11** | Omethoate | 2.1a, 2.1b, 6.1b, 7.1a | Operated by certificated stores. Insecticide and acaricide for controlling forest pine scales and caterpillars (1. Application period: active period and damage period of newly hatched larvae of pine scale, and the 2nd-3rd instar larvae of caterpillars. 2. Application dosage of formulation: 500 times solution. 3. Application method: spray evenly or smear the trunk. 4. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour. Warning signs should be set up after application, and the re-entry interval for humans and animals is 48 hours.). |

## Annex 9.3 List of FSC restricted highly hazardous pesticides registered in forestry in China

*The hazard criterion is based on <FSC-POL-30-001a FSC Lists of Highly Hazardous Pesticides>.

| Number | Pesticide active ingredient | Hazard Criterion* | Extract of registration information in China |
|---|---|---|---|
| 1 | Borax; Borate salts（disodium octaborate tetrahydrate） | 5.1a | Hygienic insecticide for controlling termites in wood (1. Application period: when needed. 2. Application dosage of formulation: 8.4-8.6 kg/m3. 3. Application method: pressure soaking treatment. 4. Attention points: the pressure treatment procedure and treatment rate must strictly follow the specifications of Borax Company of America and/or AWPA or Canadian Standards Association or other international treatment standards or export wood products specifications. Only for professionals.). Fungicide for controlling wood rot fungus (1. Application period: just after logging. 2. Application dosage of formulation: 436 times solution. 3. Application method: soaking treatment for 2 to 5 minutes. 4. Attention points: only for professionals.). |
| 2 | Chlorantraniliprole | 7.1a | Hygienic insecticide for controlling termites in wood (1. Application period: when needed. 2. Application dosage of formulation: 200 times solution. 3. Application method: brush 200ml diluted solution on the surface of every square meter of wood block, or soak it in the solution for 24 hours. 4. Attention points: only for professionals.). |
| 3 | Imidacloprid | 2.1b | Hygienic insecticide for controlling termites in wood (1. Application period: when needed. 2. Application dosage of active ingredient: 600-1000 mg/kg. 3. Application method: brush the wood surface with at least 200ml solution per square meter, and brush twice. Or soak the wood once for 24 hours.)<br>Insecticide for controlling long-horned beetles of trees and Japanese pine sawyer of pines (1. Application period: initial occurrence peak period of pests. 2. Application dosage of formulation: 3000-4000 times solution. 3. Application method: spray evenly. 4. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |
| 4 | Hexaflumuron | 7.1a | Hygienic insecticide for controlling termites in wood (1. Application period: when termites are found in the bait monitoring device. 2. Application dosage and method: replace the monitoring sticks with baits, observe regularly, and put in new baits when baits are eaten up.). |

| Number | Pesticide active ingredient | Hazard Criterion* | Extract of registration information in China |
|---|---|---|---|
| **5** | Triflumuron | 7.1a | Insecticide for controlling poplar fall webworms (1. Application period: the peak period of egg hatching and larval stage. 2. Application dosage of formulation: 1250-2500 times solution. 3. Application method: spray evenly. 4. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |
| **6** | Lufenuron | 7.1a | Insecticide for controlling poplar fall webworms (1. Application period: occurrence peak period of larvae before the 4th instar. 2. Application dosage of formulation: 1000-2000 times solution. 3. Application method: spray evenly after 4 pm in sunny days. 4. Attention points: can be used only once per quarter and can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |
| **7** | Pyridaphenthion | 2.1b | Insecticide for controlling green worms and pine caterpillars of trees (1. Application period: the peak period of egg hatching and young larval stage. 2. Application dosage of formulation: 500 times solution. 3. Application method: spray evenly. 4. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |
| **8** | Etofenprox | 7.1a | Insecticide for controlling pine caterpillars of trees (1. Application period: the peak period of egg hatching and young larval stage. 2. Application dosage of formulation: 2000-3000 times solution. 3. Application method: spray evenly. 4. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |
| **9** | Diflubenzuron | 7.1a | Insecticide for controlling fall webworms of forest and tree (1. Application period: the peak period of egg hatching to the 3rd larval stage. 2. Application dosage of formulation: 3000-5000 times solution. 3. Application method: spray evenly.), and pine caterpillars of forest and trees (1. Application period: ovipositing peak period or young larval stage. 2. Application method and dosage of formulation: 4150-6250 times solution for spraying evenly, or 8-12 g/mu for ultra-low volume spraying. 3. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |

| Number | Pesticide active ingredient | Hazard Criterion* | Extract of registration information in China |
|---|---|---|---|
| **10** | Folpet | 3.1b | Fungicide for controlling wood mold (1. Application period: before woods processing. 2. Application dosage of formulation: 200-400 times solution. 3. Application method: soaking treatment. 4. Attention points: operators must wear protective equipment and can't directly contact with solution. The soaking solution can’t be discharged until it reaching the standard after treatment.). |
| **11** | Fipronil | 2.1b | Hygienic insecticide for controlling termites in wood (1. Application period: when needed. 2. Application dosage of formulation: 40-100 times solution. 3. Application method: apply or spray at least 250 ml solution on the surface of the board per square meter, or soak the board for 24 hours.). |
| **12** | Glyphosate and its salts | 3.1a | Herbicide for controlling weeds in forest fire lane (1. Application period: 4-6 leaf stage of weeds. 2. Application dosage of formulation: 183-488 ml/mu. 3. Application method: directional stem and leaf spray. 4. Attention points: if it rains within 4 hours after application, the efficacy will be affected, therefore do not apply the herbicide before rain or in windy days.).<br>Herbicide for controlling annual weeds and perennial malignant weeds in forest (1. Application period: vigorous growth period of weeds. 2. Application dosage of formulation: 250-500 ml/mu. 3. Application method: Inter-row directional stem and leaf spray. 4. Attention points: if it rains within 4 hours after application, the efficacy will be affected, therefore do not apply the herbicide before rain or in windy days.). |
| **13** | Pendimethalin | 8.2a | Herbicide for controlling annual weeds in glossy privet nurseries (1. Application period: before emergence of weeds. 2. Application dosage of formulation: 150-200 ml/mu. 3. Application method: uniformly spraying on soil surface. 4. Attention points: do not use drones and irrigation equipment to spray herbicides.). |
| **14** | Atrazine | 6.1b | Herbicide for controlling annual weeds in forests (1. Application period: before emergence of weeds. 2. Application dosage of formulation: 2.1-5.2 g/m2. 3. Application method: uniformly spraying on soil surface.), Korean pine nurseries (1. Application period: before emergence of weeds. 2. Application dosage of formulation: 0.5-1 g/m2. 3. Application method: uniformly spraying on seedbed.), rubber plantations (1. Application period: before emergence of weeds. 2. Application dosage of formulation: 521-625 g/mu. 3. |

| Number | Pesticide active ingredient | Hazard Criterion* | Extract of registration information in China |
|---|---|---|---|
| | | | Application method: uniformly spraying on soil surface.). |
| **15** | Oxyfluorfen | 3.1b | Herbicide for controlling annual weeds in forestry nurseries (1. Application period: before emergence of weeds. 2. Application dosage of formulation: 50-83 ml/mu with water 50-60 L/mu. 3. Application method: uniformly spraying on the moist soil surface.). |
| **16** | Picloram | 6.1b | Herbicide for controlling shrubs and broadleaf weeds in forest (1. Application period: weeds from seedling stage to vigorous growth stage, and shrubs from leaf spreading stage to vigorous growth stage. 2. Application dosage of formulation: 333-1000 ml/mu with water 30-50 L/mu. 3. Application method: spray evenly. 4. Attention points: can't be used under the conditions of strong wind or expected rainfall within 1 hour.). |

## Annex 9.4 ESRA Template of a Non-FSC Highly Hazardous Pesticide (Tebufenozide)

### 1. Context and scope

To help organizations comply with ESRA requirements, the FSC Pesticides Policy allows the national Standard Development Group to complete the ESRA template; organizations can then use this pre-populated template when undertaking their own ESRA. This national-level ESRA for tebufenozide has been produced on this basis. Organizations are not obliged to use the FSC template for ESRAs; organizations may use their own template for risk assessments, provided that all the content requirements of the policy are covered.

FSC has not classified tebufenozide as a Highly Hazardous Pesticide. As such it falls under the category of 'other chemical pesticides'.

This ESRA covers standard forestry uses of tebufenozide for pine caterpillars and fall webworms control, including storage, mixing, application and waste disposal. It does not apply to non-standard uses, which may require additional safeguards.

### 2. Environmental and social risk assessment

#### 2.1 Basic information

**Date** : 2022-03-31

**Pesticide** : Tebufenozide

**Purpose of use** : Control of pine caterpillars and fall webworms

**Location of use** : ××××

#### 2.2 Abbreviations

**CM** : Control measure.

**ESRA** : Environmental and social risk assessment.

**GHS** : The globally harmonized system of classification and labelling of chemicals.

**H411** : The hazard statement code for 'Toxic to aquatic life with long lasting effects'.

**HCV** : High conservation value.

**HHP** : Highly hazardous pesticide.

**IPM** : Integrated pest management.

**FSS** : Forest Stewardship Standard.

**P501** : The precautionary statement code for 'Dispose of contents/container to local regulations'.

#### 2.3 References

- Technical specification of safety application for operated sprayers (NY/T 1225).
- Antitoxic regulations for storage-transportation, marketing and use of pesticides (GB 12475).

### 2.4 Identification and assessment of risk, and mitigation strategies to minimize it

See table below.

| Exposure Elements | Minimum list of values | Description of why/why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | | Tebufenozide is known to be **toxic to aquatic life with long lasting effects** (GHS H411). | **General strategies**<br><br>This ESRA is based on the status of tebufenozide as a non-Highly Hazardous Pesticide. From the descriptions of risk, the principal issue is the potential for the contamination of water (and associated risks, including to aquatic life). Mitigation strategies are focused on this key risk, but also address the other lesser risks identified: the potential impacts on non-target insect species, the potential for the contamination of wild foods, and effects on public access, but the proposed mitigation strategies and indicators are proportionate to the perceived level of risk.<br><br>While this ESRA comes at a point in the IPM process where it has already been decided that the use of tebufenozide is necessary, most of the risks described can be mitigated to some degree by minimizing the volume used. For this reason, minimizing tebufenozide quantities used, while achieving effective results, is a key general mitigation strategy.<br><br>**CM 1** Training for operators exposed to tebufenozide (FSS 10.7.21).<br><br>**CM 2** The application of tebufenozide complies with the relevant requirements of *Technical Specification of Safety Application for Operated Sprayers* (NY/T 1225) and *Antitoxic Regulations for Storage-transportation, Marketing and Use of Pesticides* (GB 12475), so as to mitigate the risks to worker safety and water, as well as risks such as poorly targeted applications affecting non-target insect species.<br><br>**CM 3** Operators comply with the requirements and relevant recommendations of the product label and safety data sheets (SDS).<br><br>**CM 4** Records of tebufenozide usage are maintained, including trade name, active ingredient, quantity of active ingredient used, period of use, number and frequency of applications, location and area of use, and reason for use. |

| Exposure Elements | Minimum list of values | Description of why/why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| **Environmental** | Soil (erosion, degradation, biota, carbon storage) | Standard forestry usage of tebufenozide is **not** considered to have any significant impacts. There may be positive effects from promoting prompt reestablishment of tree cover. | N/A |
| | Water (ground water, surface waters, water supplies) | Tebufenozide is known to be **toxic to aquatic life with long lasting effects** (GHS H411).<br>Tebufenozide usage has the potential to contaminate ground water, surface water and water supplies.<br>The greatest risk of harm comes from mixing and filling undiluted products. | While a wide range of measures, including careful transport and storage, are important in protecting water resources, the principal measure to protect surface waters and water supplies is to identify them and to respect appropriate buffer zones around them.<br>**CM 5** Operations, such as mixing and filling of Tebufenozide, conform to forestry standard requirements in relation to buffer zones around watercourses and waterbodies. Tebufenozide usage in buffer zones is prohibited (FSS 6.7.2 & 6.7.3).<br>**CM 6** The mixing, filling and preparation of tebufenozide, the cleaning of pesticide application instruments and personal protective equipment, and the disposal of wastes should be far away from waterways, water bodies and water sources (GB 12475).<br>**CM 7** Formulate emergency response plan for tebufenozide related accidents (GB 12475).<br>**CM 8** Monitor the impacts of Tebufenozide on water quality by using data released by environmental protection authorities and water administrative authorities. |
| | Atmosphere (air quality, greenhouse gases) | Standard forestry usage of tebufenozide is **not** considered to have any significant impacts. | N/A |
| | Non-target species | There are **potential impacts on bees**. | **CM 9** Operators strictly follow the requirements of *Technical Specification of Safety Application for Operated Sprayers* (NY/T 1225), product label and safety data sheets (SDS), |

| Exposure Elements | Minimum list of values | Description of why/why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | (vegetation, wildlife, bees and other pollinators, pets) | Standard forestry usage of tebufenozide is **not** considered to have any significant impacts on vegetation, wildlife, and pets. | to determine the target control objects, the safety of pesticides to non-target species, wind speed and direction regulations, and other information before application, and take reasonable measures to avoid spray drift to adjacent flowering plants. |
| | Non-timber forest products (as FSC-STD-01-001 V5-2 FSC Principles and Criteria, Criterion 5.1) | There may be potential impacts on bee products. | See the strategies for non-target species, above. |
| | High Conservation Values (particularly HCV 1-4) | As noted previously, there are **potential impacts on non-target insect species (HCV 1)**.<br>Standard forestry usage of tebufenozide is **not** considered to have any significant impacts on HCV 2-4. | For HCV 1, see the strategies for non-target species, above. |
| | Landscape (aesthetics, cumulative impacts) | Standard forestry usage of tebufenozide is **not** considered to have any significant impacts. There may be positive effects from promoting prompt reestablishment of tree cover. | N/A |

| Exposure Elements | Minimum list of values | Description of why/why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | Ecosystem services (water, soil, carbon sequestration, tourism) | As noted previously, there are **potential impacts on water**.<br>Standard forestry usage of tebufenozide is **not** considered to have any significant impacts on carbon sequestration or tourism. | See the strategies for water, above. |
| **Social** | High Conservation Values (especially HCV 5-6) | As noted previously, there are **potential impacts on water supplies (HCV 5)**.<br>Standard forestry usage of Tebufenozide is **not** considered to have any significant impacts on cultural values (HCV 6). | See the strategies for water, especially in relation to water supplies, above.<br>Appropriate communication and consultation as per FSS 4.1.1 and 9.4.2 will be important to ensure that neighbours with private water supplies are suitably informed and able to discuss mitigation measures. |
| | Health (fertility, reproductive health, respiratory health, dermatologic, neurological and gastrointestinal problems, cancer and hormonal imbalance) | Tebufenozide may cause **mild transient eye irritation**. | See the strategies for worker safety in general strategies.<br>**CM 10** Dispose of contents/container in accordance with local regulations (GSH P501).<br>**CM 11** Operator exposure to tebufenozide is monitored using pesticide application records and site checks of use of personal protective equipment. There is appropriate follow-up action if personal protective equipment is not being used.<br>**CM 12** Operator health concerns are monitored using pesticide application records and site checks. There is appropriate follow-up action if health concerns are identified.<br>**CM 13** Operators can easily obtain clean water, cleaning agents, towels, first aid medicines and necessary repair tools. |
| | Welfare | Standard forestry usage of tebufenozide **may have indirect effects on worker welfare through** | |

| Exposure Elements | Minimum list of values | Description of why/why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | | **the weight of spraying gear or overheating as a result of wearing personal protective equipment**. | |
| | Food and water | *Note: This value is taken to refer to wild forest foods (rather than agricultural crops) and to drinking water.*<br><br>Standard forestry usage of tebufenozide **may potentially lead to contamination of fruits etc**., and contact with residues immediately after treatment may cause mild transient eye irritation.<br><br>As noted previously, there are **potential impacts on water supplies**. | In all cases, if practical and legally possible, it is preferable to totally exclude forest users from the work-site, or close the recreation site or footpath/right of way on the work-site margins. The method of exclusion, through barriers or signage, will depend on the type of user identified. The duration of exclusion will depend on the presence or absence of edible non-timber forest products (NTFPs).<br><br>(1) If edible NTFPs that are likely to be picked are present, close the site until the non-picking period of NTFPs.<br><br>(2) If no edible NTFPs are present, close the site for 48 hours after spraying, or until the pesticide dries and there is no liquid residue that might cause accidental contamination of the public.<br><br>**CM 14** Use of tebufenozide conforms to the indicators of FSS annex 8 on food and public protection.<br><br>See the strategies for water, especially in relation to water supplies, above. |
| | Social infrastructure; (schools and hospitals, recreational infrastructure, infrastructure adjacent to the management unit) | Standard forestry usage of tebufenozide is **not** considered to have any significant impacts。 | N/A |

| Exposure Elements | Minimum list of values | Description of why/why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | Economic viability (agriculture, livestock, tourism) | Tebufenozide usage **may potentially have impacts on some water-based industries (such as fish farming), or on water supplies for enterprises (such as breweries or distilleries)**.<br><br>Tebufenozide is **toxic to silkworm**. | See the strategies for water, above.<br><br>**CM 15** Tebufenozide usage, near mulberry fields, silkworm rooms or silkworm egg farms, is forbidden. |
| | Rights (legal and customary) | Standard forestry usage of tebufenozide **may lead to restrictions on rights of access**.<br><br>Tebufenozide usage **may potentially have impacts on access to uncontaminated water**. | See the strategies for public protection and water, above. This risk is best mitigated through appropriate affected stakeholder engagement, as addressed by FSS 7.6.1.<br><br>**CM 16** Where it is desirable to restrict public access to minimize health and safety risks, such restrictions are kept to the minimum extent and duration necessary to achieve effective results. |
| | Others | No other risks have been identified. | N/A |

# Annex 9.5 ESRA Template of FSC Restricted Highly Hazardous Pesticides (Glyphosate)

## 1. Context and scope

To help organizations comply with ESRA requirements, the FSC Pesticides Policy allows the national Standard Development Group to complete the ESRA template; organizations can then use this pre-populated template when undertaking their own ESRA. This national-level ESRA for glyphosate has been produced on this basis. Organizations are not obliged to use the FSC template for ESRAs; organizations may use their own template for risk assessments, provided that all the content requirements of the policy are covered.

FSC has classified glyphosate as a Restricted Highly Hazardous Pesticide. It is included in the hazard group Chronic Toxicity under criterion 3 (Carcinogenicity), indicator 3.1, threshold (a) of Pesticide Policy (FSC-POL-30-001), on the basis of its classification by the International Agency for Research on Cancer (IARC) as 'probably carcinogenic to humans' (Group 2A).

This ESRA covers standard forestry usage of glyphosate for weed control, including storage, mixing, application and waste disposal. It does not apply to non-standard uses, which may require additional safeguards.

## 2. Environmental and social risk assessment

### 2.1 Basic information

**Date** : 2022-03-31

**Pesticide** : Glyphosate

**Purpose of use** : Weed control

**Location of use** : ××××

### 2.2 Abbreviations

**CM** : Control measure.

**ESRA** : Environmental and social risk assessment.

**GHS** : The globally harmonized system of classification and labelling of chemicals.

**H318** : The hazard statement code for 'Causes serious eye damage'.

**H411** : The hazard statement code for 'Toxic to aquatic life with long lasting effects'.

**HCV** : High conservation value.

**HHP** : Highly hazardous pesticide.

**IARC** : International Agency for Research on Cancer.

**IPM** : Integrated pest management.

**FSS** : Forest Stewardship Standard.

**NTFP** : Non-timber forest product.

**P501** : The precautionary statement code for ‘Dispose of contents/container to local regulations’.

### 2.3 References

- Technical specification of safety application for operated sprayers (NY/T 1225).
- Antitoxic regulations for storage-transportation, marketing and use of pesticides (GB 12475).

### 2.4 Identification and assessment of risks, and mitigation strategies to minimize it

See table below.

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | | Glyphosate is included in the hazard group Chronic Toxicity under criterion 3 (Carcinogenicity), indicator 3.1, threshold (a) of FSC Pesticide Policy (FSC-POL-30-001), on the basis of its classification by the International Agency for Research on Cancer (IARC) as 'probably carcinogenic to humans' (Group 2A). | **General strategies**<br><br>This ESRA is based on the listing of glyphosate as a Highly Hazardous Pesticide as a probable carcinogen, and as such it gives greatest weight to mitigating risks to human health, primarily through the pathway of direct worker exposure but also through water and wild foods. Other potential impacts (the potential for soil erosion, effects on non-target vegetation, the potential for the contamination of wild foods, risks to public health, and effects on public access) are also considered, but the proposed mitigation strategies and indicators are proportionate to the perceived lower level of risk.<br><br>While this ESRA comes at a point in the IPM process where it has already been decided that the use of glyphosate is necessary, most of the risks described can be mitigated to some degree by minimizing the volume used. For this reason, minimizing glyphosate quantities used, while achieving effective results, is a key general mitigation strategy.<br><br>**CM 1** Training for operators exposed to glyphosate (FSS 10.7.21).<br><br>**CM 2** The application of glyphosate complies with the relevant requirements of *Technical Specification of Safety Application for Operated Sprayers* (NY/T 1225) and *Antitoxic Regulations for Storage-transportation, Marketing and Use of Pesticides* (GB 12475), so as to mitigate the risks to worker safety and water, as well as risks such as spray drift affecting non-target vegetation.<br><br>**CM 3** Operators comply with the requirements and relevant recommendations of the product label and material safety data sheets (MSDS).<br><br>**CM 4** Records of glyphosate usage are maintained, including trade name, active ingredient, quantity of active ingredient used, period of use, number and frequency of applications, location and area of use, and reason for use.<br><br>**CM 5** Investigate and support the research on chemical and non-chemical alternatives to glyphosate carried out by forest research or other agencies. |
| **Environmental** | Soil (erosion, degradation, biota, carbon | Control of vegetation by using glyphosate may create bare soil, which **may potentially lead to soil** | The risk of soil erosion or degradation is considered to be relatively minor, and adequately addressed by FSS 10.10.3, and 9.3.1, respectively. |

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | storage) | **erosion or degradation**.<br><br>Whether the standard usage of glyphosate has significant impacts on soil biota or carbon storage is unknown | |
| | Water (ground water, surface waters, water supplies) | Glyphosate is known to be toxic to aquatic life with long lasting effects (GHS H411).<br><br>Glyphosate usage has the potential to contaminate ground water, surface water and water supplies.<br><br>The greatest risk of harm comes from mixing and filling undiluted products. | While a wide range of measures, including careful transport and storage, are important in protecting water resources, the principal measure to protect surface waters and water supplies is to identify them and to respect appropriate buffer zones around them.<br><br>**CM 6** Operations, such as mixing and filling of glyphosate, conform to forestry standard requirements in relation to buffer zones around watercourses and waterbodies. Glyphosate usage in buffer zones is prohibited (FSS 6.7.2 & 6.7.3).<br><br>**CM 7** The mixing, filling and preparation of glyphosate, the cleaning of pesticide application instruments and personal protective equipment, and the disposal of wastes should be far away from waterways, water bodies and water sources (GB 12475).<br><br>**CM 8** Formulate emergency response plan for glyphosate related accidents (GB 12475).<br><br>**CM 9** Monitor the impacts of glyphosate on water quality by using data released by environmental protection authorities and water administrative authorities. |
| | Atmosphere (air quality, greenhouse gases) | Impacts on the atmosphere are likely only if glyphosate is sprayed at height. As this is not the case in standard forestry usage of glyphosate (where application is by spot spraying or low boom), there are **not** considered to be any significant impacts. | N/A |
| | Non-target | Control of vegetation using | The purpose of glyphosate applications is to control vegetation. Inappropriate damage to |

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | species (vegetation, wildlife, bees and other pollinators, pets) | glyphosate **may potentially have impacts on non-target vegetation**.<br><br>Standard forestry usage of glyphosate is **not** considered to present a direct hazard to bees and other pollinators.<br><br>Standard forestry usage of glyphosate may present a potential pathway to affect wildlife or pets, but this is **not** considered to be a significant issue. | non-target vegetation may be avoided, firstly, by correctly identifying environmental values and potential products which should be protected and, secondly, by ensuring that applications are targeted as intended by avoiding issues such as spray drift.<br><br>The identification of environmental values, including those outside the management unit and potentially affected by spray drift, is considered to be adequately addressed by FSS 6.1.1, 6.2.1, 6.3.1, 10.7.8, 10.7.10 and 10.7.12, respectively.<br><br>**CM 10** Operators strictly comply with the requirements of *Technical Specification of Safety Application for Operated Sprayers* (NY/T 1225), product label and safety data sheets (SDS), determine the target control objects, the safety of pesticides to non-target species, wind speed and direction regulations, anti-drift nozzle allocation and other information before application, and take reasonable measures to avoid spray drift. |
| | Non-timber forest products (as FSC-STD-01-001 V5-2 FSC Principles and Criteria, criterion 5.1) | Control of vegetation using glyphosate **may potentially kill moss or berry producing plants**. | The potential risk of glyphosate usage to non-timber forest products is considered to be adequately addressed by FSS annex 8.<br><br>*Note: Owners/managers do not plan to harvest NTFPs. Effects on wild foods which may be harvested by other parties are considered below.* |
| | High Conservation Values (particularly HCV 1-4) | As noted previously, there are **potential impacts on non-target plant species (HCV 1-3) and on soil erosion (HCV 4)**. | Potential risks to HCV 1-3 are considered to be adequately addressed by the strength of FSS requirements including FSS 7.2.2, 9.2.1, 9.2.2, 9.3.1, 9.3.2 and 9.3.3.<br><br>For HCV 4, see the strategies for soil, above. |
| | Landscape (aesthetics, cumulative | Standard forestry usage of glyphosate is **not** considered to have any significant impacts on | N/A |

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | impacts) | landsc. | |
| | Ecosystem services (water, soil, carbon sequestration, tourism) | As noted previously, there are **potential impacts on water and soil**.<br>Standard forestry usage of glyphosate is **not** considered to have any significant impacts on carbon sequestration or tourism. | See the strategies for water and soil, above. |
| **Social** | High Conservation Values (especially HCV 5-6) | As noted previously, there are **potential impacts on water supplies (HCV 5)**.<br>Standard forestry usage of glyphosate is **not** considered to have any significant impacts on cultural values (HCV 6). | See the strategies for water, especially in relation to water supplies, above.<br>Appropriate communication and consultation as per FSS 4.1.1 and 9.4.2 will be important to ensure that neighbours with private water supplies are suitably informed and able to discuss mitigation measures. |
| | Health (fertility, reproductive health, respiratory health, dermatologic, neurological and gastrointestinal problems, cancer and hormonal imbalance) | Glyphosate is a probable carcinogen, and **professional users are potentially at risk through direct contact**.<br>*Note: This risk is considered particularly significant as it is the basis for the listing of glyphosate as a Highly Hazardous Pesticide.*<br>Glyphosate is also known to **cause serious eye damage** (GHS H318). | See the strategies for worker safety in general strategies.<br>**CM 11** Dispose of contents/container in accordance with local regulations (GSH P501).<br>**CM 12** Operator exposure to glyphosate is monitored using pesticide application records and site checks of use of personal protective equipment. There is appropriate follow-up action if personal protective equipment is not being used.<br>**CM 13** Operator health concerns are monitored using pesticide application records and site checks. There is appropriate follow-up action if health concerns are identified.<br>**CM 14** Operators can easily obtain clean water, cleaning agents, towels, first aid medicines and necessary repair tools. |

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | Welfare | Standard forestry usage of glyphosate **may have indirect effects on worker welfare through the weight of spraying gear or overheating as a result of wearing personal protective equipment**. | |
| | Food and water | *Note: This value is taken to refer to wild forest foods (rather than agricultural crops) and to drinking water.*<br><br>Standard forestry usage of glyphosate **may potentially lead to contamination of fruits etc**., and contact with residues immediately after treatment may be harmful.<br><br>As noted previously, there are **potential impacts on water supplies**. | In all cases, if practical and legally possible, it is preferable to totally exclude forest users from the work-site, or close the recreation site or footpath/right of way on the work-site margins. The method of exclusion, through barriers or signage, will depend on the type of user identified. The duration of exclusion will depend on the presence or absence of edible non-timber forest products (NTFPs).<br><br>(1) If edible NTFPs that are likely to be picked are present, close the site until the non-picking period of NTFPs.<br><br>(2) If no edible NTFPs are present, close the site for 48 hours after spraying, or until the pesticide dries and there is no liquid residue that might cause accidental contamination of the public.<br><br>**CM 15** Application of glyphosate conform to the indicators of FSS annex 8 on food and public protection.<br><br>See the strategies for water, especially in relation to water supplies, above. |
| | Social infrastructure; (schools and hospitals, recreational infrastructure, infrastructure adjacent to the | Glyphosate usage **may potentially have impacts on human health through application on and around recreational infrastructure or through spray drift onto neighbouring properties**. | Risks to public health can be mitigated by reducing the contact with deliberately or accidentally contaminated surfaces. Complying with the requirements of FSS 4.5.1 and 10.7.18 is very important to mitigate the potential risks of social infrastructure.<br><br>See the strategies for avoiding spray drift, above. |

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | management unit) | | |
| | Economic viability (agriculture, livestock, tourism) | Glyphosate usage **may potentially have impacts on some water-based industries (such as fish farming), or on water supplies for enterprises (such as breweries or distilleries)**. | See the strategies for water, above. |
| | Rights (legal and customary) | Standard forestry usage of glyphosate **may lead to restrictions on rights of access**.<br>Glyphosate usage **may potentially have impacts on access to uncontaminated water**. | See the strategies for public protection and water, above. This risk is best mitigated through appropriate affected stakeholder engagement, as addressed by FSS 7.6.1.<br>**CM 16** Where it is desirable to restrict public access to minimize health and safety risks, such restrictions are kept to the minimum extent and duration necessary to achieve effective results. |
| | Others | No other risks have been identified. | N/A |

# Annex 9.6 ESRA Template of FSC Highly Restricted Highly Hazardous Pesticides (Abamectin)

## 1. Context and scope

To help organizations comply with ESRA requirements, the FSC Pesticides Policy allows the national Standard Development Group to complete the ESRA template; organizations can then use this pre-populated template when undertaking their own ESRA. This national-level ESRA for abamectin has been produced on this basis. Organizations are not obliged to use the FSC template for ESRAs; organizations may use their own template for risk assessments, provided that all the content requirements of the policy are covered.

FSC has classified abamectin as a Highly Restricted Highly Hazardous Pesticide. It is included in the hazard groups Acute Toxicity and Environmental Toxicity, under criterion 2 (Acute toxicity to mammals and birds), indicator 2.1, threshold (b) and (c), and criterion 7 (Acute toxicity to aquatic organisms), indicator 7.1, threshold (a) of FSC Pesticide Policy (FSC-POL-30-001), respectively.

This ESRA covers standard forestry uses of abamectin for the control of pine wood nematodes and pine caterpillars, including storage, mixing, application and waste disposal. It does not apply to non-standard uses, which may require additional safeguards.

## 2. Environmental and social risk assessment

### 2.1 Basic information

**Date** : 2022-03-31

**Pesticide** : Abamectin

**Purpose of use** : Control of pine wood nematodes and pine caterpillars

**Location of use** : ××××

### 2.2 Abbreviations

**CM** : Control measure.

**ESRA** : Environmental and social risk assessment.

**GHS** : The globally harmonized system of classification and labelling of chemicals.

**H300** : The hazard statement code for ‘Fatal if swallowed’.

**H330** : The hazard statement code for ‘Fatal if inhaled’.

**H360** : The hazard statement code for ‘May damage fertility or the unborn child’.

**H372** : The hazard statement code for ‘Causes damage to organs through prolonged or repeated exposure’.

**H410** : The hazard statement code for ‘Very toxic to aquatic life with long lasting effects’.

**HCV** : High conservation value.

**HHP** : Highly hazardous pesticide.

**IARC** : International Agency for Research on Cancer.

**IPM** : Integrated pest management.

**FSS** : Forest Stewardship Standard.

**P270** : The precautionary statement code for ‘Do not eat, drink or smoke when using this product’.

**P405** : The precautionary statement code for ‘Store locked up’.

**P501** : The precautionary statement code for ‘Dispose of contents/container to local regulations’.

### 2.3 References

- Technical specification of safety application for operated sprayers (NY/T 1225).
- Antitoxic regulations for storage-transportation, marketing and use of pesticides (GB 12475).

### 2.4 Identification and assessment of risk, and mitigation strategies to minimize it

See table below.

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | | Abamectin is included in the hazard groups Acute Toxicity and Environmental Toxicity, under criterion 2 (**Acute toxicity to mammals and birds**), indicator 2.1, threshold (b) and (c), and criterion 7 (**Acute toxicity to aquatic organisms**), indicator 7.1, threshold (a) of FSC Pesticide Policy (FSC-POL-30-001), respectively. | **General strategies**<br><br>This ESRA is based on the listing of abamectin as a Highly Hazardous Pesticide due to its acute toxicity and environmental toxicity, and as such it gives greatest weight to mitigating risks to human health and aquatic life safety, primarily through the pathway of direct worker exposure and water contamination. Other potential impacts (the potential impacts on non-target insect species, the potential for the contamination of wild foods, and effects on public access) are also considered, but the proposed mitigation strategies and indicators are proportionate to the perceived lower level of risk.<br><br>While this ESRA comes at a point in the IPM process where it has already been decided that the use of abamectin is necessary, most of the risks described can be mitigated to some degree by minimizing the volume used. For this reason, minimizing abamectin quantities used, while achieving effective results, is a key general mitigation strategy.<br><br>**CM 1** Training for operators exposed to abamectin (FSS 10.7.21).<br><br>**CM 2** The application of abamectin complies with the relevant requirements of *Technical Specification of Safety Application for Operated Sprayers* (NY/T 1225) and *Antitoxic Regulations for Storage-transportation, Marketing and Use of Pesticides* (GB 12475), so as to mitigate the risks to worker safety and water, as well as risks such as poorly targeted applications affecting non-target insect species.<br><br>**CM 3** Operators comply with the requirements and relevant recommendations of the product label and safety data sheets (SDS).<br><br>**CM 4** Records of abamectin usage are maintained, including trade name, active ingredient, quantity of active ingredient used, period of use, number and frequency of applications, location and area of use, and reason for use.<br><br>**CM 5** Investigate and support the research on chemical and non-chemical alternatives to abamectin carried out by forest research or other agencies. |

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| **Environmental** | Soil (erosion, degradation, biota, carbon storage) | Standard forestry usage of abamectin is **not** considered to have any significant impacts. There may be positive effects from promoting prompt reestablishment of tree cover. | N/A |
| | Water (ground water, surface waters, water supplies) | Abamectin is known to be **very toxic to aquatic life with long lasting effects** (GHS H410).<br>Abamectin usage has the potential to contaminate ground water, surface water and water supplies.<br>The greatest risk of harm comes from mixing and filling undiluted products. | While a wide range of measures, including careful transport and storage, are important in protecting water resources, the principal measure to protect surface waters and water supplies is to identify them and to respect appropriate buffer zones around them.<br>**CM 6** Operations, such as mixing and filling of abamectin, conform to forestry standard requirements in relation to buffer zones around watercourses and waterbodies. Abamectin usage in buffer zones is prohibited (FSS 6.7.2 & 6.7.3).<br>**CM 7** The mixing, filling and preparation of abamectin, the cleaning of pesticide application instruments and personal protective equipment, and the disposal of wastes should be far away from waterways, water bodies and water sources (GB 12475).<br>**CM 8** Formulate emergency response plan for abamectin related accidents (GB 12475).<br>**CM 9** Monitor the impacts of abamectin on water quality by using data released by environmental protection authorities and water administrative authorities. |
| | Atmosphere (air quality, greenhouse gases) | Standard forestry usage of abamectin is **not** considered to have any significant impacts. | N/A |
| | Non-target species (vegetation, | There are **potential impacts on non-target insect species**. While as with any insecticide abamectin | The purpose of abamectin applications is to control pine wood nematodes and pine caterpillars. Inappropriate damage to non-target species may be avoided, firstly, by correctly identifying environmental values which should be protected and, secondly, by ensuring that |

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | wildlife, bees and other pollinators, pets) | theoretically has potential impacts on bees if they were to ingest it, there is little residue of abamectin on plant surface, and application is onto non-flowering plants, these minimize the risks of exposure of bees to the chemical.<br><br>Standard forestry usage of abamectin is not considered to have any significant impacts on insectivorous birds or mammals given it has no bioaccumulation. | applications are targeted as intended by avoiding issues such as spray drift.<br><br>The identification of environmental values, including those outside the management unit and potentially affected by spray drift, is considered to be adequately addressed by FSS 6.1.1, 6.2.1, 6.3.1, 10.7.8, 10.7.10 and 10.7.12 respectively.<br><br>**CM 10** Operators strictly comply with the requirements of *Technical Specification of Safety Application for Operated Sprayers* (NY/T 1225), product label and safety data sheets (SDS), determine the target control objects, the safety of pesticides to non-target species, wind speed and direction regulations, and other information before application, and take reasonable measures to avoid spray drift. |
| | Non-timber forest products (as FSC-STD-01-001 V5-2 FSC Principles and Criteria, criterion 5.1) | Standard forestry usage of abamectin is **not** considered to have any significant impacts, on the basis that it presents no specific risk to honey bees and therefore honey production. | N/A |
| | High Conservation Values (particularly HCV 1-4) | As noted previously, there are **potential impacts on non-target insect species (HCV 1)**.<br><br>Standard forestry usage of abamectin is not considered to have any significant impacts on HCV 2-4. | For HCV 1, see the strategies for non-target species, above. |

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | Landscape (aesthetics, cumulative impacts) | Standard forestry usage of abamectin is **not** considered to have any significant impacts. There may be positive effects from promoting prompt reestablishment of tree cover. | N/A |
| | Ecosystem services (water, soil, carbon sequestration, tourism) | As noted previously, there are **potential impacts on water**.<br>Standard forestry usage of abamectin is **not** considered to have any significant impacts on carbon sequestration or tourism. | See the strategies for water, above. |
| **Social** | High Conservation Values (especially HCV 5-6) | As noted previously, there are **potential impacts on water supplies (HCV 5)**.<br>Standard forestry usage of abamectin is **not** considered to have any significant impacts on cultural values (HCV 6). | See the strategies for water, especially in relation to water supplies, above.<br>Appropriate communication and consultation as per FSS 4.1.1 and 9.4.2 will be important to ensure that neighbours with private water supplies are suitably informed and able to discuss mitigation measures. |
| | Health (fertility, reproductive health, respiratory health, dermatologic, neurological and | Abamectin is known to be **fatal if swallowed (GSH H300) or inhaled (GSH H330)**.<br>It is also known that abamectin **may damage fertility or the unborn child (GSH H360)**, and **causes** | See the strategies for worker safety in general strategies.<br>**CM 11** Store locked up (GSH P405).<br>**CM 12** Do not eat, drink or smoke when using this product (GSH P270).<br>**CM 13** Pregnant and lactating women should avoid contact with this product. |

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | gastrointestinal problems, cancer and hormonal imbalance) | **damage to organs through prolonged or repeated contact (GSH H372)**. | **CM 14** Dispose of contents/container in accordance with local regulations (GSH P501).<br><br>**CM 15** Operator exposure to abamectin is monitored using pesticide application records and site checks of use of personal protective equipment. There is appropriate follow-up action if personal protective equipment is not being used. |
| | Welfare | Standard forestry usage of abamectin **may have indirect effects on worker welfare through the weight of spraying gear or overheating as a result of wearing personal protective equipment**. | **CM 16** Operator health concerns are monitored using pesticide application records and site checks. If health concerns are identified, there is appropriate follow-up action.<br><br>**CM 17** Operators can easily obtain clean water, cleaning agents, towels, first aid medicines and necessary repair tools. |
| | Food and water | *Note: This value is taken to refer to wild forest foods (rather than agricultural crops) and to drinking water.*<br><br>Standard forestry usage of abamectin **may potentially lead to contamination of fruits etc**., and contact with residues immediately after treatment may cause slight eye irritation.<br><br>As noted previously, there are **potential impacts on water supplies**. | In all cases, if practical and legally possible, it is preferable to totally exclude forest users from the work-site, or close the recreation site or footpath/right of way on the work-site margins. The method of exclusion, through barriers or signage, will depend on the type of user identified. The duration of exclusion will depend on the presence or absence of edible non-timber forest products (NTFPs).<br><br>(1) If edible NTFPs that are likely to be picked are present, close the site until the non-picking period of NTFPs.<br><br>(2) If no edible NTFPs are present, close the site for 48 hours after spraying, or until the pesticide dries and there is no liquid residue that might cause accidental contamination of the public.<br><br>**CM 18** Application of abamectin conform to the indicators of FSS annex 8 on food and public protection.<br><br>See the strategies for water, especially in relation to water supplies, above. |
| | Social | Abamectin usage **may potentially** | Risks to public health can be mitigated by reducing the contact with deliberately or |

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | infrastructure; (schools and hospitals, recreational infrastructure, infrastructure adjacent to the management unit) | **have impacts on human health through application on and around recreational infrastructure or through spray drift onto neighbouring properties**. | accidentally contaminated surfaces. Complying with the requirements of FSS 4.5.1, 10.7.18, 10.7.19 and 10.7.20 is very important to mitigate the potential risks of social infrastructure.<br>See the strategies for avoiding spray drift, above. |
| | Economic viability (agriculture, livestock, tourism) | Abamectin usage **may potentially have impacts on some water-based industries (such as fish farming), or on water supplies for enterprises (such as breweries or distilleries)**.<br>Abamectin is **toxic to silkworm**. | See the strategies for water, above.<br>**CM 19** Abamectin usage near mulberry fields, silkworm rooms or silkworm egg farms, is forbidden. |
| | Rights (legal and customary) | Standard forestry usage of abamectin **may lead to restrictions on rights of access**.<br>Abamectin usage **may potentially have impacts on access to** | See the strategies for public protection and water, above. This risk is best mitigated through appropriate affected stakeholder engagement, as addressed by FSS 7.6.1.<br>**CM 20** Where it is desirable to restrict public access to minimize health and safety risks, such restrictions are kept to the minimum extent and duration necessary to achieve effective results. |

| Exposure Elements | Minimum list of values | Description of why/ why not a risk | Mitigation strategies defined to minimize risk |
|---|---|---|---|
| | | **uncontaminated water**. | |
| | Others | No other risks have been identified. | N/A |

## Annex 10 Glossary of terms

Normative definitions for terms are given in FSC-STD-01-002 FSC Glossary of Terms. This glossary includes internationally accepted definitions whenever possible. These sources include, for instance, the Food and Agriculture Organization of the United Nations (FAO), the Convention on Biological Diversity (1992), the Millennium Ecosystem Assessment (2005) as well as definitions from online glossaries as provided on the websites of the World Conservation Union (IUCN), the International Labour Organization (ILO) and the Invasive Alien Species Programme of the Convention on Biological Diversity. When other sources have been used they are referenced accordingly.

The term 'based on' means that a definition was adapted from an existing definition as provided in an international source.

Words used in the International Generic Indicators, if not defined in this Glossary of Terms or other normative FSC documents, are used as defined in the Shorter Oxford English Dictionary or the Concise Oxford Dictionary.

**Active ingredient:** Part of the product that provides the pesticidal action (Source: FAO International Code of Conduct on Pesticide Management).

**Adaptive management:** A systematic process of continually improving management policies and practices by learning from the outcomes of existing measures (Source: Based on World Conservation Union (IUCN). Glossary definitions as provided on IUCN website).

**Additionality**:

- Additionality outside the management unit: Conservation and/or restoration outcomes over and above those already achieved or planned to be achieved, and that would not have been achieved without the support and/or intervention of The Organization. Projects must either be new (i.e. not already being implemented or planned), amended or extended so that conservation and/or restoration outcomes are enhanced beyond what would have been achieved, or planned or funded to be achieved without The Organization planning to remedy for historical conversion.
- Additionality inside the management unit: Conservation and/or restoration outcomes above and beyond those required by the applicable FSC standards. (Source: FSC-POL-01-007 V1-0)

**Affected Rights Holder:** Persons and groups, including Indigenous Peoples, traditional peoples and local communities with legal or customary rights whose Free, Prior and Informed Consent is required to determine management decisions (Source: FSC-STD-60-004 V2-1).

**Affected stakeholder**: Any person, group of persons or entity that is or is likely to be subject to the effects of the activities of a Management Unit. Examples include, but are not restricted to (for example in the case of downstream landowners), persons, groups of persons or entities located in the neighborhood of the Management Unit. The following are examples of affected stakeholders:

- Local communities
- Indigenous Peoples
- Workers
- Forest dwellers
- Neighbors
- Downstream landowners
- Local processors
- Local businesses

- Tenure and use rights holders, including landowners
- Organizations authorized or known to act on behalf of affected stakeholders, for example social and environmental NGOs, labour unions, etc.

(Source: FSC-STD-01-001 V5-2).

**Affected Rights Holder:** Persons and groups, including Indigenous Peoples, traditional peoples and local communities with legal or customary rights whose Free, Prior and Informed Consent is required to determine management decisions (Source: FSC-STD-60-004 V2-0).

**Alien species**: A species, subspecies or lower taxon, introduced outside its natural past or present distribution; includes any part, gametes, seeds, eggs, or propagules of such species that might survive and subsequently reproduce (Source: Convention on Biological Diversity (CBD), Invasive Alien Species Programme. Glossary of Terms as provided on CBD website).

**Applicable law**: Means applicable to The Organization as a legal person or business enterprise in or for the benefit of the Management Unit and those laws which affect the implementation of the FSC Principles and Criteria. This includes any combination of statutory law (Parliamentary-approved) and case law (court interpretations), subsidiary regulations, associated administrative procedures, and the national constitution (if present) which invariably takes legal precedence over all other legal instruments (Source: FSC-STD-01-001 V5-2).

**Bamboo Forest:** Forest land composed of bamboo species with a diameter more than 2cm, and with a canopy cover of more than 20%. (Source: Food and agriculture organization of the United Nations (FAO). Global forest resources assessment China, 2020).

**Best Available Information**: Data, facts, documents, expert opinions, and results of field surveys or consultations with stakeholders that are most credible, accurate, complete, and/or pertinent and that can be obtained through reasonable effort and cost, subject to the scale and intensity of the management activities and the Precautionary Approach.

**Binding Agreement**: A deal or pact, written or not, which is compulsory to its signatories and enforceable by law. Parties involved in the agreement do so freely and accept it voluntarily.

**Biological control agents**: Organisms used to eliminate or regulate the population of other organisms (Source: Based on FSC-STD-01-001 V4-0 and World Conservation Union (IUCN). Glossary definitions as provided on IUCN website).

**Biological diversity**: The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems (Source: Convention on Biological Diversity 1992, Article 2).

**Child:** any person under the age of 18 (ILO Convention 182, Article 2).

**Collective bargaining:** a voluntary negotiation process between employers or employers' organization and workers' organization, with a view to the regulation of terms and conditions of employment by means of collective agreements (ILO Convention 98, Article 4).

**Confidential information**: Private facts, data and content that, if made publicly available, might put at risk The Organization, its business interests or its relationships with stakeholders, clients and competitors.

**Connectivity**: A measure of how connected or spatially continuous a corridor, network, or matrix is. The fewer gaps, the higher the connectivity. Related to the structural connectivity concept; functional or behavioural connectivity refers to how connected an area is for a process, such as an animal moving through different types of landscape elements. Aquatic connectivity deals with the accessibility and

transport of materials and organisms, through groundwater and surface water, between different patches of aquatic ecosystems of all kinds. (Source: Based on R.T.T. Forman. 1995. Land Mosaics. The Ecology of Landscapes and Regions. Cambridge University Press, 632pp).

**Conservation Areas Network**: Those portions of the Management Unit for which conservation is the primary and, in some circumstances, exclusive objective; such areas include representative sample areas, conservation zones, protection areas, connectivity areas and High Conservation Value Areas.

**Conservation/Protection**: These words are used interchangeably when referring to management activities designed to maintain the identified environmental or cultural values in existence long-term. Management activities may range from zero or minimal interventions to a specified range of appropriate interventions and activities designed to maintain, or compatible with maintaining, these identified values (Source: FSC-STD-01-001 V5-2).

**Conservation zones and protection areas**: Defined areas that are designated and managed primarily to safeguard species, habitats, ecosystems, natural features or other site-specific values because of their natural environmental or cultural values, or for purposes of monitoring, evaluation or research, not necessarily excluding other management activities. For the purposes of the Principles and Criteria, these terms are used interchangeably, without implying that one always has a higher degree of conservation or protection than the other. The term 'protected area' is not used for these areas, because this term implies legal or official status, covered by national regulations in many countries. In the context of the Principles and Criteria, management of these areas should involve active conservation, not passive protection' (Source: FSC-STD-01-001 V5-2).

**Conversion Threshold:** The point at which degradation and/or clearing has occurred to an extent where recovery to natural forest conditions and/or High Conservation Value Areas is unlikely to be achieved without direct intervention (Source: FSC-POL-01-007 V1-0).

NOTE: Examples of direct intervention include but are not limited to removal of exotic species, physical protection of existing remnant native vegetation, re-wetting of drained soils, reintroduction of appropriate native species, and reintroduction of High Conservation Value species where suitable habitat remains or is re-established.

**Core area:** The portion of each Intact Forest Landscape designated to contain the most important cultural and ecological values. Core areas are managed to exclude industrial activity. Core Areas meet or exceed the definition of Intact Forest Landscape.

**Criterion** (pl. Criteria): A means of judging whether or not a Principle (of forest stewardship) has been fulfilled (Source: FSC-STD-01-001 V4-0).

**Critical**: The concept of criticality or fundamentality in Principle 9 and HCVs relates to irreplaceability and to cases where loss or major damage to this HCV would cause serious prejudice or suffering to affected stakeholders. An ecosystem service is considered to be critical (HCV 4) where a disruption of that service is likely to cause, or poses a threat of, severe negative impacts on the welfare, health or survival of local communities, on the environment, on HCVs, or on the functioning of significant infrastructure (roads, dams, buildings etc.). The notion of criticality here refers to the importance and risk for natural resources and environmental and socio-economic values (Source: FSC-STD-01-001 V5-2).

**Critical population density**: Maximum acceptable number or density of individuals in a pest population, beyond which the pest threatens the achievement of management objectives. Assessment of the critical population density should take into account historical records from the affected area, the type of pest (insects, weeds, pathogens, etc.), and how the pest population is likely to change in relation to its density, including situations in which small populations show a positive relationship between population density and growth rate (the Allee effect). (Based on: International Code of Conduct on the Distribution and use of Pesticides 2006).

**Culturally appropriate** [mechanisms]: Means/approaches for outreach to target groups that are in harmony with the customs, values, sensitivities, and ways of life of the target audience.

**Customary law**: Interrelated sets of customary rights may be recognized as customary law. In some jurisdictions, customary law is equivalent to statutory law, within its defined area of competence and may replace the statutory law for defined ethnic or other social groups. In some jurisdictions customary law complements statutory law and is applied in specified circumstances (Source: Based on N.L. Peluso and P. Vandergeest. 2001. Genealogies of the political forest and customary rights in Indonesia, Malaysia and Thailand, Journal of Asian Studies 60(3):761–812).

**Customary rights**: Rights which result from a long series of habitual or customary actions, constantly repeated, which have, by such repetition and by uninterrupted acquiescence, acquired the force of a law within a geographical or sociological unit (Source: FSC-STD-01-001 V5-2).

**Degradation:** Changes within a natural forest or High Conservation Value area that significantly and negatively affect its species composition, structure and/or function, and reduces the ecosystem's capacity to supply products, support biodiversity and/or deliver ecosystem services (Source: FSC-POL-01-007 V1-0).

**Direct involvement:** Situations in which the associated organization or individual is first-hand responsible for the unacceptable activities (Source: FSC-POL-01-004 V2-0).

**Discrimination:** includes- a) any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction, social origin, sexual orientation, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation; b) such other distinction, exclusion or preference which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation as may be determined by the Member concerned after consultation with representative employers' and workers' organization where such exist, and with other appropriate bodies (adapted from ILO Convention 111, Article1). 'Sexual orientation' was added to the definition provided in Convention 111, as it has been identified as an additional type of discrimination which may occur.

**Dispute**: for the purpose of the IGI, this is an expression of dissatisfaction by any person or organization presented as a complaint to The Organization, relating to its management activities or its conformity with the FSC Principles and Criteria, where a response is expected (Source: based on FSC-PRO-01-005 V3-0 Processing Appeals).

**Dispute of substantial duration**: Dispute that continues for more than twice as long as the predefined timelines in the FSC System (this is, for more than 6 months after receiving the complaint, based on FSC-STD-20-001).

**Dispute of substantial magnitude**: For the purpose of the International Generic Indicators, a dispute of substantial magnitude is a dispute that involves one or more of the following:

- Affects the legal or customary rights of Indigenous Peoples and local communities;
- Where the negative impact of management activities is of such a scale that it cannot be reversed or mitigated;
- Physical violence;
- Destruction of property;
- Presence of military bodies;
- Acts of intimidation against forest workers and stakeholders.

This list should be adapted or expanded by Standard Developers.

**Due consideration**: To give such weight or significance to a particular factor as under the circumstances it seems to merit, and this involves discretion (Black's Law Dictionary, 1979).

**Ecological corridors:** Also called biological corridors The biological corridor is defined in Terms of Nature Reserve, a standard of the Chinese forestry industry, as a channel connecting fragmentation habitats and suitable for living, moving or spreading of organisms.

**Economic viability**: The capability of developing and surviving as a relatively independent social, economic or political unit. Economic viability may require but is not synonymous with profitability (Source: Based on the definition provided on the website of the European Environment Agency).

**Eco-regional:** Large unit of land or water containing a geographically distinct assemblage of species, natural communities, and environmental conditions (Source: WWF Global 200. http://wwf.panda.org/about_our_earth/ecoregions/about/what_is_an_ecoregion/).

**Ecosystem**: A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit (Source: Convention on Biological Diversity 1992, Article 2).

**Ecosystem function**: An intrinsic ecosystem characteristic related to the set of conditions and processes whereby an ecosystem maintains its integrity (such as primary productivity, food chain, biogeochemical cycles). Ecosystem functions include such processes as decomposition, production, nutrient cycling, and fluxes of nutrients and energy. For FSC purposes, this definition includes ecological and evolutionary processes such as gene flow and disturbance regimes, regeneration cycles and ecological seral development (succession) stages. (Source: Based on R. Hassan, R. Scholes and N. Ash. 2005. Ecosystems and Human Well-being: Synthesis. The Millennium Ecosystem Assessment Series. Island Press, Washington DC; and R.F. Noss. 1990. Indicators for monitoring biodiversity: a hierarchical approach. Conservation Biology 4(4):355–364).

**Ecosystem services**: The benefits people obtain from ecosystems. These include:

- provisioning services such as food, forest products and water;
- regulating services such as regulation of floods, drought, land degradation, air quality, climate and disease;
- supporting services such as soil formation and nutrient cycling; and
- cultural services and cultural values such as recreational, spiritual, religious and other non-material benefits.

(Source: Based on R. Hassan, R. Scholes and N. Ash. 2005. Ecosystems and Human Well-being: Synthesis. The Millennium Ecosystem Assessment Series. Island Press, Washington DC).

**Emergency:** A situation that requires immediate action to control the sudden invasion or infestation of a pest, which threatens either long-term stability of the ecosystem, human well-being or economic viability.

Events that happen cyclically and scenarios which are predicted through planning, monitoring or the application of an integrated pest management system cannot be considered an emergency.

For the purpose of the FSC Pesticides Policy, emergency situations require immediate action and cannot feasibly be controlled by a less hazardous alternative. (Source: FSC-POL-30-001 V3-0).

**Employment and Occupation:** includes access to vocational training, access to employment and to particular occupations, and terms and conditions of employment (ILO Convention 111, Article1.3).

**Engaging / engagement**: The process by which The Organization communicates, consults and/or provides for the participation of interested and/or affected stakeholders ensuring that their concerns, desires, expectations, needs, rights and opportunities are considered in the establishment, implementation and updating of the management plan (Source: FSC-STD-01-001 V5-2).

**Environmental and social risk assessment (ESRA)**: A process to predict, assess and review the likely or actual environmental and social effects of a well-defined action, evaluate alternatives, and design appropriate mitigation, management and monitoring measures.

In the context of the FSC Pesticides Policy, it relates to chemical pesticide use (Source: FSC-POL-30-001 V3-0).

**Environmental biomonitoring:** Act of observing and assessing the state and ongoing changes in ecosystems, components of biodiversity and landscape, including the types of natural habitats, populations and species. (Source: Encyclopaedia of Toxicology (Third Edition, 2014)).

**Environmental harm:** Any impact on the environment values as a result of human activity that has the effect of degrading the environment, whether temporarily or permanently (Source: FSC-POL-01-007 V1-0).

**Environmental Impact Assessment (EIA):** Systematic process used to identify potential environmental and social impacts of proposed projects, to evaluate alternative approaches, and to design and incorporate appropriate prevention, mitigation, management and monitoring measures (Source: FSC-STD-01-001 V5-2, based on Environmental impact assessment, guidelines for FAO field projects. Food and agriculture organization of the United Nations (FAO). Rome).

**Environmental values**: The following set of elements of the biophysical and human environment:

- ecosystem functions (including carbon sequestration and storage);
- biological diversity;
- water resources;
- soils;
- atmosphere;
- landscape values (including cultural and spiritual values).

The actual worth attributed to these elements depends on human and societal perceptions (Source: FSC-STD-01-001 V5-2).

**Equal remuneration for men and women workers for work of equal value:** refers to rates of remuneration established without discrimination based on sex (ILO Convention 100, Article 1b).

**Equivalent:** For ecological equivalence, the same specific type of natural forest or High Conservation Value is restored or conserved as was destroyed.

For social remedy, equivalence shall be based on an independent assessment and agreement on remedy through Free, Prior, Informed Consent (FPIC) with the affected rights holders of the nature, quality, and quantity of all social harms as well as the on-going future benefits these would have provided. Equivalence shall entail provision of the best means possible to ensure future community wellbeing. (Source: FSC-POL-01-007 V1-0)

**Exclusion zone:** Area in which chemical pesticides are used, and which people are prevented from entering during and after pesticide application in order to avoid unacceptable risk of exposure. The exclusion zone remains in force until the risk of exposure has reduced to an acceptable level (the period of re-entry).

**Externalities**: The positive and negative impacts of activities on stakeholders that are not directly involved in those activities, or on a natural resource or the environment, which do not usually enter standard cost accounting systems, such that the market prices of the products of those activities do not reflect the full costs or benefits (Source: FSC-STD-01-001 V5-2).

**Fair compensation**: Remuneration that is proportionate to the magnitude and type of services rendered by another party or of the harm that is attributable to the first party (Source: FSC-STD-60-004 V2-0).

**Fertilizer**: Mineral or organic substances, most commonly N, P2O5 and K20, which are applied to soil for the purpose of enhancing plant growth (Source: FSC-STD-60-004 V2-0).

**Fibre Testing:** a suite of wood identification technologies used to identify the family, genus, species and origin of solid wood and fibre based products (Source: FSC-STD-60-004 V2-0).

**Forced or compulsory labour:** work or service exacted from any person under the menace of any penalty and for which the said person has not offered himself/ herself voluntarily (Source: FSC-STD-60-004 V2-0, based on International Labour Organization (ILO) Convention 29, Article 2.1).

**Forest**: A tract of land dominated by trees (Source: FSC-STD-01-001 V5-0, derived from FSC Guidelines for Certification Bodies, Scope of Forest Certification, Section 2.1 first published in 1998, and revised as FSC-GUI-20-200 in 2005, and revised again in 2010 as FSC-DIR-20-007 FSC Directive on Forest Management Evaluations, ADVICE-20-007-01).

**Formal and informal workers organization**: association or union of workers, whether recognized by law or by The Organization or neither, which have the aim of promoting workers rights and to represent workers in dealings with The Organization particularly regarding working conditions and compensation (Source: FSC-STD-60-004 V2-0).

**Fragmentation:** The process of dividing habitats into smaller patches, which results in the loss of original habitat, loss in connectivity, reduction in patch size, and increasing isolation of patches. Fragmentation is considered to be one of the single most important factors leading to loss of native species, especially in forested landscapes, and one of the primary causes of the present extinction crisis. In reference to Intact Forest Landscapes, the fragmentation of concern is understood to be that caused by human industrial activities. (Source: FSC-STD-60-004 V2-0, adapted from Gerald E. Heilman, Jr. James R. Strittholt Nicholas C. Slosser Dominick A. Dellasala, BioScience (2002) 52 (5): 411-422.)

**Free, Prior, and Informed Consent (FPIC):** A legal condition whereby a person or community can be said to have given consent to an action prior to its commencement, based upon a clear appreciation and understanding of the facts, implications and future consequences of that action, and the possession of all relevant facts at the time when consent is given. Free, prior and Informed Consent includes the right to grant, modify, withhold or withdraw approval (Source: FSC-STD-60-004 V2-0, based on the Preliminary working paper on the principle of Free, Prior and Informed Consent of Indigenous Peoples (…) (E/CN.4/Sub.2/AC.4/2004/4 8 July 2004) of the 22nd Session of the United Nations Commission on Human Rights, Sub-commission on the Promotion and Protection of Human Rights, Working Group on Indigenous Populations, 19–23 July 2004).

**FSC Transaction:** Purchase or sale of products with FSC claims on sales documents (Source: FSC-STD-60-004 V2-0).

**Gender equality**: Gender equality or gender equity means that women and men have equal conditions for realizing their full human rights and for contributing to, and benefiting from, economic, social, cultural and political development (Source: FSC-STD-60-004 V2-0, adapted from FAO, IFAD and ILO workshop on ‘Gaps, trends and current research in gender dimensions of agricultural and rural employment: differentiated pathways out of poverty’, Rome, 31 March to 2 April 2009.).

**Genetically modified organism**: An organism in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination. (Source: FSC-STD-60-004 V2-0, based on FSC-POL-30-602 FSC Interpretation on GMO (Genetically Modified Organisms)).

**Genotype**: The genetic constitution of an organism (Source: FSC-STD-01-001 V5-2).

**Good faith**: A process of engagement where the parties make every effort to reach an agreement, conduct genuine and constructive negotiations, avoid delays in negotiations, respect agreements concluded and under development, and give sufficient time to discuss and settle disputes (Source: FSC-STD-60-004 V2-0, adapted from Motion 40:2017).

**Habitat**: The place or type of site where an organism or population occurs (Source: FSC-STD-60-004 V2-0, based on the Convention on Biological Diversity (CBD), Article 2).

**Habitat features**: Forest stand attributes and structures, including but not limited to:

- Old commercial and non-commercial trees whose age noticeably exceeds the average age of the main canopy;
- Trees with special ecological value;
- Vertical and horizontal complexity;
- Standing dead trees;
- Dead fallen wood;
- Forest openings attributable to natural disturbances;
- Nesting sites;
- Small wetlands, bogs, fens;
- Ponds;
- Areas for procreation;
- Areas for feeding and shelter, including seasonal cycles of breeding;
- Areas for migration;
- Areas for hibernation (Source: FSC-STD-60-004 V2-0).

**Hazardous work (in the context of child labour):** any work which is likely to jeopardize children's physical, mental or moral health, should not be undertaken by anyone under the age of 18 years. Hazardous child labour is work in dangerous, or unhealthy conditions that could result in a child being killed or injured/maimed (often permanently) and/or made ill (often permanently) as a consequence of poor safety and health standards and working arrangements. In determining the type of hazard child labour referred to under (Article 3(d) of the Convention No 182, and in identifying where they exist, consideration should be given, inter alia, to

- Work which exposes children to physical, psychological or sexual abuse;
- Work underground, under water at dangerous heights or in confined spaces;
- Work with dangerous machinery, equipment and tools, or which involves the manual handling or transport of heavy loads;
- Work in unhealthy environment which may, for examples, expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health;
- Work under particularly difficult conditions such as work for long hours or during the night or work where the child is unreasonably confined to the premises of the employer (Source: FSC-STD-60-004 V2-0, based on International Labour Organization (ILO), 2011: IPEC Mainstreaming Child labour concerns in education sector plans and Programmes, Geneva, 2011& ILO Handbook on Hazardous child labour, 2011).

**Heavy work (in the context of child labour):** refers to work that is likely to be harmful or dangerous to children's health (Source: FSC-STD-60-004 V2-0, based on FSC report on generic criteria and indicators based on International Labour Organization (ILO) Core Conventions principles, 2017).

**High Conservation Value (HCV):** Any of the following values:

- **HCV1:** Species Diversity. Concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels.
- **HCV 2:** Landscape-level ecosystems and mosaics. Intact Forest Landscapes, 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.
- **HCV 3:** Ecosystems and habitats. Rare, threatened, or endangered ecosystems, habitats or refugia.
- **HCV 4**: Critical ecosystem services. Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.
- **HCV 5**: Community needs. Sites and resources fundamental for satisfying the basic necessities of local communities or Indigenous Peoples (for example for livelihoods, health, nutrition, water), identified through engagement with these communities or Indigenous Peoples.
- **HCV 6:** 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: based on FSC-STD-01-001 V5-2).

**High Conservation Value Areas**: Zones and physical spaces which possess and/or are needed for the existence and maintenance of identified High Conservation Values (Source: FSC-STD-60-004 V2-0).

**High grading**: High grading is a tree removal practice in which only the best quality, most valuable timber trees are removed, often without regenerating new tree seedlings or removing the remaining poor quality and suppressed understory trees and, in doing so, degrading the ecological health and commercial value of the forest. High grading stands as a counterpoint to sustainable resource management (Source: FSC-STD-60-004 V2-0, based on Glossary of Forest Management Terms. North Carolina Division of Forest Resources. March 2009).

**Highly Hazardous Pesticide (HHP):** chemical pesticides that are acknowledged to present particularly high levels of acute or chronic hazards to health and environment according to internationally accepted classification systems or are listed in relevant binding international agreements or conventions, or contain dioxins, or heavy metals. In addition, pesticides that appear to cause severe or irreversible harm to health or the environment under conditions of use in a country may be considered to be and treated as highly hazardous.

FSC distinguishes between FSC prohibited HHPs, FSC highly restricted HHPs and

FSC restricted HHPs:

- **FSC prohibited HHPs:** chemical pesticides that: a) are listed or recommended for listing under Annex A (elimination) of the Stockholm Convention on Persistent Organic Pollutants or Annex III of the Rotterdam Convention on the Prior Informed Consent Procedure or listed under the Montreal Protocol on Substances that Deplete the Ozone Layer, or b) are acutely toxic and that can induce cancer (carcinogenic and likely to be carcinogenic), or c) contain dioxins or d) contain heavy metals).

- **FSC highly restricted HHPs:** chemical pesticide presenting two or three out of the following hazards: acute toxicity, chronic toxicity and environmental toxicity.
- **FSC restricted HHPs:** chemical pesticide presenting one out of three of the following hazards: acute toxicity, chronic toxicity and environmental toxicity.

(Source: FSC-POL-30-001 V3-0).

**ILO Core (Fundamental) Conventions**: these are labour standards that cover fundamental principles and rights at work: freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labour; the effective abolition of child labour; and the elimination of discrimination* in respect of employment and occupation. The eight Fundamental Conventions are:

- Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87)
- Right to Organize and Collective Bargaining Convention, 1949 (No. 98)
- Forced Labour Convention, 1930 (No. 29)
- 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) (Source: FSC-STD-60-004 V2-0, based on FSC report on generic criteria and indicators based on International Labour Organization (ILO) Core Conventions principles, 2017).

**ILO Declaration on Fundamental Principles and Rights at Work and its Followup, adopted by the International Labour conference at its Eighty-sixth Session, Geneva, 18th June 1998 (Annex revised 15 June 2010):** is a resolute reaffirmation of ILO principles (art 2) which declares that all Members, even if they have not ratified the Conventions in question, have an obligation, arising from the very fact of membership in the organization, to respect, to promote and to realize, in good faith* and in accordance with the Constitution, the principles concerning the fundamental rights which are the subject of those Conventions, namely:

- Freedom of association and the effective recognition of the right to collective bargaining;
- The elimination of all forms of forced or compulsory labour;
- The effective abolition of child labour; and
- The elimination of discrimination* in respect of employment and occupation (Source: FSC-STD-60-004 V2-0, based on FSC report on generic criteria and indicators based on International Labour Organization (ILO) Core Conventions principles, 2017).

**Indicator**: A quantitative or qualitative variable which can be measured or described, and which provides a means of judging whether a Management Unit complies with the requirements of an FSC Criterion. Indicators and the associated thresholds thereby define the requirements for responsible forest management at the level of the Management Unit and are the primary basis of forest evaluation (Source: FSC-STD-60-004 V2-0).

**Indigenous cultural landscapes:** Indigenous cultural landscapes are living landscapes to which Indigenous Peoples attribute environmental, social, cultural and economic value because of their enduring relationship with the land, water, fauna, flora and spirits and their present and future importance to their cultural identity. An Indigenous cultural landscape is characterized by features that have been

maintained through long-term interactions based on land-care knowledge, and adaptive livelihood practices. They are landscapes over which Indigenous Peoples exercise responsibility for stewardship (Source: FSC-STD-60-004 V2-0).

**Indigenous Peoples**: People and groups of people that can be identified or characterized as follows:

- The key characteristic or Criterion is self-identification as Indigenous Peoples at the individual level and acceptance by the community as their member;
- Historical continuity with pre-colonial and/or pre-settler societies;
- Strong link to territories and surrounding natural resources;
- Distinct social, economic or political systems;
- Distinct language, culture and beliefs;
- Form non-dominant groups of society;
- Resolve to maintain and reproduce their ancestral environments and systems as distinctive peoples and communities (Source: FSC-STD-01-001 V5-2, adapted from United Nations Permanent Forum on Indigenous, Factsheet 'Who are Indigenous Peoples' October 2007; United Nations Development Group, 'Guidelines on Indigenous Peoples' Issues' United Nations 2009, United Nations Declaration on the Rights of Indigenous Peoples, 13 September

**Indirect involvement:** Situations in which the associated organization or individual, with a minimum ownership or voting power of 51%, is involved as a parent or sister company, subsidiary, shareholder or Board of Directors to an organization directly involved in unacceptable activities. Indirect involvement also includes activities performed by subcontractors when acting on behalf of the associated organization or individual (Source: FSC-POL-01-004 V2-0).

**Industrial activity**: Industrial forest and resource management activities such as road building, mining, dams, urban development and timber harvesting (Source: FSC-STD-60-004 V2-0).

**Infrastructure**: In the context of forest management, roads, bridges, culverts, log landings, quarries, impoundments, buildings and other structures required in the course of implementing the management plan (Source: FSC-STD-60-004 V2-0).

**Intact Forest Landscape**: a territory within today's global extent of forest cover which contains forest and non-forest ecosystems minimally influenced by human economic activity, with an area of at least 500 km2 (50,000 ha) and a minimal width of 10 km (measured as the diameter of a circle that is entirely inscribed within the boundaries of the territory) (Source: FSC-STD-60-004 V2-0, based on Intact Forests / Global Forest Watch. Glossary definition as provided on Intact Forest website. 2006-2014).

**Integrated pest management (IPM):** Careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations, encourage beneficial populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human and animal health and/or the environment. IPM emphasizes the growth of a healthy forest with the least possible disruption to ecosystems and encourages natural pest control mechanisms (Source: Based on FAO International Code of Conduct on Pesticide Management).

**Intellectual property**: Practices as well as knowledge, innovations and other creations of the mind (Source: FSC-STD-01-001 V5-2, based on the Convention on Biological Diversity (CBD), Article 8(j); and World Intellectual Property Organization. What is Intellectual Property? WIPO Publication No. 450(E)).

**Intensity**: A measure of the force, severity or strength of a management activity or other occurrence affecting the nature of the activity's impacts (Source: FSC-STD-01-001 V5-2).

**Intervention threshold:** Population density level where the controlling measures of the targeted pest should start. It is determined in the IPM system and it is usually lower than the critical population density level.

**Interested stakeholder**: Any person, group of persons, or entity that has shown an interest, or is known to have an interest, in the activities of a Management Unit. The following are examples of interested stakeholders.

- Conservation organizations, for example environmental NGOs;
- Labour (rights) organizations, for example labour unions;
- Human rights organizations, for example social NGOs;
- Local development projects;
- Local governments;
- National government departments functioning in the region;
- FSC National Offices;
- Experts on particular issues, for example High Conservation Values (Source: FSC-STD-01-001 V5-2).

**Internationally accepted scientific protocol**: A predefined science-based procedure which is either published by an international scientific network or union, or referenced frequently in the international scientific literature (Source: FSC-STD-01-001 V5-2).

**Invasive species:** Species that are rapidly expanding outside of their native range. Invasive species can alter ecological relationships among native species and can affect ecosystem function and human health (Source: Based on World Conservation Union (IUCN). Glossary definitions as provided on IUCN website).

**Lands and territories**: For the purposes of the Principles and Criteria these are lands or territories that Indigenous Peoples or local communities have traditionally owned, or customarily used or occupied, and where access to natural resources is vital to the sustainability of their cultures and livelihoods (Source: FSC-STD-60-004 V2-0, based on World Bank safeguard OP 4.10 Indigenous Peoples, section 16 (a). July 2005.).

**Landscape**: A geographical mosaic composed of interacting ecosystems resulting from the influence of geological, topographical, soil, climatic, biotic and human interactions in a given area (Source: FSC-STD-60-004 V2-0, based on International Union for Conservation of Nature (IUCN). Glossary definitions as provided on IUCN website).

**Landscape values**: Landscape values can be visualized as layers of human perceptions overlaid on the physical landscape. Some landscape values, like economic, recreation, subsistence value or visual quality are closely related to physical landscape attributes. Other landscape values such as intrinsic or spiritual value are more symbolic in character and are influenced more by individual perception or social construction than physical landscape attributes (Source: FSC-STD-60-004 V2-0, based on website of the Landscape Value Institute).

**Legal**: In accordance with primary legislation (national or local laws) or secondary legislation (subsidiary regulations, decrees, orders, etc.). ‘Legal’ also includes rule-based decisions made by legally competent agencies where such decisions flow directly and logically from the laws and regulations. Decisions made by legally competent agencies may not be legal if they do not flow directly and logically from the laws and regulations and if they are not rule-based but use administrative discretion (Source: FSC-STD-01-001 V5-2).

**Legally competent**: Mandated in law to perform a certain function (Source: FSC-STD-01-001 V5-2).

**Legal registration**: National or local legal licence or set of permissions to operate as an enterprise, with rights to buy and sell products and/or services commercially. The licence or permissions can apply to an individual, a privately-owned enterprise or a publicly-owned corporate entity. The rights to buy and sell products and/or services do not carry the obligation to do so, so legal registration applies also to Organizations operating a Management Unit without sales of products or services; for example, for unpriced recreation or for conservation of biodiversity or habitat (Source: FSC-STD-01-001 V5-2).

**Light work**: national laws* or regulations may permit the employment or work of persons 13 to 15 years of age on light work which is- a) not likely to be harmful to their health or development; and b) not such as to prejudice their attendance at school, their participation in vocational orientation or training programmes approved by the competent authority or their capacity to benefit from the instruction received (Source: FSC-STD-60-004 V2-0, based on International Labour Organization (ILO) Convention138, Article7).

**Living wage**: The level of wages sufficient to meet the basic living needs of an average-sized family in a particular economy (Source: FSC-STD-60-004 V2-0, based on International Labour Organization (ILO). Bureau of Library and Information Services. ILO Thesaurus as provided on ILO website).

**Local communities**: Communities of any size that are in or adjacent to the Management Unit, and also those that are close enough to have a significant impact on the economy or the environmental values of the Management Unit or to have their economies, rights or environments significantly affected by the management activities or the biophysical aspects of the Management Unit (Source: FSC-STD-01-001 V5-2).

**Local laws**: The whole suite of primary and secondary laws (acts, ordinances, statutes, decrees) which is limited in application to a particular geographic district within a national territory, as well as secondary regulations, and tertiary administrative procedures (rules / requirements) that derive their authority directly and explicitly from these primary and secondary laws. Laws derive authority ultimately from the Westphalian concept of sovereignty of the Nation State (Source: FSC-STD-01-001 V5-2).

**Long-term**: The time-scale of the forest owner or manager as manifested by the objectives of the management plan, the rate of harvesting, and the commitment to maintain permanent forest cover. The length of time involved will vary according to the context and ecological conditions, and will be a function of how long it takes a given ecosystem to recover its natural structure and composition following harvesting or disturbance, or to produce mature or primary conditions (Source: FSC-STD-01-002 V1-0).

**Management objective**: Specific management goals, practices, outcomes, and approaches established to achieve the requirements of this standard (Source: FSC-STD-60-004 V2-0).

**Management plan**: The collection of documents, reports, records and maps that describe, justify and regulate the activities carried out by any manager, staff or organization within or in relation to the Management Unit, including statements of objectives and policies (Source: FSC-STD-01-001 V5-2).

**Management Unit**: A spatial area or areas submitted for FSC certification with clearly defined boundaries managed to a set of explicit long-term management objectives which are expressed in a management plan. This area or areas include(s):

- all facilities and area(s) within or adjacent to this spatial area or areas under legal title or management control of, or operated by or on behalf of The Organization, for the purpose of contributing to the management objectives; and
- all facilities and area(s) outside, and not adjacent to this spatial area or areas and operated by or on behalf of The Organization, solely for the purpose of contributing to the management objectives (Source: FSC-STD-01-001 V5-2).

**Medical Biomonitoring**: Analysis of a chemical pesticide or one of its metabolites in the human body, using samples of substances such as blood, urine or breastmilk (Source: Based on FAO and WHO (2016). International Code of Conduct on Pesticide Management: Guidelines on Highly Hazardous Pesticides. FAO & WHO, Rome).

**Minimum age (of employment):** is not less than the age of finishing compulsory education, and which in any case, should not be less than 15 years. However, a country, whose economy and educational facilities are insufficiently developed, may initially specify a minimum age of 14 years. National laws may also permit the employment of 13-15 year olds in light work which is neither prejudicial to school attendance, nor harmful to a child's health or development. The ages 12-13 can apply for light work in countries that specify a minimum age of 14 (ILO Convention 138, Article 2).

**National laws**: The whole suite of primary and secondary laws (acts, ordinances, statutes, decrees), which is applicable to a national territory, as well as secondary regulations, and tertiary administrative procedures (rules / requirements) that derive their authority directly and explicitly from these primary and secondary laws (Source: FSC-STD-01-001 V5-2).

**National Parks:** Specific land or marine areas which are approved and managed by the state, with clear boundaries and with the main purpose of protecting a large area of national representative natural ecosystems, and realizing scientific protection and rational utilization of natural management.

**Native species**: Species, subspecies, or lower taxon, occurring within its natural range (past or present) and dispersal potential (that is, within the range it occupies naturally or could occupy without direct or indirect introduction or care by humans) (Source: FSC-STD-01-001 V5-2, based on Convention on Biological Diversity (CBD). Invasive Alien Species Programme. Glossary of Terms as provided on CBD website).

**Natural conditions/native ecosystem**: For the purposes of the Principles and Criteria and any applications of restoration techniques, terms such as 'more natural conditions', 'native ecosystem' provide for managing sites to favor or restore native species and associations of native species that are typical of the locality, and for managing these associations and other environmental values so that they form ecosystems typical of the locality. Further guidelines may be provided in FSC Forest Stewardship Standards (Source: FSC-STD-01-001 V5-2).

**Natural forest**: A forest area with many of the principal characteristics and key elements of native ecosystems, such as complexity, structure and biological diversity, including soil characteristics, flora and fauna, in which all or almost all the trees are native species, not classified as plantations.

'Natural forest' includes the following categories:

- Forest affected by harvesting or other disturbances, in which trees are being or have been regenerated by a combination of natural and artificial regeneration with species typical of natural forests in that site, and where many of the above-ground and below-ground characteristics of the natural forest are still present. In boreal and north temperate forests which are naturally composed of only one or few tree species, a combination of natural and artificial regeneration to regenerate forest of the same native species, with most of the principal characteristics and key elements of native ecosystems of that site, is not by itself considered as conversion to plantations;
- Natural forests which are maintained by traditional silvicultural practices including natural or assisted natural regeneration;
- Well-developed secondary or colonizing forest of native species which has regenerated in non-forest areas;

- The definition of ‘natural forest’ may include areas described as wooded ecosystems, woodland and savannah.

The description of natural forests and their principal characteristics and key elements may be further defined in FSC Forest Stewardship Standards, with appropriate descriptions or examples.

‘Natural forest’ does not include land which is not dominated by trees, was previously not forest, and which does not yet contain many of the characteristics and elements of native ecosystems. Young regeneration may be considered as natural forest after some years of ecological progression. FSC Forest Stewardship Standards may indicate when such areas may be excised from the Management Unit, should be restored towards more natural conditions, or may be converted to other land uses.

FSC has not developed quantitative thresholds between different categories of forests in terms of area, density, height, etc. FSC Forest Stewardship Standards may provide such thresholds and other guidelines, with appropriate descriptions or examples. Pending such guidance, areas dominated by trees, mainly of native species, may be considered as natural forest.

Thresholds and guidelines may cover areas such as:

- Other vegetation types and non-forest communities and ecosystems included in the Management Unit , including grassland, bushland, wetlands, and open woodlands;
- Very young pioneer or colonizing regeneration in a primary succession on new open sites or abandoned farmland, which does not yet contain many of the principal characteristics and key elements of native ecosystems. This may be considered as natural forest through ecological progression after the passage of years;
- Young natural regeneration growing in natural forest areas may be considered as natural forest, even after logging, clear-felling or other disturbances, since many of the principal characteristics and key elements of native ecosystems remain, above-ground and below-ground;
- Areas where deforestation and forest degradation have been so severe that they are no longer ‘dominated by trees’ may be considered as non-forest, when they have very few of the principal above-ground and below-ground characteristics and key elements of natural forests. Such extreme degradation is typically the result of combinations of repeated and excessively heavy logging, grazing, farming, fuelwood collection, hunting, fire, erosion, mining, settlements, infrastructure, etc. FSC Forest Stewardship Standards may help to decide when such areas should be excised from the Management Unit, should be restored towards more natural conditions, or may be converted to other land uses (Source: FSC-STD-01-001 V5-2).

For the purposes of FSC certification in China, Forests that originate from plantations are also defined as natural forest, if they have below characteristics:

1) High intensity management activities are not applied;
2) Dominant species are native species;
3) Are uneven-aged or multi-storied.

Uneven-aged forests are forests that feature an age class of more than 1 according to the “Technical specification for forest resources planning and design (GB/T26424-2010)”.

Multi-storied forests are forests that are composed of two or more distinct tree or canopy layers

**Bamboo forest which meet the following requirements can be considered as natural forests**

| Forest type | Natural forest (bamboo species and tree species) | Natural forest (bamboo species) |
|---|---|---|
| **Management intensity** | Low | low |
| **Harvest cycle** | ⩾6 years | ⩾6 years |
| **Harvest method** | Selective harvest or clear harvest only to bamboo | Selective harvest |
| **Fertilizers** | No | No |
| **Pesticides** | No | No |

**Natural Village:** A natural village is a village formed naturally by villagers for a long time; In general, it only has one surname and is a descendant of the same ancestor, with the same blood relationship. It is influenced by geographical conditions, lifestyle, etc. For example, in the mountains, several households living on the roadside for several generations may form a village, which is called a natural village.

A natural village is a unit of daily life and communication for farmers, but not a social management unit. The concept corresponding to natural villages is administrative villages. Administrative villages are the management scope of village committees established in accordance with the Organization Law of Village Committees for village autonomy, and are grassroots mass autonomous units in China.

**Nature reserve**: An area of land, land water or sea where representative natural ecosystems, natural concentrated distribution of rare and endangered wildlife species, natural relics of special significance and other protection objects are located, and a certain area is set aside by law for special protection and management. According to the main objects of protection, nature reserves can be divided into three categories: ecosystem type reserves, biological species reserves and natural heritage reserves. Regardless of the type of protected areas, the general requirement is that they are conservation-oriented and essential for the protection of regional and global biodiversity values.

Non-forest land-use: Land-use system, where the land is not dominated by trees.

**Non-timber forest products (NTFP):** All products other than timber derived from the Management Unit (Source: FSC-STD-01-001 V5-2).

**Objective**: The basic purpose laid down by The Organization for the forest enterprise, including the decision of policy and the choice of means for attaining the purpose (Source: FSC-STD-60-004 V2-0, based on F.C. Osmaston. 1968. The Management of Forests. Hafner, New York; and D.R. Johnston, A.J. Grayson and R.T. Bradley. 1967. Forest Planning. Faber & Faber, London).

**Obligatory code of practice**: A manual or handbook or other source of technical instruction which The Organization must implement by law (Source: FSC-STD-01-001 V5-2).

**Occupational accident**: An occurrence arising out of, or in the course of, work which results in fatal or non-fatal injury (Source: FSC-STD-01-001 V5-2, based on International Labour Organization (ILO). Bureau of Library and Information Services. ILO Thesaurus as provided on ILO website).

**Occupational disease**: Any disease contracted as a result of an exposure to risk factors arising from work activity (Source: FSC-STD-01-001 V5-2, based on International Labour Organization (ILO). Bureau of Library and Information Services. ILO Thesaurus as provided on ILO website).

**Occupational injuries**: Any personal injury, disease or death resulting from an occupational accident (Source: FSC-STD-01-001 V5-2, based on International Labour Organization (ILO). Bureau of Library and Information Services. ILO Thesaurus as provided on ILO website).

**Organism:** Any biological entity capable of replication or of transferring genetic material (Source: Council Directive 90/220/EEC).

**The Organization**: The person or entity holding or applying for certification and therefore responsible for demonstrating compliance with the requirements upon which FSC certification is based (Source: FSC-STD-01-001 V5-2).

**Peatland**: Is constituted by flooded and soggy areas, with large accumulations of organic material, covered by a layer of poor vegetation associated with a certain degree of acidity, and which presents a characteristic amber color (Source: FSC-STD-60-004 V2-0, based on Aguilar, L. 2001. About Fishermen, Fisherwomen, Oceans and tides. IUCN. San Jose (Costa Rica)).

**Pest:** Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants and plant products, materials or environments and includes vectors of parasites or pathogens of human and animal disease and animals causing public health nuisance (Source: FSC-POL-30-001 V3-0).

**Pesticide**: Any substance or preparation prepared or used in protecting plants or wood or other plant products from pests; in controlling pests; or in rendering such pests harmless. This definition includes insecticides, rodenticides, acaricides, molluscicides, larvaecides, fungicides and herbicides (Source: FSC-STD-01-001 V5-2).

**Pesticide Buffer zone:** Area established around environmental and/or social values to protect them from damage, within which pesticides are not used or are used only with additional risk mitigation measures.

**Plantation**: A forest area established by planting or sowing with using either alien or native species, often with one or few species, regular spacing and even ages, and which lacks most of the principal characteristics and key elements of natural forests. The description of plantations may be further defined in FSC Forest Stewardship Standards, with appropriate descriptions or examples, such as:

- Areas which would initially have complied with this definition of ‘plantation’ but which, after the passage of years, contain many or most of the principal characteristics and key elements of native ecosystems, may be classified as natural forests.
- Plantations managed to restore and enhance biological and habitat diversity, structural complexity and ecosystem functionality may, after the passage of years, be classified as natural forests.
- Boreal and north temperate forests which are naturally composed of only one or few tree species, in which a combination of natural and artificial regeneration is used to regenerate forest of the same native species, with most of the principal characteristics and key elements of native ecosystems of that site, may be considered as natural forest, and this regeneration is not by itself considered as conversion to plantations (Source: FSC-STD-01-001 V5-2)

**Bamboo forest, which meet the following requirements can be considered as plantation:**

| Forest type | Plantation (bamboo species) |
|---|---|
| **Management intensity** | High |
| **Harvest cycle** | <6 years |

**Precautionary approach**: An approach requiring that when the available information indicates that management activities pose a threat of severe or irreversible damage to the environment or a threat to human welfare, The Organization will take explicit and effective measures to prevent the damage and avoid the risks to welfare, even when the scientific information is incomplete or inconclusive, and when the vulnerability and sensitivity of environmental values are uncertain (Source: FSC-STD-01-001 V5-2, based on Principle 15 of Rio Declaration on Environment and Development, 1992, and Wingspread Statement on the Precautionary Principle of the Wingspread Conference, 23–25 January 1998).

**Pre-harvest** [condition]: The diversity, composition, and structure of the forest or plantation prior to felling timber and appurtenant activities such as road building (Source: FSC-STD-60-004 V2-0).

**Principle**: An essential rule or element; in FSC's case, of forest stewardship (Source: FSC-STD-01-001 V5-2).

**Priority social harms:** see the definition for social harm (Source: FSC-POL-01-007 V1-0).

**Protection**: See definition of Conservation (Source: FSC-STD-60-004 V2-0).

**Protection Area**: See definition of Conservation Zone (Source: FSC-STD-60-004 V2-0).

**Proportionate:** A 1:1 ratio: The area to be restored or conserved is the same as the area of natural forest and/or High Conservation Value destroyed (Source: FSC-POL-01-007 V1-0).

**Publicly available**: In a manner accessible to or observable by people generally (Source: FSC-STD-60-004 V2-0, based on Collins English Dictionary, 2003 Edition).

**Rare species**: Species that are uncommon or scarce, but not classified as threatened. These species are located in geographically restricted areas or specific habitats, or are scantily scattered on a large scale. They are approximately equivalent to the IUCN (2001) category of Near Threatened (NT), including species that are close to qualifying for, or are likely to qualify for, a threatened category in the near future. They are also approximately equivalent to imperiled species (Source: FSC-STD-60-004 V2-0, based on International Union for Conservation of Nature (IUCN). 2001. IUCN Red List Categories and Criteria: Version 3.1. IUCN Species Survival Commission. IUCN. Gland, Switzerland and Cambridge, UK).

**Ratified**: The process by which an international law, convention or agreement (including multilateral environmental agreement) is legally approved by a national legislature or equivalent legal mechanism, such that the international law, convention or agreement becomes automatically part of national law or sets in motion the development of national law to give the same legal effect (Source: FSC-STD-01-001 V5-2).

**Reasonable**: Judged to be fair or appropriate to the circumstances or purposes, based on general experience (Source: FSC-STD-60-004 V2-0, based on Shorter Oxford English Dictionary).

**Refugia**: An isolated area where extensive changes, typically due to changing climate or by disturbances such as those caused by humans, have not occurred and where plants and animals typical of a region may survive (Source: FSC-STD-60-004 V2-0, based on Glen Canyon Dam, Adaptive Management Program Glossary as provided on website of Glen Canyon Dam website).

**Remedy:** To correct or return something as near as possible to its original state or condition (Source: Guiding Principles on Business and Human Rights. UN. 2011).

- For environmental harms this includes actions taken to remedy deforestation, conversion degradation, or other harms to natural forest and High Conservation Value areas. Environmental remedy actions may include but are not limited to: conservation of standing forests, habitats, ecosystems and species; restoration and protection of degraded ecosystems.
- For social harms this includes providing redress for identified social harms through agreements made during an FPIC-based process with the affected rights holders, and facilitating a transition to the position before such harms occurred; or developing alternative measures to ameliorate harms by providing gains recognized by the affected stakeholders as equivalent to the harms, through consultation and agreement. Remedy may be achieved through a combination of apologies, restitution, rehabilitation, financial or non-financial compensation, satisfaction, punitive sanctions, injunctions, and guarantees of non-repetition (Source: FSC-POL-01-007 V1-0).

**Repair:** Process of assisting the recovery of environmental values and human health (Source: FSC-POL-30-001).

**Representative Sample Areas**: Portions of the Management Unit delineated for the purpose of conserving or restoring viable examples of an ecosystem that would naturally occur in that geographical region.

**Resilience**: The ability of a system to maintain key functions and processes in the face of stresses or pressures by either resisting or adapting to change. Resilience can be applied to both ecological systems and social systems (Source: IUCN World Commission on Protected Areas (IUCN-WCPA). 2008. Establishing Marine Protected Area Networks – Making it Happen. Washington D.C.: IUCN-WCPA National Oceanic and Atmospheric Administration and The Nature Conservancy.).

**Restitution:** Measures agreed with affected stakeholders to restore lands, properties or damaged natural resources to their original owners in their original condition. Where such lands, properties or natural resources cannot be returned or restored, measures are agreed on to provide alternatives of equivalent quality and extent. Restitution to affected rights holders is agreed on through an FPIC-based process (Source: FSC-POL-01-007 V1-0).

**Restoration /Ecological Restoration**: Process of assisting the recovery of an ecosystem, and its associated conservation values, that have been degraded, damaged, or destroyed (Source: adapted from 'International principles and standards for the practice of ecological restoration'. Gann et al 2019. Second edition. Society for Ecological Restoration) (shortened version – refer to the FSC Remedy Framework for full definition).

Note: The Organization is not necessarily obliged to restore those environmental values that have been affected by factors beyond the control of The Organization, for example by natural disasters, by climate change, or by the legally authorized activities of third parties, such as public infrastructure, mining, hunting or settlement. FSC-POL-20-003 The Excision of Areas from the Scope of Certification describes the processes by which such areas may be excised from the area certified, when appropriate.

The Organization is also not obliged to restore environmental values that may have existed at some time in the historic or pre-historic past, or that have been negatively affected by previous owners or organizations – with the exception of those values negatively affected through instances of conversion

and whose restoration form part of a Remedy Plan which The Organization is required to follow. In all instances, however, The Organization is expected to take reasonable measures to mitigate, control and prevent environmental degradation which is continuing in the Management Unit as a result of such previous impacts.

**Riparian zone**: Interface between land and a water body, and the vegetation associated with it (Source: FSC-STD-60-004 V2-0).

**Risk**: The probability of an unacceptable negative impact arising from any activity in the Management Unit combined with its seriousness in terms of consequences (Source: FSC-STD-01-001 V5-2).

**Scale**: A measure of the extent to which a management activity or event affects an environmental value or a Management Unit, in time or space. An activity with a small or low spatial scale affects only a small proportion of the forest each year, an activity with a small or low temporal scale occurs only at long intervals (Source: FSC-STD-01-001 V5-2).

**Scale, intensity and risk**: See individual definitions of the terms ‘scale’, ‘intensity’, and ‘risk’ (Source: FSC-STD-60-004 V2-0).

**Significant**: For the purposes of Principle 9, HCVs 1, 2 and 6 there are three main forms of recognizing significance.

- A designation, classification or recognized conservation status, assigned by an international agency such as IUCN or Birdlife International;
- A designation by national or regional authorities, or by a responsible national conservation organization, on the basis of its concentration of biodiversity;
- A voluntary recognition by the manager, owner or The Organization, on the basis of available information, or of the known or suspected presence of a significant biodiversity concentration, even when not officially designated by other agencies.

Any one of these forms will justify designation as HCVs 1, 2 and 6. Many regions of the world have received recognition for their biodiversity importance, measured in many different ways. Existing maps and classifications of priority areas for biodiversity conservation play an essential role in identifying the potential presence of HCVs 1, 2 and 6 (Source: FSC-STD-01-001 V5-2).

**Silviculture**: The art and science of controlling the establishment, growth, composition, health and quality of forests and woodlands to meet the targeted diverse needs and values of landowners and society on a sustainable basis (Source: FSC-STD-01-001 V5-2, based on Nieuwenhuis, M. 2000. Terminology of Forest Management. IUFRO World Series Vol. 9. IUFRO 4.04.07 SilvaPlan and SilvaVoc).

**Small-scale smallholder**: Any person that is depending on the land for most of their livelihood; and/or employs labour mostly from family or neighbouring communities and has land-use rights on a Management Unit of less than 50 hectares. Standard developers may define this to less than 50 hectares (Source: FSC-POL-01-007 V1-0).

**Social harms**: Negative impacts on persons or communities, perpetrated by individuals, corporations or states, which include, but may go beyond, criminal acts by legal persons. Such harms include negative impacts on persons' or groups' rights, livelihoods and well-being, such as property (including forests, lands, waters), health, food security, healthy environment, cultural repertoire and happiness, as well as physical injury, detention, dispossession and expulsion (Source: FSC-POL-01-007 V1-0).

- **Ongoing social harms**: social harms which have not been remedied.

- **Priority social harms:** social harms prioritized by an FPIC-based process with affected rights-holders or identified in consultation with affected stakeholders (Source: FSC-PRO-01-007 V1-0. Shortened version - refer to the FSC Remedy Framework for full definition).

**Stakeholder**: See definitions for 'affected stakeholder' and 'interested stakeholder' (Source: FSC-STD-01-001 V5-2).

**Statutory law or statute law**: The body of law contained in Acts of Parliament (national legislature) (Source: Oxford Dictionary of Law).

**Tenure**: Socially defined agreements held by individuals or groups, recognized by legal statutes or customary practice, regarding the 'bundle of rights and duties' of ownership, holding, access and/or usage of a particular land unit or the associated resources there within (such as individual trees, plant species, water, minerals, etc.) (Source: FSC-STD-01-001 V5-2, based on International Union for Conservation of Nature (IUCN). Glossary definitions provided on IUCN website).

**Threat**: An indication or warning of impending or likely damage or negative impacts (Source: FSC-STD-60-004 V2-0, based on Oxford English Dictionary).

**Threatened species**: Species that meet the IUCN (2001) criteria for Vulnerable (VU), Endangered (EN) or Critically Endangered (CR), and are facing a high, very high or extremely high risk of extinction in the wild. These categories may be re-interpreted for FSC purposes according to official national classifications (which have legal significance) and to local conditions and population densities (which should affect decisions about appropriate conservation measures) (Source: FSC-STD-60-004 V2-0, based on International Union for Conservation of Nature (IUCN). 2001. IUCN Red List Categories and Criteria: Version 3.1. IUCN Species Survival Commission. IUCN. Gland, Switzerland and Cambridge, UK).

**Timber harvesting level**: The actual harvest quantity executed on the Management Unit, tracked by either volume (e.g. cubic meters or board feet) or area (e.g. hectares or acres) metrics for the purpose of comparison with calculated (maximum) allowable harvest levels (Source: FSC-STD-60-004 V2-0).

**Timely manner**: As promptly as circumstances reasonably allow; not intentionally postponed by The Organization; in compliance with applicable laws, contracts, licences or invoices (Source: FSC-STD-60-004 V2-0).

**Traditional Knowledge**: Information, know-how, skills and practices that are developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity (Source: FSC-STD-60-004 V2-0, based on the definition by the World Intellectual Property Organization (WIPO). Glossary definition as provided under Policy / Traditional Knowledge on the WIPO website).

**Traditional peoples**: Traditional peoples are social groups or peoples who do not self-identify as indigenous and who affirm rights to their lands, forests and other resources based on long established custom or traditional occupation and use (Source: FSC-STD-60-004 V2-0, Forest Peoples Programme (Marcus Colchester, 7 October 2009).

**Transaction verification**: Verification by certification bodies and/or Accreditation Services International (ASI) that FSC output claims made by certificate holders are accurate and match with the FSC input claims of their trading partners (Source: FSC-STD-40-004 V3-0).

**Trigger Value:** Trigger values are expressed as the value of toxicity exposure ratio (TER) above which exposure is considered to be an unacceptable risk. The TER is calculated based on the acute toxicity value and exposure for each pesticide. Its value will be local and will be based on exposure parameters.

**Uphold**: To acknowledge, respect, sustain and support (Source: FSC-STD-01-001 V5-2).

**Use rights**: Rights for the use of resources of the Management Unit that can be defined by local custom, mutual agreements, or prescribed by other entities holding access rights. These rights may restrict the use of particular resources to specific levels of consumption or particular harvesting techniques (Source: FSC-STD-01-001 V5-2).

**Verifiable targets**: Specific goals, such as desired future forest conditions, established to measure progress towards the achievement of each of the management objectives. These goals are expressed as clear outcomes, such that their attainment can be verified and it is possible to determine whether they have been accomplished or not (Source: FSC-STD-60-004 V2-0).

**Very limited portion**: The affected area shall not exceed 5% of the Management Unit, irrespective of whether the conversion activities have taken place prior to or after The Organization is awarded with FSC Forest Management certification (Source: FSC-POL-01-007 V1-0).

**Very limited portion of the core area**: The area affected shall not exceed 0.5% of the area of the core area in any one year, nor affect a total of more than 5% of the area of the core area.

**Waste materials**: unusable or unwanted substances or by-products, such as:

- Hazardous waste, including chemical waste and batteries;
- Containers;
- Motor and other fuels and oils;
- Rubbish including metals, plastics and paper; and
- Abandoned buildings, machinery and equipment (Source: FSC-STD-60-004 V2-0).

**Water bodies** (including water courses): Seasonal, temporary, and permanent brooks, creeks, streams, rivers, ponds, and lakes. Water bodies include riparian or wetland systems, lakes, swamps, bogs and springs (Source: FSC-STD-60-004 V2-0).

**Wetlands**: Transitional areas between terrestrial and aquatic systems in which the water table is usually at or near the surface or the land is covered by shallow water (Source: FSC-STD-60-004 V2-0, based on Cowarding, L.M., Carter, V., Golet, F.C., Laroe, E.T. 1979. Classification of Wetlands and Deepwater Habitats of the United States. DC US Department: Washington).

Under the Ramsar Convention, wetlands can include tidal mudflats, natural ponds, marshes, potholes, wet meadows, bogs, peatlands, freshwater swamps, mangroves, lakes, rivers and even some coral reefs (Source: FSC-STD-60-004 V2-0, based on International Union for Conservation of Nature (IUCN), No Date, IUCN Definitions – English).

**Wild plants with minimal population**: Includes the following types: first, wild plants with minimal population in the wild, which are critically endangered and in danger of extinction at any time; second, wild plants with unique habitat requirements and narrow ecological range; and third, relatively small populations of wild plants whose potential genetic value is unclear, whose extinction would result in gene loss, reduced biodiversity, and significant loss of socio-economic value.

**Workers**: All employed persons including public employees as well as 'self-employed' persons. This includes part-time and seasonal employees, of all ranks and categories, including labourers, administrators, supervisors, executives, contractor employees as well as self-employed contractors and sub-contractors (Source: FSC-STD-60-004 V2-0, based on International Labour Organization (ILO) Convention 155, Occupational Safety and Health Convention, 1981).

**Workers' organization:** any organization of workers* _for furthering and defending the interest of workers*_(adapted from ILO Convention 87, Article 10). It is important to note that rules and guidance on composition of workers' organization vary from country to country, especially in relation to those who are

considered as rank and file members, as well those who are deemed to have power to “hire and fire”. Workers’ organizations tend to separate association between those who can “hire and fire” and those who cannot (Source: FSC-STD-60-004 V2-0, based on report on generic criteria and indicators based on International Labour Organization (ILO) Core Conventions principles, 2017).

**Worst forms of child labour:** comprises a) all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced labour, including forced or compulsory recruitment of children for use in armed conflict; b) the use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performance; c) the use, procuring or offering of a child for illicit activities, in particular for production and trafficking of drugs as defined in the relevant international treaties; d) work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children (Source: FSC-STD-60-004 V2-0, based on International Labour Organization (ILO) Convention 182, Article 3).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