



**China-UK Collaboration on International Forest  
Investment and Trade Programme (InFIT)**

# **Guide for Overseas Investment and Production of Sustainable Palm Oil by Chinese Enterprises**

Draft Version 3.0

China Chamber of Commerce of Foodstuffs and Native Produce (CFNA)

October 2015

## Background on InFIT Programme

The China-UK Collaboration on International Forest Investment and Trade (InFIT) Programme is an initiative between China's State Forestry Administration (SFA), the Ministry of Commerce (MofCom) and the UK Department for International Development (DFID). It is part of a global programme - Forest Governance Markets and Climate (FGMC).

The objective of the InFIT Programme is to reduce impacts of China's international trade in timber products and other commodities grown on forest land whose production affects forest degradation, through:

- measures aimed at eliminating illegally harvested timber from its trade;
- codes of practice that promote environmentally and socially sound resource management practices in developing countries

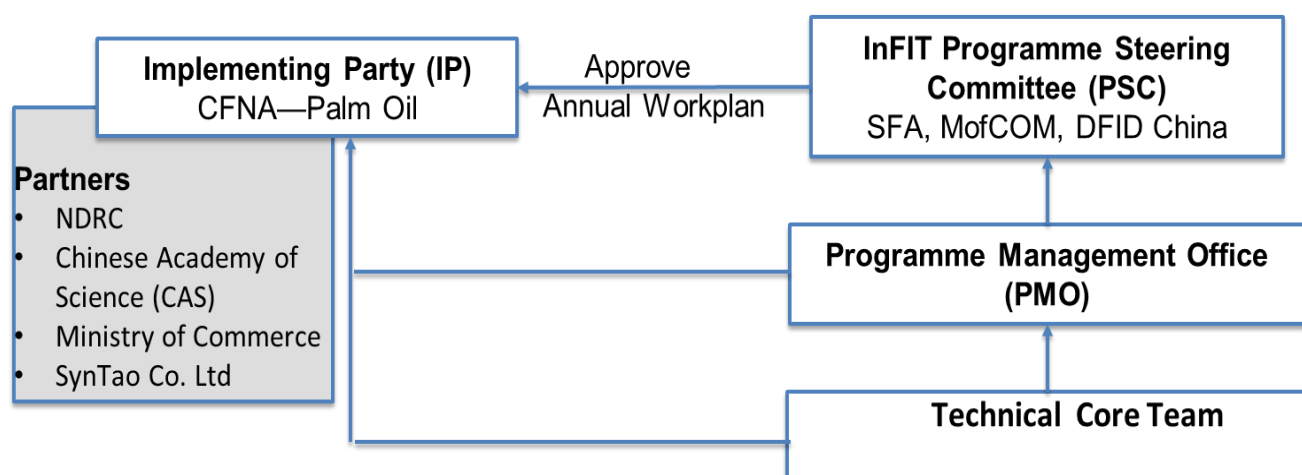
One component under the InFIT Programme is the development and application of Guides for Overseas Investment and Production of Sustainable Palm Oil by Chinese Enterprises. The outputs of this component will be two guides:

Guide for Overseas Investment and Production of Sustainable Palm Oil by Chinese Enterprises

- Guide for Promoting Trade and Consumption of Sustainable Palm Oil in China

This document presents the guide for overseas investments and production of palm by Chinese enterprises.

## InFIT-Palm Oil Project Implementation Structure



NDRC= National Development and Reform Commission  
SFA= State Forestry Administration

## **Organization for preparation of the guide**

China Chamber of Commerce of Foodstuffs and Native Produce (CFNA) is the leading party responsible for development and application of Guide for Overseas Investment and Production of Sustainable Palm Oil by Chinese Enterprises. Development of the guide was under taken by a core team by officials from CFNA and InFIT Project Management Office (PMO) and a team of technical specialists comprising the following:

- Teoh Cheng Hai, International Specialist - Palm Oil
- Zhang Jianping, Director, Dept of International Economic Cooperation, NDRC
- Zhou Mi, Deputy Director, Institute of World Economy, MofCOM
- Liu Aimin, Researcher, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Science (CAS)
- Zhang Hongfu, Senior Manager, SynTao Sustainability Solutions

## **Objectives of the Guide**

This is a voluntary Guide with the overall objective of providing guidance to Chinese enterprises which are planning or are engaged in overseas investments and production of sustainable palm.

As this Guide is designed to be consistent with global standards and guides on sustainable production, especially with regard to the RSPO Principles and Criteria, implementation of this Guide by Chinese enterprises will prepare the enterprises for international certification as well as to meet the requirements of host countries.

This Guide is also relevant for other stakeholders in the sustainable palm oil supply chain, including international organizations, host country governments, processors, manufacturers, retailers, financial institutions and banks and civil society.

## **Content**

**PART A: Purpose and China Guiding Principles for the Guide**

**PART B: Planning and Financing of Sustainable Overseas Investments**

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## **PART A: Purpose and China Guiding Principles for the Guide**

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### **A.1 Importance and Urgency**

#### **A.1.1 Importance and relevance of palm oil to China**

Originating from West Africa, palm oil is the most important vegetable oil in terms of global production, consumption and international trade. Together with soybean oil and rapeseed oil, they are considered the three most important vegetable oils in the world. Human beings have been using palm oil for more than 5000 years.

In 2014, global production of palm oil was 59.3 million tonnes, representing 36% of the total production of vegetable oils. Soybean oil and rapeseed oil production accounted for 27% and 16% respectively.

The largest producer was Indonesia accounting for 30.8 million tonnes (52%) followed by Malaysia with 19.7 million tonnes (33%). Together, they produce about 85% of the global output. The world's largest consumers of palm oil in 2014 are Indonesia (8.8 Mt), India (7.8 Mt), Europe EU-28 (7.0 Mt) and China (6.1 Mt), collectively accounting for 50% of total consumption. China was the world's consumer from 2005 until when the average annual consumption was about 6 million tonnes.

Along with the expanding of Chinese market, the demand of palm oil in China is expected to be increasing. It is estimated that palm oil trade in China will reach 8 million tonnes in 2020, and most likely exceed 10 million tonnes in 2025.

Palm oil has many industrial uses in China, the main applications being in the food industry for the production of cooking oils with a melting point of less than 44°C. Palm oil has been used increasingly for production of non-food products, oleochemical derivatives such as aliphatic acids, esters, and aliphatic alcohols and glycerin for the production of soap, detergents, epoxy palm oil, polyols, polyurethane and acrylate products. With the global concern over global warming, production of biofuels using palm oil is gaining traction in China.

As China has very limited agricultural land that is suitable for cultivation of oil palm, China's demand for palm oil has to be met by imports from producing countries, especially Malaysia and Indonesia. In the interest of ensuring security of supply, Chinese enterprises are showing an interest in overseas investments in the production of palm oil; large scale investments in plantations in Indonesia has already commenced. However, Chinese enterprises must recognize that they must produce palm oil in a sustainable manner that contributes towards the socio-economic development of the host countries and without adverse social and

environmental impacts.

An overview of the oil palm industry and production of sustainable palm oil is given in Annex A(1)

### **A.1.2 Need for production of sustainable palm oil by Chinese enterprises**

Although palm oil has been produced commercially for more than 100 years and oil palm is the most efficient oil seed in terms of oil output per unit land area compared with other major vegetable oils such as soybean oil and rapeseed oil and it has contributed towards the socioeconomic development of producing countries, there are concerns over the sustainability of production, particularly with regard to social and environmental impacts if best management practices are not applied. Over the past decade, civil society organizations have been engaged in campaigns at the global level for the production of palm oil that is not associated with deforestation, loss of biodiversity and does not cause any social injustice.

The key sustainability challenges are summarized below.

**Economic challenges:** Large productivity gaps between actual and achievable yields, declining prices of palm oil and rising costs, and poor uptake of CSPO. The productivity gap is of major concern as the average global CPO production is below 4.0 tonnes per ha compared with an achievable yield of about 8 to 10 tonnes.

**Environmental challenges:** The key concerns are deforestation and conversion of peatland, and ensuing loss of biodiversity, climate change, fires and haze. Expansion of palm oil production has often been identified as a key driver of deforestation, particularly in Indonesia. The focus of many NGO campaigns has been on de-linking oil palm development from deforestation; future development of the crop should not destroy high conservation value (HCV) or high carbon stock (HCS) areas. It has been estimated that 56% of oil palm expansion between 1990 and 2005 in Indonesia was at the expense of natural forests. Use of fires for land clearing has contributed to the annual recurrence of haze pollution has caused significant environmental, social and health consequences for Indonesia and neighbouring countries, as can be seen by extreme trans-boundary haze pollution during 2015.

**Social challenges:** Land rights, land use and land acquisition, rights of indigenous peoples and local communities, welfare of smallholders and plantation workers and use of child labour. Although oil palm development has been a catalyst for socio-economic development in producing countries, it has also been a source of numerous conflicts between communities with plantation companies as well as with governments. While smallholders are key players in the global palm oil supply chain, they have usually underperformed compared to plantation companies in terms of productivity and sustainability practices. For plantation workers, concerns include the need of a fair and safe working environment, occupational safety and health (OSH) policies and practices, freedom of association and no discrimination of any form and respect of human rights. Treatment of women who are largely employed for field operations including pesticides application deserve attention and the employment of child labour shall be strictly forbidden.

Governance challenges: Inadequate and/or ineffective policies, planning, and legal regulatory frameworks and governance structures, particularly with regard to land ownership and development.

## **A.2 Purpose**

### **A.2.1 To guide and regulate overseas investment and production of sustainable palm oil by Chinese enterprises**

This Guide provides specific guidance for overseas investment and the production of sustainable palm oil, covering legal and governance, economic, social and environmental aspects by Chinese enterprises.

It specifies the China legal requirements and procedure for overseas investments by Chinese enterprises, as well as advice on key legal requirements and procedures for investments in host countries.

It also addresses issues which the enterprises shall pay attention to promote the industry's self-discipline, improve the decision-making capacity, reduce transnational business risks, and build a harmonious foreign investment relationship.

### **A.2.2 To strengthen the industry's self-discipline and advocate the social responsibility of enterprises**

. Chinese enterprises should pay attention to ecological environment protection and biodiversity conservation, undertake scientific and rational production methods and operation measures according to the local site conditions.

Chinese enterprises shall put effort to minimize negative impacts on biodiversity, wildlife habitat, eco-fragile zones, natural landscapes, water quality, forest and ecological environment. Furthermore, the enterprises shall take appropriate measures to protect forests with high conservation values (HCVs).

Chinese enterprises shall fully consider the interest of local communities, adopt appropriate measures to avoid activities which might directly or indirectly violate, threaten and weaken the ownership or use rights of local communities to specific resources. Enterprises shall actively participate in local public welfare activities and provide job opportunities, training and other social services to the locals.

Chinese enterprises operating overseas have endeavour to certify their production of palm oil according to international and/or national certification standards

### **A.2.3 To systematically promote the best practices for management and production**

Owing to perceived low efficiency of local governments in legal enforcement and other specific constraints, Chinese enterprises shall set up management offices on the ground, to follow up related issues and handle relations with the local and regional governments. Relations with the trade unions shall be properly handled, to avoid conflicts arising from labor-related disputes. Chinese enterprises shall conduct

their business in a legitimate manner and respect the local residents and their customs.

To protect the ecological environment, Chinese enterprises shall legally and reasonably manage and use overseas land resources with minimal environmental and social impacts. Appropriate measures shall be carried out to avoid direct or indirect threats to ownership of land by local communities or their rights to use natural resources.

Enterprises shall take the necessary social responsibility for their employees. When it is needed or allowed, enterprises could hire local workers with the required skills, to localize the enterprise as well as to take necessary social responsibility and reduce the labor costs. Enterprises shall conduct safety training for employees, and invest necessary safety equipment and insurance for the employees.

Enterprises shall be knowledgeable in managing relations with media and law enforcement officials. In case of major events or incidents, the enterprise shall timely disseminate relevant information to the public.

When there are political conflicts and security risks, enterprises and their employees shall search for legal protection and protection from local governments and the Chinese embassy. The enterprises shall establish emergency response plans, and internal emergency warning mechanism for specific purposes, as well as risk management plans.

#### **A.2.4 To promote sustainable development and cooperation**

As there are no oil palm plantations in China, it is one of the largest oil palm importing countries, mainly from Malaysia and Indonesia. Therefore, China plays an important role in global palm oil trade and palm oil supply chain. It also has an important responsibility to promote sustainable palm oil development and rainforest protection. Chinese enterprises shall voluntarily promote import, process and use of sustainable palm oil and comply with related criteria for sustainable palm oil production and processing.

In 2009, CFNA and WWF China jointly established the China sustainable palm oil network with the objective of promoting production of sustainable palm oil by Chinese enterprises and to encourage the use of certified sustainable palm oil in China. Under this platform, awareness and capacity of sustainable palm oil development and utilization can be raised.

### **A.3 China Guiding Principles**

#### **A.3.1 Unified interests of economy, society and ecology**

The purpose of overseas palm oil investment and production by Chinese enterprises is to obtain sustainable economic benefits. Sustainable development also needs to take the social and ecological benefits into account, in other words, establishing good relations with local communities and protecting the local ecological environment.



While investing abroad, enterprises shall combine their own interests and interests of host countries to reach the mutual development. The development of China and other countries shall not sacrifice the ecological environment. We shall achieve the unified interests of economy, society and ecology.

### **A.3.2 Mutual benefits and win-win cooperation**

The principle of mutual benefits is also known as “the principle of reciprocity”, the Confucian value of treating others as you would want them to you. The WTO requires its members to give each other preferential treatment during international trade, emphasizes the balance of rights and obligations. In another words, while the country enjoys preferential treatment from the other party, it shall also be given preferential treatment to the other party on a reciprocal basis. In the practice of multilateral trade negotiations, the agreement can only be achieved based on the principle of equality and mutual benefits. The Chinese enterprises shall not sacrifice the host countries’ interests when they are engaged in overseas palm oil investment and production. They shall search for the win-win strategy to achieve sustainable development.

### **A.3.3 Cooperation, guide and supervision between China and host country**

Although Chinese enterprises operating overseas are bound by relevant Chinese laws, monitoring of their compliance overseas could be a constraint. Therefore, China shall cooperate with the host country in guiding and supervising Chinese enterprises in the development of oil palm plantations and processing facilities and trading in palm oil to meet the legal and regulatory requirements of both countries.

It is critical that the development of oil palm plantations by Chinese enterprises shall not contribute to deforestation in host countries.

Oil palm plantation and palm oil processing facilities shall comply with related industrial policies, investment requirements and permits issued by Chinese and host country government. Chinese enterprises are encouraged to carry out palm oil downstream processing and utilization in the host country to extend the supply chain and create development opportunities for the local communities.

Palm oil transportation shall comply with the transportation, inspection and quarantine standards of the host country.

### **A.3.4 Coexistence of government guidance and market regulation**

Chinese government and the host country government shall mutually communicate on development strategies for oil palm plantation and palm oil processing and trade, establish related development plan and to guide the investment activities, optimize oil palm plantation and the layout for palm oil production and processing.

The host country government shall provide specific requirements and standards of

environmental protection and social obligations and supervise enterprises to carry out social and environmental impact assessments.

Chinese enterprises shall make their own investment decisions and establish plantation, management and trade models. Relevant industry association can play a role in supporting the enterprises in complying with regulatory requirements.

Government policies and market regulation shall coexist to establish and maintain a sound market and economic order.

### **A.3.5 Enterprise taking responsibility voluntarily**

The enterprises shall have dual goals of achieving the investors' interests on the one hand, on the other hand to contribute to the society in general and specifically to the host country.

The enterprises shall proactively understand and study the relevant laws, regulations and standards of the host country, and meet the prescribed requirements.

The enterprises shall proactively meet the requirements of local minimum salary standards and employment and hire local staff to promote localization.

The enterprises shall provide fair opportunities for male and female workers; they shall prohibit use of child labor.

The enterprises shall communicate with local communities to establish a good relationship with them.

## **A.4 Laws, Standards and Regulations**

### **A.4.1 International conventions and related agreements - Overview**

Many international conventions and related agreements and guiding principles are of relevance to the palm oil industry and should be given due consideration by Chinese enterprises in their overseas investments. Some of the relevant conventions and agreements/principles are as follows, a summary of which is given in Annex A(2).

- UN Convention on Biological Diversity (CBD)
- UN Forum on Forests (UNFF) –Forestry principles.
- UN Framework Convention on Climate Change (UNFCCC)
- Kyoto Protocol
- New York Declaration on Forests 2014
- UN Global Compact
- International Labor Organization (ILO) conventions – particularly fundamental conventions No. 29 (1930) on forced labour, No 105 (1957) on abolition of forced labour, No. 138(1973) on minimum age, No.182(1999) on worst forms of child labour, No. 87 (1948) on freedom of association and protection of rights to organize and No.98 (1948) on right to organize and collective

bargaining, No. 100 (1951) on equal enumeration and No.111 (1958) on discrimination (employment and occupation).

- UN Global Compact
- Principles for Responsible Agricultural Investments (PRAI)
- Equator Principles

#### **A.4.2 Policies and regulations for China overseas investments**

##### **China National Policies**

- I. *The Twelve-Five plan of national economic and social development* (2011). The Plan requires expeditiously implementing the "going-out" strategy. Also, the plan will guide various forms of ownership enterprises to orderly engage in overseas investment and cooperation according to market-oriented and self - decision making principles. On legality and government levels, they should accelerate the improvement of overseas investment laws and regulations, and actively sign bilateral agreements in terms of investment protection, avoidance of double taxation.
- II. *Notice of Encouraging and Guiding Private Enterprises to Actively Conduct Overseas Investment* ([2012]1905). The notice is jointly issued by the National Development and Reform Commission, (NDRC) the People's Bank of China and related ministries. It emphasizes the important role of private enterprises in overseas investment. It aims to promote private capital participating in international cooperation and competition. Moreover, the notice requires related authorities to simplify the approval procedures of overseas investment for private enterprises; improving foreign exchange management policy; withdraw the verification and approval procedure of overseas loans and foreign exchange purchasing and payment; implement financial taxation supporting policies, and increase financing and insurance support.
- III. The National Development and Reform Commission published the "Twelve-Five" planning for the use of overseas investment (released on July 17, 2012). The planning focuses on guiding the overseas investment, including studying and developing the overall strategies for overseas investment; providing financial support to overseas investment projects through syndicated loans, export credit and project finance; expanding the scale of domestic insurance agency, developing the new insurance products, and intensifying insurance support for overseas investment.
- IV. The Ministry of Commerce and the Ministry of Foreign Affairs published the Catalogue of Countries and Industries for Guiding Investment Overseas. catalogue aims to encourage, support and guide enterprises to make full use of domestic and foreign markets, to optimize the allocation of resources, and to participate in international economic and technological cooperation and competition in broader areas and on a higher level. Enterprises which conform to the catalogue and hold a certificate of approval for overseas investment have the priority to enjoy the financial, foreign exchange, taxation,

customs, immigration and other preferential policies.

- V. The National Development and Reform Commission, the Ministry of Commerce, in conjunction with relevant departments formulate *the Guidance of Industries for Overseas Investment* and *the Guiding Catalogue of Industries for Foreign Investment* ([2006]1312). The State encourages and supports enterprises with comparative advantages to invest in overseas areas. The state will not approve prohibited investment projects and will take measures to stop such projects.
- VI. The Ministry of Commerce, the National Development and Reform Commission, and the Ministry of Foreign Affairs issued the *National Guide of Industries for Overseas Investment (2011 version)* ([2011]767). The guide introduces prior investment areas, major industrial development goals, and the key developing areas in relevant countries. Besides, the guide is based mainly on national economic development planning; the information provided by overseas investment administrations and other government departments, temporarily introducing the investment environments in 115 countries with constant adjustment.

### **China laws and regulations**

- The early stage. Within the existing legal framework in China, the early stage of overseas investments developed by domestic enterprises should be approved and reviewed by the National Development and Reform Commission, the Ministry of Commerce and the State administration of foreign exchange. Given that State-owned enterprises carry out overseas investments, they will be supervised by the State-owned assets supervision and administration commission of the state (SASAC).
- The Operational stage.
  - I. The relevant regulations of the National Development and Reform Commission.: *Interim Measures for the Administration of Examination and Approval of the Overseas Investment Projects*, and *the Notice Issued by the National Development Reform Board Office for the Record of Overseas Investment* have regulations on the changes of construction scale, and main construction content and the main products; the changes of construction locations; the changes of investors or stock equity; the situation that Chinese investment is over 20% of the original approved Chinese investment and the above.
  - II. The regulations of the Ministry of Commerce: *The measures of overseas investment* and *the notice of concerning the Joint Annual Inspection of Overseas Investment* stipulate the enterprises' qualification and annual assessment.
  - III. The regulations of the administration of foreign exchange: In *the Provisions on the Foreign Exchange Administration of the Overseas Direct Investment of*

*Domestic Institutions*, domestic enterprises need to register, change and record information of overseas investment at the local Foreign Exchange administration.

- IV. The regulation of SASAC is *the Interim Measures for the Supervision and Administration of Overseas Investment of Central Enterprises*. In the implementation process of important investment projects, if there are substantial changes in projects' contents, the amount of investment, the shareholding structures, and other significant situations, the state-owned enterprises should promptly report to the SASAC.

### **Requirements on environmental and social responsibility**

#### **Environment:**

- The State Council and other ministries of China have released some rules and regulations that directly or indirectly involve overseas investment environment protection. For instance, *Decision of the State Council on Reforming the Investment System (2004)*, *Verification and Approval of Overseas Investment Projects Tentative Administrative Procedures (2004)*, *views on encouraging and regularizing overseas investment and cooperation of Chinese Enterprises (2006)*, *Measures for Overseas Investment Management (2009)*, *Administrative Regulations on Contracting Foreign Engineering (2008)*, and *the Guidelines for Social Responsibility in Foreign Project Contracting (2012)*. These regulations stress that investors must comply with local environmental standards. Also, enterprises should identify the main environmental effects, systematically improve the environmental performance, and introduce independent third-party certification systems into operation. Moreover, these regulations emphasize the supervisory role of non-governmental organizations for overseas investment in environmental protection.

#### **Social responsibility**

- To encourage investors to implement self-regulation through codes of conduct and contracts.
- In the era of globalization, the multinational corporations are growing stronger, which means they need to take more responsibility to stakeholders. Multinational corporations should consider the requirements of all stakeholders and take more social responsibility. The prosperity of multinational corporations depends on the company's ability to process relations with different stakeholders. Qualified enterprises should actively implement a variety of laws and code of conducts relating to social responsibility. The codes of conducts should emphasize the communication with stakeholders. In practice, the mining industry and other industries have introduced the international

environmental standards for Chinese enterprises. But it is also important to make an appropriate regulatory framework to make them really work.

#### **A.4.3 Policies and regulatory requirements of host countries**

Besides compliance with the China national policies and laws and regulations pertaining to foreign investments, Chinese enterprises would have to be compliant with the regulatory requirements host countries for investment in the palm oil sector and specifically for the development of plantations and palm oil processing facilities. Laws and regulations of host countries vary considerably and it critical that Chinese enterprises have a clear understanding of the legal requirements of the prospective country they intend to invest in. These would have to be given serious consideration during the planning stage of the investment. The key legal requirements and major process steps for obtaining the legal license to operate in selected host countries are summarized in Annex A(3).

#### **A.4.4 Standards for production of certified sustainable palm oil (CSPO)**

Certification systems that are applicable for the production and use of sustainable palm oil include:

- Certification systems specifically developed for production of certified sustainable palm oil (CSPO): Roundtable on Sustainable Palm Oil (RSPO), Indonesian Sustainable Palm Oil (ISPO) and Malaysian Sustainable Palm Oil (MSPO).
- Generic certification systems applicable to a wide variety of crops including oil palm : Sustainable Agriculture Network (SAN)
- Certification systems for production of biomaterials for bioenergy and biofuels: International System for Sustainability and Carbon Certification (ISCC) and the Roundtable on Sustainable Biomaterials (RSB)

An overview of various certification standards and certification systems is given in Annex A(4).

## **PART B: Planning and Financing of Sustainable Overseas Investments**

- B.1 Assessment of Potential Overseas Investments and Feasibility Study
- B.2 Overseas Investment Procedures in China and Host Countries
- B.3 Contract for Overseas Investments (including E&S considerations)
- B.4 Green Credit and Green Financing

### **B.1 Assessment of Potential Overseas Investments and Feasibility Study**

#### **B.1.1 Investment and development strategy**

Enterprises shall prepare an investment and development strategy which fits to the mission of the enterprise and takes into considerations domestic and global development trends in the palm oil sector. Enterprises shall clearly identify the role of overseas investment in its development in terms of supply chain as well as in enhancing international competitiveness. Enterprises shall assess the predicted success rate, expected benefits or risks. While selecting the host countries, the political situation, economic, environmental and social factors shall be all considered. When it comes to economic field, synthesized consideration of the market access, FDI industry guideline, development of related industries and the trade management system of host country and regions, the enterprises should choose to first invest in countries which encourage development of the palm oil industry, have better supporting industrial capacity, facilitated export of palm oil products and better channel of trade settlement and profit repatriation. When they select the host country, the enterprises shall consider if the country has a national commitment towards production of sustainable palm oil and supports a sustainable supply chain.

#### **B.1.2 Considering environmental and social issues during planning, design and feasibility study**

Enterprises shall undertake a comprehensive feasibility study before the investment, with serious consideration for potential environmental and social impacts. As prescribed in Part C, enterprises shall conduct an integrated assessment of economic and social benefits as well as environmental impacts on the host country and related stakeholders. During the preparation of the project plan, the enterprises shall emphasis on improvement of industrial supporting infrastructure, extending the value chain of palm oil industry and mitigation of adverse environmental impacts. The enterprises should strictly obey the laws and regulation of host country, follow the international conventions to achieve sustainable development based mutual benefits and avoid damage to the natural environment of host country.

#### **B.1.3 Environmental and social impact assessments by third parties**

Enterprises shall follow the procedure of host country government to select qualified,

independent organizations to undertake the environmental and social impact assessments of the prospective investment. Enterprises shall give due consideration to the potential problems or risks found in assessment and try to reduce the adverse impacts as much as they can. The assessment report shall be submitted to the relevant authorities in the host country. A summary of the assessment report shall be disclosed to stakeholders through suitable media channels, except for commercially sensitive information. The main objective is to give stakeholders a better understanding of the prospective investment, with regard to their own interests.

#### **B.1.4 Risk assessment and management**

Enterprises shall endeavour to identify the risks in the whole investment process, evaluate the scale, trigger conditions and adverse impacts on the sustainable investment. Enterprises shall be aware of Chinese and host country's related laws and regulations, important events and risk indicators, and make the full use of the public information. Enterprises shall understand that overseas investment is more risky than domestic investment. Enterprises shall carry out business activities strictly based on related laws and regulation of the host country and international conventions. In addition, multi-measures shall be applied to reduce negative impacts of related risks. Furthermore, enterprises shall develop appropriate risk management programs to respond quickly and suitably to reduce the adverse impacts, including requiring protection under the inter-governmental protection mechanism of Bilateral Investment Treaty and using financial service, etc.

### **B.2 Overseas Investment Procedures in China and Host Countries**

Enterprises shall complete the overseas investment application procedures both in China and host country based on the requirements of related regulations. The enterprises shall submit project application to relevant authorities in the host country according to the prescribed procedures. They shall also submit related assessment reports conducted by the third party. They can only start investment with a qualification certificate. It is encouraged for the enterprises cooperate with local companies to provide employment opportunities for the local peoples.

#### **B.2.1 Overseas Investment Procedure in China**

Except for sensitive countries or regions that has not yet established diplomatic relationship with China or is currently under United Nations sanctions, Chinese enterprises shall submit related information to relevant commercial administrations for recording. Enterprises can only purchase foreign currency and process other procedures after receiving the Enterprise Overseas Investment Certificate. The enterprises shall report to the Counselor office in the host country and fulfill its obligation to submit the FDI-related statistics. The main process steps in the China procedure are listed on the next page.

#### **B.2.2 Overseas Investment Procedure in Host Countries**

The major process steps required for obtaining the legal license to operate in



selected host countries are summarized in Annex A(3).

### Procedure for overseas investment application in China

|   |   |
|---|---|
| <b>Enterprises recording for general investment</b> | <i>For the general investment, enterprises shall submit investment application to provincial authorities, to record related information, and apply for the overseas investment certificate.</i>                       |
| <b>Enterprises recording for special investment</b> | <i>For sensitive countries or regions that have not yet established diplomatic relationship with China or currently under United Nations sanctions, enterprises shall submit application to Ministry of Commerce.</i> |
| <b>Documentation for investment project</b>         | <i>For general investment over CNY300million to CNY1billion, application will be submitted to the provincial development and reform authority for documentation.</i>  |
| <b>Verification of investment project</b>           | <i>For general investment over CNY 1 billion, the application shall be submitted and approved by National Development and Reform Commission (NDRC).</i>   |
| <b>Foreign exchange purchasing</b>                  | <i>With the approved documents, Chinese enterprises can go to State Administration of Foreign Exchange for foreign exchange purchasing and complete the payment</i>   |
| <b>Overseas investment operation</b>                | <i>Chinese enterprises shall go to Chinese commercial authorities based in the host country for documentation. It is their duty to submit related data for official data statistics collation.</i>                    |

### B.3 Contract for Overseas Investments (including E&S considerations)

Based on relevant regulations and laws in the host country and international conventions, enterprises shall sign a commercial contract with the local partners to define the privileges and obligations of each party. Enterprises are encouraged to incorporate environmental and social considerations in the contract. These shall include requirements for avoiding deforestation and damage to biodiversity. The contract shall also require enterprises and their partners to incorporate relevant Corporate Social Responsibilities (CSR) activities to contribute to the sustainability of

the natural and social environment.

The commercial contract shall also the responsibilities of supply chain parties associated with the enterprise to ensure sustainable development of the investment.

#### **B.4 Green Credit and Green Financing**

According to the Guideline on Green Credit issued by China Banking Regulatory Commission, it is encouraged that banks and other financial institutions play a more important role in the sustainable investment by Chinese enterprises overseas. The green credit principles shall be clearly defined to extend its application to overseas investments. Banks and financial institutions shall give the priority to sustainable palm oil enterprises and provide preferential treatment such as lower requirements on mortgage and guarantee, provide better facilitation financing services.

The criteria for green financing shall be developed. Higher priority should be given to sustainable palm oil investors with regard to listing procedures and encourage them to list in the capital markets in China, host countries and other countries to increase influence of the brand and access to capital.

## **PART C: Criteria and Indicators for Overseas Production of Sustainable Palm Oil by Chinese Enterprises**

- C.1 Commitment to Legal compliance and corporate governance
- C.2 Use of Appropriate Best Management Practices (BMPs)
- C.3 Environmental Responsibility and Conservation of Natural Resources
- C.4 Social Responsibility for Employees and Local Communities

### **Definition**

- *The requirements for sustainable production and processing by Chinese enterprises are based on the overarching China Guiding Principles especially with regard to enterprises taking corporate responsibility voluntarily.*
- *The requirements meet the global definition of sustainable palm oil : Sustainable palm oil is 'comprised of legal, economically viable, environmentally appropriate and socially beneficial management and operations'*
- *Built on a foundation of legal compliance and good corporate governance, the requirements provide*



## C.1 Commitment to legal compliance and corporate governance

### C.1.1 Compliance to all applicable laws and regulations

|                |  |
|----------------|--|
| <b>C.1.1.1</b> | <b>Enterprises shall comply with all applicable Chinese and host country laws and regulations and relevant international conventions and agreements. Where there are no provisions for specific issues in the host country laws and regulations, requirements under relevant international conventions and agreements shall apply.</b> |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Documented evidence of a mechanism for enterprise-wide compliance of legal requirements shall be available.</li> <li>b. As system for tracking changes legal requirements and communicating them to relevant personnel in the enterprise shall be implemented</li> </ul>                     |

### C.1.2 Ethical business practices –Organizational governance

|                |   |
|----------------|---|
| <b>C.1.2.1</b> | <b>Enterprises shall develop and implement policies and systems to ensure sound corporate governance and ethical conduct of all business operations and transactions with regard to the environmental, social and governance (ESG) goals of the enterprise.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. There shall an overarching written policy defining the commitment of the enterprise to achieving positive ESG outcomes that is communicated to all internal and external stakeholders.</li> <li>b. A documented ESG management system shall be implemented to ensure continuing compliance with the ESG policy, including effective risk management and internal control mechanisms.</li> <li>c. Enterprises shall appoint a high-level ESG co-ordinating body or committee to oversee and monitor the implementation of the ESG policy and management system.</li> </ul> |
| <b>C.1.2.2</b> | <b>Enterprises shall commit to zero tolerance for all forms of corruption. Enterprises shall not, directly or indirectly, offer, give, or demand a bribe or any other undue advantage in order to obtain or retain business or other improper advantage.</b>  |
| Indicators:    | <ul style="list-style-type: none"> <li>a. A written policy on anti-corruption shall be communicated to all employees and business partners and implemented.</li> <li>b. A mechanism shall be put in place to allow reporting of corrupt or unethical practices, as defined in the anti-corruption policy to the ESG co-ordinating body or committee.</li> <li>c. Documented evidence action taken by the ESG co-ordinating body or committee on reports of corrupt or unethical practices.</li> </ul>   |

### C.1.3 Commitment to transparency

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| <b>C.1.3.1</b> | <b>Enterprises shall disclose on a timely basis, information on their ESG performance that are relevant to the implementation of these Guidelines, either in the public domain (e.g in corporate websites) and/or to specific requests from stakeholders, except in situations prevented by commercial confidentiality.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Records of information provided publicly through electronic or print media (e.g. annual reports, media releases, ESG policy statements and implementation plans, corporate sustainability reports) shall be maintained.</li> <li>b. Records of requests for information from stakeholders and responses by the enterprise shall be maintained.</li> <li>c. Information required by stakeholders involved in negotiations and/or decision making with the enterprise shall be provided in appropriate languages and forms for effective participation by the affected stakeholders.</li> </ul> |
| <b>C.1.3.2</b> | <b>Enterprises shall provide open and transparent channels of communication (electronic and physical) with their internal and external stakeholders, including local communities.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Procedures for communications, including contact details of the management representative responsible for stakeholder communications, shall be documented and made known to stakeholders.</li> <li>b. Records of communications with stakeholders shall be available.</li> </ul>  |

### C.1.4 Respect of human rights

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| <b>C.1.4.1</b> | <b>Enterprises shall pledge to uphold the UN Guiding Principles on Business and Human Rights.</b>  |
| Indicators:    | <ul style="list-style-type: none"> <li>a. A policy on respect of human rights with regard to all investments and operations of the enterprise shall be adopted, documented and communicated to all levels of employees.</li> </ul> |
| <b>C.1.4.2</b> | <b>Enterprises shall not use any form of forced or trafficked labour and/or condone the use of such labour by their contractors.</b>   |

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| Indicators: | <ul style="list-style-type: none"> <li>a. There shall be evidence of no employment of any forms of forced or trafficked labour.</li> <li>b. Where migrant workers are employed by the enterprise or its contractors, there shall be documented evidence to verify that they are legalised workers and have entered into the employment on their own free will.</li> </ul> |
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| <b>C.1.4.3</b> | <b>Enterprises shall prohibit the employment of children below the legal minimum age or condone the use of under-aged children by their contractors.</b> |
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| Indicators: | <ul style="list-style-type: none"> <li>a. There shall be evidence that children below the legal minimum age specified by host countries are not employed by the enterprise or its contractors. Where the host country does not prescribe the minimum age, children below 15 years old shall not be employed.</li> <li>b. Children between 15 and 18 years shall not be employed to undertake physically demanding or hazardous work.</li> </ul> |
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### C.1.5 Respect of rights to land and natural resources and cultural heritage

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| <b>C.1.5.1</b> | <b>Enterprises shall recognize and respect existing rights to land and associated natural resources and cultural heritage sites by indigenous peoples and local communities.</b> |
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| Indicators: | <ul style="list-style-type: none"> <li>a. Existing land rights and land use rights, both formal and informal, shall be assessed through a participatory mapping process involving affected communities and documented.</li> <li>b. The Free, Prior, and Informed Consent (FPIC) principle shall form the basis for all negotiated agreements for any compensation, acquisition, or voluntary relinquishment of rights by land users or owners for use by the enterprise.</li> <li>c. Evidence showing that indigenous peoples and local communities have continuing access to use customary spiritual or cultural heritage sites shall be available.</li> </ul> |
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| <b>C.1.5.2</b> | <b>Enterprises shall demonstrate their ownership and /or the right to use the land.</b> |
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| Indicators: | <ul style="list-style-type: none"> <li>a. Documents, including land titles, maps and land tenure history to define legal ownership of the land by the enterprise shall be available.</li> <li>b. There shall be no evidence of competing claims to legal ownership or rights to use of the land by indigenous peoples or local communities.</li> </ul> |
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## C.1.6 Commitment to continuous improvement

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| <b>C.1.6.1</b> | <b>Enterprises shall put in place a systematic process to monitor the performance of key activities and operational processes and develop and implement an action plan to achieve continuous improvement.</b>  |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Evidence of regular monitoring of performance and implementation of a continuous improvement plan shall be available.</li> <li>b. Documented improvements in key activities and operational processes to improve operational efficiencies and reduction in environmental and social impacts shall be available.</li> </ul> |

## C.2 Use of appropriate Best Management Practices (BMPs)

### C.2.1 Plantation development

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| <b>C.2.1.1</b> | <b>Prior to establishing new plantations or expanding existing ones, enterprises shall conduct a comprehensive, participatory social and environmental impact assessment (SEIA) and results are incorporated into the project development plan and the operational plan.</b>  |
| Indicators:    | <ul style="list-style-type: none"> <li>a. A participatory social and environmental impact assessment (SEIA) shall be conducted with the willing participation of affected stakeholders and results are documented.</li> <li>b. The project development plan and operational plan shall take into consideration results of the SEIA to avoid or mitigate potential negative social and environmental impacts identified.</li> <li>c. There shall be no development of High Conservation Value (HCV) areas as defined in Annex 1.</li> </ul>  |
| <b>C.2.1.2</b> | <b>Enterprises shall assess the suitability of the soils and topography of the prospective plantation area to ensure that they are suitable of cultivation of oil palm.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Maps showing soil types and topographic features (e.g. slopes and water bodies) shall be available to guide the enterprise in identifying suitable areas for cultivating oil palm and for planning of infrastructure development (e.g. roads and drainage systems).</li> <li>b. There shall be no development of marginal or fragile soils (e.g. very sandy or acid sulphate soils) or peat soil of any depth.</li> <li>c. There shall be no development on steep terrain exceeding the maximum slopes prescribed by the laws of host countries. Where host countries do not specify the maximum slope, land with slopes exceeding 25° in an area larger than 25 hectares shall not be cultivated.</li> </ul> |

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| <b>C.2.1.3</b> | <b>Before work on the land selected for the plantation development can proceed, enterprises shall demonstrate that they have secured the land use rights and obtained the necessary approvals or licences to operate from relevant authorities. For native customary lands, enterprises shall demonstrate they have obtained the agreement of indigenous peoples and/or local communities to use the land through the Free, Prior, Informed Consent (FPIC) process.</b> |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Evidence of land ownership (land titles), rights to land use and necessary approvals or licenses from relevant authorities shall be available.</li> <li>b. Documentation of negotiations between the enterprise and indigenous peoples and/or local communities following the FPIC process.</li> </ul>  |
| <b>C.2.1.4</b> | <b>Enterprises shall conduct feasibility studies or assessments and develop appropriate management plans to ensure the long term economic and financial viability of the proposed investment.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Economic feasibility studies or assessments covering the full investment cycle from development of the plantation to replanting shall be conducted and non-commercially sensitive information shall be made available.</li> </ul>   |

## C.2.2 Soil management and conservation

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| <b>C.2.2.1</b> | <b>Enterprises shall implement an integrated soil management plan to maintain or enhance soil fertility and prevent or control soil erosion or prevent land degradation.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. There shall be documented evidence of implementation of a management plan to ensure maintenance of soil fertility and control or prevention of soil erosion and prevention of soil degradation.</li> </ul> |
| <b>C.2.2.2</b> | <b>Enterprises shall implement good agricultural practices to maintain or enhance soil fertility and control or prevent soil erosion or soil degradation, as documented in Standard Operating Procedures (SOPs).</b>                                 |



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| Indicators: | <ul style="list-style-type: none"> <li>a. There shall be evidence of implementation of best agricultural practices, that include: <ul style="list-style-type: none"> <li>• Construction and maintenance of contour terraces, soil conservation bunds and silt pits to control surface water run-off and prevent soil erosion</li> <li>• Planting of legume cover crops to protect the ground cover, prevent soil erosion and enhance soil organic carbon and natural fixation of nitrogen.</li> <li>• Planting of plants such as <i>Vetiver</i> grass to protect slopes and prevent soil erosion.</li> <li>• Recycling of plant nutrients and mulching with pruned fronds, empty fruit bunches (EFB) and partially treated palm oil mill effluent (POME)</li> <li>• Regular foliar analyses to monitor the palm nutrient status and formulate appropriate fertilizer recommendations to achieve optimal and sustained yields.</li> </ul> </li> <li>a. Records of application of chemical fertilizers and organic fertilizers/mulch (e.g. EFB) should be available.</li> </ul> |
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### C.2.3 Water management

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| <b>C.2.3.1</b> | <b>Enterprises shall implement a water management plan to maintain the quality and availability of surface and ground water.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. There shall be evidence of implementation of a water management plan</li> <li>b. There shall be evidence that use of natural water resources by the enterprise does not affect the right of other users, including local communities in the catchment area.</li> <li>c. Practices shall be put in place to prevent contamination of surface water bodies or ground water by discharge of water from effluent treatment ponds or application of chemical fertilizers or agrochemicals.</li> <li>d. Usage of water by the palm oil mill per tonne of FFB processed shall be monitored and documented.</li> </ul> |
| <b>C.2.3.2</b> | <b>Enterprises shall put in place a drainage and irrigation system in flat or low lying areas and in existing plantings on peat to maintain an optimal water table level and prevent flooding during wet seasons and shortage of water of optimal plant growth and productivity during dry seasons.</b>  |
| Indicators:    | <ul style="list-style-type: none"> <li>a. There is evidence of implementation of a drainage and irrigation system</li> <li>b. In existing plantings on peat, the water table shall be maintained at an average of 50 cm (between 40-60 cm) below the ground surface, as measured by groundwater piezometer.</li> </ul>   |

## C.2.4 Integrated pest management (IPM)

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| <b>C.2.4.1</b> | <b>Enterprises shall implement an Integrated Pest Management (IPM) strategy and plan incorporating cultural, biological, physical and chemical control techniques to manage pests, diseases and weeds in plantations.</b>   |
| Indicators:    | <ol style="list-style-type: none"> <li>There is evidence of implementation and monitoring of an IPM strategy and plan.</li> <li>There is evidence that proper and adequate training has been given to those involved in IPM implementation.</li> </ol>  |
| <b>C.2.4.2</b> | <b>Enterprises shall give priority to use of available biological control approaches with the view of minimizing chemical interventions.</b>  |
| Indicators     | <ol style="list-style-type: none"> <li>There shall be documented evidence on the use of appropriate biological control methods to control pests, diseases and weeds, including: <ol style="list-style-type: none"> <li>Use of barn owls (<i>Tyto alba</i>) to control rats</li> <li>Planting of beneficial plants (e.g. <i>Tunera subulata</i>, <i>Cassia cobanensis</i>) to augment the populations of natural enemies of leaf eating pests</li> <li>Use of the fungus, <i>Metarhizium anisopliae</i> and baculovirus to control rhinoceros beetle (<i>Oryctes rhinoceros</i>)</li> <li>Inoculation of oil palm seedlings with <i>arbuscular mycorrhizal</i> fungi (AMF) against <i>Ganoderma</i> disease infection</li> </ol> </li> </ol>   |
| <b>C.2.4.3</b> | <b>When chemical control is deemed necessary, enterprises shall ensure that pesticides are used in a judicious and safe manner with minimal impact to humans and the environment.</b>   |
| Indicators:    | <ol style="list-style-type: none"> <li>Justification of use of all pesticides shall be demonstrated.</li> <li>Pesticides classified as World Health Organization Class 1A or 1B or those listed by the Stockholm or Rotterdam Conventions and paraquat shall not be used unless permitted by laws of the host countries.</li> <li>There shall be a record of all pesticides, including the active ingredients, toxicity (LD<sub>50</sub> values) and quantities used.</li> <li>There shall be evidence that workers employed in pesticides application have been given adequate training on safe handling of pesticides and have been provided appropriate personal protective equipment (PPE).</li> <li>Storage of pesticides and disposal of used pesticides containers shall be in accordance with requirements of the law of host countries or relevant international regulations.</li> <li>Pesticides operators shall be subject to annual medical surveillance.</li> <li>Pregnant or breast feeding women shall not be employed for application of pesticides.</li> </ol> |

## C.2.5 Ensuring operational efficiency

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| <b>C.2.5.1</b> | <b>Enterprises shall develop, document and implement Standard Operating Procedures (SOPs) for all aspects of their operations to optimize productivity and financial viability and minimize environmental and social impacts.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Documented Standard Operating Procedures (SOPs) on all aspects (economic, environmental and social) shall be available.</li> </ul>  |
| <b>C.2.5.2</b> | <b>Enterprises shall put in place a formal mechanism or system of monitoring the implementation of all Standards Operating Procedures (SOPs).</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. There shall be a system or mechanisms to check the implementation of all SOPs, including documentation management systems and internal control procedures.</li> <li>b. Records of non-compliances to SOP procedures and corrective actions taken shall be available.</li> </ul>                                 |
| <b>C.2.5.3</b> | <b>Enterprises shall provide appropriate training for all employees, contract workers and associated smallholders on implementation of procedures prescribed in the SOPs.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. There shall be evidence of implementation of a training program covering all operational procedures specified in the SOPs, including occupational health and safety (OSH) (See 6.5.5)</li> <li>b. Records of training activities/courses and training received by each employee shall be maintained.</li> </ul> |

## C.3 Environmental responsibility and conservation of natural resources

### C.3.1 Assessment of environmental impacts and mitigation

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| <b>C.3.1.1</b> | <b>Enterprises shall assess the potential environmental impacts from all aspects of their operations (including plantation development, replanting and palm oil processing) and develop and implement appropriate management plans to mitigate the negative environmental identified.</b>  |
| Indicators:    | <ul style="list-style-type: none"> <li>a. A formal environmental impact assessment that meets the regulatory requirements of host countries shall be conducted and documented.</li> <li>b. There shall be evidence of implementation of an environmental management plan to mitigate the negative impacts.</li> <li>c. Records on implementation of mitigation measures shall be available.</li> </ul> |

### C.3.2 Biodiversity conservation

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| <b>C.3.2.1</b> | <b>Enterprises shall assess the presence and status of rare, threatened or endangered species (RTE) and other High Conservation Value (HCV) habitats (See Annex 1) within their plantation areas and in the immediate surrounding landscape and take appropriate management actions to maintain and/or enhance the status of these species.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Records of assessment of RTE species within the plantation areas and the surrounding landscape shall be available.</li> <li>b. Where RTE species are present or found to be affected by the plantation or milling operations, a management plan to maintain and/or enhance the status of these species shall be implemented and monitored.</li> <li>c. Set-aside areas to protect/conservate RTE species and HCV habitats shall be identified and clearly demarcated and maintained.</li> </ul> |
| <b>C.3.2.2</b> | <b>Enterprises shall raise the awareness of their employees on the importance of biodiversity conservation and prohibit them from capturing, rearing or killing identified RTE species.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Records on training or awareness raising activities shall be available.</li> <li>b. Punitive actions/sanctions for capturing, rearing or killing RTE species shall be clearly communicated to employees (including signboards in set-aside areas – RTE species habitats and HCV areas)</li> </ul>   |

### C.3.3 Integrated waste management

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| <b>C.3.3.1</b> | <b>Enterprises shall develop and implement an integrated waste management strategy towards achieving zero wastes through reduction of generation of wastes at source and reusing and recycling wastes and dispose residual wastes in a responsible manner.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. An integrated waste management strategy shall be developed and implemented.</li> <li>b. All sources of wastes and sources of pollution shall be identified, quantified and documented.</li> <li>c. There shall be evidence of management actions to reduce generation of wastes and reuse and recycling of wastes or converting wastes into value-added products.</li> <li>d. Disposal of wastes, including hazardous wastes shall comply with regulatory requirements of host countries.</li> </ul> |

### C.3.4 Reduction of pollution and GHG emissions

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| <b>C.3.4.1</b> | <b>Enterprises shall develop and implement plans to reduce pollution and emissions, including greenhouse gases (GHG)</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. There shall be evidence of implementation and monitoring of a plan to reduce pollution and GHG emissions</li> <li>b. All sources of air pollution, including GHG emissions and water pollution shall be identified, quantified and monitored, using appropriate tools such as the RSPO PalmGHG tool.</li> </ul>                              |
| <b>C.3.4.2</b> | <b>Enterprises shall strive to reduce their consumption of fossil fuels through better operational efficiency and substitution with use of renewable energy</b>  |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Fossil fuel consumption (e.g. litres of fossil fuel per tonne CPO produced) shall be documented and monitored.</li> <li>b. A plan to maximise use of renewable energy from biomass and biogas produced in the mill and effluent treatment plant shall be available.</li> </ul>   |
| <b>C.3.4.3</b> | <b>Enterprises shall implement improvements in existing processing and effluent treatment plants (ETPs) to minimize greenhouse gas (GHG) emissions, especially the emission of methane gas from effluent treatment plants (ETPs)</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. There shall be evidence to show effort made to reduce the generation of palm oil mill effluents.</li> <li>b. Methane gas released from anaerobic effluent treatment ponds shall be captured and utilized for generation of renewable energy.</li> </ul>  |
| <b>C.3.4.4</b> | <b>Enterprises shall not use fire for land clearing and disposal of solid wastes.</b>  |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Fire shall not be used for land clearing for new plantations and replanting except in specific situations prescribed in the 'Guidelines for the implementation of the ASEAN Policy on Zero Burning' 2003 or equivalent regulations in host countries.</li> <li>b. Use of fire for disposal of domestic waste shall be prohibited.</li> </ul> |
| <b>C.3.4.5</b> | <b>Enterprises shall design new plantations and palm oil mills and associated infrastructure to minimize greenhouse gas emissions.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. There shall be a plan for new developments that would minimise GHG emissions through avoidance of use of land with high carbon stocks and avoidance/reduction of biogas and particulate emissions from palm oil processing.</li> </ul>   |

## C.4 Social responsibility for employees and local communities

### C.4.1 Assessment of social impacts and mitigation measures

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| <b>C.4.1.1</b> | <b>Enterprises shall assess the potential social impacts from all aspects of their operations (including plantation development, replanting and palm oil processing) and develop and implement appropriate management plans to mitigate the negative social impacts identified and promote positive ones.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. A participatory social impact assessment (SIA) in consultation with affected communities, smallholders and relevant stakeholders shall be conducted and documented.</li> <li>b. Plans for mitigating negative social impacts and maintaining or enhancing positive impacts identified shall be developed in consultation with affected stakeholders and results are communicated to them in a transparent manner.</li> <li>c. Records on implementation of mitigation measures shall be available.</li> <li>d. There shall be evidence that land acquired for new plantations from indigenous peoples and local communities has been done with their free, prior, informed consent (FPIC).</li> </ul> |

### C.4.2 Pay and conditions of employment

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| <b>C.4.2.1</b> | <b>Enterprises shall ensure that pay and conditions of employment for employees and for contract workers are compliant with legal requirements of host countries and/or relevant ILO conventions and where applicable, the terms of Collective Agreements between the enterprise and employees.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Pay and terms of employment, contracts or Collective Agreements shall be documented in languages understood by employees and these are explained to them to ensure their full understanding.</li> <li>b. Pay and conditions of employment shall include details on working hours, payment of overtime, entitlements to days of rest/public holidays, sick, medical and maternity leave, health and other benefits and termination and grievance procedures.</li> <li>c. Details for all employees and their record of employment shall be available.</li> </ul> |
| <b>C.4.2.2</b> | <b>Enterprises shall provide adequate housing, water and electricity supplies, medical, welfare and educational facilities and places of worship.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. There is evidence that employees have been provided appropriate and decent housing and access to facilities such as schools, clinics and places of worship, if public facilities are not available.</li> </ul>  |

### C.4.3 Freedom of association

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| <b>C.4.3.1</b> | <b>The enterprise shall respect the rights of employees to Freedom of Association, form trade unions or collective bargaining and negotiations with management.</b>  |
| Indicators:    | <ul style="list-style-type: none"> <li>a. A policy statement recognizing rights to freedom of association and collective bargaining shall be documented in languages understood by employees and communicated to them.</li> <li>b. Records of meetings and negotiations with management and collective agreements shall be available.</li> </ul> |

### C.4.4 No discrimination or harassment of any form

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| <b>C.4.4.1</b> | <b>Enterprises shall not practice or condone any forms of discrimination based on gender, race, nationality, religion, age, social status, membership in unions or political affiliation.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. A policy prohibiting discrimination of any form shall be documented in relevant languages and communicated to all employees and is publicly available.</li> <li>b. A complaints or grievance process should be out in place for employees or affected stakeholders to report cases on discrimination. (See 6.5.6)</li> <li>c. There shall be no evidence of discrimination in the selection and hiring or firing of employees.</li> <li>d. Reports on discrimination cases and actions taken by management shall be documented and communicated to the complainant(s).</li> </ul> |
| <b>C.4.4.2</b> | <b>Enterprises shall ensure that there is no harassment in the workplace.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. A policy to prevent harassment, including sexual harassment shall be adopted and communicated to all employees.</li> </ul>  |

### C.4.5 Occupational Health and Safety (OHS)

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| <b>C.4.5.1</b> | <b>Enterprises shall provide a safe and healthy work environment that takes into account inherent risks and hazards in the work place, including physical, chemical and biological hazards and specific threats to women.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. An occupational health and safety (OSH) policy and implementation plan that meet the legal requirements of host countries and/or international conventions or standards shall be in place.</li> <li>b. There shall be evidence that the OSH policy has been communicated to and understood by all employees.</li> <li>c. Implementation of the OSH policy and plan shall be monitored and documented, including records of workplace accidents and occupational injuries and corrective actions taken by management.</li> </ul> |

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|  | d. There shall be evidence that workers exposed to specific workplace hazards have been adequately trained (See 6.5.7); records of training of each worker shall be available. |
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| <b>C.4.5.2</b> | <b>Enterprises shall conduct a comprehensive risks and hazards assessment for workplace safety following a systematic approach for prevention and control of physical, chemical, biological, and radiological health and safety hazards and develop appropriate accident and emergency response plans (ERPs)</b> |
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| Indicators: | <ul style="list-style-type: none"> <li>a. Results of the risks and hazards assessment shall be documented and used as the basis for development of accident and emergency response plans.</li> <li>b. Reproductive rights of women shall not be compromised; pregnant or lactating women shall not be subject to physically heavy work or exposure to pesticides.</li> </ul> |
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| <b>C.4.5.3</b> | <b>Enterprises shall assign the responsibility for health and safety at the workplace to specific senior management level personnel and establish a joint health and safety committee to co-ordinate and monitor implementation of the OHS policy and plan.</b> |
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| Indicators: | <ul style="list-style-type: none"> <li>a. Names and contact details of the senior management personnel responsible for OSH and members of the joint OSH committees shall be documented and communicated to all employees.</li> <li>b. Records of meetings of OSH committees and investigations on workplace accidents shall be available.</li> </ul> |
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## C.4.6 Complaints and grievance process

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| <b>C.4.6.1</b> | <b>Enterprises shall establish a formal grievance mechanism for workers and affected stakeholders (and their organizations, where applicable) to raise issues or complaints relating to the workplace or relationships with local communities.</b> |
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| Indicators: | <ul style="list-style-type: none"> <li>a. The grievance mechanism shall be documented and communicated to and understood by all employees.</li> <li>b. The grievance mechanism shall also be available to external stakeholders who may be affected by operations of the enterprise.</li> <li>c. Records of complaints (including anonymous ones) and discussions/meetings between the complainant and management regarding handling and resolution of complaints shall be available.</li> </ul> |
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## C.4.7 Training

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| <b>C.4.7.1</b> | <b>Enterprises shall ensure that employees and contract workers receive appropriate training to enable them to undertake work assigned to them in a</b> |
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|-------------|--|
|             | <b>competent and safe manner.</b>  |
| Indicators: | <ul style="list-style-type: none"> <li>a. A formal training programme covering all aspects in these Guidelines, including occupational safety and health shall be implemented and documented.</li> <li>b. Records of training received by each employee or contract worker shall be available</li> </ul> |

#### C.4.8 Fair and ethical dealing with smallholders and local businesses

|                |  |
|----------------|--|
| <b>C.4.8.1</b> | <b>Enterprises shall deal with smallholders and local business in a fair and transparent manner.</b>   |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Payment of fresh fruit bunches (FFB) supplied by smallholders shall be made according to minimum prices set by local authorities or according to published market prices, if the former is not available. The FFB pricing mechanism shall be documented and accepted by smallholders.</li> <li>b. Contracts for supply of goods and services by local dealers shall be fair, transparent and legal.</li> <li>c. Payment for goods and services received shall be done in a timely manner, in accordance with the contract, where applicable</li> </ul> |

#### C.4.9 Contribution to local economy and sustainable development

|                |  |
|----------------|--|
| <b>C.4.9.1</b> | <b>Enterprises shall endeavour to contribute to the local economy and sustainable development, in collaboration with local communities as part of its corporate social responsibility (CSR) to society.</b>  |
| Indicators:    | <ul style="list-style-type: none"> <li>a. Enterprises shall consult with local communities on their development needs and implement appropriate CSR programs jointly with them.</li> <li>b. Enterprises shall support training and capacity building of smallholders associated with them or independent smallholders supplying FFB to their mills; the priority being to improve smallholder productivity in a sustainable manner.</li> </ul> |

## **PART D: Implementation of the Guide**

- D.1 Implementing Body and Stakeholders
- D.2 Industry Supervision, Certification and International Cooperation
- D.3 Transparency and Information Exchange
- D.4 Consultation and Participation of Stakeholders and the Public
- D.5 Assessment and Improvement

### **D.1 Implementing Body and Stakeholders**

#### **D.1.1 Implementing Body**

CFNA is responsible for promoting and monitoring the implementation of the Guide.

The Guide shall be implemented by Chinese enterprises which have investment in cultivation of oil palm and processing of palm oil. This Guide is also relevant to supply chain players associated with upstream production of palm oil, such as financial institutions and banks financing Chinese enterprises.

Implementing of the Guide by Chinese enterprises shall be done at two levels:

- Corporate or top management level, to provide leadership, strategy direction and overall implementation of the Guide.
- Operational level at the plantation and mills, to implement the criteria and indicators (as detailed in Part C).

#### **D.1.2 Various stakeholders in the palm oil supply chain can play a role to support implementation of the Guide.**

Stakeholders include:

- Government of the Peoples' Republic of China and relevant ministries including the National Development and Reform Commission (NDRC), Ministry of Commerce, Ministry of Environment, State Forestry Administration
- Governments and regulatory bodies of host countries at the national, regional and local levels
- International institutions including relevant United Nations agencies, World Bank Group etc.
- International financial institutions and banks that provide financing of overseas oil palm investments by Chinese enterprises
- Processors, traders, manufacturers of consumer goods and retailers, individually and collectively, for example through the Consumer Goods Forum (CGF)

- Oil palm industry organizations in host countries such as Indonesian Palm Oil Association (GAPKI) and the Malaysian Palm Oil Association (MPOA)
- Development, social and environment Non-Government Organizations (NGOs) and organizations representing the rights and interests of workers, local communities and indigenous peoples

As specific stakeholders would vary with host countries, Chinese enterprises shall under stakeholder analyses as part of the planning process for investments in a host country.

## **D.2 Roles of CFNA and Chinese Enterprises**

### **D.2.1 The activities of CFNA in promoting and implementing the Guide could include, but not limited to**

- Disseminating and promoting the guide to various stakeholders in China. For instance, establishing a media platform to disseminate Guide-related information to the public and Chinese enterprises and facilitating regular exchange of information about the implementation of the Guide among enterprises
- Promoting the mutual recognition with international standards/principles, such as the mutual recognition with RSPO on a global level.
- Establish a supervision, verification and monitoring system on the implementation of the Guide.
- Support or assist Chinese enterprise in capacity building for implementation of the Guide.
- Establish multi-stakeholder mechanisms and platforms, and inviting stakeholders to participate in the activities to promote adoption of the Guide. For example, organizing forums and round tables, establishing the publication platform of members' CSR reports, and setting up communication mechanisms.
- Communicate the progress of implementation of the Guide periodically, including publishing reports on the production of sustainable palm oil by Chinese enterprises such as progress in gaining international certification.
- Regularly evaluating and improving the Guide about every three years, taking into consideration results stakeholder consultations.

**D.2.2** Chinese enterprises engaged in overseas palm oil investment shall put in place monitoring and evaluation systems and establish sustainable palm oil production standards based on this Guide to ensure effective implementation of the criteria and indicators prescribed in this Guide. Results of the monitoring reports shall be accessible by relevant government agencies, industry

organizations and civil society organizations, expect for the release of commercially sensitive information. Results of the monitoring reports shall also be reviewed by the top management of the Chinese enterprise.

### **D.3 Transparency and Communication**

**D.3.1** Chinese enterprises engaged in overseas palm oil investment shall disclose the social, economic and environmental impacts resulting from their investment, and communicate with stakeholders in a clear, accurate, timely, honest way.

**D.3.2** Chinese enterprises engaged in overseas palm oil investment shall set up an information dissemination mechanism regarding corporate social responsibility, timely prepare and publish CSR reports. It is helpful for them to accurately publish the information about company management and socio-environmental impact, and react to the concerns of stakeholders.

**D.3.3** Chinese enterprises engaged in overseas palm oil investment shall establish mechanisms or channels of communication with internal stakeholders (principally employees) and external stakeholders including governments, users, suppliers, business partners, media and NGOs.

### **D.4 Stakeholder Engagement and Consultation**

**D.4.1** Chinese enterprises engaged in overseas palm oil investment shall develop stakeholder participatory mechanisms (particularly, public participation), and clarify the participation principles, scope, channels and supporting measures. Moreover, they should provide resources and create opportunities for the stakeholders' participation.

**D.4.2** The stakeholders' participation, especially public participation should be achieved through interactive communications, such as meetings, seminars, public hearings, round-table discussions, advisory committee, regular communications and consultation procedures.

**D.4.3** Enterprises shall actively participate in community development.

### **D.5 Assessment and Improvement**

**D.5.1** Enterprises shall conduct performance evaluation on the implementation of this Guide and sustainable operation and management of the enterprises. This evaluation shall be incorporated into the management system of sustainable palm oil investment. Enterprises shall take reasonable and effective measures to ensure the quality of evaluation, and accept the supervision and inspection by relevant institutions and stakeholders.

**D.5.2** The assessment includes two main considerations: one is the impact on the management and operation of enterprises through implementation of the Guide; the other is the recognition and acceptance of stakeholders of the implementation of the Guide.

**D.5.3** Through assessments, enterprises could readily identify gaps between the actual implementation process and required standards and criteria prescribed in the Guide. Considering the overall sustainable development strategy, enterprises shall develop suitable measures to improve implementation of the Guide and strengthen their sustainable competitiveness.

## Definitions:

**Biodiversity.** The variety of life on the planet. This includes the diversity within species, between species and of ecosystems.

**Chinese enterprises.** Private or publicly listed companies and State-owned enterprises (SOEs) in China

**Greenhouse gas.** A gas that contributes to the natural greenhouse effect. The Kyoto Protocol covers a basket of six greenhouse gases (GHGs) produced by human activities: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride

**Impact.** Disturbance, consequence, repercussion or similar permanent effect of a human or natural cause. Impacts may be positive or negative. They may affect a natural system, the environment, an animal or plant population or individuals (environmental impacts), or human individuals or populations (social impacts).

**Oil palm smallholder.** Farmers owning and/or cultivating oil palm areas of less than 50 hectares. They can be scheme or associated smallholder which are associated with a company or independent smallholders.

**Plan.** A time-bound and detailed scheme, programme, or method for achieving objective(s) and desired outcome(s). Plans shall have clear targets with timelines for delivery, actions to be taken and a process for monitoring progress, adapting plans to changing circumstances and reporting.

**Stakeholders.** An individual or group with a legitimate and demonstrable interest in, or who is directly affected, either positively or negatively by the activities of an organization and the consequences of those activities.

## Annexes

**A(1): Overview of the oil palm industry and production of sustainable palm oil**

**A(2): International conventions and related agreements**

**A(3): Policies, regulations and procedures of host countries**

**A(4): Sustainability standards and certification schemes**

**C(1): High Conservation Value (HCV) Areas**

### **Annex A (1): Overview of the oil palm industry and production of sustainable palm oil**

A.1.1 Importance of palm oil in the global economic and social development and food security

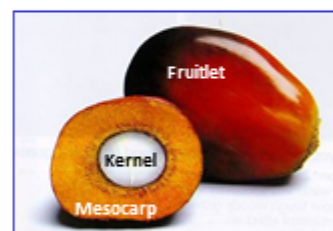
A.1.2 Sustainability challenges of palm oil production

A.1.3 Global trend towards production and use of certified sustainable palm oil

#### **A.1.1 Importance of palm oil in the global economic and social development and food security**

##### **Oil palm and palm oil**

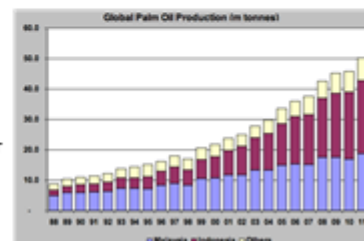
- Originating from West Africa, the oil palm (*Elaeis guineensis*) is planted in more than 20 countries in the humid tropics about 10° north and south of the equator. Indonesia and Malaysia account for more than 75% of the world's total mature area of 15.0 million hectares in 2014.
- The oil palm produces fresh fruit bunches (FFB), each bearing about 1000 to 1300 fruitlets. Each fruitlet consists of a fibrous mesocarp layer and a nut containing the kernel.
- The oil palm produces 2 types of vegetable oils; palm oil from the mesocarp and palm kernel oil from the kernel. In the milling process, the FFBs are sterilized and stripped of the fruitlets which are subjected to physical extraction processes to produce crude palm oil (CPO) and palm kernel oil (PKO).
- CPO and PKO have a wide range of applications; about 80% is used for food purposes (refined cooking oils, shortenings, margarines, confectionery etc.). Non-food uses include oleochemicals, soaps, detergents, cosmetics, industrial products and biodiesel. More than 50% of products in the supermarket contain palm oil as an ingredient.
- Oil palm is the most productive vegetable oil crop in the world, producing on average, 3.9 tonnes of oil per hectare which about 10 and 5 times the productivity of soybean and rapeseed respectively. In 2014, oil palm requires only 5.5% of the total land area to produce 35% of vegetable oils in the world.
- The key processes in the cultivation of oil palm and processing of palm oil are summarized in Annex A(1).



### A.1.1 Importance of palm oil in the global economic and social development and food security (contd)

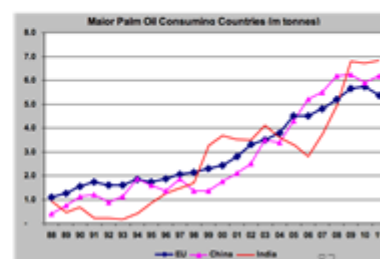
#### Global production of palm oil

- Palm oil is the world's most important vegetable oil. In 2014, global production of palm oil was 59.3 million tonnes, representing 36% of the total production of vegetable oils. Soybean and rapeseed oil production accounted for 27% and 16% respectively.
- The largest producer was Indonesia accounting for 30.8 million tonnes (52%) followed by Malaysia with 19.7 million tonnes (33%). Together, they produce about 85% of the global output. They are also the world's largest exporters of palm oil, accounting for 90% of total exports.
- Growth in the global production of palm in the past 4 decades, compared with other agricultural crops is unprecedented. Since 1970 when world production was about 2 million tonnes, production had almost doubled every decade.
- Given growing world population and increasing per capita consumption of oils and fats as well as the demand of renewable energy, the global production of palm oil is expected to increase to about 94 million tonnes by 2020. While Southeast Asia would continue to dominate production, there is great potential for other regions, especially Sub-Saharan Africa to increase their share of production in coming years.



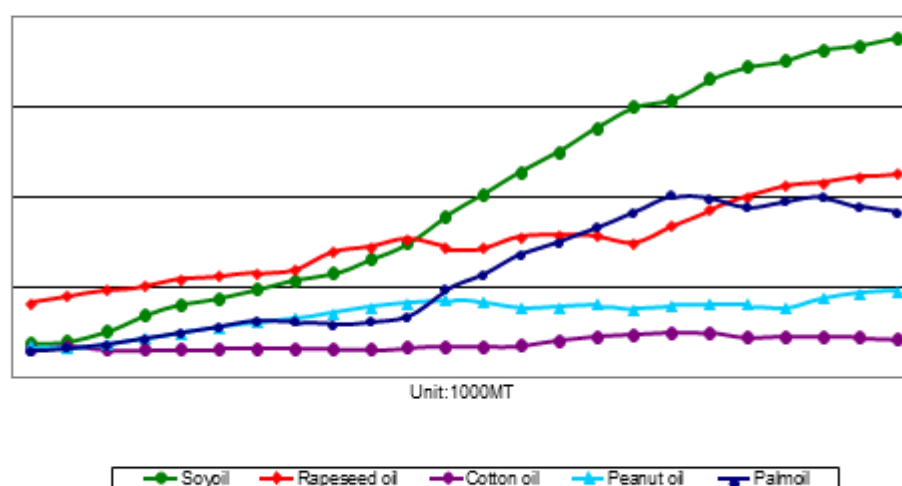
#### Global consumption of palm oil

- The world's largest consumers of palm oil in 2014 are Indonesia (8.8 Mt), India (7.8 Mt), Europe EU-28 (7.0 Mt) and China (6.1 Mt), collectively accounting for 50% of total consumption.
- Growing domestic demand for food and biodiesel production has transformed Indonesia to be the largest consumer in 2014, besides being the world's largest producer and exporter.
- China's consumption has been about 6 million tonnes per year since 2008; it was the world's largest consumer from 2005 to 2008.



### A.1.1 Importance of palm oil in the global economic and social development and food security (contd)

#### The position of palm oil in Chinese vegetable oil market



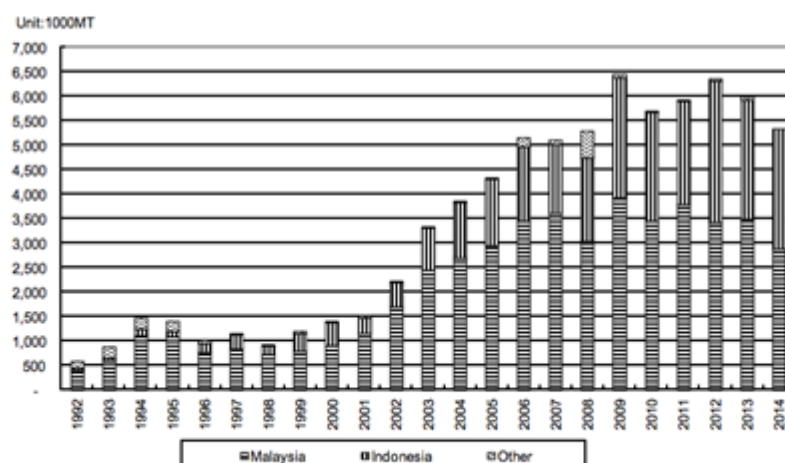
Vegetable oil consumption structure in China



### A.1.1 Importance of palm oil in the global economic and social development and food security (contd)

#### China's Palm oil imports fell slightly in the past two years

China imported 6.44 million tonnes of palm oil in 2009. In 2014, China's palm oil imports fell to 5.33 million tonnes, of which 2.87 million tonnes from Malaysia, accounting for 54% of the total imports and 2.45 tonnes from Indonesia, accounting for 46%.



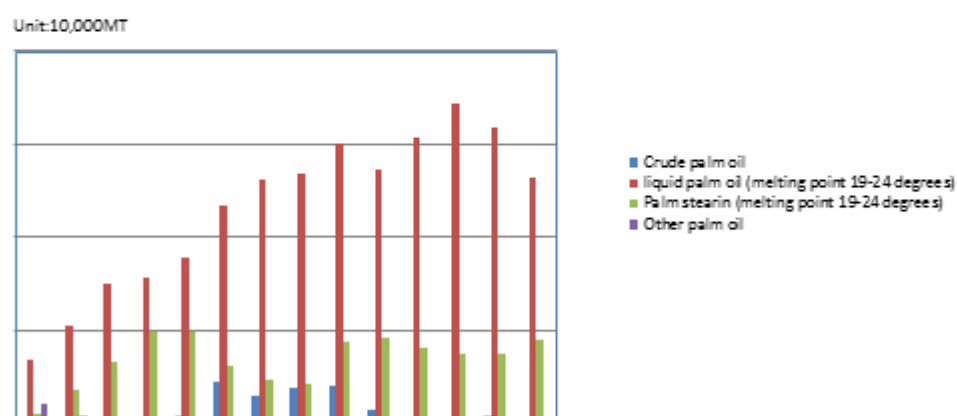
Suppliers and changes of imported palm oil in China

84

### A.1.1 Importance of palm oil in the global economic and social development and food security (contd)

#### Liquid palm oil (melting point 19<sup>0</sup>-24<sup>0</sup>) dominates the palm oil import market in China

In recent years, Chinese palm oil industry developed rapidly with strong demand of 19<sup>0</sup>-24<sup>0</sup> palm oil, so China's palm oil import is dominated by liquid palm oil (melting point 19<sup>0</sup>-24<sup>0</sup>), accounting for 60% to 70% of the palm oil market.



The import structure of palm oil in China (2001-2014)

85

## A.1.1 Importance of palm oil in the global economic and social development and food security (contd)

### Contribution of palm oil to socioeconomic development and food security

- **Economic development.** Palm oil has been a key driver of economic development and a major contributor to the export earnings of the producing countries, for example, palm oil contributed to 4.5% of the GDP of Indonesia and generated more than USD 10 billion from export revenue in 2013. Upstream production of crude palm oil and palm kernel oil provided the impetus for development of downstream industries for the production of value-added products such as specialty fats, cocoa butter substitutes, oleochemicals, nutraceuticals and biofuels.
- **Social development.** During the early development of the industry in Malaysia and Indonesia, the respective national governments identified palm oil as a vehicle for social development. With the support of the World Bank, Malaysia established land development schemes under Felda in the mid-1950s for resettling the rural poor and landless while Indonesia introduced the nucleus estate scheme (NES) which provided the foundation for the development of the smallholder sector.
- **Job creation.** Being labor intensive, the oil palm industry is a major source of employment. In Indonesia, more than 3.8 million people are directly employed in oil palm plantations.
- **Smallholder crop.** Small farmers or smallholders play a key role in the palm oil supply chain; there are about 3 million smallholders who contribute to about 40% of the global production. In Nigeria, Ghana and Thailand, smallholders are the dominant producers accounting 70 to 80% of national production.
- **Poverty reduction.** Oil palm cultivation could be a significant source of income and employment for smallholders and rural communities. Several studies have shown the link between oil palm development and poverty reduction. Experience in Malaysia showed that the poverty level among oil palm smallholders was the lowest among small-scale producers of other commodities such as rubber and rice.
- **Food security.** As the cheapest major vegetable oil, palm oil is the most commonly used oil by poorer households especially in developing countries. Considering that per capita consumption of oils and fats in many tropical countries are below the global average, palm oil could play a major role in closing this gap.

## Overview of Oil Palm Cultivation and Palm Oil Processing

• **Oil palm – the tree crop.** Oil palm is a perennial crop that thrives in the humid tropics with annual rainfall of about 2000 mm that is uniformly distributed throughout the year. Although the oil palm has a long life span, its economic cycle is usually about 25 years. Harvesting commences about 2½ to 3 years after planting and peak production of fresh fruit bunches (FFBs) is between 10 to 15 years. The main phases of the cultivation of oil palm and production of FFBs are as follows:

• **Plantation development phase.** Prior to development, economic feasibilities and social and environmental assessments would have to be undertaken to ensure that the area selected for plantation development is economically viable, legally compliant and does not have adverse social and environmental impacts. Sub-processes during this phase include

• **Land acquisition and application for license to operate.** For example, in Indonesia, land development can commence only after the conduct and approval of an Environmental Impact Assessment (EIA) and issue for a Plantation Business License, followed by the issue of a Land Clearing License. By law, 50% of the land must be cleared within 3 years of approval. Acquisition of land from indigenous peoples and local communities needs to be done in fair and transparent manner, following the free, prior informed process (FPIC). Based on results of the EIA and/or Social Environmental Impact Assessment (SEIA), soil surveys and land suitability assessments, the company would prepare a master business plan for the development of the plantation.

• **Nursery establishment commences soon after receipt of relevant licenses and permits.** High yielding germinated hybrid *tenera* (DxP) seeds\* from reputable suppliers are raised either in single-stage or two-stage nurseries (consisting of the pre-nursery and main nursery). Polybag plants are raised in the main nursery for about 12 months before they are ready for field planting. Stringent selection standards have to be maintained to ensure that only good quality seedlings with desirable characteristics are planted. To achieve this, it is necessary to raise 30% more seedlings than actual field requirement.

\* *Tenera* (DxP) hybrid seeds which have high mesocarp content and thin shell are produced by crossing female *Dura* palms (seeds with thick shells) and male *Pisifera* palms (seeds with no shell)



## Overview of Oil Palm Cultivation and Palm Oil Processing

**Site preparation.** Following the land surveys and demarcation of high conservation value (HCV) areas and peatlands that must be retained, clearing of existing vegetation is done using zero burning techniques. A buffer strip of natural vegetation (riparian reserve) is maintained along rivers and waterbodies; the width of the reserve varies with the river width. For example, a 20m wide riparian reserve is maintained for a 10-20 m wide river. A comprehensive road and drainage system is established; on flat to undulating terrain, the roads and drains are aligned systematically in blocks of about 30 to 50 hectares to facilitate field operations, harvesting and crop evacuation. The width of the block is determined by the maximum distance the harvester has to carry the FFB to the roadside. On undulating to hilly terrain with gradients from about 9° to 20°, terraces are constructed along the contour of the area being planted, the width between terraces varies with the slope. The terraces provide soil and water conservation and access for field operations such as manuring and harvesting. Planting platforms are constructed in areas with about 9° to 20° gradients while steep areas exceeding 25° should not be planted.

**Field establishment** activities include lining and digging of planting holes and planting of oil palm seedlings. The planting density varies the terrain; about 135 plants per ha are usually planted in an equilateral triangular pattern on flat to undulating land while seedlings are planted at lower densities along terraces in sloping or hilly terrain. A triangulated pattern is still maintained to ensure even spatial distribution of the palms. Legume cover crops (LCC) are planted as soon as possible after land clearing and before planting of palms to provide ground cover and minimize soil erosion and enhance soil structure and fertility. Prior to sowing, LCC seeds are inoculated with appropriate bacterial *Rhizobium* strains to enable the legume plants to fix atmospheric nitrogen in the root nodules. The aim is to maintain complete ground cover for as long as possible; LCC such as *Calapogonium caeruleum* and *Mucuna bracteata* are shade tolerant and could persist for longer period.



Zero burning technique



Contour terraces



Legume covers

## Overview of Oil Palm Cultivation and Palm Oil Processing

• **Immature phase.** Activities undertaken to ensure optimal development of the young palms include weeding, water management, fertilizer application, supplying and pest and disease management.

• While it is desirable to maintain full ground cover, it is important that the LCC and other vegetation should not compete with the young palms. Regular rounds of manual weeding or herbicide application should be done to maintain a weed-free circle around each palm. Selective weeding or herbicide application should also be done in the inter-rows to remove noxious weeds such as *Imperata cylindrica* (Alang alang).

• Routine application of fertilizers is undertaken following schedules according to the soil types. In general, bimonthly to quarterly applications are done during the first year of planting. Mulching with empty fruit bunches (EFB) around the bases of newly planted palms is a common practice.

• It is important to maintain a full stand of palms within the initial 24 months so as to maximize the cropping potential. Vacant points and poorly developed plants should be replaced with well grown seedlings from the nursery.

• Regular field inspections and census are necessary to detect any infestations by pest and diseases and timely remedial actions are taken to minimize damage or losses. The most serious pest of young palms is the rhinoceros beetle, *Oryctes rhinoceros* which can cause serious damage or loss of palms. An integrated pest management (IPM) approach combining cultural, chemical and biological control techniques has been effective for managing this pest. The biological control component uses a specific pheromone to trap large numbers of adult *Oryctes* beetles and then inoculating them with pathogens like the fungus, *Metarhizium anisopliae* and a baculovirus and releasing them to infect *Oryctes* larvae in the field.



Immature oil palm



Mulching with EFB



Biocontrol of Oryctes





## Overview of Oil Palm Cultivation and Palm Oil Processing

• **Mature phase.** The main activities are harvesting of FFBs and maintenance of the mature palms especially fertilizer applications and control of pests and diseases to ensure optimal productivity. An efficient in-field FFB collection and transportation system should be in place to deliver good quality FFB to the palm oil mill.

• **Maintenance of adequate and balanced nutrition** is critical for the palm to realize its genetic growth and yield potential. Among the agronomic inputs, fertilizer application is the largest cost item. Fertilizers are required to maintain optimal growth and productivity and compensate for large quantities of nutrients, especially nitrogen and potassium exported through harvested fruits. Determination of fertilizer requirements is based on several factors especially soil types and their physical and chemical characteristics and the nutrition status of the palm based on annual foliar analysis. Depending on the terrain, fertilizers are applied manually or mechanically. Soil fertility can be enhanced by nutrient recycling such as application of empty fruit bunches and stacking of pruned fronds in the palm inter rows.

• **Field upkeep.** Weeding (chemical spraying and/or selective manual weeding) of harvesters paths and palm circles should be done regularly to maintain unimpeded access for harvesting, collection of loose fruitlets and field operations and to minimize competition from weeds.

• **Pests and diseases,** if unchecked, can cause significant yield reduction or loss of palms. The major pests include leaf eating caterpillars (bagworms and nettle caterpillars), rhinoceros beetles and rats. In Southeast Asia, the most serious disease is *Ganoderma* basal stem rot while oil palm bud rot can be devastating disease in South America. Integrated pest management (IPM) which combines use of cultural, physical and biological measures with judicious application of pesticides should be implemented wherever possible. For example, planting of beneficial plants such as *Tunera subulata* in mature palm areas can augment the population of natural predators of leaf eating pests. Barn owls (*Tyto alba*) which feeds almost exclusively on rats are effective for controlling rats.



## Overview on oil palm cultivation and palm oil processing

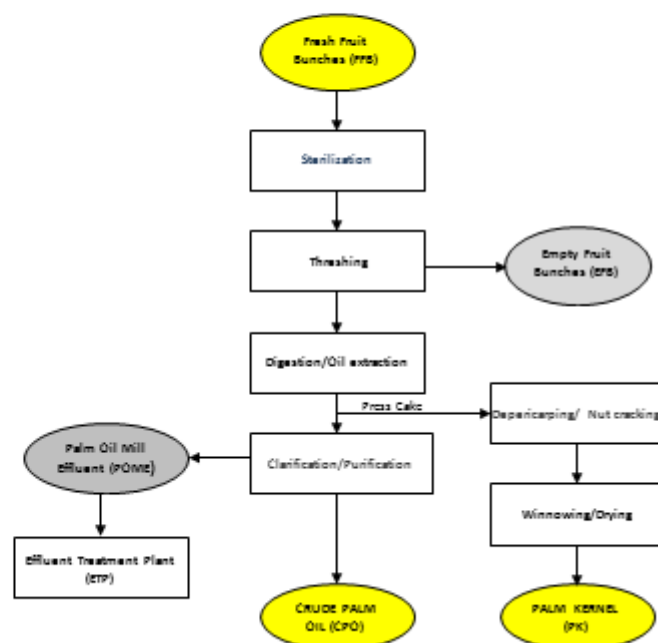
• **Harvesting.** The aim is to harvest all available FFB at optimum ripeness; the number of loose fruits in the palm circle is normally used as an indicator for ripeness. Harvesting is done at about 10-day intervals; however, longer intervals are inevitable if there is a shortage of workers. Harvesting is done manually, using a chisel for young palms up to about 7 years old and a sickle fixed to a long bamboo or aluminum pole for older palms. This task is physically demanding and is undertaken by male workers but female workers could assist in the collection of loose fruits that have become detached. The bunches are transported to the roadside by several methods, such as collection by wheel barrows, buffalo in-field collection or mechanized approaches using mini-tractors and trailers etc. The output of each harvester is placed in a collection point by the roadside where the crop quality and the number and weight of FFB are assessed. The quantity of loose fruits collected is also recorded. The harvester is paid according to actual crop harvested and fruit quality. All FFB and loose fruits are loaded on to trucks for delivery to the mill on the day of harvesting. In order to minimize handling and damage to the fruits, some companies adopt the system whereby the harvested crop is loaded into sterilizer cages and sent directly into the sterilizer vessels at the mill.

• **Replanting phase.** As the palm's productivity declines with age and increasing palm height makes harvesting more difficult, replanting of the entire field is undertaken; replanting of the plantation is done in a phased manner and generally, no more than 25% of the total plantation area is replanted. The zero burning method of replanting is adopted; the old stand is felled systematically with an excavator fitted with a chipping bucket. The palm trunk is cut or shredded into 5 to 10 cm pieces and spread in the new palm inter-rows to decompose. Planting of the new stand of palms could be done about 2 months after felling and shredding.



## Overview of Oil Palm Cultivation and Palm Oil Processing

- Palm oil – the versatile oil.** The production of a wide variety of palm oil-derived products begins with the processing of the FFBs at the palm oil mill. FFBs must be processed as soon as possible, within 24 hours of harvesting to prevent deterioration of the oil through rapid rise of free fatty acids (FFA). In view of this, mills are located within or in the vicinity of the oil palm plantation. The palm oil milling process involves the physical extraction of crude palm oil (CPO) and palm kernel (PK) from the FFB. The main process steps are shown here.



## Overview of Oil Palm Cultivation and Palm Oil Processing

### • Processing of crude palm oil (CPO)

**Sterilization of FFB.** The process begins with batch sterilization of the FFB in large cylindrical pressure vessels. The fruit bunches are steamed under pressure for about 75 to 90 minutes to deactivate enzymes causing the formation of free fatty acids and to loosen the fruitlets for easier separation in the next process step.

**Threshing.** The sterilized bunches are then stripped of the fruitlets in a rotating horizontal drum thresher. The tumbling action separates the fruitlets from the bunch. The empty bunches are discharged from the other end of the thresher while the loose fruitlets are fed continuously into the vertical cylindrical digesters.

**Digestion and oil extraction.** In the digesters, the fruits are heated using live steam and stirred to loosen the oil-bearing mesocarp from the nuts as well as to break open the oil cells present in the mesocarp. The digested mash is continuously fed into screw presses to separate the liquid and solid fractions.

**Clarification and purification.** The liquor from the screw press which is a mixture of palm oil, water and fibrous materials is diluted and pumped to vertical clarifier tanks to separate the oil from water and the fibrous materials under gravity. Being lighter, the clarified oil stays on the top of the tank and is then fed to purifiers to remove dirt and moisture before being dried further in the vacuum drier. The clean and dry oil is ready for storage and dispatch. The underflow from the clarification tank is centrifuged to recover residual oil and the waste water is discharged as palm oil mill effluent (POME).

### • Production of palm kernel (PK) and crude palm kernel oil (CPKO)

The press cake from the screw press is conveyed to the depenicarper where the fibre and nuts are separated. The nuts are cracked and the shell and kernel are separated by means of a winnower and hydro-cyclone. The clean kernels are dried prior to storage in silos.

Palm kernel is further processed in a kernel crushing plant to produce crude palm kernel oil (CPKO) and palm kernel expeller cake (PKC). The palm kernel is crushed in a series of screw presses to maximize the extraction of CPKO, after which it is passed through vibrating screens to remove coarse solids and then the CPKO is filtered to remove residual dirt and impurities. The PKC which has a rich protein and oil content is used for formulation of animal feed meals for the ruminant industry.



## Overview of Oil Palm Cultivation and Palm Oil Processing

### • Treatment/use of by-products and wastes

**Empty fruit bunches (EFB).** The empty fruit bunches (EFB) from the threshing station are often subjected to additional pressing to recover any residual oil after which it is removed on a conveyor belt into a collection yard where it can be utilized for several applications; the most common being used as a solid fuel feedstock in the mill or applied in oil palm fields as organic fertilizers and mulch. Composting of EFB is also done to produce organic fertilizers. EFB is also a potential feedstock for the production of biofuels.

**Fibre and shell** are recovered during the depericarping of the press cake to obtain palm kernels. Both are used as fuel for the boiler station at the mill. The shell could be converted into value added carbon-based products.

**Palm oil mill effluent (POME).** The palm oil milling process generates a very large quantity of liquid wastes or POME; more than 3 tonnes of POME is generated from the processing of one tonne of CPO. POME has a very high organic matter, with a biochemical oxygen demand (BOD) of about 25,000 mg/l and must be treated to meet regulatory standards before it can be discharged in waterways or used for field application. The prevalent approach is to subject the POME to anaerobic and aerobic digestion in a series of open ponds or lagoons. Although this approach is effective in mitigating water pollution, it is a major source of GHG emissions as the anaerobic digestion of POME releases methane gas which has a far greater global warming potential than CO<sub>2</sub>. To address this problem, innovative technologies are now available for capturing the methane gas and using it for generating renewable energy for use in the mill and plantation or to feed the excess power generated into the national electricity grid. Methane capture approaches include use of closed-tank anaerobic digestion system or sealing the open anaerobic pond with a High Density Polyethylene (HDPE) material.



Empty fruit bunches (EFB)



Shell as solid fuel



Effluent treatment ponds

## Overview of Oil Palm Cultivation and Palm Oil Processing

• **Social aspects and community development.** Plantation companies play an important role in the rural sector, in providing employment and income and contributing to reduction of poverty. They support the development of smallholders and the local economy in general. Companies are highly dependent on the rural population for their supply of workers. For example, a 5000 ha plantation requires 600 to 700 workers; together their families the plantation would have to support a population of about 1500 to 2000 people. Thus, it is important that the plantation company is a responsible employer and a good neighbour to the rural community.

• Companies should assess the potential social impacts of their operations and incorporate mitigation measures in their management plans. They should deal with their employees and stakeholders in fair and transparent manner and in accordance with regulatory requirements. A grievance process should be put in place to deal with complaints from any affected stakeholder. Some practices that foster a harmonious relationship between plantation companies and their stakeholders are:

**Indigenous peoples and local communities.** Existing rights to land and associated natural resources must be recognized and respected. Negotiations for land acquisition from the customary owners and local communities must follow the principles of free, prior informed consent (FPIC). Effective execution of this participatory approach would ensure that land owners would have the full information they need to make an informed decision to sell their land or to participate in a plantation development project with the company. Companies must also respect the needs of indigenous peoples and local communities for access to sites fundamental for their traditional livelihood or cultural practices. For example, sacred or burial grounds must not be affected by development.



Houses for workers



Medical services



Local burial grounds



## Overview of Oil Palm Cultivation and Palm Oil Processing

**Plantation workers.** Companies must provide a fair and safe work place with regard to occupational safety and health, fair wages, freedom of association and from various forms of discrimination. Workers should be provided with appropriate personal protection equipment (PPE) for undertaking hazardous tasks, for example spraying of pesticides. Wages should exceed the minimum set by relevant authorities, or if not available, workers should be able to negotiate for collective agreements with the employer. In addition, companies should provide housing, water and electricity to workers and their families as well as communal facilities such as places of worship, community halls and playgrounds.

**Women.** In a male-dominated industry, gender-related issues are often not given sufficient attention. Companies should put in place policies and practices to ensure that rights of women in the workplace and community are protected and there should be no gender-biased discrimination, including sexual harassment. They should not undertake heavy or hazardous work such as spraying of pesticides during pregnancy. Companies could also support women workers by providing child-care facilities such as crèches.

**Children.** Under ILO Convention 138 (1973) children below the minimum age of 15 to 18 years (depending the nature of work) should not be employed. Instead, companies should provide kindergartens and schools for workers' children.

**Smallholders.** Companies have an important role to support the development of smallholders in and around the areas where they operate. Various smallholder or outgrower schemes exist in palm oil producing countries. For instance, in Indonesia, the law requires that a company should develop at least 20% of the plantation area for smallholders. Companies assist in improving smallholders' performance and productivity through adoption of best management practices and providing better access to finance and market for their produce. As smallholders are dependent on companies to purchase their FFB, it is important that transactions are done in a transparent and fair manner, particularly with regard to prices offered by the mill.



### A.1.2 Sustainability challenges of palm oil production

#### Global sustainability concerns over palm oil production

- Although palm oil has been produced commercially for more than 100 years and oil palm is the most efficient oil seed in terms of oil output per unit land area compared with other major vegetable oils such as soy oil and rapeseed oil and it has contributed towards the socioeconomic development of producing countries, there are concerns over the sustainability of production, particularly with regard to social and environmental impacts if best management practices are not applied. Over the past decade, civil society organizations have been engaged in campaigns at the global level for the production of palm oil that is not associated with deforestation, loss of biodiversity and does not cause any social injustice.
- The key sustainability challenges were identified during multi-stakeholder consultations conducted in six countries in 2010 by the World Bank Group (WBG) as part of its development of the WBG framework for engagement in the sector. These are summarized below.

#### Economic challenges

- Large productivity gaps between actual and achievable yields, declining prices of palm oil and rising costs, and poor uptake of CSPO.
- The productivity gap is of major concern as the average global CPO production is below 4.0 tonnes per ha compared with an achievable yield of about 8 to 10 tonnes. However, this also presents a significant opportunity for improvement as progressive plantation companies have already achieved production 7 to 8 tonnes CPO per ha. Closing the productivity gap would lead to higher profitability and at the same time reduce the sustainability impact of oil palm. The rationale is improved land productivity would reduce the need to expand oil palm area to achieve the same level of total production.

## A.1.2 Sustainability challenges of palm oil production (contd)

### Environmental challenges

- Deforestation and conversion of peatland, and ensuing loss of biodiversity, climate change, fires and haze.
- Expansion of palm oil production has often been identified as a key driver of deforestation, particularly in Indonesia. The focus of many on many NGO campaigns has been on de-linking oil palm development from deforestation; future development of the crop should not destroy high conservation value (HCV) or high carbon stock (HCS) areas. It has been estimated that 56% of oil palm expansion between 1990 and 2005 in Indonesia was at the expense of natural forests.
- The loss of biodiversity is closely associated with deforestation and forest degradation. While the humid tropical belt is ideally suited for oil palm cultivation, it is also contains mega biodiversity centres in the world. Numerous endangered species such as the Sumatran tiger, Asian elephants and the *orang utan* are under threat as their natural habitats are encroached upon by further expansion of oil palm. The plight of the *orang utan* has become symbolic of the problems associated with deforestation and it has become the focus of many NGO campaigns.
- Deforestation and conversion of tropical peatland have also contributed to greenhouse gas (GHG) emissions and climate change. According to the Stern review, deforestation contributes to about 18% of global GHG emissions. Conversion of peatland which has a critical hydrological function in the ecosystem results in significant CO<sub>2</sub> emissions as they become oxidized after drainage.
- Use of fires for land clearing has contributed to the annual recurrence of haze pollution has caused significant environmental, social and health consequences for Indonesia and neighboring countries.



## A.1.2 Sustainability challenges of palm oil production (contd)

### Social challenges

- Land rights, land use and land acquisition, rights of indigenous peoples and local communities, welfare of smallholders and plantation workers and use of child labour.
- Although oil palm development has been a catalyst for socio-economic development in producing countries, it has also been a source of numerous conflicts between communities with plantation companies as well as with governments. Based on cases documented by social NGOs, the problem appears to be more acute in Indonesia. Many of the social issues and conflicts relate to issues land rights and ownership and the lack of a fair and transparent process of land acquisition. The 'free prior informed consent (FPIC)' process is often not applied when acquiring land from indigenous peoples who may have owned the land for generations.
- While smallholders are key players in the global palm oil supply chain, they have usually underperformed compared to plantation companies in terms of productivity and sustainability practices, particularly in the case of independent smallholders which are not tied or associated with smallholder schemes. Smallholders often lack access to technology, finance and markets. Furthermore, some development models of schemes do not provide equitable sharing of the benefits accrued from palm oil production.
- For plantation workers, concerns include the need of a fair and safe working environment, occupational safety and health (OSH) policies and practices, freedom of association and no discrimination of any form and respect of human rights. Treatment of women who are largely employed for field operations including pesticides application and employment of children deserve attention.

### Governance challenges

- Inadequate and/or ineffective policies, planning, and legal regulatory frameworks and governance structures, particularly with regard to land ownership and development.



### A.1.3 Global trend towards production and use of certified sustainable palm oil (CSPO)

#### The multi-stakeholder response – Roundtable on Sustainable Palm Oil (RSPO)

- RSPO was established in April 2004 to promote the production and use of sustainable palm oil globally. Its vision is 'RSPO will transform the market to make sustainable palm oil the norm'. RSPO is a voluntary multi-stakeholder platform that brings together the major players in the supply chain (including NGOs and banks) and is today the most widely accepted initiative for the production of certified sustainable palm oil.
- Definition: Sustainable palm oil is 'comprised of legal, economically viable, environmentally appropriate and socially beneficial management and operations'
- Milestones in the production of CSPO
  - Q2005: Adoption of RSPO Principles & Criteria (P&C) and pilot evaluation
  - Q2007: Adoption of the RSPO Certification System for CSPO production
  - Q2008: 1<sup>st</sup> CSPO certification and maiden shipment to Rotterdam
  - Q2009: Launch of RSPO Supply Chain Certification System
  - Q2010: Launch of RSPO trademark for CSPO; 1<sup>st</sup> certification of smallholder CSPO production
  - Q2013: Adoption of RSPO P&C 2013 revision
- Production trends in CSPO. Since the issue of the first CSPO certificate in August 2008, the production of CSPO and certified sustainable palm kernel (CSPK) has increased at an impressive rate, as shown in the figures below. The area certified for sustainable had increased 25 times from 2008 to the present area of 2.66 million hectares. CSPO production exceeded 5 million tonnes in 2008 (10% of global CPO production) and the present CSPO production capacity is about 12 million tonnes (18% of total CPO production). The largest producers of CSPO are Indonesia and Malaysia, accounting for 46% and 39% respectively of total production globally.



### A.1.3 Global trend towards production and use of certified sustainable palm oil (CSPO) (contd)

#### Supply chain mechanisms and trade of CSPO

- To facilitate trade in CSPO, RSPO developed the Supply Chain Certification System which provides 4 major mechanisms - Identity Preserved (IP), Segregation, Mass Balance and Book & Chain. While the first 3 mechanisms involve the physical trade of CSPO at differing levels of traceability, the Book & Chain route deals with tradable CSPO certificates which can be transacted on a web-based platform.
- In November, 2011, RSPO launched the RSPO trademark for CSPO which will assure consumers that the products they purchase are sustainably produced. Consumer goods manufacturers and retailers wishing to use the logo on their products are required to be licensed by RSPO and adhere to strict conditions for use and communication of claims. To-date, 251 licenses have been issued and examples of consumer products using the RSPO logo are shown in this slide.

#### Other CSPO initiatives

- Besides RSPO, other initiatives/certification schemes promoting the production of sustainable palm oil include the International Standard for Carbon Certification (ISCC), Indonesian Sustainable Palm Oil (ISPO), Malaysian Sustainable Palm Oil (MSPO) and the Rainforest Alliance Certified label for a wide range of food and beverage products (including palm oil) that comply to the Sustainable Agriculture Network (SAN).
- ISCC is an international certification system sustainability and GHG emissions to meet legal requirements in the bioenergy markets and demonstrate compliance to the EU Renewable Energy Directive (EU-RED).
- ISPO and MSPO are national certification schemes, the former being a mandatory requirement for oil palm plantations Indonesia.



## Annex A(2): International conventions and related agreements

### Introduction

- Some international conventions and related agreements and guiding principles that are of relevance to the palm oil industry are highlighted in this annex. Further information is available from the hyperlinks provided.

### Convention on Biological Diversity (CBD)

- Created during the 1992 Earth Summit (UNCED), the CBD is a comprehensive, binding agreement covering the use and conservation of biodiversity. Its three main objectives are to conserve biological diversity, sustainably use the components of biological diversity, and fairly and equitably share the benefits resulting from the use of genetic resources. ([www.cbd.int](http://www.cbd.int))
- Signed by more than 190 countries, the Conference of the Parties (COP) meets every 2 years to look at new issues and adopt targets and work programmes to address biodiversity loss. Signatory governments are required to develop national strategies and action plans based on COP decisions and report back on their implementation.
- Biological diversity or biodiversity covers all forms of life on earth, from microscopic organisms to the largest animals existing in a wide range of ecosystems. The CBD is the most significant global effort to address loss of biodiversity. While the CBD applies to all sectors, it is particularly relevant to resource-based industries such as mining, oil and gas, forestry and agriculture (including palm oil). As palm oil producing countries are also home to about 12 mega diversity centers in the world, it is critical that development of the industry is not at the expense of biodiversity.
- Besides signatory governments, business and civil society play a key role in meeting the objectives of the CBD. Numerous publications provide advice on how business can integrate biodiversity conservation in the conduct of their business, an example is the IUCN/WBCSD publication 'Business & Biodiversity: The handbook for corporate action'. Other references are available from <http://www.businessandbiodiversity.org/>

## Annex A(2): International conventions and related agreements

### United Nations Forum on Forests (UNFF)

- A major outcome of 1992 Earth Summit (UNCED) was a 'non-legally binding authoritative statement of principles' to guide the management, conservation and sustainable development of all types of forests which are commonly known as the **Forestry Principles**.
- Objectives of the Forestry Principles include:
  - Countries have the right to use forests for their social and economic development needs, based on policies consistent with sustainable development;
  - The sustainable use of forests will require sustainable patterns of production and consumption at a global level; and
  - Forestry plans should count both the economic and non-economic values of forests, and the environmental costs and benefits of harvesting or protecting forests. Policies that encourage forest degradation should be avoided.
- In October 2000, the Economic and Social Council of the United Nations (ECOSOC), in its Resolution 2000/35 established the **United Nations Forum on Forests (UNFF)** with the main objective to promote "... the management, conservation and sustainable development of all types of forests and to strengthen long-term political commitment to this end..." based on the Rio Declaration, the Forestry Principles, Chapter 11 of Agenda 21 and other forestry-related processes. UN member states are members UNFF and China currently sits in the UNFF Bureau (represented by the State Forestry Administration). (<http://www.un.org/esa/forests/about.html>)
- In December 2007, the UN General Assembly adopted the landmark **Non-Legally Binding Instrument on All Types of Forests**. This was a milestone, as it was the first time Member States have agreed to an international instrument for sustainable forest management.
- Under the UNFF, member states agreed to four shared Global Objectives on Forests, which include the reversal of the loss of forest cover worldwide through sustainable forest management (SFM) and the enhancement of forest-based economic, social and environmental benefits.
- Since UNCED, concern over loss of the world's forests has intensified and it has galvanized various players – international organizations, national governments, business and civil society organizations to address this global problem. The discussion has included inter-related issues over loss of biodiversity, impact on indigenous peoples and in the wider context of climate change. The urgency of tackling this problem is reflected in the outcome of the UN Climate Summit in 2014, a key achievement being the New York Declaration on Forests.

## Annex A(2): International conventions and related agreements

### New York Declaration on Forests 2014

- The New York Declaration on Forests (<http://www.un.org/climatechange/summit/action-areas/>) is a non-legally binding declaration that was endorsed by more than 150 governments, major business enterprises and civil society and indigenous peoples organizations at the UN Climate Summit in September 2014. The declaration endorses a global timeframe to cut loss of natural forests by 50% by 2020 and strive to end it by 2030. Meeting these goals would cut between 4.5 and 8.8 billion tonnes of carbon pollution per year globally.
- In the associated voluntary Action Plan, governments, companies and civil society organizations have announced diverse actions and partnerships to support their commitment to the Declaration. Some examples of relevance to the palm oil industry are as follows:
- The United Kingdom, Germany, Norway, France and The Netherlands pledged to work on new procurement policies to limit the consumption of commodities associated with deforestation.
- The Consumer Goods Forum (CGF), a global alliance of 400 large companies with global sales of \$3 trillion, has pledged to eliminate deforestation from consumer goods supply chains by 2020 and called for a legally binding climate agreement, including provisions for REDD+ implementation.
- More than 20 global food companies have committed to deforestation-free sourcing policies of palm oil. These included Unilever, L'Oreal, Cargill, Procter & Gamble, Kellogg's, General Mills, Dunkin' Donuts.
- Three palm oil companies - Wilmar International, Golden Agri-Resources and Cargill have committed to work together the Indonesian Business Council on implementation of zero deforestation policies. Collectively, these commitments cover about 60% of global trade in palm oil and they have the potential to reduce 400 million to 450 million tonnes of CO<sub>2</sub> emissions annually by 2020, or 2 billion tonnes in the period through 2020.
- Several international banks under the umbrella of the Banking Environment Initiative (BEI) have made public commitments to using the banking industry's services to help end deforestation in commodity supply chains by 2020. This has triggered the banking industry to work to stimulate trade in sustainably sourced commodities through trade finance instruments, and to explore supporting banking standards.

## Annex A(2): International conventions and related agreements

### United Nations Framework Convention on Climate Change (UNFCCC)

- The UNFCCC was negotiated at the Earth Summit in Rio de Janeiro from 3 to 14 June 1992 and entered into force on 21 March 1993. The treaty's main goal is the "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." ([newsroom.unfccc.int](http://newsroom.unfccc.int))
- The convention divides countries into 3 main groups:
  - Annex I countries – members of OECD and countries with economies in transition (EIT Parties)
  - Annex II countries – OECD members but not EIT Parties
  - Non-Annex countries – mainly developing countries, including China
- China is rated the world's largest GHG emitter, followed by USA. Together, they account for more 45% of global carbon emissions. However, both countries made a historic deal in November 2014 to lead the effort against climate change. China has committed to GHG emissions by 2030 and increase the share of non-fossil fuels in the national energy mix to 20% by 2030.

### Kyoto Protocol

- The Kyoto Protocol was adopted on 11 December 1997 and entered into force on 16 February 2005. It is an international agreement linked to the UNFCCC that sets internationally binding emission reduction targets for its parties ([http://unfccc.int/kyoto\\_protocol/items/2830.php](http://unfccc.int/kyoto_protocol/items/2830.php)). The first commitment period ended in 2012 and the Annex 1 countries agreed to a second commitment period from 1 January 2013 to 31 December 2020.
- Under the Protocol, countries must meet their targets primarily through national measures. However, the Protocol also offers them an additional means to meet their targets by way of three market-based mechanisms. These are
  - Joint implementation (JI)
  - Clean development mechanism (CDM)
  - International emissions trading (IET)
- Among these mechanisms, CDM has been highly relevant to the oil palm sector and numerous projects have been undertaken to reduce GHG emissions, for example capture of methane gas from effluent treatment plants for production of renewable energy.



## Annex A(2): International conventions and related agreements

### International Labour Organization (ILO) Conventions

- Founded in 1919, the International Labour Organization (ILO) (<http://www.ilo.org/global/about-the-ilo/lang-en/index.htm>) promotes rights at work, encourage decent employment opportunities, enhance social protection and strengthen dialogue on work-related issues. ILO works through a tripartite approach involving governments, employers and workers' organizations to set labour standards, develop policies and devise programmes.
- The ILO develops labour standards, in the form of *conventions*, which are legally binding international treaties that may be ratified by member states, or *recommendations*, which serve as non-binding guidelines. Conventions are grouped under fundamental, governance and technical conventions. The ILO's Governing Body has identified eight core conventions as "fundamental", covering subjects that are considered as fundamental principles and rights at work. There are four governance conventions which are "priority" instruments to ensure functioning of the international labour standards system. There are 177 technical conventions covering the full range of topics under ILO's mandate.
- Ratification of the ILO conventions varies considerably with member countries. Of the total of 189 conventions, China has ratified 25 (4 fundamental, 2 governance and 19 technical). By comparison, USA has ratified only 14 ILO conventions.
- Conventions of direct relevance to the palm oil industry include fundamental conventions No. 29 (1930) on forced labour, No 105 (1957) on abolition of forced labour, No. 138(1973) on minimum age, No.182(1999) on worst forms of child labour, No. 87 (1948) on freedom of association and protection of rights to organize and No.98 (1948) on right to organize and collective bargaining, No. 100 (1951) on equal enumeration and No.111(1958) on discrimination (employment and occupation).
- Another important convention is Convention No. 169 dealing with the rights of indigenous and tribal peoples which came into force in September 1991. However, only 20 countries have ratified it to-date, but not including China nor palm oil producing such as Indonesia and Malaysia.

## Annex A(2): International conventions and related agreements

### UN Global Compact

- The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption (<https://www.unglobalcompact.org/AboutTheGC/index.html> )
- The 10 principles
  - OHuman Rights: Businesses should support and respect the protection of internationally proclaimed human rights (Principle 1) and make sure that they are not complicit in human rights abuses (Principle 2).
  - OLabour: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining (Principle 3); the elimination of all forms of forced and compulsory labour (Principle 4); the effective abolition of child labour (Principle 5) and the elimination of discrimination in respect of employment and occupation (Principle 6).
  - OEnvironment: Businesses should support a precautionary approach to environmental challenges (Principle 7), undertake initiatives to promote greater environmental responsibility (Principle 8) and encourage the development and diffusion of environmentally friendly technologies (Principle 9)
  - OAnti-Corruption: Businesses should work against corruption in all its forms, including extortion and bribery (Principle 10).
- Since its official launch in July 2000, the Global Compact has become the world's largest voluntary corporate and sustainability initiative with more than 12,000 participants, including over 8,000 businesses in about 145 countries around the world, with the United Nations serving as the convenor and facilitator. Numerous companies in the palm oil supply chain are signatories to the Global Compact, including plantation companies, processors, manufacturers of consumer goods, retailers and banks/financial institutions.
- Any company or organization that embraces and commits to the 10 principles can participate in the Global Compact. Signatories are expected, among other commitments, to submit an Annual Commitment of Progress (COP) on their progress in operationalizing the 10 principles and implementation of partnership projects to support the broad UN goals. Non-business and civil society organizations participate in the Global Compact through various mechanisms such as policy dialogues and partnership projects with companies.

## Annex A(2): International conventions and related agreements

### Principles for Responsible Agricultural Investments (PRAI)

- UNCTAD, FAO, IFAD and the World Bank have jointly developed the following set of Principles for responsible agricultural investment that respects rights, livelihoods and resources (PRAI).

([http://www.fao.org/fileadmin/templates/est/INTERNATIONAL-TRADE/FDI/RAI\\_Principles\\_Synoptic.pdf](http://www.fao.org/fileadmin/templates/est/INTERNATIONAL-TRADE/FDI/RAI_Principles_Synoptic.pdf))

- Principle 1: Existing rights to land and associated natural resources are recognized and respected.
  - Principle 2: Investments do not jeopardize food security but rather strengthen it.
  - Principle 3: Processes relating to investment in agriculture are transparent, monitored, and ensure accountability by all stakeholders, within a proper business, legal, and regulatory environment.
  - Principle 4: All those materially affected are consulted, and agreements from consultations are recorded and enforced.
  - Principle 5: Investors ensure that projects respect the rule of law, reflect industry best practice, are viable economically, and result in durable shared value.
  - Principle 6: Investments generate desirable social and distributional impacts and do not increase vulnerability.
  - Principle 7: Environmental impacts of a project are quantified and measures taken to encourage sustainable resource use, while minimizing the risk/magnitude of negative impacts and mitigating them.
- Launched during the 64<sup>th</sup> Session of the United Nations General Assembly in September 2009, the overall purpose of the PRAI is to improve the chances of positive development outcomes from agricultural investment in developing countries, and reduce the possibility of negative social, environmental and economic effects.
  - PRAI is relevant to all agricultural sub-sectors, including the palm oil industry. Commitment to these principles would ensure the responsible and sustainable development of the industry.

## Annex A(2): International conventions and related agreements

### Equator Principles

- The Equator Principles (EPs) is a risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects and is primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making. The EPs apply globally, to all industry sectors and to four financial products (i) Project Finance Advisory Services (ii) Project Finance (iii) Project-Related Corporate Loans and (iv) Bridge Loans.
- EPs are a set of 10 principles covering the life cycle of project financing, from review and categorization of projects (Principle No.1), environmental and social (E&S) assessment (Principle No.2), applicable E&S standards (Principle No.3) and environmental and social management system and EP action plan (Principle No. 4) through to independent monitoring and reporting (Principle No. 9). (<http://www.equator-principles.com/index.php/ep3/ep3>)
- Project categorization follows the system by the International Finance Corporation (IFC) as follows:
  - Category A – Projects with potential significant adverse environmental and social risks and/or impacts that are diverse, irreversible or unprecedented
  - Category B – Projects with potential limited adverse environmental and social risks and/or impacts that are few in number, generally site-specific, largely reversible and readily addressed through mitigation measures; and
  - Category C – Projects with minimal or no adverse environmental and social risks and/or impacts.
- Adoption of the Equator Principles (EPs) is voluntary and is open to any financial institution which embraces the principles and are willing to implement them in their internal environmental and social policies, procedures and standards for financing projects. Equator Principles Financial Institutions (EQFIs) will not provide project finance or project-related corporate loans to projects where the client will not, or is unable to, comply with the Equator Principles. Currently, there are about 80 EQFIs covering more than 70% international project financing in emerging markets. Management, administration and development of the EPs is undertaken by the Equator Principles Associations established by member EQFIs in 2010.

## Guide for Overseas Investment and Production of Sustainable Palm Oil by Chinese Enterprises

### Annex A(3): Policies, regulations and procedures of host countries

#### Southeast Asia

A3.1 Indonesia

A3.2 Malaysia

#### Africa

A3.3 Central African Republic

A3.4 Democratic Republic of Congo

A3.5 Liberia

A3.6 Mali

A3.7 Sierra Leone

A3.8 Tanzania

#### South America

A3.9 Brazil

### A(3) Policies and regulatory requirements of host country – Indonesia

Key national policies and regulatory requirements relevant to palm oil sector



Key processes for investment in oil plantations and processing plants



### A(3) Policies and regulatory requirements of host country – Malaysia

Key national policies and regulatory requirements relevant to palm oil sector



Key processes for investment in oil plantations and processing plants



### A(3) Policies and regulatory requirements of host country – Central African Republic

Key national policies and regulatory requirements relevant to palm oil sector



Key processes for investment in oil plantations and processing plants



**A(3) Policies and regulatory requirements of host country –  
Democratic Republic of Congo (DRC)**

Key national policies and regulatory requirements relevant to palm oil sector



Key processes for investment in oil plantations and processing plants



**A(3) Policies and regulatory requirements of host country –  
Liberia**

Key national policies and regulatory requirements relevant to palm oil sector



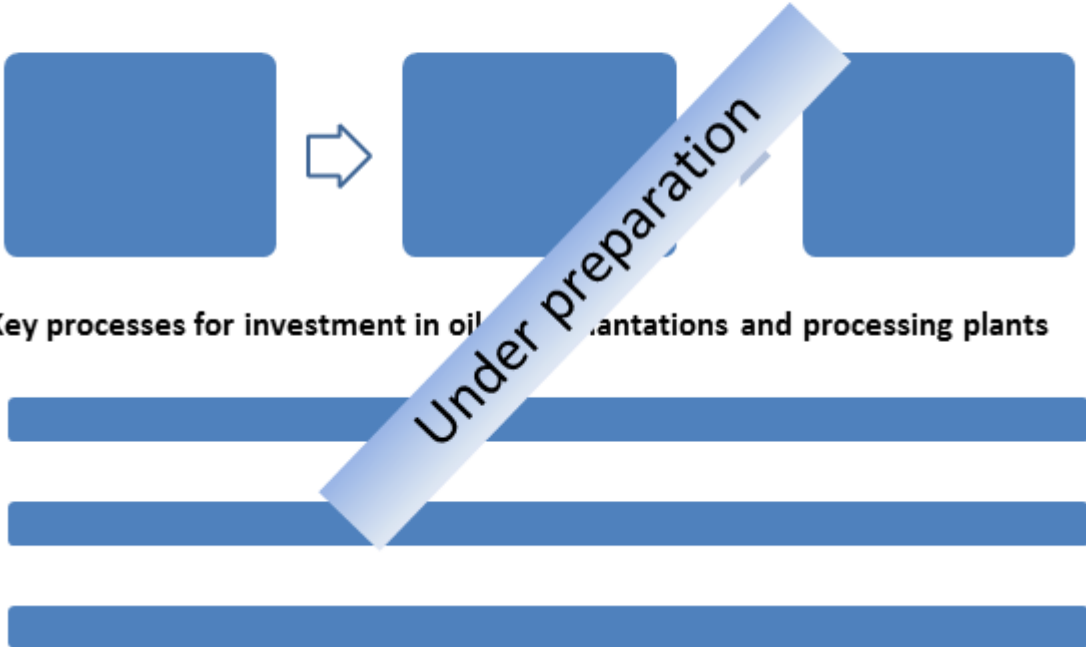
Key processes for investment in oil plantations and processing plants





**A(3) Policies and regulatory requirements of host country –  
Mali**

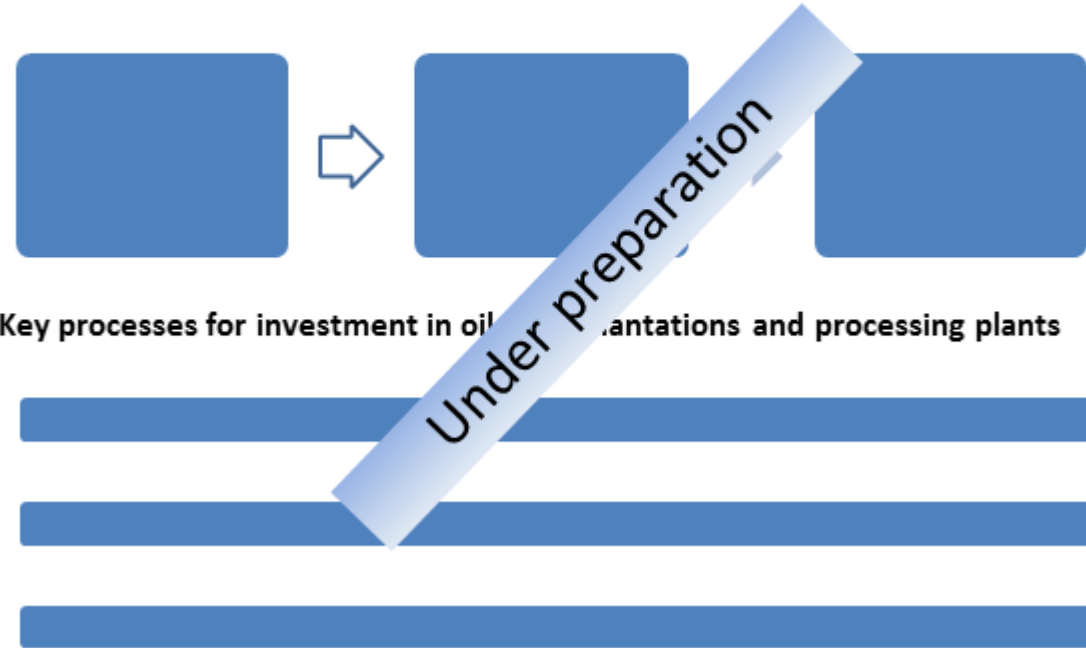
Key national policies and regulatory requirements relevant to palm oil sector



Key processes for investment in oil plantations and processing plants

**A(3) Policies and regulatory requirements of host country –  
Sierra Leone**

Key national policies and regulatory requirements relevant to palm oil sector



Key processes for investment in oil plantations and processing plants

### A(3) Policies and regulatory requirements of host country – Tanzania

Key national policies and regulatory requirements relevant to palm oil sector



Key processes for investment in oil plantations and processing plants



### A(3) Policies and regulatory requirements of host country – Brazil

Key national policies and regulatory requirements relevant to palm oil sector



Key processes for investment in oil plantations and processing plants



## Annex A(4) Sustainability Standards and Certification Schemes

### Overview on Sustainability Standards and Certification Systems

- **Introduction.** Certification systems that are applicable for the production and use of sustainable palm oil include:
  - Certification systems specifically developed for production of certified sustainable palm oil (CSPO): Roundtable on Sustainable Palm Oil (RSPO), Indonesian Sustainable Palm Oil (ISPO) and Malaysian Sustainable Palm Oil (MSPO).
  - Generic certification systems applicable to a wide variety of crops including oil palm: Sustainable Agriculture Network (SAN)
  - Certification systems for production of biomaterials for bioenergy and biofuels: International System for Sustainability and Carbon Certification (ISCC) and the Roundtable on Sustainable Biomaterials (RSB)
- Generally, certification systems consist of 3 basic elements – a **Certification Standard** that sets specific requirements for sustainable production, an **Accreditation Process** for qualifying Certification Bodies and the **Certification Process** to establish if the requirements of the certification standards have been met.
- **Certification Standards** specify the requirements that must be met and against which assessments for certification are made. Standards usually have a set of core principles governing sustainable production and use and each is supported by criteria or conditions and measurable indicators. The overarching principles for relevant standards are listed in Annex A(3). While the principles and criteria vary with organizations to meet their respective objectives, they generally cover the following basic areas.
  - **Legal compliance** – all standards stipulate the need for compliance with national laws and regulations and to relevant international conventions and agreements, for example: the UN Convention on Biodiversity
  - **Economic viability** – long term business plans and use of best management practices for optimum productivity, for example, the use of improved planting materials.
  - **Social impacts** – respecting the rights of indigenous peoples and communities and no exploitation of workers or employment of under-aged children. Companies should treat workers fairly and provide a safe and healthy environment for workers and support the development of smallholders.
  - **Environmental impacts** – ensuring that palm oil production does not contribute to deforestation and destruction of high carbon stock areas and peatlands, loss of biodiversity, air and water pollution and GHG emissions.

## Annex A(4) Sustainability Standards and Certification Schemes (contd)

### Overview on Sustainability Standards and Certification Systems

- Although various sustainability standards cover a similar range of issues, their focus and intensity of treatment of key issues vary considerably, as indicated in a comparative study\* of 4 major standards relevant to palm oil – RSPO, ISPO, SAN and ISCC. Among these, the RSPO standard was found to be most comprehensive, with well-defined requirements covering most environmental and social issues. As a mandatory standard, ISPO has the advantage over other standards with respect to legal compliance but its treatment of social issues is less comprehensive than other standards.
- RSPO, ISPO, MSPO and RSB have developed separate versions of their standards to facilitate certification of sustainable production by smallholders.
- Although not a certification standard, the IFC Performance Standards are a critical instrument to ensure that investees of IFC comply with strict environmental and social requirements. Results of an independent study found the IFC Performance Standards to be more comprehensive to the RSPO P&C.
- **Accreditation process.** Assessments for compliance with certification requirements specified in the standards are conducted by Certification Bodies (CBs) that have been accredited by national or international accreditation bodies for the competence and credibility in conducting independent audits. For example, in Indonesia, CBs are accredited by the National Accreditation Committee (*Komite Akreditasi Nasional* or KAN). An international accrediting agency, Accreditation Services International (ASI) is an international accrediting agency which acts as the accreditation body for organizations such as the RSPO, RSB and the Forest Stewardship Council (FSC).
- Accreditation is usually done against ISO/IEC Guide 65: - General requirements for bodies operating product certification systems and/or ISO/IEC Guide 66: 1999 - General requirements for bodies operating assessment and certification/registration of environmental management systems and ISO/IEC 17021:2006 Conformity assessment – Requirements for bodies providing audit and certification of management systems.
- The accreditation body itself must comply with the requirements of ISO 17011:2004 Conformity assessment – general requirements for accreditation bodies accrediting conformity assessment bodies.

\*Yap, S and Paoli, P. 2014. A Comparison of Leading Palm Oil Certification Standards Applied in Indonesia: Towards Defining Emerging Norms of Good Practices. Deonator Consulting, May 2014

## Annex A(4) Sustainability Standards and Certification Schemes (contd)

### Overview on Sustainability Standards and Certification Systems

- **Certification process.** The process begins with the appointment of a Certification Body (CB) and application to the relevant standards organization (e.g. RSPO, ISPO Commission) by the auditee company or farmer organization. The CB must define the procedures relating to the assessment process that must be consistent with the specifications defined in *ISO 19011: 2002 Guidelines for quality and/or environmental management systems auditing*.
- According to the RSPO certification system, "the procedures must require that the initial certification assessments, and the subsequent monitoring or surveillance assessments, include an appropriate range of methods to collect objective evidence, including documentation review, field checks and interviews with external stakeholders"
- For upstream production, the unit of certification shall be the palm oil mill and its supply base, including smallholders and out growers supplying fresh fruit bunches to the mill. For ISCC certification, all players along the supply chain (except transportation) are subject to certification. These include farms/plantations, 'first gathering points' (first points to receive raw biomass), traders/warehouse, conversion units (oil mills, refineries, biofuel and bioliquid plants) and relevant market players which bring biofuels and bioliquids to the market (e.g. cogeneration plants).
- Certificates will be issued by the CB after a successful audit has confirmed compliance to the standard and published on the website of the organization operating the certification system. The validity of certificates varies with organizations operating the certification system, from one year for ISCC to 5 years for RSPO but with annual surveillance audits to ensure continuing compliance. A re-assessment must be undertaken before the end of the 5-year period.
- In the event of serious violations against the principles and criteria of a particular certification scheme, the CB normally has the authority to withdraw certifications. Organizations running certification systems usually have a complaints and grievance procedure concerning certified organizations and CBs that is accessible to any interested stakeholder.

## Annex A(4) Sustainability Standards and Certification Schemes (contd)

### Overview on Sustainability Standards and Certification Systems

- **Supply chain certification.** After a producer has obtained the certification for sustainable production by a particular unit, there is a need to ensure transparency and traceability the on the usage of the CSPO along the supply chain, from the grower, to the processor, trader, manufacturer, retailer until the consumer. This is done through chain-of-custody or supply chain certification systems.
- The RSPO operates 4 supply chain mechanisms:
  - **Identity Preserved (IP).** The IP model requires all players along the supply chain to maintain full segregation and traceability of the physical product, from the producing plantation and mill to the end-user. Among the 4 mechanisms, the IP route provides the highest level of confidence on traceability but, being a more complex process, it is also the most costly to implement.
  - **Segregation.** The segregation supply chain model assures that RSPO certified palm oil and its derivatives delivered to the end user comes only from RSPO certified sources but mixing of CSPO is allowed. However, the product cannot be traced to the specific production units, unlike the IP model. Consequently, the level of traceability and claim will be comparatively lower but the cost is also expected to be lower as well.
  - **Mass Balance.** This model allows mixing of RSPO certified oil with non-RSPO palm oil; the level of traceability is low but is considerably less complex. The Mass Balance model was designed in a manner to ensure that there is strict reconciliation between the volume of certified sustainable palm oil bought and the quantity sold.
  - **Book and Claim.** The Book and Claim supply chain model provides tradable certificates for RSPO certified palm oil to the palm oil supply base. The supply base may then offer these certificates on a web based transaction system to end users who choose to support specific volumes of RSPO certified palm oil and or their derivatives.
- **Labelling of certified sustainable palm oil.** Companies that have received certificates of sustainability can use the logo or trademark provided by organizations such as RSPO and RAN on 'on-product' labels and corporate communications. However, use is governed by strict conditions on the communication of claims on sustainability.



## Annex A(4) Sustainability Standards and Certification Schemes (contd)

### Roundtable on Sustainable Palm Oil (RSPO)

- The RSPO operates two certification systems for the production and use of sustainable palm oil; the first certifies upstream production of certified sustainable palm oil (CSPO) and the second is the Supply Chain Certification System provides trade mechanisms for use of CSPO along the supply chain.
- The RSPO standard for production is the **RSPO Principles and Criteria (RSPO P&C) for the Production of Sustainable Palm Oil** (<http://www.rspo.org/certification/how-rspo-certification-works>) which consists of 8 overarching principles, as follows:
  - Principle 1. Commitment to transparency
  - Principle 2. Compliance with applicable laws and regulations
  - Principle 3. Commitment to long-term economic and financial viability
  - Principle 4. of appropriate best practices by growers and millers
  - Principle 5. Environmental responsibility and conservation of natural resources and biodiversity
  - Principle 6. Responsible consideration of employees and of individuals and communities affected by growers and mills.
  - Principle 7. Responsible development of new plantings
  - Principle 8. Commitment to continuous improvement in key areas of activity
- The RSPO P&C provides the generic guidelines for sustainable production; considering differences in legal requirements among countries for the same criteria as well cultural differences, the P&C is adapted for use in each country through National Interpretations. Currently, National Interpretations have been developed through a consultative process for 11 countries (Indonesia, Malaysia, PNG, Colombia, Peru, Honduras, Ecuador, Sierra Leone, Liberia, Ghana, Nigeria). (<http://www.rspo.org/certification/national-interpretations/>).
- The RSPO P&C has also been adapted for the certification of palm oil produced by smallholders, including independent smallholders.
- For the biofuels/bioenergy markets, RSPO has issued the RSPO RED requirements for compliance with the EU Renewable Energy Directive (EU RED) as add-ons to the P&C.

## Annex A(4) Sustainability Standards and Certification Schemes (contd)

### Indonesian Sustainable Palm Oil (ISPO)

- ISPO is Indonesia's mandatory government-led certification scheme, introduced in 2011 under the Regulation of the Minister of Agriculture No.19/Permentan/OT.140/3/2011, with the objective of improving the competitiveness of Indonesian palm oil in the global market, and achieving a reduction in GHG emissions and improving other dimensions of sustainability.
- As a mandatory scheme, the ISPO certification provides the assurance of the compliance with all applicable legal requirements.
- All plantations assessed as Class I (very good), Class II (good) Class III (average) by the Ministry of Agriculture with regard to their performance on several aspects including legality, plantation management and social and environmental aspects are required to obtain ISPO certification.
- Qualification for ISPO certification is centered on compliance with a set of Principles & Criteria (P&C) with 7 overarching principles supported by 40 criteria and 127 indicators. Three versions of the P&C currently apply to plantation companies, scheme smallholders and independent smallholders. To meet the global demand of palm oil as a feedstock for bioenergy and biodiesel, ISPO plans to introduce an additional standard that meets the requirements for compliance with the EU Renewable Energy Directive.
- The ISPO P&C principles are:
  - Principle 1. Permit and oil palm plantation management
  - Principle 2. Implementation of guidance for cultivation and processing of oil palm
  - Principle 3. Environment management and monitoring
  - Principle 4. Responsibility for workers
  - Principle 5. Social responsibility and surrounding community
  - Principle 6. Empowerment of community economic activity
  - Principle 7. Sustainable business improvement
- ISPO also operates a supply chain certification system to ensure transparent trade and use of ISPO-certified palm oil in the supply chain. The trade mechanisms include (i) segregation (ii) mass balance and (iii) book and claim.

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## Annex A(4) Sustainability Standards and Certification Schemes (contd)

### Malaysian Sustainable Palm Oil (MSPO)

- The Malaysian Sustainable Palm Oil (MSPO) scheme is a voluntary national certification system for the production of sustainable palm oil in Malaysia. It is an alternative system to existing sustainability certification such as the RSPO. The Government of Malaysia approved a set of MSPO standards - Malaysian Sustainable Palm Oil (MSPO) MS 2530:2013 Parts 1 to 4 in September 2013 and the MSPO certification scheme became effective from 1<sup>st</sup> January 2015.
- Part 1 of the MSPO standards provides the general principles for production of sustainable palm oil while Parts 2 to 4 provide specific requirement for sustainable production by independent smallholders, oil palm plantations/organized smallholders and palm oil mills respectively. The principles of the MSPO standard cover:
  - Principle 1. Management commitment and responsibility (including an action plan for continuous improvement)
  - Principle 2. Transparency (including documentation, communications and traceability)
  - Principle 3. Compliance to legal requirements (including recognition of customary rights)
  - Principle 4. Social responsibility, health, safety and employment conditions
  - Principle 5. Environment, natural resources, biodiversity and ecosystem services
  - Principle 6. Best practices (including standard operating procedures for site management, fair pricing mechanisms etc)
  - Principle 7. Development of new plantings (ensuring conservation of high biodiversity values, peatlands and assessments of social and environmental impacts)
- The MSPO standards are built on the existing Malaysian Palm Oil Board (MPOB) Codes of Practice covering good nursery practices, agricultural and milling practices, handling, transportation and storage of palm oil products. Inclusion of smallholders in the standards is critical as they account for 40% of the planted area.
- The Malaysian Palm Oil Board (MPOB) serves as the Governing Body for administration and implementation of the MSPO standards and certification scheme. As with other systems, assessment for compliance to MSPO certification requirements are undertaken by accredited 3<sup>rd</sup> party certification bodies.
- The MSPO scheme is part of the national strategy for branding Malaysian palm oil and enhance global market uptake. The government is making effort to encourage acceptance of MSPO certified palm oil by in consuming countries.

## Annex A(4) Sustainability Standards and Certification Schemes (contd)

### IFC Sustainability Framework & Performance Standards

- The IFC Sustainability Framework articulates the strategic commitment to sustainable development by the International Finance Corporation (IFC) and is an integral part of its approach to risk management. The Sustainability Framework which consist of 3 pillars (Policy on Environmental and Social Sustainability, Performance Standards and Access to Information Policy) helps its clients do business in a sustainable way. It promotes sound environmental and social practices, encourages transparency and accountability, and contributes to positive development impacts.
- The IFC Performance Standards (PSs) are directed towards clients, providing guidance on how to identify risks and impacts, and are designed to help avoid, mitigate, and manage risks and impacts as a way of doing business in a sustainable way, including stakeholder engagement and disclosure obligations of the client in relation to project-level activities. (<http://www.ifc.org/performancestandards>)
- In the case of its direct investments (including project and corporate finance provided through financial intermediaries), IFC requires its clients to apply the Performance Standards to manage environmental and social risks and impacts so that development opportunities are enhanced.
- The IFC Performance Standards consist of 8 standards that clients must meet throughout the life of an investment by IFC, as follows:
  - PS 1: Assessment and Management of Environmental and Social Risks and Impacts
  - PS 2: Labor and Working Conditions
  - PS 3: Resource Efficiency and Pollution Prevention
  - PS 4: Community Health, Safety, and Security
  - PS 5: Land Acquisition and Involuntary Resettlement
  - PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
  - PS 7: Indigenous Peoples
  - PS 8: Cultural Heritage
- Performance Standard 1 establishes the importance of (i) integrated assessment to identify the environmental and social impacts, risks, and opportunities of projects; (ii) effective community engagement through disclosure of project-related information and consultation with local communities on matters that directly affect them; and (iii) the client's management of environmental and social performance throughout the life of the project. Performance Standards 2 through 8 establish objectives and requirements to avoid, minimize, and where residual impacts remain, to compensate/offset for risks and impacts to workers, affected communities, and the environment.

## Annex A(4) Sustainability Standards and Certification Schemes (contd)

### Sustainable Agriculture Network (SAN)

- The Sustainable Agriculture Network (SAN) is a global coalition of civil society organizations that promotes productive and efficient agricultural systems, biodiversity conservation and sustainable human development through the application of its sustainable agriculture standard. Developed in the 1990s, the SAN standard has been applied to small farms and plantations growing more than 80 crops, including oil palm in about 45 countries.
- SAN Sustainable Agriculture Standard is based on the themes of environmental soundness, social equity and economic viability. The standard consists of 10 principles with specific criteria to promote good environmental, labour and agronomic practices. The current version of the standard contains 99 criteria ([http://www.san.ag/biblioteca/docs/SAN-S-1-1.2\\_Sustainable\\_Agriculture\\_Standard.pdf](http://www.san.ag/biblioteca/docs/SAN-S-1-1.2_Sustainable_Agriculture_Standard.pdf))
- The principles of the Sustainable Agriculture Standard are:
  - Principle 1. Social and Environmental Management System
  - Principle 2. Ecosystem Conservation
  - Principle 3. Wildlife Protection
  - Principle 4. Water Conservation
  - Principle 5. Fair Treatment and Good Working Conditions for Workers
  - Principle 6. Occupational Health and Safety
  - Principle 7. Community Relations
  - Principle 8. Integrated Crop Management
  - Principle 9. Soil Management and Conservation
  - Principle 10. Integrated Waste Management
- SAN has developed a range of systems and guidance documents to support the implementation of the Sustainable Agriculture Standard, including the certification policy, chain of custody system, local interpretation guides and standards for group certification of farmers.
- To facilitate access to international markets, certified farms can use the Rainforest Alliance Certified logo on their products.

## Annex A(4) Sustainability Standards and Certification Schemes (contd)

### International Sustainability and Carbon Certification (ISCC)

- ISCC is an international certification system for sustainability and greenhouse gas emissions to meet legal requirements in the bioenergy markets as well as to demonstrate the sustainability and traceability of feedstock in the food, feed and chemical industries. In July 2011, the European Commission recognized ISCC as one of the first certification schemes to demonstrate compliance with the EU Renewable Energy Directive's (EU-RED) requirements. (<http://www.iscc-system.org/en/iscc-system/about-iscc/>)
- ISCC has two basic certification systems – ISCC EU/DE for the biofuels markets and ISCC PLUS for other markets for the production of food and feed products as well as for technical/chemical applications (e.g. bioplastics) and applications in the bioenergy sector (e.g. solid biomass).
- ISCC covers entire supply chains and ensures traceability from the field to the consumer. Requirements for certification are covered in a series of systems documents on quality management, risk management, sustainability and traceability requirements and methodologies for calculation of GHG emissions.
- ISCC and ISCC PLUS sustainability requirements are based on the following principles:
  - Principle 1. Biomass shall not be produced on land with high biodiversity value or high carbon stock. HCV areas shall be protected
  - Principle 2. Biomass shall be produced in an environmentally responsible way. This includes the protection of soil, water and air and the application of Good Agricultural Practices
  - Principle 3. Safe working conditions through training and education, use of protective clothing and proper and timely assistance in the event of accidents
  - Principle 4. Biomass production shall not violate human rights labour rights or land rights. It shall promote responsible labour conditions and workers' health, safety and welfare and shall be based on responsible community relations
  - Principle 5. Biomass production shall take place in compliance with all applicable regional and national laws and shall follow relevant international treaties
  - Principle 6. Good management practices shall be implemented
- ISCC has gained wide acceptance in the palm oil industry and a numerous plantation companies supplying to the bioenergy market in Europe have achieved ISCC certification since 2010.

## Annex A(4) Sustainability Standards and Certification Schemes (contd)

### Roundtable on Sustainable Biomaterials (RSB)

- The Roundtable on Sustainable Biomaterials (RSB) is an international multi-stakeholder initiative for ensuring the sustainability of biomaterials production and processing. Biomaterials produced from biomass include liquid biofuels and biomass and biogas for heating and electricity generation.
- RSB certification system is based on a set of Principles and Criteria (P&C) that applies to production and use of all types of any feedstock worldwide (<http://rsb.org/pdfs/standards/11-03-08%20RSB%20PCs%20Version%202.1.pdf>). For the EU market, the P&C have been adapted to ensure compliance with the Renewable Energy Directive, which defines the land-use and GHG criteria for biofuels entering the EU market. The RSB EU RED standards received the recognition of the European Commission on July 19, 2011.
- **RSB Principles.** The overarching principles that apply to the global P&C and the RSB EU RED standards are as follows. Each principle is supported by a set of criteria and the minimum requirements that must be met by various operators, including 'Feedstock Producers', 'Feedstock Processors', 'Biofuel Producers' and 'Biofuel Blenders'
  - OPrinciple 1. Biofuel operations shall follow all applicable laws and regulations.
  - OPrinciple 2. Sustainable biofuel operations shall be planned, implemented, and continuously improved through an open, transparent, and consultative impact assessment and management process and an economic viability analysis.
  - OPrinciple 3. Biofuels shall contribute to climate change mitigation by significantly reducing lifecycle GHG emissions as compared to fossil fuels.
  - OPrinciple 4. Biofuel operations shall not violate human rights or labor rights, and shall promote decent work and the well-being of workers.
  - OPrinciple 5. In regions of poverty, biofuel operations shall contribute to the social and economic development of local, rural and indigenous people and communities.
  - OPrinciple 6. Biofuel operations shall ensure the human right to adequate food and improve food security in food insecure regions.
  - OPrinciple 7. Biofuel operations shall avoid negative impacts on biodiversity, ecosystems, and conservation values.
  - OPrinciple 8. Biofuel operations shall implement practices that seek to reverse soil degradation and/or maintain soil health.
  - OPrinciple 9. Biofuel operations shall maintain or enhance the quality and quantity of surface and ground water resources, and respect prior formal or customary water rights.
  - OPrinciple 10. Air pollution from biofuel operations shall be minimized along the supply chain.
  - OPrinciple 11. The use of technologies in biofuel operations shall seek to maximize production efficiency and social and environmental performance, and minimize the risk of damages to the environment and people.
  - OPrinciple 12. Biofuel operations shall respect land rights and land use rights.

## Annex C(1): High Conservation Value (HCV) Areas

**High Conservation Value (HCV) Areas:** The areas necessary to maintain or enhance one or more High Conservation Values (HCVs):

**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.** 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.

Source: RSPO Principles and Criteria for the Production of Sustainable Palm Oil 2013: Definitions