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Soy Risk Assessment
China

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A. Introduction

The world demand for soy is rapidly growing and is driving deforestation and other negative corporate social responsibility (CSR) related impacts e.g., biodiversity loss, greenhouse gas emissions, corrupt and illegal behaviour, and violation of civil rights including workers' rights, traditional and indigenous peoples' rights.

Each of the CSR categories are considered minimum legal, environmental and social responsible criteria that should met for soy plantation establishment and management. The criteria are in line with key CSR International Guidelines Content Areas as identified, analysed and published by the Danish Business Authority: A comparison of 4 international guidelines for CSR OECD Guidelines for Multinational Enterprises, ISO 26000 Guidance on Social Responsibility, UN Global Compact and UN Guiding Principles on Business and Human Rights, January 2015

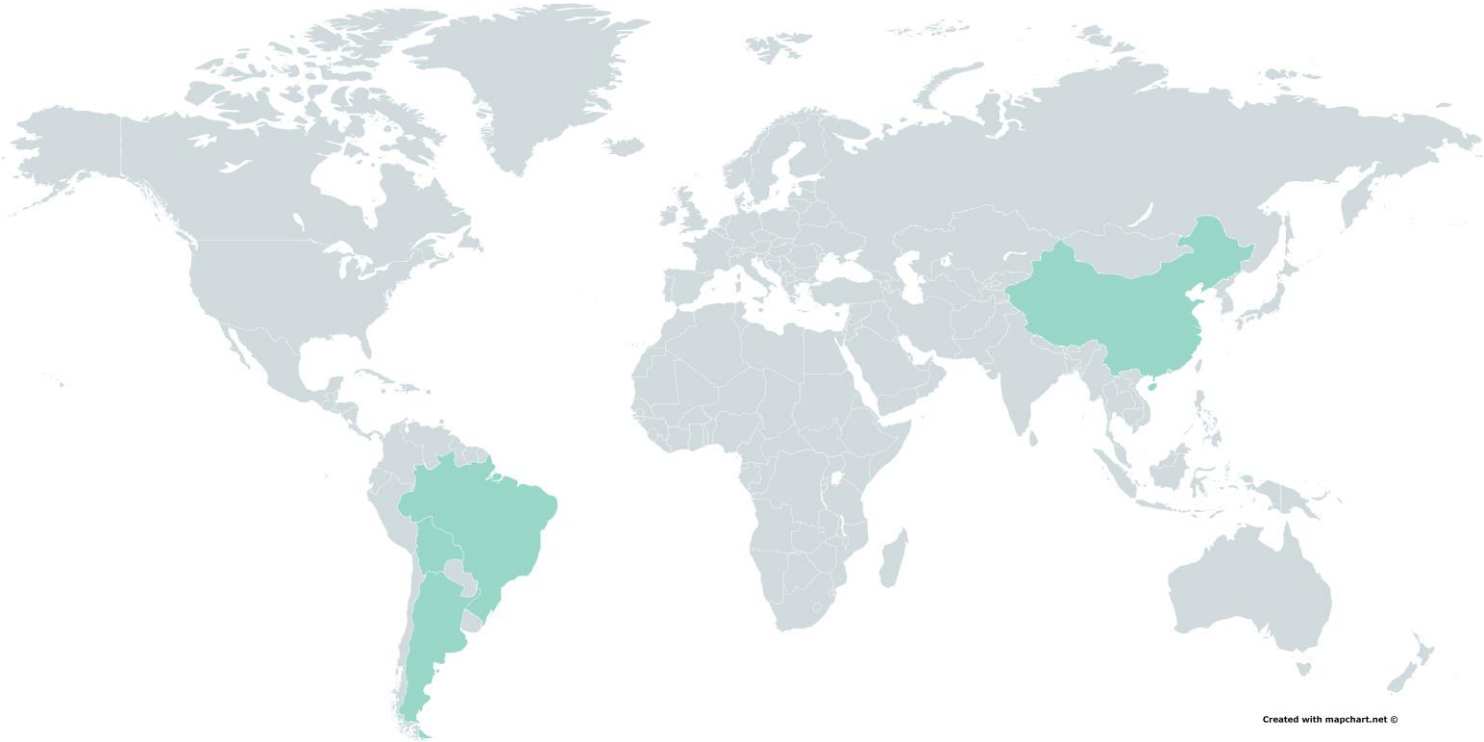


Figure 1. Countries for which NEPCon have developed a risk assessment for soy

B. Overview of sourcing risks for soy from China

Soy Risk Score: 80 / 100 in 2017

This report contains an evaluation of the CSR risks in China for five categories and 21 sub-categories of law. We found:

- **Specified risk in 6 sub-categories.**
- **Low risk for 11 sub-categories.**
- **Not applicable for 4 categories.**

Soy source types and risks

There are three soy source types found in China. Knowing the "source type" that soy originates from is useful because different source types can be subject to different applicable legislation and have attributes that affect the risks. We have analysed the risks for all source types and found the risks differ between them.

Farm collectives	All land in China is still owned by the government, farm households are given use rights via collective leases by the village authorities. This enables them to cultivate specific parcels of land. Average farm size is 0.6 hectares.
State-owned farms	There are a few large state-owned and state managed soy farms located in Heilongjing province.
Organic farms	Commercially run by state owned organizations or private companies who lease the land from Farm collectives. To market organic soy farms, must obtain an organic agri-product certification recognized by the government

The key CSR risks identified in this report concern business issues, social issues and environmental issues.

Regarding **business issues,** for farm collectives there is a risk of:

- Unclear and unfair management and administration of land use allocation and land use rights, (sub-indicator 1.1). This is due to:
    - missing regulations about the duration of the agricultural land use rights for the farmers,
    - frequent land readjustments in response to changes in households,
    - no uniform land contract and certificate existing; and
    - no specific rules for the farmers to be compensated when land is taken from them.
- Incomplete, scattered or inconsistent land registration in rural areas, mainly due to the dispersal of land registration with so many administrative departments and the exodus of farmers into urban areas (1.2).

Regarding **social issues,** for farm collectives and state owned farms, there is a risk that:

- The laws protecting the Health & Safety are not always complied with for the peasants employed by the farms (2.2). Most of the peasants working in rural areas do not know their rights and thus work under conditions that may pose a high risk to their health.

For all source types, there is a risk that:

- The ILO Fundamental Conventions are upheld (2.3). Businesses in China may not uphold the ILO conventions because China has ratified only four ILO conventions and has not always successfully implemented these conventions.

Regarding **Environmental issues,** for farm collectives and state owned farms, there is a risk of:

- farms causing significant water pollution because of heavy use of fertilizers and pesticides and/or mishandling of agro-chemicals (3.1).
- soil erosion and loss of soil productivity especially in the black soil region in China because of sandification despite the efforts to reduce it, thereby jeopardising HCV 4, critical ecosystem services (3.3).

This matrix summarises the findings of the CSR risk assessment set out in this report.

Legal Category	Sub-category		Risk conclusion		
			Farm collectives	State-owned farms	Certified organic farms
Business Issues	1.1. Land tenure		Specified	Low	Low
	1.2. Plantation registration & management rights		Specified	Low	Low
	1.3. Payment of royalties & required fees		N/A	N/A	N/A
	1.4. Value Added taxes & other sales taxes		N/A	N/A	N/A
	1.5. Income and profit taxes		N/A	N/A	N/A
	1.6. Disclosure of Information		N/A	N/A	N/A
Social issues	2.1. Legal employment		Low	Low	Low
	2.2. Health and safety		Specified	Low	Low
	2.3. ILO Fundamental Conventions are upheld		Specified	Specified	Specified
	2.4. IP and TP rights are upheld.		Low	Low	Low
Environmental issues	3.1. Environment		Specified	Specified	Low
	3.2. Protected sites and species		Low	Low	Low
	3.3. HCV	3.3.1 Species diversity.	Low	Low	Low
		3.3.2 Landscape-level ecosystems & mosaics.	Low	Low	Low
		3.3.3 Ecosystems and habitats	Low	Low	Low
		3.3.4 Critical ecosystem services.	Specified	Specified	Low
		3.3.5 Community needs	Low	Low	Low

	3.3.6 Cultural values.	Low	Low	Low
Conversion	4.1. New plantations since November 2005 have not replaced natural forest or ecosystems.	Low	Low	Low
	4.2 Fire avoidance is being practised	Low	Low	Low
GMOs	5.1. No GMO's	Low	Low	Low

C. Overview of the soy sector in China

China is the world's fourth-largest producer of soybeans. The total area of soybean growth and production reached 6.59 million hectares (ha) in 2015/2016, 210 thousand ha more than 2014/2015, respectively, based on data from Information Centre of Ministry of Agriculture. As a consequence, fluctuations in soybean growth area and production in China have a large impact on the world supply and price of edible oil and soybeans. Although soybeans are extensively cultivated across China, approximately 50% of the total area of soybean cultivation in China is located in the northeast part because of its high productivity (see Figure 1 below for China's main soybean growing regions).

China's primary soybean-producing region is Heilongjiang province, in the far North-eastern part of the country. The soybean produced in Heilongjiang currently accounts for 40% of the country's entire crop production. The soy growing season starts from March to May in Spring each year for all China crop areas and is harvested from August to October autumn season in the North of China but one to two months earlier in Southern part of China. The most typical area is Northeast China for cropping soybean typically with topography characterized by plains, mountains and hills.

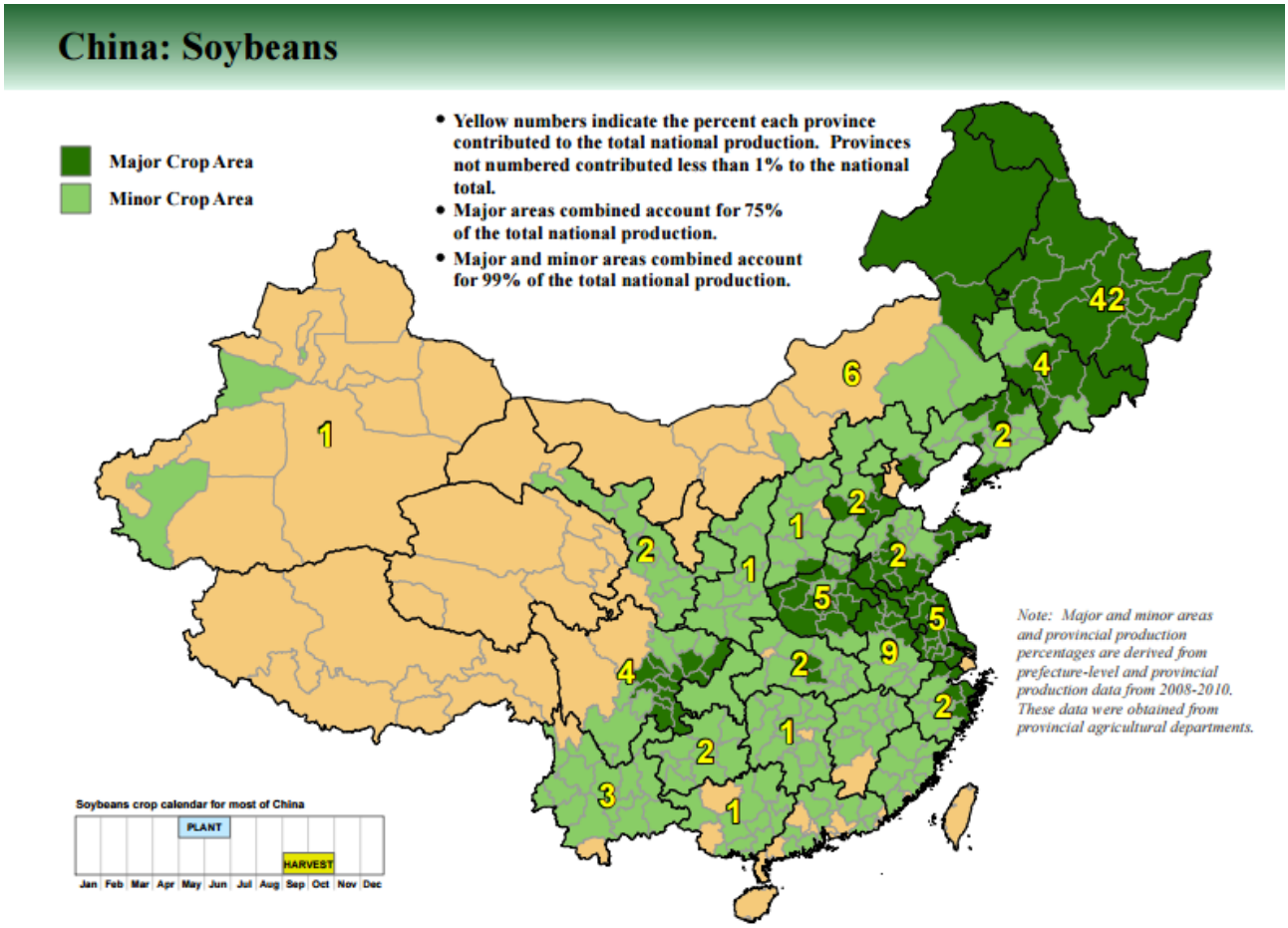


Figure 1: China's main soybean growing regions.

According to figure 2, extracted from the study in 2013 for spatializing Growth Suitability for Spring Soybean Cultivation in Northeast China, of the total area under soybean cultivation in northeast China are classified, respectively, as suitable, moderately suitable, and unsuitable

for spring soybean cultivation, equivalent to 62.21%, 28.41%, and 9.38% for Liaoning, 73.31%, 16.53%, and 10.16% for Jilin, and 15.39%, 51.70%, and 32.91% for Heilongjiang. Relative to Jilin and Liaoning, the prospects for spring soybean cultivation in Heilongjiang are found to be significantly less suitable. The findings of this study suggest that the pattern of cultivation for spring soybeans in Heilongjiang is unreasonable and that the Songnen Plain in northeast China is the most suitable for spring soybean growth while the Sanjiang Plain is the least suitable. As a whole, Northeast China is still the main soybean production area in China.

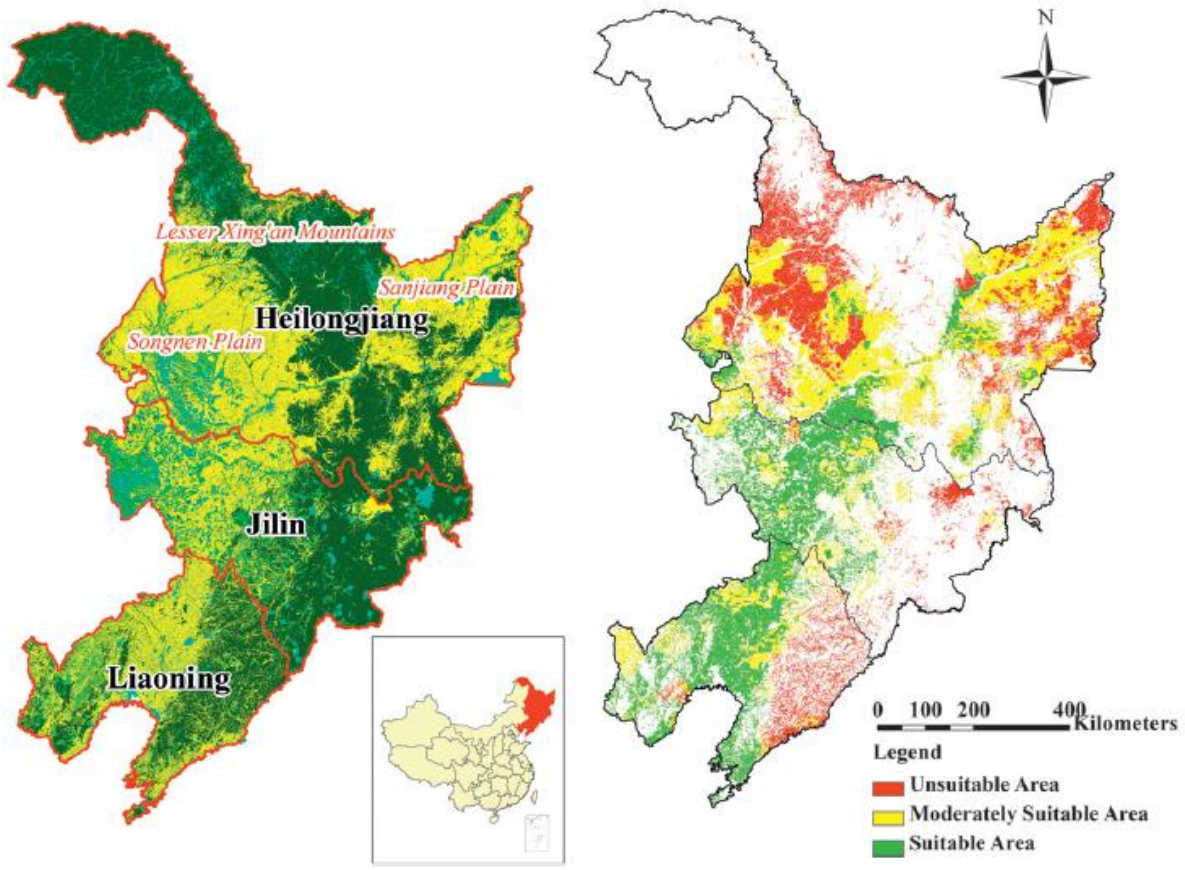


Figure 2: Suitability map for cultivating spring soybeans (extracted from the study 'Growth Suitability for Spring Soybean Cultivation in Northeast China' 2013)

China's history of traditional and ecological farming practices stretches back at least 4,000 years. For most of this time, there was no use of chemical fertilisers or pesticides. Traditional practices included legume crops for nitrogen fixation, crop rotations and intercropping, terracing and the use of diverse crop varieties. Human, animal and crop wastes were systematically recycled to maintain soil fertility. Due to China's long traditional farming history there were more than 6,000 varieties of soybeans that Chinese farmers have developed over thousands of years which account for 90 percent of all soybean varieties in the world. Today, only a few varieties make up the core of the soybean industry in China. To protect the natural agricultural crop varieties, it is forbidden by law to use GM soy in China. Thus China's soybean crop consists entirely of non-genetically modified soybeans, in stark contrast to soybeans from North and South America which are mostly of the genetically modified variety.

At present the Chinese agricultural sector faces major environmental challenges. Applications of fertilisers and pesticides are among the highest in the world. Soil erosion, soil pollution and

loss of agricultural biodiversity are widespread. Water scarcity affects many parts of the country, as shown by plummeting water tables in northern China. Overuse of fertilisers and pesticides is causing pollution and food safety problems. Furthermore, Chinese agriculture has now become reliant on utilising these chemicals. There is a small segment of the soy production that is organic which is driven mainly by the demand from external markets. However, due to high costs and lower outputs linked to the production of organic soybeans it remains a very small proportion of China's overall soybean production.

Although China produces a lot of soya, its rapidly growing economy has spurred food consumption, turning the country into the world's leading soybean importer. According to IGCs (International Grain Council) forecast, China will import 81 million tonnes of soybean in 2015/16 and have a crop output of about 11 million in 2015/16.

Soy Farm Governance

China has a complete land use planning system at all levels of government – national, provincial, prefectural, county and township. National, provincial, and general planning at city level can be regarded as strategic planning, since its main objective is to formulate general planning targets for the next level and to provide a basis for annual land use planning. The township-level planning, which sits at the bottom of the system, has the responsibility for implementing planning regulations and requirements set by higher levels of government. Land use planning is the foundation for designating land use, approving agricultural land and land requisition, making and reviewing farmland allocations and reclamation projects.

Land in rural and suburban areas is mainly owned by collectives, except for those areas designated by law to the state. Under the system of collective ownership, farmers have the right to lease and manage the land for a limited term. Since the establishment of the People's Republic in 1949, there have been numerous land reforms, but one element does not change – farmers do not possess ownership of the land.

There is a small percentage of soy production that is managed by state-owned farms which tend to be larger operations than the individual farm collectives.

The Corruption Perception Index (CPI) in China for 2015 was 40 (on a scale from 0 to 100 where 100 is lowest level of corruption) and ranked 79 out of 176 countries. This means there is high perception that China is a corrupt country.
(https://www.transparency.org/country/#CHN)

Organic Soy Certification

Organic soy in China is either produced by large state-owned farms or private commercial entities that rent land from farm collectives for soy production. To be officially considered organic, soy producers and/or manufacturers, retailers etc. must adhere to the *Administrative Measures for Organic Product Certification* overseen by the State General Administration of Quality Supervision, Inspection and Quarantine department. The aspects covered by these measures include organic production, processing and trade, regulating the organic product certification activities, enhancing the quality and management level of organic products and protecting the ecological environment which have been formulated in accordance with the Regulation of the People's Republic of China on Certification and Accreditation and with the provisions of other relevant laws and administrative regulations.

The Certification and Accreditation Administration of the People's Republic of China (hereinafter referred to as the CNCA) is the body responsible for undertaking unified management, overall

coordination and supervision over the certification and accreditation activities. At the time of writing this report national organic certification in China is carried out by 23 independent certification bodies (see Annex 1 for the list of accredited certification bodies) which have been registered with the CNCA and by the national accreditation body CNAS (China National Accreditation Service for Conformity Assessment (www.cnas.org.cn).

When an organic soy producer or processor is verified through regular audits by the certification bodies and found to be compliant with the CNCA requirements they are issued an organic product certification certificate. There are two types of certificates and organic product labels that can be issued for use by certification bodies:

1) Organic for raw organic goods; and
2) Conversion to Organic for products made from the conversion of organic raw materials.

See Annex 2 for more details on the logo use for certified organic products including soy in China.

It is important to note that there have been many counterfeit cases where fraudulent organic government labels are even being sold in black markets according to China's news (SanXiang 2016). According to an investigation on the certification of organic products conducted by CNCA in 2014, the rate of fraudulent certification up to 5.8%, among which, 50% of the certificates had expired; 14.3% of it had forged organic labels; 28.6% had the organic required code missing and 7.1% did not use the certification mark. CNCA has worked with local government to have a more strict supervision system in place and there are over 180 test technologies which can verify the authenticity of the certified organic products.

Buyers of China CNCA's Organic Product Certification should ensure the certificate and product label is valid and active (see more details in Annex 2). One can check and verify the certification information and organic product code through http://food.cnca.cn (please note the site is in Chinese only).

Information sources:

- Administrative Measures for Organic Product Certification published by the State General Administration of Quality Supervision, Inspection and Quarantine department. Promulgation and effective date respectively: 11-05-2004 and 04-01-2005. Link to certification requirements (in English): faolex.fao.org/docs/texts/chn53717.doc
- 21.06.2016 SanXiang (Changsha) http://news.163.com/16/0621/07/BQ2O2HP100014Q4P.html

Good Agricultural Practice (GAP) Certification

GAP is a national voluntary certification for safety control of primary agricultural product. The basic principles of GAP are food safety, environment protection, agriculture sustainable development, animal welfare and employees' health and safety. China's GAP certification is based on GLOBALGAP which is a private sector body that sets voluntary certification standards and procedures for good agricultural practices to be adopted by producers. It was originally created by a group of European supermarket chains aiming to increase consumers' confidence in food safety by developing good agricultural practices.

GLOBALGAP is a prefarmgate standard, which means that the certificate covers the process of the certified product from before the seed is planted until it leaves the farm. The GLOBALGAP

standard requires that producers establish a complete control and monitoring system. Products are registered and can be traced back to the specific farm unit where they were grown. GLOBALGAP rules are relatively flexible about field practices such as soil fumigation and fertilizer usage. There are strict regulations about pesticide storage and pesticide residue limits. In addition, it is important to record and justify how the product was produced, so detailed records must be kept about farm practices (FAO 2007).

On February 24, 2009, a Memorandum of Understanding of Certification and Accreditation Administration of the People's Republic of China (CNCA) and the GLOBALGAP on Comparison of Good Agricultural Practices Certification System was signed. This MoU marks that CNCA recognizes that the GAP certificates issued in China, which are governed by CNCA, will be recognized by GLOBALGAP, and the information of enterprises with GAP certificates will be available to main global retailers via the website of GLOBALGAP. The adherence to the GAP criteria by farmers in China and chain-of-custody actor results in a certificate called ChinaGAP-GLOBALGAP (Good Agriculture Practice) certificate.

To date, it is mainly the large state-owned farms or large private farming companies that have or are developing global agricultural markets that have a ChinaGAP certificate; as it is too cost prohibitive for the farm collectives.

Information sources:

- A Practical Manual for Producers and Exporters from Asia RAP Publication 2007/13 REGULATIONS, STANDARDS AND CERTIFICATION FOR AGRICULTURAL EXPORTS. http://www.fao.org/docrep/010/ag130e/AG130E12.htm
- China Good Agricultural Practices (GAP) Certification Gains Worldwide Recognition. China Certification and Inspection Group. Date: 03-09-2009. http://www.ccic.com/web/static/articles/catalog_2c94ec8a295e418401295e46607d0002/2010-09-27/article_ff8080812a89c0a5012b2da5fa8101b9/ff8080812a89c0a5012b2da5fa8101b9.html

Where relevant, they have been specifically referenced under “sources of Information” for each applicable sub-category

D. CSR Risk Assessment

BUSINESS ISSUES

1.1. Land Tenure

Legislation covering land tenure rights that includes the use of legal methods to obtain tenure rights. Risk may be encountered where land rights have not been issued according to prevailing regulations and where corruption has been involved in the process of issuing land tenure rights. The intent of this indicator is to ensure that any land tenure rights have been issued according to the legislation.

1.1.1. Applicable laws and regulations

- Property Law of the People's Republic of China Article 7/20/27/39/117/120/125/128/135/137/43/146//148/149/152/153/156/170 – It describes that ownership rights, right to land contractual management, right to use of construction land, residential housing land, etc. and also the registration of land-use rights, Rural property expropriation procedure, etc. - link
- Law of the People's Republic of China on Land Contract in Rural Areas. In accordance with the Constitution, this Law is enacted for the purposes of stabilizing and improving the two-tier management system that combines centralized and decentralized management on the basis of household contractual management, granting to the peasants long-term and guaranteed land-use right, safeguarding the legitimate rights and interests of the parties to land contracts in rural areas, and promoting the development of agriculture and rural economy and social stability in the countryside. - link
- Land Administration Law of the People's Republic of China- This Law is enacted in accordance with the Constitution for the purpose of strengthening land administration, maintaining the socialist public ownership of land, protecting and developing land resources, making rational use of land, effectively protecting cultivated land and promoting sustainable development of the society and the economy. - link
- Rural Work Document No. 11- It states "the term for contracting land may be extended" for another 30 years upon the expiration of the 15-year rights mandated by 1984 Rural Work Document No. 1. - link
- Implementing Regulations for the Law of the People's Republic of China on Land Administration - link
- Provisional Regulations of the People's Republic of China Regarding the Grant and Assignment of State-Owned Land Use Rights in Urban Areas - link
- Provisional Measures for the Administration of Foreign Investment for the Development and Operations of Tract Land - link
- Notice of the State Council Concerning the Limits to Approval Authority for the Grant of State-Owned Land-Use Rights - link
- Provisional Regulations of the People's Republic of China for Land Value-added Tax - link
- Provisional Regulations for the Administration of Allocated Land-Use Rights During State-Owned Enterprise Reform - link

1.1.2. Legal authority

- National People's Congress of the People's Republic of China
- Land Administration Department of the People's government

- Chinese Communist Party Central Committee and the State Council

1.1.3. Legally required documents or records

- State-Owned Land-Use Rights Certificate
- Grant Contract for State-Owned Land-Use Rights (Supplementary Grant Contract for Allocated Land-Use Rights)
- Grant Contract for State-Owned Land-Use Rights (Grant Contract for a Parcel of Land)

1.1.4. Sources of information

Governmental

- http://www.npc.gov.cn/englishnpc/Law/2009-02/20/content_1471118.htm

Non-Governmental

- Ho, Peter (21 July 2005). Institutions in Transition: Land Ownership, Property Rights, and Social Conflict in China: Land Ownership, Property Rights, and Social Conflict in China. Oxford: OUP. ISBN 978-0-19-928069-8. Retrieved 26 October 2015.
- Rural land tenure reforms in China: issues, regulations and prospects for additional reform - J.D. Ping Li-Staff Attorney and Beijing Representative for the Rural Development Institute (RDI) http://www.fao.org/docrep/006/y5026e/y5026e06.htm
- Property Law of the People's Republic of China http://www.npc.gov.cn/englishnpc/Law/2009-02/20/content_1471118.htm
- http://www.asianscientist.com/2013/12/features/john-donaldson-forrest-zhang-smu-china-two-tier-land-tenure-system-2013/
- Rural land tenure reforms in China: issues, regulations and prospects for additional reform - J.D. Ping Li http://www.fao.org/docrep/006/y5026e/y5026e06.htm

1.1.5. Risk determination

Overview of Legal Requirements

China has experienced several land reforms in terms of different historical stages after the founding of the People's Republic of China (PRC) in 1949. Regarding rural land, these changes began with the establishment of the Higher Agricultural Production Cooperatives in 1956. Thereafter rural private land ownership was effectively abolished through Land Reform, which left land in the hands of the state or the collective.

A fundamental legal source of the regime of property and property rights in the PRC lay in the Constitution of PRC enacted in 1982. The 1982 constitution provided for the "socialist public ownership" for the means of production, which takes two forms - state ownership and collective ownership. The collective ownership of land and allocation of specific parcels to individual households have been essentially universal throughout China since 1983. The Central government or Communist Party policy supported 15-year use terms for farm households in 1984, and an extension of 30-year rights in 1993. After more than 3 years of drafting and deliberation, the Standing Committee of China's National People's Congress adopted the Rural Land Contracting Law (RLCL) on 29 August 2002 - the first modern Chinese law to deal exclusively with the issue of rural land tenure. The effective date of the law was 1 March 2003 since the passing of Household Responsibility System (see 1.1.4 for more details). This landmark law represents the most important legal breakthrough for securing 30-year land rights for China's 210 million farm households since the passing of Household Responsibility System (see 1.1.4 for more details).

China retains a two-tier land tenure system of collective ownership coupled with household

use. The Household Responsibility System (HRS), widely credited for reducing rural poverty by increasing farmers' incomes and productivity, was implemented in the early 1980s. Under China's unique land ownership system, all farmlands are collectively owned by rural villages and a farmer can only avail of the right to rent the land by virtue of his membership in the village. This mechanism was created, with a feature of separation of use rights to land from ownership of land in which the collective entity would continue to hold ownership but use rights to land would be allocated to members of the collective for individual farming.

China's Constitution stipulates that land in rural and suburban areas, except by a law other than those belonging to the state are collectively owned. That is to say, in China there is no private ownership of land, only state ownership and collective ownership exist. After the Third Plenum of the Eleventh CPC Central Committee, a series of policy documents on this system confirmed, refined, consolidated and improved. The first law that governs farmers' individual land rights is the revised Land Administration Law, adopted in 1998. The law legally ratifies the policy provisions on granting to farmers 30-year rights and states that such 30-year land rights are "protected by law". The Rural Land Contracting Law carries this spirit further. Under the RLCL, farmers' land rights are categorized as "contracting and operation rights" to all categories of farmland, including arable land, forestland, grassland and wasteland. The Property Law further strengthened the legal contract system of agricultural land. Under the Rural Land Contract Law (RLCL), farmers' land rights include "rights to use, profit from, and transfer land contracting and operation rights, and the right of autonomy over production and operations, and disposition of products" and "the right to receive the corresponding compensation" for the land taken by the state or collective for non-agricultural purposes.

China has over the last decade taken decisive legislative steps in attempting to curtail land readjustments. The first law containing provisions on land readjustment is the Land Administration Law (LAL). It prohibits village wide big readjustments while allowing small readjustments. RLCL introduced additional important restrictions on land readjustments. It establishes a basic principle of no readjustment within the 30-year contract period and allows limited readjustments only under "special circumstances." The benefits of documentation and registration of collective ownership appear to have been recognized by the Chinese legislature. The LAL provides that the collective land owner may apply for registering its ownership with people's government at county level for affirmation of its ownership.

Description of risk

There is a risk of unclear and unfair management and administration of land use allocation and land use rights. This is due to:

- missing regulations about the duration of the agricultural land use rights for the farmers,
- frequent land readjustments in response to changes in households,
- no uniform land contract and certificate existing; and
- no specific rules for the farmers to be compensated when land is taken from them.

Farm collectives:

Despite of strengthening the land tenure security through the years of land reforms and policies and regulation announcement, some key issues remain. Foremost among these are:

1. frequent land readjustments in response to changes in size of households. The nation-wide land re-measurement is held every ten years and it might be more frequent for household when the number of household population is changed or needs to be adjusted;
2. administrative re-contracting of previously household contracted land to non-villagers

with little or no compensation to affected households;

3. the lack of effective mechanisms for dispute resolution; this rarely takes place;
4. compulsory taking of land for undefined "public use" with inadequate compensation - it is for any specific case when the land is determined for public use by the government -; and
5. ineffective protection of women's land rights.

Also, given the current economic development, China's rural land system reform still faces challenges and prospects. First, concerning the nature of collective ownership. The law does not answer the fundamental question of who should actually control the land within a geographic area. In addition, ambiguities exist even as to the specific entity responsible for collective ownership of land. Collectively owned land should be clearly defined as jointly owned by all members of the collective. Collective land ownership should be established at the villager group, the level closest to and probably most responsive to farmers.

Second, the duration of agricultural land use rights was not sufficiently clear, the farmers should be given the integrity of the land of permanent property. Based on Property Law, when the 30-year contract period after the expiry of the right to land contractual management can continue to contract in accordance with relevant state regulations. But the country has not yet introduced how to continue the contracting policy in the future. It should be clearly announced as soon as possible of the land contracted by farmers the right to permanent use. Meanwhile, farmers land tenure, use rights and disposal of the power and functions still need to be improved and perfected in order to overcome the current shortcomings of the farmers' land ownership.

Third, land readjustment has remained a serious threat to farmers' tenure security despite the repeated efforts by the central government to tighten up controls. Its continuing existence is facilitated by legal ambiguities. Two options exist. One is to spell out in clear and narrowly-drawn detail the conditions under which "special circumstances" could be asserted as grounds for a readjustment. A second option, and the clearest, strongest, and most readily communicable and monitorable approach would be to a complete prohibition of all readjustment of farmers' contracted land, without exception.

Lastly, a uniform land contract and certificate have not been uniformly designed. Currently, land contract and land certificates are designed by each province or even at the county level, - or indeed, sometimes even at the township level - resulting in a wide variety of deviations from the law that reduce or nullify the legal force of such documents.

State-owned farms:

As state-owned farms are owned, managed and administered by the state they are obliged to, and based on observation, in practice do comply with the laws or regulations related to the land tenure/ownership.

Risk conclusion

By analysing these challenges, elevated risk is still considered and evaluated for China's land tenure system for farm collectives, because land use allocation and land use right are not completely fairly and clearly managed and administered and there are no specific rules to compensate the farmers when the farmland is taken from the local government for public use.

1.1.6. Risk designation and specification

Elevated risk – Farm collectives

Low risk – State-owned farms and organic farms with China Organic Product Certification (see Annex 1 and 2

1.1.7. Control measures and verifiers

- Confirm land contracts [State-Owned Land-Use Rights (Supplementary Grant Contract for Allocated Land-Use Rights) & Grant Contract for State-Owned Land-Use Rights (Grant Contract for a Parcel of Land)] are registered at the relevant authority: either the province, county/municipal or township level.

And

- The provincial or municipal (county or township) government has issued Land-Use Rights Certificate.

1.2. Plantation registration and management rights

Legislation covering land management rights including customary rights and any legal requirements for management planning. It also covers legal business registration and tax registration, including relevant legal required licenses. Risk may be encountered where land rights have not been issued according to prevailing regulations and where corruption has been involved in the process of issuing land tenure and management rights. The intent of this indicator is to ensure that any land management rights have been issued according to the legislation. Low quality of the management plan resulting in illegal activities may be a risk factor for this indicator as well.

1.2.1. Applicable laws and regulations

- The Land Management Law (1986)
- Property Law of the People’s Republic of China
- Agriculture Law of the People's Republic of China

1.2.2. Legal authority

- The state council represents the central government and authorizes the Ministry of Land and Resources is the legal authority for the farmland registration and management in China.
- The County Government or Township Government
- Use rights of state-owned land shall be registered by local governments above the county level such as provincial or municipal directly under the central government.

1.2.3. Legally required documents or records

The Land Management Law states: farmer collective owned land shall be registered by the county government and be issued certificates to confirm the ownership. Use rights of state-owned land shall be registered by local people's governments above the county level (such as provincial or municipal) and be issued certificates to confirm the use rights". Land Management Law Implementation Regulations states: "State implement land registration system according to law".

After the land is registered, the Land administrative department who act as land registration agency will issue land certificate to applicant in accordance with the registration result on behalf of the government. Currently there are four types of land rights certificates:

- Certificate for use right of state-owned land
- Certificate for ownership of farmers collective owned land
- Certificate for use right of farmers collective owned land
- Certificate for other land rights

1.2.4. Sources of information

Government sources

- Property Law of the People's Republic of China http://www.npc.gov.cn/englishnpc/Law/2009-02/20/content_1471118.htm
- Land Registration Measures http://landwise.resourceequity.org/record/268
- China's Land Registration Situation, Challenges and Efforts - Cadaster Division in China Land Surveying and Planning Institute 2014 http://www.fig.net/resources/proceedings/fig_proceedings/fig2014/papers/TS06C/TS06C_huanle_7227.pdf
- Ministry of Land and Resources (2012), China Land and Resources Gazette 2012. http://www.fig.net/resources/proceedings/fig_proceedings/fig2014/papers/TS06C/TS06C_huanle_7227.pdf

1.2.5. Risk determination

Overview of Legal Requirements

The Land Management Law was promulgated in 1986. In 1989, the Bureau of Land Management (MLR predecessor) introduced "Land Registration Rules", stipulating land registration procedures and requirements after the "Property Law" was enacted in 2007. Currently, China's land registration system is primarily stipulated by the Property Law and the Land Registration Measures.

Though the "Property Law" enacted in 2007 had already proposed "national unified registration system for real estate", there has been little progress in the way of implementation. Until early 2013, in the "institutional reform of the State Council and the functional transformation plan", the State Council pledged to "reduce overlapping responsibilities of departments, to maximize integration of the same or similar functions which were dispersed in different departments of the State Council. The duties of housing registration, woodlands registration, prairie registration and land registration should be integrated in one department." In December 2013, the State Council clearly stipulated that Ministry of Land and Resources should be responsible for the guidance and supervision of real estate registration, including houses, grasslands, woodlands, waters, etc. Therefore, currently unified land registration system is still in the early stage of implementation.

At the level of central government, the Department in the Ministry of Land and Resources will establish another institution, Bureau of Real Estate Registration, which will have the function of guiding and supervising unified land registration. At the level of local government, there is also a need to integrate the registration agency, particularly at the level of county or municipal government for they are the concrete agencies to register accordance to the principle of territoriality registration.

The basic procedure of land registration is divided into four steps: application for land registration, land tenure censorship, registration and issuance of certificates. Different types of land registration may have small difference in procedure. The Land Registration Measures states that the "land registration shall be based on the application for land registration, except situations stipulated by laws and regulations". To apply land registration, the applicant (in practice the collective representative applies for and administers the land right certificate on behalf of the farmers in the collective) has to submit proof of personal identity, proof of land rights, cadastral survey data and other materials in accordance with regulations. After the application is accepted, the land registration agency has the responsibility to censor the documents submitted by applicants to make sure whether the registration application should be admitted. The local government (municipality or provincial) will then make a decision to approve the land registration. After land registration is approved, its details are registered.

Upon registration, the land rights are legally effective.

Additionally, according to "Land Registration Measures" under the Property Law, the type of land registration include total land registration, initial registration, change of registration, cancellation of registration and other registration. Total land registration means making efforts to register land as much as possible within a certain time in a specific area. Initial land registration refers to the first registration of one parcel of land except the cases in total land registration. Change of registration refers to the registration when some information is changed, such as transfer of land or changes of owner's name. Cancellation of registration is carried out when the land right ended. Other registration refers to the registration other than above registration types, including correction of registration, registration of objection, registration of notice and registration of warrant of seizure.

Description of risk

There is a business risk associated with farm collectives and its management due to incomplete, scattered or inconsistent land registration in rural areas, mainly due to the dispersal of land registration with so many administrative departments and the exodus of farmers into urban areas.

China's land administrative system is dispersed between several departments and has different land registration procedures (He, 2013). Ownership of farmer collectives owned land, use rights for construction, use rights for villager's housing, land mortgage, easements etc. are registered by the land administrative department. Rural land contracted management rights, prairie ownership, use rights of water and coastal mud flat for breeding aquatics are registered by the agriculture administrative department. Ownership and use rights of forestry and woodlands were registered by the forestry administrative department etc.

The dispersed land registration results in a lot of issues. Land registration has been scattered in different administrative departments and the recorded information is often not shared between the departments. Additionally, land registered by different departments according to different criteria is inevitably causing land registration conflict and/or inconsistencies. For instance, one parcel of land registered by the forestry administrative department may overlap with another parcel of land registered by the agriculture administrative department. Overall, this is not conducive to protecting land rights and to securing land transactions.

In urban area, almost all land has been registered (but not all documentation is digital yet). While in vast rural areas, some land has not been registered yet. This is linked to the fact that millions of farmers have left their rural lands and moved into urban areas. This led to many rural lands being abandoned and the land registration was discontinued. Furthermore, even for the registered lands there is a widespread problem of this rural land registration being outdated and/or incomplete because they are not being kept up to date.

State-owned farms: As state-owned farms are owned, managed and administered by the state they are obliged to, and based on observation, in practice do comply with the laws or regulations related to the land tenure/ownership.

Risk conclusion

Land registration in rural areas has been either incomplete, scattered or inconsistent mainly due to the dispersal of land registration with so many administrative departments and the exodus of farmers into urban areas thus this indicator is evaluated as elevated risk.

1.2.6. Risk designation and specification

Elevated risk – Farm collectives

Low risk – State-owned farms and organic farms with China Organic Product Certification (see Annex 1 and 2)

1.2.7. Control measures and verifiers

Seek evidence from the relevant competent authority that the farm collective has:

- Certificate for ownership of farmers collective owned land
- Certificate for use right of farmers collective owned land
- Certificate for other land rights

1.3. Payment of royalties and required fees

Legislation covering payment of all legally required commodity fees such as royalties and other volume based fees. It also includes payments of the fees based on correct classification of quantities, qualities and species. Incorrect classification of products is a well-known issue often combined with bribery of officials in charge of controlling the classification.

1.3.1. Applicable laws and regulations

All agricultural-related taxes of the central government were completely eliminated in 2006.

1.3.2. Legal authority

State Administration of Taxation is the legal authority for tax levy and central administration and local administration of tax shares the tax revenue.

1.3.3. Legally required documents or records

Tax paid proof-a receipt is received from tax bureau after the types of tax is paid.

1.3.4. Sources of information

- https://www.wsws.org/en/articles/2006/01/chin-j17.html - Beijing abolishes centuries-old agricultural tax By John Chan 17 January 2006
- http://www.encyclopedia.com/article-1G2-3291200020/farm-land-occupation-tax.html Farm Land Occupation Tax-Taxation in China 2006
- http://uk.reuters.com/article/uk-china-economy-farming-idUKKCN0JH11P20141203 China bolsters support for farm sector with tax breaks
- https://www.sciencedirect.com/ - Rural taxation and government regulation in China
- Journal of the Asia Pacific Economy Vol. 10, No. 4, 486–505, November 2005-Urban and Rural Household Taxation in China. Measurement, Comparison and Policy Implications
- http://www.extension.iastate.edu/agdm/ - 2015 farm income tax – tale of two tails

1.3.5. Risk determination

Overview of legal requirements

In the late 1990s, the government of the People's Republic of China (PRC) enacted a rural tax reform known as the 'Tax-for-Fee Reform' (TFR), as a response to rural farmers' bitter complaints about what they saw as a heavy fiscal burden. The reform was intended largely to reduce the fiscal burden on farmers (as well as to improve local governance). All agricultural-related taxes of the central government were completely eliminated in 2006. Therefore, China has free agriculture tax for the farmers.

Description of risk

On January 1, 2006, the Chinese government officially abolished its agricultural land tax, which was levied on each peasant family according to their land and was the main source of

government revenue during the centuries of imperial rule. Chinese farmers including all soy farm types do not pay any kinds of royalties, required fees and income tax on the soy production and responding tax. After the abolishment of agricultural tax, no specific taxes are levied to Chinese farmers.

Besides any relevant formal taxes, the Chinese farmers also needed to pay various fees to local governments and village community organizations. They are township-pooling funds for education, public security, law and order, civil service and family planning; village levies such as collective accumulation fees, collective welfare fees, and administration fees; fees covering labour service for flood prevention, maintaining and expanding irrigation systems, road and school construction, water conservation and reforestation projects, as well as various local fundraising without explicit government legislation. Such fundraising could be anywhere between a few dozen and more than one hundred items, ranging from charges for road and school construction and other local improvement projects, to purchase of insurance, to charges for marriage certificates or housing construction, to prohibitive prices for electricity and tap water, and so on.

Given there are no relevant agricultural taxes on Chinese farmers, i.e., any soy farm types, and in general farmers consistently pay local government fees this indicator has been deemed not applicable.

1.3.6. Risk designation and specification

Not applicable

1.3.7. Control measures and verifiers

N/A

1.4. Value added taxes and other sales taxes.

Legislation covering different types of sales taxes which apply to the material being sold. Risk relates to situations where products are sold without legal sales documents or far below market price resulting in illegal avoidance of taxes.

1.4.1. Applicable laws and regulations

Value Added Tax Law of the People's Republic of China - link

Note: all soy farm types are excluded from paying VAT.

1.4.2. Legal authority

State Administration of Taxation is the legal authority for tax levy and central administration and local administration of tax shares the tax revenue.

1.4.3. Legally required documents or records

VAT invoice (FAPIAO) when the purchasing activities are done.

1.4.4. Sources of information

- http://www.chinatax.gov.cn/ - State Administration of Taxation
- http://wenku.baidu.com/link?url=d0P62g9xBvWidKMoqOEG-uwss13L2dRC9jrMDVsgPvGeH5CvEmwT_W2ZJSK0jBila6LU34pIovDCN3fG7cUP0oegFCpm0ytOGaoHeh30c8y
- The Provisional Regulations of the People's Republic of China on Value Added Tax http://www.ifrc.org/Docs/idrl/900EN.pdf

1.4.5. Risk determination

Overview of legal requirements

The VAT is levied on all goods and a small portion of services (mainly product processing, repairing, packing and importing services) with a uniform rate of 17%, except for five categories of goods (such as grain and edible oil, books and newspapers, tap water and heating, feeds and agricultural chemicals and other goods as stipulated by the State Council with a VAT rate at 13%). However, when farmers sell goods like agricultural commodities such as soybean, the farmers, i.e., all soy farm types, are excluded from VAT levies.

Chinese farmers, all soy farm types, enjoy main direct and indirect tax exemptions for producing and selling their own agricultural products. VAT taxes are realized when household farmers only pay for the goods and services in markets and are exempted when farmers sell the products that they produce themselves.

Risk conclusion

This indicator has been deemed not applicable because all soy farm types are excluded from paying VAT.

1.4.6. Risk designation and specification

Not applicable

1.4.7. Control measures and verifiers

N/A

1.5. Income and profit taxes

Legislation covering different types of sales taxes which apply to the material being sold. Risk relates to situations where products are sold without legal sales documents or far below market price resulting in illegal avoidance of taxes.

1.5.1. Applicable laws and regulations

- Law of the PRC on Enterprise Income Tax - link
- Individual Income Tax Law of the People's Republic of China - link
- Agriculture Law of the People's Republic of China - link
- Administrative Regulation on the Registration of Farmers' Professional Cooperatives - link
- Law of the PRC on Enterprise Income Tax

NOTE: All soy farm types enjoy a corporate income tax exemption preferential as long as they are engaged in soybean crop and production.

1.5.2. Legal authority

State Administration of Taxation is the legal authority for tax levy and central administration and local administration of tax shares the tax revenue.

1.5.3. Legally required documents or records

Tax paid proof-a receipt is received from the local (municipal or provincial) tax bureau after the types of tax is paid.

1.5.4. Sources of information

- Law of the PRC on Enterprise Income Tax - http://wenku.baidu.com/link?url=QtzP2xEZzALUB2IjJIKknbRDD-Bwvc5sex-5qPT3i0TfksGn4dFcQVHX_oKLto4TtE72DVC3TU8cNlS1TnuDdxRX4dc3w6EBtu7pfYTDTi7
- Individual Income Tax Law of the PRC 2011 - http://wenku.baidu.com/link?url=C1ukqCMZdJ8zsxCP4CkGWgmV8jZPlL1wOhUSW24arf2S4L3MQ3_35HRtUCK9EnKPibNXkOuqUf9AkyBK-qmeIaXJzh5OL5H_7t6oATW2piK

1.5.6. Risk designation and specification

Overview of legal requirements

The income tax rate in China is currently 25%. According to Article 86 of Enterprise Income Tax Law: The companies who engage on agriculture, forestry, animal-breeding, fishery, enjoy tax exemption or reduction on income tax.

The following categories of agricultural sectors are tax exempt from paying income tax:

- Plants of Vegetables, grains, tubers, oil plants, beans (including soybean), cotton, fruits, nut,
- New agricultural species
- Plants of Chinese medicinal materials;
- Livestock
- Wood

According to PRC Individual Income Tax Law and CAISHUI No.30 (2004) enacted by State Administration of Taxation PRC, Individual farmers have personal income tax exempted in cases when farmers sell their own produced products.

In general, according to the law, either the agricultural cooperative, state-owned farm or organic certified farm is regarded as a corporate organization to be levied income tax when they are profitable. However, currently the government has granted an income tax preferential such as income tax exemption for agricultural sectors including soybean farmers. Additionally, individual farmers have personal income tax exempted in cases when farmers sell their own produced products.

Risk conclusion

All soy farm types enjoy a corporate income tax exemption preferential as long as they are engaged in soybean crop and production, therefore, this indicator has been deemed not applicable.

1.5.6. Risk conclusion

Not applicable

1.5.7. Control measures and verifiers

N/A

1.6. Disclosure of information

Legislation covering requirements for regular business reporting to ensure information disclosure and transparency. Risk relates to lack of business transparency and/or incorrect disclosure of legally required business information.

1.6.1. Applicable laws and regulations

Not applicable - there are no regulatory requirements in China for disclosure of business

information, except for public companies and there are no publicly listed soy farm companies in China.

1.6.2. Legal authority

N/A

1.6.3. Legally required documents or records

N/A

1.6.4. Sources of information

N/A

1.6.5. Risk determination

Not applicable

1.6.6. Risk designation and specification

N/A

1.6.7. Control measures and verifiers

N/A

SOCIAL ISSUES

2.1. Civil rights - legal employment

Legal requirements for employment of personnel involved in plantation activities including requirement for contracts and working permits, requirements for obligatory insurances, requirements for competence certificates and other training requirements, and payment of social and income taxes withhold by employer. Risk relates to situations/areas where systematic or large scale noncompliance with labour and/or employment laws. The objective is to identify where serious violations of the legal rights of workers take place, such as forced, underage or illegal labour.

2.1.1. Applicable laws and regulations

- Labour Contract Law dated 28th December 2012 - Chapters 3-5, 8-9. Available at - link
- Labour Protection Law of People's Republic of China dated 5th of July 1994 - Article 16, 17, 19, 25, 26 and 28. Available at - link
- Trade Union Law dated 27th of August 2009 - Article 9, 10, 12, 19, 20 and 21. Available at - link
- Women's Rights Protection Law dated 28th of August 2005 - Chapter 4. Available at - link
- Regulation of Labour Security Supervision dated 11th of January 2004. Available at - link
- People's Republic of China Labour Law ---Clause 3, 15,48,100；-Chapter three

  ---Occupational Training—Chapter Eight

  ---Social Security & Welfare---Chapter Nine
- Agriculture Law of the People's Republic of China》----Chapter Nine, Clause 78
- The Provision of the Minimum Salary> enacted on Dec 30, 2003 and effective on March 1st, 2004, approved by China Ministry of Labour and Social Security

2.1.2. Legal authority

- People's Republic of China, Ministry of Agriculture, Human Resources & Social Security Department
- Department of Labour & Administration of the State Council

2.1.3. Legally required documents or records

- Name lists for staff and contractors;
- Salary payment records;
- Employment contracts for permanent and temporary staff

NOTE: Social Security card of each worker provides evidence of social security and other insurances paid.

2.1.4. Sources of information

Government sources

- http://news.newsxc.com/folder696/2014-12-04/200429.html
- http://www.china.org.cn/living_in_china/abc/2009-07/15/content_18140508.htm Chinese Labour Law (English)
- http://www.wipo.int/edocs/lexdocs/laws/en/cn/cn157en.pdf Agriculture Law of the People's

Republic of China

Non-Government sources

- http://www.ilo.org/gateway/faces/home/polareas/empandlab?locale=en&countryCode=CHN&track=STD&policyId=2&_adf.ctrl-state=hbotnajub_107
- Transparency.org. (2014). Corruption by Country/Territory: Corruption Perceptions Index 2014 for China. [online]. Transparency International. Available at: http://www.transparency.org/country/#CHN
- The World Bank. (2014). Worldwide Governance Indicators for China: Country Data Report for China, 1996-2014. [online]. Available at: http://info.worldbank.org/governance/wgi/index.aspx#countryReports

2.1.5. Risk determination

Overview of legal requirements

China has paid significant attention to legal employment issues in recent years, and the revised Labour Law makes detailed provisions relating to many aspects of legal employment, including the following:

- Workers enjoy the right to be equally employed, choose their own occupations, receive payment, enjoy leave, get health and safety protection, receive professional and work-related training, have social security and other welfare, apply for settlement of labour disputes and other labour rights in line with laws and regulations. Those employing workers shall establish and improve the rules and procedures to protect the rights of workers.
- Workers enjoy the right to participate in, or organise, labour unions that can independently carry out activities and represent and safeguard the legal rights of workers. Workers can also participate in the management of an organisation or carry out negotiations with regards the protection of legal rights by participating in employer meetings, employer representative meeting and others.
- The government at various levels has the obligation to promote legal employment by providing employment-related services. Workers' rights to be employed are protected from bias or discrimination based on nationality, ethnicity, gender and religion. Women enjoy equal rights to men and cannot be refused employment because of gender. However, employment of juveniles (under 16 years old) is prohibited.
- Organizations are obliged to sign labour contracts with workers to establish the labour relationship and clarify the rights and obligations of both parties. Contracts include the duration of the work relationship, specific work requirements, issues relating to work protection or conditions, payment, working rules, contract cessation conditions, responsibilities for breach of contract, etc. In addition, employees are empowered to engage in collective bargaining with their employers for issues relating to payment, working hours, leave and rest arrangements, work-related health and safety, insurance and welfare issues; and may sign a collective labour contract. The draft contract shall be discussed and approved in employer representative meetings or by all employers. The collective contract shall be signed by the labour union on behalf of employees and, if no labour union exists, representatives of employees will sign the contract with the organization.
- China requires that workers' daily working hours cannot exceed 8 hours and weekly the working time cannot be greater than 44 hours. Organisations must guarantee that workers have one day of rest per week, and must arrange for leave by workers during legally required holidays. If an employer requests overtime work, the employer must negotiate with the labour union and workers, and the overtime work cannot be more than one hour in principle and no more than three hours in special circumstances. If workers engage in overtime work, organisations shall compensate the overtime by paying no less than 150%

of the normal day payment, or 200% of normal payment if working at weekends (although there is no compensation for rest) or 300% of the normal payment if working on a legally required holiday.

- China implements a minimum pay (minimum wage) system. Minimal pay is defined by provincial governments and documented by the State Council. Organisations shall pay their workers no less than the local minimum pay.
- Organizations should establish work-related training systems for the benefit of workers in light of a training plan developed based on actual needs. Workers engaging in technical work shall be trained before conducting such work.
- China has established and is further developing its social security system to enable workers to receive assistance and compensation when retired, ill, unemployed or requiring maternity leave. Organisations are encouraged to pay workers supplementary insurance.
- During any dispute between an employer and employee, the worker has the right to apply for mediation or arbitration or even take legal action. The employer may set up a labour dispute mediation committee, composed of an employee representative, a representative of the organisation and a labour union representative who also chairs the committee.
- The Labour Security Supervision Regulation requires that the national labour security supervision authorities are responsible for the overall supervision nationwide of labour laws while local supervision authorities are responsible for the work in their jurisdictions as well as supervising the implementation of labour laws. Labour unions safeguard the legal labour rights of workers, and supervise the organisations' compliance with relevant laws, regulations and rules.

State-owned farms and private commercial farms, as legal entities, need to comply with all the above general laws and regulations, including signing labour contracts, paying social security and insurance on behalf of their staff, providing vocational training, respecting the right of staff to be employed, etc.

Description of risk

Currently data or information sources on the labour force in the soybean farming sector is very limited. The situation of personnel employment in rural farms of China is different from that of other developing/advanced countries in such most farms are small and to a large extent, Chinese peasants work for themselves and almost no additional employment takes place. During the seasonal harvest period, individual farmers from a collective may consider employing some part-time workers. In most cases they are hired without a contract. The salaries of workers are decided through verbal mutual agreements. Signing contracts and organising insurance etc. for seasonal workers is not required nor is adhering to a minimum wage for the workers. This is not surprising as there is no formal legal requirements for seasonal and/or temporary workers. Furthermore, it is more common than not, that as farmers are self- employed and they usually work on their farm as a family.

Based on observation drawing from general common knowledge, state-owned organizations in China always comply with all the law and regulations including labour laws and regulations.

Risk conclusion

The risk for this indicator has been evaluated low for all farm soy types.

2.1.6. Risk designation and specification

Low risk

2.1.7. Control measures and verifiers

N/A

2.2. Health and Safety

Legally required personnel protection equipment for persons involved in farming activities and safety requirements to machinery used. Legally required safety requirements in relation to chemical usage. The health and safety requirements that shall be considered relate to operations on the farm. Risk relates to situations/areas where health and safety regulations are consistently violated to such a degree that puts the health and safety of farm workers at significant risk throughout farm establishment and management operations.

2.2.1. Applicable laws and regulations

- Good Agricultural Practices, GAP Chinese GAP Standard - link
- Law of People's Republic of China on Prevention and Control of Occupational Disease dated 31st December 2011. Available at - link
- Labour Law of People's Republic of China dated 27th August 2009, Chapter 6-7. Available at - link
- Women's Labour Protection Law dated 18th April 2012. Available at - link
- Work Safety Law of the People's Republic of China (amended) dated 31st August 2014 - Chapter 2–4. Available at - link
- 2001 Occupational health and safety assessment series（GB/T 28001-2001） - link
- People's Republic of China Labour Law-Clause 3, 92/Chapter Six - link

2.2.2. Legal authority

- Ministry of Personnel of the People's Republic of China
- The Labour Administrative Department of the State Council

2.2.3. Legally required documents or records

- Training Records for safe operation;
- Accident Insurance;
- Work permit for special occupations, e.g. chainsaw operator;
- Outsourcing agreement;
- Accident records and related administrative procedures and measures

2.2.4. Sources of information

Government sources

- Good agricultural practice (GAP) of Chinese materia medica (CMM) for ten years: achievements, problems and proposals] Year 2014. Available at: http://www.ncbi.nlm.nih.gov/pubmed/25011244
- China Good Agricultural Practices (GAP) Certification Gains Worldwide Recognition-Year 2009. Available at: http://www.ccic.com/web/static/articles/catalog_2c94ec8a295e418401295e46607d0002/2010-09-27/article_ff8080812a89c0a5012b2da5fa8101b9/ff8080812a89c0a5012b2da5fa8101b9.html
- Law of the People's Republic of China on Prevention and Control of Occupational Diseases-Year 2001. Available at: http://www.npc.gov.cn/englishnpc/Law/2007-

12/10/content_1383440.htm

- Law of the People's Republic of China on Work Safety-Year 2002. Available at: http://english.gov.cn/archive/laws_regulations/2014/08/23/content_281474983042179.htm

Non-Government sources

- Ilo.org. (2014). World Social Protection Report 2014-15: Building economic recovery, inclusive development and social justice. [online]. Geneva: International Labour Organization, pp. 1-314. Available at: http://www.ilo.org/global/research/global-reports/world-social-security-report/2014/WCMS_245201/lang--en/index.htm
- Occupational diseases of peasants can't be neglected. Available at: http://www.051jk.com/zhiye/show/263735.html
- Terrible and shocking situation in China's rural areas. Available at: http://www.360doc.com/content/16/0212/23/30635962_534179605.shtml
- Transparency.org. (2014). Corruption by Country/Territory: Corruption Perceptions Index 2014 for China. [online]. Transparency International. Available at: http://www.transparency.org/country/#CHN
- The World Bank. (2014). Worldwide Governance Indicators for China: Country Data Report for China, 1996-2014. [online]. Available at: http://info.worldbank.org/governance/wgi/index.aspx#countryReports

2.2.5. Risk determination

Overview of legal requirements

China has formulated and implemented a legal system to ensure and protect the safety and health of workers employed within organisations, including the safety and health of forest management enterprise employees.

Organizations are required to establish a worker health and safety system and comply with requirements in this regard against accidents in the workplace and in reducing occupational hazards. Organizations must ensure adequate health and safety conditions exist and the necessary materials and equipment for employees are provided in line with national requirements. Regular health checks must be provided to those who engage in dangerous work. Employees engaging in special operations must be specially trained and qualified.

The Chinese government has also placed special emphasis on protecting workers' basic interests and rights, to improve employment conditions and to promote social equality. The law on work safety provides that employees of a business entity shall be safeguarded against unsafe work practices and be able to perform safe work practices according to the law. It also requires that the trade union of a business entity helps develop or amend work safety policy and rules, and protect the lawful rights and interests of employees in terms of work safety.

Organizations that hire workers must create an enabling working environment consistent with occupational sanitary requirements, and adopt measures to ensure health and safety protection. Trade unions must monitor the prevention of occupational diseases to safeguard the legal rights of employees. Organizations must take into account to the recommendations of labour unions when developing or revising approaches to occupational disease prevention. At the national level, the labour authorities shall establish a treatment system for accidents and occupational diseases – and monitor/ pool data on these to facilitate reporting on and addressing accidents, deaths and occupational diseases.

Organizations must pay employment injury insurance. The People's Government is required to ensure the oversight and governance of employment-related injuries to ensure employees receive compensation in accordance with laws.

China provides special labour protection to women by prohibiting (or not recommending) that women engage in jobs with a certain level of work intensity. Women enjoy no fewer than 90 days' maternal leave. Women who are breastfeeding shall not engage in work above a certain level of intensity; or which is incompatible with breastfeeding; or work overtime or night shifts.

China has also issued regulations to protect female workers' work safety conditions and requires business entities to adopt measures to provide training to female workers and to improve their health and safety and working conditions.

Description of risk

There is a risk that the laws protecting the Health & Safety are not always complied with for the peasants employed by the farms. Most of the peasants working in rural areas do not know their rights and thus work under conditions that may pose a high risk to their health.

China has made progress in improving the health and safety of workers and has also worked with the Beijing Regional Office of ILO, which has carried out some programs in close cooperation with the Ministry of Human Resources and Social Security, such as the Decent Work Program, Green Job Program and Sustainable Enterprise Development Program etc. According to related reports by ILO, significant progress has also been made with the social protection of workers.

In China, peasants are a special group because the majority of the farmers/peasants still work with a very limited land area, which means those farmers/peasants will be facing the risk of suffering the harm caused by health and safety.

Although there are laws protecting the H&S rights of the peasants, the requirements in the laws are not always upheld in a consistent manner for the peasants employed by the farms. The phenomena that the peasants are not legally treated do occur with no specific supporting data. Most peasants that grow their own land face a big risk of catching diseases caused by unsafe H&S. The situation in Chinese rural areas is that most peasants do not know their rights and thus work under conditions that may pose a high risk to their health.

Most peasants in China lack knowledge about self-protection and often struggle with having their physical conditions checked on a regularly basis due to weak acknowledgment and limited time. When they are diagnosed with diseases, they need to spend money and time on treatment, which will definitely cause them to get involved into a malicious circle. They always have the traditional mind that can't catch up with the rapid development of modern agriculture, the is the same for health and safety.

Compared to big cities of China, the development of medical care and marketing measure of protecting the health and safety of the peasants is not advanced and fast. The related labour protection products are not specifically categorized and cannot meet the demand of the H&S of the peasants. Besides, poor conditions of medical care available in rural areas, makes it difficult to both prevent and treat the diseases. Example of a frequent occupational disease obtained by the peasants is a blood or skin disease, which is caused by the exposure and handling of chemicals used on the production level of the farms.

State-owned farms and organic farms: Based on observation drawing from general common knowledge state-owned farms and organic farms manage better conditions for the employees or workers by complying with all the safety and health standards. State-owned farms provide the employees with complete social security, medical insurance, pension, etc. Overall, in China, state-owned organizations have the best employment welfare conditions amongst all types of organisations.

Risk Conclusion

Based on the available information, the risk associated with this category is assessed as elevated due to the informal nature of the seasonal employees working for the soy farms where H&S legal obligations are for small farm cooperatives commonly not adhered to.

This indicator has been assessed as low risk for state-owned soy and organic and/or China ChinaGAP-GLOBALGAP certified farms.

2.2.6. Risk designation and specification

Elevated risk – Farm collectives

Low risk – State-owned farms and organic farms with China Organic Product Certification or ChinaGAP certified farms

2.2.7. Control measures and verifiers

- Organization (i.e., farm cooperatives) shall be able to demonstrate the existence and maintenance of a health and safety procedures document, in line with national laws and regulations.
- Organization shall be able to demonstrate, upon request, the existence and maintenance of the following:
    - Training Records for safe operation;
    - Evidence of Accident Insurance to cover all workers;
    - Work permit for special occupations; e.g. chainsaw operator;
    - Accident records and related administration procedures and measures
- Inspections of farming cooperative sites shall verify the implementation of safety training and health and safety procedures (this should especially be done during harvesting season):
    - Interviews with relevant staff/workers shall provide confidence that they are aware of procedures and have participated in training;
    - Interviews with staff/workers engaged in special areas of work shall provide confidence that they have attended specific training, have secured the relevant qualification certificate for the work and have access to safety equipment;
    - Field observations to harvesting sites shall verify the correct implementation of health and safety procedures.

2.3. ILO Fundamental Conventions are upheld

National and sub national laws and regulations incorporation of the ILO Fundamental Conventions. This is to ensure minimum employment requirements cover an observance of minimum working age, legislation against forced and compulsory labour, and discrimination and freedom of association etc.

2.3.1. Applicable laws and regulations

- Labour Contract Law dated 28th December 2012 - Chapters 3-5, 8-9. Available at - link
- Labour Protection Law of People's Republic of China dated 5th of July 1994 - Article 16, 17, 19, 25, 26 and 28. Available at - link
- Trade Union Law dated 27th of August 2009 - Article 9, 10, 12, 19, 20 and 21. Available at - link
- Women's Rights Protection Law dated 28th of August 2005 - Chapter 4. Available at - link
- Regulation of Labour Security Supervision dated 11th of January 2004. Available at - link
- People's Republic of China Labour Law ---Clause 3, 15,48,100 ; -Chapter three

  ---Occupational Training—Chapter Eight

---Social Security & Welfare---Chapter Nine

- Agriculture Law of the People's Republic of China - Chapter Nine, Clause 78
- The Provision of the Minimum Salary> enacted on Dec 30, 2003 and effective on March 1st, 2004, approved by China Ministry of Labour and Social Security

China has ratified the following ILO Fundamental Conventions:

- Minimum Age Convention, 1973 (No. 138)
- Worst Forms of Child Labour Convention, 1999 (No. 182)
- Equal Remuneration Convention, 1951 (No. 100)
- Discrimination (Employment and Occupation) Convention, 1958 (No. 111)

The following ILO Fundamental Conventions are not ratified:

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

2.3.2. Legal authority

- People's Republic of China, Ministry of Agriculture, Human Resources & Social Security Department
- Department of Labour & Administration of the State Council

2.3.3. Legally required documents or records

- Name lists for staff and contractors;
- Salary payment records;
- Employment contracts for permanent and temporary staff

NOTE: Social Security card of each worker provides evidence of social security and other insurances paid.

2.3.4. Sources of information

- International Labour Treaty that China has ratified: http://zhidao.baidu.com/link?url=ph4gsFEWQ7rgijwVnHVb2POPfpTKJR6RNvpLpadDInxcKPXOf3fTkcEyA4sBSNXYy4n5uFqpvPU7BbixVwC-o
- Ratifications for China http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:103404
- China's minimum wages http://www.ilo.org/gateway/faces/home/polareas/minwage?locale=en&countryCode=CHN&track=LP&policyId=5&_adf.ctrl-state=17gweke5tn_139
- http://wenku.baidu.com/link?url=bicmcaPLfDDNcFUhavNv10N_Upkooh5chAALM8kGOUYBAAAJHOQwQ7bITwh7NGxVao8SMGBdBiLC99kdkmoEH1leE93qRVaRf1WUrBdhkH7
- https://en.wikipedia.org/wiki/Right_to_Organise_and_Collective_Bargaining_Convention,_1949
- http://www.ilo.org/global/standards/introduction-to-international-labour-

standards/conventions-and-recommendations/lang--en/index.htm

- Child labour in China and Mongolia http://www.ilo.org/beijing/areas-of-work/child-labour/lang--en/index.htm
- Equality and discrimination in China and Mongolia http://www.ilo.org/beijing/areas-of-work/equality-and-discrimination/lang--en/index.htm

2.3.5. Risk determination

Overview of legal requirements

China has ratified Equal Remuneration Convention, 1951 (No. 100) and Discrimination (Employment and Occupation) Convention, 1958 (No. 111) and national laws and regulations specifically ban discrimination in areas of employment including recruitment, salary, social benefits etc.

The minimum legal age to work in China is 16 years according to article 11 of General Principles of the Civil Law of the People's Republic of China. National policies, programmes and laws support the prevention of child labour, notably the Compulsory Education Law and corresponding measures to enforce the law and prevent school dropouts; the National Mid- and Long-Term Reform on Education and Development Programme (2010-2020), which includes specific compulsory education targets, and measures to raise the quality of education at all levels; the Plan of Action against Human Trafficking (2013–20), as well as the Anti-Trafficking Inter-Ministerial Joint Meeting (IMJM) of the State Council; and, the abolishment of the Re-education through Labour (RETL) programme. Chinese authorities at various levels have implemented measures to ensure that children of internal migrant workers have access to social services, especially compulsory education and quality education programme.

Description of risk

There is a risk that ILO Fundamental Conventions are not upheld by soy farm types because China has ratified only four ILO Fundamental Conventions and has not always successfully implemented these conventions.

Equal Remuneration and Discrimination: Despite the existence of national and national laws and regulations specifically ban discrimination in areas of employment including recruitment, salary, social benefits etc. improvements are still needed to completely eliminate discrimination based on age, sex, social status or disability. As described under 2.1.3, seasonal farm workers are often underpaid and do not receive employment contracts etc. as there is no formal legal requirement to do so.

Minimum Age and Child labour: So far, China has not published nor submitted official statistics on child labour. The labour inspectorate is mandated to enforce the labour law, which outlaws child labour and sanctions violations. No cases of child labour found by the labour inspectorate have been reported to the ILO. Nevertheless, it is quite common that farmer's children work on their own farms and generally there is no monitoring of farming families' obligation to adhere to China's minimum age requirements.

The violations of ILO and legal rights of workers more often take place in far rural areas, which include violations such as forced, underage or illegal labour.

State-owned farms: State-owned farms always strictly comply with China law and regulations including the applicable laws that cover the core ILO Conventions identified under 2.2.1.

Risk Conclusion

Based on the available information, the risk associated with this category has been assessed as elevated based on China not ratifying all the ILO core labour conventions and with the one it has ratified the risks associated with the failure to fully implement the ILO conventions.

2.3.6. Risk designation and specification

Elevated risk

2.3.7. Control measures and verifiers

- Ensure the company has a policy and compliance system (a way of ensuring the policy is implemented) that covers the ILO Core labour conventions. the organisations policies and compliance system (a way of ensuring the policy is implemented) that covers the ILO Core labour conventions. The policy should explicitly prohibit child labour and set a minimum age for employment consistent with the law. As China has not ratified ILO Conventions No. 87, No. 98, No. 29 and No. 105, ensure policy covers the following areas, as these are not enshrined in Chinese law: Freedom of Association and Protection of the Right to Organise; Right to Organise and Collective Bargaining; and Forced Labour. .
- Consult Staff/workers, interviewed during harvesting season, confirm that staff are aware of the policy and compliance system in place that cover the ILO Core labour conventions, and that it is followed in the field.
- Carry out on-site verification to confirm that the policy and compliance systems that cover the ILO Core Labour conventions are followed in the field by inspecting farming cooperative sites.

2.4. The rights of indigenous and traditional peoples are upheld

Legislation requirements addressing: i) customary rights relevant to plantation activities including requirements covering sharing of benefits and indigenous rights ii) "free prior and informed consent" in connection with transfer of plantation management rights and customary rights to the organisation in charge of the plantation operation iii) Legislation that regulates the rights of indigenous/traditional people as far as it's related to plantation activities. Possible aspects to consider are land tenure, right to use certain plantation related resources or practice traditional activities, which may involve plantation lands.) When there is no or inadequate legislation addressing the rights of traditional and indigenous peoples, their rights are still upheld by the relevant plantation operation(s). Risk relates to the violation of indigenous and traditional peoples' rights including land tenure rights, resource access and use rights, a due process has been follow in cases of transference of rights, a recognised dispute conflict resolution process exists etc.

2.4.1. Applicable laws and regulations

- Villager Committee Organisation Law of P.R. China dated 4th of November 1998 - Article 3, 8 and 10. Available at - link
- People's Mediation Committee Organisation Regulation dated 5th of May 1989 - Article 3 and 6. Available at - link
- The Organic Law of 1998 - link
- Constitution of the People's Republic of China dated 4th December 1982. Available at - link
- Regional Ethnic Autonomy Law of P. R. China dated 31st of May 1984 and revised 28th of February 2001. Available at - link

2.4.2. Legal authority

- State Ethnic Affairs Commission
- State Forestry Administration

2.4.3. Legally required documents or records

N/A

2.4.4. Sources of information

Government sources

- Seac.gov.cn. (N.Y.). (General Source of Information). [online]. State Ethnic Affairs Commission. Available at: http://www.seac.gov.cn
- Gov.cn. (2005). Regional Ethnic Autonomy Law of the People's Republic of China. [online]. The Central People's Government of the People's Republic of China. Available at: www.gov.cn/test/2005-07/29/content_18338.htm and http://hrlibrary.umn.edu/research/china-autonomy_law.html in English.

Non-Government sources

- http://www.survivalinternational.org/
- http://www.landmarkmap.org/
- Indigenous and Traditional Peoples and Protected Areas---- Best Practice Protected Area Guidelines Series No.4 - Xishuangbanna Nature Reserve, China
- Integrating Sacred Knowledge for Conservation: Cultures and Landscapes in Southwest China
- https://en.wikipedia.org/wiki/Indigenous_and_Tribal_Peoples_Convention,_1989 Indigenous and Tribal Peoples Convention, 1989
- Human Right Magazine (N.Y.) An interview with Mr. Li Dezhu, Director of State Ethnic Affairs Commission. [online]. Available at: http://humanrights-china.org/

2.4.5. Risk determination

Overview of legal requirements

Generally, China is not an immigrant country. From a historical point of view in China, there is no clear separation of indigenous and traditional people and new immigrants. Therefore, there is no specific law or regulations for specific indigenous and traditional people in China.

China has since ancient times been a multi-ethnic country. The rights and interests of ethnic minorities are addressed within Chinese law and society.

The State Ethnic Affairs Commission was established specially to be responsible for dealing with minority affairs, including harmonising ethnic relationships and ensuring the traditional rights of minorities.

In China, the 1998 Land Administration Law leaves in place the basic rule that agricultural land is to be held in collective ownership. At the same time, however, the law lays the groundwork for greater recognition of the rights of the individual cultivators who make up a collective. It provides for peasant contracts of 30 years, thus giving the individual cultivator formal rights over a specific parcel which can only be altered by the collective management through a specified procedure. "The new law", observes one recent commentary, "rests on the principle that by strengthening the security of tenure and the stature of the individual vis-à-vis the collective, the peasant will become a more careful protector of the quality of the land and a more efficient land user".

Conflicts in relation to community traditional rights are resolved according to the Organic Law of the Villagers Committees of the People's Republic of China and Organic Statute of People's Mediation Committee. The villager committee, which is a rural self-governing organisation, is responsible for administering – according to mediation regulations – affairs concerning traditional rights disputes. If mediation fails, the parties concerned can apply to government

for mediation, or apply to the People's Court for a judicial procedure.

Description of risk

China only has presence of indigenous peoples in the Yunnan province located in the west & southern part of China, there is an indigenous group called the Xishuangbanna Nature Reserve (XNR) in the southern region of the Yunnan Province. Sharing its border with Laos and Myanmar at the extreme southwest corner of mainland China, XNR is covered in biodiverse-rich tropical and sub-tropical forest. But this is not an area included in the main area under assessment. Moreover, the People's Republic of China does not formally recognise the presence of Indigenous people within China.

China does have more than 30 ethnic minorities living in southwest China. For generations, these people have maintained landscapes through traditional land use and cultural practices. This traditional knowledge places a high value on protecting forests, landscapes and water catchments while preserving biodiversity. The Organic Law of 1998 granted villages the legal right to self-government and gave indigenous communities greater responsibility for land and resource use. But China has not ratified the provisions of ILO Convention 169.

Experts from international organisations such as the World Bank have spoken highly of the autonomous regions system in China. This is despite some concerns raised by foreign governments and NGOs relating to minority policies implemented in China, especially those focusing on Tibet and Xinjiang autonomous regions. However, there is no direct relationship between these concerns and the traditional rights to soy farming activities.

With recognised and equitable processes through the regional autonomous systems – the villagers' self-government system and the court system in China – there is a legal framework for protecting traditional rights, for which there is little evidence to suggest it is not working well with regards to farming activities.

Risk Conclusion

Based on available information, the risk in this category has been assessed as low.

2.4.6. Risk designation and specification

Low risk

2.4.7. Control measures and verifiers

N/A

THE ENVIRONMENT

3.1. Environment

National and sub national laws and regulations related to the identification and/or protection of environmental values including but not limited to those relating to water use, air and green-house gas emissions, chemical, fertilizer and pesticide use. Risk relates to systematic and/or large scale non-compliance with legally required environmental protection measures that are evident to an extent that threatens natural resources or other environmental values.

3.1.1. Applicable laws and regulations

- Environmental Protection Law of the People's Republic of China http://www.china.org.cn/english/environment/34356.htm Clause 29, 33 & 49
- Law of the People's Republic of China on Environmental Impact Assessment dated 1st September 2003 - Chapter 1 & 2. Available at - link
- Water Pollution Prevention and Control Law of the People's Republic of China - link
- Soil and Water Retention Law dated 25th December 2010 (Revised) - Article 18-23. Available at - link
- Good Agricultural Practices, GAP Chinese GAP Standard - link

3.1.2. Legal authority

Ministry of Environmental Protection of the People's Republic of China

3.1.3. Legally required documents or records

Rural Environment Registry

Environmental Impact Assessment (EIA)

3.1.4. Sources of Information

Government sources

- Ministry of Environmental Protection of the People's Republic of China http://www.mep.gov.cn/

Non-Government sources

- The maximum penalty up to CNY 500K if the deleterious species are released in natural protection zone http://news.163.com/16/0915/08/C108R5PM00014AEE.html
- In Heilongjiang province, the environment for Non-GMO soybeans production is well protected. http://www.hopebiol.com/asphtml/zuxin8195.htm
- The rotation system of soybean crops in Heilongjiang to be paid attention to http://politics.people.com.cn/n/2015/0521/c70731-27036269.html
- Good Agricultural Practices, GAP Chinese GAP Standard (http://www.cqc.com.cn/www/english/c/2016-03-25/524216.shtml)

3.1.5. Risk determination

Overview of legal requirements

The Law on Environmental Impact Assessments applies to land use planning and architecture/infrastructure projects implemented by governments and relevant agencies. An

Environmental Impact Assessment (EIA) is required during planning for construction, development and utilisation relating to land use, and the planning-related text shall also have a specific chapter or explanation relating to the EIA. Architecture/infrastructure projects implemented by governments and agencies relevant to industry, agriculture, forestry, energy, transportation, etc. shall have an EIA before the project plan is submitted for approval. According to law, land use planning for the large soy farm producers also requires an EIA to be developed by government or designated agency.

The Soil and Water Retention Law provides that plants and vegetation be protected from soil and water loss in ecologically fragile areas. Deforestation is prohibited within soil- and water-loss prone areas.

Clause 49 under Environmental Protection Law indicates that the government and agricultural department at all levels should guide the scientific crop and cultivation for agricultural production and use pesticide, fertilizers and other agricultural inputs at appropriate levels and scientifically dispose agricultural films, crop straw and other wastes in the production. During the production, it is prohibited to dump solid waste and waste water into the field. The farm must take measures to prevent heavy metals and other toxic and hazardous substances pollution.

Despite the above regulations the main issue with environmental regulation in China and in particularly with regards to fertilizer and pesticide use is that the level of national policy-making, regulation and law design on for these agro-chemicals is very weak or non-existent i.e., there are no required use thresholds limits for agro-chemicals. The number of reports and findings on the high level of pollution by agro-chemicals by the agricultural and other sectors the government is starting to pay attention to these issues.

Description of risk

Regarding Environmental issues, for farm collectives and state owned farms, there is a risk of farms causing significant water pollution because of heavy use of fertilizers and pesticides and/or mishandling of agro-chemicals (3.1).

In February of 2010, the Chinese government released results of the first national pollution census. The most significant finding of this nearly three-year long investigation was that the agricultural sector was a bigger source of water pollution in China than other industries, e.g., the manufacturing industries. Researchers found that farming was responsible for 44 percent of chemical oxygen demand (COD—the main measure of organic compounds in water), 67 percent of phosphorus discharges, and 57 percent of nitrogen discharges into bodies of water. The Ministry of Agriculture immediately recognized that these findings were the direct result of the shift to intensive farming methods over the past 30 years. Fertilizers and pesticides have played an important role in enhancing productivity but in certain areas improper use has had a grave impact on the environment.

Fertilizer- and pesticide-containing runoff from crop fields (vegetables, grains, oilseeds, cotton, etc.) is an important source of this water pollution. Greenpeace estimates that China uses 35 percent of the world's fertilizer, and pesticide use is increasing every year. In 2006, Chinese farmers used 1.2 million tons of pesticide on approximately 300 million hectares of farmland and forest. In 2009, China was the world's largest pesticide producer. Output volume was 2.23 million tons, export volume was 0.51 million tons and leftover pesticide demand was 400,000 tons. As a result of increased fertilizer and pesticide application, at least seven percent of arable land is polluted from improper use, in addition to significantly increased water pollution levels throughout the country.

Farmers also need more available agricultural education. Many subsistence farmers experience yield drag because of poor agricultural practices; fertilizers may be used incorrectly, plots may be set up wrong, or livestock are not cared for correctly. Also, copious amounts of conventional nitrogen fertilizer are used polluting nearby waterways and streams. These

agricultural practices can lead to land degradation and decreased yields.

Through increased education and training, farmers could reduce their impact on the air, water, and soil by bettering their practices with new technology.

More efficient crops and livestock could also improve yields. Many crops and livestock are "genetically poor," meaning that the gene pool in that community is shallow, reducing productivity in the soils and increasing the likelihood for devastating diseases.

Because of the rising middle class in China, increased foreign demand from the United States and Europe, and the desire for safe and reliable food, organic farming has experienced a boom in recent years. Nevertheless, despite growing demand for organic soy, the current size of organic farming production in China is very small – this is based on consultations with experts due to the lack of official data. The low level of organic soy production is still likely due to the high cost of production and thus its market price is high and only meets the demands of a high-income earners in China and/or export demand.

State-owned farms: despite following the environmental laws given the low level of restrictions on fertilizer and pesticide use there is still a high level of use of agro-chemicals by state-owned farms that is also contributing to negative environmental impacts on soils, waterways etc.

Risk conclusion

As heavy use of fertilizers and pesticides and/or mishandling of such agro-chemicals by the farming sector including soy farmers in China has caused significant water pollution this indicator is designated as elevated risk.

3.1.6. Risk designation and specification

Low risk – organic farms with China Organic Product Certification and ChinaGAP-GLOBALGAP certified farms

Elevated risk – Farm collectives and state-owned farms

3.1.7. Control measures and verifiers

- Evidence of Rural Environmental Registry approved by the relevant competent authority.
- Obtain a map of the production area, verify that the soy is sourced from areas where best practices of farm management are applied, including pesticides, fertiliser and chemical use. This should include consideration of:
    - Crop and Soil Management Strategies
    - Conservation Buffers
    - Integrated Pest Management (IPM)
    - Selecting Appropriate Pesticides
    - Proper Pesticide Mixing and Loading Procedures
    - Proper Application Procedures
    - Irrigation Management
    - Proper Pesticide Storage
    - Proper Disposal of Pesticides and Containers
- Consultations with local farm cooperative and residents to confirm on the occurrence (or lack thereof) of environmental issues on soy farm lands.

3.2. Protected sites and species

International, national, and sub national treaties, laws, and regulations related to protected areas allowable forest uses and activities, and/or, rare, threatened, or endangered species, including their habitats and potential habitats. Risk relates to illegal plantation establishment and/or management within protected sites. Note that protected areas may include protected cultural sites, including sites with historical monuments.

3.2.1. Applicable laws and regulations

- Measures for National-level Nature Reserve Monitoring and Check dated 26th October 2006 - Article 3, 7, 10, 13, 14, 18 & 19. Available at - link
- Wild Plant Protection Regulation dated 30th September 1996 - Chapter 3. Available at - link
- Law of the People's Republic of China on the Protection of Wildlife-Year 1989-
  Article1，2，4，9，19，24，31，
- Regulations of the People's Republic of China on Nature Reserves (Clause 26, 35)
- Nature Reserve Regulation of P.R. China dated 9th October 1994 - Article 2, 3, 10, 11, 12, 14, 15, 18, 26, 27, 28, 29 & 32. Available at - link
- Regulations for the Implementation of the People's Republic of China on the Protection of Terrestrial Wildlife [Revised]-1997-
  Aricle2，7，13，14，15，16，19，20，23，24，27，32，39，41，
- Fisheries Law of the People's Republic of China –Aricle16，29，30
- Regulation on the Implementation of the Forestry Law of the People's Republic of China (Clause 29, 33, 49)

3.2.2. Legal authority

- Ministry of Environmental Protection of the People's Republic of China
- State Forestry Administration of the People's Republic of China
- Ministry of Forestry of the People's Republic of China
- Environmental State Council of the People's Republic of China
- Ministry of Agriculture of the People's Republic of China
- Ministry of Land and Resources of the People's Republic of China
- Urban and Rural Development, Ministry of Water Resources of the People's Republic of China

3.2.3. Legally required documents or records

- Artificial breeding license
- List of local rare and endangered species - provided by State-owned forest farms

3.2.4. Sources of Information

Government sources

- Regulations for the Implementation of the People's Republic of China on the Protection of Terrestrial Wildlife[Revised]http://www.lawinfochina.com/display.aspx?lib=law&id=679&CGid
- Regulation on the Implementation of the Forestry Law of the People's Republic of China http://www.lawinfochina.com/display.aspx?id=4747&lib=law
- Regulations of the People's Republic of China on Nature Reserves

http://www.lawinfochina.com/display.aspx?id=12164&lib=law

- Several Opinions of the CPC Central Committee and the State Council on the Implementation of New Concepts on the Development and the Acceleration of the Agricultural Modernization for the Realization of the Moderate Prosperity in All Respects (Title Only) http://www.lawinfochina.com/Search/SearchLaw.aspx?department=5
- Measures of the People's Republic of China for the Control of Hunting Rifles and Ammunition http://www.lawinfochina.com/Search/SearchLaw.aspx?department=60230
- China's Fifth National Report on the Implementation of the Convention on Biological Diversity, The Ministry of Environmental Protection of China March, 2014 https://www.cbd.int/doc/world/cn/cn-nr-05-en.pdf
- China CBD country profile. Available at: https://www.cbd.int/countries/profile/default.shtml?country=cn#facts

Non-Government sources

- Heilongjiang Wuchang Dragon Phoneix Wetland Natural protection zone http://hjwc.forestry.gov.cn/11807/85801.html
- Songliao Basin- http://www.cnpc.com.cn/en/xhtml/pdf/22-Songliao%20Basin.pdf

3.2.5. Risk determination

Overview of Legal Requirements

Under the Law of the People's Republic of China on the Protection of Wildlife, the national and local governments are required to designate rare or threatened species for special protection under the law.

The Wild Plant Protection Regulation requires that the government shall enhance the protection of wild plant resources and actively develop as well as responsibly encourage their utilisation. Wild plant authorities or related bodies take measures to rescue key threatened national or local wild plant resources to protect and restore their habitats and, when necessary, other measures such as establishing a propagation base, germplasm bank, etc. To protect wild plant resources, the State Council approved the National Key Protected Wild Plant List (first edition), while key local protected wildlife lists are approved and released by provinces.

- It is prohibited to collect wild plants that are under national Class I protection. If there is a need to collect these for scientific research or artificial cultivation, a collection permit must be acquired from national forestry authorities or their designated agencies, after obtaining consent from provincial forestry authorities.
- Wild plants under national Class II protection shall be collected only with a collection permit issued by provincial forestry authorities after a consent is obtained from county forestry authorities. The collection permit has a standardized format that shall be utilized by State Forestry Administration.

The type of legal protection that a particular species in China enjoys may depend on the locality of administration. For example, the Beijing Municipal Government designates the red fox, wild boar, leopard cat and masked palm civet, which are found in the wilderness around the municipality, as local Class I protected species even though none are among the Class I or II protected species designated by the national government.

China has a well-established system of natural reserves and has set up laws and a regulatory system to protect its species and ecosystems biodiversity. See Figure 3 indicating an increase of the number of natural reserves in China over the period 1997 – 2012. Besides this, there are well-established, administrative organisations in charge of natural reserve protection, including the Ministry of Environment Protection and State Forestry Administration.

Harvesting, hunting, grazing of livestock, fishing, land reclamation, mining and quarrying are not permitted in nature reserves unless these activities occur in areas with lower levels of protection (e.g. class 3: generally protected forest). In the core and buffer areas of nature reserves, no tourism or production activities are permitted; and the core area may not be accessed. If someone wants to enter a core area for scientific research, he or she must request access through the nature reserve administration authorities (including, where relevant, the national authority), having submitted an activities plan in advance and obtained approval from provincial nature reserve authorities.

In areas where key national- or local-level protected species occur, a nature reserve must be established to protect the species. Appropriate signage must be established, and it is prohibited to damage or destroy this. Wildlife population growth shall be monitored to protect the species and its habitat. If projects have negative impacts on wildlife habitat, an evaluation must be carried out by the project manager and be reviewed and approved by environment protection authorities after consultation with other relevant organisations.

China is a signatory country to the CITES and Convention on Biological Diversity (since 1994) and the national government's protected species list generally follows the designation of endangered species by CITES, but also includes certain species that are rare in the country but quite common in other parts of the world so as not to be considered globally threatened (such as moose and beaver) or are vulnerable to economic exploitation thus require legal protection (such as sable and otter). The Chinese endangered species classifications are updated relatively infrequently, and a number of species deemed to be endangered by international bodies have not yet been so recognized in China. Many listed species are endemic to the country, such as the groove-toothed flying squirrel and the Ili pika.

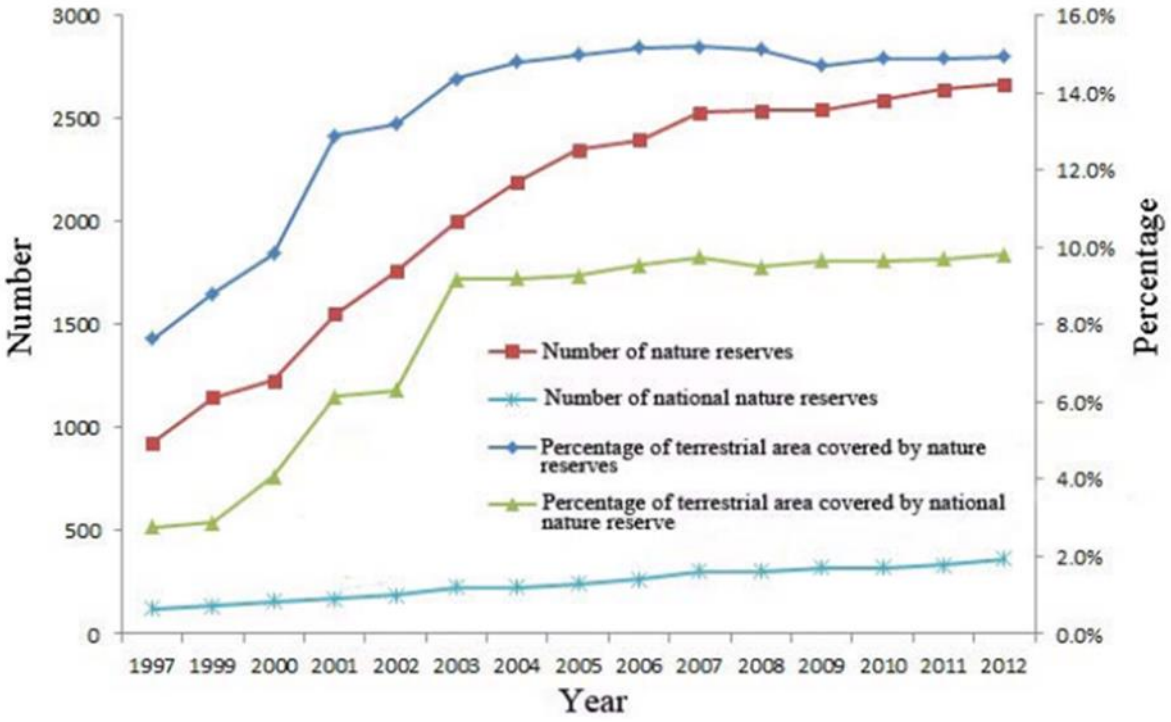


Figure 3: Number of Nature Reserves and Percentage of Areas. Source: China Report on the State of the Environment, China Environmental Statistics Yearbook (Extracted from China's Fifth National Report on the Implementation of the Convention on Biological Diversity, The Ministry of Environmental Protection of China March, 2014)

Description of Risk

- Soy farm types are located outside natural reserve areas and the soy production within the farms do not directly threaten these protected areas. There have been no recent reports of adverse impacts of farming activities on protected areas or species.
- As a signatory country to the Framework Convention on the Conservation of Biological Diversity, China has developed a biodiversity protection activities plan and has submitted national reports on the implementation of the Convention. According to the Fifth China National Report (3), China has made significant achievements in establishing biodiversity protection and management systems.
- There are well-established administrative organizations in charge of natural reserve protection. The State Council environment administrative department is responsible for national reserve management. Forestry, agriculture, mining, water conservation, marine (and related administrative departments) manage natural reserves in their own areas of responsibility.
- There appears to be a well-established system and set of laws protecting natural reserves. No evidence, nor significant body of reports have been published which identify threats to these natural reserves by soy farming.
- China's current legislation does not touch on specific articles related to soy farmers or production as the conversion of the forest to farmland does not exist in China. It has quite the opposite policy in fact, as China launched a program of converting the farmland to forest for over many years (see Category 4 for more details), which includes any potential impact on protected species. Furthermore, China still contains large areas that are sufficient for farming for future development which would not involve the conversion on protected sites or species.

Risk Conclusion

Based on the available information, the risk in this category has been assessed as Low.

3.2.6. Risk designation and specification

Low risk

3.2.7. Control measures and verifiers

N/A

3.3. High Conservation Values (HCV)

International, national, and sub national treaties, laws, and regulations related to protected areas allowable forest uses and activities, and/or, rare, threatened, or endangered species, including their habitats and potential habitats. Risk relates to illegal plantation establishment and/or management within protected sites. Note that protected areas may include protected cultural sites, including sites with historical monuments.

Overall Context

As one of the world's most biodiverse countries China has more than 30,000 higher plant species, ranking third in the world, following Brazil and Colombia. China has over 6,000 vertebrate species, accounting for 13.7% of the world's total (The Ministry of Environmental Protection, 2011). The richness of vascular plants and mammals in China is characterized by highness in south China and lowness in north China, highness in mountains and lowness in plains.

China is a signatory country to the relevant international conventions, the Convention on

Biological Diversity (CBD) since 1994 and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The national government's protected species list generally follows the designation of endangered species by CITES, but also includes certain species that are rare in the country, but quite common in other parts of the world, so as not to be considered globally threatened (such as moose and beaver) or are vulnerable to economic exploitation thus require legal protection (such as sable and otter). The Chinese endangered species classifications are updated relatively infrequently, and a number of species deemed to be endangered by international bodies like IUCN/World Conservation Union have not yet been recognized by China. Many listed species are endemic to the country, such as the groove-toothed flying squirrel and the Ili pika.

The use of the HCV concept in China has been driven forward by WWF China the introduction of the HCVF toolkit in 2003. The initial focus of work was on:

- Defining and interpreting the six values in the North-East region (Dongbei), and
- Mapping areas of potential HCV at the Dongbei regional level

Northeast region is the main production of soybean. Therefore, it is important to bring HCV concept to Northeast region and make it applicable for other sectors beyond the forest sector, in which the HCV concept was originally applied for.

3.3.1. Species Diversity – HCV 1

Concentrations of biological diversity including endemic species, and rare, threatened or endangered species that are significant at global, regional or national levels. HCV 1 sub-categories also consider:

a) *Areas that contain species that are listed as rare, threatened or endangered by IUCN and or Official National and/or regional lists;*

b) *Centres of endemism where concentrations of endemic species occur;*

c) *Areas that contain species that are listed as depleted or poorly reserved at national or regional scale;*

d) *Areas with mapped significant seasonal concentrations of species (e.g. migratory staging areas);*

e) *Areas of high species/communities diversity*

f) *Areas that are identified in the literature as refugia.*

3.3.1.1. HCV Occurrence

China is home to a significant number of wildlife species vulnerable to or in danger of local extinction due to the impact of human activity. In order to further strengthen the protection of wildlife and rescue work on endangered species and breed, China has established more than 700 nature reserves, botanical gardens, animal domestication and breeding centres, the establishment of these protected areas has protected a large number of wild animals and plants, such as Emei Mountain National Park. By the last century, the country has established 14 breeding wild animal rescue centres, more than 20 kinds of artificial breeding populations of endangered species, more than 400 rare plants conservation and breeding base library, more than 100 botanical gardens and arboretums so that more than 1,000 kinds rare plants are protected. Figure 4 illustrates the level of biodiversity China's Wild Vascular Plant and Vertebrate Species.

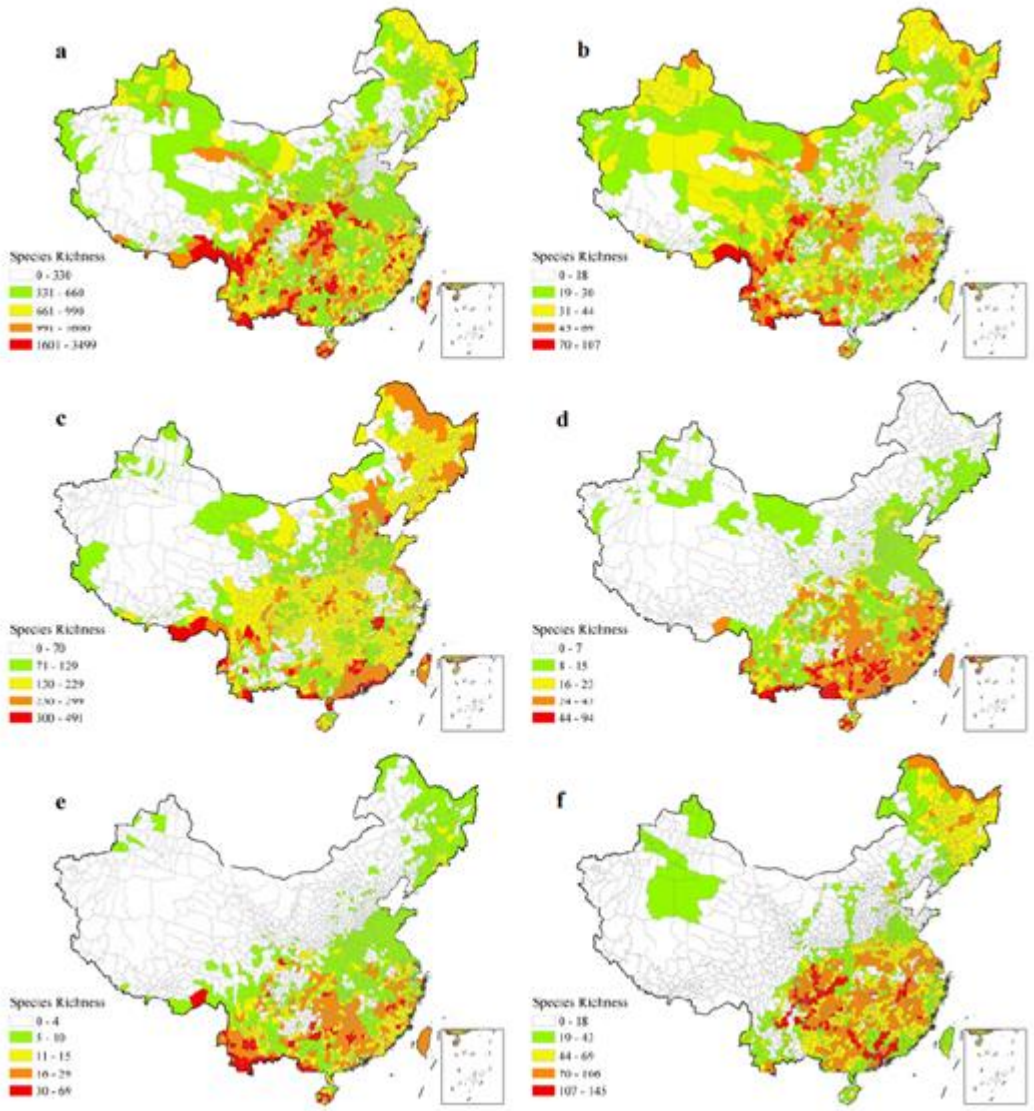


Figure 4: Spatial Distribution of China's Wild Vascular Plant and Vertebrate Species. (a) Vascular plants; (b) mammals; (c) birds; (d) reptiles; (e) amphibians; (f) inland water fishes (Extracted from China's Fifth National Report on the Implementation of the Convention on Biological Diversity, The Ministry of Environmental Protection of China March, 2014)

Heilongjiang Province in Northeast region harbours a great level of biodiversity including a large area of forest many of which are well-known such as Great Khingan. According to HeiLongjiang Province High Conversion Value Forest Research, HCV 1 occurs within the areas of Panzhongsheng Nature Protection Zone, Beijicun Nature Protection Zone in Mohe county, Hanjiayuan Nature Protection zone, Jingbo Lake Forest Park Protection Zone, part of Chaihe Region, Natural Purple Cedar Protection Zone and Northeast Tiger Protection Zone in Suiyang City, etc.

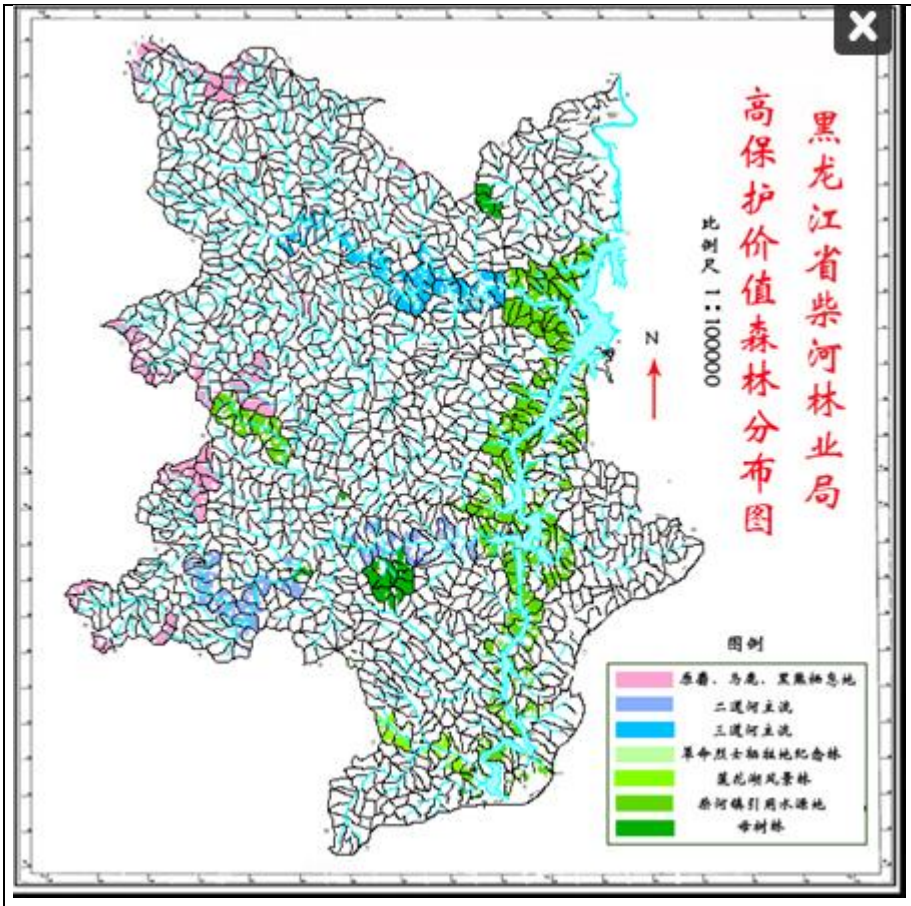


Figure 5. HCV1 graph for Chaihe Region in Northeast China.

Title: Heilongjiang Province Chai He Forest Bureau HCV Forest Distribution Map

Translated Legend:

Pink –black bear, red deer, wild pig habitat

Blue –Main stream in Second River zone

Turquoise –Main stream in Third River zone

Min Green –cemetery of revolutionary martyrs

Light Green –Lotus Lake Scenic Spot

Green – Land for drinking water in Chaihe county

Dark Green – Jungle, Woods.

http://hljsdc.nefu.edu.cn/show.php?cid=57&id=100&vid=127

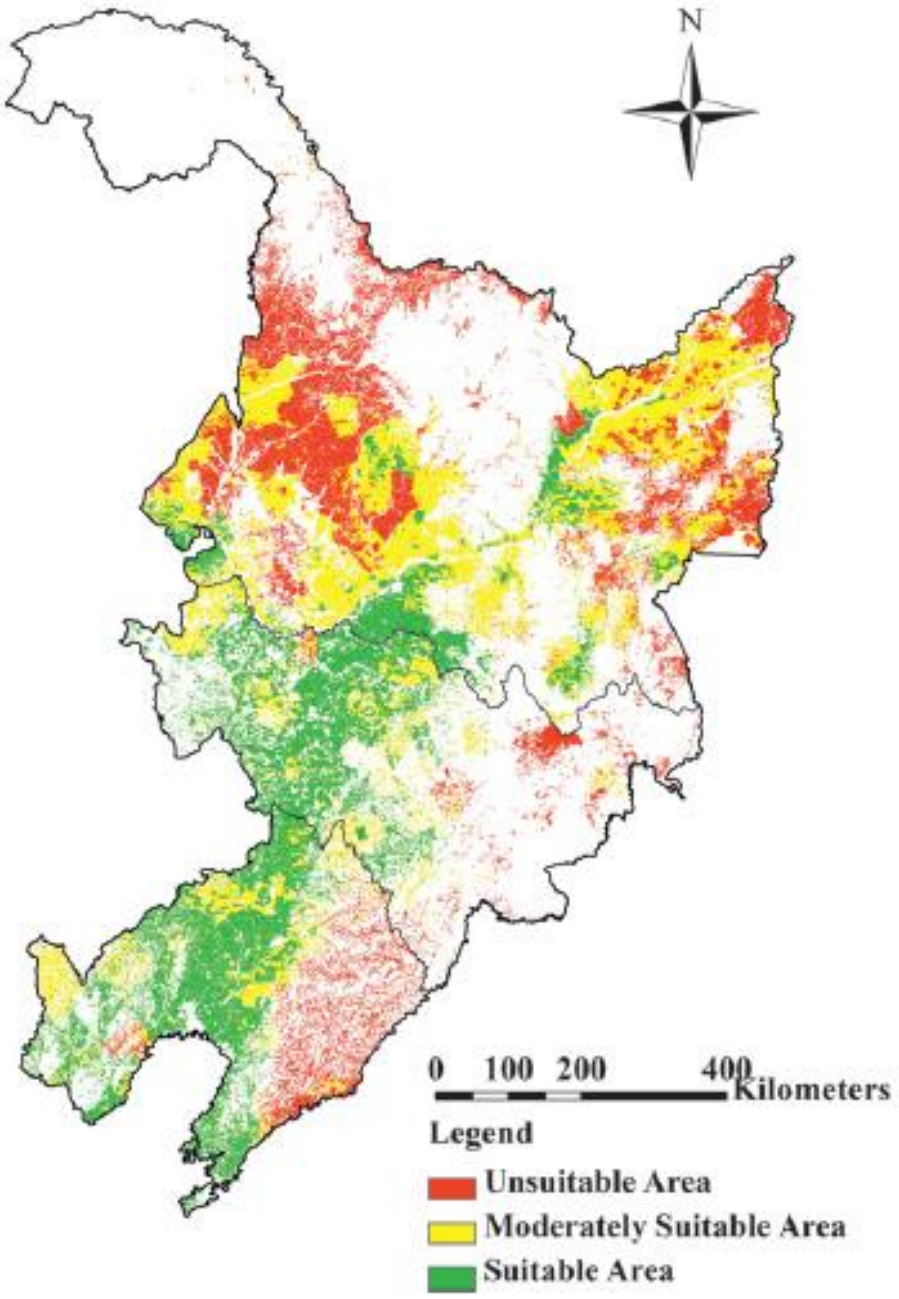


Figure 2 (from introduction): Suitability map for cultivating spring soybeans (extracted from the study 'Growth Suitability for Spring Soybean Cultivation in Northeast China' 2013)

Figure 6: Northeast Siberian tiger habitat range

Yellowish brown: Historical area for Siberian tiger habitat

Brown: Current Siberian tiger habitat

Comparing Figure 6 with Figure 2 indicates there is not much overlap between the current Siberian habitat with soybean production area.

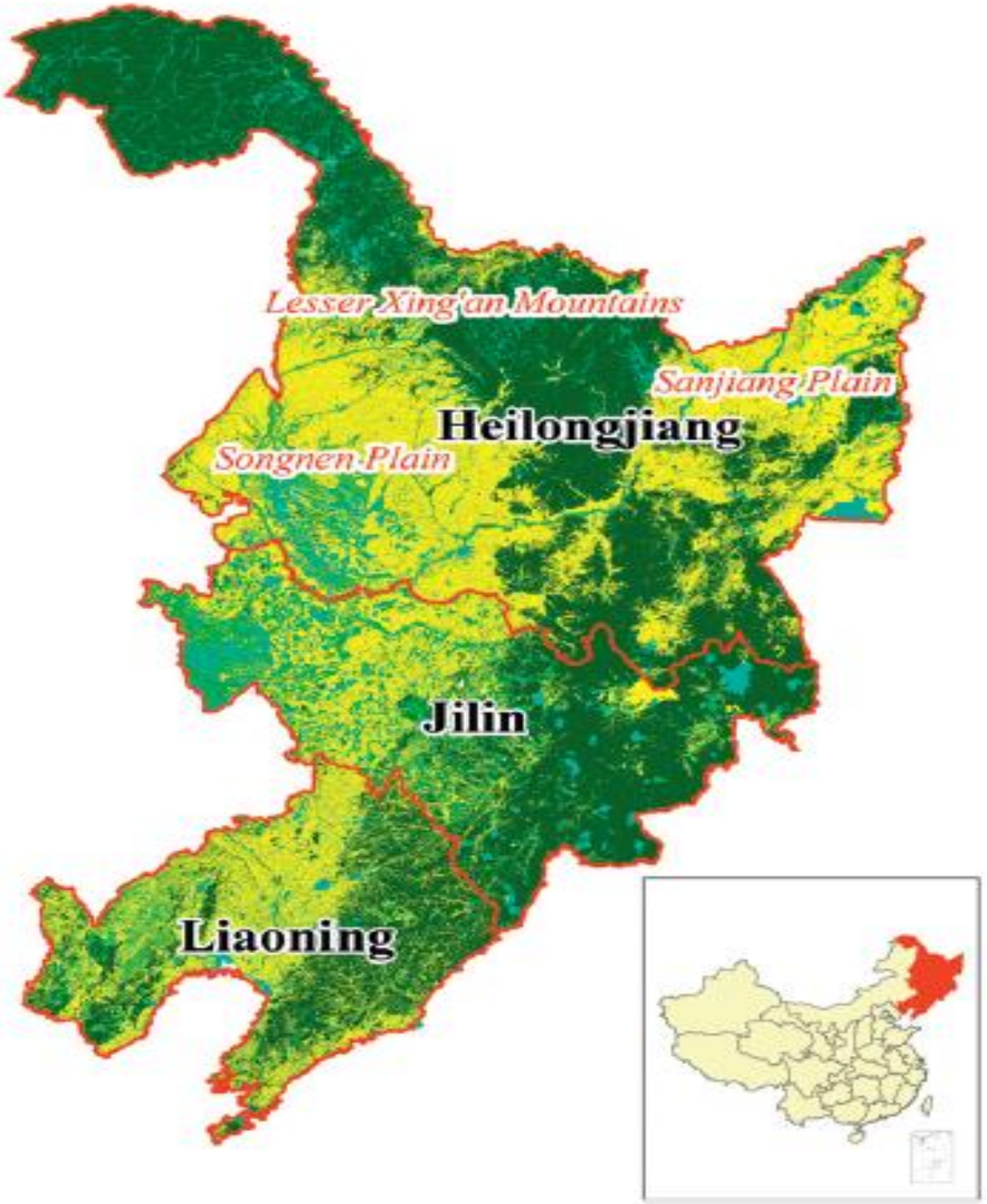


Figure 2 (from introduction): Suitability map for cultivating spring soybeans (extracted from the study 'Growth Suitability for Spring Soybean Cultivation in Northeast China' 2013)

3.3.1.2. Sources of information

- www.proforest.net -Use of the HCV framework in China -A guidance document for forest managers
- www.hcvnetwork.org -The HCV Framework and land use planning for REDD
- http://www.worldagroforestrycentre.org/sea -World Agroforestry Centre

- http://cmes.kib.ac.cn
- http://www.docin.com/p-808430067.html - Hei Longjiang Province High Conversion Value Forest Research
- China's Fifth National Report on the Implementation of the Convention on Biological Diversity, The Ministry of Environmental Protection of China March, 2014 https://www.cbd.int/doc/world/cn/cn-nr-05-en.pdf
- China CBD Country Profile: https://www.cbd.int/countries/?country=cn
- China Natural Resource - http://np.china-embassy.org/eng/Features/xzwt/Geography/t167857.htm

3.3.1.3. Risk determination

Despite some positive trends in the increase of forest levels (China's forest resources have witnessed continuous growth and forest cover has increased from 8.6% in 1949 to 20.36% at present), many natural areas and habitats outside protected areas are threatened nowadays. In particular, about 90% of grasslands are experiencing different degrees of degradation and desertification and 40% of China's major wetlands are facing threats of severe degradation, especially mudflats and mangroves.

The main factor that endangers wild species is the degradation or loss of habitats (Wei, 2010; the Ministry of Environmental Protection and the Chinese Academy of Sciences, 2013). The total area of land reclamation from grasslands since the 1950's is up to 193,000 km2, with 18.2% of the total existing arable land of China coming from grassland reclamation (Fan et al., 2002). Incidents of grassland reclamation are still occurring in recent years. Invasion of alien species is one of the main causes of biodiversity loss. Due to its vast land area that covers nearly 50 latitudes and 5 climatic zones, as well as diversity of its ecosystems, China is more vulnerable to invasion of alien species, and species from any parts of the world may find suitable habitats in China. China is one of the countries that are most seriously affected by invasive alien species. The number of invasive alien species known so far in China has exceeded 500 (Xu & Qiang, 2011).

In China, the protection of HCV1 attributes are mainly managed through nature protection zones established by central and local governments (also See category 3.2 for more details). As these areas are outside soy farms and the soy production within the farms do not directly threatened HCV1 in protected areas. Outside protected areas, China has an overall increase in forest cover and other natural ecosystems like grasslands and agroforestry managed areas (see Category 4 for more details) due to China's programs and policies to support the conversion of farmland to forest for many decades already. Moreover, agricultural expansion is planned in abandoned rural/farm areas (due to the high levels of rural habitants migrating into urban areas) where there is likely very little overlap with HCV 1/3 values.

Also, as illustrated by Figures 4, 5, 6 and 7 (see HCV 3) cross referenced with Figure 2 there is a low level of HCV 1 values in areas suitable for soybean farming and potentially occurring in or adjacent to where there already exists a high level of soybean farm cooperatives and large farms.

Furthermore, soy farmers must comply with the regulations identified under section 3.2.4 which include also managing areas like riparian zones within the farm boundaries. In some cases, because some local farmers are poorly educated or the local supervision of the relevant laws is not strict there is a likelihood of some HCV 1 values being threatened by soy farm activities.

Overall, given the good level of protection of threatened species in China, the low level of HCV 1 overlap in soy production areas and future areas and the restoration and the overall increase of forests and grasslands there is a low level of threat from soy farms to HCV 1 in China.

3.3.1.4. Risk designation and specification

Low risk

3.3.1.5. Control measures and verifiers

N/A

3.3.2. Landscape-level ecosystems and mosaics – HCV 2

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. Sub-categories:

a) Intact Forest Landscapes (IFL map[1] uses the most recent coverage)

b) Landscape-scale natural forests that have experienced lesser levels of past human disturbance (e.g., minimal timber harvesting) or other management (e.g. fire suppression), or areas within such forests.

c) Forests recognised as being regionally significant at the bioregion or larger scale by conservation organisations (in formally recognised reports or peer reviewed journals) due to the unusual landscape-scale biodiversity values provided by size and condition of the forest relative to regional forest land cover and land use trends.

d) Forests that provide regionally significant habitat connectivity between larger forest areas or between refugia and mosaics.

e) Significant Roadless areas.

f) Significant Forests that haven't been affected by forest management activities.

3.3.2.2. Sources of information

- http://www.docin.com/p-808430067.html - Hei Longjiang Province High Conversion Value Forest Research
- http://www.docin.com/p-932586224.html Jilin Province High Conversion Value Forest Research
- http://hljsdc.nefu.edu.cn/product.php?cid=56&pid=3&p=3 Heilongjiang Database Centre
- http://www.globalforestwatch.org/map

3.3.2.3. Risk determination

The only Intact Forest Landscapes in the North East of China are close to the Mongolian border – see Figure 7.

[1] http://www.intactforests.org/world.map.html

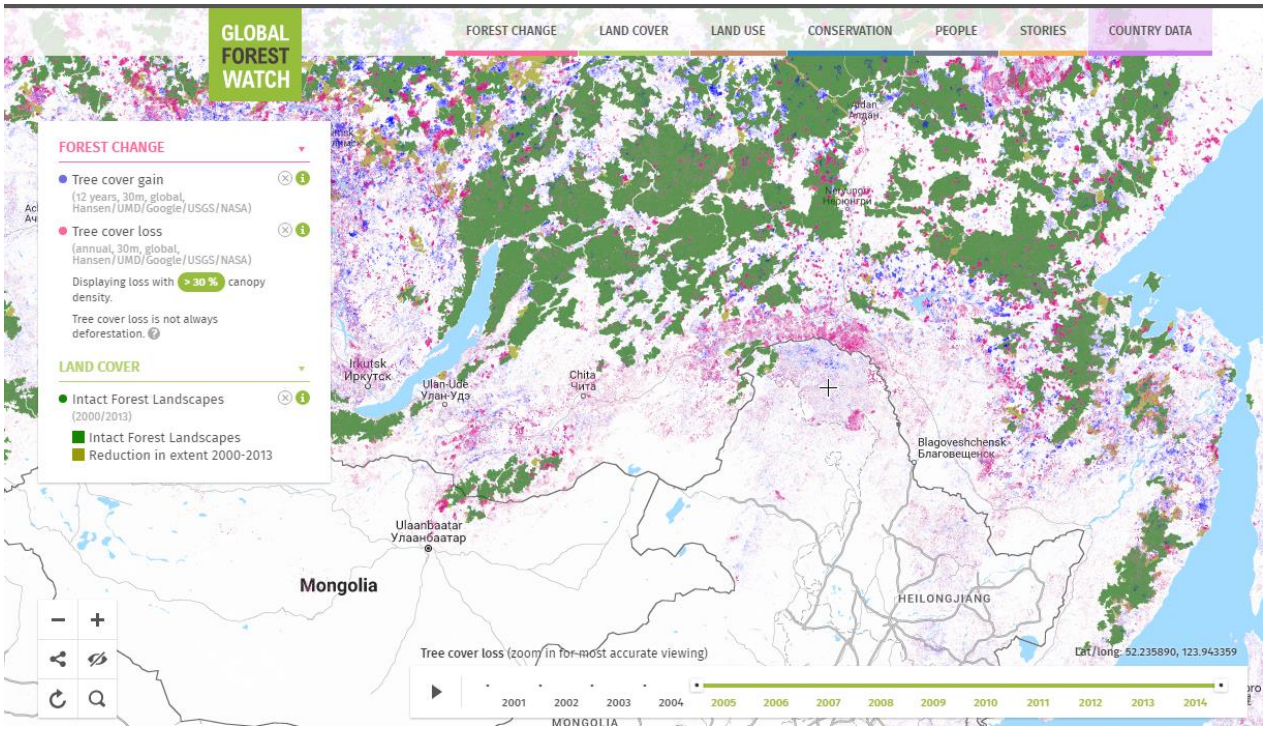


Figure 7. Intact Forest Landscapes (IFLs) and reduction of IFLs over the period of 2000-2013 in North East China.

As seen last on 10-11-16 on the Global Forest Watch map website: http://www.globalforestwatch.org/map/5/52.24/123.94/ALL/grayscale/loss,forestgain/607?tab=analysis-tab&begin=2005-01-01&end=2015-01-01&threshold=30&dont_analyze=true

Despite evidence of IFL loss between 2000 and 2013 the IFL areas are not where soy production is occurring or expanding. Therefore, for this sub-category it is evaluated that soy farms are at low risk to threatening HCV 2 values in the North East of China.

3.3.2.4. Risk designation and specification

Low risk

3.3.2.5. Control measures and verifiers

N/A

3.3.3. Ecosystems and habitats – HCV 3

Rare, threatened, or endangered ecosystems, habitats or refugia. Sub categories:

a) Existing forests in forest landscapes where these ecotypes are rare;

b) Areas of important genes or genetically distinct populations;

c) Ecosystems that are depleted or poorly reserved at the regional or national scale;

d) Old growth forests, outside of forest biomes where the concept is redundant;

e) Remnant natural forest vegetation in heavily cleared landscapes.

3.3.3.1. HCV Occurrence

Heilongjiang Province in Northeast region harbours a great level of biodiversity including a large area of forest many of which are well-known such as Great Khingan. According to

HeiLongjiang Province High Conversion Value Forest Research, HCV 3 occurs within the areas of Panzhongsheng Nature Protection Zone, Beijicun Nature protection Zone in Mohe county, Hanjiayuan Nature Protection zone, Jingbo Lake Forest Park Protection Zone, part of Chaihe Region, Natural Purple Cedar Protection Zone and Northeast Tiger Protection Zone in Suiyang City, etc.

Figure 8 below also illustrates key areas for biodiversity conservation in China. In the north-east of China there is some potential overlap of these areas with suitable soybean farm growing areas (Figure 2).

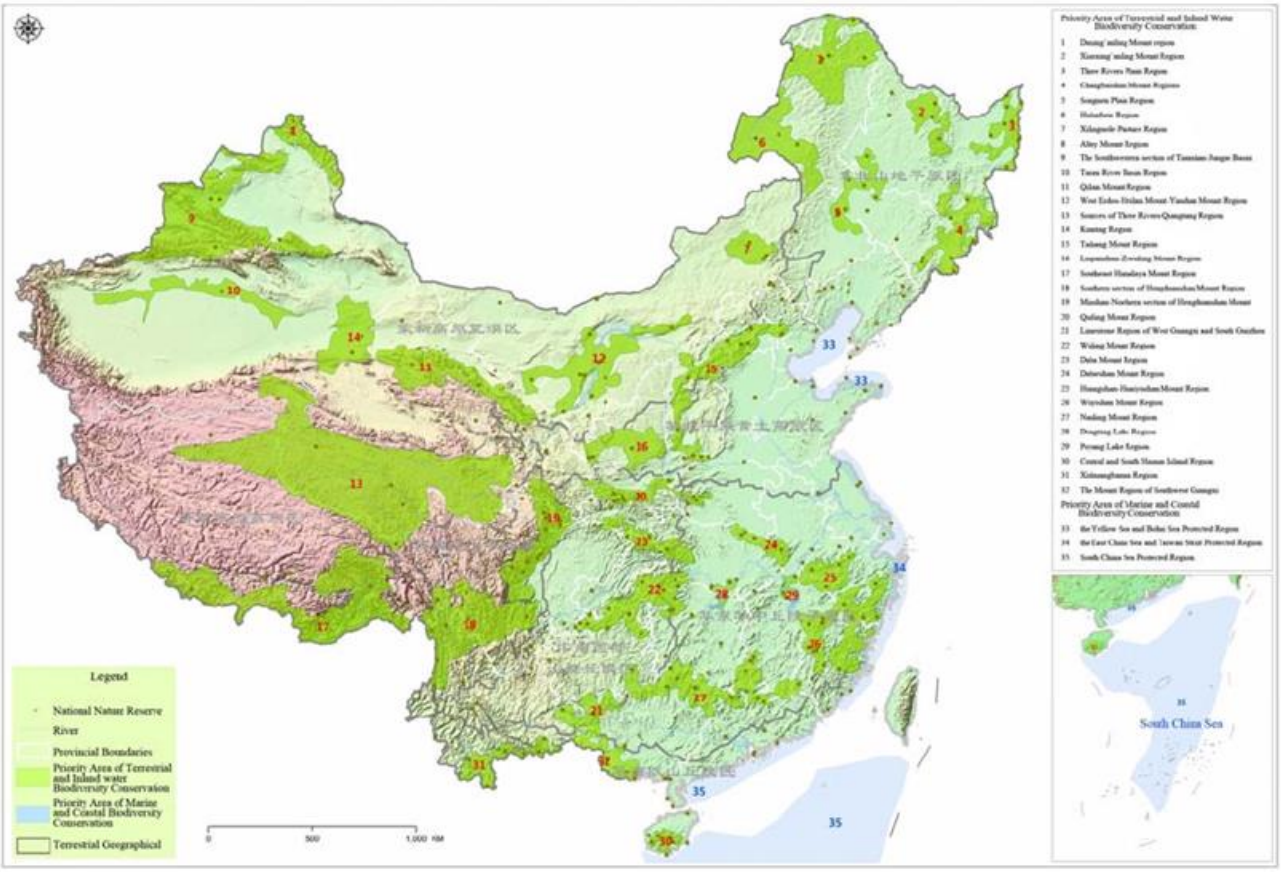


Figure 8: Priority Regions for Biodiversity Conservation (Extracted from China's Fifth National Report on the Implementation of the Convention on Biological Diversity, The Ministry of Environmental Protection of China March, 2014)

3.3.3.2. Sources of information

- Hei Longjiang Province High Conversion Value Forest Research. Available at: http://www.docin.com/p-808430067.html
- Jilin Province High Conversion Value Forest Research http://www.docin.com/p-932586224.html
- Use of the HCV framework in China -A guidance document for forest managers Available at: www.proforest.net
- The HCV Framework and land use planning for REDD Available at: www.hcvnetwork.org
- China's Fifth National Report on the Implementation of the Convention on Biological Diversity, The Ministry of Environmental Protection of China March, 2014 https://www.cbd.int/doc/world/cn/cn-nr-05-en.pdf

- China CBD Country Profile. Available at: https://www.cbd.int/countries/?country=cn

3.3.3.3. Risk determination

Despite some positive trends (China's forest resources have witnessed continuous growth and forest cover has increased from 8.6% in 1949 to 20.36% at present), many natural areas and habitats are threatened nowadays. In particular, about 90% of grasslands are experiencing different degrees of degradation and desertification and 40% of China's major wetlands are facing threats of severe degradation, especially mudflats and mangroves.

As highlighted under HCV 1, the main factor that endangers wild species is the degradation or loss of habitats – potential HCV 3 areas (Wei, 2010; the Ministry of Environmental Protection and the Chinese Academy of Sciences, 2013). The total area of land reclamation from grasslands since the 1950's has come up to 193,000 km2, with 18.2% of the total existing arable land of China coming from grassland reclamation (Fan et al., 2002). Incidents of grassland reclamation are still occurring in recent years.

In China, the protection of HCV3 attributes are mainly managed through nature protection zones established by central and local governments (also see category 3.2 for more details). As these areas are outside soy farms and the soy production within the farms it does not directly threaten HCV3 protected areas. Outside protected areas, China has an overall increase in forest cover and other natural ecosystems like grasslands and agroforestry managed areas (see Category 4 for more details) due to China's programs and policies to support the conversion of farmland to forest for many decades already. Moreover, agricultural expansion is planned in abandoned rural/farm areas.

Risk Conclusion

As illustrated by figures 5, 6 and 7 cross checked with figure 2, there is a low level of HCV 3 areas in the area under assessment that overlap with where soy farm production takes place, thus this subcategory is evaluated as low risk for HCV 3.

3.3.3.4. Risk designation and specification

Low risk

3.3.3.5. Control measures and verifiers

N/A

3.3.4. Critical ecosystem services – HCV 4

Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes. Sub-categories:

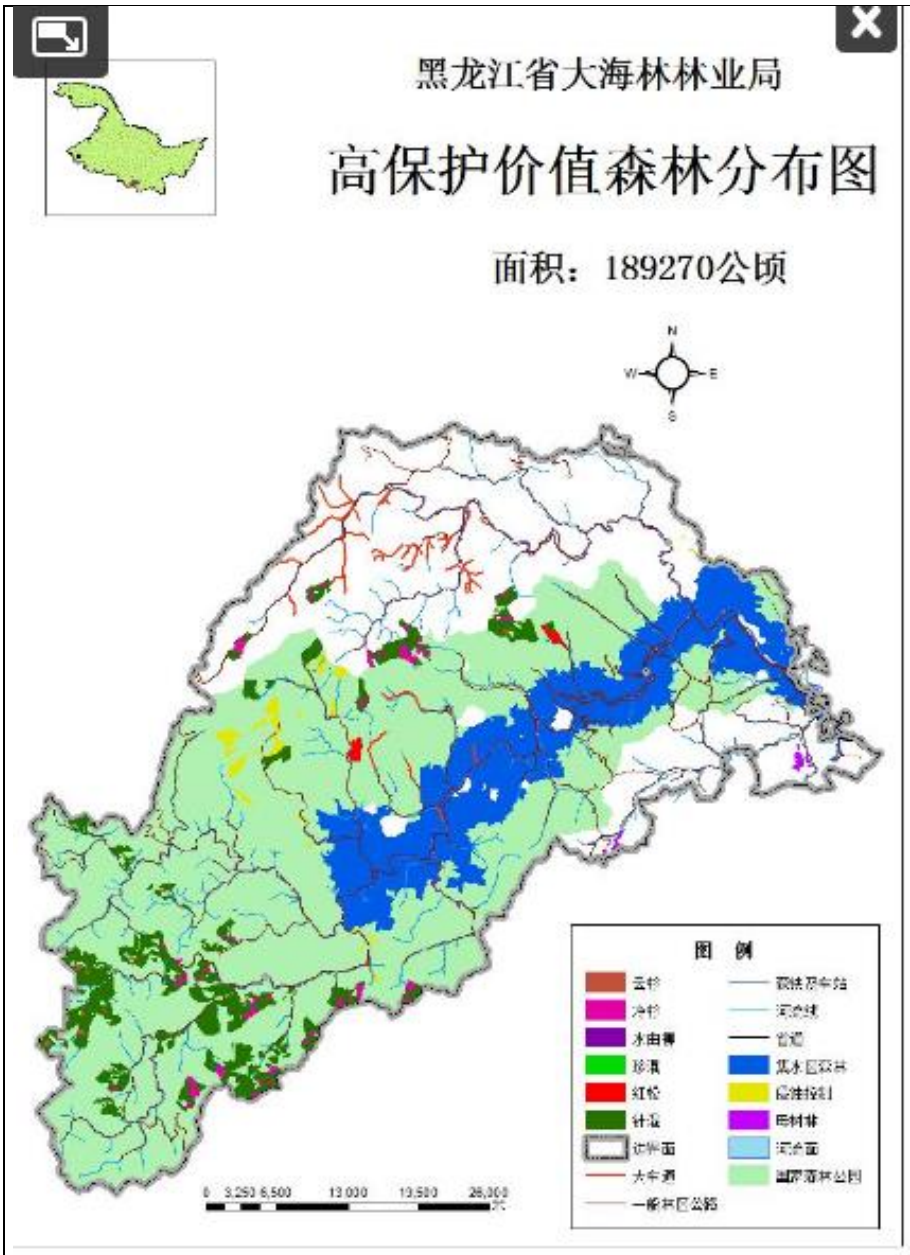
a) protection from flooding;

b) protection from erosion;

c) barriers from destructive fire;

d) clean water catchments

3.3.4.1. HCV Occurrence



Title: Heilongjiang Province Chai He Forest Bureau HCV Forest Distribution Map

Area: HCV 4 189,270 hectare area

Translated Legend

Brown- spruce trees	Heavy blue line- Railway station
Light Purple-fir	Light blue line-River line
Purple- Fraxinus mandshurica	Thick black line- Province roadway
Light Green-Rare mix	Blue- Forest in water zone
Red- Korean pine	Yellow- Erosion control
Heavy Green-Needle mix	Purple-Parent stand
Grey- boundary surface	Light Blue- River surface

Red line-Roadway Light-Green-National forest park

Public way

3.3.4.2. Sources of information

- World Agroforestry Centre
- http://www.worldagroforestrycentre.org/sea
- http://www.docin.com/p-808430067.html - Hei Longjiang Province High Conversion Value Forest Research
- http://www.docin.com/p-932586224.html Jilin Province High Conversion Value Forest Research
- http://hljsdc.nefu.edu.cn/product.php?cid=56&pid=3&p=3 Heilongjiang Database Centre
- http://www.npc.gov.cn/englishnpc/Law/2007-12/12/content_1383873.htm Law of the People's Republic of China on Water and Soil Conservation
- https://www.researchgate.net/publication/248516186_Soil_Loss_and_Conservation_in_the_Black_Soil_Region_of_Northeast_China_A_Retrospective_Study Soil Loss and Conservation in the Black Soil Region of Northeast China: A Retrospective Study
- Impact of long-term continuous soybean cropping on ammonia oxidizing bacteria communities in the rhizosphere of soybean in Northeast China http://china.tandfonline.com/doi/abs/10.1080/09064710.2015.1025823

3.3.4.3. Risk determination

Regarding HCV 4 values, for farm collectives and state owned farms, there is a risk of soil erosion and loss of soil productivity especially in the black soil region in China because of sandification despite the efforts to reduce it, thereby jeopardising HCV 4, critical ecosystem services.

In order to curb deterioration of its ecosystems, China implemented the Natural Forest Protection Program in 2000, stopped commercial logging along the upper reaches of the Yangtze River, the upper and middle reaches of the Yellow River, reduced the timber output of the key state-owned forest areas in northeast China and Inner Mongolia etc. The forestry development strategy has been changed from timber production primarily to mainly ecological development, in an effort to recuperate the natural forest and bring it onto the track of sound development. Since the implementation of the program more than 10 years ago, the accumulative total net increase of forest area is 10 million hectares, the net increase of forest stock volume is 725 million cubic meters. 680,000 surplus workers have been reemployed, and 276,000 people have turned from timber harvesters into "Forest Guards". In 2011, China launched the second phase of the Natural Forest Protection Program (2011-2020), with a goal of increasing forest area by 5.2 million hectares (or 78 million mu), forest stock by 1.1 billion cubic meters and forest carbon sink by 416 million tons by 2020. As a result of the program, water and soil erosion in program areas have been reduced significantly, and biodiversity increased markedly. By the end of 2013, investment in the Natural Forest Protection Program has accumulated to 154.099 billion yuan, with afforestation area, aerial seeding area and mountain closure area reaching 3.2217 million hectares, 3.48 million hectares and 8.3561 million hectares respectively.

In order to deal with water and soil erosion and improve its ecological condition, China began to implement the Conversion of Cropland into Forest (CCFP) Program in 1999. The Program was carried out in 25 provinces across the country in 2002. The key project aims were to protect and improve ecological systems. The CCFP was designed to address the problems of slope cropland and sandified (land that suffers from sandy material on the surface in dry as well as humid climates) cropland that either suffer from serious water and soil erosion, are

seriously sandified, salinized or stony desertified, are ecologically significant or have low and unsteady grain output. The method was to take planned and phased steps to stop grain planting in such areas, convert them into forest or grassland and restore vegetation in light of local conditions. During the implementation, the State provided appropriate subsidies of food, seedlings and cash for afforestation. By the end of 2013, the total conversion area was 28.1987 million hectares, of which 9 million hectares of croplands were converted to forest, 16.98 million hectares of barren land and mountains were turned into forest plantation and 2.89 million hectares of forest rehabilitation in mountain areas.

The black soil region in Northeast China is an important region for soybean production in the country. However, several decades of overexploitation and unsustainable land use practices have caused substantial loss of soil and soil productivity. The dominant soil erosion processes in the black soil region are water, wind and meltwater erosion, of which water erosion on the slope farmland is the major contributor to soil erosion.

Also, see Category 3.1 for more analysis on environmental impacts by soy production on water and soils.

Despite the efforts to reduce to reforest and reduce sandification, there is still soil erosion and loss of soil productivity especially in the black soil region in China, and with the high levels of agrochemical use in soy production (Category 3.1) this indicator has been determined as Elevated risk of soy production threatening HCV 4 values.

3.3.4.4. Risk designation and specification

Low risk – organic farms with China Organic Product Certification and ChinaGAP certified farms

Elevated risk – Farm collectives and state-owned farms

3.3.4.5. Control measures and verifiers

- Obtain a map of the production area. Verify that the material:
    - Does not originate from mapped watersheds that are supplying local communities with drinking water, OR
    - Is sourced from areas where best practices of farm management are applied, including water course buffers, equipment restrictions, road building, protection against contamination, pesticides use.; or
    - A High Conservation Value (HCV) assessments and HCV conservation management plan is in place.

Generic:

It is important to remember that the appropriate way to maintain or enhance each value will depend on the value itself. There are a variety of possible options to maintain or enhance various HCVs, which include:

- Strategies to protect any water catchments of importance to local communities located within or downstream of the Management Unit, and areas within the unit that are particularly unstable or susceptible to erosion. Examples may include protection zones, chemical use restrictions, and/or prescriptions for road construction and maintenance, to protect water catchments and upstream and upslope areas.
- Measures to restore water quality and quantity are in place.
- Strategies to maintain or enhance carbon sequestration and storage are in place.

3.3.5. Community needs – HCV 5

Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous

peoples (e. g.: for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or indigenous peoples. Sub-categories:

a) Unique/main sources of water for drinking and other daily uses;

b) Unique/main sources of water for the irrigation of food crops;

c) Food, medicines or fuel etc. for local consumption.

3.3.5.1. HCV Occurrence

As documented under 2.4, China has more than 30 ethnic minorities living in the southwest of China. For generations these people have maintained landscapes through traditional land use and cultural practices. This traditional knowledge places a high value on protecting forests, landscapes and water catchments while preserving biodiversity which could be considered as HCV 5 values. The Organic Law of 1998 granted villages the legal right to self-government and gave indigenous communities greater responsibility for land and resource use. However, China has not ratified the provisions of the ILO Convention 169.

Additionally, other HCV 5 values are in areas such as wild mushroom protection zone, which is under the authority of the Dongjingcheng forestry bureau and wild thorn protection zone, which is under the authority of the Suiyang forestry bureau.

3.3.5.2. Sources of information

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- http://www.survivalinternational.org/
- http://www.landmarkmap.org/
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- Integrating Sacred Knowledge for Conservation: Cultures and Landscapes in Southwest China
- https://en.wikipedia.org/wiki/Indigenous_and_Tribal_Peoples_Convention,_1989 Indigenous and Tribal Peoples Convention, 1989
- Human Right Magazine (N.Y.) An interview with Mr. Li Dezhu, Director of State Ethnic Affairs Commission. [online]. Available at: http://humanrights-china.org/

3.3.5.3. Risk determination

In China, the 1998 Land Administration Law leaves in place the basic rule that agricultural land

is to be held in collective ownership. At the same time, however, the law lays the groundwork for greater recognition of the rights of the individual cultivators who make up a collective. It provides for peasant contracts of 30 years, thus giving the individual cultivator formal rights over a specific parcel which can only be altered by the collective management through a specified procedure. "The new law" observes one recent commentary, "rests on the principle that by strengthening the security of tenure and the stature of the individual vis-à-vis the collective, the peasant will become a more careful protector of the quality of the land and a more efficient land user".

Furthermore, experts from some international organisations such as World Bank have spoken highly of the autonomous regions system in China. This is despite some concerns raised by foreign governments and NGOs relating to minority policies implemented in China, especially those focusing on Tibet and Xinjiang autonomous regions. However, there is no direct relationship between these raised concerns and the traditional rights to soy farming activities.

With recognised and equitable processes through the regional autonomous systems – the villagers' self-government system and the court system in China – there is a legal framework for protecting traditional rights, for which there is little evidence to suggest it is not working well with regards to farming activities.

Additionally, other HCV 5 values are in areas such as wild mushroom protection zone which is under the authority of the Dongjingcheng forestry bureau and the wild thorn protection zone which is under the authority of the Suiyang forestry bureau. Based on observation and no substantial evidence of soybean farms threatening wild mushroom and wild thorn protections zones, it is high likely that soybean farms do not threaten these HCV 5 values.

Risk Conclusion

The risk in this category has been assessed as low due to the legal frameworks working sufficiently to protect traditional rights and no evidence of major issues of HCV 5 values being threatened by soy farms.

3.3.5.4. Risk designation and specification

Low risk

3.3.5.5. Control measures and verifiers

N/A

3.3.5. Cultural values – HCV 6

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

a) Aesthetic values;

b) Historic values;

c) Scientific values;

d) Social (including economic) values;

e) Spiritual values.

3.3.6.1. HCV Occurrence

The following laws are related to HCV6:

- The law of the people's Republic of China on Protection of Culture Relics: Clause 14,

69文物保护法

- The law of intangible culture and its protection: Clause 6, 15, 17 & 40非物质文化遗产法
- The law of China's Protection on World Natural Relics中国世界自然遗产保护法 (note this law is still under discussion within the State Council and is not officially launched as of yet).

In the soybean production region, Northeast China, HCV 6 occurs in the cultural historic sites such as Jacques saghou battlefield, ancient posthouse under Amuer forestry bureau, some wetland parks under Tuqiang forestry bureau, etc. These are protected under the law mentioned above.

3.3.6.2. Sources of information

- http://www.docin.com/p-808430067.html - Hei Longjiang Province High Conversion Value Forest Research
- http://www.docin.com/p-932586224.html Jilin Province High Conversion Value Forest Research
- http://hljsdc.nefu.edu.cn/product.php?cid=56&pid=3&p=3 Heilongjiang Database Centre

3.3.6.3. Risk determination

There are a few areas of HCV 6 and most are historic sites, wetland parks etc. where soy production do not take place. Therefore, low risk is evaluated for HCV 6.

3.3.6.4. Risk designation and specification

Low risk

3.3.6.5. Control measures and verifiers

N/A

CONVERSION

4.1. New plantations have not replaced natural forest or natural ecosystems since November 2005

November 2005 has been set as the baseline of natural forest and/or ecosystem conversion. Risk relates to plantation establishment on converted natural forest and/or ecosystem areas post November 2005. Note: The baseline of natural forests and ecosystem conversion has been set at November 2005 to be in aligned with other international benchmarks set through the Roundtable on Sustainable Soy's deforestation 2005 baseline and to complement initiatives such as Amazon Soy Moratorium establishment in 2006.

4.1.1. Applicable laws and regulations

- Regulations on Conversion of Farmland to Forests (2003)
- Wildlife Protection Law (2016)
- Law of Preventing and Combating Desertification and Sandification (2002)
- Forest Law (2009)
- Seed Law (2002)
- Regulations for the Implementation on the 30 Protection of Terrestrial Wildlife Regulations on the Protection of Wild Plants
- Regulations on Nature Reserves
- Regulations on Forest Fire Prevention
- Regulations on Wetland Protection

4.1.2. Legal authority

- State Forestry Administration
- Ministry of Environmental Protection of the People's Republic of China
- Ministry of Forestry of the People's Republic of China
- Environmental State Council of the People's Republic of China
- Ministry of Agriculture of the People's Republic of China
- Ministry of Land and Resources of the People's Republic of China
- Urban and Rural Development, Ministry of Water Resources of the People's Republic of China
- China National Committee to Implement the Convention to Combat Desertification (CCICCD)
- Forest fire Situation and Management in China-Forest Fire Management Office, State Forestry Admonition

4.1.3. Legally required documents or records

- State-Owned Land-Use Rights Certificate
- Grant Contract for State-Owned Land-Use Rights (Supplementary Grant Contract for Allocated Land-Use Rights)
- Grant Contract for State-Owned Land-Use Rights (Grant Contract for a Parcel of Land)

- Rural Environment Registry
- Environmental Impact Assessment (EIA)

4.1.4. Sources of information

- http://www.fao.org/docrep/010/ai412e/AI412E13.htm
- http://www.npc.gov.cn/englishnpc/Law/2007-12/14/content_1384274.htm
- Article-29/30 etc. - Regulations on Conversion of Farmland to Forests
- China.org.cn "Protection of forests and control of desertification". Retrieved April 2, 2008.
- http://www.fao.org/docrep/008/ae537e/ae537e0j.htm
- Li, Zhiyong. "A policy review on watershed protection and poverty alleviation by the Grain for Green Programme in China". Retrieved April 2, 2008.
- Data from the sixth survey on China's forest resources, conducted between 1999 and 2003 (China Daily, January 19th 2005).
- Food and Agriculture Organisation, The State of the World's Forests 2003, Rome, FAO, 2003.
- http://rightsandresources.org/
- http://news.stanford.edu/press-releases/2016/06/16/chinas-environmed-scientists-say/
- STATE FORESTRY ADMINISTRATION OF CHINA-Forestry in China-documentation
- www.mdpi.com/journal/forests "China's Conversion of Cropland to Forest Program for Household Delivery of Ecosystem Services: How Important is a Local Implementation Regime to Survival Rate Outcomes?"
- A Case for Farmers and Rural Communities' Right to Compensation Under China's Natural Forest-by Landesa Rural Development Institute

4.1.5. Risk determination

Context

China has implemented the Natural Forest Protection Program (NFPP), the Conversion of Cropland into Forest Program (CCFP), and the Three-North Shelterbelt Development Program (SDP) since the 1980s, all of which have greatly promoted the protection and increase of forests and its resources. China's forestry sector is responsible for the protection, restoration and management of the three natural ecosystems of forest, wetland and desert, which cover nearly two-thirds of China's total land area and play an irreplaceable important role in safeguarding human survival and development.

In order to curb deterioration of its ecosystems, China implemented the Natural Forest Protection Program in 2000, it stopped commercial logging along the upper reaches of the Yangtze River, the upper and middle reaches of the Yellow River, reduced the timber output of the key state-owned forest areas in northeast China and Inner Mongolia etc. The forestry development strategy has been changed from timber production primarily to mainly ecological development, to recuperate the natural forest and bring it onto the track of sound development. Since the implementation of the program more than 10 years ago, the accumulative total net increase of forest area is 10 million hectares, the net increase of forest stock volume is 725 million cubic meters. 680,000 surplus workers have been re-employed, and 276,000 people have turned from timber harvesters into "Forest Guards". In 2011, China launched the second phase of the Natural Forest Protection Program (2011-2020), with a goal of increasing forest area by 5.2 million hectares (or 78 million mu), forest stock by 1.1 billion cubic meters and forest carbon sink by 416 million tons by 2020. As a result of the program,

water and soil erosion in program areas have been reduced significantly, and biodiversity increased markedly. The program has created 648,500 jobs for the forest area, and employed nearly all the resettled workers, contributing to social harmony and stability in the forest areas. By the end of 2013, investment in the Natural Forest Protection Program has accumulated to 154.099 billion yuan, with afforestation area, aerial seeding area and mountain closure area reaching 3.2217 million hectares, 3.48 million hectares and 8.3561 million hectares respectively.

To deal with water issues and soil erosion and improve its ecological condition, China began to implement the Conversion of Cropland into Forest (CCFP) Program in 1999. The Program was carried out in 25 provinces across the country in 2002. The key project aims were to protect and improve ecological systems. The CCFP was designed to address the problems of slope cropland and sandification (i.e., cropland that either suffer from serious water and soil erosion, are seriously effective by sand, salinized or experience desertification) that are ecologically significant or have low and unsteady grain output. The method was to take planned and phased steps to stop grain planting in such areas, convert them into forest or grassland and restore vegetation in light of local conditions. During the implementation, the State provided appropriate subsidies of food, seedlings and cash for afforestation. By the end of 2013, the total conversion area was 28.1987 million hectares, of which 9 million hectares of croplands were converted to forest, 16.98 million hectares of barren land and mountains were turned into forest plantation and 2.89 million hectares of forest rehabilitation in mountain areas. An accumulated investment of 276.847 billion yuan was made, of which 243.116 billion was made by the state. The 12th Five-Year Plan (2011-2015) requires continued implementation of CCFP in fragile and key ecological regions, especially those with a steeper slope of over 25 degrees. At the same time, the achievements of the conversion program should be solidified and more efforts will need to be taken to benefit the areas and farming households with continued ecological difficulties.

In addition, China made the decision to launch the Three-North (Northwest, North China and Northeast) Shelterbelt Development Program in November 1978 to curb drought, sand hazard and water and soil erosion in its north-western, northern, and north-eastern regions of China. The program was designed to cover 551 counties in 13 provinces, autonomous regions or municipalities including Beijing, Tianjin, Hebei, Shanxi, Inner-Mongolia, Liaoning, Jilin, Heilongjiang, Shaanxi, Gansu, Ningxia, Qinghai, and Xinjiang, accounting for 42.4% of China's land territory. The goal was to increase forest coverage of the Three-North region from 5.05% to 14.95% and increase the forest stock volume to 4.27 billion cubic meters by 2050. So far, the total afforestation preserved area is over 26.47 million hectares and the forest coverage has reached 12.4% from 5.05% in 1977. The program has become a signature project of China's ecological development, resulting in continued increase of forest area under the program, optimized layout of trees and seedlings, strengthened capacity against disasters, and significantly reduced sand hazard and water and soil erosion.

For the purpose of curbing the frequent sand attacks, pilot projects were carried out in Beijing, Tianjin, Shanxi and Inner-Mongolia in 2000. This program aimed at restoring the vegetation around Beijing and solving the problem of sand hazards through existing vegetation conservation, forest cultivation by closing sandy areas, afforestation by aerial seeding, tree planting, and conversion of cropland to forest, grassland treatment, watershed management and some other biological measures. Through 13 years of continuous treatment, development pattern has taken shape in the program areas where the grass and bushes grow well, mountains and hillsides are covered with trees and grass and livestock are kept in pen. By the end of 2013, 3.98 million hectares of trees were planted, 1.0 million hectares of forest planted through aerial seeding, 2.8 million hectares of barren mountains or mountains with scattered trees were closed up for afforestation, 2.4 million hectares of grassland treated, and 1.06 million hectares of watershed areas were treated. Resulting in markedly increased forest area and reduced sandy climate and sandified lands, the program has contributed to 24.7%-28.3% of economic growth in the regions concerned with increasing ecological, economic and social

benefits.

Risk description

In China, to protect the forests, the Central Government invested more than 40 billion yuan (approximately USD 5.8 billion) between 1998 and 2001 on protection of vegetation, farm subsidies, and conversion of farm to forests. Between 1999 and 2002, China converted 7.7 million hectares of farmland into forest. China enacted Regulations on Conversion of Farmland to Forests. The government specifically regulates the farmers who convert their farmland to forests shall plant trees and grass, intercropping grain crops in between trees or acts of damaging the existing tree and grass vegetation are prohibited etc. The state government organization is officially State Forestry Administration.

The Chinese government has paid great attention to forest management in accordance with law to safeguard forest resources. For decades, the Chinese government has improved its forestry legal system, enacted and amended laws, rules and regulations such as the Forest Law, the Wildlife Protection Law, the Law of Preventing and Combating Desertification and Sandification and, the Seeds Law, the Regulation on the Implementation of the Forestry Law, the Regulations for the Implementation on the 30 Protection of Terrestrial Wildlife, the Regulations on the Protection of Wild Plants, the Regulations on Nature Reserves, the Regulations on Forest Fire Prevention, the Regulations on Wetland Protection, and the rules and regulation on forest land protection and management, forest property right circulation and timber logging management. Through these measures, the legal system relating to forestry development and ecosystem protection and restoration has improved. In terms of forestry law enforcement, China continues to strengthen supervision and law enforcement, crack down on crimes like excessive logging and killing of wild animals, and consolidate the achievements of forestry development. The cooperation and exchanges with foreign countries have been actively carried out. The Chinese government has actively implemented conventions such as CITES, UNCCD, RAMSAR and UNFCCC. China has set up channels of cooperation with more than 20 international organizations such as UN FAO, UNDP, EU, GEF, ITTO, WB, ADB, WWF, TNC and WI, carried out cooperation projects in wetland conservation, natural reserve construction and personnel training, and actively fulfilled its international obligations. The goal is to breed and cultivate over 5 million hectares of forest per year and upgrade China's forest coverage to 23% by 2020, and by 2050, achieve a net increase of forest areas of 47 million hectares over 2020 level, stabilize forest coverage at over 26%, and sustain the capacity for forest carbon sink. The Chinese government will vigorously cultivate and protect forest resources, develop forestry industry, lay the foundation for poverty elimination, development of green economy and sustainable development, make efforts to fulfil the commitment by the Chinese leaders in the United Nations Conference on Climate Change, namely, to vigorously increase forest carbon sink, try to increase forest areas by 40 million hectares and increase stock volume by 1.3 billion cubic meters by 2020 from the 2005 levels.

Major forestry policies support ecological protection in China for instance, the farmland on the slope over 25 degree must be converted into forest or grassland and the reclamation of lands with a slope over 25 degree will be considered illegal. Taking the specification of slope farmland conversion to forest or grassland as an example, other measures and policies supporting converting lands back to more natural states include some of the following:

- The households who would like to convert their slope farmland into forest or grassland will be supported by government in the ways of:
    - The central government provides grain foods as subsidiary for 1 mu (666 m2) conversion of slope farmland of 150kg in upper reach of Changjiang River and 100kg in upper and middle reaches of Huanghe River, respectively. The determination for the time span to subsidize the farmers depends on the forest type. The time span is 5 years for cash tree plantations and 8 years for ecological forest plantations. After this time span, farmers will get grain compensation on the basis of the evaluation of

their income.

- Governmental cash compensation for households;
- Governmental payment for the seedlings,

For the farmers not willing to manage the converted land, the local government can rent it to another farmer through auction system according related national laws. Multiple ways to promote the 'beneficial' land conversion can be carried out by local expert households for afforestation, social communities, enterprises, are also encouraged to rent slope land for forestry development. Household to construct forest and grass farms are encouraged. The longest period for management of the land could be as much as 50 years.

In addition, other related policies for implementing the program include:

- Expenditure for demonstrating and technical support activities to implementing the conversion project covered by central government;
- Reductions of agricultural taxes for the households.
- Fiscal transfer payment mechanisms adopted from the budget of central government.

In addition, the conversion projects will be carried out in accordance with the Poverty Alleviation campaign, Agricultural Integrated Development and Soil and Water Conservation Initiatives. Finance from different government channels will be organized as a whole. For instance, the finance for conversion project also can be used to construct infrastructures for agricultural development such as basic farmland and small water structures and for technical training of the farmers. All such activities can promote the conversion project. The completion of the conversion planning will be based on implementation by households. Only after the farmers have successful finished their works of conversion, the grain and cash compensation will be given to them. The extent of income reduction varies in relation to how large a role the forest sector played in the local economy. But it is clear that rural communities and farmers have suffered substantial financial losses due to the implementation of the NFPP. The fundamental problem is that tens of millions of affected farm households and rural villages whose land is covered by the NFPP received virtually no compensation for their lost use rights when their land is converted to forest land.

At the very beginning (1999), the annual compensation standard was 2.5 yuan (approx. Euro 0.32) per mu (666 m^2). It was gradually increased and now it stands at 12 yuan (approx. Euro 1.55) per mu. Some municipalities, especially the wealthy ones, have chosen to allocate additional local revenues to increase the compensation level. For example, in Guangzhou city, the standard in 2009 was 41 yuan (approx. Euro 5.30) per mu. In Dongguang city, ecological forests that are owned by village collectives and farmers receive 100 yuan per mu on top of the 12 yuan provided by the provincial fund. Since 1999, 5.4 million farm families and 14,000 villages have benefited directly from this program.

The forest deficit that characterises China today is the outcome of a long history of deforestation, which became particularly acute after the founding of the People's Republic. The Chinese government has come to appreciate the ecological consequences of this deforestation, and of the increasing pressure on the ecosystem by the growing demand for timber products. Over the last twenty years it has radically changed its policy on forest regions, from a strategy based on production and exploitation to one of protection of resources and conservation of biodiversity.

China has taken an opposite position compared to other countries such as Brazil, China has been launching "returning land to forests" program for many years and enacted the regulations on the conversion of farmland to forests and included the restoration of other ecosystems like grasslands and wetlands.

Risk conclusion

The risk of converting the forests and other natural ecosystems to land is low and China is actually converting more land to forests in order to resolve severe environmental issues that China is facing under the context of global climate change.

4.1.6. Risk designation and specification

Low risk

4.1.7. Control measures and verifiers

N/A

4.2. Fire avoidance is being practiced

Assess the risk of fire use in plantation establishment and/or management activities. Risk relates to assessing the role of fire use driving natural ecosystem conversion.

4.2.1. Applicable laws and regulations

- Fire Protection Law of the People's Republic of China-Article 22 - link

4.2.2. Legal authority

- Forest fire Situation and Management in China-Forest Fire Management Office, State Forestry Admonition

4.2.3. Legally required documents or records

- Fire Avoidance Convention
- Fire Avoidance Responsibility Policy

4.2.4. Sources of information

Government sources

- Forest statistics of China (1990-2000). Beijing: Chinese forestry press.
- Fire Protection Law of the People's Republic of China http://www.china.com.cn/policy/txt/2008-10/29/content_16680891.htm

Non-Government sources

- Forest fire Situation and Management in Northeast China-International Forest Fire News No. 34(2006) http://www.fire.uni-freiburg.de/iffn/iffn_34/10-IFFN-34-China-1.pdf
- Forest Fire and Fire Danger Rating in China- Northeastern Forestry University, Harbin, China (2008) http://www.wamis.org/agm/meetings/wofire08/S2-Yang_China.pdf
- Tropical Forest Fire Monitoring and Management System Based on Satellite Remote Sensing Data in China –China Academy of Forestry (2009) http://www.itto.int/files/user/pdf/publications/PD%20228%2003/pd228-03%20rev2(F)%20e.pdf

4.2.5. Risk determination

Overview of legal requirements

Early in 1998, China adopted Fire Control Law of the People's Republic of China passed by the Second Session of the Ninth National People's Congress. This law is formulated in the purpose of preventing fire and reducing fire damage, safeguarding citizen's personal security, public property and civil assets, upholding public security and ensuring the smooth construction of the

socialist modernization. This law roughly regulates the requirements for fire control and prevention for farm management. Under Article 22 it indicates that for farms during harvest seasons and fire prevention period for forests and grasslands, major holidays and frequent fire disaster seasons, local people's government at all levels shall organize and carry out fire control propaganda and education according to the specific situations, adopt fire prevention measures and conduct fire control safety inspection.

In 2008, a new revised version for the law was announced. A new article 30 was added that the local people's governments at all levels shall intensify the leadership over the rural fire protection work, take measures to intensify the construction of public fire protection facilities, and organize the establishment of and urge the implementation of the fire safety accountability system.

Specifically:

According to Article 32 of the Fire Protection Law of PRC, the municipal government needs to support and aid village committees on fire protection efforts. Village Committees should draw up a Fire Avoidance Convention and ensure that the fire controls are in accordance with the convention.

According to Article 30 of Fire Protection Law of PRC, all levels of the local government should enhance the leadership of local rural fire protection and take measures to support the infrastructure of public fire protection stations and ensure there is a Fire Avoidance Responsibility Policy.

Description of risk

For the main soy production areas, Northeast China, including Heilongjiang province, Jilin Province, Liaoning Province and Inner Mongolia autonomous region, the natural environment is very diverse. Forest and land fires are affected by inter-annual spatial and temporal distribution. The provinces that have more number of occurrences and burned area concentrate on the Northeast China, and impacted by atmosphere current and seasonal monsoon, the fire season of the regions have distinct seasonal variation. However, most fires in the region are caused by humans. In many cases, the fire is caused from combusting straw by the farmers and meanwhile straw combustion is becoming major concern of causing haze pollution. The government has been taking action to control straw combustion in autumn and winter particularly in the farmland of Northeast China. Moreover, the fire is not used to clear land or forests in soy farms. As mentioned in 4.1, China has been working on the conversion of land to forest. It is not a practice to burn forest down to clear land. In the forest in Northeast China, fire is required to be controlled in the forest to avoid destroying the forest ecosystem.

Fire prevention stands to the guideline of “take prevention first and extinguish actively”. In order to strengthen the leadership of forest fire management, Forest Fire Headquarters were set up successively in total 30 provinces, autonomous regions, and municipalities. China strongly enhanced the prevention, fighting and management of forest fires over many years. The main measures to manage forest fires are to raise public awareness through publicity and educational activities, manage forest fires by legislation, firefighting team development and mobilize the power of society to prevent forest fires, reinforce the infrastructure construction and key fire danger zones management.

China utilizes many means to prevent, monitor, and fight forest fires. However how to manage the forest fires effectively, decrease the load of fuel in the forest, and avoid large forest fires occurrences are still the main challenges being faced today and into the foreseeable future.

Although there is Fire Control Law in place in China and the government pays much more attention to fire control and prevention on farms, fire is not used to convert natural ecosystems or forests for soy farm establishment this for this indicator it is consider low risk for fire as a driver of natural ecosystem conversion (fire as an environmental hazard as it should be considered under 3.1 is however considered as elevated risk).

Risk conclusion

Based on the available information, the risk in this category has been assessed as low risk.

4.2.6. Risk designation and specification

Low risk

4.2.7. Control measures and verifiers

N/A

GENETICALLY MODIFIED ORGANISMS (GMOs)

5.1. There is no commercial use of genetically modified soy.

Plantations have not been planted with genetically modified commodities and/or GMO fertiliser is not being used. Risk relates to the use of GMO plants and/or fertiliser as a potential factor influencing upstream buyers purchasing decisions based on consumer preferences.

5.1.1. Applicable laws and regulations

- Administrative Measures for Safety Evaluation Agricultural GMO] (hereinafter Safety Evaluation Measures) (issued by the Ministry of Agriculture (MOA) Jan. 5, 2002, effective Mar. 20, 2002, revised July 1, 2004
- Measures for Examination and Approval of Processing Agricultural GMO] (issued by MOA Jan.16, 2006, effective July 1, 2006
- Administrative Measures for Labelling Agricultural Genetically Modified Organisms Marks] (hereinafter Labelling Measures) (issued by MOA Jan. 5, 2002, effective Mar. 20, 2002, revised July 1, 2004), 2002 Jan-June Falü Qüanshu 1689. For an unofficial English translation of the above three sets of Measures, see USDA Foreign Agricultural Service GAIN Report #CH2002 (Jan. 14, 2012)
- Administrative Measures for Safety Control of Importing Agricultural GMO Products] (issued by MOA Jan. 5, 2002, effective Mar. 20, 2002, revised July 1, 2004
- Administrative Measures on the Entry and Exit Agricultural GMO Products Inspection and Quarantine] (issued by AQSIQ Sept. 5, 2001
- Administrative Measures for Genetically Modified Food Hygiene] (promulgated by MOH Apr. 8, 2002, effective July 1, 2002, repealed July 2, 2007
- Regulations on Administration of Agricultural Genetically Modified Organisms Safety (hereinafter GMO Regulations)] (promulgated by State Council May 23, 2001, revised Jan. 8, 2011), 2001 Fagui Huibian 1072, English translations

5.1.2. Legal authority

Ministry of Agriculture

5.1.3. Legally required documents or records

N/A

5.1.4. Sources of information

Government sources

- Measures for the examination and approval of agricultural genetically modified organisms - http://www.gov.cn/flfg/2006-03/02/content_215830.htm
- China, People's Republic of Food and Agricultural Import Regulations and Standards Ag GMO Implementation Measures 2002 - http://apps.fas.usda.gov/gainfiles/200201/135683205.pdf
- What kind of transgenic crop production and application safety certificates have been issued in China?

  Source: Ministry of Agriculture, Agricultural Transgenic Biosafety Management Office, Date: 2013-04-27 -

http://www.moa.gov.cn/ztzl/zjyqwgz/zswd/201304/t20130427_3446853.htm

- China's Fifth National Report on the Implementation of the Convention on Biological Diversity. The Ministry of Environmental Protection of China. March, 2014 - https://www.cbd.int/doc/world/cn/cn-nr-05-en.pdf

Non-Government sources

- Labelling Genetically Modified Foods in China http://www.healthandsafetyinshanghai.com/labeling-genetically-modified-foods.html
- Restrictions on Genetically Modified Organisms: China https://www.loc.gov/law/help/restrictions-on-gmos/china.php
- Web Commentary "China's Regulation on the Trade of Agricultural Product GMOs" (zhong guo dui zhuan ji yin nong chan pin mao yi de guan zhi), http://www.agri.gov.cn (December 17, 2002). MOA, Communication No. 349 (February 20, 2004), http://www.agri.gov.cn (April 5, 2004).
- GM Approval Database http://www.isaaa.org/gmapprovaldatabase/default.asp FAO website http://www.fao.org/biotech/en/
- Biotechnology Policy Documents of FAO Members http://www.fao.org/biotech/country-policy-documents/en/
- BIOTECHNOLOGIES FOR AGRICULTURAL DEVELOPMENT http://www.fao.org/docrep/014/i2300e/i2300e00.htm

5.1.5. Risk determination

Overview of Legal Requirements

China does not allow universal commercial cultivation of any genetically modified (GM) foods with a few exceptions for development. For the exceptions, China requires GMO crops to obtain several certificates, including a Bio-safety certificate, business certificate and seed production license, before they may be commercially cultivated. Regulations on Administration of Agricultural Genetically Modified Organisms Safety is the basic regulation used to control GMO in China.

In May 2001, the State Council passed a new "Administrative Regulation on the Biosafety of Agricultural GMOs" (hereinafter referred as the 2001 State Council Regulation) which repealed the 1996 MOA Measures on Agricultural GMOs. What is noteworthy about this regulation is that, firstly, it is a regulation, not a ministerial administrative measure any more, which means that it is more comprehensive in nature. Secondly, although the regulation still deals with agricultural GMOs, it was not issued by the Ministry of Agriculture but by the superior authority, the State Council. This change enhanced the legal effect of the act and had institutional implications, which is addressed in the description of risk section.

In order to implement this regulation, the MOA subsequently issued the following, more detailed, ministerial acts: the "Administrative Measures on the Safety of the Import of Agricultural GMOs" (hereinafter referred as the 2002 MOA Import Measures), the "Administrative Measures on the Labelling of Agricultural GMOs" (hereinafter referred as the 2002 MOA Labelling Measures) and the "Administrative Measures on the Safety Assessment of Agricultural GMOs" (hereinafter referred as the 2002 MOA Assessment Measures) in July 2002.

These measures were applicable from March 20 2002, but in fact, the entry into force was postponed till April 20, 2004. On February 20, 2004, the MOA issued Ministerial Communication No. 349, which formally confirmed that the MOA should conduct "normal" (zheng chang) administration in accordance with the 2001 Regulation and three MOA Measures. It means that the rules pertaining to risk assessment, production licensing, business licensing, product labelling and import/export approvals were applied as from April 20, 2004.

The government also provided to technical capacity building for risk assessment and detection of GMOs. So far 39 institutions undertaking GMO risk assessment and 47 detections have been approved by the Ministry of Agriculture. 82 technical standards for GMO safety have been developed and regular detection of GMOs is being undertaken.

Description of Risk

According to the data published by the MOA (Ministry of Agriculture) on April 27, 2013, China has issued GMO Safety Certificates to develop seven domestically genetically modified (GM) crops, including a variety of tomato (1997), cotton (1997), petunia (1999), sweet pepper and chili pepper (1999), papaya (2006), rice (2009) and corn (2009). Among the seven, the approved GM cotton has been broadly cultivated in China. As of 2010, China grew 3.3 million hectares of the approved GM cotton and a few hectares of the papaya, while the other GM crops had not been cultivated broadly, according to the MOA. To date GMO soybean is not allowed to be produced and it is still illegal to cultivate GM soybean in China.

Moreover, there are more than 6,000 varieties of soybeans that Chinese farmers have developed over thousands of years accounting for 90 percent of all the soybean varieties in the world. Today, only a few varieties make up the core of the soybean industry; experts fear that if GM soy production is allowed in China, most wild types will be wiped out. The conversion of mass tracts of land to monoculture crop production in the country's Northeast and elsewhere will further reduce overall agro-ecosystem species diversity.

In September 2015, the Chinese Ministry of Agriculture said it would launch a new nationwide investigation into the illegal cultivation of GMO crops in Suihua, Heilongjiang province in China after reports of local grown GM soybeans being discovered. The local government made deep investigation and did sampling on the seeds of soybean suspected and the result showed no evidence that there were GMO seeds of soybean. As a whole, China allows certain strains of GMO soybeans to be imported as raw materials for processing into cooking oils and for animal feed. Most of these imports come from the US.

On a whole, the agricultural GMO regulatory system seems complete, containing both substantive and institutional norms, and incorporating international regulatory approaches and techniques, but the real challenge to such a regulatory system is firstly whether China, the largest developing country has the capacity to implement and enforce the rules. Taking into consideration the highly decentralized and fragmented character of public administration in China, administrative resources (both human and financial resources) are limited and strong local protectionism by local governments and other elements would still be kept in the near future.

Risk conclusion

The commercial use of GM soy is illegal and there is no evidence that there is violation of this regulation by soy farmers in China, thus the risk is evaluated to be low.

5.1.6. Risk designation and specification

Low risk

5.1.7. Control measures and verifiers

N/A

Annex I: Soy source types

The table **Soy Source Types in China** identifies the different types of plantations in **China** which supply soy to the market.

'Soy source type' is a term used to describe the different types of soy plantations in a country, in order to allow a more detailed specification of risk. The Soy Source Type is used to clarify:

- which plantation types soy can be sourced from legally;
- what the legal requirements are for each plantation type, and
- if there are risks related to certain plantation types and not others.

In China the land average for each farmer family is an "ultra-small size", roughly, it is approximately 0.6 hectares on average for China. By comparison it is 1.4 hectares for Japan, 1.2 hectares for South Korea and 195.2 hectares for the United States (Jianming Mei, 2002). In terms of regions of China, there are larger differences (see Table 1 and Figure 1). The average cultivated area reached 40.18 Mu (2.7 hectares) for Heilongjiang in 2008 for all crops, the same year Beijing average cultivated land area was only 0.69 Mu (0.046 hectares). According to the administrative region of China, in northwest and northeast regions the average household land scale is larger, and the average cultivated land in coastal area is quite smaller. In China, land is allocated in a form of rural collective, that is to say, each rural family belongs to a collective group ("CUN" or "DADUI") and different groups have different population and the area of land managed. CUN allocates land in the light of the population in the CUN and the area of the land. Therefore, the farmers in different regions are allocated to different size of land.

SOY SOURCE TYPES IN CHINA				
Plantation type	**Region/Area**	**Land Classification**	**Ownership**	**Management regime**
Farm collectives. Under collective ownership, farmers in China do not own the land and cannot sell it. Instead, village authorities allocate farm households use rights, or rights to cultivate specific parcels of land.	Northeast China mainly incl. Heilongjiang Province, part of Jilin and Inner Mongolia province	Collectively leased land.	State owned	Managed by individual farm households. On average, each farmer has 0.6 hectares of land. Village authorities allocated land to farm households according to the number of people in a household.
State-owned soy farms There are a few large state-owned and state managed soy farms located in Heilongjing province.	Heilongjiang Province	State owned farm land.	State owned	State managed under the administration of the state owned organizations.
Organic soy farms Commercially run by state owned organizations or private companies who lease the land from Farm collectives. To market organic soy farms, must obtain an organic agri-product certification recognized by the government.	Majority of farms are located in Heilongjing province.	Leased from farm collectives or state managed land.	State owned	Under the administration of the state owned organizations or private companies leasing land from Farm collectives.

Annex II: Accredited Certification Bodies

By Certification and Accreditation Administration of the People's Republic of China for Organic Product Certification

No.	Name of Bodies
1	中国质量认证中心China Quality Certification Centre www.cqc.com.cn
2	杭州万泰认证有限公司Wantai Attestation Limited Company http://www.wit-int.com
3	方圆标志认证集团有限公司 http://www.cqm.com.cn/ China Quality Mark Certification Group
4	广东中鉴认证有限责任公司 http://www.gzcc.org.cn/ Guangdong Zhongjian Certification Co. Ltd
5	浙江公信认证有限公司Gainshine Assessment http://www.gac.org.cn/
6	中食恒信（北京）质量认证中心有限公司Zhongshihengxin Food Quality Certification Under MC http://www.zshx.org.cn/
7	北京中安质环认证中心 http://www.zazh.com/ Zhongan Authentication Centre
8	黑龙江省农产品质量认证中心 http://nzaq.hljagri.gov.cn/ Heilongjiang Agriculture Products Quality Security Website
9	中环联合（北京）认证中心有限公司http://www.mepcec.com/ CEC
10	北京五洲恒通认证有限公司http://www.bjchtc.com/ CHTC
11	北京中绿华夏有机食品认证中心http://www.ofcc.org.cn/ COFCC
12	辽宁方园有机食品认证有限公司http://www.fofcc.org.cn/ FOFCC
13	辽宁辽环有机食品认证中心http://lnlhcc.com/about.php Liaoning Liao Huan Certification Centre
14	北京五岳华夏管理技术中心http://www.bjchc.com.cn/ CHC
15	新疆生产建设兵团环境保护科学研究所http://www.xjyjxh.org/Organic.aspx?id=13 Xinjiang Organic Products Association
16	西北农林科技大学认证中心http://ylofcc.nwsuaf.edu.cn/newsite/index.php NWAFUC
17	南京国环有机产品认证中心(同时还可开展出口有机产品认证) http://www.ofdc.org.cn/

18	北京东方嘉禾认证有限责任公司http://www.jiahe.org.cn/ Beijing Orient Jiahe Certification Co.,Ltd
19	杭州中农质量认证中心http://www.organicteachina.com/ Hangzhou Chinese Agricultural Quality Certification Centre
20	北京爱科赛尔认证中心有限公司（同时还可开展出口有机产品认证) http://www.ecocert.cn/ Beijing ECOCERT Certification Centre
21	南京英目认证有限公司（仅限出口有机产品认证）-Already revoked in 2014 by STATE GENERAL ADMINISTRATION OF QUALITY SUPERVISION INSPECTION AND QUARANTINE
22	北京中合金诺认证中心有限公司http://www.co-ic.com/ Beijing CO-OPS Integrity Certification Centre
23	上海色瑞斯认证有限公司（仅限出口有机产品认证）http://www.ceres-cert.cn/ Shanghai Ceres Certification Co.,Ltd (Only for the certification of export of organic product)

Annex III: Organic Product Certification Labels

According to the 'Administrative Measures for Organic Product Certification' certified China organic products shall have the certification mark which includes the Chinese Characters "中国有机产品" and the corresponding English word "ORGANIC".

As to the products made during the organic product conversion period or processed from the products made during the conversion period as raw materials, they must use the China organic conversion product marks. Such a mark shall bear an indication of the Chinese Characters "中国有机转换产品" and the corresponding English words "CONVERSION TO ORGANIC".

Buyers of China CNCA's Organic Product Certification should ensure sure the certificate and product label is valid and active. One can check and verify the certification information and organic product code through http://food.cnca.cn – (please note the site is in Chinese only).

1. China Organic Product Certification Mark :

C:100 M:0 Y:100 K:0
C:0 M:60 Y:100 K:0

2. China Organic Product Conversion Mark

C:0 M:40 Y:100 K:40
C:0 M:60 Y:100 K:0

China Organic Product Certification Mark has five sizes:10mm、15mm、20mm、30mm and 60mm.

You can check and verify the certification information and organic product code through http://food.cnca.cn

Source: text and Annex extracted from Administrative Measures for Organic Product Certification published by the State General Administration of Quality Supervision, Inspection and Quarantine department. Promulgation and effective date respectively: 11-05-2004 and 04-01-2005.

About

Responsible Sourcing of Soy, Cattle and Palm Oil

Responsible Sourcing of Soy, Cattle and Palm Oil is a project aimed at creating awareness and capacity among Danish companies to minimise risks of social and environmental problems connected to sourcing palm oil, soy and cattle from developing countries. The project is run by NEPCon and SEGES and funded by DANIDA, Ministry of Foreign Affairs of Denmark.

NEPCon

NEPCon (Nature Economy and People Connected) is an international, non-profit organisation that builds commitment and capacity for mainstreaming sustainability. Together with our partners, we foster solutions for safeguarding our natural resources and protecting our climate.

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