

Soy Risk Assessment Brazil

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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. This risk assessment used the methodology detailed in the Corporate Social Responsibility (CSR) Soy Risk Assessment Framework Guidelines (November 2015).

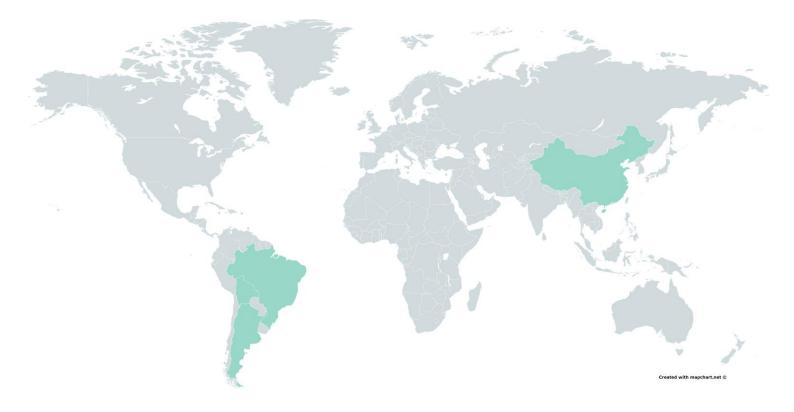


Figure 1. Countries for which NEPCon have developed a risk assessment for soy

B. Overview of sourcing risks for soy from Brazil

Soy Risk Score: 21 / 100 in 2017

This report contains an evaluation of the CSR risks in Brazil for seven categories and 20 subcategories of law. We found:

- Specified risk in 16 sub-categories.
- Low risk for 3 sub-categories.
- 1 category was not applicable

Soy source types and risks

There are three soy source types found in Brazil. 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.

Large commercial farms	Soy from large commercial farms greater than 2,500 hectares. Such farms are mainly privately owned, many with uncertain land tenure.
Medium-sized farms	Soy from medium-sized commercial farms of an average of 500 hectares. Such farms are mainly privately owned, many with uncertain land tenure.
Small cooperative farms	Soy from small cooperative farms in the Atlantic biome. The farms are mostly privately owned, many with uncertain land tenure. A small portion of soy is also produced by smallholders in rural settlements who mainly sell their production through cooperatives. Land tenure is less contentious than in the other two main soy producing tropical regions of Brazil.
	Note that this source type occurs only in the Atlantic Forest Region.

We have analysed the risks for all source types and found the risks are different depending on the region sourced from.

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

Regarding **business issues**, there is a risk of:

- illegal/undocumented land tenure (sub-category 1.1). There is a risk that many properties are under illegal possession due to land/property not being properly registered or being based on forged documents. The Rural Environmental Registry (CAR) is aiming to register all farms by 2017.
- tax evasion for Value Added Taxes (1.4). Reportedly, tax evasion is commonly practiced via: the sale of products without the emission of a fiscal bill of sale; the issuance of the



fiscal bill of sale with a volume below the actual volume delivered; and/or the issuance of a fiscal bill of sale with the value of the product below the actual value.

Regarding **social issues**, there is a risk that:

- that producers engage in illegal labour practices, particularly with respect to discrimination, women's' rights and minimum age issues (2.1 and 2.3). Reportedly, the labour laws are not well respected in the agriculture sector and rural workers tend to be unaware of their labour rights.
- workers are exposed to health and safety risks beyond legal limits (2.2). Reportedly, a large part of the soy farm work force is not professionally trained or given health and safety guidance.
- conflicts over land tenure rights exist where soy producers claim land tenure over areas claimed to be traditionally owned by the indigenous and/or traditional peoples (2.4). The risk that soy farms operate in areas where there are outstanding land claims is significant, as there are several explicit cases of disrespecting the legal rights of indigenous and traditional people in Brazil.

Regarding **environmental issues**, there is a risk that:

- the Brazilian Forest Code, the main environmental protection requirement, is not complied with (3.1). There is also a risk that the code and several complementary significant state laws under the Environmental Adjustments Program (PRA) have not been subsequently established and/or implemented, leading to inadequate and/or variable permitting regulations.
- natural forests are converted (cleared) to make way for soy farms (3.2) and HCVs (3.3.1 3.3.4) causing significant negative impacts on protected sites and species and HCVs. The overall level of official protection of HCV values in the soy farm regions is insufficient.

Regarding **conversion** (4.1), there is a risk that natural forests or ecosystems are cleared to establish soy farms. Reportedly, the expansion of soy plantations in the Cerrado biome is one of the main drivers of land conversion threatening natural ecosystems and is done through illegal or legal means. For soy suppliers not committed to the Soy Moratorium in the Brazilian Amazon there is still a risk that soy farms drive deforestation in the Amazon. The risk of land conversion for soy production is low in the Atlantic region

Regarding **GMOs** (5.1), there is a risk of GMO soy being produced in Brazil. GMO soy is difficult to identify or separate from non-GMO soy unless tested in laboratories or certified as being organic. GMO soy is legal and commercial production of GM soy covers more than 90% of the total production in Brazil.

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

	Sub-category		Risk Conclusion		
Legal Category			Amazon	Cerrado	South
	1.1. La	and tenure	Specified	Specified	Specified
		antation registration & jement rights	Specified	Specified	Specified
Business Issues		ayment of royalties & required	Low	Low	Low
	1.4. Va taxes	alue Added taxes & other sales	Specified	Specified	Specified
	1.5. Ir	come and profit taxes	Low	Low	Low
	1.6. Disclosure of Information		N/A	N/A	N/A
	2.1. Legal employment		Specified	Specified	Specified
Social issues	2.2. ILO Fundamental Conventions are upheld.		Specified	Specified	Specified
	2.3. H	ealth and safety	Specified	Specified	Specified
	2.4. IP and TP rights are upheld.		Specified	Specified	Specified
	3.1. Environment		Specified	Specified	Specified
	3.2. Pi	otected sites and species	Specified	Specified	Specified
	3.3. HCV	3.3.1 Species diversity.	Specified	Specified	Specified
Environmental issues		3.3.2 Landscape-level ecosystems & mosaics.	Low risk for soy moratorium companies	Specified	Low
		3.3.3 Ecosystems and habitats	Specified	Specified	Specified
		3.3.4 Critical ecosystem services.		Specified	
		3.3.5 Community needs		Specified	
		3.3.6 Cultural values.		Specified	Specified
Conversion	Conversion 4.1. New plantations since November 2005 have not replaced natural forest o ecosystems.		Low risk for soy moratorium companies	Specified	Low
GMOs	5.1. No GMO's		Low	Low	Low



C. Overview of the soy sector in Brazil

Over the past two decades, the soy agricultural sector has experienced significant growth in Brazil. Due to the genetic enhancement of the soybean and the Cerrado region's soil correction (making it cultivable), soy can be grown in several tropical areas in the Brazil. New agricultural frontiers areas were created in particularly the Amazon region to reallocate livestock from areas that soy farms were overtaking.

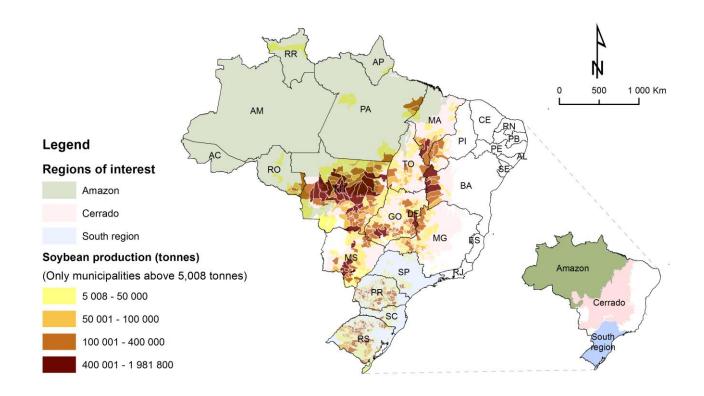
In 2015 soy was grown on approximately 30 million hectares (ha) producing more than 84 million metric tons of soy bean. Soy farming in Brazil is distributed over three regions (see map below) and are related to three tropical biomes (Atlantic Forest (a.k.a South Region), Cerrado and Amazon); >80% of Brazil's soy production is concentrated in these 3 biomes. Soy was first cultivated in Southern Brazilian then moved to the Midwest (Cerrado and Amazon) and is currently moving in the Northern Cerrado region called MAPITOBA (specifically in the following states: Maranhão, Piauí, Tocantins and Bahia).

Two major factors are currently shaping the nature of CSR practices and impacts linked to soy production which are particularly poignant the Cerrado region. In response to pressure from retailers and nongovernmental organizations (NGOs), major soybean traders signed the Soy Moratorium, agreeing not to purchase soy grown on lands deforested after July 2006 (updated to 2008 to align with the changes in the Brazilian Forest Code) in the Brazilian Amazon. The moratorium is widely credited as a major factor in the reduction of deforestation in the Brazilian Amazon in recent years. The second factor, relates to the Forest Code which is the predominant national legal framework for land use in Brazil. Both factors have generated an impetus to review land use strategies in the Cerrado, where the soy production is currently a key driver of major social and environmental impacts.

Brazil's Soy Moratorium H. K. Gibbs, L. Rausch, J. Munger, I. Schelly, D. C. Morton, P. Noojipady, B. Soares-Filho, P. Barreto, L. Micol, N. F. Walker Science 23 Jan 2015: Vol. 347, Issue 6220, pp. 377-378

Biome	Soy production (Tons) 2015	% Total Brazil 2015
Amazon	11.963.628	14%
Cerrado	40.768.744	47%
South Region	31.332.357	36%
Subtotal	84.064.729	97%
Total Brazil	86.760.520	100%

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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

- Law No. 5868/72 National Rural Registration System full (I) link
- Decree 72.106/73 Regulates law 5868, of 12/12/1972, which instituted the national rural registration system and provides for other matters - full (I) - <u>link</u>
- Law No. 4504/64 Land statute Chapter I (land access); Chapter IV (Use or temporary tenure land) (I) <u>link</u>
- Decree No. 59.566/66 Regulates as sections I, II and III of the chapter IV of the title III of law nº 4.504, of November 30th 1964, the Land Statute, the chapter III of law n º 4.947, April 6th 1966, and other matters Chapters I, II e III. (I) <u>link</u>
- Decree No. 7.830 It provides for the Rural Environmental Registry System, the Rural Environmental Registry, establishes general standards for Environmental Adjustment Programs, mentioned in Law No. 12,651, of May 25, 2012, and other matters <u>link</u>
- Normative Instruction No. 2/14 Provides for the procedures for integration, performance and compatibility of the Rural Environmental Registry System - SICAR and defines the general procedures of the Rural Environmental Registry - CAR - <u>link</u>
- Law No.9393/96 Provides for the Rural Territorial Property Tax (ITR) link
- Decree No. 4,382/02 Provides for the Rural Territorial Property Tax (ITR) link

1.1.2. Legal authority

- INCRA National Institute for Colonization and Agrarian Reform Instituto Nacional de Colonização e Reforma Agrária / Ministry of Agrarian Development - Ministério do Desenvolvimento Agrário (I)
- Real Estate Registration Notary Cartório de Registro de Imóveis (II)
- Secretariat of the Federal Revenue of Brazil Secretaria da Receita Federal (III)
- National System of Rural Environmental Registry Sistema Nacional de Cadastro Ambiental Rural SICAR (IV)
- Brazilian Institute of Environment and Renewable Natural Resources Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis - IBAMA / Environmental Ministry -Ministério do Meio Ambiente - MMA (V)
- State or Local Environmental Agency Órgão Estadual de Meio Ambiente (VI)

1.1.3. Legally required documents or records

 CCIR (Certificate of Registration of Rural Real Estate - Certificado de Cadastro do Imóvel Rural) (I) - <u>http://www.incra.gov.br/estrutura-fundiaria/regularizacao-fundiaria/cadastrorural</u>

- Proof of Registration of the Territorial Institute Comprovante de Cadastro do Instituto Territorial - ITR
- Certificate of Deed of Entire Content of the Rural Real Estate Certidão de Matrícula de Inteiro Teor do Imóvel Rural
- CNDIR (Negative Certificate for Debots of the Rural Real Estate Certidão Negativa de Débitos do Imóvel Rural) -<u>http://www.receita.fazenda.gov.br/aplicacoes/atspo/certidao/certinter/niitr.asp</u>
- CNPJ Card <u>http://www.receita.fazenda.gov.br/pessoajuridica/cnpj/cnpjreva/cnpjreva_solicitacao.asp</u>
- Registered or Notarized Lease, Partnership or Lending Agreement Contrato de Arrendamento, Parceria ou Comodato Rural Registrado ou com firma reconhecida em cartório
- Rural Environment Registry receipt / record Protocolo / recibo do Cadastro Ambiental Rural - CAR - <u>http://www.car.gov.br/#/</u>

1.1.4. Sources of information

- <u>http://www.florestal.gov.br (1)</u>
- <u>http://www.iss.nl/fileadmin/ASSETS/iss/Documents/Conference_papers/LDPI/88_Gustavo_Oliveira.pdf (2)</u>
- Based on observation and corroborated by reviewed done by in-country experts. (3)
- Legislation Portal of the Federal Government <u>https://legislacao.planalto.gov.br/legisla/legislacao.nsf/fraWeb?OpenFrameSet&Frame=frm</u> <u>Web2&Src=/legisla/legislacao.nsf%2FFrmConsultaWeb1%3FOpenForm%26AutoFramed</u>
- Secretariat of the Federal Revenue of Brazil website -<u>http://www.receita.fazenda.gov.br/aplicacoes/atbhe/tus/default.aspx?/a/2</u>
- INCRA http://saladacidadania.incra.gov.br/
- Perception Index of Legal Compliance IPCL Brazil
- FGV Fundação Getúlio Vargas <u>http://bibliotecadigital.fgv.br/dspace/handle/10438/14133</u>
- The CPI (corruption perception index) transparency.org.
- Rural Environment Registry Cadastro Ambiental Rural CAR http://car.gov.br/#/

1.1.5. Risk determination

Overview of legal requirements

Brazil has an old and complex legislation that regulates land tenure. Furthermore, the land tenure situation in rural areas across the country is quite disorganized as the law is poorly enforced and non-official documents are commonly used and accepted for multiple purposes. (1)

Land ownership in Brazil can be classified into two categories: private and public. Every private land owner needs to demonstrate they are holding a valid land title issued by the relevant governmental agency; either the Brazilian National Institute of Colonisation and Agrarian Reform (INCRA) at the federal level, or state land agencies at the state level. Local notary offices at the municipal level also issue non-official land titles that should only serve as an interim document until the official land title can be finalized; however, this 'interim' documentation is the one most commonly held by farmers throughout Brazil.

Public lands are:



- (1) Land legally defined for a public use and can include different land use/possession types: i.e., protected areas, indigenous territories and rural settlements; or
- (2) Unclaimed land which is land that has not been legally defined or designated for a public use and neither given nor sold to any private owner. Unclaimed land is generally source of conflict and land grabbing, particularly in the new agriculture expansion frontiers.

In 2012, a new Forest Code, legislation that regulates environmental protection measures for farms was approved in Brazil. As a part of the Forest Code approval the Brazilian government made it mandatory that all rural properties, including soy farms, be mapped and registered in a database, known as the CAR (Rural Environmental Registry - *Cadastro Ambiental Rural*). The CAR database holds geospatial data on property boundaries as well as environmental information on rural agricultural production. This registration does not demonstrate full compliance with the Forest Code, but rather is a good step and proxy for indicating private land in Brazil is officially registered.

Description of risk

There is a risk of soy farms having illegal/undocumented land tenure. Many properties are under illegal possession, either because the land/property have not been properly registered as required by the law or is based on forged documents. The Rural Environmental Registry (CAR) registration which can be used as one proxy for legal land tenure is aiming to register all farms by 2017.

Historically land rights have been held and/or obtained irregularly through corrupt means such as through forged documents, resulting in a large number of properties under illegal possession; this issue is mainly found in the North (Amazon region) and Midwest (Cerrado) of the country where the agribusiness has been expanding over the last two decades. (1)

The existing land tenure legislation is dysfunctional and as a result has created confusing and bureaucratic procedures that often leads to regulation of land ownership by extra-judicial ways. (2) It is common that the land property is not properly registered or forged documents ("land grabbing ") are used. This can result in more than one document of ownership covering the same land area. This overlap of ownership usually comes to light when there is a conflict related to land tenure where more than one land owner calls for legitimate possession, or when the entire dominion is analysed, which is a requirement of only some state environmental agencies. (3)

Brazil can be considered a country with high corruption perception: The IPCL (Perception Index of Legal Compliance) was 7.0 in the first semester of 2015 (on a 0-10 scale where 10 the laws are completely enforced in the country). In addition, CPI (corruption perception index) in Brazil in 2015 was 38 (on a scale from 0 to 100 where 100 is lowest level of corruption). This means there is high perception that Brazil is a corrupt country.

Nevertheless, despite the above governance issues associated with land tenure, good progress on CAR registration has been made. By May 2017 and at the time of the drafting of this report 81.7% of farms had completed CAR registration. (2)

Risk conclusion

Given the relevant land tenure laws are not upheld and consistently enforced by all relevant authorities, and furthermore the evidence linked to not all farms being registered under the CAR system indicates there is an elevated risk of farms having officially legally recognized land tenure rights in the Amazon Biome.

1.1.6. Risk designation and specification

Elevated risk

1.1.7. Control measures and verifiers

- Verify the soy farm has the following valid land tenure documents:
 - A <u>CAR</u> A Rural Environment Registry receipt / record (Protocolo / recibo do Cadastro Ambiental Rural)
 - A <u>CCIR</u> Certificate of Registration of Rural Real Estate (Certificado de Cadastro do Imóvel Rural)
 - An <u>ITR</u> Proof of Registration of the Territorial Institute (Comprovante de Cadastro do Instituto Territorial)
 - A <u>Certificate of Deed of Entire Content of the Rural Real Estate</u> (Certidão de Matrícula de Inteiro Teor do Imóvel Rural)
 - A <u>CNDIR</u> Negative Certificate for Debts of the Rural Real Estate (Certidão Negativa de Débitos do Imóvel Rural)
 - A <u>CNPJ</u> Card Registration and Cadastral Situation of Legal Entity (Comprovante de Inscrição e de Situação Cadastral de Pessoa Jurídica)
 - Registered or Notarized Lease, Partnership or Lending Agreement Contrato de Arrendamento, Parceria ou Comodato Rural Registrado ou com firma reconhecida em cartório
 - Recursos Hídricos)
 - Records Free Prior Informed Consent and copies of negotiated agreements
- Verify the farm has a valid CAR status by checking its CAR registration number in the Public Module of the Rural Environmental Registry System (SiCAR, Simistema Nacional de Cadastro Ambiental Rural): <u>www.http://car.gov.br/publico/imoveis/index</u>
- Review information on land tenure disputes and developments on indigenous and traditional peoples' land claims:
 - Identify potential conflicts especially for medium to large enterprises. Ask the supplier for a map identifying the traditional communities close to its farms and/or cross reference the farm location with the location of indigenous lands and Quilombolas communities which can be found on the following websites:
 - Indigenous lands in Brazil <u>website</u>
 - Quilombolas communities' <u>official website</u>
 - Research documented conflicts by Brazilian states
 - Information on traditional communities can be found on the Ministry of Environment's <u>website</u>
 - Review a <u>recent report</u> (2015) of well-known conflicts by Brazilian states
 - Consult with neighbours, local communities, landowners and other stakeholders to find out if A) land tenure rights are clear and – where applicable – lease of the land has been agreed by all the landowners; and B) if there are any court orders or other legal decisions that mean that the company is not allowed to operate due to conflicts of land tenure.

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.

Context

The only legal requirements linked to farm management in Brazil is the Forest Code which regulates environmental protection measures and establishes criteria for land use and conservation of native vegetation in rural properties. These measures are not related to the production activities but rather to farm zoning and environmental protection areas, e.g., buffer zones along water courses and the legal reserve - which is the minimum area per farm that needs to be maintained (and in for some rural properties the legal reserve needs to be restored) in its natural ecosystem state (the legal reserve percentage is set according to biome – 80% in the Amazon Biome, 50% in the Cerrado and 20% in South region).

1.2.1. Applicable laws and regulations

- Lei No. 12651/12 Forest Code full Art. 27 to 29 link
- Normative Instruction No. 09/15 Discipline the technical and administrative procedures for the operation of Provisional Authorisation Rural Activity in the State of Mato Grosso link

1.2.2. Legal authority

- Brazilian Institute of Environment and Renewable Natural Resources Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis - IBAMA / Environmental Ministry -Ministério do Meio Ambiente - MMA
- National Water Agency ANA
- State or Local Environmental Agency Órgão Estadual de Meio Ambiente

1.2.3. Legally required documents or records

- Rural Environment Registry Cadastro Ambiental Rural CAR
- Restoration of degraded areas projects PRAD (if available)
- Grant of Right to Use Water Resources Outorga de Direito de Uso de Recursos Hídricos
- Transitory authorization of rural activity operation Autorização Provisória de Funcionamento de Atividade Rural - APF https://monitoramento.sema.mt.gov.br/apfrural/Index.aspx
- Environmental Commitment Term Termo de Compromisso Ambiental (TCA)

1.2.4. Sources of information

- Legislation Portal of the Federal Government <u>https://legislacao.planalto.gov.br</u>
- Rural Environment Registry Cadastro Ambiental Rural CAR <u>http://car.gov.br/#/</u>
- <u>http://www.mma.gov.br/estruturas/202/ arquivos/livro apps e ucs x areas de risco 20</u> <u>2.pdf; http://www.canalrural.com.br/noticias/agricultura/falta-informacao-para-produtores-seguirem-novo-codigo-florestal-8342</u>
- <u>http://www.mma.gov.br/estruturas/202/ arquivos/livro apps e ucs x areas de risco 20</u>
 <u>2.pdf</u>
- <u>http://www.canalrural.com.br/noticias/agricultura/falta-informacao-para-produtores-seguirem-novo-codigo-florestal-8342</u>
- http://ipam.org.br/prazo-para-cadastro-ambiental-rural-deve-ser-mantido/

- Assessing compliance with the Forest Code: A practical guide. Pedro Amaral (Proforest) Tiago Reis (IPAM) Roberta del Giudice (Instituto BVRio). 2017
- http://www.proforest.net/proforest/en/files/guia-codigo-florestal_english_final_web.pdf

1.2.5. Risk determination

Overview of legal requirements

The only legal requirements linked to farm management in Brazil is the Forest Code which regulates environmental protection measures and establishes criteria for land use and conservation of native vegetation in rural properties. These measures are not related to the production activities but rather to farm zoning and environmental protection areas, e.g., buffer zones along water courses and the legal reserve - which is the minimum area per farm that needs to be maintained (and in for some rural properties the legal reserve needs to be restored) in its natural ecosystem state (percentage is set according to biome and for the Amazon Biome 80% of the farm area must be contained in a legal reserve).

The Forest Code Act 12.651/12 defines if and how farm management interventions may occur in forest areas and/or native vegetation areas of the farm property, i.e., if management and operational activities are permissible and/or where forest and/or natural ecosystems can be converted into farm land. It also defines areas that are in inconsistent with the established rules and required mechanisms and instruments for ensuring the property meets the rules: either through restoration, and either through compensation (e.g., Forest Reserve Credits (CRAs, Cotas de Reserva Ambiental) through legal reserve offsetting between rural properties, donation to the state or federal government of a privately-owned area within a protected area) or by other manners prescribed by law.

The main obligations established by the Forest Code are soy farms need to 1st obtain CAR (Rural Environmental Registry - Cadastro Ambiental Rural) then ensure its Permanent Preservation Areas (APPs, Áreas de Preservação Permanente) are established (these are areas, covered or not by native vegetation, e.g., APPs are riparian zones, springs, hilltops, steep slopes) and its Legal Reserve (LRs) are established (the size of a Legal Reserve varies according to the biome in which the property is located, as well as its Ecological Economic Zoning (ZEE), if the property is located within the Amazon).

Deadlines for meeting APP and LRs commitments are defined by each Brazilian state and defined by the compliance mechanism called Term of Commitment. Soy farms with compliance issues must develop a plan to restore degraded/altered areas and sign the Term of Environmental Commitment. Nevertheless, the ultimate deadline established by the national government for full compliance with the Forest Code is set for May 2032 (the maximum deadline of 20 years for the regularization of the rural property is defined in Item II of Article 66 of Law 12651/2012).

Risk description

There is a risk of non-compliance with the Forest Code by soy farms in the Amazon demonstrated by evidence produced in many recent published reports (both scientific and Non-governmental (NGO) reports). Even though a large majority of rural properties including soy farms have CAR registration as described under `1.1 Risk Evaluation' not all are registered. Also, CAR registration only represents part of the obligations of farmers in its Forest Code implementation. Farmers not in full compliance with its Forest Code obligations still need to ensure it establishes its APPs and LRs and fulfil its obligations of the Term of Commitment (which outlines the time line for compliance for APPs and LRs).

In addition, in Brazil each state has the autonomy to establish its own procedures for agriculture licenses, causing large differences in legal requirements across districts. There is a high frequency of changes in the dynamics of the regulatory state laws on the subject. All definitions and processes should be aligned with requirements of the National Environmental



System - SISNAMA (Complementary law No. 140/11).

A number of soy farms not fully compliant with the Forest Code can also be attributed to the lack of effective deployment of the Environmental Adjustments Program (PRA). The PRA is to ensure Forest Code implementation is aligned by the state laws and regulations; however, a number of significant state laws and regulations have not been subsequently established and/or implemented.

Risk conclusion

This indicator has been evaluated as Elevated risk as many farms are not fully compliant with the Forest Code.

1.2.6. Risk designation and specification

Elevated risk

1.2.7. Control measures and verifiers

- Verify the soy farm has the following relevant Forest Code documents:
 - A <u>CAR</u> A Rural Environment Registry receipt / record (Protocolo / recibo do Cadastro Ambiental Rural)
 - A TCA Term of Environmental Commitment Term (Termo de Compromisso Ambiental);
 - $\circ~$ A PRAD (Restoration of degraded areas projects if required by the Brazilian Forest Code)
- Verify the farm has a valid CAR status by checking its CAR registration number in the Public Module of the Rural Environmental Registry System (SiCAR, Simistema Nacional de Cadastro Ambiental Rural): www.http://car.gov.br/publico/imoveis/index
- Verify if PRAD (restored degraded areas), if required, is implemented according the Forest Code and TCA requirements. Obtain the shape file of the soy farm property's boundaries and compare/overlay with mapping data from the following initiative that are using satellite time series images to detect the land change cover:
 - www.globalforestwatch.org
 - http://www.obt.inpe.br/prodes/index.php PRODES/INPE (high resolution)
 - http://www.obt.inpe.br/deter/index.html DETER/INPE (high resolution)
- Check that the Forest Code requirements and environmental controls are implemented in the field
- Verify the soy farm has the following relevant other farm management documents:
 - Transitory authorization of rural activity operation for Mato Grosso state (Autorização Provisória de Funcionamento de Atividade Rural) - APF https://monitoramento.sema.mt.gov.br/apfrural/Index.aspx
 - Grant of Right to Use Water Resources (Outorga de Direito de Uso de (Outorga de água/ Law No. 9.433/97) - if required.

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

• Law 8.137/1990 (common law) defines crimes against the tax, and economic orders, and against the consumption relations, and provides for other matters. (xvii/ iv/ v) - Clause 1 - $\frac{link}{2}$

1.3.2. Legal authority

- National Treasury
- Secretariat of the Federal Revenue of Brazil
- State Department of Treasury

1.3.3. Legally required documents or records

- Proof of payment of the rates regarding the analysis of the management plan by the responsible environmental body
- Joint Certificate of Debits Related to Federal Taxes and to the Current Debt Before the Union – <u>http://www.receita.fazenda.gov.br</u>

1.3.4. Sources of information

Government sources

- Legislation Portal of the Federal Government https://legislacao.planalto.gov.br
- Secretariat of the Federal Revenue of Brazil - <u>http://www.receita.fazenda.gov.br/aplicacoes/atbhe/tus/Servico.aspx?id=180&idArea=3&id</u> <u>Assunto=43</u>

1.3.5. Risk determination

Overview of legal requirements

The rates that an interested party must pay, when carrying out any economic activity in Brazil, are referred for analysis and approval by the administrative bodies. An example might be the analysis and approval of the management plan and the rates related to the issuance of operation permits.

Description of risk

In general, companies willing to legally carry out the activity are also usually willing to pay the rates. The non-payment of the rates results in the license being withheld and may cause the company to become indebted to the Government. It may also cause the confiscation of the company's property for the settlement of the pending fees.

Risk conclusion

Considering that only legally established companies with licensed operations must pay rates for forest management – and that the rates do not represent a significant financial burden for the companies – the risk for this criterion is considered as low.

1.3.6. Risk designation and specification

Low risk

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

- Complementary Law No. 87/96 Circulation Tax on Goods and Services (ICMS). (LEI KANDIR) Artigo 2° <u>link</u>
- Law No. 8.846/94 Provides about the issuance of fiscal documents and the arbitrage of the minimum revenue for taxation, and provides for other matters - <u>link</u>

1.4.2. Legal authority

 Secretariat of the Federal Revenue of Brazil / Ministry of the Treasury - Secretaria da Receita Federal / Ministério da Fazenda

1.4.3. Legally required documents or records

- Corporate Taxpayers' Registration Numbers (CPF (Cadastro de Pessoas Físicas) /CNPJ (Cadastro Nacional da Pessoa Jurídica))
- Joint Certificate of Debits Related to Federal Taxes and to the Current Debt Before the Union - Certidão Conjunta de Débitos Relativos a Tributos Federais e à Dívida Ativa da União - <u>http://idg.receita.fazenda.gov.br/interface/cidadao</u>
- Fiscal bill of sale Nota fiscal de venda do Produto

1.4.4. Sources of information

- Legislation Portal of the Federal Government https://legislacao.planalto.gov.br
- Secretariat of the Federal Revenue of Brazil - <u>http://www.receita.fazenda.gov.br/aplicacoes/atbhe/tus/Servico.aspx?id=180&idArea=3&id</u> <u>Assunto=43</u>
- Estimative study on the level of tax evasion in Brazil (SINPROFAZ): <u>http://www.quantocustaobrasil.com.br/artigos-pdf/sonegacao-no-brasil-uma-estimativa-do-desvio-da-arrecadacao-do-exercicio-de-2013.pdf</u>
- Tax Evasion: <u>http://www.quantocustaobrasil.com.br/artigos-pdf/sonegacao-no-brasil-uma-estimativa-do-desvio-da-arrecadacao-do-exercicio-de-2013.pdf</u>
- <u>http://exame.abril.com.br/english/brazil-now/tax-evasion-may-reach-r\$-415-billion-in-2013.shtml</u>

1.4.5. Risk determination

Overview of legal requirements

The ICMS (Sobre Operações Relativas à Circulação de Mercadorias e Serviços de Transporte Interestadual de Intermunicipal e de Comunicações) is the main trade of goods or services tax and is applicable for the soy trade. Also, every sale of soy in Brazil is required to be processed through a formal document called 'nota fiscal', which is used to issue and collect the ICMS; the rates are set by each Brazilian State.

Description of risk

There is a risk of tax evasion. Tax evasion techniques used normally include: the sale of products without the emission of a fiscal bill of sale; the issuance of the fiscal bill of sale with a

volume below the actual volume delivered; and/or the issuance of a fiscal bill of sale with the value of the product below the actual value.

A SINPROFAZ (National Treasury Attorney's Union) study estimated that tax evasions totalling up to 415 billion reals took place in 2013 tax evasion could have– nearly 10% of the Brazilian GDP.

The practice of tax evasion is considered elevated risk for the soy sector at the farm level due to the widespread and high probability of tax evasion occurrence on the sale of products in Brazil.

http://exame.abril.com.br/english/brazil-now/tax-evasion-may-reach-r\$-415-billion-in-2013.shtml

1.4.6. Risk designation and specification

Elevated risk

1.4.7. Control measures and verifiers

- Confirm the farmer that the following related valid tax documents:
 - Confirm <u>Individual or Corporate Taxpayers' Registration Numbers</u> (CPF (Cadastro de Pessoas Físicas) /CNPJ (Cadastro Nacional da Pessoa Jurídica))
 - Certificate of Debt Relating to Federal Tax Credits and to Active Union Debt
- Cross check samples of sales receipts that the appropriate VAT has been paid:
 - Fiscal bills of sale (Nota fiscal de venda do Produto) must include applicable VAT taxes.
 - Receipts for payment value-added taxes shall exist.
 - Sales prices shall be in line with market prices.
- Confirm with authorities from the Federal Revenue (<u>website</u>) that operation is up to date in payment of applicable value-added taxes

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 8.137/1990 (common law) defines crimes against the tax, and economic orders, and against the consumption relations, and provides for other matters. - Clause 1 - <u>link</u>
- Law No. 8.846/94 Provides about the issuance of fiscal documents and the arbitrage of the minimum revenue for taxation, and provides for other matters. - Full text - <u>link</u>
- DECREE No. 3,000, OF MARCH 26, 1999. Regulates the taxation, inspection, collection, and administration of the Income Tax and Proceeds of Any Nature - As of Chapter IV - <u>link</u>
- Export Tax (IE) Law No. 1.578, of October 11, 1977 Full text link

1.5.2. Legal authority

• Secretariat of the Federal Revenue of Brazil

1.5.3. Legally required documents or records

• Joint Certificate of Debits Related to Federal Taxes and to the Outstanding Debt Before the



Union - http://www.receita.fazenda.gov.br

1.5.4. Sources of information

Government sources

- Tax Portal <u>http://www.portaltributario.com.br/tributos/irpj.html</u>
- Secretariat of the Federal Revenue of Brazil <u>http://www.receita.fazenda.gov.br</u>
- Federal Government Legislation Portal

1.5.5. Risk determination

Description of risk

In Brazil, the responsible body for the collection and inspection of the income tax is the Secretariat of the Federal Revenue of Brazil (RFB).

The RFB has a computerized system to collect the income taxes of all statutory Individuals and entities, cross-checking data between different payers and income recipients. The government acts upon those who try to evade income taxes. Anyone can check if a company has any disputes with the Secretariat of the Federal Revenue of Brazil through the RFB website.

Considering that the existing problems of tax evasion are related to generating income and not to the non-payment of profit taxes, this criterion is of low risk.

Risk conclusion

Low risk

1.5.6. Risk designation and specification

Low risk

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.

Context

There are no regulatory requirements in Brazil for business information disclosure.

1.6.1. Applicable laws and regulations

N/A

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

There are no regulatory requirements in Brazil for business information disclosure thus the risk for these criteria is not applicable for all of Brazil.

1.6.6. Risk designation and specification

Not applicable

Caution there is not legal requirement for business information disclosure applicable to the soy sector in Brazil. One still may require key business information from their suppliers despite this being a low legal risk.

1.6.7. Control measures and verifiers

Generic

- Evidence of annual business reports with key business information relating to revenue, sales, taxes and CSR commitments are published and available.
- Contact relevant authority to verify that all required income and profit taxes have been paid.



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

- Decree Law No. 5.452 / 1943 Approves the Consolidation of Labour Laws CLT link
- Lei nº 5.889/73 Trabalho Rural Íntegra link

2.1.2. Legal authority

- MTE Ministry of Labour and Employment Ministérios do Trabalho e Emprego
- TST Higher Labour Court Tribunal Superior do Trabalho
- TRT Regional Court of Labour Tribunal Regional do Trabalho
- DRT Regional Labour Agency Delegacia Regional do Trabalho
- MPT Public Labour Attorney Ministério Público do Trabalho
- CEF Federal Savings Bank 0 Caixa Econômica Federal
- INSS National Social Security Institute Instituto Nacional da Seguridade Social

2.1.3. Legally required documents or records

- CAGED Statement General Register of Employees and Unemployed Cadastro Geral de Empregados e Desempregados
- Collective Agreement recorded in MTE Ministry of Labour and Employment (MTE) Ministério do Trabalho e Emprego
- CNDT Negative Certificate of Labour Law Debit - Certidão Negativa de Débitos Trabalhistas
- Negative Certificate of Labour Lawsuits Certidão Negativa de Débitos Trabalhistas
- CRF FGTS Regularity Certificate (Time of Service Guarantee Fund Certificado de Regularidade do FGTS Fundo de Garantia por Tempo de Serviço)
- CND Negative Certificate of Debits Before the Federal Revenue Service -Certidão Negativa de Débitos Trabalhistas - INSS (National Social Security Institute - Instituto Nacional do Seguro Social)
- Salary Receipt or Proof of Deposit in Checking Account
- CTPS Work and Social Security Booklet Trabalho e Previdência Social

2.1.4. Sources of information

- MTE Ministry of Labour and Employment -<u>https://granulito.mte.gov.br/portalcaged/paginas/home/home.xhtml</u>
- TST Higher Labour Court www.tst.jus.br/certidao

- Federal Savings Bank <u>https://www.sifge.caixa.gov.br/Cidadao/Governo/Asp/crf.asp</u>
- Federal Revenue of Brazil DTAPREV http://www.dataprev.gov.br
- Federal Government Legislation Portal
- Reporter Brazil Lista da Transparência sobre Trabalho Escravo List Transparency on Slave Labour - <u>http://reporterbrasil.org.br/2015/09/lista-de-transparencia-sobre-trabalho-</u> escravo-traz-nomes-flagrados-por-esse-crime/
- World Bank <u>http://info.worldbank.org/governance/wgi/index.aspx#countryReports</u>
- <u>http://www.canalrural.com.br/noticias/agricultura/dificuldade-aplicacao-das-leis-trabalhistas-traz-inseguranca-para-produtores-trabalhadores-campo-8310</u>

2.1.5. Risk determination

Overview of legal requirements

Brazil has a broad legal framework on the legality of employment. The decree-Law 5452/1943 (Consolidation of the Labour Laws - CLT) is the main legislation on this matter. Clause 41 defines that all employees must be registered by the employer. It also covers other legal requirements related to the length of the workday, paid rest, child and female labour issues, compensation, unionization and other matters. For rural employment, there is a complementary law, Lei 5889/73 Trabalho Rural that needs to be observed.

The registration of the employee also assures rights such as the Guarantee Fund for Time of Service (a cumulative amount that can be withdrawn when the employee is terminated, the contract expires or when he/she retires) and the support of the INSS (National Social Security Institute - for a pension after retirement or in cases such as sick leave, incapacity, or death, among other benefits). To make this structure feasible, the employer pays the government on a monthly basis a contribution proportional to the salary of the registered employee.

The Law 7998/1990 regulates the unemployment insurance, which is compensation given by the government to workers that are unemployed without fair cause after having fulfilled at least 6 months of registered work. This benefit lasts for 4 months.

Description of risk

There is a risk that producers are engaging illegal labour practices. Reportedly, the labour laws are not well respected in the agriculture sector and the rural worker in Brazil in general is unaware of his/her labour law rights.

Overall, the rural worker in Brazil in general, has low schooling and frequently is unaware of his/her labour law rights.

In general, the labour laws are not well respected in the agriculture sector based on general observation corroborated by the index of "Rule of Law" of 55.3 reach in 2014 (in a scale from 0 to 100 where 100 is good), instituted by the World Bank and in-country expert review.

Risk conclusion

This indicator has been evaluated as Elevated risk as identified laws are often ignored by farm entities and/or in some cases by the relevant authority in terms of achieving general compliance in the whole soy sector related to legal employment.

2.1.6. Risk designation and specification

Elevated risk

2.1.7. Control measures and verifiers



Generic

- All workers are employed according to the regulation and required contracts are in place.
- Persons involved in farm management activities shall be covered by obligatory insurances.
- Persons involved in farm management activities shall hold required certificates of competence for the function they carry out.
- At least the legally established minimum salaries shall be paid for personnel involved in farm management activities.
- Salaries shall be paid officially and declared by the employer according to requirements for personnel involved in farm management activities.
- Minimum age shall be observed for all personnel involved in farm management activities.
- Minimum age shall be observed for all personnel involved in hazardous work.
- Stakeholders shall confirm that forced or compulsory labour is not involved in farm management activities.

Country specific

- Confirm the farm has the following valid relevant employment documents in place:
 - CAGED Statement General Register of Employees and Unemployed (Cadastro Geral de Empregados e Desempregados)
 - Collective Agreement recorded by Ministry of Labour and Employment (MTE -Ministério do Trabalho e Emprego)
 - CNDT- Certificate of Negative Labour Debits (Certidão Negativa de Débitos Trabalhistas)
 - Certificate of Negative Labour Lawsuits
 - CRF- FGTS Regularity Certificate (Certificado de Regularidade do FGTS Fundo de Garantia por Tempo de Serviço)
 - CNDT Certificate of Negative Labour Debits with the Federal Revenue Service);
 - CTPS Work and Social Security Booklet (Trabalho e Previdência Social)
 - Employment contracts
 - Evidence of insurance (National Social Security Institute (INSS Instituto Nacional do Seguro Social)
 - Salary payment receipts
- A crosscheck of workers receiving government benefits for the unemployed and the company list of employees. Cross check documents on the Social Security Employee website of Brazil: <u>http://sipa.inss.gov.br</u>
- Ensure a supplier is not listed in the black list of slave labour which is monitored and published by the NGO called <u>Reporter Brazil</u> and/or the Transparency List on Slave Labour on the <u>InPACTO website</u>
- Consult the Social Security Employee <u>website</u> of Brazil to ensure all employees are registered and all relevant insurances are in place.
- On-site verification shall confirm:
 - o All workers are employed according to the regulations and required contracts
 - Employees:

- Are covered by mandatory insurance policies
- Hold certificates of competence required for the function that they perform
- Are paid a salary which is officially stated by the employer according to legal requirements
- Are above the minimum age for both soy farm activities and hazardous work
- Are paid at least the legally established minimum wage
- The company does not employ unregistered workers, either on probation, or who receive government benefits for the unemployed
- Confirm soy ranches takes place within the authorized boundaries in accordance with the relevant licenses

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.

Context

There is detailed set of legislative regulations related to health and safety requirements in Brazil. Overall, they are considered very strict and difficult to comply with especially by smallholders and farmers. They generally argue the legislative requirements are not adapted to the reality in rural farming zones based on general observations and corroborated by incountry expert review.

Although H&S regulations are very poorly enforced, they are an important protection measures for workers as demonstrated by farms that fully comply with health and safety regulations.

The set of H&S regulations are nationally applicable, although in most of the country there is a systematic lack of compliance with the regulations.

http://www.canalrural.com.br/noticias/agricultura/dificuldade-aplicacao-das-leis-trabalhistastraz-inseguranca-para-produtores-trabalhadores-campo-8310

2.2.1. Applicable laws and regulations

- Ordinance No. 3.214/78 Approves the Regulatory Standard NR of Chapter V, Title II, of the Consolidation of the Labour Laws, relative to the Labour Safety and Medicine - <u>link</u>
- Ordinance No. 3.158/71 MTE Creates the Inspection Book link
- Regulatory Standard No. 01 General Provisions link
- Regulatory Standard No. 06 Personal Protective Equipment PPE
- Regulatory Standard No. 07 Occupational Health Medical Control Programs
- Regulatory Standard No. 09 Environmental Risks Control Programs
- Regulatory Standard N^o 31 Regulatory Standard for Safety and Health in Working Safely in Agriculture, Livestock, Forestry, Forest Exploration, and Aquaculture.

2.2.2. Legal authority

• Ministry of Labour and Employment - Ministério do Trabalho e Emprego - MTE



- Regional Labour Agency Delegacia Regional do Trabalho / DRT
- Labour Public Attorney Ministério Público do Trabalho / MPT

2.2.3. Legally required documents or records

- Health Management, Security and Environment Rural Worker Plan (PGSSMATR) Programa de Gestão de Segurança, Saúde e Meio Ambiente de Trabalho Rural (NR – 31)
- PPRA Program for the Prevention of Environmental Risks Programa de Prevenção de Riscos Ambientais (NR – 9)
- PCMSO Program for the Medical Control of Occupational Health - Programa de Controle Médico e Saúde Ocupacional (NR – 7)
- Minutes of the CIPA/CIPATR - Internal Commission for the Prevention of Accidents of Rural Work Comissão Interna de Prevenção de Acidentes do Trabalho
- Labour Ministry Inspection Book - Livro de Inspeção do Trabalho
- PPE (Personal Protection Equipment - Equipamento de proteção pessoal) Delivery Voucher
- ASO Occupational Health Certificate - Atestado de Saúde Ocupacional
- SSO Occupation Health and Safety Segurança e Saúde Ocupacional (SSO) Training Proof (for operators of chainsaws, machine operators and application of herbicides, etc.)

2.2.4. Sources of information

- MTE Ministry of Labour and Employment <u>http://portal.mte.gov.br/legislacao/normas-regulamentadoras-1.htm</u>
- Labour Public Attorney <u>http://portal.mpt.gov.br/</u>
- Federal Government Legislation Portal

2.2.5. Risk determination

Overview of Legal Requirements

The Ministry of labour and Employment (MTE) is the authority responsible for the inspection and compliance with H&S regulations. There is a vast range of Regulating Norms (NR) that deal with the matter, NR 31 is the most applicable to the agriculture sector (Security and Health in the Work in the Agriculture, Livestock farming, Forestry, Forest Exploitation and Aquaculture), which has the objective of aligning the planning and development of rural activities with the health and security of the workers.

Farmers generally argue the legislative requirements are not adapted to the reality in rural farming zones based on general observations and corroborated by in-country expert review. Although H&S regulations are very poorly enforced, they are an important protection measures for workers as demonstrated by farms that fully comply with health and safety regulations.

The set of H&S regulations are nationally applicable, although in most of the country there is a systematic lack of compliance with the regulations.

Description of risk

There is a risk that workers are exposed to health and safety risks beyond legal limits and many soy farms are not compliant with H&S regulations.

Soy production is usually accomplished with high mechanization and a low amount of humanpower. However, serious problems related to health and safety issues exist in soy farms and several assessment notices and fines have been issued by the Ministry of Labour and Employment linked to issues with living areas, personnel protection equipment, food and potable water, health exams, collective transport and first aid.

Risk conclusion

This indicator has been evaluated as Elevated risk as the relevant H&S identified laws are often ignored by farm entities and overall the relevant authority has not achieved consistent high level of compliance with H&S regulations within the soy farming sector. This is especially salient in the agriculture frontiers in the Cerrado region.

2.2.6. Risk designation and specification

Elevated risk

2.2.7. Control measures and verifiers

Generic

- All safety and health regulations shall be followed and all required safety equipment shall be used.
- Occupational health and safety requirements shall be observed by all personnel involved in farm management activities.
- Interviews with staff and contractors shall confirm that legally required protection equipment is required/provided by the organization.
- All requirements on prevention water pollution shall be followed and are verified through reports monitoring pollution (when applicable).

Country specific

- Confirm the farmer has the following required valid Health and Safety (H&S) documents in place:
 - H&S Manager employee contract
 - SSO Occupation Health and Safety Training Procedures (Segurança e Saúde Ocupacional)
 - PGSSMATR Rural Work Safety, Health and Environment Management Program (Programa de Gestão de Segurança, Saúde e Meio Ambiente de Trabalho Rural (NR – 31))
 - PPRA Program for the Prevention of Environmental Risks (Programa de Prevenção de Riscos Ambientais (NR – 9))
 - PCMSO Program for the Medical Control of Occupational Health (Programa de Controle Médico e Saúde Ocupacional (NR – 7))
 - Minutes of the CIPA/CIPATR Internal Commission for the Prevention of Accidents of Rural Work (Comissão Interna de Prevenção de Acidentes do Trabalho Rural)
 - ASO Occupational Health Certificate (Atestado de Saúde Ocupacional)
 - Labour Ministry Inspection Book (Livro de Inspeção do Trabalho)
- Ensure a supplier is not listed in the black list of slave labour which is monitored and published by the NGO called <u>Reporter Brazil</u> and/or the Transparency List on Slave Labour on the <u>InPACTO website</u>
- Consult the Social Security Employee <u>website</u> of Brazil to ensure all employees are registered and all relevant insurances are in place.
- On-site verification shall confirm:



 Verify that the company has an occupational safety and health (OSH) management system and program, a H&S officer position (required for large-scale plantations), training, procedures and equipment are in place

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

See 2.1.1

2.3.2. Legal authority

See 2.1.2

2.3.3. Legally required documents or records

See 2.1.3

2.3.4. Sources of information

- <u>http://reporterbrasil.org.br/documentos/BRASILLIVREDETRABALHOINFANTIL_WEB.pdf</u> see page 28, 4th paragraph
- <u>http://reporterbrasil.org.br/dados/trabalhoescravo/</u> interactive maps and graphics
- Chains (Correntes), documentary about the slave labour that show a little bit of the noncompliance to the labour laws <u>http://reporterbrasil.org.br/documentarios-da-reporterbrasil/</u>
- http://reporterbrasil.org.br/documentos/BRASILLIVREDETRABALHOINFANTIL_WEB.pdf
- http://reporterbrasil.org.br/dados/trabalhoescravo/ interactive maps and graphics
- http://www.canalrural.com.br/noticias/agricultura/dificuldade-aplicacao-das-leistrabalhistas-traz-inseguranca-para-produtores-trabalhadores-campo-8310

2.3.5. Risk determination

Overview of legal requirements

Brazil has ratified the International Labour Organisation (ILO) Core Conventions and they are covered by the relevant national labour legislation. The main legal employment legislation is the CLT (Consolidation of Labour Laws), which covers all the different areas concerning legal employment. Although this legislation is considered comprehensive it is generally considered difficult to fully comply with. Also, see 2.1.5 for more information.

The main evidence of compliance is generally through the formal registry of the employee which is demonstrated when an employer is required to process and demonstrate payment of taxes and other related employment duties. For rural work in Brazil, there is a complementary law that needs to be observed.

Brazil has a broad legal framework that addresses legal employment. Clause 41 of the CLT defines that all workers should be registered by the employer with the Ministry of Labour and Employment (MTE). The legislation also covers rules for the workday, paid down time/rest, restrictions on child labour, female labour rights, workers compensation, unionization, etc. The registration of the worker assures rights such as the Guarantee Fund for Time of Service (a cumulative amount that can be withdrawn when the employee is terminated, the contract

expires or when he/she retires) and the support of the INSS (National Social Security Institute - for a pension after retirement or in cases such as sick leave, incapacity, or death, among other employment benefits). To make this structure feasible, the employer pays the government a monthly contribution proportional to the salary of the registered employee.

Description of Risk

There is a risk that the ILO Fundamental Conventions are not upheld.

There is no formal source of information indicating the status of ILO Fundamental Conventions in the agriculture sector in Brazil, neither some particular source of information for soy. It is therefore important to consider a local evaluation of compliance with the ILO Fundamental Conventions.

As presented under section 2.1 of this report, the labour law in Brazil is poorly enforced and there is a lot of evidence of non-compliance of the ILO fundamental conventions, particularly those related to discrimination, women rights and minimum age. These situations are commonly associated with agriculture production in general in Brazil, including soy producers.

Overall, rural workers in Brazil have a low level of education and are frequently unaware of his/her labour law rights.

In general, the labour laws are not well respected in the agriculture sector. This is corroborated by the index of "Rule of Law" of which Brazil placed 55.3 in 2014 (on a scale from 0 to 100 where 100 is good), instituted by the World Bank (<u>www.govindicators.org</u>).

Risk Conclusion

This indicator has been evaluated as Elevated risk. Identified laws are often ignored by soy farm entities and the relevant inspections or control cannot achieve the entire sector.

2.3.6. Risk designation and specification

Elevated risk

2.3.7. Control measures and verifiers

Generic

- All workers are employed according to the regulation and required contracts are in place
- Persons involved in farm management activities shall be covered by obligatory insurances.
- Persons involved in farm management activities shall hold required certificates of competence for the function they carry out.
- At least the legally established minimum salaries shall be paid for personnel involved in farm management activities.
- Salaries shall be paid officially and declared by the employer according to requirements for personnel involved in farm management activities.
- Minimum age shall be observed for all personnel involved in farm management activities.
- Minimum age shall be observed for all personnel involved in hazardous work.
- Stakeholders shall confirm that forced or compulsory labour is not involved in farm management activities.

Country specific

- Implement 2.1.7 control measures and;
- Confirm the farmer has Policies and procedures confirming ILO Fundamental Conventions



are upheld, for example, a policy against workplace discrimination

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 according to ILO's Convention Indigenous and Tribal Peoples Convention No.169by 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.

Context and considerations

There are communities and indigenous peoples with customary or traditional rights across the majority of Brazil.

Indigenous peoples and other tradition communities have customary rights recognized by federal legislation. This legislation is not quite well enforced and there are some conflicts between soy producers and communities with customary rights. (CPT website (<u>http://www.cptnacional.org.br/index.php</u>). Follow the last report where you can research all conflicts by Brazilian states.

http://www.cptnacional.org.br/index.php/component/jdownloads/send/41-conflitos-no-campobrasil-publicacao/14019-conflitos-no-campo-brasil-2015)

Also, there is a recently adopted piece of federal legislation that regulates the access to biodiversity and genetic resources and benefit sharing, which includes a clause on free prior and informed consent.

2.4.1. Applicable laws and regulations

- Constitution of the Federative Republic of Brazil 1988 Chapter I Art. 5 (XXII Land tenure); Chapter VIII (Indigenous peoples) - <u>link</u>
- Decree No. 5.051/04 Enacts Convention no. 169 of the International Labour Organization

 ILO about indigenous and tribal people link
- Decree No. 4.887/03 Regulates the procedure for the identification, acknowledgment, delimitation, marking, deed preparation and register for the land occupied by the people remaining from the quilombola communities, pursuant Clause 68 of the Act of the Transitory Constitutional Provisions.
- Law No. 13.123 that regulates the access to genetic patrimony and the protection and access to traditional knowledge and benefit sharing for the conservation and sustainable use of biodiversity.
- Law No. 6.001/73 Indigenous Peoples Statute <u>link</u>

2.4.2. Legal authority

- FUNAI National Indigenous People Foundation Fundação Nacional do Índio
- FCP Palmares Cultural Foundation Fundação Cultural Palmares
- IPHAN National Historic and Artistic Assets Institute Instituto do Patrimônio Histórico e Artístico Nacional (X)

- INCRA National Institute for Colonization and Farming Reform Instituto Nacional de Colonização e Reforma Agrária / Ministry of Agrarian Development - Ministério do Desenvolvimento Agrário (I)
- Environmental Ministry (<u>http://www.mma.gov.br/</u>)
- CGEN Managing Council for the Genetic Patrimony (<u>http://www.mma.gov.br/patrimonio-genetico/conselho-de-gestao-do-patrimonio-genetico)</u>

2.4.3. Legally required documents or records

• In cases of soy plantations near Indian Reserves, Environmental License issued by IBAMA and endorsed by the legally competent agencies (FUNAI, FCP, IPHAN) (I/X)

2.4.4. Sources of information

The location of indigenous lands, protected areas and quilombolas communities can be found on the following websites:

- Indigenous lands in Brazil website (<u>http://ti.socioambiental.org/pt-br/#!/pt-br/terras-indigenas</u>) and official geographic database published by FUNAI (National Foundation for Indigenous People (<u>http://www.funai.gov.br/index.php/servicos/geoprocessamento</u>)
- Official website (Brazilian Forest Service) with the map of protected areas and the subdivision of indigenous lands and other areas that are used by local communities (<u>http://www.florestal.gov.br/snif/recursos-florestais/sistema-nacional-de-unidades-de-conservacao?print=1&tmpl=component</u>).
- Quilombolas communities official website (<u>http://mds.gov.br/assuntos/seguranca-alimentar/direito-a-alimentacao/povos-e-comunidades-tradicionais/comunidades-quilombolas</u>)
- Note that there are local communities with basic needs that are not located inside protected areas, but rather spread across the country. There is no map locating all of these communities and identification may be needed to be done through a local assessment.
- Socioambiental.org <u>https://www.socioambiental.org/pt-br</u>
- Portal de legislação do Governo Federal Fundalção Palmares -<u>http://www.palmares.gov.br/?page_id=95</u>
- FUNAI http://www.funai.gov.br/index.php/indios-no-brasil/terras-indigenas
- CGEN Managing Council for the Genetic Patrimony (<u>http://www.mma.gov.br/patrimonio-genetico/conselho-de-gestao-do-patrimonio-genetico</u>)
- IBGE Indigenous people <u>http://indigenas.ibge.gov.br/mapas-indigenas-2</u>
- MMA Ministry of the Environment <u>http://www.mma.gov.br/desenvolvimento-</u> <u>rural/terras-ind%C3%ADgenas,-povos-e-comunidades-tradicionais</u>
- INCRA Quilombolas http://www.incra.gov.br/estrutura-fundiaria/quilombolas
- Pró-Indio Commission in São Paulo <u>http://www.cpisp.org.br/</u>
- Palmares Cultural Foundation <u>http://www.palmares.gov.br/?page_id=88&estado=SP</u>
- Portal of the Federal Government Legislation http://www4.planalto.gov.br/legislacao

See also:

Indigenous lands in Brazil website (<u>http://ti.socioambiental.org/pt-br/#!/pt-br/terras-indigenas</u>) and official geographic database published by FUNAI (National Foundation for Indigenous People (<u>http://www.funai.gov.br/index.php/servicos/geoprocessamento</u>)



- Official website (Brazilian Forest Service) with the map of protected areas and the subdivision of indigenous lands and other areas that are used by local communities (<u>http://www.florestal.gov.br/snif/recursos-florestais/sistema-nacional-de-unidades-deconservacao?print=1&tmpl=component</u>).
- Quilombolas communities official website (<u>http://mds.gov.br/assuntos/seguranca-alimentar/direito-a-alimentacao/povos-e-comunidades-tradicionais/comunidades-quilombolas</u>)
- Record of conflicts with local communities and indigenous peoples: <u>http://www.cptnacional.org.br/index.php/component/jdownloads/send/41-conflitos-no-campo-brasil-publicacao/14019-conflitos-no-campo-brasil-2015</u>

2.4.5. Risk determination

Overview of legal requirements

Decree 6.040/07 defines Traditional People and Communities as: culturally differentiated groups that acknowledge themselves as such and maintain their own social organization, and which occupy and use territories and natural resources as a condition for their cultural, social, religious, ancestral economic reproduction, using knowledge, innovation and practices generated and transmitted by tradition.

The same decree also defines as Traditional Territories: the spaces necessary for the cultural, social and economic reproduction of the Traditional People and Communities, whether they are used in permanent or temporary form;

According to the Ministry of Environment, Brazilian traditional people and communities includes the following groups:

Indigenous people;

- Quilombolas (descendants of rebelled Afro-Brazilian slave communities);
- Seringueiros (latex collectors);
- Castanheiros (Brazilian nut collectors);
- Quebradeiras de coco-de-babaçu (Babaçu coconut breakers);
- Comunidades de Fundo de Pasto (Back pasture communities);

Prairie dwellers;

Artisan fishermen;

- Marisqueiras (shellfish collectors);
- Ribeirinhos (river side dwellers);
- Varjeiros (mangrove side dwellers);
- Caiçaras and Praieiros (sea shore dwellers);
- Sertanejos (farm dwellers);
- Jangadeiros (raft fishermen);

Gypsies;

- Açorianos (descendants of settlers from the Azores);
- Other backwoods and river community workers.

Note that indigenous people (commonly referred to as Indians in Brazil) are also included in the definition of traditional peoples.

The New Social Cartography Institute has already identified and mapped several traditional communities in Brazil, indicating that there are traditional communities spread over the entire national territory.

The Palmares Foundation is a public institution under the Ministry of Culture that aims to promote and preserve the African-Brazilian culture. It has already identified and formally recognized more than 2,000 Quilombola communities in 23 Brazilian states.

FUNAI, the National Indian Foundation, is the Brazilian government body that establishes and carries out policies relating to indigenous peoples. It has mapped and demarcated 544 traditionally occupied indigenous territories around the country, and there are another 135 either under investigation to provide isolation and protection of the communities. Additionally, there are 51 indigenous reserves that have been established or in the process of being established. In total, there are more than 110-million hectares of indigenous land in Brazil which is approximately 13% of the total land area of Brazil.

In Brazil, indigenous people are defined as traditional peoples, but includes also Quilombolas, who receive the same legal rights as other local communities with customary rights.

Clause 231 of the Federal Constitution states that the land traditionally occupied by Indians is inalienable and is destined to their permanent possession, therefore they are exclusively entitled to use the resources found in the soil, rivers and lakes etc.

Clause 68 of the Act of the Transitory Constitutional Provisions (ADCT) establishes in its text that "The people remaining from the Quilombo communities, which occupy their land will have the definitive ownership of such land acknowledged, and the State shall issue them the respective deeds."

Through such mechanisms, the right to the ownership of the land by the indigenous communities is acknowledged.

The Inter-ministerial administrative decree issued by the Environment Ministry under no. 419/11 states that, applying for an environmental license for activities near indigenous or Quilombola land, the applicant must inform IBAMA (Brazil's environmental protection agency) of this fact, thus IBAMA can carry out a formal consultation with the entities involved. This consultation also might be necessary component in the preparation of an EIA/RIMA (Environmental Impact Study and Report) which requires public consultation.

The unplanned process of 'Land Occupation' (not planned occupation or occupation without land tenure) that took place in Brazil, has added to the bureaucracy process of approving indigenous and Quilombola land. This has resulted in many traditional communities being isolated among large private areas and has often to lead to conflicts where these communities are fighting to have their traditional rights and territories respected based on general observations and corroborated by in-country expert review.

Also, there is a recently adopted piece of federal legislation that regulates the access to biodiversity and genetic resources and benefit sharing, which includes a clause on free prior and informed consent

Description of Risk

There is a risk that indigenous and traditional peoples' rights are not being upheld.

There are communities and indigenous peoples with customary or traditional rights across the majority of Brazil.

Despite legislation safeguarding indigenous and traditional peoples' rights existing and requiring commercial entities to consult indigenous and traditional communities prior to any development taking place this legislation is often not complied with by companies.

The disorganized process of 'Land Occupation' (not planned occupation or occupation without land tenure) that took place in Brazil, has added to the bureaucracy process of approving



indigenous and Quilombola land. This has resulted in many traditional communities being "isolated" among large private areas and has often to lead to conflicts where these communities are fighting to have their traditional rights and territories respected based on general observations and corroborated by in-country expert review.

Furthermore, there are several explicit cases of disrespected of indigenous and traditional peoples' rights in Brazil, which is not isolated to one region. The UNDRIP provisions are frequently disrespected and there is not a good track record of dispute resolutions processes for these types of conflicts.

There are some cases concerning soy producers which are in conflict with indigenous and other traditional peoples. The conflict mainly is centred on land tenure rights where soy producers are claiming land tenure over areas that are claimed to be traditionally owned by the indigenous and/or traditional peoples. Furthermore, as these conflicts occur in a local setting a local risk assessment would often be needed to demonstrate low risk of conflict with indigenous peoples and local communities with traditional rights.

Risk conclusion

Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

2.4.6. Risk designation and specification

Elevated risk

2.4.7. Control measures and verifiers

- Ensure 1.1.7 Land tenure control measures are implemented
- Review information on land tenure disputes and developments on indigenous and traditional peoples' land claims:
 - Identify potential conflicts especially for medium to large enterprises. Ask the supplier for a map identifying the traditional communities close to its farms and/or cross reference the farm location with the location of indigenous lands and Quilombolas communities which can be found on the following websites:
 - Indigenous lands in Brazil <u>website</u>
 - Quilombolas communities' official website
 - Research documented conflicts by <u>Brazilian states</u>
 - $\circ\,$ Information on traditional communities can be found on the Ministry of Environment's $\underline{website}$
 - Review a <u>recent report</u> (2015) of well-known conflicts by Brazilian states
- Consult with neighbours, local communities, landowners and other stakeholders to find out if A) land tenure rights are clear and where applicable lease of the land has been agreed by all the landowners; and B) if there are any court orders or other legal decisions that mean that the company is not allowed to operate due to conflicts of land tenure.

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 noncompliance 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

Note: For this criterion, only compliance with Brazil's Forest Code was conducted. Future updated risk assessments will include other environmental factors relating to water use, air and green-house gas emissions, chemical, fertilizer and pesticide use.

Complementary law No. 140/11 - Sets standards in terms of sections III, VI and VII of the caput and sole paragraph of art. 23 of the Federal Constitution, for cooperation between the Union, the states, the Federal District and the municipalities in administrative proceedings arising from the exercise of common responsibility for the protection of outstanding natural landscapes, to environmental protection, the fight against pollution in any of its forms and the preservation of forests, fauna and flora; and changes to Law 6.938 of August 31, 1981. - Chapter 3 regulates the cooperative actions and determine the responsibility for issue environmental licences. - link

Law No. 6.938/81 - National Environmental Policy - link

Lei No. 12651/12 - Forest Code - full - Art. 27 to 29 - <u>link</u>

Decree No. 8.235/14 - Establishes additional general rules to Environmental Adjustment Programs of the states and the Federal District, dealt with in Decree 7830 of October 17th, 2012 establishing a Programme More Environment Brazil, and other matters - <u>link</u>

Normative Instruction ICMBIO No. 06/09 - It provides for the process and procedures for investigating violations by administrative conduct and activities harmful to the environment. - Art. 39 and 76 - link

3.1.2. Legal authority

- Brazilian Institute of Environment and Renewable Natural Resources Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis –
- IBAMA / Environmental Ministry -Ministério do Meio Ambiente MMA
- State or Local Environmental Agency Órgão Estadual de Meio Ambiente

3.1.3. Legally required documents or records

- Rural Environment Registry Cadastro Ambiental Rural CAR
- Restoration of degraded areas projects PRAD (if available)

3.1.4. Sources of Information

- Legislation Portal of the Federal Government <u>http://www4.planalto.gov.br/legislacao</u>
- Rural Environment Registry Cadastro Ambiental Rural CAR <u>http://car.gov.br/#/</u>
- Article published in Science on the level of compliance of the Forest Code in Brazil (<u>http://lerf.eco.br/img/publicacoes/Soares Filho etal 2014 artigo Science.pdf</u>)
- Report of the Forest Code Observatory demonstrates the challenges for compliance of the



Forest Code

(<u>http://www.observatorioflorestal.org.br/sites/default/files/relatorio_codigoflorestal_pt_web.pdf</u>)

3.1.5. Risk determination

Overview of legal requirements

The only legal requirements linked to farm management in Brazil is the Forest Code which regulates environmental protection measures and establishes criteria for land use and conservation of native vegetation in rural properties. These measures are not related to the production activities but rather to farm zoning and environmental protection areas, e.g., buffer zones along water courses and the legal reserve - which is the minimum area per farm that needs to be maintained (and in for some rural properties the legal reserve needs to be restored) in its natural ecosystem state (percentage is set according to biome and for the Amazon Biome 80% of the farm area must be contained in a legal reserve).

The Forest Code Act 12.651/12 defines if and how farm management interventions may occur in forest areas and/or native vegetation areas of the farm property, i.e., if management and operational activities are permissible and/or where forest and/or natural ecosystems can be converted into farm land. It also defines areas that are in inconsistent with the established rules and required mechanisms and instruments for ensuring the property meets the rules: either through restoration, and either through compensation (e.g., Forest Reserve Credits (CRAs, Cotas de Reserva Ambiental) through legal reserve offsetting between rural properties, donation to the state or federal government of a privately-owned area within a protected area) or by other manners prescribed by law.

The main obligations established by the Forest Code are soy farms need to 1st obtain CAR (Rural Environmental Registry - Cadastro Ambiental Rural) then ensure its Permanent Preservation Areas (APPs, Áreas de Preservação Permanente) are established (these are areas, covered or not by native vegetation, e.g., APPs are riparian zones, springs, hilltops, steep slopes) and its Legal Reserve (LRs) are established (the size of a Legal Reserve varies according to the biome in which the property is located, as well as its Ecological Economic Zoning (ZEE), if the property is located within the Amazon).

Deadlines for meeting APP and LRs commitments are defined by each Brazilian state and defined by the compliance mechanism called Term of Commitment. Soy farms with compliance issues must develop a plan to restore degraded/altered areas and sign the Term of Environmental Commitment. Nevertheless, the ultimate deadline established by the national government for full compliance with the Forest Code is set for May 2032 (the maximum deadline of 20 years for the regularization of the rural property is defined in Item II of Article 66 of Law 12651/2012).

Risk description

There is a risk of non-compliance with the Forest Code by soy farms in the Amazon demonstrated by evidence produced in many recent published reports (both scientific and Non-governmental (NGO) reports). Even though a large majority of rural properties including soy farms have CAR registration as described under `1.1 Risk Evaluation' not all are registered. Also, CAR registration only represents part of the obligations of farmers in its Forest Code implementation. Farmers not in full compliance with its Forest Code obligations still need to ensure its establishes its APPs and LRs and fulfil its obligations of the Term of Commitment (which outlines the time line for compliance for APPs and LRs).

In addition, in Brazil each state has the autonomy to establish its own procedures for agriculture licenses, causing large differences in legal requirements across districts. There is a high frequency of changes in the dynamics of the regulatory state laws on the subject. All definitions and processes should be aligned with requirements of the National Environmental

System - SISNAMA (Complementary law No. 140/11).

A number of soy farms not fully compliant with the Forest Code can also be attributed to the lack of effective deployment of the Environmental Adjustments Program (PRA). The PRA is to ensure Forest Code implementation is aligned by the state laws and regulations; however, a number of significant state laws and regulations have not been subsequently established and/or implemented.

Risk conclusion

This indicator has been evaluated as Elevated risk as many farms are not compliant with the Forest Code

3.1.6. Risk designation and specification

Elevated risk

3.1.7. Control measures and verifiers

Country Specific

- Verify the soy farm has the following valid Forest Code documents:
 - A <u>CAR</u> A Rural Environment Registry receipt / record (Protocolo / recibo do Cadastro Ambiental Rural)
 - A TCA Term of Environmental Commitment Term (Termo de Compromisso Ambiental);
 - $\circ~$ A PRAD (Restoration of degraded areas projects if required by the Brazilian Forest Code)

Verify the farm has a valid CAR status by checking its CAR registration number in the Public Module of the Rural Environmental Registry System (SiCAR, Simistema Nacional de Cadastro Ambiental Rural): www.http://car.gov.br/publico/imoveis/index

- Verify if PRAD (restored degraded areas), if required, is implemented according the Forest Code and TCA requirements. Obtain the shape file of the soy farm property's boundaries and compare/overlay with mapping data from the following initiative that are using satellite time series images to detect the land change cover:
 - www.globalforestwatch.org
 - http://www.obt.inpe.br/prodes/index.php PRODES/INPE (high resolution)
 - http://www.obt.inpe.br/deter/index.html DETER/INPE (high resolution)
- Check that the Forest Code requirements and environmental controls are implemented in the field

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.

Context

Brazil is the most biologically diverse country in the world. It is second only to Indonesia in terms of species endemism. It contains two biodiversity hotspots (the Atlantic Forest/South Region and the Cerrado), six terrestrial biomes and three large marine ecosystems. It is



estimated that Brazil hosts between 15-20% of the world's biological diversity, with the greatest number of endemic species on a global scale. Brazil's biodiversity is ever-expanding, with an average of 700 new animal species discovered each year.

Overall, there is little risk of farming activities threatening the status of protected sites and species if there has been no conversion of natural ecosystems to farmland based on general observation corroborated by in-country expert review. If conversion is commonly practiced by farms in the region, then the protection status of species and areas may be at risk. The risk for this criterion needs to be analysed in combination with CSR subcategory 3.3 High Conservation Values and Category 4 – Conversion.

3.2.1. Applicable laws and regulations

- Law No. 5,197/67- Provides for the protection of fauna and other matters. link
- Ordinance No. 443/14 MMA National Official Species of Flora in Endangered link
- Ordinance No. 444/14 MMA -National Official Species of Endangered fauna link
- Ordinance No. 445/14 MMA -National Official Species of Endangered fauna Fish and Aquatic Invertebrates - <u>link</u>
- Decree No. 3.607/00 Provides for the implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES, among other matters. - <u>link</u>
- Law n° 9.985/00 Founds the SNUC (III) <u>link</u>

3.2.2. Legal authority

- Brazilian Institute of Environment and Renewable Natural Resources Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis - IBAMA / Environmental Ministry -Ministério do Meio Ambiente - MMA
- State or Local Environmental Agency Órgão Estadual de Meio Ambiente

3.2.3. Legally required documents or records

- Rural Environment Registry Cadastro Ambiental Rural CAR
- Restoration of degraded areas projects PRAD (if available)

3.2.4. Sources of Information

- Official data of deforestation in the Amazon (INPE/Federal Government): <u>http://www.obt.inpe.br/prodesdigital/cadastro.php</u>
- ICMBIO Threatened Species of the Fauna <u>http://www.icmbio.gov.br/portal/biodiversidade/fauna-brasileira/lista-de-especies.html</u>
- Brazilian Forest Service SNIF National System of Forest Information -<u>http://www.florestal.gov.br/snif/recursos-florestais/especies-florestais</u>
- IBAMA Threatened Species <u>http://www.ibama.gov.br</u>
- Greenpeace news <u>http://www.greenpeace.org/brasil/pt/Noticias/Desmatamento-da-</u> <u>Amazonia-dispara-novamente-/</u>
- IMAZON Amazon deforestation Bulletin <u>http://imazon.org.br/boletim-do-desmatamento-</u> <u>da-amazonia-legal-novembro-de-2015-sad/</u>
- WWF-Brasil <u>http://www.wwf.org.br/?46622</u>
- Centralized National Risk Assessment for Category 3 of FSC Controlled Wood Risk to High Conservation Values in Brazil Finalised Report. Proforest February 2015

• List of Endangered Species:

o **Flora**

(http://pesquisa.in.gov.br/imprensa/jsp/visualiza/index.jsp?data=18/12/2014&jorna l=1&pagina=110&totalArquivos=144)

 Terrestrial Fauna: (http://www.icmbio.gov.br/portal/images/stories/biodiversidade/faunabrasileira/avaliacao-dorisco/PORTARIA N%C2%BA 444 DE 17 DE DEZEMBRO DE 2014.pdf

3.2.5. Risk determination

Overview of legal requirements

There are different types of federal and state conservation units in Brazil, protected under the SNUC (Sistema Nacional de Unidades de Conservação) Law (Law 9985/2000) – Article 22 and Decree 4340/2002 - Article 2. The following normative guidance also applies to conservation units (IN ICMBio No. 05, dated May 15, 2008 and IN ICMBio No. 03, of September 18, 2007). These conservation units are further subdivided into integral protection units ((where the level of protection level falls under the range of IUCN protected are categories I – III: Ecological Station (Estação Ecológica), Biological Reserve (Reserva Biológica), National Park (Parque Nacional), Natural Monument (Monumento Natural), Wildlife refuge (Refúgio de vida Silvestre)) and sustainable use units (where the level of protection range falls under IUCN categories- II to VI).

By mid-2010, 27.10% of the Brazilian Amazon biome was officially protected, as were 7.33% of the Caatinga; 8.43% of the Cerrado; 8.99% of the Atlantic Forest; 4.79% of the Pantanal; 3.50% of the Pampas. Given the state of governance of Brazil the level of effective official protection is variable across Brazil's biomes (Proforest, February 2015).

Brazil requires through the Forest Code (Law 12.651 / 12 Clauses 4, 5, and 6) a large number of areas to be protected as 'areas of permanent preservation' (APPs also see more on information in section 1.2.5 in this report). Due to the large volume and broad distribution of 'areas of permanent preservation', these protected areas are also the most vulnerable areas during the agriculture activities.

Clauses 12 to 25 of the Forest Code has requirements linked to "Legal Reserve Area" of any legal land holding in Brazil which may represent 20 to 80% of the land (20% in South region, 50% in the Cerrado region and 80% in the Amazon region) that should maintained the land's native vegetation.

Besides these protected areas under the Forest Code, Brazil has over 300 protected areas that can be classified as fully protected or for sustainable use (Law 9985/00, Clause 7). Sustainable forest management is permissible in these areas but agricultural including soy production is not.

Description of risk

There is a risk that natural forests/ecosystems are converted (cleared) to make way for soy farms (also see report section's 1.2, 3.1 and 4.1 for more details on the risk of natural forest conversion for soy farm establishment). This can have a significant negative impact on protected sites and species.

Furthermore, externalities from the soy production system can impact the protection areas inside the farms by driftage of agrochemicals, water contamination, impairment of animal connectivity, soil erosion etc. However, the main risk of fauna and flora endangered and threatened species is in the conversion of the natural vegetation mainly within the farm boundaries but in some cases outside as well.



Risk conclusion

Because there is a high level of non-conformance and ineffective governmental mechanisms to monitor compliance against the protection measures required under the Forest Code for this CSR sub-category it is concluded as Elevated risk. Also, given the state of governance of Brazil the level of effective official protection is variable across Brazil's biomes (Proforest, February 2015) and thus there is an Elevated risk of soy farms threatened the protection of species and/or these areas.

3.2.6. Risk designation and specification

Elevated risk

3.2.7. Control measures and verifiers

- Verify the soy farm has the following valid Forest Code documents:
 - A <u>CAR</u> A Rural Environment Registry receipt / record (Protocolo / recibo do Cadastro Ambiental Rural)
 - A TCA Term of Environmental Commitment Term (Termo de Compromisso Ambiental);
 - $\circ~$ A PRAD (Restoration of degraded areas projects if required by the Brazilian Forest Code)
- Verify the farm has a valid CAR status by checking its CAR registration number in the Public Module of the Rural Environmental Registry System (SiCAR, Simistema Nacional de Cadastro Ambiental Rural): <u>www.http://car.gov.br/publico/imoveis/index \</u>
- Confirm location of the soy farm is not located in <u>a protected area</u>
- Check if a farm has been <u>apprehended (black listed)</u> by the federal government for illegally converted natural forests and ecosystems
- Assess the risk of deforestation and PRAD (restored degraded areas) compliance using satellite time series images to detect the land change cover within the soy farm boundaries, some sources include:
 - <u>Global Forest Watch maps</u>
 - PRODES/INPE (high resolution)
 - DETER/INPE (high resolution)
- Conduct on-site verification to:
 - Check that the Forest Code requirements and environmental controls are implemented in the field
 - Confirm management plans for protected sites, species and High Conservations Values are implemented and monitored.
 - $_{\odot}$ $\,$ Maps/remote sensing images for deforestation assessed reflect reality
 - Verify the supplier has documentation or a copy of a management plan that ensures required legally protected areas and species are safeguarded in accordance with the law.
 - ICMBIO Fauna Species
 - Brazilian Forest Service <u>SNIF</u> National System of Forest Information on threatened species
- List of Endangered Species: <u>Flora</u> and <u>Terrestrial Fauna</u>

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

Brazil is the most biologically diverse country in the world. It is second only to Indonesia in terms of species endemism. It contains two biodiversity hotspots (the Atlantic Forest and the Cerrado), six terrestrial biomes and three large marine ecosystems. It is estimated that Brazil hosts between 15-20% of the world's biological diversity, with the greatest number of endemic species on a global scale. Brazil's biodiversity is ever-expanding, with an average of 700 new animal species discovered each year.

Represented by more than 200 indigenous peoples and 170 languages, Brazil is megadiverse from a cultural perspective as well. This large number of local communities and villages possesses considerable knowledge on flora and fauna species, including on the traditional management systems for these natural resources. The contribution of these communities is therefore fundamental for the conservation and sustainable use of the country's genetic and biological resources.

In 1992 Brazil signed the Convention on Biological Diversity (CBD). To comply with the requirements of the CBD, Brazil has developed a National Policy on Biological Diversity and actions proposed by this national policy are being implemented by the National Programme on Biological Diversity (PRONABIO). PROBIO (part of the Ministério do Meio Ambiente (MMA)) identified Brazil's six biomes as conservation priority areas: Amazonia, Caatinga, Cerrado, Pantanal, Mata Atlantica and Pampas.

There are different types of federal and state conservation units in Brazil, protected under the SNUC (Sistema Nacional de Unidades de Conservação) Law (Law 9985/2000) – Article 22 and Decree 4340/2002 - Article 2. The following normative guidance also applies to conservation units (IN ICMBio No. 05, dated May 15, 2008 and IN ICMBio No. 03, of September 18, 2007). These conservation units are further subdivided into integral protection units ((where the level of protection level falls under the range of IUCN protected are categories I – III: Ecological Station (Estação Ecológica), Biological Reserve (Reserva Biológica), National Park (Parque Nacional), Natural Monument (Monumento Natural), Wildlife refuge (Refúgio de vida Silvestre)) and sustainable use units (where the level of protection range falls under IUCN categories- II to VI).

By mid-2010, 27.10% of the Brazilian Amazon biome was officially protected, as were 7.33% of the Caatinga; 8.43% of the Cerrado; 8.99% of the Atlantic Forest; 4.79% of the Pantanal; 3.50% of the Pampas. Given the state of governance of Brazil the level of effective official protection is variable across Brazil's biomes (Proforest, February 2015).

Information sources:

- https://www.cbd.int/countries/profile/default.shtml?country=br
- Centralized National Risk Assessment for Category 3 of FSC Controlled Wood Risk to High Conservation Values in Brazil Finalised Report. February 2015

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

HCV 1 occurs in most parts of the country, and it includes the biological concentration of endemic, rare, threatened and endangered species that are significant at regional and national levels. Proxy HCV1 areas for sourcing timber products in Brazil was also used see Figure 6 (Proforest, February 2015) to detect possible HCV 1 occurrence where soy farms may be in located or in close proximity.

The assessment of HCV 1 occurrence at the local level can be conducted through the official lists of endangered species and the official map of priorities areas for conservation, both of which are available by the Brazilian Federal government.

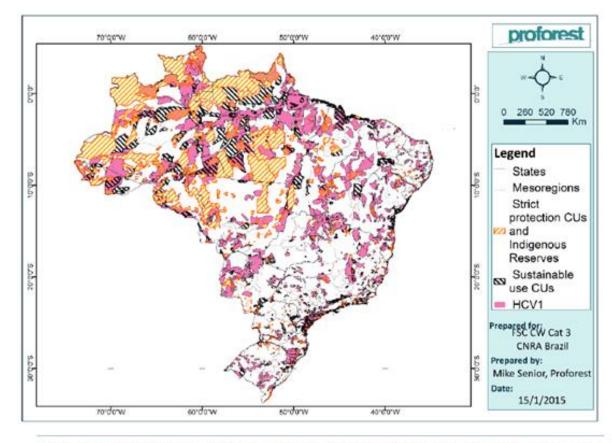


Figure 6: Location of potential HCV1 areas overlaid with existing protected areas in the mesoregions of Brazil.

3.3.1.2. Sources of information

• Official Map of "Priority Areas for Conservation, Sustainable Use and Benefit Sharing of

Brazilian Biodiversity. (<u>http://www.mma.gov.br/biodiversidade/biodiversidade-brasileira/%C3%A1reas-priorit%C3%A1rias/item/489</u>)

- Official List of Endangered Species:
 - Flora
 (http://pesquisa.in.gov.br/imprensa/jsp/visualiza/index.jsp?data=18/12/2014&jorna
 I=1&pagina=110&totalArquivos=144)
- Terrestrial Fauna: (<u>http://www.icmbio.gov.br/portal/images/stories/biodiversidade/fauna-brasileira/avaliacao-do-</u> risco/PORTARIA N%C2%BA 444 DE 17 DE DEZEMBRO DE 2014.pdf)
- Aquatic fauna: (<u>http://www.icmbio.gov.br/portal/images/stories/biodiversidade/fauna-brasileira/avaliacao-do-</u>
- risco/PORTARIA N%C2%BA 444 DE 17 DE DEZEMBRO DE 2014.pdf)
- Centralized National Risk Assessment for Category 3 of FSC Controlled Wood Risk to High Conservation Values in Brazil Finalised Report. February 2015

3.3.1.3. Risk determination

There is a risk of soy farms threatening HCV values. The protection of HCV1 attributes is mainly managed in Brazil through a mosaic of public land protected areas established by federal and state governments. These areas are outside privately owned soy farms and the soy production within the farms do not directly threatened HCV1 in these areas. However, natural ecosystems are also present in privately owned farms, and the conversion of HCV1 values does occur within soy farms.

In general, any conversion of natural ecosystem for agricultural commodity production presents threats to HCV1 values. Despite, Brazil being a signatory to the Convention of Biological Diversity (CBD), a certain level of conversion is legally allowed (see Category 4) and is commonly used by farmers in Brazil as a way to expand their farm production areas and overall the level of official protection of HCV 1 values in the soy producing regions is insufficient.

Habitat fragmentation and the use of agrochemicals are also sources of risk for HCV1 that are linked to soy farm establishment and production in Brazil.

Elevated risk as HCV 1 is identified in the area under assessment and it is threatened by soy farm management activities and due to the lack of overall insufficient legal protection.

3.3.1.4. Risk designation and specification

Elevated risk

3.3.1.5. Control measures and verifiers

- Confirm the farm has the following in place:
 - Biodiversity surveys and High Conservation Value (HCV) assessments
 - Conversation/High Conservation Value (HCV) management plans
 - Historical remote sensing imagery evidence to confirm no conversion of primary forest, peatlands and HCVs post 2008.
- Check if a farm has been <u>apprehended (black listed)</u> by the federal government for illegally converted natural forests and ecosystems
- Assess the risk of deforestation and PRAD (restored degraded areas) compliance using satellite time series images to detect the land change cover within the soy farm



boundaries, some sources include:

- o <u>Global Forest Watch maps</u>
- PRODES/INPE (high resolution)
- o <u>DETER/INPE (high resolution)</u>
- Confirm location of the farm is not located in <u>a protected area</u> or threatening High Conservation Values.
- If buying from JBS, Marfrig and Minerva verify the companies' compliance against their zero Amazon deforestation October 2009 commitment. Review the companies' progress reports here and corroborate results with a Brazilian stakeholders like <u>WWF</u>, <u>Greenpeace Brazil</u>, <u>National Wildlife Federation (NWF)</u>
- Conduct on-site verification to:
 - Check that the Forest Code requirements and environmental controls are implemented in the field
 - Confirm management plans for protected sites, species and High Conservations Values are implemented and monitored.
 - Maps/remote sensing images for deforestation assessed reflect reality
 - Verify the supplier has documentation or a copy of a management plan that ensures required legally protected areas and species are safeguarded in accordance with the law.
 - ICMBIO Fauna Species
 - Brazilian Forest Service <u>SNIF</u> National System of Forest Information on threatened species
 - List of Endangered Species: <u>Flora</u> and <u>Terrestrial Fauna</u>

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 map¹ 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.

3.3.2.1. HCV Occurrence

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

Amazon

HCV 2 occurs in the Amazon region, including in the agriculture expansion frontier. There are HCV2 in regions where soy is currently being produced and where there are plans for it to be produced in the future.

Cerrado

HCV 2, as per the Intact Forest Landscapes (IFLs) definition, IFL occurrence in the Cerrado is very limited and are concentrated in indigenous territories and some other minor protected areas. There are other large landscape-level ecosystems and ecosystem mosaics that do occur in the region.

South region

There is a small level of HCV2 that occurs in the South region and the majority of these areas are mainly protected under the law.

Proxy HCV2 areas for sourcing timber products in Brazil was also used see Figure 8 (Proforest, February 2015) to detect possible HCV 2 occurrence where soy farms may be located or in close proximity.

HCV 2 occurs in the Amazon region, including in the agriculture expansion frontier. There are HCV2 in regions where soy is currently being produced and where there are plans for it to be produced in the future.

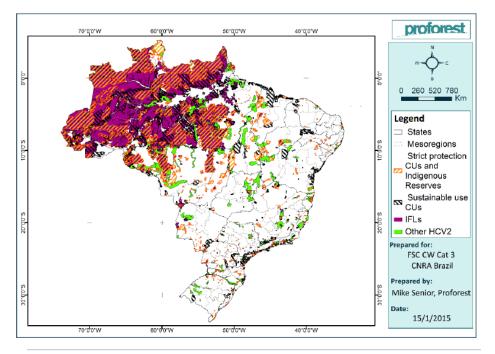


Figure 8: Location of potential HCV2 areas overlaid with existing protected areas in the mesoregions of Brazil.

3.3.2.2. Sources of information

- <u>http://www.intactforests.org/world.map.html</u>
- <u>www.globalforestwatch.org</u>
- Centralized National Risk Assessment for Category 3 of FSC Controlled Wood Risk to High



Conservation Values in Brazil Finalised Report. February 2015

3.3.2.3. Risk determination

There is a risk of soy farms threatening HCV 2 values in the Amazon and Cerrado.

Amazon

The conversion of natural forests represents a threat to HCV2, particularly where HCV2 are not or insufficiently protected particularly those soy farms and expansion occurring outside the bounds of the Soy Moratorium. As IFLs in the Amazon are located outside protected areas and therefore are threatened by the expansion of soy production.

Cerrado

The conversion of natural forests/ecosystems represents a threat to HCV2, particularly where HCV2 are not or insufficiently protected. In the Cerrado there are very few protected areas and therefore the expansion of soy production and the associated high rates of deforestation represent a significant threat to HCV2.

South region

Due to the very limited occurrence of HCV2 in the south region of Brazil and what does exist is sufficiently protected, the risk of soy farm establishment and production threatening HCV2 in this region is very low.

Furthermore, as cited under Category 4 - Conversion of natural ecosystems in the Atlantic Rainforest biome, present in the South Region of Brazil, allows for a maximum of 80% of the farm area to be converted. However, due to a history of rampant conversion of natural ecosystems in the1980's and 1990's, currently new conversion in this region is very unlikely to happen for any agriculture production.

3.3.2.4. Risk designation and specification

Amazon

Low risk - For soy suppliers committed to the Soy Moratorium in the Brazilian Amazon and the Soy Moratorium is in effect.

Elevated risk - For suppliers that are not committed to the Soy Moratorium, local verification assessments are required to classify as low risk and if the Soy Moratorium is no longer in effect

Cerrado

Elevated risk

South region

Low risk

3.3.2.5. Control measures and verifiers

Amazon

- Confirmation of that the soy supplier(s) is committed to the Soy Moratorium in the Brazilian Amazon. The moratorium is a pledge adopted by Brazilian Grain Exporters Association (ANEC)'s 35 associate members and Brazilian Vegetable Oil Industry Association (ABIOVE)'s twelve associate members to not trade or finance soya originating from land in the Amazon Biome - which together represent over 90% of the Brazilian soya trade.
- ANEC members:
 - o <u>http://www.anec.com.br/en/</u>

ABIOVE members - <u>http://www.abiove.org.br/</u>

Control Measures for Cerrado and Amazon (where suppliers and soy producers are not committed to the Soy Moratorium)

- Confirm the farm has the following in place:
 - High Conservation Value (HCV) assessment
 - High Conservation Value (HCV) management plans
 - Historical remote sensing imagery evidence to confirm no conversion of primary forest, peatlands and HCVs post 2008.
- Check if a farm has been <u>apprehended (black listed)</u> by the federal government for illegally converted natural forests and ecosystems
- Assess the risk of deforestation and PRAD (restored degraded areas) compliance using satellite time series images to detect the land change cover within the soy farm boundaries, some sources include:
 - o <u>Global Forest Watch maps</u>
 - o PRODES/INPE (high resolution)
 - o DETER/INPE (high resolution)
- Confirm location of the farm is not located in area where it is High Conservation Values.

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

HCV3 occurs in most parts of the country, and it includes rare, threatened and endangered ecosystems and habitats. Proxy HCV3 areas for sourcing timber products in Brazil was also used see Figure 10 (Proforest, February 2015) to detect possible HCV 3 occurrence where soy farms may be in located or in close proximity.



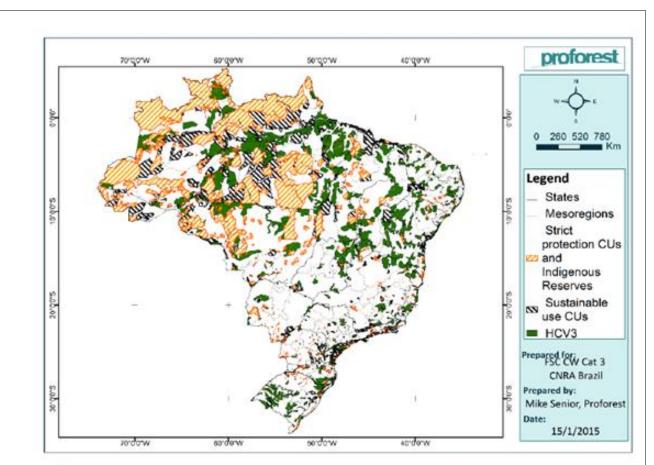


Figure 10: Location of potential HCV3 areas overlaid with existing protected areas in the mesoregions of Brazil.

3.3.3.2. Sources of information

- Official Map of "Priority Areas for Conservation, Sustainable Use and Benefit Sharing of Brazilian Biodiversity. (<u>http://www.mma.gov.br/biodiversidade/biodiversidadebrasileira/%C3%A1reas-priorit%C3%A1rias/item/489</u>)
- https://www.cbd.int/countries/profile/default.shtml?country=br
- Centralized National Risk Assessment for Category 3 of FSC Controlled Wood Risk to High Conservation Values in Brazil Finalised Report. February 2015

3.3.3.3. Risk determination

There is a risk of soy farms threatening HCV 3 values. In general, any conversion of natural ecosystem for agricultural commodity production presents threats to HCV3 values (see report sections 1.2, 3.1 and 4.1 for details on land conversion risks for the establishment of soy farms). Despite, Brazil being a signatory to the Convention of Biological Diversity (CBD), a certain level of conversion (see Category 4) is legally allowed and is commonly used by farmers in Brazil as a way to expand their farm production areas.

Habitat fragmentation and the use of agrochemicals are also sources of risk for HCV3 that are linked to soy farm establishment and production in Brazil.

The protection of HCV3 attributes are mainly managed in Brazil through a mosaic of public land

protected areas established by federal and state governments. These areas are outside privately owned soy farms and the soy production within the farms do not directly threatened HCV3 in these areas.

However, the FSC Centralized Risk Assessment HCV analysis for Brazil conducted by Proforest (February 2015) Figure 10 (see above map) identified the lack of effective protection as a key overlaying threat factor to HCV3. Given the fact there is insufficient official protection for HCV3 in the 3 biomes under assessment there is a threat of converting HCV3 values within soy farms that may affect the overall status HCV3 values in these biomes.

3.3.3.4. Risk designation and specification

Elevated risk

3.3.3.5. Control measures and verifiers

- Confirm the farm has the following in place:
 - Biodiversity surveys and High Conservation Value (HCV) assessments
 - Conversation/High Conservation Value (HCV) management plans
 - Historical remote sensing imagery evidence to confirm no conversion of primary forest, peatlands and HCVs post 2008.
- Check if a farm has been <u>apprehended (black listed)</u> by the federal government for illegally converted natural forests and ecosystems
- Assess the risk of deforestation and PRAD (restored degraded areas) compliance using satellite time series images to detect the land change cover within the soy farm boundaries, some sources include:
 - o <u>Global Forest Watch maps</u>
 - PRODES/INPE (high resolution)
 - <u>DETER/INPE (high resolution)</u>
- Confirm location of the farm is not located in <u>a protected area</u> or threatening High Conservation Values.
- If buying from JBS, Marfrig and Minerva verify the companies' compliance against their zero Amazon deforestation October 2009 commitment. Review the companies' progress reports here and corroborate results with a Brazilian stakeholders like <u>WWF</u>, <u>Greenpeace Brazil</u>, <u>National Wildlife Federation (NWF)</u>
- Conduct on-site verification to:
 - Check that the Forest Code requirements and environmental controls are implemented in the field
 - Confirm management plans for protected sites, species and High Conservations Values are implemented and monitored.
 - o Maps/remote sensing images for deforestation assessed reflect reality

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

HCV4 is widely represent across the country. The protection of water catchments and control of vulnerable slopes erosion is regulated under the major national environmental law, the Forest Code (2012); which defines buffer zones around watershed and water catchments areas and identifies where native forest cover must be maintained e.g., also in areas with steep slopes.

Proxy HCV4 areas for sourcing timber products in Brazil was also used see Figure 13 - Areas at risk from soil erosion (Proforest, February 2015); Figure 18 - Proxy areas for protection of water quality and flood protection (Proforest, February 2015) to detect possible HCV 4 occurrence where soy farms may be in located or in close proximity.

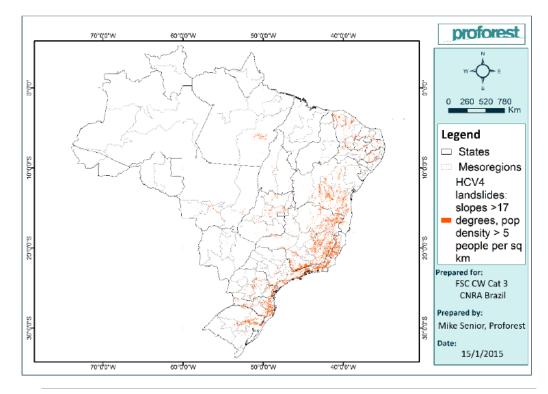


Figure 13: Areas at potential risk from soil erosion in Brazil.

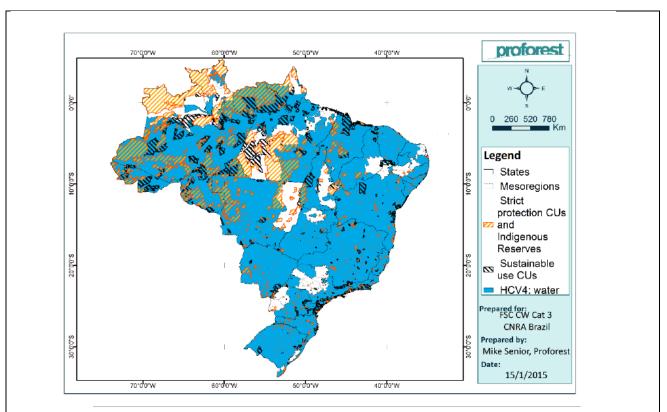


Figure 18. HCV 4 proxy areas for protection of water quality and flood prevention, overlaid with strict protection and sustainable use Conservation Units.

3.3.4.2. Sources of information

- Brazilian Forest Code (<u>https://www.planalto.gov.br/ccivil 03/ ato2011-2014/2012/lei/L12651compilado.htm</u>)
- http://lerf.eco.br/img/publicacoes/Soares Filho etal 2014 artigo Science.pdf
- Centralized National Risk Assessment for Category 3 of FSC Controlled Wood Risk to High Conservation Values in Brazil Finalised Report. February 2015

3.3.4.3. Risk determination

There is a risk of soy farms threatening HCV 4 values. Forest Code legislation is poorly implemented and enforced on-the-ground across the country; this is particularly salient within in commodities production farms like soy (also see report sections 1.2, 3.1 and 4.1). Soy production, in particular, may be very harmful for soil and water protection if the forest code is not fully implemented, as well as if best management practices, such as tillage, are not used.

The risk HCV 4 values threatened by soy production activities is elevated for all over the country. A recent a Science publication indicated how much of the Forest Code is compiled with in Brazil; it showed that most of the native vegetation that should exist within buffer zones around water catchments and other watershed streams is non-existent. These areas often overlap with commodity agricultural production such as soy farming and thus it can be concluded there is an elevated risk of soy farm establishment and production as potential threats to HCV 4 values.

3.3.4.4. Risk designation and specification

Elevated risk



3.3.4.5. Control measures and verifiers

- Implement control measures from indicator 1.2
- Farms that can demonstrate the use of tillage could be classified as a lower risk linked to HCV 4 soil values.
- Confirm the farm has the following in place:
 - High Conservation Value (HCV) assessment
 - High Conservation Value (HCV) management plans
 - Historical remote sensing imagery evidence to confirm no conversion of primary forest, peatlands and HCVs post 2008.
- Check if a farm has been <u>apprehended (black listed)</u> by the federal government for illegally converted natural forests and ecosystems
- Assess the risk of deforestation and PRAD (restored degraded areas) compliance using satellite time series images to detect the land change cover within the soy farm boundaries, some sources include:
 - Global Forest Watch maps
 - PRODES/INPE (high resolution)
 - DETER/INPE (high resolution)
- Conduct on-site verification to:
 - Check that the Forest Code requirements and environmental controls are implemented in the field
 - Confirm management plans for protected sites, species and High Conservations Values are implemented and monitored
 - Maps/remote sensing images for deforestation assessed reflect reality

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

There are communities and indigenous peoples with customary or traditional rights across the majority of Brazil, and natural forest/ecosystems are of fundamental importance in satisfying their basic livelihood needs. Therefore, a potential occurrence of HCV5 values exist across all Brazil's regions. Proxy HCV5 areas for sourcing timber products in Brazil was also used see Figure 21 (Proforest, February 2015) to detect possible HCV 5 occurrence where soy farms may be in located or in close proximity.

Indigenous peoples, local communities nationally defined as traditional people and Quilombolas communities are included in the HCV5 definition. There are approximately 0.5 million indigenous people in Brazil living in 593 recognized territories. These territories are legally protected and titled to the communities as Terra Indigena (CF / 88, Law 6001/73 - Indian Statute, Decree n. °1775 / 96). Also, see Category 2.4 analysis for more details on traditional

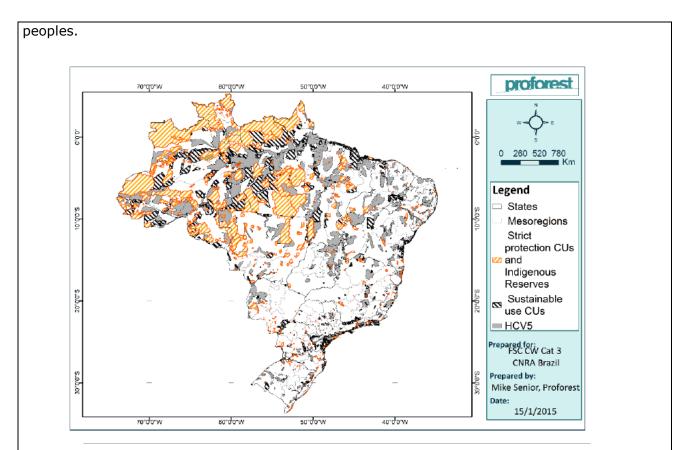


Figure 21. Location of potential HCV5 areas (inc Quilombola communities from 2011) overlaid with existing protected areas in the mesoregions of Brazil.

3.3.5.2. Sources of information

- Indigenous lands in Brazil website (<u>http://ti.socioambiental.org/pt-br/#!/pt-br/terras-indigenas</u>)
- Official website (Brazilian Forest Service) with the map of protected areas and the subdivision of indigenous lands and other areas that are used by local communities (<u>http://www.florestal.gov.br/snif/recursos-florestais/sistema-nacional-de-unidades-de-conservacao?print=1&tmpl=component</u>).
- Quilombolas communities official website (<u>http://mds.gov.br/assuntos/seguranca-alimentar/direito-a-alimentacao/povos-e-comunidades-tradicionais/comunidades-quilombolas</u>)
- Centralized National Risk Assessment for Category 3 of FSC Controlled Wood Risk to High Conservation Values in Brazil Finalised Report. February 2015

3.3.5.3. Risk determination

There is a risk of soy farms threatening HCV 5 values. There are multiple cases of conflicts between soy producers and local communities and indigenous peoples in the country. HCV5 in Brazil need to be identified through a local assessment process that includes consultation with local stakeholders.

Farm properties that can demonstrate land tenure documents that are legally recognized, along with the CAR (rural environmental registry), as established in the Forest Code, are less likely to have any conflict with local communities, but a final decision is still dependent on a



local assessment process.

The Soy Moratorium does not include any criteria for the protection of HCV5, and therefore there may be occurrence of threats to HCV5 from the expansion of Soy in most of the biomes, including in the Amazon where the Moratorium is applied.

Also, see Category 2.4 for more information on traditional and indigenous rights and potential conflicts with soy farms.

3.3.5.4. Risk designation and specification

Elevated risk

3.3.5.5. Control measures and verifiers

Control Measures:

- Implement control measures from indicators 1.1 and 2.4
- Confirm the farm has the following in place:
 - High Conservation Value (HCV) assessment
 - High Conservation Value (HCV) management plans
- Conduct on-site verification to confirm management plans for High Conservations Values are implemented and monitored

3.3.6. 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

HCV6 values occur across the majority of the Brazilian territory and its identification requires a local assessment process that includes consultation with local stakeholders. Proxy HCV6 areas for sourcing timber products in Brazil was also used see Figure 23 (Proforest, February 2015) to detect possible HCV 6 occurrence where soy farms may be in located or in close proximity. and Category 2.4.

HCV 6 values that are critical cultural value to local, indigenous and traditional communities occur across most of Brazil. It assumed that many HCV 6 values that are critical cultural indigenous communities are generally well protected within Indigenous lands (Terras Indígenas).

In Brazil, indigenous people are defined as traditional peoples, but includes also Quilombolas, who receive the same legal rights as other local communities with customary rights. (Also, see Category 2.4 for more details)

Clause 231 of the Federal Constitution states that the land traditionally occupied by Indians is inalienable and is destined to their permanent possession, therefore they are exclusively entitled to use the resources found in the soil, rivers and lakes eventually existing in them.

Clause 68 of the Act of the Transitory Constitutional Provisions (ADCT) establishes in its text

that "The people remaining from the Quilombo communities, which occupy their land will have the definitive ownership of such land acknowledged, and the State shall issue them the respective deeds."

Through such mechanisms, the right to the ownership of the land by the indigenous communities is acknowledged.

Cultural or archaeological sites of national or global significance may also be protected as Natural Monuments (Monumento Natural) or in Private Natural Heritage Reserves (Reserva Particular do Patrimônio Natural).

Furthermore, historical and cultural values of national or global significance in Brazil is overseen by the Brazilian Institute of National and Artistic Heritage (IPHAN). IPHAN is responsible for the protection of sites and artefacts of cultural and historic value. They have identified approximately 19,000 archaeological sites that are officially protected for scientific or environmental reasons. These sites are defined and protected by Law No. 3.924 / 61, are considered assets of the Union. IPHAN is also the national body responsible for maintaining Brazil's seven world heritage sites:

- The Atlantic Forest South-East Reserves,
- The Brazilian Atlantic Islands,
- The Central Amazon Conservation Complex,
- The Cerrado Protected Areas (Chapada dos Veadeiros and Emas National Park),
- The Discovery Coast Atlantic Forest Reserves,
- Iguaçu National Park, and
- The Pantanal Conservation Area.

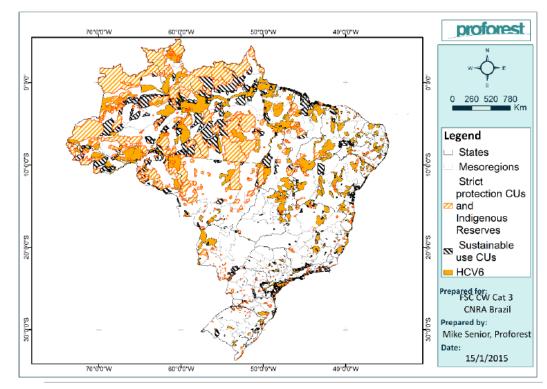


Figure 23. Location of potential HCV6 areas (inc Quilombola communities from 2011) overlaid with existing protected areas in the mesoregions of Brazil.



The Soy Moratorium does not include any criteria for the protection of HCV6, and therefore there may be occurrence of threats to HCV6 from the expansion of Soy in most of the biomes, including in the Amazon where the Moratorium is applied.

3.3.6.2. Sources of information

- Indigenous lands in Brazil website (<u>http://ti.socioambiental.org/pt-br/#!/pt-br/terras-indigenas</u>)
- Official website (Brazilian Forest Service) with the map of protected areas and the subdivision of indigenous lands and other areas that are used by local communities (<u>http://www.florestal.gov.br/snif/recursos-florestais/sistema-nacional-de-unidades-de-conservacao?print=1&tmpl=component</u>).
- Quilombolas communities official website (<u>http://mds.gov.br/assuntos/seguranca-alimentar/direito-a-alimentacao/povos-e-comunidades-tradicionais/comunidades-quilombolas</u>)
- IPHAM (<u>http://portal.iphan.gov.br/</u>).
- Centralized National Risk Assessment for Category 3 of FSC Controlled Wood Risk to High Conservation Values in Brazil Finalised Report. February 2015

3.3.6.3. Risk determination

There is a risk of soy farms threatening HCV 6 values. All of Brazil's World Heritage sites are conserved to some extent within existing Brazilian Conservation Units, and thus were not included as a proxy for HCV6 within the Centralized National Risk Assessment (CNRA) for Category 3 of FSC Controlled Wood Risk to High Conservation Values in Brazil Finalised Report. (February 2015) Thus based on the same rational as they are sufficiently conserved within Brazilian Conservation Units they are considered low risk of threat from soy farm establishment and management.

The CNRA report similarly did not include the IPHAN archaeological sites as direct HCV6 proxies because they were well protected under Law 3.924/61 and under negligible threat from forestry activities. For similar reasons IPHAN archaeological sites are considered low risk of threat from soy farm establishment and management.

There are multiple cases of conflicts between soy producers and local communities and indigenous peoples in the country regarding land tenure and rights issues. There is no map or any other mean of identification of these conflicts. Furthermore, not all traditional communities such as the Quilombo have been mapped and registered. HCV6 values in Brazil need to be identified through a local assessment process that includes consultation with local stakeholders. Also, see Category 2.4 for more details.

3.3.6.4. Risk designation and specification

Elevated risk

3.3.6.5. Control measures and verifiers

Control Measures:

- Implement control measures from indicators 1.1 and 2.4
- Confirm the farm has the following in place:
 - High Conservation Value (HCV) assessment
 - High Conservation Value (HCV) management plans
- Conduct on-site verification to confirm management plans for High Conservations Values

are implemented and monitored



CONVERSION

4.1. New plantations have not replaced natural forest or natural ecosystems since July 2008

July 2008 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 July 2008. Note: The baseline of natural forests and ecosystem conversion has been set at 2008 to be in aligned with the Brazilian Forest Code changes and other international benchmarks set through the Roundtable on Sustainable Soy's deforestation baseline and to complement initiatives such as Amazon Soy Moratorium baseline of 2008.

Context

Overall Brazilian Context:

The Forest Code has granted amnesty to illegal natural forest and ecosystem conversion that took place before July 2008, classifying them and establishing such areas as consolidated areas (areas with agriculture activities are in place). Therefore, any forest or natural ecosystem conversion that took place after July 2008 without legal authorization or due to the conversion taking place in an area that is not in alignment with what was authorized or with an authorization based on falsified information (e.g., providing inaccurate information on forest species and protected areas), can be considered illegal conversion.

The illegal risk connected to conversion relates to the licenses connecting the date of the conversion. All farms which converted area after July 2008 should has a 'License for the suppression of natural vegetation' and respect the relevant conditions of Forest Code (Chapter II Permanent Preservation Areas, Chapter IV art. 12 Legal Reserve of the Forest Code Act 12.651/12).

Farms that converted natural vegetation before July 2008 shall follow the Environmental Regularization Program - PRA through the CAR (rural environmental registry) to comply with the specific land use Forest Code requirements to obtain legal conversion status.

The Forest Code Act 12.651/12 defines whether and how interventions may occur in forest areas and native vegetation of the property, such as management, operation and removal; also, see Category 1.1 for more details on the Forest Code.

Chapter V (Clauses 26 to 28) of the Forest Code created by Act in the. 12.651/12 allows the suppression of vegetation for an alternative soil usage, depending on authorization by the appropriate State Agency.

Amazon Context and Considerations:

After July 2008, the Forest Code allows for the conversion of natural forests/vegetation for farming practices up to a maximum of 20% of the farm boundaries in the Brazilian Amazon. There is a licensing procedure (see overall context) to ensure that the conversion is legal, but this procedure is poorly enforced and thus most conversion in the Amazon is conducted illegally.

The high deforestation rates in the Amazon are due to the expansion of the agriculture frontier, particularly for new pasture areas for the soy sector.

Soy has also been a driver for deforestation in the Amazon, but this has been controlled and monitored through the Soy Moratorium, a multi-stakeholder initiative and involved the soy industry and civil society organizations, established in 2006.

Cerrado Context and Considerations:

Conversion of natural ecosystems in Cerrado is allowed up to a maximum of 65% of a farm's property according to the Forest Code (the other 35% shall to be protected). There is a licensing procedure to ensure that the conversion is legal, but this procedure is poorly enforced and results in most conversion in the Cerrado conducted illegally (i.e., without the applicable permits).

If the conversion happened inside a farm and was above the 65% threshold before 2008, the farmer can now declare it as legal conversion through the CAR (rural environmental registry) procedure and obtained amnesty for its previous potential illegal status.

The high conversion rates of natural ecosystems in the Cerrado are occurring due to the expansion of the agriculture frontier, particularly for new soy plantations. There is no such agreement like the Soy Moratoria in the Amazon in the Cerrado biome.

South Region Context and Considerations:

Conversion of natural ecosystems in the Atlantic Rainforest biome, present in the South Region of Brazil, allows for a maximum of 80% of the farm area to be converted. However, due to a history of rampant conversion of natural ecosystems in the1980's and 1990's, currently new conversion in this region is very unlikely to happen for any agriculture or livestock production.

4.1.1. Applicable laws and regulations

- Environmental Regularization Program PRA
- Forest Code (Chapter II Permanent Preservation Areas, Chapter IV art. 12 Legal Reserve of the Forest Code Act 12.651/12) - <u>link</u>

4.1.2. Legal authority

IBAMA / Environmental Ministry - Ministério do Meio Ambiente - MMA

4.1.3. Legally required documents or records

- Rural Environment Registry Cadastro Ambiental Rural CAR
- Restoration of degraded areas projects PRAD (if available)

4.1.4. Sources of information

- Legislation Portal of the Federal Government <u>http://www4.planalto.gov.br/legislacao</u>
- Rural Environment Registry Cadastro Ambiental Rural CAR <u>http://car.gov.br/#/</u>
- Article published in Science on the level of compliance of the Forest Code in Brazil (<u>http://lerf.eco.br/img/publicacoes/Soares Filho etal 2014 artigo Science.pdf</u>)
- Report of the Forest Code Observatory demonstrates the challenges for compliance of the Forest Code (<u>http://www.observatorioflorestal.org.br/sites/default/files/relatorio_codigoflorestal_pt_we_b.pdf</u>)

Amazon

- Official data of deforestation in the Amazon (INPE/Federal Government): <u>http://www.obt.inpe.br/prodesdigital/cadastro.php</u> (requires a personal registry); and: <u>www.globalforestwatch.org</u>
- Official data of deforestation in the Amazon (INPE/Federal Government): <u>http://www.obt.inpe.br/prodesdigital/cadastro.php</u> (requires a personal registry); and: <u>www.globalforestwatch.org</u>
- On the effectiveness of the Soy Moratoria, see an article published at the Remote Sensing



journal (<u>http://www.mdpi.com/2072-4292/3/1/185/</u>) and Science http://www.sciencemag.org/content/347/6220/377.summary#aff-6

 The latest report from the Soy Moratoria initiative is for the 2014 period and includes the list of companies that are committed to it.
 <u>http://www.abiove.org.br/site/_FILES/Portugues/12122014-105447-</u> 19.11.2014. relatorio da moratoria da soja - 7%C2%BA ano.pdf

Cerrado

 Non-official data for deforestation of the Cerrado (<u>https://www.lapig.iesa.ufg.br/lapig/index.php?option=com_content&view=article&id=38&I</u> <u>temid=52</u>); and:

www.globalforestwatch.org

 Recent research paper that shows the potential impact of soy production in the Cerrado <u>https://www.elementascience.org/articles/76</u>

South Region

- Non-official data for deforestation of the Atlantic Rainforest (<u>https://www.sosma.org.br/projeto/atlas-da-mata-atlantica/dados-mais-recentes/</u>); and: <u>www.globalforestwatch.org</u>
- Non-official data for deforestation of the Atlantic Rainforest (<u>https://www.sosma.org.br/projeto/atlas-da-mata-atlantica/dados-mais-recentes/</u>); and: www.globalforestwatch.org

4.1.5. Risk determination

Amazon

Although the Forest Code allows conversion up to 20% of the farm area in the Amazon biome, after the implementation of the Soy Moratoria (2006), the conversion of natural forests in the Amazon for soy production was significantly reduced, i.e., less than 3% of the total conversion in the biome since 2006, and commitments not to convert any natural forests for soy production is monitored very closely by this initiative.

The Soy Moratoria initiative publishes every year a report on the monitoring of conversion in the Amazon for soy production and this can be accessed for the period of 2014.

Not all soy traders and industries are committed to the Soy Moratoria, and therefore preferring suppliers that are part of this initiative is a quite effective safeguard measure for ensuring soy from the Amazon is not linking to natural forest/ecosystem conversion.

The initiative has recently announced that will it a permanent fixture but it is important to be up-to-date on the monitoring reports.

Cerrado

The expansion of soy plantations in the Cerrado biome is a driver threatening natural ecosystems in this region. Either legal or illegal, the conversion reduces the area of natural ecosystems in this biome and there is a very high rate of this type of conversion in the Cerrado.

'Elevated risk':

The soy production is driving direct impact of converting natural forest or ecosystems post July 2008. Data yield evidence that conversion is occurring on a widespread and/or systematic basis.

South Region

For at least the last 15 years the soy production in this region is not threatening the natural ecosystems in this region.

4.1.6. Risk designation and specification

Amazon:

Low risk - For soy suppliers committed to the Soy Moratorium in the Brazilian Amazon and the Soy Moratorium is in effect.

Elevated risk - For suppliers that are not committed to the Soy Moratorium, local 3rd party verification assessments are required to classify as low risk.

Cerrado

The expansion of soy plantations in the Cerrado biome is a driver threatening natural ecosystems in this region. Either legal or illegal, the conversion reduces the area of natural ecosystems in this biome and there is a very high rate of this type of conversion in the Cerrado.

'Elevated risk'

South Region

'Low risk' conversion of natural forest and ecosystems is not occurring in the region under assessment

4.1.7. Control measures and verifiers

Amazon

- Confirmation of that the soy supplier(s) is committed to the Soy Moratorium in the Brazilian Amazon. The moratorium is a pledge adopted by Brazilian Grain Exporters Association (ANEC)'s 35 associate members and Brazilian Vegetable Oil Industry Association (ABIOVE)'s twelve associate members to not trade or finance soya originating from land in the Amazon Biome - which together represent over 90% of the Brazilian soya trade.
- ANEC members:
 - o <u>http://www.anec.com.br/en/</u>
- ABIOVE members:
 - o http://www.abiove.org.br/

Control Measures for Cerrado and Amazon (where suppliers and soy producers are not committed to the Soy Moratorium)

- Confirm the farm has the following in place:
 - Historical remote sensing imagery evidence to confirm no conversion of primary forest, peatlands and HCVs post July 2008.
- Check if a farm has been <u>apprehended (black listed)</u> by the federal government for illegally converted natural forests and ecosystems
- Assess the risk of deforestation and PRAD (restored degraded areas) compliance using satellite time series images to detect the land change cover within the soy farm boundaries, some sources include:
 - Global Forest Watch maps
 - PRODES/INPE (high resolution)



• DETER/INPE (high resolution)

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.

Context

The production of soy GMO is currently the business as usual in Brazil. More than 90% of the soy produced in Brazil is GMO and it is almost impossible to identify or separate soy GMO-Free. There are some laboratories that do conduct GMO detection analysis and can provide GMO-free certification for specific lots of soy segregate from the farm to the market.

5.1.1. Applicable laws and regulations

Biosafety Law No. 11,105 (approved by the Brazilian Congress on March 24, 2005)

5.1.2. Legal authority

National Biosafety Council (Conselho Nacional de Biossegurança - CNBS)

National technical commission (CTNBio)

5.1.3. Legally required documents or records

N/A

5.1.4. Sources of information

- Article about the amount of soy in Brazil that is GMO. -<u>http://br.reuters.com/article/domesticNews/idBRSPEA3808K20140409</u>
- On GMO-free standards <u>http://www.nongmoproject.org/learn-more/what-is-gmo/</u>
- The Biosafety Law, from 2005, is the legal reference of this subject http://www.planalto.gov.br
- The allowance for GMO soy production can be found at <u>http://www.agricultura.gov.br</u>
- Reporter Brasil (Brazilian NGO) campaigning against GMO soy -<u>http://reporterbrasil.org.br/2013/11/legalizados-ha-10-anos-transgenicos-vivem-apoteose-no-brasil/</u>
- Restrictions on Genetically Modified Organisms: Brazil <u>https://www.loc.gov/law/help/restrictions-on-gmos/brazil.php</u>
- 'On GMO-free' standards
- <u>http://www.nongmoproject.org/learn-more/what-is-gmo/</u>

5.1.5. Risk determination

Overview of legal requirements

In Brazil, genetically modified organisms (GMOs) are governed by Law No. 11,105 of March 24, 2005, which regulates principles established by the Constitution regarding the preservation of the environment and the country's genetic patrimony, as well as the supervision of entities dedicated to research and manipulation of genetic material.

The CTNBio responsible for all regulation of the biotechnology sector. CTNBio has approved the



commercial use of about fifty GMOs, of which thirty-five are plants, including beans, cotton, corn, and soy, the latter of which is the most cultivated GMO in the country. According to the president of CTNBio, the rules for the release of these organisms in the country are among the strictest in the world.

Description of risk

There is a risk GMO soy being used by farmers in Brazil. The commercial production and trade of GMO soy in Brazil has been legally permitted since 2005. There are no license requirements for a farmer that wants to produce and/or trade GMO soy.

Furthermore, there are no systems required or commonly in place that ensures the physical separation and/or traceability of GMO free soy.

There are few certification standards for GMO-Free soy that can be used.

Risk Conclusion

GMO soy use is legal according to applicable legislation and the commercial production of GM soy covers more than 90% of the total production in Brazil therefore this indicator is evaluated as elevated risk.

5.1.6. Risk designation and specification

Elevated risk

5.1.7. Control measures and verifiers

As there are no regulations requiring the physical separation nor traceability of GMO and non-GMO soy from the farm and along the supply chain, it is very difficult to make sure that the soy that is traded in the spot market is not GMO (it given the level of GMO soy grown in Brazil the likelihood the spot market soy contains GMO soy is very high).

The only mechanism to avoid GMO soy is to identify and buy directly from producers who claim GMO-free soy and can demonstrate this through laboratories GMO-free certification and/or claim organic soy supply.

Verifier:

Confirm the soy supplier farm is producing GMO free soy through holding a valid:

- o GMO-free certification
- Organic certification

Annex I: Soy source types

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

'Soy plantation type' is a term used to describe the different types of soy plantations in a country, to allow a more detailed specification of risk. The Soy Plantation 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.

Through evaluating the CSR risks associated with soy farm production in Brazil, there are no relevant significant differences amongst farm types in the three different soy producing regions in Brazil.

In the Amazon and Cerrado regions, the types of soy farms are similar: medium to large farms with private ownership with a large proportion of farms having questionable legal land tenure.

In the south Atlantic Forest region (a.k.a. South Region), the soy farms are generally smaller than in the Amazon and Cerrado. They are also privately owned farms although there is a small proportion of a small holder producers in rural settlements. The land tenure in the Atlantic Forest region is less contentious than in the other two main soy producing tropical regions of Brazil.



SOY SOURCE TYPES IN BRAZIL				
Plantation type	Region/Area	Legal Land Classification	Ownership	Management regime
Soy	Amazon	<i>Mostly crops only</i> Size: medium (average 500 hectares) and large commercial (e.g. farms can be 2,500 hectares or more).	Mostly privately owned farms – many with uncertain land tenure.	Private, renting
	Cerrado			
	South Region	<i>Mostly crops only</i> Size: medium and large commercial; small cooperative	Mostly privately owned farms – many with uncertain land tenure. A small portion of soy is also produced by small holders in rural settlements and the majority of small farmers sell their production through cooperatives	Private, renting and cooperatives

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 (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.

NEPCon | www.nepcon.org | info@nepcon.org