

Soy Risk Assessment Paraguay

Version 1.2 | November 2017



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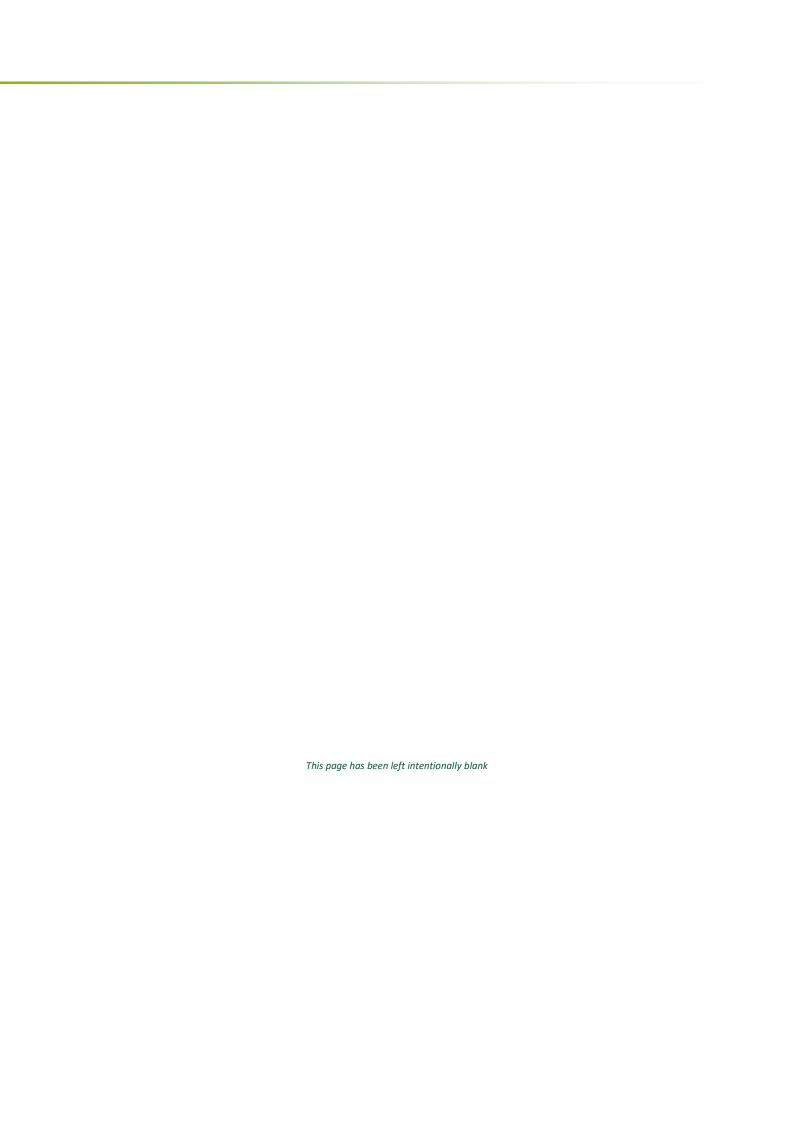
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A. Introduction

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).

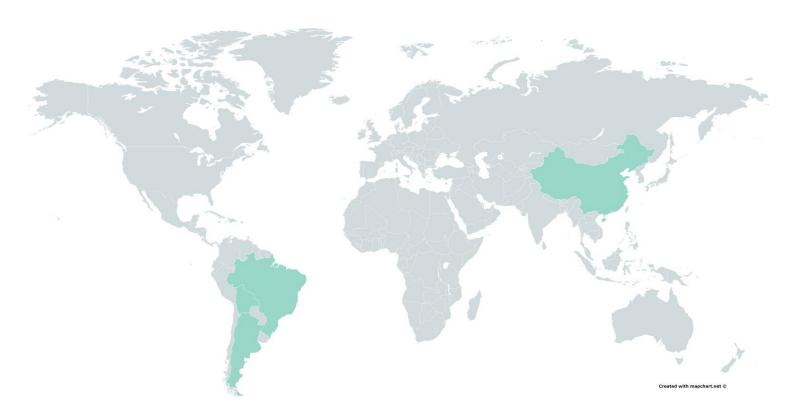


Figure 1. Countries for which NEPCon have developed a risk assessment for soy

B. Overview of sourcing risks for soy from Paraguay

Soy Risk Score: 17 / 100 in 2017

This report contains an evaluation of the CSR risks in Paraguay for five categories and 21 subcategories. We found:

- Specified risk in 15 sub-categories.
- Low risk for 3 sub-categories
- No requirements for 3 sub-categories

Soy source types and risks

There are three soy source types found in Paraguay. Knowing the "source type" that soy originates from is useful because different source types can be subject to different legal requirements and have attributes that affect the risks.

C	C C C 'I		
Smallholder	Soy from family manage	ed adricultural	crops. Family plots

are managed primarily for subsistence farming purposes. The average farms are 10 hectares in size. As of 2008, there were 21,000 small land owners growing soy, covering approximately 200,000 ha of crops in total. This source is not commonly found in export supply chains.

Medium sized holder Soy from medium sized, mechanised commercial farms.

> Farms are on average 162 hectares in size. As of 2008, there were approximately 8000 medium-sized producers

covering 1.3 million ha of land.

Large holder Soy from large industrialised commercial farms. Farms

> are on average of 2100 hectares in size. As of 2008, there were approximately 1000 are large producers who farm around 1.7 million ha. Approximately 53% of the area under cultivation is in the hands of these 3.3% of

land owners. This is the primary source of soy in

Paraguay.

We have analysed the risks for all source types and found the risks do not differ between the different source types. The CSR risks identified in this report occur in relation to business issues, social issues, environmental issues, conversion and GMOs.

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

Soy farms do not have valid land tenure because they do not hold valid property deeds stemming the high costs to acquire land title (sub-category 1.1). A payment of 25% of the value of the plot is required to secure tenure. It is reported that 35.15% of those with less than 5 ha, 51.5% of family farming and 80.14% of the so-called medium- and large-scale producers, hold valid property deeds. There is a lack of coordination between the Ministry of Agriculture and Livestock Farming (MAG) and the Institute for Rural Development and Land (INDERT) over land tenure governance coupled with an



- absence of adequate legislation to cover the leasing of agricultural land. This has led to a situation where many leases are on land without proper land titles. Furthermore, there are also many land claim disputes including by indigenous and the "landless" population in Paraguay; and
- Income and profit taxes are not paid in full (1.5). There is weak enforcement of the laws and high levels of corruption in the country. Reportedly, large foreign owned soy operators are also evading national taxes.

Regarding social issues, there is a risk that:

- Labour regulations such as workers not receiving the minimum or fair wage, holidays, or statutory breaks, social security, healthcare, pensions etc. are not complied with due to the high level of informal workers in the rural sector (2.1);
- Health and Safety regulations are not met due to a lack of coordinated legislation on occupational safety, and a lack of governance and enforcement of existing laws (2.2). This is compounded by the fact that up to 85% of the rural workforce is working informally in the agricultural sector;
- ILO Fundamental Conventions implementing laws are not upheld consistently by all entities and/or are systematically ignored, and/or are not enforced by relevant authorities (2.3). It is estimated over 20% of children in Paraguay are involved in child labour and almost half are working in the agricultural sector. There are also there are significant challenges in terms of the basic rights and employment rights of women being fair and respected. There is also evidence that freedom of association in practice is obstructed in Paraguay; and
- Indigenous or traditional peoples' rights are violated (2.4, 3.3: 3.3.5 3.3.6). Indigenous people do not hold the legal land titles over their traditional territories and the state has not protected them against the actions of corporate owners or of other non-indigenous farmers and agriculturists despite there being laws in place to protect their land ownership rights. Indigenous communities are facing the threat of developers and illegal settlers who invade their lands. Their territorial claims come up against powerful economic interests that have a degree of influence over the government and these interested parties are often opposed to awarding land to indigenous people and thus there a many land disputes over what is claimed to be traditional territory.

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

- Environmental legislation is not complied with, due to poor implementation and weak monitoring and enforcement (3.1 and 3.3.4). This has led to deforestation, soil erosion, water pollution due to pesticide and fertilizer use; and
- Existing laws relating to protected sites and species are not upheld consistently by all entities and often ignored, and are not enforced by relevant authorities (3.2 and 3.3: 3.3.1–3.3.4). The Environment Secretariat (Secretaría del Ambiente, SEAM) receives minimal funding, which insufficient to effectively manage and monitor its protected areas. Additionally, there has been a process of land excision from National parks for indigenous communities but this lost area is not compensated with a new protected area.

Regarding **conversion**, there is a risk that:

- Natural forest and ecosystems are converted for agriculture purposes including for soy farms in the Eastern region continues despite the Paraguayan government having a zero deforestation policy and legislation for the Eastern region (4.1); and
- Fire avoidance is not being practiced on farms, that illegal fires are being set for land clearing purposes and that such fires are leading to devastating uncontrolled fires (4.2).

Regarding GMOs, there is a risk that GMO's are used for soy production (5.1). In fact, 99% of the soy production is with GMOs. Despite an established regulatory framework for biosafety in Paraguay there is a lack of information on the approval processes, relevant authority, the National Commission for Agricultural and Forestry Biosafety, has a website that does not work, and the Ministry of Agriculture does not report on the releases of GMO varieties.



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

	Sub-category		Risk conclusion		
Legal Category			Smallholder	Medium Commercial	Industrial
	1.1. Land tenure		Specified	Specified	Specified
	1.2. Plantation registration & management rights		Low	Low	Low
Business Issues	1.3. Payment of royalties & required fees		N/A	N/A	N/A
	1.4. Value Added taxes & other sales taxes		Low	Low	Low
	1.5. Ir	ncome and profit taxes	Specified	Specified	Specified
	1.6. D	isclosure of Information	Low	Low	Low
	2.1. L	egal employment	Specified	Specified	Specified
Social issues	2.2. ILO Fundamental Conventions are upheld.		Specified	Specified	Specified
	2.3. Health and safety		Specified	Specified	Specified
	2.4. IP and TP rights are upheld.		Specified	Specified	Specified
	3.1. Environment		Specified	Specified	Specified
	3.2. Protected sites and species		Specified	Specified	Specified
	3.3. HCV	3.3.1 Species diversity.	Specified	Specified	Specified
Environmental		3.3.2 Landscape-level ecosystems & mosaics.	Low	Low	Low
issues		3.3.3 Ecosystems and habitats	Specified	Specified	Specified
		3.3.4 Critical ecosystem services.	Specified	Specified	Specified
		3.3.5 Community needs	Specified	Specified	Specified
		3.3.6 Cultural values.	Specified	Specified	Specified
Conversion	Conversion 4.1. New plantations since November 2005 have not replaced natural forest or ecosystems.		Specified	Specified	Specified
	4.2. Fire avoidance		Specified	Specified	Specified
GMOs	5.1. No GMO's		Low	Low	Low

C. Overview of the soy sector in Paraguay

Paraguay is the world's fourth largest soy exporter, having exported 4.6 million tonnes in the 2015/16 season (1). Exports generated an income of US\$ 2.4 billion, which equates to 45% of total agricultural exports for Paraguay (Tables 1 and 2). Paraguay produces 8-9 million tonnes of soy per year. This sector has contributed to the Paraguayan economy growing by an average annual growth of Gross Domestic Product by 5% (2). The rapid development of the soy sector is linked to the introduction of genetically modified soy (Roundup Ready (RR)) in 1996. Since then, the production surface area has increased from one million hectares (ha) in 1996 to 3.26 million ha in 2016 (1) (3).

The Republic of Paraguay's land is politically subdivided into 17 provinces and one capital district (See Annex III - Map 1). The Río Paraguay divides the nation's land into two regions, Eastern (Oriental) and Western (Occidental) (8). The Eastern region is the main area for soy production in the country (See Annex III - Maps 2 and 4) (4).

According to statistics from the 2008 Agricultural Census (5) (not this was the last official census), there were approximately 30,000 soy producers (6), of which around 21,000 are small land owners who plant 200,000 ha (an average of 10 ha), 8000 are medium-sized producers covering 1.3 million ha of land (average 162 ha) and the remaining 1000 are large producers who farm around 1.7 million ha (an average of 2100 ha) (5), which means that 53% of the area under cultivation is in the hands of 3.3% of land owners.

In Paraguay, the institution responsible for the agricultural sector is the Ministry of Agriculture and Livestock Farming (10). Regarding fiscal matters the Ministry of Finance is involved (11), and it is also responsible for the National Land Registry Service (12) for rural properties. The institution responsible for the environment is the Ministry of the Environment (13) and the entity responsible for the forestry sector is the National Forestry Institute (14). The Paraguayan Institute of Indigenous Affairs (15) is responsible for matters relating to native peoples.

Paraguay has six ecoregions. The majority of this land covers the dry Chaco (40%), the humid Chaco (25%) and the Atlantic Forests of high Paraná (20%). The rest of the surface area corresponds to the Pastizales de la Mesopotamia, Pantanal and Cerrano ecoregions (Map 3). The Atlantic Forests of high Paraná is the ecoregion that is the worst affected by soy production. Due to massive deforestation and the accelerated deterioration of the Atlantic Forest, all that remains is 13%. Of the total surface area of Paraguay, only 7% is protected wilderness areas (7).

According to the FAO (SOFO 2016), the progress of the agricultural frontier in Paraguay is very rapid (16). Between 2000 and 2010, the country converted 29.8 million ha of native forests for agricultural use, of which 70% was designated for cattle farming, 25% for agriculture and the remaining 5% for other uses. Global Forest Watch (17) estimates that the loss of native forests in Paraguay from 2005 to 2014 was 3.6 million hectares. According to World Resources Institute (18), the transformation of forest loss is happening at a rate of 7,7% per year, and Paraguay is ranked at number 5 in the world for countries that have lost the most native forest coverage. Paraguay is level of conservation of forests, wetlands and grasslands is lower than neighbouring South American countries. (21, 22).

Despite Paraguay supporting and a signatory to many international treaties such as the Convention on Biological Diversity (CBD) these commitments are rarely translated into environmental laws and/or implemented and enforced at a local level, according to the expert Fernando Díaz Shenker (28).



Paraguay stands out as being one of the Latin American countries with the worst record on equality and the most human rights infringements (25). Oxfam reported the deep inequality that can be observed in Paraguay, although Peasant Family Farming (AFC is the Spanish acronym) represents 91.4% of all agricultural operations, it only covers 6.3% of the total land. Of the 31 million hectares used by the agricultural sector, AFC only covers 1.9 million hectares, according to the CADEP report (26). Similarly, unequal access to land is one of the main factors that contributes to rural poverty in Paraguay (27). The agricultural model favours the concentration of land, wealth and political power in the hands of a few (21). On the Human Development Index Paraguay is in position 111 (of 186 countries in total). According to Greenpeace, the mechanised agriculture sector performs poorly when it comes to complying with environmental and employment laws (21, 22).

A serious problem in Paraguay is the high level of corruption across all areas of society. According to Transparency International, Paraguay is 130th in the world ranking for corruption, with a rating of 27 out of 100 (on a scale from 0 to 100 where 100 is lowest level of corruption). This means there is high perception that Paraguay is a corrupt country.

The production of soy in Paraguay is concentrated in the region known as Eastern (Oriental) and 99% of production occurs in the following provinces; Alto Paraná, Itapúa and Canindeyú, followed by the Caaguazú, San Pedro, Amambay, and Caazapa provinces, and with a lesser concentration in Misiones, Concepción and Guaira.

The Western (Occidental) area only has around 10,000 hectares of soy production, given its extremes of temperature and the lack of seeds adapted to cope with these conditions. This risk analysis focuses on the soy production area of the Eastern region (see Annex III - Map 4).

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DOX 1: SHOWS	tile alstribation (oi iaiiu pei	umerent sizeu	Soy producers in	Paraguay.

Soy Producers in Paraguay according to size						
Size (ha)	N° Landowners	% Area	% According to type of producer	Area (ha)		
Up to 50	21,000	8.06	70.00	250,000		
50 - 500	7000	24.19	23.33	750,000		
500 - 1000	1000	19.35	3.33	600,000		
1000 - 5000	800	29.03	2.67	900,000		
5000 - 10,000	150	12.90	0.50	400,000		
more than 10,000	50	6.45	0.17	200,000		
Total	30,000	100.00	100.00	3,100,000		
According to the 2008 agricultural census						

There are no current statistics available for the size of production. However, the information collected in 2008 is undoubtedly still a good basis for understanding the land ownership and soy production situation in Paraguay, as well as for determining the type of producer.

Also, see Annex III Map 1- Provinces of Paraguay, Map 3 - Ecoregions of Paraguay, Map 5: Territorial distribution of the main agricultural activities and Table 1 Production of Soya from 2008 - 2016 and Table 2 - Paraguay Soya Exports 2012 - 2016.

- (1) Cappro: http://cappro.org.py/estadisticas
- World Bank: http://www.bancomundial.org/es/country/paraguay (2)
- Terra: http://www.tera.com.py/capeco/index.php?id=area-de-siembra-produccion-y-(3) rendimiento
- (4) INBIO, Estimate of rural soy production 2014-2015 (capeco): http://capeco.org.py/wp-content/uploads/2015/06/estimacion-de-produccion-sojacampana-2014-2015-inbio-capeco.pdf
- (5) 2008 Agricultural Census: http://www.mag.gov.py/Censo/Book%201.pdf
- Ultima hora: http://www.ultimahora.com/paraguay-tiene-cerca-30000-productores-(6) soja-n957540.html
- (7) National Parks in Paraguay: http://parguesnacionalesdelparaguay.blogspot.com.ar/2014/03/nuevas-ecorregionesdel-chaco-paraguayo.html
- (8) FAO, Paraguay: http://www.fao.org/nr/water/aquastat/countries regions/pry/indexesp.stm
- (9) Maps of world: http://espanol.mapsofworld.com/continentes/sur- america/paraguay/paraguay-mapa.html
- (10)Paraguay Ministry of Agriculture and Livestock Farming: http://www.mag.gov.py/
- Ministry of Finance: http://www.hacienda.gov.py/web-hacienda/index.php?c=77 (11)
- (12)National Land Registry Service: http://www.catastro.gov.py/funcion.html
- (13)Ministry of the Environment: http://www.seam.gov.py/
- National Forestry Institute: http://www.infona.gov.py/index.php?cID=181 (14)
- Paraguayan Institute of Indigenous Affairs: http://www.indi.gov.py/pagina/18- (15)pueblos-indigenas.html
- (16)FAO (SOFO 2016): http://www.fao.org/3/a-i5588s.pdf
- (17)Global Forest Watch: http://www.globalforestwatch.org/country/PRY
- (18)World Resources Institute: http://www.wri.org/sites/default/files/uploads/WRI15 UMD Forest Update Accelerati on v2.jpg
- Ecoregions: https://es.wikipedia.org/wiki/Ecorregiones de Paraguay (19)
- (20)Cappro: http://cappro.org.py/wp-content/uploads/2013/12/Export- Paraguay Mensual-3.jpg
- Soy Observatory: http://observatoriosoja.org/wp-content/uploads/2014/08/OSAS-(21)fact-sheets-ESP.pdf
- WWF: (22)http://www.wwf.org.py/que hacemos/proyectos/iniciativa de transformacion de me rcados mti/la expansion soja en paraguay/
- La Nación inequality in land ownership: (23)http://www.lanacion.com.py/2016/05/25/paraguay-el-mas-desigual-en-la-tenenciade-la-tierra/
- (24)Transparency International Paraguay: https://www.transparency.org/country/
- (25)Oxfam: https://www.oxfam.org/es/paraguay-el-pais-donde-la-soja-mata
- (26)ABC: http://www.abc.com.py/edicion-impresa/suplementos/abc-rural/agriculturafamiliar-1282241.html
- Justiciafiscal: http://www.justiciafiscal.org/2014/05/cuales-son-los-paises-mas- (27)desiguales-de-latinoamerica/
- ABC: http://www.abc.com.py/edicion-impresa/suplementos/abc-rural/el-valor-de-(28)



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

- National Constitution of Paraguay, Art. 114, 115 and 116 Section II On Agricultural Reform - http://www.bacn.gov.py/CONSTITUCION ORIGINAL FIRMADA.pdf
- Act 622/60 (Full Text) On de facto Settlements and Developments http://www.mag.gov.py/Ley%2062260.pdf
- Act No 1863/2002 Art. 1, Art 84 ESTABLISHES THE AGRICULTURAL STATUTE http://www.mag.gov.py/Ley%201863-02.pdf
- Act No 2419/2004 (Full Text) Created the National Institute for Rural Development and Land - http://www.bacn.gov.py/ampliar-leyes-paraguayas.php?id=2273
- Act Nº 2531/04 (Full Text) AMENDS ARTICLE 16 OF ACT Nº 2002/02, "AMENDS SEVERAL ARTICLES OF ACT N° 1863/02, AND ARTICLES 17, 58, 90 & 93 OF ACT N° 1863/02 'ESTABLISHES THE AGRICULTURAL STATUTE' - http://www.bacn.gov.py/ampliar-leyesparaguayas.php?id=4023

1.1.2. Legal authority

The main national Public Sector entities that are concerned with aspects regarding land in Paraguay are the Ministry of Agriculture and Livestock Farming (MAG), and the National Institute for Rural Development and Land (INDERT).

- Ministry of Agriculture and Livestock Farming: http://www.mag.gov.py/
- National Institute for Rural Development and Land (INDERT): http://www.indert.gov.py/
- National Land Registry Service (SNC): http://www.catastro.gov.py/
- Directorate-General for Public Records (DGRP): http://www.pj.gov.py/contenido/154direccion-general-de-los-registros-publicos/154
- Municipal governments

INDERT works closely with the Ministry of Agriculture and Livestock Farming but the Government of Paraguay classes it as an independent agency (see Act N° 2419, Art. 3).

1.1.3. Legally required documents or records

- Title Deed and/or Judicial Resolution (original or a certified copy).
- Proof of payment of property tax for the current year or a certificate showing exemption from property tax, in the province in which the tax obligation originated (original or a certified copy).
- Land Registry Certificate form (3 sheets) correctly filled out and legible. Corrections, erased sections and white correction fluid are not permitted on land registry certificates.

- Payment of Duties (7).
- In cases of rental or leasing, a rental contract.

1.1.4. Sources of information

Government sources

- INDERT: http://www.indert.gov.py/
- (1)LAND OWNDERSHIP IN PARAGUAY. NATIONAL INSTITUTE FOR RURAL DEVELOPMENT AND LAND (INDERT): http://direitoamoradia.org/wpcontent/uploads/2013/08/ResponseParaguay2de2 04.2013.pdf
- (7) Catastro: http://www.catastro.gov.py/archivos/costos%20y%20requisitos/requisitos/Certificados%20 Catastrales.pdf; http://www.catastro.gov.py/aranceles.html
- (14) 2008 Agricultural Census: http://www.mag.gov.py/Censo/Book%201.pdf

Non-Government sources

- Transparency International's Corruption Perception Index 2014: http://www.transparency.org/country
- Ultima Hora: http://www.ultimahora.com/paraguay-tiene-cerca-30000-productores-sojan957540.html
- (6) Portal Guarani: http://www.portalguarani.com/2393 rafaela guanes de laino/17332 familias sin tierra e n paraguay por rafaela guanes de laino.html
- (2) Ultima Hora: http://www.ultimahora.com/el-conflicto-tenencia-tierras-se-agudiza-eleste-n469102.html
- (3) Semillas: http://www.semillas.org.py/wp-content/uploads/2012/04/Conflictividad-y-Violencia-en-Paraguay-.pdf
- (4) Oxfam: http://www.oxfamblogs.org/lac/paraguay-causas-y-efectos-de-un-golpe- institucional-parte-i/
- (5) Report: The situation of indigenous peoples in Paraguay: http://unsr.vtaulicorpuz.org/site/index.php/es/documentos/country-reports/84-reportparaguay
- (8) GRAIN: https://www.grain.org/es/article/entries/4657-limites-legales-a-la-compra-detierras-refrenan-a-los-acaparadores-de-tierra-o-adormecen-el-debate
- (9) USAID: http://pdf.usaid.gov/pdf_docs/Pnadi431.pdf
- (10) Informality of Rental: http://www.abc.com.py/edicion-impresa/economia/hay-altainformalidad-v-evasion-en-los-contratos-rurales-dice-asesor-de-cap-556598.html
- (11) Paraguay Information Agency: http://www.ip.gov.py/ip/?p=108223
- (12) FNC: http://fncparaguay.blogspot.com.ar/
- (13) http://direitoamoradia.org/wpcontent/uploads/2013/08/ResponseParaguay2de2 04.2013.pdf

1.1.5. Risk determination

Overview of Legal Requirements

Historical development of land ownership



Land policy in Paraguay has traditionally consisted of encouraging the settlement of nondeveloped land belonging to the tax authorities or to absent landowners. After the War of the Triple Alliance (1864-1870), the trend of state settlement resulted in the reinforcement of the system comprised of the division of land into large cattle/forestry estates, agricultural smallholdings and the entrenchment of the large estates model. In the 1960's and 70's, the opening and expansion of the agricultural frontier came into force, and in the 80's and 90's the frontier dried up.

The great expansion of the colonising process encouraged by the State took place between 1954 and 1989 (see map for the Eastern area under point 4.1), during the presidency of General Alfredo Stroessner. During this period, there were three distinct phases:

- 1. 1954 to 1974 Government decided to expand the agricultural frontier via spontaneous settlement, i.e. making land available in response to invasions carried out by uprooted peasants. Agricultural expansion happened in the North in the San Pedro, Concepción and Amambay provinces, and in the East in the provinces of Caaquazú and Alto Paraná (Eastern).
- 2. 1975 to 1982 Peasant demand for land was notably reduced. Agriculture itself experienced a significant upsurge due to the growth in exports of cotton and soy, which led to the start of private developments, capitalized by Brazilian farmers who arrived being attracted by the price and quality of land in Paraguay. These immigrants settled in the provinces of Itapúa, Alto Paraná and Canindeyú. During this period, large land ownership was reshaped, creating modern agricultural companies, with foreign capital and large areas of spare land. Immigrant farmers, national political stakeholders, supporters of the regime, friends and relatives, and foreign capital speculators all took advantage of this situation.
- 3. 1983 to 1989 The international economic crisis had repercussions on the fall in price of cotton and soy, and construction of hydroelectric infrastructure came to an end. The combination of these factors meant that the national unemployment index reached its highest ever level. A new demand for land for peasants arose.

According to Oxfam, during Stroessner's rule (1954–1989), the state distributed approximately 10 million hectares of land (25 percent of the country's total), but much passed illicitly to friends of the regime, while what little was received by smallholders was never titled. This has led to numerous conflicts over land, thousands of men and women farmers imprisoned, and more than 130 extrajudicial executions of community leaders since the end of the dictatorship.

Current land ownership

The current situation is characterised by extremely serious social conflicts, legal insecurity regarding land ownership, and physical uncertainty for both business owners and for peasants and farm workers (8, 9).

To be lawfully allocated land in an agricultural settlement, a person must meet the following criteria (Act N° 1863/02, Title II - Article 16):

- a) be a Paraguayan citizen regardless of gender, be of legal age, be a holder of the relevant Police Identity Card and have a record of good conduct;
- b) to work directly and habitually in agriculture, as your main economic activity;
- c) not have been previously granted land by the Institute of Rural Welfare; and
- d) not have been previously granted land by the Enforcement Agency.

The following organisation types may also be allocated land (Act N° 1863/02, Article 17):

a) agricultural production, forestry or farming cooperatives, and other producers or rural producer organizations, formally established; or

b) Indigenous Communities, who reside on land covered by the patrimony of the Enforcement Agency, among others.

The Act 1863/02 stablished in its Title III the lands that will be designated to Colonization and agrarian reform. Under this Title III, the law defines (Article 20) the colonial settlements that can be created by the Ministry of Agriculture and Livestock Farming, in the Eastern Region the colonial agricultural settlements are preferably established as forestry - grazing - farming productive units. The Ownership and tenure in rural property can be held by either (Act 1863/02, article 20): a) family, b) associative, or C) mixed.

Under the same Title III, it is stablished the following procedure to obtain the land title:

- a) Measurement, boundaries and land adjudication will be handled by the Implementation Organism of the Act or an official institution on behalf of it.
- b) The title will be measured, approved and registered in the Implementation Organism.
- c) Obligations of the beneficiaries: start immediately preparation of agricultural activities, use of land according to the land use management plan stablished by the Implementation Organism and payment requirements, a payment of 25% of the value of the plot is required to secure tenure (article 56)

According to Oxfam (4) and INDERT (1) lands types tenure can be classified as:

- Provisional document: According to INDERT they were lands that were acquired without being regularized their legal status, which in turn may belong to the private domain or to the state. In the first case, may refer to ancestral occupations, whose previous owners have died and that the heirs do not occupy them or that cannot demonstrate such condition, therefore do not promote any claim lawsuits. In the second case, it may be the product of the sale of lots granted for the purposes of agrarian reform, sale of rights or rights expectations, totally outside the law. Another of the circumstances, is that the property is in the process of being bought, so its transfer has not yet been perfected
- Rented land: Contract by virtue of which the owner of an agricultural land transfers his holding to another person in return for payment of an amount of money, part of the profits or other form of compensation.
- Occupier: land occupation prior to any regularization

The rental system gets a special mention in the agricultural statute under "Rural Contracts" (Act 1863/02 - Chapter VIII Rural Contracts). Rental agreements need to define: land number registry, payments, contract period and improvements agreed between the Parties.

Large producers may also lease estates that have agricultural land (Brazilian business owners are the main renters). In the case of family farming land, these can be represented by INDERT colonial lots, under spoken contract or private contract signed in a notary's office, generally not registered with the Directorate-General of Public Registers. The total amount of rented or sharecropping land is 2,467,234 hectares (ha), of which family farming corresponds to 69,335 ha made up of 62,424 farms; 2.4 million ha are rented by large- and medium-sized producers

The Project to Legally Regulate Land Ownership and Assess Settlements is currently underway; via an agreement signed by both the National Institute for Rural Development and Land (INDERT) and the Association for the Paraguayan Population (ADEPO).

See Annex 1 Table 3 which shows properties and parcels of land in the process of consolidation in the Eastern Region of Paraguay in 2012, according to INDERT.

Description of risk

There is a risk that the farms do not have valid land tenure because they do not hold valid property deeds stemming from the high costs to acquire land title.



- Reportedly, 35.15% of farms less than 5 ha hold valid property deeds, 51.5% of family farming and 80.14% of the so-called medium-and large-scale producers (2008 Census) (14).
- According to an Oxfam report (4), taking into account the different types of land tenure (definitive title, provisional document, rented land, occupier and others), two thirds of farms smaller than 20 hectares do not have a definitive property title.
- The National Institute for Rural Development and Land (INDERT) states that the reason for this is essentially economic, because to acquire the correct title, a payment of 25% of the value of the plot is required.
- According to Land Portal (https://landportal.info/book/countries/PRY), "land registration is unreliable, as the overlapping of rights is common: Paraguay has an area of 40.6 million hectares and the sum of existing land titles exceeds 50 million."
- The situation regarding land is conflictive and there is a high level of tension. This has created uncertainty and legal instability where land ownership is concerned, including for indigenous land. Protests, which involve the invasion of private land, road closures, civic strikes, etc. are being carried out by aggrieved social movements whose main complaint is regarding land for the landless.
- According to the III Census of 2012, 375 communities declare themselves to be land owners, although 3.9% of them do not have deeds, and 134 state that they do not have any land. Likewise, 145 communities reported issues regarding land ownership such as misappropriation by business owners, invasion of peasants, misappropriation by public bodies, overlapping deeds or rental or loan of lands to third parties (5,6).
- There are several landmark cases that illustrate the issues highlighted above. One of those is the Colonia San Juan in the Puente Kyja district, in which 8000 ha of land was found to have been converted into homogenous "soy fields" which makes it impossible to define boundaries or housing, which is currently the object of a legal dispute, and several other cases which now have not formalised their tenure and who act as landlord, in blatant violation of the agricultural statute. There are serious disputes about claims over land by the "landless" in Paraguay, as a number of press articles note (2,3,4).
- According to the Oxfam report (4), the strategy of the peasant and "landless" peoples to address the lack of protection, has consisted of occupying large estates. By doing this they oblige owners to negotiate and the authorities to find a solution. In the first 15 years of democracy (between 1990 and 2004) there were 895 land conflicts, 571 protests, 370 farm occupations and 357 violent evictions. During this same period, at least 7296 male and female peasants were arrested.
- Although the main grievance of peasant movements has been access to land, another cause has recently been added to this: to slow down the growth of large-scale soy cultivation due to the detrimental effects on health and on the environment associated with the wholesale use of agrochemicals. The peasant revolt has been suppressed by violence on the part of the State security agencies and there have also been arbitrary and extrajudicial killings by gunmen and paramilitaries.
- Aside from these problems created by inequalities in the distribution of land, there are the following structural challenges that contribute to the precarious land ownership situation:
 - The lack of short, medium and long term government policies to solve the problems associated with land.
 - The lack of coordination between the Ministry of Agriculture and Livestock Farming (MAG) and the Institute for Rural Development and Land (INDERT), two important players who work on land matters and on the provision of services to peasants and farmers.

- The lack of State support for established peasants and the landless.
- The lack of a National Census and a National Register of Property (the last National Census was in 1991). It is estimated that 50 - 70 percent of the country's land properties are not registered and do not have deeds. For those that do have a title deed they may not be correctly registered. Public and private sector workers believe that it should be a Government priority to carry out a new National Census and a National Land Registry of Property.
- There is a lack of coordination between the Ministry of Agriculture and Livestock Farming (MAG) and the Institute for Rural Development and Land (INDERT) over land tenure governance coupled with an absence of adequate legislation to cover the leasing of agricultural land. This has led to a situation where many leases are on land without proper land titles.
- Furthermore, there are also many land claim disputes including by indigenous and the "landless" population in Paraguay.
- There is an absence of adequate legislation to cover the leasing of agricultural land. The total size of leased or sharecropping land is 2.4 million hectares, of which family farming accounts for 69,335 ha, whilst large- and medium- sized producers lease 2.4 million ha.
- Generally, it is possible to tell from the number of farms, that large producers lease estates that have agricultural land, with Brazilian business owners being the main renters (1). Regarding the ownership of this land, in many cases of leasing these have been taken out on land that has problems concerning consolidation of land titles (10).

Risk conclusion

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

1.1.6. Risk designation and specification

Elevated risk

1.1.7. Control measures and verifiers

Control measures

Verifiers - INRA report:

- Check the farm has all the valid legally required land tenure documents:
 - Deed Title and/or Judicial Resolution (original or a certified copy)
 - Proof of property tax payment for the current year or a certificate showing exemption from property tax, in the province in which the tax obligation originated.
 - Land Registry certificate
 - o Farms up to 20 hectares are registered with National Register of Family Farming (RENAF)
 - o For land renters:
 - Long term rental contract
 - Record of rent payments
 - Copy of the owner's title of ownership
 - Records Free Prior Informed Consent and copies of negotiated agreements (if applicable)



- o Evidence of a dispute resolution mechanism
- Review information on land tenure disputes and developments on indigenous and traditional peoples' land (small holders) claims:
 - o Identify potential conflicts over land uses. 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
 - Records of Free Prior Informed Consent, copies of negotiated agreements shall be available
 - Evidence of a dispute resolution mechanism is in place
 - Consult interested parties:
 - National Institute for Rural Development and Land (INDERT)
 - Paraguayan Institute of Indigenous Affairs
 - Paraguayan Federation of Indigenous Peoples FAPI
 - **WWF Paraguay**
- Through on-site verification:
 - Confirm soy farms takes place within the authorized boundaries in accordance with the relevant licenses
 - Stakeholder consultation shall confirm that registration of farm has been granted following legally prescribed processes

1.2. Plantation registration and management rights

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

1.2.1. Applicable laws and regulations

- ACT Nº 125/91, Book III, Title 1 ESTABLISHES THE NEW FISCAL SYSTEM http://www.mic.gov.py/mic/site/comercio/dgcs/pdf/6 Servicios Financieros/LEY125.pdf
- DECREE Nº 6539/05. Full text WHEREBY GENERAL REGULATIONS ON THE STAMPING AND USE OF SALES RECEIPTS, COMPLEMENTARY DOCUMENTS, COVER NOTES AND PROOF OF HOLDING ARE ENACTED. http://www.oas.org/juridico/spanish/mesicic3 pry decreto6539.pdf
- ACT Nº 385/94. Full text ON SEEDS AND PROTECTION OF CULTIVARS http://www.cej.org.py/games/Leyes por Materia juridica/AGRARIA/LEY%20No385.pdf
- ACT Nº 1.863/02. Full text ESTABLISHES THE AGRICULTURAL STATUTE http://www.mag.gov.py/Ley%201863-02.pdf
- Decree N° 1031. Full text WHEREBY THE TAX ON PROFIT FROM AGRICULTURAL ACTIVITIES (IRAGRO) IS REGULATED - http://www.pstbn.com.py/wpcontent/uploads/2014/08/decreto-nro-%201031.13.pdf

- ACT N° 542. Full text ON FORESTRY RESOURCES http://www.cej.org.py/files/games/Leyes por Materia juridica/FORESTAL/LEY%20Nro542. pdf
- ACT N° 2524 (2004). Full text ON PROHIBITION IN THE EASTERN REGION OF THE TRANSFORMATION AND CONVERSION OF LAND WITH FOREST COVERAGE. http://www.seam.gov.py/sites/default/files/ley 2524.pdf
- Act N° 5045. Full text Amends Art. 2 and 3 and extension of Act 2524 http://www.infona.gov.py/application/files/9214/2902/7951/Ley 5045.pdf
- DECREE Nº 11.898/08. Full text WHEREBY THE MINISTRY OF AGRICULTURE AND LIVESTOCK FARMING (MAG), IS AUTHORISED TO USE THE REGISTER OF AGRICULTURAL CERTIFICATION OF THE 2007/2008 AGRICULTURAL CYCLE, AS A BASIS FOR THE NATIONAL REGISTER OF FAMILY FARMING (RENAF) http://www.buscoley.com/pdfs/d 11898 2008.pdf
- Decree Nº 2651. Full text WHEREBY DECREE Nº 11,464 OF 21 DECEMBER 2007 IS PARTIALLY AMENDED AND IS EXPANDED, "WHEREBY THE NATIONAL REGISTER OF FAMILY FARMING (RENAF) IS CREATED AND IMPLEMENTED" http://www.gacetaoficial.gov.py/gaceta.php?action=show&id=2635&num=230
- DECREE-ACT Nº 51/52. Full text ON PROPERTY TAX AND OTHER LEVIES ON REAL PROPERTY http://www.catastro.gov.py/archivos/decretos/Relacionadas%20al%20Catastro/Decreto%2 0<u>51-52.pdf</u>
- Decree N° 14956. Full text Regulation of Act N° 51/52 http://paraguay.justia.com/nacionales/decretos/decreto-14956-sep-18-1992/gdoc/

1.2.2. Legal authority

- Ministry of Finance: http://www.hacienda.gov.py/web-hacienda/index.php
- Sub secretary of State for Taxation (SET): https://www.hacienda.gov.py/web- hacienda/index.php?c=260
- Ministry of Agriculture and Livestock Farming: http://www.mag.gov.py/
- National Forestry Institute: http://www.infona.gov.py/

1.2.3. Legally required documents or records

- Unique Taxpayer Register (RUC)
- National Register of the Beneficiaries of RENAF (Small Producer)

Note: It is not necessary to obtain licences for agricultural activity linked to a particular farm.

1.2.4. Sources of information

Government sources

- Ministry of Agriculture and Livestock Farming: http://www.mag.gov.py/index- renaf.php?pag=reporte renaf2014.php
- INFONA, Laws: http://www.infona.gov.py/index.php?cID=309
- Ministry of Finance: http://www.hacienda.gov.py/web-hacienda/index.php
- Sub secretary of State for Taxation (SET): https://www.hacienda.gov.py/webhacienda/index.php?c=260
- RENAF Register (RENOAF): http://www.renaf.magyp.gob.ar/principal.php?nvx_ver=23



Non-Government sources

- WRM: http://wrm.org.uy/oldsite/boletin/92/Paraguay.html
- Monografias: http://www.monografias.com/trabajos71/derecho-agrario/derechoagrario2.shtml
- (1) Oxfam; The limits of corporate social responsibility in the case of Paraguay's Agricultural Development, 2013: https://www.oxfam.org/sites/www.oxfam.org/files/rr-soymirage-corporate-social-responsibility-paraguay-290813-es.pdf; https://www.oxfam.org/sites/www.oxfam.org/files/rr-soy-mirage-corporate-socialresponsibility-paraguay-290813-es.pdf; https://www.oxfam.org/es/paraguay-el-paisdonde-la-soja-mata; https://www.oxfam.org/es/paises/paraguay
- (2) USAID: http://pdf.usaid.gov/pdf_docs/Pnadi431.pdf
- (3) UN: http://unsr.vtaulicorpuz.org/site/index.php/es/documentos/country-reports/84- report-paraguay

1.2.5. Risk determination

Overview of Legal Requirements

Overall there is neither a control system nor any obligations linked to the management of agricultural property. The legislation listed in section 1.2.1 covers the registration of the taxpayer at the Unique Taxpayer Register (RUC).

There is a system for registering and treating seeds, regulated by act N° 385, and then the obligation for people to register themselves with the Unique Taxpayer Register (tax system) with the Sub secretary of State for Taxation (SET) to be allocated an RUC number.

Current legislation does not require the preparation of management plans or activity licences for the cultivation of soy.

Description of risk

There is no specific system to outline management activities in the agricultural sector.

On the non-compliance with tax legislation (see points 1.4 and 1.5) it is believed that many producers are not registered in the appropriate manner. A deep-rooted problem is the lack of any agreement between the Government and soy producers in relation to agricultural taxation (2).

Violation of basic needs, particularly where indigenous communities and small landowners are concerned, is occurring, also and specifically by foreign companies (see the Oxfam report). Concerning the land situation in Paraguay, the UN has noted that despite the Paraguayan Constitution recognising, in article 64, the right that indigenous communities should communal ownership of lands, which are defined as immune from seizure, inseparable, non-transferable, not liable to guarantee contractual obligations nor to be leased, and exempt from tax. It also indicates that indigenous peoples cannot be displaced without their consent. Despite this, in Paraguay there is a general situation of a lack of respect for and protection of these rights, which is a source of violent conflict and these then lead to human rights abuses. The obstacles identified that prevent the enjoyment of these rights have been mentioned in the sentences of the Inter-American Court of Human Rights in the cases of Yakyé Axa, Sawhoyamaxa and Xakmók Kasék (3).

Risk conclusion

There is no legal requirement for farm management permits etc. applicable to the indicator. There is neither a control system nor any obligations linked to the management of agricultural property other than those detailed the under other relevant sub-categories including land

tenure (1.1), legal employment (2.1), health and safety management (2.2) and environmental management (3.1).

1.2.6. Risk designation and specification

Eastern Paraguay - Low Risk

1.2.7. Control measures and verifiers

N/A

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

In Paraguay, there are no taxes relating to production rights, patents, franchises, etc. with the exception of intellectual property relating to the cultivation of genetically modified soy. Act N° 2422 (Full Text) - CUSTOMS CODE - link

1.3.2. Legal authority

- Ministry of Finance: http://www.hacienda.gov.py/web-hacienda/index.php?c=77
- National Customs Authority (DNA): http://www.aduana.gov.py/

1.3.3. Legally required documents or records

N/A

1.3.4. Sources of information

Government sources

- Ministry of Finance: http://www.hacienda.gov.py/web-hacienda/index.php?c=77
- National Customs Authority (DNA): http://www.aduana.gov.py/

Non-government sources

- EDYDSI: http://www.edydsi.com
- (2) INFOBEA: http://www.infobae.com/2013/10/17/1516687-cartes-veta-el-impuesto-lasexportaciones-soja-y-granos/
- (1)CADEP, Fiscal Observatory: http://www.mag.gov.py/cadep/Analisis-del-sistematributario%20%202011.pdf
- (3) CIAT: http://www.ciat.org/index.php/en/products-and-services/ciatdata/681paraguay.html
- (4) UNDP report http://www.mag.gov.py/varias/Sector%20Rural%20Paraguayo%202010.pdf

1.3.5. Risk determination

In Paraguay, the tax burden is light. This low level of regulation and minimal tax burden relevant to indicators 1.3. to 1.6. contrasts with the importance of the sector to GDP. Information published by the UNDP in 2010 regarding the rural sector in Paraguay (4) stated



that a quarter of Gross Domestic Product (GDP) comes from the primary sector, and approximately 60% of industrial activities are related to, or supplied by, primary sector production. According to USAID (9) and the Paraguay Information Agency (11), the lack of an agreement between the Government and soy producers regarding agricultural taxation causes a significant imbalance between the importance of the soy sector as a driver of the Paraguayan economy and actual taxes levied.

There is no specific tax legislation regarding soy, nor is there an export fee. Since 2013 the government of Paraguay has been trying to introduce a new piece of legislation that does not yet exist. The president of Paraguay (Thursday 17 October 2013), via a decree, overruled the law that was passed on 9 October 2013 by Congress, which specified the implementation of a 10% tax on soy.

Because there are no taxes linked to activity licenses, payments for production rights, payments for land use, payments associated with species, varieties or others, the risk of noncompliance does not exist either. For this reason, this category has been deemed not applicable.

1.3.6. Risk designation and specification

N/A

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

- ACT Nº 125/91, Book III, Heading 1 ESTABLISHES THE NEW TAX SYSTEM link
- Act 5143, Art. 27 Amends Act No 125 and establishes the new tax system. link
- DECREE Nº 1030/13. Full text WHEREBY VALUE ADDED TAX (VAT) ESTABLISHED IN ACT N° 125/91 AND ITS AMENDMENTS IS REGULATED - link
- Decree N° 1440. Full text WHEREBY ARTICLES 24, 29 AND 30 OF THE APPENDIX TO DECREE No 103012013 "WHEREBY VALUE ADDED TAX (VAT) ESTABLISHED IN ACT N° 125191 AND ITS AMENDMENTS " ARE AMENDED. - link
- Act N° 438/94 Full Text This law has as its end to regulate the constitution, organisation and workings of cooperatives and the cooperative sector. - link

In accordance with the amendments introduced in the plenary of the Senate, Value Added Tax (VAT) will be applied across the board at 5 percent, leaving open the Income Tax on the yield of the sugar harvests.

1.4.2. Legal authority

- Ministry of Finance: http://www.hacienda.gov.py/web-hacienda/index.php
- Sub secretary of State for Taxation (SET): https://www.hacienda.gov.py/web- hacienda/index.php?c=260

1.4.3. Legally required documents or records

- Unique Taxpayer Registration Number (RUC)
- Sworn Declaration
- Stamped invoices
- Book of purchases and sales (Invoices)

1.4.4. Sources of information

Government sources

- Ministry of Finance: http://www.hacienda.gov.py/web-hacienda/index.php
- Sub secretary of State for Taxation (SET): https://www.hacienda.gov.py/webhacienda/index.php?c=260
- SET: http://www.set.gov.py/portal/PARAGUAY-SET/detail?folderid=repository:collaboration:/sites/PARAGUAY-SET/categories/SET/bibliotecavirtual/preguntas-frecuentes/iva&content-id=/repository/collaboration/sites/PARAGUAY-SET/documents/biblioteca/biblioteca-virtual/iva-preguntas-frecuentes

Non-Government sources

- (2) Ejempla: https://ejempla.com/negocios/paraguay-tiene-los-impuestos-mas-injustos
- (3)CIAT: http://www.ciat.org/index.php/en/products-and-services/ciatdata/681paraguay.html
- POLUNA: http://www.pol.una.pv/cie/sites/default/files/files/reg_unico_contribuyente.pdf
- BID: https://publications.iadb.org/handle/11319/3506?locale-attribute=es
- (4) Analysis of Paraguay's tax system: http://www.mag.gov.py/cadep/Analisis-del-sistematributario%20%202011.pdf
- EA: http://ea.com.py/v2/entre-el-33-y-el-35-seria-la-evasion-impositiva-en-paraguay-enel-caso-del-iva/
- (5) ABC: http://www.abc.com.py/edicion-impresa/economia/cantidad-de-posibles-fraudessupera-la-capacidad-de-la-fiscalia-y-la-set-1285665.html
- (6) Ultima Hora: http://www.ultimahora.com/los-cuatro-escandalos-y-fraudesinternacionales-que-salpican-paraguay-n980140.html

1.4.5. Risk determination

Overview of Legal Requirements

The tax system is hugely reliant on four basic taxes: Value Added Tax (VAT), Corporate Income Tax (IRACIS), Selective Excise Tax (ISC) and the Foreign Trade Tax.

Act 125/91, Book III, Heading 1, regulates the tax on added value. The law has been amended by several decrees over recent years.

The payment of VAT is carried out depending on the type of tax and activity in the sworn declaration according to the system of payment, which can be: GENERAL VAT (Monthly) SIMPLIFIED VAT (Every four months). This is done with a SWORN DECLARATION (Form) and depending on the type of activity.

Value Added Tax (IVA), on average represents 50% of the total collected tax, US\$ 1.262 billion in 2010. The role that this tax plays in contributing to GDP has seen sustained growth, coming to constitute on average around 6% of it.

VAT corresponding to all the purchases of goods and services that directly impact on production, constitutes fiscal credit that can be directly claimed against the tax, since the 2005



tax year. The balance of VAT from one tax year can be transferred to the following period until the total has been used (2,3,4).

VAT is a tax that is collected at each phase of the trading of a good until it reaches the end consumer. It does not independently tax the total of each sale, rather as its name indicates, only on the added value that is added at each stage by each economic agent. VAT taxes the sale of goods or sale of services, the lending of services (excluding those of a personal nature that are lent in a dependency relationship) and the import of goods. In this sense sales are, for example, the production and sale of products and merchandise that are carried out via a company. Agricultural products in their natural state do not pay VAT (3,4).

Private individuals, one-person companies registered in the country, cooperatives, with the scope established under Act N° 438/94, and companies that carry out commercial, industrial, or service-based activities, are all liable to pay VAT.

The tax is calculated on the price of the sale of the good or the provision of the service. On this amount, the general VAT rate is applied, which is 10%. With the amendments introduced by Act No 5061/13, the application of VAT rates is understood differently, depending on the product or service affected (2).

The following are exempt from this tax:

- The sale of agricultural products in their natural state;
- Capital goods, produced by national manufacturers, which are used directly in the industrial or agricultural productive cycle (4).

The majority of agricultural operations are exempt from paying VAT because they are selling agricultural products in their natural state. Agricultural consumables and machinery, meanwhile, are subject to VAT. According to the Sub secretary of State for Taxation (SET) evasion of VAT in Paraguay is between 33 to 35% (1 and 5). Generally, there is little willingness to pay taxes in Paraguay. (6).

Besides general situation about taxes payments, due to the fact that agricultural products in their natural state are excluded to VAT (3, 4) this indicator has been evaluated as not applicable.

1.4.6. Risk designation and specification

N/A

1.4.7. Control measures and verifiers

N/A

1.5. Income and profit taxes

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

1.5.1. Applicable laws and regulations

- ACT Nº 125/91 (Full Title) ESTABLISHES THE NEW TAX SYSTEM link
- ACT N° 2421/04 (Full Title) DE REORDENAMIENTO ADMINISTRATIVO Y DE ADECUACIÓN FISCAL - Administrative reordering and Fiscal adaptation - link
- Act N° 4673 (Full Title) Identifies and expands measures for the creation of income tax on services of a personal nature - link

- DECREEE Nº 8595 (Full Title) WHEREBY THE INCOME TAX ON SERVICES OF A PERSONAL NATURE, CREATED BY ACT N° 2421, IS REGULATED - link
- Decree N° 8593 (Full Title) WHEREBY INCOME TAX ON THE SMALL TAXPAYER, CREATED BY ACT N° 2421, IS REGULATED - link
- Decree N° 1028 (Full Title) Amendment of decree 8593 Income Tax on the Small Taxpayer - link
- Decree N° 1031 (Full Title) WHEREBY THE INCOME TAX ON AGRICULTURAL ACTIVITIES (IRAGRO) IS REGULATED - link

1.5.2. Legal authority

- Ministry of Finance: http://www.hacienda.gov.py/web-hacienda/index.php?c=77
- Sub secretary of State for Taxation (SET): https://www.hacienda.gov.py/web- hacienda/index.php?c=260

1.5.3. Legally required documents or records

- Certificate of enrolment in RUC.
- Property title deed or equivalent document.
- For companies and large-scale producers, an annual report
- Sworn declaration of payment of taxes

1.5.4. Sources of information

Government sources

- Ministry of Finance: http://www.hacienda.gov.py/web-hacienda/index.php
- Sub secretary of State for Taxation (SET): https://www.hacienda.gov.py/web- hacienda/index.php?c=260
- SET: http://www.set.gov.py/portal/PARAGUAY-SET/detail?folderid=repository:collaboration:/sites/PARAGUAY-SET/categories/SET/bibliotecavirtual/preguntas-frecuentes/iva&content-id=/repository/collaboration/sites/PARAGUAY-SET/documents/biblioteca/biblioteca-virtual/iva-preguntas-frecuentes

Non-Government sources

- (2) Ejempla: https://ejempla.com/negocios/paraquay-tiene-los-impuestos-mas-injustos
- (3)CIAT: http://www.ciat.org/index.php/en/products-and-services/ciatdata/681paraguay.html
- POLUNA: http://www.pol.una.py/cie/sites/default/files/files/req_unico_contribuyente.pdf
- BID: https://publications.iadb.org/handle/11319/3506?locale-attribute=es
- (4) Analysis of Paraguay's Tax System: http://www.mag.gov.py/cadep/Analisis-del- sistema-tributario%20%202011.pdf
- EA: http://ea.com.py/v2/entre-el-33-y-el-35-seria-la-evasion-impositiva-en-paraguay-enel-caso-del-iva/
- (5) ABC: http://www.abc.com.py/edicion-impresa/economia/cantidad-de-posibles-fraudessupera-la-capacidad-de-la-fiscalia-y-la-set-1285665.html
- Analysis of the Tax system: http://www.maq.qov.py/cadep/Analisis-del-sistematributario%20%202011.pdf



- Business management: http://www.gestion.com.py/?page_id=781
- ABC: http://www.abc.com.py/edicion-impresa/economia/estudios-coinciden-en-queevasion-fiscal-del-paraguay-ronda-el-40-1236121.html
- (7) Ultima Hora: http://www.ultimahora.com/evasion-del-iva-ronda-el-50-y-renta-el-30segun-experto-ciat-n1001726.html
- (6) Ultima Hora: http://www.ultimahora.com/los-cuatro-escandalos-y-fraudesinternacionales-que-salpican-paraquay-n980140.html
- (8) http://www.maq.gov.py/varias/Sector%20Rural%20Paraguayo%202010.pdf

1.5.5. Risk determination

Overview of legal requirements

Income Tax on Agricultural Activities (IMAGRO) is regulated in ACT No 125/91 and its amendments. It is a tax on the value of agricultural lands which is paid at different rates related to on the size of the property. Whilst large properties are liable for the normal tax of 10%, small and medium ones are only liable for a tax on assumed income of just 2.5% and landowners with less than 20 ha are exempt (Decree No 1031). This differentiation in the way properties are treated acts as an incentive to falsely declare the values of property on small or medium farms with a view to paying a lower rate.

There are also others such as the Income Tax on the Small Taxpayer (IRPC), an Income Tax on Agricultural Activities (IMAGRO), and a series of taxes which suppose a lower tax burden such as: the One-off Tax, the One-off Tax on Maguilas, the Tax on Deeds and Documents, Fiscal Patent and others. Personal Income Tax (IRP), was created as part of the tax reforms of 2004 but its application has been delayed on several occasions, its implementation recently having been envisaged for the year 2013.

Income Tax on Agricultural Activities (IMAGRO), represents on average 0.2% of total tax revenue in Paraguay. Income from this tax was US\$ 6 million in 2010, with a yearly growth of around 19.5%. IMAGRO only contributes 0.03% of GDP.

The following contribute to this tax: private individuals, companies that either have or do not have legal status, associations, corporations and other private entities of whatever nature, public organisations, self-governing bodies, decentralised entities and companies and mixed economy and persons or entities that are resident or registered abroad and their subsidiaries, agencies or establishments in the country.

There are two payment systems linked the type of rural property a soy farmer is managing:

- Large Properties, rural properties that individually or jointly reach or have an SAU*1 greater than 300 hectares in the Eastern Region.
- Medium Properties, rural properties that individually or jointly have 300 hectares or less of SAU*1 in the Eastern Region, can choose to settle via the assumed, simplified or accounting system.
- Small Landowners are exempt from this tax: private landowners who individually or jointly own property that is less than or equal to 20 hectares of SAU in the Eastern Region.
- 1. Assumed system: Is the direct application of a formula, the amount of SAU, declared on the Sworn Property Statement Form by the productivity rate of the land, which depends on the location of the properties by the average market price that is determined on a yearly basis by the Ministry of Agriculture and Livestock Farming (MAG). The tax rate is 2.5%.
- **2. Simplified system:** Consists of paying the tax on income minus outgoings.
- 3. Accounting system: Payment of the tax on accounting results. The rate of tax both for the simplified and accounting systems is 10%. Over all the real necessary costs, duly

documented, it is possible to deduct, for example, machinery depreciations, improvements and equipment (only for the accounting system), and in the case of private individuals, all personal and family costs for which he is responsible. Direct costs in help for private individuals who own small neighbouring farms up to 20% of gross profits (income).

There is a Tax on Commercial, Industrial or Service Income. This is calculated annually and covers the periods between the first of January and the thirty first of December of each year, and accordingly it is paid after the end of the year. Any person, one-person company, company in general or association, corporation or cooperative who carries out commercial, industrial or service activities and is not registered in the primary agricultural sector paying into the Income Tax on Agricultural Activities should contribute to the IRACIS. This tax applies to the processing of soy, which in Paraguay mainly refers to milling and the production of oil.

Payment is made via an IRACIS Sworn Declaration provided by SET which is form number 848 and must be presented in one of the designated places in the month of April following the tax year that has ended.

*1 The agriculturally useful surface area (SAU), is the total surface area of rural land that a private individual or legal entity possesses in one region (Western or Eastern) on national territory and which can be used effectively for the following activities; fishing, arable farming, farming, and other agricultural activities. To calculate SAU the following areas should be deducted from the total hectares of the property: (natural forests, plantations, bodies of water, wetlands etc. non-productive areas).

Description of risk

There is a risk that income and profit taxes are not paid in full. There is weak enforcement of the laws and high levels of corruption in the country. Reportedly, large foreign owned soy operators are also evading national taxes.

- In general, there is a low level of compliance in Paraguay to pay income tax mainly due to the fact there is weak enforcement and repercussions on tax evasion. Various press articles and studies that have been carried out, it is estimated that in Paraguay the rate of tax evasion is around 40% (1).
- A study carried out by the CIAT reaches the conclusion that tax evasion is 30% of the total (5,6,7). This could be linked to the high level of corruption in Paraguay as the country has a CPI rating of 27 out of 100 (on a scale from 0 to 100 where 100 is lowest level of corruption).
- Paraguay has after a long dictatorship a very privileged elite accustomed to dominate the country. The extreme difference in the distribution of income in society causes an extreme inequality. A large part of the population is too poor to participate visibly in the economy, and therefore is not subject to taxes. The other part of society is associated with influencing the management of the country many try to avoid losing revenue via tax evasion.
- Perhaps exacerbated by the fact that most of the large landowners (more than 70% of the land) are foreign investors (Argentines and Brazilians) and based on observation they this group do not feel obliged to pay taxes in Paraguay.

Risk conclusion

Elevated risk for medium and large land holders: Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

Not applicable for small land holders.

1.5.6. Risk designation and specification

Elevated risk for medium and large land holders.



Not applicable for small land holders.

1.5.7. Control measures and verifiers

- Verify the soy farmer has the following valid tax related documents
 - Certificate of Unique Taxpayer Registration Number ((RUC) Número del Registro Único del Contribuyente)
 - An annual report (for companies and large-scale producers)
 - o Sworn declaration of payment of taxes.
- Confirm the farmer/producer/company is registered with the National Tax Administration through holding a valid Unique Taxpayer Registration Number Certificate

1.6. Disclosure of information

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

1.6.1. Applicable laws and regulations

In accordance with previous indicators, there is no specific regulated system in Paraguay that applies to the primary agricultural sector. There is no legislation making it obligatory to present annual activity reports or business reports either to the authorities or publicly in the soy sector.

1.6.2. Legal authority

N/A

1.6.3. Legally required documents or records

N/A

1.6.4. Sources of information

N/A

1.6.5. Risk Determination

Not applicable.

1.6.6. Risk designation and specification

N/A

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

1.6.7. Control measures and verifiers

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

- Act N° 213. Full text Labour Code link
- Decree Act No 1860/50 (Full Text) Social Security System, contained within the Creation of the Institute for Social Security - link
- ACT 729/1961 (Full Text) SANCTIONS THE LABOUR CODE. link

2.1.2. Legal authority

- Ministry of Labour, Employment and Social Security (MTESS) https://www.paraguay.gov.py/ministerio-de-trabajo
- Institute of Social Prevention (IPS): http://portal.ips.gov.py/portal/IpsWeb/Overview/
- Ministry of Agriculture and Livestock Farming: http://www.mag.gov.py/

2.1.3. Legally required documents or records

- Valid identity document
- Certificate of current employment
- Payroll account
- Annual accounts of the corresponding company
- Most recent payroll receipt or photocopy of proof of being registered for Social Security
- Employers' information
- Sworn Declaration of Employer Registry
- Company's RUC
- National Register of Family Farming (farms up to 20 hectares in size)

2.1.4. Sources of information

Government sources

- (5) Ministry of Labour, Employment and Social Security (MTESS): http://www.mtess.gov.py/index.php/noticias/diario-ultima-hora-ministro-del-trabajo-favorde-cambio-en-ajuste-del-salario-minimo
- Institute of Social Prevention (IPS): http://portal.ips.gov.py/portal/IpsWeb/Overview/
- (2) Agricultural Statistics and Census Directorate (DCEA): http://www.mag.gov.py/index-b- nuevo.php?pag=dcea.html



(3) Ministry of Agriculture and Livestock Farming (RENAF): http://www.renaf.magyp.gob.ar/principal.php?nvx ver=23; http://www.maq.gov.py/dqp/dqp/ACTUALIDAD%20AGROPECUARIA%20PY%202012.pdf

Non-Government sources

- Monografica: http://www.monografias.com/trabajos44/derecho-laboral/derecholaboral4.shtml
- (13) Paraquay: http://www.paraquay.com/nacionales/3-datos-para-analizar-el-trabajo-enparaguay-127452
- (11) Vivapy: https://vivapy.wordpress.com/2011/05/01/si-no-mejora-la-situacion-de-lostrabajadores-el-paraguay-seguira-siendo-un-pais-pobre/
- (10) Nanduti: http://nanduti.com.py/2015/05/01/laino-en-paraguay-la-situacion-laborales-pesima/
- (4) Oxfam: https://www.oxfam.org/sites/www.oxfam.org/files/rr-soy-mirage-corporatesocial-responsibility-paraguay-290813-es.pdf
- (6) UNDP Report 2010: http://www.mag.gov.pv/varias/Sector%20Rural%20Paraguayo%202010.pdf
- (12) Cut Autentica: http://cutautentica.org.py/falta-de-trabajo-decente-en-el-sector-ruralafecta-fuertemente-a-paraguay/
- (9) Actualidad: https://actualidad.rt.com/economia/203574-salario-minimo-paisesamerica-latina
- (7) CTA Agency: http://agenciacta.org/spip.php?article10021
- (8) FAO: http://www.fao.org/americas/noticias/ver/es/c/230329/

2.1.5. Risk determination

Overview of legal requirements

Labour law in Paraguay is governed by the Labour Code. It is regulated by Act N° 213 Labour Code (CT), in which specific rights and obligations are defined. As a basic element, it lays down the Rural Work Contract which is entered by men or women, who engage in work for an agricultural establishment, or similar operations, with their respective workers.

Paraguayan labour law covers the following aspects, among others:

- The rural employer is someone who works personally or through a representative on cultivating the land, hiring other people as employees.
- Rural workers are people who lend their services as an employee in a rural establishment. There are special conditions concerning young workers, for instance workers under 18 years of age are not permitted to carry out heavy lifting tasks (Art. 179) and Art.180 and Art. 119 to 127 (the Work of Minors).
- **Breaks:** Workers have a right to statutory breaks.
- Workplace accidents: In case of an accident or work-related illness the payment of salaries is obligatory up to a maximum of 90 days. For those workers who reside permanently on site, the employer should provide proper housing, safety and adequate hygiene.
- Notice of termination: The employer is obliged to provide notice in cases where the working relationship is ending, if there have been no defined breaches of the Labour Code.

- Leave: Article 218 states regarding paid annual holiday that all workers have the right to a period of paid leave after each year worked, of between 12 and 30 days or more depending on seniority.
- Hours: The duration of a complete working day is defined in Art. 193: "consider that an effective working day is the time during which the worker remains at the disposition of the employer, i.e. 8 hours per day and 48 hours in a week when the work is during the daytime (between 06:00 - 20:00). The maximum daytime working day for those aged over 15 and under 18 years is 6 hours per day and 36 hours per week, for minors between 12 and 15 years of age no more than 4 hours per day or 24 hours per week. Statutory rest periods laid down in Art. 212 of the Code is an uninterrupted 10 hours.
- Timesheets: There should be a special timesheet (Art. 214) with the names of the workers who are employed, with the compensatory rest shifts corresponding to each one of them.
- Minimum wage: Article 254 establishes that based on research that has been carried out, the National Council on Minimum Wages, in accordance with the stipulations, shall put forward the minimum wage scale. The current minimum wage in Paraguay in 2016 is 1,824,055 Guarani per month (around 324 USD dollars) (5).
- Underage workers: Where the work of an under 18-year-old is concerned, it will be necessary to have the birth certificate, the yearly certificate of physical and mental ability to work, issued by the relevant health authority, and the authorisation of a responsible adult. They may not be used for work that puts their life, health or morality in danger, that requires effort beyond that which their age enables, specified in laws or regulations. The salary of minors (basic) should not be less than 60% of the minimum wage (1).
- Social security: Social contributions are collected by the Social Security Institute. Requirements for the Employers Registration of private individuals and legal entities is the correct completion of the Sworn Declaration of Employers Registration form for Companies, Consortiums, Condominiums, Cooperatives and One person companies and providing the documents listed in section 2.1.3. of this report. Certified photocopies: Company Incorporation, Minutes of the latest General Meeting, Company RUC (One person companies), ID of the Legal Representative (One person companies), Company Seal and Proof of Enrolment in the RUC (One person companies). Monthly contributions made to the Social Security Institute from the year 2000 onwards can be checked on the "Contributor Enquiry". Details of contributions dating from before 2000 can be checked in "Statement" (Personal). To do so, an identity card number is required as well as details f the relevant employers.
- The National Family Farming Register (RENAF), set up in 2007, considers producers whose main source of household income is agriculture, with plots of a maximum of 20 ha in the Eastern region, to be family farmers. In December 2009 RENAF had 161,291 registered producers. In general, these producers work independently, or work dependently some of the time (3).

Description of risk

There is a risk of non-compliance with labour regulations such as workers not receiving the minimum or fair wage, holidays, or statutory breaks, social security, healthcare, pensions etc. due to the high level of informal workers in the rural sector.

- The central problem is the high incidence of informal rural working in Paraguay, and poverty. Poverty makes rural workers more vulnerable, and failures to implement legislation allow employers to exploit workers (10, 11, 12). Poverty currently affects 60% of the population employed in rural areas of Paraguay (employees and self-employed workers).
- In the document Notes on Decent Work in the Rural Sector, published recently by the FAO and the ILO (7 and 8) the FAO and ILO warn that "Rural poverty is inextricably linked to a



major lack of decent work in agriculture, the evidence of which can be seen in high levels of informal labour among employed workers, the lack of compliance with labour regulations, and the weak presence of labour institutions in rural areas". The document adds that these failings in part explain the persistence of poverty in Paraguay's rural areas. The main barriers to decent work in the rural sector are related to the informality of jobs, noncompliance with the minimum wage, weaknesses in unionisation and collective bargaining, gaps in social welfare coverage, and the way manual labour is contracted. According to the report, the scourge of poverty affects 60% of the population working in rural regions of Paraguay (employees and self-employed workers).

- In Paraguay 40% of workers in the rural sector live below the poverty line, more than 60% of whom receive less than the current minimum wage (9), and informal labour is estimated to account for between 80% and 85% of rural work - one of the highest rates in the Latin American region (2).
- Land access inequality is one of the main issues perpetuating rural poverty in Paraguay (according to Oxfam): the country's land distribution is the most unfair in the whole of Latin America. Whilst an elite of large landowners hoard 80% of land for agricultural use, thousands of peasant farmers and indigenous people lack enough land to survive, and are forced to migrate to the cities. This problem has been exacerbated in recent years with the rise in monocultures, with soy leading the way. There is a logical link between unfair land distribution, poverty, and worker vulnerability among the rural population in Paraguay.
- There are differences between the political interpretation (the Government's) and reality, as data from the DGEEC (Directorate-General for Statistics, Surveys and Censuses) regarding the level of labour informality demonstrates: "There are people who are working but they do not have access to a fair wage, holidays, or statutory breaks; they work more than 8 hours and have neither social security, nor healthcare, nor pensions. A large proportion of the economically active population find themselves in this situation" says lawyer Gustavo Reinoso (13).
- The 2008 Farming Census registered just 81,754 permanent workers, and an estimated 230,000 temporary workers in 27,915 rural farms, and there are estimated to be a further 400,000 informal workers. Having not been registered, the majority of these farm workers lack medical insurance and pension rights (as they are not making social security contributions) and face difficulties making compensation claims for unfair dismissal, paid holidays, or other reasons.
- There is a high level of informal workers in the rural sector; 40% of workers in the rural sector live below the poverty line, more than 60% of whom receive less than the current minimum wage (9), and informal labour is estimated to account for between 80% and 85% of rural work. This level of informal labour leads to a high level of non-compliance with labour regulations such as workers not receiving the minimum or fair wage, holidays, or statutory breaks, social security, healthcare, pensions etc.

Risk conclusion

This indicator has been evaluated as Elevated risk. Identified laws are not upheld consistently by all entities and/or are often ignored, and/or are not enforced by relevant authorities.

2.1.6. Risk designation and specification

Eastern Paraguay - Elevated risk

2.1.7. Control measures and verifiers

Control measures:

Check whether the employer is: the owner of the land, the landlord or the service companies*

Verifiers:

- o Institute of Social Prevention (IPS) registration
- Identity Card (CI) of the Employer
- Certificate of RUC
- Check that all employees are officially registered (in accordance with Act N° 213).

Verifiers:

- Workers are insured and enrolled with the Social Security Institute
- Check with information from the RUC (MTESS)
- Identity Card (CI) of employees
- In situ verification of the legality of the employment according to the work carried out.

Verifiers:

- Interview employers and ask what activity they are carrying out, how much the employer pays for the activity, what payment system they have (daily/wage, monthly, performance/production), how long the working day lasts, how many days per week they work and observance of the basic wage for the category
- Certification of credits
- Wage receipt
- Contract of employment
- Ministry of Labour, Employment and Social Security (MTESS)
- Interview employees, requesting their DNI (national identity document) to ensure that they are on the national identity database. *

Verifiers:

- Ascertaining that the worker is registered in employers' registration (Registro Patronal): for limited liability companies and for corporations.
- Consult neighbours and interested parties and the Employment Office about the work situation of the producer-employer and the workers.

Verifiers:

- Reports from the Ministry of Labour, Employment and Social Security (MTESS) Industrial demands
- Interviews

2.2. Health and Safety

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

2.2.1. Applicable laws and regulations



Act Nº 213 - Work Code -

http://www.ilo.org/dyn/natlex/docs/WEBTEXT/35443/64905/S93PRY01.htm

ACT 729/1961 - SANCTIONS THE WORK CODE. - http://www.bacn.gov.py/MjUxNQ==&ley-n-<u>729</u>

Decree N° 14,390 (Art. 3, 17, 31, 32, 36, 37, 39, 43, 44, 45, 46, 47) - SAFETY RULES IN THE WORKPLACE - General technical regulations regarding Safety, Hygiene and Medicine at work http://dsso.mtess.gov.pv/pdf/reglamento.pdf

2.2.2. Legal authority

- Ministry of Labour, Employment and Social Security (MTESS) https://www.paraguay.gov.py/ministerio-de-trabajo
- Institute of Social Prevention (IPS): http://portal.ips.gov.py/portal/IpsWeb/Overview/
- Ministry of Agriculture and Livestock Farming: http://www.mag.gov.py/

2.2.3. Legally required documents or records

- Registration number with the Ministry of Labour, Employment and Social Security (MTESS).
- Report from the technical inspection regarding Occupational Health and Safety
- Official authorisation from MTESS Technical report outlining the H&S measures that must be implemented. Known as the Report on General Survey of Workplace Risks

2.2.4. Sources of information

Government sources

- Ministry of Labour, Employment and Social Security (MTESS) https://www.paraguay.gov.py/ministerio-de-trabajo
- Institute of Social Prevention (IPS): http://portal.ips.gov.py/portal/IpsWeb/Overview/
- Ministry of Agriculture and Livestock Farming: http://www.mag.gov.py/

Non-Government sources

- ILO: http://www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/---ilo- buenos aires/documents/publication/wcms bai pub 118.pdf
- (2) Seguridad Paraguay: http://seguridadparaguay.blogspot.com.es/2009/04/paraguaysin-leves-y-datos-sobre.html

2.2.5. Risk determination

Overview of Legal Requirements

Job security and occupational health in Paraguay should be framed in the context of the complex situation of the jobs sector that has already been outlined in this report, in which the percentage of illegal work is at 80-85%.

According to the study carried out by CIF and the ILO (1) there is very minimal Social Security coverage for workers in Paraguay; only 13.5% nationally are covered and, in particular, where rural workers are concerned only 5% of the total are covered.

The Work Code (Act N° 213), together with decree N° 14,390, SAFETY RULES IN THE WORKPLACE, make up the General Technical Regulations on Safety, Hygiene and Medicine in the Workplace are a good, complete legal tool to guarantee health and safety in rural job posts.

Decree N°14390/92, passes the General Technical Regulations on Safety, Hygiene and Medicine in the workplace, in which specific technical preventative measures are established. The decree details the general conditions that buildings and workplaces should meet, and a number of points of interest are mentioned: industrial hygiene (physical, chemical and biological agents), pest control, personal protective equipment, and obligatory medical examinations.

The employer (company) is obliged to provide three kinds of service: a) Safety, b) Hygiene and c) workplace medicine. Pre-occupational examinations should be carried out every 6 to 12 months.

At least 15 days prior to commencing operations, an employer must give written notice to the Administrative Work Authority that includes the start date of operations at their establishment (including for agriculture), the location of the establishment, its nature, raw materials, type of machinery and equipment. An expert will then inspect the place of work in detail, looking to ensure that decree N° 14,390 and its detailed requirements are being met. This report shall be presented to the Ministry of Labour, Employment and Social Security for them to review and pass. This also includes plans for any construction or renovation projects or significant repairs to the industrial buildings and places of work and machinery to be used.

Staff should receive appropriate instruction to prevent accidents at work and work-related illnesses in accordance with legislation applicable to the agricultural sector. Furthermore, there should be training and education regarding the possibility of accidents or fire.

Description of risk

There is a risk that H&S regulations are not being met due to a lack of coordinated legislation on occupational safety, and a lack of governance and enforcement of existing laws. This is compounded by the fact that up to 85% of the rural workforce is working informally in the agricultural sector

- There is a lack of harmonious legislation on occupational safety, and there is no body with coercive power to ensure that rules and regulations are adhered to, and nor is there a database of information regarding accidents at work (2).
- The estimate that 80 to 85% of rural workers in Paraguay work illegally (informally), means that these people are not affiliated to any kind of work insurance (see points 2.1 and 2.2), they are not registered with the IPS, nor with the MTESS and consequently there is no way of checking up on health and safety legislation, which very probably is not being adhered to due to the lack of regular enforcement by the relevant authorities.
- Only 5% of rural workers are covered by Social Security (1).
- According to the ILO report, adherence to health and safety legislation is low in Paraguay. It is estimated that insurance against accidents at work covers no more than 9% of the population. As a result, it can be deduced that the implementation of and adherence to decree N° 14,390 is minimal, given that it does not apply to 91% of rural workers, so not even the basic requirements are met, such as plans regarding workplace risks, a register of accidents, use of personal protective equipment or training in how to prevent accidents.
- In 2009 at the II International Congress on Occupational Health organised by the Human Development Foundation (2), Manuel Nogueira Izquierdol said that they main failing that affects the Health and Safety system in Paraguay is the lack of a body of perfectly trained inspectors to enforce and watch over the implementation of international rules.

Risk conclusion

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



2.2.6. Risk designation and specification

Elevated Risk

2.2.7. Control measures and verifiers

Control measures:

Check that there is a Health and Safety Plan that is implemented and adapted to agricultural operations.

Verifiers:

- Report on General Survey of Workplace Risks
- Monitor the provision of work clothing and Personal Protective Equipment. Check whether the general survey of workplace risks was carried out.

Verifiers:

- ID of worker
- Registered with the Ministry of Labour, Employment and Social Security (MTESS)
- Obligatory register of Employers (RUC)
- Report on general survey of workplace risks
- Registration with the Institute of Social Prevention (IPS)
- Interview employees and find out about health and safety, the provision of information materials, training, among other elements and check if this marries with the Technical Report.

Verifiers:

- o Report of the Technical Inspection on Occupational Health and Safety
- Review the pre-occupational medical examination (in accordance with the evaluated risk) and affiliation to insurers of risks IPS and check report on the accident rate and register of accidents.

Verifiers:

- Medical examination (every 6 to 12 months)
- Check whether they are registered with the IPS.
- Register of accidents

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

ILO C029 - Ratified and in force - link

ILO C087 - Ratified and in force - link

ILO C098 - Ratified and in force - link

Act N° 925 - Passes and ratifies the ILO convention 100 - link

ILO C105 - Ratified and in force - link

ACT Nº 1154/66 - PASSES CONVENTION Nº 111 REGARDING DISCRIMINATION IN TERMS OF WORK AND OCCUPATION - link

Act 2332 - Passes the ILO convention No 138 - link

Act N° 1680/01 and Decree N° 4951 and RESOLUTION Nº 701 - (C N° 182) Children and Adolescents Code; and WHEREBY ACT 1657/2001 IS REGULATED AND THE LIST OF DANGEROUS CHILD WORK IS PASSED: and WHEREBY THE FORMATS AND DESIGNS FOR THE SPECIAL REGISTER OF THE ADOLESCENT WORKER IS PASSED AND THE OBLIGATORY USE OF THE SAME IS DECREED - link; and link and link

2.3.2. Legal authority

See 2.1.2

2.3.3. Legally required documents or records

- Registration number with the Ministry of Labour, Employment and Social Security (MTESS).
- Report from the technical inspection regarding Occupational Health and Safety
- Official authorisation from MTESS Technical report outlining the H&S measures that must be implemented.

2.3.4. Sources of information

- Ministry of Labour, Employment and Social Security (MTESS) https://www.paraguay.gov.py/ministerio-de-trabajo
- Global March Against Child Labour: http://www.globalmarch.org/
- (1) ILO: http://www.ilo.org/ipecinfo/product/viewProduct.do?productId=22015
- (2) ABC: http://www.abc.com.py/edicion-impresa/judiciales-y-policiales/trabajo-infantiluna-preocupante-realidad-que-se-instalo-en-paraguay-603087.html
- (3) Ella: http://ella.paraguay.com/actualidad/criadazgo-una-de-las-peores-formas-detrabaio-infantil.html
- (8) Amnesty: http://amnesty.org.py/amnistia-internacional-lamenta-la-falta-decompromiso-de-paraguay-para-proteger-los-derechos-sexuales-y-reproductivos-de-lasmujeres-y-ninas/
- (5) CODEHUPY Report on human rights: http://www.codehupy.org/index.php?option=com_docman&task=doc_download&gid=39&It emid=21; http://www.codehupy.org.py/upload/pdf bibliotecas/DDHH%202015 web.pdf; http://www.codehupy.org/upload/pdf bibliotecas/Informe%20DDHH%202012.pdf
- (6) Amnesty, page 346: http://www.amnesty.org/en/annual-report/2015
- Human Rights Watch: http://www.hrw.org/
- http://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO::P1100 ISO CODE3,P1100 YEA R:PRY,2013
- (7) Oxfam: https://www.oxfam.org/sites/www.oxfam.org/files/rr-soy-mirage-corporatesocial-responsibility-paraguay-290813-es.pdf; https://www.oxfam.org/es/paraguay-elpais-donde-la-soja-mata; https://www.oxfam.org/es/paises/paraguay
- (3)CEPAL, ILO, FAO: http://www.ilo.org/santiago/sala-de-prensa/WCMS 222136/lang-es/index.htm



(4) Rebelion: http://www.rebelion.org/noticia.php?id=174817

2.3.5. Risk determination

Overview of Legal Requirements

See description of legal requirements in 2.1.5.

Paraguay has ratified the following ILO Fundamental Conventions:

- Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)
- Right to Organise and Collective Bargaining Convention, 1949 (No. 98)
- Forced Labour Convention, 1930 (No. 29)
- Abolition of Forced Labour Convention, 1957 (No. 105)
- Minimum Age Convention, 1973 (No. 138)
- Worst Forms of Child Labour Convention, 1999 (No. 182)
- Equal Remuneration Convention, 1951 (No. 100)
- Discrimination (Employment and Occupation) Convention, 1958 (No. 111)

http://www.ilo.org/global/standards/introduction-to-international-labourstandards/conventions-and-recommendations/lang--en/index.htm

The Ministry of Labour, Employment and Social Security (MTESS) is responsible for ensuring compliance with the conventions.

Description of risk

There is a risk that ILO Fundamental Conventions related laws are not upheld consistently by all entities and/or are systematically ignored, and/or are not enforced by relevant authorities.

Freedom of Association / Right to Organise / Collective Bargaining

- Regarding the freedom to hold meetings and to protest, the National Constitution considers this right, however a report published in 2012 by the Paraguay Coordinator of Human Rights (5) considers the inappropriate nature of the law, primarily for two reasons: on the one hand, because of the fixing of specific times during which protests can be held and, on the other hand, by making it illegal for them to be held outside certain public institutions. These two provisions clearly undermine the right to hold meetings and to protest.
- There is also evidence that freedom of association in practice is obstructed in Paraguay.

Forced Labour

Minimum Age / Child Labour

- It is estimated over 20% of children in Paraguay are involved in child labour and almost half are working in the agricultural sector.
- The National Survey on the Activities of Boys, Girls and Adolescents (EANA) carried out in 2011 by the Directorate-General for Statistics, Surveys and Censuses revealed that Paraguay has 1,880,109 children and adolescents aged between 5 and 17 years, which is equivalent to 40.8% of the total population (1). This survey highlighted that 22.4% (416,425 children of the 1.9 million in Paraguay) find themselves undertaking child labour.
- No fewer than 95.1% of child workers have dangerous jobs. In Paraguay, there are 46,993 children and adolescents in domestic service (3), which represents 2.5% of the total number of the country's children and adolescents.

- Child labour is one of the main reasons that children leave education. As the child grows older, the further s/he becomes detached from their studies because of their workload (1,2).
- Almost half (49.2%) of all children and adolescents aged from 5 to 17 who are child labourers are employed in the areas of agriculture, livestock farming, hunting and fishing (204,727 people), essentially carrying out general tasks related to crop cultivation and the rearing of animals. (1,2)

Equal Remuneration / Discrimination

- There are significant challenges in terms of the basic rights and employment rights of women being fair and respected.
- The document Notes on Decent Work in the Rural Sector, recently presented by the FAO and the ILO (3), points out "important shortfalls in decent work and weaknesses of the labour institutions". The document goes on to add that these shortfalls partly explain the persistence of poverty in rural areas of Paraguay. According to international and national observers of human rights there are significant challenges in terms of the basic rights and employment rights of women in Paraguay (5,6,8).

Risk conclusion

Elevated risk. ILO Fundamental Conventions related laws are not upheld consistently by all entities and/or are systematically ignored, and/or are not enforced by relevant authorities in Paraguay.

2.3.6. Risk designation and specification

Elevated risk

2.3.7. Control measures and verifiers

Control measures:

Check the age of the employee and monitor whether there are children working in forced conditions. There should be employment contracts and workers ought to be registered with the ROE.

Verifiers:

- IPS registration
- o ID of the Employer
- Certificate of enrolment in RUC
- o ID of the worker
- Interview employees and check about: Food during the working day (quantity, quality, variety), accommodation, union membership, how the employer treats workers, the presence of women and children workers.

Verifiers:

- Check with RUC information (MTESS)
- Identity card (CI) of employees
- Employment contracts
- Wage receipts and deposit receipts
- Check if there are any registered complaints against the employer:



Verifiers:

- Ministry of Labour, Employment and Social Security (MTESS)
- Registered Union (if applicable): (http://www.sitramis.com.py/index.php/cesitp/12-central-sindical-detrabajadores-del-paraguay-cesitpCheck on registers for any complaints against the employer and membership of a union.

2.4. The rights of indigenous and traditional peoples are upheld

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

2.4.1. Applicable laws and regulations

- National Constitution of Paraguay Chapter V Art. 62 to 67 link
- ACT N° 234/93 (Full Text) PASSES CONVENTION N° 169 ON INDIGENOUS AND TRIBAL PEOPLES IN INDEPENDENT COUNTRIES - link
- Act N° 1286 (Full Text) Criminal Procedure Code of the Republic of Paraguay, Art 16, Art. 432 to 438 - link
- Act N° 904/81 (Full Text) The aim of this legislation is to preserve the social and cultural identity of indigenous communities, to defend their heritage and their traditions, to improve their economic conditions, to ensure their effective participation in the process of national development and access to a legal system that guarantees them ownership of land and other productive resources with the same rights as other citizens. - link
- Act N° 3231/04 (Full Text) CREATES THE GENERAL DIRECTORATE OF INDIGENOUS SCHOOL EDUCATION. - link

2.4.2. Legal authority

- Paraguay Institute for Indigenous People (INDI): http://www.indi.gov.py/
- Ministry of Education and Culture: http://www.mec.gov.py/cms/

The Paraguay Institute of Indigenous Affairs (INDI) is a self-governing entity with legal status and its own heritage whose relations with the Executive Power should be maintained through the Ministry of Education and Culture.

2.4.3. Legally required documents or records

N/A

2.4.4. Sources of information

Distribution of Indigenous Peoples: http://www.indi.gov.py/pagina/18-pueblosindigenas.html

- GIZ: https://www.giz.de/fachexpertise/downloads/giz2010-es-laenderpapier-paraguay.pdf
- Forestpeople: http://www.forestpeoples.org/es/topics/world-banks-forest-carbonpartnership-facility-fcpf/publication/2010/organizaciones-ind%C3%ADgenas
- Mundosputnik:
 - https://mundo.sputniknews.com/americalatina/20160815/1062828001/paraguay-renunciapresidente-indigenas.html
- http://unsr.vtaulicorpuz.org/site/index.php/es/documentos/country-reports/84-reportparaguay
- (1) IFAD: https://www.ifad.org/documents/10180/59ff348c-5f73-4c55-8c32-6e7071ccbd3d
- Oxfam: https://www.oxfam.org/es/paises/paraguay
- (3) Ministry of Defence: http://www.mdp.gov.py/application/files/7914/4414/1703/Glosario Legal Pueblos Indigen as.pdf
- http://www.crespial.org/es/Content2/index/0011/NF/4/paraguay-legislacion
- INDI: http://www.indi.gov.py/pagina/2-el-indi.html
- (4) UN: http://unsr.vtaulicorpuz.org/site/index.php/es/documentos/country-reports/84report-paraguay
- (2) Paraguay: http://www.paraguay.com/nacionales/onu-denuncia-discriminacion-contra- indigenas-119535
- UNDP: http://www.mag.gov.py/varias/Sector%20Rural%20Paraguayo%202010.pdf
- - http://www.portalguarani.com/742 jose zanardini/5170 los indigenas del paraguay 200 1 por jose zanardini y walter biedermann.html
- (6) Tierrasbajas: https://tierrasbajas.files.wordpress.com/2012/05/mapa-ror.jpg
- (7) CNN publication: http://edition.cnn.com/2009/WORLD/americas/11/10/paraguay.pesticide.attack/
- (8) Coordinating body for the Self-Determination of Indigenous Peoples (CAPI): http://www.capi.org.py/ and http://www.sicpy.gov.py/generales/?6779

2.4.5. Risk determination

Overview of Legal Requirements

Legislation on the rights of indigenous peoples in Paraguay is focused on the framework of convention 169 of the ILO, which was confirmed and ratified by Act 234/93. Furthermore, the rights of indigenous peoples are regulated in articles 62 to 67 of Paraguay's Constitution. Article 62 says; This Constitution recognises the existence of indigenous peoples, defined as groups whose culture dates before the formation and organisation of the State of Paraguay.

The objective of Act N° 904/81 is the social and cultural preservation of indigenous communities, and furthermore Act 3231/04 lays down matters relating to the education of indigenous peoples (3).

According to data gathered from the III National Census of Indigenous Peoples in 2012, the indigenous population in Paraguay comprises 115,944 people (roughly 2% of the total population of the country) and they live in 13 provinces, in the Eastern region as well as in el Chaco and in the city of Asunción [1]. Of these 493 indigenous communities, 86.2% have legal status (4).



The Coordinating Body for the Self-Determination of Indigenous Peoples (CAPI) (8) is an autonomous indigenous organisation for coordination. It is made up of 15 indigenous organisations from the Eastern and Western (Chaco) regions of the country. CAPI has played an active role at the international level, participating in the Permanent Forum for Indigenous Affairs, supporting the mission of the Forum in Paraguay and as a partner of the United Nations Development Programme (1).

Description of risk

There is a risk of widespread violation of indigenous or traditional peoples' rights.

Indigenous people do not hold the legal land titles over their traditional territories and the state has not protected them against the actions of corporate owners or of other non-indigenous farmers and agriculturists despite there being laws in place to protect their land ownership rights. Indigenous communities are facing the threat of developers and illegal settlers who invade their lands. Their territorial claims come up against powerful economic interests that have a degree of influence over the government and these interested parties are often opposed to awarding land to indigenous people and thus there a many land disputes over what is claimed to be traditional territory.

In recent decades, up to the present day, indigenous peoples have been facing the threat of developers and illegal occupants invading their lands. Their claims on territory come up against powerful economic interests who hold sway over the government, and these interested parties are opposed to the concession of land to indigenous communities. The fact that Paraguay does not have a land registry makes it far easier for settlers to expropriate lands from indigenous communities. (1) Source: UN Permanent Forum of Indigenous Peoples, Mission in Paraguay, Report and Recommendations, May 2009.

Indigenous communities have for years been threatened by forestry and farming interests and by hydroelectric projects. In recent years, Paraguay has become the fourth largest soy producer in the world. Soy dominates the entire Eastern part of the country. The rapid advance of large-scale cultivation of genetically modified soy constitutes a new and dangerous threat for rural and indigenous communities.

In 1996 and 1997, the INDI (Paraguay Institute of Indigenous Affairs) acquired 2638 hectares of the ancestral lands of the avá guaraní indigenous communities in their name. However, the landowners have commenced legal proceedings against the communities. It is believed that some landowners, who state that they hold titles over the land, obtained these during the dictatorship of General Stroessner (1954-1989), when landowners were given titles over a significant percentage of Paraguay's national territory by underhanded or illegal means. The judicial bodies have issued preventative measures to protect the rights of the five communities (7).

There is legislation that at least officially demonstrates an interest in the rights of indigenous peoples in Paraguay. Regrettably, according to several observers and institutions the reality is quite different. The main problems are twofold:

- a) Racism and bad treatment, and
- b) the total ignorance of the land rights and the territories of indigenous peoples in Paraguay.

The IFAD study respects that agrarian reform and support for agriculture are the areas that require the most attention to guarantee the survival and wellbeing of indigenous peoples in Paraguay. The majority of indigenous lands are in the hands of landowners or large owners. Indigenous people do not hold the legal land titles over their traditional territories and the state has not protected them against the actions of corporate owners or of other non-indigenous farmers and agriculturists. Indigenous communities are facing the threat of developers and illegal settlers who invade their lands. Their territorial claims come up against powerful

economic interests that have a degree of influence over the government and these interested parties are opposed to awarding land to indigenous people (1).

The UN's observations regarding the land situation are that the Paraguayan Constitution recognises, in article 64, the right that indigenous communities to communal ownership of lands, which are defined as inalienable, imprescriptible and guaranteed against seizure, not subject to guaranteeing contractual obligations or to being rented, and exempt from taxation. It also indicates that indigenous populations cannot be displaced without their consent. Despite this, in Paraguay there is a general situation of a lack of respect for or protection of these rights, which is a source of violent conflict that generates further human rights abuses. The obstacles identified as getting in the way of these rights being enjoyed have been cited in the sentences of the Inter-American Court of Human Rights in the cases of Yakyé Axa, Sawhoyamaxa and Xakmók Kasék (4).

76% of indigenous people live in a situation of extreme poverty, according to information from the National Institute of Indigenous Affairs (INDI) (2). The indigenous community also accuses the Brazilian company Yaquareté Porá, which owns 78,500 hectares in the region, which is considered ancestral territory, of illegally felling around 4000 hectares of forest between April and September of 2014 (2).

Risk conclusion

Elevated Risk: Substantial evidence of widespread violation of indigenous or traditional peoples' rights exists; and Indigenous and/or traditional peoples are not aware of their rights; and there is evidence of conflict(s) of substantial magnitude pertaining to the rights of indigenous and/or traditional peoples.

2.4.6. Risk designation and specification

Elevated Risk

2.4.7. Control measures and verifiers

Control measures:

- Implement control measures for Indicator 1.1
- Review information on land tenure disputes and developments on indigenous and traditional peoples' land claims:
 - Identify potential conflicts over land uses. 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
 - 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.
 - Consult interested parties:
 - National Institute for Rural Development and Land (INDERT)
 - Paraguayan Institute of Indigenous Affairs
 - Paraguayan Federation of Indigenous Peoples FAPI
 - **WWF Paraguay**
- Verify there are records Free Prior Informed Consent and copies of negotiated agreements in place (if applicable)



Evidence of a dispute resolution mechanism – there is documented system for dealing with complaints and grievances and is accessible

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

- National Constitution of Paraguay Chapter II Art. 7 and 8 link
- ACT No. 1561/00 CREATES THE NATIONAL ENVIRONMENTAL SYSTEM, THE NATIONAL ENVIRONMENT COUNCIL AND THE SECRETARY OF THE ENVIRONMENT - link
- Decree Nº 17201 WHEREBY ARTICLES 12, SUBSECTION "N" AND 15, SUBSECTION "B" OF ACT 1561/2000, "CREATES THE NATIONAL ENVIRONMENTAL SYSTEM, THE NATIONAL ENVIRONMENT COUNCIL AND THE SECRETARY OF THE ENVIRONMENT". - link
- ACT No 422/73 Forestry link
- ACT N°294/93: Environmental Impact Assessment link and its decree 453/2013
- Act Nº 4241/10 REESTABLISHING FORESTS THAT PROTECT WATER COURSES IN THE NATIONAL TERRITORY - link
- ACT N° 542 ON FOREST RESOURCES link
- ACT 816/96 PARAGUAY FORESTRY LAW link
- Act No 536/95 PROMOTING FORESTATION AND REFORESTATION link
- Act No 515/94 PROHIBITS THE EXPORT AND DEALING OF ROLLS, PIECES AND BEAMS OF TIMBER - link
- DECREE N º 9425/95. REGULATES ACT N º 536/95 "PROMOTING FORESTATION AND REFORESTATION" - link
- ACT N° 2524 (2004) PROHIBITING THE PROCESSING AND CONVERSION OF AREAS WITH FOREST COVER IN THE EASTERN REGION. - link
- Act N° 5045 Amendments of Art. 2 and 3 and extends Act 2524 link
- ACT N° 294/1993 ASSESSING THE ENVIRONMENTAL IMPACT link
- DECREE N.º 453/13 WHEREBY ACT Nº 294/1993 "ASSESSING THE ENVIRONMENTAL IMPACT" IS REGULATED - link
- Act N° 716 Art. 4 PENALIZES CRIMES AGAINST THE ENVIRONMENT link
- ACT N° 4014 PREVENTION AND CONTROL OF FIRES link
- ACT Nº 970/96 PASSES THE UNITED NATIONS CONVENTION ON THE FIGHT AGAINST DESERTIFICATION. - link
- ACT Nº 123/91 ADOPTS NEW MEANS OF PHYTOSANITARY PROTECTION link
- ACT 816/96 ADOPTS MEASURES TO PROTECT NATURAL RESOURCES link
- ACT N° 3556/08 ON FISHING AND AQUACULTURE link



- ACT Nº 42/90 PROHIBITS THE IMPORTING, DEPOSITING, OR USE OF PRODUCTS CLASSED AS DANGEROUS INDUSTRIAL WASTE OR TOXIC RUBBISH AND ESTABLISHES CORRESPONDING PUNISHMENTS FOR NON-COMPLIANCE. - link
- ACT Nº 3742 CONTROLS PHYTOSANITRY PRODUCTS FOR AGRICULTURAL USE. link
- Act N° 5211/14 Protects air and atmospheric quality link
- Act 251/93 PASSES THE CONVENTION ON CLIMATE CHANGE link
- ACT Nº 1447/99 APPROVES THE KYOTO PROTOCOL AND UNITED NATIONS FRAMEWORK ON CLIMATE CHANGE - link
- Decree N° 12685/08 REGULATES THE CONTROL OF SUBSTANCES THAT DAMAGE THE OZONE LAYER AND THE USE OF ALTERNATIVE TECHNOLOGIES - link
- ACT N° 3239/2007 ON WATER RESOURCES IN PARAGUAY link
- STOCKHOLM AGREEMENT STOCKHOLM AGREEMENT ON PERSISTENT ORGANIC POLLUTANTS - link
- ACT Nº 567/95 APPROVES THE BASEL CONVENTION ON THE CONTROL OF CROSS-BORDER MOVEMENTS OF DANGEROUS WASTE AND ITS DISPOSAL - link
- Act N° 253/93 PASSES THE CONVENTION ON BIOLOGICAL DIVERSITY link
- Act N° 3966/10 Chapter II Art 12 Heading a a)b)c) and Heading 4 a)b)c)d) Municipal Organic Law - link
- ACT Nº 3742 CONTROLS PHYTOSANITRY PRODUCTS FOR AGRICULTURAL USE. link
- ACT N° 3001/2006 ON THE APPRAISAL AND COMPENSATION OF ENVIRONMENTAL SERVICES - link
- Act N° 164414/00 GENERALLY ON THE REGULATORY AND TARIFF FRAMEWORK OF THE SERVICE OF PROVISION OF DRINKING WATER AND SANITARY SEWERAGE FOR THE REPUBLIC OF PARAGUAY - link
- ACT 2748/05 ON PROMOTION OF BIOFUELS link
- ACT Nº 2309 APPROVES THE CARTAGENA PROTOCOL ON THE SAFETY OF BIOTECHNOLOGY AND OF THE CONVENTION ON BIOLOGICAL DIVERSITY - link
- ACT N° 1231/1986 Passes and ratifies the convention on the protection of World, Cultural and Natural Heritage. - link

3.1.2. Legal authority

- Environment Secretary http://www.seam.gov.py/
- Ministry of Agriculture and Livestock Farming: http://www.mag.gov.py/
- National Forestry Institute: http://www.infona.gov.py/
- Directorate-General for Protection and Conservation of Biodiversity (DGPCB): http://www.seam.gov.py/direcci%C3%B3n-general/direcci%C3%B3n-general-deprotecci%C3%B3n-y-conservaci%C3%B3n-de-la-biodiversidad-dqpcb

3.1.3. Legally required documents or records

- Environmental study or report (Large owners over 500 ha)
- Approved permit for burning

3.1.4. Sources of Information

- Environment Secretary http://www.seam.gov.py/
- Ministry of Agriculture and Livestock Farming: http://www.mag.gov.py/
- National Forestry Institute: http://www.infona.gov.py/
- (5) Directorate-General for Protection and Conservation of Biodiversity (DGPCB): http://www.seam.gov.py/direcci%C3%B3n-general/direcci%C3%B3n-general-deprotecci%C3%B3n-y-conservaci%C3%B3n-de-la-biodiversidad-dgpcb
- (6) Paho:

http://www.paho.org/par/index.php?option=com_docman&view=download&category_slug =contaminacion&alias=453-contaminacion-analisis-marco-legal-ambiental-comparativoparaguay-brasil-diciembre-2012&Itemid=253

- (7) SEAM:
 - http://www.py.undp.org/content/dam/paraguay/docs/PROYECTO%20AUTOEVALUACION%2 0DE%20LAS%20politicas%20nacionales%20NCSA.pdf
- (8) UN: http://unsr.vtaulicorpuz.org/site/index.php/es/documentos/country-reports/84report-paraguay
- (9) Natureserve: http://www.natureserve.org/library/quarani full report.pdf
- Monografías: http://www.monografias.com/trabajos32/gestion-ambientalparaguay/gestion-ambiental-paraguay.shtml
- (10) Paraguay Geology: http://www.geologiadelparaguay.com/Suelos.htm
- (11) Paraguay Geology: http://www.qeologiadelparaguay.com/Erosi%C3%B3n-actual-y- potencial-del-suelo-en-Paraguay.pdf
- http://www.elobservador.com.uy/catastrofe-ambiental-paraguay-podria-afectar-al-rio-laplata-n709195
- (12) ABC: http://www.abc.com.py/edicion-impresa/suplementos/escolar/la-erosion- 3623.html
- (1) ABC: http://www.abc.com.py/edicion-impresa/suplementos/abc-rural/el-valor-de-lalegislacion-ambiental-1209838.html, http://www.abc.com.py/edicionimpresa/suplementos/abc-rural/los-humedales-del-paraguay---ing-agr-fernando-diazshenker--1447889.html
- (2) Ultima Hora: http://m.ultimahora.com/wwf-paraguay-critica-cartes-no-se-puede- mentir-al-mundo-n949461.html
- (3) Mercosur Parliament: https://www.parlamentomercosur.org/innovaportal/v/5701/1/secretaria/situacion_del_med_ io ambiente en paraguay preocupa parlamentarios del bloque.html
- (4) Luciérnaga Informativa: http://luciernagainformativa.blogspot.com.ar/2016/04/medioambiente-en-paraguay-la-version.html
- Sites google: https://sites.google.com/site/marconormativoambiental/paraguay
- (13) SENAVE: http://www.senave.gov.py/registros-de-agroquimicos.html
- - http://www.paho.org/par/index.php?option=com_docman&view=download&category_slug =contaminacion&alias=453-contaminacion-analisis-marco-legal-ambiental-comparativoparaguay-brasil-diciembre-2012&Itemid=253



(14) OXFAM: http://www.oxfamblogs.org/lac/paraguay-responsabilidad-social-empresarial- no-seria-suficiente-para-mitigar-danos-sociales-y-ambientales-causados-por-produccionde-soia/

3.1.5. Risk determination

Overview of Legal Requirements

Paraguay's environmental legislation is thorough:

- The Constitution, Sections 7 and 8, states the importance of environmental wellbeing.
- This is elaborated on in Act No 1561 (Ley No 1561) on the environment and its decrees.
- There is also a number of forestry acts: Acts No 422, 542, 816, 536, 515 (Leyes No 422, 542, 816, 536, 515) and Decree No 9425 (Decreto No 9425), as well as Act No 2524 on zero deforestation (Ley Nº 2524 de deforestación cero) and Act Nº 5045 (Ley Nº 5045). which extends its mandate until 2018.
- There are also specific legal instruments on soil and desertification, Act No 970 (Ley No 970); phytosanitary legislation, Act No 123 and Act No 3742 (Ley No 123 and Ley No 3742); legislation on GMOs (see 5.1) and on water and air.
- In addition, acts ratifying several important international conventions (e.g. on climate change) have also been passed (6).

Environmental Impact Assessments

Farms and properties under 500 ha do not have to conduct EIAs or obtain licenses (Decree No 453 of 2013 (Decreto No 453 de 2013)). Properties greater than 500 ha must conduct and EIA and obtain an environmental license.

Chemicals

The use of agrochecmical is regulated under Act No 3742. According to that Act (article 2), companies marketing and selling agro-chemicals must be registered with SENAVE (National Service for Plant and Seed Quality and Safety, Servicio Nacional de Calidad y Sanidad Vegetal y de Semillas) (13). This is not compulsory for soy producers who do not apply agrochemical products as service providers.

Soil, Water

In Paraguay's Itapúa Department (Departamento de Itapúa) average soil losses due to erosion in the last 5 years have been measured. These amount to 22,940 kg/ha for conventionally tilled land; 33,190 kg/ha for fallow land; and only 530 kg/ha for land where direct drilling (zero tillage) was used (Table 2) (6).

The National Forest Institute (Instituto Forestal Nacional, INFONA) is registering River Bed Protecting Forests (Bosques Protectores de Cauces Hídricos). This label is useful in locating (a) remaining vegetation and (b) vegetation of high importance for its services to the ecosystem (11). Decree Nº 9824 of 2012, Chapter VII, Section 21 (Decreto Nº 9824 de 2012, Capítulo VII, Artículo 21) states that INFONA shall set up the River Bed Protecting Forest Register (Registro de Bosques de Protección de Cauces Hídricos) based on the data provided by municipalities. Interested parties can register with a sworn statement on voluntary basis. INFONA's River Bed Protecting Forest Register can be used to check the river bed areas, which contain natural resources that are crucial for development, that should be recovered in accordance with their unique characteristics. On the Register, regional and national databases can be built to collect data that shall later be used as input for the National River Bed Recovery Programme (Programa Nacional de Restauración de Cauces Hídricos).

The Resolution establishing the River Bed Protecting Forest Register in the Framework of Act Nº 4241 of 2010 (Resolución por la Cual se Crea el Registro de Bosque Protector de Cauces Hídricos en el Marco de la Ley Nº 4241 de 2010) (9/10) is available at the following link (9).

Note: Future updated risk assessments will included other environmental factors relating to water use, air and green-house gas emissions, chemical, fertilizer and pesticide use.

Description of risk

Environmental issues relating to water, soil and forest resources are the responsibility of the State and the government's environmental agencies. To regulate environmental issues and observe the law, countries have defined public environmental policy and passed legislation. Their aim is the wise and sustainable use of resources to preserve them and protect them from degradation and extinction. Paraguay has abundant environmental legislation, both local and to ratify international treaties. Unfortunately, much of it is not observed, according to agricultural engineer Fernando Díaz Shenker (1).

Generally, law enforcement in Paraguay is lax. Law is infringed, for example, when applying the wide and strict forestry legislation. To conduct land clearing activities, an official authorisation, an environmental impact study and other documents are necessary. Despite the regulations, Paraguay still has one of the highest deforestation rates in the world, and over 85% of it is illegal. In fact, legislation was unable to restrain land clearing activities, and Eastern Paraguay was almost entirely cleared. All that remains of the Upper Paraná Atlantic Forests (Bosques Atlánticos del Alto Paraná, BAAPA) are highly degraded relicts which cover around 10% of their original area (see 4.1). Land clearing was so intense that in 2004 Act No 2524 on zero deforestation (Ley Nº 2524 de deforestación cero), applicable only in Eastern Paraguay, was passed. This legal action was too late and failed to stop land clearing, according to WWF controls. In fact, illegal forest conversion affected 14.5 million hectares in 2015-16.

Act 3.239/07 on Paraguay's water resources (Act 3.239/07, which has not been complemented by specific regulations yet, provided the legal framework to "regulate the sustainable, integral management of all water resources and the land where they are located, whatever their status or natural location within the Paraguayan territory...". Act No. 4241 (Ley N° 4241), focused on the restoration of forests that protect watercourses, is an attempt at introducing a legal framework to protect water resources and their vegetation, which so far has not translated into an actual application on the ground. Amongst the main threats to water resources, we need to highlight the greater amount of land that has been dedicated to farming, which has entailed burning and clearing to benefit soy production. As buffer an area of 100 m on both bank of the watercourse is stablished as reference but this minimum distance is not reflected on the ground.

There are other serious issues: agricultural soil erosion (10, 11, 12) and water pollution due to pesticide and fertilizer use and a lack of environmental control to enforce the legislation in force. Environmental legislation regulating all important environmental aspects exists in Paraguay. For example, large soy producers (over 500 ha) should conduct environmental assessments. There are around 2,000 such soy farms in Eastern Paraguay. However, there is a lack of compliance monitoring and control. There is a wide gap between existing legislation and compliance with minimum requirements regarding social and environmental responsibility in Paraguay (2, 3). Oxfam describes the situation as follows: Soy production inevitably has an impact on the environment, health and the livelihoods of communities living near the plantations. Agribusiness actors, especially soy producing companies, use various strategies to gain control of land and expand their production in rural areas. Said strategies include direct purchase, property rental, expulsion of people by polluting the area through the extensive use of toxic agricultural products, by extending their crops to the urban boundaries and through loan-based debt mechanisms (14).

Risk conclusion



Elevated risk: This indicator has been evaluated as Elevated risk. Environmental legislation and regulations exist; however, there is widespread non-compliance and a lack of control and supervision.

3.1.6. Risk designation and specification

Eastern Paraguay - Elevated Risk

3.1.7. Control measures and verifiers

Verify the soy farm producer has the following valid required environmental documentation:

Verifiers:

- Environmental Impact Assessment for large properties (> 500 hectares)
- Land use plan (Plan de Ordenamiento Predial) addressing the management of soils, forests, water, biodiversity and agrochemical products.
- o Environmental monitoring and mitigation plan (Plan de monitoreo ambiental predial)
- Environmental impact assessment report
- Assess the risk of deforestation and native forest management is in accordance with Act No 2524 and Act No 5045 (Ley No 2524 and Ley No 5045)
 - Check the VS SHP satellite image of property limits and compare with data from Official National Forest Institute (INFONA)'s maps, Global Forest Watch deforestation maps, WWF Paraguay (regularly published deforestation reports and maps) and other relevant data
- Confirm through on-site verification management plans for environmental issues are implemented and monitored including hazardous waste management.

Verifiers:

- Agrochemical product use in the property
- Agrochemical product deposit conditions and safe application methods.
- o Management of waste and hazardous waste.

3.2. Protected sites and species

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

3.2.1. Applicable laws and regulations

- ACT Nº 96 (LEY Nº 96) ON WILDLIFE (DE VIDA SILVESTRE) link
- ACT Nº 352 OF 1994 (LEY Nº 352 DE 1994) ON PROTECTED NATURAL AREAS (DE AREAS SILVESTRES PROTEGIDAS) - link
- ACT Nº 40 OF 1990 (LEY Nº 40 DE 1990) ESTABLISHING THE NATIONAL NATURAL RESOURCES PROTECTION COMMITTEE (QUE CREA LA COMISIÓN NACIONAL DE DEFENSA DE LOS RECURSOS NATURALES) - link
- ACT Nº 542 (LEY Nº 542) ON FOREST RESOURCES (DE LOS RECURSOS FORESTALES) link

- ACT Nº 253 OF 1993 (LEY Nº 253 DE 1993) ADOPTING THE CONVENTION ON BIOLOGICAL DIVERSITY (APRUEBA EL CONVENIO SOBRE DIVERSIDAD BIOLOGICA) - link
- ACT Nº 3556 OF 2008 (LEY Nº 3556 DE 2008) ON FISHERIES AND AQUACULTURE (DE PESCA Y ACUICULTURA) - link
- ACT Nº 2715 OF 2005 (LEY Nº 2715 OF 2005) DECLARING BANCO SAN MIGUEL AND THE ASUNCIÓN BAY A PROTECTED NATURAL AREA UNDER THE MANAGEMENT CATEGORY OF ENVIRONMENTAL RESERVE (QUE DECLARA COMO ÁREA SILVESTRE PROTEGIDA CON LA CATEGORÍA DE MANEJO RESERVA ECOLÓGICA AL BANCO SAN MIGUEL Y LA BAHÍA DE ASUNCIÓN) - link
- ACT Nº 2714 OF 2005 (LEY Nº 2714 DE 2005) DECLARING THE CERRO CORÁ NATIONAL PARK A PUBLIC DOMAIN PROTECTED NATURAL AREA (QUE CONVIERTE EN ÁREA SILVESTRE PROTEGIDA BAJO DOMINIO PÚBLICO AL ÁREA DE RESERVA PARA PARQUE NACIONAL CERRO CORÁ) - link
- ACT No 350 OF 1994 (LEY No 350 OF 1994) ADOPTING THE CONVENTION ON WETLANDS OF INTERNATIONAL IMPORTANCE, ESPECIALLY AS THE HABITAT OF WATERFOWL (QUE APRUEBA LA CONVENCIÓN RELATIVA A LOS HUMEDALES DE IMPORTANCIA INTERNACIONAL, ESPECIALMENTE COMO HÁBITAT DE AVES ACUÁTICAS) - link
- ACT Nº 2524 (LEY Nº 2524) BANNING THE CONVERSION OF FOREST-COVERED AREAS IN EASTERN PARAGUAY (DE PROHIBICIÓN EN LA REGIÓN ORIENTAL DE LAS ACTIVIDADES DE TRANSFORMACIÓN Y CONVERSIÓN DE SUPERFICIES CON COBERTURA DE BOSQUES) link
- ACT Nº 179 (LEY Nº 179) GRANTING MONUMENT STATUS TO CERRO KOI AND CERRO CHORORI (QUE DECLARA MONUMENTOS NATURALES AL CERRO KOI Y AL CERRO CHORORI) - link
- ACT Nº 1231 OF 1986 (LEY Nº 1231 OF 1986) ADOPTING AND RATIFYING THE CONVENTION CONCERNING THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE (QUE APRUEBA Y RATIFICA LA CONVENCIÓN SOBRE LA PROTECCIÓN DEL PATRIMONIO MUNDIAL, CULTURAL Y NATURAL) - link
- ACT Nº 758 OF 1979 (LEY Nº 758 OF 1979) ADOPTING AND RATIFYING THE CONVENTION ON NATURE PROTECTION AND WILD LIFE PRESERVATION IN THE WESTERN HEMISPHERE (QUE APRUEBA Y RATIFICA LA CONVENCIÓN PARA LA PROTECCIÓN DE LA FLORA, DE LA FAUNA, Y DE LAS BELLEZAS ESCÉNICAS NATURALES DE LOS PAÍSES DE AMÉRICA)
 - NATURALES DE LOS PAÍSES DE AMÉRICA. link
- ACT Nº 3239 OF 2007 (LEY Nº 3239 OF 2007) ON THE WATER RESOURCES OF PARAGUAY (DE LOS RECURSOS HÍDRICOS DEL PARAGUAY) - link
- Resolution No 388 of 1997 (Resolución No 388 of 1997) REGULATING THE USE, BREEDING, TRADE, EXPORT, IMPORT AND RE-EXPORT OF THE SPECIES LISTED IN THE CITES APPENDICES (POR LA CUAL SE REGLAMENTA LA UTILIZACIÓN, CRIA, COMERCIO, EXPORTACIÓN, IMPORTACIÓN Y REEXPORTACION DE ESPECIES INCLUIDAS EN LOS APENDICES DE CITES) - link
- Act Nº 583 (LEY Nº 583) ADOPTING AND RATIFYING THE CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (APRUEBA Y RATIFICA LA CONVENCIÓN SOBRE EL COMERCIO INTERNACIONAL DE ESPECIES AMENAZADAS DE FAUNA Y FLORA SILVESTRES) - link
- ACT Nº 112 (LEY Nº 112) ADOPTING AND RATIFYING THE CONVENTION ESTABLISHING AND PRESERVING THE NATURAL RESERVE IN THE MBARACAYU FOREST AND THE JEUJI RIVER BASIN, SIGNED BY THE GOVERNMENT OF THE REPUBLIC OF PARAGUAY, THE



UNITED NATIONS SYSTEM, THE NATURE CONSERVANCY AND THE MOISES BERTONI FOUNDATION FOR NATURE CONSERVATION, IN ASUNCIÓN, ON 27 JUNE 1991 (APRUEBA Y RATIFICA EL CONVENIO PARA ESTABLECER Y CONSERVAR LA RESERVA NATURAL DEL BOSQUE DEL MBARACAUY Y LA CUENCA QUE LO RODEA DEL RIO JEJUI, SUSCRITO ENTRE EL GOBIERNO DE LA REPUBLICA DEL PARAGUAY, EL SISTEMA DE LAS NACIONES UNIDAS, THE NATURE CONSERVANCY Y LA FUNDACION MOISES BERTONI PARA LA CONSERVACION DE LA NATURALEZA, EN ASUNCION, EL 27 DE JUNIO DE 1991) - link

- ACT Nº 1314 (LEY Nº 1314) ADOPTING THE CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF WILD ANIMALS (APRUEBA LA CONVENCIÓN SOBRE LA CONSERVACIÓN DE LAS ESPECIES MIGRATORIAS DE ANIMALES SILVESTRES) - link
- ACT Nº 555 OF 1995 (LEY Nº 555 OF 1995) ADOPTING THE AGREEMENT ON CONSERVATION OF WATER FAUNA IN RIVERS IN THE BORDER AREA (QUE APRUEBA EL ACUERDO PARA LA CONSERVACIÓN DE LA FAUNA ACUÁTICA EN LOS CURSOS DE LOS RÍOS LIMÍTROFES) - link
- ACT Nº 1508 OF 1999 (LEY Nº 1508 OF 1999) ADOPTING AND RATIFYING THE GABORONE AMENDMENT TO THE CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (CITES) (QUE APRUEBA LA ENMIENDA DE GABORONE A LA CONVENCIÓN SOBRE EL COMERCIO INTERNACIONAL DE ESPECIES AMENAZADAS DE FAUNA Y FLORA SILVESTRE (CITES)) - link

3.2.2. Legal authority

- Environment Secretariat (Secretaría del Ambiente) http://www.seam.gov.py/
- Agriculture Ministry (Ministerio de Agricultura y Ganadería): http://www.mag.gov.py/
- National Forestry Institute (Instituto Nacional Forestal): http://www.infona.gov.py/
- Directorate-General for the Protection and Conservation of Biodiversity (Dirección General de Protección y Conservación de la Biodiversidad, DGPCB): http://www.seam.gov.py/direcci%C3%B3n-general/direcci%C3%B3n-general-deprotecci%C3%B3n-y-conservaci%C3%B3n-de-la-biodiversidad-dqpcb
- Paraguay National Parks (Pargues Nacionales de Paraguay): http://parquesnacionalesdelparaquay.blogspot.com.ar/
- (19) National Parks (Parques Nacionales): http://parquesnacionalesdelparaquay.blogspot.com.ar/2015 12 01 archive.html?view=cla ssic

3.2.3. Legally required documents or records

N/A

3.2.4. Sources of Information

Government sources

- Directorate-General for the Protection and Conservation of Biodiversity (Dirección General de Protección y Conservación de la Biodiversidad, DGPCB): http://www.seam.gov.py/direcci%C3%B3n-general/direcci%C3%B3n-general-deprotecci%C3%B3n-y-conservaci%C3%B3n-de-la-biodiversidad-dqpcb
- (7) Environment Secretariat (Secretaria del Ambiente, SEAM): http://www.py.undp.org/content/dam/paraguay/docs/PROYECTO%20AUTOEVALUACION%2 0DE%20LAS%20politicas%20nacionales%20NCSA.pdf

- Paraguay National Parks (Parques Nacionales de Paraguay): http://parguesnacionalesdelparaguay.blogspot.com.ar/
- (8) National Parks (Parques Nacionales) (IBAs): http://parquesnacionalesdelparaguay.blogspot.com.ar/2014/03/areas-de-importanciapara-la.html
- http://noticias-seam.blogspot.com.ar/2014/06/las-areas-silvestres-protegidas-del.html

Non-Government sources

- (4) Luciérnaga Informativa: http://luciernagainformativa.blogspot.com.ar/2016/04/medioambiente-en-paraguay-la-version.html
- Proteger: http://www.proteger.org.ar/?s=cuenca%20del%20plata
- Ramsar: http://www.ramsar.org/wetland/paraguavcx
- (5) (IBAs): http://www.birdlife.org/datazone/userfiles/file/IBAs/AmCntryPDFs/Paraguay.pdf
- (3) La Nación: http://www.lanacion.com.py/2016/06/20/paraguay-cuenta-con-cincoparques/
- (2) ABC: http://www.abc.com.py/edicion-impresa/internacionales/cites-sanciona-aparaguay-y-prohibe-la-comercializacion-de-fauna-y-flora-431340.html
- (1) CBD Paraguay Strategy (CBD Estrategia Paraguaya): https://www.cbd.int/doc/world/py/py-nbsap-01-p1-es.pdf, https://www.cbd.int/doc/world/py/py-nbsap-01-p2-es.pdf, https://www.cbd.int/doc/world/py/py-nbsap-01-p3-es.pdf, https://www.cbd.int/doc/world/py/py-nbsap-01-p4-es.pdf, https://www.cbd.int/doc/world/py/py-nbsap-01-p5-es.pdf; https://www.cbd.int/doc/world/py/py-nbsap-01-p6-es.pdf, https://www.cbd.int/doc/world/py/py-nbsap-01-p7-es.pdf, https://www.cbd.int/doc/world/py/py-nbsap-01-p8-es.pdf
- ABC: http://www.abc.es/natural-biodiversidad/20130206/abci-bolivia-llanos-moxos-201302061234.html
- (9) WWF: http://www.wwf.org.mx/?203766/Alarmante-mensaje-del-Estado-Paraguayosobre-la-importancia-que-le-otorga-a-las-Areas-Protegidas and http://www.wwf.org.py/que hacemos/sig2/monitoreo de la deforestacion/

3.2.5. Risk determination

Overview of Legal Requirements

In Paraguay, there is legislation regulating Protected Areas (Áreas Protegidas), the protection of biodiversity and threatened and endangered species. The general framework includes Act No 1561 on the environment (Ley No 1561 de Medio Ambiente) and several other, more specific, acts, such as Act No 96 on wildlife (Ley No 96 de vida silvestre), Act No 352 on protected natural areas (Ley No 352 de áreas silvestres protegidas) and Act No 3239 of 2007 on the water resources of Paraguay (Ley Nº 3239 of 2007 de los Recursos Hídricos del Paraguay).

Paraguay has ratified and adopted most conventions on protected areas, fauna and flora by means of the following acts: Act No 253 of 1993 on biological diversity (Ley No 253 de 1993 sobre la diversidad biológica), Act Nº 350 of 1994 on wetlands of international importance (Lev Nº 350 de 1994 sobre los humedales de importancia internacional), Act Nº 758 of 1979 on nature protection and wildlife (Ley No 758 de 1979 sobre la protección de la flora, de la fauna, y de las bellezas escénicas), Act Nº 112 establishing and preserving the natural reserve in the Mbaracayu forest and the Jeuji river basin (Ley No 112 para establecer y conservar la reserva natural del bosque del Mbaracayu y la cuenca que lo rodea del rio Jejui), Act Nº 1314 on



migratory species of wild animals (Ley No 1314 sobre las especies migratorias de animales silvestres), Act No 555 of 1995 on water fauna in rivers in the border area (Ley No 555 de 1995 sobre la fauna acuática en los cursos de los ríos limítrofes).

Act No 1508 of 1999 on international trade in endangered species of wild flora and fauna (CITES) (Ley Nº 1508 de 1999 sobre el comercio internacional de especies amenazadas de fauna y flora silvestre (CITES)) must also be mentioned. Any agricultural use of land is banned in National Parks. In Biosphere Reserves, on the other hand, agriculture is part of the conservation plan for the area.

There are a total of 279 threatened plant species as well as 8 reptiles, 86 bird and 38 mammal species at risk. Some of the major threats to biodiversity include: changes in land use, deforestation, exploitation of wood, urban expansion, illegal hunting and capture of wildlife, indiscriminate fishing practices, development of infrastructure and invasive alien species (1).

The national territory under protection is 61,000 Km2 in a total of 38 protected areas. There is also one Biosphere Reserve and 4 Ramsar sites and 57 Important Bird Areas (IBA) which cover 3,3 million ha 8,4% of the total area. In Eastern Paraguay public and private protected areas amount to 600,000 ha. Almost 100% of those are in the ecoregion of the Upper Paraná Atlantic Forests (Bosques Atlánticos del Alto Paraná, BAAPA).

Description of risk

There is a risk that the existing laws relating to protected sites and species are not upheld consistently by all entities and often ignored, and are not enforced by relevant authorities.

- The Environment Secretariat (Secretaría del Ambiente, SEAM) receives minimal funding, which insufficient to effectively manage and monitor its protected areas. Additionally, there has been a process of land excision from National parks for indigenous communities but this lost area is not compensated with a new protected area
- According to the Environment Secretariat (Secretaría del Ambiente, SEAM), Protected Areas cover 6.1 million hectares in Paraguay, which amounts to 15% of the total surface area of the country. According to a CBD assessment, protected areas in Paraguay amount to 8.3 million hectares (20.5%).
- Peter Clark (expert on protected areas and wildlife of Paraguay), however, has stated that these figures are not current. According to Clark's estimates, Paraguay's 91 protected natural areas amount to 27,296 km² (6.7%) instead of 83,378 km² (20.5%) as previously stated. The largest figure considers all Biosphere Reserves, including the core area (protected natural areas), buffer zones and transition areas. A large part of those areas has been "developed" and turned into ranches and farms.
- When it comes to monitoring compliance, there are fewer than 50 forest rangers for a total protected surface of 61,000 km². Moreover, the government's investment to care for the land (which is worth millions of dollars) is USD 0.16 per hectare. 78% of the resources intended for protected areas come from international contributions. The State is investing 0.0003% of its GDP in the preservation of 15% of its territory (4, 7).
- According to the Environment Secretariat (Secretaria del Ambiente, SEAM), its yearly budget is PYG 44 billion for around 6 million hectares scattered over 15% of the national territory. There are only 60 forest rangers to monitor the whole area (3). This means that each forest ranger must keep watch over 100,000 hectares.
- Given the low degree of implementation and management of protected natural areas in Paraguay, it is advised to establish mechanisms within the creation and consolidation process to guarantee the availability of essential resources needed for effective implementation and management of these areas.
- Another noteworthy problem is high land tenure insecurity in Eastern Paraguay. This is due to demands by indigenous peoples and Landless Farmers (Sin Tierra). Indigenous peoples

have made many claims for supposedly protected areas. A 2012 WWF report on the issue can be found on its website: "Yesterday, the Environment Minister gave the President of the Republic his approval of the landless farmers' ('carperos') location in the Ñacunday National Park". He labelled the landless farmers "environmental refugees". This decision was done through the infringement of several national acts.

- Additionally, Paraguay has been featured negatively in the news and makes history in Latin America as the first country to facilitate and approve the occupation of National Parks. WWF states that Nacunday National Park is not a one-off case; it is a symbol of the state's neglect of the vast majority of Paraguay's Protected Natural Areas (9).
- The Convention on International Trade in Endangered Species of Wild Fauna and Flora(CITES) (Convención sobre el comercio internacional de especies amenazadas de fauna y flora silvestres) imposed a sanction on Paraguay in 2012 and it demanded a ban on wild fauna and flora trade. The Environment Secretariat (Secretaría del Ambiente, SEAM) oversees this issue, but thus far there are no clear steps for its implementation (2).

Risk conclusion

This indicator has been evaluated as Elevated risk. Identified laws are not enough to protect endangered ecosystems and species, besides the existing laws are not upheld consistently by all entities and often ignored, and are not enforced by relevant authorities.

3.2.6. Risk designation and specification

Elevated Risk

3.2.7. Control measures and verifiers

Control measures:

- Assess the risk of deforestation and native forest management is in accordance with Act No 2524 and Act No 5045 (Ley No 2524 and Ley No 5045)
 - o Check the VS SHP satellite image of property limits and compare with data from Official National Forest Institute (INFONA)'s maps, Global Forest Watch deforestation maps, WWF Paraguay (regularly published deforestation reports and maps) and other relevant data
- Confirm location of the soy farm is not located in a protected area or threatening High Conservation Values. Cross check a remote sensing or GIS map showing property limits against:
 - Map of the nationally and regionally protected areas
 - List of species categorised by threat level, and identifying rare, endemic, threatened and endangered species in accordance with the IUCN list and the SEAM national lists

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

Soy farming area

Soy is grown in almost all Eastern Paraguay. The crops area overlaps the original area of the Upper Paraná Atlantic Forests ecoregion (Bosques Atlánticos del Alto Paraná, BAAPA).



Current situation and Protected Areas in Eastern Paraguay

WWF estimates show the following: out of the almost 9 million hectares originally covered by Upper Paraná Atlantic Forests (Bosques Atlánticos del Alto Paraná, BAAPA), only around one million remains in 2016 (slightly over 10%). Of the latter, around 600,000 ha are protected by the state (5), while the remaining 400,000 are privately owned. There are 43 private and public parks in Eastern Paraguay. The three largest parks account for around 300,000 ha (3), while the rest of the parks are relatively small (7,500 ha on average).

The total national territory under protection is 61.000 Km² in 38 government owned protected areas and 14 private initiatives. There is also one Biosphere Reserve and 4 Ramsar sites and 57 Important Bird Areas (IBA) which cover 3,3 million ha 8,4% of the total area.

WWF estimates show the following: out of the (almost) 10 million hectares that originally covered the Upper Paraná Atlantic Forests (Bosques Atlanticos del Alto Paraná), only around one million remains in 2016 (10%). Of the latter, around 600,000 ha are protected by the state (12). The remaining 400,000 are privately owned (13).

Species

The geologically unique feature of Paraguay is the asymmetry it presents as it is found on 2 different geological formations: the Brazilian shield and the Andean depression. There are two main identified habitats:1) the warm, temperate, humid forests and 2) the warm, temperate dry forests. Paraguay does not have a complete inventory of the flora and fauna found in its territory therefore most records are estimates. There are about 13,000 plant species found in Paraguay, of which 69% are regionally endemic species. There are about 100,000 species of invertebrates and 1,233 to 1,336 vertebrate species of which: 250 fish species; 76 amphibians; 135 reptiles; between 645-685 bird species; and 167 mammal species.

There are a total of 279 threatened plant species as well as 8 reptiles, 86 bird and 38 mammal species at risk. Some of the major threats to biodiversity include: changes in land use, deforestation, exploitation of wood, urban expansion, illegal hunting and capture of wildlife, indiscriminate fishing practices, development of infrastructure and invasive alien species (2).

In Paraguay, there are 1,636 vertebrate species, 262 of which are nationally threatened under any of the following categories: critically endangered, endangered and vulnerable, according to the Environment Secretariat (Secretaría del Ambiente, SEAM).

SEAM threatened species list		
Item	Threatened species (3)	Endangered species (4)
Flora	40	81
Invertebrates	17	16
Amphibians	8	9
Reptiles	35	12
Birds	64	56
Mammals	10	35
Total	174	209

Threatened and endangered species are listed in the following SEAM websites:

Threatened: http://www.seam.gov.py/sites/default/files/amenazadas de extincion.pdf

Endangered: http://www.seam.gov.py/sites/default/files/peligro_de_extincion.pdf

Legislation

Paraguay's legal framework on the environment, protected areas and threatened and endangered species is sufficiently developed (See 3.1 and 3.2). However, law enforcement in its territory is proving problematic.

Environmental services

Legislation in Paraguay includes Act No 3001 of 2006 on the valuation and retribution of environmental services (Ley Nº 3001 de 2006 sobre la valoración y retribución de los servicios ambientales, LSA). Section 1 of this act states the following: The mission of this Act is to promote the conservation, protection, recovery and sustainable development of the country's biodiversity and natural resources through the fair, timely and adequate valuation and retribution of environmental services. This Act also aims to contribute to the fulfilment of the international commitments made by the Republic of Paraguay.

Unfortunately, the areas providing environmental services have not been systematically mapped and surveyed. A map of certified environmental service provider areas in Paraguay is available on SEAM's website (1). The aforementioned act, LSA, grants individuals and legal entities owning or holding properties and investing on environmental services the right to financial compensation for the provision of environmental services. In accordance with the Forestry Act (Ley Forestal), owners, usufructuaries or holders of rural real estate in forest areas larger than 20 ha in which more than 25% of the surface is covered by natural forests can be entitled to retribution by means of an Environmental Services Certificate (Certificados de Servicios Ambientales, CSA). CSAs can be sold at the national and international markets or used to compensate local tax (4).

Soil, Water

In Paraguay's Itapúa Department (Departamento de Itapúa) average soil losses due to erosion in the last 5 years have been measured. These amount to 22,940 kg/ha for conventionally tilled land; 33,190 kg/ha for fallow land; and only 530 kg/ha for land where direct drilling (zero tillage) was used (Table 2) (6).

The National Forest Institute (Instituto Forestal Nacional, INFONA) is registering River Bed Protecting Forests (Bosques Protectores de Cauces Hídricos). This label is useful in locating (a) remaining vegetation and (b) vegetation of high importance for its services to the ecosystem (11). Decree Nº 9824 of 2012, Chapter VII, Section 21 (Decreto Nº 9824 de 2012, Capítulo VII. Artículo 21) states that INFONA shall set up the River Bed Protecting Forest Register (Registro de Bosques de Protección de Cauces Hídricos) based on the data provided by municipalities. Interested parties can register with a sworn statement on voluntary basis. INFONA's River Bed Protecting Forest Register can be used to check the river bed areas, which contain natural resources that are crucial for development, that should be recovered in accordance with their unique characteristics. On the Register, regional and national databases can be built to collect data that shall later be used as input for the National River Bed Recovery Programme (Programa Nacional de Restauración de Cauces Hídricos).

The Resolution establishing the River Bed Protecting Forest Register in the Framework of Act Nº 4241 of 2010 (Resolución por la Cual se Crea el Registro de Bosque Protector de Cauces Hídricos en el Marco de la Ley Nº 4241 de 2010) (9/10) is available at the following link (9).

Presence and Rights of the Indigenous Communities



Indigenous peoples in Paraguay are in a very difficult situation. There are indigenous communities in Eastern Paraguay; most of them have lost their land and/or are involved in serious land tenure conflicts (also see 2.4).

Presence and analysis of HCVs

The Upper Paraná Atlantic Forests (Bosques Atlánticos del Alto Paraná, BAAPA) ecoregion has been seriously affected by native forest displacement due to agricultural conversion, especially for soy farming.

Nowadays, only scattered and fragmented relicts remain. The largest ones can be found in protected areas. There is no detailed inventory of HCV sites in the area under assessment. To date, only one HCV determination study has been conducted in Paraguay. It was conducted in three separate areas in Eastern Paraguay (Alto Paraná, Caazapá and Itapúa Departments), and it serves as a practical approach to Atlantic Forest HCV attributes. It was conducted by WWF International in 2015 (5). The lack of HCV2 forests in the assessment area must be highlighted. HCV2 are defined as (5) "Intact forest landscapes and large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance." No forests large enough and unbroken by roads or agricultural exploitation areas exist outside the Protected Areas. All existent relicts are heavily degraded due to human intervention. Therefore, they do not fulfil the environmental functions required to be labelled HCV2 forests. WWF applied the HCV2 criterion in its study aimed at applying HCV attributes to three areas (17). However, according to consulted experts, the criterion used does not comply with the definition of HCV2. Neither does it when one minimum area size is adopted for all species, because larger species require larger areas than are available in the assessed area.

The aim of the WWF study is biodiversity conservation, the continuity of habitat connectivity studies, maintenance of the conservation areas available, and recovery of the connectivity lost to the advancing agricultural border due to soy farming. The main characteristic of the areas selected for assessment is their large Atlantic Forest mass area. The Upper Paraná Atlantic Forest (Bosques Atlánticos del Alto Paraná, BAAPA) is one of the five most important Priority Terrestrial Ecoregions due to its high degree of diversity, large number of endemic species and its status as one of the world's most threatened ecosystems.

The HCV identification methodology was based on the ProForest guide (2003), but some of the criteria were adapted to the assessment areas to account for differences in surface area.

Also, see the Annex III Maps 6 to 9.

- (1) Ministry for Public Works and Communication (Ministerio de Obras Públicas y Comunicaciones, MOPC): http://www.mopc.gov.py/wwf-destaca-decision-del-mopc-deadquirir-certificados-de-servicios-ambientales-n2210
- (2) CBD Paraguay Strategy (CBD Estrategia Paraguaya): https://www.cbd.int/doc/world/py/py-nbsap-01-p1-es.pdf, https://www.cbd.int/doc/world/py/py-nbsap-01-p2-es.pdf, https://www.cbd.int/doc/world/py/py-nbsap-01-p3-es.pdf, https://www.cbd.int/doc/world/py/py-nbsap-01-p4-es.pdf, https://www.cbd.int/doc/world/py/py-nbsap-01-p5-es.pdf; https://www.cbd.int/doc/world/py/py-nbsap-01-p6-es.pdf, https://www.cbd.int/doc/world/py/py-nbsap-01-p7-es.pdf, https://www.cbd.int/doc/world/py/py-nbsap-01-p8-es.pdf
- (3) WWF: http://www.wwf.org.py/ donde trabajamos /bosque atlantico/
- (4) 5 Días: http://www.5dias.com.py/38645-certificacion-de-servicios-ambientales-unamedida-de-mercado-para-promover-la-sustentabilidad

- http://d2ouvy59p0dq6k.cloudfront.net/downloads/informe final guyra py wwf diciemb re 2015 1.pdf
- (6) http://www.rolf-derpsch.com/es/siembra-directa/sustentabilidad/
- (7) http://www.5dias.com.py/35730-agricultura-de-conservacion-paraguay-ocupa-el-sextolugar-en-ranking-de-paises
- (8) http://glovis.usgs.gov/
- (9) National forest Institute (Instituto Forestal Nacional, INFONA): http://www.infona.gov.py/index.php/noticias/restablecimiento-de-bosques-protectores-decauces-hidricos
- (10) National forest Institute (Instituto Forestal Nacional, INFONA): http://www.infona.gov.py/
- (11) National forest Institute (Instituto Forestal Nacional, INFONA): http://www.infona.gov.py/application/files/5314/3092/8338/Presentacion IFN PARAGUAY 06.05.2015.pdf
- (12) Environment Secretariat (Secretaría del Ambiente, SEAM): http://www.seam.gov.py/sites/default/files/mapa actualizado de sinasip.pdf
- (13) WWF: http://www.wwf.org.py/que hacemos/campanas de comunicacion/campana 2014/
- (14) Environment Secretariat (Secretaría del Ambiente, SEAM): http://www.seam.gov.py/sites/default/files/Informe sinasip 2007.pdf
- (15) Environment Secretariat (Secretaría del Ambiente, SEAM): http://www.seam.gov.py/
- (16) National forest Institute (Instituto Forestal Nacional, INFONA): http://www.infona.gov.py/index.php?cID=296
- (17) WWF: http://d2ouvy59p0dg6k.cloudfront.net/downloads/informe final guyra py wwf diciemb re 2015 1.pdf

Also, see Annex III Map 7: Watercourses

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
- 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

Guyra Paraguay provided a list of vertebrate species detailing the total number of species found in the country and which of those that are threatened, in accordance to the updated list (2013) by the International Union for Conservation of Nature (IUCN) (2) and SEAM lists, which resulted from the 2005 national workshop and were published in 2006 by means of Resolution



No 524 of 2006, approving the list of threatened flora and fauna species in Paraguay (Resolución Nº 524 of 2006 por la cual se aprueba el listado de las especies de flora y fauna amenazadas del Paraguay).

There are 1,636 vertebrate species, 262 of which are nationally threatened under any of the following categories: critically endangered, endangered and vulnerable, according to the Environment Secretariat (Secretaría del Ambiente, SEAM) (3, 4).

SEAM threatened species list			
Item	Critically endangered species (3)	Endangered species (4)	
Flora	40	81	
Invertebrates	17	16	
Amphibians	8	9	
Reptiles	35	12	
Birds	64	56	
Mammals	10	35	
Total	174	209	

A list of species and threatened species found in the country, according to Guyra Paraguay's Biodiversity Database (Base de Datos de Biodiversidad de Guyra Paraguay, BDBGP) is included hereunder (1, 6):

Mammals: 182 species in total, out of which 39 are threatened species. (2014)

Birds: 715 - 112 threatened species.

Reptiles: 178 - 41 threatened species.

Amphibians: 85 - 15 threatened species.

Fish: 476 - 18 threatened species (1).

The 2014 list includes no changes regarding Paraguay; the following globally threatened species can be found in the country: 28 bird species, 9 mammal species, 4 reptile species, 2 amphibian species, 0 fish species. (1)

WWF Paraguay has selected the following criteria to assess the presence of HCV1 and link it to a weighting system (5).

HCV1.1.	Interpretation	Score
Private reserves: properties aimed at permanent conservation.	High HCV	2

-,	Medium HCV	1	
main goal is to protect and ensure the sustainable use of available natural resources; private properties that are			
not private reserves and indigenous reserves.			

HCV1.2. Threatened and endangered species. Properties hosting vertebrate and/or plant species classified as Critically Endangered (CR), Endangered (EN) and Vulnerable (VU) according to the UICN (global), SEAM Resolution No 524 of 2006 (Resolución No 524 de 2006 de la SEAM) and Motte et al. (2009) (national) for amphibians and fish.

HCV1.2	Interpretation	Score
Presence of globally threatened species (CR, EN, VU), as well as nationally threatened species.	Very high HCV	4
Presence of globally threatened species (EN, VU) as well as nationally threatened species.	High HCV	3
Presence of globally threatened species (VU) as well as nationally threatened species.	Medium HCV	2
Presence of nationally threatened species.	Low HCV	1

HCV1.3. Endemic species, species endemic to the Atlantic Forest. Endemic species are species restricted to a specific region and are found nowhere else (Szumik et al., 2002).

HCV1.3	Interpretation	Score
Presence of endemic species: plant species, vertebrate species and/or over 33% of the Atlantic Forest endemic bird species.	High HCV	2
Under 33% of the Atlantic Forest endemic bird species.	Low HCV	1

HCV1.4. Critical temporal use, natural areas acting as biological corridors or crucial migration sites, concentration sites, breeding sites, feeding sites.

HCV1.4	Interpretation	Score
Presence of migratory species	High HCV	1
Presence of vertebrates' breeding sites.	High HCV	1
Concentration of species	High HCV	1

3.3.1.2. Sources of information

- (2) IUCN Red List: http://www.iucnredlist.org/search
- (1) National Parks (Parques Nacionales): http://parguesnacionalesdelparaguay.blogspot.com.ar/2014/06/lista-de-especiesamenazadas-del.html
- (3) Environment Secretariat (Secretaria del Ambiente, SEAM): http://www.seam.gov.py/sites/default/files/amenazadas_de_extincion.pdf



- (4) Environment Secretariat (Secretaria del Ambiente, SEAM): http://www.seam.gov.py/sites/default/files/peligro de extincion.pdf
- (5) WWF 2015 Report. http://d2ouvy59p0dq6k.cloudfront.net/downloads/informe final guyra py wwf diciemb re 2015 1.pdf
- (6) Guyra Paraguay: http://guyra.org.py/base-de-datos-de-biodiversidad/

3.3.1.3. Risk determination

Currently, only 10% of the original vegetation remains in Paraguay, 600,000 ha of which are found in state protected areas. The remaining 400,000 ha can be found in scattered, relatively small relics, mainly vegetation around watercourses, land with heavy gradients and wetlands. The relics are categorised as HCV1 sites.

Human activity has led to a decrease in numbers for these species. Loss of natural habitat is the main factor affecting endangered species (1).

Paraguay ratified the Convention on Biodiversity and legalised it by means of Act No 253 of 1993 (Lev Nº 253 de 1993).

This report's section 4.1 shows the advance of the agricultural border in Eastern Paraguay, even though Act No 2524 (Ley No 2524) and its extension Act No 5045 (Ley No 5045) strictly ban land clearing in the region. Additionally, Act No 4241 (Ley No 4241) emphasises the recovery of forests protecting watercourses in the national territory; Section 4 of this Act states that all watercourse-protecting forests shall be permanently preserved in their natural state. However, as shown in section 4.1 of this report, the agricultural border continues its advance in Eastern Paraguay due to land clearing and the destruction of relicts of remaining vegetation and vegetation protecting HCV1 watercourses, which are constantly threatened by soy farming.

3.3.1.4. Risk designation and specification

Elevated risk: HCV 1 occurrence is likely in the area under assessment and potentially threatened by management activities mainly due to land conversion for the establishment of soy farm.

3.3.1.5. Control measures and verifiers

Control measures:

- Confirm the farm has the following information/documents/data in place:
 - o 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 2005
- Assess the risk of deforestation and native forest management is in accordance with Act No 2524 and Act No 5045 (Ley No 2524 and Ley No 5045)
 - Check the VS SHP satellite image of property limits and compare with data from Official National Forest Institute (INFONA)'s maps, Global Forest Watch deforestation maps, WWF Paraguay (regularly published deforestation reports and maps) and other relevant data
- Confirm location of the soy farm is not located in a protected area or threatening High Conservation Values. Cross check a remote sensing or GIS map showing property limits against:
 - Map of the <u>nationally</u> and regionally protected areas

- List of species categorised by threat level, and identifying rare, endemic, threatened and endangered species in accordance with the IUCN list and the SEAM national lists
- High Conservation Data:
 - HCV data from the National Forest Inventory (Inventario Forestal Nacional (INFONA))
 - High Conservation Value (HCV) assessments
 - Defined forest areas that protect watercourses under Act 4.241/10 (Bosque
- Conduct on-site verification to:
 - Confirm management plans for protected sites, species and High Conservations Values are implemented and monitored.
 - Maps/remote sensing images for deforestation assessed reflect reality

3.3.2. 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

According to the amendments to HCV2 identification in the WWF (2015) report, HVC2 sites are defined as all remnants of native forests. In this case, the surface areas needed by individuals of specific species are used, adapting the definition in Di Bitteti et al. (2003) with amendments by De Egea & Balbuena (2011). However, consulted experts declare this criterion does not match the definition of HCV2 sites: Expert consultation conducted by NEPCon, 2014.

In soy production areas, there are no relatively intact forest areas large enough to guarantee environmental processes and ecosystem functions in a way that makes populations viable. Large areas which could be considered HCV2s fall under protected areas. Initially, Upper Paraná Atlantic Forests (Bosques Atlánticos del Alto Paraná) covered around 9 million hectares. Currently, only around 1 million hectares remain, out of which 600,000 hectares are included in Protected Areas.

Very fragmented forest areas within intensive agricultural production (soy) areas amount to just 400,000 hectares. These remaining forest areas do not fulfil the HCV2 criteria on size and environmental functions; the remnant forest areas are rather likely to be classified as HCV1, HCV3 and HCV4 because most of them are areas with large gradients, around watercourses

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



and have very fragile soil which is not adequate for agricultural use and host rare/threatened/endangered species and ecosystems.

There are no HCV2 sites in Eastern Paraguay. Only three areas larger than 50,000 hectares exist; the remaining protected areas are scattered over the whole Eastern Paraguay region. All protected areas are heavily degraded, and some of them have barely been naturally recovered.

3.3.2.2. Sources of information

See general introduction point 3.3.

3.3.2.3. Risk determination

Low risk as there is no HCV 2 in the area under assessment.

3.3.2.4. Risk designation and specification

Low risk

3.3.2.5. Control measures and verifiers

N/A

3.3.3. Ecosystems and habitats – HCV 3

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

- a) Existing forests in forest landscapes where these ecotypes are rare;
- b) Areas of important genes or genetically distinct populations;
- c) Ecosystems that are depleted or poorly reserved at the regional or national scale;
- d) Old growth forests, outside of forest biomes where the concept is redundant;
- e) Remnant natural forest vegetation in heavily cleared landscapes.

3.3.3.1. HCV Occurrence

Remaining native forests only amount to 10% of the original area. Besides, they are heavily fragmented and/or degraded. Therefore, all forests in the soy farming landscape can be classified as HCV3 sites. Moreover, most of them are in areas not apt for agriculture due to large gradients, poor soil quality and/or wetlands or vegetation around watercourses.

WWF Paraguay suggests the following criteria for HCV3 determination on the field. Under this category, the following landscapes are included: areas around watercourse sources, forests on saturated or flooded soil dominated by tree ferns, peat bogs, cliffs and ravines with lithophyte vegetation, rapids and waterfalls, hills.

HCV3 sites are rare or vulnerable ecosystems or communities protecting watersheds and/or hosting rare or threatened species.

HCV3	Interpretation	Score
Areas with gradients greater than 15%	High HCV	1
Watercourse sources covered by forests within the 300 metre buffer zone	High HCV	1
Hills, waterfalls, rapids	High HCV	1

3.3.3.2. Sources of information

- (1) Environment Secretariat (Secretaría del Ambiente, SEAM): http://www.seam.gov.py/programas-y-proyectos/enpab/qu%C3%A9-es-el-proyecto-enpab
- (2)CDB: https://www.cbd.int/doc/world/py/py-nbsap-01-p1-es.pdf
- (3) WWF: http://d2ouvy59p0dq6k.cloudfront.net/downloads/informe final guyra py wwf diciemb re 2015 1.pdf
- (4) SEAM Workshop 2013: https://www.cbd.int/doc/nbsap/nbsapcbw-la-01/nbsap-villa-delevva-paraguav.pdf

3.3.3.3. Risk determination

HCV3 sites have not been identified on the ground; therefore, no concepts and criteria exist for their appropriate management and conservation.

Data are scarce and there is no HCV1 and HCV3 site inventory. Thus, HCV3 sites must be mapped locally.

The only study on HCV identification in accordance to the FSC concept and the ProForest (2003) methodology is WWF's model study (3), which applied to three properties and serves as a guide for HCV1 and HCV3 on-site work. The study identifies for biodiversity conservation there needs to be an aim of preserving already existing conservation areas, guaranteeing the connectivity of different areas or recovering habitat connectivity lost to the advance of the agricultural border. HCV3 sites are very fragile and under- protected.

No appropriate measures or legislation to protect HCV3 sites exist in Paraguay. Despite zero land clearing legislation in Eastern Paraguay, forests and vegetation around watercourses are still destroyed at a rate of 14,000 hectares per year.

The National Strategy and the Paraguay Biodiversity Action Plan (Estrategia Nacional y el Plan de Acción de Biodiversidad Paraguay) (2) (Aichi CDB) dates to 2009 and is available on the CDM website (1).

To date, the Government of Paraguay has not satisfactorily fulfilled the Aichi Targets set out in the National Biodiversity Strategies and Action Plans (NBSAPs 2011-20). On average, only 30% of AICHI Targets no. 1 to 10 and 20% of Targets no. 13 to 19 has been completed. With regards Target 11, on Protected Areas (currently 14% of Paraguay's territory) and Target 12 on Extinction Prevention, 70% has been completed.

The main problem is a lack of sufficient funding (Target 20), which is only 15% complete. Therefore, all action related to protected areas lacks sufficient funding for on-site effective management and monitoring. (Also, see this report's section 3.2 for more details).

3.3.3.4. Risk designation and specification

HCV 3 occurrence is likely in the area under assessment and there are threatened by management activities.

3.3.3.5. Control measures and verifiers

Control measures:

- Confirm the farm has the following information/documents/data in place:
 - o Biodiversity surveys and High Conservation Value (HCV) assessments
 - o Conversation/High Conservation Value (HCV) management plans
 - Historical remote sensing imagery evidence to confirm no conversion of primary forest, peatlands and HCVs post 2005.



- Assess the risk of deforestation and native forest management is in accordance with Act No 2524 and Act No 5045 (Ley No 2524 and Ley No 5045)
 - Check the VS SHP satellite image of property limits and compare with data from Official National Forest Institute (INFONA)'s maps, Global Forest Watch deforestation maps, WWF Paraguay (regularly published deforestation reports and maps) and other relevant data
- Confirm location of the soy farm is not located in a protected area or threatening High Conservation Values. Cross check a remote sensing or GIS map showing property limits against:
 - Map of the <u>nationally</u> and regionally protected areas
 - High Conservation Data:
 - HCV data from the National Forest Inventory (Inventario Forestal Nacional (INFONA))
 - High Conservation Value (HCV) assessments
- Conduct on-site verification to:
 - Confirm management plans for protected sites, species and High Conservations Values are implemented and monitored.
 - Maps/remote sensing images for deforestation assessed reflect reality

3.3.4. 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

Given that remaining native forests only amount to 10% of the original cover and they are heavily fragmented and/or degraded, all forests in the soy farming landscape can be classified as HCV4 sites. Moreover, most of them are located in areas not apt for agriculture due to large gradients, poor soil quality and/or wetlands or vegetation around watercourses. These forests are particularly important as protectors of watersheds and draining basins (see map 7 Annex III). Due to high rainfall in the Eastern Region, many draining basins of rivers, streams and estuaries can be found there.

The image below gives a clear picture of a representative situation in the Eastern region, with plenty of water streams, most of them with vegetation made up mainly of native species.

See Annex III Map 10 and Map 11 showing the same landscape sequence depicted in the Google Earth image. Both show the presence and relevance of HVC4s in the East. They also highlight the fragmentation and forest relicts related to water sources small streams and rivers.

WWF Paraguay has established three criteria for HCV4 identification and assessment.

HCV 4.1. Forests critical to water catchments Any forest land which is at least 100 wide protecting both banks of the river streams; forests protecting watercourse sources and springs with a buffer of at least 300 m.

HCV 4.1	Interpretation	Score
1104 111	Interpretation	566.6

Watercourse sources covered by forests within the 300 m buffer zone	High HCV	3
Watercourses covered by forests which are at least 100 m wide on both river banks	Medium HCV	2
Watercourse sources and watercourses not covered by forests which are at least 100 m wide on both river banks	Low HCV	1

HCV 4.2. Forests critical to erosion control. In this case, all forests on slopes greater than 8% shall be considered HCVs to ensure protection from erosion that could lead to soil loss and other damages to the ecosystem. Soils in areas that are not adequate for agricultural or forestry use are considered to be at high risk of erosion so their forests shall be protected accordingly.

HCV 4.2	Interpretation	Score
Forests on slopes greater than 15% (capacity types IV and VIII)	High HCV	3
Forests on 8-15% slopes (capacity types III and VII)	Medium HCV	2
Forests on 0-8% slopes (capacity types I, II, V and VI)	Low HCV	1

Land use capacity types definitions in Eastern Paraguay, on the basis of parameter E as seen on López et al. (1995)

Land use capacity type	General definition	E slope (%)
I	These soils have no or few limitations that restrict their use.	0-3
II	These soils have moderate limitations that reduce the selection of possible crops, or require moderate conservation practices to cultivate them.	3-8
III	These soils have strong limitations that reduce the selection of possible crops, or require special conservation practices to cultivate them, or both.	8-15
IV	These soils have very strong limitations that reduce the selection of possible crops, or require very careful management, or both.	15-30
V	These soils do not tend to erode, but have other limitations that are very hard to resolve, that limit their use.	0-3



VI	These soils have severe limitations that for the most part make them unsuitable for cultivation.	3-8	
VII	These soils have very severe limitations that make them completely unsuitable for cultivation.	8-15	
VIII	These soils and other miscellaneous areas have limitations that virtually preclude their use for commercial production.	>15	

3.3.4.2. Sources of information

- (1) FAO: http://www.fao.org/nr/water/aguastat/countries regions/pry/indexesp.stm
- (2) WWF: http://d2ouvy59p0dq6k.cloudfront.net/downloads/informe final guyra py wwf diciemb re 2015 1.pdf

3.3.4.3. Risk determination

HCV4 sites have not been identified on the ground; therefore, no concepts and criteria exist for their appropriate management and conservation thus only proxies for HCV 4 values can be

The National Strategy and the Paraguay Biodiversity Action Plan (Estrategia Nacional y el Plan de Acción de Biodiversidad Paraguay) (2) (Aichi CDB) dates to 2009 and is available on the CDM website (1). So far, the Government of Paraguay has not satisfactorily fulfilled the Aichi Targets set out in the National Biodiversity Strategies and Action Plans (NBSAPs 2011-20). The main handicap is the lack of funding to implement the strategy and to further develop concepts such as sustainable production (3 and 4 AICHI Targets).

Act 3.239/07 on Paraguay's water resources (Ley 3.239/07 "De los Recursos Hídricos del Paraguay"), which has not been complemented by specific regulations yet, provided the legal framework to "regulate the sustainable, integral management of all water resources and the land where they are located, whatever their status or natural location within the Paraguayan territory..." (Section 1). Act No. 4241 (Ley N° 4241), focused on the restoration of forests that protect watercourses, is an attempt at introducing a legal framework to protect water resources and their vegetation, which so far has not translated into an actual application on the ground.

The research "The growth of Soy: Impacts and Solutions) WWF 2014, shows that higher rainfall interception in soybean fields than in transitional tropical forests, combined with faster run-off due to soil compaction in these fields, reduces the amount of water percolating into deeper soils and groundwater. It can be inferred that wide conversion to intensive soy cultivation will therefore reduce water availability in the long term (Bäse et al., 2012). Water quality and quantity is also very much impacted by soil erosion and agrochemical residues. The use of agrochemicals (pesticides and chemical fertilizers) is one of the main environmental threats linked to soy production, regardless of farm size, causing soil contamination as well as huge impacts on water quality and its biodiversity.

To register water basins, an area of 100 m on both banks of the watercourse has been established as a reference (Section 5 of Decree No. 9.824/2012 / Art. 5º del Decreto Nº 9.824/2012). In most properties, this minimum distance is not complied with and often simply does not exist anymore.

Amongst the main threats to water resources, we need to highlight the greater amount of land that has been dedicated to farming, which has entailed burning and clearing to benefit soy

production, but also agrochemicals or effluents-induced pollution, soil erosion and dredging for improvements to the navigability of rivers. (also, see 3.1 for more details)

There are registers and monitoring efforts in place to maintain the quality of the waters, such as interventions by the state (Environment Secretariat [SEAM]'s requests, DIGESA inspections) However, this information (as compiled by the Environment Secretariat [SEAM]) has not been sufficiently systematised or studied to create an accurate quality assessment of the national water resources.

The protection of water resources is highly important, since it is the primary measure to avoid soil erosion. The area under assessment has a 1.200 to 1800 mm annual rainfall rate, which has a huge impact in terms of soil erosion on > 8% slopes. Soil loss has improved to the penetration of direct sowing of soy in Paraguay over the last few years. However, soil loss is still a major cause of degradation and is associated with soy production in the area under assessment.

Agricultural policies have mostly focused on land property issues rather than land management, because there are certain areas of settlement where water supply is supposed to be provided for human consumption, disregarding the amount of water that shall be used for farming (1).

3.3.4.4. Risk designation and specification

HCV 4 occurrence is likely in the area under assessment and there are threatened by management activities.

Eastern Paraguay - Elevated Risk

3.3.1.5. Control measures and verifiers

Control measures:

- Confirm the farm has the following information/documents/data in place:
 - Environmental Impact Assessment for large properties (> 500 hectares)
 - Land use plan (Plan de Ordenamiento Predial) addressing the management of soils, forests, water, biodiversity and agrochemical products.
 - Environmental monitoring and mitigation plan (Plan de monitoreo ambiental predial)
 - o High Conservation Value (HCV) assessments
 - o Conversation/High Conservation Value (HCV) management plans
 - o High Conservation Value (HCV) assessments
 - Historical remote sensing imagery evidence to confirm no conversion of primary forest, peatlands and HCVs post 2005
- Assess the risk of deforestation and native forest management is in accordance with Act No 2524 and Act No 5045 (Ley No 2524 and Ley No 5045)
 - Check the VS SHP satellite image of property limits and compare with data from Official National Forest Institute (INFONA)'s maps, Global Forest Watch deforestation maps, WWF Paraguay (regularly published deforestation reports and maps) and other relevant data
- Confirm location of the soy farm is not located in a protected area or threatening High Conservation Values. Cross check a remote sensing or GIS map showing property limits against:
 - Map of the <u>nationally</u> and regionally protected areas
 - High Conservation Data:
 - HCV data from the National Forest Inventory (Inventario Forestal Nacional (INFONA))



- High Conservation Value (HCV) assessments
- Defined forest areas that protect watercourses under Act 4.241/10 (Bosque Protector de Cauces Hídricos en el Marco de la Ley 4.241/10)
- Conduct on-site verification to:
 - 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

The indigenous population in Paraguayan territories is made up of 19 indigenous peoples who belong to 5 linguistic families and whose total population amounts to 112,848 individuals (Directorate-General for Statistics, Surveys and Census, DGEEC in its Spanish acronym, 2013), distributed amongst both regions of the country (Eastern and Western). They survive in 531 communities, 241 villages and 54 households [3]. The official website of the Paraguayan Indigenous Peoples Institute (Instituto Paraguayo del Indígena) reports the existence of 572 communities officially recognised by the State which have been granted legal entity status. Land/territory is key to the ethnic and financial development of indigenous peoples as well as to their survival. (1)

The report on the territorial situation of the indigenous peoples of Paraguay highlights in different testimonies by Eastern communities that the river sources and ravines are sacred for "our people", and that all resources, from food to medicines to water, came entirely from the forest. (3)

WWF conducted a study to identify HCVs applied to three cases in the Paraguayan Eastern Region. This study points out how forests provide environmental services to the communities within the studied area as well as outside of it. One of these environmental services could be that of serving as a source of firewood, food, water and medicines. The indigenous communities within the studied area and their 5km buffer zone are finally considered HCVs (4).

HCV 5	Interpretation	Score
Indigenous communities within the Reserve polygon and their 5 km buffer zone	High HCV	2
Indigenous communities and peasant (<i>campesino</i>) communities located outside the Reserve polygon, and their 5 km radius buffer zone. Peasant (<i>campesino</i>) communities outside the Reserve polygon, with limited relationship and dependence on the forests.	Low HCV	1

However, to determine whether this is the case, it is necessary to conduct an evaluation and identification on the ground in the area under assessment. Thus more accurate data can be

gathered on the presence of sites of special interest due to their role in meeting the basic needs of the communities located within the area or nearby.

3.3.5.2. Sources of information

- (1) August 2014: Indigenous native peoples of Paraguay (Part I) Población originaria indígena de Paraguay (Primera Parte) http://www.tierraviva.org.py/?pueblo=poblacion- originaria-e-indigena-del-paraguay-primera-parte
- (2) August 2015: UN Human Rights Council Thirtieth session Agenda item 3, A/HRC/30/41/Add.1 13 August 2015 Report of the Special Rapporteur on the rights of indigenous peoples, Victoria Tauli-Corpuz, The situation of indigenous peoples in Paraguay: http://unsr.vtaulicorpuz.org/site/index.php/es/documentos/country-reports/84-reportparaguay
- (3) September 2015: Territorial Situation of the Paraguayan Indigenous Peoples (Situación Territorial de los Pueblos Indígenas de Paraguay) Paraguayan Federation of Indigenous Peoples (FAPI in its Spanish acronym) and FPP http://www.forestpeoples.org/sites/fpp/files/news/2015/11/Situaci%C3%B3n%20Territoria l%20de%20los%20Pueblos%20Ind%C3%ADgenas%20de%20Paraguay%20FAPI%20y%20 FPP.pdf
- (4) December 2015: WWF HCV implementation criteria project in AGROPECO S.A., Ypetí Private
 - Reserve and the forested Reserve of the Puerto Barra Indigenous community (WWF Implementación de áreas de alto valor para la conservación(AAVC) en Agropeco S.A., Reserva Privada Ypetí y Comunidad Aché de Puerto Barra): http://www.wwf.org.py/ donde trabajamos /bosque atlantico/
- More information on point 2.4

3.3.5.3. Risk determination

Many studies and publications have highlighted the fact that indigenous land in the Eastern region suffered forest destruction because of the extension of farming land. It has been reported very often as well that great expanses of forest were cut down, which resulted in the destruction of Guarani sites for nomadic hunting, harvesting and farming (3). In these studies, it is often stated that Eastern communities are under unrelenting pressure to lease their land for soy production (3). Additionally, it is often pointed out that indigenous land was irreparably destructed, their environment harmed and their natural resources plundered. The destruction of natural resources has led to the destruction of traditions, medicines, rituals, etc. (1).

Even though Paraguay has the legal framework to protect indigenous communities, according to "The situation of indigenous peoples in Paraguay" ("Estudio de la situación de los pueblos indígenas en el Paraguay*") the legislation does not duly ensure compliance with constitutional and international demands on the issue of indigenous peoples' rights. The legal framework suffers from conceptual shortcomings, as it characterises land as no more than a productive resource without taking into account traditional land uses and the cultural and spiritual values that indigenous peoples associate with the land. According to the experts consulted in this risk assessment, the procedure for securing land titles is bureaucratic, difficult to follow and slow. The privatization of large amounts of land and the lack of a proper land registry have given rise to the existence of overlapping ownership deeds that serve as a basis for multiple claims to the same parcels. (2).

Considering that the land/territory is the basis for an ethnic and financial development, it can be concluded that the basic condition for survival of almost half of the indigenous communities in Paraguay is not ensured. Only a small fraction of indigenous communities have enough land of good enough quality. Most indigenous communities with ensured access to land are



overpopulated and environmentally challenged to apply traditional financial strategies for survival and in most cases, to conduct farming in a way that meets basic food security needs. Moreover, indigenous peoples' land was irreparably destructed, their environment harmed and their natural resources plundered. The destruction of natural resources has led to the destruction of traditions, medicines, rituals, etc. (1)

*Human Rights Council Thirtieth session Agenda item 3, 13 August 2015 Report of the Special Rapporteur on the rights of indigenous peoples, Victoria Tauli-Corpuz.

3.3.5.4. Risk designation and specification

Eastern Paraguay - Elevated Risk

3.3.5.5. Control measures and verifiers

Control measures:

- Also, implement 2.4 control measures.
- Confirm the farm has the following information/documents/data in place:
 - o High Conservation Value (HCV) assessments
 - o Conversation/High Conservation Value (HCV) management plans
 - o High Conservation Value (HCV) assessments
- Confirm location of the soy farm is not located in a protected area or threatening High
 - Confirm management plans for High Conservations Values are implemented and monitored.
- Consult with stakeholders and national park officials on the location of indigenous people and other local communities in the area and the presence of potential HCV 5 values.

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

There are HCV6s in the Eastern Region.

Paraguay has only one World Heritage Site: the Jesuit Missions of La Santísima Trinidad de Paraná and Jesús de Tavarangue, in the Eastern Region, declared so by UNESCO (9).

It must be pointed out that almost the entire Eastern Region was covered by the Upper Parana Atlantic Forest (BAAPA in its Spanish acronym), where native peoples lived until 1945. The situation currently faced by indigenous peoples and communities is quite difficult, since there are many issues surrounding land ownership, and their cultural and traditional values are often disregarded or ignored (See point 2.4).

According to the study conducted by WWF for the implementation of HCV 6 criteria, forests can be considered an important asset for several indigenous communities, namely San Rafael (also known as Tekoha Guasu) is the traditional land of several indigenous peoples pertaining to the Tupí-Guaraní family (Jacobsen, 2003). There are four indigenous peoples who have

traditionally occupied the Atlantic Forest: Pai-Tavyterá, Ava- Chiripá, Mbya-Guarani and Aché (Fragano & Clay, 2006).

HCV 6	Interpretation	Score
Indigenous communities located within the studied area polygon and the 1 km buffer zone.	High HCV	2
Indigenous communities outside the studied area polygon and the 1 km buffer zone.	Low HCV	1

In order to determine whether this is the case, it is necessary to conduct an evaluation and identification on the ground in the area under assessment. This way, more accurate data be gathered on the presence of sites of critical importance due to their role in protecting the traditional cultural identity of the communities located near or within the area.

3.3.6.2. Sources of information

- (1) August 2014: Indigenous native peoples of Paraguay (Part I) Población originaria indígena de Paraguay (Primera Parte) http://www.tierraviva.org.py/?pueblo=poblacion- originaria-e-indigena-del-paraguay-primera-parte
- (2) August 2015: UN Human Rights Council Thirtieth session Agenda item 3, A/HRC/30/41/Add.1 13 August 2015 Report of the Special Rapporteur on the rights of indigenous peoples, Victoria Tauli-Corpuz, The situation of indigenous peoples in Paraguay: http://unsr.vtaulicorpuz.org/site/index.php/es/documentos/country-reports/84-reportparaguay
- (3) September 2015: Territorial Situation of the Paraguayan Indigenous Peoples (Situación Territorial de los Pueblos Indígenas de Paraguay) Paraguayan Federation of Indigenous Peoples (FAPI in its Spanish acronym) and FPP http://www.forestpeoples.org/sites/fpp/files/news/2015/11/Situaci%C3%B3n%20Territoria 1%20de%20los%20Pueblos%20Ind%C3%ADgenas%20de%20Paraguay%20FAPI%20y%20 FPP.pdf
- (4) December 2015: WWF HCV implementation criteria project in AGROPECO S.A., Ypetí Private
 - Reserve and the forested Reserve of the Puerto Barra Indigenous community (WWF Implementación de áreas de alto valor para la conservación(AAVC) en Agropeco S.A., Reserva Privada Ypetí y Comunidad Aché de Puerto Barra): http://www.wwf.org.py/ donde trabajamos /bosque atlantico/
- More information on point 2.4

3.3.6.3. Risk determination

Many studies and publications have stated the fact that indigenous land in the Eastern region suffered forest destruction because of the extension of farming land. It has been reported very often as well that great extensions of forest were cut down, which resulted in the destruction of sites essential to the Guarani people's livelihoods and culture (3). In these studies, it often stated that Eastern communities are under unrelenting pressure to lease their land for soy production (3). Additionally, it is often pointed out that indigenous land was irreparably destructed, their environment harmed and their natural resources plundered. The destruction of natural resources has led to the destruction of traditions, medicines, rituals, etc. (1).

Even though Paraguay has the legal framework to protect indigenous communities, according to "The situation of indigenous peoples in Paraguay" ("Estudio de la situación de los pueblos indígenas en el Paraguay*") the legislation does not duly ensure compliance with constitutional



and international demands on the issue of indigenous peoples' rights. The legal framework suffers from conceptual shortcomings, as it characterises land as no more than a productive resource without considering traditional land uses and the cultural and spiritual values that indigenous peoples associate with the land.

According to the testimonies heard, the procedure for securing land titles is bureaucratic, difficult to follow and slow. The privatization of large amounts of land and the lack of a proper land registry have given rise to the existence of overlapping ownership deeds that serve as a basis for multiple claims to the same parcels. (2).

Considering that the land/territory is the basis for an ethnic and financial development, it can be concluded that the basic condition for survival of almost half of the indigenous communities in Paraguay is not ensured. Only a small fraction of indigenous communities have enough land of good enough quality. Most indigenous communities with ensured access to land are overpopulated and environmentally challenged to apply traditional financial strategies for survival and in most cases, to conduct farming in a way that meets basic food security needs. Moreover, indigenous peoples' land was irreparably destructed, their environment harmed and their natural resources plundered. The destruction of natural resources has led to the destruction of traditions, medicines, rituals, etc. (1)

*Human Rights Council Thirtieth Session Agenda item 3, 13 August 2015 Report of the Special Rapporteur on the rights of indigenous peoples, Victoria Tauli-Corpuz.

3.3.6.4. Risk designation and specification

Elevated Risk

3.3.6.5. Control measures and verifiers

Control measures:

- Also, implement 2.4 control measures.
- Confirm the farm has the following information/documents/data in place:
 - o High Conservation Value (HCV) assessments
 - o Conversation/High Conservation Value (HCV) management plans
 - High Conservation Value (HCV) assessments
- Confirm location of the soy farm is not located in a protected area or threatening High
 - Confirm management plans for High Conservations Values are implemented and monitored.
- Consult with stakeholders and national park officials on the location of indigenous people and other local communities in the area and the presence of potential HCV 6 values.

CONVERSION

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

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

4.1.1. Applicable laws and regulations

- ACT No 422 / 73 (LEY No 422/73). (Full Text) Forestry Act link
- ACT Nº 542 (LEY Nº 542). (Full Text) ON FOREST RESOURCES (DE LOS RECURSOS FORESTALES) - link
- ACT 816/96 (LEY 816/96) (Full Text) PARAGUAY'S FORESTRY ACT (LEY FORESTAL PARAGUAY) - link
- ACT Nº 2524 (2004) LEY Nº 2524 (2004). (Full Text) BANNING THE CONVERSION OF FOREST-COVERED AREAS IN EASTERN PARAGUAY (DE PROHIBICIÓN EN LA REGIÓN ORIENTAL DE LAS ACTIVIDADES DE TRANSFORMACIÓN Y CONVERSIÓN DE SUPERFICIES CON COBERTURA DE BOSQUES) - link
- Act No. 5045 (Ley No 5045) (Full text) Amendment to Sections 2 and 3 and extension of Act 2524 (Ley 2524) - link
- ACT No. 294/1993 (LEY No 294/1993). (Full Text) ENVIRONMENTAL IMPACT ASSESSMENT - link
- Decree No. 453/13 (Decreto Nº 453/13). (Full Text) BY VIRTUE OF WHICHTHE REGULATION OF ACT No. 294/1993 "ON ENVIRONMENTAL IMPACT ASSESSMENT" (LEY Nº 294/1993 "DE EVALUACIÓN DE IMPACTO AMBIENTAL") IS ISSUED - link

4.1.2. Legal authority

- Ministry of Agriculture (Ministerio de Agricultura y Ganadería): http://www.mag.gov.py/
- National Forestry Institute (Instituto Nacional Forestal): http://www.infona.gov.py/

4.1.3. Legally required documents or records

Environmental impact assessment (see conditions in 4.1.5.)

4.1.4. Sources of information

- (1) WRM: http://wrm.org.uy/oldsite/boletin/92/Paraguay.html
- Chaco Día por Día: http://chacodiapordia.com/interes-general/noticia/109162/chaco-entrelas-provincias-con-mayor-porcentaje-de-desmontes-en-su-suelo
- (3) Monografías: http://www.monografias.com/trabajos81/desforestacionparaguay/desforestacion-paraguay2.shtml
- European Commission Europe: http://ec.europa.eu/regional policy/sources/cooperate/international/pdf/latin ctf parana a nnex es.pdf



- Noticias Ambientales http://noticias-ambientales- internacionales.blogspot.com.ar/2013/05/gobierno-de-paraguay-dice-que-brutal.html
- (6) Paraguay National Parks (Parques Nacionales de Paraguay): http://parquesnacionalesdelparaquay.blogspot.com.ar/2016 01 01 archive.html?view=cla
- (2) WRI: http://www.wri.org/blog/2015/09/satellites-uncover-5-surprising-hotspots-treecover-loss
- (4) Global Forest Watch: http://www.globalforestwatch.org/country/PRY
- (3) National Forest Institute (Instituto Forestal Nacional, INFONA): http://www.infona.gov.py/index.php/noticias/manejo-forestal-sostenible-en-paraguay
- (5) Environment Secretariat (Secretaria del Ambiente, SEAM): http://www.seam.gov.py/sites/default/files/mapa actualizado de sinasip.pdf
- (8) UNESCO: http://www.unesco.org.uy/ci/fileadmin/ciencias%20naturales/mab/wp38baja.pdf
- http://www.silvapar.com/publications/events/2.%20Evaluacion%20Biomasa%20Solida.pdf
- http://www.wwf.org.py/gue hacemos/campanas de comunicacion/campana 2014/

4.1.5. Risk determination

Overview of Legal Requirements

Act Nº 2524/04 (LEY Nº 2524/04) known as the "Zero Deforestation Act" was enacted in late 2004. This Act prohibits the change of land-use from forest to farming or cattle breeding. In September 2013, The Senate passed Act 5045 (ley 5045), which is an extension of the Act which shall be valid until 2018. Overall, this Act strengthens the prohibition to cut down trees and destroy forest in the Eastern region, which is extended until 31 December 2018. (1).

Decree No. 453/13 of 8 October 2013 (decreto N° 453/13) extends and amends Act No. 294/93 on Environmental Impact Assessment (Ley N° 294/93 sobre la Evaluación del Impacto Ambiental). The decree details the exemption of conducting an environmental impact assessment for farms and properties of less than 500 ha in the Eastern Region and for farms and properties of less than 2,000 ha in Chaco (Western region).

Act No. 542 in its Section 45 (Ley N° 542 en el Art. 45) sets down the requirement for farmers and breeders to maintain 25% of the forests on their land. In the event of a farmer or breeder not having such minimum percentage of forest in their land, the same section of the act establishes reforestation requirements and sets different percentages depending on the size of the land.

Description of risk

There is a risk that conversions of natural forest and ecosystems for agriculture purposes has taken place since 2004. The conversion allegedly continues despite the Paraguayan government having a zero deforestation policy and legislation for the Eastern region.

In the East of the country there is a very important ecoregion, the Upper Paraná Atlantic Forests, which is in the country which is most suitable for soy farming. The deforestation process in Eastern Paraguay left the native landscape devoid of natural forests. Approximately, 4.9 million (M) hectares of native forest have been converted for agricultural purposes, particularly between 1945 and 1985. Different studies conducted by the Ministry of Agriculture (Ministerio de Agricultura y Ganadería) report that in 1985 there

were still 3.5 M ha of continuous forests which, however, were undergoing forestry interventions.

WWF estimates show the following: out of the almost 10 million hectares originally covered by Upper Paraná Atlantic Forests (Bosques Atlánticos del Alto Paraná), only around one million remains in 2016 (10%). Of the latter, around 600,000 ha are in areas protected by the state (5). The remaining 400,000 are privately owned (9).

See Annex III Map 12 and 13.

- According to the National Forest Institute (INFONA) and to data gathered by the 2011 National Forest Inventory (Inventario Forestal Nacional), 40.9% of the national territory has a forest cover, which amounts to 16.5 M ha, 2.5 M ha of which are located in the Eastern region, with the remaining 14 M ha being located in the Western region. Out of this total surface, 14.9 M ha are areas of forestry production (TCP/PAR/3304 - FAO/INFONA Project on sustainable forest management).
- However, there are certain discrepancies between the different sources consulted. Global Forests Watch (4) reports that 1.7 M ha of native forest cover have been depleted since the 2011 until now. Paraguay stands out as a notable hotspot for loss, both in the Chaco and the biodiverse Atlantic forests, due to expanding cattle ranching and soybean farming (2).
- According to reliable data, 90% of the forest cover in the Eastern Region has disappeared.
- From 2005 until the present an estimate of one million hectares have been converted in the Eastern region.
- Despite the zero deforestation policy and legislation for the Eastern region, WWF has proven with its annual monitoring system that (9) during the December 2013 - August 2014 period, 11,714 hectares of land suffered deforestation, while a total of 43,188 hectares were deforested in this region during the year 2013. It can be concluded that the situation is still critical
- The Environment Secretariat (Secretaría del Ambiente or SEAM) does not have staff enough to effectively control the entire Paraguayan territory in the oversight of the aforementioned laws. This institution has created alliances with different national and international nongovernmental organisations, but they still struggle to ensure that that local environmental legislation is duly complied with.
- The laws that are most often violated are Act 294/93 on Environmental Impact (Ley 294/93 de Impacto Ambiental), which makes it compulsory for big land owners to conduct an environmental impact assessment and the Zero Deforestation Act 2.524/04 (Ley 2.524/04 de Deforestación Cero), which prohibits transformation and conversion activities in land or areas where there is a native forest cover for the entire Eastern region.
- During 2004, the year when the Zero Deforestation Act 2.524/04 (ley 2.524/04 "Deforestación Cero") was passed, only 5,700 ha of native forest were lost, whereas in 2002 the country had lost 110,000 ha. Despite the legislation, deforestation has continued in the Eastern region (3).

Risk conclusion

Elevated risk that soy farms have been established in an area converted from natural forest or ecosystem after November 2005.

4.1.6. Risk designation and specification

Elevated risk

4.1.7. Control measures and verifiers



Control measures:

- Implement control measures for indicator 1.1
- Assess the risk of deforestation and native forest management is in accordance with Act No 2524 and Act No 5045 (Ley No 2524 and Ley No 5045)
 - o Check the VS SHP satellite image of property limits and compare with data from Official National Forest Institute (INFONA)'s maps, Global Forest Watch deforestation maps, WWF Paraguay (regularly published deforestation reports and maps) and other relevant data
- Verify on-site (if a risk has been detected) that there is no sign of forest conversion in the farm (prohibited since 2004)

4.2. Fire avoidance is being practiced

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

4.2.1. Applicable laws and regulations

- Act Nº 716 Section 4 (LEY Nº 716 Art.4) THAT PUNISHES ENVIRONMENTAL OFFENCES link
- ACT Nº 4014 (LEY Nº 4014) (Full Text) ON WILDFIRE CONTROL AND PREVENTION link
- ACT Nº 422/73 (LEY Nº 422/73) (Full Text) Forestry Act link

4.2.2. Legal authority

- Ministry of Agriculture (Ministerio de Agricultura y Ganadería): http://www.mag.gov.py/
- National Emergency Secretariat (Secretaría de Emergencia Nacional or SEN): http://www.sen.gov.py/
- National Forestry Institute (Instituto Nacional Forestal): http://www.infona.gov.py/
- Environment Secretariat (Secretaria del Ambiente): http://www.seam.gov.py/

4.2.3. Legally required documents or records

Controlled burning permit

4.2.4. Sources of information

- (1) http://www.seam.gov.py/content/seam-recuerda-vigencia-de-normas-sobreprevenci%C3%B3n-v-control-de-incendios
- (2) http://www.hoy.com.py/nacionales/accidente-fatal-por-quema-de-pastizales-la-seamrecuerda-vigencia-de-lev
- (3) http://www.abc.com.py/nacionales/ley-de-incendios-inaplicable-1214309.html
- (4) National Fire Use Plan (Plan nacional del uso del fuego): http://www.fire.unifreiburg.de/GlobalNetworks/SouthAmerica/PENAMIF-Paraguay-2012-2016.pdf
- (5) http://www.seam.gov.py/content/normativa-vigente-obliga-prevenir-y-controlar-deincendios

4.2.5. Risk determination

Overview of Legal Requirements

Using fire for farming is prohibited by Act No. 716 Section 4. (Ley N° 716 Art 4). Act No. 4014 (Ley N° 4014) 4 provides details of Section 3 (Art. 3). Whereby muncipalities are hereby declared Authorities in charge of Application of this Act, in coordination with the specialised unit "Paraguayan Network for the Prevention, Monitoring and Control of Wildfire" ("Red Paraquava de Prevención, Monitoreo y Control de Incendios"), which is coordinated by Asunción National University along with other subject matter expert institutions from the public and private sectors.

Act No. 4014 (Ley No 4014) set up the specialised network "Paraguayan Network for the Prevention, Monitoring and Control of Wildfire" ("Red Paraguaya de Prevención, Monitoreo y Control de Incendios"). This network's mandate involves, amongst other things, participating in the procedure to issue the permits for controlled burning, as well as compulsorily reporting some of the cases of unauthorised burning that it may detect to the Public Prosecutor's Office (Ministerio Público). From the moment, this act was passed into law, all municipalities in the country were left in charge of "issuing permits" for Prescribed Burning, under the expressed condition of doing so in collaboration with the "Paraguayan Network for the Prevention, Monitoring and Control of Wildfire". The permits allow the holder to burn, and they are issued after on-the-ground inspection of the way in which this burning is managed

Controlled burning is therefore regulated by means of Act No. 4014/10 "On wildfire control and prevention" (Ley Nº 4014/10 "De prevención y control de incendios") which aims at establishing appropriate rules for the control and prevention of wildfire in rural, forest, interface and vegetation areas. Since its passing in 2010, uncontrolled burning of pastures, forests, thickets, fallow land, natural fields, sawdust or any other cereal, oilseed or type of flammable organic material that might cause a wildfire has been prohibited.

On this basis, the only sort of burning that is permitted under this act is controlled burning, which is defined as controlled burning applying relevant techniques under conditions that make it realistic to expect that the fire will remain within a specified area (5).

Management of these Controlled Burning relies on the coordination of the country's towns with the Paraguayan Network for the Prevention, Monitoring and Control of Wildfire" ("Red Paraquaya de Prevención, Monitoreo y Control de Incendios"), in charge of "issuing permits" for Prescribed Burning which allow the holder to burn after conducting on-the-ground inspections of the way in which this burning is managed.

To issue the permits, which must be issued by the authorities, the following minimum requirements must be complied with: 1. Wind velocity shall not exceed the established limit. Air temperature shall not exceed the established limit. There shall be a minimum pre-set environmental relative humidity; 2. The months during which burning shall be legal must be established; 3. Minimum time for recess between fires 4. Permitted starting hours; 5. Minimum number of people with adequate equipment for starting the fire; 6. Vehicles; means of communication and any other necessary security measures to be provided by the interested person; etc. (1).

Description of risk

There is a risk that fire avoidance is not being practiced on farms, that illegal fires are being set for land clearing purposes and that such fires are leading to devastating uncontrolled fires.

There are various causes for forest wildfire, but all of them are linked to human activities, be them rooted in accidents, intentional actions or recklessness. These are the most frequent causes known of:

- Burning in the farm without sufficient precautionary measures in place, regardless of whether such absence of precaution is intentional or due to recklessness.
- General public's lack of information regarding appropriate fire management techniques.



Frequency and intensity of wildfires depends on weather and wind patterns and the change intervals induced by the Nino and Nina effects.

In the 2001-2010 period, 41,959 heat sources and 21.6 million (M) ha of burnt land were detected (4). Most wildfires that have happened over the last 10 years have taken place at the Paraguay river banks where there are natural and/or artificial pastures. In production areas where there are annual crops the wildfire rate is smaller. The three most affected departments in the East were: Concepción, with 2.8 M ha (13% of the national total figure), San Pedro with 1,338,630 ha (6%), and Amambay with 1,338,331 ha (6%). This means the Eastern region suffered 35% of the total number of wildfires.

Controlled burning that turns into uncontrolled wildfire is a frequent occurrence in Paraguay. According to data included in Paraguay's 2012/2016 National Plan for the Use of Fire (plan nacional sobre uso del fuego Paraguay 2012/2016), between 2001 and 2010 the annual national average rate of wildfires was 4,000, with an average affected land of 2.1 M ha. The Paraguayan Network for the Prevention, Monitoring and Control of Wildfire" ("Red Paraguaya de Prevención, Monitoreo y Control de Incendios") set up by Act No. 4014 (ley Nº 4014) is not operating now and consequently the government is not currently in control of the situation (1).

Fire use is still used for the establishment of soy plantations in Paraguay thus this indicator is considered elevated risk. However, burning is not a widespread practice in Paraguay's soy farming industry and thus the risk linked to soy farms is low risk. Fire is used for soy plantation establishment

Risk conclusion

Elevated risk

4.2.6. Risk designation and specification

Elevated risk

Control Measures

Assess the risk of fire incidents occurring within the farm - examine fires trends by region/province/district and potential overlap with soy plantations;

Verifier:

- Global Forest Watch Fires platform: http://fires.globalforestwatch.org/about/
- Verify that the soy farm has the following valid documents if a risk of fire use by soy farm(s) has been detected:

Verifiers:

- o Property fire protection plan
- Approved control burn permit Control burn permit
- Consult local authorities and/or local stakeholders that no land preparation was conducted by through the unauthorised use of fire.

GENETICALLY MODIFIED ORGANISMS (GMOs)

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

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

5.1.1. Applicable laws and regulations

- Act No 385 (LEY No 583) Law on Seeds and Protection of Cultivars http://www.cej.org.py/games/Leyes_por_Materia_juridica/AGRARIA/LEY%20No385.pdf
- Decree 9699 National Commission on Agricultural and Forestry Biosafety (CONBIO). http://www.aprosemp.org.py/uploads/decreto 9699 bioseguridad.pdf
- Decree 12706 Modifies and broadens decree 18.481/97 que crea la comisión de bioseguridad - http://www.senave.gov.py/decretos.html

5.1.2. Legal authority

- Ministry of Agriculture and Livestock (MAG)
- Commission on Agricultural and Forestry Biosafety (CONBIO)
- National Service of Plant and Seed Health and Safety (SENAVE)

5.1.3. Legally required documents or records

Seed certificate of origin

5.1.4. Sources of information

- Isaaa: http://www.isaaa.org/gmapprovaldatabase/default.asp
- FAO: http://www.fao.org/biotech/en/;
- FAO, Paraguay: http://www.fao.org/biotech/country-policy-documents/en/
- Paraguay national policy and program: http://www.leyes.com.py/todas disposiciones/2011/decretos/decreto 6733 11 anexo.pdf
- FAO: http://www.fao.org/docrep/014/i2300e/i2300e00.htm
- (1) Cei:
 - http://www.cej.org.py/games/Leyes por Materia juridica/AGRARIA/LEY%20No385.pdf
- (2) Redsuramericana:
 - http://www.redsudamericana.org/sites/default/files/doc/DT%20red%20mercosur%20-%20Paraguay%20vfinal.pdf
- (3) Biotecia: http://www.bioetica.org/umsa/seminario/I-8-Producto.pdf
- (4) FAO: http://www.fao.org/docrep/012/a0861s/a0861s00.pdf
- (5) SENAVE: http://www.senave.gov.py/
- (6) ElAgro: http://www.elagro.com.py/agricultura/desde-2012-paraguay-ablando-sunormativa-para-aprobar-cultivos-transgenicosdesde-2012-paraguay-ablando-su-normativapara-aprobar-cultivos-transgenicos/
- (7) Aprosemp: http://www.aprosemp.org.py/uploads/decreto 9699 biosequridad.pdf
- (8) Ministry of Agriculture and Farming: http://www.mag.gov.py/



- (9) Senave: http://secure.senave.gov.py:8443/registros/servlet/login
- (10) SIREOGM: http://www.senave.gov.pv/bioseguridad.html
- (11) DISE N°455: http://www.senave.gov.py/docs/servicios/semillas/lista-deensayos/DISE%20N%20445%20Lista%20de%20testigos%20de%20Soja-1.pdf
- (12) La Nación newspaper: http://www.lanacion.com.ar/1783187-bolsa-blanca-un-ilicitosin-control-que-desacopla-ala-argentina-de-la-region
- (13) Corporativa Global: http://corporativaglobal.com/index.php/component/k2/item/642buscanacuerdo-para-solucionar-el-comercio-ilegal-de-semillas
- (14) Ultimahora: http://www.ultimahora.com/preocupa-ingreso-semilla-ilegal-sojan730397.html
- (15) "Transgenic seeds and agribusiness: Varieties and procedures for its approval" Silvia González. The paper is part of the dossier "With soy to the neck: Report on agribusiness in Paraguay 2013-2015", edited by Base Social Investigations BASE IS.

5.1.5. Risk determination

Overview of Legal Requirements

Paraguay's GMO regulatory framework began in 1997 and is regulated by Decree No. 18481/97, which was amended and extended by Decree 12706 of August 13 2008 (3) (4). This decree stipulates that the Ministry of Agriculture and Livestock (MAG) is the national authority with competence over the agricultural sector, which authorizes and regulates the use of GMOs in field trials, confined releases and commercial applications. Biosecurity management is carried out through legal regulations in plant and animal health regulations, seed health, food safety, and compliance with requirements such as environmental impact assessment.

Paraguay has Law No. 385 on Seeds and The Protection of Cultivars, which aims to promote efficiency in the procurement of cultivars: production, circulation, marketing and seed quality control; ensuring that farmers and users in general know the identity and quality of the seeds they purchase, and protecting the right of new breeders in accordance with intraregional agreements signed or due to be signed as well as with international seed standards (1).

The Ministry of Agriculture and Livestock is the authority responsible for all matters involving seeds, compliance control of the law's provisions and its application through the technical agency. The Seeds Department is a technical body responsible for compliance with this law. (1) This law creates the National Seed Council, an advisory body for the Ministry of Agriculture and Livestock, chaired by the Vice Minister of Agriculture. (1)

Other similar laws include the Environmental Impact Assessment Act, the Act Ratifying for the Convention on Biological Diversity. On the basis of this legislation, Paraguay has approved the planting of GM soy (3).

Between 2004 and June 2012, Paraguay had approved only one GM plant, Monsanto's Roundup Ready (RR) soybean. However, Decree 9699 of September 19 2012 paved the way for new releases. (6) Paraguay has approved 20 GM crops in its territory, 19 of which were approved after 2012 with two of these being soy.

SENAVE has a list of seed traders and producers (9) and a location map (5) available.

See Annex III Map 14: Seed registry

It has the registration forms and registration applications of companies who use regulated genetically modified organisms (SIREOGM) (10).

SENAVE holds the SOY Official Witness List for the 2016/2017 DISE N° 455 (11) campaign (below). The Official Witness contains references to the yield data of varieties in the registration applications from the National Register of Commercial Cultivars (RNCC), results of the soybean cycle performance test carried out by the Paraguayan Association of Plant Breeders (PARPOV), the seed production plans submitted to the Seed Certification Department and the DISE seed import database (Seeds Department).

CICLO	CURER PRECOZ
	SUPER PRECOZ
CD 250 RR STS	NS 5258
***	CLO PRECOZ
RM 5500	AG 5780 Xi
SYN1059 RR	AG 6440 Xi
SYN 1158 RR	AG 6525 Xi
TEC 5936IPRO	5814IPRO
Don Mario 5.9i	AG 6565 Xi
NIDERA A 5909 RG / NA 5909 RG	NS 5419 IPRO
6211 IPRO	SYN1359S IPRO
RMO 509	AG 6011 Xi
RMO 6001	AG 6220 Xi
LDC 5.9	SYN13561 IPRO
IGRA 616	IGRA 526
LCD 5.3	53I53 RSF IPRO
HO 5910	5715IPRO
TMG 7662	SW BRIZA RR
NS 6909 IPRO	5958 RSF IPRO
SYN1365 RR	CD2630RR
HO 6110 IPRO	5855RSF IPRO
SYN1157 RR	5855RSF IPRO
CD2644IPRO	

Don Mario 0.01	BRS 245 RR		
SRM 6403	NIDERA A 5509 RR		
Don Mario 6.2 i	M5947 IPRO		
TMG 7161 RR	NIDERA A 5509 RR		
RA 626	6262 RSF ipro		
7166 RSF ipro	NS 6248		
5706 B	NS 5959 IPRO		
5506 B	TGM 7062 IPRO		
5905 IPRO	M5947IPRO		
AS 3610 IPRO	NA 66 R		
SYN 1163 RR	BRS 245 RR		
NK 7059 RR	NIDERA A 5509 RR		
SYN 1161 RR	6663 RSF		
TEC 6029IPRO	6968 RSF		
TMG 1264 RR			
	CICLO MEDIO		
BMX POTENCIA RR	SY9070 RR		
CICLO TARDIO			
NS 8282	Munasqa		
A 8000			

CICLO SEMI PRECOZ

Description of risk

There is a risk GMO soy being used by farmers in Paraguay. In Paraguay, 99% of soybean grown are GMOs.

- According to statements and investigations (15), approval of GMOs was facilitated with the enactment of Decree No. 9699. Between 2004 and June 2012, Paraguay had approved only one GM plant, 19 of which were approved after 2012 with two of these being soy. This release of GMOs was supposedly due to a lowering of biosafety requirements, in contrast with the commitments made by Paraguay internationally and, additionally, the issue of the biosafety was centralized the Ministry of the Environment.
- This decree eliminated the obligatory biosafety requirements as stated in Cartagena Protocol on Biosafety, ratified by Paraguay through Act 2.309. There is no transparency or information on the processes, the National Commission for Agricultural and Forestry Biosafety has a website that does not work, and the Ministry of Agriculture does not report on the releases (8).
- According to the newspaper La Nación, in the 2015 soybean campaigns in Paraguay only 25 to 35% of germoplasm intellectual property is recognized and registered under the conditions of Decree 9699 (12). The Corporativa Global Magazine (April 2016) (13) points out that they are seeking an agreement to resolve the illegal seed trade issue with Paraguay. The (SENAVE), the Paraguayan Seed Producers Association (APROSEMP) and the Paraguayan Association of Plant Breeders(PARPOV) organized a seminar on the growing problem of violation of the intellectual property rights violations for seeds, which affects the entire production chain in Paraguay. The newspaper La Ultimahora (2013) reported on the illegal entry of soybeans into Paraguay. Customs detected the illegal entry of 9 tons of soybeans into Paraguay, which was supposedly of great concern for the Paraguayan Seed Producers Association (Aprosemp) (14). This is analysed by the researcher and lawyer Silvia González in her article "GM seeds and agribusinesses: Varieties and procedures for their approval". The paper is part of the dossier "Up to our neck in soy: Report on



agribusiness in Paraguay 2013-2015", edited last December by Base Social Investigations (BASE IS).

Risk conclusion

Elevated risk: There is commercial use of GM soy in the area under assessment.

5.1.6. Risk designation and specification

Elevated Risk

5.1.7. Control measures and verifiers

Country Specific

- Determine if Genetically Modified seeds are used:
 - o Consult the supplier on the seed type used and relevant certificates
 - o Verify if the seed is officially authorized in Paraguay, is not GM seed and that the seed supplier is registered in the SENAVE register http://www.senave.gov.py/

Annex I: Soy source types

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

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

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



SOY SOURCE TYPES IN PARAGUAY - Eastern (Oriental) Region			
Source type	Ownership and management	Description of source type	
Smallholder	Privately owned at a family level or leased land. Managed under a private renting / leasing schemes.	Soy from family managed agricultural crops. Family plots are managed primarily for subsistence farming purposes. The average farms are 10 hectares in size. As of 2008, there were 21,000 small land owners growing soy, covering approximately 200,000 ha of crops in total. This source is not commonly found in export supply chains.	
Medium sized holder	Privately owned and commercially managed.	Soy from medium sized, mechanised commercial farms. Farms are on average 162 hectares in size. As of 2008, there were approximately 8000 medium-sized producers covering 1.3 million ha of land.	
Large holder	Privately owned and managed commercially.	Soy from large industrialised commercial farms. Farms are on average of 2100 hectares in size.	
		As of 2008, there were approximately 1000 are large producers who farm around 1.7 million ha. Approximately 53% of the area under cultivation is in the hands of these 3.3% of land owners.	
		This is the primary source of soy in Paraguay.	

Annex II: Maps and tables

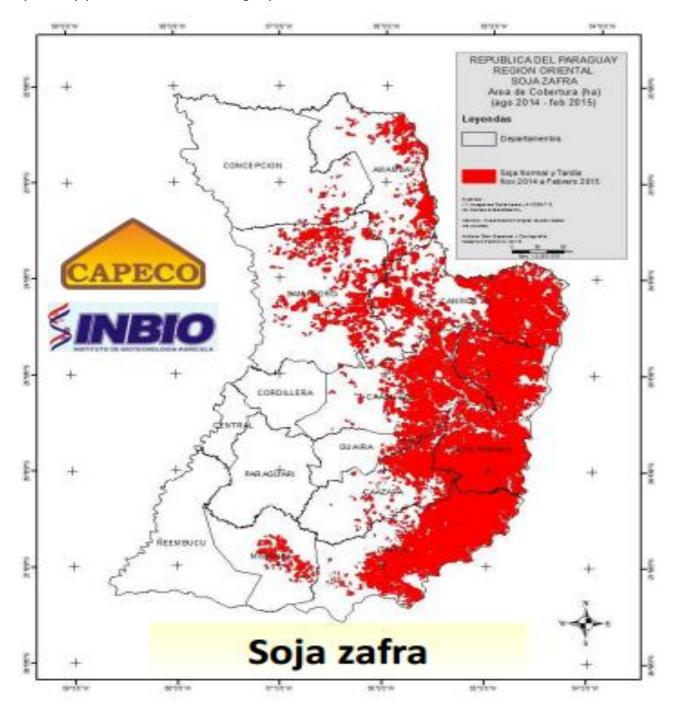
Map 1: Provinces of Paraguay



Source: Mapsofworld: http://espanol.mapsofworld.com/continentes/suramerica/paraguay/paraguay-mapa.html



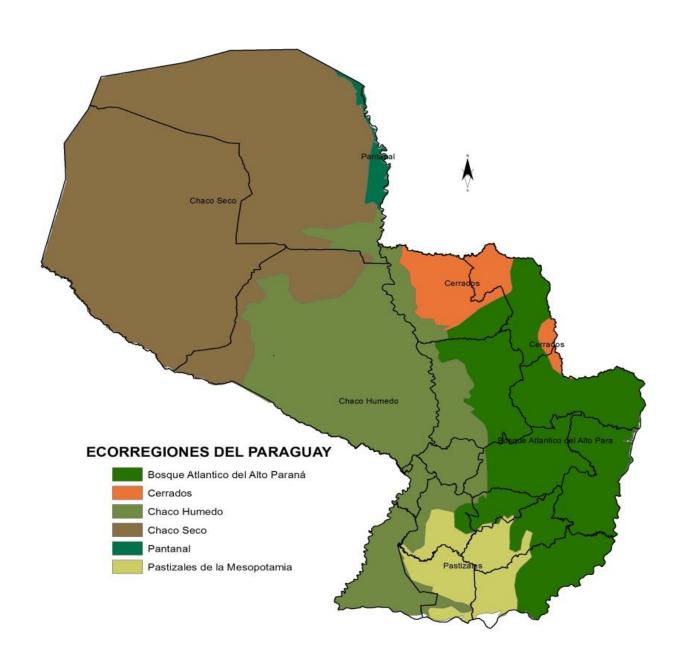
Map 2: Soy production area in Paraguay



Source: (5) INBIO, Estimate of rural soy production 2014-2015 (capeco)

Map 3: Ecoregions of Paraguay

Ecorregiones del Paraguay



Source: Ecoregions: https://es.wikipedia.org/wiki/Ecorregiones de Paraguay

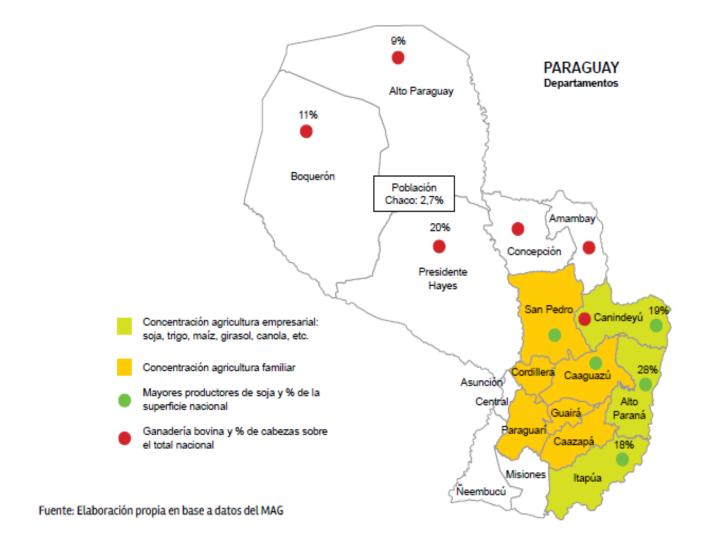


Map 4: Eastern (Oriental) and Western (Occidental) Regions (FAO 2008)

La región Oriental y la región Occidental o Chaco



Source: Maps of world: http://espanol.mapsofworld.com/continentes/sur- america/paraguay/paraguay-mapa.html



Map 5: Territorial distribution of the main agricultural activities.

Source: World Bank:

http://documents.worldbank.org/curated/en/105821468332711721/pdf/928660WP0SPANI 00Box385339B00PUBLIC0.pdf

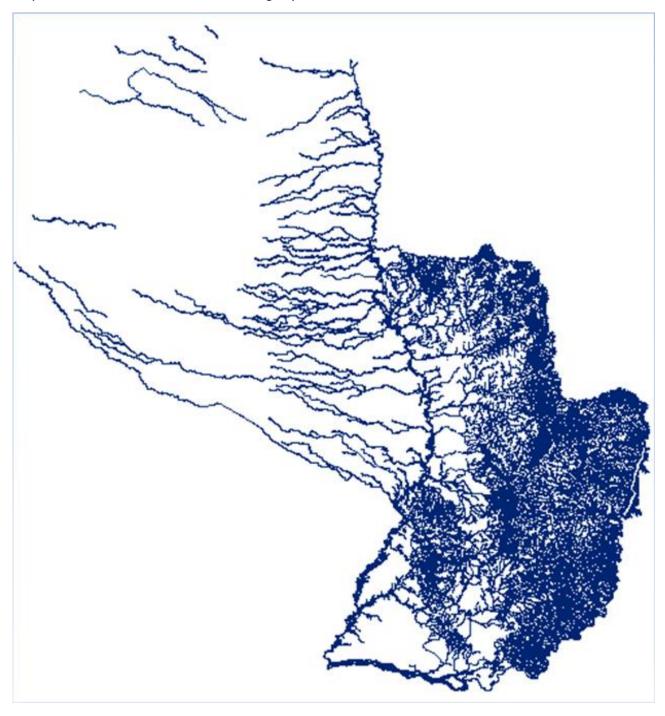


Map 6 - HCV1: Areas providing Environmental Services



Source: Environment Secretariat (Secretaria del Ambiente, SEAM): http://www.seam.gov.py/

Map 7 – HCV 1: Watercourses in Paraguay





Bolivia 100 300 km 200 Totally protected -33% Partially protected PY002 PY005 Not protected Brazil PY003 PY004 PY01 PY014 PY008 PY019 PY021 PY025 Argentina PY020 PY045 PY032 PY041 PY047 PY039 Asunción PY028 PY048 PY046 PY029 Y050 PY053

Map 8 - HCV 1: Protected and unprotected Important Bird Areas in Paraguay (5, 8)

Source: Implementation of High Value Areas for Conservation (HCV) in Agropeco S.A., (Private Reserve Ypetí and Community Aché de Puerto Barra Implementación de Áreas de Alto Valor para la Conservación (AAVC) en Agropeco S.A., Reserva Privada Ypetí y Comunidad Aché de Puerto Barra). World Wildlife Fund Paraguay, December 2015 http://d2ouvy59p0dg6k.cloudfront.net/downloads/informe_final_guyra_py wwf_diciemb re 2015 1.pdf

Infond MAPA DE COBERTURA FORESTAL DEL PARAGUAY AÑO 2011 INSTITUTO FORESTAL NACIONAL INVENTARIO FORESTAL NACIONAL ESCALA 1:3.750.000 2.607.420 **Region Oriental** REFERENCIAS ■ Capitales Departamentales Rios y arroyos principales Datos obtenidos con base a:

-Puntos de verificación de campo a nivel País: 91

- Clasificación Automática y Visual de Imágenes Satelitales
Landset 5TM Año 2.011

-Madis Vegetarien Continuos Field (VCF) 2010

- Cartografía Censal 2.002 de la DGEEC

- SINASIP, 2007

Procesos Generales:

- Clasificación Supervisada y Visual

- Area mínima clasificade: 2 ha

- Bosque 2011: 16.623.387 has

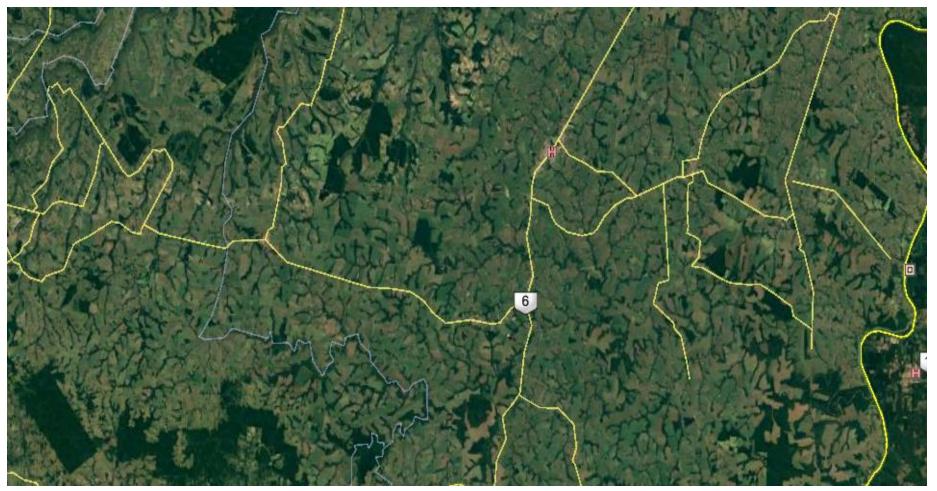
ABRIL - 2014 Departamentos Distritos Cobertura Forestal Cobertura No Forestal

Map 9 - HCV 1: Forests and Protected Areas in Paraguay 2014

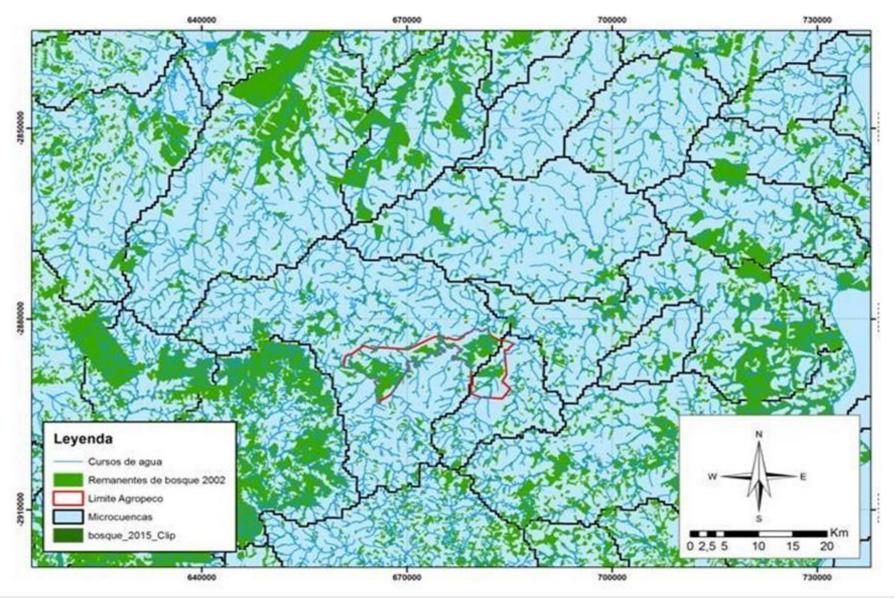
Source: National forest Institute (Instituto Forestal Nacional, INFONA): http://www.infona.gov.py/index.php?cID=296



Map 10: Google Map 2016 same topographic as in map 11

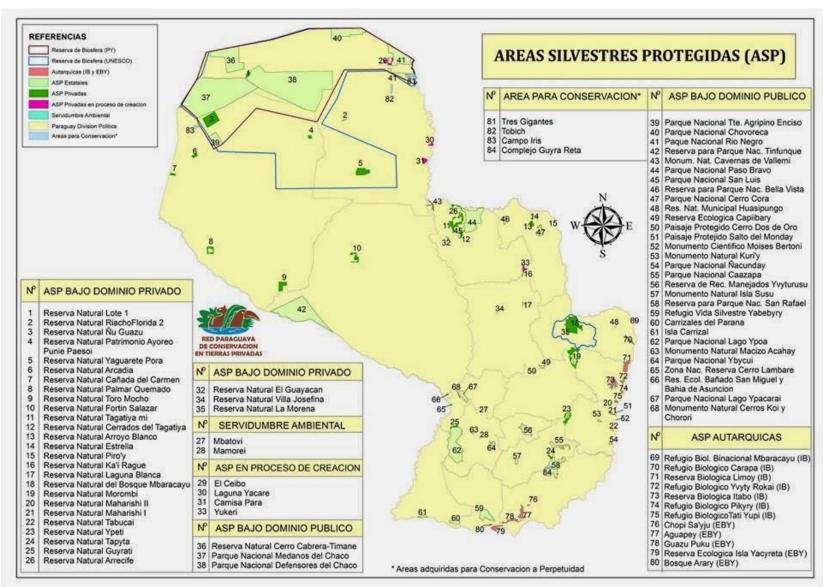


Map 11: Microbasins, water streams and remaining native forests in 2002 (2)

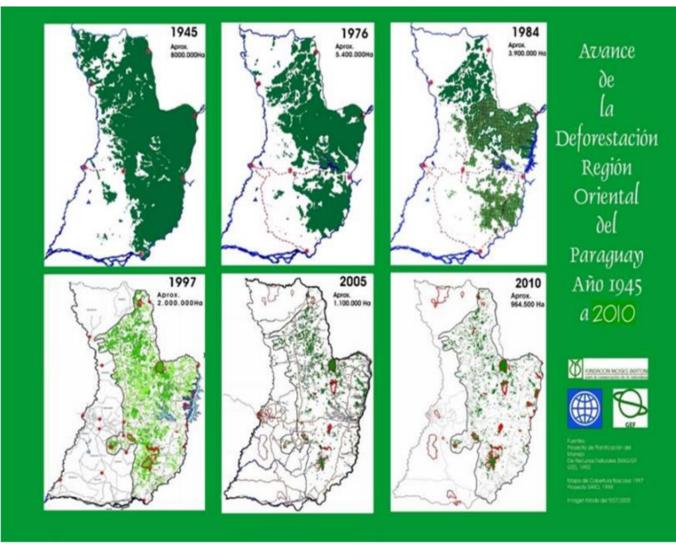




Map 12: Protected Areas (12)



Map 13: Eastern deforestation from 1945 to 2010 (Deforestación Oriente 1945 al 2010) (Fundación Moisés Bertoni/GEF) (7,8)

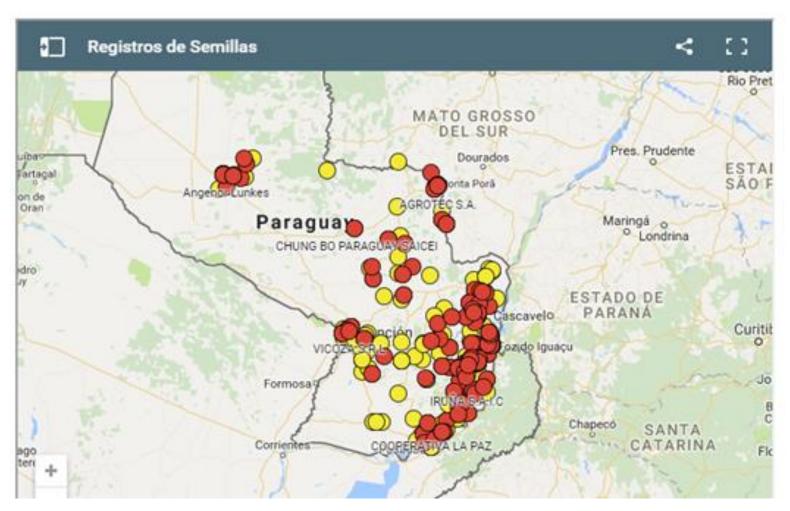


Source: Paraguay National Parks (Parques Nacionales de Paraguay): http://parquesnacionalesdelparaquay.blogspot.com.ar/2016 01 01 archive.html?view=classic



Map14: Locations of Paraguay Seed Registries

SENAVE: Registro de Semillas



Source: SENAVE

Producción Nacional de Soja/ Industrialización Cappro

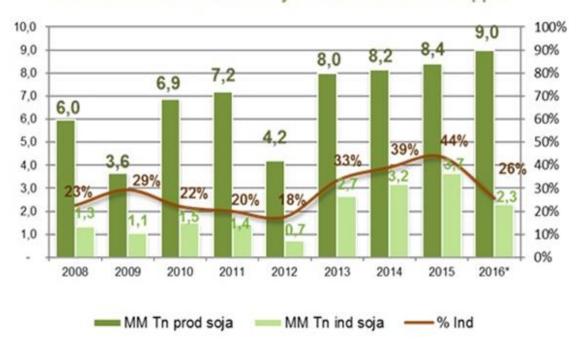


Table 1: Production of Soya from 2008.

Exportaciones de Paraguay-Principales Productos Agroindustriales					
	2012	2013	2014	2015	2016*
Granos de soja	3.161.711	5.081.996	4.831.667	4.575.867	4.837.252
Aceite de soja	122.951	519.102	592.369	698.561	430.028
Harina de soja	491.725	1.945.022	2.285.014	2.498.645	1.518.320
Cascarilla de soja	13.385	75.278	74.920	70.569	61.350
Granos de maíz	2.476.996	2.826.571	2.236.519	3.287.790	915.078
Granos de trigo	1.454.556	440.283	273.547	872.307	420.689

Elaboración propia. Cifras en toneladas. Fuente: BCP

Table 2 - Paraguay Soya Exports 2012 - 2016.

Source for both tables: Cappro: http://cappro.org.py/wp-content/uploads/2013/12/Export- Paraguay Mensual-3.jpg

^{*} datos a julio



Table 3. Properties and parcels of land in the process of consolidation in Eastern Region of Paraguay (2012)

Cuadro 1. PARAGUAY; Región Oriental: Cantidad de lotes administrados por INDERT, total de títulos otorgados y total a Registrar y Regularizar la tenencia de tierra, por Departamento.

Departamento	Lotes administrados por INDERT	Lotes con títulos otorgados	Lotes a Registrar
Concepción	18.335	9.433	8.909
San Pedro	38.837	16.407	23.674
Caaguazú	32.027	16.383	16.264
Canindeyú	18.532	4.424	14.108
Cordillera	8.164	6.887	2.462
Guairá	9.054	5.335	4.443
Caazapá	15.011	8.188	7.809
Itapúa	25.171	21.187	15.152
Misiones	7.359	3.601	4.373
Paraguarí	13.454	11.536	3.942
Alto Paraná	19.128	8.799	11.917
Central	2.567	7.069	44
Ñeembucú	5.989	3.011	3.557
Amambay	9.598	4.063	5.535
Total	223.225	126.323	122.188

Fuente: Base de datos de Colonias habilitadas por INDERT y Títulos otorgados 2012

Source: Instituto Nacional de Desarrollo Rural y de la Tierra (INDERT) 2012

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.

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