

PARTNERING WITH PARAGUAY FOR FOREST CONSERVATION

Towards stronger ADP country collaboration to address
Paraguayan deforestation in value chains and beyond.

A report for dialogue with the Amsterdam Declaration Partnership

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Colophon

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Photo: Soy field in the Atlantic Forest region. By Guyra Paraguay

1. Introduction

The Amsterdam Declaration Partnership (ADP) is based on the Amsterdam Declarations ¹ signed by Denmark, France, Germany, Italy, the Netherlands, Norway and the United Kingdom, recently extended with Belgium and Spain. The overall ambition of the ADP is to achieve deforestation-free, sustainable commodities.

This report is result of an assignment given by the Dutch Ministry of Agriculture, Nature and Food Quality to IUCN National Committee of the Netherlands. The assignment was meant to provide input in an ADP dialogue on Paraguay as a new country for collaboration, next to Brazil.

Aim of this report is threefold:

- (1) To give insight in the situation related to deforestation in Paraguay,
- (2) To provide an overview of relevant activities by ADP countries and major NGOs/programmes to promote good forest and land governance, and
- (3) To provide suggestions for the ADP countries to step up action and collaboration towards zero deforestation and ecosystem conversion in Paraguay and its agro value chains.

This is very relevant from a point of view of climate change, human rights and biodiversity conservation as such, but also of increasing urgency given Paraguayan trade relations to Europe subject to (upcoming) legislation on due diligence, forest/ecosystem risk commodities, and finance.

Paraguay –a country with high rates of deforestation- forms an important source for soy, beef and leather imports in the EU²³⁴. Paraguay is home to the Gran Chaco, which is South America's second-largest forest, behind only the Amazon rainforest, and which is threatened by agricultural development, largely to produce beef and soy⁵. Right now, in the Netherlands (and the EU) much of political and public attention only goes to the deforestation and conversion in the Amazon and the Cerrado, with limited attention to the situation in the (Paraguayan part) of the Gran Chaco, or the Atlantic Forest.

In recent years, however, deforestation especially occurred in the Chaco region, mainly for cattle, which has been pushed there by the large-scale soy expansion over grasslands in the Atlantic Forest region. More recently drought-resistant varieties of soy have been approved for commercial use; therefore, soy expansion into the Chaco is expected soon. It is therefore an important moment for the ADP to engage with Paraguay about the need and opportunity to avoid deforestation and conversion in its international trade chains. Not only in the Chaco, but also in the current main sourcing area of soy, the Atlantic forest region, where deforestation for commodities still occurs and forest cover is below legal requirements on soy farms⁶.

1 <https://ad-partnership.org/wp-content/uploads/2018/10/Amsterdam-Declaration-Deforestation-Palm-Oil-v2017-0612.pdf>

2 https://www.iucn.nl/files/publicaties/european_soy_monitor.pdf

3 <https://www.idhsustainabletrade.com/uploaded/2020/05/IDH-European-Soy-Monitor-v2.pdf>

4 <https://insights.trase.earth/yearbook/context/paraguay-soy/>

5 World Wildlife Fund (n.d.). Gran Chaco. Retrieved from: <https://www.worldwildlife.org/places/gran-chaco>

6 http://www.infona.gov.py/application/files/8115/3480/2832/Decreto_7702_explicacion_grafica.pdf

Within the EU and its member states, deforestation is high on the agenda. This is reflected in the upcoming EU Forest Action plan and related legislation, the Biodiversity Strategy, and Farm to Fork Strategy. It is also an important subject in the Mercosur-EU trade agreements. Part of the trade agreement negotiations the country is under a magnifying glass regarding among others land rights, deforestation, sustainability and human rights.

The ADP is a forerunning community in this respect. However, most attention, here, too, has gone to Brazil so far. Several ADP countries are active in Paraguay: what is the current situation regarding forest conservation, deforestation and regeneration, what is the exposure of ADP countries to deforestation in Paraguay, and what is being done by ADP national governments and the EU as diplomats, financiers and facilitators of processes for forest conservation? How does this offer potential for further collaboration and collective diplomacy?

The reports explores all this, based on study of documents, interviews and the authors' experience of working with and in the country. Suggestions/recommendations are formulated of what can be ADP's roles, and what are potential (additional) interventions in support of forest and ecosystem conservation in Paraguay. Elements include approaches towards private sector actors, the strengthening of legal compliance, land use planning and conservation/restoration programs, and support to (local) civil society to advocate and provide advice for good governance.

The report is meant for further dialogue and agenda setting among ADP countries; its draft findings will be discussed in an ADP country virtual meeting at the end of February 2021, and after a final round of edits a final report will be delivered early March.

IUCN National Committee of the Netherlands, Feb 2021.

Information about IUCN NL and Paraguay

IUCN National Committee of the Netherlands, the Dutch chapter of the International Union for the Conservation of Nature has sustainability at the heart of its mission: safeguarding nature for all life on earth. It has decade long experience with dialogues, advisory work and collaboration to diminish the Dutch footprint on natural resources.

IUCN NL has a track record of working in Paraguay for over 10 years, where it has cooperated with many actors: community based (indigenous) groups, NGOs, financial institutions and agricultural producers. Furthermore, its Paraguayan partners also have a long track record in engaging with national government and working in large NGO networks (e.g. Redes Chaco). With support of IUCN NL partnership resources e.g. the [Shared Resources Joint Solutions Programme](#) has contributed to results on improved ecosystem governance in Paraguay. These include increased transparency, for example concerning land use and land ownership, accessible through a [public app](#), which is managed by Guyra Paraguay. With its partners, Guyra Paraguay, IDEA Paraguay, and WWF Py, IUCN NL has also embarked upon land use planning programs with local municipalities like [Bahia Negra](#), communities and private sector stakeholders.

2. Deforestation in Paraguay – a context analysis

2.1 Deforestation data both regions Chaco vs Atlantic Forest – historic trends and projections

Paraguay is a land-locked country, with numerous rivers which make up the Plata watershed. Its population consists of over 7 million people, the vast majority of which lives in the eastern region. One of the most important natural resources of the country is the forest, with a total of 16,604,857 hectares of forest cover with two distinct types of forest cover or strata: the Chaco Dry Forest and the Moist Forest of the Eastern Region.

Agriculture and livestock sectors greatly influence the economy (GDP and exports) in Paraguay; particularly relevant commodities are beef and soybean. With regards to soy, Paraguay is the world's 6th largest producer of soybeans and soybean oil, and the 4th largest exporter of that grain⁷; it is known that soy cultivation contributes to 8% of its GDP. In terms of beef, Paraguay is the 8th largest exporter in the world, and its production accounts for just over 2% of the national GDP (Central Bank of Paraguay). These commodities greatly influence industry sectors (30% of GDP) and services (40%). It can therefore be argued that soy and beef could have a direct influence on 10% and indirect influence on 70% of GDP.⁸ Together, soy and beef industries have created jobs for around 600,000 citizens of Paraguay⁹, representing an extensive cohort of small, medium, or large-scale producers throughout the country. In large part due to these commodities, national economy has grown at 4.5 % per year on average, since 2004, while poverty has fallen by 49% (World Bank Group, 2019).

Despite the immediately tangible socioeconomic benefit of nationwide agricultural productivity, Paraguay has compromised its vast forest along the way. In fact, Paraguay had lost the greatest share of forest in 2017 than almost any other country on Earth over the previous 15 year period (UNDP GCP, 2018). Furthermore, as these sectors are natural resource intense and dependent on predictable weather patterns and climate characteristics, they are highly-sensitive to climate change, as is the economy of Paraguay¹⁰.

Paraguay's Third National Communication submitted to the UNFCCC in 2017 shows that the land use change and forestry (LULUCF) sector is the most relevant in the country in terms of emissions (73% of total emissions). Official data from the Forest Reference Emissions Levels (FREL) submitted to the UNFCCC in January 2016 and reviewed by UNFCCC experts in 2017, estimates that the average annual deforestation between 2000 and 2015 was 366,319 hectares, causing 58,763,376 tCO₂e/year on average¹¹. According to Global Forest Watch Paraguay lost approximately 6 million hectares between 2001 and 2019, and as such lost the second largest cover of forest in South America¹². Paraguay has significant forest remnants (16.6 million hectares according to data from the National Forest Inventory - 2016), the majority of which are in the Chaco Region. Instituto Forestal Nacional (INFONA) reported in 2020 that only 1.8 million hectares of forests remained by 2020 in the Eastern Region of Paraguay

⁷ <https://capeco.org.py/ranking-mundial-es/>

⁸ Iberglobal, Paraguay IEC.

⁹ "Boletín Trimestral de Empleo", Dirección General de Estadística, Encuestas y Censos, 2019.

¹⁰ <https://www.mspbs.gov.py/portal/21829/-situacion-de-incendios-en-paraguay.html>

¹¹ <https://unfccc.int/resource/docs/2016/tar/pry.pdf>

¹² <https://www.lanacion.com.py/pais/2020/06/15/paraguay-es-el-segundo-pais-mas-deforestador-de-sudamerica/>

(El Trece, 2020)¹³. Also, the local organization Guyra Paraguay has been monitoring the deforestation from 2011 in the Chaco, including Argentina, Bolivia and Brazil showing an average of 410,244 ha/year, and Paraguay leading this process with an average of 136,398 ha/year¹⁴. This all is at odds with the Green Climate Fund recognizing Paraguay for REDD + results over 2015-2017¹⁵.

The analysis for the construction of the (Forest Reference Emission Level) FREL provides evidence that land clearing for cattle pastures and for soybean farms expansion are the main drivers of deforestation, land degradation and loss of associated ecosystem services in the country. Private lands have the highest deforestation rate. As per a USAID report¹⁶, in Paraguay's Chaco region, private lands had the deforestation rate at 1.5 %/year, while the public lands had lowest deforestation rate of 0.3%. While the expansion process of the agriculture and cattle ranching frontier has been constant over the last 40 years, it is only until the 1990's that it has shown a dramatic increase. In recent years, Paraguay has become one of the top five countries with the highest acceleration in deforestation rates. Since 2000, Paraguay's beef and soybean output have each increased by close to 2.5-fold.

Analysing data from agriculture production, reveals an increase of cultivated surface area of approximately 1,700,000 hectares over the 1991-2008 period. The expansion of crops has occurred primarily in the Eastern Region, while the Western Region has experienced growth of the livestock sector. According to data from the National Agriculture & Livestock Census, between 1991 and 2008, the number of farms rose by 22%, representing an increase in surface area of 5,255,625 hectares. A detailed collection of land cover maps are available at "Mapbiomes Chaco Initiative"¹⁷.

Independent statistical and spatial analysis of Paraguay's changing land use patterns using remotely sensed data and governmental statistics¹⁸ corroborate official data on land use change patterns in Paraguay on a national and sub-national basis. Both cattle herd size and soybean harvested area exhibit a strong negative correlation with deforestation in Paraguay at national, regional, and departmental levels. As soybean fields and cattle ranches grow, forested areas shrink, through both legal and illegal deforestation. A recent report of September 2020 reports more than 5500 deforestation for soy and cattle in the Paraguayan Chaco between June 2019 and May 2020 that occurred without a license, in breach with required environmental impact measures and/or in natural forest/protected areas; i.e this 5500 is potentially illegal¹⁹.

Furthermore, independent results indicate that soybean land area and cattle herd size in Paraguay are strongly correlated, particularly in the decade leading up to 2016, when both soybean harvested area and cattle herd size were growing at nearly the same rate, over 3 percent annually. There is a strong correlation between expanding soybean farms in Paraguay's Eastern Region and expanding cattle herds in the Western Region. This corroborates the assertion that ranchers in Paraguay's Eastern Region are selling pastureland in the East to soybean farmers and clearing forested land in the Western

¹³ <http://www.trece.com.py/actualidad/ley-de-deforestacion-cero>

¹⁴ Guyra Paraguay. Monitoreo de la deforestación del Gran Chaco – Informes anuales <http://guyra.org.py/informe-deforestacion/>

¹⁵ <https://www.greenclimate.fund/project/fp121>

¹⁶ https://www.land-links.org/wp-content/uploads/2017/06/USAID_Land_Tenure_TGCC_Paraguay_Risk_Assessment_June-2017.pdf

¹⁷ <https://mapbiomas-chaco-site-stg.herokuapp.com/>

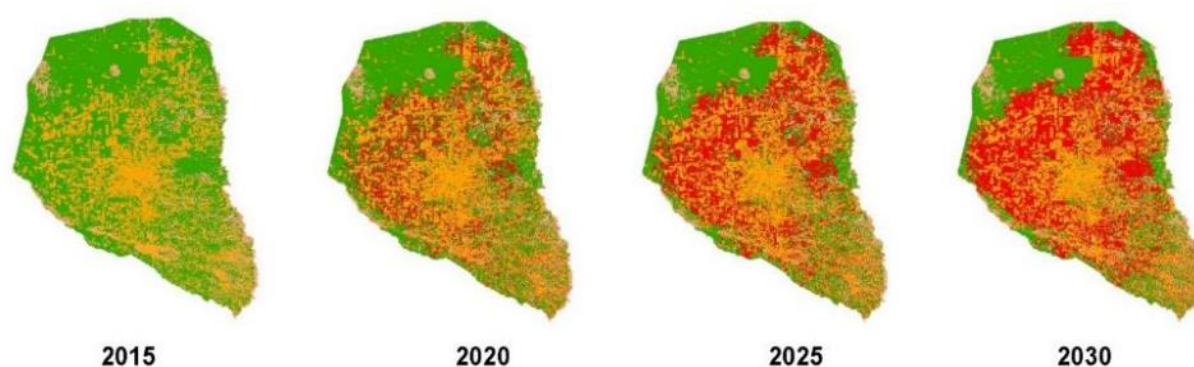
¹⁸ Larsen, Janet (2018) Agricultural drivers of land use change in Paraguay, Masters project Nicholas School of the Environment of Duke University. Accessed at :

https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/14210/Larsen_MP_Paraguay_Deforestation_and_Agriculture_Duke.pdf?sequence=1&isAllowed=y

¹⁹ Mighty Earth (2020) Rapid Response Soy and Cattle Report- Paraguay, Sept 2020. <https://www.mightyearth.org/wp-content/uploads/2Paraguay-Report-September-2020-version1.pdf>

Region for new pasture. Almost no soy has been planted in the Western Region; however, research under way may make western soybean expansion a possibility in the future. This points to the fact that unless soy production can be sustainably intensified in the Eastern Region, it will likely move into the Chaco displacing pastureland which will further encroach into forest areas.

According to recent modelling scenarios the estimate is that if business continues as usual, by 2028 there will be an additional loss of almost 4 million hectares of forest in Argentina and over 7 million hectares in Paraguay²⁰.



Uso del suelo	2015	2020	2025	2030	Cambio (ha)	Porcentaje de transición
Bosque	14.154.000	11.365.400	9.071.900	7.249.500	-6.904.500	↓ -49
Ganadería	7.132.300	9.897.000	12.176.900	13.988.200	6.855.900	↑ 96
Agricultura	19.100	23.300	26.700	29.500	10.400	↑ 54
Otras coberturas	5.800	5.800	5.800	5.800	0	→ 0
Cobertura natural no boscosa	2.765.200	2.784.800	2.795.000	2.803.400	38.200	→ 1

²⁰ Source: Presentation Guyra Paraguay project Collaboration for Forest and Agriculture WWF/Guyra Paraguay with the support of Gordon & Betty Moore Foundation.

2.2 Legal and policy context in Paraguay – deforestation laws plus agricultural and market policies

Main components of the Law on protecting forest and HCV areas

In Paraguay environmental protection is foreseen in the constitution (principally articles 7, 8 and 38) and forests are protected by the terms of the constitutional provisions. Paraguay has also signed the main international treaties on environmental issues and they have a hierarchy superior to that of other laws (Article 137, Constitution).

Law 422/3 "Forestry" is the first forestry law (from 1973) and, also, the first environmental law of Paraguay. Originally, it covered not only the regulation of forests and forest lands, but also hunting, fishing and the establishment of protected areas. At present - after some partial derogations and Laws that regulated in greater detail some of the mentioned aspects – the Law regulates the rational use of forests and forest lands, prohibiting their devastation and establishing that they cannot be used without authorization from the enforcement authority (See annex 2 for a list of relevant laws).

Natural forest areas

The Law and its Regulations establish that 25% of the forest present in 1986 on rural properties larger than 20 ha has to be left (Walcott, Thorley, Kapos, Miles, & Wo, 2015). If those forests have already been eliminated before the entry into force of this legal provision in 1986, they must reforest 5% of the property or the total forest area from 1986. These legal reserves of natural forests are the same for the entire country; the fragility of the different biomes is not taken into account.

Law 3001/06 on environmental services stipulates that properties, where the obligation to maintain the legal reserve of natural forests has not been fulfilled before the entry into force of this law, can compensate this non-compliance in two ways, see section on 'cut-off date'.

The maintenance of natural forests is not exempt from taxes. In the case of forest plantations (or cultivated "forests"), the law establishes some subsidies and tax exemptions.

In accordance with Law 294/93 and its regulations (Decree 453/13, text according to Decree 954/13), the use of native forests requires an environmental impact assessment (EIA) for properties of more than 500 hectares dedicated to agriculture and livestock in the Eastern Region or more than 2000 ha in the Western or Chaco region²¹.

Any change in land use of 2 hectares or more for productive purposes ("legal deforestation") must do an EIA, irrespective of the size of the property. In the case of reforestations or "forest cultivation", the management plan itself (which must consider the environmental variable) is sufficient, except when it concerns monocultures of 1,000 hectares or more that do require an environmental impact evaluation.

²¹ As laid down in Decree 954/13 (that changed partially Decree 453/13)

Natural forest areas – Eastern region only

In the Eastern Region, Law 2524/04, known as the "zero- deforestation law", was enacted in late 2004 and prohibits the change of land use of natural forest surfaces. This Law has recently been extended until December 31 2020.

Productive forests

Additionally, the Law (Laws 422/73, 3239/07 and 4241/10) establishes the maintenance of protective forests, as for example along watercourses, or as windbreaks and in areas with steep slopes that are not counted as part of the natural forest reserves).

This Law and the obligation to reforest along water courses already exists implicitly since 1973 but is made explicit since 2007. Since the enactment of the regulatory Decree of Law 4241/10 (2010), the width of the strip of protective forests along water channels is related to the width of the channel. All the legal norms mentioned above apply to privately owned land.

Other HCV areas - protected areas and species

There is no specific law that protects HCV areas (Molas, 2018). There are, however, various laws on protected areas and species. There is for example 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 and several other, more specific, acts, such as Act No 96 on wildlife, Act No 3239 of 2007 on the water resources of Paraguay²².

National Parks belong to the State and that which is not yet state property should become so in the future. There are also protected areas under private ownership, but they are not the majority. The law that regulates the national system of protected wild areas is Law 352/94 (Áreas Silvestre Protegidas). Paraguay has also ratified and adopted most conventions on protected areas, fauna and flora (NEPCON, August 2017)²³.

Wetlands

The Congress recognized in 1994 the Convention on Wetlands of International Importance (Law No. 350). Besides, there is national legislation that protects wetlands in general. Authorities have to further decide which activities are allowed, and which ones could harm the ecosystem. The Ministry of Environment and Sustainable Development (MADES), through its General Directorate for the Protection and Conservation of Water Resources, protects wetlands and manages the management thereof for the purpose of conservation (Molas, 2018)²⁴.

²² NEPCON aug 2017, Soy Risk Assessment Paraguay, version 1.1 https://preferredbynature.org/sites/default/files/library/2017-08/NEPCon-SOY-Paraguay-Risk-Assessment-EN-V1_1.pdf

²³ 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 (Ley 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 Jejuí river basin (Ley No 112 para establecer y conservar la reserva natural del bosque del Mbaracayu y la cuenca que lo rodea del río Jejuí), 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), (NEPCON, August 2017).

²⁴ Personal email communication of authors with E. Molas in 2018

2.3 Forest types and areas where deforestation is not allowed

- The Forest Law has Regulations for natural forest areas only;
- The Forest Law has requirements for protective forests (for watercourses, or as windbreaks and in areas with steep slopes), which are not part of the natural forest reserves;
- Beside this, there are additional laws that protect areas: 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 (NEPCON, August 2017);
- Paraguay has 22 wetland regions of which 6 have been recognized as Ramsar sites. However protection and regulation is very limited.

2.4 Is there a cut-off date and if yes, which one?

The Forest Law has as legal requirement to set aside and protect 25% of all forested land that was present in 1986 on a given rural property since the establishment of this Regulation in 1986. Where the obligation to maintain the legal reserve of natural forests has not been fulfilled, one should compensate this non-compliance by:

- Reforesting 5% of the property or;
- Reforesting the area to the forest area surface from 1986.

There are two options to comply with this obligation:

- With certificates of environmental services of other properties in which natural forests have been certified above the legal obligation;
- The alternative is to reforest. Decree 7031/17 allows that reforestation is to be carried out with a minimum of 40% of native species.

There is also an obligation to reforest productive forests along water courses.

There is no date before which you have to fulfil with the obligation, this is negotiated per property with the legal authority, when they decide to act upon it as part of the renewal of the environmental license.

Eastern Region: 2004

The Zero Deforestation Law was enacted in 2004 for the Eastern Region and since then deforestation of native forests is prohibited. However, at the time the Law was enacted, some landowners already submitted their Environmental Management Plans and only those that already received approval could deforest within a land use plan for 5 years – until 2009 (Molas, 2018) ²⁵.

According to information provided by INFONA, as of 2019, the loss of 600,000 hectares of forest has been reported in the Eastern Region since the enactment of the Law in 2004 (IP, 2019). In 2017 alone, Trase estimates there was almost 8,000 ha of illegal soy deforestation risk in exports from eastern Paraguay.

²⁵ Personal email communication of authors with E. Molas in 2018

Compensation

The Forest Law has a compensation component for those lands that do not meet the required 25% of legal reserve on their rural property.

Reforestation

In the case of forest plantations (or cultivated "forests"), the law establishes subsidies and tax exemptions (**Law 536/95** and its amendments). In practice, subsidies have rarely been granted and only tax exemptions apply. Additionally, to promote reforestation, **Law 4890/13** (2013) created the formal right of forest surface that allows to separate the ownership of the land from that of the trees and allows the constitution of a guarantee right over them. Theoretically, this should facilitate credits for reforestation. In practice, it is a law still little used.

2.5 Recent changes in the Forest Law

The Forest Law itself is not changed and exists already since 1973. In the last years, there have been partial derogations and Laws that regulated in greater detail some of the aspects under the general Forest Law, such as Decree 453/13 or Law 4890/13 (both from 2013).

Another example is the protection of watercourses with protective forests. This obligation already existed since Law 422/73 (1973) but came into force with Law 3239/07 (2007). Law 4241/10 (2010) "reinforced" that obligation but allowed the width of these protective forests to be reduced. Since the enactment of the regulatory Decree of Law 4241/10, the width of the strip of protective forests is related to the width of the channel (before it was defined to for example 100 m in the Chaco), (IDEA, 2018).

Law No. 2524/04 on zero deforestation is currently in force in the Eastern region and has recently been extended to December 2030, by Law No. 6676/20.



Photo: Cattle ranching in the Chaco region. By Guyra Paraguay

2.6 Enforcement mechanism

Responsible organizations

- The recently created Ministry of Environment and Sustainable Development (MADES) is responsible for applying the laws of environmental impact assessment, environmental services, deforestation and protected areas and for the environmental provisions of the Forestry Law (IDEA, 2018);
- INFONA, the National Forestry Institute, is in charge of applying the forest laws in everything that does not fall within the competence of the MADES (IDEA, 2018).

Enforcement

Finally, as regards environmental criminal legislation (mainly, Law 716/96 and Penal Code), carrying out works or activities without an environmental license or without complying with it is a crime. Pollution of water, soil or air, processing waste illegally or damaging protected areas are also crimes. Deforesting illegally causing serious damage to the ecosystem is a crime. All these punishable acts are of public criminal action and are to be investigated and prosecuted by the Public Ministry. There are, however, no specific legal rules for environmental damage caused by citizens (IDEA, 2018).

Level of enforcement

Paraguay's legal framework on the environment, to regulate illegal deforestation, protected areas and threatened and endangered species is sufficiently developed (Dam, An analysis of sustainable land use in the Chaco region (Paraguay), 2015). However, the application and enforcement of the Law is problematic, due to:

- One of the most notable points is the notorious lack of political will on the part of the national authorities to enforce the laws. This low political will results in a very low capacity of implementing institutions to apply laws, mainly because of the very low budget they have (on average, both the MADES and the INFONA have assignments equivalent to 0.06%, each, of the total General Budget of the Nation. Many times, its limited capacity to apply environmental and forestry law depends on international cooperation, such as large programs from UNDP, USAID or the World Bank (IDEA, 2018). (Paraguay.com, 12 April, 2016) Also mentions about the poor performance of prosecutors and judges in cases of deforestation. Even if illegal cases are detected, the lack of application of sanctions or procedures against the transgressors of environmental laws evidences a weak Public Ministry and Judiciary. They are not very transparent and complacent with the power groups. Corruption and lack of transparency, together with impunity, are the worst enemies of forests and their resources.
- In 2012-2013 there have been 175 registered complaints in the departments of the Paraguayan Chaco in relation to the transgression of Law 716/96. Also (INECIP-Paraguay, 2016) concludes that the amount of personnel and infrastructure available to the Public Prosecutor's Office is insufficient for an effective criminal prosecution of punishable offense. Nonetheless, although very uncommon, a conviction has taken place for illegal deforestation after a complaint presented by the Institute of Environmental Law and Economics (IDEA) in June 2019. The defendant recognized incurring in environmental crimes and was sentenced to restore natural forests and acquire certificates of environmental services in order to repair and

compensate for damages. The accused was granted a conditional suspension of the proceedings (Abc color, 2020)²⁶.

- Limited capacity (and budget) is also mentioned in the article from (BENÍTEZ, 2018), mentioning about the limited number of park rangers in the country which have to control national parks and reserves. Also, the Institution of the National Parks, part of the Ministry of the Environment in charge of dealing with all environmental complaints at the national level, has only 12 auditors throughout the country to fulfil this function. (Connectas, 2018) mentions that just eight rangers, several of them with no other resources than their own bikes, must take care of 75,000 hectares that make the San Rafael Reserve (Caazapá-Itapúa) and Ñacunday National Park (Alto Paraná).
- According to (NEPCON, August 2017), there is a risk that the existing laws relating to forests, protected sites and species are not upheld consistently by all entities and often ignored and are not enforced by relevant authorities. Another highlight is that, despite the fact that the conservation and restoration of the environment and natural resources are constitutional obligations for the State and its different agencies, it does not assume its commitment.

As was mentioned during the interviews “Corruption and lack of transparency, together with impunity, are the worst enemies of forests and their resources.”



Photo: Cattle in the Chaco region

²⁶ <https://www.abc.com.py/nacionales/2020/08/10/empresario-debera-reparar-e-indemnizar-deforestacion-ilegal-en-el-chaco/>

2.7 Market context

Soy and beef are vital to the Paraguayan economy. Paraguay is the world's fourth largest soy exporter, selling 9.5 million tons in 2018²⁷. Soy accounts for 50% of Paraguay's exports²⁸ and beef a further 15%²⁹.

In 2014 the Paraguayan government launched its 2030 National Development Plan (NDP)³⁰. It aims to create a sustainable and competitive economy, introduce a more transparent approach to territorial management and increase national GDP by 6.8% a year in the process. Given the importance of agriculture to Paraguay's economy, such ambitious growth will likely put further pressure on the country's remaining forests.

Mekon Ecology (2020) wrote a report on the beef and leather trade chains in Latin America and their export to Europe, giving more details than we can do here on the sector. Paraguay hardly sells beef to Europe but it does sell much of its leather to Europe (see chapter 3). Its beef goes mainly to Russia, Chile Brazil, Hongkong and others. Of the 81 companies sourcing beef, dairy and leather, only 15 have sustainability and deforestation commitments. Cattle has been the major driver of commodity related deforestation in the Paraguayan Chaco so far³¹.

Soy has been growing mostly in the Atlantic zone, where a zero deforestation law has been in place since 2004. Despite this, illegal deforestation for commodities is still happening, as well as illegal cultivation of soy -caused by a lack of forest cover on farm according to the Paraguayan law.

Soy production has not yet been developed at a large scale in the Chaco. The main bean varieties planted are not suitable to the Chaco's dry conditions and the roads can be heavily flooded, making them sometimes impassable for trucks. Nevertheless, soy production has increased in recent years — the land area used to cultivate soy in the Paraguayan dry Chaco went from zero hectares in 2011 to 5,315 hectares in 2018³². In November 2019, the Paraguayan government approved the introduction of a new drought-resistant soybean variety³³. This makes it easier to grow soy in the dry Chaco. Land is currently far cheaper there than in eastern Paraguay, and as there is no deforestation moratorium to protect the area, it seems likely that large-scale soy agribusiness could come up in the region. Soy has reportedly gone up to an estimated 45.000-90.000 ha in the Chaco throughout 2019/2020/2021³⁴, but in 2020 it was hit by drought and pests. Soy is mainly used as rotation crop on pastures, against soil compaction, weeds and as animal feed. No high export is to be expected soon, but physical characteristics of the Chaco would allow for up to ten times the actual area, and the adaptation of the varieties to the characteristics of the area continue³⁵. It is therefore an important opportunity to engage with producers in this region to prepare for deforestation/conversion free responsible production.

²⁷ <https://trase.earth/dashboards/new?countries=176&commodities=1>

²⁸ <https://oec.world/en/profile/country/pyr/>

²⁹ <https://medium.com/trase/delivering-transparency-for-sustainable-agriculture-in-paraguay-c833ae31d5ee>

³⁰ <https://plataformacelac.org/en/politica/111>

³¹ <https://mekonecology.net/wp-content/uploads/2020/12/Mekon-Ecology-2020-Beef-Leather-Supply-Chain-Latin-America-Europe-vFINAL.pdf>

³² <http://www.mag.gov.py/index.php/institucion/dependencias/sintesis-estadistica>

³³ <https://www.nsagriculture.com/news/verdeca-paraguay-hb4-soybeans/>

³⁴ <https://mekonecology.net/wp-content/uploads/2020/12/Mekon-Ecology-2020-Beef-Leather-Supply-Chain-Latin-America-Europe-vFINAL.pdf> <https://www.abc.com.py/nacionales/2021/01/31/resaltan-potencial-para-el-desarrollo-de-cultivos-agricolas-en-el-chaco/>

³⁵ see video for experiments CAPECO/USDA and Chortitzer cooperative:
<https://www.youtube.com/watch?app=desktop&v=03QvAp5o9HQ>

2.8 Related social conflicts

Soy grown in communities is often carried out under the guise of a mutual cooperation agreement (disguising the rental of land) where, for tiny sums, soy producers access indigenous lands, in some cases without complying with any regulatory environmental framework. Indigenous communities are subjected to pressure by producers, whether for arable land or for pasture, in order to be able to use their lands. This has severe consequence on their way of life³⁶.

The effects of deforestation have economic impacts because indigenous peoples in Paraguay base their economy on diversification, that is, they collect from the forest, hunt in the forest and in small clearings they practice agriculture or small livestock. These communities, due to their close relationship with nature, tend to be the most affected by the adversities of land use change and climate change.

In relation to communities without secured land, there is still a lack of compliance with the judgment of the Inter-American court that has established that Paraguay must improve its legal framework for effective compliance with the legalization and titling of the lands claimed by indigenous peoples^{37 38}.



Photo: Peasant women walking through a field of soy. Photo by Luis Wagner

³⁶ https://lib.ohchr.org/HRBodies/UPR/Documents/Session10/PY/AI_AmnestyInternational_eng.pdf

³⁷ https://www.corteidh.or.cr/docs/casos/articulos/seriec_125_ing.pdf

³⁸ https://www.corteidh.or.cr/docs/casos/articulos/seriec_146_ing.pdf

3. Deforestation exposure of ADP countries

3.1 Trade relations between Paraguay and the ADP countries

General exports from Paraguay

Paraguay mainly exports to Brazil, Argentina, Chile and Russia: in 2018, over 70% of Paraguayan exports went to these countries. The Netherlands (1.73%) ranks 6th and Italy 8th (1.68%) in the list of export countries for Paraguay. The other ADP countries are less important export partners for Paraguay.

This table shows the exports from Paraguay in 2018.

Rank	Importing country	Export (US\$ thousand)	Export partner share (%)
1	Brazil	2,808,903	31.06
2	Argentina	2,188,459	24.20
3	Russia	783,762	8.67
4	Chile	624,621	6.91
5	India	247,329	2.74
6	Netherlands	156,663	1.73
8	Italy	152,066	1.68
12	United Kingdom	104,142	1.15
20	Spain	49,451	0.55
22	Germany	44,422	0.49
26	France	33,078	0.37
28	Denmark	31,588	0.35
57	Belgium	3,837	0.04
69	Norway	2,110	0.02

This means the ADP countries accounted for 6,38 % of total Paraguayan export in 2018.

In 2018, the top exports of Paraguay were Soybeans (US\$2.23B), Soybean Meal (US\$945M), Frozen Bovine Meat (US\$653M), Soybean Oil (US\$473M), and Bovine Meat (US\$449M)³⁹. The largest share of the exports from Paraguay to the ADP countries consists of soybeans and soy meal. Other important categories are beef, hides and skins (leather), wood and chemicals. Norway's imports from Paraguay mainly consist of metals and chemicals⁴⁰.

General imports into Paraguay

Paraguay mainly imports products from China, Brazil, Argentina and the United States. ADP countries the Netherlands (3.47%) and Germany (2.15%) are relatively important exporters to Paraguay. The other ADP countries are less important import partners for Paraguay⁴¹.

³⁹ OEC (n.d.), *Paraguay*, online: <https://oec.world/en/profile/country/pry>

⁴⁰ World Bank (n.d.), *World Integrated Trade Solution*, "Paraguay Exports by country 2018", online: <https://wits.worldbank.org/CountryProfile/en/Country/PRY/Year/2018/TradeFlow/Export/Partner/by-country>

⁴¹ World Bank (n.d.), *World Integrated Trade Solution*, "Paraguay Imports by country 2018", online: <https://wits.worldbank.org/CountryProfile/en/Country/PRY/Year/2018/TradeFlow/Import/Partner/by-country>

The next table shows the imports to Paraguay in 2018.

Rank	Exporting country	Import (US\$ thousand)	Import partner share (%)
1	China	3,764,178	28.23
2	Brazil	2,978,400	22.33
3	Argentina	1,330,975	9.98
4	United States	1,088,789	8.16
5	Netherlands	462,357	3.47
7	Germany	286,571	2.15
14	Spain	142,662	1.07
17	France	131,111	0.98
19	Italy	92,691	0.69
24	Belgium	62,506	0.47
25	United Kingdom	58,365	0.44
48	Denmark	10,090	0.08
60	Norway	3,020	0.02

The largest share of import products from the ADP countries to Paraguay consists of fuels (the Netherlands and UK), machines and electronics, transportation and chemicals (Germany, France, Italy, Norway), wood (Norway) and food products (UK).

Imports of Paraguayan beef, leather and soy in EU/ ADP countries

Below we give some data about the imports of beef, leather and soy in EU or ADP countries. This is not a complete picture at all, but an indication of relevance to work towards deforestation free responsible value chains to comply with both Paraguayan and upcoming EU (import/ due diligence) or ADP country legislation (eg France, UK).

What is missing here is data on financial institutions from EU/ ADP countries lending to or investing in the beef /leather/soy sector in Paraguay. For example, from the Netherlands, FMO and Rabobank are indirectly involved in the sector. This assignment did not allow for this, but it is recommended to do a further study of ADP (country) exposure to deforestation and HR risks related to both agro commodity imports from Paraguay as well as to lending/investment in the sectors in PY, directly or through Paraguayan banks.

Beef

None of the ADP countries features in the top 10 of importers of Paraguayan beef.⁴² Between 2011 and 2015, the EU banned beef imports from Paraguay due to a Foot-and-Mouth disease outbreak. After 2015, European companies started to import beef from Paraguay again. For example, major Dutch meat importer Jan Zandbergen reported in 2015 “to add Paraguayan grass-fed beef to its product range. The first containers have now arrived and are available for sale in the EU market.”⁴³ EU market access for Paraguayan beef will to a large extent depend on the approval of the EU-Mercosur trade deal.

According to Trase data, in 2018, the European Union was exposed to 6,500 hectares of cattle-related deforestation risk through direct trade to EU. This amounts to 2.7% of the total cattle deforestation risk of beef produced in Paraguay (243,500 hectares). The ADP countries the Netherlands, Italy, the

⁴² Trase (n.d.), *Trase Earth*, online: <https://trase.earth/>

⁴³ Jan Zandbergen (2015, 30 July), *Jan Zandbergen offers grass-fed beef from Paraguay*, online: <https://www.janzandbergen.nl/en/grass-fed-beef-paraguay/>

United Kingdom and Germany were responsible for about 95% of the EUs exposure to cattle-related deforestation risk in Paraguay.⁴⁴

Leather

Paraguay exports leather to Europe for furniture, fashion, and cars. A 2020 report of the NGO Earthsight linked Italian tanneries and British (Jaguar Land Rover) and German (BMW) car producers to deforestation-related cattle production in the Chaco in Paraguay. 60 % of Paraguayan export goes to Italy. Earthsight reports that “The leading importer of Paraguayan leather is Italian firm Pasubio, one of the largest leather producers in Europe. An estimated 39 per cent of Paraguay’s leather exports are destined for this one company, which relies on the automotive industry for upwards of 90 per cent of its €313 million in annual sales. Other important Italian buyers of Paraguayan leather include Gruppo Mastrotto, Europe’s largest tannery with a growing automotive segment”⁴⁵.

Soy

In 2018, European countries imported 1,5 million tonnes of soy (around 4% of total EU soy consumption) from Paraguay⁴⁶. The Netherlands is the main EU import country for soy, but in 2018 the United Kingdom and Italy were the most important ADP-importers of Paraguayan soy. Between 2015 and 2017, Spain, a large soy user, was in the top 10 of importers of Paraguayan soy⁴⁷.

In 2017, the total soy deforestation risk of soy produced in – and directly exported from- Paraguay was 7.926 thousand hectares. Of this total, Italy (7% of total), Spain (5.5%), United Kingdom (4.5%), Germany (3%) and the Netherlands (2%) were the most exposed ADP countries⁴⁸. However this only concerns the direct trade. It is important to note that 2018 knew an increasing share of soybeans being exported to Argentina, and from there in part also to Europe. In the years prior to 2018, a larger share of the exports went (directly) to countries on other continents. In 2017 this amounted to 10.01% and in 2016 to 11.26%, but in 2018 only 6.38% of the total Paraguayan exports went to the ADP countries.

The trend to export to -or through- Argentina has continued. A report by the Cámara Paraguaya de Exportadores y Comercializadores de Cereales y Oleaginosas (CAPECO) stated that in the first 3 months of 2020, out of the 2.1 million tonnes of exported soy, 85% was destined to Argentina, 6% to Brazil, 1% Russia and the remaining 8% to Italy, the USA and Senegal (La Nación, 2020)⁴⁹. This indicates there was hardly any *direct* trade of soybeans to Europe lately. However, it is expected that from the Argentinean trade to ADP, a considerable part was originally from Paraguay, partly for economic reasons related to changes in soy export taxes in Argentina⁵⁰. **It is important to mention here, that this indirect trade from Paraguay to ADP will also be subject to EU due diligence or forest risk commodity legislation once in place, thus affecting Paraguayan production and trade.**

⁴⁴ Trase (n.d.), *Trase Earth*, online: <https://trase.earth/>

⁴⁵ Earthsight (2020), *Grand Theft Chaco*, p. 25, online: <https://www.earthsight.org.uk/media/download/962>

⁴⁶ IDH (2020), *European Soy Monitor 2019*, p. 20, online: <https://www.idhsustainabletrade.com/uploaded/2020/05/IDH-European-Soy-Monitor-v2.pdf>

⁴⁷ Trase (n.d.), *Trase Earth*, online: <https://trase.earth/>

⁴⁸ Trase (n.d.), *Trase Earth*, online: <https://trase.earth/>

⁴⁹ <https://www.lanacion.com.py/negocios/2020/04/21/exportaciones-de-soja-paraguay-se-concentran-en-mercados-regionales/>

⁵⁰ <https://www.fas.usda.gov/data/argentina-new-export-tax-rates-argentina>

The next table shows the share of Paraguayan exports of soybeans, soybean meal, soybean oil, frozen bovine meat, bovine meat, tanned equine and bovine hides that went to the combined ADP countries in 2016, 2017 and 2018. **Soybeans, soybean meal and bovine hides (leather) stood out as very relevant, and therefore are market-based leverage points for the ADP.**

Also, further investigation and engagement with Argentina, Brazil and China are important for their economic relations with Paraguayan commodities.

Table: Exports from Paraguay to the combined ADP countries, indicating market share of ADP⁵¹.

Commodity	ADP % 2016	ADP % 2017	ADP % 2018
Soybeans	20,05	17,9	4,4 (rest through Argentina?)
Soybean meal	33,91	27,7	22,8
Soybean oil	4,84	5,26	12,59
Frozen bovine meat	1,22	1,57	1,32
Bovine meat	5,46	5,37	5,48
Tanned equine and bovine hides	47,92	58,23	44,31



Photo: Soy silos

⁵¹ OEC (n.d.), *Paraguay*, online: <https://oec.world/en/profile/country/pry>

4. Existing initiatives by ADP countries and other related programs

Quick scan of available info on initiatives impacting and/or contributing to ADP goals.

4.1 ADP country and EU involvement in Paraguay

The ADP group has different experiences, projects, positions and resources to offer to collaboration in Paraguay. GIZ and KfW, who carry out programmes for the German BMZ have an extensive experience and network, and are very valuable for other ADP countries with finding their way into the government structures. Also UK programme is established in that sense and Denmark's programme is small but dedicated to value chains and conservation. The Netherlands so far has mostly engaged with Paraguay through civil society organizations involved in conservation, including IUCN NL, WWF, and their local partners IDEA and Guyra. Spain must have a lot to offer in terms of programs and knowledge, but unfortunately is not yet actively involved in this collective effort, not having forests as a priority so far in the country. France has established contact with Paraguayan Embassy in Paris related to its work against deforestation in value chains and Italy is also taking steps to come further on board of the ADP ambitions.

The table below gives a short overview, please correct and add where applicable. Please see annex 1 for contact details.

Country	Country programs and government supported initiatives
Belgium	PY is not a partner country, probably no govt funded programs.
Denmark	Embassy in Buenos Aires, not in PY; programme on water and energy. In Denmark there is a lot of attention for deforestation in DK trade, among others by soy, and attention goes to ARG, PY and Uruguay; the Embassy is interested in further collaboration with ADP countries on the topic.
France	Obtained support of PY Embassy in Paris to the France Alliance for Tropical Forest Conservation (soy/palm oil/cattle, other). Deforestation free import very relevant for France: https://www.deforestationimportee.fr/fr . Link with French Embassy in Asuncion still to be made, Paraguay not yet part of top 10 producing countries for government to government Roadmaps.
Germany	Project Biodiversity and Protected Areas, with PY Ministry of Environment and Sustainable Development-MADES, and German Development Bank KfW- in preparation. Strengthening system of protected areas (SINASIP), esp 6 protected areas in Chaco Biosphere Reserve; institutional support to MADES. BMZ also supports Paraguay through GIZ: (1) FortaleceRES: support of vulnerable communities in Eastern PY with sustainable agriculture, soil protection and agroforestry (2) ProCadenas- co financed by EU, cooperation with PY Ministry of Agriculture and Cattle Ranching (MAG): sustainable livestock rearing ao in Chaco/Alto Paraguay- Pantanal area. (3) develop PPP: private sector cooperation with cooperative (Volendam) for silvo-pastoral land use. Fact sheets on BMZ projects available. Also CSO support through IKI donor programme, ao WWF.

4. Existing initiatives by ADP countries and other related programs

Country	Country programs and government supported initiatives
Italy	In reorientation and decision-making phase as DG has entered pension phase, new DG has been asked for reaction. Interview to be done.
Netherlands	<p>Does not have direct diplomatic mission in PY, but has Embassy in Buenos Aires instead, just like Denmark. It seeks to strengthen its relation to PY for deforestation free value chains and forest conservation, in close cooperation with other ADP countries.</p> <p>The Power of Voices Programme (2021-2025) of Ministry of Foreign Affairs supports cooperation on the topic by among others Dutch international CSOs, including: Solidaridad, Friends of the Earth and WWF (esp. Chaco). The WWF program is called Amplifying Voices for Just Climate Action: inclusive conservation and climate change action by CSOs, not directly linked to deforestation free value chains. Additional support for Dutch Fund for Climate and Development (DFCD) green loans for deforestation free production as for PY.</p> <p>Support from FMO to Paraguayan banks, including guidelines how to scan for illegal deforestation among their clients.</p> <p>Experimental programme on land use options Chaco by Wageningen University (WMFC)</p>
Norway	Current chair of ADP. PY is not a primary focus. Norway has supported CSO reports on Paraguay of Aid Environment and Mighty Earth (NB: info of their reports is used for report). Contacts Aid Environment and Mighty Earth available.
Spain	Spain has diplomatic mission in Asuncion, and a considerable programme. They do not have a specific programme or contact for forest issues, but do invest in water and sanitation, and water management. Contact with Embassy is established by EU Delegation.
UK	<p>The UK is cooperating with Paraguay, since reopening of the UK Embassy in Asuncion in 2013. FCDO provides funds for short-term projects in education, human rights, inclusive economic growth and improvement of business environment.</p> <p>A £20k special fund for Climate Change was enabled this year and will support events such as the Forestry Congress (led by IDEA Paraguay) as well as a short-term sustainable development project for the city of Ñemby. EFISA is an example of a UK company operating in Paraguay on sustainable forestry.</p> <p>The Sustainable Land Use and Commodity Dialogue, a government to government dialogue to be launched during UN Climate Change Conference in UK (COP 26), is meant to become a global collaborative partnership between key producer and consumer countries to minimise deforestation driven by globally traded commodities. In the COP26 context, this will be part of a broader campaign to strengthen political commitment and increase financial flows for nature-based solutions to climate change and biodiversity loss.</p>
US	Even if not part of ADP group, the US Embassy and USAID programmes are relevant for the ADP group as considerable investment as in climate change and production.
EU Delegation	The EU Delegation in PY is interested in cooperation with NL and ADP in context of their new multi annual programme 2021-2027, in which improving equality as well as fighting climate change will feature. Within the climate theme, also deforestation, forest conservation, reforestation will be important ingredients of programming. Among others in the Eastern region, where zero deforestation law is recently prolonged for another 10 years. Programming should be in line with EU policies and be developed in synergy with member states.

4.2 Other major relevant programs running in Paraguay

There are many existing initiatives that ADP can learn from and build with; initiatives that would benefit from further exchange and support. This is a summary of most relevant organizations and programs running in 2021 and beyond. The list is not complete however, please contact the authors if you know of a key initiative that is missing. The last column refers to how a program links to governance challenges given later in paragraph 5.2. Please see annex 1 for contact details.

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
Amplifying Voices for Just Climate Action - WWF NL (part of Power of Voices)	Amplifying Voices for Just Climate Action - Climate Mitigation and Adaptation	The programme aims for local civil society groups to claim a central role as empowered innovators, facilitators and advocates of climate solutions, in order to come to a positive and innovative just transition agenda.	WWF-NL + consortium partners: Hivos, Akina Mam wa Afrika (AMWA), Avina, ShackDwellers International (SDI), SouthSouth North (SSN).	2021 until 2025	1, 3, 6
Reclaim Sustainability - Solidaridad Nederland (part of Power of Voices)	Trade and making value chains more sustainable	The programme contributes to inclusive sustainable value chains and trade, in which the interests, voices and rights of farmers, workers and citizens are represented and heard.	Fundacion Solidaridad Latinoamericana, Stichting Fairfood International.	2021 until 2025	1, 4
Green Livelihood Alliance (part of Power of Voices)	Forests for a just future - Climate mitigation and adaptation	The programme will increase participation of IPLC's (indigenous people and local communities) in forest governance. This is done by strengthening IPLC governance over forest, halting deforestation and addressing concerns on forests and human rights.	Milieudefensie (lead), Tropenbos International, IUCN NL, Gaia Amazonas, Sustainable Development Institute, (NTFP-EP)	2021 until 2025	1
DFCD	Climate adaption and mitigation Financing sustainable investments in the Paraguayan Chaco	Identify and financially support projects, from companies or entrepreneurs a positive impact on nature and people with positive financial returns.	Green Climate Fund (GCF), executed by FMO UNDP + Climate Fund Managers (CFM), WWF-NL, SNV	2019 until 2022	4, 5

4. Existing initiatives by ADP countries and other related programs

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
FMO (&Green Climate Fund)	Promoting low-emission and climate resilient practices in the soy and cattle ranching sectors	Addressing financial barriers by providing (soy- & cattle farmers in Paraguay with concessional loans that will enable them to invest in low-emission, climate resilient productive practices.	Green Climate Fund, Dutch Ministry of Foreign Affairs		4, 5
AGRI3Fonds	The Fund will develop business models and mobilize the capital of commercial banks and other financial institutions by de-risking and catalyzing investment propositions to meet three objectives (Not yet in Paraguay)	1) Contribute to sustainable and efficient agricultural production 2) Prevent deforestation and stimulate reforestation 3) Improve rural livelihoods	BZ, IDH, Rabobank	Officieel van start gegaan februari 2020	4, 5
Observatorio Pantanal / Pantanal Observatory	A broad participatory platform of local organizations working in the Pantanal Region	A platform to share information relevant for local organizations. This includes from international conservation organizations, NGOs, fishermen, indigenous communities, and others.	WWF is leading the initiative with more than 50 members mainly from Brazil, but also from Bolivia and Paraguay.	2015 - ongoing	1
Wageningen Metropolitan Food Cluster (WMFC)	System innovation through technical invention and cooperation with stakeholders, improving the efficiency of agriculture	Co-design of strategy for modernization of agrifood production and biodiversity conservation of Northern Paraguay	With Agricultural Producer Agua Dulce (APAD), WWF PY, Guyra PY, Banco Regional	2019 -	4, 6

4. Existing initiatives by ADP countries and other related programs

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
Roundtable for Sustainable Beef (MPCS)	The Paraguayan Roundtable for Sustainable Beef (MPCS, in Spanish) brings together all the links in the beef value chain, seeking to make Paraguay a global reference.	The sectors of the industry, production, supplies, consumption, as well as the civil society organizations participate in it. It also integrates the public sector, the academy and international cooperation agencies.	This Paraguayan cross-sectoral roundtable brings together the sectors of industry, production, inputs, consumption, and civil society organizations.	Since 2017	4
Roundtable for sustainable Finance	The initiative will serve to promote best environmental and social practices in the Paraguayan banking sector	Promote the responsibility of the financial sector in supporting and strengthening the transformation towards a sustainable economy, taking the lead in the common effort of all its stakeholders as clients, employees, authorities, NGOs and the general public to face the risks and take advantage of the opportunities for sustainable challenges in Paraguay	Four leading Paraguayan banks: Sudameris Bank, Vision Banco S.A.E.C.A., Banco Continental, Banco regional S.A.E.C.A.) + long term funding from FMO	Since 2013	5
Moore Foundation - GRANT	Strengthening Forest and Land Use Monitoring	To create the enabling conditions for enhanced forest and land use monitoring and transparency to achieve conversion free commodity production in the Chaco.	WRI, IFONA	2019 - 2021	2
MAPBIOMAS Chaco	A regional network of GIS specialists for the documentation about the changes of land use in the Great Chaco.	This initiative offers an inter annual collection of land use and covers maps using machine learning and GIS technologies.	TNC Brazil, INTA Salta Argentina, Guyra Paraguay with the support of Gordon & Betty More Foundation.	2017 -2022	2

4. Existing initiatives by ADP countries and other related programs

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
Germany & WWF: SCP South-South	Establish Sustainable Consumption and Production - a South--South Transfer	The project supports national governments in their development of mitigation strategies in the agro-food sector. Companies are encouraged to implement sustainable business models and are offered support on this path. Consumer awareness regarding sustainable consumption and production (SCP) is raised through the engagement of opinion leaders and communication campaigns.	WWF Germany + (Funding from Ministry for Environment, Nature Conservation and Nuclear Safety) + Ministry of Environment and Sustainable Development Paraguay (MADES)	03/2017 - 12/2022	2, 4
WorldBank - Market access for Agricultural Products Project	Mainly focus on Agricultural markets, commercialization and agribusiness	To enhance access to markets by Agricultural Producers' Organizations and Indigenous Communities through investments subprojects inserted in value chains in selected parts of the Borrower's territory.	International Bank for Reconstruction and Development	2020-2026	4
IFAD (International Fund for Agricultural Development - UN agency)	1) Ensuring sustainability in production and trade - 2) strengthening social capital by building human and social capital and empowering rural organizations.	IFAD loans focus on empowering smallholder farmers and indigenous families by creating and strengthening rural organizations - in terms of governance, organizational administration and service capacity.	IFAD	2016 - 2022	4
Paraguay Forest Conservation Project	Reduction of GHG emissions from Deforestation and Forest Degradation in The Chaco-Pantanal Ecosystem	The project goal is to conserve the natural and cultural qualities of forest lands in the Chaco-Pantanal transition zone of Alto Paraguay that are of high conservation value but threatened with transformation to cattle ranching.	Swire Pacific Offshore Operation (Pte) Ltd. (Proponent) + Guyra Paraguay and World Land Trust	Start date 2011 - crediting period: 20 years	3

4. Existing initiatives by ADP countries and other related programs

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
Green Climate Fund	Poverty, Reforestation, Energy and Climate Change Project (PROEZA)	Promoting forest planting and reforestation in Eastern Paraguay, sequestering carbon and supporting local households to diversity their agricultural production to enhance their resilience to the impacts of climate change.	Food and Agriculture Organization of the United Nations (FAO) and MADES	Start date March, 2018 end date January, 2025	3, 4
United Nations Environment Programme (UNEP)	Ecosystem-based approaches to reduce the vulnerability of food security under the effects of climate change in the Paraguayan Chaco	To contribute in the diminishing of vulnerability related to food security in the Western Region of Paraguay	MADES	Start date, 2019 end date, 2023	2, 4
Green Climate - Arbaro Fund	Investing in sustainable plantation forestry projects	To provide effective climate change mitigation in emerging forestry markets of Latin America and Sub Saharan Africa, while also bringing adaptation co-benefits. Provide a solution to increase carbon sinks by producing wood in a sustainable manner and conserving natural forests, whilst contributing to reduction of illegal logging.	MUFG Bank, Ltd , MADES,	Start date March 2020, end date October 2034	2
United Nations Development Programme (UNDP)	Green Chaco Project	To promote new alternatives for a sustainable development designed alongside with communities.	The Global Environment Facility (GEF), MADES, Ministry of Agriculture and livestock (MAG), Instituto Forestal Nacional - INFONA, ADM, Cargill Paraguay Louis Dreyfus and others.	Start date 2017, end date 2021	2, 6

4. Existing initiatives by ADP countries and other related programs

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
Protected areas strengthening and connectivity in the north Chaco.	To strength greatest protected areas of the Chaco and to implement physically biological corridors in between through best agriculture practices.	Work jointly with cattle ranchers in order to review their land use planning and improve physical connectivity between the biggest national parks of the region. This project included the measurement and legal inscription of the Chovoreca Natural Monument in the protected area systems.	WWF and Guyra Paraguay, The APAD Cattle ranchers association, IUCN NL, and The World Land Trust.	2019-2021	3
Instituto de Derecho y Economía Ambiental - IDEA (Environmental lawyers)	Promoting transparency of environmental data, pursuing environmental crimes and strengthen environmental governance.	Government (environmental, transparency, Legality in deforestation, to improve legislation	IDEA Paraguay, IUCN NL, USAID and various donors	2016 - 2021	1, 2, 7
SIDDit Chaco	Land use Monitoring of the Chaco through Artificial Intelligence	The SIIDiT Chaco platform has the objective of monthly monitoring the transformation of natural areas in the South American Chaco through artificial intelligence technology. It will be possible to compare deforestation with other polygons such as land use licenses.	Guyra Paraguay, Ellipsis, IUCN NL	2018-2021	1, 2
#Porlosbosques coalition	Forest protection, transparency, environmental justice, good forest governance	The #PorLosBosques coalition united to support #LeydedeforestacionCero and the Escazú Treaty for social and environmental justice. For a transparent and equal Paraguay.	IDEA, Guyra, WWF Py among others. The #PorLosBosques coalition made up of more than 60 civil society organizations, mostly environmental, social and health organizations.	Ongoing	1

4. Existing initiatives by ADP countries and other related programs

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
Nature reserves managed by Guyra Paraguay	To conserve more than 30,000 ha of natural ecosystem from the Chaco-Pantanal to the Arid Chaco with the involvement of local communities.	Guyra Paraguay has developed a successful program of land purchase, Reserve areas comprises: The Pantanal Reserve, Fortin Galpon, Campo Iris and Cañada El Carmen. Reserves areas are developing management programs, including rural development in its buffer zone with local communities.	Guyra Paraguay with the support of The World Land Trust, US Forest Service, US Fish & Wildlife Service, IUCN Netherlands, WWF, and UNDP.	2006 – Ongoing for perpetuity	3
Promotion of a Diversified and Sustainable Livestock Production	The action is focused on at least 6 value chains, on the improvement of production systems, the use of potential and access to sustainable markets.	Specific Objectives: 1) Detailed study of the production and commercialization potential of identified sectors; 2) Markets for products are identified and characterized; 3) Analysis of each value chain (value chain mapping); 4) Analysis of each competitive table.	GIZ	2018-2022	4
Technical assistance to strengthen the regulatory, institutional and health framework for sustainable livestock production and its diversification	Support for the strengthening of the normative and institutional framework for sustainable livestock production and its diversification with lines of action that aim to strengthen institutional capacities of the public sector	To provide the private sector with national sectoral policies, legislation and services favourable for its development, including issues of sustainable livestock production in national policies and legislation. Support for the strengthening of the public health service.	EQUINOCCIO (leader), AFC and IICA	2019-2021	2, 4

4. Existing initiatives by ADP countries and other related programs

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
Implementation of two pilot experiences of concerted and sustainable actions between civil society, local governments and the private sector, which positively impact the fulfilment of SDG 1, 2, 10 and 13 in Paraguay	The action aims to contribute to the establishment of synergies between civil society, the private sector and local governments, to implement concerted and sustainable actions that positively impact the fulfilment of SDG 1, 2, 10 and 13.	Promote actions from civil society, local governments and the private sector, that contribute to the development of actions that contribute to the fulfilment of SDGs 1,2, 10 and 13 in Caaguazú and Asunción.	DECIDAMOS	2021-2023	1, 4, 6
ESPACCIO-JOVEN: Socio-Productive Youth Empowerment with Equal Opportunities in the Context of the Challenges of Climate Change	Promote the economic, social and public advocacy empowerment of youth, especially women, in rural and sub-urban areas, within the framework of the challenges of climate change.	Increase the voice of young people in society, including that of young people with fewer opportunities; increase the participation of CSOs in the fight against climate change and the mitigation of its adverse effects and reinforce the role, capacities and rights of women and girls as agents of change.	Fundación ENTRECULTURAS / FE y ALEGRIA / CEPAG	2021-2023	1
ÑAÑUA Paraguay, Promoting strategies and synergies to increase the resilience of Paraguay in the face of Climate Change	Contribute to raising awareness among the general population of the impact of Climate Change on their lives and of how to adapt, as well as the importance of articulating joint actions between CSOs and national authorities on Climate Change.	Promote planning and coordination mechanisms between civil societies and the public and private sectors, aimed at raising awareness, political advocacy and implementation of resilient actions in the face of climate change at the national level.	MANOS UNIDAS / COOPI / ASOCIACION PARAGUAY ORGANICO / ALTER VIDA - CENTRO DE ESTUDIOS Y FORMACION PARA EL ECO-DESARROLLO	2021-2024	1

4. Existing initiatives by ADP countries and other related programs

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
TERRITORIAL MANAGEMENT OF THE PARAGUAYAN PANTANAL: Empowerment of youth and women in mitigation and adaptation actions to climate change.	To increase the conditions for a sustainable development in Carmelo Peralta, taking into account the impact that the new infrastructures could produce in the region.	Specific Objectives: (1) territorial management initiatives, with emphasis on activities that support resilience to climate change and sustainable community practices, (2) promote the empowerment and strengthening of indigenous and peasant women's associations, and (3) contribute to spaces for indigenous and non-indigenous youth	PRO COMUNIDADES INDIGENAS / WORLD WILDLIFE FUND INC PARAGUAY Country Office	2020-2024	1, 6
Application of a territorial management model in two districts of the buffer area of the Ybytyruzú Managed Resources Reserve.	To generate a sustainable management model for the buffer area of the Ybytyruzú Managed Resources Reserve (RRMY) for adaptation and mitigation to the effects of climate change.	Generate replicable strategies in at least 2 other Resource Managed Reserves and in another 65 protected areas of the country, in order to transmit information to local actors about climate change and the role that each person plays.	A TODO PULMON RESPIRA	2021-2024	3
Management and restoration of forests in productive environments	It is to improve the socio-ecological resilience of local populations through the strengthening of forest management devices and territorial governance of the Gran Chaco.	Specific Objectives: (C1) Increase the knowledge, capacities and competencies of local actors in the management of forests (C2) Improve the assessment and awareness of local actors and political decision-makers of the collective management of landscapes; (C3) Strengthen national monitoring systems (C4) strengthen capacities for territorial governance	National Institute of Agricultural Technology (INTA) Paraguayan Institute of Agricultural Technology (IPTA) Empresa Brasileira de Pesquisa Agropecuaria (EMBRAPA) Nature, Earth and Life (NATIVA)	2019-2021	3, 6

4. Existing initiatives by ADP countries and other related programs

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
Participatory Environmental Governance integrating the challenges of climate change (CC) in the Gran Chaco Americano-GAPCha.	Contribute to environmentally sustainable and resilient development in the face of adverse climatic events in the Gran Chaco Americano, which aim to improve the living conditions of indigenous and mestizo populations.	Specific Objectives: (1) Conserve healthy and functional ecosystems for resilient human settlements to CC impacts oriented to the creative economy and (2) Promote participatory environmental governance from local governments towards public policies on forests, biodiversity and the Chaco ecosystem.	Mingarã, Unión Iberoamericana de Municipalistas (UIM), Gestión Ambiental para el Desarrollo Sustentable (geAm) Municipalidad de Filadelfia, Fundación Plurales	2019-2021	3, 6
A regional model of sustainable, participatory, inclusive and climate-smart development in interconnected areas of the Cerrado, Pantanal, and Chiquitano Dry Forest of Bolivia, Brazil, and Paraguay.	Preserve biodiversity, ecosystem and cultural services and functions in the Cerrado, Pantanal and Chiquitano Dry Forest to ensure sustainable productive development, contributing to the improvement of human well-being	Strengthen conservation, productive systems and governance to promote a regional model of sustainable, participatory, inclusive and climate-smart development in interconnected areas of the Cerrado, Pantanal and Chiquitano Dry Forest of Bolivia, Brazil, and Paraguay.	WWF Brasil, INSTITUTO DE MEIO AMBIENTE DE MATO, WWF	2018-2022	3, 4
Trinational Pilcomayo: shared management area.	Implement a management scheme for a cross-border and integrated "Shared Management Area" for the convergence and sustainable development of the tri-national basin of the Pilcomayo river, in the Gran Chaco ecoregion.	Strengthen protected areas; Preserve the functionality of ecosystems; Implement sustainable production models; Strengthen local and regional governance mechanisms; Make information available to different recipients.	PROJUNGAS, MOISES BERTONI, NATIVA	2017-2021	3, 6

4. Existing initiatives by ADP countries and other related programs

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
For our Sustainable Gran Chaco: Active participation in territorial management models for environmental conservation integrated with sustainable production.	Improve the productive capacities of target groups and final beneficiaries, within the framework of conservation strategies for environmental functions.	Support for these agreements, mechanisms and experiences to be systematized; Have agreed plans and agreements between the actors involved on the use of natural resources	CERDET FUNDAPAZ FUNDECOR TIERRAVIVA COOPI ICCO	2018-2021	4, 6
Environmental governance and consolidation of sustainable production systems in the Departments of Boquerón / Alto Paraguay (Paraguay) and Santa Cruz / Chuquisaca (Bolivia)	Contribute to environmental and productive sustainability in the degraded biomes of the Chaco and the Dry Forest of South America.	Strengthen the capacities of indigenous and peasant populations for environmental governance and the consolidation of sustainable production systems in the Departments of Boquerón / Alto Paraguay (Paraguay) and Santa Cruz / Chuquisaca (Bolivia).	CENTRO DE INVESTIGACION Y PROMOCION DEL CAMPESINADO ALTER VIDA OXFAM PRO COMUNIDADES INDIGENAS	2018-2021	4
NDC Support Program Strengthening climate action in Paraguay	1) Strengthened leadership and promoted an ambitious vision of climate change; 2) Design and Planning Evidence-based mitigation actions. 3) Improving an environment suitable for partnerships with the private sector.	Strengthen leadership and promote an ambitious national vision agreed upon on sustainable development and climate action within the framework of the Paris Agreement, with a focus on the CNCC and incorporating the strategic lines of the ENGCC.	Ministry of the Environment and Sustainable Development	2019-2022	2

4. Existing initiatives by ADP countries and other related programs

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
Global Public Goods and Challenges thematic program (GPGC) Integrated Sustainable Landscape Management in the Cerrado Biome in Brazil and Paraguay	Sustainable integrated management of the landscape in the Cerrado with socioeconomic inclusion, protection of biodiversity and climate mitigation and adaptation.	1. Promote climate-smart and sustainable agriculture (SCSA) in landscapes and food production systems. 2. Promote conservation through the sustainable use of socio-biodiversity of protected and conserved areas. 3. Promote public and private policies and practices for food and water security.	WWF The Netherlands, WWF Brazil, WWF Paraguay, Instituto Sociedade, População e Natureza (ISPN)	2020-2024	2, 3, 4
ENDED recently but relevant results					
MejorAgro	100% sustainable soybean sourcing	Continuous improvement of social, environmental and economic performance of farmers.	COFCO International, Solidaridad and the Colonias Unidas Cooperative	2017-2019	4
Paraguay and the Fundación Solidaridad Latinoamericana	Handbook for the sustainable meat programme in the Chaco	Reference material for technical professionals in the field, producers, investors, academics, students to implement climate-smart meat production practices.	Over 75 agricultural enterprises	Publishing date, 2020	4
Agencia Financiera de Desarrollo (AFD)	Funding for commercial reforestation projects	Funding for forestry projects of fast-growing native or exotic species with a focus on responsible cultivation of such species.	Banks, finance companies or cooperatives authorized to operate with the AFD, resident in Paraguay and with forestry projects to be developed	Finalized 2020	3
Shared Resources, Joint Solutions	Secure climate resilience, water provisioning and food security	By bringing together various stakeholders, we sparked the development of a future-proof management plan for the region, which allows space for species to thrive and for nature to fulfil its important role as climate buffer.	WWF, IUCN NL, Guyra Paraguay, IDEA Paraguay,	Finalized 2020	1, 3

4. Existing initiatives by ADP countries and other related programs

Name	Main goal	Summary	Partners	Timing	Links to challenges in chapter 5.2
Farmers for Forest	Farmers for Forest – forest-friendly agriculture commodity chains	Biggest surface of the entire programme is in PAR & ARG (soy & beef). Land use	Solidaridad, Dutch Ministry of Foreign Affairs	Finalized 2020	4
Germany & WWF	Taking Land Use Change out of Commodity Production in Savannahs and Grasslands through Policy Engagement, Land Use Planning and Best Management Practices	The project plans and implements more climate-friendly land use and management in the regions in order to increase agricultural production, while at the same time protecting natural areas and reducing greenhouse gas emissions.	WWF Germany, WWF Paraguay+ MADES; Government of Alto Paraguay; Institute for Hydrology, Meteorology and Environmental Studies (IDEAM), Ministry of Agriculture and Livestock; and Others	09/2016 - 09/2020, has ended, but follow up is proposed	2
WWF	Handbook on good farming practices for the sustainable development of Alto Paraguay	The handbook seeks to develop incentives for the adoption of more sustainable practices in meat and soybean production. It also seeks to promote better management of natural resources and the conservation of the country's forests, as well as the of the country's forests.	WWF-Paraguay, USAID, Minerva Foods, Wildlife Conservation Society (WCS), Cooperativa Neuland, International Finance Corporation (IFC), Asociación de Municipios del Chaco Central.	Publishing date, 2018	4
United Nations Development Programme (UNDP)	Supporting the reduction of deforestation in commodity production in Paraguay and generating responsible demand - IAP Chaco	To eliminate deforestation from commodity supply chains and promote an integrated approach to address the underlying causes of deforestation for commodity production, specifically African palm, soy and beef, with a focus on the latter commodity in the Chaco Region.	UNDP, MADES and Fondo para el Medio Ambiente Mundial (FMAM).	Start date July 2017, end date June 2020	2

5. Potential roles and actions for the ADP partners

In this chapter we suggest potential (additional) roles and actions for the ADP in support of good forest and land governance in PY, trade related and beyond. The recommendations on potential ADP roles and interventions is embedded in overall needs of improving forest and land governance in Paraguay. In this, input from our interviews with country representatives and NGOs, our own long involvement in the country, and insights from literature have come together. The chapter presents suggestions for an ambitious agenda, in which support to civil society organizations, support to Paraguayan government and the power of diplomacy, finance and facilitation have the potential to come together. The first paragraph will focus on specific ADP roles, the second paragraph presents a comprehensive national governance agenda in which ADP interventions can certainly play an additional, supportive role.

5.1 Potential (strengthened) roles for ADP

ADP collaboration mechanism.

Relevant government and NGO programs are already happening. We refer to the tables in the former chapter listing major ADP country and other programs relevant for strengthening forest and land governance, sometimes specifically related to trade chains. However, there certainly is potential for more exchange, collaboration and coherence between the ADP country and NGO activities as well as stepping up engagement. Coordination could happen to promote:

- i) exchange of information and contacts,
- ii) the possibility to develop joint plans,
- iii) explore and establish joint policy positions and diplomacy,
- iv) maintain an overview of relevant projects that are funded
- v) explore joint (basket) funding, and
- vi) cooperate with other platforms.

An ADP liaison- contact person/representative in Asuncion, could offer a new, flexible way to cooperate among ADP countries, including support for coordinated action towards Paraguayan government. In addition, an ADP convening body or platform could be established for dialogue such as discussed above.

In the next set of suggestions we distinguish between the ADP (country) roles as diplomats, financiers and facilitators, and we explore potential entrance points to give shape to ADP “bilateral” collaboration with Paraguay. This is of special importance in face of upcoming EU legislation on due diligence, forest risk commodities and finance. ADP can be supportive to prepare Paraguay for this challenge. A number of suggestions:

Diplomacy

- The ADP could intensify diplomacy in their home countries and towards the European Commission, to have in place effective legal requirements for companies and financial institutions against deforestation/conversion and human rights infringements. We refer to the current legislative processes on due diligence, forest and ecosystem risk commodities (EU

Stepping Up Action To Protect and Restore the Worlds' Forests), as well as those on sustainable financial regulation- including reporting requirements.

- It is already recognized at the level of the European Commission that policy and legislation against deforestation should entail a smart mix of measures at the demand side; it is important here to underline the importance of supportive mechanisms for producing countries such as Paraguay to be able to live up to the standards. In other words, to set a strong bar in Europe while raising the level of good forest and land governance in producing countries such as Paraguay. For supportive measures, see further on.
- ADP member states could practice stronger (joint) diplomacy towards PY government to enhance transparency and social/environmental legal compliance, bringing Paraguayan regulations -and their implementation - closer to EU standards and trade requirements on deforestation and human rights. Finding entry points in Paraguayan standing policies is important in this endeavour (See Annex 2 for a list of relevant laws).
- The EU Delegation's seven year programme 2021-2027 offers potential for good forest governance support as well. The ADP group could link with this programme, and advocate for and support Team Europe in promoting (a) measures against deforestation, (b) conservation/sustainable forest management and regeneration, as well as (3) the country's Protected Area System.
- A bilateral programme on sustainable trade between Paraguay and the ADP countries could also be set up. Possibly including the strengthening of Paraguay's role in a broader ADP wide-Latin American initiative on beef and leather (cf recommendations Mekon Ecology report 2020).
- The Mercosur trade deal could offer potential to enhance soy/beef/leather sustainability.

Finance:

- The ADP can strengthen its support to civil society and grass root groups, among others for them to address urgencies in good governance (see next paragraph) but also for piloting best practices.
- The ADP could invest (more, together) in sourcing regions of Paraguay with high risk of ecosystem conversion to promote good environmental and social governance. Both Chaco and Atlantic forest offer potential for this. It is recommended to focus on risk areas rather than purely on ADP country's own sourcing regions, if/when known. For beef and leather, the Chaco is already key. For soy, the current Atlantic zone is key, but the Chaco is its new frontier, where potential (and urgency) for avoiding deforestation is present.
- The ADP can (further) support farmer capacity strengthening to enhance their readiness for deforestation/conversion free value chains. For soy, this can include (relevant steps towards) certification by the Roundtable for Responsible Soy. For cattle, this support could entail "proofs" of legally and responsibly produced beef or leather, building on current beef initiatives. ADP can support the setting up or improving current certification seal(s) for Paraguayan beef, to further promote conservation and social responsibility⁵².
- ADP can support transparency and traceability systems: coupling commercial data to legality and sustainability info in cattle and soy chains. For example, restoring the required forest cover is crucial for farmers to be able to comply with legal or zero deforestation requirements. Support can include a baseline showing all properties which have a current forest deficit (too little forest cover according to the law), either caused by recent deforestation or historical deforestation. Support can also include satellite monitoring on deforestation, and making this information publicly available. Support can also be given to the required regeneration of forest.

⁵² These include Carne Natural (ao Solidaridad/ARP), the Alianza de Pastizales (Guyra and others), and Rainforest Alliance certification (Mekon Ecology 2020).

- The ADP could help overcome bottlenecks for conservation by promoting/investing in farmers' incentives such as sustainability premiums or Payments for Ecosystem Services. Ideally coupled with certification, one can think of carbon & biodiversity credits and premium mechanism to support farmers' conservation and restoration beyond legal compliance. This can be piloted in priority conservation/restoration areas, including regeneration with native tree species. Such incentives can be set up with public-private finance. In this endeavour, it is important to take into account the "eco-regional vision" and conservation/land use proposals for the Chaco, as well as conservation priorities in the Atlantic Forest⁵³.
- The ADP also has an opportunity to – directly- financially support the stronger legal status of protected areas, as compensation to land owners in strategic – biodiversity rich- sites still has to be paid by the government, risking deforestation/conversion and degradation.

Facilitation

- ADP programmes could support (either as conveners or financial supporters) a process of dialogue between groups such as grass root groups, CSOs and agricultural producers, to promote conflict resolution, to understand each other's views and build consensus. This, to reach agreements on sustainable land use, which also may offer support to live up to requirements of the EU /ADP market.
- Not dependent on – or preparing for- EU or home country legislation, the ADP group can more strongly promote companies and financial institutions to take pro-active responsibility for verifiable deforestation free value chains in Paraguay, among others by Public Procurement requirements.



Photo: Soybean plants are seen in a field in Hernandarias, Paraguay February 8, 2017.
REUTERS/Jorge Adorno

⁵³ <https://nativabolivia.org/evaluacion-ecorregional-actualizacion-al-2018/>

5.2. Overall challenges for good forest and land governance with suggestions for (further) interventions.

In this paragraph we take a broader perspective by listing a number of acknowledged good governance challenges in Paraguay that could benefit from further support. What follows is quite a comprehensive agenda for forest and land governance. What are current -and what could be further - roles for ADP countries to strengthen this agenda, to strengthen the basis for responsible deforestation free value chains over time? It is up for dialogue what is already being practiced and what are the best entry points for ADP interventions and collaboration. We are aware this is a long term agenda. We therefore hope that this agenda could be of use for ADP / EU country, private sector and NGO dialogue and collaboration over a longer programme period.

2030 objective: no more deforestation related to agricultural production and cattle

As discussed in earlier sections, deforestation is a complex problem, and will most likely be only solved in an integrated manner through the below mentioned, closely related, good governance objectives. They can be achieved through dialogue with the Paraguayan government, in coordination between ADP countries, EU member states, with US and if possible China, as well as through EU regulation-and-collaboration processes including the private and financial sector. Key to this agenda is an increased sense of political urgency in Paraguay and clear Paraguayan regulations that would receive sufficient support for their effective compliance mechanisms - including the judiciary system.

Existing programs of ADP member states mentioned in 4.1, but also the many initiatives listed under 4.2 offer a wealth of experience and network. Below, we will outline a number of overall governance challenges. As an indication we will mention how many linkages we have found with existing initiatives (see last column in scheme 4.2) - being aware that information is limited, and that the size and results of programmes differ. Then we give suggestions on what potential (strengthened) interventions for ADP could be for each governance challenge.

Challenge 1) Paraguayan national and local civil society groups and local (indigenous) communities are stronger and safer to dialogue, advocate and litigate against deforestation and related environmental human rights infringements.

We see 12 linkages with existing initiatives under 4.2. As change mostly needs to come from within a country, strong further support could be given to Paraguayan civil society groups and grass root groups, related to the objectives of the ADP.

Potential (strengthened) interventions for ADP:

- Diplomatically and/or financially support international but also local CSOs and environmental human rights defenders to dialogue, communicate, advocate and litigate on topics below.
- Diplomatically support the ratification of the Escazu agreement in Paraguay⁵⁴.

⁵⁴ <https://www.cepal.org/en/escazuagreement>. Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean

Challenge 2) National policies, budgets and regulatory frameworks are improved with regard to their effectiveness and transparency related to -trade related- deforestation and forest conservation.

We see 13 linkages with initiatives under 4.2. Some of these are with the government, some with producers and some are trying to provide transparency. A more coordinated, result based and transparent approach when working with government agencies could be beneficial.

Potential (strengthened) interventions for ADP:

- (Jointly) communicate to different levels of government the importance to improve value chain and landscape governance related to deforestation.
- Invest in ministries to improve the implementation of environmental legislation; in a way that is verifiable for the Paraguayan public.
- Improve the compliance with national legislation and coherence with international environmental and social obligations / standards.
- Practice transparency of international donations meant for improving environmental governance, and require transparency of their governmental recipients (e.g. MADES) to have an effective societal control.
- Require that raw/basic data on governance is available (e.g. licenses, ownership) so civil society can analyse this (with AI technology).

Challenge 3) Forest management, protected areas and biological corridors are better implemented.

Protected areas need to obtain a stronger legal status and more support in their management (possibly by a separate entity than MADES, to deal with protected areas). Outside protected areas the forest landscape needs strong biological and bio-cultural corridors, to be strengthened by restoration and Payments for Environmental Services. This to ensure connectivity for endangered species, protect (seasonal) rivers and respect culture and lands of indigenous peoples.

We see 11 linkages with existing initiatives under 4.2. Looking at this linkages, it shows strengthening is required to provide a strong basis for forest management and protected areas.

Potential interventions ADP:

- Diplomatically and/or financially ensure that the protected areas system becomes stronger, including new management plans, funding for rangers, infrastructures & mobility.
- Diplomatically and/or financially support legal measurements and buying out land owners who still have a title in those protected areas.
- Diplomatically and/or financially support policies and multi-stakeholder land use planning process that take strong forest management and biological corridors and bio-cultural corridor protection and regeneration into account.

Challenge 4) Producers and traders implement more sustainable practices. Cattle and soy farmers associations, slaughter houses and traders have transparent and controllable zero-deforestation commitments, supportive to human rights and sustainable agricultural practices, and with zero-tolerance to illegal practices.

Here we see up to 23 linkages with existing initiatives under 4.2 which means interesting projects and experiences are available, but they could benefit from more exchange and could certainly benefit from backing by ADP countries in face of the core ambition of the Partnership.

Potential interventions ADP:

- Advocate for EU -or implement national- regulation to ban from its market soy and beef related to deforestation after a clear cut-off date (*This date is for discussion in EU/ in-country, if possible in line with EU Renewable Energy Directive, not in the future*).
- Build/ require track and trace systems and make available satellite monitoring as pre competitive, public data for traders investors, and civil society.
- Use ADP market leverage as considerable importer of Paraguayan leather, and of soybeans from Argentina, through which Paraguay sells the largest volume of its soybeans (see paragraph 3.1). It gives the opportunity to request traceability and conversion free production, or at least a basic certification proving legality and sustainability of products on ADP/EU market.
- Find out Forest deficit of soy farmers in the oriental region, a baseline on which properties were historically illegally deforested. Promote natural forest regeneration for farmers to restore the landscape and to comply with Paraguayan legislation and EU requirements.
- Promote conservation of nature as a concept within the country's brand in food production. Chaco livestock is in a favourable position to strengthen that country brand for leather and beef, conserving natural landscapes, grasslands, conserving the jaguar, and other emblematic wildlife species. It is very much encouraged to promote the same for (future) soy from the Chaco.
- Work with farmers/producer groups that have interest in EU market and promote and support incentives for conservation (incl premiums/payments for ecosystem services; highlight the good examples and promote cross farmer learning on good practice.
- Promote the market signals from other markets (Chile, Russia, China) towards cattle and soy farmers in Paraguay.

Challenge 5) Financial Institutions practice stricter monitoring, with regard to lending and investment criteria in order to avoid (illegal) deforestation and human rights infringements, and to promote sustainable business.

We see (only) 4 linkages with existing initiatives listed under 4.2, and suggest to strengthen this work in face of the core ambition of ADP.

Potential Interventions for ADP:

- Clear regulation at member state and EU financial flows prohibit financing of value chains related to (illegal) deforestation and human rights infringements. Black-listing, excluding and reporting producers and others in the value chain that commit crimes.
- Formalize traceability and monitoring of loans to avoid deforestation, money laundering and related human abuses in the agricultural sector. These monitoring systems at Financial Institutions with a link to EU should be mandatory and independently audited to ensure that consequences are drawn when clients are not complying with environmental and human rights laws.
- Motivate GEF, WB, IDB, Green Climate Fund and institutional investors to only support business practices, that offer nature based solutions to climate change and biodiversity conservation⁵⁵.

⁵⁵ <https://www.iucn.org/theme/nature-based-solutions/resources/iucn-global-standard-nbs>

Challenge 6) Municipal governments have stronger governance capabilities, to implement policies that incentivize good production practices, forest protection and are in line with multi-stakeholder Land Use Plans.

We see (only) 9 linkages with existing initiatives under 4.2 and could imagine further investment is beneficial here to create areas that fulfil the standards of the ADP countries.

Potential interventions for ADP:

- Support training programs for different levels of government, for example in Bahia Negra and Fuerte Olimpo in the Chaco on forest governance and multi-stakeholder land use planning, e.g. with local CSOs, researchers, cadastre.
- ADP group can both require and support sustainable production, by (a) enabling remediation of deforestation in the past (restoration, compensation or other) (b) support high conservation value area protection and management, (c) support biological corridor building, (d) support zero emission schemes etc.

This package needs further elaboration with key experts in PY and ADP group, choosing important conservation and restoration priorities in Paraguay.

Challenge 7) Overall independence of the judiciary, including public prosecutors improves. This entails the enforcement of current legislation, including a stronger judiciary system related to social and environmental legislation⁵⁶.

We see only 1 connection to current initiatives under 4.2, and suggest to further explore ADP countries' roles with established local experts and embassies.

Potential interventions for ADP

- Maintain diplomatic standpoint that trade and investment from EU and US depend on a fair, strong and independent judiciary system. This to ensure right of investors are upheld, and that conflicts regarding environmental and social standards can be brought to a court with judges trained in environmental legislation.
- Support transparency of public information⁵⁷, support transparency measures and support a special office in the Public Prosecutor office that deals with environmental crimes.

It is up for dialogue to decide the best entry points for ADP collaboration and interventions. We hope the overall, comprehensive agenda as outlined will be of use for dialogue and collaboration over a longer period among ADP, EU delegation and non-governmental experts.

Annex 1 List of contacts of ADP countries, EU Delegation and programmes (separate to report).

⁵⁶ This includes application of anti-corruption and anti-money laundering measures, declarations of political campaigns, free access to public information

⁵⁷ <https://informacionpublica.paraguay.gov.py/portal/>

Annex 2. Overview of relevant Paraguayan Laws

Please correct and add where applicable.

Title	Date	Link
Ley N° 6676 / 2020, Que prohíbe las actividades de transformación y conversión de superficies con cobertura de bosques en la Región Oriental.	11-12-2020	https://www.bacn.gov.py/leyes-paraguayas/8711/ley-n-6256-prohibe-las-actividades-de-transformacion-y-conversion-de-superficies-con-cobertura-de-bosques-en-la-region-oriental
Presentación de Proyecto Borrador de Código Ambiental paraguay.	17-11-2020	http://www.mades.gov.py/2020/11/17/gobierno-da-un-paso-gigante-con-la-presentacion-del-proyecto-codigo-ambiental-paraguay/
Resolución 1 Acta 61 del Banco Central del Paraguay que reglamenta la Ley 4890/13 "Derecho real de la Superficie forestal".	12-11-2020	http://baselegal.com.py/docs/11835a94-2e66-11eb-a564-525400c761ca
Plan de Ordenamiento territorial en Puerto Casado	10-07-2020	https://www.stp.gov.py/v1/puerto-casado-conforma-instancia-para-elaboracion-de-plan-de-ordenamiento-territorial/
Plan de Ordenamiento territorial en Carmelo Peralta	17-06-2020	https://www.stp.gov.py/v1/conforman-mesa-para-trabajar-planes-de-ordenamiento-en-carmelo-peralta/
Decreto N° 3246 / 2020, Por el cual se reglamenta el Sistema Nacional de Monitoreo Forestal del Paraguay	10-01-2020	http://dncc.mades.gov.py/wp-content/uploads/2020/01/DECRETO3246_lpx2nk9l.pdf
Proyecto de Declaración "Que Insta a varias Instituciones del Poder Ejecutivo y al Ministerio Público a Ejecutar Acciones Urgentes para parar la Deforestación, el Tráfico de Rollos de Madera y Cultivos Ilícitos en el Área Protegida Morombí",	04-11-2019	http://silpy.congreso.gov.py/expediente/119134
Resolución N° 397 / 2019, MADES. Por la cual se establecen los lineamientos para certificaciones de propiedades privadas en áreas silvestres protegidas bajo dominio público de acuerdo a lo establecido en la Ley N° 3001/2006 "De valoración y retribución de los servicios ambientales.	26-07-2019	http://www.mades.gov.py/resoluciones/por-la-cual-se-establecen-los-lineamientos-para-certificaciones-de-propiedades-privadas-en-areas-silvestres-protegidas-bajo-dominio-publico-de-acuerdo-a-lo-establecido-en-la-ley-n-3001-2006-de/
Resolución N° 356 / 2019, MADES. Por la cual se establece el reglamento de tipificaciones de las infracciones a la Legislación Ambiental.	09-07-2019	http://www.mades.gov.py/resoluciones/por-la-cual-se-establece-el-reglamento-de-tipificaciones-de-las-infracciones-a-la-legislacion-ambiental/
Ley N° 6286 / 2019, De defensa, restauración y promoción de la agricultura familiar campesina	17-05-2019	https://www.bacn.gov.py/leyes-paraguayas/8898/ley-n-6286-de-defensa-restauracion-y-promocion-de-la-agricultura-familiar-campesina
Estrategia nacional de bosques para el crecimiento sostenible (ENBCS)	15-05-2019	http://www.mades.gov.py › 2019/06 › ENBCS-Final
Modelos de Gestión y Desarrollo Territorial de nivel local y departamental en Paraguay	07-05-2019	https://www.desarrollo.org.py › app › pdf › publications
Resolución N° 81 / 2019, MADES. Por la cual se reglamenta el artículo 8° del Decreto 11.202/13 Por el cual se reglamenta parcialmente el artículo 11° de la Ley N° 3001/2006 "De valoración y retribución de los servicios ambientales y se establece el mecanismo para avanzar en la reglamentación del artículo 8° de la misma.	04-02-2019	http://www.mades.gov.py/wp-content/uploads/2019/03/Resolucio%CC%81n-MADES-81-19.pdf
Proyecto de ley "que prohíbe deforestación en el área comprendida entre el paralelo 22 y el meridiano 60 y reserva de la biosfera del chaco paraguayo"	18-01-2019	http://silpy.congreso.gov.py/expediente/115466
Proyecto de Declaración "Que exhorta al Poder Ejecutivo a declarar en situación de emergencia nacional la Región Occidental por la deforestación masiva de los bosques"	16-01-2019	http://silpy.congreso.gov.py/expediente/115477

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Title	Date	Link
Ley N° 6256 / 2018, Que prohíbe las actividades de transformación y conversión de superficies con cobertura de bosques en la región oriental	14-12-2018	https://www.bacn.gov.py/leyes-paraguayas/8711/ley-n-6256-prohibe-las-actividades-de-transformacion-y-conversion-de-superficies-con-cobertura-de-bosques-en-la-region-oriental
Plan Nacional de Desarrollo Paraguay 2030	06-12-2018	http://www.stp.gov.py/wp-content/uploads/2018/12
Decreto N° 175 / 2018, Por el cual se deroga el Decreto 7702 del 14 de setiembre de 2017, se instruye a la Presidenta del Instituto Forestal Nacional (INFONA) a proponer una nueva reglamentación, y se establece un régimen provisorio que reglamenta el Artículo 42 de la Ley N° 422/1973 “Forestal”	06-09-2018	https://www.todoleyes.com/0ed755d152b09035ecb4f1d00f1d99e9
Guía para la elaboración de planes sectoriales de adaptación ante el cambio climático	31-07-2018	http://dncc.mades.gov.py/uploads/2018/08/Guía-p...
Diagnóstico para el ordenamiento territorial de Paraguay proyecto 88354 "economía verde e inclusiva para reducir la brecha entre el desarrollo sostenible y reducción de la pobreza"	21-07-2018	https://www.stp.gov.py/uploads/2018/07
Ley N° 5984 / 2017, Que aprueba el Estatuto de la Agencia Internacional de Energías Renovables (IRENA)	06-12-2017	http://silpy.congreso.gov.py/descarga/resolucion-397514
Ley N° 5875 / 2017, Nacional de Cambio Climático	15-09-2017	https://www.bacn.gov.py/leyes-paraguayas/8712/ley-n-5875-nacional-de-cambio-climatico
Decreto N° 7702 / 2017, Por el cual se reglamenta el Artículo 42 de la Ley N° 422/1973 «Forestal» y se abrogan los Decretos N° 7031, del 17 de abril de 2017, 7152 del 22 de mayo de 2017, n° 7674 del 4 de septiembre de 2017	14-09-2017	http://digesto.senado.gov.py/detalles&id=9824
Decreto N° 7674 / 2017, Por el cual se reglamenta el Artículo 42 de la Ley N° 422/1973, «Forestal» y se abrogan los Decretos N° 7031, del 17 de abril de 2017 y N° 7152, del 22 de mayo de 2017	04-09-2017	http://d2ouvy59p0dg6k.cloudfront.net/downloads/decreto_nro_7702_del_2017.pdf
Resolución N° 467 / 2017, SEAM. Por la cual se reglamenta el Artículo 7° Y 8° del Decreto 11.202/13 “Por el cual se reglamenta parcialmente el Artículo 11° de la Ley N° 3001/2006 “De valoración y retribución de los Servicios Ambientales” y se establece el mecanismo para avanzar en la reglamentación del Artículo 8° de la misma”.	01-09-2017	http://www.mades.gov.py/wp-content/uploads/2018/07/img-170905053013.pdf
Resolución N° 212 / 2017, INFONA. Por la cual se establece el precio de canon de aprovechamiento de bosques privados, y se abroga la Resolución INFONA N° 211/2016, de fecha 09 de marzo de 2016”.	21-06-2017	http://www.infona.gov.py/application/files/7514/9149/4578/res_n_212_-_17.pdf
Resolución N° 320 / 2017, SEAM. Por la cual se modifica la Resolución SEAM N° 353/2013 y se actualiza la relación de equivalencia de Certificados de Servicios Ambientales en el marco de la Ley N° 3001/2006 De Valoración y Retribución y de los Servicios Ambientales”	07-06-2017	http://www.mades.gov.py/wp-content/uploads/2018/08/Resoluci%C3%B3n-SEAM-N%C2%B0-320-17.pdf
Decreto N° 7031 / 2017, Por el cual se reglamenta el Artículo 42 de la Ley N° 422/1973 «Forestal»	17-04-2017	http://www.infona.gov.py/application/files/4714/9269/8984/DECRETO7031.pdf
Resolución N° 172 / 2017, INFONA. Por la cual se modifica parcialmente el Artículo 4° de la Resolución N° 205/2010 y se excluye como requisito la Presentación de la Última Boleta de Pago de Impuesto Inmobiliario de los Formularios 04, 05, 06 Y 17	07-03-2017	http://www.infona.gov.py/application/files/1514/9019/4099/Resolucion_Nro_172-2017.pdf
Ley N° 5681 / 2016, Que aprueba el Acuerdo de París sobre el Cambio Climático.	06-10-2016	https://www.bacn.gov.py/leyes-paraguayas/5243/ley-n-5681-aprueba-el-acuerdo-de-paris-sobre-el-cambio-climatico

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Resolución N° 469 / 2016, SEAM. Por la cual se modifica el Artículo 3°, i) inc. a) y b) de la Resolución N° 199 de fecha 04 de octubre de 2013, Por la cual se establecen las condiciones y requisitos para poder certificar los servicios ambientales que produzcan los bosques, así como las condiciones y los requisitos para que los adquirentes de certificados de servicios ambientales de bosques puedan utilizarlos para compensar el déficit de reserva legal de bosques naturales, de acuerdo con las Leyes 422/73 Y 3001/06".	18-08-2016	http://www.mades.gov.py/wp-content/uploads/2018/07/img-160823084333.pdf
Estrategia nacional y plan de acción para conservación de la biodiversidad del Paraguay	15-08-2016	https://www.cbd.int/doc/world/py/py-nbsap-v2-es.pdf
Resolución N° 450 / 2016, SEAN. Por la cual se establecen los términos oficiales de referencia para el aprovechamiento comercial de la flora, en el marco de la Ley N° 96/92 "De Vida Silvestre".	05-08-2016	http://mades.gov.py/resoluciones?page=7
Resolución N° 216 / 2016, SEAM. Por la cual se aprueba la compensación por adquisición de Certificados de Servicios Ambientales por el valor del 1% del costo de inversión de la obra perteneciente al Ministerio de Obras Públicas y Comunicaciones Conforme El Artículo 11 De La Ley N° 3001/06 "De Valoración Y Retribución De Los Servicios Ambientales" Y Sus Decretos Reglamentarios.	04-05-2016	http://mades.gov.py/sites/default/files/users/comunicacion/Resoluci%C3%B3n%20261.pdf
Dirección de Derecho Ambiental de la Corte Suprema de Justicia (Informe de Gestión de la CSJ)	01-01-2016	https://www.pj.gov.py › contenido › informes_gestion
Decreto N° 4433 / 2015, Por el cual se proroga la vigencia del Decreto N° 7636, del 7 de noviembre de 2011, "Por el cual se reglamenta el artículo 26 de la Ley N° 422/73 "Forestal", y se establece un régimen especial para el aprovechamiento, transporte y comercialización de maderas y otros productos provenientes de plantaciones forestales establecidas con especies exóticas o introducidas de rápido crecimiento", y se modifican los artículos 3°, 4°, 5° y 7°".	19-11-2015	http://www.conaderna.gov.py/archivos/Paginas/Compilaci%C3%B3n_Ambiental/Decretos/2015/D_4433-15_Prorroga_la_vigencia_D_7636-11_Reg_422-73.pdf
Plan Marco Nacional de Desarrollo y Ordenamiento Territorial del Paraguay	08-10-2015	http://desarrollo.org.py › webroot › pdf › publications