CREATING A FOREST AND RIGHTS OBSERVATORY: A BRAZILIAN CASE STUDY

DISCUSSION DOCUMENT
Prepared by Maria-Therese Gustafsson and Almut Schilling-Vacaflor, with support from Nicole Polsterer and Saskia Ozinga.

We would like to thank the participants of a stakeholder workshop held in June 2023, those who took part in our survey and participants of a second stakeholder workshop in November 2023.
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1. Introduction

In recent years, the ‘home states’ of many transnational corporations in the global North have adopted binding regulations with the aim of holding companies accountable for human rights and environmental impacts throughout their supply chains.\(^1\) Diverse studies have argued that regulations based on a Human Rights and Environmental Due Diligence (HREDD) approach are likely to be particularly effective.\(^2\) The United Nations Guiding Principles for Business and Human Rights (UNGPs) were unanimously adopted by the UN Human Rights Council in 2011 and have since then constituted the authoritative global standard on human rights due diligence (HRDD). In the same year, the OECD aligned its Guidelines for Multinational Enterprises with the UNGPs and outlined company duties to exercise human rights and environmental due diligence (HREDD). The 2023 edition of the OECD Guidelines provides updated recommendations for responsible business conduct, including adequate supply chain due diligence. These international norms require companies to carry out HREDD to assess, prevent, mitigate and remediate negative impacts, caused or contributed to by their own operations, their subsidiaries and/or suppliers. Companies should report upon their HREDD systems; relevant stakeholders and rightsholders should be involved in all stages of a due diligence process; and access to remedy for victims should be guaranteed. Moreover, companies must ensure effective grievance mechanisms for individuals and communities who may be adversely impacted.

The European Union (EU) and Member States have taken a pioneering role in adopting HREDD laws. For instance, the EU has recently agreed a Regulation on deforestation-free products (EUDR) and it is about to adopt a Corporate Sustainability Due Diligence Directive (CSDDD). The EUDR specifically focuses on different ‘forest risk commodities’ (such as beef, coffee, cocoa, palm oil, rubber, soy and timber) – commodities that are associated with high risks of deforestation. The EUDR aims to minimise the EU’s impact on deforestation by prohibiting companies from putting products on the EU market that are tainted with deforestation.

To support EUDR implementation, the EU has committed to establish a **Forest Observatory**, focusing on deforestation, forest degradation, changes in the world’s forest cover, and associated drivers.\(^3\) Although the EUDR will require companies to also carry out due diligence to ensure there is no violation of human rights and specifically land tenure rights in their supply chains, the EU Observatory is presently not expected to monitor human rights violations. Deforestation is, however, often linked to a wide array of human rights violations, such as violations of the rights to land, water, food, a healthy environment, fair labour and Indigenous Peoples’ rights.

This project aims to develop a pilot study and present recommendations to the EU on how a Forest and Rights Observatory could be established in order to complement the planned EU Forest Observatory. In a first stage, we plan to focus on land tenure rights and related conflicts and show how this data can be linked with data on the production of forest risk commodities and deforestation. Initial interviews focussed on the Amazon and on MATOPIBA,\(^4\) where the link between deforestation and forest degradation and the violation of land tenure rights and land conflicts has been particularly severe. The idea is to combine data on deforestation with public

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1 See, for instance, Gustafsson et al. (2023)
2 See, for instance, Smit et al. 2020; Bager et al. (2021)
3 May and Ozinga (2021)
4 MATOPIBA is the acronym for a land area with particularly high deforestation rates in the Cerrado, which expands across the Brazilian States of Maranhão, Tocantins, Piauí, and Bahia, located in the northeastern and northern region of the country.
databases on land tenure and the land use of Indigenous Peoples, traditional communities and family farmers (Povos e Comunidades Tradicionais e Agricultores Familiares, PCTAFs), land conflicts, as well as other types of human rights impacts such as land- and water conflicts, and modern slave labour. In the future, a broader array of human rights impacts such as pesticide pollution could also be covered.

This report has gained important insights from workshops where we presented our recommendations to the EU and funding agencies. We believe that creating a Forest and Rights Observatory, alongside the Forest Observatory already announced by the EU could help companies carry out risk assessments and civil society actors to scrutinise companies’ impacts and responses to them as well as support Competent Authorities to enforce the EUDR. Furthermore, the Forest and Rights Observatory could help implement other HREDD laws, such as the French Duty of Vigilance law, the German Supply Chain Due Diligence law and the CSDDD.

The report includes our methodology, the process for developing a Forest and Rights Observatory, and background information on land tenure and land conflicts in Brazil. It briefly introduces existing public databases on land tenure and land use, on PCTAFs, and the current status of mapping of Indigenous Peoples’ and local communities’ lands and land conflicts. We aim to discuss the suitability of existing data and examine the question of the extent to which we already have the geolocation data that is required for implementing the EUDR and other HREDD laws to protect human rights, such as land tenure rights.

Selected EUDR requirements

**Article 3: Prohibition**

“Relevant commodities and relevant products shall not be placed or made available on the market or exported, unless all the following conditions are fulfilled:

(a) they are deforestation-free;
(b) they have been produced in accordance with the relevant legislation of the country of production; and...”

Art 2(40) ‘relevant legislation of the country of production’ means the laws applicable in the country of production concerning the legal status of the area of production in terms of:

(a) land use rights;
(b) environmental protection;
(c) forest-related rules, including forest management and biodiversity conservation, where directly related to wood harvesting;
(d) third parties’ rights;
(e) labour rights;
(f) human rights protected under international law;
(g) the principle of free, prior and informed consent (FPIC), including as set out in the UN Declaration on the Rights of Indigenous Peoples;

The risk assessment shall take into account, in particular, the following criteria:

(b) the presence of forests in the country of production or parts thereof;
(c) the presence of indigenous peoples in the country of production or parts thereof;
(d) the consultation and cooperation in good faith with indigenous peoples in the country of production or parts thereof;
2. Methodology and process for developing a Forest and Rights Observatory

In its report "A Forest and Rights Observatory", Fern explored how the EU can best integrate deforestation and human rights violations data in its regulatory proposals, using the example of Brazil. The report concluded that "the Cerrado represents a region in which there remains a significant deficit of information regarding the processes which have led to land use change and land tenure conflict. Dispossession of smallholders and traditional communities has occurred in areas that have been consolidated over the past decade through illegal means to convert to monocultures. Although some recent initiatives have sought to restore territorial and labour rights, the data which would support a broader effort to monitor the existence of conflict is largely limited to the alerts and denunciations formulated by affected communities and reported to the CPT [Comissão Pastoral da Terra]. There is as yet no interactive mapping or online database to cross-reference the occurrence of such conflict with spatially explicit information regarding agricultural expansion. For the present, it would be possible to indicate the presence of reported conflict, their scale (number of communities and people involved, and the area in conflict), and (possibly) the duration of such conflicts over time. [...] In the Amazon similar problems occur with respect to mapping of areas undergoing tenure conflict. Land grabbing is prevalent at the frontier and in areas of public forest where titling has been facilitated using the CAR [Cadastro Ambiental Rural] as a step toward tenure legitimation. In response to such infractions, cross-referencing between the INCRA and SICAR [National Rural Environmental Registry System] databases has been used by the MPF [Federal Public Prosecutor] to identify falsification of land titling in Indigenous territories. Greater use of these data would be a positive step toward monitoring of situations where tenure conditions are unclear or where conflicts have arisen both in the Amazon and in the Cerrado."

A participant in the related webinar where we discussed the findings confirmed that "There is a lot of work to do (in the coming two years) to ensure the draft EU Regulation will be based on transparent data that reflects the reality on the ground and fully includes human rights violations." Dedicated funding allowed Fern to establish a one-year project. This project also builds on interview data by Schilling-Vacaflor and Gustafsson described below.

Maria-Therese Gustafsson and Almut Schilling-Vacaflor have together led the research project “Bringing the social dimension into deforestation-free supply chain initiatives”, funded by the Swedish Research Council for Sustainable Development (Formas). Within this project, they analysed whether and how human rights issues, such as land tenure rights and land conflicts, have been included in the sustainability governance of global supply chains. In their recent research, they particularly focus on new HREDD laws and their implementation and consequences in the Global South. The empirical analysis of this research builds on nine months of field research in cities and rural areas in Brazil, including visits and participatory observation in the producing sites of soy and beef in the Cerrado and Amazon biomes; a stakeholder workshop organised in collaboration with the University of Brasilia in 2020; interviews with around 150 representatives of non-governmental organisations (NGOs), grassroots organisations, state agencies, producers, agri-food companies and business associations in Brazil; 50 interviews with key state and non-state actors in Europe; as well as the document analysis of sustainability reports and vigilance plans of agri-food companies from Europe.

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5 The most reliable and comprehensive database on rural conflicts is available from the Pastoral Land Commission (Comissão Pastoral da Terra – CPT).
6 FORMAS, 2020-2024
7 see, for instance, Gustafsson et al. 2023; Schilling-Vacaflor 2021; Schilling-Vacaflor and Gustafsson (2023)
To develop a pilot study of a Forest and Rights Observatory in Brazil and present recommendations to the EU, Fern, University of Osnabrück and Stockholm University organised a first stakeholder workshop with different Brazilian civil society organisations, selected experts and a representative from Brazil’s federal public prosecutor office in June 2023. Thereafter, we conducted follow-up interviews with several participants of the first workshop to dig deeper into the topics discussed.

2.1 FIRST STAKEHOLDER WORKSHOP ON 19 JUNE 2023

The first workshop was attended by approximately 20 representatives from civil society organisations, experts on the topic and staff from the federal public prosecutor. Invitees included people who have played a leading role in developing new databases on land use, land tenure and land conflicts in relation to global supply chains in Brazil and those who work closely with and make use of such databases.

The objectives of the first workshop were to:

- Discuss the advantages and disadvantages of existing databases, and how different databases can be combined to visualise land tenure rights and land conflicts involving PCTAFs in one online interactive map.

- Identify any potential risks to showcase sensitive land tenure data and how to deal with these risks in order to ensure the protection of PCTAFs rights.

- Identify gaps in data about land tenure and land conflicts in Brazil and data that would be needed to support a rights-based approach to EUDR implementation.
In relation to the objectives of the Forest and Rights Observatory, participants stressed that this database must not turn into a “clearing house”, to be used as a compliance tool and potentially to reduce the risks for companies. They voiced the opinion that a Forest and Rights Observatory should not include data that is being used as evidence in lawsuits, but rather serve to point to the existence of specific risks and inform companies’ risk assessments. Participants also reflected upon differences in monitoring deforestation and social risks. They argued that it is challenging to geolocate social risks, because “they are alive” and sometimes the scale at which a conflict takes place is unclear, as it can have consequences in more distant places as well.

Another important outcome of the first workshop was that participants expressed the need to discuss issues in relation to the governance structure of a Forest and Rights Observatory, such as the question of who should lead and coordinate this initiative. We reflect upon this important question in section 5.

2.2 SECOND STAKEHOLDER WORKSHOP ON 16 NOVEMBER 2023

In total, 35 people attended the second workshop which took place in the office of Oxfam in “São Paulo”. Participants could also join the event digitally.

In advance of the meeting a survey was shared with 39 people - participants of the first workshop and additional experts they had recommended. Eight people responded. The survey included all databases included in the first briefing, complemented by additional databases mentioned during the first workshop. The aim of the survey was to select and prioritise particularly helpful databases for the inclusion in the Forest and Rights Observatory, as well as to discuss how it should be governed.

After a short introduction by Nicole Polsterer, Maria-Therese Gustafsson presented the survey and its results. This was followed by an open discussion and three presentations on databases and experiences of using them (“Atlas Agropecuario” (presented by Imaflora), the “Mapa dos Conflitos” (presented by the Agência Pública) and “Tamo de Olho” (presented by WWF)). This led to recommendations for the further development of the Forest and Rights Observatory.

The discussions related to considerations when developing a Forest and Rights Observatory can be summarised as follows.

THE COMBINATION OF DIFFERENT DATA SETS

There are challenges related to the question of how to combine different data sets based on distinct methodologies. Furthermore, the Forest and Rights Observatory needs to consider the need to decide how to deal with the time dimension, as databases can be static and cover data from different moments in time. Participants suggested how the Observatory could constructively deal with these challenges.

One proposed way to deal with different datasets and their combination would be to create technical standards for the datasets and to write briefings on them and their use. For instance, Trase uses such standards and is transparent about the data they use and their limitations. This suggests that the process for selecting data, the development of technical standards, and the validation of the briefing documents could be done in a collective manner.

In their presentation about the Mapa dos Conflitos, representatives from the Agência Pública explained how they created indices to compare the data across a broad range of municipalities.
DIFFERENT DATASETS AND THE TIME DIMENSION

In the survey and the workshop, participants pointed to the limitations of the PRODES and MapBiomas data, as they are only updated yearly. Two participants suggested including MapBiomas Alerta and Deter data, “which offer information more frequently, with updates about every 15 days”. These alert mechanisms focus on deforestation and land use change. Different participants expressed interest in the Forest and Rights Observatory being linked to the creation of a new alert mechanism that focuses on violations of land tenure rights or other human rights more broadly.

In relation to the different time span covered by distinct databases, one participant explained that in the Atlas Agropecuário they apply linear regression techniques to harmonise the data. He explained with reference to a possible triangulation of CPT data on rural conflicts and soy production in Brazilian municipalities that crossing different datasets would make it possible to predict which municipalities will have the largest risk of human rights violations. The Atlas Agropecuário data are updated on an annual basis. A problem this dataset faces is how to conserve and deal with historical data.

THE LIMITATIONS OF EXISTING DATA SETS: HOW TO DEAL WITH THE ABSENCE OF TRADITIONAL COMMUNITIES, OTHER ACTORS AND CONFLICTS FROM MAPS?

Several participants of the workshop expressed their concern that official data on traditional communities and Quilombola communities have been very deficient and limited. A participant explained: “In the Cerrado Biome, only less than 2% of Quilombola territories are actually officially recognised, and less than 1% of traditional communities are recognised by the authorities. So, we need to think of what’s left outside of the mapping and the georeferencing that we will be suggesting to make. Are these conflict areas? Are these areas invaded by corporations for illegal deforestation? So, all the data sets provide figures that are much smaller than the actual figures we have”.

In relation to this topic, the question still needs to be discussed of how to deal with diverse community mapping projects (e.g., led by public Universities, Tô No Mapa, Nova Cartografia Social, and Plataforma dos Territorios Tradicionais from the Public Prosecutor) and the data developed therein and whether there can be constructive ways of showcasing existing data in a way that empowers communities that have often been “invisible”, i.e., absent from public maps and registers.

With regards to the CPT data, participants of both workshops pointed to the fact that georeferencing this data can be challenging. However, the Agência Pública has developed a methodology to register and visualise CPT conflicts at the municipal level and expressed their plan and interest to expand the database they have developed in collaboration with the CPT to the national level.
HOW TO DEAL WITH CAR DATA IN THE FOREST AND RIGHTS OBSERVATORY?

In the survey, participants stated that the Forest and Rights Observatory needs to be careful when using the CAR (SICAR database) data, as this data does not register land tenure, but is a self-declared repository of private rural properties. This data should be validated by the state, but the validation process has been very slow. However, several participants suggested that this data should still be used in a Forest and Rights Observatory, arguing, for instance: “The CAR registries overlap traditional territories, and this is an indicator for possible invasion and deforestation”.

While participants of the workshop have been very aware of the diverse challenges associated with the task to establish a Forest and Rights Observatory, they also expressed a lot of motivation to advance with this important endeavour.

FOLLOW-UP ACTIVITIES FROM THE SECOND WORKSHOP: PLANNING THE NEXT STEPS

Based on the survey results, the discussions from the second workshop and follow-up interviews, we would recommend the following next steps for developing a Forest and Rights Observatory:

- Support efforts to geo-reference conflict data registered by the CPT at a municipal level. The database by Mapa dos Conflitos currently only covers the Amazon, but there are plans to expand this database to cover all of Brazil.

- Create a taskforce that also includes many of the workshop participants to further develop the Rights Observatory, for instance by writing technical notes on different databases, selecting databases and working on different pilot studies to find out how different sources can be meaningfully combined.

- Accept MapBiomas generous offer to share available data they have already collected with the Forest and Rights Observatory. A list can be made to see what kind of data sources they already have at their disposal.

- Establish more contact with different state agencies such as the Ministry of the Environment, the Ministry of Indigenous Peoples, and the public prosecutor.

- Contact Indigenous Peoples’ and Quilombola organisations (e.g. CONAQ, APIB) to consult them about, and if possible include their data in the Forest and Rights Observatory.
3. Land tenure, land conflicts and deforestation in Brazil

The EU has imported large volumes of ‘forest risk commodities’, such as beef, coffee, soybeans and timber, from Brazil, even though these products have been strongly associated with deforestation, land speculation and land grabbing. Brazil is among the countries with the greatest land inequality globally and the export-oriented agribusiness has contributed to further land concentration with negative impacts on smallholders and traditional communities. There is a growing recognition among actors that to contribute to just sustainability, environmental issues such as deforestation should be addressed alongside social and human rights concerns, such as the recognition and protection of the lands and territories of PCTAFs, including customary rights.

Deforestation is a multifaceted problem and there are close links between deforestation and land tenure conflicts. The lands and territories of PCTAFs cover around a quarter of Brazil’s territory and these territories are home to most of the country’s biodiversity, the source of much fresh water and important global carbon sinks. However, PCTAFs in the Amazon and Cerrado biomes often do not possess formal land titles. In a context of contested and unclear land tenure rights, deforestation in Brazil has often been used for ‘grabbing’ lands and has been associated with the dispossession of PCTAFs from their access to land and livelihoods and a lack of recognition of customary rights. In turn, the recognition and titling of Indigenous and Quilombola lands has proven to be a powerful tool for preventing deforestation and forest degradation.

There are still large areas in the Amazon that are formally characterised as ‘undesignated’ public lands. Brazilian domestic laws and policies, such as the “Legal Land” programme, the “Forest Code” (law 12,651), and the rural environmental registry CAR (Cadastro Ambiental Rural) have been criticised for promoting land speculation and land grabbing. The CAR registry is self-declaratory and to date, less than five per cent of all entries have been validated by the respective states. Studies have shown that in the Amazon region 11.6 million hectares (ha) of undesignated public lands have been registered in the CAR systems, indicating attempts to appropriate such lands. In 2020, almost 10,000 CAR entries overlapped with the lands of Indigenous Peoples. While such overlaps can be cleared, they can be seen as evidence of private actors’ interest in grabbing PCTAFs’ land, especially when it is not yet recognised and demarcated. Against this background, researchers argue that non-deforestation policies – in order to be effective – should simultaneously tackle land speculation and land grabbing.

8 Cowi et al. (2018); Rajão et al. 2020; Cabral et al. (2023)
9 Guedes Pinto et al. (2020)
10 Brites and De Mello (2021)
11 Azevedo-Ramos et al. (2020)
12 Oviedo et al. (2021)
13 Bowman et al. (2012); Sparovek et al. 2019; Schilling-Vacaflor (2021)
4. Overview of databases to be considered for inclusion in the Forest and Rights Observatory

In this section we briefly introduce (1) databases on land tenure, land use and deforestation in Brazil; (2) public databases on Indigenous and Quilombola territories and agrarian reform settlements; (3) community mapping projects; and (4) data on land conflicts. Thereafter, we outline (5) additional possible sources of data that could be used and (6) databases on other negative social and human rights impacts that might be used when expanding the Forest and Rights Observatory from the topic of land tenure and land conflicts to include a broader set of issues. The table below gives an overview of all databases discussed during the workshop. It is followed by a brief explanation of each of them.

<table>
<thead>
<tr>
<th>Types of databases</th>
<th>Specific databases/georeferenced (yes/no)</th>
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</table>
| 1) Databases on land tenure, land use and deforestation in Brazil | • PRODES and DETER data on deforestation in Brazil (INPE) (yes)  
• MapBiomas data on land cover and land use in Brazil (yes)  
• SICAR database (Cadastro Ambiental Rural CAR registers) (yes)  
• Atlas Agropecuario data on land tenure rights in Brazil (Imaflora) (yes)  
• National Register on Public Forests (CNFP) (yes)  
• Data on public lands: Data from INCRA (SIGEF) (yes)  
• Data on public lands: Union Heritage Secretariat (Secretaria do Patrimônio da União - SPU) (yes)  
• Data on lands embargoed by Ibama (yes) |
| 2) Public databases on Indigenous and Quilombola lands and agrarian reform settlements | • FUNAI database on Indigenous Peoples’ lands (yes)  
• INCRA data on demarcated Quilombola lands (yes)  
• Fundação Palmares (FPC) data on recognised Quilombola communities (no)  
• Census data from 2022 on Quilombola communities (yes/no)  
• INCRA data and data from state agencies on agrarian reform settlements (yes) |
| 3) Data on the location of PCTAF communities (community mappings) | • Platform of traditional communities (Plataforma dos territórios tradicionais) (yes)  
• Tô no Mapa (yes)  
• Nova Cartografia Social (yes)  
• UFPA database on Quilombola communities (Pará) (no)  
• UFBA mapping of traditional communities requested by the Secretariat for the Promotion of Racial Equality (Bahia) (no)  
• CIMI data on Indigenous peoples (mentioned in second workshop) (no) |
| 4) Data on land conflicts | • CPT Data on rural conflicts (no)  
• Mapa dos conflitos (no)  
• UNESP database “DataLuta” on rural conflicts  
• Atlas Agropecuario (areas where different land claims overlap could be seen as a proxy for the likelihood of land conflicts) (yes)  
• Tamo de Olho (yes)  
• Environmental Justice Atlas (EJAtlas) (yes) |
| 5) Additional data sources on land tenure and land conflicts | • Alert systems (no)  
• Databases on lawsuits (no) |
| 6) Data on other social impacts | • Black list on modern slavery (Radar SIT - Statistics and Information Dashboard of Labour Inspection in Brazil) (yes)  
• SUS data on pesticide intoxication (yes)  
• SUS data on physical violence (no)  
• SMART lab on labour rights violations (yes)  
• ANA/EMBRAPA data on irrigation licenses (yes)  
• Atlas dos Agrotóxicos (USP) (yes)  
• Impacto data on slave labour (yes) |
4.1 DATABASES ON LAND TENURE, LAND USE AND DEFORESTATION IN BRAZIL

PRODES AND DETER DATA ON DEFORESTATION IN BRAZIL (INPE)

Data can be accessed here:
http://terrabrasilis.dpi.inpe.br/app/map/deforestation?hl=en

Description:
The TerraBrasilis portal is a web platform developed by INPE for accessing, consulting, analysing and disseminating geographic data generated by the institute’s native vegetation monitoring projects, such as PRODES and DETER. In mapping the suppression and/or degradation of native vegetation (PRODES and DETER), INPE is not responsible for analysing the legality of the suppression and/or degradation, but merely quantifies and spatialises these occurrences. This data is intended to help public bodies formulate public policies for the Brazilian state. Private entities can also use this information to plan their activities, always aware that the data does not contain an analysis of legality.

Advantages:
PRODES and DETER data are widely used and public, they have a high resolution and are reliable.

MAPBIOMAS

Data can be accessed here:
https://brasil.mapbiomas.org

Description:
According to their website, the aim of MapBiomas is “to reveal the transformations of Brazilian territory through science, with precision, agility and quality, and to make knowledge about land cover and land use accessible, in order to seek the conservation and sustainable management of natural resources, as a way of combating climate change”. MapBiomas is a collaborative network of NGOs, universities and technology startups. They produce annual maps of land cover and use and monitor water surface and fire scars on a monthly basis, with data from 1985 onwards. They have also validated and produced reports for each deforestation event detected in Brazil since January 2019, through MapBiomas Alerta.

Advantages:
The data produced is openly accessible and widely perceived as legitimate. The data can easily be downloaded and used.

SISTEMA NACIONAL DE CADASTRO AMBIENTAL RURAL (SICAR)

Public database on rural properties.

Data can be downloaded here:
https://www.car.gov.br/##/
Description:
The National Rural Environmental Registry System (SICAR) was created through Decree No. 7,830/2012 to integrate and manage environmental information from all rural properties in the country, which are required to carry out the Rural Environmental Registry (CAR) in environmental agencies of their respective States. Registration in the CAR and adherence to the Environmental Regularization Programs (PRA) must be done with the state environmental agencies. It is up to the state environmental agencies to provide the electronic systems needed to register properties in the CAR and make environmental regularization feasible.

Advantages:
Data is georeferenced and available for the whole country and can be used to triangulate it with other datasets and to identify potential land conflicts.

Disadvantages/limitations:
The data is self-declaratory, and to date less than five per cent of all entries have been validated by the respective states.

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ATLAS AGROPECUÁRIO

Atlas Agropecuário is developed by Imaflora in collaboration with GeoLab and the Royal Technological University (Sweden).

Data can be accessed here:
https://atlasagropecuario.imaflora.org

Description:
Atlas Agropecuário includes information on forest cover, agricultural lands and hydrographical data in Brazil. The purpose is to provide a platform that covers and clarifies different types of land tenure and monitors land use change. It includes information from a wide variety of tenure mapping and tools (INCRA registries, land reform settlements, and the CAR data). Together, these data sources cover 80 per cent of the country. For the areas that are not covered, additional data collection has been carried out. Recently, this data has been combined with Trase data.

In the revised version of the Atlas Agropecuário, which was launched at the end of 2023, overlaps between different land claims are not ‘cleaned up’ anymore, but they are visualised: “We do not interfere with the actual demarcation of properties by cleaning up the overlaps. Thereby, we still get a better understanding of what is happening in terms of land tenure. The darker the area, the more overlaps you have on that particular part of the map. […] That allows us to solve the overlapping problem and at the same time still explore the social and anthropological topics connected to that area”. (representative of the Atlas Agropecuario, November 2023).

Advantages:
The Atlas uses many different sources for creating its “malha fundiaria” (land tenure net).
THE NATIONAL REGISTER OF PUBLIC FORESTS
(CADASTRO NACIONAL DE FLORESTAS PÚBLICAS CNFP)

Data can be accessed here:
https://snif.florestal.gov.br/pt-br/cadastro-nacional-de-florestas-publicas

Description:
According to their webpage, the CNFP is a forest management planning tool that gathers georeferenced data on Brazil’s public forests in order to offer public managers and the general public a reliable base of maps and data with relevant information for forest management. CNFP data helps in the processes of allocating public forests for community use, creating conservation units and carrying out forest concessions. The Register also contributes to transparency, social participation and the unification of information on public forests. The information is consolidated as new data is made available by partner institutions - this makes the Cadastre a dynamic database.

SISTEMA DE GESTÃO FUNDIÁRIA (SIGEF)

SIGEF is a land management tool operated by INCRA and by the Ministry of Agrarian Development.

Data can be downloaded here:
https://sigef.incra.gov.br/

Description:
SIGEF was developed to manage land information in the Brazilian countryside. It entered into force in 2013. The electronic tool is used to receive, validate, organise, regularise and make available georeferenced information on rural property boundaries.

Land owners are required to register their properties in the SIGEF system, providing information about the size, boundaries, land use, and ownership status. It plays a role in the regularisation of land tenure, especially in cases where land ownership or boundaries are disputed or unclear. SIGEF is also used to track compliance with environmental laws and regulations related to land use, especially in protected areas or regions with strict environmental requirements.

Advantages:
The information is geo-referenced and electronic. In principle, SIGEF should verify overlaps with Indigenous lands and protected areas.

Disadvantages/limitations:
SIGEF cannot identify overlaps with lands of agrarian settlements, conservation units, Indigenous lands, or Quilombola territories that have not yet been demarcated.
DATABASE ON PUBLIC LANDS BY SECRETARIA DO PATRIMÔNIO DA UNIÃO’S (SPU)

Public database on public lands in Brazil.

Description:
SPU is an agency of the Brazilian federal government responsible for managing and overseeing federal public property in Brazil. Its primary function is to administer and safeguard the federal government’s real estate assets and land holdings across the country. SPU is responsible for the database of federal public lands.

IBAMA: DATA ON EMBARGOS

Data can be accessed here:

Advantages:
Information consists of public data, which is updated on a daily basis. Names and personal ID of the offenders are available. This database allows users to search using two different parameters: the place where the embargo took place, or the data of the offender. You can also filter by deforestation embargoes or other types of embargoes.

Disadvantages/limitations:
The quality of data depends on the quality of public monitoring and enforcement mechanisms.
4.2 PUBLIC DATABASES ON INDIGENOUS TERRITORIES, QUILOMBOLA TERRITORIES AND AGRARIAN REFORM SETTLEMENTS

DATA ON INDIGENOUS PEOPLES’ LAND

Data on Indigenous Peoples’ demarcated lands and lands in process of demarcation are available from the Fundação Nacional dos Povos Indígenas (FUNAI).

Data can be downloaded here: https://www.gov.br/funai/pt-br/atuacao/terras-indigenas/geoprocessamento-e-mapas

Description: FUNAI’s database is built with the open software GeoServer. Currently, there are 764 areas in FUNAI’s registry, of which 483 areas are sites whose demarcation processes have been concluded. There are 281 additional sites that are currently under analysis. Together, these areas represent 13.75 per cent of the Brazilian territory, and are located in all biomes, especially in the Legal Amazon.

Advantages: Georeferenced data, available for the entire country, public data, open access, continuously updated, strong legal protection of Indigenous Peoples’ lands.

Disadvantages/limitations: Does not include all customarily owned Indigenous territories. Data on other types of local communities is not included in this database (e.g., Geraizeiros, Ribeirinhos, Quilombolas), which is why it is important to complement this data with data, such as from community mapping databases and on land conflicts (see below).

Questions to discuss:

How to ensure that all customarily owned lands by Indigenous Peoples and traditional communities communities are being included in a database?

Input from the workshop: A database on PCTAF lands and territories in Brazil will probably not be complete. A good solution seems to be to combine different sources of public data and data produced by civil society. In this regard it is challenging that many databases overlap and do not yet speak to each other.

DATA ON QUILOMBOLA TERRITORIES (INCRA)

Data on demarcated Quilombola lands/territories are available from INCRA.

Data can be accessed here, for instance: https://www.gov.br/incra/pt-br/assuntos/governanca-fundiaria/titulos_quilombolas_nov_2021.pdf and

Description:
INCRA’s national public database is the official site for certified properties. It includes in total 2.9 million ha of Quilombola territories. However, according to the Comissão Pró-Índio of São Paulo, only 136 properties or 7.1 per cent of Quilombola lands out of a total of 1,916 properties belonging to Quilombola communities, which are in some stage of the process of demanding legal recognition, have been officially titled.¹⁴

Advantages:
This is public data that is georeferenced, available for the entire country, open access, and continuously updated.

Disadvantages/limitations:
Only a minority of Quilombola communities’ demands for land rights have been legally recognised and are, therefore, included in the INCRA database.

DATA ON QUILOMBOLA COMMUNITIES (FUNDAÇÃO PALMARES)

Data on recognised Quilombola Communities are available from the Fundação Palmares Cultural (FPC).

Data can be downloaded here: https://www.palmares.gov.br/?page_id=37551

Short description:
FPC is a former division of the Ministry of Culture that was responsible for environmental licensing and the regularisation of titles for Quilombola communities. They certified communities that declared themselves as Quilombolas. However, under the Bolsonaro administration this responsibility was transferred to INCRA.

Advantages:
Indications of the existence of Quilombola communities across Brazilian municipalities.

Disadvantages/limitations:
Data is not georeferenced and usually it is used on an aggregated level (Quilombola communities per municipality or state). There are some ongoing pilot studies to complement FCP data with georeferenced data (polygons).

Questions to discuss (related to both INCRA and Fundação Palmares):

- Would it be important to create more georeferenced data on Quilombola and other types of local or traditional communities?
- Is this already sufficiently done by the Ministerio Público or projects like Tô No Mapa?
- Should such existing projects be further developed or do we need a new database? If yes, who should be in charge of such a database (e.g., FCP, Ministerio Público, INCRA)?

Input from workshop:
Participants argued that it would be best to build on ongoing initiatives and to see how they can be combined in a meaningful and feasible way. It is important to stress that existing data is not complete and that the absence of communities from maps should not be interpreted as evidence that they do not exist.

¹⁴ May and Ozinga (2021)
CENSUS DATA ON QUILOMBOLA LANDS

Data can be downloaded here:

Description:
In 2022, the Brazilian Institute of Geography and Statistics (IBGE) carried out a Census of Quilombola communities in collaboration with Conaq (National Coordination for Articulation of Black Rural Quilombola Communities). It was the first time that Quilombola communities were included in the Census. The results showed that Brazil has more than 1.3 million Quilombolas, of which less than 5 per cent live in demarcated territories.

Advantages/limitations:
Compared to the INCRA data on Quilombola communities this gives a much more comprehensive overview as it also includes people who identify as Quilombola living in undemarcated lands. The data is georeferenced and publicly available. As Conaq has been involved in this process, it is generally well-received by Quilombola communities.

DATA ON SETTLEMENTS FROM THE AGRARIAN REFORM

Data on settlements from the agrarian reform are available from INCRA. Furthermore, data on Agrarian settlements are also available at State level.

Data can be downloaded here:

Short description:
The agrarian reform settlement is a set of agricultural units, installed by INCRA in a rural property, which, despite having an owner, did not comply with its social function, i.e., it was not properly used as foreseen in Article 5 of the Federal Constitution. Each of these units, called plots or lots, is destined for a family of farmers or rural workers without economic conditions to acquire a rural property. The benefiting family must live and explore the lot, with the development of various productive activities. The settlement also has areas for community use and for the construction of collective structures, such as churches, community centres, agro-industries, schools, health units and sports areas. Every agrarian reform area also has environmental preservation areas, such as legal reserves and permanent protection areas. INCRA distinguishes between different types of settlements, such as Federal Settlements, Agro-extractivist Settlements, Forestry Settlements and Sustainable Development Settlements (mainly for traditional populations).

Questions to discuss:
- Is georeferenced data publicly available?
- Should data on settlements from the Agrarian reform be included in the Forest and Rights Observatory?
- How should companies consider the existence of agrarian reform settlements in their HREDD systems?

Input from workshop:
This data should be included in the Forest and Rights Observatory and could be complemented by state data on Agrarian settlements.
Advantages:
This is a national public database, available for the entire country, and continuously updated.

Disadvantages/limitations:
During the Bolsonaro administration, there was a delay/blockade in the recognition of collective settlements. Not all Agrarian settlements from the diverse states are included in this database.

4.3 COMMUNITY MAPPING

Community maps can be important tools for visualising lands that are inhabited and used by PCTAFs, irrespective of the question of whether local communities possess legal land titles. Such maps can help them to become more visible, to be empowered in land conflicts and to gain titles of their lands and territories in the future. However, there might also be risks to be considered in relation to the question of how to deal with and use data from community maps. First, the publication of community locations might expose them and be associated with risks. Second, as data is self-declaratory, there is a risk that communities do not map their lands and territories adequately or that conflicts with neighbours are exacerbated.

Participants in the first stakeholder workshop emphasised that “Community maps on lands not yet formally recognised will be an important source of information as long as [Free Prior and Informed Consent] FPIC is duly respected”, “[…] the existence of a georeferenced point (of an Indigenous or traditional people) in the impact zone of the agricultural enterprise is sufficient to indicate to the company or auditors that prior consultation should be carried out. This information is, therefore, useful to inform companies about risks and duties to consult rightsholders”. Participants of the first workshop also agreed that “the absence of communities from maps does not necessarily indicate that such communities do not exist”.

TÔ NO MAPA

Tô no Mapa is an initiative of the Amazon Environmental Research Institute (IPAM) together with the Institute for Society, Population and Nature (ISPN) and the Cerrado Network, in partnership with the Cerrados Institute.

Data can be downloaded here:
https://tonomapa.org.br/en/interactive-map/

Description:
Tô no Mapa is a georeferenced and updated database of traditional territories, that helps to fill the current gap in official data. Tô no Mapa is developed based on a cell phone application that enables Indigenous Peoples, traditional communities, and family farmers to map their territories. Initially, it started in the Cerrado, but the idea is to also cover the Amazon, and there have been some advances in this regard. While it is an important tool to visualise traditional territories, it does not guarantee land legalisation, regularisation, or demarcation by the competent body. The interactive map available on the webpage currently covers 239 traditional communities.

Advantages:
Community maps can help traditional communities to gain land titles, but Tô No Mapa is mainly a tool for visualising lands and territories communities inhabit and use. Tô No Mapa offers the option that collected data are included in the Plataforma das comunidades tradicionais, if communities choose this option. Tô No Mapa does not distinguish between individual and collective claims to land.
Disadvantages/limitations:
In the interactive map that is disclosed on the webpage the location of communities is shown with a point, while the exact location and size of lands inhabited and used is not available. To date, relatively few communities have assessed their lands using georeferential methodology. There have been debates among the organisations involved in Tô No Mapa about making georeferential data public.

Questions to discuss:

- Are there any risks to use non-validated data?
- Could the disclosure of data about invisible communities represent a risk for the communities that are covered by the database or for the ones that are not (yet) covered?
- What about contested ideas about land property within local communities?
- How could existing challenges be overcome in a way that contributes to the protection of PCTAF rights?

Input from workshop:
“Over the past years of mapping, we have seen that there are like three times more invisible communities than the ones included in official data sets […] most of the conflicts that we identified, or like 72%, are related to land use conflicts, associated with the expansion of commodity production […] communities feel very threatened when they describe these types of violations. […] In the Forest and Rights Observatory we need to discuss and to figure out how to deal with the risks of revealing the identities of the communities, and of working with bottom-up data collected and brought by the communities. […] In the Cerrado there is a clear overlap of most forested areas and areas occupied by local communities that have been mapped out. Strategies could emerge for securing those territories that are associated with abundant vegetation.”

“The Platform works as a system of self-declaration to gain the maximum visibility and also to gain and consolidate rights.”

PLATFORM OF TRADITIONAL COMMUNITIES (PLATAFORMA DOS TERRITÓRIOS TRADICIONAIS)

The Platform of traditional communities is developed by the Public Prosecutor (Ministerio Público Federal MPF).

Data can be downloaded here:
https://territoriostradicionais.mpf.mp.br/sig/app/index.html#

Description:
Georeferenced data from various sources on the lands of Indigenous Peoples and traditional communities. The Public Prosecutor has constructed the database in partnership with the Federal University of Lavras (UFLA), Conselho Nacional de Povos e Comunidades Tradicionais (CNPCT), and the German Agency for International Cooperation (GIZ) in Brazil. The construction of the platform also relied on the partnership of the Federal University of Lavras (UFLA), the Nova Cartografia Social project, and the Ministry of Environment’s Extractivism Secretariat. There is a collaboration between Tô No Mapa and the MPF, wherein the communities have the option to include the data gathered by Tô no Mapa to the MPF platform. The objective is to carry out a diagnosis of the occupation of territories and of the needs of these peoples and
communities to guide the actions of public agencies and the definition of policies that attend to these communities.

Advantages:
The database contributes to visualise the territories of traditional communities. There is a collaboration between Tô No Mapa, and the Ministerio Público, and there is the opportunity to upload the information from Tô No Mapa on the Platform.

Disadvantages/Limitations:
There is very little information on the website about the information that is used to map the lands of traditional communities.

NOVA CARTOGRAFIA SOCIAL

The database is developed by the New Social Cartography of the Amazon Project (PNCSA).

Webpage:
http://novacartografiasocial.com.br/cadernos/projeto-mapeamento-social/

Description:
The objective is to create a self-cartography of the traditional peoples and communities in the Amazon. The information is published in booklets, which are intended to make communities visible and help strengthen social movements. Each cartography process is initiated by a community, and maps are developed through workshops, wherein communities are trained in global positioning systems (GPS) and mapping techniques. Data is collected about the territory and the community's social history. PNCSA georeference the data, but also include testimonies and drawings from the communities in published booklets.

Questions to discuss:
- What kind of data are shown on the map of their website? What do the data on traditional communities cover in practice? Are the land claims already validated or are they self-declaratory?
- Are all data open access? Could they be included in a Forest and Rights Observatory?

Input from workshop:
Self-declaration in Brazil is a right that is guaranteed by the Federal Constitution. It is an important mechanism and guarantee for territorial rights. “So this guarantees, legally guarantees that the self-declaration system protects land rights and all of this is supported by and coordinated by the Brazilian federal public prosecutor.” The Platform brings together information on demarcated and not-demarcated lands. In general, the data is transparent and available, but in cases of land conflicts some of the data is not openly available.

Questions to discuss:
- To what extent could data be disclosed and used in the Forest and Rights Observatory?
- Could this be done with the FPIC of involved communities?

Input from workshop and follow-up interview:
All data disclosed by the Nova Cartografia Social project are developed and published with the ownership of local communities and their FPIC. They are openly accessible and can be used in a Forest and Rights Observatory. However, as the communities themselves decide what aspects they want to highlight and how they want to represent their territories, the different maps are not comparable. Moreover, the development of each map is a big participatory effort, which is why it is difficult to achieve the coverage of a large number of communities with these tools. The maps are made in specific moments and not continuously updated.
Advantage:
Very detailed information about land and land use as perceived and experienced by local actors in specific places. Participatory process of generating the data. Local knowledge is recognised, and several rounds of cross-checking the accuracy of the data between the PNCSA research team and the communities

Disadvantages/limitations:
Limitations in relation to scale (often at the local level) and data is often confidential.

UNIVERSIDADE FEDERAL DA PARÁ RESEARCH ON QUILOMBOLA COMMUNITIES

There is no official website where the data could be downloaded.

Description:
Professor Girolamo Treccani at the Federal University of Pará has led a research project, wherein they have developed a database on Quilombola communities. The database is partly based on data from the FCP and the INCRA.

Advantages/limitations:
Whereas participants at the first workshop highlighted this as the best database on Quilombola communities, there is no information available online on the database. The database is thus not publicly available via publications and is not georeferenced.

UFBA MAPPING OF LOCAL COMMUNITIES (COMUNIDADES DE FUNDOS E FECHOS DE PASTO CFFP) IN THE STATE OF BAHIA

In this project researchers from the department of geography at the Federal University of Bahia (UFBA) mapped traditional communities. This study was requested by the Secretariat for the Promotion of Racial Inequality.
Data can be accessed here:
https://geografar.ufba.br/sites/geografar.ufba.br/files/relatoriofinal_mapeamentoffp_vf.pdf

Description:
According to their report: "Since 2002, GeografAR has been carrying out research and studies, seeking to interpret the reality of these traditional peoples and communities, the contradictions and conflicts that exist in the transformation of space by capital and the impacts and consequences of public policies aimed at these communities. The basic methodology of this analysis is the direct and participatory involvement of the subjects themselves and their representative organisations. It is based on this methodological principle that the GeografAR Research Group has been carrying out work, actions, dialogues and studies along this historical path." The general objective of the Mapping Project is to draw up a georeferenced database of self-identified traditional communities (CFFPs) with ongoing land regularisation processes at the Bahia Agrarian Development Coordination (CDA), in the legal form of Associations, by December 2015, the date on which the proposal for this current project was finalised. The report contains information about 628 CFFPs communities.

4.4 CONFLICT MAPPING

CPT DATA ON RURAL CONFLICTS

The most reliable and comprehensive database on rural conflicts is available from the Pastoral Land Commission (Comissão Pastoral da Terra – CPT).

Webpage:

Description:
CPT publishes an annual report on different types of rural conflicts, including land conflicts, and has established a database. CPT has offices across the country and in-depth knowledge about land conflicts. This data provides detailed information about land conflicts, but they do not provide georeferenced locations about the conflicts.

Advantages:
Detailed data about different kinds of conflicts. Whereas the data is not geo-referenced, the names of involved actors (e.g., farms or local communities) and locations are often included, which makes it possible to georeference this data.

Disadvantages/limitations:
As this is not an official public database, the CPT data is often perceived as “biased” by companies and business associations. This is likely to be a limitation for using this information as evidence in lawsuits, without the verification of public institutions, such as the Public Prosecutor.

Questions to discuss:
- Would it make sense to georeference CPT data whenever possible? What would it require to do so?
- Estimation: What percentage of land conflicts is being documented?
- How to ensure all land conflicts are being documented and up to date?

Input from workshop:
“So, why don’t we georeference them? Because many of these conflicts aren’t located within one area of land. So, we have to think about the impact or the zones of influence.”
MAPA DOS CONFLITOS

Mapa dos Conflitos is developed by Apublica in collaboration with the CPT.

**Website:**
https://mapadosconflictos.apublica.org/

**Metodologia**

**Description:**
The database maps rural conflicts in the Legal Amazon between 2011-2020, based on the CPT data as well as other sources of data (e.g., SUS data, data from the National Water Agency ANA). There is information about the number of conflicts in each municipality. There is information on conflicts related to deforestation; fires; inequality; mining; pesticides; violence; and water.

**Advantages:**
The information is presented in an interactive and user-friendly map, which gives a good overview of different types of rural conflicts at municipal level in the Amazon from 2011-2020.

**Disadvantages/limitations:**
The data is not georeferenced, but aggregate information about conflicts at municipal level is included.

ATLAS AGROPECUARIO

Atlas Agropecuario is developed by Imaflora in collaboration with GeoLab and the Royal Technological University (Sweden).

**Website:**
https://atlasagropecuario.imaflora.org (at the time of writing (January 2024) the website was not available due to maintenance).

**Description:**
Atlas Agropecuario includes information on forest cover and agricultural lands in Brazil. The purpose is to provide a platform that covers and clarifies different types of land tenure and monitors land use change. It includes information from a wide variety of tenure mapping and tools (INTRA registries, land reform settlements, and the CAR data). Together, these data sources cover 80 per cent of the country. For the areas that are not covered, additional data collection has been carried out. Recently, this data has been combined with Trase data.

Questions to discuss:

- To what extent is the data that is not geo-referenced useful for companies for developing their due diligence systems or for external actors to challenge company practices?
- Can the Apublica database be geo-referenced to a more local level? Would it be possible to extend the database to the Cerrado?

**Input from workshop:**
Participants argued that expanding the Mapa dos Conflitos to other areas than the Amazon would be useful. They suggest that georeferencing them to the level of specific plots would be challenging, but that conflict data can be disaggregated to the municipal level.

Questions to discuss:

- Should the Atlas be used to show where many overlapping land claims exist, as a proxy for contested land tenure?

**Input from workshop:**
“We should give a lot of attention to the Atlas da Agropecuaria Brasileira, because it is the biggest effort to actually put everything on the same map and clear the disputes and overlaps”. However, in the new version of the Atlas the overlaps will remain visible. It would be very important to collaborate and to update this database every six months or so, and submit this information to the EU in a pre-organised fashion.
**Advantages:**
The Atlas uses many different sources for creating its “malha fundiaria” (land tenure net). The Forest and Rights Observatory could use the Atlas Agropecuario to show overlaps between different categories of land rights as an indicator for land conflicts. The raw data that has not been cleaned or merged is potentially useful for this purpose.

**Disadvantages/limitations:**
The overlapping exercise would show overlapping claims that do not necessarily affect PCTAFs. Furthermore, overlapping claims do not necessarily result in a land conflict.

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**TAMO DE OLHO**

Tamo de Olho (“Eyes on you”) initiative was launched in 2021 in a partnership between WWF-Brazil, the Society, Population and Nature Institute (ISPN), the Cerrado Network, the Cerrados Institute and IPAM, in addition to collaboration with the MATOPIBA Observatory and the University of Brasilia (UnB).

**Website:**
https://www.tamodeolho.org.br

**Description:**
The Tamo de Olho Initiative seeks to systematically identify the most emblematic cases of deforestation and violations of the rights of traditional peoples and communities in the biome. The main objective is to support the communities in legal and political advocacy actions with public agencies of the Justice System and the Executive and Legislative branches.

**Advantage:**
Detailed information about specific and emblematic cases. The platform is currently being maintained but it seems like there is no georeferenced data.

**Disadvantage:**
Information only about a few cases.

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**ENVIRONMENTAL JUSTICE ATLAS (EJATLAS)**

The Atlas is developed by Leah Temper and Joan Martinez Alier at ICTA-UAB and coordinated by Daniela Del Bene, at the Institute of Environmental Science and Technology (ICTA) at the Universitat Autonoma de Barcelona.

**Website:**
https://ejatlas.org

**Description:**
The environmental justice atlas documents and catalogues social conflict around

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**Questions to discuss:**

- **Would it make sense to include such data in the Forest and Rights Observatory?**

**Input from workshop:**
This data can be important for legal cases, but it does not give a systematic overview of a larger number of conflicts.
environmental issues. As resources needed to fuel our economy move through the commodity chain from extraction, to processing and disposal, at each stage environmental impacts are externalised onto the most marginalised populations. The EJ Atlas collaborates with a wide network of activists and scholars in collecting the stories of communities struggling for environmental justice from around the world. It aims to make these struggles more visible, highlight claims and testimonies, and to make the case for true corporate and state accountability for the injustices inflicted through their activities. It also attempts to serve as a virtual space for those working on EJ issues to get information, find other groups working on related issues, and increase the visibility of environmental conflicts.

**Advantages:**
Database with in-depth information on a large number of conflicts all over the world. Database is georeferenced and updated.

**Disadvantages:**
Only data that is reported to the EJ Atlas-Team by activists and scholars are included in the database.

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**UNIVERSIDADE ESTADUAL PAULISTA’S DATABASE “DATALUTA” (PART OF THE DATA IS GEOREFERENCED)**

Reports can be downloaded here: https://www.fct.unesp.br/#p/pesquisa/dataluta/

**Description:**
The Land Struggle Database (DATALUTA) is a community research project initiated in 1998 by the Centre for Agrarian Reform Study, Research and Projects (NERA) linked to the Geography Department of the Science and Technology Faculty of São Paulo State University (UNESP). DATALUTA publishes reports with data on land occupations, agrarian reform settlements, socio-territorial movements, land tenure, protests, and land grabbing. The reports include graphs of composite data, tables, charts and maps on these aspects of Brazil's agrarian reality.

The DATALUTA Brazil Report is produced annually and is the result of systematising data collected from socio-territorial movements and organisations such as the Pastoral Land Commission. It also includes information obtained from the registry of INCRA (National Institute for Colonisation and Agrarian Reform), ITESP Foundation (São Paulo State Land Institute) and ANOTER (National Association of State Land Bodies), as well as data gathered by the research groups that make up the Dataluta Network.

**Advantages/limitations:**
High quality data collected by 15 research groups at Brazilian universities. As the information is collected in collaboration with social movements it is likely to be seen as legitimate in the eyes of rightsholders and grassroots organisations. The last report was published in 2020. Part of the data is geo-referenced, but the report includes a mix of geo-referenced and non-georeferenced data.
4.5 ADDITIONAL DATA SOURCES ON LAND TENURE AND LAND CONFLICTS

### ALERT SYSTEMS

There are several alert systems that could help to detect the invasion of the lands of PCTAFs, such as a database by the ISA (https://terrasindigenas.org.br/pt-br/noticicas), the FUNAI’s centre of remote monitoring (CMR) and reports from NGOs such as Repórter Brasil, Mighty Earth, Chain Action Research, Mongabay and the Business and Human Rights Resource Center. Companies in the agri-food sector increasingly collect such NGO reports for detecting risks in their supply chains.

**Questions to discuss:**

- Would it make sense to include such data in the Forest and Rights Observatory? If yes, how?

**Input from workshop and follow-up interviews:**

The building of a “DETER Social” would be desirable. (Comment: DETER is an alert system by INPE on deforestation occurrences).

### DATABASE(S) ON LAWSUITS IN RELATION TO LAND TENURE RIGHTS AND LAND CONFLICTS

To our knowledge, a database on lawsuits in Brazil that focuses on land tenure rights and land conflicts does not exist. However, data on legal cases and lawsuits could provide relevant information about land conflicts.

**Questions to discuss:**

- Are there already webpages that can be consulted for finding information about lawsuits in relation to the lands of PCTAFs?
- Would it be feasible and meaningful to establish such a database? If yes, how and with what sources of information?

**Input from workshop:**

Participants were not aware of an initiative to collect data on lawsuits in relation to land rights at a larger scale. This would be interesting to do, but would require a lot of work and resources.

### GRIEVANCE MECHANISMS

Grievance mechanisms are an important component of HREDD systems of companies. However, these mechanisms have usually been company-controlled and often enjoy limited legitimacy. Actors that are external to companies and particularly rightsholders themselves have seldom made use of grievance mechanisms.

The development of independent and legitimate grievance mechanisms could be an important source of information and an important channel for voicing grievances in relation to land tenure violations and land conflicts. The Forest and Rights Observatory could be combined with such grievance mechanisms.
4.6 DATA ON OTHER SOCIAL IMPACTS

Participants in the first stakeholder workshop stressed the need to debate about the question of which kinds of human rights violations and impacts will be covered by the Forest and Rights Observatory. A participant argued: “I think that a risk mapping should not just be made about land rights and deforestation, but also cover other issues, such as labour rights, because all these things are connected.”

For assessing additional social risks and impacts, participants mentioned the following sources of data:

- Black list on modern slavery (Radar SIT - Statistics and Information Dashboard of Labour Inspection in Brazil)
- SUS data on pesticide intoxication
- SUS data on physical violence
- SMART lab on labour rights violations
- ANA/EMBRAPA data on irrigation licences
- Atlas dos Agrotóxicos (USP)
- Impacto database with a vulnerability index of slave labour at municipal level

5. Governance of the Forest and Rights Observatory

Another question that requires further discussion is “Who will be in charge of the Forest and Rights Observatory?” It will be important to decide whether the Observatory will be headed in Brazil or in Europe and who will be involved. Participants of the first stakeholder workshop emphasised that civil society organisations and rightsholders from Brazil should play a crucial role in the Forest and Rights Observatory. Furthermore, participants argued for the importance of sufficient funding for leading and continuously updating data included in the Observatory.

When asking Brazilian civil society organisations and experts about the governance of the Forest and Rights Observatory, the large majority expressed their opinion that Brazilian organisations should lead. A few participants reflected upon the possibility that a Brazilian state agency (e.g., the Ministry of the Environment, Brazil’s judiciary, the National Committee on Human Rights) could lead and coordinate this Observatory.

One argument against the possibility that an EU agency could lead this initiative discussed during the second workshop was that the narrative that Brazil is a victim of ‘green neocolonialism’, mainly coming from Europe, is currently quite strong in this country. Hence, hosting this initiative in Brazil might be considered as a more legitimate option.

Input from workshop:

“[The issue of governance] will be almost as important as the data collection as such. So, for instance, which stakeholders would decide about the governance or take decisions about this observatory and what kind of data would it collect.”
Annex

1. Analysis of the survey results

In anticipation of the second workshop, we distributed a survey to gather insights on which databases are considered most crucial for inclusion in the Forest and Rights Observatory. With the project’s initial focus on land rights, the survey first addressed databases specifically dedicated to this topic. To this end, we included the four categories of data that have been described in detail in this report: 1) Data on land tenure rights and land use; 2) data on PCTAFs land; 3) data from different community mapping initiatives; 4) data on land conflicts.

Considering the future potential expansion of the Observatory’s scope to include other social impacts, such as slave labour and pesticide pollution, the survey also included questions about databases mentioned during the first workshop, that encompass a broader range of social impacts.

In this section, following a brief description of our methodology, we will present the survey results. This presentation will encompass qualitative responses provided by some respondents and insights gathered from discussions during the workshop.

1.1 METHODOLOGY

We distributed the survey to the 29 people who were invited to the first workshop and to an additional 10 people who were recommended for their expertise on the topic. In total, eight people filled out the survey. The respondents represented the following institutions:

Trase, Center for Territorial Intelligence – CIT, Observatorio Matopiba (two respondents), MapBiomas, Imaflora, Instituto Socioambiental (ISA), Greenpeace, and the Tenure Facility. In some cases, several people responded to the survey collaboratively instead of submitting individual responses.

We asked the respondents to answer (1) which databases are absolutely crucial to include in the first phase; (2) which databases could potentially be included in a second phase; (3) and which databases are not necessary to include at all. There were also possibilities to provide for qualitative motivations of the responses, as well as indicate if some databases are missing. Finally, we asked a question about who should host such an Observatory.

1.2 DATA ON LAND TENURE, LAND USE AND DEFORESTATION

In the category of land tenure, land use and deforestation, we included in total eight databases or platforms that bring together several datasets. Figure 1 shows that the respondents rated all of these databases very highly, suggesting their potential relevance for inclusion. We will start by discussing the databases that received most votes and subsequently address the others.

First, concerning Atlas Agropecuario, CNFP, SIGEF, and SPU data, seven out of eight respondents voted to include them in the first phase. Regarding Atlas Agropecuario, one respondent argued that the dataset should not be included as the information was not updated since 2017. However, in Atlas Agropecuario’s presentation during the second stakeholder workshop it was clarified that the data are updated on an annual basis. Regarding CNFP and SPU, the remaining
respondent answered “don’t know”, and regarding SIGEF one respondent answered that it could potentially be included in a second phase. This suggests an almost unanimous consensus regarding the importance of including these datasets in the first phase.

Second, these datasets are closely followed by Mapbiomas, SICAR, and Ibama’s data on embargos, all of which received six votes for inclusion in the first phase. Regarding Mapbiomas, two respondents highlighted that it could be potentially included in the second phase, while another person argued that if the focus is solely on land rights, Mapbiomas database’s relevance is unclear. Concerning SICAR, one respondent answered “don’t know” and another one argued that it should not be included as it is an environmental registry that should not be used as a proxy for land rights. Finally, concerning Ibama’s data on embargoes for environmental infractions, one respondent answered that it could potentially be included in the second phase, and another one suggested that it should be excluded as it does not focus on land rights. Hence, respondents raised important questions regarding the purpose of the Observatory that need to be resolved.

Finally, PRODES received five votes. One respondent who voted against the inclusion of this dataset argued that it is irrelevant for the analysis of land rights, while the two other respondents argued that it is necessary to choose between PRODES and Mapbiomas data.

### Figure 1. Data on land tenure, land use and deforestation

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Prodes</th>
<th>Mapbiomas</th>
<th>SICAR</th>
<th>Agropeuário</th>
<th>CNFP (public forest)</th>
<th>SIGE (rural properties)</th>
<th>SPU (public lands)</th>
<th>Ibama Embargo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolutely crucial in first phase</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Potentially relevant to include in a second phase</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Not relevant to include</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Do not now</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### 1.3 DATA ON INDIGENOUS AND QUILOMBOLA TERRITORIES AND AGRARIAN REFORM SETTLEMENTS

In the category of Indigenous and Quilombola territories and agrarian reform settlements, we included five datasets. Figure 1 illustrates that respondents rated four out of five databases very highly.

First, all respondents agreed that the FUNAI database on indigenous lands and the INCRA database on demarcated Quilombola lands were crucial to include in the first phase.

Second, seven out of eight respondents were also in favour of including Fundação Palmares (FPC) data on recognized Quilombola communities and INCRA data and state data on Agrarian reform settlements in the first phase. Regarding the FPC, the remaining respondent answered
"don’t know," and concerning the INCRA data, the last respondent suggested that it could potentially be included in a second stage. This suggests that there is generally no opposition or arguments against including these databases, indicating a high level of support for the four frontrunners in this category.

Finally, the Census data on Quilombola communities is the only dataset that stands out. While three respondents voted in favour of including it in the first phase, five suggested that it could potentially be included in a second phase.

**Figure 2: Data on indigenous and quilombola territories and agrarian reform settlements**

![Data on indigenous and quilombola territories and agrarian reform settlements](image)

- Absolutely crucial in first phase
- Potentially relevant to include in a second phase
- Not relevant to include
- Do not now

### 1.4 DATA FROM COMMUNITY MAPPING PROJECTS

In comparison to public datasets on land tenure, land use, and PCTAFs land, which enjoyed widespread support for inclusion in the first phase, Figure 3 illustrates that opinions are more diverse when it comes to data from community mapping projects.

First, the platform of traditional territories (MPF) stands out with six votes. Of the remaining two respondents, one indicated that it is not necessary to include it at this stage, as it is still under construction and the information is not publicly available. The other respondent suggested that it could potentially be included in the second phase. Overall, there is relatively broad support for including the MPF database, with no specific arguments against it.

Second, Tô no Mapa and the UFPA community mapping both received four votes. Regarding Tô no Mapa, the remaining four respondents were in favour of potentially including it in the second phase. However, one respondent argued that the information is accessible via the MPF platform, making it unnecessary to include both. Another respondent pointed out that it currently includes few communities, and, moreover, it is necessary to ensure processes of prior consultation before disseminating the data. Similarly, regarding the UFPA community mapping, three respondents answered that it could potentially be included in the second phase, and one responded with “don’t know.” Similar to Tô no Mapa, one respondent emphasized the importance of ensuring community consent before disseminating the data.

Finally, the Nova Cartografia Social and UFBA community mapping project received three and two votes, respectively. Regarding the first, four respondents indicated that it could potentially be included in the second phase, and one voted against including it due to existing restrictions.
on its use in other platforms. The main argument against its inclusion appears to be related to the need for community consent. Concerning the UFBA community mapping project, only two respondents voted to include it in the first phase, whereas three were in favour of potentially including it in a second phase, and three respondents answered with “don’t know.” No arguments other than the need for community consent were given.

Figure 3: Data from community mapping projects

1.5 DATA ON LAND CONFLICTS

Regarding the databases on land conflicts, there are also some different opinions regarding what datasets are most crucial to include.

Figure 4 illustrates that three datasets stand out in terms of support: CPT data, Mapa dos Conflitos, and Tamo de Olho. Regarding the CPT database, five respondents voted to include it in the first phase, and three to include it in the second phase. The only objection is that the data is already included in Mapa dos Conflitos. However, this is only partially true, as the CPT data covers the entire country, whereas Mapa dos Conflitos only covers the Amazon. Regarding Mapa dos Conflitos, four respondents voted to include it in the first phase, two in the second phase, and two answered that it is not necessary to include this data at all. However, the reason not to include it is because it is already covered by the CPT data, suggesting a need to decide which of these database to use and/or how they can be combined. Finally, regarding Tamo de Olho, four respondents were in favor of including it in the first phase, one in the second, and three respondents answered “don’t know.” The latter respondents mentioned that the database mainly focuses on a few emblematic cases.

Secondly, three datasets received relatively few votes: UNESP Dataluta, Atlas Agropecuario, and Environmental Justice Atlas. Two of the respondents argued that UNESP Dataluta was critical to include in the first phase, four that it could be potentially included in the second phase, and two respondents answered “don’t know.” Those in favor of potentially including it in the second phase mentioned that the main focus of UNESP Dataluta is on mobilizations rather than on land conflicts. Regarding using the overlaps in Atlas Agropecuario as a proxy for land
conflicts, there were quite divergent views. Two respondents responded that it was crucial to include it in the first phase, four that it could potentially be included in the second phase, and two that it should not be included at all. However, the main reason for this hesitation seems to be the lack of update of the data since 2017. Regarding the Environmental Justice Atlas, there seems to be little support for including it. Only two respondents were in favour of including it in the first phase, one in the second phase, one did not think it was necessary to include it at all, and four responded that they “don’t know.”

Figure 4: Data on land conflicts

1.6 ADDITIONAL DATA ON LAND TENURE AND CONFLICTS

Finally, we asked the respondents to assess alternative data on land tenure and conflicts. Figure 5 shows that, with the exception of the database on lawsuits in relation to land tenure rights and land conflicts, there is little support to include these datasets in the first phase.

First, concerning the database on lawsuits, three respondents were in favour of including this data in the first phase, three potentially in a second phase, whereas two responded “don’t know.” One respondent highlighted that there is probably no such database, which aligns with our assessment as well as the discussions at the first workshop where participants emphasised their lack of awareness of an initiative to collect data on lawsuits in relation to land rights at a larger scale. Hence, this database would have to be constructed.

Second, there was little support for including alert mechanisms and grievance mechanisms. Regarding alert mechanisms, only one respondent was in favour of including them in the first phase, two potentially in the second phase, whereas five responded that they don’t know. Similarly, regarding the grievance mechanism, there was also only one person who voted in favour of including this in the first phase, four potentially in the second phase, whereas three people responded that they don’t know. However, it is important to point out that such mechanisms do not currently exist, but would have to be created to enable the voicing of grievances related to land tenure violations and land conflicts.

Hence, overall, we found relatively little support—at least in the first stage—to include these additional databases.
1.7 DATA ON OTHER TYPES OF SOCIAL IMPACTS

Finally, while in the initial stage, the Observatory could focus on land rights, there is a possibility to broaden the scope of the observatory in the future to include other social impacts. Therefore, we included questions about databases that encompass a broader range of social impacts.

Among these databases, the Modern Slavery list stands out, with five respondents perceiving it as “very important,” and three responding with “don’t know.” This is followed by five databases that were considered very important by three respondents, and finally, the Atlas dos Agrotoxicos was identified as very important by two respondents. Should there be a consensus to broaden the scope of the Observatory, it would be important to delve deeper into these datasets, considering their respective strengths and limitations.
Finally, in the open-ended question about missing data, the respondents included a number of new datasets. These were:

- The SNCR (National Rural Registry System);
- data and localisation of the production of non-forest products (bioeconomy) (ICT);
- data on forest conservation and recovery projects; data on legal actions and police operations in order to identify crimes committed by those in the land conflict database;
- the CONAQ database and regional representations of the legal Amazon on the location and perimeter of territories;
- database of Conservation Units (i.e. RESEX, RDS, FLONA) from the MMA and UFs in the legal Amazon (ISA);
- PNCSA mapping initiative on rights of natural resource use (the Free Babassu Laws and the protection of the babassu forests).

1.8 GOVERNANCE OF THE FOREST AND RIGHTS OBSERVATORY

The question of which organisation should host the Observatory emerged as a critical concern during the first workshop. Consequently, we sought the respondents’ opinions on whether the observatory should be hosted by: 1) the EU alone; 2) a civil society organization or several civil society organizations, or a state entity or state entities in Brazil; or 3) both the EU and a Brazilian entity. Five respondents answered this question.

Four out of five respondents emphasized that one or several civil society organizations or state entities in Brazil should host the observatory. They specifically mentioned organizations such as the Ministry of the Environment, the Climate Observatory, Forest Code Observatory, MapBiomas, and Inpacto.

However, one respondent proposed that both the EU and a Brazilian entity should jointly host the Forest and Rights Observatory. This respondent argued, “Establishing a transnational observatory is crucial to ensure not only legitimacy, effectiveness, and representativeness but also operational capacity and long-term sustainability.”

This is a key question that merits further discussion.
Recommended reading


Fern is a non-governmental organisation (NGO) created in 1995 with the aim of ensuring European policies and actions support forests and people. Our work centres on forests and forest peoples’ rights and the issues that affect them such as aid, consumption, trade, investment and climate change. All of our work is done in close collaboration with social and environmental organisations and movements across the world.

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