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Voices from Tapajós: Indigenous views on planned infrastructure projects

Editors:



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Abstract

This report brings the voices of the indigenous peoples of the Tapajós Basin region in the Brazilian Amazon into focus, as their livelihoods are severely threatened by planned infrastructure projects.

As the report shows, the Amazon has been exploited for its abundance of natural resources for decades. Since the 1960s, infrastructure projects designed to transport these goods have had a devastating impact on biodiversity and the lives of the communities living there. The report leaves no doubt that the following three projects planned for the Tapajós Basin represent a continuation of this historic exploitation of the Amazon: the EF-170 (Ferrogrão) railroad project, the Tapajós Hydroelectric Complex, and the Tapajós waterway. They aim at facilitating and accelerating the transportation of minerals and agricultural produce, such as soya for export. An analysis of the companies potentially implementing and/or operating the projects and financial institutions that finance them shows that companies from all over the world are interested and possibly involved in the projects. At the same time, the study details the views and concerns of affected indigenous communities about these projects. They fear severe impacts on their livelihoods due to the flooding of large areas of their land and the deforestation of their forests. Even though indigenous communities are among the most potentially affected groups, no genuine consultation process has yet taken place.

Therefore, the report concludes with a concrete set of demands to the Brazilian state and national and international businesses. In particular, it calls upon Brazilian and international companies potentially implementing and/or operating the projects and their financiers to meet their obligation to consider environmental and social impacts in their risk analyses. It further asks them to clearly align their due diligence with national and international human rights norms and standards. This report thereby has a prospective character and functions as an early warning system, that may potentially be involved of the environmental and social risks in relation to these projects.

Introduction

“We see these projects as a death sentence by the government. (...) Development has a different meaning for us than it does for them. For us, it means clean water, the intact forest, it means us living off the forest, not depending on the Ferrogrão railway, hydroelectric power and industrial waterways. They claim these are economically-sustainable projects for Brazil, but they couldn’t care less about our people. And we know these huge projects are never beneficial for the society. The only ones who benefit are them, the capitalists. These railways, waterways, dams and the like are not acceptable as far as we are concerned.” (Anderson Munduruku, 2020)

The Amazon rainforest is the home of numerous indigenous peoples. It is the largest tropical forest in the world, equivalent to one third of the planet’s tropical forests, and accounts for 10% of the total biomass on the planet. Since it stores 90 to 140 billion tonnes of carbon, it plays an essential role for the regional and global climate¹. However, the destruction of the rainforest is accelerating: in the first six months of 2020, for example, more forest in Brazil was destroyed than ever before since records began^{2,3}.

The main drivers of the destruction of the Brazilian Amazon are known: the global hunger for soya, meat and minerals. Brazil is the world’s largest soya producer⁴, second largest beef producer⁵ and strives for a stake in palm oil production⁶. Mining is taking place in ever more remote and therefore fragile places. In 2019, gold mining activities in indigenous territories, mostly in the Amazonian region, increased by 91% compared to the previous year⁷.

1 Por que a Amazônia é vital para o mundo? | Natureza | G1 (globo.com) <https://g1.globo.com/natureza/noticia/2019/08/22/por-que-a-amazonia-e-vital-para-o-mundo.ghtml>

2 <https://www.aljazeera.com/news/2020/08/02/brazil-july-surge-in-amazon-fires-raises-fears-of-repeat-of-2019/>

3 For the States that form Amazonas Legal, the National Institute for Science, Technology and Innovation (INPE), the lowest deforestation rate was reached in 2012. Since then it has risen again dramatically – especially since the takeover of President Bolsonaro. INEME (2021): A taxa consolidada de desmatamento por corte raso para os nove estados da Amazônia Legal. Online: http://www.inpe.br/noticias/noticia.php?Cod_Noticia=5465

4 <https://www.reuters.com/article/us-brazil-soy-usa/brazil-to-pass-u-s-as-worlds-largest-soy-producer-in-2018-idUSKBN1IC2IW> ; <https://beef2live.com/story-world-soybean-production-ranking-country-0-164836>

5 <https://beef2live.com/story-world-beef-production-ranking-countries-0-106885>

6 <https://www.theguardian.com/sustainable-business/2017/jun/29/brazil-palm-oil-amazon-rainforest-deforestation-temer-farming-para-cerrado>

7 <https://apublica.org/2020/02/a-mineracao-em-terra-indigena-com-nome-sobrenome-e-cnpj/>

This report aims to draw attention to an important component of Brazil's newest development plan that would further exacerbate the ongoing exploitation of the Amazon: The government plans multiple mega infrastructure projects for the transport of agricultural goods within Brazil and towards global markets and new energy plants specifically dedicated to the energy demand of these transport systems.

The report takes a close look at a region of the middle and lower Tapajós Basin (Bacia Hidrográfica do Rio Tapajós), an area that stands out because of its unique cultural and biodiversity. Nevertheless, due to its geographical position and abundance of minerals it also has become one of Brazil's hotspots of Amazon destruction. Here, about 43 hydroelectric power plants and dams are planned⁸, alongside with several highways and numerous ports⁹. Besides, the railway project Ferrogrão (officially named EF-170) shall complete the infrastructure to guarantee cheap and fast transport of commodities.

This report focuses on seven of the originally planned dams (Complexo Hidrelétrico Tapajós), the waterway (Hidrovia Tapajós) and the railway Ferrogrão. Whereas the newest strategic plan of the Ministry of Mines and Energy (Ten-Years-Plan of Energy Expansion)¹⁰, does not foresee a project start of these seven dams and the waterway before 2030, the construction and implementation of the Ferrogrão has the highest priority for the government¹¹ and licencing process is expected to start in the first trimester of 2022.

What is all too often ignored in the planning of these projects, however, are the massive adverse social and ecological impacts. While the state and the private sector only see the short-term economic benefits, the voices of the most affected go unheard: indigenous communities in the region contest heavily all these mega-projects, pointing to the fact that the projects' impact on the Amazon forest as an ecosystem and their livelihood would be disastrous.

8 Fearnside, Philip. Instituto Nacional de Pesquisas da Amazônia. 2015

9 <https://g1.globo.com/natureza/desafio-natureza/noticia/2019/05/22/conquista-estrategica-ou-risco-para-a-floresta-projetos-para-a-bacia-do-rio-tapajos-geram-debate.ghtml>

10 https://www.epe.gov.br/sites-pt/publicacoes-dados-abertos/publicacoes/PublicacoesArquivos/publicacao-490/PDE%202030_RevisaoPosCP_rv2.pdf

11 <https://pulitzercenter.org/blog/ferrograo-path-illusion>

Notwithstanding that indigenous communities are among the most potentially affected, a genuine consultation process has not been conducted so far. Therefore, this report gives them extensive space to express their views of and concerns about the planned projects.

At this point, it is fundamental to stress the duty of the Brazilian State to protect the indigenous peoples' rights. Since 1988, Brazil's Federal Constitution explicitly recognises indigenous peoples' rights in Art. 231 and 232¹². Brazil has also ratified the ILO Convention on Indigenous and Tribal Peoples in Independent Countries (ILO 169) concerning Indigenous and Tribal Peoples and has approved of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The state therefore has an obligation to guarantee indigenous peoples' right to self-determination both due to national and international legislation¹³.

Given Brazil's apparent lack of willingness to fulfil its obligation to protect human rights, this report acts as an early warning for companies (potential stakeholders interested in the projects) and financial service providers (creditors and investors) worldwide. It clearly identifies the irreversible social and environmental damages the projects are likely to cause and the considerable reputational and financial risks that may arise for companies when getting involved in these projects without sufficient social and environmental risk management.

On the basis of concrete arguments and evidence, the report calls for the Brazilian State to realise its constitutional and international obligations to protect indigenous peoples and for potential Brazilian and international implementing and/or operating companies and financial institutes to meet their obligations according to the United Nations Guiding Principles on Business and Human Rights (UNGPs) and the OECD Guidelines for Multinational Enterprises to consider environmental and social impacts in their risk analysis.

12 <https://www.globalhealthrights.org/wp-content/uploads/2013/09/Brazil-constitution-English.pdf>

13 ISEAL, 2018: https://www.isealliance.org/sites/default/files/resource/2019-02/FPIC_Full_Report.pdf, p.21.

Since the projects are still in their preparatory phase, businesses are in the position to clearly align their due diligence with national and international human rights norms and standards and shift their risk assessment beyond material risks to the company and particularly expand it to environmental and social risks such as the respect of human and indigenous peoples' rights.

The structure of this report

The report consists of the following three sections:

The first chapter (**Historical Context and Project Description**, p. 11-36) provides a historical and contextual analysis of the exploitation of the Amazon. It was written by Telma Monteiro¹⁴, a renowned expert on infrastructure projects in the Amazon. Monteiro puts the planned projects in a historical perspective, showing how the exploitation of natural resources in the Amazon region has happened systematically and at the expense of indigenous communities.

The second part (**Financial Study**, p. 37-73), analyses which companies worldwide showed interest in constructing and/or operating the infrastructure projects (potential stakeholders) Ferrogrão and Tapajós Hydroelectric Complex and Waterway and identifies the financial institutions who provided financial services to these companies in the past. The Research institute Profundo¹⁵ conducted the study on behalf of the Society for Threatened Peoples (STP). It considers loans and underwritings with closing/issue dates January 2014 - February 2021 as well as bonds and shareholdings up to submission dates February 2021 (for more details, see Appendix).

Chapter 3 (**Indigenous Voices from the Tapajós River**, p. 74-152) portrays the views of representatives of those indigenous communities that would be directly affected by the infrastructure projects. This is to counteract the fact that indigenous communities do not feel sufficiently consulted about the projects. Their opinions and views were collected in two anthropological fieldworks in the Lower and Middle Tapajós (October and November 2020).

¹⁴ <https://www.telmadmonteiro.com/>

¹⁵ <https://www.profundo.nl/en/>

Anthropologist Vinícius da Silva Machado¹⁶ conducted mainly semi-standardised interviews (see Appendix), collaborating with the indigenous organisations Conselho Indígena Tapajós Arapiuns (CITA) and Associação Indígena Pariri. This report is complemented by the documentary “Threatened Tapajós” by the Brazilian filmmaker Thomaz Marcondes Garcia Pedro (see www.gfbv.ch/amazon).

The report concludes (**Final Considerations and Demands**, p. 153-167) with a concrete set of demands to the Brazilian State and businesses potentially involved in these projects. The Brazilian State is appealed to fully comply with domestic and international law and standards regarding the rights of indigenous peoples, for example by conducting processes in line with the principle of Free, Prior and Informed Consent (FPIC) in these projects prior to issuing preliminary licencing process. The Society for Threatened Peoples (STP) and indigenous rights holder call upon potential Brazilian and international implementing and/or operating companies and financiers to meet their obligation to consider environmental and social impacts in their risk analysis and to clearly align their due diligence with national and international human rights norms and standards. Due to the current project stage, this report has a prospective character and functions as an early warning system, alerting potentially-involved companies about environmental and social risks in relation to these projects.

16 Doctoral Candidate in Law, Federal University of Pará (UFPA), Masters in Anthropology (UFPA), and Bachelor of Laws (UFPA). Researcher for the Society for Threatened Peoples (STP). Member of the Brazilian Association of Anthropology (ABA) and the Brazilian Bar Association (OAB). Member of the Research Group Cidade, Aldeia & Patrimônio [city, village, and heritage research group]. E-mail: vinicius_s.m@hotmail.com.

1 Historical Context and Project Description

by Telma Monteiro¹

1.1 Introduction

The aim of this report is to provide a general overview of the Amazon region since the beginnings of its economic exploitation, focusing on the consequences of these activities on indigenous populations and biodiversity. The new potential infrastructure projects may worsen the adverse impacts, posing a higher risk to the forest, a key resource for maintaining the world's climatic balance. The Tapajós hydrographic basin region (764,183 km² [295,052 sq mi]), which occupies approximately 6% of Brazil's national territory, is currently threatened by hydropower plant, railway and waterway construction projects, with no relevant studies on the synergistic and cumulative effects caused by past, present and future operations.

The Tapajós basin is the Amazon area that will suffer the most devastating consequences and, because of its environmental relevance to the world's climate and the vulnerability of local communities, it is also important to alert companies and investors about the irreversible risks and damages due to these undertakings in terms of financial consequences, legal issues, public image and reputation.

According to a study published by José Aroudo Mota, Sustainability Coordinator of Brazil's Institute for Applied Economic Research (Instituto de Pesquisa Econômica Aplicada, IPEA), the Amazon's natural resources are worth two quadrillion dollars, "only taking into account the estimated value of its subterranean water reserve, made up of 1,344,201.7 km² (518,999.1 sq mi) of porous aquifers (data from June, 2011)."² The study emphasizes that water is the most important resource for human life and survival, and that it is currently a scarce planetary

¹ Telma Monteiro, since 25 years a specialist in the analysis of licensing processes for infrastructure projects in the Amazon, with a focus on socio-environmental impacts and indigenous lands and protected areas. Author and co-author of books, articles in national and international press, lecturer at universities and international organisations.

² <https://www.ecodebate.com.br/2011/07/15/tapajos-recursos-naturais-da-amazonia-valem-quatrilhoes-de-dolares-artigo-de-telma-monteiro/>

resource. The Amazon has always been coveted, not only for its rich biodiversity and mining resources, but also for its immense water reserves – the most strategic global asset.

Successive Brazilian governments have always tried to use all those natural resources from the Amazon as a means to transform the country into one of the biggest global economies. With that goal in mind, they spared no effort in creating exploration proposals with infrastructure projects involving waterways, railways and roads, so that multinational enterprises and speculative private capital investors could more easily access unexplored natural resources. With an estimated value of US\$ 20 trillion³, raw materials such as gold, oil reserves, iron, and aluminium are in high demand in the international economic community of major powers and multinational Brazilian enterprises. According to the IPEA study, this modern exploitation in the Amazon region is currently dangerously boosted by another threat: the increasing purchase of land by foreigners.⁴

PHOTO: THOMAZ PEDRO



In Brazil, big efforts have been made to establish an economy based on the exploitation of natural resources.

3 <https://www.franciscogomesdasilva.com.br/amazonia-vale-muitos-quatilhoes-de-dolares/>

4 <https://www.franciscogomesdasilva.com.br/amazonia-vale-muitos-quatilhoes-de-dolares/>

Mention should also be made of the significance of the Amazon's ability to absorb carbon, as described in the study "Environmental Services as a Strategy for Sustainable Development in Rural Amazonia", written by researcher Philip Fearnside⁵. Fearnside estimates that the ability of standing forests to absorb carbon is worth US\$ 379 billion and, according to another study from Utrecht University in the Netherlands, the environmental services provided by 219 million hectares (541.1 million acres) of forest would yield US\$ 50 billion annually.⁶

The plan to transform the Amazon into a huge construction site has always posed a threat to rivers, indigenous communities, forests and biodiversity. There are projects, for example, to transform the Amazonian rivers into waterways (as previously done in the Netherlands and Belgium), based on a model of industrial settlement along the banks with the consequential loss of biodiversity. Infrastructure projects could introduce similar changes in the Tapajós hydrographic basin, one of the main sub-basins of the Amazon River. The biggest cause for alarm is the construction of hydropower plants that destroy the forest and negatively affect indigenous communities and their lands, as well as other riverside populations, with the sole purpose of generating enough electric energy to support a destructive regional economy boosted by expanding agribusiness and mining operations.

Mainly in the Amazon region, hydropower plants have provided large incomes for building companies, using finance obtained from the Brazilian Economic and Social Development Bank (Banco Nacional de Desenvolvimento Econômico e Social, BNDES), with subsidised interest rates, and posing a risk to the environment, increasing deforestation levels and adversely affecting biodiversity. This predatory policy focusing on hydropower plant construction clearly shows a complete disregard of alternative clean sources of energy, such as wind and solar power. Improvements achieved in technological development and costs in clean sources of energy, alternatives to hydropower plants, should form the basis of the next decade's 10-Year Energy Plans (Planos Decenais de Energia, PDE) in Brazil. Deforestation in the Amazon is driven by the construction of hydropower plants, waterways and roads, which encourage a disorderly coloni-

5 National Institute of Amazonian Research (Instituto Nacional de Pesquisas da Amazônia, INPA), Coordinator of the National Institute of Science and Technology from the Environmental Services of Amazon (Instituto Nacional de Ciência e Tecnologia dos Serviços Ambientais da Amazônia, INCT-SERVAMB).

6 <https://www.franciscogomesdasilva.com.br/amazonia-vale-muitos-quatilhoes-de-dolares/>

sation of the forest in the pursuit of regional economic development based on the transportation of commodities and the expansion of cattle ranching for the export of meat and meat products, without taking into consideration indigenous communities and their lands. **Agribusiness and agribusiness logistics in the Amazon, pursued with the sole aim of deriving profit and ignoring the importance of preserving the environment to maintain the climate equilibrium, is a crime against our planet.**

Nowadays, hydropower is considered cheaper because the social and environmental impacts on costs are not fairly taken into account. Since development companies regard social and environmental impacts as operational costs, the real damage initiated even before civil engineering works begin is underestimated. Hydropower plants are not the only undertakings being implemented in the Tapajós hydrographic basin: road, waterway and railway projects are also being approved as part of the modernisation proposals aiming at the integration of the Amazon region with the rest of the world. Large international enterprises, investors and banks have already made the necessary arrangements to facilitate the invasion and exploitation of the two-quadrillion dollars-worth natural resources available in the world's most important forest. If all these proposals are taken forward, future generations will suffer the most from the devastation of the Amazon, and will have to bear the real costs.

1.2 Threats to the Tapajós Region

The most affected Amazonian area is the middle and lower Tapajós basin, which has been enduring the agricultural production pressure coming from Northern Mato Grosso state, along with deforestation, illegal logging and small-scale mining. Additionally, apart from coping with considerable pressure from increased soybean production (which has grown 61% in the last 10 years), existing cattle herds represent 5% of Brazil's total. The road-building process of the 1970s sped up colonisation, and its negative consequences have been present for years now. **Droughts in southern Brazil and drinking water reservoirs falling below their historic levels are already some of the consequences of the diminished "flying rivers"**. These air currents originating in the Amazon basin carry moisture to southern and southeastern Brazil and preserve the regional rainfall pattern. Climate warming and increasingly severe storms are adversely affecting crops and urban outskirts in Brazil, as well as reducing the extent of fertile areas. The Tapajós hydrographic basin is the key component of this environmental puzzle.

Before providing some background on the Tapajós Integration Region, comprising six municipalities, acquaintance with the following figures is required: 244,492 inhabitants, 3% of the population of Pará state; 189,610 km² (73,208 sq mi), the state's third biggest region (15% of its territory); GDP of R\$ 1.5 billion, 1.6% of Pará's total GDP; gold mining activities, with the region of Itaituba accounting for 60% of the state's production of gold; 15% of Brazil's total soybean production. **It is important to note that 33% of landholdings in the Tapajós basin are unoccupied or have an irregular ownership status, a situation that facilitates the expansion of agricultural production in protected areas.**

In 2010, an inventory identifying the hydropower potential of the Tapajós river hydrographic basin was completed. Other studies were also presented, such as the Comprehensive Environmental Assessment (Avaliação Ambiental Integrada, AAI) of the Teles Pires and Juruena rivers, which join together to form the Tapajós river. This was the beginning of a new large appropriation and privatisation process of the Amazon's natural resources, carried out by state-owned companies in association with large national and international enterprises, with funds from BNDES. While the first studies were being made, draft bills were sent to the National Congress asking for permission to construct locks – to even out the river's natural level differences – as well as to construct dams on navigable and non-navigable rivers in the Tapajós basin region. One of the prioritised projects is the Tapajós-Juruena-Teles Pires Waterway.

PHOTO: THOMAZ PEDRO



Several water dams and waterways are planned to be built in the middle and lower Tapajós basin.

The initial Tapajós Complex project, on which this report focuses, has had its licensing suspended and has no bidding date. The project foresees the construction of seven hydroelectric power plants, the most important being the São Luiz do Tapajós hydropower plant, in Itaituba, Pará. Studies were carried out – following the normal procedure in Brazil – with the participation of the Brazilian Electricity Regulatory Agency (Agência Nacional de Energia Elétrica, ANEEL) and the Brazilian Institute for the Environment and Natural Resources (Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis, IBAMA).

However, the licensing process was suspended by IBAMA in 2016 due to a request made by the National Indian Foundation (Fundação Nacional do Índio, FUNAI) because lands belonging to the Munduruku tribe would be directly impacted. Protected areas and indigenous territories occupy 40% of the Tapajós hydrographic basin. The new 10-Year Energy Plan for 2030 (PDE 2030) does not include the building of the hydropower plants on the Tapajós river. Social and environmental issues, lengthy environmental licensing processes (due to the complexity of operations and construction sites), the impacts on indigenous lands, lower deployment costs of alternative energies such as wind and solar power, and changes in rainfall patterns in northern Brazil (including a potential reduction in river flows during the increasing periods of drought) are the main justifications in PDE 2030 to change the Brazilian government's strategy regarding the use of hydropower plants as the main source of electrical energy.

After successive periods of spice, rubber and gold exploitation, the Tapajós basin is now the victim of road-building, agricultural production and settlements that spread along the roads planned since the 1960s. There are other potential structural projects in the Amazon, such as the Ferrogrão railway (EF-170), an important subject of this report. The Ferrogrão (EF-170) will follow the course of the BR-163 highway, a controversial project conceived during the period of military governments, for integrational purposes.

1.3 Historical Background to Exploitation of the Amazon

The exploitation cycles of the Amazon's natural resources started with Christopher Columbus' second voyage (1493-1495) to the New World.⁷ Columbus' announcement about the existence of rubber to the Old World was the starting point for extractivism and exploitation of natural resources, the genocide of indigenous peoples and the invasion and colonisation of the Amazon⁸. The Amazon then experienced its first economic exploitation: the Rubber Cycle. From 1743 onwards, and later in 1763, rubber became part of daily human activities due to new processes developed in France. The Amazon then became a source of economic exploitation at the beginning of the 19th century with rubber vulcanisation⁹.

1.3.1 First Rubber Cycle: 1879-1912

As a consequence of the First Rubber Cycle, architectural, cultural and social activities flourished, especially in Manaus, Amazonas state. The city became an international cultural centre and the source of the money produced by rubber exploitation. Manaus, Belém (Pará state) and Porto Velho (Rondônia state) transformed into meccas for Europeans who saw the Amazon as an incredibly huge pot of gold and other natural resources¹⁰.

The Amazon became the world's biggest centre of rubber extraction and exportation, with a production of 2,673 tons¹¹. From 1855 to 1912, rubber exportation levels peaked, with a total of 40,000 tons, and Brazil became the world's biggest rubber producer and exporter. **Capitalisation of the Amazon's biodiversity through rubber exploitation did not take into account the costs of the impact on indigenous populations, such as semi-slave labour, evangelisation and use of their ancestral lands.** At the end of the 19th century, the Amazonian tribes were also adversely affected by the arrival of immigrants coming from Brazil's northeastern states – fleeing from a major drought –, who were used as cheap labour.¹² Extractivism was producing rubber and profits, but it did not provide wellbeing or respect for traditional communities and the forest.

7 <http://books.scielo.org/id/p5mw5/pdf/godoy-9788579831270-10.pdf>

8 <https://www.todamateria.com.br/ciclo-da-borracha/>

9 <https://www.todamateria.com.br/ciclo-da-borracha/>

10 <https://www.educamaisbrasil.com.br/enem/historia/ciclo-da-borracha>

11 http://www.biologico.sp.gov.br/uploads/docs/pag/v9_1/dagostini3.pdf

12 <https://www.portalsaofrancisco.com.br/historia-do-brasil/ciclo-da-borracha>

1.3.2 Madeira-Mamoré Railway

The Amazon, already hit by exploitation, received a new blow in 1907, when construction of the Madeira-Mamoré railway started with the aim of integrating the territory with the rest of the world, taking advantage of the successful extraction of rubber and its trading in the global market. The purpose of building the railway, an idea encouraged by Bolivia in 1846, was to transport the rubber extracted from Brazilian and Bolivian forests through Amazonas and Rondônia states, via the Mato Grosso border, and export it via the Atlantic Ocean ports. When the last part of the railway was inaugurated in 1912, the decline of rubber extraction had already begun. The economic boom ended because of the fall in the price of latex due to competition from Malaysia, to where rubber tree seeds had been smuggled from Brazil.¹³

Challenging both human force and profits, the Amazon forest resisted fiercely. Heavy rains destroyed levelled ground, bridges and trails, which caused delays and challenged the pace of works. The transportation of latex and other extractive products was only feasible with the construction of two new railways, one in Chile and another in Argentina. They provided access to the recently inaugurated Panama Canal, in 1914. A total of 364 km (226 mi) of the Madeira-Mamoré railway were built. It was used until the 1930s and was completely deactivated in 1972, when the Trans-Amazonian Highway was inaugurated, another major undertaking which took forward the saga of brutal exploitation in the Amazon¹⁴.

1.3.3 Trans-Amazonian Highway, BR-230 – “Integration to Avoid Invasion”

Started in the 1960s by Brazilian dictatorship, the integrational cycle was aimed at colonising lands in order to incorporate the Amazon region into the rest of the country. Demographic vacuums, according to the governments of the time, meant foreign countries could covet these territories. Based on the understanding that the economic exploitation of the Amazon region was key to incorporating the region to Brazil’s development, the Military Government decided to build roads, to launch agricultural colonisation projects and to

¹³ [https://www.infopedia.pt/\\$exploracao-e-comercio-da-borracha-no-brasil](https://www.infopedia.pt/$exploracao-e-comercio-da-borracha-no-brasil)

¹⁴ [https://www.infopedia.pt/\\$exploracao-e-comercio-da-borracha-no-brasil](https://www.infopedia.pt/$exploracao-e-comercio-da-borracha-no-brasil), https://pt.wikipedia.org/wiki/Ciclo_da_borracha

develop ranching, agriculture and infrastructure activities to modernise the forest¹⁵. The motto was “Integration to Avoid Invasion”¹⁶.

The project behind the “Integration to Avoid Invasion” motto significantly raised settlement rates in the Amazon: between 1970 and 1991, the population grew from 4 million to 10 million inhabitants, and ranching grew from 1.7 million to 17 million head of cattle. The region’s GDP, formerly around US\$ 1 billion, increased to US\$ 25 billion per year. However, according to IPAM data from 2000, the accelerated growth did not improve the population’s literacy and income levels. Unfortunately, there are no available studies with updated figures on the negative consequences of this growth for indigenous peoples, traditional communities and biodiversity of the Amazon region. The arrival of agriculture and ranching activities in the region, illegal logging, mining and the construction of hydropower plants favoured the building of roads, such as the Trans-Amazonian highway, the Cuiabá-Santarém (BR-163) highway, the Belém-Brasília highway, among other state highways, and the Madeira-Mamoré railway. **The building of the highway network, which started at the beginning of the 20th century, boosted waves of migration to Pará – mainly to the Tapajós hydrographic basin – which adversely impacted the forest; meanwhile, the exploitation of natural resources gradually eroded the whole territory.**

PHOTO: THOMAZ PEDRO



The construction of infrastructure to facilitate resource extraction has a long history in Brazil.

15 IPAM, 2000

16 https://www.researchgate.net/publication/342322623_TRANSAMAZONICA_INTEGRAR_PARA_NAO_ENTREGAR

In order to understand the overall picture of Amazon exploitation, we must describe the increased environmental and social impacts caused by Brazilian dictatorship's 1964-1985 project of integration with the rest of the country. The construction of the Trans-Amazonian Highway, BR-230, was started under the pretext of strategically protecting the territories and creating a geographically unfeasible route to the Pacific to transport Brazilian output. The highway boosted colonization, pressure on indigenous lands, genocide, an increase in clearing activities and illegal logging to expand agribusiness and commodities production. The Trans-Amazonian Highway did not reach the Pacific Ocean, but it certainly impacted the Amazon.

The construction was carried out during the government of Emílio Garrastazu Médici, from 1969 to 1974, when democratic freedom was most severely suppressed. With 4,260 km (2,647 mi) built and 1,200 km (745 mi) pending construction, the Trans-Amazonian Highway was inaugurated in 1972. It connected Cabelado city, Paraíba state's coastal region (northeastern Brazil) with Lábrea city, Amazonas state, crossing through Pará state and bordering the Tapajós river and the Munduruku lands. Crossing the Amazon basin, seven Brazilian states and 63 municipalities, the Highway affected three ecosystems¹⁷: the Amazon, the Cerrado (Brazilian savanna) and the Caatinga (dry forest region).

1.3.4 Cuiabá-Santarém Highway, BR-163

The Cuiabá-Santarém Highway, BR-163, which crosses the Amazon from south to north, was built at the same time as the Trans-Amazonian Highway. The highway was built in 1971 to transport all the cattle and agricultural production of Mato Grosso state. Currently, it is used to transport 70% of the state's total production. With an extension of 1,764 km (1,096 mi), the highway connects Mato Grosso's capital, Cuiabá, with Santarém city, located on the banks of the Tapajós river, in Pará state. Once the highway was available to transport crops, the northern region of Mato Grosso state received thousands of settlers¹⁸ coming from the southern and southeastern regions of Brazil through

17 <https://radios.etc.com.br/revista-brasil/edicao/2015-10/transamazonica-ja-se-passaram-45-anos-desde-o-inicio-da-construcao>

18 https://www.wwf.org.br/informacoes/noticias_meio_ambiente_e_natureza/?2866

agricultural settlement programmes promoted by the Federal Government. The expansion of agribusiness towards the Amazon forest started with the settlements alongside the BR-163 highway, in a “fish bone” pattern along its course, as far as the Tapajós river, in Pará.

In the 1970s, the Brazilian Army’s Engineering and Construction Battalion (Batalhão de Engenharia de Construção do Exército Brasileiro, BEC) started the deployment works for the Cuiabá-Santarém Highway, BR-163. **The agricultural and irregular settlements favoured the area’s degradation along the highway and, simultaneously, illegal logging and fires took place for land clearance.** Another scar in the Amazon, the Cuiabá-Santarém Highway, BR-163, is the guiding line for the construction of the EF-170 - Ferrogrão railway, which is going through the licensing process. Currently, the process has been suspended due to evidence of irregularities in structural and environmental studies, which are being assessed by the General Accounting Office (Tribunal de Contas da União, TCU).

PHOTO: THOMAZ PEDRO



As a direct or indirect effect of road construction, deforestation has increased dramatically in the Brazilian Amazon.

Of the total 1,764 km (1,096 mi) of the Cuiabá-Santarém Highway, BR-163, a 781 km (485 mi)-long section up to the Mato Grosso border has been completely paved and a high percentage of the highway has already been doubled. It was only in 2020 that the last highway section belonging to Pará state was fully paved to provide access to Miritituba port, on the Tapajós river. The paved BR-163 facilitates the construction works of the Ferrogrão, which runs

in parallel. **If built as planned, the Ferrogrão Railway will cross Jamanxim National Park**, located in the Tapajós river hydrographic basin, where President Dilma Rousseff's government changed the borders in 2016 to allow the planning and construction of the railway.¹⁹

1.4 Railway and Waterway Projects in the Tapajós Region

This chapter explains in detail the different infrastructure projects planned on the Tapajós.

1.4.1 The Ferrogrão Railway

The EF-170 Ferrogrão Railway project foresees the construction of a 933 km (579 mi) railway, parallel to BR-163 Highway, which already crosses Jamanxim National Park. There will be branch railway lines to Santarenzinho and Itapuracá (32.3 km [20 mi] and 11 km [6.8 mi]) long, respectively) and a 69-year concession term²⁰. **The BR-163 Highway has caused the highest levels of illegal settlement, logging, small-scale mining and land-grabbing in the Tapajós region. There are plans to build 54 loading and unloading terminals at the sides of the Ferrogrão to transport crops from northern Mato Grosso.**²¹ The Brazilian government plans to put the EF-170 Ferrogrão railway project to tender in 2021 to allow the already accelerated expansion of agribusiness in Brazil's Legal Amazon region. **In addition, there will be negative consequences in 19 indigenous lands in the Tapajós river basin and its tributaries' sub-basins as well as in conservation units.**

Large national and international enterprises are already forming consortia to participate in the bidding, which has a current estimated cost of R\$ 15 billion (the government already plans to provide R\$ 2.2 billion to the future concessionaire, with resources from General Accounting Office, to support the operations' so-called "non-manageable risks"²²).

19 <https://www.correiocidadania.com.br/columnistas/telma-monteiro/13000-ferrograo-consolidando-a-invasao-da-amazonia-parte-1>

20 <https://ecoa.org.br/wp-content/uploads/2021/04/20a-Carta-de-Infraestrutura-23.04.2021.pdf>

21 <https://www.correiocidadania.com.br/columnistas/telma-monteiro/13000-ferrograo-consolidando-a-invasao-da-amazonia-parte-1>

22 <https://www.udop.com.br/noticia/2020/12/08/governo-poe-ate-r-2-2-bi-na-ferrograo-para-reduzir-risco.html>

Between 30 July and 7 August 2020, virtual meetings were held with potential investors and funders for the Ferrogrão (EF-170) railway. Participating representatives of the Brazilian government were: SPPI, the Ministry of Infrastructure's Secretariat for Development, Planning and Partnerships (Secretaria de Fomento, Planejamento e Parcerias do Ministério da Infraestrutura, SFPP/MINFRA), the National Secretariat of Land Transportation (Secretaria Nacional de Transportes Terrestres, SNTT/MINFRA), National Agency of Land Transportation (Agência Nacional de Transportes Terrestres, ANTT), the Planning and Logistics Corporation (Empresa de Planejamento e Logística, EPL) and the Civil Office of the Republic Presidency. **The Ferrogrão's potential investors and funders were:** Pátria Investimentos, New Development Bank – NDB, VLI SA, Salini Impregilo + Banca Intesa + Sace, Sacyr Construcción SA, Bradesco BBI, Sumitomo Corporation, CCR SA, CCCC – China Communications Construction Company, China Railway Group (Crec10), CAF – Banco de Desenvolvimento da América Latina, Santander, BNDES, Opportunity, Banco do Brasil, EDLP.²³

Two important pieces of information regarding the Ferrogrão (EF-170) process deserve special attention. One of them relates to the Partnership and Investment Programme (Programa de Parcerias em Investimentos, PPI), created by the federal government to coordinate and establish infrastructure operations and their investment and partnership policies. The previously mentioned meetings with potential investors and funders were aimed at receiving feedback on how to run the railway's licensing and bidding process. Among the concerning items identified as potential financial and public image risks to stakeholders are the following environmental issues: (a) to what extent the investor is responsible for pre-existing environmental liabilities included in the studies; (b) risks to investors due to delays in processes related to land issues and availability; (c) constraining responsibility risks associated with the costs of the environmental licensing processes; (d) risks to public image originating from strategic consultation to indigenous communities, especially from two Itaituba tribes directly affected by the project and other tribes living less than 40 km (25 mi) from the future railway, as per ILO Convention 169; (e) risks of the potential judicialisation of environmental issues during the licensing process; (f) risks of potential climate changes described in the studies.

23 Resumo Executivo Ferrogrão 2020, PPI – Programa de Parcerias e Investimentos, Road Show Ferrogrão 2020 (Ferrogrão 2020 Executive Summary, PPI – Partnership and Investment Program): https://www.ppi.gov.br/html/objects/_downloadblob.php?cod_blob=8046

The deployment process of the Ferrogrão (EF-170) started in 2014 and the Public Hearing to receive feedback on Technical Studies and Legal Documents was held in 2017. The feedback received during the Public Hearing included environmental, societal and cultural matters related to the Ferrogrão (EF-170), with special focus on the following items: the need to carry out consultations with indigenous peoples, traditional communities and municipalities located near the railway route and the completion of environmental impact studies before the railway project is put to tender and awarded. It is only by means of the environmental impact studies (EIA-RIMA) that affected people can understand the extent of the consequences to their communities²⁴. However, this request was rejected under merit assessment, on the grounds that studies can be made after the licensing process, and the hearing of indigenous peoples will follow this sequence.

EDLP Consortium

EDLP Consortium – Estação da Luz Participações Ltda. – made the studies on the Ferrogrão (EF-170). The EDLP CEO is Guilherme Quintella, who represents Brazil's biggest agribusiness companies. Trading companies Amaggi, ADM, Bunge, Cargill, Dreyfus and EDLP were the partners who funded the railway's technical and environmental assessment studies requested by the National Agency of Land Transportation (Agência Nacional de Transporte Terrestre, ANTT). The main purpose for building the Ferrogrão (EF-170) is transporting crops (corn, soya bean and soya bran) via the central-northern corridor of Mato Grosso towards northern Brazil. For that purpose, freight and transshipment terminals are projected in Miritituba (PA), on the banks of the Tapajós river, with logistical support from BR-163 highway and the waterway system with ports in Santarém (PA) and Santana (AP). **The route of the Ferrogrão, parallel to highway BR-163, traverses Tapajós Garimpeira Reserve and Conservation Unit, created in 1983. The region encompasses the Tapajós Mineral Province, an area containing more gold than the biggest Brazilian mining site of all times, Serra Pelada, in the Carajás mountains²⁵.** The railway will also be used to promote mining exploitation in the Amazon, taking into account the ease of transportation to Brazilian ports²⁶.

24 <https://participantt.antt.gov.br/Site/AudienciaPublica/VisualizarAvisoAudienciaPublica.aspx?CodigoAudien- cia=176>

25 <https://www.todamateria.com.br/serra-pelada/>

26 https://www.jornaldocomercio.com/_conteudo/cadernos/jc_logistica/2019/01/664510-governo-fe- deral-quer-apressar-licitacao-da-ferrograo.html

Gaps in Environmental Licenses

The Ferrogrão will not avoid Indigenous Lands or Conservation Units (UCs). The National Indian Foundation (FUNAI) has already demarcated these 19 Indigenous Lands (TIs), which have different statuses: declared, delimited, regularised, validated, referred and under consideration. According to Interministerial Ordinance #419, of 26 October 2011, works subject to environmental licensing must be located at a minimum distance of 10 km (6.2 mi) from Indigenous Lands in Legal Amazon. It is also widely known that UCs have a very important environmental role and that natural resources from the Amazon ecosystems are used by indigenous peoples and traditional communities as a source of income. The preliminary studies themselves pointed out the importance of the biological diversity and natural wealth of the regions to be traversed by the Ferrogrão. However, studies performed ignored the importance of these protected areas and their great relevance to the region, even after being damaged by the construction of highway BR-163. The railway's deployment and operational impacts have been minimised in the licensing process studies. **The existence of populations and ranching and agricultural activities, logging and hunting in the region were considered prerequisites for approving the construction of the railway, which will threaten indigenous lands and UCs.**²⁷

The Railway's Approved Route

The route of the Ferrogrão crosses luxuriant landscapes, where the Amazon forest and the Cerrado (Brazilian savanna) meet and create transition areas, producing inconceivably valuable natural treasures. The central-northern region of Mato Grosso state, the Ferrogrão's projected starting point, is an important producer of soybeans, output of which is growing fast year upon year, invading the Amazon edges. The Ferrogrão preliminary studies²⁸ give a false perception that the existence of the Legal Amazon is a "problem", since it covers half of the national territory. Farming and mining industries have worked as a lobby group to encourage more flexible Brazilian environmental laws, such as PL 3.729/2004, a project that has already been approved by Deputies of the National Congress and which could be voted by the Senate at any time. The approval of PL 3.729/2004 will facilitate the advances of deforestation in

27 <https://www.correiocidadania.com.br/colunistas/telma-monteiro/13149-terras-indigenas-unidades-de-conservacao-e-a-sobrevivencia-da-amazonia-no-caminho-da-ferrograo-3>

28 FERROGRÃO - Estudos Preliminares, Concessão da EF -170: SINOP/MT – ITAITUBA/PA - ANTT - place: Brasília date: 24/04/2018

Legal Amazon and, especially, mining exploitation in the Tapajós hydrographic basin. Even though changes in the biome are evident, mainly in the area between highway BR-163 and the Iriri river basin, in a region known as “Terra do Meio”, the Ferrogrão preliminary studies consider this just involves “selective logging exploitation”²⁹.

Brazil as the Biggest Global Producer and its Commercial Partners

The European Union request made to Brazil³⁰, under threat of boycott, that agricultural commodities must not be produced on illegally cleared lands, is not being granted. **The Ferrogrão (EF-170) project became a priority for the Brazilian government as a means to promote agribusiness growth and commodities transportation towards the Northern Arc (Arco Norte) ports**³¹. Brazil is the world’s biggest soya bean producer and exporter, surpassing the USA. During the last 25 years, the country has established itself as a global player in agribusiness, producing and exporting soybean, corn, cellulose, coffee, beef and poultry, sugar and orange juice. The building of the Ferrogrão and the paving of highway BR-163 are considered important infrastructure programmes to improve transportation logistics of commodities produced in the central-western region towards Pará to access the Atlantic. Despite the EU’s threat of boycott, farmers continue to lobby to get the logistic projects implemented in the Amazon. To give an idea, even during the COVID-19 pandemic context of 2020, Brazil exported a record total that exceeded US\$ 10 billion in a single month.³² At the same time, the Brazilian government reduced the resources available to protect the Amazon: for the purchase of equipment, brigade training, increases in groups controlling illegal fires, to combat illegal mining in indigenous lands and deforestation. Since the main environmental control functions from inspection agencies were removed, Brazilian biomes, mainly the Amazon, have become hostages of the uncontrolled expansion of agribusiness.

29 FERROGRÃO - Estudos Preliminares, Concessão da EF -170: SINOP/MT – ITAITUBA/PA - ANTT - place: Brasília date: 24/04/2018

30 <https://www.bbc.com/portuguese/internacional-56996285>

31 <https://www.bbc.com/portuguese/internacional-56996285>

32 <https://www.dinheirorural.com.br/o-grao-brasileiro-de-5-bilhoes-de-dolares/>

However, big investors from China are not worried about the origin of Brazilian commodities. China, Brazil's main commercial partner nowadays, is already planning to invest in the macro development of most of the Amazon through infrastructure, technology, logistics and energy projects. They also plan to import commodities from the mining and agriculture sectors. Despite big investors' concern for commitments to reduce greenhouse gas emissions (GGE) and slow down the pace of deforestation in the Amazon, pressure on this region has only increased during the last two years. **The Brazilian government's plans, including higher investments in logistics along with more flexible environmental laws and faster environmental licences, will have catastrophic consequences for protected areas in the Amazon, Cerrado, Conservation Units and indigenous lands.** The demand from the Chinese market is particularly beneficial for the agribusiness sector, which has no regard for the application of the best practices requested by the EU. The Ferrogrão (EF-170) is only one component of the Ministry of Infrastructure's proposal, supported by a wider linked network of transportation modes (railways, roads, waterways, ports and airports) to meet the needs of production chains and big companies involved. The Ferrogrão preliminary studies are themselves a proof of this, when they refer to its structural role for transporting corn, soybean and soybean bran production. The Logistics Integration Project (PIL) refers to the railway as the "inseparable anchor" of highway BR-163³³.

1.4.2 Energy Exploitation in the Tapajós Hydrographic Basin

Hydropower plants built on the Madeira, Teles Pires and Xingu rivers had a devastating impact in the Amazon, and the Tapajós river hydrographic basin is threatened by the construction of seven such plants.

The infrastructure works planned and built in the Amazon caused shrinking Conservation Units, impacts on indigenous lands, biodiversity destruction, water table contamination, mandatory displacement of traditional communities from their habitats, changes in river regimes, contamination of igarapés (watercourses) and a decline in subsistence fishing.

³³ <https://online.unisc.br/acadnet/anais/index.php/sidr/article/viewFile/16309/4405>, <http://www.observatoriodoclima.eco.br/avanco-da-soja-em-areas-de-desmatamento-na-amazonia-e-o-maior-em-cinco-anos/>, <https://online.unisc.br/acadnet/anais/index.php/sidr/article/viewFile/16309/4405>

Energy exploitation, including projecting and building hydropower plants in the Tapajós hydrographic basin and its tributaries, especially in the Tapajós and Jamanxim rivers, can only be resumed by the Federal Government after 2030. It was not included in the 10-Year Energy Plan (PDE 2030) for 2020-2030 period. There were seven potential hydroelectric undertakings projected in the Tapajós river basin. The biggest, the São Luiz do Tapajós hydropower plant, in Itaituba, Pará, has had its licence suspended. **The Ferrogrão (EF-170) project depends on dredging and desilting the Tapajós river and the building of port infrastructure in the Miritituba port section up to Santarém, to ensure the integration of this multimodal transport complex** aiming at transporting agricultural production from the central-western region towards Rotterdam and Chinese ports³⁴.

The purpose of the railway-waterway-road modal integration is to meet the increasing demand to export agricultural commodities produced in cleared forests and also to complete the Amazon's integration process proposed in the 1960s during the period of military governments. **Indigenous people who will be affected by construction of the Ferrogrão have not been consulted on any of the proposed projects.** The region's exploitation will be exponentially worsened due to the settlements resulting from the works and operations. The announcement of the projects alone – whether those projects involve the construction of hydropower plants or of railways – produces a migratory flow that, as a consequence, generates land-grabbing, illegal mining, violence and deforestation. Jamanxim National Park, a Conservation Unit created in 2006, has felt the impact of BR-163 since the highway started to cross the forest in the 1970s. This UC is very important and considered a “corridor unit” connecting the Tapajós UC network with the Xingu UC network. It encompasses over 17 million hectares (42 million acres) of federal protected areas³⁵.

The environmental studies conducted by the Ferrogrão developers did not reveal the true social and environmental impacts on Jamanxim National Park. The studies describe the many land ownership conflicts and human pressures in the area, including deforestation and land-grabbing, and suggest that

34 https://www.jornaldocomercio.com/_conteudo/cadernos/jc_logistica/2019/01/664510-governo-federal-quer-apressar-licitacao-da-ferrograo.html

35 https://www.jornaldocomercio.com/_conteudo/cadernos/jc_logistica/2019/01/664510-governo-federal-quer-apressar-licitacao-da-ferrograo.html

existing problems justify the impacts produced by the railway. The full paving of BR-163 has caused an increase in traffic and more intense human pressure in the Jamanxim National Park region.

The Amazon is threatened once again with the potential licensing of the Ferrogrão (EF-170), which would be built within a UC and near indigenous lands. Escalation of negative impacts will be imminent due to the deconstruction of the Brazilian environmental framework promoted by the federal government and the Ministry of the Environment. New areas will be cleared by grileiros (land grabbers) for agribusiness, the railway's sole beneficiary. Legal and illegal mining exploitation will establish themselves and grow alongside the railway, increasing pressure on the Amazon. The region crossed by highway BR-163 and the Ferrogrão's projected parallel route is located in the Tapajós hydrographic basin and in its tributaries' sub-basins.

1.4.3 Tapajós Hydrographic Basin

The Tapajós hydrographic basin and its tributaries' sub-basins are located in two Brazilian biomes: the Amazon and the Cerrado, in Pará and Mato Grosso states. The basin's area belonging to the Amazonian biome is covered by dense moist tropical forest; despite its infertile soil, there is a great wealth of biological diversity. The area located in Cerrado biome, possessing the world's richest biodiversity, is considered an endemic savanna. The biodiversity of both areas has over a thousand tree species and 1,700 animal species. The Tapajós basin covers 764,183 km² (295,052 sq mi) and has a population of 1,200,000 inhabitants (IBGE, 2010). According to data from 2013, 19% of the Tapajós hydrographic basin and its tributaries/sub-basins have already been cleared and over 70% of this deforestation was carried out in Mato Grosso state; the cleared area may reach 11,000 km² (4,247 sq mi)³⁶.

Provisional Measure PM no. 558 was updated in January 2012 by President Dilma Rousseff to change the border of Amazon National Parks "Campos Amazônicos" and "Mapinguari", Crepori and Itaituba I & II National Forests, and the Tapajós Environmental Protection Area, in order to build hydroelectric power plants on the Tapajós river, Pará, without environmental objections. The

36 <https://www.inputbrasil.org/regioes/bacia-do-tapajos/>

licensing process of the hydropower plants to be constructed in the Tapajós hydrographic basin started in 2012. In the same year, FUNAI sent an official letter to IBAMA to report that, according to Ordinance #419, any disruption in

indigenous lands due to the construction of hydropower plants must keep a minimum distance of 40 km (25 mi.), and an additional 20 km (12.5 mi) where nearby rivers are used as reservoirs.

PHOTO: FÁBIO NASCIMENTO / GREENPEACE



If the São Luiz do Tapajós dam is built, its impacts will be even worse than those caused by the Belo Monte dam.

The Tapajós river is formed by the confluence of two rivers: the Teles Pires and the Juruena. The Tapajós and Juruena rivers, along with their tributaries, form a large hydrographic basin with distinctive characteristics, including several indigenous lands. The potential site of the São Luiz do Tapajós hydropower plant is located near Itaituba city, in Pará. In this portion of the river, there is a beautiful waterfall complex which would be lost if IBAMA decided to reactivate the licensing and the works were carried out. On the basis of an IBAMA directorate request dated 5 August 2016, licensing remains suspended. Building a huge infrastructure project in a river that crosses conservation units, indigenous lands and traditional communities may have impacts in similar proportion to those of the Belo Monte hydropower plant on the Xingu river. It is important to bear mind the existence of a project to build locks in the São Luiz do Tapajós hydropower plant to enable the construction of the Tapajós

waterway up to Jacareacanga, within the multimodal highway-railway-waterway Logistics Integration Project. **Two of the protected areas located in the region and expected to be the site of the hydroelectric power plant are the Amazon National Park, on the left bank of the river, and the Sawré Muybu indigenous lands, located within the direct area of impact of the potential works.** These were the main reasons for suspending the environmental licensing process³⁷.

By way of illustration, if the original projects for the São Luiz do Tapajós hydropower plant were reactivated (not feasible until 2030, according to PDE 2030), they would become a new monster in the Amazon, judging by the following figures: a 7,608 m (25,000 ft)-long dam (over 4.5 mi) diagonally crossing the river; a 729 km² (281.5 sq mi) permanently-flooded area; a 123 km (76 mi) reservoir; 850,000 tons of cement and 208,000 tons of steel; over 22 million m³ (776.9 million cu ft) of excavated rock. If São Luiz do Tapajós is built, then Belo Monte will lose its status of “Brazil’s worst hydropower plant”.

This potential undertaking in the Tapajós hydrographic basin may occur in the world’s biggest gold-bearing area³⁸.

1.5 Mining in the Areas Surrounding Future Hydroelectric Projects

The Tapajós hydrographic basin territory includes the Tapajós Mineral Province (PMT)³⁹, covering 100,000 km² (38,610 sq mi) and considered one of the biggest mining sites and the world’s biggest gold deposit. National and international enterprises are partnering to explore and expropriate, with the permission of Brazilian state, its potential resources, even though deposits are located in indigenous lands. Gold in the region was discovered at the beginning of the 1950s and the area has been relentlessly exploited by garimpeiros (small-scale miners) during the last 50 years.

37 <http://www.ihu.unisinos.br/159-noticias/entrevistas/595417-a-destruicao-da-soberania-brasileira-e-a-debacle-de-agendas-ambientais-nunca-vista-na-historia-entrevista-especial-com-telma-monteiro>

38 <https://www.telmadmonteiro.com/2011/08/complexo-tapajos-estaria-no-maior.html>

39 <https://www.telmadmonteiro.com/2011/08/complexo-tapajos-estaria-no-maior.html>

„Brazilian Gold plans to use the resources obtained from the sale to support the development of their projects in the Northern region, where they own eight areas in Tapajós Mineral Province and two in Alta Floresta Auriferous Province, near the Tapajós“⁴⁰.

It is estimated that, until now, around 800 tons of gold have been – officially and illegally – extracted from PMT, an amount equivalent to 16 times Serra Pelada’s total production⁴¹. This represents around US\$ 2 billion, but official registers only account for a production of approximately 194 tons until 2006⁴². The massive presence of mining sites in the region is confirmed by the number of landing strips: 300 in Tapajós, 170 in Parima and 185 in Alta Floresta. The Tapajós Mineral Province Project – Project PROMIN TAPAJÓS – was created in 1995 to get a reliable level of geological knowledge and stimulate research of gold deposits and new undertakings. Gold and hydroelectric projects on the Tapajós and Jamanxim rivers are located within the mineral province. The extraction of ore, gold panning and the newly granted mining rights will cause another logging cycle. New impacts will be felt in indigenous lands⁴³.

PHOTO: FÁBIO NASCIMENTO / GREENPEACE



Since the 1950s, gold has been exploited in the Tapajós area – with devastating impacts on the environment.

40 <https://agego.org.br/sobre-a-agego/>

41 Serra Pelada was Brazil's biggest gold panning site, explored mainly between 1980 and 1983.

42 <http://www.valedoxingu.com.br/?pg=noticia&id=1274>

43 <https://www.telmadmonteiro.com/2011/08/complexo-tapajos-estaria-no-maior.html>

Moreover, management of açai palm trees and Brazil nuts undertaken in all municipalities of the Tapajós hydrographic basin, especially in Santarém and Jacareacanga, will be threatened. The potential construction of hydropower plants will not address these issues and neither will it promote the sustainable development of the region. Illegal mining continues to thrive. Free small-scale mining is not supervised in rivers either within or outside indigenous lands. Illegal mining is the direct path to environmental damage and contamination of water resources with mercury. 17,408 mining permit applications are in progress in the National Department of Mineral Production (Departamento Nacional de Produção Minerária, DNPM) to start exploiting operations. The regional municipalities of the Tapajós river basin were blessed with the natural resources of vegetable, mineral and water reserves, fish stocks, beautiful landscapes and prospects of tourism. The government believes that, in order to add value to the region's primary products and strengthen the local economy, it is necessary to support artificial developments. The priority has been to encourage the exploitation of the hydroelectric potential of the Tapajós, Teles Pires and Juruena rivers through the construction of power plants⁴⁴.

Big corporate mining groups, encouraged by Federal Government's incentives to build hydroelectric projects in the Amazon (as on the Madeira and Belo Monte rivers), are already competing for their share of mineral resources. Focused on those natural resources, a draft bill to authorize mining in indigenous lands is currently being assessed by the Chamber of Deputies⁴⁵. National and international companies plan to increase their production capacity by exploiting indigenous lands. Global demand for mineral resources is rising.

If the Ferrogrão, Tapajós hydropower plants and the waterway are built, settlement in the region will increase and agribusiness will continue to invade ecosystems. The decision of the government to prioritize the construction of big and small hydropower plants will benefit agribusiness, the export of agricultural commodities, mining and the growth of industrialization in the region.

44 <https://www.telmadmonteiro.com/2011/08/complexo-tapajos-estaria-no-maior.html>

45 PL 5.265/2009 plans the exploitation of mineral resources in indigenous lands and suggests other measures.

The Ferrogrão (EF-170) logistics project will have devastating effects and its only purpose will be to transport agricultural and mineral production. The previous government already rejected the possibility of holding a consultation with indigenous peoples. Electro-intensive industries exert pressure for the construction of hydroelectric complexes in the Tapajós basin region, which could be a determining factor in reactivating projects. In Juruti, in far western Pará, Alcoa's licence to mine bauxite has been approved. The company plans to build a processing plant with high power consumption, a river port and a railway. Large industries with energy as their main input look for places where hydropower plants might be built. The arrival of these industries in the region has major impacts. Even though these projects increase municipal revenues, side effects are migration, pressure on infrastructure, utilities and natural resources, and an increase in land ownership conflicts.

1.6 Exploitation of Indigenous Lands

In 2019, 2020 and 2021, Brazil was the crown jewel of three mining events organized in Canada by PDAC (Prospectors & Developers Association of Canada). The Brazilian government invited multinational enterprises to exploit mining resources in indigenous lands. In 2020, they held "Brazilian Mining Day" and, in 2021, they introduced a project allowing for the deregulation and flexibilization of Brazil's environmental laws and offered financing to attract big mining companies. Up to 2022, they have offered 35,000 areas and eight blocks for mining prospecting, and areas in the Tapajós Mineral Province⁴⁶. Northern Mato Grosso and southern Pará were even offered as "nice surprises" for investors. Some areas are located in Alta Floresta Mineral Province, in the region of the Juruena and Teles Pires rivers, rich in gold, copper, lead and zinc and with "the country's biggest amount of exploration areas per hectare."

The numbers presented by the Mining Observatory⁴⁷ on illegal mining in the Amazon are striking: 2,576 units of illegal small-scale mining affecting 17% of protected areas and 10% of indigenous lands. **The Tapajós basin has Brazil's biggest area of illegal mining: 4,700 units recorded in 2020 using satellite images.** Clearance rates in indigenous lands of the Amazon have reached 23%

⁴⁶ <https://observatoriodaminerao.com.br/brasil-aposta-tudo-no-maior-evento-de-mineracao-do-mundo/>

⁴⁷ <https://observatoriodaminerao.com.br/brasil-aposta-tudo-no-maior-evento-de-mineracao-do-mundo/>



The exploitation of natural resources is being carried out on indigenous territories while severely impacting the communities' health and wellbeing.

(data from 2020) according to the Real-Time Deforestation Detection System (Sistema de Detecção do Desmatamento em Tempo Real, DETER). Threats to the Amazon deriving from gold extraction and worsened by the imminent construction of the Ferrogrão cannot be disregarded. Currently, gold mining threatens 3.8 million hectares (9.3 million acres) from Conservation Units and 2.4 million hectares (almost 6 million acres) of indigenous lands. However, the most serious problem is the level of mercury contamination⁴⁸ in the Tapajós basin region, to which Munduruku indigenous peoples have been chronically exposed to, according to IMAZON. Both agribusiness and gold extraction boost logging and deforestation; a 40% rise in gold price and the increase in meat exportation to China have increased deforestation levels and, as a consequence, the number of small-scale mining sites⁴⁹.

48 <http://www.ufopa.edu.br/ufopa/comunica/noticias/pesquisa-indica-exposicao-cronica-de-indigenas-munduruku-ao-mercurio-na-regiao-da-bacia-do-tapajos/>

49 <https://www.socioambiental.org/pt-br/blog/blog-do-monitoramento/destruicao-avanca-no-territorio-munduruku>

1.7 The Amazon under Bolsonaro's Government

During their first year of office, 2019, President Jair Bolsonaro's Administration dissolved the Ministry of Environment. Bolsonaro had already spoken about his desire to do so during his campaign for the presidency. The National Council on the Environment (Conselho Nacional do Meio Ambiente, CONAMA) was an achievement of the Federal Constitution of 1988. Environment Minister Ricardo Salles, appointed by the president, altered CONAMA's equilibrium, reducing civil society participation and favouring the business sector, governmental agencies and policies imposed by financial and economic interests.

Jair Bolsonaro dismissed Ricardo Galvão, director of the National Institute for Space Research (Instituto Nacional de Pesquisas Espaciais, INPE), because he dared to disclose data from July 2019 about the increased deforestation levels in the Amazon. The Brazilian Institute for the Environment and Natural Resources (Instituto Brasileiro de Meio Ambiente, IBAMA) was dismantled by Salles, who reduced resources aimed at combating illegal fires and deforestation in the Amazon. Efforts to combat forest fires were inadequate due to the lack of resources, and the Amazon suffered more than ever⁵⁰ without IBAMA's trained teams.

Since most of the Amazon basin is located within Brazilian territory, whatever happens there can affect the rest of the Amazonian countries. The world's climate balance depends on the maintenance and preservation of the Amazon, and the fight against deforestation and forest fires. However, the world's eyes are focused not only on the conservation of the forest, but also on the protection of indigenous peoples and their lands, which have never been so seriously threatened. As shown in this initial study, large enterprises and national and international investors have interests in agribusiness; and the Ferrogrão project attracts potential investors.

The following chapter provides a comprehensive overview as well as data on the interests of banks and international companies.

50 <https://g1.globo.com/am/amazonas/noticia/2020/10/11/queimadas-no-amazonas-em-2020-superam-recorde-de-2005-e-registram-maior-numero-da-historia.ghtml>

2 Financial Study

2.1 Introduction

This chapter describes the project structure, project status and stakeholder financing of two major Brazilian infrastructure projects in the Amazon region:

- **Ferrogrão Railway**
- **Tapajós Hydroelectric Complex and Tapajós Waterway**

Since the two projects are still in the preparatory stage, project participants are not known, and direct financing has not been arranged. Instead, stakeholders that showed interest in participating in the projects have been identified. In addition, the financing of these potential project stakeholders has been researched. Past and current financiers of the potential stakeholders are good candidates to provide finance once the latter participate in the project, and are therefore considered as potential financiers (see Figure 1). Research methodology is outlined in the appendix (see p. 168).

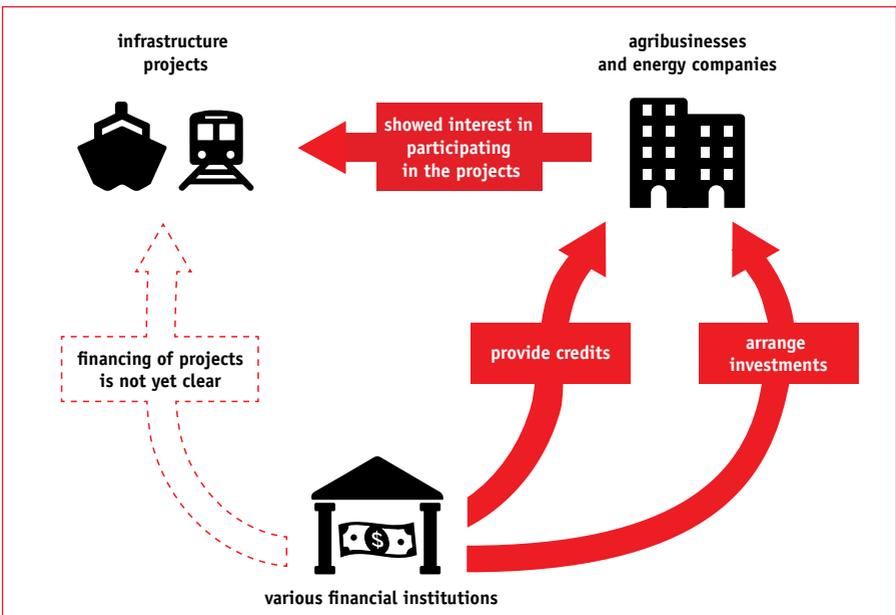


Figure 1: Current state of project financing (simplified)

Financing of the potential stakeholders can be arranged through either credit or investment. Creditors provide credit to a company in the form of a loan or underwriting service. Investors invest in bonds or shares of a company. As a bondholder, an investor holds a tradable value paper (bond) with a usually fixed repayment date. As a shareholder, an investor owns a part of a company through tradable shares (see Figure 2 and Appendix for more detailed information).

CREDITS

loans: creditors lend money, either short-term or long-term

underwriting: creditors buy bonds with the intention of selling them to investors

INVESTMENTS

bonds: investors hold a tradable value paper (bond) with usually a fixed repayment date

shares: as a shareholder, the investor owns a part of a company through tradable shares

Figure 2: Forms of credits and investments

The subject of this chapter is financing through both credit and investment. It describes the findings per selected infrastructure project. Section 2.2 describes the Ferrogrão railway, section 2.3 the Tapajós Hydroelectric Complex and Waterway. In each section, four subsections describe the project status, the project structure, direct and indirect finance, and financing of the potential stakeholders.

2.2 Ferrogrão Railway

The Ferrogrão, Grainrail, or EF-170 project is a proposed 933 km railway from Sinop (Mato Grosso) to Miritituba (Pará), connecting soya producing areas to harbour facilities on the Amazon river (see Figure 3). The railway has been declared a government priority¹ and is projected to run in the same corridor as the existing BR-163 highway² but to significantly lower costs in transport.

1 Pulitzer Center (2020, August), "Ferrograo, a Path of Illusion", online <https://pulitzercenter.org/blog/ferrograo-path-illusion>, viewed in February 2021. .

2 PPI (2020), "Railway EF-170 - MT / PA - Ferrogrão", online <https://www.ppi.gov.br/ef-170-mt-pa-ferrograo>, viewed in February 2021.

Therefore, it would make soya more competitive³. It is estimated that the Ferrogrão project could bring about a 70% increase in yearly grain collection over ten years⁴. 58 million tons of grain shall be transported via this railway per year⁵.

2.2.1 Project Status

The project was qualified for the Brazilian Investment Partnership Program (PPI) in 2016. In May 2020, the public consultation was completed⁶. The PPI discussed the concession with potential future stakeholders in October 2019 and August 2020⁷.

In July 2020, the Transportation Regulatory Agency (ANTT) approved the concession. The concession tenor was set to 69 years. Commercial operation is expected to start in 2029⁸.

At the time of this research, in March 2021, the project status is still "TCU Assessment in progress". As part of this procedure, the Tribunal de Contas da União (TCU; Federal Court of Accounts) had started the assessment of studies submitted by potential investors and financiers for the project on 10 October 2020.⁹ The technical section of the TCU then published a partial report in January 2021. In it, it identified several issues which are expected to lead to political difficulties¹⁰. In the same month, the federal public prosecutor (Ministério Público Federal, MPF) initiated an investigation into the insufficiencies in the

3 Datarnews (2019), "Indigenous community mobilizes against Ferrograo Railway", online <https://www.datarnews.com/noticias/indigenous-community-mobilizes-against-ferrograo-railway/>, viewed in February 2021.

4 Datarnews (2019), "Indigenous community mobilizes against Ferrograo Railway", online <https://www.datarnews.com/noticias/indigenous-community-mobilizes-against-ferrograo-railway/>, viewed in February 2021.

5 Environmental Justice Atlas (2020), "Ferrograo Railway Ferrovia EF-170, Mato Grosso – Para, Brazil", online <https://ejatlas.org/conflict/planned-construction-of-ferrograo-railroad-to-boost-soy-exports-mato-grosso-para-brazil>, viewed in February 2021.

6 PPI (2020, May), Concessão da Ferrogrão, trecho Sinop, MT a Itaituba, PA, EF-170_MT_PA [Portuguese]; ANTT (2020, 20 October), "Public hearing Proposal Attachments", <https://participantt.antt.gov.br/Site/AudienciaPublica/VisualizarAvisoAudienciaPublica.aspx?CodigoAudiencia=176>, viewed in February 2021.

7 PPI (2020, 21 December), Executive Summary Ferrogrão Roadshow 2020.; PPI (2020, 14 July), "Ferrogrão Roadshow (EF-170)", <https://www.ppi.gov.br/roadshowferrograo>, viewed in February 2021.

8 IJGlobal (2020, 10 July), Brazil approves Ferrogrão railway project, online: <https://ijglobal.com/articles/148638/brazil-approves-ferrograo-railway-project>, viewed in February 2021

9 PPI (2020), "EF 170 – MT/PA - Ferrogrão Railroad", online: https://www.ppi.gov.br/ef_170_mt_pa_ferrograo_railroad, viewed in February 2021.

10 Veja (2021, 12 January), "TCU should make Tarcísio's life difficult in the bidding for Ferrogrão", online: <https://veja.abril.com.br/blog/radar-economico/tcu-deve-dificultar-a-vida-de-tarcisio-na-licitacao-do-ferrograo/>, viewed in February 2021.

technical studies on the socioeconomic impact generated by the Ferrogrão project. The procedure is part of a series of complaints filed by indigenous peoples and other local stakeholders.¹¹

Generally, the TCU's endorsement is expected at the end of 2021, and the auction is expected in the first trimester of 2022.¹² However, in March 2021, a judge of the Federal Supreme Court suspended all processes related to the Ferrogrão concession.¹³ These processes and investigations may delay the project.

2.2.2 Project Structure

The Transportation Regulatory Agency (ANTT) is overseeing the concession process.¹⁴ EPL Planning and Logistics, a consultancy firm, analyses the studies and supports ANTT in the concession process.¹⁵

Since the project is in a preparatory phase, the project participants are not yet known. Parties that showed interest in bidding for the concession of the project are:

- In 2016, Shanghai Pengxin Group, a Chinese agricultural business group, showed interest in taking part in the tender.¹⁶ Shanghai Pengxin Group owns a controlling stake in Brazilian soya companies Fiagril and Belagricola through its subsidiary Dakang International Food & Agriculture.¹⁷

11 VG Notícias (2021, 25 January), "MPF finds lack of technical studies for the construction of Ferrogrão", online: <https://www.vgnoticias.com.br/cidades/mpf-apura-falta-de-estudos-tecnicos-para-construcao-da-ferrograo/74596>, viewed in February 2021.

12 Programa de Parcerias de Investimentos (2021): Ferrovia EF-170 - MT/PA -Ferrogrão, online: <https://www.ppi.gov.br/ef-170-mt-pa-ferrograo>, viewed in August, 2021.

13 "Defesa dos Direitos dos Povos Indígenas", online: <http://www.frenteparlamentarindigena.com.br>, viewed in February 2021.

14 PPI (2020), "Railway EF-170 - MT / PA – Ferrogrão", online: <https://www.ppi.gov.br/ef-170-mt-pa-ferrograo>, viewed in February 2021.

15 EPL (2020), "EF-170 MT / PA Railway – Ferrogrão", online: <https://www.epl.gov.br/ferrovia-ef-170-mt-pa-ferrograo>, viewed in February 2021.

16 MacuaHub (2017), "Shanghai Pengxin Group interested in railway concession in Ferrogrão, Brazil", online: <https://macuahub.com.mo/2016/10/28/shanghai-pengxin-group-interested-in-railway-concession-in-ferrograo-brazil/>, viewed in February 2021.

17 South China Morning Post (2017), "Shanghai Pengxin sets sights on importing more Brazilian soybean", online: <https://www.scmp.com/business/companies/article/2112688/shanghai-pengxin-sets-sights-importing-more-brazilian-soybean>, viewed in February 2021.

Figure 3: Map of the planned infrastructure projects



Source: Society for Threatened Peoples, based on Bruno Fonseca

- In 2017, American food corporation Cargill was in talks to form a consortium to bid for the Ferrogrão railway. Prospective consortium partners include rival grain traders Archer Daniels Midland (ADM), Bunge, Louis Dreyfus Corporation (LDC), and Brazil's Amaggi.¹⁸ On behalf of the consortium partners, the project development company Estação da Luz Participações (EDLP, Brazil) plays an active role in the development, promotion and advocacy of the Ferrogrão project and can be seen as a major driver during the early stages of the project.¹⁹ ADM, Bunge, Cargill, and LDC are the four largest grain traders globally, and together with Amaggi, the five largest soya traders in Brazil. In 2020, EDLP still showed interest in the project.²⁰
- In 2019 and 2020, in addition to the above companies, several more companies showed interest in preparing a bid for the auction: Acciona (Spain); C.Vale (Brazil); CCR (Brazil); China Communications Construction Company (China); China Railway Engineering Corporation (China); CIANPORT (Brazil); Ecorodovias (Brazil); Gorski (Brazil); Hidrovias do Brasil (Brazil); Sacyr Construccion (Spain); Sumitomo Corporation (Japan); Transportes Bertolini (Brazil); VLI Logística (Brazil); and Webuild (Italy).²¹

Whether the operation of the railway will be auctioned separately from the construction is still unclear. It is possible that the company or consortium that constructs the railway will also operate it, and that the railway will not become a public asset when the contract has ended.²²

18 Reuters (2017), "Cargill may partner on \$4.3 billion rail project, Brazil chief says ", online: <https://www.reuters.com/article/us-cargill-investments/cargill-may-partner-on-4-3-billion-rail-project-brazil-chief-says-idUS-KBN1DY2H9>, viewed in February 2021.

19 PlantProject (2019), "Ferrogrão's driver", online: <http://plantproject.com.br/novo/2019/01/agribusiness-guilherme-quintella-o-maquinista-da-ferrograo/>, viewed in May 2020; EDLP (n.d.), "Ferrogrão", http://edlp.com.br/download/infografico_Ferrograo.pdf, viewed in February 2021.

20 PPI (2020, 21 December), Executive Summary Ferrogrão Roadshow 2020.

21 PPI (2020, 21 December), Executive Summary Ferrogrão Roadshow 2020.

22 Valor International (2019), "Government may hand over Ferrogrão through authorization license", online: <https://www.valor.com.br/international/news/6208539/government-may-hand-over-ferrograo-through-authorization-license>, viewed in May 2020.

2.2.3 Direct and Indirect Finance

The project is still in the preparatory phase. The project has not been granted a concession or a license. Therefore, the construction companies, operators and owners have not been determined, and financing has not been arranged. Presenting the concession, the Investment Partnership Program estimates the project costs as:²³

- Capital expenditure for implementation: R\$ 8.4 billion (US\$ 1.6 billion);
- Capital expenditure for maintenance: R\$ 13.1 billion (US\$ 2.5 billion);
- Operational expenditure: R\$ 63.7 billion (US\$ 12.0 billion).

Implementation cost includes both construction and acquisition of rolling stock.²⁴

In December 2020, the Ministry of Infrastructure proposed to make a R\$ 2.2 billion (US\$ 429 million) fund available to the future concessionaire to finance “non-manageable risks” of the enterprise.²⁵ In January 2021, the deputy attorney general at the TCU filed a case against the allocation of this R\$ 2.2 billion to the railway.²⁶ This may delay the project.

In 2019 and 2020, the following financial institutions showed interest in financing the railway project:²⁷

Banco do Brasil (Brazil); BNDES (Brazil); Bradesco (Brazil); Brasil Capital (Brazil); Cassa Depositi e Prestiti (Italy); Constellation Asset Management (Brazil); Corporacion Andina de Fomento (Venezuela); Intesa Sanpaolo (Italy); Itaú Unibanco (Brazil); New Development Bank (China); Opportunity Asset Management (Brazil); Pátria Investimentos (Brazil); Santander (Spain).

23 Investment Partnership Program (2020, 7 August), “Ferrogrão Presentation - July 2020” (Powerpoint presentation).

24 IJGlobal (2020, 10 July), Brazil approves Ferrogrão railway project, online: <https://ijglobal.com/articles/148638/brazil-approves-ferrogr-o-railway-project>, viewed in February 2021

25 Valor (2020, 8 December), “Government puts up to R \$ 2.2 billion in Ferrogrão to reduce risk”, online: <https://valor.globo.com/brasil/noticia/2020/12/08/governo-poe-ate-r-22-bi-na-ferrograo-para-reduzir-risco.ghtml>, viewed in February 2021.

26 Poder360 (2021, 21 January), “Attorney at TCU represents against R \$ 2.2 billion in Ferrogrão”, online: <https://www.poder360.com.br/economia/procurador-junto-ao-tcu-representa-contra-r-22-bilhoes-na-ferrograo/>, viewed in February 2021.

27 PPI (2020, 21 December), Executive Summary Ferrogrão Roadshow 2020.

The project has not been auctioned; therefore, it is not at the financing stage. Apart from the above-mentioned Ministry of Infrastructure proposal, preparations for direct financing of the Ferrogrão project have not been identified.²⁸

2.2.4 Financing of Potential Stakeholders

This section describes the financiers of the potential stakeholders of the Ferrogrão project; potential stakeholders are the companies that showed interest to make a bid for the project (see Section 2.2.2). Both creditors to and investors in these companies have been identified.

Potential stakeholders and the respective company group are given in Table 1. The table also indicates whether financiers of these stakeholders have been identified. Financing has been identified for 14 of the 21 company groups (see Tables 2-7).

The financial institutions in the following subsections are linked to the potential stakeholders; they are not linked to the Ferrogrão project. The financial institutions may get involved in the project when the related stakeholder gets involved. The financial institutions mentioned in section 2.2.3 showed interest in the project on their own merit.

Credit

In total, 216 financial institutions were identified that provided credit to the potential stakeholders in the Ferrogrão project, with a total value of US\$ 235 billion. The largest creditors overall are Citigroup (United States), Bank of America (United States), and BNP Paribas (France). The Top-5 creditors per company are presented in Table 2.

28 IJGlobal (2021), 'TransactionSearch_Secondary Sector=Heavy Rail; Country=Brazil', viewed on 4 February 2021; BNDES (2021), 'Search results: EF 170; Ferrogrão, Grainrail', online: <https://www.bndes.gov.br/wps/portal/site/home/Busca/solrsearch?q=Ferrogrão>, viewed in February 2021; Wordbank (2021), 'PPI CustomQuery_ Brazil, Transport, Railway, 2015-2020', online: <https://ppi.worldbank.org/en/customquery>, retrieved on 4 February 2021; Wordbank (2021), 'Projects search: Brazil, Railway, 2015-2020', online: https://projects.worldbank.org/en/projects-operations/projects-list?qterm=&countryshortname_exact=Brazil§or_exact=Railways, retrieved on 4 February 2021.

Table 1 | Potential Stakeholders in the Ferrogrão Project

Potential stakeholder (company group)	Country	Potential stakeholder (as identified)	Country	Financiers identified?
Acciona	Spain	Acciona	Spain	Yes
Archer Daniels Midland (ADM)	United States	Archer Daniels Midland (ADM)	United States	Yes
ASTM	Italy	Ecorodovias	Brazil	Yes
Bertolini	Brazil	Transportes Bertolini	Brazil	No
Bunge	United States	Bunge	United States	Yes
Cargill	United States	Cargill	United States	Yes
CCR	Brazil	CCR	Brazil	Yes
China Communications Construction Company	China	China Communications Construction Company	China	Yes
China Railway Group	China	China Railway Engineering Corporation	China	Yes
Cianport	Brazil	Cia Norte de Navegação e Portos	Brazil	No
Coop. C.Vale	Brazil	C.Vale	Brazil	No
EDLP	Brazil	Estação da Luz Participações	Brazil	No
Gorski	Brazil	Gorski	Brazil	No
Grupo Amaggi	Brazil	Grupo Amaggi	Brazil	No
Hidroviás do Brasil	Brazil	Hidroviás do Brasil	Brazil	Yes
Louis Dreyfus Company (LDC)	Netherlands	Louis Dreyfus Company (LDC)	Netherlands	Yes
Pengxin	China	Shanghai Pengxin Group (Fiagril, Belagricola)	China	Yes
Sacyr	Spain	Sacyr Construccion	Spain	Yes
Sumitomo Corp	Japan	Sumitomo Corp	Japan	Yes
VLI	Brazil	VLI Logística	Brazil	Yes
Webuild	Italy	Webuild	Italy	No

Table 2 | Top-5 Creditors to Potential Stakeholders in the Ferrogrão Project (2014- January 2021, in US\$ million)

Potential stakeholder	Creditor	Country	Loans	Underwriting	Total
Acciona	Santander	Spain	5,922	396	6,318
	La Caixa Group	Spain	4,630	115	4,745
	Banco Bilbao Vizcaya Argentaria (BBVA)	Spain	2,652	424	3,075
	Intesa Sanpaolo	Italy	2,170	148	2,318
	NatWest	United Kingdom	1,576	83	1,658
Archer Daniels Midland (ADM)	Bank of America	United States	4,097	1,362	5,459
	Barclays	United Kingdom	3,499	1,618	5,118
	Citigroup	United States	3,472	1,391	4,863
	JPMorgan Chase	United States	2,020	1,335	3,355
	BNP Paribas	France	105	1,404	1,509
ASTM	BNDES	Brazil	488		488
	UniCredit	Italy	254	102	355
	BTG Pactual	Brazil		322	322
	Itaú Unibanco	Brazil		296	296
	Santander	Spain		287	287
Bunge	SMBC Group	Japan	1,404	381	1,785
	Citigroup	United States	396	729	1,125
	ING Group	Netherlands	778	214	992
	JPMorgan Chase	United States	179	791	969
	Farm Credit Services Commercial Finance Group	United States	865		865
Cargill	BNP Paribas	France	4,547	542	5,089
	JPMorgan Chase	United States	3,956	542	4,498
	Bank of America	United States	3,956	375	4,331
	Barclays	United Kingdom	2,906	317	3,223
	Deutsche Bank	Germany	2,084	617	2,700
CCR	Bradesco	Brazil		4,451	4,451
	Itaú Unibanco	Brazil		1,391	1,391
	Banco do Brasil	Brazil		1,360	1,360
	BTG Pactual	Brazil		611	611
	Santander	Spain	38	554	592
China Communications Construction Company	CITIC	China		2,670	2,670
	Bank of China	China	1,057	803	1,860
	Industrial and Commercial Bank of China	China	258	1,010	1,268
	HSBC	United Kingdom	764	333	1,097
	CSC Financial	China		998	998

Potential stakeholder	Creditor	Country	Loans	Underwriting	Total
China Railway Group	China International Capital Corporation	China		2,267	2,267
	CITIC	China		2,101	2,101
	Ping An Insurance Group	China		2,032	2,032
	China Merchants Group	China		2,023	2,023
	China Zheshang Bank	China		859	859
Hidroviás do Brasil	Bank of America	United States		240	240
	Itaú Unibanco	Brazil		240	240
	Morgan Stanley	United States		240	240
	Santander	Spain		190	190
	JPMorgan Chase	United States		100	100
Louis Dreyfus Company (LDC)	Société Générale	France	1,117		1,117
	Rabobank	Netherlands	644		644
	BNP Paribas	France	453	178	630
	ABN Amro	Netherlands	517	75	592
	ING Group	Netherlands	358	178	535
Pengxin	Guotai Junan Securities	China		1,310	1,310
	Shenwan Hongyuan Group	China		452	452
	Rabobank	Netherlands	33		33
	Itaú Unibanco	Brazil	33		33
	XP Investimentos	Brazil		15	15
Sacyr	Santander	Spain	974	222	1,196
	Fidentiis Gestión	Spain		313	313
	Société Générale	France	136	173	308
	BFA Holding	Spain	263		263
	Crédit Agricole	France	244		244
Sumitomo Corp	Mitsubishi UFJ Financial	Japan	5,825	189	6,014
	SMBC Group	Japan	4,337	425	4,762
	Mizuho Financial	Japan	3,862	383	4,245
	Citigroup	United States	3,834	250	4,084
	Sumitomo Mitsui Trust	Japan	3,617		3,617
VLI	Votorantim Group	Brazil		54	54
	Mizuho Financial	Japan		22	22
	Bradesco	Brazil		21	21
	Pentagono	Brazil		7	7
Webuild	Intesa Sanpaolo	Italy	494	635	1,128
	BPCE Group	France	293	800	1,094
	UniCredit	Italy	403	635	1,038
	Goldman Sachs	United States	91	635	725
	BNP Paribas	France	313	297	611

Four Swiss creditors have been identified, Credit Suisse, Zürcher Kantonalbank, AKFED and UBS, with a total value of US\$ 1.2 billion. Credit Suisse provided credit to ADM, Bunge, Cargill and Louis Dreyfus Company (LDC); Zürcher Kantonalbank to Bunge and LDC, and AKFED and UBS to LDC (see Table 3).

Table 3 | Swiss Financial Institutions providing Credit to Potential Stakeholders in the Ferrogrão Project (2014 – January 2021, in US\$ million)

Potential stakeholder	Creditor	Loans	Underwriting	Total
Archer Daniels Midland (ADM)	Credit Suisse	217		217
Bunge	Credit Suisse	146	93	240
	Zürcher Kantonalbank	101		101
Cargill	Credit Suisse	581		581
Louis Dreyfus Company (LDC)	Credit Suisse	40		40
	Zürcher Kantonalbank	21		21
	AKFED	19		19
	UBS	19		19
Total		1,145	93	1,238

Sources Table 2 and 3: Refinitiv (2021), 'Loans, bond and share issuances of selected companies', viewed in February 2021; Bloomberg (2021), 'Loans, bond and share issuances of selected companies', viewed in February 2021; IJGlobal (2021), 'Transaction search infrastructure, power, and transport, Brazil', viewed in February 2021, TradeFinance Analytics (2021), Transaction search selected companies', viewed in February 2021; further details available in the dataset.

Seven development finance institutions provided credit to the potential stakeholders: BNDES (Brazil), Development Bank of Japan and JBIC (Japan), European Bank for Reconstruction and Development and European Investment Bank, The Inter-American Development Bank (United States), and China Development Bank provided loans to six companies of the company selection, with a total value of US\$ 2.2 billion (see Table 4).

Table 4 | Development Finance Institutions providing Credit to Potential Stakeholders in the Ferrogrão Project (2014 - January 2021, in US\$ million)

Potential stakeholder	Creditor	Country	Loans
Acciona	European Investment Bank	Luxembourg	286
	The Inter-American Development Bank	United States	70
ASTM	BNDES	Brazil	488
Bunge	Development Bank of Japan	Japan	45
China Communications Construction Company	China Development Bank	China	616
Louis Dreyfus Company	European Bank for Reconstruction and Development	United Kingdom	300
	Development Bank of Japan	Japan	13
Sumitomo Corp	JBIC	Japan	310
	Development Bank of Japan	Japan	30
Total			2,157

Sources: Refinitiv (2021), ‘Loans, bond and share issuances of selected companies’, viewed in February 2021; Bloomberg (2021), ‘Loans, bond and share issuances of selected companies’, viewed in February 2021; IJGlobal (2021), ‘Transaction search infrastructure, power, and transport, Brazil’, viewed in February 2021, TradeFinance Analytics (2021), ‘Transaction search selected companies’, viewed in February 2021; further details available in the dataset.

Investment

Investments in thirteen of the potential stakeholders in Ferrogrão have been identified, with a total value of US\$ 46 billion. The Top-5 investors per company are presented in Table 5.

Table 5 | Top-5 Investors in Potential Stakeholders in the Ferrogrão Project (January 2021, in US\$ million)

Potential stakeholder	Investor	Country	Shareholding	Bondholding	Total
Acciona	Invesco	United States	131		131
	Dimensional Fund Advisors	United States	109		109
	Vanguard	United States	87		87
	Crédit Agricole	France	76		76
	BlackRock	United States	62		62
Archer Daniels Midland (ADM)	Vanguard	United States	2,487	268	2,755
	State Farm	United States	2,594		2,594
	BlackRock	United States	1,900	130	2,030
	State Street	United States	1,663	36	1,698
	Wellington Management	United States	1,059	49	1,108
ASTM	Itaú Unibanco	Brazil	39	0	39
	Kapitalo Investimentos	Brazil	34		34
	Miles Capital	United States	32		32
	Safari Capital	Brazil	24		24
	Vanguard	United States	16		16
Bunge	T. Rowe Price	United States	769	19	788
	Vanguard	United States	597	20	617
	BlackRock	United States	590	15	605
	Fidelity Investments	United States	246		246
	UBS	Switzerland	206		206
Cargill	American Family	United States		26	26
	MetLife	United States		25	25
	Wellington Management	United States		22	22
	Globe Life	United States		20	20
	Macquarie Group	Australia		18	18
CCR	Capital Group	United States	613		613
	Comgest	France	145		145
	BlackRock	United States	128		128
	Vanguard	United States	97		97
	Lazard	Bermuda	72		72
China Communications Construction Company	BlackRock	United States	122	1	123
	China Universal Asset Management	China	9	66	74
	Ping An Insurance Group	China	0	74	74
	Capital Group	United States	37	42	42
	China Merchants Group	China	37		37

Potential stakeholder	Investor	Country	Shareholding	Bondholding	Total
China Railway Group	Penghua Fund Management	China		10	10
Louis Dreyfus Company (LDC)	BPCE Group	France		64	64
	BlackRock	United States		17	17
	Close Brothers	United Kingdom		17	17
	Janus Henderson	United Kingdom		8	8
	Rothschild Group	France		8	8
Pengxin	China Southern Asset Management (CSAM)	China	5		5
	Vanguard	United States	4		4
	China Universal Asset Management	China	3		3
	CITIC	China	1		1
	Harvest Fund Management	China	1		1
Sacyr	Dimensional Fund Advisors	United States	41		41
	Government Pension Fund Global	Norway	39		39
	UBS	Switzerland	1	34	34
	Vanguard	United States	24		24
	BlackRock	United States	12		12
Sumitomo Corp	Sumitomo Mitsui Trust	Japan	1,058	0	1,058
	Berkshire Hathaway	United States	819		819
	Nomura	Japan	748	2	750
	Mitsubishi UFJ Financial	Japan	591		591
	Orbis Group	Bermuda	582		582
Webuild	Cassa Depositi e Prestiti	Italy	287		287
	Intesa Sanpaolo	Italy	88	3	91
	UniCredit	Italy	83		83
	Azimut	Italy	9	34	43
	Crédit Agricole	France	0	36	36

Sources: Refinitiv (2021), 'Shareholdings of selected companies' viewed in February 2021; further details available in the dataset.

Of the total identified investment value, US\$ 1 billion was invested by Swiss investors in 12 potential stakeholders. In total, 55 Swiss investors were identified. The Top-5 Swiss investors per company are presented in Table 6.

Table 6 | Top-5 Swiss Investors in Potential Stakeholders in the Ferrogrão Project (January 2021, in US\$ million)

Potential stakeholder	Investor	Shareholding	Bondholding	Total
Acciona	UBS	2		2
	Credit Suisse	2		2
	RAM Active Investments	1		1
	Julius Bär	1		1
	Vontobel	1		1
Archer Daniels Midland (ADM)	UBS	191	38	229
	Schweizerische Nationalbank	106		106
	Credit Suisse	70	16	86
	Pictet	27		27
	Fisch Asset Management		20	20
ASTM	Credit Suisse	2		2
	UBS	0		0
	Zurich Insurance	0		0
	Julius Bär		0	0
Bunge	UBS	206		206
	Schweizerische Nationalbank	35		35
	Credit Suisse	16	0	16
	Zürcher Kantonalbank	3	1	4
	Pictet	3		3
Cargill	Credit Suisse		10	10
	UBS		1	1
	Zürcher Kantonalbank		0	0
	GAM Holding		0	0
	Graubündner Kantonalbank		0	0
CCR	Pictet	13		13
	UBS	4	0	4
	Credit Suisse	4		4
	GAM Holding	3		3
	Zürcher Kantonalbank	2		2
China Communications Construction Company	Pictet	7		7
	Swiss Life		5	5
	UBS	3	2	5
	Lombard Odier		3	3
	Credit Suisse	2		2

Potential stakeholder	Investor	Shareholding	Bondholding	Total
Hidrovias do Brasil	Credit Suisse	10	2	12
	Sumus Capital		2	2
	Pharus Holding		0	0
	Lombard Odier		0	0
Louis Dreyfus Company (LDC)	Atlanticomnium		7	7
	Haron Holding		2	2
	Bruellan		1	1
	Chartvalor		1	1
	OpenCapital		1	1
Sacyr	UBS	1	34	34
	Credit Suisse	1		1
	RAM Active Investments	0		0
	Mirabaud	0		0
	Reuss Private Group	0		0
Sumitomo Corp	UBS	25	1	26
	Credit Suisse	14	1	15
	Pictet	5		5
	Zürcher Kantonalbank	4		4
	GAM Holding	1	1	2
Webuild	Pictet	0	23	23
	Credit Suisse	9	0	10
	Lombard Odier		6	6
	Swiss Life		4	4
	UBS	0	3	4

Sources: Refinitiv (2021), 'Shareholdings of selected companies' viewed in February 2021 Refinitiv Emaxx (2021), 'Bondholdings of selected companies' viewed in February 2021; further details available in the dataset.

Investments by development finance institutions in the selected companies consist of two shareholdings of World Bank and BNDES (Brazil) in Hidrovias do Brasil (US\$ 44 million) and a small shareholding of China Development Bank in China Communications Construction Company (US\$ 16 thousand), see Table 7.

Table 7 | Development Finance Institutions Investing in Potential Stakeholders in the Ferrogrão Project (January 2021, in US\$ million)

Potential stakeholder	Investor	Country	Loans
China Communications Construction Company	China Development Bank	China	0
Hidrovias do Brasil	World Bank	United States	27
	BNDES	Brazil	17
Total			44

Sources: Refinitiv (2021), 'Shareholdings of selected companies' viewed in February 2021 Refinitiv Emaxx (2021), 'Bondholdings of selected companies' viewed in February 2021; further details available in the dataset.

2.3 Tapajós Hydroelectric Complex and Tapajós Waterway

2.3.1 Project Status

The Tapajós Hydroelectric Complex and Tapajós Waterway consists of seven large dam structures, including locks, situated on the Tapajós and Jamanxim rivers in the state of Pará, Brazil. The construction serves a dual purpose of power generation and improving navigability. The total projected power capacity of the seven large hydro power plants (HPPs) is 12,000 MW.

The Tapajós waterway is connecting large agricultural production areas in the state of Mato Grosso with the Amazon river at Santarém. The waterway can partially replace road cargo traffic that is currently congesting highway BR-163 (Cuiabá – Santarém).²⁹ The shipload capacity is projected to rise from the current 900 ton to 7,500 ton per train-of-barges.³⁰

The Association of Mato Grosso Soy and Corn Producers (Aprosoja) estimates that the cost of transporting a ton of soybeans would drop from R\$ 227 to R\$ 60 with the waterway, and will be emitting 95% less CO₂. One shipload transports the equivalent of 1,050 trucks.³¹

Upstream from Santarém, the São Luiz do Tapajós dam is the first and largest dam of the complex. Further upstream, the complex is also to include the Jatoba and Chacorão dams on the Tapajós river, and the Cachoeira do Cai, Jamanxim, Cachoeira dos Patos and Jardim do Ouro dams on the Jamanxim river (see Figure 3).

Besides these seven large dams, the complex includes several small hydro-power plants (SHPs). The inventory by the National Electric Energy Agency (ANEEL) identified 29 possible small hydroelectric projects³².

29 Diálogos hidrovieáveis (n.d.), “Tapajós Waterway”, online: <http://hidrovieaveis.com.br/hidrovia/hidrovia-do-tapajos/>, viewed in May 2020.

30 DNIT (2018), ‘Tapajós Waterway -Teles Pires’, online: <http://www.dnit.gov.br/modais-2/aquaviario/hidrovia-do-tapajos-teles-pires>, viewed in May 2020.

31 MT Esporte (2012), “Federal Government intends to remove waterway between Teles Pires and Tapajós from paper”, online; http://mtesporte.com.br/noticias/id-76992/governo_federal_preteende_tirar_hidrovia_entre_teles_pires_e_tapajos_do_papel, viewed in May 2020.

32 Globo (2019): “Justiça Federal manda Ibama assumir licenciamento ambiental de duas hidrelétricas na bacia do Tapajós”, online: <https://g1.globo.com/pa/santarem-regiao/noticia/2019/07/03/justica-federal-manda-ibama-assumir-licenciamento-ambiental-de-duas-hidreletricas-na-bacia-do-tapajos.ghml>, viewed in March 2021.

Two of these small dams (SHPs) are the Braços Leste and Oeste dams. In March 2019, the Federal Court ruled that the environmental licensing for the two dams should be granted by the federal environmental agency IBAMA and not by the local agency Semas (State Secretariat for the Environment and Sustainability of Pará). The court further ruled that the environmental impacts of the Tapajós Hydropower Complex projects should be assessed as a whole, instead of conducting an impact assessment and licensing process for each dam separately.³³ The ruling might be significant for the licensing of other dams within the complex.

In 2013, the Ministry of Transport issued an Inland Waterways Strategic Plan, in which the Tapajós waterway, dams, locks, and other measures are described. The plan has been written by a consortium led by Arcadis Logos, a Brazilian subsidiary of Dutch engineering firm Arcadis.³⁴ A detailed review of the plan was published in scientific journal *Ambio* in 2015. The article describes clearly that the planned dams in the Tapajós Basin would heavily affect Indigenous territories. It states that a total of 78'380 ha in protected areas would be swamped and the Chacorão dam alone would flood 18'700 ha of Mundurukú Indigenous land.³⁵

In 2020, the Ministry of Infrastructure announced studies to analyse the potential of Public-Private-Partnerships (PPPs) in the Tapajós (and Madeira) waterways projects. The analysis is co-financed by the World Bank. The report, by Dutch consultancy firm Royal Haskoning, is expected in February 2021.³⁶ The following seven subsections describe the latest research findings for each dam. Feasibility studies, environmental assessments, licenses, concessions or involved parties have not been identified unless otherwise noted.

As mentioned in Chapter 1, the ten-year energy expansion plan 2029 and 2030 of the Ministry of Mines and Energy does not include the Tapajós hydroelectric power plants and waterways. However, since the plans can be reactivated anytime, the study analyses potential stakeholders and financiers.

33 JusBrazil (2019), "Ibama will have to assume environmental licensing of hydroelectric plants to be built in the western region of Pará", online: <https://blogdoespacoaberto.jusbrasil.com.br/noticias/728510098/ibama-tera-que-assumir-licenciamento-ambiental-de-hidreletricas-que-vaio-ser-construidas-na-regiao-oeste-do-para?ref=serp>, viewed in May 2020.

34 Ministry of Transport (2013), *Inland Waterways Strategic Plan*, p. 89.

35 Fearnside, P.J. (2015), Amazon dams and waterways: Brazil's Tapajós Basin plans, in: *Ambio* 2015 Sep; 44(5): 426–439, online: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4510327/>, viewed in May 2020.

36 Ministry of Infrastructure (2020, 10 September), "Partnership between MInfra and the World Bank enables studies on the potential of PPP in the Tapajós and Madeira waterways", Online: https://www.gov.br/saude/pt-br/assuntos/sesai_noticias/dsei-rio-tapajos-realiza-ii-oficina-do-sisvan-indigena, viewed in February 2021.

Sao Luiz do Tapajós Hydro Project

The Sao Luiz do Tapajós Hydro Project is the largest dam of the Tapajós hydroelectric complex. It concerns the construction of an 8,040 MW hydropower plant on the river Tapajós. The overall project investment is estimated at US\$ 13.3 billion. The awarding authority is Brazil's Ministry of Mines and Energy. First, in 2014, the tendering process was expected to be held in December 2015. Following the completion of technical, economic and environmental feasibility studies, the planned installed capacity of the dam rose from 6,133 MW to 8,040 MW. Later, the tender for the project was scheduled to come online by December 2019.³⁷

At that time, two consortia were likely to make a bid:³⁸

- Grupo de Estudos Tapajós, coordinated by Eletrobras and consisting of seven other energy companies: Eletronorte, Camargo Corrêa, Cemig and COPEL (all Brazilian), and Engie and EDF (both French). Enel Brazil withdrew from this group in early 2016.
- China Three Gorges (CTG) confirmed they had been preparing a bid for the dam's concession.³⁹ In July 2014, CTG carried out a feasibility study for the dam together with Furnas (another Eletrobras subsidiary).

However, in August 2016, Brazil's environmental agency IBAMA decided to deny the environmental license for the project.⁴⁰

The project is not mentioned in the Ten-Year Energy Expansion Plan (PDE) 2029⁴¹. This plan of the Ministry of Mines and Energy indicates the prospects for future expansion of the energy sector for the next decade. If a project is not listed in the Expansion Plan 2029, this means the government does not expect it to be realised before 2030.

37 IJGlobal 2020, 'Transaction data_31656_Sao Luiz do Tapajos Hydro Plant (8040MW)', viewed in February 2021.

38 BankTrack (2016), "São Luiz do Tapajós dam Brazil", online: "https://www.banktrack.org/project/tapajos_hydro_power_project", viewed in May 2020

39 MacauHub (2016), "China Three Gorges Group prepares proposal for construction of dam in Brazil", online: <https://macauhub.com.mo/2016/03/17/china-three-gorges-group-prepares-proposal-for-construction-of-dam-in-brazil/>, viewed in May 2020.

40 Mongabay (2016), "Environmental licence for São Luiz do Tapajós hydroelectric dam denied", online: <https://news.mongabay.com/2016/08/environmental-licence-for-sao-luiz-do-tapajos-hydroelectric-dam-denied/>, viewed in May 2020.

41 Energy Research Company (2020), PDE 2029, Ten-Year Energy Expansion Plan 2029, online: https://www.epe.gov.br/sites-pt/publicacoes-dados-abertos/publicacoes/Documents/PDE_2029.pdf, viewed in March 2021.

Jatobá

In 2018, the National Electric Energy Agency (ANEEL) accepted the Feasibility Studies for the 2,338 MW Jatobá project. The studies of the Jatobá Hydro Power Plant were conducted by a group formed by several companies in the sector: Eletronorte, Camargo Corrêa, EDF, Cemig, Copel, Engie, Enel and Neoenergia.⁴²

In 2017, the project was suspended, according to Energy Research Company (EPE), the research and development arm of the Mines and Energy Ministry. In 2018, the suspension was confirmed by the Minister of Mines and Energy.⁴³

However, this project is part of the Ten-Year Energy Expansion Plan 2029, with the earliest date of operation after 2029. It is the only project of the Tapajós Hydroelectric Complex that is mentioned in the Ten-Year Energy Expansion Plan 2029, which means the government does not expect it to be realised before 2030⁴⁴.

Chacorão

The 3,336 MW Chacorão project and its Chacorão locks are listed as a priority in the National Waterways Plan 2010. The dam's reservoir would eliminate the Chacorão rapids, allowing barge traffic above the dam's locks. Nevertheless, despite its central role in the waterways plan, the Chacorão dam is rarely discussed in the context of the Tapajós Basin developments.

In 2010, Eletronorte had not yet applied for registration with the National Electricity Agency to start feasibility studies for the Chacorão hydro power project (HPP).⁴⁵

The project is not mentioned in the Ten-Year Energy Expansion Plan 2029.⁴⁶

42 Amazônia, "Aneel accepts feasibility studies at HPP Jatobá", online: <http://amazonia.org.br/2018/01/Aneel-aceita-estudos-de-viabilidade-da-uhe-jatoba/>, viewed in May 2020.

43 International Rivers (2018), "Brazil Shelves Plans for New Megadams to Reassess Strategy", online: <https://www.internationalrivers.org/resources/brazil-shelves-plans-for-new-megadams-to-reassess-strategy-bloom-berg-16616>, viewed in May 2020.

44 Energy Research Company (2020), PDE 2029, Ten-Year Energy Expansion Plan 2029, online: <https://www.epe.gov.br/sites-pt/publicacoes-dados-abertos/publicacoes/Documents/PDE%202029.pdf>, viewed in March 2021.

45 Fearnside, P.J. (2015), Amazon dams and waterways: Brazil's Tapajós Basin plans, in: *Ambio* 2015 Sep; 44(5): 426–439, online: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4510327/>, viewed in May 2020.

46 Energy Research Company (2020), PDE 2029, Ten-Year Energy Expansion Plan 2029.

Cachoeira do Cai

The 802 MW Cachoeira do Cai project is a joint venture of Eletrobras, Eletro-norte, Construções e Comércio Camargo Córrea, EDF (Consultoria em Projetos de Geração de Energia), and EPP (Energia Elétrica Promoção e Participações). The project is estimated to cost US\$ 1.1 billion.⁴⁷

In June 2018, the National Electric Energy Agency (ANEEL) approved the extension of the deadline for the completion of the technical and economic feasibility studies for three hydroelectric projects of the Tapajós consortium, one of them is the Cachoeira do Cai HPP. The studies were to be delivered by 31 December 2019.⁴⁸ The current status of the feasibility studies is not clear. The project is not mentioned in the Ten-Year Energy Expansion Plan 2029.⁴⁹

Jamanxim

In 2016, it was reported that the deadline for the delivery of the feasibility studies for the 881 MW Jamanxim project was delayed to 31 December, 2017. The studies are being carried out by Eletrobras, Eletronorte, Camargo Corrêa, EDF (Consultoria em Projetos de Geração de Energia), Cemig, Copel, Engie (GDF Suez Energy Latin America Participações), Enel (Endesa Brasil), Neoenergia Investimentos and Consórcio Tapajós.⁵⁰

Like the Cachoeira do Cai project, the Jamanxim project was among the three hydroelectric projects whose deadline for the completion of the technical and economic feasibility studies was permitted to be extended in 2018. The studies were to be delivered by 31 December 2019.⁵¹ The current status of the feasibility studies is not clear.

47 Barragens na Amazonia, “Cachoeira do Cai Plant profile”, online: <http://dams-info.org/pt/dams/view/cachoeira-do-cai/>, viewed in May 2020.

48 CanalEnergia (2018), “Aneel extends delivery of feasibility studies for the Tapajós Consortium’s UHEs”, online: <https://canalenergia.com.br/noticias/53063343/aneel-prorroga-entrega-dos-estudos-de-viabilidade-das-uhes-do-consorcio-tapajos>, viewed in May 2020.

49 Energy Research Company (2020), PDE 2029, Ten-Year Energy Expansion Plan 2029.

50 Portal PCH, “2016/01/20 - Deadline for delivering studies at the Jatobá HPP is extended until December”, online: <http://www.portalpch.com.br/5997-20-01-2016-prazo-para-entrega-de-estudos-da-uhe-jatoba-e-prorroga-do-ate-dezembro.html>, viewed in May 2020.

51 Canal Energia (2018), “Aneel extends delivery of feasibility studies for the Tapajós Consortium’s UHEs”, online: <https://canalenergia.com.br/noticias/53063343/aneel-prorroga-entrega-dos-estudos-de-viabilidade-das-uhes-do-consorcio-tapajos>, viewed in May 2020.

The project is not mentioned in the Ten-Year Energy Expansion Plan 2029.⁵²

Cachoeira dos Patos

The Hydroelectric Inventory Study for the 528 MW Cachoeira dos Patos project was prepared by Eletronorte, Camargo Corrêa (CNEC Engenharia), and approved by the National Electric Energy Agency (ANEEL) in 2009.

The feasibility studies of the Cachoeira dos Patos hydro power project were to be prepared by Eletronorte and Camargo Correa and to be delivered in December 2013. Instead, the Ministry of Environment suspended the licensing in 2013⁵³.

However, the Cachoeira dos Patos is the third project whose deadline for the completion of the technical and economic feasibility studies was permitted to be extended in 2018. The studies were to be delivered by 31 December 2019⁵⁴. The current status of the feasibility studies is not clear.

The project is not mentioned in the Ten-Year Energy Expansion Plan 2029⁵⁵.

Jardim do Ouro

The 227 MW Jardim do Ouro is a proposed hydro dam on the Jamanxin river. The project is not mentioned in the Ten-Year Energy Expansion Plan 2029⁵⁶.

2.3.2 Project Structure

The Tapajós Waterway project is managed by the Waterway Administration of the Eastern Amazon (AHIMOR), a department of the National Department of Infrastructure and Transport (DNIT).⁵⁷

52 Energy Research Company (2020), PDE 2029, Ten-Year Energy Expansion Plan 2029, online: <https://www.epe.gov.br/sites-pt/publicacoes-dados-abertos/publicacoes/Documents/PDE%202029.pdf>, viewed in March 2021.

53 Instituto Humanitas Unisinos (2013), "Licensing of another hydroelectric plant in Tapajós is pending at Ibama", online: <http://www.ihu.unisinos.br/noticias/522345-licenciamento-de-outra-hidroeletrica-no-tapajos-tramita-no-Ibama>, viewed in May 2020.

54 CanalEnergia (2018), "Aneel extends delivery of feasibility studies for the Tapajós Consortium's UHEs", online: <https://canalenergia.com.br/noticias/53063343/aneel-prorroga-entrega-dos-estudos-de-viabilidade-das-uhes-do-consorcio-tapajos>, viewed in May 2020.

55 Energy Research Company (2020), PDE 2029, Ten-Year Energy Expansion Plan 2029, online: <https://www.epe.gov.br/sites-pt/publicacoes-dados-abertos/publicacoes/Documents/PDE%202029.pdf>, viewed in March 2021.

56 Energy Research Company (2020), PDE 2029, Ten-Year Energy Expansion Plan 2029, online: <https://www.epe.gov.br/sites-pt/publicacoes-dados-abertos/publicacoes/Documents/PDE%202029.pdf>, viewed in March 2021.

57 DNIT (2018), "Waterway Administration of the Eastern Amazon – AHIMOR", online: <http://www.dnit.gov.br/modais-2/aquaviario/administracao-hidroviaria-da-amazonia-oriental>, viewed in May 2020.

2.3.3 Direct and Indirect Finance

The seven projects are still in the proposal phase. The Jatobá project is the furthest developed project and is the only Tapajós hydropower plant mentioned in the Ten-Year Energy Expansion Plan 2029.

All seven projects have not been granted a concession or a license. Therefore, the constructors, off-takers and future owners have not been set, and financing has not been arranged.

None of the sub-projects has been confirmed either; therefore, they are not at the financing stage. Preparations for direct financing for any of the Tapajós projects have not been identified⁵⁸.

2.3.4 Financing of Potential Stakeholders

This section describes the financiers of the potential stakeholders of the Tapajós projects. Potential stakeholders are the companies that have been mentioned in literature as being (potentially) involved in the Tapajós hydro dams and waterway project (see Section 2.1). Both creditors to and investors in these companies have been identified.

The financial institutions in this section are linked to the potential stakeholders; they are not linked to the Tapajós projects. The financial institutions may get involved in the project when the related stakeholder gets involved. Potential stakeholders and group companies are given in Table 8. The table also indicates whether financing has been identified. Financing has been identified for all ten company groups.

58 IJGlobal (2021), 'TransactionSearch_Sector=Maritime Transport, Power-Hydro; Country=Brazil', viewed in February 2021; BNDES (2021), 'Search results: Tapajós', online: <https://www.bndes.gov.br/wps/portal/site/home/Busca/solrsearch?q=Tapajós>, viewed in February 2021; Wordbank (2021), 'PPI CustomQuery: Brazil, Energy, Ports, 1996-2020', online: <https://ppi.worldbank.org/en/customquery>, viewed in February 2021; Worldbank (2021), 'Project search: Brazil, Ports, Waterways, Power', online: <https://projects.worldbank.org/en/projects-operations/projects-list>, viewed in February 2021.

Table 8 | Potential Stakeholders in the Tapajós Projects

Potential stakeholder (company group)	Creditor	Potential stakeholder (as identified)	Country	Tapajós projects	Financiers identified?
Cemig	Brazil	Companhia Energetica de Minas Gerais	Brazil	Sao Luiz do Tapajós, Jatobá, Jamanxim	Yes
China Three Gorges	China	China Three Gorges	China	Sao Luiz do Tapajós	Yes
Copel	Brazil	Companhia Paranaense de Energia	Brazil	Sao Luiz do Tapajós, Jatobá, Jamanxim	Yes
EDF	France	EDF Consultoria em Projetos de Geração de Energia	Brazil	Sao Luiz do Tapajós, Jatobá, Cachoeira do Cai, Jamanxim	Yes
Eletrobras	Brazil	Eletrobras	Brazil	Sao Luiz do Tapajós, Cachoeira do Cai, Jamanxim	Yes
		Eletronorte	Brazil	Sao Luiz do Tapajós, Jatobá, Chacorão, Cachoeira do Cai, Jamanxim, Cachoeira dos Patos	
Enel	Italy	Enel Endesa Brazil	Italy	Jatobá	Yes
			Brazil	Jamanxim	
Engie	France	Engie	France	Sao Luiz do Tapajós, Jatobá	Yes
		GDF Suez Energy Latin America Participações		Jamanxim	
Iberdrola	Spain	Neoenergia	Brazil	Sao Luiz do Tapajós, Jatobá	Yes
		Neoenergia Investments	Brazil	Jamanxim	
Mover Participações	Brazil	Camargo Corrêa	Brazil	Sao Luiz do Tapajós, Jatobá, Cachoeira do Cai, Jamanxim	Yes
		CNEC Engenharia	Brazil	Cachoeira dos Patos	
OAS	Brazil	EPP (Energia Elétrica Promocoões e Participações)	Brazil	Cachoeira do Cai	Yes

Credit

In total, 148 financial institutions were identified that provided credit to the potential stakeholders in the Tapajós projects, with a total value of US\$ 279 billion. The Top-5 creditors are presented in Table 9. The largest creditors are Santander (Spain), BNP Paribas (France), and Crédit Agricole (France).

Table 9 | Top-5 Creditors to Potential Stakeholders in Tapajós Projects (2014 - January 2021, in US\$ million)

Potential stakeholder	Creditor	Country	Loans	Underwriting	Total
Cemig	Banco do Brasil	Brazil		1,959	1,959
	Bradesco	Brazil		1,640	1,640
	Itaú Unibanco	Brazil		252	252
	Deutsche Bank	Germany		250	250
	Citigroup	United States		250	250
China Three Gorges	CITIC	China		9,619	9,619
	Industrial and Commercial Bank of China	China	2,240	3,236	5,476
	Bank of China	China	2,070	2,368	4,438
	Agricultural Bank of China	China		3,429	3,429
	CSC Financial	China		3,041	3,041
Copel	BTG Pactual	Brazil		1,328	1,328
	Itaú Unibanco	Brazil		694	694
	Bradesco	Brazil		627	627
	BNDES	Brazil	525		525
	Banco do Brasil	Brazil		496	496
EDF	Crédit Agricole	France	1,374	1,568	2,942
	BNP Paribas	France	837	1,922	2,760
	Standard Chartered	United Kingdom	233	1,700	1,933
	Société Générale	France	728	1,125	1,853
	Barclays	United Kingdom	112	1,740	1,853
Eletrobras	Santander	Spain		1,832	1,832
	BNDES	Brazil	1,715		1,715
	Caixa Econômica Federal	Brazil	1,463		1,463
	Banco do Brasil	Brazil	1,463		1,463
	Itaú Unibanco	Brazil		461	461
Enel	UniCredit	Italy	4,401	1,644	6,045
	JPMorgan Chase	United States	1,424	2,912	4,336
	Santander	Spain	2,005	2,130	4,135
	BNP Paribas	France	1,834	1,707	3,541
	Goldman Sachs	United States	833	2,649	3,482

Potential stakeholder	Creditor	Country	Loans	Underwriting	Total
Engie	Société Générale	France	1,386	2,489	3,875
	Crédit Agricole	France	1,386	1,928	3,314
	BNP Paribas	France	1,386	1,901	3,287
	BPCE Group	France	868	1,777	2,645
	Mizuho Financial	Japan	1,386	1,172	2,558
Iberdrola	Santander	Spain	1,256	2,074	3,330
	Citigroup	United States	624	2,481	3,105
	Banco Bilbao Vizcaya Argentaria (BBVA)	Spain	1,643	1,312	2,955
	Barclays	United Kingdom	868	1,578	2,446
	HSBC	United Kingdom	1,083	1,132	2,215
Mover Participações	Itaú Unibanco	Brazil	320	457	777
	Bradesco	Brazil	83	670	753
	Caixa Econômica Federal	Brazil	706		706
	Banco do Brasil	Brazil		648	648
	BTG Pactual	Brazil	50	399	449
OAS	Brookfield Asset Management	Canada	267		267
	BR Partners	Brazil		253	253
	Bradesco	Brazil		100	100
	Santander	Spain		100	100
	HSBC	United Kingdom		100	100

Sources: Refinitiv (2021), 'Loans, bond and share issuances of selected companies', viewed in February 2021; Bloomberg (2021), 'Loans, bond and share issuances of selected companies', viewed in February 2021; IJGlobal (2021), 'Transaction search infrastructure, power, and transport, Brazil', viewed in February 2021, TradeFinance Analytics (2021), 'Transaction search selected companies', viewed in February 2021; further details available in the dataset.

Two Swiss creditors have been identified, Credit Suisse and UBS, with a total value of US\$ 6.6 billion. They invested in China Three Gorges, EDF, Enel, Engie and Iberdrola (see Table 10).

Table 10 | Swiss Financial Institutions Providing Credit to Potential Stakeholders in Tapajós Projects (2014 - January 2021, in US\$ million)

Potential stakeholder	Creditor	Loans	Underwriting	Total
China Three Gorges	UBS		493	493
EDF	Credit Suisse	112	808	921
Enel	Credit Suisse	181	1,888	2,069
	UBS	33	502	535
Engie	UBS	199		199
	Credit Suisse		111	111
Iberdrola	UBS	43	1,468	1,511
	Credit Suisse		781	781
Total		569	6,053	6,621

Sources: Refinitiv (2021), 'Loans, bond and share issuances of selected companies', viewed in February 2021; Bloomberg (2021), 'Loans, bond and share issuances of selected companies', viewed in February 2021; IJGlobal (2021), 'Transaction search infrastructure, power, and transport, Brazil', viewed in February 2021, TradeFinance Analytics (2021), 'Transaction search selected companies', viewed in February 2021; further details available in the dataset.

Five development finance institutions provided credit to the selected companies, with a total value of US\$ 11 billion (see Table 11).

Table 11 | Development Finance Institutions Providing Credit to Potential Stakeholders in Tapajós Projects (2014 - January 2021, in US\$ million)

Potential stakeholder	Creditor	Country	Loans	Underwriting	Total
Cemig	Agence France Development Bank	France	119		119
China Three Gorges	China Development Bank	China	600	264	864
	BNDES	Brazil	522		522
	China Eximbank	China		468	468
Copel	BNDES	Brazil	525		525
EDF	BNDES	Brazil	514	53	567
	European Investment Bank	Luxembourg	460		460
Eletrobras	BNDES	Brazil	1,715		1,715
Enel	European Investment Bank	Luxembourg	1,142		1,142
	BNDES	Brazil	875		875
Engie	BNDES	Brazil	1,036		1,036
Iberdrola	BNDES	Brazil	1,414		1,414
	European Investment Bank	Luxembourg	1,051		1,051
Total			9,972	785	10,758

Sources: Refinitiv (2021), 'Loans, bond and share issuances of selected companies', viewed in February 2021; Bloomberg (2021), 'Loans, bond and share issuances of selected companies', viewed in February 2021; IJGlobal (2021), 'Transaction search infrastructure, power, and transport, Brazil', viewed in February 2021; TradeFinance Analytics (2021), 'Transaction search selected companies', viewed in February 2021; further details available in the dataset.

Investment

Investments in the potential stakeholders of the Tapajós projects have been identified with a total value of US\$ 126 billion. The Top-5 investors per company are presented in Table 12. The largest investors are Capital Group, BlackRock, and Vanguard (United States).

Table 12 | Top-5 Investors in Potential Stakeholders in Tapajós Projects (January 2021, in US\$ million)

Potential stakeholder	Investor	Country	Shareholding	Bondholding	Total
Cemig	BlackRock	United States	692	2	694
	Banco Classico	Brazil	394		394
	Equitable Holdings	United States	5	125	131
	Vinci Partners	Brazil	124	0	124
	Itaú Unibanco	Brazil	107	0.1	107
China Three Gorges	Penghua Fund Management	China		60	60
	MetLife	United States		29	29
	Franklin Resources	United States		25	25
	Prudential (UK)	United Kingdom		16	16
	Schroders	United Kingdom		13	13
Copel	BNDES	Brazil	715		715
	BlackRock	United States	323		323
	Allianz	Germany	93		93
	Itaú Unibanco	Brazil	93	0.1	93
	LSV Asset Management	United States	86		86
EDF	BlackRock	United States	210	479	689
	Allianz	Germany	9	397	406
	Standard Life Aberdeen	United Kingdom	2	368	370
	Crédit Agricole	France	39	313	352
	MetLife	United States	1	310	311
Eletrobras	3G Radar	Brazil	173		173
	Bank of New York Mellon	United States	133	0	133
	BlackRock	United States	73	24	97
	Vanguard	United States	62	1	63
	Allianz	Germany	0	58	58

Potential stakeholder	Investor	Country	Shareholding	Bondholding	Total
Enel	Capital Group	United States	8,536	151	8,686
	BlackRock	United States	7,630	741	8,371
	Vanguard	United States	2,511	305	2,817
	Government Pension Fund Global	Norway	2,025		2,025
	Allianz	Germany	338	1,131	1,469
Engie	BlackRock	United States	1,916	514	2,430
	Government Pension Fund Global	Norway	880		880
	Caisse des Dépôts et Consignations	France	854		854
	Capital Group	United States	758	2	760
	CNP Assurances	France	642		642
Iberdrola	Qatar Investment Authority	Qatar	7,904		7,904
	BlackRock	United States	6,312	437	6,749
	Government Pension Fund Global	Norway	2,846		2,846
	Vanguard	United States	2,452	147	2,599
	Capital Group	United States	2,401	5	2,406
OAS	Standard Life Aberdeen	United Kingdom		2	2
	Oaktree Capital	United States		0.4	0.4

Sources: Refinitiv (2021), 'Shareholdings of selected companies' viewed in February 2021; Refinitiv (2021), 'EMAXX Bondholdings of selected companies' viewed in February 2021; further details available in the dataset.

A large number of Swiss investors in the selected companies has been identified. 87 Swiss financial institutions invested a total value of US\$ 5 billion. The Top-5 Swiss investors per company are presented in Table 13. Pictet, UBS and Credit Suisse invested the largest values.

Table 13 | Top-5 Swiss Investors in Potential Stakeholders in Tapajós Projects (January 2021, in US\$ million)

Potential stakeholder	Investor	Shareholding	Bondholding	Total
Cemig	Pictet	58		58
	Credit Suisse	38	0.2	38
	UBS	6	11	17
	Zürcher Kantonalbank	8		8
	GAM Holding	5		5
China Three Gorges	Chubb		4	4
	Credit Suisse		1	1
	GAM Holding		0.2	0.2
	Zürcher Kantonalbank		0.2	0.2
Copel	Zürcher Kantonalbank	3		3
	Credit Suisse	2		2
	Julius Bär		1	1
	UBS	1.1		1.1
	Pictet	0.6		0.6
EDF	Pictet	141	11	151
	UBS	31	99	130
	Credit Suisse	9	57	65
	Zürcher Kantonalbank	2	43	46
	Chubb		40	40
Eletrobras	Credit Suisse	25	13	38
	UBS	3	14	17
	Zürcher Kantonalbank	0.8	2	3
	Chubb		2	2
	Pictet	1		1
Enel	Pictet	919	80	999
	UBS	356	180	536
	Credit Suisse	167	71	237
	Vontobel	9	102	112
	Zürcher Kantonalbank	45	57	102

Potential stakeholder	Investor	Shareholding	Bondholding	Total
Engie	UBS	85	41	127
	Credit Suisse	29	8	37
	Pictet	13	19	32
	Zürcher Kantonalbank	7	18	24
	De Pury Pictet Turretini	12		12
Iberdrola	Pictet	793	25	817
	UBS	340	27	367
	Credit Suisse	157	46	203
	Zürcher Kantonalbank	31	18	49
	Vontobel	46	4	49

Sources: Refinitiv (2021), 'Shareholdings of selected companies' viewed in February 2021; Refinitiv (2021), 'EMAXX Bondholdings of selected companies' viewed in February 2021; further details available in the dataset.

Of the development finance institutions, only BNDES invested in the selected companies, with a total value of US\$ 780 million (see Table 14).

Table 14 | Development Finance Institutions Investing in Potential Stakeholders in Tapajós Projects (January 2021, in US\$ million)

Potential stakeholder	Investor	Country	Shareholding
Copel	BNDES	Brazil	715
Cemig	BNDES	Brazil	65
Total			780

Sources: Refinitiv (2021), 'Shareholdings of selected companies' viewed in February 2021; further details available in the dataset.

2.4 Summary and Conclusion of this Chapter

This chapter described the project structure, project status and stakeholder financing of the Ferrogrão railway and the Tapajós Hydroelectric Complex and Tapajós Waterway. While both projects are still in the preparatory stage, the chapter listed the stakeholders that have shown interest in the projects and identified financiers (through credit or investment) of most of these potential stakeholders.

2.4.1 Main findings on Potential Stakeholders and Financiers of the Projects

In the case of the Ferrogrão railway, mainly food corporations have shown interest in the project, while most potential stakeholders in the Tapajós Hydroelectric Complex and Tapajós Waterway are energy companies. Regarding financing of these potential stakeholders, the research results can be summarised as follows:

- Various financial institutions provided credit to the potential stakeholders in the Ferrogrão project, with a total value of US\$ 235 billion. Among them, the largest creditors overall were Citigroup (US), Bank of America (US) and BNP Paribas (France).
- Various financial institutions provided credit to the potential stakeholders in the Tapajós Hydroelectric Complex and Tapajós Waterway, with a total value of US\$ 279 billion. Among them, the largest creditors were Santander (Spain), BNP Paribas (France), and Crédit Agricole (France).
- Concerning investments, the research identified US\$ 46 billion of investment in potential stakeholders of the Ferrogrão project, and US\$ 126 billion in potential stakeholders of the Tapajós Hydroelectric Complex and Tapajós Waterway.
- In both projects, development institutions provided only a comparatively small financing of the potential stakeholders, according to this research.
- Regarding financing of potential stakeholders by Swiss companies, the research revealed Credit Suisse, Zürcher Kantonalbank, AKFED and UBS as creditors to potential stakeholders of the Ferrogrão project. In addition, 55 Swiss financiers invested in potential stakeholders of this project.

- In the case of the Tapajós Hydroelectric Complex and Tapajós Waterway, the research identified Credit Suisse and UBS as creditors of and 87 Swiss financial institutions as investors in potential stakeholders of the project.

2.4.2 Financial and Reputational Risks for Companies

However, the financing of these potential stakeholders – and even more so the direct involvement through project or corporate financing at a more advanced stage of the projects – can bring incalculable financial and reputational risks. The following examples illustrate this:

As mentioned, the São Luiz de Tapajós dam, which is the second largest dam project in Brazil's history, was shelved in August 2016, because the environmental agency IBAMA denied the environmental license. It is reasonable to assume that this decision rooted in the massive resistance of the Mundurukú, whose territory Sawré Muybu would have been floated. In resisting the project, they found allies in national and international environmental organisations.

The decision of a judge of the Federal Supreme Court on 15 March 2021⁵⁹ to temporarily suspend the Ferrogrão project also indicates that the enforcement of projects without the consent of the affected indigenous communities means investment uncertainties. Therefore, the risk for further losses for companies involved in these infrastructure projects are likely to be enormous.

Both examples show that insufficient risk management by the stakeholders and financial institutions involved can turn into a financial fiasco for the companies. For example, regarding the São Luis de Tapajós project, it can be estimated that investments in the amount of US \$13.3 billion were lost with its suspension. If the companies, investors and lenders had paid due attention to the rights and concerns of the local population from the outset and taken seriously the opposition to an undertaking that violated the constitution, they could have spared themselves financial, logistical and reputational damage.

59 Frente Parlamentar Mista em Defesa dos Direitos dos Povos Indígenas: "Vitória dos indígenas no processo da Ferrogrão", online: <http://frenteparlamentarindigena.com.br/vitoria-dos-indigenas-no-processo-da-ferrograo/>, viewed in March 2021.

2.4.3 Increasing Resistance from Indigenous Communities

Despite the suspension of the São Luiz de Tapajós and the temporal suspension of the Ferrogrão project, other mega-projects are being planned. The Brazilian government is sticking to its development plans for the Tapajós region: the projects listed above are only seven of the more than 40 dams and waterways on the Tapajós River alone⁶⁰, and the Ferrogrão railroad project is joined by other road projects and ports.

As a consequence, affected indigenous peoples and allied environmental and human rights organizations have already shown unwavering resistance to several railway, waterways and hydroelectric power plants planned^{61,62,63}. This resistance is likely to grow and indigenous peoples and civil society are increasingly using legal means.

2.4.4 Recommendations for Financiers of Potential Stakeholders

As these projects – with the exception of the Jatobá Dam (forecasted to operate before 2030) – are still in the preparatory phase, financial institutions still have the option to use their leverage on potential stakeholders in compliance with international human rights and environmental standards.

In order to facilitate risk management for financial institutions, the following chapters present in a detailed and systematic manner the views of the indigenous peoples affected by the two mega-infrastructure projects.

60 Amazon dams and waterways: Brazil's Tapajós Basin plans, online: https://d3nehc6y/l9qzo4.cloudfront.net/downloads/wwf_brasil_tapajos_uma_visao_de_conservacao_25abr2016_port_web.pdf, viewed in March 2021.

61 Associação Indígena Pariri (2021): Facebook post, <https://www.facebook.com/1508210296145529/posts/2651250648508149/>, viewed in March 2021.

62 Ivan Martínez-Vargas and Mariana Grazini: "Caminhoneiros e índios brigam na Justiça contra Ferrogrão, e projeto deve atrasar", online: <https://www1.folha.uol.com.br/mercado/2019/08/indios-e-caminhoneiros-brigam-na-justica-contra-ferrograo-e-projeto-deve-atrasar.shtml>, viewed in March 2021.

63 Comissão Pastoral da Terra: "Em seminário, povos e comunidades do Tapajós (PA) debatem a resistência em defesa da vida e da Amazônia", online: <https://www.cptnacional.org.br/publicacoes/noticias/articulacao-cpt-s-da-amazonia/5029-ameacas-de-morte-criminalizacao-e-persegucoes-sao-denunciadas-em-seminario-povos-do-tapajos-construindo-resistencia-em-defesa-da-amazonia>, viewed in March 2021.

3 Indigenous Voices from the Tapajós River

by Vinícius da Silva Machado¹

3.1 Initial Considerations

The research upon which this part of the report is based was aimed at gathering the opinions of the indigenous peoples of the Médio and Baixo Tapajós regions in the west of the state of Pará, in the Brazilian Amazon region, on the infrastructure projects planned for the region, such as the railway, hydroelectric and waterway projects. Twenty-five indigenous persons were interviewed from the following communities: Tupinambá, Munduruku, Borari, Arapiuns, Tapajó, Kumaruara and Maytapu (see Annex).

The aim is to raise national and international awareness on the impact that the planned infrastructure projects will have on Brazil's indigenous peoples, and in particular on those groups in the River Tapajós region of Brazil's Amazon region. The results of this research are based on the statements of twenty-five indigenous people living in this region.

The report is divided into six sections and summarises the answers given by participants to the questions asked during the interviews (see Annex).

Section 3.2, Projects, summarises answers given to questions about the projects planned for the River Tapajós region. Semi-structured questions were based on the question: "What do you know about the projects planned for the River Tapajós region? Especially the railway, waterway and hydroelectric projects? In Section 3.2.1, Projects planned for the Amazon region, we report on the overall perspective of those interviewed on the infrastructure projects with regards to mineral exploration, agribusiness, contamination of the rivers with mercury and the consequences of these activities on the indigenous peoples of the River Tapajós. In Section 3.2.2, the Ferrogrão railway, we summarise answers given relating to the railway project. In Section 3.2.3, waterways, we

¹ Doctoral Candidate in Law, Federal University of Pará (UFPA), Masters in Anthropology (UFPA), and Bachelor of Laws (UFPA). Researcher for the Society for Threatened Peoples (STP). Member of the Brazilian Association of Anthropology (ABA) and the Brazilian Bar Association (OAB). Member of the Research Group Cidade, Aldeia & Patrimônio [city, village, and heritage research group]. E-mail: vinicius_s.m@hotmail.com.

summarise the answers given relating to the waterway projects and in the last section 3.2.4, we summarise answers given relating to the hydroelectric projects planned for the region.

In Section 3.3, Resistance, we present answers relating to the semi-structured question: “Has the community resisted the railway, waterway and hydroelectric projects?” “What strategies have you employed to defend yourselves against these projects?” We report on how the indigenous peoples of the River Tapajós region oppose the mega infrastructure projects planned for the region. In this section we present ways how the indigenous peoples oppose the “death projects” (Anderson Munduruku, 2020), an expression used by many with regards to the projects planned for the River Tapajós region.

Section 3.4, Co-optation, summarises answers to the semi-structured question: “Is there any disagreement and difference of opinion about the railway, waterway and hydroelectric projects? Are there any groups in favour of the project? Why? Why does that happen? How are differences of opinion dealt with?”

Section 3.5, Consultation, summarises answers to the semi-structured question: “Were the communities consulted on these projects? If so, when? In what way? (What language was used? Were threats involved? Were bribes involved?) Are the leaders aware of their right to prior consultation?” Opposition by means of the Free, Prior and Informed Consent (FPIC) was emphasised by the indigenous communities of the River Tapajós region as a means of opposing the hydroelectric, waterway and railway projects.

Section 3.6, Alliances, summarises answers to the semi-structured question: “Are there alliances and, if so, are the people confident in these? What alliances have been made between the groups, internationally and others?” Participants described current alliances aimed at opposing the mega projects planned for the River Tapajós region. Alliances are a way of fighting projects such as the hydroelectric, railway and waterway projects.

Section 3.7, Unfeasibility, summarises answers to the following question: “What would it take for the railway, waterway and hydroelectric projects to be acceptable to the indigenous peoples?” Unlike other sections, where answers were summarised, in this section the direct answers are given, because those interviewed, both in the Baixo Tapajós and the Médio Tapajós regions, were unanimous in answering that the projects were unfeasible.

In some sections, answers to more than one question are summarised. For example, answers to the question on the impact of the projects on the indigenous peoples are also given in the section on unfeasibility. The answers to this question appear in various sections.

All those interviewed believed that there is no way that the mega projects, such as the railway, the waterway and the hydroelectric project, could be carried out without having a negative impact on the daily lives of the indigenous peoples of the River Tapajós region. However, because of the vested interest of certain economic sectors, there is an imminent risk of these projects being approved and implemented, despite the resistance of the people who will be affected by them. The following sections report on the views of the indigenous persons interviewed during this research project.

3.2 Projects

In this chapter, we present a summary of participants' answers to the question, "what do you know about the projects being planned for the region of the Tapajós River? Especially the Ferrogrão railway, waterway, and hydroelectric projects?" It summarises the answers of the indigenous peoples given in the field, expressing their opinions about the infrastructure projects that are planned for the Tapajós River. Of course, it would be difficult to gauge all the possible consequences of such projects, but those affected have a fair idea of the consequences, their answers being based on other projects they experienced.

The first section gives an overall perspective on the infrastructure projects and how they are linked to mineral exploration, agribusiness, mercury contamination of the river and the impact all this will have on the indigenous peoples of the Tapajós River. The second section summarises participants' opinions on the Ferrogrão railway project, the third on the waterway project and the final section on the hydroelectric projects. All the information is based on answers given by the participants.

3.2.1 Projects Planned in the Amazon Region

The projects planned for the Amazon region are being hailed as a development strategy. However, those who live nowhere near the Amazon and see it simply as a huge green area fail to understand what is happening in those forests, where a series of human rights violations are taking place.

"By means of threats, assassinating human rights defenders and indigenous leaders, co-opting leaders and violating human rights, they are slowly exterminating any effective leadership" (Abimael Munduruku, 2020).

Projects such as railways, waterways and huge hydroelectric projects perpetuate these violations and bring great devastation. Graça Tapajó believes that

"it has all come to rob us of our quiet lives, our peace, our culture, our spirituality, our people being all over this region, starting from Alto Tapajós [higher region], through Médio Tapajós [middle region] and all the way down to Baixo Tapajós [lower region]" (2020).

The affected communities see the implementation of these projects as something akin to taxation – coming down from the top without any consultation of the people or their leaders and without their consent¹:

“Decisions are made top down without any thought for us or the battles we are fighting. They completely ignore the people whose very survival is intrinsically connected to the environment we live in” (Cacique [the indigenous communities’ highest representation] Josenildo Munduruku, 2020).

These are not isolated projects, but part of a whole package of infrastructure and construction projects planned for the Amazon.

“We have been following the planning of these large projects, because we know there is not just one but a whole array of projects planned for the region” (Juarez Munduruku, 2020).

Cacique Josenildo Munduruku points out,

“whilst they were still planning the hydro dam at São Luíz do Tapajós, the government was already thinking ahead to the Ferrogrão railway and the waterway, and then there’s the mining” (2020).

All these interconnected exploration projects – the hydroelectric plants to feed the machines for mineral exploration, the building of the waterway and the Ferrogrão railway to transport the mining products – are all created to accelerate the exploitation of the Amazon in a synergetic way.

“When one project is carried out, so is the rest. If one will not be carried out, none of them will. That’s why the government doesn’t want to demarcate our territory, because if they do so, none of the projects would be carried out”² (Juarez Munduruku, 2020).

1 For more information, see chapter 3.5.

2 The matter of the infrastructure projects and demarcation of indigenous territory will be discussed in chapter 3.8.

The planning of this railway-hydroelectric-waterway infrastructure is performed within a detailed mapping of the entire Tapajós region, thus representing the announcement of destruction:

“It hurts us to know that our whole Tapajós region is mapped out for agribusiness” (Auricelia Arapium, 2020).

And it is not just agribusiness that needs infrastructure, but mining does too – waterways, hydroelectric power, railways... all of it is needed for mining, energy production and logging.

“We are convinced that these projects are the main roots of all troubles and the cultural destruction of our people” (Josenildo Munduruku, 2020).

PHOTO: THOMAZ PEDRO



“We are very concerned about the impact these projects will have.” Josenildo Munduruku

The state-owned Brazilian companies, in partnership with domestic and international private partners, state-owned banks, BNDES, etc. belong to the groups designing these projects. The Brazilian government plans large infrastructure projects, which might end up being implemented in spite of all the affected communities organising themselves and fighting against them.

“They are approved because the government does not respect the autonomy, the rights or the lives of these people” (Josenildo Munduruku, 2020).

The government prefers paying out compensation to respecting the Brazilian Constitution and the international human rights treaties that Brazil itself has ratified.

“They prefer to be fined by the international criminal courts than to respect the human rights of their own people. That’s the way our government operates. And it’s not because of President A or President B, it’s the whole government. The whole government system is to blame.” (Abimael Munduruku, 2020)

This matter will be discussed further in chapter 3.5, which is about the right to consultation and consent.

The government plans its projects for the Tapajós region to attract investment from international companies. These huge multinationals exploit the resources and leave the indigenous peoples, the quilombo communities and the riverine communities to pick up the pieces.

“These people are the downtrodden minority, scoffed at and disrespected especially by this government” (Josenildo Munduruku, 2020).

No wonder the indigenous communities fight back. There is no dialogue, no mutual exchange, no details given about these projects beforehand, and no respect.

“This is serious, and it is real. We are up against the government and they are doing what they please with not even a nod in the direction of the indigenous peoples” (Graça Tapajó, 2020).

The indigenous peoples are the ones who suffer from the environmental, cultural, and social consequences of these projects.

“We know about [the projects they are planning for the region] and are well aware of their plans. We are even more aware of the impacts, we are very concerned about the impact these projects will have” (Josenildo Munduruku, 2020).

The situations in which they are ignored, intensifies the already existent concern of the indigenous communities about illegal prospecting for gold that goes on, particularly in the Alto Tapajós and Médio Tapajós regions. A Fiocruz (Fundação Oswaldo Cruz [Oswaldo Cruz Foundation]) survey³ reveals some alarming facts about this prospecting:

“People are getting sick from mercury poisoning in our region. [...] In the Santarém area, people were suffering from neurological disorders. Mercury was found in their blood and traced back to the fish in their diet” (Luana Kumaru-ara, 2020).

PHOTO: THOMAZ PEDRO



Fish is the main part of the diet of the people living alongside the Tapajós River. But due to illegal gold mining, it is contaminated with mercury.

3 “Mercury was found in the hair samples of all participants, whether children, adults, old people, men or women, without exception. Contamination levels varied from 1.4 to 23.9 $\mu\text{g}/\text{g}$ of hair and around six out of ten (57.9%) participants were found to have mercury levels of over $6\mu\text{g}\cdot\text{g}^{-1}$. The highest mercury levels were found in the people from Sawré Aboy village, where around nine out of ten of those surveyed (87.5%) had mercury levels of over $6\mu\text{g}\cdot\text{g}^{-1}$. In the Poxo Muybu village, six out of ten people surveyed (60.6%) had high levels of contamination, whilst in the Sawré Muybu village, four out of ten of those surveyed (42.9%) were contaminated. The people of Sawré Aboy village were twice as likely to have mercury poisoning, compared to the people of Sawré Muybu village. Neurodevelopmental disorders were detected in nine out of 57 children (15.8%). Analysis of the fish found that the fish-eating species had the highest levels of contamination, with mercury levels of 0.13 to 1.95 $\mu\text{g}\cdot\text{g}^{-1}$. Additionally, average mercury level calculations show that these people are ingesting daily mercury levels that are between four and 18 times higher than the safety levels published by the US Environmental Protection Agency (EPA) (2000) and two to nine times higher than the safety limits tolerated by the United Nations Food and Agriculture Organisation (FAO/WHO, 2003)” (Basta & Hacon, 2020, p. 3).

Fish forms the main part of the diet of the people of the region of the Tapajós River. Illegal prospectors use this mercury, so

“we are being directly impacted by prospecting in the Tapajós region. Our water is full of mercury, which ends up in the fish, we eat the contaminated fish and then our people get mercury poisoning” (Auricelia Arapiun, 2020).

“As someone who fishes in this river, I really feel sorry for my children. And what about my grandchildren who have not yet been born? What will it be like here in 20 years’ time?” (Graciene Munduruku, 2020).

“We see these projects as a death sentence by the government. We always see government projects as a death sentence. Development has a different meaning for us than it does for them. For us, it means clean water, the intact forest, it means us living off the forest, not depending on the Ferrogrão railway, hydroelectric power, and industrial waterways. They claim these are economically sustainable projects for Brazil, but they couldn’t care less about our people. And we know these huge projects are never beneficial for the society. The only ones who benefit are them, the capitalists. These railways, waterways, dams and the like are not acceptable as far as we are concerned” (Anderson Munduruku, 2020).

For the indigenous communities, these projects spell death: death of the river, death of the forest, death of the peoples themselves. The following section sets out the answers given by the communities when questioned about the Ferrogrão railway, the waterway and the hydroelectric projects planned for the River Tapajós region.

3.2.2 The Ferrogrão Railway

Luciane Munduruku suspects that the Ferrogrão railway project will

“affect us, because it will end up invading our territory, and our livelihood depends on the forest and the animals” (2020).

According to Abimael Munduruku,

“the railway is protected [by the Brazilian government] and is seen as development. The railway shall link the state of Pará, which has become a major grain production centre, to the state of Rio Grande do Sul” (2020).

The aim is to connect the northern part of the state of Mato Grosso, a producer of agricultural and mineral commodities, to the regions of the so-called Northern Arc, in the state of Pará, and up to the banks of the Tapajós River and from there onwards via waterway to the Atlantic Ocean, thus facilitating and speeding up the transport of soya and minerals.

“At the moment, the problem with transporting from the Santarém area [...] is the lack of ports. This railway is designed to pass right through indigenous land, just because it suits their own interests” (Abimael Munduruku, 2020).

PHOTO: THOMAZ PEDRO



The planned infrastructure projects in the Tapajós area aim at facilitating the transport of agricultural and mineral commodities to the Atlantic Ocean.

The Ferrogrão project has been discussed since 2017 and is intended to accompany the planned Highway 163 which dates back to the times of the Brazilian military dictatorship, from 1964-1985.

“In this period, they strived to occupy the Amazon and the territories within this area, so they started to plan railways, waterways and roads” (Adenilson Borari, 2020).

According to Cacique Juarez Munduruku, all these projects and the consequences for this region have always been part of a major plan.

“The first project they wanted to implement was the São Luiz do Tapajós dam⁴, but they didn’t manage to bring that in at the time. So, they stopped for a while, but now they’re trying it again.”

The battle to stop these projects is unending.

“We are well aware that they want to link Sinópolis directly to Meritituba with this railway. And, at the same time, they are busy with their plans for the Jatobá dam. I am not sure what the status of São Luiz is at right now, but I imagine they are planning that too” (Juarez Munduruku, 2020).

Cacique Josenildo Munduruku claims that the plans for the railway are being made “top down”. He claims that they are not complying with the legal licensing requirements and are not respecting the voice of the indigenous peoples.

“That is why regarding the railway, we end up being harmed, because when they [carry out] their environmental impact studies, they don’t consult the quilombo communities, the indigenous peoples or the riverine communities” (Adenilson Borari, 2020).

Adenilson Borari claims that:

“What ends up happening is that a public notice is given and the companies themselves choose an institution or company to do the environmental impact study, so they can get the result they require. They don’t bother consulting the people who live in the area of the project. So, an environmental impact study is done which doesn’t find any impacts but, on the contrary, totally ignores traditional knowledge, and the project is installed without listening to the people. If a group manages to get legal help to fight any of the mega projects, there is a huge battle. It starts with the co-opting of leaders. Then, if the leadership continues to resist and their threats don’t shut them up, they try a different tack, which often ends up in the murder of leaders. It is well-known that in this state,

4 “The official estimates for power capacity stand at 8,040 MW and the planned flooding is for an area of 722 square kilometres. They are planning a hydroelectric power station in the middle course of the river which, if it goes ahead, will affect the traditional territories of the Munduruku and river people such as the Montanha and Mangabal, São Luiz and Pimental, who all live in this area. It was only after various campaigns, mainly by the Munduruku, and legal action by the Federal Public Ministry (MPF), that the government was legally obliged to consult the people who will be affected.” (Oliveira, 2016, p. 18-19)

Pará, leaders who fight for the Amazon, whether for rivers or territories, often end up dead. The state of Pará is a champion at murdering leaders: indigenous, quilombo and traditional leadership. So, that's how it goes" (2020).

The Ferrogrão railway is for the benefit of agribusiness, as they need further ways to transport the grain.

"Since Cargill, the soya export company, arrived in Santarém, ships have gone backwards and forwards the whole time" (Luana Kumaruara, 2020).

The port on the Tapajós River is one end of this export route, which initiates in the large grain estates in the northern part of Mato Grosso State and continues along the Highway BR-163 through the forest of the southern part of the state of Pará.

PHOTO: THOMAZ PEDRO



"I don't want my whole house surrounded by soya and chemicals and toxins and all sorts of things that will cause me harm." Abimael Munduruku

"If you ever use the BR-163 highway between Santarém and Belterra, you will see huge queues of soya trucks waiting for darkness to fall. Once the city traffic has died down, they start bringing down the trucks. Those trucks come from the state of Mato Grosso. We already have a grain road here – it is called the BR-163 highway and the Trans-Amazonian Highway. Then there's all the soya coming from Mirituba and Itaituba. They bring it all down from the soya plantations on barges. Santarém is the port from which all those big ships go abroad" (Luana Kumaruara, 2020).

The Ferrogrão route will follow a route which is already in full operation, the highway BR-163, and will extend its impacts to the port of Miritituba and the Tapajós river.

This route is already busy, and it will just get busier when they build the railway. And as for the Tapajós River,

“the River Tapajós is already a railway, even if it’s an imaginary one (...), with not just the soya barges travelling up and down it, but also the wooden boats (...), there are hundreds and hundreds of logs” (Luana Kumaruara, 2020).

The impacts are immeasurable. Destruction of the natural resources used every day by indigenous communities is just one of the impacts.

“In the Planalto region, for example, the relatives of the Munduruku people have seen whole areas of igarapé⁵ dry up. [We] depend on those igarapés for bathing and for drinking water. They have dried up! Their soya plantations have dried up the sources of our rivers” (Luana Kumaruara, 2020).

They have dried up because the forests have been chopped down to make soya plantations. Without the forest, you cannot keep the river sources – just one more consequence of projects like the Ferrogrão railway. Soya is advancing ever closer in the direction of the indigenous territories.

Further impact is felt in the spirituality of the people, because the advance of soya plantations has destroyed parts of the forest that they consider to be sacred:

“Not to mention the sacred places. They go into the places where our spirits live, where our protectors are, where the water mother is, the mother of the forest. That makes it difficult for us to connect [with our spiritual world], which causes us great pain” (Luana Kumaruara, 2020).

5 “Igarapé” is an indigenous word of Tupi origin, meaning “canoe way”. It is a waterway linking two islands together or linking an island to the mainland. Because these channels are narrow and shallow, only canoes and small boats can navigate them (...). These waterways are an intrinsic part of the life of the forest, so any change to the forest will affect them. Environmental changes caused by deforestation, road building and pollution can destroy the small waterways, especially if they are close to towns. In 2001, The National Institute of Amazonian Research (Instituto Nacional de Pesquisas da Amazônia or INPA) set up the Igarapés Project to study the effects of deforestation on the fauna of the igarapés” (Igarapé | Britannica Escola Online, available at: <https://escola.britannica.com.br/artigo/igarape/483295>, accessed on 26 April 2021).

Not only do they have to put up with these impacts, but when the indigenous peoples stand tall and fight for their rights, they are criminalised and accused of getting in the way of progress.

“When the indigenous communities stop a project, they are seen as obstacles to progress. How can that be? I don’t want a railway going through my living room, through the middle of my house, or through my leisure area. I don’t want that area submersed in water or my whole house surrounded by soya and chemicals and toxins and all sorts of things that will cause me harm. And then they call us an obstacle to progress!” (Abimael Munduruku, 2020).

These worries are a constant source of concern for the people of the River Tapajós basin who, besides having to fight for their territory, for their whole way of life, are called “obstacles to the development and progress of the nation”.

“It is getting worse and worse. These huge projects, and from this region particularly the Ferrogrão railway project, are talked about more and more, and they really want to make that railway. We are wondering, what’s going to happen regarding this project?” (Juarez Munduruku, 2020).

3.2.3 The Waterway

Cacique Brás Tupinambá tells us that the plan is to deepen the Tapajós River, desilting it, so that ships can use it during all tides.

“What they want to do is to pressure the government into allowing them to deepen the Tapajós River so that ships can get as far as Miritituba in Itaituba. The soya can then be loaded there” (2020).

He explains that

“if they deepen the river, the water will get dirty. They will pull out the stones of our holy place, our Tapajós River. They will kill our fish and all our fish will be gone and we won’t be able to fish anymore” (Brás Tupinambá, 2020).

Deepening the river will be a problem for everyone in the River Tapajós region, because

“if you mess with the course of the Tapajós River you mess with the livelihood of all those who live from its waters” (Adenilson Borari, 2020).



“Igarapé” is a waterway that links two islands together or an island to the mainland. Only canoes and small boats can navigate them. They are an intrinsic part of the life of the forest.

The project, which includes the desilting of the waterway, is also being planned “top down”, according to Joselindo Munduruku (2020).

“The idea of the waterway is to save on grain transport times. They haven’t thought about the population, the traditional people. All their plans were made in a room with four walls” (Abimael Munduruku, 2020).

They have not thought about those it will affect, because they are too busy eyeing up international investment:

“They are violating the rights of our people, but they don’t care about those who will die or those who will suffer the consequences of what they are doing” (Abimael Munduruku, 2020).

Consequences such as those pointed out above by Cacique Brás Tupinambá.

“We have been debating this in the region since 2015 when the Tapajós River waterway was announced. As if it wasn’t enough that we have the port of Miritituba in the Médio Tapajós region. They have just ignored all the knowledge the Munduruku have of that region. They even built ports in Miritituba above archaeological sites” (Adenilson Borari, 2020).

The waterway will not just help agribusiness and mining, but it will help loggers too, both legal and illegal.

“As soon as they build that waterway, it won’t just be for grain, but it will also be for logging in the Tapajós area. And that’s what these big logging companies have always wanted”. [...] “[The loggers] will deceive the people with the promise of jobs and they don’t have reasons to [worry/complain]. [But what they are really doing] is creating what are practically slave labour jobs. If you take the trouble to check it all out, you will see all kind of violations for yourself” (Abi-mael Munduruku, 2020).

With all these attempts to expand the transport routes for agribusiness, mining, and logging,

“the waterway is being discussed again and [that] is a big worry to us. Along this stretch from Santarém to Itaituba alone there are many traditional communities living and surviving from the river” (Adenilson Borari, 2020).

They worry about the life of the Tapajós River itself because

“if you mess with the course of the river, you change the whole dynamic of it. If you put great big barges full of soya and minerals on it, the impact on these people groups is almost immeasurable” (Adenilson Borari, 2020).

It will become viable to transport soya, minerals, logs etc. with huge barges.

“The waterway won’t just be here but [...] it will go all the way to Mato Grosso. That’s what worries us. And we have an even bigger worry too. If they make a waterway here in the Tapajós region, what will happen to these igarapés? Because they want to deepen it too, and the riverbank will, I reckon, end up like this wall here. And the igarapés will eventually go down and everything will be ruined. The Tapajós River will lose its strength. It will dry up. The igarapés are the river’s strength, because they bring all the rain in, especially in this season. The igarapés are what makes the Tapajós strong. They are its lifeblood. And how will the fish fare? How will they lay their eggs? The mother of the fish, for whom the Tapajós offers so many sacred places, will be destroyed” (Juarez Munduruku, 2020).

The indigenous peoples of the Tapajós basin believe that destruction and suffering will come.

“These projects the government wants to bring to the Tapajós region will bring destruction. It will destroy all the sacred places” (Juarez Munduruku, 2020).

3.2.4 The Hydroelectric Project

This is about energy. Huge hydroelectric plants are planned for the River Tapajós: São Luiz do Tapajós, Jatobá, Chacorão, Cachoeira do Cai, Jamaxim, Cachoeira dos Patos and Jardim do Ouro, along with various smaller ones. Brazil’s Amazon region already has hydroelectric plants at Tucuruí and Belo Monte, and this has been bringing great destruction for the indigenous communities.

“In indigenous territory, hydroelectric plants spell the end of a culture, the end of a people and the end of a territory” (Abimael Munduruku, 2020).

At the time they were planned, the purpose of these projects was to supply Brazil with electricity to sustain the growth of the Brazilian economy, even though they created serious environmental impacts for the indigenous peoples and riverside communities.

“Hydro power stations are mega-projects. We don’t need any more hydro power stations here in the Amazon region, in the Tapajós region. We never needed them, because there are already some” (Adenilson Borari, 2020).

The hydroelectric plants will destroy the livelihood of the people of the Tapajós region.

“The hydroelectric plant will be the end of everything. It will flood our home, our sacred places and even our lives. We are sacred, the animals are sacred, everything that has life in it is sacred to us. The impact will be huge” (Aldira Munduruku, 2020).

The hydroelectric project will not benefit the people of the region, it will benefit agribusiness and mining.

“It’s all about profit, right? It is of no benefit to the country. We are certain of that. Sometimes I think the way most people think is so strange. When I say most people, I mean the common people, like the people who live in our region. They watch us fighting for this [against] big business, and it seems like we are the only ones who should be fighting” (Antonio Munduruku, 2020).

The hydroelectric plants will spell the end for the people who live in their way, the indigenous communities believe.

“São Luiz do Tapajós won’t just affect people here, in this area. São Luiz do Tapajós is that hydroelectric plant they want to build in the Alto Tapajós” (Abimael Munduruku, 2020).

They plan to build it in the Alto Tapajós, but it will affect the whole Tapajós region, because the region is a living organism, and all parts are ultimately affected.

“That’s why we are opposing the plans for the São Luiz do Tapajós plant. They didn’t include us in the EIA/RIMA study⁶, but the impact will be felt down here too” (Luana Kumaruara, 2020).

What happens at the top of the river affects the middle and lower regions of the river. The Tapajós River is a living organism and should be treated as such, explain the people who live there. If they build the hydroelectric plant,

“it will indirectly affect us here because the water will be dammed up the top. Not to mention of course the devastation caused by the flooding of a whole area. They’re not interested in who lives here, they just want their power plant” (Abimael Munduruku, 2020).

Thanks to the opposition of the indigenous peoples, the quilombos and the traditional communities, the São Luiz do Tapajós power plant had its licence suspended by IBAMA in 2016, at the request of FUNAI.

“Did you know that the federal attorney managed to stop a hydroelectric plant that was already to be functioning? Yes, the São Luiz plant, near Itaituba. The prosecutors managed to get it stopped. That is not to say the government won’t get it started again. We are ready for that. We don’t want any more hydroelectric plants. When they made one up the top, on the border of Pará with Mato Grosso, up there in Jamanxim, people even died. That was at the time of President Dilma⁷, and she sent the army up there to check out the area to build a hydroelectric power plant. The army killed a Cacique there. And it wasn’t good

⁶ The EIA/RIMA means the environmental impact assessment and the environmental impact report, respectively.
⁷ 36th President of the Federal Republic of Brazil. Start: 1 January 2011. End: 31 August 2016.

at the start of Lula's government⁸ either, when they built the Belo Monte dam. The people fought but couldn't get that one stopped" (Brás Tupinambá, 2020).

The conflict caused by this project might still end up causing a huge impact on the Tapajós people, says Abimael Munduruku.

"It's a volcano waiting to explode. These huge projects for the Amazon area, the Tapajós River area [...] haven't been filed away forever, they've just been put aside for a while. At some point they will rear their ugly heads again" (2020).

Winning this particular battle does not spell peace for the Tapajós people.

"We won this time, but it didn't make us happy, because we know it will be back. We wanted them to write it off entirely [but] we didn't manage that" (Rozeninho Munduruku, 2020).

"The São Luiz do Tapajós hydroelectric plant... just to give you an idea, I visited the Pimentão, a traditional community where there are Munduruku Apicá people. In that community too [because of] the hydroelectric plant, the disputed wall was going to be built right through the community. The environmental report, at the time, claimed nobody lived there. That goes to show you how irresponsible they are, not just this government, but all governments who plan such things. This one is much like all the others. They all have this idea of improving things by making sure the majority shout louder than the minority. But it's not even them really, it's capitalists who are shouting the loudest" (Abimael Munduruku, 2020).

According to Abimael Munduruku, the hydroelectric plants will affect everyone who lives in the Tapajós region.

"With a hydroelectric plant being built up there, this part of the Tapajós where we live, right now, is only a metre deep. It is wide but it is not deep, because of that containment [the damming of the river]. And there in the high Tapajós region it will be frequent [the low level of the river], and it will be devastating for those people" (Abimael Munduruku, 2020).

⁸ 35th President of the Federal Republic of Brazil. Start: 1 January 2003. End: 1 January 2011.

There is a risk of the government reactivating the project, in particular, if the flexibilisation of environmental licensing is approved in the National Congress. Although this can be ruled out according to a timeline extending until 2030, since it is not part of the National Energy Plan (PDE 2030). However, the government, which is unpredictable in its actions, may once again pose a threat to the Tapajós communities.

Therefore, it is necessary to stay on high alert.

3.3 Resistance

In the light of the previous session, it is clear that resistance has become necessary for the people of the Tapajós River region. This session presents a summary of the answers given to the questions: “Has the community resisted the Ferrogrão railway, waterway and hydroelectric projects?” and “What strategies have you employed to defend yourselves against these projects?” We discuss how the indigenous peoples of the River Tapajós region defend themselves against mega-infrastructure projects being planned for the region.

Manoel Rocha Munduruku, Cacique [highest representation] of the village of Ipaupixuna, on the Santarém plateau in the lower region of the River Tapajós says,

“the need to fight against all these projects, which will all bring us negative impacts, grows stronger every day” (2020).

Fighting huge infrastructure projects that will harm the indigenous communities of the River Tapajós is a need based on a real danger.

“The worst thing is that they want to wipe out our culture, our world view and our very existence” (Manoel Rocha Munduruku, 2020).

Cacique Manoel Rocha Munduruku believes that they are trying to wipe the indigenous people out, but they will resist them and are not afraid of those who are only interested in profit and gain. The people are fighting to protect not only the forest, the river, the fauna, but their very way of life.

“Our culture belongs to us, and we will never forget that. We will not stop fighting and we will not stop living our way of life, our spirituality, our culture” (Manoel Rocha Munduruku, 2020).

The people of the River Tapajós are fighting collectively.

“We have a really good strategy. We are working as a collective, and that solidarity gives us autonomy and power” (Manoel Rocha Munduruku, 2020).

Estévina Tupinambá, Cacique of the village of Castanhal, located at the head of the Amorim in the lower region of the River Tapajós, tells us about this collective resistance:

“We are united. We are working together for one goal. We are fighting these projects. No Tupinambá community wants any of these projects in the region. We will not allow it. No, we will not!” (2020).

With every new battle, their resistance grows.

“We have a right to meet, to demonstrate and to protest about our situation as a group. We are fighting this, together! Sometimes even our own representatives threaten us. [They] threaten us, the police threaten us, [...] many fight us, but it only makes our resistance twice as strong” (Manoel Rocha Munduruku, 2020).

PHOTO: THOMAZ PEDRO



“The need to fight against all these projects, which will all bring us negative impacts, grows stronger every day.” Manoel Rocha Munduruku

They are fighting to defend the rights of the indigenous peoples of the River Tapajós. Those rights are set out in the Constitution of the Federal Republic of Brazil of 1988 (CRFB/88). Article 235 states:

“We recognise the social organisation, customs, languages, beliefs and traditions of the indigenous peoples, and their original rights over the territories they traditionally occupy. The Union must demarcate these territories, protect them and make sure all their property is respected” (CRFB/88).

These rights are being violated and that is why they must fight.

“We are fighting to defend what is ours, because when we are gone, whose will it be? So, our children are fighting with us, and this will not end, we will pass down from father to son through the generations” (Graciene Munduruku, 2020).

Their rights must be respected.

“We have rights. We have the right to say we do not want¹, for example, a hydroelectric plant, and they must respect that” (Aldira Munduruku, 2020).

They are fighting to keep their autonomy, and it is a difficult fight, but they are fighting together, and that makes them stronger.

“We can fight because we are united, because we are resisting together. The indigenous peoples are strong together. Our fight is for autonomy, and we are strong against many situations affecting us every day. But it’s not easy [...] for anyone. It’s a challenge particularly for the leaders. They are threatened on a daily basis. But we will keep fighting, and no government or people can tell us we have no right to fight for our own culture. We have a strategy” (Cacique Manoel Rocha Munduruku, 2020).

Awareness of their rights and the need to fight is growing daily. An indigenous member of the Maytapu, Florêncio Vaz, Professor at the Universidade Federal do Oeste do Pará (Federal University of Western Pará – UFOPA) says,

“I think there is ever-increasing awareness of our rights and the realisation that it is only in putting the pressure on, in fighting, occupation and protest that will ensure we are respected” (2020).

Many different strategies are employed in fighting the threat of mega-projects planned for the Tapajós region. We will discuss some of the ways the indigenous communities have resisted, which they told us about during the study.

¹ Chapter 3.5 discusses the right to consultation and consent.

3.3.1 Means of Resistance

Abimael Munduruku says:

“We fight today with face-to-face clashes. Civil disobedience on the part of the social movement organised by the indigenous peoples is taking [them] forward, filling the space it needs to fill” (2020).

Graça Tapajó calls this civil disobedience “physical resistance”, which uses the body as a weapon in the fight for justice, the fight against the “death projects”, as Anderson Munduruku calls the Ferrogrão railway, waterway and hydro-electric projects planned for the region (2020).

Graça Tapajó tells us,

“we are fighting off these attacks with physical resistance. We want to tell them, ‘we are here’, ‘look here, this is our territory’, ‘look here, we are going to demarcate this territory’” (Graça Tapajó, 2020).

This strategy aims to guarantee their rights and to highlight the spirituality of the indigenous peoples against a backdrop of greed.

“Each one of them deals with our rights differently. We need to ensure our very existence, our rights, our spirituality. We hold that belief very strongly. We must come against greed and power. They do not realise that. They do not realise that I listen to the birds, and they tell me things. They do not bear that in mind [the huge investors that finance the huge projects]. They do not know what the moon is telling me. They do not know what nature is telling me. If they come to take away our spiritual natures, our ties to the earth, the jungle, and the forest, then we are ready to fight back” (Graça Tapajó, 2020).

This vision of “blocks of interest” (Graça Tapajó, 2020), along with face-to-face combat, seeks to raise awareness on the ground.

“The Grupo Consciência Indígena (Indigenous Consciousness Group – GCI)² continues to operate by political means, raising awareness, drawing attention to values, rather than any more immediate project. This is the way forward” (Florêncio Maytapu, 2020).

“We must raise awareness amongst the indigenous communities who will be impacted about the real intentions of these “death projects” (Anderson Munduruku, 2020).

“One of the main things to be done is to raise awareness amongst our relatives in the village that these mega-projects will never be any good for us” (Adenilson Borari, 2020).

Raising awareness is the most advanced method of resistance but it is not easy to do this, because there are many potential problems facing indigenous leaders.

“In the wake of all of this will come destruction, sickness, violence. We will lose control. So the groundwork is very important. If our leaders don’t rise up and explain the impacts of the hydroelectric plants [...], we will lose our support base. Some of our leaders are not up to it. As I said, our region is vast, and we are not paid to fight or to do this groundwork. It is complex work and requires us to mobilise a lot of people. We try to explain to the families that they must be strong and resist because when things get tougher, we must be united. It is much easier for us to live in our territories than in the urban centres, where life is completely different. I think our mobilisation has helped and will help because we are raising awareness amongst our relatives that we must keep our territories and not let them surround us with mega-projects” (Adenilson Borari, 2020).

This organised raising of awareness, presented in the talk by Adenilson Borari, is another form of resistance, another form of fighting and a way of viewing these challenges.

² “As part of my graduation project for my master’s degree, I set up the Indigenous Consciousness Group. Most of the members are religious young people from the Catholic Church. This indigenous consciousness group came at a time when nobody in Santarém wanted to admit being indigenous and there were no indigenous villages in the Santarém region. The indigenous consciousness group was formed in 1997” (Florêncio Maytapu, 2020).

“We have organised ourselves through our assemblies. We are going from village to village, working with our assemblies, getting together in the villages, and bringing in our leaders and our relatives” (Estévína Tupinambá, 2020).

PHOTO: CITUPI



Tupinambá are blocking ships to demonstrate against illegal logging.

This unites the people of the River Tapajós, all the different groups.

“We are resisting, meeting with our relatives from the upper, middle and lower reaches of the [Tapajós]. And we are all fighting. We will never let them bring us down. We are strong, standing by our leaders” (Aldira Munduruku, 2020).

This collective organisation has seen various successes, occupied rivers as well as public spaces in cities. Cacique Brás Tupinambá tells us about the time they closed down the River Tapajós to protest against what was happening.

“We have our way of protesting at the upstream of the River Tapajós. On the seventh, eighth and ninth of November [we] went there, to the upstream of the river. [...] We went to demonstrate the government and the companies that are exploiting the river and bringing their barges that we are watching them. We are united. We are awake. We held a protest there. Ask the barge captain. We went in three boats – we don’t have enough money to hire more than that. Boats are very expensive in our region. [...] They need fuel too, and captain and crew. That was the way we made our request. Well, not exactly a request. We carried out our mission. We jumped onto the barge. We went into the captain’s cabin. We put up a banner. We put it up to show that we do not want these

things in the Tapajós River region. Our region. We don't want their hydroelectric plants, their waterways, their railways. We don't want the logging and the mining. Another problem we are now facing are the big fishing boats. They are invading our river to get fish and export them" (2020).

As well as occupations of the river, the people demonstrate on the roads, in the ports, in the city, to show everyone what is happening. Anderson Munduruku, an indigenous leader in the Médio Tapajós region, tells us more:

"We shut things down. We practically bring the city to a halt. We occupy the BR highways³ and stop the traffic. The traffic is bringing products from Itaituba in trucks or boats to the port. It's all happening near the village of Itaituba. There are lots of ports where they bring all the products to sell, and there is fuel. We shut the whole city down so they will listen to us and we tell them that we are shutting the highway because of these mega-projects they are trying to bring into our region. And we tell them that they are not respecting us. They are just steam-rolling right over us" (Anderson Munduruku, 2020).

Another resistance story is told by Professor Florêncio Maytapu. An occupation of the federal justice building in Santarém was staged to protest against a sentence that denied the ethnic identity of the Borari people of the Maró region in the Médio Tapajós:

"I believe it was in 2015. The federal judge decreed that the Maró people were not indigenous, that they were just caboclos (descendants of indigenous and various other people migrating to the area) and such. So, the people of CITA (Tapajós-Arapiuns Indigenous Council)⁴, with the support of other groups, occupied the federal justice building. We camped there for three days and only left when the Federal Prosecutor's Office acted, and the sentence was overturned. The sentence was archived. It didn't even get a merit trial, so it wouldn't look bad on the judge. But the sentence was cancelled. We see that as a victory for the indigenous peoples" (2020).

3 BR highways are federal roads, owned by the government. These highways link different regions of Brazil. They are very important for the circulation of merchandise, capital and people.

4 The Tapajós and Arapiuns Indigenous Council (CITA) is the socio-political representative body of the indigenous peoples of the Lower Tapajós region.

Public exposure is another strategy used by the people of the Tapajós River region. They expose what the public authorities are doing. The Federal Prosecutor's Office has been supporting them in this. "[They are] a great support to us, and they are also the most neutral partner we have in this fight"⁵ (Abimael Munduruku, 2020). They are exposing what is happening, without fear, to the bodies that can help them, fighting to hold on to their culture and their livelihood, Graciene Munduruku tells us:

"Alongside this public exposure, we draft documents, we protest directly to the Public Ministry, to IBAMA⁶, to SEMAS⁷. When we are not protesting, we are presenting documents to be filed. We are always busy, because we feel that this government has opened up the way for everyone, particularly the farmers, the land invaders. As indigenous people, we are fighting for our land" (2020).

Besides exposure and documentation, the Munduruku use means of communication to present what is happening or to communicate with partners and get the information published, as we were told by Cacique Josenildo Munduruku from the village of Açaizal on the Santarém plateau. He told us that,

"this is one of the strategies [...]: exposing these violations through the means of communication, publishing what is happening through the organisations that have helped us" (2020).

⁵ Chapter 3.8 discusses this matter in more detail.

⁶ The Brazilian Institute of the Environment and Renewable Natural Resources (O Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA)) is a federal autarchy with legal rights, administrative and financial autonomy, linked to the Ministry of the Environment (MMA), in accordance with article 2 of Law nº 7.735 of 22 February 1989" (BRAZIL, 2021) Available at: <https://www.gov.br/ibama/pt-br/aceso-a-informacao/institucional/sobre-o-ibama>.

⁷ A body linked to the administration of the State of Pará, the Secretariat for Environment and Sustainability (Secretaria de Estado de Meio Ambiente e Sustentabilidade (SEMÁS)) was created on 11 May 1988 by Law nº 5457, and at the time it was called the State Secretariat for Science, Technology, and the Environment (Secretaria de Estado de Ciência, Tecnologia e Meio Ambiente (SECTAM)). The body was reorganised by Law nº 5.752 of 26 July 1993, and on 30 July 2007, through Law nº 7026 it dropped the Science and Technology and kept only "Environment", becoming the Ministry of the Environment." (PARA, 2021). Available at: <https://www.semas.pa.gov.br/institucional/o-que-e-a-sema/>.

Another means of resisting the “death projects” is by means of FPIC (free, prior and informed consent), legally based on Convention 169 of the ILO⁸.

“In spite of the lack of compliance, of the disrespect when it comes to this matter of free and informed consultation, we believe in it and we make sure our protocol is respected” (Josenildo Munduruku, 2020).

Consultation protocols are documents prepared by the indigenous communities that describe how they should be consulted and how their opinions should be heard when any decision is made that would impact their territories.

“So, a consultation protocol is not something we have done so we can sit on top of it or rip it up. We take two or three years drawing it up, bringing the people together to tell them how we want to be heard. If they then just rip up our protocol it is what they have been doing, ripping up our history, our identity, our way of organising ourselves, and denying our rights. [...] So the consultation protocol [...] gives us the legitimacy to say that with their planned projects they need [the consent of the communities]. The indigenous communities and other communities need to be heard. I would say, therefore, these consultation protocol are essential for our participation and to tell them whether we agree or not to their plans. I think it is one of the main fronts of our fight in this whole situation” (Josenildo Munduruku, 2020).

Unfortunately, there is a lack of respect, as we are told by Cacique Josenildo Munduruku. More detail is found in chapter 3.5, Consultation, where our survey asked specific questions about the use of consultation protocols as a resistance strategy by the people of the Tapajós River.

Another important form of resistance is constant communication, which has been highlighted throughout the survey.

8 “Convention n° 169 of the International Labour Organisation (ILO) on Indigenous and Tribal Peoples in Independent States presents key advances in the recognition of collective indigenous rights, with significant text on economic, social and cultural rights. Convention n° 169 is currently the most up to date and broad international instrument on living and working conditions for the indigenous people and it is an international treaty ratified by the State, with binding nature.” https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_ILO_CODE:C169

“One of the things that has helped a lot in this work of raising awareness is communication. It is very important. It is a key part of the process” (Adenilson Borari, 2020).

The advance of technology and the use of it by the indigenous people is an important weapon. “The virtual world has become a weapon. We didn’t use it much before, as we didn’t have much access to technology, but now we use it” (Florêncio Maytapu, 2020).

Technological advance allows them to monitor better their territory and report violations in real time.

PHOTO: THOMAZ PEDRO



“The virtual world has become a weapon. We didn't use it much before, as we didn't have much access to technology, but now we use it". Florêncio Maytapu

“Before, when we started, information would reach us in a week, because we had to send letters by boat. The answer would take another week. We would send a letter on Wednesday and only get the answer next week. That has all changed. Some territories have installed Wi-Fi signals. Now, when someone tries to invade our territory, we hear about it in real time. We hear about it on the same day, and we can alert IBAMA, the Federal Police or the Federal Public Ministry. Communication has helped us a lot” (Adenilson Borari, 2020).

These means of resistance show that the indigenous peoples of the River Tapajós region are standing firm in their fight against projects that are putting their lives and their territories at risk.

3.4 Co-Optation

We asked:

“Are there any disagreements and differences of opinion about the railway, waterway and hydroelectric projects? Are there any groups in favour of the projects? Why? How are differences of opinion dealt with?”

In the report that follows we were told about how the representatives of mega projects take advantage of these differences of opinion and co-opt indigenous peoples by offering them jobs and money to attract them, then using them to get their way on the projects.

“This really exists. However, it cannot be said that they are defeated votes. There are plenty of indigenous people who have lost all ties to their territory and are only interested in getting their own piece of land. Pretending that the indigenous peoples are asking for these mega projects is totally untrue. I saw an example of this when some of the Munduruku people met with the President and the Minister of the Environment in Brasília, suggesting that the Munduruku people are in favour of prospecting. We know this is not true. They were probably a small group of indigenous people, who are, unfortunately, definitely indigenous, who listened to false promises about it being good, it being better, it being beneficial for them, and were co-opted, when of course it really is none of that” (Adenilson Borari, 2020).

This is a very sensitive matter and requires careful handling. However, all the indigenous people interviewed talked about this, calmly and in a very down-to-earth way. It is obviously a very present reality, and a concern to the indigenous peoples of the River Tapajós. According to the people interviewed, co-opting indigenous peoples is one of the strategies of the “death project” leaders (Anderson Munduruku, 2020) trying to get their hydroelectric, waterway and railway projects through.

“In reality there are several of our relatives doing it. There are plenty of greedy people out there. They are offered money by the companies, and they close their eyes to their people, their children and their grandchildren” (Aldira Munduruku, 2020).

Aldira Munduruku suggests that these people are used to create conflict amongst the people, to weaken them as well as the fight they are trying to maintain. She tells us:

"I don't think these people have a heart. If they would think about our people, they would say no to these companies. And those people, of whom there are quite a few in our group, we have to sit them down and talk to them, advise them to participate more in our meetings, to make them aware of what is right and what is wrong. Plenty of our relatives are now against us in the matter of prospecting. It's embarrassing for us – they are our own relatives – but it's true. All we can do is keep on with what we are doing. We have to ignore them – we have plenty of people on our side. There are plenty of caciques [the tribes' highest representation] from the higher region being bought off and trying to hand over our land, but we are strong too" (2020).

This problem is not just a matter of one village or area, but it is all over the River Tapajós region. Cacique Josenildo Munduruku confirms this by saying that

"this situation is a concern not just here in the village but in many other territories. Because we know that the economic power and the capitalist power are very influential (2020)."

Graciene Munduruku, President of the Ipaupixuna village indigenous association tells us,

"they forget their heritage and let themselves be influenced by the leaders of these hydroelectric, waterway and railway projects as well as agribusiness, mining and logging and end up pledging their support. There are indigenous people here who are in favour of the soya plantations. They are on the side of the farmers. They are on the side of the land grabbers and the loggers" (2020).

The indigenous peoples of the River Tapajós believe this is a colonial practice that is rife amongst the groups behind the "death projects" (Anderson Munduruku, 2020).

"We believe it's a colonial practice, bringing division amongst the people. We need to put a stop to it. This division ends up putting communities and relatives against each other" (Graça Tapajó, 2020).

They set up false leaders amongst the people and make them spokespersons, all in the interest of the capitalists, who want to create internal conflict and thus facilitate their "death projects" (Anderson Munduruku, 2020). But the indigenous peoples of the River Tapajós know the difference between real leaders and leaders co-opted by the capitalists, as Anderson Munduruku tells us:



“This division ends up putting people, communities and relatives against each other”.
Graça Tapajó

“This really exists. This co-opting of people who call themselves leaders. But they are not leaders, and they don’t speak for the Munduruku people. We know who our real leaders are¹. Real leaders fight for their people and for their territory in order to preserve it. Those who are co-opted are just selfish and individualistic. It’s like the mining – we know it is no good. They say it’s sustainable mining. They say our people depend on it, but that’s a lie. That’s a lie they make our own relatives say to defend the white people” (2020).

Another characteristic of a false leader is that they lost their ancestry², as Cacique Josenildo Munduruku tells us. He tells us about false leaders, who distance themselves from the ties between the indigenous peoples and nature, which is what links them to conservation:

“To be part of the natural environment is our ancestry” (2020).

1 Real leaders, as Anderson Munduruku calls them, are constituted through the recognition of their fight and their connection with the cosmology of their people and through the self-recognition of the group. The false leaders, on the other hand, do not defend the interests of the indigenous peoples but those of external actors.

2 This is a holistic concept, which is related to the lineage, to the spirituality and to the connection with the forest etc.

To break the indigenous peoples away from their ancestry is one of the strategies used by the “death project” leaders (Anderson Munduruku, 2020) to create this “policy of division”:

“There are people that generally lose their roots and are easily co-opted by these big landowners [known as “ruralistas”] who are obviously working very hard to create such division. Yes, we have that problem in our territory, of indigenous people who support the development policy, which we don’t think is development at all. For us, development is something that respects our knowledge and our ancestry and thinks about future generations” (Josenildo Munduruku, 2020).

This policy of division takes advantage of a lack of information.

“Yes, some villages have these divisions, some of them support [the big projects or soya farmers]. But those who support these projects are often uninformed, and when they are informed, they end up backing down” (Abimael Munduruku, 2020).

The leaders of these mega projects planned for the Tapajós region take advantage of the fact that some people are not well-informed of the real impact of the ‘death projects’ (Anderson Munduruku, 2020) and use this to deceive and co-opt these people. That is why raising awareness is key to defending their territory:

“Because when these project developers come, they present the projects to us without setting out the downside. They only talk about the benefits. Those who don’t really understand the real impact of these mega projects will just be drawn to the benefits. They don’t understand. They think it will bring improvements. To their own lives, to their families’ lives. But when the situation is explained to them, they understand and realise that they are running before they can walk. That’s the real explanation for the division amongst some of our people” (Abimael Munduruku, 2020).

People who are “greedy for gain” (Aldira Munduruku, 2020) and are used in this “policy of division” (Josenildo Munduruku, 2020) are actually a small minority, according to Adenilson Borari (2020).

They are led to believe that the promises of development sold to them will bring them benefits.

“This happens. This happens because of a lack of awareness amongst some of our relatives, and the dominant side takes advantage of that” (Graça Tapajó, 2020).

Another strategy used in this “policy of division” (Josenildo Munduruku, 2020) is the recent self-determination of some indigenous people, who have only recently discovered their indigenous roots. This is used by the “dominant side” (Graça Tapajó, 2020), as Florêncio Maytapu, a teacher, tells us:

“Personally, I think this problem is very real. There are some leaders who have only recently started to identify as indigenous. Most of these people are in favour of the capitalists and the loggers or even, in this election period, politically motivated. They want to set themselves up as candidates. This is because they’ve only recently joined the movement. They haven’t been with us from the start, part of a carefully developed project based on indigenous values” (Florêncio Maytapu, 2020).

Francisco Munduruku, a Munduruku leader from the Médio Tapajós [middle region] tells us,

“these [mega projects] have tried to buy us off in many different ways and to gain the support of our leaders for their little package” (2020).

The “little package” he is referring to is the various means used in the attempt to co-opt indigenous peoples.

This co-optation aims at disarticulating the indigenous movement:

“It’s been very worrying, because some groups were passing on so much information that we even got to the point of not wanting their involvement in our fight, our organisation and our planning. There were people in the group passing on information to the government so that they would know beforehand what we were planning” (Francisco Munduruku, 2020).

This ends up destabilising the indigenous movements and causing a lot of pain and hurt, because it is not easy to fight those close to you, as Luana Kumaruara tells us,

“we have learnt to fight the white man and the land grabbers, but we find it hard to fight our own relatives. This knocks us down, because we don’t want to report our own relatives or get them into trouble. As leaders, we end up being branded as criminals” (Luana Kumaruara, 2020).

This pain and hurt affects many people and different generations amongst the peoples of the River Tapajós region, as the following report relates:

“Our grandparents, our ancestors, always fought for our territory, and we need to pass this mission on to future generations. When we see some of our leaders going in the opposite direction, this makes us really sad. We are indigenous peoples, but we are human beings too. I don’t know how some leaders can turn their backs on us. You are there, defending your territory and you suddenly see one of your own on the enemy side, defending their plans, their agribusiness, like many are doing all over Brazil now. It’s really painful to have to report your own relatives. This is happening, this co-optation of leaders. [Co-opted leaders] say they are doing this for their families. They are saying that in the Alto Tapajós [higher region]. They say their families need internet, a good TV, and such like. That’s how it happened with the Belo Monte project, which was also a political move by some of the front-line leaders” (Luana Kumaruara, 2020).

Co-opted indigenous leaders are an embarrassment to their own people.

Luciane Munduruku, a member of the audio-visual group of the Médio Tapajós region, tells us how painful it is to see the Munduruku name associated with such practices. She tells us how sad it makes them to see these people embarrassing their own people, who have always been known as warriors, people who fight for their territory and their rights.

“These people have let the prospectors come right into our land. They’re a small minority. They bring in non-indigenous people. And it’s the Munduruku people who are doing it. That makes me so sad. Because people know we’ve always been warriors, but now they see us doing this. They start saying things like, ‘The Munduruku people have always been fighters, but now they’re selling themselves out.’ But we defend ourselves by saying it’s not all the Munduruku people, just those who live in the cities and have to keep making money to maintain themselves there. [...] But the indigenous people who live in the village don’t need the money to survive because there we have a river and the forest to support us” (Luciane Munduruku, 2020).

Graça Tapajó says it is the “death projects” (Anderson Munduruku, 2020) that

“take advantage of us by causing division, which suits their interests well. Internal division amongst the indigenous peoples suits them. And what can we do about this?”

PHOTO: THOMAZ PEDRO



“The indigenous people who live in the village don’t need the money to survive because there we have a river and the forest to support us.” Luciane Munduruku

How can this be dealt with? Cacique Josenildo Munduruku tells us,

“We have these problems. But we also have a group of leaders who care about our ancestry, who believe we should fight, not just for our own sakes, but for future generations” (2020).

These leaders who still care about their ancestry are trying to raise awareness amongst their own relatives:

“We need to make them aware, aware that they are not on their own, make them part of the indigenous vision, part of our fight” (Graça Tapajó, 2020).

The fight is a constant one,

“we need to keep strengthening the unity amongst the people and the organisations, so that we can keep on fighting. That way we can achieve the aims of our fight” (Graça Tapajó, 2020).

This groundwork seems to be a possible solution to co-optation, as the following report confirms:

“It’s like an addiction, this fight. Even for the dominant ones. But that’s how we can go forward in the fight for our rights. If we think collectively, training people, training the young people, training indigenous women, so that they can all become ethical leaders. Leaders who take the work seriously and can’t be bought. Because this really exists. These mega money projects come and sometimes they even divide our front-line leaders between them. So we need to be aware of this, and train against it, helping our front-line people in this” (Graça Tapajó, 2020).

These are the indigenous people’s weapons against the “policy of division” (Josenildo Munduruku, 2020), this is the fight the indigenous peoples of the River Tapajós are involved in. Standing up against “people greedy for gain” (Aldira Munduruku, 2020), who are also their relatives and need to be handled with care.

“We have been fighting this by taking these people aside, convincing them to rethink their attitudes, and also by training leaders to be aware of these strategies. We fight this every day to stop it spreading amongst the villages. We make them aware of our fight and what it is we want. We are not just thinking of ourselves, but we are doing this for future generations. It’s hard work, of course, and we know we are fighting against that desire for money that is in us all, but we are determined to keep fighting. We are strong, really strong” (Josenildo Munduruku, 2020).

As the cacique says, there are lots of problems, and the railway, waterway and hydroelectric projects end up accentuating the co-optation and cause internal division, because that is part of their strategy to get what they want. In order to avoid such situations it is necessary to raise awareness among all those who will be impacted. One way to achieve this is by using the right to Free, Prior and Informed Consent (FPIC) enshrined in the Convention no.169 of the International Labour Organisation, which will be explained further in the next section.

3.5 Consultation

This section gives a summary of the answers given to the following question: “Were the people consulted on these projects? If so, when? In what way? (What language was used? Were threats involved? Were bribes involved?) Are the leaders aware of their right to prior consultation?” In general, the right to Free, Prior and Informed Consent (FPIC) is seen as a helpful tool in the fight against projects such as the hydroelectric, waterway and railway projects planned for the River Tapajós region.

In section 3.3 Resistance, we presented some of the ways in which the “death projects” (Anderson Munduruku, 2020) planned for the River Tapajós region are being fought against. In that section, we asked the indigenous communities of the River Tapajós region how they are fighting the hydroelectric, waterway and railway projects and they mainly mentioned the FPIC.

We also asked a specific question about the use of the FPIC against the hydroelectric, waterway and railway projects and, in this section, we report the answers given on the field, digging deeper into the discussion of the matter we started in 3.3 Resistance.

The International Labour Organisation (ILO) Convention 169 (C169) establishes in its Article 3 that “indigenous and tribal peoples shall enjoy the full measure of human rights and fundamental freedoms without hindrance or discrimination”¹. The United Nations Declaration on the Rights of Indigenous Peoples² declares in its Article 3 that “indigenous peoples have a right to self-determination, which includes the right to freely determine their political status and freely pursue their economic, social and cultural development”³.

The American Declaration on the Rights of Indigenous Peoples of the Organization of American States (OAS) affirms that indigenous peoples are original, diverse societies with their own identities that constitute an integral part of

1 ILO (2019): Convention 169, Art. 3.1. Accessible online: https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169

2 Brazil adhered to the UN Declaration in 2007. Although the declaration is not legally binding, it has the character of customary law.

3 UNO (2008): Declaration on the Rights of Indigenous Peoples, Art. 3. Accessible online: https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf

the Americas and have the right to self-determination. The legal document sets out in its Article 1, paragraph 2, that “States shall respect the right to such self-identification as indigenous, whether individually or collectively”⁴.

These international documents ensure human rights and the right to autonomy and self-governance, as well as ensuring that indigenous peoples are brought into all discussions on their own rights, using the FPIC.

The FPIC respects and guarantees the protection of the strong relationship and interdependence that exists between traditional communities and nature.

The traditional peoples and communities are linked by a sense of belonging, shared land and shared vision. They seek to live life to the full, to live in harmony with nature and to maintain their traditional ways of life. All of this is linked to their right to self-determination as a people and their right to decide upon their own future.

Brazil’s Constitution, in its Article 231, states that “indigenous peoples shall have their social organization, customs, languages, creeds and traditions recognized, as well as their original rights to the lands they traditionally occupy”, though it does not talk about the rights set out in the FPIC. However, this is part of the Brazilian legal order and is in line with Brazilian norms, as stated here:

“Brazil is tied to this international order to protect human rights by force of decision of its own Constitution, which establishes that the State shall rule its international relationships based on these rights (article 4, II). This precept is reinforced by the amplifying standards of the role of fundamental rights set out in §§ 2 and 4 of article 5”⁵.

4 Organization of American States (2016): Declaration on the Rights of Indigenous Peoples, Art. 1.2. Accessible online: <http://www.narf.org/wordpress/wp-content/uploads/2015/09/2016oas-declaration-indigenous-people.pdf>
5 Duprat, D. (2015): Convention no. 169 of the ILO and the right to prior consultation. In: DUPRAT, D. (org.). Convention no. 169 of the ILO and the National States. Brasília: ESMPU. p. 53-78. Available at: <https://rca.org.br/wp-content/uploads/2019/02/Conven%C3%A7%C3%A3on.169daOITeosEstadosEbannerConven%C3%A7%C3%A3on.169Nacionais.pdf>.

Three indigenous communities living in the River Tapajós region have already drawn up consultation protocols to systematise their rights under the FPIC. In these protocols, the communities set out how they want to be heard on projects and administrative and legislative proposals that affect them. The three indigenous communities are:

- 1) The Munduruku people from the Alto and Médio Tapajós regions;
- 2) The Munduruku people from the Santarém plateau in the Lower Tapajós;
- 3) The Tupinambá people of the Lower Tapajós.

The first to be drawn up in the region, and the second in all Brazil, was that of the Munduruku people from the Alto and Médio Tapajós regions.

“Before we had the protocol, we watched our relatives, the Wajãpi people, draw up the first protocol, and ours is inspired by theirs” (Juarez Munduruku, 2020).

It is a political and legal tool in the fight against the impositions of the “interest blocks”(see chapter 3.5) (Graça Tapajó, 2020).

“We, the Munduruku people, want to hear what the government has to say to us. But we don’t want false information. For us to make a decision, we need to know what is really going on. The government needs to listen to us. First and foremost, we want demarcation of the Sawré Muybu indigenous territory. Under no circumstances will we accept to be removed from there. We also want to protect isolated relatives living on our land and guarantee the right to consultation of the other communities impacted by their projects, the Apiaká and the Kayabi. Finally, we want the riverine communities impacted by the River Tapajós dams, Montanha, Mangabal, Pimental and São Luiz to have their right to consultation guaranteed, in a way that is suitable and specific to their reality. Like us, the riverine communities have the right to prior consultation” (Munduruku consultation protocol, 2017).

In 2017, the Munduruku and Apiaká peoples of the Santarém plateau drew up their consultation protocol:

“We have drawn up our own consultation protocol on our own initiative. With this protocol, we told ourselves, ‘Let’s do this, let’s do our research and draw up this protocol, because we really need it’” (Josenildo Munduruku, 2020).

The protocol arose from the need to ensure the rights of the indigenous peoples:

“This document was born out of the need of the Munduruku and Apiaká peoples to establish formal criteria for legally guaranteed rights, so that they would be consulted on plans and projects that might put their livelihoods and the culture of the people living in their villages at risk. We also confirm that the São Francisco da Cavada, Açaizal, Amparador and Ipaupixuna villages have already demarcated their occupied territory and have officially applied to FUNAI for the creation of the Munduruku do Planalto Indigenous Territory” (Munduruku & Apiaká consultation protocol, 2017).

PHOTO: THOMAZ PEDRO



“When someone comes to our village, we have to be consulted”. Estevina Tupinambã

The third protocol drawn up by indigenous peoples in the River Tapajós region was that of the Tupinambá people, in 2018:

“We, the Tupinambá people, sat down together and drew up this consultation protocol” (Estévina Tupinambá, 2020).

This is a tool that will help in defending their rights.

“When someone comes to our village, we have to be consulted, they have to consult us, because we have a consultation protocol, we indigenous peoples” (Estévina Tupinambá, 2020).

The ILO Convention 169 is a legal and valid document, ratified in Brazil in 2002 by means of legislative decree number 143 and which became effective in 2004 with executive decree number 5051. It is legally binding and subject to legal action where other declarations, however important, are not legally

binding. It is also a document that confirms the use of international treaties and demands that Brazil respects indigenous rights;

“We demand recognition and respect, and we want our rights to be fully met. The ILO Convention 169, which was ratified by Brazil by means of legislative decree number 143/2002 and which became effective in 2004 with executive decree number 5051/2004 guarantees us a series of rights such as the right to self-determination and the right to FPIC. In addition to ILO Convention 169, there are the UN Declaration on Indigenous Rights, and the OAS American Declaration on the Rights of Indigenous Peoples which also reaffirm these rights, which Brazil is obliged to respect” (Consultation Protocol of the Tupinambá people, 2018).

PHOTO: THOMAZ PEDRO



“What the consultation protocol says is that it’s not just one association or just the cacique that needs to be consulted. Women, children, elders, shamans, warriors, teachers, nurses – all must be consulted.” Alessandra Munduruku

Article 6 of ILO Convention 169 states that “governments shall consult the peoples concerned, through appropriate procedures and, in particular, through their representative institutions, whenever consideration is being given to legislative or administrative procedures which may affect them directly”⁶. The UN Declaration on the Rights of Indigenous Peoples, in its Article 19, confirms

⁶ ILO (2011): Convention 169, Art. 6. Accessible online: Convention https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169

and reinforces that: “States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them”⁷.

All peoples concerned should be consulted, all peoples concerned should take part in this listening process, as Alexandra Munduruku says:

“It’s not just the Munduruku people who need to be consulted. All those concerned and who may be affected must be involved. If the Kayapó people may be affected, they have the right to be consulted. If the [people] of the Baixo Tapajós, the Tupinambá, may be affected, they also have [the right] to be consulted. If the riverine communities may be affected, then we should call them in too. That is what ‘informed’ means. It has to be prior. It has to be people. It all has to be organised so that everyone takes part. All the information needs to reach the people on the ground” (2020).

Like Article 19 of UNDRIP, Article 23, paragraph 2 of the American Declaration on the Rights of Indigenous Peoples says,

“States shall consult and cooperate in good faith with the indigenous peoples concerned, through their own representative institutions, in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them”⁸.

This is an important legal and political step in guaranteeing the rights of indigenous peoples all over the world.

The FPIC consolidated internationally as an important achievement of the indigenous people given that it establishes a new kind of relationship, more symmetrical and respectful, between governments and these communities. Nevertheless, there are still many challenges which hinder the effective implementation of the FPIC by governments.

7 UN (2008): Declaration on the Rights of Indigenous Peoples, Art. 19. Accessible online: https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf

8 Organisation of the American States (2016): Declaration on the Rights of Indigenous Peoples, Art. 23.2. Accessible online: <http://www.narf.org/wordpress/wp-content/uploads/2015/09/2016oas-declaration-indigenous-people.pdf>

The indigenous peoples of the River Tapajós are aware of their rights, as Cacique Brás Tupinambá tells us:

“So, we know that when they are planning a project here in these territories, they have to consult us. But there are still institutions who turn a blind eye to this right” (2020).

According to Florêncio Maytapu, this right is not upheld by the Brazilian government.

“No, no. The state institutions do not care a bit about this right to consultation, quite the opposite. Whenever there is any initiative by the government institutions, whether that be the Executive, or institutions like IBAMA [the Brazilian Institute of the Environment and Renewable Natural Resources] or ICMBio⁹, they just scoff at the right to consultation” (2020).

The FPIC is either not respected by the Brazilian government, or they “turn a blind eye”, as Cacique Brás Tupinambá says (2020).

“Although there is a really good protocol, ILO Convention 169, which Brazil signs its name to as a member of the ILO, we can see it is not being respected. They are not respecting the right to FPIC set out in it” (Graça Tapajó, 2020).

Rather, they violate the FPIC:

“There is no prior, free and informed consultation. We see those rights being violated quite clearly – whenever we get to a place, we tell the people about a project that is going to be implemented, and they know nothing about it, or only a small group was called upon for discussion. ‘We have discussed it and we are bringing it in’ [the small group will say]. It is not true. For a work to be done well, people need to be organised, the impacts need to be clearly explained,

9 The Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio [Chico Mendes Institute for the Conservation of Biodiversity]) is a governmental agency under special regime. Created on 28 August 2007 by Law 11,516, the ICMBio is linked to the Ministry of the Environment and integrates the National Environmental System (Sisnama for its acronym in Portuguese). The institute is responsible for executing the actions of the national system of nature conservation units, and it can propose, implement, manage, protect, tax and monitor the conservation units set up by the Union. It is also responsible for developing and executing biodiversity research, protection, preservation and conservation programmes and acts a role of environmental policing to protect the federal conservation units. Available at: <https://www.gov.br/icmbio/pt-br/aceso-a-informacao/institucional/o-instituto>.

they need to know what will happen to their lives, their culture, to the river, to all living beings, and that isn't taken into account" (Graça Tapajó, 2020).

For a consultation to be valid, the government must follow the protocol of the people who are going to be consulted, as we are told by Alessandra Munduruku:

"The consultation protocol clearly says they mustn't just consult one association or one chief, but everyone! Women, children, the elderly, the pajé [wise person], the warriors, the teachers, nurses and technicians, everyone" (2020).

Florêncio Maytapu tells us about what happens with the indigenous peoples in the Baixo Tapajós:

"They hold quick meetings, listen to a few people, give lengthy explanations on some project or another and say they have listened, they have consulted us. That happens with the ICMBio and the TAPAJOARA [Tapajós-Arapiuns Extractive Reserve Associations]. They call it a consultation, but it clearly isn't" (2020).

Also, the consultations are supposed to respect the time¹⁰ of the indigenous peoples. Respecting the culture means respecting the indigenous way of life, which is very different, and has specific and different demands. However, they do not respect that time, they don't respect what is set out in the protocols.

"We want the government to respect this protocol and listen to us, as set out in the protocol" (Juarez Munduruku, 2020).

"They have the protocol, they say they respect it, but what happens? They call a quick meeting, saying 'on such and such a day there will be a meeting in such and such a Community', and they call everyone to the meeting. Then we get there, and they say what they want to say. And call it a consultation, but it is not one! A prior, free and informed consultation needs time. A lot of time. So that we can memorise everything they have said and know if it is going to be good for us or not. That's how consultation needs to be for us" (Brás Tupinambá, 2020).

Another thing that needs working on is the information given at the consultation.

¹⁰ Time is a concept that works differently for the indigenous peoples. Time as a synonym for culture.

“For as long as we don’t understand the way it might affect us and what their interests are [with the projects], they need to sit down with us and explain, giving real and true information that we can understand” (Alessandra Munduruku, 2020).

Another important point that is not respected, is:

“When they talk about their projects and the “benefits” they will bring, they don’t tell you the other side of it” (Abimael Munduruku, 2020).

If the consultation is going to be a valid one, the people need to have understood the information given.

Several violations of the right of the indigenous peoples to be heard are being committed. Nevertheless, using consultation protocols as a tool to exercise the FPIC right has brought a certain amount of security:

“The consultation protocol has definitely brought us a measure of security. A lot of security. Even though they hold these very fast meetings. People think twice before coming onto our territory” (Brás Tupinambá, 2020).

One example of this reluctance occurred at the RESEX¹¹ conservation unit in the Tapajós-Arapiuns area:

“They wanted to have a forest project in our territory. Now they are saying there will be no forest project in our territory. They had even set up the demonstration project. It was a forest carbon project, to do with loads of trees, but we managed to stop it. When they were busy setting it up, we paralysed the forest project and the carbon project¹². Once we brought in the consultation protocol, they decided

11 Reserva Extrativista. Brazilian Resource Reserve

12 “Reduction of Emissions from Deforestation and Deforestation (REDD) mechanism, which foresees the possibility of limited compensation of greenhouse gases emissions by investments in the recovery and preservation of forests as well as biodiversity. It is understood that the possibility of developed countries to compensate a small and limited part of their emissions with investments in developing countries, for the maintenance and recovery of the forests, does not undermine the requirement of reducing greenhouse gases emissions through the establishment of new production and consumption patterns in historically polluting countries, and contributes to the maintenance of the remaining forests.” Available at: https://pib.socioambiental.org/pt/Cr%C3%A9ditos_de_Carbono:_Oportunidades_e_Riscos_para_a_Etnogest%C3%A3o_de_TIs

not to do any projects in our territory after all. If we shut our eyes and give up fighting, they will be back” (Brás Tupinambá, 2020).

The appropriation of the FPIC by the indigenous peoples is another important win, alongside using consultation protocols.

“The communities themselves, the movement, has started researching what the right to consultation means” (Florêncio Maytapu, 2020).

This strengthens the groundwork and the strategy of resistance presented in session 3.3, which strengthens the raising of awareness of the indigenous peoples of the River Tapajós about the “death projects” (Anderson Munduruku, 2020).

“We were doing some very important research, even at the beginning of the pandemic, going from village to village, doing whole days of research, raising peoples’ awareness of their rights. Unfortunately, the pandemic struck, and we had to stop all of it” (Florêncio Maytapu, 2020).

Another positive thing about the consultation protocols is that it makes people demand more from the government.

“Making the government uncomfortable, making companies uncomfortable, telling them we must be consulted, that we haven’t been consulted, making sure the Public Prosecutor knows we weren’t consulted.” (Florêncio Maytapu, 2020)

The indigenous peoples of the River Tapajós have also had some success using the consultation protocols, as Alessandra Munduruku tells us:

“The first time was when we managed to stop the São Luiz do Tapajós hydroelectric project. The second was when we managed to delay the Ferrogrão railway project. Another was the ports. But with this government encouraging them and saying there won’t be any consultations, [it’s difficult]” (2020).

When the protocols are not respected, or just anytime really, the peoples unite to fight the planned railway, the waterway and the dams, and this raises awareness, empowers them, strengthens their resistance and becomes a legal tool. In the next section, we will talk about the policy of unity that the indigenous peoples of the River Tapajós are using to fight the infrastructure projects planned for the region.

3.6 Alliances

This section gives a summary of the answers given to the following question: “What alliances have been made between the indigenous communities, internationally and others? Are the alliances believed to be strong enough to resist the mega infrastructure projects planned for the River Tapajós region?” Alliances are a way of fighting projects such as the hydroelectric, railway and waterway projects. These alliances are seen as key, as Abimael Munduruku tells us,

“unity is key, because we need support in this fight” (2020).

The “death projects” (Anderson Munduruku, 2020) force the communities to unite, because the impact is felt by everyone in the River Tapajós region, as we explained in earlier sections.

“So, being united will make us strong. Not just the indigenous movement, but the trade union movement, the movement of those impacted, the fishermen’s movement” (Abimael Munduruku, 2020).

Their shared aim brings the peoples of the River Tapajós region together under one flag.

“The government’s aim is to eliminate all of Brazil’s indigenous peoples. They believe we hinder development. They believe we are holding them back. What affects us here in Médio Tapajós [middle region], affects them there in the Baixo Tapajós [lower region]. I think the peoples need to unite and fight together, because we will be much stronger that way. Unity is key to this fight” (Anderson Munduruku, 2020).

Our study gathered information on the types and levels of alliances made by the peoples of the River Tapajós region. There are four levels:

- 1) local; indigenous councils in each community, which bring together leaders from the different villages, such as, for example, the Conselho Indígena Tapajós Arapiuns [Tapajós Arapiuns Indigenous Council] (CITA), which brings together the indigenous peoples of the Baixo Tapajós,
- 2) regional; for example the Federação dos Povos Indígenas do Pará [Federation of Indigenous Peoples of Pará] (FEPIPA), which brings together different indigenous peoples in the state of Pará,
- 3) national; for example the Articulação dos Povos Indígenas do Brasil [Articulation of Indigenous Peoples of Brazil] (APIB), which brings together most of the indigenous peoples of Brazil, and

4) international; for example the alliance with the Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica [Coordinator of Indigenous Organisations of the Amazon Basin] (COICA) and other non-indigenous organisations.

In the next sections, we present what we observed on the ground regarding each level of alliance:

- 1) the local alliances, which are those between the indigenous peoples of the River Tapajós;
- 2) the regional alliances, between the indigenous peoples of the River Tapajós and the indigenous peoples of the state of Pará and the Amazon Basin;
- 3) the national alliances, between the indigenous peoples of the River Tapajós and other indigenous peoples in Brazil; and
- 4) the international alliances, between the indigenous peoples of the River Tapajós, international organisations and indigenous peoples in other countries.

PHOTO: THOMAZ PEDRO



“The government’s aim is to eliminate all of Brazil’s indigenous peoples. They believe we hinder development.” Anderson Paca Munduruku

3.6.1 Local Alliances

Local alliances are made with the nearest peoples, who generally live in the same territory. One example is the alliance between the indigenous peoples of the Baixo Tapajós, the Conselho Indígena Tapajós Arapiuns (CITA), which brings together 13 communities in that region.

“Here in the Baixo Tapajós we are 13 communities. These 13 communities are working together. That is in our region, the Baixo Tapajós” (Brás Tupinambá, 2020).

Cacique [the tribe’s highest representation] Manoel Munduruku tells us about this:

“Our council has a strong alliance with all the other councils in the form of the CITA, which is made up of the Munduruku council of Takuara, the Maró council, the Tupinambá council and the council of the Cobra Grande territory. This alliance fights the fight together, united. It is very important to us. Not only that, but we have our spiritual supporters, our ancestors, who are beside us to defend us in all our battles” (2020).

The CITA is an alliance between the following indigenous peoples of the Baixo Tapajós: Arapiuns, Munduruku, Apiaká, Maytapu, Kumaruara, Jaraqui, Tupinambá, Borari, Cara-preta Munduruku, Tapuia, Arara-Vermelha (Arapiranga), Tapajó and Tupaiú. It is an alliance on local, regional, national and international level between communities and partners. It is a bridge, a space where the communities can express themselves and gain strength in the battle against the projects planned for the River Tapajós region.

“Locally, we have our groups, we are well structured and organised within our territory. Each village has its own association. Açaizal village has its association, Ipaupixuna village has its association, Cavada has its association, and within the territory we have created a council that represents all those villages. The council has autonomy to take our demands and problems to the Public Prosecutor, and he also has autonomy to approach the CITA. The CITA represents the 13 communities of the Baixo Tapajós region. We are interconnected” (Josenildo Munduruku, 2020).

Another example is the alliance between the Munduruku peoples of the Médio Tapajós, which brings together various villages of the region in the Associação Indígena PARIRI [Pariri Indigenous Association] (A.I. PARIRI):

With its headquarters in the village of Praia do Mangue (Itaituba), the Pariri Association was created on 8 November 1998, and its main objective is the physical and cultural survival of the Munduruku people of the Médio Tapajós region, with legal representation of eleven villages: Praia do Mangue, Praia do Índio, Sawre Apompu, Sawre Jaybu (Terra Indígena Sawre Bapim), Dace Watpu,

Sawre Muybu, Boa Fé, Karo Muybu, Dajekapap, Sawre Aboy, Poxo Muybu, (Terra Indígena Sawre Muybu) (A. I. PARIRI, 2021)¹.

These organisations consolidate the alliances between the different communities in the River Tapajós region. These alliances are a way of fighting projects such as the hydroelectric, railway and waterway projects. The alliances are expressed in meetings where the people can talk about personal and political issues, as we are told:

“As far as relationships with our relatives in the Tapajós region go, we have the strongest relationships with the Munduruku from the middle and higher regions. Sometimes we have women’s meetings, sometimes assemblies invite us to their meetings and sometimes they come here” (Auricelia Arapiun, 2020).

3.6.2 Regional Alliances

Regional alliances are between people from different ethnic regions. An example is the Federação dos Povos Indígenas do Pará (FEPIPA), which is between eight ethnic regions: Altamira, Belém, Itaituba/Jacaraeacanga, Marabá/Tucuruí, Oriximiná, Novo Progresso, Tucumã/São Félix, Santarém, bringing together 58 ethnic groups in the state of Pará, including all the ethnic groups living in the River Tapajós region:

The Federação dos Povos Indígenas do Pará – FEPIPA – was founded in April 2016. It is an indigenous organisation of a private and legal nature, with its own legal personality, non-profit, created to promote social, political, economic and cultural well-being and to defend the human rights of the indigenous peoples. Its headquarters is in the municipality of Ananindeua (PA) [State of Pará]. The FEPIPA aims to defend and to discuss matters of collective interest to the indigenous peoples of the state of Pará, promoting their social, political, economic and cultural organisation and strengthening their autonomy (COIAB [Coordination of the Indigenous Organizations of the Brazilian Amazon], 2021)².

The Coordination of the Indigenous Organizations of the Brazilian Amazon (COIAB) is a network that brings together the indigenous peoples of the

1 Available at: <https://www.aipariri.com.br/untitled-c1k5m>.

2 Available at: <https://coiab.org.br/para>.

Brazilian Amazon and is active in nine states: Acre, Amapá, Amazonas, Maranhão, Mato Grosso, Pará, Rondônia, Roraima and Tocantins, and is composed of a network of local, regional and federal associations, indigenous women's, teachers and students groups, and is subdivided into 64 regions, including the Baixo Tapajós and the region of Jacaraeacanga/Itaituba, which are regions of the peoples of the River Tapajós:

COIAB was founded on 19 April 1989 and is Brazil's largest regional indigenous organisation. It was set up by leaders of indigenous organisations that existed at the time and came out of the political fight of the indigenous peoples to have their rights recognised, and a set of social and political changes in Brazil after the implementation of the Federal Constitution of 1988. COIAB aims to defend the rights of the indigenous peoples to land, health, education, culture and sustainability, considering the diversity of the communities and seeking independent political expression and strengthening of the indigenous organisations (COIAB, 2021)³.

For the peoples of the River Tapajós region, both FEPIPA and COIAB are alliances that help in the fight and are spaces where they can meet with other peoples of the Brazilian Amazon and unite to face challenges together.

"This is a partnership. FEPIPA and COIAB are partners who have always supported us and given us strength in the fight" (Manoel Munduruku, 2020).

Graça Tapajó tells us:

"[Forming] partnerships is about finding other communities, other ethnic groups, who join their experience to ours in the fight and make us stronger. COIAB brings together the different associations, and we have the CITA which is represented on the COIAB" (2020).

³ Available at: <https://coiab.org.br/quemsomos>.

3.6.3 National Alliances

The APIB is a national alliance. It is an important space and well-respected organisation, according to Auricelia Arapiun:

“The APIB gives us respect at the national level for our larger organisations. We [the indigenous peoples of the River Tapajós region] are guided by FEPIPA and COIAB” (2020).

This alliance is made up of the following organisations: Articulação dos Povos Indígenas do Nordeste, Minas Gerais e Espírito Santo [Articulation of the Indigenous Peoples of the Northeast, Minas Gerais and Espírito Santo states] (APOINME), Conselho do Povo Terena, Articulação dos Povos Indígenas do Sudeste [Council of the Territories, Articulation of the Indigenous Peoples of the Southeast] (ARPINSUDESTE), Articulação dos Povos Indígenas do Sul [Articulation of the Indigenous Peoples of the South] (ARPINSUL), Grande Assembleias do povo Guarani [Grand Assemblies of the Guarani People] (ATY GUASU), Coordenação das Organizações Indígenas da Amazônia Brasileira (COIAB) and the Comissão Guarani Yvyrupa [Guarani Yvyrupa Committee]. APIB covers all the peoples of the River Tapajós and is referential to the Brazilian indigenous movement.

The Articulação dos Povos Indígenas do Brasil – APIB – was created by the Acampamento Terra Livre [Free Land Camp] (ATL) indigenous movement of 2005. The ATL is a national protest, which has taken place every year since 2004 and aims to raise awareness on indigenous rights and demands that the Brazilian government meet their demands. APIB is referential in the indigenous movement in Brazil and is an organisation working at the grass roots level. It consolidates all the regional indigenous organisations and was created to strengthen the unity of the communities, to bring together different regional associations and to mobilise indigenous organisations to defend their rights (APIB, 2021)⁴.

APIB’s main forum for building and strengthening this national alliance is through the ATL which happens annually in Brasília, the capital of Brazil. It is

⁴ Available at: <https://apiboficial.org/sobre/>.

a space for reporting problems, exchanging information and sharing experiences. Cacique Brás Tupinambá tells us about knowledge sharing within the ATL:

“Now at a national level all we have is the ATL that happens in Brasília. It is run by the APIB. That’s the only time we meet with the APIB. We also approach the government by means of the ATL. We meet with institutions and hand over documents and have hearings there in Brasília” (2020).

3.6.4 International Alliances

COICA is the international alliance which was referred to during the interviews. It is an international alliance amongst the indigenous peoples of the Amazon of the following countries: Peru, Guyana, Bolivia, Brazil, Ecuador, French Guyana, Surinam, Colombia and Venezuela.

COICA is an indigenous organisation of international level which guides efforts at promotion, protection and security of indigenous peoples and territories by defending their ways of life, principles and social, spiritual and cultural values. COICA exists to defend life in the Amazon region so that the communities remain there as a seed in the ground and protect the forests so that everyone has a living planet to guarantee the continuity of present and future generations. COICA states that the indigenous communities’ history and world view is holistic, because the life of the peoples is directly linked to the other beings that live in the Amazon forest (COICA, 2021)⁵.

The indigenous peoples of the Rio Tapajós region are also members of this alliance:

“On an international level, we have the COICA, which is the coordination of the Amazon Basin that also brings together Brazil’s indigenous peoples in one space” (Graça Tapajó, 2020).

This alliance brings together the indigenous movement internationally and they forge relationships with indigenous peoples in other countries, other places and of course, the Amazon itself.

⁵ Available at: <https://coica.org.ec/que-es-la-coica/>.

“Our relatives fight on an international level by means of COICA. We had a relative here [with whom] we were very close, who was a coordinator of COICA at the time. Through them, we started to bring in other relatives [on an international level]” (Auricelia Arapiun, 2020).

Besides alliances with other indigenous peoples, locally, regionally, nationally and internationally, there are alliances with indigenous and non-indigenous organisations, such as the partnership that the Tupinambá people have with the Society for Threatened Peoples in Switzerland. This alliance supports the fight for these people:

PHOTO: THOMAZ PEDRO



“We have moved forward by a long way because of the support of the Society for Threatened Peoples in Switzerland.” Brás Tupinambá

“Now the Tupinambá of the lower region [Tapajós] have a partner. A partner who is not in Brazil. They are in Switzerland. That is the STP (APA for its acronym in Portuguese). It is helping the Tupinambá fight for their territory. The Tupinambá territory is one of the larger areas in the lower region [Tapajós]. We have moved forward by a long way because of the support of this group. Without them, we probably wouldn't be where we are today” (Brás Tupinambá, 2020).

These alliances with indigenous and non-indigenous international organisations are, according to the peoples of the River Tapajós region, key to helping raise awareness of what is happening, letting the world know about the threats from mega projects like the hydroelectric plants, the waterways, the railways and other projects planned for the region.

“International awareness has been a very important factor. We have seen that it is slow [in terms of results], but there has been an impact. A lot of companies and financing bodies are no longer financing the projects” (Adenilson Borari, 2020).

This raising of awareness has been very important, as reported here:

“We have international organisations helping us defend ourselves. The difference is that these international organisations come here and actually listen to what we have to say. International organisations are not really doing what the government says they are – it says they want to take away our national sovereignty – but they actually listen to us. The international organisations are doing what the national government should be doing” (Joseñildo Munduruku, 2020).

These alliances are built with great care, checking out the real motives of those who are seeking them. In this way, good relations can be achieved and indigenous peoples are not disadvantaged, as was reported:

“When it comes to making alliances with national organisations, we are very, very careful, and check out their real motives. Who are these people coming here to the Tapajós region? Those who come here must seek to speak with the Tapajós Arapiuns Indigenous Council. What are their motives? What are their objectives?” (Graça Tapajó, 2020).

Indigenous communities believe it is very important to have more contact with international organisations and forge more international alliances.

“International organisations have a good track record in the defense of human rights. We can see that these organisations are really helpful to us in getting our message to the world” (Joseñildo Munduruku, 2020).

“Everything that is brought to the light [for those who want to develop these projects] is harmful to those who are doing wrong things. So, this is the light that we have and can shine on these situations. We have the chance to tell the world what is really happening and not let the government get away with selling an image of a Brazil that is doing everything it should be doing. Because it is not. Rights of indigenous peoples, quilombola communities, minorities, are being disrespected and weakened more and more. This is what we are concerned about, and this is what these organisations are helping us combat” (Joseñildo Munduruku, 2020).

Or, as Adenilson Borari says:

“This alliance is important. It is important, even if we don’t always use it to publish information, because sometimes we have to be careful about our own lives and the lives of our leaders who are travelling around. But it [the alliance] has given rise to a very positive international discussion. We have indigenous voices speaking out against the soya plantations over there in China, telling the Chinese that the soya products they eat are harming the lives of indigenous peoples in the Amazon” (2020).

Adenilson Borari finishes by saying:

“This is important, because we end up talking even to the financiers of these mega projects, and we are able to tell them it’s not like it’s sold to the international market, agribusiness isn’t really following all the licensing rules. We know that’s the image they want to get across, that they are not chopping down all the forests and invading territories. We know this is not true. We send indigenous spokespersons to Europe, the biggest consumers of Brazilian raw materials, telling them that what they are eating is produced on indigenous territory, that leaders have died fighting those companies and that they use us as slave labour. We raise awareness, and that is important work” (2020).

The indigenous peoples of the River Tapajós region believe that alliances are part of a strategy in their fight to defend their traditional territories. The alliances, as we found out in the interviews, are on different levels:

- 1) local;
- 2) regional;
- 3) national; and
- 4) international.

For these ethnic groups, the relationship and the political articulation with other indigenous peoples (local, regional, interregional or international) serve to strengthen them in the fight for their territories, their rights and their very survival.

There are also alliances with international non-indigenous and indigenous organisations. Such as the Associação para os Povos Ameaçados APA [Society for Threatened Peoples STP]. This organisation helps them report and publish on an international level the threat to the indigenous peoples’ human rights.



“We send indigenous spokespersons to Europe, telling them that what they are eating is produced on indigenous territory, that leaders have died fighting those companies and that they use us as slave labour.” Adenilson Borari

So all the alliances, on all levels, help the indigenous peoples fight for survival and for their territories. They are important because they help strengthen the demands and needs of these groups, especially when it comes to relating to governments, financiers and big companies trying to bring mega infrastructure projects into the Amazon region and push out these indigenous peoples.

3.7 Unfeasibility

In this section, we present the answers to the following question: “What would it take for the Ferrogrão [grain railway], waterway and hydroelectric projects to be acceptable to the indigenous peoples?” Unlike other sections, where answers were summarised, in this section the direct answers are given, because those interviewed, both in the Baixo Tapajós [lower region] and the Médio Tapajós [middle region] were unanimous in answering that the projects were unfeasible.

All those interviewed believed that there was no way that the mega projects, such as the railway, the waterway and the hydroelectric project, at least in their current form, could be carried out without having a negative impact on the daily lives of the indigenous peoples of the River Tapajós region. Therefore, they do not accept the projects.

Cacique [the tribe’s highest representation] Brás Tupinambá is adamant that the projects planned for the River Tapajós region cannot be allowed to go ahead. He says they will not be of any benefit to the indigenous peoples living in the area where they are planned. Implementing them would cause death and bring an end to their livelihoods, and this is why they do not want these projects in their territory or in their lives. As he says,

“these projects are impossible for us. They will not bring us any benefits at all. They will be good for nothing. As far as we are concerned. That is why we are opposing them with our different social movements. If they are implemented, that will be the end for us. The government’s hydroelectric projects, waterways, mining and logging projects all impact us negatively. And they won’t be any good. They will bring death. When the government comes in, they come in with weapons and [especially] this current government, which says it kills so that nobody will die. We do not want any hydroelectric projects or any of it” (2020).

For Abimael Munduruku, these projects are unfeasible because of the way they are planned:

“The first thing is that these projects are unfeasible [for us] and the second thing is the way they are planned” (2020).

The social and economic effects of such projects are not being equally taken into consideration, according to Abimael Munduruku, and this lack of balance is what makes these mega projects unfeasible:

“Those who think about [plan] the projects for the Amazon region have usually never lived here. People from Brasília are making plans for a place they don’t even know. They have no idea what it is like here, yet they [the capitalists] think everything has to be done their way. They make their plans without even considering whether their projects have taken [our rights] into account. They say those don’t fit into their ideas on what the economic and social outcomes should be. But the economic outcomes and the social outcomes don’t match up and can’t be equally balanced. The two don’t go together. So, there is a fight [a conflict] here and the capitalists, because they are the ones with the power, implement and implement even [with] all the action [of the indigenous peoples who are resisting], and implement more” (2020).

Cacique Estévina Tupinambá believes that the projects are unfeasible because those who represent the projects are not transparent about them. She says that although they say the projects will not bring any negative impact to the indigenous peoples, the opposite is actually true.

“So, we see that [...] this project is run by people who say they are going to benefit [the territory]. They say income will be generated. They say the residents will see benefits, but we can see that it won’t be like that for us. It really won’t. It will be different. We know that all these projects will bring harm, especially to our land. We have plenty to hunt here, and the river is full of fish. I know that these projects will end all that. It won’t be as easy as it is now [to sustain ourselves on the land]. That is why we are not happy and don’t accept many things” (2020).

Adenilson Borari says that these projects are not planned for the benefit of the indigenous peoples of the River Tapajós region. They are planned to benefit the interests of the capitalists. He cites the example of the waterway and the hydroelectric projects:

“Look at the types of project planned - the current ones are not feasible for us, because they haven’t been planned to benefit the [indigenous] population. They are mega projects to extract raw material for export. So, for example, we might say, if you are going to construct hydroelectric projects, why don’t you invest in wind or solar power, which has a less harmful impact? But they are not interested in benefiting the people. So, as we say, they [the people planning the

projects for the region] are not interested in planning something more feasible for the local population. Look at the hydroelectric project. They say they want to open the river to increase the flow-off for agricultural production. Here in Santarém, the River Tapajós here in the Amazon region is the gateway to the sea and export to Europe. So basically, these projects are unfeasible” (2020).

Auricélia Arapiun does not believe this is really sustainable development. She believes they need to invest in different ethnic models for education and healthcare, rather than mega projects such as those planned for the River Tapajós region:

“They talk about sustainable development, but how can development bring anything but destruction? How? If that is possible, we have not seen it yet. I believe that for development to reach our communities, our villages, our territory, we need good public education and health policies, policies that are good and that differentiate [...]. We should be able to live sustainably off our own territory, not have it exploited by others. We should be able to continue living here and living off what belongs to us. There are no policies for that. Nobody wants to help the indigenous peoples live off their own land without destroying the forests” (2020).

PHOTO: THOMAZ PEDRO



“We should be able to live sustainably off our own territory, not have it exploited by others.”
Auricélia Arapiun

Agreeing with this, Alessandra Munduruku says that sustainable projects are impossible, because every project will have its own impact:

“There is no solar panel that won’t have some sort of impact. For example, where do the batteries come from? Where does the material come from? It all comes from somewhere. All these projects, solar and wind energy projects, they all bring some sort of impact. Sustainable projects don’t really exist. There is always some sort of impact” (2020).

Graça Tapajó reminds us that none of these projects planned for the River Tapajós region take into account the spiritual and world views of the indigenous peoples, and that is one of the things that makes them unfeasible:

“When these projects come, they don’t take this world into account [the spiritual world]. I am talking about the world view and spirituality of the indigenous peoples. [...] I want to live as I wish, alongside my people, in my own way. I do enjoy many of the pleasures of the western world too. But in a way that doesn’t harm the environment. We don’t understand why they insist [on these projects]. But they don’t really care whether we understand or not. They don’t respect us. Whenever you bring in the idea of our world view and our spirituality, you can see they don’t respect us. We have to make them see things our way and respect us. We indigenous peoples want to live in a way that takes the supernatural into account. That brings us into conflict with them. Their attitudes are very different to our own. They don’t understand us, or don’t want to” (2020).

Luana Kumaruara tells us how indigenous people think differently to non-indigenous people. They have a different mindset, a different world view, and that ends up with projects that do not suit the indigenous peoples:

“They say we are against development. We ask, what development?! We also want development, but in our own way. [...] We have different mindsets and think differently. We are not against development, but it depends on what that development is. We have agricultural and ecological [development] projects and community tourism projects, as well as cooperative groups that sell our crafts. We have our demands, and we have our proposals. But our way is not about profit, which is [something] the capitalists want” (2020).

Cacique Josenildo Munduruku also tells us about how differently indigenous and non-indigenous people think. He tells us of the big differences in indigenous and non-indigenous attitudes to development, stating that the railway,

waterway and hydroelectric projects planned for the River Tapajós region do not respect the indigenous way of life and will bring a lot of harm to the indigenous peoples:

“They have their views. Capitalists have their perspective on development and we, the indigenous peoples, also have our perspective. However, our views are, in the main, very different. Many farmers, soya plantation owners and government bodies say that we are standing in the way of development. They say we don’t want development. What sort of development are they talking about? They are talking about coming into our houses and destroying our bathrooms, our river channels, our river. About destroying our places of rest, the places we commune with nature, the jungle, where we feel at home, where we are happy. Our home! What sort of development is that for us? That is not our type of development. [Development] needs to respect our lifestyle, our territory and future generations of our people. Their type of development is not what we would call development. For us, development is about what will be development for us, our children, future generations, without sacrificing our lifestyles and our livelihoods. That is what we would call development. Capitalism doesn’t care about that. Those hydroelectric projects, those waterways, those railways, that soya extraction, it is all destroying nature, destroying the vegetation, the flora and the fauna. And their development always leaves destruction in its path, in the form of prostitution, drugs and accidents. This has to stop” (2020).

Aldira Munduruku says the projects are unfeasible because of the negative impact they would have. She says they need to think about how to develop in a way that will not cause harm to the indigenous peoples of the River Tapajós region and the forest.

“Their projects are all destructive to us. They always bring us problems. Including the hydroelectric projects. We talk about that a lot, the hydroelectric project and the railway that we know they want to bring just behind our village. The branch line would be really close. None of the government’s projects bring anything but negative impacts for our people. They ought to find other ways of generating electricity. They ought to find ways that are different and that don’t harm us and our forest” (2020).

Cacique Manoel Rocha Munduruku says the projects planned for the River Tapajós region will only benefit the politicians, because they are the ones who will profit from these projects, not the indigenous peoples, who will be negatively impacted:

“What sort of profit will that bring for us indigenous peoples? No profit at all, only harm, discord, and other negative impacts on our territories. Our representatives, who say they are representing Brazil, don’t care about these people, they just want to make profits on importing, to look good politically. They don’t help anyone except the politicians. You can see that with Belo Monte. At the beginning, they were handing out a small amount to all the tribes. Now, there is no fish, no land, no plants, no hunting. They have lost a lot of their means of survival. How can that [benefit] us, [the indigenous peoples of the River Tapajós region]? These [mega projects planned for the River Tapajós region] bring no benefits whatsoever” (2020).

Graciene Munduruku says the indigenous peoples need to be heard, their views considered and respected:

“It will definitely impact us, both directly and indirectly. We would like them to look at it from our point of view. We want them to see our reality” (2020).

PHOTO: THOMAZ PEDRO



“We would like them to look at it from our point of view. We want them to see our reality.”
Graciene Munduruku

Rozeninho Munduruku says the impact starts to be felt when the indigenous peoples start to change their lifestyles. When these big projects generate jobs and indigenous people start working on them, then they end up leaving their own lifestyles and their own way of production:

“In my opinion, it will cause some sort of impact, for example [...] I will cite my own example. When we start working [on these projects] we become lazy, we stop working our own land, we stop fishing, so that is how it impacts us” (2020).

Florêncio Maytapu says these big projects are unfeasible because they are part of a bigger picture, and the impact is felt not only in the region where they are implemented, but all over the world:

“I believe the world is at a point in history where humanity is facing the final battle. If they destroy the rivers, the waterfalls and the forests, in order to gain, we all lose. We all lose. We lose the indigenous peoples, we lose the white people, the black people, the country dwellers, the forest dwellers, the jungle dwellers. We lose the people of New York, of London, Rio de Janeiro, all of them, because we destroy the rivers, the forests, and we impact everyone.” (2020)

Cacique Luís Kumaruara, when asked about the feasibility of the mega projects such as the waterway, hydroelectric projects and railway projects for the River Tapajós region, confirms the importance of demarcation of territory as a way of fighting back, because that will show how badly they would impact nature and future generations. In his answer, he stated:

In order for them [the big projects] not to bring destruction, I think demarcation is a good strategy. We want to be vigilant with that. Tupinambá with Kumaruara would be a bigger area than separating out the Kumaruara and Tupinambá territories. That would make us stronger against these [projects]. I think that way [we could] defend ourselves better and be safer. If we want to fight them, we have to unite, find the best way to defend ourselves. I don't know how long I personally will have, because of my age, so we need to fight together. None of us are here to stay. We do our best to survive. But what about the young people - our grandchildren, great grandchildren and great-great grandchildren, how much nature will be left for them to see? (2020).

Cacique Juarez Munduruku thinks it would be difficult for the projects to adapt to the criteria of the indigenous peoples. He believes that even if the territories were marked out, the indigenous peoples would still be at risk:

“I don't know, I think it would still be difficult, even if the territory was marked out. The same could happen again. It doesn't get better. Brazilians are cutting down more and more forest. [...] More people are likely to invade. I don't think it will get better” (2020).

Cacique Valdemar Munduruku says that he is always hearing of new infrastructure projects, and that they all bring negative impact:

“These hydroelectric and railway projects are no good. We are always hearing about these projects, and we know they are going to have a negative impact on us. The soya plantations send soya this way and it gets into the water. The fish come up the river and we catch them [and this] ends up affecting our health. This is a concern in the Médio Tapajós region” (2020).

Luciane Munduruku also believes that these projects planned for the River Tapajós region are unfeasible because mega projects like hydroelectric projects destroy everything around them – people, plants, animals, as she says:

“I really don’t think this can be allowed to happen. Because when people are getting a lot of income from what they are doing they are bound to want to take it further, as is the case with mining or stealing wood from indigenous territory. And the hydroelectric project, because it is so big, will just end up destroying land, forest and the livelihoods of the communities who live near to all of it” (2020).

Anderson Munduruku says the projects are totally unfeasible and will always end up negatively impacting the indigenous peoples:

“I think it would be impossible for such huge infrastructure projects not to have harmful effects. That scenario just doesn’t exist. Like we are always saying, these guys say they are coming to do sustainable prospecting. That scenario just doesn’t exist. Sustainable exploitation is an oxymoron. There will always be negative effects. Someone will always be negatively impacted. These projects are unfeasible from our point of view. There is no way such projects won’t affect us, both directly and indirectly. That is why we believe it is unfeasible to have any kind of infrastructure projects in the River Tapajós region” (2020).

All these strongly held views and convictions show clearly how much the indigenous peoples of the River Tapajós oppose these projects – the railway, the waterway and the hydroelectric complex – and believe they are planned by capitalist developers who do not take other world views into account or respect the lifestyle of these communities or nature itself and what it means to these people. That is why they believe they are unfeasible.

In conclusion, these projects are unfeasible because of the differences between these two world views and the fact that it will not just be one group of people in the Amazon who will be affected – it will be humanity itself. The indigenous peoples believe that these mega projects in the River Tapajós region will affect not only them but other regions of the country and even other parts of the world.

PHOTO: THOMAZ PEDRO



“Brazilians are cutting down more and more forest. More people are likely to invade.” Juarez Mundurucu

3.8 President Jair Bolsonaro's Anti-Indigenous Policies

In this section, we present answers given to the following question: "Do you think the situation in Brazil has gotten worse since Jair Bolsonaro came to power?" These are participants' answers on the current government and its attitudes to indigenous peoples and large infrastructure projects. According to answers given by interviewees, these mega projects are supported by the Brazilian government in general and in particular by Jair Bolsonaro's current government. The government is closely aligned with the interests of international investors and has acted against the interests of Brazil's indigenous peoples, as we are told below:

"The current government is doing everything we didn't want it to. We have seen an increase in threats, attempts to implement projects without consultation, threats against indigenous leaders, discrimination and racism under this government. That's why we feel this government is not on our side. Indeed, Bolsonaro has made it clear from the beginning that he is not willing to concede one centimetre of indigenous territory" (Adenilson Borari, 2020).

As Adenilson Borari says, this government does not respect the indigenous peoples. As a result, there has been an increase in racism and violation of the human rights of the indigenous peoples. Luciane Munduruku tells us that this government has made things worse for the indigenous peoples:

"I think it has gotten way, way worse. Since this president came in, more and more forest has been chopped down. I reckon this year has been the worst so far for deforestation and forest burning. This has had a real impact on the indigenous peoples. It has been tragic for us to see all that forest being destroyed. To watch the forest animals die. For us, every tree is sacred. Every tree represents one of our ancestors. It has been tragic, and Bolsonaro has done nothing to stop it. The number of projects he has implemented is constantly growing. Deforestation and invasions are increasing too" (2020).

Juarez Munduruku shares his view:

"Personally, I haven't seen anything improve since Bolsonaro came into power. I have only seen things get worse. I don't know if it has improved for people of his persuasion, but it certainly hasn't for the indigenous peoples. There has certainly not been more support for indigenous peoples, or demarcation of our land. Our lands is constantly being invaded. As far as we, indigenous peoples,

are concerned, his government has not brought any improvements. I think for the Quilombola communities there has also been more invasion and more deaths amongst the leaders since Bolsonaro came in” (2020).

These opinions show that Bolsonaro’s government has caused a rise in fear, insecurity and uncertainty amongst the indigenous peoples. Their leaders are in constant fear of their lives and the government does nothing to protect them or ensure their rights are upheld, as Alessandra Munduruku tells us:

PHOTO: THOMAZ PEDRO



Bolsonaro's government has caused a rise in fear, insecurity and uncertainty amongst the indigenous peoples.

“This president is causing suffering, pain and sickness. We are here fighting for our territory, but if there were laws to protect it, I could go home in safety to my village there in Itaituba. But there aren't, and I know that if I leave this place, any moment someone could kidnap me and kill me on my way home” (2020).

This situation is clearly shown by proposals for a law permitting prospecting¹ on indigenous lands:

“For us Munduruku communities he [President Bolsonaro] has done nothing at all. The illegal prospectors are asking mining in our territory to be legalised. That is not feasible for us indigenous peoples” (Juarez Munduruku, 2020).

There are also proposals to end demarcation of indigenous territories², and this is causing great concern and anguish, not just for the indigenous peoples of the River Tapajós region but throughout Brazil, as Luana Kumaruara tells us:

“The president's campaign statements saying that he would not demarcate one centimetre of indigenous territory was to please the big landowners (known as “ruralistas”), who don't like us [indigenous peoples]. A president who makes such a declaration can only be declaring war. Since he was elected, he has been following this through, and the indigenous peoples have become more and more resentful against him. Since he came to power nothing has improved for us, either in terms of territory or in other matters. All we can do is try to ensure that things don't go backwards, that we don't lose land that our previous leaders won. Today, we have Joenia Wapichana³ in Congress. If it wasn't for that,

1 Bill [Projeto de Lei (PL)] 191/2020. Author: Executive Power; Presentation: 06/02/2020; Menu: Regulates § 1 of art. 176 and § 3 of art. 231 of the Constitution to establish the specific conditions for carrying out research and mining of mineral and hydrocarbon resources and for the use of water resources to generate electricity in indigenous lands and establish compensation for the restriction of the usufruct of indigenous lands; Status: Awaiting Creation of Temporary Commission by MESA (status 07.07.2021); Complementary Data: Changes Laws no. 6001 of 1973 and 11,460 of 2007. Available at: <https://www.camara.leg.br/proposicoesWeb/fichadetramitacao?idProposicao=2236765>

2 Bill [Projeto de Lei (PL)] 490/2007. Author: Homero Pereira - PR/MT; Presentation: 20/03/2007; Menu: Changes Law no. 6001 of 19 December 1973 on the Statute of the Indian; Complementary Data: Establishes that Indian territory is demarcated by law; Status: The proposal was voted on 29/06/2021; text proposed by the rapporteur was maintained. Result: yes: 39; no: 19. total: 58. Plenary session of the Chamber of Deputies closed. Matter forwarded for discussion by the plenary (status 07.07.2021). Available at: <https://www.camara.leg.br/propostas-legislativas/345311>

3 Joenia Wapichana is the only indigenous person, and the first indigenous woman, in national Congress. “She belongs to the Truaru da Cabeceira indigenous community in the region of Murupu, municipality of Boa Vista, and to the Wapichana, the second largest of the state of Roraima. In the Chamber she leads her party, she is Deputy of the Opposition, she coordinates the Frente Parlamentar Mista em Defesa dos Direitos dos Povos Indígenas [Joint Parliamentary Front for the Rights of Indigenous Peoples], made up of 210 deputies and 27 senators. She is on many key committees, such as the Constitution, Justice and Citizenship Commission (CCJC), the Environment and Sustainable Development Commission (CMADS), the Mines and Energy Commission (CME) and the Education Commission (CE), amongst others. She has written two key reports, one in plenary and the other in committee. Her mandate is a collective one.” Joenia Wapichana (2021): Federal Deputy. Available at: <http://www.joeniawapichana.com.br/quem-sou>.

things would be much, much worse. Thankfully she is able, even at the last minute, to notify us [on projects being voted in] and we [manage] to mobilise protests, even on social media, to pressure the deputies to veto [the projects] and not approve them” (2020).

This violence is not just apparent in legislative proposals, but in daily life in indigenous territories and in the lives of the indigenous peoples of the River Tapajós region. Take, for example, what happened in the village, Fazenda Tapajós, in the Munduruku indigenous territory, in the River Tapajós higher region, in the municipality of Jacareacanga, south-east of Pará state. Illegal prospectors attacked the village and set fire to the house of the Munduruku leader Maria Leusa Kaba. “The federal government is directly responsible for the violence against the Munduruku communities. Active omission by Bolsonaro’s government and incentives to mining in indigenous territories strengthens criminal groups acting inside the Munduruku indigenous territory”⁴. Our interviewees on the ground heard stories of this violence:

“Since Bolsonaro came to power this [the violence] has greatly increased. Many leaders have died since he came to power. They were assassinated, thanks to his policies. Personally, I think this president should be punished for the death of our leaders, who died defending their territory. They still exist today [people who hate the indigenous peoples] and they publicly express their opinions. They are not afraid of expressing those opinions. They discriminate us. They say: “If the president can say it, so can I.” They use that. The matter of legalisation of weapons, all of that. There are many more threats against us. He has made people think they can do what they like” (Anderson Munduruku, 2020).

Along with all of these concerns, the indigenous peoples of the River Tapajós region have had to contend with the SARS-CoV-2 pandemic. They told us of this problem during the interviews:

⁴ “There is no news of anyone being wounded in the fires. However, reports indicate that the group of illegal prospectors is still searching in other villages for leaders of the movement against illegal prospecting in Munduruku territory. They even have a hit list. Maria Leusa Kaba heads up Associação Wakoboron, a group of indigenous women who are against prospecting in indigenous territories. Over the years she has received many death threats. She has even had to leave the region to protect herself and to fight against destruction of the Munduruku territory. In March, the headquarters of the association was destroyed by illegal prospectors in the municipality of Jacareacanga.” CIMI (2021): The federal government is directly responsible for the violence against the Munduruku communities. Available at: <https://cimi.org.br/2021/05/governo-federal-responsavel-direto-violencia-povo-munduruku/>.

“Many indigenous leaders died during the pandemic. Many of our ancients died, and he [President Bolsonaro] has always denied it, saying it was a flu, it was nothing, and many have died” (Graça Tapajós, 2020).

So, along with this health crisis, which has directly affected the indigenous peoples of the River Tapajós region, Bolsonaro’s government has also made decisions that have negatively impacted these communities.

PHOTO: THOMAZ PEDRO



“The president’s campaign statements saying that he would not demarcate one centimetre of indigenous territory was to please the big landowners who don’t like us” Luana Kumaruara.

“We have really felt it. That meeting where Minister Salles talked about making the most of the fact the press is preoccupied with the pandemic to push through [relaxation of environmental laws]. Not only that, but we have had to contend with this terrible coronavirus pandemic. We have had to fight for our territory. They have continued to advance, to threaten our territory, to cut down the forests, to mine, to plant soya. They have pushed through legislation to make them legal [environmental crime and crime against indigenous peoples]. They really have been pushing them through. Bolsonaro’s government is a fascist government that is pro-genocide” (Luana Kumaruara, 2020).

The following report shows a government that is not interested in discussion with indigenous peoples, a government that is on the side of those who want to exploit the Amazon, a government who brings nothing good for the indigenous peoples:

“Bolsonaro’s government is a really bad one for us. We can’t talk to him. We have no rights. They say he is all right, but we know he is causing damage to the indigenous peoples, and he is not here for our rights. He is here for the rich, for those who want to destroy the Amazon for their own gain. For us, he has come to destroy our territory, but he won’t be able to bring us down. We have been here for thousands of years. We have resisted massacres, and we are still fighting. Every day. This government will pass. Will he bring us harm? Yes, he will. But he too will pass. We will not. We are staying right here. There will be many others like him, but we will still be here. We will pass the fight down through our generations, we will defend our communities, defend the rights of our traditions and our land. Our forest, our river” (Anderson Munduruku, 2020).

This government represents a part of Brazilian society, a political project that is way more than just President Jair Bolsonaro, as Florêncio Maytapu tells us:

“President Bolsonaro should be seen as something bigger than just the man he is. He represents a huge chunk of Brazilians from evangelical churches, neo-pentecostal churches, conservative parts of the Catholic Church, anti-indigenous people and other parts of society. Bolsonaro wasn’t the first anti-indigenous campaigner. It is not [only] Bolsonaro who is chauvinist, authoritarian and homophobic, it is not [only] Bolsonaro who is anti-life and disrespects indigenous peoples. He represents a whole sector of the society who is against us and our [lifestyle]” (2020).

These threats did not start with Bolsonaro, and they won’t end with him. The problems faced by the indigenous peoples run deep and are worse right now. So, we need to raise awareness both here in Brazil and abroad on indigenous rights. At the moment, the political climate is anti-indigenous, so companies operating in Brazil need to take great care and carry out risk analysis to make sure they don’t end up supporting the Brazilian government in violating human rights and destroying the environment.

3.9 Final Comments

This report summarises interviews carried out in both the Médio [middle region] and the Baixo [lower region] Tapajós areas. The answers were based on previous experience, as all the impacts of these projects cannot obviously be measured as yet. However, the indigenous peoples of the region where we held the interviews have a lot of experience in fighting projects that threaten their way of life and are therefore well-placed to assess potential impacts, as we will see in this report.

The railway and hydroelectric projects planned for the River Tapajós region are part of a whole set of plans for different ways of exploiting the natural resources of the Amazon region. Hydroelectric projects are needed to produce energy to supply mining and agribusiness ventures. Waterways and railways are needed to export the products of these projects to Europe, the USA or China. The projects aim at shortening routes and increasing profit for large investors.

In section 3.2 Projects, we presented the thoughts of interviewees on the infrastructure projects planned for the River Tapajós region. These projects are planned “from the top down” (Josenildo Munduruku, 2020). According to the interviewees, they do not respect the legal directives of the Brazilian courts and they do not consider the indigenous peoples as the legitimate owners of their land.

Answers given to questions about the infrastructure projects planned for the River Tapajós region were very heated. Indigenous leaders of the region believe that projects such as the industrial waterway, the hydroelectric dams and the railway are unfeasible for the region in their current form (see section 3.7 Unfeasibility). The indigenous leaders interviewed believe that these projects will not bring any benefits for the indigenous peoples but will rather threaten their very livelihoods. The waterway will pollute the waters and kill the fish, the hydroelectric dams will flood their lands and the Ferrogrão railway will destroy parts of the forests that are sacred to the indigenous peoples.

Those interviewed believed that these projects do not consider the world view of indigenous peoples or respect their culture or the way they relate to nature. The indigenous peoples believe that instead of bringing development, the projects will destroy sacred places, kill the fish and destroy their culture and traditions. They are afraid this is exactly what will happen if these projects are implemented.

To fight these big projects, such as the railway, the hydroelectric dams and the waterway, the indigenous peoples of the River Tapajós region are using collective action and resisting in a joint and united manner. Their resistance grows stronger with every new battle. One of their main forms of resistance is raising awareness of the impact of these big projects on the daily lives of the communities who live in the River Tapajós region.

Indigenous leaders point to unity as being key to their fight (3.3 Resistance and 3.6 Alliances). Local, regional, national and international alliances are key to defending their traditional territories. Indigenous organisations such as CITA (Conselho Indígena Tapajós Arapiuns [Tapajós Arapiuns Indigenous Council]), from the Baixo Tapajós region and PARIRI (Associação Indígena PARIRI [Pariri Indigenous Association]) from the Médio Tapajós region are key to getting their voice heard. Thanks to these alliances, they have already won some victories.

PHOTO: THOMAZ PEDRO



Unity among indigenous leaders is key to their fight.

The fight against these projects brings about a lot of problems, as was confirmed by the interviewees. Large infrastructure projects are plagued by co-optation (3.4 Co-optation) which divides opinions and ends up causing internal conflict, which is deliberately manipulated to weaken the unity amongst the indigenous peoples and thereby get the projects through.

In section 3.5 Consultation, we saw how the indigenous peoples use the Free, Prior and Informed Consent (FPIC). This right is seen by these communities as a way of resisting, a strategy to ensure that their rights are respected. The right to consultation must be upheld by the Brazilian government, which ratified convention 169 of the International Labour Organisation (ILO). It is an important legal tool for the indigenous peoples.

However, this right is being disrespected and violated. Those who plan these projects for the region are not seeking the consent of the indigenous peoples. Those interviewed confirmed that the consultation protocols are not being respected by the Brazilian government and this in a context of constant threats.

This atmosphere of constant threats did not start with Bolsonaro's government, and it won't end with it (see section 3.8 President Jair Bolsonaro's Anti-Indigenous Policies). The problems faced by the indigenous peoples are part of Brazil's structure, as was pointed out on several occasions by the interviewees. Different governments may make them worse or increase them, as is the case with the current government. According to indigenous representatives in order to overcome structural racism against indigenous peoples, relentless exploitation of natural resources as well as violence have to stop, awareness must be raised and society must be educated towards respecting nature and cultural diversity. The current political climate clearly opposes the indigenous peoples. Therefore, companies operating in Brazil need to take great care and carry out risk analysis to make sure they don't end up supporting the Brazilian government in violating human rights and destroying the environment.

The fight of the indigenous peoples of the River Tapajós region continues without abate, as we are told by leaders from both the Médio and Baixo Tapajós regions.

The indigenous peoples continue to seek to raise awareness amongst governments in other countries. Interviewees asks the international community to help put pressure on the Brazilian government to do what it should have done long ago – to demarcate the indigenous territories. Bolsonaro's government has not done any demarcation at all so far.

The world needs to understand that these projects are harmful to the planet, not just to the River Tapajós region. Indigenous leaders ask governments to listen to the indigenous peoples and to bear in mind that everyone lives and breathes because of the forest.

They also point to the fact that exploitation of the Amazon by global actors, in turn, brings about worldwide responsibility to support the indigenous peoples of Brazil in their fight to protect the Amazon.

It is necessary to get to know the indigenous peoples as they are. This will allow us global society, governments, and companies to understand their customs, traditions and values. Their fight is also everyone else's fight.

This report has pointed out why the indigenous peoples of the River Tapajós region are against these planned infrastructure projects – the waterways, hydroelectric dams and the railway – and why they are not in their interest. We have seen from their replies to our questions that the Brazilian government is not respecting either internal legislation or international treaties related to the rights of the indigenous peoples.

To finish off, we will leave you with the words of Graça Tapajó, who asks for respect for the indigenous peoples:

“There is so much we would like to say. But what I will say is that the indigenous peoples are fighting for their livelihoods, their lives, and for respect for their rights. If our legislation and international agreements were actually respected, indigenous peoples would not need to be camping out and putting pressure on the government. We just want our rights to be guaranteed and acted upon, in fact and law. These are rights that were fought for by many and which are set out in law. Our territory should be demarcated, and our lifestyle should be guaranteed. These big projects, which only have an eye on profit, need to respect us and follow legislation, convention 169. This convention establishes prior, free and informed consultation and asks that this be respected. Indigenous peoples need to be respected, listened to and have a voice. This territory we are walking on is ours. We own it. But we don't mean it is “ours” in a selfish way, but rather “ours” to look after and care for so that all of humanity can benefit from it” (2020).



Exploitation of the Amazon by global actors brings about worldwide responsibility to support the indigenous peoples of Brazil in their fight to protect the Amazon.

4 Final Considerations

This report has illustrated the social and environmental risks associated with planned infrastructure projects in the Tapajós basin – the Ferrogrão EF-170 and the Hydroelectric Complex and Tapajós Waterway¹. The region’s environmental relevance to the world’s climate, as well as the vulnerability of local communities, makes the issue one of national and international importance. Especially as the world’s eyes are turning towards the Amazon, the “green lung of the earth” and home to a large amount of different species, its maintenance and preservation as well as the fight against deforestation and forest fires are becoming a matter of global urgency. Indigenous communities have repeatedly shown their decisive role in protecting the rainforests around the world². Therefore, the enormous threat to indigenous peoples and their lands by economic interests is put under increasing public scrutiny.

On the basis of concrete arguments and evidence, this report calls for potential Brazilian and international implementing and/or operating companies (potential stakeholders interested in the projects) and financiers to meet their obligation to consider environmental and social impacts in their risk analysis and appeals to their great responsibility to clearly align their due diligence with national and international human rights norms and standards.

The situation is coming to a head as President Jair Bolsonaro’s Administration gradually dismantles institutions that were created to protect the environment and indigenous peoples’ rights and pushes to introduce new laws that considerably violate indigenous rights³. It is fundamental to stress the duty of the Brazilian State to protect the indigenous peoples’ rights at this point. Most importantly, since 1988, Brazil’s Federal Constitution explicitly recognises

1 The waterway is still on paper and has no licencing process, since there are no plans to build these hydroelectric plants before 2030.

2 <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=20748&LangID=E> ; <https://g1.globo.com/natureza/desafio-natureza/noticia/2019/05/21/areas-da-amazonia-que-deveriam-ter-desmatamento-zero-perdem-6-cidades-de-sp-em-tres-decadas.ghtml>

3 <https://cimi.org.br/2021/06/nota-cimi-aprovacao-pl-490-cj-c-brutalidade-policia-dupla-violencia-contra-povos-indigenas-brasil/> ; <https://www.socioambiental.org/en/node/6572> ; <https://www.theguardian.com/world/2020/feb/05/brazil-indigenous-tribes-missionary-agency-ricardo-lobes-dias-christianity-disease>

indigenous peoples' rights in Art. 231 and 232⁴. Brazil has also ratified the ILO Convention on Indigenous and Tribal Peoples in Independent Countries (ILO 169) and has approved of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The state therefore has an obligation to guarantee indigenous peoples' right to self-determination both due to national and international legislation⁵.

"These people have rights and these rights must be respected – regardless of whether we question the relevance of the project, the necessity of the project, or how much our country needs the infrastructure. What is under discussion is an international treaty [ILO 169] that Brazil has signed and that has been incorporated into our legal system through a norm approved by the National Congress."⁶ (Eliana Torelly, Coordinator of the Indigenous Peoples Chamber & Deputy Attorney General of the Republic)

However, Brazil continuously weakens the legislative and institutional framework that protects the indigenous peoples' rights and the current political context blindly prioritises short-term financial and economic interests over both immediate and long-term social and environmental risks. Apparently, various companies have already placed their concerns about social and environmental issues related to the Ferrogrão railway before government institutes such as the Investment Partnership Programme (PPI)⁷.

This report wants to alert companies and financial service providers (creditors and investors) worldwide to the irreversible damages the projects are likely to cause. According to the Guidelines of the OECD, an organisation Brazil strongly would like to adhere to, enterprises must respect human rights, regardless of a State's abilities or willingness to fulfil its obligation to protect human rights. Therefore, additionally to serving as a valuable source regarding the sensitivity of the particular projects at hand, the information provided in this report also allows for general inferences regarding responsible business conduct in

4 <https://www.globalhealthrights.org/wp-content/uploads/2013/09/Brazil-constitution-English.pdf>

5 ISEAL, 2018: https://www.isealalliance.org/sites/default/files/resource/2019-02/FPIC_Full_Report.pdf, p.21.

6 Subtil (2021): Ferrogrão: entenda sobre o projeto de ferrovia que promete impulsionar o escoamento de grãos pelo Norte, mas enfrenta impasse legal. Amazônia: <https://g1.globo.com/natureza/amazonia/noticia/2021/07/11/ferrograo-entenda-sobre-o-projeto-de-ferrovia-que-promete-impulsionar-o-escoamento-de-graos-pelo-norte-mas-enfrenta-impasse-legal.ghtml>

7 Programa de Parceria de Investimentos (2020) : Resumo Executivo. Roadshow Ferrogrão 2020.

the Amazon region of Brazil currently subjected to a fragile political context that leads to considerable human rights conflicts, particularly the violation of indigenous peoples' rights.

Responsible business conduct in the Amazon: a general frame of reference

In the following, an account is given on how the planned infrastructure projects in the Tapajós basin have been violating and bear the risk to further violate international human rights legislations. It thereby shows what risks and duties this brings for involved companies.

The Concept of Free, Prior and Informed Consent

A central aspect of international standards with the aim of protecting indigenous peoples' right to self-determination is the concept of Free, Prior and Informed Consent (FPIC). Enshrined in both the UNDRIP and ILO 169, it applies to activities that take place on, or otherwise impact, the land, territories and natural resources that constitute the livelihoods of indigenous communities or are culturally important to them⁸ (see chapter 3.5). The Performance Standards of the International Finance Corporation are one of the most influential set of standards for corporate responsibility worldwide – they therefore do not only apply to the operations of the IFC but are also a widely accepted “code of conduct” for the operations of businesses involving environmental or social risks.

⁸ OXFAM, 2019, p. 7-11: <https://oxfamlibrary.openrepository.com/bitstream/handle/10546/620854/bp-consent-is-everybodys-business-200819-en.pdf?sequence=3&isAllowed=y>

According to the IFC, FPIC is achieved if: First, there has been a well-documented negotiation that was held in good faith between the party implementing the project (here: state agencies and companies that signalled interest in the projects) and the affected indigenous communities. Second: The negotiation resulted in the affected population giving consent to the project. To adequately manage environmental, social and governance (ESG) risks, the interested companies must use their leverage before the engagement to guarantee a FPIC process and, once they decide to engage, must continuously document the mutually accepted process with the affected community for maintaining consent as well as whether the parties have agreed upon the outcome of the negotiations⁹. The ISEAL (International Social and Environmental Accreditation and Labelling Alliance) Innovations Fund describes the FPIC process as follows:

[The right to self-determination] is protected through consultations that are conducted in a good-faith process, and through Indigenous Peoples' own decision-making procedures, where the community is: free from coercion, intimidation or manipulation; consultation begins sufficiently prior to the start of any proposed activity to allow for the community to come to a decision using customary mechanisms; where the community is fully informed of both the nature of the project, including project risks and impacts, and the form and structure of the FPIC process in a culturally-appropriate, accessible and timely manner; and where the community has the right to either grant or withhold consent¹⁰.

However, this report illustrates the lack of Free, Prior and Informed Consent (FPIC) by affected indigenous peoples for the projects examined. Neither the Ferrogrão railway project nor the Tapajós Hydroelectric and Waterway projects have carried out a dialogue in good faith with the indigenous communities in a culturally-appropriate way and with sufficient information provided. In the case of the Ferrogrão, the Brazilian Investment Partnership Programme (PPI) plans to consult relevant stakeholders only at the time of preparing the environmental licence, which clearly undermines the Prior principle in FPIC¹¹.

9 IFC, "Performance Standards 7": https://www.ifc.org/wps/wcm/connect/3274df05-7597-4cd3-83d9-2a-ca293e69ab/PS7_English_2012.pdf?MOD=AJPERES&CVID=jiVQI.D, p. 3.

10 ISEAL, 2018, "Enabling FPIC through voluntary standards": https://www.isealliance.org/sites/default/files/resource/2019-02/FPIC_Full_Report.pdf, p. 8-9.

11 <https://g1.globo.com/natureza/amazonia/noticia/2021/07/11/ferrograo-entenda-sobre-o-projeto-de-ferrovia-que-promete-impulsionar-o-escoamento-de-graos-pelo-norte-mas-enfrenta-impasse-legal.ghtml>

Similarly, the licencing process of the São Luiz do Tapajós dam was suspended by the Brazilian Institute of the Environment and Natural Resources (IBAMA) in 2016 due to a request made by the National Indian Foundation (Fundação Nacional do Índio, FUNAI) because lands belonging to the Munduruku communities would be directly impacted¹².

By giving a voice to the affected indigenous rights holders, this report provides comprehensive evidence that the respective projects are lacking indigenous consent and are therefore in breach of domestic Brazilian and international law and standards.

Legal insecurities in the Brazilian context

The infrastructure projects under study in this report further illustrate the increasing legal insecurities of the Brazilian context. The Ferrogrão project, for example, is facing considerable legal risks and obstacles as the Supreme Court is assessing the legal basis of alterations to the boundaries of the Federal Nature Reserve Jamaxim crossed by the railway route. At the same time, the Indigenous Peoples and Traditional Communities Chamber of the Federal Prosecutor's Office (Câmara de Populações Indígenas e Comunidades Tradicionais do Ministério Público Federal) issued a technical note calling for FPIC consultation with indigenous peoples and communities affected by the project in line with ILO Convention 169¹³.

Also, the environmental licensing process of the São Luiz do Tapajós hydropower plant was suspended in 2016 because both the Federal Prosecutor's Office and the Brazilian Institute of the Environment and Natural Resources (IBAMA) gave much consideration to the fact that indigenous territories and a National Park would be negatively affected and FPIC had not been guaranteed¹⁴. Such legal insecurities that arise when national practices come into conflict with international and constitutional regulations bear significant risks for companies and financiers seeking to engage in infrastructure projects in the region.

12 <https://www.theguardian.com/world/2016/apr/22/brazil-amazon-dam-project-suspended-indigenous-munduruku-sao-luiz-do-tapajos>

13 <https://g1.globo.com/natureza/amazonia/noticia/2021/07/11/ferrograo-entenda-sobre-o-projeto-de-ferrovia-que-promete-impulsionar-o-escoamento-de-graos-pelo-norte-mas-enfrenta-impasse-legal.ghtml> ; Folha de S. Paulo (2021): <https://www1.folha.uol.com.br/mercado/2021/04/debate-ambiental-sobre-ferrograo-e-cortina-de-fumaca-diz-ministro-da-infraestrutura.shtml>

14 <https://www.oeco.org.br/noticias/ibama-arquiva-licenciamento-da-hidreletrica-sao-luiz-do-tapajos/>

This report, therefore, wants to be an early warning for companies and financiers to pay heed to the considerable risks that arise from doing business in the Tapajós basin and the Amazonas region in general when short-term entrepreneurial decisions ignore long-term human rights and environmental impacts.

The companies' inevitable duty to respect human rights

The UN Guiding Principles on Business and Human Rights (UNGPs) and the OECD Guidelines for Multinational Enterprises require the states to protect human rights and the companies to respect these. Regardless of whether the state fulfils this duty, the companies have a duty to respect human rights. In the Brazilian context, where implementation of international standards is weak, companies and financial institutes bear the responsibility to mitigate the risks of adverse impacts linked to their business activities.

Therefore, companies seeking to engage in the presented projects (be it as a financial service provider or getting involved in consulting, constructing or operating) must carry out an enhanced due diligence on environmental and social risks, paying specific attention to complying with indigenous peoples' right of self-determination. Otherwise, through their business activities, they are at risk of contributing or being linked to serious adverse impacts on indigenous rights and also the rights of indigenous peoples living in voluntary isolation.

More specifically, on the basis of the UNGPs and OECD Guidelines, companies involved in consulting, constructing and/or operating the Ferrogrão and Tapajós Hydroelectric Complex may contribute to adverse impacts and are therefore responsible for mitigating these risks as well as providing remedy in case of negative impacts¹⁵. Financial institutes that provide credit or invest in companies involved in these projects are directly linked to potential adverse impacts on indigenous rights through their business relationship – even if they do not provide direct project finance. In this case, the UNGPs and OECD Guidelines require the financial institutes to use their leverage to mitigate these risks¹⁶.

15 UN Guiding Principles on Business and Human Rights (2011): https://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf ; OECD Guidelines for Multinational Enterprises (2011): <http://mneguidelines.oecd.org/guidelines/>

16 UN Guiding Principles on Business and Human Rights (2011): https://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf ; OECD Guidelines for Multinational Enterprises (2011): <http://mneguidelines.oecd.org/guidelines/>

If project financiers fail to take appropriate measures and continue to provide services despite adverse impacts, their involvement can be classified as a direct link or even a contribution to those impacts, where the latter makes them responsible for providing remedy.

The increasing importance of holistic sustainability standards

As the global community is taking measures for a transition to a green economy, the term “sustainability” has become a contested issue. The upcoming disclosure regulations in the EU identify sustainability criteria to support the global climate and energy targets. As the EU Technical Expert Group on Sustainable Finance states: “Companies and other issuers disclosing against the Taxonomy will need to assess their compliance with minimum safeguards, meaning the standards embedded in the OECD Guidelines on Multinational Enterprises (MNEs) and the UN Guiding Principles on Business and Human Rights”¹⁷. This EU Taxonomy, a classification system that identifies criteria for environmental sustainability, sets out social minimum standards that define the criteria under which a financial product or activity can be described as “environmentally sustainable” and is therefore of interest to any company interested in business relations with EU financial institutes.

This holistic approach guarantees that one dimension of sustainability (e.g. environmental and climate protection) is not promoted in a way that considerably harms progress in another dimension (e.g. workers and indigenous rights). As an increasing number of companies and financial institutes set strategic targets to make a positive contribution to the achievement of particular Sustainable Development Goals (SDGs) by 2030, it is important that they act to avoid causing, contributing or being linked to adverse impacts in other areas of environmental and social impact.

These considerations must be taken into account when assessing the sustainability of the Ferrogrão railway and the Tapajós Hydroelectric Complex and Waterway project:

17 EU Technical Expert Group on Sustainable Finance (2020): Technical Report. Taxonomy: Final report of the Technical Expert Group on Sustainable Finance. Available online: https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf

For the Ferrogrão railway, representatives have announced that they are expecting to obtain a “green seal” and follow the parameters of the climate bond initiative (CBI) as the railway offers a low-carbon transport as opposed to transport by trucks¹⁸. However, companies and financial institutes considering engagement in the project should be aware of the one-sided sustainability approach: the development runs risks to do environmental harm by crossing through a natural reserve and by boosting rainforest destruction thanks to lowering costs for transport¹⁹ and gas. It also risks being in breach with social minimum standards concerning indigenous human rights. These substantial risks led to a suspension of the project in Brazil. In the case of energy generation by hydropower, its “sustainability” is also often emphasised, due to the substitution of fossil energy. As already pointed out above, this understanding of sustainability, however, falls short on the social component²⁰.

Many of the companies and financial institutes identified in the financial analysis of this report have adopted sustainability strategies. They also have in place a corresponding code of conducts, policies and standards to, on the one hand, make a positive contribution to the SDGs and, on the other hand, avoid adverse impacts on humans and the planet. Before engaging with the Ferrogrão railway EF-170 and the Tapajós Hydroelectric Complex and Waterway projects, they should therefore carry out thorough risk management and due diligence process to mitigate potential infringements of their policies or national and international obligations. In addition, they should set up contracts that set out clear actions in case of infringements of their policies (e.g. through corresponding exit clauses).

The danger of reputational and financial losses

If companies and financial institutes fail to consider the long-term risks to the Amazonian ecosystem and the indigenous peoples, they do not only fail to manage long-term financial value drivers and corresponding risks in terms of financial consequences and legal issues – as it is their fiduciary duty. In a time that the world’s eyes are turning towards the Amazonian region, they also

18 <https://g1.globo.com/natureza/amazonia/noticia/2021/07/11/ferrograo-entenda-sobre-o-projeto-de-ferrovia-que-promete-impulsionar-o-escoamento-de-graos-pelo-norte-mas-enfrenta-impasse-legal.ghtml>

19 https://www.climatepolicyinitiative.org/wp-content/uploads/2020/03/PB_The-Environmental-Impacts-of-the-Ferrograo-Railroad-1.pdf

20 https://wwfbr.awsassets.panda.org/downloads/wwf_brasil_tapajos_uma_visao_de_conservacao_9fev2017_port_web.pdf

expose their company to considerable risks regarding public image and reputation loss. Here, the case of the Dakota Access Pipeline (DAPL) in the United States can provide an insight into the substantial material losses that can arise from insufficient social risk management and subsequent social conflict. Energy Transfer Partners (ETP) and other firms with ownership stake in DAPL incurred no less than US\$7.5 billion in costs²¹. International regulations increasingly reinforce what is called a double materiality approach to due diligence, meaning that businesses must manage material risks to the company as well as to humans and the environment. Tying in with this tendency, enterprises are well advised to shift their risk assessment beyond material risks to the company and particularly to expand them to risks for humans and the environment.

21 http://nathancummings.org/wp-content/uploads/social_cost_and_material_loss.pdf

5 Demands

In the following, demands by indigenous communities are made to the different players involved in the Ferrogrão railway EF-170 and the Tapajós Hydro-electric Complex and Waterway.

As already stated above, first and foremost, it is the duty of the Brazilian State to protect the rights of communities negatively affected by these projects and to cease and prevent violations. Nonetheless, given the State's lack of willingness, we particularly call upon the implementing and/or operating companies and potential financiers to meet their obligation to consider environmental and social impacts in their risk analysis and appeal to their great responsibility.

Demands to the Brazilian State and its Institutions

- Fully respect the Federal Constitution and particularly Art. 231 and Art. 232 regarding the rights of indigenous peoples.
- Fully respect international norms and standards such as the ILO 169 and UNDRIP, which Brazil ratified and voted for, respectively.

Demands to the National Indian Foundation (Fundação Nacional do Índio, FUNAI):

- Together with the Federal Prosecutor's Office (Ministério Público Federal) guarantee that FPIC is implemented before the realisation of projects that affect communities, in line with international indigenous rights standards.
- Deliver the impact analysis on indigenous peoples and their land (Study of the Indigenous Component)²² to the Brazilian Institute of the Environment and Natural Resources (IBAMA) during the analysis of the Environmental Impact Assessment. Deliver the study prior to reaching the decision of whether or not potential adverse impacts on affected communities exist.
- Guarantee that FPIC is implemented with potentially-affected communities prior to issuing Preliminary Licences.

²² The study identifies and analyses the impacts of a project on indigenous peoples and lands, taking into account environmental and social aspects.

Reminder to all players: How to implement FPIC in line with international standards

- Verify and monitor adequate FPIC according to clear indicators and evidence.
- Engage with indigenous rights holders from the outset and co-define the conditions of the FPIC process with them as rights holders to increase planning security.
- Verify that stakeholder engagement is improved in line with international indigenous rights standards on FPIC:
 - Start FPIC process prior to first decisions
 - Make process culturally appropriate
 - Set deadlines that are culturally appropriate and accepted by indigenous peoples
 - Provide sufficient and adequate information
 - Implement FPIC as an ongoing process throughout the project's lifecycle
 - Do not mistake "consultation" with "consent": verify that indigenous peoples were granted the possibility to say "no" to plans to guarantee equal footing in negotiations.
- Guarantee that benefit-sharing agreements were negotiated between all affected parties.
- Verify that concerns of indigenous people were taken seriously and effective solutions were agreed.

Demands to Companies Implementing or Operating the Ferrogrão and Tapajós Hydroelectric Complex and Waterway	Demands to Financial Institutes
<p>Enhancement of Risk Management</p> <ul style="list-style-type: none"> • Implement the double materiality approach in risk management procedures: manage material risks to the company as well as to people and the environment. • Incorporate indicators for indigenous rights & FPIC in policies, risk management and monitoring processes for all business activities. • Incorporate evidence of controversies on indigenous rights and local opposition as set out in this report in the identification, assessment, mitigation and monitoring of social risks • Manage country-specific risk factors for Brazil that take into account the considerable legal insecurities, as national human rights practices are at risk of coming into conflict with international standards and law • Manage specific risk factors for the Amazonian region that take into account the context-specific environmental and social risk exposure including risks to indigenous rights 	<p>Enhancement of Risk Management</p> <ul style="list-style-type: none"> • Implement the double materiality approach in risk management procedures: manage material risks to the company as well as to people and the environment • Integrate indicators for indigenous rights & FPIC in policies, risk management and monitoring processes for all business activities • Integrate controversies on indigenous rights and local opposition as set out in this report as red flags for social risk management • Implement country-specific risk factors for Brazil that take into account the considerable legal insecurities, as national human rights practices are at risk of coming into conflict with international standards and law • Implement specific risk factors for the Amazonian region that take into account the context-specific environmental and social risk exposure including risks to indigenous rights

Demands to Companies Implementing or Operating the Ferrogrão and Tapajós Hydroelectric Complex and Waterway	Demands to Financial Institutes
<p>Environmental and Human Rights Due Diligence</p> <ul style="list-style-type: none"> • Carry out human rights due diligence prior to and during engagement in infrastructure projects/with stakeholders linked to such projects in the Amazonian region, including but not limited to: <ul style="list-style-type: none"> - Indicators and Evidence that a genuine FPIC (Free, Prior and Informed Consent) process has been undertaken and consent has been provided by the affected populations - Indicators and Evidence on meaningful Environmental & Human Rights Impact Analyses including indigenous expertise in Environmental and Human Rights Impact Analyses 	<p>Environmental and Human Rights Due Diligence</p> <ul style="list-style-type: none"> • In case of loan syndication, request the managing bank to provide transparent evidence of thorough environmental and human rights due diligence including indigenous rights and verification of an adequate FPIC process • In case of consortium financing, clearly assign the responsibility of environmental and human rights due diligence including indigenous rights and verification of an adequate FPIC process
<p>Exit Clauses and Client Disclosure</p> <ul style="list-style-type: none"> • Increase leverage potential from the outset by contractually linking exit clauses to infringements of company policies and international standards 	<p>Exit Clauses and Client Disclosure</p> <ul style="list-style-type: none"> • Insert clauses into client contracts reserving the right to disclose details of client relationships in certain circumstances (e.g. infringements of company policies and international standards)

Demands to Companies Implementing or Operating the Ferrogrão and Tapajós Hydroelectric Complex and Waterway	Demands to Financial Institutes
<p>Engagement with Business Partners to strengthen Rights of Indigenous Peoples prior to entering Business Relations and throughout Project Lifecycle</p> <ul style="list-style-type: none"> • Use your leverage to engage with the National Indian Foundation (FUNAI), the Ministry of the Environment and Renewable Natural Resources (IBAMA), the National Agency for Surface Transport (ANTT), etc. to promote an adequate FPIC process prior to the approval of licencing process and to prevent and mitigate adverse impacts prior to engagement and throughout the project lifecycle • In case of adverse impacts on human rights, meet the demands of affected communities and consider the withdrawal from projects if engagement does not lead to positive results • Collaborate with other companies potentially involved in constructing and/or operating the projects to increase leverage 	<p>Engagement with Business Partners to strengthen Rights of Indigenous Peoples prior to entering Business Relations and throughout Project Lifecycle</p> <ul style="list-style-type: none"> • Use your leverage to engage with the companies interested in implementing and/or operating the projects to guarantee an adequate FPIC process and to prevent and mitigate adverse impacts prior to engagement and throughout the project lifecycle has been undertaken • In case of adverse impacts on human rights, meet the demands of affected communities and consider the withdrawal from projects if engagement does not lead to positive results • Collaborate with other involved financial institutes to increase leverage

<p>Demands to Companies Implementing or Operating the Ferrogrão and Tapajós Hydroelectric Complex and Waterway</p>	<p>Demands to Financial Institutes</p>
<p>Guarantee access to remedy for affected parties</p> <ul style="list-style-type: none"> • Provide dialogue-based grievance mechanisms compatible with the OECD guidelines fulfilling the requirements of legitimacy, accessibility, predictability, equitability and transparency • In case of causing or contributing to adverse impacts on the environment or human rights, provide access to remedy for affected rights holders 	<p>Guarantee access to remedy for affected parties</p> <ul style="list-style-type: none"> • Provide dialogue-based grievance mechanisms compatible with the OECD guidelines fulfilling the requirements of legitimacy, accessibility, predictability, equitability and transparency • In case of causing or contributing to adverse impacts on the environment or human rights, provide access to remedy for affected rights holders
<p>Promote social sustainability in Line with EU Taxonomy</p> <ul style="list-style-type: none"> • Respect minimum social safeguards when promoting projects as "green", include clear social objectives as well as avoid harm to other social dimensions when promoting the projects as "sustainable" • Make use of FPIC as an benchmark to manage risks at the intersection of environmental and social risks and avoid one going to the expense of the other 	<p>Promote social sustainability in Line with EU Taxonomy</p> <ul style="list-style-type: none"> • Request tangible evidence on all claimed dimension of sustainability and especially use leverage to request minimum social safeguards for "green" projects • Make use of FPIC as an benchmark to manage risks at the intersection of environmental and social risks and avoid one going to the expense of the other

Appendix

1 Methodology for the Financial Study

Loans and underwritings were researched for closing/issue dates in the period January 2014 – February 2021. Bond- and shareholdings were researched at most recent filing dates in February 2021.

The loans and underwriting services provided by financial institutions were retrieved from financial databases Bloomberg and Refinitiv (formerly known as Thomson Reuters Eikon). Investments in bonds and shares by financial institutions were retrieved from financial database Refinitiv.

Project finance was gathered through project finance database IJGlobal. Additional information was searched in trade finance database TradeFinance Analytics, annual reports of the selected companies, company websites, and company registers, followed by a general media search.

This part of the appendix is organised as follows: Section 1.1 describes the types of financing included in the study; Section 1.2 explains the determination of the financial contributions per financial institution.

1.1 Types of financing

Loans

The easiest way to obtain debt is to borrow money. In most cases, money is borrowed from commercial banks. Loans can be either short-term or long-term in nature. Short-term loans (e.g. trade credits, current accounts, leasing agreements) have a maturity of less than a year. They are mostly used as working capital for day-to-day operations. Short-term debts are often provided by a single commercial bank, which does not ask for substantial guarantees from the company.

A long-term loan has a maturity of at least one year, but more often of three to ten years. Long-term corporate loans are particularly useful to finance expansion plans, which only generate rewards after a certain period of time. The proceeds of corporate loans can be used for all activities of the company. Long-term loans are frequently extended by a loan syndicate, which is a group of banks brought together by one or more arranging banks. The loan syndicate will only undersign the loan agreement if the company can provide certain

guarantees that interest and repayments on the loan will be fulfilled. Corporate loans are often used as project finance (a loan that is earmarked for a specific project) or as general corporate purposes or working capital. Sometimes, a loan's use of proceeds is reported as general corporate purposes when it will be used for a certain project. This is difficult to ascertain.

Moreover, another type of loan is a revolving credit facility. A revolving credit facility provides a company with an option to take up a loan from a bank (or more often: a banking syndicate) when it has an urgent financing need. It is similar to a credit card. Companies can use the revolving facility up to a certain limit, but they don't have to. Revolving credits are often concluded for a five-year period and then renewed, but many companies renegotiate their revolving credit facility every year with the same banking syndicate. Amounts, interest rates, fees and participating banks can change slightly every year. As the financial press often reports these renegotiations for larger companies, this might raise the impression that banks are lending huge sums of money to the same company every year. But: this concerns renegotiations of basically the same facility and a revolving credit facility is hardly ever actually called upon for a loan. Within the scope of this research, revolving credit facilities are counted for every time that they are renewed.

Although revolving credit facilities are not always fully called upon, the syndicate of banks providing the facility do have the obligation to provide the entire amount of money when the company asks for it. Therefore, even if the company ends up never using the facility, the banks were still involved with the company during the period of the revolving credit facility and would have provided the company with the money when they asked for it.

Share issuances

Issuing shares on the stock exchange gives a company the opportunity to increase its equity by attracting a large number of new shareholders, or to increase the equity from its existing shareholders.

When a company offers its shares on the stock exchange for the first time, this is called an Initial Public Offering (IPO). When a company's shares are already traded on the stock exchange, this is called a secondary offering of additional shares. To arrange an IPO or a secondary offering, a company needs the assistance of one or more (investment) banks, which will promote the shares and find shareholders. The role of investment banks in this process is therefore very important.

The role of the investment bank is temporary. The investment bank purchases the shares initially and then promotes the shares and finds shareholders. When all issued shares that the financial institution has underwritten are sold, they are no longer included in the balance sheet or the portfolio of the financial institution. Nevertheless, the assistance provided by financial institutions to companies in share issuances is crucial. They provide the company with access to capital markets and provide a guarantee that shares will be bought at a pre-determined minimum price.

Bond issuances

Issuing bonds can best be described as cutting a large loan into small pieces and selling each piece separately. Bonds are issued on a large scale by governments, but also by corporations. Like shares, bonds are traded on the stock exchange. To issue bonds, a company needs the assistance of one or more (investment) banks which underwrite a certain amount of the bonds. Underwriting is in effect buying with the intention of selling to investors. Still, in case the investment bank fails to sell all bonds it has underwritten, it will end up owning the bonds.

(Managing) shareholdings

Institutional investors, such as banks, insurance companies, pension funds and asset managers, can, through the funds they are managing, buy shares of a certain company, making them part-owners of the company. This gives the bank a direct influence on the company's strategy. The magnitude of this influence depends on the size of the shareholding.

As financial institutions actively decide in which sectors and companies to invest, and are able to influence the company's business strategy, this research investigated the shareholdings of financial institutions of the selected companies. Shareholdings are only relevant for stock listed companies. Not all companies in the study are listed on a stock exchange.

Shareholdings have a number of peculiarities that have implications for the research strategy. Firstly, shares can be bought and sold on the stock exchange from one moment to the next. Financial databases keep track of shareholdings through snapshots, or filings. This means that when a particular shareholding is recorded in the financial database, the actual holding, or a portion of it, might have been sold, or more shares purchased. Secondly, share prices vary from one moment to the next.

(Managing) investments in bonds

Institutional investors can also buy bonds of a certain company. The main difference between owning shares and bonds is that an owner of a bond is not a co-owner of the issuing company; the owner is a creditor of the company. The buyer of each bond is entitled to repayment after a certain number of years, and to a certain interest during each of these years. Similarly to shares, bonds can be bought and sold from one moment to the next. Bond holdings are also reported by the holding investor through regular filings.

1.2 Financial institution financing contributions

The financial databases do not always include details on the levels of individual financial institutions' contribution to a deal. Individual bank's contributions to syndicated loans and underwriting were recorded to the largest extent possible where these details were included in the financial databases. In many cases, the total value of a loan or issuance is known, as well as the number of banks that participate in this loan or issuance. However, the amount that each individual bank commits to the loan or issuance has to be estimated. This research used a two-step method to calculate this amount. The first used the ratio of an individual institution's management fee to the management fees received by all institutions. This is calculated as follows:

Participant's contribution:

$$\left(\frac{\text{individual participant attributed fee}}{\text{sum of all participants attributed fees}} * \text{principal amount} \right)$$

When the fee was unknown for one or more participants in a deal, the second method was used, called the 'book ratio'. The book ratio (see formula below) was used to determine the commitment distribution of book runners and other managers.

Book ratio:

$$\frac{\text{number of participants} - \text{number of book runners}}{\text{number of book runners}}$$

Table 1 shows the commitment assigned to book runner groups with this estimation method. When the number of total participants in relation to the number of book runners increases, the share that is attributed to book runners decreases. This prevents very large differences in amounts attributed to book runners and other participants.

Table 1 Commitment assigned to book runner groups

Bookratio	Loans	Issuances
> 1/3	75%	75%
> 2/3	60%	75%
> 1.5	40%	75%
> 3.0	< 40%*	< 75%*

* In case of deals with a bookratio of more than 3.0, we use a formula which gradually lowers the commitment assigned to the bookrunners as the bookratio increases. The formula used for this:

$$\frac{1}{\frac{\sqrt{\text{bookratio}}}{1.443375673}}$$

The number in the denominator is used to let the formula start at 40% in case of a bookratio of 3.0. As the bookratio increases, the formula will go down from 40%. In the case of issuances, the number in the denominator is 0.769800358.

2 Methodology for the Ethnographical Research

The research used four criteria for selecting participants: 1) ethnicity; 2) location in the River Tapajós region; 3) gender and 4) age.

The method used was of semi-structured interviews with rotation of questions on the topics set out below. Twenty indigenous people were interviewed, including political and traditional leaders, men and women, young people and elderly people. Five interviews were also carried out with local groups in the Santarém Plateau and in the Tapajós-Arapiuns Extractive Reserve (RESEX for its acronym in Portuguese). These were unstructured interviews.

The interviews aimed to gauge the level of information held by and the opinions of indigenous people who will potentially be affected by the projects planned for the River Tapajós region, as well as to gather information on the development of these projects and the strategies being used to oppose them. Interviews consisted of nine semi-structured questions which the interviewer could adapt and use in the way they felt appropriate to each interview. Interviews were conducted by: Thomaz Marcondes Garcia Pedro and Vinícius da Silva Machado.

The pre-determined questions were as follows:

- 1) Introduction: 1.1) Tell me a bit about your story; 1.2) What sorts of battles have you already had to fight in relation to your territory? 1.3) At what point did you feel it was important that you identified yourself as an indigenous person?
- 2) What do you know about the projects planned for the River Tapajós region and, in particular, about the Ferrogrão railway, industrial waterway and hydroelectric projects?
- 3) Is there disagreement between the communities about the railway, waterway and hydroelectric projects? Are there groups within your community who are in favour of the projects? Why? How does this happen? How are disagreements handled?
- 4) Has the community opposed the railway, waterway and hydroelectric projects? What strategies have they used to oppose these projects?
- 5) Were the communities consulted on these projects? If so, when? In what way? (What language was used? Were threats involved? Were bribes involved?) Are the leaders aware of their right to prior consultation?

- 6) What sort of relationship do the communities have with the State (through FUNAI (Fundação Nacional do Índio [National Indian Foundation]), MPF [the Federal Prosecution Service] etc) with regards to the railway, waterway and hydroelectric projects?
- 7) What alliances have been made between the communities, internationally and others?
- 8) What impact will the railway, waterway and hydroelectric projects have on the territory (in both the short and long term, on daily life, on lifestyle, etc).
- 9) What would it take for the indigenous peoples to accept the railway, waterway and hydroelectric projects?
- 10) Has the situation in Brazil worsened since Bolsonaro came into power?
- 11) Closing questions: Is there anything else you would like to add? Is there anything you would particularly like to emphasise or anything that didn't come up that you would like to point out?

There were two different rounds of semi-structured and unstructured interviews. The first round of interviews was from 16th to 30th October 2020, with the participation of the indigenous peoples of the Baixo Tapajós [lower region]. Santarém, in the state of Pará, was the city used as a base for this phase of the research. Interviews were carried out in Santarém, Alter-do-chão, in the Santarém Plateau and in the villages of Açaizal, Paúipixuna and Cavada. At the Tapajós-Arapiuns Extractive Reserve (RESEX), interviews were carried out in the village of Araçazal. Sixteen people were interviewed, of whom seven were women and nine were men, nine were elderly and seven were young people, and seven different ethnic groups were represented, as follows:

- 1) Tupinambá, 2) Munduruku, 3) Borari, 4) Arapiuns, 5) Tapajó, 6) Kumaruara and 7) Maytapu.

The second round of interviews was from 17th to 30th November 2020, with the participation of the indigenous peoples of the Médio Tapajós. Itaituba, another city in the state of Pará, was the base for this second phase of the research. All interviews were carried out in the village of Munduruku Sawre Muybu. Nine indigenous people were interviewed, of which six were men and three were women, two were elderly people and seven were young people. All of them were from the Munduruku communities.

15 men
10 women

14 young people
10 elderly people

Ethnicity

16 Munduruku
2 Tupinambá
1 Borari
1 Tapajó
1 Maytapu
3 Kumaruara
1 Arapiuns

9 people from Médio Tapajós
[middle region]
16 people from Baixo Tapajós

Due to the sensitivity of indigenous peoples to the new coronavirus strain, SARS-CoV-2, the interviewers were very careful to avoid taking the virus to the communities. To start with, interviews were only held at the base cities, to avoid infection. However, as we got to know the indigenous leaders, they asked us to go to the villages and observe the situation on the ground. We did so in order to respect the indigenous leaders and their request.

We had the consent of the indigenous leaders to visit the villages. We were careful not to carry out any activities in big groups, to avoid the risk of infection. We followed the instructions and guidelines of the local authorities and organisations when it came to protecting the communities, and we quarantined before visiting the communities. If any interviewer was found to be infected with the virus, before or during the rounds of interviews, we would cancel the activities immediately. Also, if communities believed there was an increased level of risk, interviews and visits would be postponed. This was the health protocol used during the interviews on the ground.

The twenty-five indigenous people interviewed were informed that their answers would be made public and that their names would be published in this and other documents on the matter. Participants were informed that they could request to remain anonymous if they so requested, particularly if they felt that their statements might put someone at risk. However, all those interviewed gave their written consent to the publication of their statements and their names.

All interviews were transcribed and documented. All statements have been clearly attributed to the person who made them.

With the STP for human rights

The Society of Threatened Peoples (STP) is an international human rights organisation that supports minorities and indigenous peoples. It documents human rights abuses, informs and sensitises the public, and represents the interests of victims against authorities and decision makers. It supports local efforts to improve the human rights situation for minorities and indigenous peoples, and works together, both nationally and internationally, with organisations and people that are pursuing similar goals. The STP has advisory status both at the Economic and Social Council (ECOSOC) of the UN and at the Council of Europe.

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Thank you very much!

Imprint:

Society for Threatened Peoples Switzerland

Birkenweg 61, CH-3013 Bern

www.gfbv.ch / info@gfbv.ch

Tel. (+41) (0)31 939 00 00

Donations: Berner Kantonalbank

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