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The Brazilian government has its sights set on the river for hydroelectric power plant projects. The river is one of the most preserved in the Amazon



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The studies are supposed to measure environmental impact. However, they look more like marketing for the hydroelectric dams



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#### **MASTHEAD**

**EDITORIAL BOARD** 

Danicley de Aguiar, Larissa Rodrigues, Louise Nakagawa, Luana Lila, Tica Minami and Vitor Leal.

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#### COVER

Munduruku warrior during the General Assembly of the People, in March 2015 Photo: Fábio Nascimento

#### **SEE MORE**

The full analysis of the EIA/RIMA report you can access (in Portuguese) on greenpeace.org.br/tapajos/docs/ analise-eia-rima.pdf. The critical analisys was made by scientists of the National Institute for Amazonian Research (INPA). the Emilio Goeldi Museum and Federal University of Pernambuco.

#### **EDITORIAL**



Munduruku children swim in the Cururu River, a tributary of the Tapajós

# A STUDY THAT DOESN'T MEASURE IMPACT

"WE WILL NOT GIVE UP ON BUILDING TAPAJÓS." is what Gilberto Carvalho said when he was Chief Minister of the General Secretariat of the Presidency of the Republic. This quote, from a November 2014 interview with BBC Brazil, said while the Environmental Impact Assessment was still in progress, reveals that environmental impact studies in Brazil have become a mere formality for legitimizing political decisions already made, instead of predicting the real impact of the construction of a hydroelectric dam project of this size. The dam is slated to be built on one of the most beautiful and preserved rivers of the Amazon, in western Pará. Greenpeace commissioned nine leading researchers

from various fields to provide critical and independent analyses of the Tapajos Project's Environmental Impact Study and Environmental Impact Report (EIA/RIMA). The scientists concluded that the EIA/RIMA submitted to the Brazilian Institute of the Environment (Ibama) should be rejected by the

If it had been done properly, the EIA/RIMA for the São Luiz do Tapajós would show that the construction of the project is not viable

licensing agency, because it does not fulfill its purpose of analyzing the environmental viability of the project. The EIA/RIMA minimizes and omits serious negative impacts that would result from the project, such as effects on the stretch below the dam and the plans for installation of four additional hydroelectric dams in the same basin. If it had been done correctly, the EIA/RIMA would show that the consequences of building the São Luiz do Tapajós hydroelectric power plant are unacceptable and, therefore, not viable.





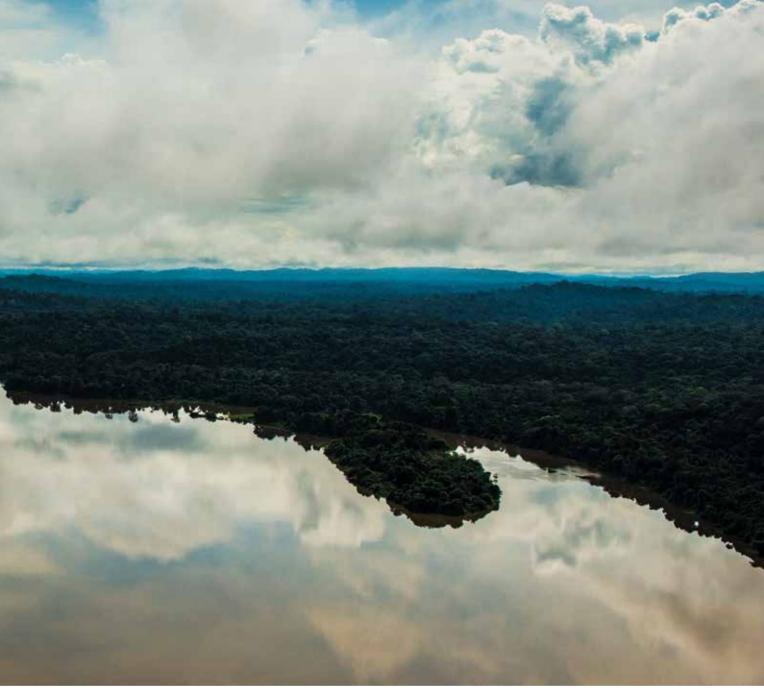
The Tapajós River is Brazil's latest hydroelectric frontier. In addition to the São Luiz do Tapajós, another four dams are slated for construction on the river and on the Jamanxin River, its main tributary. Not to mention the dozens of other dams planned for the other rivers of the basin

#### THE AMAZON HAS THE WORLD'S LARGEST

reserve of freshwater. Around 100,000 km of rivers forms the most diverse network of water courses on the planet. The Tapajós is one of the most beautiful and important.

A bed of blue-green waters that gives shape to a succession of rapids, beaches, waterfalls, flooded forest, streams and streambeds, framed by untouched forest. A Brazilian paradise, like those in Abrolhos (Bahia) and Fernando de Noronha (Pernambuco).

Starting in Mato Grosso State, the Tapajós River winds through western Pará State for 800 km



Framed by an immensity of green, the Tapajós runs 800 km until it empties into the Amazon River

until it empties into the Amazon River, governing the lives of thousands of Indigenous Peoples and riverside dwellers and dictating the rhythm of the residents of the cities that it bathes, like Itaituba and Santarém. The river and its annual regimen of flooding and drought is the main source of life in these communities and the home to an inestimable amount of plant and animal biodiversity, minimally protected by a mosaic of 10 conservation units and 19 indigenous lands (of which only four have been officially sanctioned). It is not by chance that the Tapajós is a priority area for the Ministry of the Environment (MMA) for the conservation of the Amazon biome.

It is this scenario of extraordinary biological and cultural wealth that is at the center of a fierce dispute between the generation of energy at any cost and environmental conservation.

One of the last free-flowing rivers in the Amazon, the Tapajós, is the latest target of the federal government for the installation of hydroelectric power plants-in addition to waterways and ports. At least 40 large dams (with over 30 MW of installed capacity) are being built or planned for the Amazon basin. Five of them are a priority for the government, including the São Luiz do Tapajós, slated to be the largest of them all. Backed up against the National Amazon Park, the dam is in the environmental licensing stage, following a bumbling script that suggests a repetition of the chaos observed in the construction of other power plants, like Belo Monte, on the Xingu River, and Santo Antônio and Jirau, on the Madeira River.

#### **LESSONS NOT LEARNED**

The socioenvironmental impacts of the dams are well known by the populations and the regions affected and are repeated with each new project such as deforestation, a reduction in biodiversity, forced displacement of traditional communities, swelling populations without planning, drug trafficking, prostitution.

Construction of the power plants on the Madeira, for example, changed life in Porto Velho (Rondônia). Local social movements observed a fall in fish stocks in the area impacted by the hydroelectric dams; and in 2014, historic flooding, exacerbated by the damming of the river, which advanced on houses and riverbanks, something that the environmental studies underestimated.

At Belo Monte, a dossier released in June 2015 by the Instituto Socioambiental (ISA) listed a series of mitigation activities that were not carried out on and the negative consequences of the project.

The city of Altamira was immersed in chaos, with a 50% increase in population; the number of homicides grew by 80% between 2011 and 2014 and cases of violence against women and adolescents, robberies and theft doubled over the same period.

Among other negative consequences, the study shows that there was a jump in deforestation, with the illegal opening of roads and invasion of indigenous lands by miners, hunters and loggers. Conclusion: this so-called "progress" – the main "product" pedaled to local populations to convince them of the "benefits" of the dams – was not seen for any hydroelectric power plant project in the Amazon.

Greenpeace is opposed the construction of large dams in fragile biomes like the Amazon, due to their irreversible impact on biodiversity and the way of life of the people who live there. In this publication, we aim to demonstrate, within the scope of Environmental Licensing, the omission and underestimation of the impacts inherent to the construction of the São Luiz do Tapajós hydroelectric dam, and alert society to the risks of a policy of building projects of this size in the Amazon. Instead of concentrating on expanding the generation of electrical energy using hydroelectric power, Brazil's enormous potential lies in renewable alternatives, such as wind, solar and biomass energy, which should be explored further.

The "progress" peddled by the power plants has not been not seen in any case in the Amazon.
Much to the contrary.



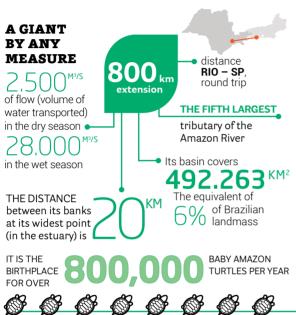
Of astounding beauty, the region is second to no other Brazilian paradise.

9FABIO NASCIN

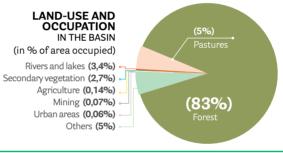
#### THIS IS THE

# TAPAJÓS RIVER

One of the best preserved in the Amazon, it winds through three states and cuts through the entire western part of Pará before emptying into the Amazon River, providing shelter and food to river dwellers, Indigenous Peoples and an inestimable number of species of plants and animals







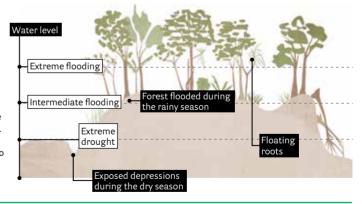
Indigenous Lands (ILs)

## Conservation Units (CUs)

#### THE PULSE OF THE RIVER

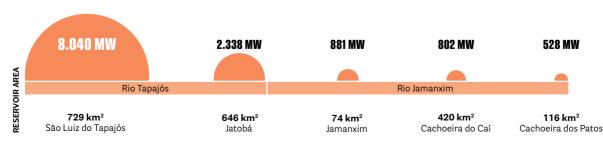
The annual rising and falling of the Tapajós regulates the way of life of the animals and plants of the region

In the rainy season (December to May), the waters of the Tapaiós rise much as seven meters, flooding the forests that line this 800 km watercourse and create a favorable environment for the reproduction of plant and animal life. In the dry season (June to November), the water returns to the normal course of the river, and with it all of the life that was reproduced in the rainy months. The building of hydroelectric dams changes the normal ebb and flow, compromising the reproduction cycle of life along the river, which can lead to the extinction of animals and plants that depend on this spectacle of nature.



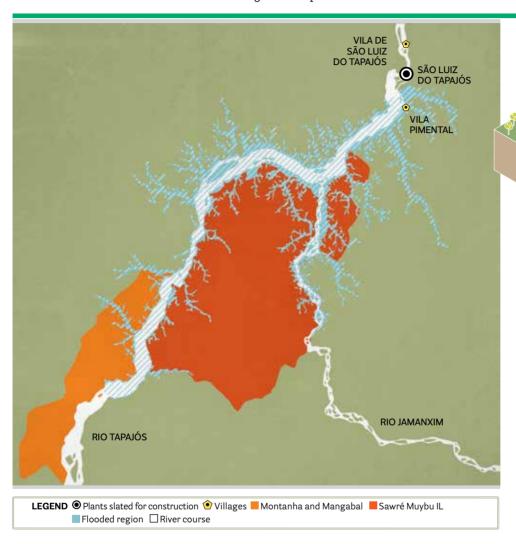
#### THE TAPAJÓS HYDROELECTRIC DAM COMPLEX

The power plants planned will transform the river and its tributaries into a series of reservoirs



# DAMAGE

If built, the São Luiz do Tapajós dam will form a reservoir that will extend for 123 km on the Tapajós River and another 76 km on the Jamanxim River. This will make 376 km² of forest disappear from the map, resulting in the forced displacement of Indigenous Peoples and other traditional riverside dwellers.



#### **UNDERESTIMATED COSTS**

The project is expected to cost R\$ 18.1 billion, but experience shows that these amounts are always underestimated

Plant	Projected investment (in billion R\$)	Investment as Oct. 2014 (in billion R\$)
Jirau	<b>9,2</b> (2007)	16,6
Santo Antônio	<b>9,2</b> (2007)	19,2
Belo Monte	<b>16</b> (2010)	28,861
São Luiz do Tapajós	<b>18,1</b> (2011)	-

SOURCE: GROWTH ACCELERATION PROGRAM (PAC)

# THE DAM IN NUMBERS

Reservoir Dam
Powerhouse Spillway
Transmission line

RESERVOIR

729 km<sup>2</sup>
LARGER
than the city of
Salvador (706 km<sup>2</sup>)

DAM

A huge

7,6 km

long wall cutting across the river, 53 M in height (equivalent to an 18 story building)

INDIRECT DEFORESTATION

2.235 km<sup>2</sup>

PROJECTED ENERGY GENERATION

 $4.000\,\mathrm{M}_{\mathrm{M}}$ 

8.040 MW OF TOTAL INSTALLED CAPACITY\*

\*The energy produced by the system varies depending on water and operational conditions. This is why a dam never reaches its installed capacity.

# A WATER DEPENDENT **ENERGY MIX**

97%

OF THE BRAZILIAN ENERGY MIX is dependent on water, whether to generate electricity through hydroelectric power plants, or by thermoelectric plants—these also need water to function. It is high time that we change the way we think: instead of destroying the Amazon, its rivers and biodiversity, it is necessary to invest in alternative sources that are actually clean and renewable.





Do we want a repeat of these scenarios on the Tapajós? Social chaos and deforestation are legacies of the large hydroelectric projects on the Amazon (left, Belo Monte dam; right, Altamira)

# THERE IS ANOTHER WAY

Wind and solar energy do not need water to function. These are the fastest growing sources of energy in the world. Ten years ago they represented just 1% of the world's plants. Today, they represent 9% and lead other sources in new facilities.



If we added all the potential for wind estimated up until now to the Brazilian energy mix, we could triple the country's energy generation.

With just the energy potential of the wind, we can harness the equivalent of almost The potential for wind energy in

as the capacity of all plants already installed in the country

the size of the São Luiz do Tapajós project.

**POWER** 

**PLANTS** 

#### SOLAR .

The potential of energy that comes from the sun is also very high, since the incidence of solar radiation in Brazil is one of the highest in the world.

The worst place to generate solar energy in Brazil is much better than the sunniest place in Germany, where energy generated by the sun already serves



If each Brazilian house had one solar panel on its roof, the energy generated would be 8X AS MUCH as that generated by São Luiz do Tapajós project



# FARSE OF

The aim of an Environmental Impact Study (EIA) is to provide information to help determine whether a project is viable from an environmental standpoint.

Unfortunately, since these studies became mandatory in Brazil (in 1986), they have served more to legitimize projects already decided and less to protect the country's natural resources.

The EIA/RIMA for the São Luiz do Tapajós Hydroelectric Power Plant is another example that confirms this tendency

# ENVIRONMENTAL LICENSING (EIA/RIMA)

#### **DEFINITIONS**

An EIA is a detailed technical study required to obtain an environmental license for a project of significant impact. Without this license, a project of this size cannot go forward. While the RIMA is a means for communicating with civil society.

The document is a type of summary of the EIA, with easier to understand language, and contains the main conclusions.

# Who produces these reports?

The people responsible for commissioning these studies, both the EIA and the RIMA, are those with the greatest stake in the project.

## WHAT IS THE EIA SUPPOSED TO EVALUATE?



THE PHYSICAL ENVIRONMENT

The water, air, climate, soil and natural and mineral resources of the region.



THE BIOTIC ENVIRONMENT The flora and fauna of the project's area of influence, highlighting the species encountered.



#### THE SOCIOECONOMIC ENVIRONMENT

The use and occupation of the land, the use of water and the local economy, highlighting historical and cultural aspects of the people who inhabit the region.



THE IMPACTS How the project may affect the three environments above, directly or indirectly in the short, medium and long-term.

The study should contain mitigating measures for the negative impacts and a monitoring program for these impacts.

#### THE PATH TO LICENSING

In the case of hydroelectric dams of up to 30 MW, the licensing procedure is carried out by the Institute of the Environment (Ibama), in three licensing stages:



LICENSE

Approves the

**PROVISIONAL** 

environmental viability

authorizes its location.

The enterprise must

submit an EIA/RIMA

based on an Ibama

Term of Reference.

The agency evaluates the

study and consults other

governmental agencies

regarding the project

conditions to be met in the coming phases.

and establishes

before issuing an opinion

of the project and

#### INSTALLATION LICENSE

Approves the start of the project or installation of the enterprise. Here, another study should be conducted: The Basic Environmental Plan (PBA), which details the programs designed to minimize and compensate negative impacts.



#### **OPERATING LICENSE**

Authorizes the start of operations of the project after verifying compliance with the previous stages.

Throughout the licensing process, licenses can be denied for lack of environment viability or due to violations of established norms or due to serious risks to the environment and health.

#### AT WHAT STAGE IS

# THE LICENSING PROCEDURE?

The FIA/RIMA for the São Luiz do Tapajós dam was submitted to Ibama by Eletrobras, which is handling the licensing, in August 2014. It is still being discussed. Both Ibama and Funai have requested complementary documentation, alleging a lack of information. Soon, Ibama is expected to schedule the public hearings. However some problems that have emerged along the way still need to be resolved. The main one is noncompliance, by the government, with the obligation to conduct a free, prior and informed consultation (FPIC), provided for in Convention 169 of the International Labor Organization, to which Brazil is a signatory. The FPIC is a time when indigenous communities and traditional populations affected have to be heard. No FPIC has been conducted or scheduled. What has happened is there is a rush to obtain licensing, and that is why the

government has ignored steps and used questionable strategies. In 2012, for example, through Provisory Measure 558/2012, the borders of vast areas of protected forest in the region were reduced. The objective: to "make space" for the two reservoirs planned for the Tapajós (São Luiz and Jatobá). Two years later, another maneuver. The Ministry of Mines and Energy (MME) scheduled an auction for the dam on December 15, without Funai's opinion on the indigenous component of the EIA. The government cannot auction a project that has no provisional license and, therefore, without the findings from Funai. After this irregularity was denounced by the Munduruku people and published in the press, the MME backed down and the auction was suspended. The government is running roughshod over the legal procedure in an effort to complete the project by 2020.

The EIA for the São Luiz do Tapajós project involved the participation of over 300 people, hired by CNEC WorleyParsons Engenharia SA. The team of researchers presented an analysis containing 25 volumes and 15,000 pages to Ibama. Although the work points to the huge diversity of species in the region, its analysis and methodology contain many flaws and omit information. In other words: the study does not fulfill its main objective: report on the socio-environmental viability of the project. The RIMA presented follows the same line. It is tendentious and ignores fundamental data, like the presence of threatened species and those limited to the stretches of the Tapajós River that will be impacted. In this sense, it serves only as a marketing tool. Read more about some of the main problems found.



The methodology recommended by Ibama was changed, reducing the number of transects (a fixed path used to define collection areas) by 20%. Furthermore, all the transects are upstream from the dam, resulting in a lack of standardized samples from downstream.

#### **FLAWS IN ANALYSIS**

The EIA does not show which species occur in riparian zones (riverbanks, islands and streambed), precisely the areas most affected by the flooding. It also does not report on how the environmental changes caused by the hydroelectric power plant will affect the flora and fauna.

#### **CUMULATIVE IMPACTS**

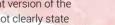
The current version of the EIA does not clearly state which species may disappear locally or which may suffer more severe consequences on a regional or global scale. Given that the plans for the hydroelectric use of the Tapajós River are not restricted only to the São Luiz do Tapajós dam, a complete analysis of the future scenario is necessary, which must include other planned projects. In addition, there is no distinction made between the impacts of the different stages of the projects (construction, flooding and operation).

#### FLAWS IN THE INVENTORY

The inventories vary widely in their effectiveness, reliability and usefulness to evaluate and predict the impacts on the biodiversity of a project the size of the São Luiz do Tapajós hydroelectric dam. The diversity of some groups was underestimated, while others were adequately evaluated - terrestrial for example.

#### UNDERESTIMATED **MERCURY**

Although it indicates that the reservoir for the dam will receive water from smaller rivers, the EIA ignores the strong possibility that an accumulation of mercury will occur in the lake for the dam and that this substance could be absorbed by the people and the animals that live there. Mercury, once accumulated. can be transported by the turbines to the Tapajós falls, in Santarém, after passing by thousands of riverside dwelling families, in addition to the municipal seats of Itaituba and Aveiro.



fauna is relatively well identified, Whereas terrestrial vegetation

would need additional fieldwork.

#### **OMISSION OF IMPACTS**

The report omits information about the presence of threatened species and endemic plants and animals (which only exist in the region). The EIA also does not analyze what could happen with the new species of animals detected by the researchers. including primates and birds, which could potentially disappear without ever having "been described by science" or documented by scientists.



#### NEGLECTED SOCIAL ASPECT

Social impacts common to large projects, such as prostitution and drug use, were not even mentioned. This is a recurring problem in the EIAs, given the difficulties in measuring these activities and the need for more elaborate plans to mitigate this type of impact.

However, these need to be discussed, considering what happened in the city Altamira, adjacent to the Belo Monte Dam site where higher rates of sex crimes against children were recorded since



#### NEGLECT OF THE **INDIGENOUS PEOPLES**

The part dedicated to Indigenous Peoples was added to the EIA as an annex months after the rest of the report had already been completed, an indication of the low priority given to the subject. The EIA itself also states that the study "did not fully follow the methodological processes, as the plan presented had announced "



#### **FEDERAL CONSTITUTION IGNORED**

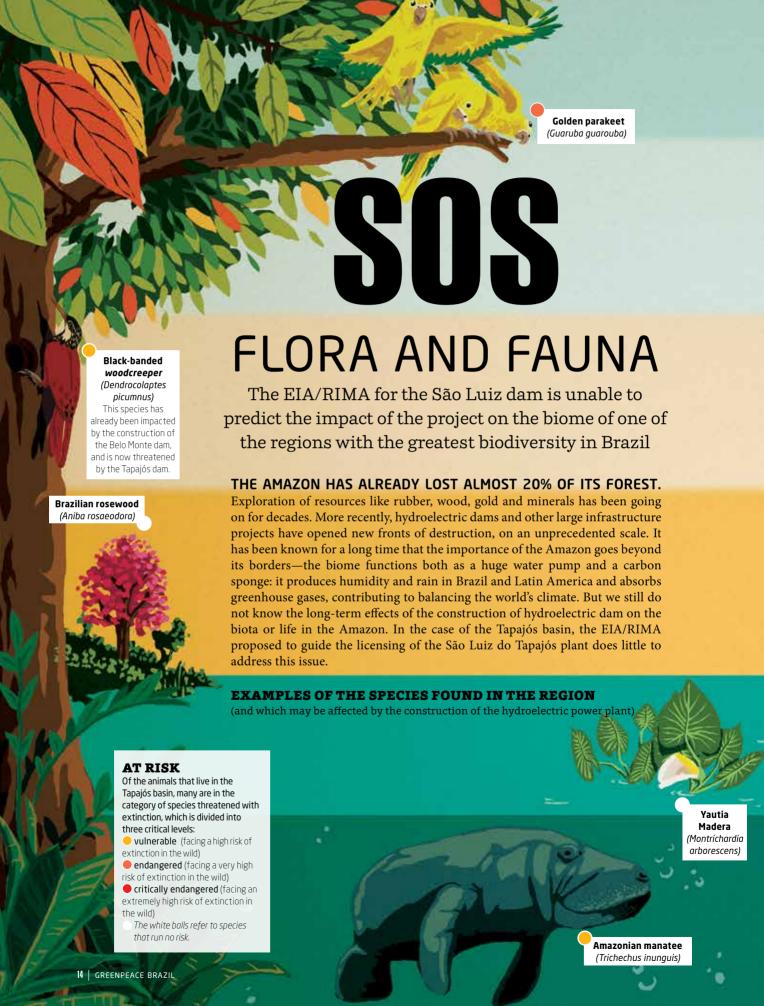
In a clear attempt to justify the removal of the indigenous groups that inhabit the banks of the Tapajós, the EIA ignores the explicit Indigenous Rights protections in the Brazilian Federal Constitution (see quote to the right) and instead cites the military dictatorship era 'Indian Statute' that holds less weight than rights outlined in the Constitution.

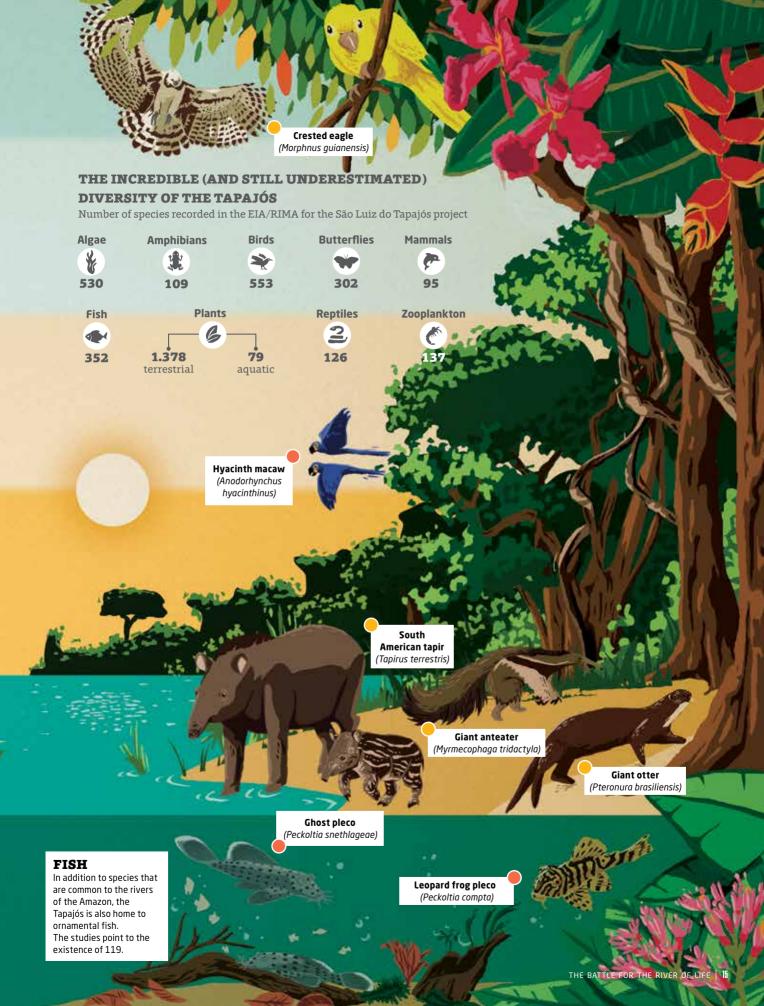
#### SUPERFICIAL MITIGATION

"The programs presented to mitigate the impact are unrealistic, ineffective, and weren't even evaluated within the EIA For example, the first environmental project suggested calls for "reducing the need for the rescue of fauna by encouraging spontaneous exit or disturbance using guided deforestation." Which means: destroying forest habitat in order to scare animals into the habitat of other animals.

"The removal of indigenous groups from their lands is prohibited, except (...) in the event of a catastrophes or epidemic that puts the population at risk (...), guaranteeing, in all circumstances, their immediate return after the risk has subsided"

ART. 231 OF THE BRAZILIAN FEDERAL CONSTITUTION









#### A FLAWED EIA/RIMA

Some ecological impacts that were not properly calculated and errors were encountered in the material



#### **Aquatic plants**

Few ecological aspects were considered regarding the implications of the proliferation or extinction of this community of plants, despite their importance as shelter and food for a large diversity of species. especially the manatee. The formation of the reservoir tends to favor floating species, which are already abundant, and this increase will cause a variety of impacts on the aquatic environment due to the increase in organic material, generating, consequently, the production of methane gas.



#### Mammals and birds



The region has some of the greatest diversity of mammals in the Amazon, in addition to a rare species, an indication of species unknown to science, including primates and birds that could disappear without having been studied. Many of the species recorded are endemic and others are threatened with extinction, occurring in environments that are directly impacted by the project, such as alluvial forests, streambeds and beaches, which were not adequately sampled.



#### **Reptiles and amphibians**



The RIMA states that "most of the species of amphibians and reptiles are not included in any endangered category and only one species of frog is classified as vulnerable." However, the 16 possible new species that were found in the field surveys may be limited in distribution to the region and have not had their respective endangered status evaluated because they have yet to be described by science. With regard to turtles, the RIMA states that "(...) the entire area studied is considered of low relevance for the reproductive stage of these animals." However, the EIA emphasizes that the reproduction period for the yellow-spotted Amazon river turtle (Podocnemis unifilis), the most abundant species in the area (and regionally endangered), was not covered by the sampling period. Therefore the study of this species was flawed.



The diagnosis presents problems in the identification of species. The study erroneously identifies, for example, the species of curimata most abundant in the basin: Prochilodus nigricans, which in the EIA appears as P. britskii. The most serious mistake is that the entire analysis is based on this error. In turn, P. britskii is a species that is rare and exclusive to the region, but which is not listed as an endemic species, nor is it listed in the area of influence of the project.



#### Benthic invertebrates

These animals live in the riverbed and are very important for the ecosystem because they are on a lower level of the food chain.

A survey of these invertebrates was carried out, but the possible impacts resulting from deforestation, silting, reduced flow, damming, reduction of oxygen and increase in organic material due to the installation of the São Luiz do Tapajós hydroelectric dam was not explained by the group.



Mundurukus preparing to participate in the General Assembly of the People, which was held in March 2015, on the Mundurucu Indigenous Land, with over 600 leaders from the entire region. On the agenda, the concern over the destruction that could be caused by the Tapajós hydroelectric dams

# THREATENED OLIVES

With an estimated population of 12,000 people, the Munduruku are the most numerous group in the region where the São Luiz do Tapajós hydroelectric dam is planned. Other Indigenous Peoples ethnic groups, riverside dwellers, settlers and urban residents also live in the region.

**THE IMPACT OF THE HYDROELECTRIC DAMS** on the lives, land and traditions of these populations is immeasurable.

The loss of fishing – a key resource for the Munduruku people and traditional riverside dwellers - the destruction of sacred places for the Indigenous People and the forced removal of where they have lived for centuries and generations are a few of the serious socioeconomic impacts that the construction of the São Luiz do Tapajós dam could cause. All of this should have been the subject of an in-depth analysis in the Environmental Impact Study, but the document presents the information in a superficial manner to the extent that it ignores, minimizes and even denies important impacts that would directly affect the lives of every person who lives in the region and depends on the river for food.



Protest by the Munduruku, in November 2014, against the construction of the Tapajós hydroelectric dam. They demand their right to be consulted



# The Munduruku

The Tapajós River represents the essence of the Munduruku people, who have traditionally inhabited its banks for thousands of years. They depend on it for food, transportation and to maintain their traditions. The EIA/RIMA for the São Luiz do Tapajós dam presumes that the river and its resources, like fish, will remain essentially unchanged, implying that the Munduruku and riverside dwellers have no cause for concern. History of the construction of other hydroelectric dams on the Amazon shows that this is not the case. The loss of their means of subsistence is a huge cause for concern. The damming changes the quality of the water, interferes in the reproduction of fish and produces other negative effects.

The changes in the river undermine the entire cultural dynamic of the Munduruku.

Part of the Sawré Muybu Indigenous Land and some of their sacred places, for example, are doomed to disappear with the flooding of the land.

#### THE FIGHT FOR THE RIVER OF LIFE

For centuries the Munduruku have fought to keep their land free and far from exploration by commercial interests. First, there were the rubber tappers, then later, the loggers and miners.

More recently, added to these threats are the plans to build dams. Since the mid-1980s, the energy companies have tried to introduce hydroelectric dams in the region. Simultaneously, for years the Munduruku have been calling for the demarcation of their territory. The final approval of the Sawré Muybu Indigenous Land has dragged on for more than a decade and is now completely paralyzed.

The land is supposed to cover 178,173 hectares, 7% seven of which would be inundated by the São Luiz do Tapajós reservoir. The damming project has hampered efforts at demarcation, since Article 231 of the Federal Constitution prohibits the definitive removal of indigenous groups from their lands (which would be necessary if the project is









authorized).

In September 2014, Munduruku leaders met with then interim president of Funai, Maria Augusta Assirati, who affirmed that the report for the creation of the indigenous land had been approved months before, but had not been published because other interests of the government were involved. At the end of that year, the Munduruku decided to begin demarcating the territory on their own. As a way of drawing attention to their rights, the Indigenous Peoples marked the borders of their lands according to the unpublished report by Funai.

#### THEY NEED TO BE HEARD

The disrespect with the Munduruku people goes



even further. As signatory to Convention 169 of the International Labor Organization (ILO), Brazil is supposed to guarantee traditional and Indigenous Peoples the right to free, prior and informed consultation. In other words: before deciding on any initiative that affects indigenous lands and their way of life, the government has to hear from those involved. But this is not what happened in the case of São Luiz do Tapajós. In addition to the Munduruku never being consulted, the government allowed the impact studies on their lands to be carried out by force, by sending soldiers from the National Guard to accompany researchers. In a letter addressed to the government in 2013, the Munduruku state: "at no time were we consulted, but the studies are already being done on our lands." And they requested: "that our complaints be considered immediately; that the armed forces leave their land; that they halt research studies; that they stop the construction of hydroelectric dams; and that they explain everything that will happen on our lands and listen to us and respect our decision." At the end of 2014, the Indigenous People created a protocol defining how they wanted to be consulted regarding the construction of the hydroelectric dams. Among the various guidelines, the document requests that the process occur in all of the villages and that everyone be heard, not only the leaders. In addition, they determined that the consultation can only occur after the Sawré Muybu is approved. In February 2015, the protocol was delivered to general secretary of the presidency, Miguel Rossetto, and they never got a response. The good news is that, in June of this year, the federal courts prohibited the government from licensing the dam before holding the free, prior and informed consultation.

- 1. Chief of the Munduruku people, Arnaldo Kaba, speaks during the General Assembly of the People.
- 2. Woman creates a traditional Munduruku painting, on the Sawré Muvbu Indigenous Land, which runs the risk of being flooded if the hydroelectric dam is built.
- 3. Man observes a primer on Convention 169 of the ILO, during a workshop held at the end of 2014 to explain the right to FPIC.
- 4. Munduruku children in a stream of the village Sawré Muybu. The organic relationship of the Munduruku with the Tapajós River begins in childhood and is of paramount importance to these people.
- 5. River dwellers in the Montanha e Mangabal Agricultural and Extractivist Project, who will also be impacted by the São Luiz do Tapajós dam.
- 6. Oar of a riverside dweller of Tapajós. If the hydroelectric dam is built, many of then will have to be removed and leave their homes.

# The riverside dwellers

There is an estimated 2,500 riverside dwellers who live in communities along the river, lakes and floodplains, and who will be displaced by the dams of the power plant. Like the Indigenous Peoples, they should have been consulted by the government and stakeholders in the plant before the project was even proposed. The EIA, however, tries to take away their rights by not recognizing them as "traditional populations." The neglect of the riverside dwellers has a long history. The EIA itself endorses one of the most notorious schemes of land grabbing in the Amazon, which happened in the 1970s. To describe the location of the Montanha e Mangabal a community of riverside dwellers, the EIA presents a faulty map that was used to legitimize a more than one million hectare land grab by the company Indussolo. In 2006 a Brazilian court had ruled against Indussolo's land. The Montanha e Mangabal population is now threatened by the flooding associated with the proposed dam and once again is trying to protect territory. Like the Munduruku, this community delivered a protocol to the Brazilian Government in which they requested to be consulted and have the right to decide the future of their land.





"The river is a part of us because it gives us life. Our ancestors left this heritage for us, this is why we have to take care of it. Nature has a law, if we violate it, there will be consequences. For us [the construction of dams] is an offense, a violation of our rights"

Munduruku historian Jairo Saw

# Settlers and urban residents

The settlers are not covered in the conceptual framework of Convention 169 of the ILO, but have the right to hold the land that they inhabit. The EIA/RIMA provides for total and partial compensation, in cash, or exchange of plots or homes for those that will be removed from their homes. This compensation in cash, however, is destructive, as we have seen with the Belo Monte project and in other places. The people generally end up without any money within a short period of time, since the amount paid for the plots or houses is not enough for them to purchase a new one, given the property speculation generated by the project.

The EIA also cites the precarious nature of public and private services in the area today, but the idea that the dam will bring better schools, health services and job opportunities is an illusion. To convince the local population, basic goods are offered, like health and education (which in fact are rights), are traded like favors in exchange for accepting the project.

### WE CAN'T GO ON LIKE THIS!

# THE TAPAJOS NEEDS YOU

Let's put a stop to the destruction of the Amazon! It is time to invest in sources that are actually clean and renewable. Share this publication and help keep the Tapajós River free!

THE TENDENTIOUS and incomplete treatment of the impacts in the EIA/ RIMA for the São Luiz do Tapajós project are a poor example of how environmental studies are conducted in Brazil. The collection and presentation of the scientific data, which today are financed by major stakeholders in the projects, should be conducted under an arrangement free of political pressure, and discussed democratically. Something that, as we've seen, is not even close to happening. If the EIA for the São Luiz do Tapajós dam was a geniune piece of work, the government would have already concluded that this project is not viable, due to the enormous consequences for the environment and the local people.

The hydroelectric dam will be built in the heart of the Amazon, in a region with immense biodiversity and of extreme importance to the conservation of the biome. The government plans include the installation of not just one, but at least 40 dams throughout the Tapajós basin. It is essential that we question the manner in which these decisions are being made, without the due participation of society, and the path our energy mix is taking, toward one that is increasingly dependent on water. The Tapajós is not just a river. It is a source of environmental and cultural heritage for all Brazilians. A paradise that is under threat and needs help. A project the size of São Luiz cannot be approved behind closed doors. It needs to be broadly discussed and disseminated. We may have the power to make a difference in our hands, as we have seen in so many examples, like the fight of Ruth Buendía (right) and the Munduruku people. Let's put the theme on the country's agenda. Let's change the course of history and save the Amazon. Say "no" to destruction and "yes" to a free Tapajós.

**TO LEARN MORE** A complete analysis of the EIA/RIMA for São Luiz do Tapajós can be found in Portuguese at: <a href="mailto:greenpeace.org.br/tapajos/docs/analise-eia-rima.pdf">greenpeace.org.br/tapajos/docs/analise-eia-rima.pdf</a>



### AN EXAMPLE OF DETERMINATION

Fighting for what you believe in

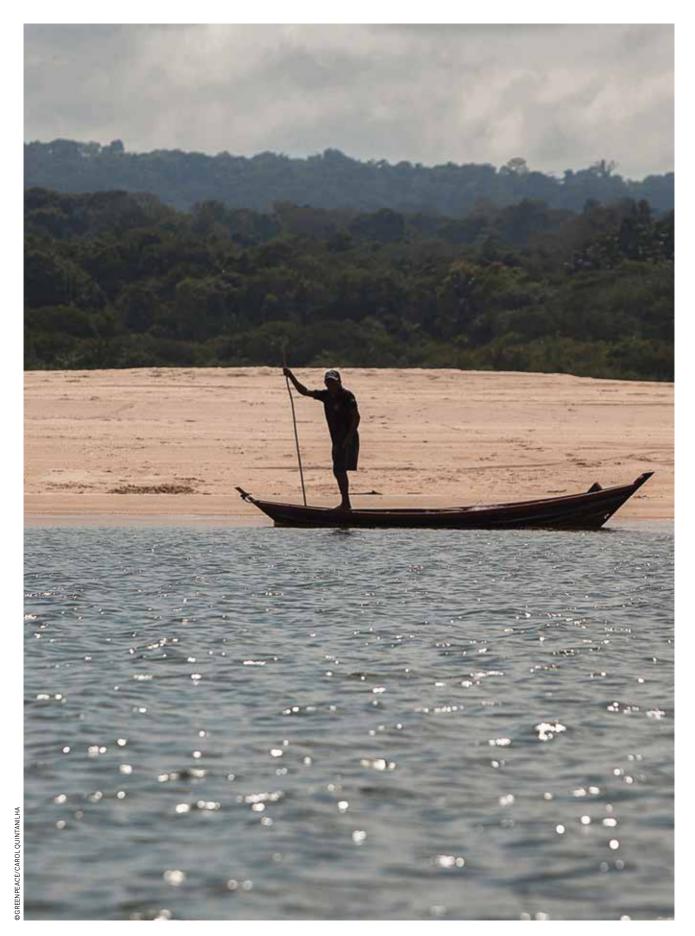
requires grit and determination. When this path is successful, however, all the effort becomes its own reward. Ruth Buendía Mestoquiari is an example of this. She is the leader of the Ashaninka people, who live along the Ene River, in the Peruvian Amazon, and president of the Central Ashaninka of the Ene River (CARE), an organization that defends the indigenous rights of 17 communities (around 10,000 people) of the region. She gained notoriety worldwide when she was awarded the Goldman Prize in 2014, considered the Nobel Prize for the environment. Her history is intimately linked with that of her people.

"The reason for being of the Ashaninka is to have a territory.

If the dams flood the valley, where will we go? It will be like we've disappeared"

Ruth was one of the leaders in the fight against the building of the hydroelectric dams on the Ene River and Tambo River. Summoning all of her determination, she was able to draw the world's attention to the cause. She insisted that the law was on their side and that the people needed to be heard. After years of fighting, in 2010, plans for the construction of the Pakitzapango hydroelectric dam were shelved.

**SEE ALSO** the documentary *Linhas*. (linhas.minisserie.org.br), a six-episode web series that delves deep into the past, the present and the future of energy in Brazil. Each video contains a character whose life is directly transformed by the production of energy.



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