

QUILOMBOLA LANDS IN ORIXIMINÁ: PRESSURE AND THREATS



© Comissão Pró-Índio de São Paulo - São Paulo, October 2011 (Pro-Indian Commission of São Paulo)

By

Lúcia Mendonça Morato de Andrade

Technical Consultant

Rodolfo Gadelha

Photos

Carlos Penteado

Translation

Cíntia Mendonça Garcia

Graphic Design

Irmãs de Criação

Study and Publication Sponsor





Institutional Sponsors











CPI-SP (Pro-Indian Commission of São Paulo) is a non-governmental organization founded in 1978 that works with the indigenous peoples and the quilombolas to secure their territorial, cultural and political rights, aiming to contribute to empower democracy, to gain recognition of the rights of ethnic minorities, and to fight racial discrimination. CPI-SP's partnership with the quilombolas of Oriximiná started in 1989, through assistance given to the quilombola organizations, promotion of training activities, development of joint actions advocacy, and the pursuit of alternative sustainable management of the quilombolas territories

Rua Padre de Carvalho 175 - 05427-100 - São Paulo - SP - Brasil Email: cpisp@cpisp.org.br - www.cpisp.org.br

The data and opinions expressed in this work are the responsibility of the authors and do not necessarily reflect the opinion of the sponsor of the study.

Contents

Foreword	07
Introduction	08
Technical Note	10
Delays in Tenure Regularisation	13
Deforestation	19
Timber and Logging	27
Mineral Interests	33
Hydroelectric Power Plants	39
Rihliogranhy	41



Foreword

I had the opportunity to visit Brazil and the partner more than once. While this beautiful and vast land has seen its profile increasing in the international scenario, the country still maintains the cruel structures that make this promising country a champion of inequality.

One of the main causes is the unequal access to land. For the quilombolas - who had this right recognised only for the last 23 years - the struggle is still arduous. These communities suffer due to lack of access to services and see their livelihood threatened by the same State that has vowed to support them.

In the area of Oriximiná in the Brazilian Amazon, the focus of this study, there are no public policies to ensure the respect of land titles. Quilombola communities are seeing an increase of mining concessions, construction of dams, and logging activities surrounding their territories. Day to day it gets clearer that the only way for the forest to be protected is through the initiative and leadership of the communities.

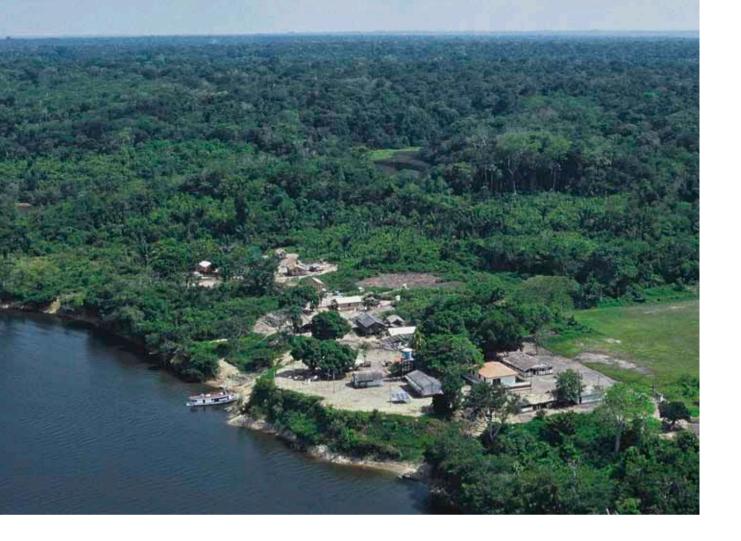
Christian Aid has been supporting the capacity building of quilombola communities for many years in Brazil, with the aim to improve the lives of hundreds and thousands of Afro-Brazilians who cannot be condemned to a limited life because of their origin and culture.

Certainly, this book provides new and important elements to the debates on traditional communities, forest management, and the historical debt of the Brazilian society to the Afro-Brazilians. It is the first step to allow the quilombolas communities to better understand the threats they are suffering and prepare themselves to deal with the future.

Hopefully, it will also foster public policies to allow these communities to preserve their way of life and traditions, to fulfil the priceless task of protecting the forest and show the way to other regions and communities. And certainly will be a valuable contribution for the entire Amazon in South America region!

We are very proud to be part of this project that raises the need to develop a model that is not only sustainable but integral and inclusive for all.

Dina Guerra Head of South America – Latin American and Caribbean Division Christian Aid



Introduction

The quilombolas from Oriximiná are descendants of slaves who, in the 19 century escaped from the plantations and the properties of white slave-owners in Óbidos, Santarém, Alenquer and Belém. In the forest, the runaway slaves found refuge, and built a new life. Since then, the forest has provided their livelihood and freedom.

Currently, the quilombolas from Oriximiná live within nine ethnical territories along the banks of Trombetas, Erepecuru, Acapu, and Cuminá rivers. They comprise 35 communities, whose residents share an extensive kinship network that connects all the different nuclei in which they live.

The municipality of Oriximiná is located in the area of *Calha Norte* a region in the extreme North of the State of Pará with the largest mosaic of protected lands in the world, including 12.8 million hectares of state conservation units, 1.3 million hectares of federal conservation units and 7.2 million of Indigenous Lands¹ (Bandeira, *et alli:* 2010:02).

Seven titled quilombola lands are located in *Calha Norte*, where 32 quilombola communities live: Boa Vista, Água Fria, Trombetas, Erepecuru, and Alto Trombetas (in the Municipality of Oriximiná), Pacoval (in the Municipality of Alenquer), and Cabeceiras (in Óbidos). Other 36 quilombola communities, in the municipalities of Oriximiná, Óbidos, Santarém, Alenquer, and Monte Alegre, still await regularisation of their lands (CPI-SP, website).

Frame 1. Quilombola Communities in the Calha Norte Region (Pará)

ALENQUER

Community: Pacoval (land titled)

MONTE ALEGRE

Communities: Peafu, Passagem, Curral Grande e Miri Flexal (lands not yet titled).

ÓBIDOS

Communities: São José, Matar, Castanhanduba, Apuí, Cuecê e Silêncio (land titled).

Communities: Nossa Senhora das Graças, Arapucú, Patauá do Umirizal, Muratubinha, Mondongo, Igarapé dos Lopes e Mocambo (lands not yet titled).

ORIXIMINÁ

Communities: Boa Vista, Água Fria, Mussurá, Bacabal, Arancuan de Cima, Arancuan do Meio, Arancuan de Baixo, Serrinha, Terra Preta II, Jarauacá, Poco Fundo, Acapú, Varre Vento do Erepecurú, Boa Vista Cuminá, Santa Rita, Jauari, Aracá, Espírito Santo, São Joaquim e Pancada (lands titled).

Communities: Abuí, Paraná do Abuí, Tapagem, Sagrado Coração de Jesus e Mãe Cué (land parcially titled).

Communities: Juquirizinho, Juquiri Grande, Jamari, Curuçá, Palhal, Último Quilombo do Erepecú, Nova Esperança, Moura, Nova Jerusalém e Cachoeira Porteira (lands not yet titled).

SANTARÉM

Communities: Arapemã, Saracura, Bom Jardim, Murumuru, Murumurutuba, Tiningú, Nova Vista do Ituqui, São José do Itugui, São Raimundo do Itugui e Pérola do Maicá (lands not yet titled).

In Legal Amazon there are 77 titled quilombola lands in which 144 communities live². These territories amount a total of 633,178.2743 hectares distributed within the states of Pará, Amapá, Maranhão, and Rondônia³. From the protected areas, the guilombola territories are among the most vulnerable to pressure and threats, once there are no public policies to support the communities in protecting and managing their lands.

For decades, isolation in Oriximiná has helped the guilombolas keep their lands protected. Their territories have large stretches of forest of which nearly 100% is preserved. However, as occupation progresses in that Amazon region, it renders quilombolas and their forests more and more exposed to a series of threats, such as logging and mineral exploration, hydropower projects for the rivers that cross their lands, fishermen and illegal gold prospectors, besides the impact caused by climate changes.

This study identifies key vulnerabilities in the quilombola territories in Oriximiná, and aims to draw the attention of Government and society to the need of public policies to support the quilombola communities in the protection and management of their lands.

¹ Grão Pará Ecological Station, Jari Ecological Station, Maicuru Biological Reserve, Rio Trombetas Biological Reserve; Saracá-Taquera National Forest; Mulata National Forest; Paru State Forest, Trombetas State Forest, Faro State Forest; Paytuna Environmental Protection Area; Monte Alegre State Park; Tumucumaque, Trombetas-Mapuera, Zo'e, Paru D'Este, and Nhamundá-Mapuera Indigenous Lands.

² This tally does not include the title granted by Fundação Cultural Palmares (Palmares Cultural Foundation) to the Mata Cavalo community (Mato Grosso) in 2000. This is part of a series of title granted during Fernando Henrique Cardoso's government, without mandatory expropriation of valid titles within the quilombola territory. A new process for titling the area was started by Incra in 2004, and is still ongoing.

³ To learn more, visit: www.cpisp.org.br/terras

Technical Note

This paper focuses on eight areas inhabitated by 34 communities. They are affiliated to the ARQMO - Associação das Comunidades Remanescentes de Quilombos do Município de Oriximiná (Association of the Remaining Communities of Quilombos of the Municipality of Oriximiná), a partner of Comissão Pró-Índio de São Paulo since 1989. The survey does not cover the quilombola community of Vila Nova de Cachoeira Porteira, located in the same municipality.

The study presented in this publication was carried out between October 2010 and August 2011 within the scope of the "The rights of the quilombola communities and forest protection" project, and was implemented by CPI-SP with the financial support of Christian Aid/In Their Lifetime Programme.

CPI-SP had the technical expertise of Rodolfo Gadelha, an environmental engineer, responsible for the preparation of maps and satellite image analysis.

Sources of the data

The data employed to assemble deforestation maps and analyses was collected from the Incra-Instituto Nacional de Reforma Agrária (National Institute of Colonisation and Agrarian Reform), the Iterpa-Instituto de Terras do Pará (Land Institute of Pará), the INPE-Instituto Nacional de Pesquisas Espaciais (National Institute for Space Research), and from the Comissão Pró-Índio de São Paulo (CPI-SP)'s collection.

Table 1. Source of the data employed.

Data	Format	Source	Year
Deforestation	Vector – Shapefile	INPE	2010
Legalised quilombola lands	Vector – Shapefile	Iterpa and Incra	no data available
Quilombola Lands under regularisation	Vector – Shapefile	ARQMO, CPI-SP, Embrapa	2001
Individual Squatters' plots	JPG	Iterpa and Incra	1998

Satellite images and satellite monitoring data from the INPE were used in the study. Data on deforestation are made available by INPE, through the PRODES-Projeto de Monitoramento do Desmatamento na Amazônia Legal (Deforestation Monitoring Project in the Legal Amazon), which provides annual data on deforestation in the Amazon. In order to gauge deforestation in the Amazon, Prodes utilizes the Landsat satellite. As it shows better spatial resolution as compared to other deforestation monitoring systems and it is subject to climate conditions in the dry season for cloud free image capture, Prodes' monitoring is performed only once a year (INPE, 2010). Images of 2010 could not be used in this analysis because the clouds hindered the readings.

Table 2. Source of satellite images employed.

Orbital Sensor	Scene (Orbit-Point)	Date of Imaging	Source
LANDSAT 5	228/061	11/08/2000; 10/09/2005; 23/10/2009.	INPE
Thematic Mapper (TM)	229/061	11/09/2000; 13/06/2005; 28/09/2009.	INPE

The map of "Mineral Processes in the quilombola Lands of Oriximiná" was prepared using the following database system UTM Projection System, Datum SAD 69, Zone 21.

Table 3. Source of mineral processes research.

Datum Employed	Format	Source	Year
Mineral Processes	Vector – Shapefile	DNPM (Sigmine)	08/2011
Quilombola Lands	Vector – Shapefile	Iterpa and CPI-SP	-

The hydroelectric projects maps were designed based on information provided by the "Plano Nacional de Energia 2030" (2030 National Energy Plan) of the Ministry of Mines and Energy.

Boundaries of non-titled Quilombola lands

Data regarding the limits of quilombola lands of Alto Trombetas, Jamari/Último Quilombo and Moura (not yet titled) were collected by ARQMO and CPI-SP in 1999 and 2000 through participatory mapping. The data obtained in the field were consolidated into a map with the assistance of the staff from the Laboratory of Remote Sensing of Embrapa Amazônia Oriental (Embrapa Eastern Amazon), in 2000.

The limits of the quilombola land of Ariramba were based on data collected by the staff of Incra's Superintendency in Santarém, in 2005, and on Public Notice Nº. 30953 of 26/06/2007 published by Iterpa in the Diário Oficial do Pará (Official Gazette of Pará).

Data Analysis and Treatment

The data on deforestation, consolidated into a Geographic Information System (GIS), were used in the preparation of information in tabular, graphical and cartographic form. The software Quantum GIS (QGIS), which is a free GIS with an open code developed as a project by Open Source Geospatial Foundation (OSGeo) was employed in this study to support spatial analysis of deforestation as geographic database, with built-in storage and retrieval of spatial information, as well as a tool to produce maps (www.qgis.org).

To determine the progress of deforestation, a multitemporal analysis was conducted covering three periods: before 2000, from 2001 to 2005, and from 2006 to 2009, for each of the quilombola

lands. To demonstrate the external pressure the quilombola lands suffer, analysis of the area surrounding the quilombola territories, within an outer radius of 10 kilometres was also carried out.

In QGIS software, deforestation data mapped by INPE/PRODES were used as the basis for deforestation in 2000. From Landsat-TM satellite images the mapping of annual increment of deforested areas within the guilombola land was performed, that is, through visual interpretation of images on a scale of 1:50.000, the deforested areas not previously mapped by INPE/Prodes were vectorized (scanned), taking into account the large accumulation and constant presence of clouds in the region. Through this procedure it was possible to accomplish the most complete picture of deforestation within guilombola territories, in those years. Once the deforested areas within quilombola lands had been properly mapped, they were overlapped to the limits of eight territories, and then the respective deforested areas (in hectare) were gauged per analysis period.

For the identification of road constructions, a temporal analysis of the images associated with the visual interpretation of Landsat TM's band 5 was performed, and thus, after a 1:50.000 scale vectorisation, the extension of roads constructed in the quilombola territory and its surroundings was gauged. Finally, to identify the occurrence of forest fires, the data available at the INPE website was used complemented by NOAA Night 12:16 satellite data.

The spatial analyses in the mineral processes in the quilombola lands of Oriximiná study were performed through Geographic Information System (GIS) with Quantum GIS open source software (version 1.7.0) in which a data cross-section study was done in vector format using a (0.6.1) Ftools complement and the area calculation tool of the Quantum GIS vector attribute table.



Delays in Tenure Regularisation

The Brazilian Federal Constitution grants the quilombolas the right to ownership of their lands. However, in Brazil a minute part of guilombola communities holds titles of their lands: 192 communities, representing 6% of the total number of communities estimated to exist in Brazil4 (CPI-SP's website).

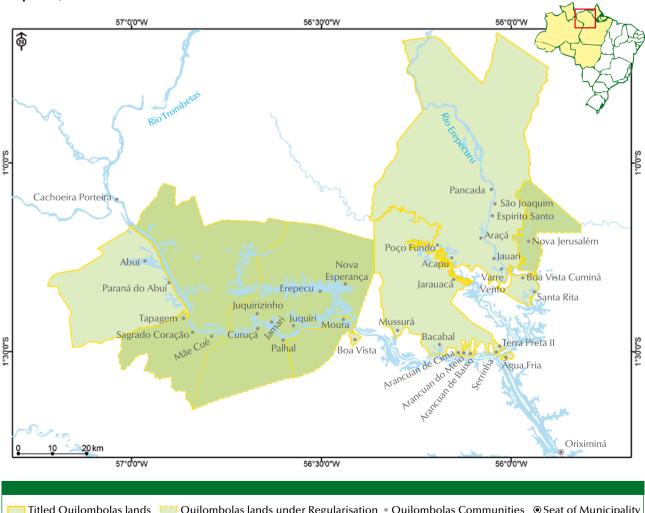
Land titling is a very important procedure for it establishes the extension and boundaries of the guilombola territory, and settles disputes that may occasionally arise over the lands occupied by the communities. When land ownership regularisation is not properly defined it renders guilombolas vulnerable. It makes it difficult for them to have access to public programmes and policies, which

is a hindrance to the sustainable management of their territories.

Oriximiná is a milestone in the quilombolas' struggle. It was the place where the first collective quilombola land titling occurred in compliance with Constitutional resolution, in November 1995, when Incra conferred the title of domain recognition to the Boa Vista Community.

Currently, the guilombolas of Oriximiná retain ownership of 361,825.48 hectares, distributed along five territories where 25 communities live (Frame 2). Those five territories represent 37.2% of all titled land in Brazil under the names of quilombola communities, and 57.2% of titled land in the Legal Amazon.

Map 1. Quilombolas Communities in Oriximiná.



🧰 Titled Quilombolas lands 💥 Quilombolas lands under Regularisation 🍨 Quilombolas Communities 💿 Seat of Municipality

Frame 2. Quilombola Lands in Oriximiná.

BOA VISTA

Titled by Incra in 1995. Extension: 1,125.0341 hectares.

Community: Boa Vista.

ÁGUA FRIA

Titled by Incra in 1996. Extension: 557.1355 hectares.

Community: Água Fria.

TROMBETAS

Titled by Incra and by Iterpa in 1997. Extension: 80,887.0941 hectares.

Communities: Mussurá, Bacabal, Arancuan de Cima, Arancuan do Meio, Arancuan de Baixo, Serrinha, Terra Preta II, and Jarauacá.

EREPECURU

Titled by Incra and by Iterpa in 1997. Extension: 218,044.2577 hectares.

Communities: Poço Fundo, Acapú, Jarauacá, Varre Vento Erepecurú, Boa Vista Cuminá, Santa Rita, Jauari, Araçá, Espírito Santo, São Joaquim, and Pancada.

ALTO TROMBETAS

Parcially titled by Iterpa in 2003/ Retified by Iterpa Statement of Rectification in Dec 17 2010. Extension: 61.211.9600 hectares

Portion to be titled (Incra Case nº 54100.002189/2004-16). Estimated extension: 151,923 hectares.

Communities: Abuí, Paraná do Abuí, Tapagem, Sagrado Coração de Jesus, and Mãe Cué.

JAMARI/ ÚLTIMO QUILOMBO

To be titled (Incra case nº 54100.002185/2004-20). Estimated extension: 138,822 hectares.

Communities: Juquirizinho, Juquiri Grande, Jamary, Curuçá, Palhal, Último Quilombo do Erepecú, and Nova Esperança.

MOURA

To be titled (Incra case nº 54100.002186/2004-74). Estimated extension: 18,491 hectares.

Community: Moura.

ARIRAMBA

To be titled (Incra case nº 54100.000755/2005-28; Iterpa case nº 2005/315528).

Estimated extension: 23,418 hectares.

Community: Nova Jerusalém

Note: The process of land regularisation in the quilombola community of Vila Nova de Cachoeira Porteira, also located in the Municipality of Oriximiná - which is not the target of this study -, was opened by Iterpa in 2004 (Case 2004 / 125212).

However, there are still 15 quilombola communities in Oriximiná waiting for land ownership regularisation⁵. The titling processes of Alto Trombetas, Jamari/Último Quilombo, Moura, and Ariramba were initiated by Incra and Iterpa in 2004 and 2005, comprising an estimated area of 332,654 hectares.

Six years after the proceedings started, there is still no progress. Even the initial stage of identification studies has not yet been completed. This paralysis is consistent with the national scenario, in which 87% of more than one thousand quilombola land regularisation cases opened by Incra - Instituto Nacional de Colonização e Reforma Agrária (Institute for Colonization and Agrarian Reform in Brazil) still have not been identified nor had a delimitation report, the first stage of the proceedings (CPI-SP's website).

In January 2009, Incra's president sent written communication nº. 1/2009-P committing to "conclude, by 2009, the Alto Trombetas Identification and Delimitation Technical Report, whose Anthropological Report is already finalised", and to "finalise, by 2009, the Technical Reports on the Identification and Delimitation of Jamari and Moura territories and to continue the proceedings". However, this has not been accomplished and no studies have been carried out so far.

Overlap with Conservation Units

All the quilombola territories which have not yet been titled overlap conservation units: Reserva Biológica do Rio Trombetas (Trombetas River Biological Reserve), Floresta Nacional Saracá-Taquera (Saracá-Taquera National Forest), and Floresta Estadual Trombetas (Trombetas State Forest) (Table 4). The quilombolas lay claim to the revision of limits of those units in order to exclude the area of quilombola occupation and ensure it is titled in name of the communities.

Federal Conservation Units

The regularisation processes of the quilombola lands of Alto Trombetas, Jamari/Último Quilombo and Moura are in the Chamber of Conciliation and Arbitration of the AGU-Advocacia Geral da União (Federal Attorney General's Office) due to the "claim by the Instituto Chico Mendes de Conservação da Biodiversidade (Chico Mendes Institute for Biodiversity Conservation) that opposes the titling of the area in the name of the communities, due to the overlap with conservation units" (Incra Presidential Letter 1/2009-P).

This instance of the Advocacia Geral da União (Federal Attorney General's Office) has the mission to resolve disputes between government agencies. According to information disclosed in the AGU's website, in 2009, six regularisation processes of quilombola lands which overlap conservation units were in the Conciliation Chamber, the Oriximiná ones are among them⁸.

The quilombolas of Oriximiná received no communication from the Advocacia Geral da União (Federal Attorney General's Office) stating

Table 4. Overlap of Quilombola Lands and Conservation Units of Oriximiná⁷.

Quilombo	la Land	Overlapping Areas with UCs (Conservation Units) (ha)			
Name	Estimated Extension (ha)	Trombetas Biological Reserve	Saracá-Taquera National Forest	Trombetas State Forest	
Alto Trombetas*	151,923	98,057	39,071	-	
Jamari/Último Quilombo	138,822	97,037	39,041	-	
Moura	18,491		18,431	-	
Ariramba	23,418	-	-	10,046	
TOTAL	332,654	195,094	96,544	10,046	

^{*}Portion of territory not yet titled

57°0,'0"W 56°0'0"W 8 Erepecuru Ariramba Alto Trombetas Trombetas Jamari/ Último Quilombo Moura Água Fria Oriximiná 56°0'0"W 57°0'0"W 56°30'0"W Titled Quilombolas lands Quilombolas lands under Regularisation Conservation Units Overlap area

Map 2. Overlap Quilombola Lands with Conservation Units.

that their case was in the Conciliation Chamber; nor were they invited to take part, or were briefed on the progress of the discussions. This procedure contradicts the right to free informed prior consultation, as established in the Indigenous and Tribal Peoples Convention of the International Labour Organization , every time the communities may be directly affected by any administrative measures (Convention 169, article 6).

It is worth noticing that a similar situation involving land regularisation of the Santo Antônio do Guaporé quilombola community (that overlaps the Guaporé Biological Reserve, in Rondônia) prompted the Procuradoria da República in Rondônia (Public Attorney's Office) to file a suit ("ação civil pública" 10) that, among other requests, demanded that the Federal Government enabled

the representatives of the quilombola communities to participate in the discussions held in AGU Conciliation Chamber (Procuradoria da República em Rondônia, 02/10/2010).

Trombetas State Forest

From the three conservation units that overlap quilombola lands in Oriximiná, the Floresta Estadual Trombetas (Trombetas State Forest) is the most recent, created in December 2006¹¹. By the time of its creation, the Ariramba and Cachoeira Porteira quilombola land titling processes were already being carried out in Iterpa. Nevertheless, the conservation unit was established, even though the regularisation of the area occupied by the quilombolas had not been concluded.

Decree nº 2.607 of 12/04/2006, which established the state forest, refers to the presence of quilombola communities and determines that wherever traditional quilombola communities are identified in terms of the Conservation Unit management plan, they will be subject to regularisation by "concessão de direito real de uso" (article 4). On the other hand, Article 5 of the Decree disclaims the option of the communities to exercise their property right as provided by the article 68 ADCT and relevant state legislation, in which case the referred areas will be excluded by law within the scope of Trombetas State Forest, as provided by the article 22, § 7 of Law Nº. 9985 of June 18, 2000.

In practice, however, the Ariramba community has been struggling to enforce their title option. CPI-SP has been following up negotiations between the quilombolas and the government of the State of Pará. In 2010 the government stand was that the

quilombolas should request themselves the change of the boundaries of the unit from the Legislative Assembly of Pará, and that nothing could be done by the Executive Branch.

In August 2011 Floresta Estadual Trombetas' management plan was approved and published by the Secretaria do Meio Ambiente do Estado do Pará (Pará Secretariat for the Environment) (Portaria SEMA 1.704/2011). The Executive Summary mentions the "claim of Ariramba quilombola land titling" within a "moderate intervention zone"¹³. The management plan provides a sub-programme of land consolidation, which includes, among other strategies, "to promote discussions about the indigenous and quilombola situation in the Flota." It is expected that in the scope of that sub-programme previous actions related to land regularisation of those quilombola lands may resume, as well as their right to the land title granted.

⁴ A census of the quilombola population in Brazil has never been conducted. Estimates of the social movement point to the existence of 3 to 5 thousand quilombola communities. Data from the Secretaria de Políticas de Promoção da Igualdade Racial (Secretariat for the Promotion of Racial Equality of the Presidency of the Republic of Brazil) identified 3,524 quilombola communities (SEPPIR, 2010:8)

⁵ Among them, the Vila Nova de Cachoeira Porteira Community. The land regulation process of that community started by Iterpa in 2004 (case 2004/125212), is still on hold.

⁶ To learn more about quilombola land titling process, visit CPI-SP website at www.cpisp.org.br/terras

⁷ Problems related to overlap in that state forest also involve quilombolas from Vila Nova de Cachoeira Porteira and indigenous people.

⁸ In that year, besides the Oriximiná communities' case, other cases were also in the Conciliation Chamber, the case of the Tambor community overlapping Jau National Park (Amazonas), the Santo Antônio of Guaporé community overlapping Guaporé biological reserve (Rondônia), Cunani community, that lives within Cabo Orange National Park (Amapá), the Mumbuca community overlapping Mata Escura Biological Reserve (Minas Gerais), and São Roque community whose lands overlap Serra Geral and Aparados da Serra National Parks (Rio Grande do Sul).

⁹ ILO's Convention 169 has power of law in Brazil, and is applicable to the indigenous and quilombola communities.

^{10 &}quot;Ação Civil Pública" is a legal procedural instrument, as provided for in the Brazilian Constitution, intended to prevent or abate diffuse, collective and homogeneous individual rights. "Ação civil pública" cannot be filed by any citzen; legitimacy is limited.

¹¹ The Rebio do Rio Trombetas (Trombetas River Biological Reserve) was established in 1979 (Decree Nº 84.018 on September 21, 1979) and Floresta Nacional Saracá-Taquera (Saracá-Taquera National Forest) in 1989 (Decree Nº 98.704 on December 27, 1989).

^{12 &}quot;Concessão de direito real de uso" (concession of real right of use) is an agreement in which the Public Administration transfers (upon payment or free of charge) the use of a public land to an individual, for all intents and purposes relevant to public interest.

¹³ M2: moderate intervention area, with 178,400 hectares - medium to high priority conservation zone. The activities in this area should not modify environment and landscape characteristics. It mostly comprises protected areas, and may have areas of anthropogenic changes (SEMA, 2011).



Deforestation

Deforestation is one of the most serious environmental problems in Brazil. From 2000 to 2009, the Brazilian Amazon lost, in average, 17,600 square kilometres a year of natural forest (WWF, 2010: 4). In 2010, the accumulated deforestation in the Legal Amazon reached 18% of the region (In: Celentano *et alli*, 2010:62).

Deforestation leads to loss of biodiversity, with direct impact on the livelihoods of millions of people who rely on the forest for survival. Moreover, deforestation and forest degradation contribute to greenhouse gas emissions – they are responsible for 17 to 20% of global emissions of greenhouse gases. Brazil is among the top carbon dioxide emitters in the planet, the main greenhouse gas which causes global warming, mainly due to deforestation. It is estimated that changes in the use of land and forests correspond to 61% of Brazilian emissions (Ibid: 65).

In 2011, deforestation in the Amazon resumed after a period of decline that had begun in 2005.

According to Imazon, accumulated deforestation in the period from August 2010 to July 2011, which corresponds to the twelve months of the current deforestation calendar, reached 1,628 square kilometres. There was a 9% increase compared to the previous year (August 2009 to July 2010). In July 2011, the State of Pará was leading with 41% of detected deforestation (in Hayashi *et alli:* 1-3).

Deforestation in the Municipality of Oriximiná

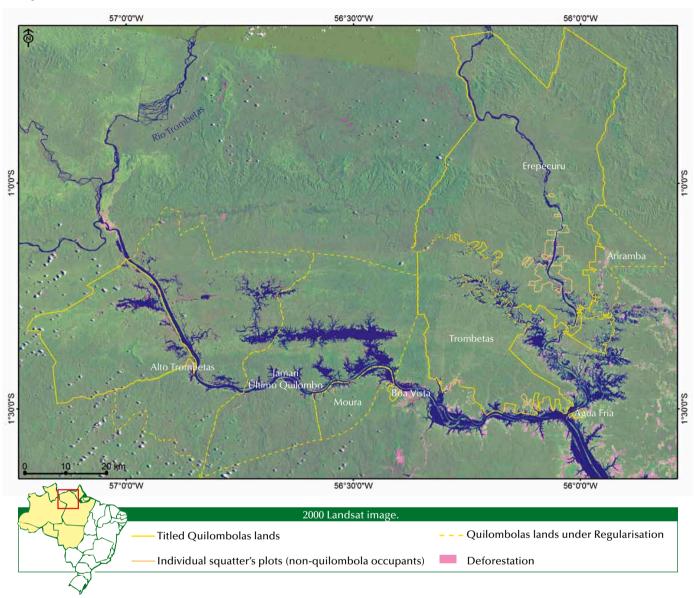
According to INPE/Prodes data, in 2009 the Municipality of Oriximiná had 1.32% of its territory deforested, which represents an area of 1,428 square kilometres¹⁴. Between 2000 and 2009, the deforested area in Oriximiná corresponded to 271 square kilometres, which represented an increment of 19% over the total deforested area in the municipality.

Table 5. Progress of deforestation in the Municipality of Oriximiná.

Year	Accumulated Deforestation since 2000 (km²)	Percentage of accumulated deforestation against the municipality's total area
2000	1,157.0	1.07%
2001	1,196.6	1.11%
2002	1,255.0	1.16%
2003	1,292.4	1.20%
2004	1,318.9	1.22%
2005	1,341.8	1.24%
2006	1,355.6	1.26%
2007	1,380.7	1.28%
2008	1,410.3	1.31%
2009	1,428.0	1.32%

Source: http://www.dpi.inpe.br/prodesdigital/prodesmunicipal.php

Map 3. Quilombola Territories - Deforestation until 2000.



Deforestation in the Surrounding areas of the Quilombola Lands

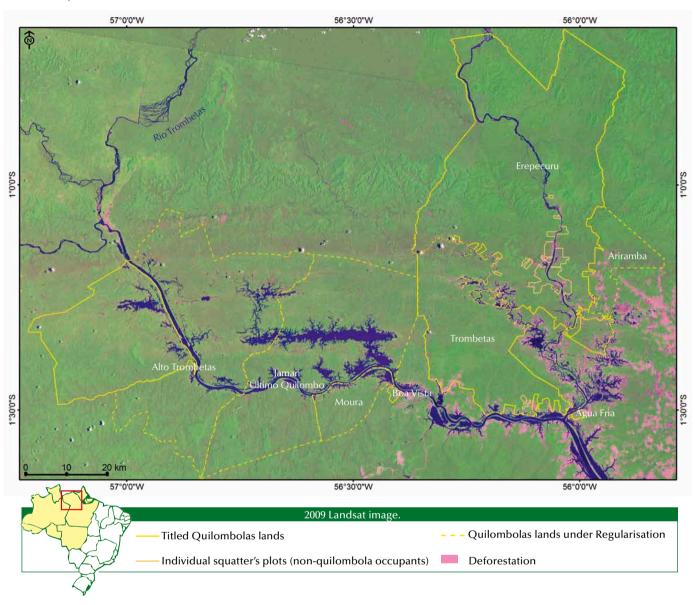
In order to estimate the dimension of external pressure on the quilombola lands of Oriximiná, CPI-SP analysed deforestation in its surrounding areas, considering an external radius of 10 kilometres. The surrounding area totals around 6 thousand square kilometres and partially falls within the Conservation Units of Reserva Biológica do Rio Trombetas, Floresta Nacional Saracá-Taquera, Floresta Estadual Trombetas and Floresta Estadual Faro.

The study gave evidence that until 2009 deforestation in the areas surrounding the quilombola lands had totalled 272.54 square kilometres (Table 6) – which represents 19% of the total deforested area in the

Table 6. Deforestation in the surrounding areas of Quilombola lands.

6 1: 4 (1 2)	D : 1	D (
Surrounding Area (km²)	Period	Deforested area (km²)	
6,084.21	Até 2000	211.77	
	2001 a 2005	39.67	
	2006 a 2009	21.10	
	TOTAL	272.54	

Map 4. Quilombola Territories – Deforestation until 2009.



Municipality of Oriximiná until that year (1,428 square kilometres). The deforested region concentrates in areas close to rivers and lakes and along a road, known as the "BEQ road", which stretches from the town of Oriximiná to the proximities of Ariramba and Erepecuru Quilombola Lands.

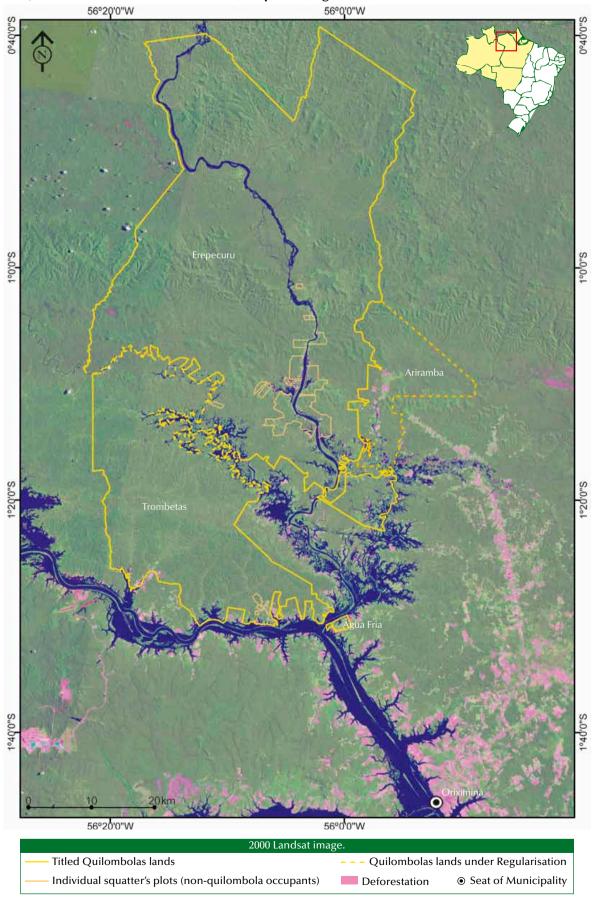
The CPI-SP study mapped approximately 90 kilometres of roads surrounding quilombola lands (Table 7).

As it can be noticed from the satellite images, the titled quilombola lands of Erepecuru, Trombetas, and Água Fria represent a "barrier" to deforestation, although it stretches into Ariramba land, not yet regularised.

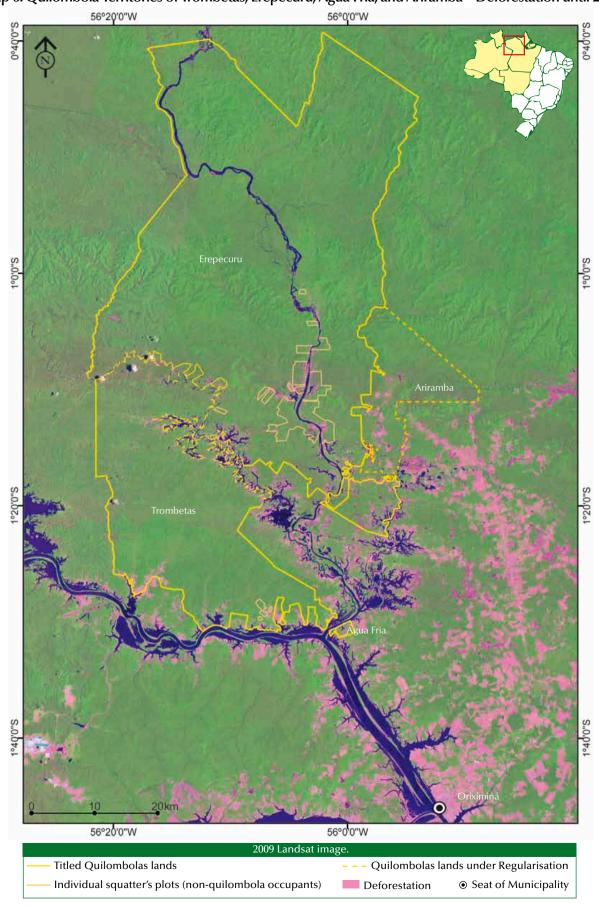
Table 7. Mapped roads surrounding Quilombola Lands.

Period	Road Extension (m)
Até 2000	49.0
2001 a 2005	10.2
2006 a 2009	25.5
TOTAL	84.7

Map 5. Quilombola Territories of Trombetas, Erepecuru, Água Fria, and Ariramba – Deforestation until 2000.



Map 6. Quilombola Territories of Trombetas, Erepecuru, Água Fria, and Ariramba – Deforestation until 2009.



Pressure of deforestation also affects existing conservation units in the Municipality of Oriximiná¹⁵, even though they are not included among the units at higher risk of deforestation, according to Imazon's analysis (Sales, 2011). The unit with the largest deforested area (in absolute terms and in proportion to its total area) is the Saracá-Taquera National Forest, with 3.3% of its area deforested up to 2009. In this unit, Mineração Rio do Norte (Rio do Norte Mining Company) has been exploring bauxite since the 70's.

Table 8. Deforestation in conservation units in the Municipality of Oriximiná.

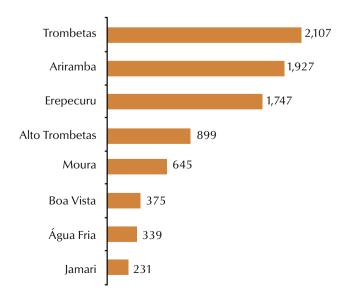
Nome of UC	Flona Saracá-Taquera	Rebio Trombetas	Flota Trombetas	Flota Faro	ESEC Grão Pará
Area km²	4,417.6	4,082.1	31,472.4	6,295.6	42,095.8
Category	National Forest	Biological Reserve	State Forest	State Forest	Ecological Station
Goup	Sustainable use	Integral Protection	Sustainable use	Sustainable use	Integral Protection
Scope	Federal	Federal	State	State	State
Total Deforestation	145.4 (3.3 %)	20.6 (0.5 %)	65.7 (0.2 %)	15.9 (0.3 %)	9.8 (0.0 %)
until 2009 km²					

Source: Prodes - site visited on 20/07/2011

Deforestation in Quilombolas Lands

Quilombola lands have large tracts of preserved forest. Deforestation in eight quilombola territories in Oriximiná totalled 8,269.22 hectares, in 2009, corresponding to 1% of all the areas.

Chart 1. Accumulated deforestation per Quilombola Land (absolute area in ha) until 2009.

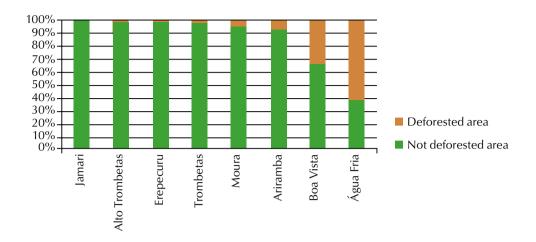


In 2009, among the titled lands with larger extensions, the Quilombola Land of Trombetas had the greater proportion of deforested areas: 2.6%. Within Erepecuru and the titled portion of Alto Trombetas lands, the deforested areas were respectively 0.8 and 0.3% of total extension.

Among the titled lands with smaller extensions, Água Fria and Boa Vista, the proportion of deforested territory is significantly higher. In 2009, it accounted for, respectively, 60.8% and 33.3% of the guilombola land area.

On the other hand, in the not-yet-titled lands of Alto Trombetas and Jamari/Último Quilombo, the deforested areas were respectively 0.47% and 0.17% of the territory, in 2009. In the Quilombola Land of Moura the rate was greater, 3.49% of the territory extension. As for the Quilombola Land of Ariramba, the deforested area was 8.23% of the total areas claimed by the community – deforestation occurs mainly within the portion of the territory which overlaps public land without formal allocation, and according to quilombola's denouncement, it is mainly due to the actions of non-quilombola occupants.

Chart 2. Proportion of accumulated deforestation per quilombola land until 2009 (area percentage).



The analysis of evolution against time indicates that 78.2% of deforestation within quilombola territories happened until 2000; 14.6% in the period between 2001 and 2005, and 7.2% in the period between 2006 and 2009 (Table 9), which means that when all the quilombola territories in Oriximiná are considered, the speed of deforestation declines between 2001 and 2009. However, deforestation progress presents different characteristics in each territory.

The Boa Vista territory (titled in 1995) has not shown deforestation after 2000. In six of its territories, a decrease of deforested area was noted, when the periods between 2001/2005 and between 2006/2009 are compared: Água Fria, Trombetas, and Erepecuru (titled); Jamari, Moura, and Ariramba (non-titled).

Table 9. Deforestation in Quilombolas lands per period of analysis.

Quilombola Land			Deforestation (ha)			
Name	Land Tenure	Area (ha	Until 2000	From 2001 to 2005	From 2006 to 2009	TOTAL
Boa Vista	Titled in 1995	1,125.03	374.69	-	-	374.69
Água Fria	Titled in 1996	557.14	335.95	2.52	0.85	339.32
Trombetas	Titled in 1997	80.887.09	1,646.27	305.17	155.51	2,106.95
Erepecuru	Titled in 1998/2000	218.044.26	1,306.78	316.82	123.34	1,746.94
Alto Trombetas	Titled in 2003	61.212.96	146.52	13.32	24.83	184.67
Alto frombetas	Under regularisation	151,923	663.76	50.59	-	714.35
Jamari	Under regularisation	138,822	152.59	61.13	16.82	230.54
Moura	Under regularisation	18,491	587.4	50.79	6.69	645.22
Ariramba	Under regularisation	23,418	1,253,93	406.83	265.78	1,926.54
	TOTAL	694,479.01	6,468.23	1,207.17	593.82	8,269.22

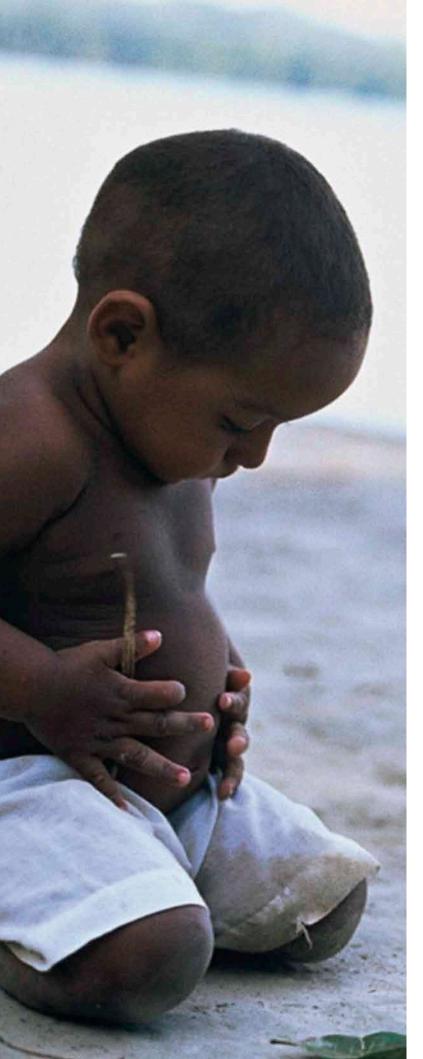
In the Trombetas territory 305.17 hectares were deforested, between 2001 and 2005. Then again, within the next four years (2006 to 2009), the extension of deforestation fell by half: 155.51 ha. In Erepecuru Quilombola Land, a decrease in the speed of deforestation was also recorded. Between 2001 and 2005, 316.82 hectares were deforested, falling by 61% in the following period (2006/ 2009), with a record of 123.34 hectares of deforestation.

In the Alto Trombetas territory an increase in the speed of deforestation was noticed within the portion that was titled in 2003: 13.23 hectares between 2001 and 2005, almost doubling in the period of 2006/2009 to 24.83 hectares. On the

other hand, in the part of the territory which has not yet been regularised, there was a decrease: 50.58 hectares were deforested between 2001 and 2005, while there was no deforestation in the following period (2006/2009).

¹⁴ The whole extension of the Municipality of Oriximiná is 107,778 square kilometres.

¹⁵ In the municipality of Oriximiná, there are five conservation units: Estação Ecológica Grão Pará, Foresta Estadual Faro, Florestal Estadual Trombetas, Floresta Nacional Saracá-Taquera, and Reserva Biológica do Rio Trombetas (Ministry of Environment – National Register of Protected Areas).



Timber and Logging

In the last five years, the quilombola communities in Oriximiná have been approached with many offers of partnership by logging companies to explore the forest within their territories. The quilombola lands which are already titled in that region are an attractive option for the companies because they comprise extensive areas in the forest and have their land ownership regularised.

One of the legal requirements by the Brazilian environmental law for approval of forest management plans is to prove legal ownership of the land. Bearing in mind that the rights to ownership in the Amazon are very poorly defined – estimated at 53% by Imazon (Brito, 2009) - such a requirement has become a hindrance to forest exploration. Because of that, the timber sector has pursued forests with landownership cleared, such as titled quilombola territories, indigenous lands, and Incra land reform settlements.

Until 2011, the guilombolas in Oriximiná had refused the offers by different logging companies. However, in February 2011, the Trombetas and Erepecuru territories owner's associations (ACORQAT -Associação das Comunidades Remanescentes de Quilombos of Bacabal, Arancuan de Cima, Arancuan do Meio, Arancuan de Baixo, Serrinha, Terra Preta II, e Jarauacá and ACORQE – Associação das Comunidades Remanescentes de Quilombo Pancada, Aracá, Espírito Santo, Jauari, Varre Vento, Jarauacá e Acapu) signed agreements for logging in their territories with Construtora Medeiros Ambiental Ltda., a company based in the State of Tocantins, whose main economic activity is 'engineering services', according to the Cadastro Nacional de Pessoa Jurídica (Company's Tax ID Number)¹⁶.

According to quilombola's testimony, the company offered an estimated monthly income of 1,800.00 reais per family (approximately 754 euros) for the duration of the contract for the families in the Quilombola Land of Trombetas, and 3,000.00 reais (approximately 1.256 euros) for the Erepecuru's. The quilombolas also informed that

according to the negotiation next to Construtora Medeiros, logging was expected to start in September 2011.

In the period that followed the signature of the contract, the company performed the forest inventory of the two areas with a view to obtain environmental license for the forest management plan. On June 16, 2011, the application for the "licença de atividade rural" (environmental licence for rural activities) in the Quilombola Land of Trombetas was filed at the Secretaria de Meio Ambiente do Pará (Pará Secretariat for the Environment). The Erepecuru Quilombola Land Association's application was filed on August 18. Both processes were in progress by the time this book was concluded.

Profile of Contracts Signed

The contracts were signed by three coordination members of each quilombola association and a representative of Construtora Medeiros Ambiental whose status within the company was not specified in the document. The contracts do not mention or append any documents which demonstrate that the members of quilombola associations have acknowledged and agreed the terms of the contract in a formal meeting.

Each association signed two different contracts with the company. One, called "partnership to develop, explore and execute a sustainable forest management plan with residue reutilisation", and a second contract for "purchase and sales". The terms of the two contracts signed by the two associations are very similar.

The contracts establish a "partnership in the designing, exploration and execution of a sustainable forest management plan and residue

reutilisation (branches and trunks)", with duration of five years. The contracts specify that "after the inventory is completed, both parts will define the wood species to be managed".

The "partnership" contracts establish that the sustainable forest management plan will be implemented in annual plots of 3,733 hectares in the Quilombola Land of Trombetas, and 7,410 hectares in Erepecuru, implying that in five years the logging area should reach 23% of the Trombetas Land, and 17% of Erepecuru Land.

According to the agreement, the company will be responsible for the costs of the operation: expenses to obtain the necessary documentation next to government agencies for the approval of the forest management plan; cost of hired technicians and other related charges; other costs related to the elaboration, exploration and execution of the forest project, "except expenses with residue reutilization and transportation."

As for payments, the partnership contracts establish that "50% (fifty percent) of the volume of wood from species approved by SEMA/PA which are extracted in PMFS (sustainable forest management plan) will be transferred" to the associations, and the remaining 50% to the company as "remuneration for their services". As for forest residue reutilization, according to the agreement, the partition will be made after deductions of expenses to obtain the products, except for the cost with installation of charcoal ovens that will at the company's cost.

"Purchase and sales" contracts establish that the quilombolas associations will sell their 50% share of extracted timber to Construtora Medeiros "for R\$120.00 (one hundred and twenty reais), R\$130.00 (one hundred and thirty reais), R\$140.00 (one hundred and forty reais) and R\$150.00 (one hundred and fifty reais) per cubic metre, and

Table 10. Logging area in the Quilombola lands of Erepecuru and Trombetas.

Quilombola Land	Land Extension (ha)	Logging area in 5 years (ha)	% of Total land extension
Trombetas	80,887.09	18,665	23%
Erepecuru	218,044.26	37,050	17%

classification will be made after the inventory between the parties." There is no provision for adjustment of the index values over the five years of partnership.

The agreement also establishes that Construtora Medeiros will be responsible for the management and execution of the forest management plan, while the associations will be in charge of its supervision and monitoring. However, before the environment agencies, the associations will be the only party accountable for the venture since the license is requested solely on their behalf.

Risks

The logging agreements signed in Oriximiná represent a serious risk to the integrity of the quilombola territories considering that the associations do not have the means to satisfactorily monitor the whole business to ensure that forest exploration is executed through low impact management.

Throughout the negotiations and formalisation of the contracts, the associations did not receive any legal or technical guidance that enabled them to knowingly define the terms of the agreement. The management plan was designed by the company without any monitoring or assessment by technical consultant on the side of the associations.

Moreover, the associations do not seem qualified to monitor important aspects of the logging trade, such as credit control of forest permits¹⁷ which are going to be issued in the name of the associations, since they are nominally accountable for the venture next to the environmental agency.

Monitoring by the community is itself even more important in view of the illegality surrounding this sector, and the difficulties the government find to control it. Estimates indicate that 33% of all timber production in the Amazon is illegal (Adeodato *et alli*, 2011: 73).

Imazon's analysis revealed that 73% of explored hectares in Pará between August 2008 and July

2009 had no license from the Secretaria do Meio Ambiente do Pará (Pará Secretariat for the Environment). Illegal logging was detected in all regions of the state, and the Baixo Amazonas (Lower Amazon region) - where Oriximiná is located - accounted for 4% of the total identified (Monteiro et alli, 2010: 2). In the same period, unauthorized exploitation of timber was diagnosed within the Saracá-Taquera National Forest, a conservation area near quilombola lands (Idem: ibidem).

Irregularities permeate logging from extraction of the wood in the forest to the final consumer: "It is not just a question of flaws and shortcomings. Through corruption, the exploration of undue sites is approved, including non-forested areas. [...] In addition to the approval of fictitious plans, including falsification of documents, non-licensed logging and timber illegal trade, the control system has many loopholes that enable a variety of fraud along the processing chain" (Adeodato *et alli*, 2011: 73-75).

Problems occur even within legalised logging: "much of the unauthorised logging, even though it is legal, has no quality, presents flaws in inspection and it is practised through methods which harm the forest" (Idem: 64). Imazon assessment of operational forest management plans between 2008 and 2009 found that only 14% were good quality logging, while 64% were intermediate, and 22% were low (predatory logging) (Monteiro *et alli*, 2010: 12-13).

In this scenario, the chances of this partnership not generating the expected benefits for the communities are high. This seems to be the reality in logging projects that are being executed in quilombolas lands elsewhere in Pará¹⁸.

Logging in Quilombolas Lands in Pará

The Comissão Pró-Índio de São Paulo identified five other quilombola associations in Pará involved in logging projects on their lands, besides the two in Oriximiná. These seven quilombola associations

represent 45 communities that have ownership over 416,527.9438 hectares.

Three associations are already running forest management projects, and a fourth has license approved by the SEMA-Secretaria do Meio Ambiente do Pará (Pará Secretariat for the Environment) to commence operations in 2011 (see Table 11). Three other associations have pending licensing applications before SEMA: the Quilombola Lands of Trombetas, Erepecuru (in Oriximiná), and Bailique (in the Municipality of Baião).

All seven projects identified were developed partnership between the quilombola associations and the companies. In April 2011, an event promoted by CPI-SP and Malungu -Coordenação das Associações das Comunidades Remanescentes Quilombos de do (Coordination of the Associations of Remaining Quilombo Communities of Pará)19 brought together leaders of these associations to reflect on such initiatives. Testimonies showed that the partnerships have not provided the expected benefits; moreover, they have caused divisions within the communities themselves.

It was found that the terms of the agreements signed are not fully known to the quilombolas. Some leaders did not have a single copy of the contracts; besides, not one of the associations present at the event had had any legal advice to define the terms of the contracts.

Testimony indicated that, in general, the communities are not able to carry out an effective control of forest exploitation. Difficulties of monitoring timber trade have been reported. None of the associations, for instance, is able to work with the timber transport permit control programme, which ends up becoming the responsibility of the company.

Another controversial aspect is the fact that companies do not appear in the environmental licensing process as sharing accountability for the venture, though they are the ones that carry out inventories and management plans as well as timber logging and sales. That is, the quilombola associations have taken full responsibility for a process that they cannot fully master.

Forest Concession in Flona Saracá-Taquera

Another potential impact on the quilombola lands of Oriximiná related to logging is the concessions²⁰ in Saracá-Taquera National Forest. This Conservation Unit was selected by the government as a priority in forest concession. The concession will cover an area of 142,060 hectares representing 32% of the total size of that conservation unit in which activities of mineral extraction are already being carried out.

In 2009, a public tender of the first two forest management units was carried out. In August 2010 two contracts were signed with the winning companies: Ebata Produtos Florestais - for logging, timber residue reutilisation, and non-timber products in an area of 30,063 hectares; and Golf Indústria e Comércio de Madeiras that will manage an area of 18,794 hectares, in logging, timber residue reutilisation, and non-timber products and services (Serviço Florestal Brasileiro website). In 2011 the second stage of the public tender is expected to occur, involving another two management units covering a total of 93,203.39 hectares, located in the neighboring areas of the Quilombola Lands of Alto Trombetas, Jamari/Último Quilombo and Moura.

Initially, the concession area established by the Serviço Florestal Brasileiro (Brazilian Forest Service) overlapped on the Quilombola Lands of Alto Trombetas, Jamari/Último Quilombo and Moura. After the protest by the Associação das Comunidades Remanescentes de Quilombos do Município de Oriximiná (Association of the Remaining Communities of Quilombos of the Municipality of Oriximiná), with the support of the Federal Public Prosecutor's Office and the Comissão Pró-Índio de São Paulo, the concession area was reviewed by the government to avoid the overlapping with lands previously claimed²¹. Until today, however, no study has been carried out to assess the possible impacts on the environment and

Table 11. Quilombola associations holders of SEMA's permit to explore the forest.

Association	Community	Permit LAR- Rural Environmental License AUTEF - Permit to Explore the Forest	Quilombola Land extension (ha)	Municipality
Associação Comunitária de Negros do Quilombo Pacoval de Alenquer (ACONQUIPAL)	Pacoval	 LAR nº 359/2008 - permit to forest management of 3,051.70 ha (valid until: 2013). AUTEF nº 296/2008 - authorised area: 1,016.4240 ha (valid until: 19/08/2009). AUTEF nº 1306/2010 - authorised area: 878.8589 ha (valid until: 21/09/2011). 	7,472.8790	Alenquer
Associação dos Remanescentes de Quilombos da Comunidade Maria Ribeira (ARQMR)	Maria Ribeira	 LAR nº 592/2009 - permit to forest management of 1,255.16 ha (valid until 11/08/2014). AUTEF Nº 589/2009 - authorised area: 1,123.3741 ha (valid until: 12/08/2010). 	2,031.8727	Gurupá
Associação dos Remanescentes de Quilombos de Igarapé-Preto e Baixinha (ARQIB)	Igarapé Preto, Baixinha, Panpelônia, Teófilo, Varzinha, Campelo, Cupu, França, Araquenbaua, Carará, Costeiro, Igarapezinho	 LAR nº 1455/2010 - permit to forest management of 2,953.4522 ha (valid until: 29/09/2015). LAR nº 1425/2010 - permit to forest management of 2,953.4522 ha (valid until: 22/09/2015). AUTEF Nº 1377/2010 - authorised area: 480 ha (valid until: 30 /09/2011). AUTEF Nº 1347/2010 - authorised area: 480 ha (valid until: 23/09/2011). 	17,357.0206	Baião Oeiras do Pará Mocajuba Bagre
Associação das Comunidades Remanescentes de Quilombos de Gurupá (ARQMG)	Jocojó, Flexinha, Carrazedo, Gurupá-mirin, Camutá do Ipixuma, Bacá do Ipixuna, Alto Ipixuma e Alto Pucuruí	 LAR nº 1322/2010 - permit to forest management of 4,790.74 ha (valid until: 22/12/2015). AUTEF Nº 1261/2010 - authorised area: 3,886.3943 ha (valid until: 23/12/2011). 	83,437.1287	Gurupá

on the livelihoods of the guilombola communities of this enterprise in National Forest, from where bauxite is already being extracted by Mineração Rio do Norte.

Given the risks to the rights of the quilombola communities, the Public Prosecutor's Office in Santarém filed a suit ("ação civil pública") against the Federal Government, in November 2009. In the suit, the Federal Public Prosecutor's Office argued that "it cannot be allowed that the Public Administration, through the Serviço Florestal Brasileiro (Brazilian Forest Service), cause its members damages that are difficult or impossible to repair, through concession of public forests without clearly establishing which territories are to be titled" (Ação Civil Pública, 1516-09.2009.4.01390: 22-23).

Thus, the Federal Public Prosecutor's Office required in the suit: "Immediate suspension of forest concession public tenders in the Saracá-Taguera National Forest until a Technical Report on Identification and Delimitation of the existing quilombola territories within that conservation unit, and a new National Forest Management Plan are published in the official press", and that, "at the same time, the Federal Government (through the Serviço Florestal Brasileiro - Brazilian Forest Service) pay the obligation to make consistent to readjust the terms of forest concession bidding for the Saracá-Taquera National Forest, to suit the Identification and Designation Technical Report and the National Forest Management Plan published in the official press".

In January 2010, a preliminary injunction was granted determining that the Federal Government suspend all effects implemented and subsequent actions of the public tender process. However, in March 2010, the preliminary injunction was withdrawn, and the case is still pending in the Tribunal Regional Federal da 1ª Região (Federal Court of the 1st Region).

¹⁶ Source: Receita Federal, Comprovante de Inscrição e de Situação Cadastral - issued on May 21, 2011.

¹⁷ Once the management and operation plans are approved, the Operation License and the Forest Exploration Authorisation are issued. The authorisation is released in the official electronic systems that control forest products, generating credits for wood supply in the market, according to the area of origin, destination, species, and quantities of approved timber. The producer receives a password which issues a Forest Permit, essential for the transport of the wood to the processing plant, and to the final buyer (Adeodato *et alli*, 2011:83).

¹⁸ Agreements with companies for forest exploration are also found in areas Incra land reform settlements in the Amazon. A study conducted by the Instituto Internacional de Educação do Brasil (International Institute of Education in Brazil), sponsored by the Serviço Florestal Brasileiro (Brazilian Forest Service) and the German Technical Cooperation (GIZ) offers an analysis of 15 cases involving companies and settlers for exploration, processing and marketing of forest products in Pará (Amaral Neto, 2011).

¹⁹ Workshop: "Quilombola Lands and Logging" promoted by Malungu and CPI-SP, from April 26 to 28, in Belém, with the support of Christian Aid and ICCO..

²⁰ Forest concession is one of the modalities of public forest management provided by Law 11.284/2006- Lei de Gestão das Florestas Públicas (Public Forest Management Law). It is a form of indirect management in which government grants a legal entity the right to operate forest products and services in a sustainable manner for a fee. By law, the delegation of the right to forest management should be done through public tender (Article 3, section VII).

²¹The boundaries of the quilombola land in question have not yet been officially identified by Incra. Thus, the Serviço Florestal Brasileiro (Brazilian Forest Service) used the indicative limits surveyed by CPI-SP and ARQMO through participatory mapping, that can still be subject to adjustments in the identification process to be conducted by Incra.



Mineral Interests

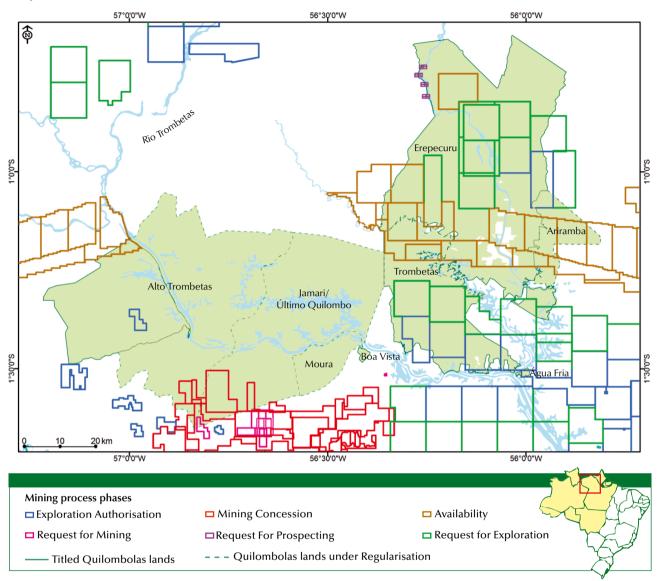
Another strong pressure on the quilombola lands is the mineral interests. Data collected by the DNPM-Departamento Nacional de Produção Mineral (National Department of Mineral Production)²², in July 2011, indicate that there were 94 mining processes²³ in Oriximiná quilombola lands, with 10 of them being mining concession. The processes involve bauxite (26 cases), phosphate (33 cases) and gold (35 cases).

Convention 169 on Indigenous and Tribal Peoples of the International Labour Organisation - which has the force of law in Brazil and applies to the quilombola communities - states that the rights to natural resources pertaining to their lands shall be specially safeguarded.

With special regard to mineral exploitation, the Convention stipulates that in cases of State ownership of mineral or subsurface resources existing on the land, "governments shall establish or maintain procedures through which they shall consult these peoples, with a view to ascertaining whether and to what degree their interests would be prejudiced, before undertaking or permitting any programmes for the exploration or exploitation of such resources pertaining to their lands" (Convention 169, Article 15). It also states that the "peoples concerned shall wherever possible participate in the benefits of such activities, and shall receive fair compensation for any damages which they may sustain as a result of such activities" (Convention 169, Article 15).

Despite the legal provisions, mining concessions and exploration authorisations have been granted by the government without consultation with the quilombola communities, or specific studies on the impacts of such projects for this population carried out.

Map 7. Mineral Processes in Quilombola Territories.



Mineral Processes in Quilombola Lands

There are mineral processes in six out of eight quilombola territories, reaching 34.6% of its total size (table 12). The quilombola territories that show the highest proportion of area under mining process are: Trombetas (77%), Ariramba (75.6%), Água Fria (72.4%) and Erepecuru (64.3%).

Table 12. Overlap of Quilombola lands and mineral processes.

Quilombola Land	Nº of Cases	Area of the Mineral Process (ha)	% Against Total Extension of Quilombola Land
Água Fria	3	403.20	72.4%
Alto Trombetas	9	7,858.07	3.7%
Ariramba	9	17,692.96	75.6%
Erepecuru	48	140,093.94	64.3%
Jamari/ Último Quilombo	7	12,002.26	8.6%
Trombetas	18	62,264.58	77.0%
TOTAL	94	240,315.00	34.6%

Source: DNPM

Among the mining processes, 10 are for bauxite mining concessions and overlap the Trombetas and Alto Jamari/Último Quilombo territories which are also subject to a request for mining, one in each territory. 10 exploration authorisations involving five quilombola lands were identified (Table 13).

Table 13. Mineral processes that overlap Quilombola lands.

Quilombola Territory	Mining Concession	Request for Mining	Exploration Authorisation	Availability	Request for Exploration	Request for Prospecting	Total of Processes
Água Fria	-	-	2	-	1	-	3
Alto Trombetas	4	1	1	3	-	-	9
Ariramba	-	-	1	8	-	-	9
Boa Vista	-	-	-	-	-	-	-
Erepecuru	-	-	2	17	17	12	48
Jamari/ Último Quilombo	6	1	-	-	-	-	7
Moura	-	-	-	-	-	-	-
Trombetas	-	-	4	9	5	-	18
TOTAL	10	2	10	37	23	12	94

Source: DNPM

Companies Involved

The mineral processes in quilombola lands in Oriximiná involve eight companies - BHP Billiton Metais S.A.; Mineração Rio do Norte S.A.; Vale S.A.; Amazonas Exploração e Mineração Ltda.; RBS- Redstone Mineração do Brasil Ltda.; Pará Metais Nobres Ltda.; Brasmidia, Administração de Bens, Títulos e Valores Imobiliários; e, Posto Novo Progresso Ltda. - and four individuals (Table 14).

Table 14. Holders of mineral processes falling within Quilombola lands.

Holder	Processes: stage and volume	Substances	
Amazonas Exploração e Mineração Ltda.	Exploration Authorisation- 6	Bauxite	
Mineração Rio do Norte S/A	Mining Concession - 10	Bauxite	
Vale S. A.	Availability - 33	Phosfate	
Pará Metais Nobres Ltda.	Exploration Authorisation - 1	Cold	
Para Metals Nobres Ltda.	Request for Exploration - 13	Gold	
BHP Billiton Metais S.A.	Availability - 2	Bauxite	
Prosmidio Administração do bono títulos o valores	Exploration Authorisation - 2	Gold	
Brasmidia Administração de bens, títulos e valores	Request for Exploration - 1	Gold	
RBS - Redstone Mineração do Brasil Ltda.	Request for Exploration - 5	Bauxite	
Posto Novo Progresso Ltda.	Request for Exploration - 4	Gold	
	Request for Mining - 2		
December France	Exploration Authorisation - 1	Bauxite	
Pessoas Físicas	Availability - 2	Gold	
	Request for Prospecting - 12		



Mineração Rio do Norte (MRN) is the only one which already operates mineral exploration in the municipality of Oriximiná, at the moment, within areas outside the limits of quilombola lands. MRN's operations, which began in the 1970s, involve extraction, processing and sale of bauxite ore. The company is the largest producer of bauxite in Brazil accounted for 68% of national production (IBRAM, 2010: 8).

Mineração Rio do Norte is a privately held corporation whose shareholders are Vale do Rio Doce (40%), BHP Billiton (14.8%), Rio Tinto Alcan (12%), Companhia Brasileira de Alumínio (10%), Alcoa Alumínio SA (8.58%), Alcoa World Alumina (5%), Norsk Hydro Brazil Ltda (5%) and Awa Alcoa Brazil Holdings (4.62%).

Among the many mining titles held by MRN in the region are 10 mining concessions that fall within quilombola lands. The total area of overlap amounts to 15,925.15 hectares, of which 4,225.45 hectares are in Alto Trombetas land (2% of the quilombola area) and 11,699.70 hectares in Jamari/Último Quilombo land (8.4%). Mineração Rio Norte's mining plan is scheduled to start operating in the plateaus which fall within quilombola lands as from 2019 (Serviço Florestal Brasileiro, n.d.).

Overlapping Saracá-Taquera Flona

The MRM concessions (in operation and planned) are located within the Saracá-Taquera National Forest. The Saracá-Taquera National Forest is among the conservation units in the Legal Amazon region with the largest proportion of mining area²⁴ (Veríssimo, 2011: 75).

The management plan of that unit establishes a "mining zone" comprising the areas in which mineral deposits are located and exploration provided by mining concessions issued by the Departamento Nacional da Produção Mineral (National Department of Mineral Production) and easement areas, such as roads, access, storage of waste and tailings, workshops, offices, ore

57°0,'0"W 56°30'0"W 56°0'0"W 8 Mining Zone 56°30'0"W 2009 Landsat image Quilombolas lands under Regularisation Titled Quilombolas lands Deforestation Mining zone Boundaries National Forest Boundaries

Map 8. Overlap Quilombola Lands with Mining Zone of Saracá-Taquera National Forest.

processing plants, storage yards, camps, cafeterias and other (Ministério do Meio Ambiente / IBAMA, 2001: 5.2).

The mining area stretches over 142,095.47 hectares, which corresponds to 33% of the size of the National Forest (Ibid: 5.5.), including the required MRN area of operations. Of this total, 19,279.34 hectares overlap Alto Trombetas and Jamari/Último Quilombo quilombola Lands.

Plateau Monte Branco

In December 2010, MRN obtained from Ibama-Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (Brazilian Institute of Environment and Renewable Natural Resources) an Licença de Instalação (Installation License)25 for the expansion of its operations. The new area to be explored is called Plateau Monte Branco with 3,750 hectares. The opening of this mine is scheduled for 2012 (Ibama, 2010:2). The exploration of the area will require clearing of the existing forest, construction of a road to transport equipment and personnel, and installation of a conveyor belt for the ore (Idem: ibidem).

The Plateau Monte Branco is located in the area surrounding Moura and Jamari/Último Quilombo lands where eight quilombola communities live. Such communities are vulnerable to the impacts of the project, including at the risk of compromising the quality of the water of streams that spring on the plateau and run towards the quilombola lands, as the Moura Igarapé (stream) that flows into a lake on the banks of which are located the homes of the Moura quilombola community.

In addition, Ibama's report indicates that mining in that plateau will result in the loss of exploration and extraction of the copaiba oil²⁶, therefore, it demands "compensation to the communities due to the damage caused by removal of the forest in Monte Branco Mountain Chain" (Idem: 44). Although the region is outside the limits pleaded by the quilombolas for titling, it is used by them for the extraction of copaiba. The importance of that product for the communities in that area of influence is recognized in a document by the mining company (Idem: 45).

The Licença de Instalação (Installation License) granted by Ibama establishes a series of conditions, among them, "2:13. To submit, within 60 days, specific economic valuation calculation and methodology for purposes of indemnity and compensation to the copaiba oil extractor communities." This condition indicates that the license was granted before the matter was properly equated with the communities that traditionally use the non-timber resources of that area.

The uncertainties regarding the non-timber products in the region to be explored by MRN are subject to judicial inquiry by the Federal Public Prosecutor's Office. In a Public Civil Action (Case 0003080-52.2011.4.01.3902), in which Ibama and MRN are the defendants the Federal Public Prosecutor's Office argues that the authorization for deforestation granted by Ibama is illegal, since the mining company did not provide an inventory of non-timber products, as required for any deforestation authorization. Only timber products have been inventoried.

According to the Federal Public Prosecutor's Office, the data on total market value of timber and non-timber products from the deforested area is relevant because the mining company is obliged to pay to society for the suppression of forest resources (MPF Pará, 2011). The inventory also serves to guide the restoration of the forest when mineral exploration is ended.

On July 29, 2011, the Federal Court in Santarém granted a preliminary injunction which suspended the authorisation and prohibited deforestation in Plateau Monte Branco by Mineração Rio do Norte pending completion of inventory of non-timber forest products²⁷.

²² The DNPM-Departamento Nacional de Produção Mineral (National Department of Mineral Production) is a federal agency under the Ministério de Minas e Energia (Ministry of Mines and Energy) that aims to promote planning and promotion of mineral exploration and exploitation of mineral resources, and ensure, control and monitoring of the performance of mining activities across the country (Source: Ministério de Minas e Energia, website).

²³ In Brazil, mineral resources are property separate from the soil, for the purpose of exploration or exploitation, and belong to the Union. Research and exploitation of these resources depend on concession granted by the federal government. To obtain a mining concession, the applicant must first apply for exploration authorisation to define the deposit, its evaluation and determination of its economic use feasibility. Once approved, an *Exploration Authorisation* is issued by DNPM. At the end of this stage, the individual must submit to DNPM for approval a detailed report of the work, containing geological and technological quantified statements of the deposit, and mining technical and economic feasibility. Later, with the report approved they may apply for a *Mining Concession* of the Mining Minister of Mines and Energy. Such requests must occur within a specified period. After the deadline, if the holder has not applied for mining concession, their right will expire, being due to the DNPM, by notice published in the Official Gazette, to declare the *Availability* of the studied deposit, for further mining concession application. As for "lavra garimpeira" (*prospecting permits*) apply to minerals such as gold, alluvial diamond and semiprecious stones, and depend on permission by DNPM (Sources: Federal Constitution - Articles 20 and 176; Mining Code Decree-Law 227 of 28 / 02/67). The operation also depends on environmental license.

²⁴ ISA and Imazon study indicated that by September 2010, more than 30% of the Legal Amazon Protected Areas overlapped 11,691 mining processes, including search requests and authorized processes (Veríssimo, 2011: 72).

²⁵ Environment License 761/2010. The process of environment licensing has three distinct stages: a Licença Prévia (Prior License) must be requested to Ibama during the venture's implementation, changes or enlarging planning stages. That license does not authorize the project's installation, but approves environmental viability of the project and authorizes its location and technological conceptions; Licença de Instalação (Instalation License) authorizes the works or installations to start; Licença de Operação (Operation License) is the one that authorizes the start of the enterprise. The agency in charge of licensing is Ibama (Brazilian Institute of Environment and Renewable Natural Resources), an arm of the Ministry of Environment.

²⁶ In the botanical classification, this plant is presented as belonging to the *Leguminosae family, Caesalpinoideae* subfamily, genus *Copaifera*. From the Copaiba tree, an oily resin is extracted that is used in traditional popular medicine with a wide variety of applications.

²⁷ Source, Tribunal Regional Federal da 1ª Região website: http://processual.trf1.jus.br



Hydroelectric Power Plants

The national energy plan provides for the federal government's exploration of Trombetas and Erepecuru Rivers for hydroelectric power generation. The Ministério de Minas e Energia (Ministry of Mines and Energy) estimates that the Trombetas river sub-basin has hydroelectric potential of 6,236 MW, representing 8.1% of the potential of the Amazon Basin (MME, 2007:12).

In the basin of Trombetas river, studies carried out projected 15 hydroelectric power plants, 13 of them have inventory studies, one with feasibility study and one with a basic project²⁸ (Ibid: 188-190). According to the "Plano Nacional de Energia 2010" (National Energy Plan 2030), the forecast of total area to be flooded by the power plants would add 5,530 square kilometres.

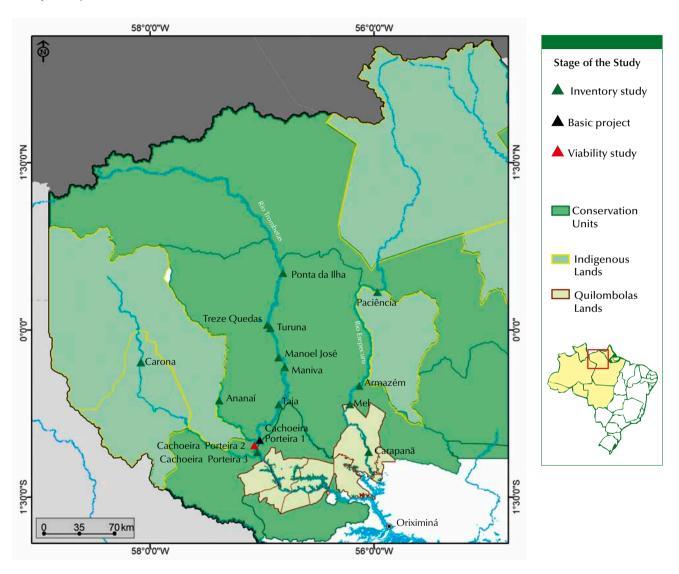
As for impacts caused by such projects, the Ministério de Minas e Energia (Ministry of Mines and Energy) says that "enterprises are in APCB²⁹ (the Amazon biome), two of them are inserted into indigenous lands (Nhamunda/Mapuera and Zoe indigenous lands), two in Incra settlement areas, and two within 10 km radius of the buffer zone of the Conservation Unit of Rebio Trombetas River" (ibid.: 188).

Two areas referred to as "Incra settlements" in the national energy plan are in fact the Trombetas and Erepecuru quilombola lands already titled. The remaining quilombola lands that are also susceptible to the impacts of the projects are not listed in the plan.

Studies on the use of the Trombetas River Basin continue. In July 2010, the EPE-Empresa de Pesquisa Energética (Energy Research Company)³⁰ hired the services of Engefoto – Engenharia e Aerolevantamentos SA (Engineering and Aerosurvay) to prepare, within 12 months, the planial timetric mapping for the Inventory Studies of the Trombetas and Erepecuru rivers' Basin (Source: EPE website, electronic consultation 7/7/2011).

So far, the quilombola communities have not yet been formally informed nor consulted about the plans of the Ministério de Minas e Energia (Ministry of Mines and Energy). The association that owns the Erepecuru quilombola land was sought by the Empresa de Pesquisa Energética (Energy Research Company) to authorize studies in their lands. However, the quilombolas said they do not know exactly what kind of studies those actually are, what their goals are, and have no knowledge as to whether they fall within a larger plan to use the Trombetas basin for hydroelectric power generation.





²⁸ Hydroelectric inventory studies begin to identify and characterize the hydroelectric plants. In this step the hydroelectric potential of a hydrographic basin is determined, and a better division of falling provided. This analysis is based on secondary data, supplemented by field information. Feasibility studies are to succeed inventory studies and aim to determine the overall design of use identified in the previous step. Later, basic project studies are developed with a goal to the final definition of structures and equipment in order to subsidize hiring of contractors and suppliers of equipment, goods and services.

²⁹ Priority Areas for Conservation of Biodiversity.

³⁰ The Empresa de Pesquisa Energética (Energy Research Company) is a public company under the Ministério de Minas e Energia (Ministry of Mines and Energy) that aims to provide services in the area of study and research to support planning of the energy sector.

Bibliography

ADEODATO, Sérgio; MONZONI, Mario; BETIOL, Luciana Stocco e VILLELA, Malu: *Madeira de ponta a ponta: o caminho desde a floresta até o consumo*. São Paulo, SP: FGV/RAE, 2011.

ADVOCACIA-GERAL DA UNIÃO: "AGU, Incra e MDA querem acelerar acordos para titulação de áreas quilombolas em unidades de conservação ambiental". Sítio eletrônico da Advocacia Geral da União - 28 de Maio de 2009.

AMARAL NETO, Manuel; CARNEIRO, Marcelo Sampaio e MIRANDA, Katiuscia Fernandes: *Análise de acordos entre empresas e comunidades para a exploração de madeira em assentamentos rurais na região da BR163 e entorno, no Estado do Pará.* Belém: Instituto Internacional de Educação do Brasil-IEB, 2011.

ARQMO, CPI-SP e EMBRAPA AMAZÔNIA ORIENTAL: Mapa "Coordenadas geográficas dos limites das comunidades remanescentes de quilombos Alto Trombetas, Oriximiná-PA", Belém: ARQMO, CPI-SP e Embrapa Amazônia Oriental, 1999.

Mapa "Terras de remanescentes de quilombos e Unidades de Conservação, Oriximiná - PA" Belém: ARQMO, CPI-SP e Embrapa Amazônia Oriental, 2001.

BANDEIRA, R., COSLOVSKY, S., PEREIRA, J., QUINTELLA, R. e VERÍSSIMO, A.: *Potencial Econômico nas Florestas Estaduais da Calha Norte*. Belém: Imazon, 2010.

BRASIL. MINISTÉRIO DE MINAS E ENERGIA.: *Plano Nacional de Energia 2030 / Ministério de Minas e Energia*. Brasília : MME : EPE, 2007.

BRITO, Brenda e BARRETO, Paulo: *Os riscos e os princípios para a regularização fundiária na Amazônia.* Série O Estado da Amazônia, v 10. Imazon: Belém, 2009.

CELENTANO, Danielle; SANTOS, Daniel e VERÍSSIMO, Adalberto: *A Amazônia e os objetivos do Milênio 2010,* Belém, PA: Imazon, 2010.

GADELHA, Rodolfo: "Relatório Final: Diagnóstico do Desmatamento nas Terras Quilombolas, Município de Oriximiná - Pará". CPI-SP, maio de 2011.

HAYASHI, Sanae; SOUZA JR., Carlos, SALES, Márcio e VERÍSSIMO, Adalberto: *Boletim Transparência Florestal da Amazônia Legal*. Belém, PA: Imazon, julho de 2011.

INSTITUTO BRASILEIRO DO MEIO AMBIENTE E DOS RECURSOS NATURAIS RENOVÁVEIS - IBAMA: "Parecer 115/2010/COMOC/CGTMO/DILIC - IBAMA", Brasília, 21 de outubro de 2010.

INSTITUTO BRASILEIRO DE MINERAÇÃO - IBRAM Informações e Análises da Economia Mineral Brasileira. 5ª edição. Brasília: IBRAM, 2010.

MINISTÉRIO DO MEIO AMBIENTE/IBAMA: "Plano de Manejo da Floresta Nacional de Saracá-Taquera, Estado do Pará-Brasil". Curitiba: MMA/Ibama: dezembro de 2001.

MINISTÉRIO PÚBLICO FEDERAL NO PARÁ: "Justiça suspende desmatamento da Mineração Rio do Norte em Oriximiná (PA)". Sítio eletrônico do Ministério Público Federal no Pará, 10/08/2011.

MONTEIRO, A.; CARDOSO, D.; CONRADO, D.; VERISSIMO, A. e SOUZA JR, C.: *Transparência Manejo Florestal do Estado do Pará (2008 e 2009)*. Belém, PA: Imazon, 2010.

PROCURADORIA DA REPÚBLICA EM RONDÔNIA: "MPF/RO quer impedir genocídio de comunidade quilombola no estado". Sítio eletrônico da Procuradoria da República em Rondônia, 10/2/2010.

SALES, Márcio; SOUZA JR., Carlos e HAYASHI, Sanae: "Risco de Desmatamento Edição 02 - Agosto de 2011 a Julho de 2012". Boletim Transparência Florestal da Amazônia Legal. Belém, PA: Imazon, julho de 2011.

SECRETARIA DE ESTADO DO MEIO AMBIENTE DO PARÁ: *Plano de manejo da Floresta Estadual do Trombetas - Resumo Executivo.* Belém, SEMA 2011 (Portaria SEMA 1.704/2011).

SECRETARIA DE POLÍTICAS DE PROMOÇÃO DA IGUALDADE RACIAL DA PRESIDÊNCIA DA REPÚBLICA - SEPPIR: Comunidades Quilombolas Brasileiras - Regularização Fundiária e Políticas Públicas. Brasília, 2010.

SERVIÇO FLORESTAL BRASILEIRO

Florestas do Brasil em resumo - 2010: dados de 2005-2010. Serviço Florestal Brasileiro. Brasília: SFB, 2010.

SERVIÇO FLORESTAL BRASILEIRO

Mapa de Zoneamento e Unidades de Manejo Florestal — Flona Saracá-Taguera. Brasília, s.d.

VERÍSSIMO, Adalberto; ROLLA, Alicia; VEDOVETO, Mariana e FUTADA, Silvia de Melo (organizadores) Áreas Protegidas na Amazônia brasileira: avanços e desafios. Belém : Imazon ; São Paulo : Instituto Socioambiental. 2011.

WWF-Brasil

Arpa – um novo caminho para a conservação da Amazônia. Desmatamento e mudanças climáticas, 2010.

Web sources

COMISSÃO PRÓ-ÍNDIO DE SÃO PAULO

http://www.cpisp.org.br/terras/

http://www.cpisp.org.br/htm/leis/

http://www.quilombo.org.br/

DEPARTAMENTO NACIONAL DE PRODUÇÃO

MINERAL - DNPM

http://www.dnpm.gov.br

EMPRESA DE PESQUISA ENERGÉTICA (EPE)

http://www.epe.gov.br

INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS - INPE/PRODES

http://www.obt.inpe.br/prodes/index.html

INSTITUTO SOCIOAMBIENTAL

Unidades de Conservação na Amazônia Brasileira

http://uc.socioambiental.org/

MINERAÇÃO RIO DO NORTE

http://www.mrn.com.br/index 1024.htm

MINISTÉRIO DO MEIO AMBIENTE

Cadastro Nacional de Unidades de Conservação

http://www.mma.gov.br/sitio/index.php?ido=conteudo.monta&idEstrutura=119&idConteudo=9677&idMenu=11809

MINISTÉRIO DO MEIO AMBIENTE - IBAMA

Sistema Informatizado de Licenciamento Ambiental Federal http://www.ibama.gov.br/licenciamento/index.php

MINISTÉRIO DO MEIO AMBIENTE - SERVIÇO FLORESTAL BRASILEIRO

http://www.sfb.gov.br

PROCURADORIA DA REPÚBLICA NO PARÁ

http://www.prpa.mpf.gov.br

TRIBUNAL REGIONAL FEDERAL DA PRIMEIRA REGIÃO http://processual.trf1.jus.br





