

**Structures of Participation:  
Indigenous Peoples in Two Projects in Reduced Deforestation  
(REDD) in the Brazilian Amazon**

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It is estimated that tropical deforestation and forest degradation contribute approximately 17% of total global greenhouse gas (GHG) emissions into the atmosphere (Alencar et al.). Since 2005 the international community, under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC), has been working toward a mechanism to compensate developing nations for reducing emissions from deforestation and degradation. The mechanism, REDD (or REDD+ including forest regeneration and restoration activities), is regarded as an efficient and urgent means to reduce GHG emissions. It promises to play a significant role in national climate and energy policies and practices.

In this context, the Amazon basin, location of the largest remaining tropical rain forest in the world, is extremely relevant. The Amazon basin covers 6.5 million km<sup>2</sup> in Bolivia, Brazil, Colombia, Ecuador, Guyana, and Venezuela. The largest portion of the Amazon basin, an estimated 60%, is located within the national territory of Brazil. There, Indigenous Territories (ITs) with legal recognition by the federal government occupy an area equaling 110 million ha (ISA and Forest Trends 2010). According to a 2007 study, biomass on indigenous lands in the Amazon accounts for 30% of total carbon stocked in the Amazon (Saatchi et al. 2007). For this reason, among others, government agencies, scientific researchers, financial investors, conservation organizations, and indigenous peoples are carefully considering the implications for REDD projects in indigenous territories.

In this paper I will consider two projects presently under development in the Brazilian Amazon: the first proposed by the Suruí in the western Amazon,

and the second proposed by a consortium of NGOs for the indigenous peoples of the Xingu basin in the southeastern Amazon.

### **Structures of participation.**

Projects of reduced deforestation entail the contributions of many actors and substantial resources. The language assigned to different participants reflects their roles and responsibilities in the project. The initiators of a project are usually designated “Developers” or “Project Proponents.” IDESAN and TNC (2010) define the *proponent* as the leading implementing institution that “holds the rights over the generated REDD credits and will be the main responsible [entity] for implementing project activities” (IDESAN and TNC 2010).

Of the 26 sub-national forest carbon projects listed for the Brazilian Amazon (with up to 4 proponents each) listed in May and Millikan (2020), implementing institutions were distributed this way: 28 NGOs; 5 sub-national government agencies; two research institutions, and one each Carbon Fund, Amazon Fund, the National Brazilian Indigenous Foundation (FUNAI). Only one indigenous society was listed as a project proponent – the Suruí.

### **The Suruí Carbon Fund**

The case of the Suruí, in the western Brazilian state of Rondonia provides an important example in discussions of Reduced Deforestation [REDD] and indigenous peoples. The Paiter- Suruí, in the western Amazonian state of Rondônia, were severely impacted by interstate highway BR 364 and related colonization programs financed by the Brazilian government through a loan from the World Bank. As a result, Suruí territory suffered severe deforestation and population decline. The land was demarcated as the Terra Indígena Sete de Setembro in 1983.

In 2007, the university-educated, Suruí leader, Almir Narayamoga Suruí, approached the Washington-based, non-governmental organization, Forest Trends, to seek assistance in managing and reforesting Suruí lands. It was Forest Trend’s recommendation to chief Almir to develop a project to sell

carbon credits on the voluntary carbon market. Forest Trends commissioned a legal survey to assess the tribe's rights to carbon income. That report, though not conclusive, provided sufficient basis to regard as likely the rights of indigenous peoples to the carbon in their lands. It has been used as a model elsewhere. With this assurance, the Suruí became the first indigenous group in Brazil to initiate a REDD project.

The Paiteir-Suruí number about 1,300 people who occupy 248,147 hectares of submontane open and dense ombrophilous forests. The estimated carbon in their lands is calculated by Saatchi et al. (2007) to be 25,781,850.

#### **Carbon In Indigenous Lands\***

	Size of Area (ha)	Total carbon (tons)
Surui Sete de Setembro	244,196	25,781,850
Xingu	2,646,405	234,674,949
Kayapo	3,307,878	407,685,159

- from ISA/Forest Trends 2010:15.

A representative body, the Associação Metareilá do Povo Indígena Suruí, was created to act as the proponent of the project. The role of the Associação Metareilá is to administer environmental resources, support and enforce the activities of members, and oversee allocation of resources to the Paiteir-Suruí.

Four additional partners, suggested by Forest Trends, were brought in to contribute expertise:

(1) The Associação de Defesa Etnoambiental (Association for Ethno-environmental Defense) or Kanindé, a Brazilian-based NGO that conducts biological surveys, environmental impact reports, and ethno-zoning with indigenous peoples in the western Amazon.

(2) ACT-Brasil, Equipe de Conservação da Amazônia (Amazon Conservation Team), provides GIS, legal and anthropological expertise. In

addition, it acts as an interlocutor between the Suruí and investors. Together with Forest Trends, ACT provides seed funds for transaction costs, including measurement and documentation needed to qualify for certification under the Voluntary Carbon Standards (VCS) and the Climate, Community, and Biodiversity Standards (CCB). Among the partners of ACT-Brasil are the indigenous organization, COIAB, and the agency USAID.

(3) IDESAM, the Instituto de Desenvolvimento Sustentavel do Amazonas (The Amazonian Institute of Sustainable Development), a Brazilian NGO whose role in providing technical capacity to the CCB-Gold rated Juma REDD project, is responsible for quantifying carbon emissions, including the present-day measurements, the construction of a baseline, and modeling carbon emissions reduction scenarios. These data will be used to compile the Project Design Document (PDD), which IDESAM coordinates, and which will be presented to potential investors. The plan rigorously quantifies and estimates potential carbon benefits used on the competitive carbon market.

(4) Forest Trends is a Washington D.C.- based non-profit organization that promotes the marketing and investment of forest product initiatives. Created in 1999 by representatives of industry, banking, private investment, and conservation, it describes its role as catalyzing “connections between forward looking producers, communities, and investors, and developing new financial tools to help markets work for conservation and people” ([www.forest-trends.org](http://www.forest-trends.org)).

In 2009 in Copenhagen, the Suruí Carbon project received the support of USAID to organize a fund to sell carbon credits ([www.brasil.usaid.gov](http://www.brasil.usaid.gov)). The relationship does not constitute a partnership. A different, perhaps, complicating, role, is played by Funbio, the Brazilian Biodiversity Fund. Despite the fact that Funbio is not listed as a partner, its role is said to “advise the Suruí on how to funnel carbon fund income into environmental projects – such as carbon-friendly agriculture and rainforest preservation” ([blog.news.funbio.org.br](http://blog.news.funbio.org.br)). Over time it is expected that the Suruí “will shift to other businesses and investments that can generate a sustainable economy”

([blog.news.funbio.org/br](http://blog.news.funbio.org/br)). All decisions, however, will be made by the Associação Metareilá do Povo Indígena Suruí, a representative body that the tribe set up to administer environmental resources.”

<http://blog.news.funbio.org.br/2010/12/07/brazils-surui-establish-first-indigenous-carbon-fund/>

Funbio is a non-profit civil association that was created in 1996 with a US\$20 million donation from the Global Environment Facility (GEF) to complement government efforts in accordance with the Convention on Biological Diversity (CBD) and the National Program for Biological Diversity (Pronabio). On the basis of past activities, they can be expected to serve as an intermediary for resource distribution; identify and evaluate investment opportunities; raise funds; and generally oversee the economic workings of the project. The possibility for overlap between the responsibilities and prerogatives of the Associação Metareilá do Povo Indígena Suruí and Funbio must be recognized as a possibility.

In addition, the Katoomba Group, an international network working to promote markets and payments for ecosystem services (PES), is serving to link collaborators and funders to the Suruí project.

The project continues to grow. It is hampered by existing uncertainties about the rights of indigenous people to develop carbon projects, sell them, and receive REDD benefits directly. Like other REDD projects, it is hampered by the many unknowns in the REDD process that await decisions by international entities. Yet another potential obstacle is the lack of direct connection between the Suruí project and the national REDD system. In this sense, the project serves as an experiment in the autonomy of indigenous actors to bypass national and other mediators in dealings with assets within indigenous territories.

### **Xingú SocioEnvironmental Carbon Project (XSEC)**

The Xingú SocioEnvironmental Carbon Project (hereafter, XSEC) attempts to secure compensation for reductions in deforestation through the

voluntary carbon market, including short-term donations, and, if formalized, through an internationally recognized REDD market. It is a large project, whose goals are far-reaching. The project aims to consolidate the indigenous lands of the Xingú basin to create the largest biodiversity corridor in the world (Schwartzman and Zimmerman 2005). In approaching deforestation in accordance with the National Plan on Climate Change (ipam.org.br), the project hopes to provide a model for REDD programs at the international, national, and local levels.

Two major indigenous configurations are joined together in this large project to conserve the forests of the Xingú basin – the territories of the Kayapó and those of the indigenous peoples of the Xingú National Park. Together, they comprise a continuous north–south corridor of some 14 million ha of protected forests. When joined with the recently created 5-million-ha protected area to the north, the Terra do Meio, the combined areas total 22 million ha (Schwartzman and Zimmerman 2005). If protected, these lands will constitute the largest corridor of protected forest areas in the world.

A consortium of five NGOs are developers of the XSEC. The project is a synthesis of two ongoing conservation initiatives, one involving the Kayapó in which the NGO actors have been CI, the International Conservation Fund of Canada (ICFC); and another between the peoples of the Xingú Park, working with the Brazilian NGO Instituto Socioambiental (ISA) and the US-based Environmental Defense Fund (EDF).

### **Kayapó Territories**

The vast contribution to this territory are the five legally-designated areas of the Kayapó in the states of Pará and Mato Grosso. These contiguous territories total nearly 105,000 km<sup>2</sup> (ICFC), -- an area six times the size of Yellowstone; two times the size of Wrangell-St.Elias, the largest National Park in North America; and more than twice as large as Switzerland.

The area encompasses one of the largest continuous blocks of pristine, closed-canopy rainforest in the world. It is also site of the northern limit of

Brazil's savannic *cerrado*, one of the largest, yet least understood, habitats in the Americas.

The Kayapó, who militantly control access to their lands, play a critical role in the preservation of the region's biodiversity. The population of approximately 7,000 Kayapó is sparsely distributed, with village sizes ranging from under 100 to over 1000. The Kayapó, like the other indigenous peoples of the Amazon, practice a variety of low-intensive land use methods, combining cultivation with foraging of game, fish, fruit, insects, and honey. Because of small garden size and short cultivation cycles, interference of the natural dynamics of forest succession is minimal. As a result of scant population, low-impact utilization, and militant surveillance of intruders by the Kayapó, the size of uninterrupted tracts of forest and *cerrado* is sufficient to maintain reproductive populations of numerous species of plants and animals that have been driven to local extinction elsewhere (Zimmerman et al. 2001).

The extent of intact forest cover is all the more remarkable given the relentless pressure from mining, logging, ranching, and export agriculture in the region. A growth spurt that accompanied the gold rush into southern Pará in the 1980s and early 1990s resulted in rapid rates of deforestation (Turner 1995). Most recently large soy plantations are expanding ever closer to the reserve, pushing ranchers and colonists in their path (Zanotti 2009). Today, deforestation reaches the borders of the Kayapó territory.

For some time CI and its counterpart in Brazil, Conservation International-Brasil, have been providing technical, administrative, and financial support to two Kayapó NGOs: Associação Floresta Protegida (AFP) in Pará state and Instituto Raoní (IR) in Mato Grosso. Through Funai, the organization funds territorial surveillance as well as environmentally sustainable projects such as Brazil nut collection (Schwartzman and Zimmerman 2005). (Recently these activities have been assumed by the International Conservation Fund of Canada, ICFC). Together, these organizations work in collaboration with FUNAI, the national Brazilian agency responsible for indigenous people. The partnership fortifies FUNAI's role in the

region, providing the resources for its legal authority, coordination, and administration of field activities (Schwartzman and Zimmerman 2005).

The CI–Kayapó alliance furthered opportunities for meetings of Kayapó, dispersed across a vast expanse of territory, to meet on a regular basis (Chernela 2005). The meetings serve as a collective forum for achieving consensus, an important principle of Kayapó society, to unite leadership, and reinforce traditional Kayapó political institutions.

### **Xingú National Park (Parque Indígena do Xingú)**

The Xingú National Park (Parque Indígena do Xingú, or PIX), located in the southeastern Amazon in the state of Mato Grosso, contains 2.8 million hectares. The area holds some of the richest biodiversity in the world, containing two endangered biomes, the neotropical rain forest, and the Brazilian cerrado, a semi-deciduous savannah landscape.

The Park was created in 1961, largely through the efforts of the renowned indigenists, the Villas Boas brothers (Decrees 50.45 and 51.084) and finally registered as Indigenous Territories in 1978. The hybrid category of a National Park and an Indigenous Territory reflects the dual roles of the area, which is set aside for both environmental protection and as home to the indigenous people (referred to by FUNAI as “proteção da sociodiversidade nativa”).

The 6,152 indigenous inhabitants of the Xingú Indigenous Territories (hereafter, TIX), represent sixteen different languages, belonging to four different language stocks: Kamaiurá e Kaiabi (Tupian); Juruna (Tupian); Aweti (Tupian); Mehinako, Wauja e Yawalapiti (Aruákan); Kalapalo, Ikpeng, Kuikuro, Matipu, Nahukwá e Naruvotu (Karíb); Suyá e Tapayuna (Macro Gê); and Trumai, an isolated language ([pib.socioambiental.org/povo](http://pib.socioambiental.org/povo)). Despite the range of linguistic variation, the different language groups of the Xingú basin share many commonalities in lifestyles and are closely articulated through intermarriage, specialized exchange, and ritual.

In a manner analogous to CI’s collaborative work among the Kayapó, the Instituto SocioAmbiental (ISA), has been working among indigenous peoples of

the park for more than a decade. They worked with local inhabitants to establish a Xingú Lands Indigenous Association (ATIX) and collaborated in projects involving territorial monitoring and control; bilingual education; resource mapping; and environmentally sustainable economic alternatives, including agribusiness and apiculture. ISA's partnership and investment in economic alternatives in 28 villages in the northern and middle Xingú to collect certified organic honey, for example, maintains a contract with a large Brazilian supermarket chain. Ranchers, soybean farmers, and colonists, have been threatening the Park since its formation in 1961. Research by ISA confirmed evidence of deforestation and pesticide pollution of watercourses. A project to create incentives to preserve the Xingú headwater region was carried out by ISA in Mato Grosso in 2004 (SSBZ).

The indigenous groups of the Xingú, from the Kayapó in the north to the groups in TIX in the south, have demonstrated their capabilities as strong regional actors who have forestalled powerful frontier expansion.

The Xingú SocioEnvironmental Carbon Project involves several types of participation. The Partnering Developers of the project involve five NGOs:

(1) ISA, Instituto Socioambiental (the Social and Environmental Institute), a Brazil-based NGO with many years of experience working among indigenous peoples of the Xingú basin. ISA has ties to numerous international NGOs, governments, and financial institutions, including NORAD, UNDP, USAID, GEF, and others.

(2) IPAM, Instituto de Pesquisa Ambiental da Amazonia (The Environmental Research Institute of Amazonia), is a Brazil-based research institute which engages in scientific activities associated with the Amazonian forest. The Institute collaborates with state entities and international research institutes.

(3) CI, Conservation International, a Washington-based international NGO with a Brazil affiliate, is one of the largest environmental organizations in the world. CI has been working among the Kayapo since 1992.

(4) EDF, Environmental Defense Fund, a large Washington-based international NGO, with over three decades of experience working with the Panará in the Xingú basin.

(5) ICFC, International Conservation Fund of Canada, is an international conservation NGO with a strong team of Kayapo experts and partnerships with three Kayapo NGOs.

In addition, the Woods Hole Research Center (WHRC), a research institute located in Massachusetts, provides technical assistance. Additional linkages have been created with the indigenous organizations Associação Floresta Protegida (AFP) in Pará state; Instituto Raoní (IR) in Mato Grosso; the Instituto Kabu (IK) in the village of Baú; and ATIX in the Xingú Park. FUNAI, the Brazilian agency charged with indigenous affairs, is named as a partner in some contexts but, like the indigenous organizations listed, does not appear to be a developer of the project. Funding for the project comes from numerous sources including the David and Lucile Packard Foundation.

### **Discussions and Conclusions**

The two projects described here should be regarded as experimental. They provide us with the opportunities to consider and question processes at a point in the development process. Accordingly, I present these remarks as preliminary.

Participant structure and related information flows are one area in which the two projects may be compared. In the case of the Suruí, where only 1,300 indigenous persons are involved, and where the chief is both the initiator of the project and a participant in UNFCCC networks, information flows are relatively direct. In the case of the multi-tiered XSEC project, information flows are complicated by the size of the indigenous population in question, its multiple ethnicities, its dispersal in space, and its remoteness. In addition, the XSEC process entails many levels of participation, requiring negotiations of understanding and agreement at each juncture. Knowledge flows through the XSEC levels entail greater challenges with multiple opportunities for miscommunication. While this makes the XSEC process more cumbersome, it is

a far larger investment, both for the indigenous peoples involved, and the project developers.

Both projects entail risk. A portion of the expense, heavy reliance on expertise, and networking in the XSEC project is an attempt to create a financially stable plan. This, for example, justifies involvement in federal government entities. If the Xingú Project is to succeed, given its scope, it will no doubt require the participation of federal-level entities. At the same time as these alliances increase the likelihood that the project will take place, they may compromise the autonomy of the local peoples. A 1973 Statute, which is still in vigor, allows the federal government's agency of indigenous affairs, in its "protective capacity," to make decisions such as the allocation of resources to the indigenous recipients of benefits. Until the legalities of these aspects are worked out, the project may be hazardous to the indigenous participants. In contrast, the Suruí tests the limits of indigenous autonomy as guaranteed by international documents ILO 169 and the UN Declaration on the Rights of Indigenous Peoples. It is premature to evaluate these strategies as they depend heavily upon national and international processes.

A different matter of participation is the role played by the indigenous participants in projects in which they are the owners of the assets whose value is being traded. A great difference arises from the fact that the indigenous participants in the first case are the Project Proponents and in the second case they are the Stakeholders. However, discrepancies in power apply in both cases. Several indigenous NGOs are active participants in the XSEC process, while a number of powerful non-indigenous actors in the Suruí process could play influential roles. Vulnerabilities are especially salient with regard to (1) constraints and (2) benefits. These can only be avoided when participant structures include indigenous peoples as decision makers at every level.

Proponents of carbon projects in indigenous lands hold that forest conservation is not as attractive as other land uses under the current conditions. The prospects of financial resources generated by carbon credits would provide an incentive for indigenous peoples to protect their forests and

avoid conversion to other, unsustainable, land uses. The resulting benefits could be invested in the establishment of viable economic alternatives based on sustainable agroforestry in combination with other options for income generation. REDD discourses fail to acknowledge practices that are carbon neutral or carbon positive (Griffiths 2008).

The assumptions underlying this complex proposition raise several questions. First, the statement suggests that indigenous peoples are not or will not conserve the forests on which they may depend. This is a direct contradiction of claims by the same proponents that indigenous peoples have been principal in protecting the last remaining stands of biodiversity (Schwartzmann and Zimmerman 2005; Nepstad et al. 2006). It also appears to ignore present sustainable practices, proposing instead to substitute them with cash-based, market economies.

Second, it obfuscates the fact that whatever revenues may accrue are subject to conditions of which the indigenous peoples, who will be held to them, may not be fully aware. Such conditions may be established by parties that do not include the indigenous peoples in the conversation, and could be evaluated by outsiders who may have a stake in identifying violations.

Third, the strategy uses the anticipation of benefits to draw in indigenous collaborators, despite the fact that neither the benefits themselves, nor the manner of their allocation or form, can be defined or assured. This complicates the direct benefit by indigenous peoples. It is perhaps for this reason that benefits are spoken of in terms of education and medical services. Since both of these are guaranteed by the federal government, the danger exists that the benefits could serve the state rather than the indigenous peoples whose lands provide the assets at the base of the project.

Free Prior Informed Consent is now required in most REDD processes. However, the two cases here illustrate the potential pitfalls when “consultation” is taken to mean approval rather than full participation at every level of the decision-making process.

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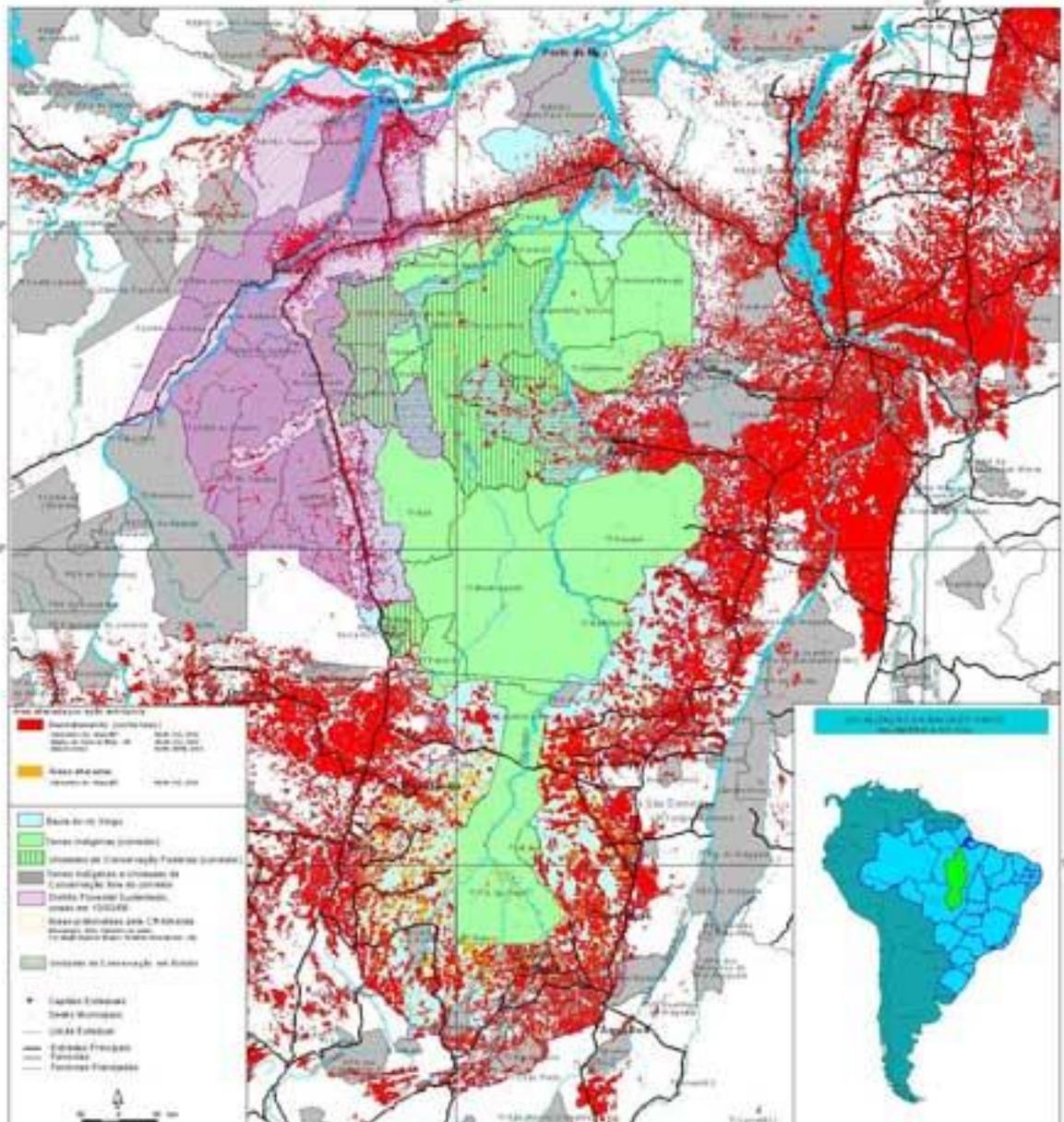
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## CORREDOR DE UNIDADES DE CONSERVAÇÃO NA BACIA DO XINGU



Xingu River Basin: Protected Areas Corridor and Deforestation through 2006

The red and orange areas on this map show areas of deforestation. The light green areas are all Indigenous Territories, and the green hatched areas indicate other types of protected areas, such as Extractive Reserves. The heavy black lines are main roads and the blue lines are rivers.

