



Forests and the Biodiversity Convention

**Independent Monitoring of the
Implementation of the Expanded Programme
of Work
in Brazil**

Terra de Direitos



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Amazon in Brazil.

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1. SOCIO-ECONOMIC, ENVIRONMENTAL AND GEOPHYSICAL ASPECTS

1.1. Socio-Economic

Brazil is a country of continental proportions and holds a “mega-diverse” status (at least 14% of the planet species). As the world’s largest continuous tropical forest, the Amazon forest covers around 7 million square hectares; 5 million hectares of it located in Brazil, covering around 49.3% of the Brazilian territory. Besides having one of the largest forest and biological diversities on the planet, Brazil it is also characterized for a severe socio-economic inequality.

An underlying structural component of social inequality in Brazil is attributed to land concentration. Official figures account for 3.1 million rural properties registered, corresponding to 331 million hectares of land. Out of this number, latifundia (large states with a thousand hectares or more) account for only 2.8% of all rural properties but cover 56.7% of all arable land, owned and registered. Meanwhile, small scale properties represent 89.1% of all properties registered, covering only 23.4% of the total owned and registered agricultural areas¹. As with land, the basic asset, income is also concentrated: in 2006 the richest Brazilians, 1% of the population (1.7 million) held an income equivalent to the total income held by the 50% poorest Brazilians (86.5 million people).

Within this land regime, agriculture and monocultures are key to understand Brazilian economy: deep rooted historically in colonial plantations and agro-export oriented drive, the main engine to produce wealth remains basically the same, as modern agribusiness displays emblematically. Brazil is today the largest world producer and exporter of meat (poultry, pork and beef), coffee, sugar and orange juice, with major figures of cellulose exports. The country is the second largest soy producer and exporter in the world and produces 70% of the biofuels (mainly ethanol from sugar cane) traded in the international market up to this date.

Agribusiness, as a main driver to promote land and income concentration in the country, is recognizable the main driving force pushing over the agricultural frontier, leading to continuous deforestation and clearing of new areas. Agribusiness oriented economy and supportive public policies to its promotion and expansion are the greatest responsible for the loss of forest diversity in Brazil.

The Amazon Forest is the natural border to the expansion of the agricultural frontier in the country. The effects of agriculture over the forest can be direct (clearings to extract logging, fires to open pasture areas or soy fields) or indirect (when land use changes or crop expansion in the southeast, mainly, pushes forth the frontier). A tension between biodiversity, forest and resource conservation, in one side, and expansion of massive monocultures through industrial agriculture, on the other, underlies just about every social and environmental conflict in the country. Recently, this tension has been exacerbated by the expansion of agroenergy programs for biofuels (ethanol and biodiesel) but also for fast growing eucalyptus plantations to be used as charcoal for industry. Plantations of large extensions of ‘energetic forests’ and prospectively, as second generation cellulosic biofuels, are increasingly growing as a major threat over forest and biodiversity in Brazil.

1.2. Geophysical and Environmental Aspects.

Brazil is conformed of 7 biomes: Amazon; Cerrado (savannah); Pantanal; Caatinga; Atlantic Forest; Coastal and Sea zone; Pampa (southern grasslands). It has 49 classified eco-regions and innumerable ecosystems.

Brazilian Biomes	Area (Km ²)	Area/total Brazil
Amazon	4.196.943	49.29%

¹ According to: *Atlas Fundiário*, National Institute for Settlement and Land Reform (INCRA)..

Cerrado (Savannah)	2.036.448	23.92%
Atlantic Forest	1.110.182	13.04%
Caatinga	844.453	9.92%
Pampa	176.496	2.07%
Pantanal	150.355	1.76%
Total área (Brazil)	8.514.877	100%

Brazilian relief is extremely vast, diverse and complex. Given the current area occupied with urban settlements and anthropoid activities, it is classified in sectors accordingly with the areas of greatest prominence on the Brazilian relief. According to the definition of Embrapa's (Brazilian Agricultural Research Corporation) satellite monitoring and research, those areas and relief aspects could be divided as follows²:

To the South and Southeast of Aracá mountain range a group of majestic clastic tables of the Roraima Formation. At the south plains are the springs of Cuieiras river, at the North of the Amazon State. Stock (to the left) and batholiths (to the right) of Mapuera granitoids, in the region of Mapuera River, at the Northwest of Pará, distinguished from the peneplan kept for rocks of the Guianense Complex (above). There is a pattern of drainage through meandering channels, with abandoned channels, area of Itaquai river, in pelitics formations of Solimões, West of the Amazon.

At the South of Ceara state, there are the supracrustal of Ceara group and the 'Senador Pompeu' fault; to the East, the view of the Orós Complex and to the South-Southwest a view of the 'Lavras de Mangabeira' Complex.

The detail of the Orós Complex, South of Ceara domains is structurally characterized for a strong linearity and a great extension, relatively to the small thickness of the metasedimentar package. It is constituted by the presence of quartzitos, filitos, with the presence of marble magnesia's, dolomites and magnesite. In the Mountain range of Araras, at the Serrana Province (high Paraguay river) in Mato Grosso; presence of folds of the formations Arara, Raizama and Diamantino (group Corumbá or Alto Paraguay). The waste part of this land is covered by quaternarium sediments of the Pantanal Matogrossense. The Araras formation is formed by conglomeratics margas, limy, subordinated dolomites and marbles. The Diamantino and Raizama formations are distributed over the mountain range of Araras and Azul, to the West and North of Corumbá, supporting the highest group of mountains of this landscape. The Diamantino Formation is constituted by a thick package of folhelhos and micaceous siltitous. The Raizama formation consists of feldspatics sandstones, calciferous cement, intercalating conglomeratic levels with quartz pebbles.

The Brasilia Folding Band, from the proterozoic age in the Center-East of Goias, includes a set of stratigraphic and metasedimentary units, folded and metamorphicized in at least two tectonics cycles: Uruaquano and Brasiliano. The prolonged crests are related to high angle inverse imperfections of the system of the Serra São Domingo mountain range.

2. CHARACTERIZATION OF THE BRAZILIAN FORESTS³

Although Brazil has an enormous diversity of species, it recognizes two large sets of vegetation: Forests (which occupy more than 60% of the domestic territory) and Open Fields.

-Forest formations include ombrophilous and deciduous seasonal forests located in the Amazon region and outside the Amazon, in particular at the Atlantic Forest. In the Amazon region predominate open and dense ombrophilous forests, with medium and large sized trees, with

² MIRANDA, E. E. de; (coord.). Brasil em Relevô. Campinas: Embrapa Monitoramento por Satélite, 2005. At: <<http://www.relevobr.cnpem.embrapa.br>>. Access in: 12/11/2007.

³ Instituto Brasileiro de Geografia e Estatística – Mapa dos Biomas do Brasil e Mapa da Vegetação do Brasil. IBGE: 2004. Acessado em 14/09/2007.

occurrences of lianas, orchideas and bromeliads. Forests outside the Amazon coincide with the forest formations that compose the Atlantic Forest, where seasonal semi-deciduous forests and the mixed predominate and dense ombrophilous forests (with araucaria pine); in both cases, deciduous seasonal forest occur to a lesser extent.

-Open fields formations are constituted by open vegetation, which according to typology would be: savanna, correspondent to the Cerrado which predominates over the central region in Brazil, but that also occurs in small areas in other regions of the country, including the Amazon; "steppic savannas" includes Northeastern savanna, Caatingas, the fields of Roraima, the Pantanal Mato-Grossense and a small occurrence in the extreme West of the Rio Grande do Sul; steppes corresponding to the fields, at the plateaus and the lower lands at the extreme south of Brazil; and the "campinarana", a type of vegetation that results from the lack of mineral nutrients in the soil, occurring in the Amazon, at the basin of the Black River (Rio Negro).



Amazon

According to official Brazilian government data, Amazonic ecosystems covers 368.989.221 hectares, including the states of Acre, Amapá, Amazon, Pará, Rondônia, Roraima and a small part of the states of the Maranhão, Tocantins and Mato Grosso. It is recognized that the great geologic diversity, added to the differentiated relief, has resulted in the formation of the most varied classes of soils, under the influence of high temperatures and precipitations, very characteristics of the super humid and humid hot equatorial climate. However, the natural fertility of soil is low, in contrast with the exuberance of the ombrophilous (humid) forests that develop over them.

It is important to note that the forest, although be the most characteristic of Amazon, includes a great variety of ecosystems, amongst which: bushes, flooded forests, fertile valleys, igapós, open fields and savannas. Amazon is a shelter for infinity of vegetal and animal species: 1.5 million vegetal species catalogued; three thousand species of fishes; 950 types of birds;

insects, reptiles, amphibians and mammals⁴. Within the Amazon biome there are: campinaranas; deciduous and semi-deciduous seasonal forests; open ombrophilous forests; dense ombrophilous forests; pioneer formations; montano shelters and Amazonian Savannas.

Caatinga

The Caatinga is the predominant ecosystem in the Northeast region of Brazil, found in the semi-arid climates, corresponding to an area of 73.683.649 ha, 6.83% of the national territory; it is found over the states of the BA, CE, PI, PE, RN, PB, IF, AL, ME and the MG. The Caatinga term is originally of tupi-guarani and means "white bush". Although situated in area of semi-arid climate, presents large variety of landscapes. The occurrence of seasonal droughts sets intermittent regimes to the rivers and leaves the vegetation leafless. The plant's foliage sprouts back and turns into green on the short rain period.

The Caatinga is dominated by a vegetation of xerophyte characteristics – dry vegetable formations, composing a dry and thorny landscape - with composite stratus of grass, shrubs and trees of low and medium size (average 3 to 7 meters/height), deciduous plants, great number of prickly plants, larded of other species as cactaceous and bromeliads. The ecosystems of Caatinga biome are currently quite modified, with native vegetal species substituted for crops and pastures. Deforestation and fires are still common practices to the preparation of the land for the farming. Beyond destroying the covering vegetal layer, harms the maintenance of wild life population, water quality, and the balance of climate and soil. Approximately 80% of the original ecosystems have already been human impacted.

Southern Fields

The fields of the Southern region of Brazil are called "Pampas", term of indigenous origin referring to "plain region". However, this designation is attributed only to one type of field, relative to the southern part of Rio Grande do Sul state, reaching Uruguay and Argentina. There are other known types of fields in the same region, as the Campos de Cima da Serra found in areas of transition where Araucaria forest predominates. In other areas it is possible to find fields like to savannas.

This campestre vegetation demonstrates an apparent uniformity, presenting at its plainest tops a low herbaceous carpet - of 60 cm to 1 meter - thin and poor in species, but that becomes denser and richer in the hillsides, predominating grasses, composed and leguminous. The alluvial bush presents innumerable arboreal species of commercial value.

Cerrado

Located, mainly, over the Brazilian Central Plateaus, in the states of Goiás, Tocantins, Mato Grosso, Mato Grosso do South, some parts of Minas Gerais, Bahia and the Federal District, it encloses 196.776.853 hectares. However, there are other areas of Cerrado, called peripheral, that are transition areas with the Amazon, Atlantic Forest and Caatinga biomes, displaying diverse ecosystem formations. From a physiognomic point of view, there are the "cerradão", the typical cerrado, the fields 'dirty' with cerrado (campos sujos de cerrado) and the clean fields, all showing a decreasing sequence of vegetal biomass.

This typical Cerrado is constituted by relatively low trees (up to twenty meters), disperse, spread within shrubs, sub-shrubs and a low vegetation, formed mostly by grass. Two strata are observable in the cerrado: a superior, formed by trees and deep rooted shrubs able to reach the freatic water table, situated between 15 to 20 meters deep; and an inferior stratus, formed by a grassy carpet, with shallow roots in which the light intensity is high in relation to the space occupied. During droughts, this shallow grass carpet turns into straw like, making it easy for fire propagation. The typical vegetation that occurs in the cerrado has winding trunks, of low stature, twisted branches, thick rinds and thick leaves. Carried out studies consider that the native vegetation of the cerrado has resulted as such given the edafic factors, as a disequilibrium of micronutrients, as aluminum.

⁴ IBAMA.

The Brazilian Cerrado is acknowledged as the biodiversity richest savanna in the world, encompassing many ecosystems, very rich flora with more than 10.000 species of plants, being 4.400 endemic, exclusive of this area.

Costeiros

In the Brazilian coastal region there is a mosaic like of ecosystems of high environmental relevance, which are: manguezais, restingas, dunes, beaches, islands, rocky costs, bays, heaths, cliffs, estuaries, choral reefs and other important environments from the ecological point of view, all presenting different animal and vegetal species. This diversity occurs in virtue of climatic and geologic differences along the Brazilian coast, besides residual presence of Atlantic Forest. On the coast the vegetation has a superior biodiversity in respect to vegetal species. Also the mangroves of expressive occurrence in the coastal zone fulfill essential functions to the biotic reproduction of sea life. At last, the costal space has considerable richness of natural and environmental resources but the intensity of a chaotic process of occupation is putting at risk all the ecosystems in the coast of Brazil. The Amazonian coast goes from the Oiapoque river mount to the delta of the Parnaíba River. Displays a large extension of exuberant mangroves, as well as bushes, dune fields and beaches.

Atlantic Forest

Atlantic Forest is considered the fifth richest in biodiversity (endemic species) and threatened area of the world. A diversified ecosystems mosaic, Atlantic Forest presents different structures and forest compositions, according to soil specificities, relief aspects and climatic characteristics over the vast area of occurrence of this biome in Brazil. Currently, only 7.3% remains of the original forest covering, with 20.000 species of vascular plants, of which 8.000 are endemic only to the Atlantic Forest. Recently, a region in the south of Bahia was identified as having the world's largest botanical diversity of woody plants: 454 species were registered in only one hectare. Its current area is today highly reduced and fragmented with its forest remaining located mainly in areas of difficult access. Preservation of these remaining has been: guaranteeing hillside contention, creating opportunities to enjoy the exuberant landscapes and to the development of ecotourism activities, serving as shelter for traditional populations, including indigenous peoples. Moreover, its hydro sources are vital to guarantee supplying for about 70% of the Brazilian population.

Pantanal

The Pantanal biome is the most important plain in the humid areas of South America. Its geographic localization is of particular relevance, as it is the natural link between the Cerrado, in central Brazil, the Chaco, in Bolivia, and the Amazon region, to the North, itself being at the basin of high Paraguay River.

The soil has limitations to farming activities. In the *pantaneiras plains* predominate infertile soils (lateritas) in humid areas (hydromorphic) and planosols, beyond several other types, all flooded in greater or minor degree but all of low fertility. Over the plateaus, even with the predominance of soils with many limitations to agricultural activity, mostly low fertility, topography or water scarcity, there are some favorable situations. As a transition area, the Pantanal region exhibits a terrestrial ecosystems' mosaic, with affinities with the cerrados, and in some extent with the Amazon forest, beyond aquatic and semi-aquatic ecosystems, interdependent in a greater to a lesser extent. The plateaus and the highlands of the top basin are formed by scarped areas and formations of eroded plateaus, known locally as 'mountain ranges'. Covered by opened vegetations mostly open, such as clean fields, dirty fields, cerrados and cerradões, the occurrence of these vegetations is determined mainly for edaphic and climatic factors and, also, for the humid forests, as an extension of the Amazon ecosystem

3. PROPERTY REGIMES AND FORESTRY MANAGEMENT IN BRAZIL.

Brazil has many laws and regulations that discipline the management and the property regime of the forests in Brazil. The main laws are: the Forest Code (law nº 4.771/1965), the law that creates the National System of Conservation Units (law nº. 9.985/2000), the law of Public

Forests Management (law n°. 11.284/2006) and the Law of Atlantic Forest (law n°. 11.428/2006).

The Brazilian Forest Code entered into force in 1965, having suffered many changes since then, the last one in 2001. As stated by the Forest Code: "The existing forests in the domestic territory and the many forms of vegetation, recognized as useful to the lands that they coat, are goods of common interest to all the inhabitants of the Country, being the exercise of property rights limited to what the legislation in general disposes and what this law especially regulates". (Art.1º)

In accordance with the Forest Code, every properties will have to keep the "areas of permanent conservation" (APP), which include: both margins of a river or any water course in marginal area ⁵; b) around lagoons, lakes or natural or artificial water reservoirs; c) in the springs, even if intermittent, and on the "water eyes", in any topographical situation, in a minimum ray of 50 meters of width; d) in the top of hills, mounts, mountains and mountain ranges; e) in the hillsides or part of these with declivity over 45º, equivalent to 100% in the line of highest declivity; f) in 'restingas', as dunes' keepers or stabilizers for mangroves; g) in the edges of trays or chapadas, from the line of the relief's break, in a band never inferior to 100 meters in a horizontal projections and h) in higher altitudes, over 1,800 meters, for any vegetation.



Amazon, Brazil

The Forest Code determines that, each rural property owner keeps or reconstitutes, according to each case, one forest area - called "legal reserve" - whose proportion depends on the region of the country: 80% if the rural property is in the Legal Amazon; 35% if the rural property is within the cerrado biome (on the states that compose the legal Amazon); and 20% in the rural properties on all the other regions of the country.

Since 2001, it's compulsory to the owner of rural property that within his property, if he does not have the area of legal reserve that he initiates a process of forest recovery, through annual planting of 1/3 of what needs to be recovered. Although there are no systematic numbers to quantify the number of properties that keeps or reconstitutes the legal reserves, according to Bacha (2003) less than 10% of the owners of rural properties have complied with the forest legislation. Government actions to fiscalise are not sufficient to guarantee the compliance with

⁵ In this case the area that must be kept shall vary in accordance with the width of the water courses: 30 meters for the water courses with less than 10 meters of width; - less than 50 meters for the water courses that have from 10 to 50 meters width; less than 100 meters for the water courses that have from 50 to 200 meters width; less than 200 meters for the water courses that have from 200 to 600 meters of width; less than 500 meters for the water courses that have width over 600 meters.

the law. There is no official survey on the amount of legal reserves in Brazil and its representativeness in relation to the conserved forests.

Beyond the forest cover that each rural property must have, Brazil has created a considerable number of Conservation Units and a specific legal regimen to regulate them, disciplined according to the law nº. 9.985/2000 that defines the National System of the Conservation Units. The Conservation Units are subdivided in Units of Integral Protection and Units of Sustainable Use.

The Conservation Units of Integral Protection can be:

- **Ecological station:** have as a goal the nature preservation and the accomplishment of scientific research, being of public ownership and domain. The private areas enclosed within its limits will be disappropriated.
- **Biological reserves:** have as a goal the integral preservation of biota and other existing natural attributes within its limits, without direct human interference or ambient modifications, excepting the measures taken for the ecosystem's recovery and the management actions necessary to recoup and to preserve natural balance, biological diversity and the natural ecological processes. Its ownership and domain are public and the enclosed private areas in its limits will be disappropriated.
- **National park:** its central goal is the preservation of the natural ecosystem of great ecological relevance, making it possible the accomplishment of scientific research and activities of environmental education, recreation and ecological tourism. It is of public ownership and domain; the enclosed private areas within its limits will be disappropriated. The public visitation is subjected to the norms and restrictions established in the Management Plan and to the norms established for the agency responsible for its administration, and to those norms foreseen in the regulation.
- **Natural monument:** the basic objective is to preserve rare, singular natural sites or of great scenic beauty and it can be constituted by private areas, since it is possible to make compatible the goals of the unit with the use of the local land and natural resources by the proprietors.
- **Shelter of Wild Life:** has the goal to protect natural environments where are assured the conditions for the existence or reproduction of species or communities of the local flora and the resident or migratory fauna. The shelter can be formed out of private areas, since it is possible to make compatible the objectives of the unit with the local use of the land and the natural resources by the proprietors.

The Units of Sustainable Use are subdivided in:

- **Area of Environmental Protection:** mostly an vast area, with a certain degree of human occupation, endowed with a biotic, biotic, esthetic or cultural attributes, especially important for the quality of life and well-being of the human populations, having as a basic goal to protect the biological diversity, to discipline the occupation process and to assure the sustainability of the use of natural resources, constituted of public or private lands. The private properties, observed the constitutional limits, can suffer restrictions to the property use and the development of economic activities.
- **Areas of relevant ecological interest:** mostly areas of a small extension, with little or no human occupation, with extraordinary natural characteristics or sheltering rare units of regional biota, and having as goal to keep natural ecosystems of regional or local importance and to regulate the permitted use of these areas, in a compatible way with the goals of nature conservation; can be constituted by public or private lands.
- **National forests:** areas with forest covering of predominantly native species and having as basic goal the sustainable multiple use of forest resources and scientific

research, with emphasis in methods for sustainable exploitation of native forests. Those forests are of public ownership and domain and the enclosed private areas in its limits must be disappropriated. It's permitted the permanence of traditional populations that inhabit those areas at the time of its creation as national forests, in compliance with its Plan of Management.

- **Extrativist reserves:** areas used by traditional extractivist populations, whose subsistence is based on the extractivism and, in a complementary way, on subsistence agriculture and the raising of small animals. The basic goal is to protect the ways of life and the culture of these populations, and to assure the sustainable use of the natural resources of the unit. They are of public domain, with use granted to the traditional extractivist populations, and the private areas enclosed in its limits will be disappropriated.
- **Fauna Reserves:** natural areas with native animal population, terrestrial or aquatic, resident or migratory species, suitable for techno-scientific studies, of public ownership and domain. The enclosed private areas in its limits will be disappropriated.
- **Reserves of Sustainable Development:** natural areas that shelter traditional populations, whose existence is based on sustainable systems of exploration of the natural resources. They have as a basic goal to preserve the nature and, at the same time, to assure the necessary conditions and ways for the reproduction and the improvement of ways of life and life quality of traditional populations on their exploration of natural resources.
- **Private reserves of Natural Patrimony:** areas that can be created by private proprietors, with interest in the conservation of the natural forest resources. Once created, the proprietor cannot undo the status of Reserve, not even his/her heirs.

Total Units by Category			
Category	Sub-total	%	Total
Area of Environmental Protection	31	4,26	727
Areas of relevant ecological interest	17	2,34	
Ecological station	32	4,40	
National forests	73	10,04	
National park	62	8,53	
Shelter of Wild Life	3	0,41	
Biological reserves	29	3,99	
Reserves of Sustainable Development	1	0,14	
Extrativist reserves	50	6,88	
Private reserves of Natural Patrimony	429	59,01	

Source: IBAMA, 2006

In 2006, there were 727 federal conservation units in the Brazilian territory. The federal conservation units are relatively balanced in terms of area, between those of integral protection (48%) and of sustainable use (52%). Between biomes, however, there are substantial differences in this balance: the integral protection is more common on the Pantanal (100%) and the Cerrado (69%), while the areas of sustainable use occupy substantially larger areas at the Atlantic Forest (74%), Caatinga (72%) and coastal region (74%). Only in the

Amazon there is a balanced approach between integral protection (49%) and sustainable use (51%). In the Amazon, 23% of the territory is composed of Conservation Units, what corresponds to a total area of more than 116 million hectares.

The creation of Conservation Units has not guaranteed that those territories be effectively protected. The conservation units suffer from pressure of illegal logging and the expansion of the agricultural frontier.

In this sense, it's worth notice that the efforts to protect biodiversity, as well as the politics of socio-economic and cultural sustainability of the indigenous peoples in Brazil have been defective. In Brazil, there is not yet a policy for biodiversity conservation that encompasses the whole set of our territory, concerning from conservation units to indigenous lands and private reserves, until spaces that will not be under any special protection.

In this way, although the Brazilian government strong bet on the creation of Conservation Units, it is necessary to set public policies that accomplish its goal, in accordance with Brazilian socio-economic factors.

4. DESCRIPTION OF THE STATE OF FOREST PEOPLES BEFORE AND AFTER THE EFFORTS OF THE EXPANDED WORK PLAN

Brazil has a large sociodiversity and local communities of riverrines, extractivists, quilombolas, indigenous, "quebradeiras de babaçu", have a history track of their struggles for the defense of their natural resources, including the forest. Thus, we can say that the existing public polices are the result of the history of mobilization and struggle of these communities: the creation of Extractivists Reserves, the permission for the communities to stay in the National Forests, the free access to the 'babaçuais' (babaçu coconut native forests), and all specific forms of titling of the territories. The most well preserved places, forests and rivers, still coincide with sites within lands occupied by indigenous peoples and other traditional cultures.

It is estimated that 25% of the Brazilian territory is under the ownership or under claim of traditional peoples and communities. (Wagner, 2006). In February 2007, the National Policy of the Peoples and Traditional Communities Sustainable Development was instituted by law, with a specific regulatory landmark.

However, the proper articulation amongst the public polices related to the Forest Peoples are not related or connected with the Work Program or another component of the Convention on Biological Diversity. When answering to question 61 of the Questionnaire of the EWP, the Brazilian Government affirmed that: "it has been not yet implemented measures related to the participation of the traditional communities".

That is: it is not possible to describe the state of the forest peoples before and after the CMB, once the Government itself considers that communities and the polices in this area are not involved in the Work Program.

5. PRACTICES OF MANAGEMENT AND REGULATION

Since 1965, the Forest Code already regulated that the exploration of the forest in the Amazon should be done through "forest management". However, only in 1994, by means of the decree nº 1.282, forest exploitation was defined under the terms of sustainable management, based on the general principles and technical support, and, in 1995, the Brazilian Institute of Environment and Renewable Resources (IBAMA) has specified the sustainable forest management through an administrative regulation (portaria nº 48). (GARRIDO FILHA 2002).

In 2003, the Federal Government created the National Center for Support of Forest Management - CENAFLO. Its creation was related with the necessity to put in place and practice the legislation on forest management, once the largest part of the activity of exploitation of forests in Brazil is done on the edge of the law. Although the creation of this agency has meant an advance from the point of view of the centralization of information/politics/actions over forest management, the institutional fragility of it is evident: the agency counts with only 08 employees.

Currently, the forest management in Brazil is regulated by Decree 5.975/2006 that applies to both forests of public and of private domain. The Decree defines the multiple use sustainable forest management, the "forest administration for the attainment of economic, social and environment benefits, respecting the mechanisms of the ecosystem objectives of management sustainability, considering cumulatively or alternatively, the utilization of multiple lumber species, multiple non lumber products and by-products, as well as the use of other goods and services of forest nature."



Amazon, Brazil

The forest management must have as general principles the conservation of the natural resources, the preservation of the forest structure and its functions; the maintenance of the biological diversity and the socio-economic development of the region. Must be the technical grounding for sustainable management: characterization of the physical and biological environment; specification of the existing supply; intensity of exploitation compatible with the site capacity; promotion of the forest' natural regeneration; adoption of silvicultural proper system; adoption of adequate system of exploitation; monitoring of the development of the remaining forest; guarantee of the technical-economic viability and the social benefits and mitigative measures of the environmental impacts.

Everyone that develops activity of lumber exploitation must elaborate and search for approval of its Plan of Sustainable Forest Management with the environmental authority.

Although the arrangement and the legislation on forest management have improved, the effective control of the public authorities on logging and lumber activity is precarious. It is estimated that in the Amazon, at least 47% of the wood commercialized is of illegal origin, that is, it does not come from the extraction through Plans of Management.

All over the country, traditional communities have pointed difficulties in the Community Management of the forest resources. In July 2007, local communities and civil society organizations have divulged a document where they pointed as difficulties to the community forest management: "the absence of land titling regularization, the incapacity of the regulatory state agencies (federal and state level) to work with the issue of forest management, as they

lack capacity to understand traditional techniques and methods, causing: delay in the analysis and approval of the plans, infrastructure problems to guarantee the flow and the improvement of the forest products, unjust threats to the communitarian leaders and unfair relations between lumber companies and communities, generating situations of disrespect to the human and environmental rights.”

5.1. Regulation of Forest Management in Brazil

Legal title	Content
Decree 5.975, November 30, 2006	<ul style="list-style-type: none"> • General definition on Forest management • Regulates the Forest Code • Defines exploitation of natural forests only under Forest management • Conceptualizes technical and scientific foundations to Forest management
<ul style="list-style-type: none"> • Normative Instruction of MMA 04, December 11, 2006 • Normative Instruction MMA 05, December 11, 2006 	<ul style="list-style-type: none"> • General Regulation of Forest Management • Procedures of analysis of management plans April 24, 2007

6. DESCRIPTION AND ANALYSIS OF THE MARKED BASED CONSERVATION MECHANISMS AND ITS INTERFERENCE IN THE IMPLEMENTATION OF THE WORK PLAN

The Brazilian Government has created a Working Group to formulate the National Policy of Payment for Environmental Services. This working group has elaborated a bill proposal to prescribe the national policy of environmental services, establishing the payment mechanisms, creating the National Program of Environmental Services and the Incentive Fund to the Conservation for Sustainable Development.

Although regulation in federal level does not exist, there are some state level initiatives of market based conservation:

6.1. Ecological Tax on Circulation of Goods and Services: The ICMS is a tax that must be collected by the each state of the federation and 25% of its value must be passed on to the cities. In some cities, up to 5% of this value can be directed according to environmental criteria.

6.2. Environmental compensation: Based in the principle "polluter-payer" it establishes that the enterprises with possible or inevitable impact on the environment (Petrobras, for example, with the gas-pipeline) pay a compensation (in this case to the State), used to create and to keep conservation units.

6.3. Forest replacement: it is a mechanism that compels who explores native wood to reforest, that is, through private planting, paying a tax of reposition to the IBAMA, to finance projects of planting or forest promotion.

7. EVALUATION OF THE PAPER OF THE INTERNATIONAL ORGANIZATIONS

Interviewed public officials, although have pointed the international organizations as the World Bank, as related to financing the polices concerning the forest question, the public managers did not point out the relation between these polices and organizations to the Expanded Work Program.

8. SENSIBLE QUESTIONS RELATED TO FOREST CONSERVATION IN BRAZIL AND THE IMPLEMENTATION OF THE EXPANDED WORK PROGRAM

Although it is possible to point the existence of some advances from an institutional and regulatory point of view in what concerns the environmental question, it is noticeable the lack of public polices that can alter substantially the production and development model built upon the degradation of natural resources. On the contrary, we mention the State initiatives that tend to reinforce this very model, becoming promoters of environmental degradation. We mention as public initiatives that potentially compromise the conservation of the forests and, therefore, the Expanded Work Program:

● **PAC – Growth Acceleration Program:**

In February 2007, the Brazilian Government presented to society the "Growth Acceleration Program", a set of public polices consisting mainly of heavy investment on energy and infrastructure, that foresees an investment of 508 billion reais (around 190 billion euros) in the period between 2007-2010. On commenting about PAC, the director of Economy and Environment of the Ministry of the Environment has affirmed: "economic and financial stimulus to this productive structure intensive in environment impacts, will have to result in the increment of the level of the economic activity in Brazil and, therefore, in additional environmental costs of difficult measurement." (TEIXEIRA, 2007).

In accordance with the Occidental Amazon Forum - FAOR, "the IIRSA and the PAC will impact significantly in the reorganization of the territories, once the impacts of these two strategies will be deep and wide, including the extent to which they will evidence the dispute over access and use of these territories and, consequently, of its natural resources. Such situation gains an all special contour when it is about the Amazon, as in this region are natural resources of great interest to the big mining companies, agribusiness exporters, pharmacy, lumber, energy and biotechnology companies, among others - the so called valorization of nature by the capital" (FAOR, 2007)

● **National Plan of Agroenergy (2006-2010):**

In December 2006, the Brazilian Government published the National Plan of Agroenergy, establishing the main lines of public intervention in this new "sector" of the Brazilian agribusiness.

According to the Brazilian Institute of Geography and Statistics IBGE (November/2007), the area planted with sugar cane should increase only 7% in 2007, while the production should register a 7.9% expansion.

In next the 15 years, it is estimated that the planted area - only with sugar cane - can increase on 30 million hectares. It is evident that the expansion of the crop for agroenergy production will further pressure the agricultural border and the remaining forest, especially in the Amazon and the Cerrado.



Carajás Forest District

A major global source of a large variety of mining products, Brazil extracts and exports alone 50% of all iron traded internationally, value added as pig-iron, a basic raw material to the steel industry worldwide. The world largest mineral province is located at Serra dos Carajás, Pará state, Brazil, within the Amazon forest.

This region has one of the highest deforestation rates in the Amazon – 40% - accompanied by high rates of rural violence, harsh labor conditions, forced evictions and land conflicts, caused by logging, mining, charcoal production, cattle raising and soy. In operation since the early 80's, and located in the middle of the forest, this major pig iron industry is energy intensive and relies entirely on charcoal and on an ever increasing supply of fuel wood. To guarantee the supply of energy to the mining district organized around the company Vale (former Vale do Rio Doce), which accounts for 95% of all the mining exports, the Brazilian government has created the 'Forest District of Carajás': an ambitious program to cover deforested areas with 1 million hectares (on the initial phase) of fast growing eucalyptus plantations and native species 'to assure supply of fuel to the pig iron industry and, at the same time, to reforest and promote social inclusion of peasants and traditional communities'. The total area to be included in this program encompasses 25 million hectares in the middle of the Amazon.

A coalition of social movements and civil society has strongly rejected this program. Social movements say that although presented by the government as a program to halt deforestation over other areas of virgin Amazon forest and to guarantee socio and economic activities dependant on the mining and pig iron industry, the implementation of large scale plantations of exotic fast growing species as eucalyptus to provide fuel wood to the largest pig iron production cluster in the world can never be combined, in any extent, to a coherent sustainable program to protect and recover forest diversity.

They have called it a "pseudo forest district, as plantations are not forests", and argue for an effective and consistent sustainable program to protect biodiversity and forest peoples' rights. (Open Letter, First Meeting on State and Peasantry in the Amazon, Marabá, September 2007)

9. CONCLUSIONS:

Considering the main elements of the Expanded Work Programme on the Biological Diversity of the Forests, which are: a) Conservation, Sustainable Use and Benefit Sharing; b) Favorable Institutional and socio-economic surroundings, c) Knowledge, Monitoring and Evaluation, we articulate the main conclusions, recurrent of the interviews with public officers, researchers and representatives of civil society:

1. The carried out interviews have proven the almost absolute absence of information on the Expanded Work Program of Work Extended within the Brazilian Government and the civil society.
2. Although some sparse actions are carried through in accordance with the general direction of the Expanded Work Program, the Brazilian Government has not articulated these policies in accordance with the objectives and goals of the Program, what compromises, also, the precise evaluation of the subject.
3. The Brazilian Government points out as the main instrument to preservation and conservation of the Biological Diversity of Forests the creation of Conservation Units. Conservation. The voracious expansion of the agribusiness activities, as a political and economic option of this Government, mainly in the context of the promotion of the Agroenergy, has hindered the promotion, reflection and implementation of preservation policies that seek to alter the production standards. At the same time, the Conservation Units created so far suffer from many problems that many times, hinder the effective preservation. In this sense, we can affirm that there are no truly structural actions to reduce the threats and to mitigate the impacts of these processes that place in danger the forest biological diversity.
4. The initiatives of forest restoration are incipient and are broken up. It is distinguished in this respect, the absence of fiscalisation of the implementation of mandatory Legal Reserves in the rural properties, mainly, in the Atlantic Forest and the Cerrado.



Yvyapuruvu tree, parana, brazil

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