

**NATURAL FOREST MANAGEMENT AND STUMP-TO-FOREST GATE CHAIN-OF-CUSTODY
RECERTIFICATION EVALUATION REPORT FOR:
JURUÁ FLORESTAL LTDA -FAZENDA ARATAÚ
IN NOVO REPARTIMENTO, PARÁ STATE – BRAZIL**

**CONDUCTED UNDER THE AUSPICES OF THE FSC AND SCS FOREST CONSERVATION
PROGRAM**

Certification Program Accredited by the FSC

**Certification registration number:
SCS-FM/COC-00045N**

**SUBMITTED TO
JURUÁ FLORESTAL LTDA.**

Distrito Industrial de Ananindeua, Quadra 06, Lote 03, Setor D
67695-000 – Ananindeua – Estado do Pará
BRAZIL

Coordinated by Vanilda R. S. Shimoyama

Field audit: August 20 to 23, 2007

Date of Final Report: December 11, 2007

Date of Recertification: December 11, 2007

Updated: September 2008 and January 2009 (Sections 1.1 and 6.1)

**BY
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Organization of the Report

This report is a result of evaluation carried out by the FSC auditors and it is divided into two sections. Section A provides the public summary and background information that is required by the Forest Stewardship Council. This section is made available to the general public and is intended to provide an overview of the evaluation process, the administrative and management programs and the plan of action regarding the forests as well as the results of the evaluation. Section A will be posted on the SCS website (www.scscertified.com) for at least 30 days after recertification. Section B contains more detailed information for the use of the company.

Recertification Process

Recertification process of Juruá, Arataú farm in the Novo Repartimento region, State of Pará, Brazil. Juruá Florestal manages a total area of 24,955 hectares, where over 30 native species are harvested. The most important are: Angelim-vermelho, Fava, Faveira-branca, Guajará, Ipê, Jatobá, Maçaranduba, Piquirana, Tauari and Tatajuba.

Maximum annual harvesting area = 2,800 ha

Approximate annual volume: 55,000 m³ with an average of 19,500 m³/ha

FOREWORD

SCS -Scientific Certification Systems, a certification body accredited by the Forest Stewardship Council (FSC), was commissioned by JURUÁ FLORESTAL LTDA to conduct the recertification process of its natural forest management at Fazenda Arataú, located in the Novo Repartimento region, State of Pará. According to the FSC/SCS certification system, forest management operations that meet the international standards for forest management can be certified as “well managed” and, thereby are eligible to use the FSC logo in the marketplace.

In August 2007, an interdisciplinary team of natural resource specialists was assigned by SCS to conduct the evaluation. The team collected and analyzed documents, carried out a public consultation through e-mail and letters, conducted interviews, and completed a four-day field and office audit of the subject property as part of the evaluation for recertification. Upon completion of the fact-finding phase, the team concluded that the company meets all FSC criteria, so that recertification is recommended.

This report is issued in support of a recommendation to award FSC-endorsed recertification to FAZENDA ARATAÚ of JURUÁ FLORESTAL LTDA for the management of its natural forests in the Novo Repartimento region, State of Pará, thus guaranteeing the already existing SCS-FM/COC-00045N certificate. A few major corrective actions were highlighted by the evaluation team upon completion of the field audit and were handed to Juruá Florestal. The company accomplished all corrective actions prior to the closing of this report, as verified by SCS. In case recertification is awarded, SCS will post this public summary on its website (www.scs-certified.com).

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SECTION A – PUBLIC SUMMARY AND BACKGROUND INFORMATION

1.0 GENERAL INFORMATION

1.1 – DATA REQUIRED BY FSC

Applicant entity	JURUÁ FLORESTAL LTDA.	
Contact person	Idacir Peracchi – Director/Owner	
Address	Distrito Industrial de Ananindeua, Quadra 06, Lote 03, Setor D 67695-000 – Ananindeua – PR - BRASIL	
Telephone	+ 55 (91) 3250-3080	
Fax	+ 55 (91) 3250-3222	
E-mail	idacir@juruaflorestal.com.br	
Certificate Type	Three Areas, Three Management Plans	
Number of FMU's	03	
Number of FMUs in scope that are		
less than 100 ha in area		
100 - 1000 ha in area	02	
1000 - 10 000 ha in area	01	
Location of the area which will be certified (Fazenda Arataú) Latitude	(Camping) Lat 04 00' 50.8" S	(VERTICE DIVISA) Lat 04º 08'49.3" S
Longitude	Long 50º 06' 51.6" W	Long 50º 10'07.0" W
Fazenda Picapau Latitude	Lat 01 03' 56.1" S	Lat 1 01 23.088 S Lat 1 01 30.288 S Lat 1 01 24.600 S Lat 1 01 25.932 S Lat 1 01 31.944 S Lat 1 01 44.004 S Lat 1 01 39.144 S Lat 1 01 40.620 S Lat 1 03 45.216 S Lat 1 05 42.900 S Lat 1 02 56.220 S Lat 1 01 24.888 S
Longitude	Long 53 30'38.4" W	Long 53 30 25.452 W Long 53 30 12.996 W Long 53 29 53.628 W Long 53 29 45.852 W Long 53 29 39.876 W Long 53 29 29.616 W Long 53 29 16.404 W Long 53 29 15.648 W Long 53 28 10.776 W Long 53 30 43.704 W Long 53 30 31.464 W Long 53 30 25.596 W
Fazenda Sucupira Latitude	-	Lat 1 02 58.272 S Lat 1 05 43.548 S Lat 1 06 11.808 S Lat 1 06 36.756 S Lat 1 03 12.600 S

Longitude	-	Long 53 30 31.968 W Long 53 30 48.708 W Long 53 31 24.348 W Long 53 33 46.512 W Long 53 33 51.408 W
Forest Region	Tropical	
Total forest area in scope of certificate	30,651.527 ha	
Less than 100 ha	--	
From 100 to 1,000 ha	--	
From 1,000 to 10,000 ha	5,651.527 ha	
More than 10,000 ha	25,000 ha	
Land Tenure	Fazenda Arataú -Rented (100%) Fazendas Picapau e Sucupira - private	
Number of forest workers (including contractors) in the forest within the scope of the certificate	Fazenda Arataú: 85 direct employees (37 work at the FMU area and 68 in the industry), and 35 contractors responsible for field activities. Fazenda Picapau and Fazenda Sucupira: 44 direct employees and 29 contractors responsible for field activities.	
Areas of forest and non-forest land protected from commercial harvesting of timber and managed primarily for conservation purposes	5% Preservation Area – 2,820.47 ha Buffer Zone – 16.5 ha	
Area of forest classified as 'high conservation value forest'	The company has just defined three Lagedo areas, all with the required attributes for HCVF.	
List of high values for conservation	The company has a list of wildlife and vegetation species present at the FMU, including endangered species.	
Productive forest area	26,628.415 ha	
Area of production forest classified as 'plantation' for the purpose of calculating the Annual Accreditation Fee (AAF)	N/A	
List of main commercial timber and non-timber species included in the scope of certification (botanical name and common trade name)	<p>Arataú FMU: <i>Vouacapoua americana</i> (acapú), <i>Dinizia excelsa</i> (angelim-vermelho), <i>Cedrelinga catenaeformis</i> (cedrorana), <i>Micropholis macrophylla</i> (currupixá), <i>Parkia</i> sp.(fava), <i>Parkia multijuga</i> (faveira-branca), <i>Micropholis venulosa</i> (guajará), <i>Tabebuia</i> spp. (ipê), <i>Hymenaea courbaril</i> (jatobá), <i>Cordia alliodora</i> (louro), <i>Manilkara huberi</i> (maçaranduba), <i>Cariocar glabrum</i> (piquiarana), <i>Couratari oblongifolia</i> (tauari), and <i>Bagassa guianensis</i> (tatajuba)</p> <p>Pica-Pau FMU: maçaranduba, piquiá, <i>Carapa guianensis</i> (andiroba), <i>Pouteria pachycarpa</i> (goiabão), jatobá, and <i>Dinizia Excelsa</i> angelim-pedra. UMF Sucupira: maçaranduba, goiabão, <i>Piptadenia suaveolens</i> (timborana),</p>	

	piquiá, andiroba, and jatobá.
Approximate annual allowable harvesting (AAH) of commercial logs	Faz. Arataú: approximately 55,000 m ³ logs/year (2,800 ha). Faz. Picapau (UPA01): 6,613 m ³ of logs and 1,726.17 m ³ of short logs Faz. Sucupira (UPA01): 7,089.58 m ³ of logs and 1,850.38 m ³ of short logs.
List of product categories included in the scope of joint FM/COC certification and therefore available for sale as FSC-certified products (include basic description of products - e.g. round wood, pulp wood, sawn timber, kiln-dried sawn timber, chips, resin, non-timber forest products, etc.)	Tropical Timber

1.2 MANAGEMENT CONTEXT

The management of native forests, developed by Juruá Florestal at Fazenda Arataú, is subject to the state and federal regulations applicable to the activity. The following regulations must be abided by:

At the federal level:

- a. Brazilian Forestry Code (Law Nr. 4771/65) and corresponding regulations.
- b. Approval of the management plan by IBAMA (Brazilian Environmental Institute)
- c. AUTEF – for forest exploitation
- d. GF1 (Logs for sawmill), GF2 (Timber sale) - for log transportation

At State level:

- a. State Environmental Policy (Law Nr. 5887/95)
- b. Issuance of invoices, when products are sold

At the Municipal level:

- a. ISSQN (municipal service tax) payments, when third party services are used.

In addition, all work-related tax payments at the federal level are mandatory, including:

- a. Social security payments
- b. FGTS (Government severance pay indemnity fund) payments
- c. Labor Union fees (Union dues)

1.2.1 Environmental Context

Fazenda Arataú Forest Management Unit of Juruá Florestal in Novo Repartimento municipality is located around 65 km southwest of Tucuruí, along Highway BR 230 (Transamazon) at km 206. The local climate is hot and humid. The average monthly temperatures do not vary much during the year, remaining around 25° to 26° C. In general, the average annual rainfall is over 2,000 mm. There is a short drought period, when the rainfall is less than 60 mm for the period. During the year, there are two well defined periods: one marked by heavy rains, beginning in January and extending to the end of May; the other is characterized by a warmer and less rainy season, from June to December. The relative humidity is always high, around 80%. As shown on the relief map of Brazil, the municipality where the FMU is located is inserted in the area known as Residual Plateaus of Southern Amazon. These are residual reliefs in between river valleys with flat surfaces and conserved as tabular remnants with worn-out and rounded borders, at elevations over 400 m, and mountain ranges carved in pre-Cambrian rocks, of volcanic, sub volcanic and metamorphic origin, represented by granites, rhyolites, granitoids, gneissic belts, migmatites and arcosean sandstones (IBGE-1996). The predominant soils in this region are Red-Yellow Spodosols, Red-Yellow Oxisols, Yellow Oxisols, Lithosols, and Plinthaquepts. At Fazenda Arataú FMU there are several small watersheds. However, only a few water streams did receive official denominations by the army cartographic service (DSG). To the west of the farm, there is the Doze stream (“igarapé”) and, to the south, are the Caripé River and the Onze stream. The predominant vegetation is the Open Tropical Rain Forest with palm trees, characterized by one of the highest levels of biodiversity in the world. That plant formation includes large trees, with the presence

of outstanding specimens and scattered understorey. In smaller proportions, other forest types such as low and high thickets are also present. The dense vegetation at Fazenda Arataú supports a very rich wildlife. Many species of mammals, birds, reptiles, amphibians and invertebrates in general take part in nutrient cycling, seed dispersal, and energy flow. These processes not only keep the forest ecosystem functioning, but also help in its regeneration.

Use of Agrochemicals

There is no evidence of use of agricultural chemicals within the management unit, since it is totally unnecessary in native forests. The company has defined in its management proposal to adopt proper silvicultural practices that preclude the use of agrochemicals.

1.2.2 Socio-economic Context

Fazenda Arataú is located at approximately 25 km from the town of Novo Repartimento which, in turn, is 65 km south-west of Tucuruí. The extension of Novo Repartimento is 15,396 km², with a population of 41,819 according to the 2000 survey. This is a predominantly rural community since most people (62.88%) live in rural areas. Fazenda Arataú is located along the Transamazon Highway, towards the town of Marabá, at the southeast, in the opposite direction to Altamira. The urban core of the municipality was rebuilt because the former town of Repartimento was flooded when the lake of Tucuruí Hydroelectric Power Plant was formed.

As mentioned at the FSC certification phase, five years ago, Novo Repartimento has a relatively recent history, which started back in the 1970's, when a settlement started in the surroundings of a stream named Repartimento, next to the lodgings of the Construtora Mendes Júnior company which was building the Transamazon Highway. The socio-economic problems noted at that time still prevail. These are related to wood exploitation in the Parakanã indigenous areas and in other sites in the municipality. Most of the times, wood exploitation is done illegally. The INCRA (National Institute for Colonization and Land Reform) settlements (Rio Arataú and Tuerê) in the municipality, although established since 2001, are still in the process of consolidation. The Tuerê settlement is one of the largest projects in the country. There are nearly 3,000 families, many of whom were previous land squatters that came from conflict areas such as Eldorado do Carajás, and Curionópolis, in the State of Pará.

Land invasions are still common and the most significant conflict took place in Cururuí. Although settlement of the area has already been established, it was done without the environmental license. Moreover, there are cases of killings and missing people reported in the area due to conflicts with lumbermen. All those areas, however, are distant from Fazenda Arataú and there is no relation of these social conflicts with forest management. The exception is Fazenda União, a property next to Fazenda Arataú, where approximately 450 families invaded an area of 28,000 hectares. These invasions are not related to MST (Movement of Landless People) which, according to surveys, has little influence in the municipality.

One of the remarkable presences in the municipality is Eletronorte company, notably in promoting social actions in health care area. Despite all the investment, social problems in the municipality are still notable. Violence and crime continue to soar in Novo Repartimento.

1.3 FOREST MANAGEMENT IN THE COMPANY

1.3.1 Background

JURUÁ FLORESTAL started its activities in 1992, in the city of Tucumã (PA). Activities were carried out for three years, but were halted until May, 1999, when the company changed its body of stockholders. Mr. Idacir remained as the sole associate with his wife. Then, the operations were transferred to Tailândia and Belém (May, 1999). Until 1999, the company produced only sawn timber and, in 2000, with the acquisition of an industrial unit in Ananindeua, it started to sort different products in order to add values. With this, most of the output is geared toward foreign markets. In early 2000, the company leased Fazenda Arataú and started its logging operations at the end of that year. The company has 85 direct employees, distributed between forestry and industrial activities. It also has 35 workers of third, responsible ones for the harvesting activities

Fazenda Arataú has a total area of 45,696.30 hectares. The area of forest management, however, is 24,995.00 hectares.

JURUÁ has a technology transfer agreement with EMBRAPA (Brazilian Corporation for Agricultural Research) and CIFPR (International Forest Research Center), financed by OIMT (International Tropical Timber Organization). This agreement involves professionals from SUDAM (Superintendence for Amazon Development), mainly in remote censusing, FCAP (Agrarian Science School of Pará) and DFID (The UK Department for International Development). It maintains, also, a cooperation agreement with FFT (Tropical Forest Foundation) for research on low impact forest management. A more recent agreement was established with IPAM (Amazon Environmental Research Institute), for surveillance of environmental impacts, especially on wildlife, caused by the management carried out through low impact logging operations.

In 2000, Juruá started preparations for the process of forest certification. To this effect, it created a forestry department and hired two foresters and two technicians. Moreover, it trained its team on low impact logging techniques. From that point on, a series of changes has been promoted zeroing on new goals. In April, 2001, the forest operations at Farm Santa Marta, in Tailândia, were certified. And sequently Farm Arataú was added.

The current technical and administrative structures of Juruá include Mr. André Moraes Caldeira (forester), commissioned as the general manager of Fazenda Arataú, Mr. Natalino José Loreno, as the logging manager, and Mr. Alfredo Mota Santos, manager of the Novo Repartimento sawmill.

The natural forest management at Fazenda Arataú in Novo Repartimento, State of Pará, was evaluated in September 2001. It was awarded the “Well Managed Forest” certificate and Chain of Custody Certificate in February 2002.

1.3.2 Land Outside Scope of Certification

Juruá is seeking FSC certification for all the lands that they currently manage because Arataú is Juruá's only forest. At one point Juruá Florestal was also managing Santa Marta, which was FSC certified; however, this concession agreement was terminated.

1.4 MANAGEMENT PLAN

1.4.1 Management Objectives

General Objectives:

To establish the guidelines and actions for wood production to supply Juruá Florestal industrial units, based on the government regulations on forestry activities in the Brazilian Amazon, and complying with the principles of sustainable forestry activity.

Specific Objectives:

- To apply the technical guidelines for low impact logging in order to minimize the influence of log harvesting operations on the ecosystem;
- To implement a program for surveillance and controlling of all forestry operations as a means to gather information on productivity, yield, costs and socio-economic and environmental impacts. These are necessary to provide a guideline for decision-making on technical-administrative issues and as a basis for necessary reviews of the management plan;
- To review the management plan submitted to IBAMA-PA SUPES under number 1373/74, to the effect of including Arataú FMU and to adjust its operations to the FSC requirements as for the fulfillment of good management principles and criteria, aiming to obtain the forest certificate.

1.4.2. Composition of the Forest

The Open Tropical Rain Forest with palm trees has an open canopy for the crowns do not always close, due to the presence of a large number of palm trees (babaçu), as well as vines in a lesser extent. Its upper layer is

composed of a small number of outstanding trees. The shrub-herbaceous layer is denser and better at closing the understorey than the dense forest. This makes walking in its interior very difficult.

In a similar manner as the dense forest, the open forest also shows no remarkable seasonality. However, the level leaf shedding can reach 5% or even higher in some cases.

Among the most important commercial species found in this type of forest are: currupixá (*Micropholis macrophylla*), faveiras (*Parkia* spp.), melancieira (*Alexa grandiflora*), jatobá (*Hymeneae courbaril*), cedrorana (*Cedrelinga cataeniformis*), marupá (*Simaruba amara*), and tauari (*Couratari* sp.).

The property encompasses a total area of 45,696.30 hectares; the Open Tropical Rain Forest with palm trees extends through 26,977.60 hectares (Table 1) and the remaining area include pasture lands, subsistence agriculture, and lakes. The forest area leased by Juruá Florestal for management covers 24,955.00 hectares (Table 2). It includes the area already subjected to selective logging since 2000.

Table 1. Areas of the phytoecologic environments and land use:

Ecosystems	Area (ha)
Open Tropical Rain Forests with Palm Trees	26,977.60
Pasture	10,676.30
Subsistence Agriculture and Pasture	400.80
Pasture with bushes	7,149.10
Dense Secondary Forest (Capoeirão)	482.60
Lake	9.00
TOTAL	45,696.30

According to exploratory surveys in the area, it contains wood volume in quantity that is sufficient for a second round of logging. Therefore, by considering an annual harvesting area of up to 2,800.00 hectares, the company still has forest area to supply the industry with raw-material for some more time. In order to continue with its certified management, the company has acquired a new area that will undergo the process for its inclusion in the certification by mid 2008.

Table 02. Current situation of the Tropical Rain Forest in the FMU.

Open Tropical Rain Forest with Palm trees			
Productive Forest (ha)		Preservation Forest (ha)	
Exploited	Not Exploited	Preservation	5% FSC
18,787.90	4,153.69	2,014.00	2,022.00

1.4.3 Silvicultural Practices

The company adopts the polycyclic silvicultural system. For the upland (terra firme) conditions in the Brazilian Amazon, Embrapa has named it SBMF (Brazilian Selective Management System). In this system, the rotation period is divided into smaller intervals or harvesting cycles. At each cycle, mature trees are harvested at intermediate periods. In the current management plan, a harvesting cycle of 30 years will be adopted in order to follow the forest legislation. The application of this system is based on research results, which have shown this system as the most suitable for tropical forest management, especially for African and neotropical forests. A summarized and generic sequence of operations used in silvicultural systems to be applied at Fazenda Arataú FMU as part of this management plan are shown in Table 3.

Table 3. Sequence of operations to be applied in the project at Fazenda Arataú, by JURUÁ FLORESTAL LTDA.

Year	OPERATIONS
E2-1	Macro and Microzoning (FMU/Annual Production Units/Work Units) Flagging of Annual Production Units, Work Units and direction trails. Inventory of 100% (forest census) and cutting of vines off the trees to be logged. Preparation of the logging maps.

Year	OPERATIONS
	Establishment and measurement of permanent plots Planning and building of permanent infrastructure (roads and woodyards) Surveillance of activities
E	Logging operations (surveillance of activities)
E+1	Remeasurement of permanent plots Maintenance of permanent infrastructure Post-harvesting silvicultural treatments
E+3	Remeasurement of permanent plots Maintenance of permanent infrastructure
E+5	Remeasurement of permanent plots Maintenance of permanent infrastructure
E+10	Remeasurement of permanent plots Maintenance of permanent infrastructure
E+20	Remeasurement of permanent plots Maintenance of permanent infrastructure
E+30	Beginning of the second cycle

Concepts and criteria for application of silvicultural treatments

The adoption of silvicultural treatments such as opening of the canopy and regeneration management has shown positive results in experiments in the Amazon estuary region (Silva, 1997) and in managed areas of Costa Rica (Lehmann, 1991). These practices allowed cutting cycles to be shortened to 15 years for andiroba (*Carapa guianensis*).

Studies in upland areas by Silva *et al.* (1997) and Piña-Rodrigues *et al.* (1999) determined the mean annual increment (MAI) in volume of 0.8 to 1.0 m³ for species such as kapok (*Ceiba pentandra*) and breu-sucuruba (*Trattinickia burseraefolia*). These results indicate the potential of each species, as long as silvicultural practices are properly applied. This was demonstrated in management plans in the Tapajós and Jari regions, where exploitation systems at the intensity of 40m³/ha every 10 years, combined with silvicultural treatments, resulted in increments between 0.7 and 1 cm/year in diameter and 2 m³/ha/year in wood volume in 30 year cutting cycles (Silva, 1997).

Logging intensities of up to 40 % of wood volume have not shown detrimental effects on the diversity of an upland forest at Floresta Nacional de Tapajós, particularly when only trees larger than 45 cm in DBH were removed (Carvalho *et al.*, 1986). Silva (1989) recommended tree fellings in a well distributed pattern in order to prevent large canopy gaps. He also suggested the removal of vines 10 years after logging because they develop fast in presence of gaps in tree canopies. This practice should be followed by thinning to release desirable trees.

The experience acquired from managing upland forests has shown that indicates that logging at moderate intensity by removing 30-40 m³/ha in a 25-30 year cycles is desirable in order to avoid opening of large gaps (Silva, 1997). Further studies were recommended to determine other cutting intensities and silvicultural treatments in order to minimize cutting cycles. Although experimental data have shown higher volume increment due to silvicultural treatments, there is little or no information on operational costs and on economic viability of this activity, especially on a large scale. For example, an annual logging operation over 5,000 ha has been planned with silvicultural treatments applied only on experimental basis, just to determine the balance between the reduction of cutting cycles and the economic feasibility.

Large-scale experiment on post-harvesting silviculture in the Brazilian Amazon Region

A study is being carried out on the lands of two certified companies that are partners in the Projeto Bom Manejo (Good Management Project) (Embrapa/ITTO). The project spans over the following areas: 1) 700 ha at Fazenda Arataú, which had been logged in 2004, in the municipality of Novo Repartimento, under the responsibility of Juruá Florestal Ltda; 2) 700 ha at Santa Marta Farm, which had been logged in 2003, also belonging to Juruá Florestal Ltda., in the municipality of Moju; and 3) 700 ha at Fazenda Rio Capim, a property of Cikel Brasil Verde Madeiras Ltda, in the municipality of Paragominas, State of Pará. The latter had been subjected to a low impact logging in 2004. The experiment was replicated in these locations from December 2004 to June 2005. A completely randomized design was used. Seven treatments were applied in

each farm, with four replications. The experiments covered an area of 700 ha in each farm, with treatments distributed over the WUs (Work Units) and APU (Annual Production Units) of the Sustainable Forest Management Plan - SFMP of the mentioned farms. Each WU was divided into four quadrants (25 ha square plots each) to constitute treatment replicates. Management treatments were applied and surveillance will be performed on these experimental plots. Each 25 ha plot includes a 4.75 ha border belt (25 m on each side). Therefore, the effective area in each plot was reduced to 20.25 ha (450m × 450m).

Details on each treatment are:

- T1: Classical release thinning (Wadsworth; Hutchinson) by girdling, and removal of vines from potential trees (species currently traded) for future harvesting.
- T2: Modified release thinning (classic simplified) by girdling, and removal of vines from potential trees (species currently traded) for future harvesting.
- T3: Release thinning by girdling and removal of vines from potential trees (any species, regardless of being traded or not) for future harvesting.
- T4: *Planting in gaps, conservation of some naturally regenerated seedlings of species with commercial value found in the gaps, and removal of vines from potential trees for future harvesting.*
- T5: T2 + T4
- T6: Logged control
- T7: Unlogged control

Trees that showed benefit from the silvicultural treatments were, at least, 35 cm in DBH (diameter at 1.30 m from the ground). All favored trees, in 7 treatments, and those that were girdled (in T1, T2, T3, and T5) were described and had their measurements recorded according to the guidelines for continuous forest inventory. Field record sheets for permanent plot measurements were used with a few adaptations in order to record both the favored and the girdled trees.

The time spent in silvicultural treatment activities, the cost of material used, and the wage of the personnel directly involved in the establishment of the experiment were recorded as well (Table 4), in order to estimate the operational costs, according to the guidelines established in the MEOF program - Economic Surveillance of Forestry Operations, developed by Embrapa Amazônia Oriental.

Table 4. Timetable of measurements and silvicultural treatments.

YEARS OF MEASUREMENTS AND REMEASUREMENTS – COMPLETED(X) AND PLANNED (P)												
TREATMENTS	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
T1	X	X		P		P						P
T2	X	X		P		P						P
T3	X	X		P		P						P
T4	X	X		P		P						P
T5	X	X		P		P						P
T6	X	X		P		P						P
T7	X	X		P		P						P

In the whole sampling area (567 ha) at Fazenda Arataú (all 7 treatments), 9,410 trees with DBH over 35 cm were favored, with an average of 17 trees/ha. The gaps in T4 and T5 were planted with 1,573 seedlings in 99 clearings, with an average of 15 plants per clearing. Unlike the operations at Fazenda Rio Capim, where 2,801 naturally regenerated plants of commercial species were favored, at Fazenda Arataú, only 28 seedlings were favored in all clearings.

The 10 species with the greatest number trees favored by the silvicultural treatments were, in decreasing order of abundance: melancieiro (*Alexa grandiflora* Ducke), curupixá (*Micropholis* sp.), muiracatiara (*Astronium leiconte* Ducke), louro-pimenta (*Ocotea glomerata* (Nees) Mez), angelim-pedra (*Hymenolobium petraeum* Ducke), orelha-de-macaco (*Entorolobium schomburgkii* Benth.), jatobá (*Hymenaea courbaril* L.),

tauari (*Couratari* sp.), louro-tamaquaré (*Caraipa excelsa* Ducke), and fava-atanã (*Parkia gigantocarpa* Ducke).

In treatments 4 and 5, seedlings of the following species were planted: paricá (*Schizolobium amazonicum* (Huber) Ducke), fava-tamboril (*Enterolobium maximum* Ducke), amarelão (*Apuleia leiocarpa* (Vogel) J.F.Macbr.), mahogany (*Swietenia macrophila* King), and jatobá (*Hymenaea courbaril* L.). The species of which naturally regenerated plants were favored in the clearings were: paraparã (*Jacaranda copaia* Aubl. D.Don.), angelim-pedra (*Hymenolobium petraeum* Ducke), amarelão (*Apuleia leiocarpa* (Vogel) J.F.Macbr.), cabeça-de-arara (*Aspidosperma* sp.), louro-abacate (*Ocotea acutangula* (Miq.) Mez.), breu-manga (*Tetragastris altissima* (Aubl.) Swart), orelha-de-macaco (*Entorolobium schomburgkii* Benth.), tatajuba (*Bagassa guianensis* Aubl.), and faveira (*Parkia* sp.). Nine hundred and eight seedlings were planted in T4 and 669 in T5. As for the number of seedlings from natural regeneration, 12 were favored in T4 and 16 in T5.

LOGGING RESIDUES

Logging operations, especially in tropical forests, leave a considerable amount of residues, including branches, remains of the trunk, other trees felled during harvesting, discarded parts of trunks due to excess gauge or defects. Studies at Buriticupu, State of Maranhão, in forests similar to CIKEL's, revealed that the extraction of 15 m³/ha of sawmill grade logs resulted in 250 st of firewood (Thibau, 1970).

The use of logging residues as raw-material for charcoal for iron smelters, furniture, pallets and other products is a way to optimize the use of forest products. At the same time, this generates income and jobs in rural areas. Therefore, studies on the economic feasibility of the use of residues and potential markets should be carried out in the short run. Juruá is considering the possibility of selling logging residues to charcoal industries and iron smelters.

1.4.4 Estimates of Maximum Sustainable Yield.

As a way to regulate production, the concept of Allowed Harvesting was applied. This term is defined as the mean quantity (of timber or other products) that can be harvested from a management unit, annually or with other frequency during a period of 5-10 years (FAO, 1998). When the harvesting is specified in annual terms, it is called Annually Allowed Harvesting (AAH).

In tropical forests, AAH is determined on the basis of the mean annual increment (MAI) and the losses due to damages during the logging operations (Alder, 2000). The reduction in volume is represented by the production (P) and the impact of damages due to logging (D). MAI is estimated as the increase in volume (Vt) in a given time period (T):

$$MAI = Vt/T$$

Then AAH is estimated as:

$$AAH = (1-D\%).MAI$$

Where:

$$D\% = D/(P+D)$$

According to Alder (2000), in practical terms, AAH is around 50-70% of commercial MAI, depending on the observed level of damages at logging. This refers only to standing volume, disregarding losses due to defects (hollow stems and decays). The inclusion of these losses is necessary if AAH were monitored in terms of harvested volume. The author suggested the addition of 50-70% over the observed damages at logging. Dawkins (1964) suggested a pan-tropical annual mean increment in commercial volume of 1 m³/ha.year. Then, in practical terms, AAH would be around 0.25-0.50 m³/ha.year measured as harvested logs (in wood yard).

In this management plan, an AAH of 70% of pan-tropical MAI was adopted, as indicated by Dawkins. Therefore, AAH of 0.7 m³/ha.year will be used until the company comes up with its own data on growth and

losses due to damages and defects (Silva, 2006). A study on the Assessment of the Impact of Logging was carried out at APU2004, in partnership with Projeto Bom Manejo, in order to estimate AAH. The data were used as part of a thesis project from the Universidade Federal Rural da Amazônia (Sérgio E. C. Martins Filho) entitled “AVALIAÇÃO DOS DANOS E MÉTODOS DE REGULAÇÃO DA FLORESTA SUBMETIDA À EXPLORAÇÃO DE IMPACTO REDUZIDO NA AMAZÔNIA ORIENTAL” (Assessment of damages and management methods in forest subjected to low impact logging in Eastern Amazon). One of the conclusions was that the equation “ $AAH = (1-D\%).MAI$ ” is the most adequate for the actual situation in the Amazon. The result showed values that avoid over-exploitation and maintain a continuous production in the forest and in the industry. By using the principle of precaution, it is recommended that a MAI of 1 m³/ha be adopted until the company produces its own increment data.

1.4.5 Estimate of planned and present production

The forests of Juruá Florestal are used, basically, to supply raw-material to a sawmill in Novo Repartimento (PA), and a wood processing mill in Ananindeua (PA), near Belém. More than 40 species are harvested (Table 5) over an area of up to 2.800 ha a year (Table 6).

Table 5. Main species logged at the Management Unit

SPECIES	SCIENTIFIC NAMES	Removed volumes (m ³) in year				
		2002	2003	2004	2005	2006
ACAPÚ	<i>Vouacapoua americana</i>	356	485	390	405	20
CEDRORANA	<i>Cedrelinga catenaeformis</i>	493	228	205	364	761
CURRUPIXA	<i>Micropholia venulosa</i>	2,285	2,512	4,278	4,605	3,692
FAVA	<i>Parkia spp.</i>	351	1,075		185	1,592
IPÊ	<i>Tabebuia spp</i>	313	223	273	373	688
JATOBÁ	<i>Hymenaea courbaril</i>	980	438	544	617	497
LOURO	<i>Nectandra spp.</i>	615	780		2,243	1,113
MAÇARANDUBA	<i>Manilkara huberi</i>	641	355	279	1.168	515
TAUARI	<i>Couratari spp.</i>	1,274	868	1,196	1,425	1,850
(Veneer logs)	(Various and sold)			2,470	2,623	8,728
TOTAL		15,965	14,383	15,505	18,446	21,400
Planejada		51,325	36,386	54,558	65,710	44,487

Table 6. Number of WU's per year of management in the Amazon Forest.

Year	APU	Area of APU	Nr. of WU's
1999/2000	2000	660,00	07
2001	2001	2.040,00	18
2002	2002	2.355,00	26
2003	2003	2.778,00	30
2004	2004	2.740,00	28
2005	2005	2.701,00	32
2006	2006	2.781,549	34
2007	2007	2.732,355	40

Obs: Information on total areas of management and of logged APU's are shown on the property's phytoecologic maps (Appendix 01a,b, and c).

2.0 - STANDARDS USED IN THE EVALUATION PROCESS

The standards used in the process of recertification of Fazenda Arataú of Juruá Florestal Ltda. were the principles, criteria, and identifiers defined by the Working Group – Brazil of FSC – Forest Management

Council for the Management on Brazilian Amazon Upland Forest. This document was approved by the Board of Directors of FSC International on March 24, 2002. The standard can be found on the website of FSC Brasil: www.fsc.org.br

3.0 – THE PROCESS OF EVALUATION

3.1 *DATES OF EVALUATION*

- Recertification audit: August 20-23, 2007.

3.2 *EVALUATION TEAM*

Vanilda R. S. Shimoyama: Forestry graduate from the USP, M.Sc. from ESALQ/USP and Doctor degree from the UFPR in Wood Technology. With over twenty years of experience, she has worked as researcher, consultant, and contract professional for the private sector in Brazil. In the forest sector, she developed and implemented quality control programs in forestry activities. She has, also, developed research to increase forest productivity and wood quality. Her further activities include seven years in wood harvesting, studies and development of programs to minimize environmental impacts by forest activities, development and implementation of programs for the management of residues generated by forest activities, and development of regulations for the utilization of chemical products and for the introduction of new products. She coordinated studies on natural forest fragments and degraded land reclamation projects. In the social area, she developed programs for the qualification of human resources (training) in the aspects of productivity, quality, labor safety, and environment. She developed projects and implemented environmental education programs in the Pioneer North in the State of Paraná. In the industrial sector, she developed and implemented programs for Forest-Industry Integration geared toward the final product quality improvement and the reduction of costs, as well as studies and programs for the optimization of raw-material. Under SCS, she has participated in certification/recertification processes of 6 (six) forest management units involving both planted and natural forests by performing 26 audits. She has participated in 12 chain of custody certification processes, and performed a total of 64 audits (north, south, southeast, and mid-west regions of Brazil).

Mário Kikuchi: Sociology graduate from the Universidade de São Paulo (USP), M.Sc. and Doctor degrees in sociology from the USP and Post-doctor from UNIFESP/EPM. Consultant on development projects, with activities in environmental issues. He has participated in several certification processes with SCS, involving both natural and planted forests. In the area of environmental impact, his experience includes the Ji-Paraná Hydroelectric Plant (Rondônia), Itá (Rio Grande do Sul and Santa Catarina), Machadinho (Rio Grande do Sul and Santa Catarina), Segredo (Paraná), and Estreito (Tocantins). He led a research team on the Socio-Economic and Ecologic Zoning of the State of Mato Grosso and collaborated on the Economic and Ecologic Zoning (ZEE) of the Ministry of the Environment. He is a member of JBDSG of the Department of Preventive Medicine at Escola Paulista de Medicina/Universidade Federal de São Paulo, where he developed research as the field coordinator of the Diabetes Mellitus and Associated Diseases project in the Nikkei community in Bauru – Second Phase. Also, he coordinated the data base recording of the population under study on health and environmental issues. He is a founder member of the GEMAPP/USP (Working Group on Environmental Studies and Peoples' Participation). Presently, he is vice-president of the Centro de Estudos Nipo-Brasileiros (Center for Japanese-Brazilian Studies).

Ana Cristina Mendes de Oliveira: Biology graduate from the Universidade Federal de Minas Gerais, with M.Sc. in Animal Behavior and Doctor degree in Sustainable Development in the Humid Tropics, both from the Universidade Federal do Pará. She held the post of Adjunct Professor III of the Department of Biology at Universidade Federal do Pará and acted as advisor in the Graduate Program in Zoology of the Museu Paraense Emílio Goeldi, and as a collaborating researcher of the Instituto de Pesquisa Ambiental da Amazônia. She has lived for 12 years in the Amazon and has amassed knowledge in Ecology, mainly in wildlife. In the aspect of Forest Certification, she has participated as auditor in three certification and recertification processes of natural forests in the Amazon, as well as of planted forests in the southern region of Brazil.

Miguel Lanzaolo de Paula: Agronomy graduate from the Universidade Federal do Paraná and Business Administrator graduate from the Fundação de Estudos Sociais do Paraná, has worked for six years in the Forestry and Wood Based Industry Sectors. In the forestry sector, he has worked in the coordination of

operations, planning, production control, and operational labor training in the northern region of Brazil. In the Industrial Sector, he participated in the development, application, training, and coordination of the FSC - Forest Stewardship Council and CE marking chain of custody certification processes for distinguished companies. He has developed activities on reorganization of production controls, identification and control systems, and maintenance of certified product stocks. He has acted as the coordinator of the forest nursery and as the manager of a company branch in charge of logging operations, wood processing, and wood production from planted forests. Other activities included environmental education for company employees and visitors. For over a year, he has worked on FSC forest certification, through SCS (Scientific Certification System), and has performed forest management audits in natural and planted tropical forests, as well as audits on chain of custody.

Rossynara Batista Cabral Marques Aguiar: Forestry graduate from the Instituto de Tecnologia da Amazônia, has a vast experience in forest management in the Brazilian Amazon. She has a great experience in management and control of projects developed in partnership with timber companies and communities. For five years, she held the post of coordinator of the Promising Initiatives Component within the ProManejo project. Presently, she is in charge of implementing a community forest management project within a Conservation Unit. She has good knowledge on community forest management developed in Central America and Latin America. Since 2000, she has participated in the MFC Working Group, where she has contributed with proposals on public policies. She has experience in forest certification and has worked with IMAFLORA and the Centro de Investigación y Manejo de Recursos Naturales Renováveis –CIMAR.

3.3 EVALUATION PROCESS

The process of recertification of Fazenda Arataú started with a Public Consultation in mid July, 2007. FSC and a number of environmental, social, and economic institutions acting in local, regional, and national scopes were notified. The multi-disciplinary team of auditors specialized in forestry, environment, and socio-economic areas started the work by verifying the documents and the formal procedures in management. In field work, all auditors verified the operational procedures in logging, planning, felling, transport, and labor safety, as well as in the evaluation of environmental aspects, according to the sequence shown in Table 7. On the last day of evaluation, the auditors convened in order to analyze the information gathered in the field. These were compared to the Principles, Criteria, and Indicators of the FSC Certification Standards. At last, major CAR's and those that the company should comply with were listed and presented to the company's director and the technical team at the final meeting.

3.3.1 Itinerário

Table 7. Itinerary and areas visited by the auditors

Date	Fazenda Rio Capim	Consultant
20/08/2007	Checking of company documents, Management Plan, forest inventory system, and selection of trees.	Vanilda
	Checking of the 5% conservation area, Legal Reserve, and Permanent Protection Areas; visit to stands to be logged in 2008. Checking in the data base of the system to choose trees for felling.	Ana Cristina
	Audit of the chain of custody in the company's sawmill in Novo Repartimento. Analysis of the authorizations of forest management operations.	Miguel
	Checking of: labor safety management plan; statistics on accidents; non-conformity reports; incidents; memoirs of CIPA (Internal Committee on Labor Accidents); and internal meetings.	Mário Kikuchi; Rossynara
21/08/2007	Checking of forest operations involving operational plan, tree felling, bucking, hauling, safety conditions, environmental care, opening of skidroads, conservation and maintenance of roadwork; identification of felled trees, wood yard.	Vanilda

	Checking of ecologic corridors that connect 5% areas to the UMF; checking of road planning and permanent protection areas.	Ana Cristina
	Chain of custody of forest management, choice of areas to be evaluated, evaluation of internal audits, and the management plan.	Miguel
	Checking of the company documents, training, third party surveillance, interviews with local and union leaderships.	Mário Kikuchi; Rossynara
22/08/2007	Checking of the: company's environmental education; experiments established; areas managed in 2006 and the first semester in 2007 for the evaluation of reclamation rate.	Vanilda
	Checking of: neighboring areas; experiments established; areas managed in 2006 and the first semester in 2007 for the evaluation of reclamation rate.	Ana Cristina
	Checking of: chain of custody aspect in the field; field operations (felling, bucking, planning and hauling; non-conformities identified in previous audits in the field.	Miguel
	Checking of forest operations with respect to the living conditions in field camps, and to labor safety (felling, hauling, and planning).	Mário Kikuchi
	Identification of stumps from different areas in order to keep track of the chain of custody. Evaluation of non-conformities of previous audits in the field.	Rossynara
	Evaluation of the company's performance	All
23/08/2007	Final meeting and presentation of the evaluation to the company	All

3.3.2 Evaluation of the Management System

The evaluation of the socio-economic aspects related to the forest management was done through analyses of the primary and secondary data, in conjunction with several local and regional civil society representatives, in addition to public agencies related to environmental and forestry issues. Field working conditions were also evaluated, including labor safety, training, transport, meals, payments, tax collection, and compliance to the legislation. Company's direct employees and contracted workers were interviewed, including those at labor fronts and camps, as well as union representatives.

For the analysis of the environmental aspects, recently logged areas, as well as remnant areas that were logged according to the low impact system in different years at Juruá Florestal were visited. The area defined as Reserve (5%), which is representative of the UMF ecosystem, was checked "in loco".

With regard to soil conservation, conservation conditions and maintenance of the roadwork, involving the main and the secondary roads, were checked. Possible environmental impacts on water streams affected by the roads and under the influence of permanent infra-structure in the UMF. Moreover, the work on wildlife surveillance, as well as on pre- and post-harvesting silvicultural treatments were verified, by checking the criteria for the selection of trees for felling in the computerized system of the company.

With respect to the operational aspects of management, the areas visited during the evaluation in the field were chosen by Vanilda (auditor). These were places where forest operations such as inventory, felling, hauling and transport were taking place. Other areas chosen for checking were those where operations had already finished, in order to assess the impacts and the recovery of the forest.

The evaluation team concluded that the analysis of the documents and the field visits were sufficient and well representative in its intensity and quality for the checking of forest operations. This representativeness is essential for the evaluation of management, so that an adequate decision can be made on certification. The evaluation team used the time allocated for field work to visit all plant community formations where Juruá Florestal Ltd. is located. The whole development of the forests was observed and the people in charge of each area were interviewed.

3.3.3. Consultation with Local leaderships (Stakeholders)

According to the procedures of SCS, the consultation with the most relevant local leaderships is an important component of the evaluation process. The consultations took place prior to the field work, through regular mail to a number of entities (list on Annex 1). During the audit, the consultations were performed through interviews with local leaderships and with representatives of various sectors of the civil society from Novo Repartimento and Tucuruí. The interview included union leaders, representatives from public services, private organizations, political leaders, and local people living in areas surrounding the company land. The main purposes of the consultation were:

- To request information from the affected parties regarding the strong and weak points of the JURUÁ FLORESTAL forest management, as well as on the nature of interactions between the company and the people in the surrounding areas;
- To request information whether the people in charge of the forest management had consulted with the interested parties in order to identify any area with high conservation value.

The main interested parties were identified in this evaluation on the basis of the information stored in the SCS data bank, the results from a list presented by the company, the search in other sources, and the FSC-Brasil list. The following groups were defined as the main interested parties:

- Company employees, including management and field personnel;
- Contracted workers;
- Neighboring land holders;
- Members of FSC-Brasil;
- Local and regional members of social NGOs;
- Company log buyers;
- Federal, state, and municipal environmental agency officials (licensing, enforcing);
- Other relevant groups.

The evaluation team contacted organizations and individuals from the main interested parties. In total, there were two organizations or individuals that responded via E-mail, by telephone, or personal interview about the evaluation (see item 3.3.5.1 the summary of comments). The public consultation questionnaire and an invitation letter were sent, by E-mail or regular mail, with description of the certification process to 78 organizations and individuals. An opportunity to make comments was offered for the parties (Annex 2). The organizations and individuals that made comments and permitted that their names be published in the report, as well as those who were contacted but made no comment are maintained in Annex 2 in the SCS files.

3.3.3.1. Model – Public Consultation of JURUÁ Florestal – Fazenda Arataú

PUBLIC CONSULTATION

FSC Recertification of Fazenda Arataú

Municipality of Novo Repartimento (PA)

JURUÁ FLORESTAL

SCS – Scientific Certification Systems (www.scs-certified.com) – an FSC (Forest Stewardship Council) accredited entity to process Forest Certification presents itself through this letter to promote a **Public Consultation** in order to proceed with the Forest Recertification Process, requested by JURUÁ Florestal, which develops native forest management at **Fazenda Arataú**, in the municipality of Novo Repartimento, State of Pará. The total management area covers 25,000 ha.

Fazenda Arataú was certified in 2002 and has the main purpose to supply logs to the company's sawmill, located in Novo Repartimento, for later transfer to Juruá headquarters in Ananindeua. It is an area under lease from a total of 45,696 ha where the owner (Agropecuária Rio Arataú – Queiroz Galvão do Carajás S.A.) also develop cattle raising in a large part of the rest of the farm. The latter has not part in the area under certification.

The dominant forest formation is the Open Tropical Rain Forest of which a significant part was already logged in the past under a selective exploitation regime. However, there is still a significant part that remained untouched. In this area, Juruá Florestal is applying forest management by using low impact logging, in order to obtain an annual log volume to be processed at the sawmill in Novo Repartimento, at the rate of 20,000 m³/year. The mean harvested volume is in the order of 7 m³/ha, involving more than 40 native species of which, the most important are: Angelim, Fava, Faveira-branca, Ipê, Jatobá, Maçaranduba, Piquiarana, Tauari, and Tatajuba.

The process of FSC Certification requires the participation of the *civil society* by means of a Public Consultation. The Forest Certification implies the exercise of full individual or institutional citizenship either directly or indirectly interested in the issue. In its turn, the applicant must develop its forest management in conformity with the FSC Principles and Criteria. To that effect, it is assumed that the company must conduct the management in a way that is *socially fair, environmentally adequate, and economically viable*.

The objective of this Consultation is to gather suggestions and concerns that should guide the field audit work, which will evaluate how forest management is performed in the *social, legal, environmental, and economic* aspects. That field evaluation will be undertaken by a multidisciplinary team of auditors, during the period of August 20-24, 2007. Thus, your participation is welcome because it is most important that everyone can show his concerns, comments, suggestions, criticism, or present new evidences that can be useful to the recertification process of the area.

If you are interested, you can find attached a Questionnaire to be filled out and sent to the following e-mail: luise.marta@uol.com.br or, if you prefer, to the fax: (0xx19) 3424-5028. In addition, if, by any chance, you require more detail about the *FSC Certification Standards for Upland Forest Management in the Legal Amazon*, that document can be obtained at the FSC website (www.fsc.org.br), at the item “Padrões de Certificação”, where it is possible to download (in Word format) free of charge.

Thus, **everyone is invited** to participate in this Public Consultation, **independently of having formally received this communiqué**. Therefore, we ask you to publicize this event and the attached Questionnaire to institutions and individuals of your acquaintance who might have interest in participating in the process.

Sincerely

Luise Bauch
 Representative of SCS in Brasil
 Mário Kikuchi
 Auditor of SCS

3.3.3.2. Model – JURUÁ – Fazenda Arataú Public Consultation Questionnaire

PUBLIC CONSULTATION QUESTIONNAIRE

**Recertification of native forest management
 Fazenda ARATAÚ – Novo Repartimento (PA) - JURUÁ Florestal**

Name												
Institution												
Address for Contact												
ZIP:						-					E-mail	
<p>1. Do you know Juruá Florestal? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Would you have any comment to make about Juruá Florestal? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>3. What would be the comments?</p>												
<p>4. Are you aware of any particular aspect in the Fazenda Aratú which would have ecologic importance? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>5. Which would be the areas (where they are located) and which are the characteristics that make them important for conservation?</p>												
<p>6. Is there any aspect with regard to the environment that you consider to be worthy of attention in the field assessment? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>What would be this(these) environmental aspect(s)?</p> <p>6.1 _____</p> <p>6.2 _____</p>												
<p>7. Is there any aspect in the social area that you consider to be worthy of attention in the field assessment? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>												

What would be this(these) social aspect(s)?

7.1 _____

7.2 _____

The present questionnaire has the objective to let citizens from all backgrounds and interests, or representatives from institutions that represent the civil society, to participate actively in the process of FSC Forest Certification. Thus, we request that this questionnaire be sent to the following E-mail: luise.marta@uol.com.br. If you prefer, it can be sent to the following fax: (0xx19) **3424-5028**. We would appreciate if you could publicize this questionnaire to those who, in your opinion, can contribute to the process.

OBS.: a) The identity of the contributors that make observations in this questionnaire will not be exposed in the documents of the Certification Process.

b) The participation of interested parties in this Public Consultation does not imply any co-responsibility in the Certification Process.

3.3.3.3 Summary of the public concerns and replies by the team

Social concerns

- **Are the workers rights respected?**

The field audit detected that JURUÁ FLORESTAL is concerned about abiding by the labor legislation and keeps track of the procedures adopted by contracted companies operating in the management area. Moreover, no complaint against the company was detected during the interviews with workers and local leaderships. Instead, everyone stated that the company's image is positive in face of the local society. The Labor Union which is sited at Tucuruí, also, stated no labor complaint from the representatives of the company workers. Moreover, it declared that JURUÁ is receptive to requests from the union and remain open for meetings with the workers as often as the union requests.

Environmental concerns

- **What are the management procedures regarding the gullies and lowlands in the Fazenda Arataú?**

At the road planning, as well as in all forest activities, necessary measures are taken in order to minimize the impact on the gullies and lowlands. Water streams are formed during rainy periods in these areas and they dry out during the dry season. Roads are planned to avoid cutting through these areas and, when it is unavoidable due to large number of gullies, wood bridges with hollow logs are built in order to let water flow. In forest operations, the gullies are taken into account in planning for the logging. The minimum distance of the operations to the gullies are kept as required by the legislation, so that trees are not removed from the Permanent Protection Areas.

Economic concerns

- **Should the management at Fazenda Arataú raise doubts about good management practices, as suggested by the *FSC Watch* article published in the USA?**

In contrast to the article "*SCS certification of Juruá Florestal, Brazil: FSC plumbs new depths of bad practice*" from *FSC Watch*, a self-nominated entity as "*An independent observer of the Forest Stewardship Council*", the management practiced at Fazenda Arataú is found to be in overall conformance with the FSC Certification Principles and Criteria. In the case of Fazenda Arataú, the accusation raised in the *FSC Watch* article are false. The statement that the corrective actions (CARs) presented to Juruá Florestal were not being obeyed is not true. As in all FSC Certification process, the company's management was audited at the beginning of the Certification in 2002. At that time, the auditors concluded that, in fact, the management procedures should be improved in several aspects and then, they presented pre-conditions (presently known as Major CAR). The Certification was awarded only after these Major CARs were fulfilled and, in sequence,

minor CARs were presented in order to improve the management. In fact, the company faced some difficulties to comply with some CARs at the beginning of the process, as can be clearly seen on the public reports. However, it can be noted as well on the reports that Juruá Florestal constantly improved the management to the point that, in the 2006 report, is stated that all CARs were fulfilled, except one referring to the Management Plan which only required updating, since the information was available at the company. The public summary detailing the position of CARs during the first term of certification (2002-2006) is available from SCS upon request. The public summary detailing the current term of certification is available on the SCS website at http://www.scs-certified.com/forestry/forest_certclients.html. In 2007, Fazenda Arataú went through the Recertification process. It was evaluated by a new team of auditors made up of five professionals. Once more, it was concluded that the management at Juruá Florestal complies with all FSC Certification Principles and Criteria. Although Major CARs were stipulated, as can be seen on the Recertification report, these issues were quickly and effectively addressed by Juruá. There are an additional nine corrective action requests that Juruá will need to address in subsequent surveillance audits.

3.3.4 – Other evaluation techniques

No other evaluation technique was used, other than the normally used such as field inspections, interviews, and checking of documents.

3.4 – Total Time Spent in Audit

For the evaluation of Fazenda Arataú, a team of auditors was formed to review all the documents sent for the audit. The auditors had to travel from their respective cities of origin to the company and performed a 3-day field audit. In addition, a time was spent in order to define the interested parties and to send out invitations and questionnaires. The total number of hours used by the team is presented in the following table:

(hours)

Activity	Vanilda	Cristina	Miguel	Mário	Rossynara
Travel (round trip)	20	8	12	14	18
Documentation	6	4	6	6	6
Field	16	20	16	8	16
Interested Parties / invitation	-	-	0	6	6
Closing (23/08/2007)	1	1	1	1	1
Closing session	5	5	5	5	5
Sub-total	48	38	40	40	46

3.5 – Process for the Determination of Conformities

The certification standards defined by FSC include three ranks: the principles, the criteria detailing the principles, and the indicators detailing each criterion. According to the protocol of the SCS Forest Conservation Program, the evaluation team must collectively verify if a given forest operation is in conformity with any applicable indicator within the relevance of the certification standard. Each non-conformity of a criterion or sub-criterion must be evaluated in order to determine if it constitutes a major or minor non-conformity. Not all indicators have the same importance and there is no numerical formula to determine if an operation is in non-conformity. The team uses a joint judgement at evaluating each criterion and defining its non-conformity. If an operation is evaluated as non-conformity for a give criterion, then at least one indicator must be evaluated as a major non-conformity.

Required corrective actions (*Corrective action request* - CAR) are defined for each non-conformity. The Major non-conformities are known as Major CAR and the minor non-conformities as minor CAR or, simply CAR.

Interpretation of major CAR's (pre-conditions), CAR's (minor CAR) and Recommendations.

Major CAR's / pre-conditions: It refers to an individual major non-conformity or in combination with other non-conformities from other indicators. It represents a fundamental requirement in order to comply with the objectives of FSC criteria and the uniqueness of the affected resources. This corrective action must be solved

or closed before the certification is issued. If a major CAR is defined after certification, the deadline to correct this non-conformity is typically shorter than for a minor CAR. The certification will be conditioned to the response of the forest operation in solving this pending issue within the given deadline.

CAR's or Minor CAR's: These are corrective actions in response to minor non-conformities, which are typically limited in scale or can be characterized as unusual system errors. Corrective actions must be met within a deadline defined after the certification is issued.

Recommendation: These are suggestions presented by the evaluation team as a way to help the company to gear toward an ideal performance situation. The implementation of the recommendations is voluntary and has no effect on the maintenance of the certificate. Recommendations can become conditions if the compliance with some criteria is affected.

4.0 – RESULTS OF THE EVALUATION

In this section, the conclusions of the evaluation team are presented, showing the strong and the weak points of the forest operations in relation to the FSC certification standards, as well as the corrective actions required (major and minor) and the recommendations for each principle.

4.1 – Main Strong and Weak Points of the Performance of JURUÁ Florestal in relation to FSC P&C

Principles	Strong points	Weak points	Measures
P 01: Compliance with the Laws and the FSC Principles	<ul style="list-style-type: none"> • Compliance with the legislation pertaining to forest management activities; • Compliance with the union legislation; • Taxes and fares paid; • Long-term commitment to FSC; • There is no outstanding issues either administrative or legal involving the company; 	<ul style="list-style-type: none"> • Need to formalize the procedures to keep track and correct possible illegal activities within the management area. • Need to arrange a new area where logging can continue 	<p>Major CAR 2007.02</p> <p>CAR 2007.01</p>
P 02: Rights and Responsibilities of Land Ownership and Use	<ul style="list-style-type: none"> • Clear documentation of the property; • Peaceful tenure of the area; • No threat to the population in surrounding areas; 	None	
P 03: Indigenous and Traditional Communities Rights	<ul style="list-style-type: none"> • Not applicable. There are no indigenous populations within this area. 	None	
P 04: Community Relations and rights of Forest Management Unit workers.	<ul style="list-style-type: none"> • Workers are hired locally; • There is no discrimination of any nature within the management area; • Workers receive training for their activities; • Workers show understanding about environmental issues pertaining to the activity; • The area is open to and has been frequently visited by researchers; • Good quality food is provided to workers; • There is sufficient surveillance of worker safety; • There is active and open communication between subordinates and their superiors; • Existence of a Collective Labor Deal and a very good relationship with the Workers Union; • Good institutional behavior toward the local 	<ul style="list-style-type: none"> • There was no test results showing the potability of the water at the camp • Needed suiting the PCMSO (Program of Medical Control of Occupational Health) and the PPARA(Program of Prevention of Ambiental Risks) also to contracted services There was a need to improve the main road signs • Need to post a copy of the Collective Labor Deal on the notice board • Need to improve the refueling 	<p>Major CAR 2007.02</p> <p>2007.03</p> <p>2007.04</p> <p>2007.05</p> <p>CAR 2007.04</p>

	<p>society;</p> <ul style="list-style-type: none"> • The management causes no negative impact in any local or regional community; 	area	
P 05 : Benefits from the Forest	<ul style="list-style-type: none"> • JURUÁ FLORESTAL is investing in new wood processing in order to increase yield and widening the market; • Promoting the use of new and unusual timber species. In the 2006 survey, 81 native forest species were recorded; • The company owns a sawmill in Novo Repartimento city which generates jobs and income; • Use of chainsaws, skidders, and forklift, which are economically viable techniques in logging operations; • Existence of a plan to reduce residue generation (e.g., utilization of long logs); • Juruá promotes the purchase of goods and services in the local market, as much as possible; • Existence of a continuous forest inventory; • Existence of a network of permanent plots involving all APUs that are being regularly measured; • In the FMP, the forest cycle and the logging rate are justified; • Existence of a surveillance system to keep track of damages and non-conformities which verify the whole range from technical quality applied to the generation of residues; 	<ul style="list-style-type: none"> • There is a need for additional management area(s) to ensure the continuity of timber yield • Program for the utilization of non-wood forest products could be improved • Juruá still has no program for the utilization of logging residues 	<p>CAR 2007.01</p> <p>REC 2007.02</p> <p>REC 2007.07</p>

<p>P 06 : Environmental Impact</p>	<ul style="list-style-type: none"> • Environmental impact evaluation procedures are performed before and after the logging operations; • Rare plant species are preserved through the system to choose trees for felling and to maintains at least 10 % or 3 individuals of the remnant species within each Work Unit; • The rigor at maintaining remnant vegetation ensures the maintenance of wildlife; • Juruá maintains partnership with research institutions such as EMBRAPA, Museu Emílio Goeldi, and Instituto de pesquisa Ambiental da Amazônia, to perform studies on plants and wildlife; • Establishment of experiments on post-harvesting silvicultura treatments; • An area of 5% defined for preservation, in addition to those required as Permanent Preservation Area; • There are guidelines and measures to minimize the impacts of infrastructure; • Techniques of directed tree felling are used in order to reduce damages, especially to trees for the next harvesting cycle. Directional felling also benefits hauling operations and reduces excessive crown openings; • Planning and implementing techniques to minimize compaction and other damages to the soil, including lifting of the log end during the hauling operation, and to minimize the area set aside for wood lots and roads; • No chemical pesticides are used in the FMU • There are procedures as well as infrastructure for the management, treatment, discarding, and final destination of residues and containers; • FSC guidelines to refrain from using GMO are followed; • No biological control is used; • Exotic species have been used, under control and properly monitored, in the case of regeneration on open areas such as along wide roads; • Areas under FMP have not been converted to any other use; 	<ul style="list-style-type: none"> • Most of the technical-scientific studies on surveillance developed at Arataú have not shown conclusive results about the effect of management on plants and wildlife. • The edge effect on the corridors that connect the 5% preservation areas to the FMU is great because of their narrow shape. • The workers have little knowledge about the benefits of the responsible forest management. • The management areas and the 5% preservation area suffer edge effect due to neighboring pasture lands. • There is no separation of organic garbage from inorganic waste for use as fertilizer in the camp garden. 	<p>CAR 2007.05</p> <p>CAR 2007.07</p> <p>REC 2007.03 2007.05</p> <p>REC 2007.04</p> <p>REC 2007.06</p>
<p>P 07: Management Plan</p>	<ul style="list-style-type: none"> • A management Plan contains the required components; • POA for 2007 already approved by IBAMA; • Juruá uses a low impact logging technology, with improvements based on acquired knowledge; • Training program adequate for the development of the management plan; • The removal of vines is done 12 months prior to logging, during the forest inventory; • Existence of a plan to protect rare species and those threatened to extinction; • There are procedures for the construction and maintenance of the roadwork; • Juruá monitors growth and the forest dynamics; • Juruá performs forest inventories by identifying all commercial trees with DBH > 45 cm; • The labor used at Juruá is sufficient and there are annual training courses for all personnel directly 	<ul style="list-style-type: none"> • The management plan that was presented was not updated; • Lack of mechanisms to improve the educational level of its workers; • Juruá must publicize the Management Plan to the external public; • Environmental education program to the company workers can be improved 	<p>Major CAR 2007.01</p> <p>CAR 2007.03</p> <p>CAR 2007.06</p> <p>REC 2007.05</p>

	<ul style="list-style-type: none"> involved in operations Juruá maintains a training program already consolidated through an agreement with the Instituto Floresta Tropical (IFT). 		
P 8 – Surveillance and Evaluations	<ul style="list-style-type: none"> The surveillance and the evaluation of the impacts have been performed in the FMU. There are regulations and frequency pre-defined for all; Surveillance of wildlife is being done pre- and post-logging, recovery of the forest after logging, social aspects, and others; Juruá established a follow-up procedure to the logging operations by tree and by operation so that each item can be followed from the forest to its transformation. Juruá has a network of permanent plots that are being continuously measured according to the plan. 	None	
P 09 – Maintenance of Forests with High Conservatin Value	<ul style="list-style-type: none"> A consultation with interested parties has been completed, but no particular area was indicated. Flora and fauna surveys were conducted in 2004 	<ul style="list-style-type: none"> Although survey work and stakeholder consultation indicated no HVCF, the company has to continue working to find in its areas attributes that could define or characterize HVCF. 	CAR 2007.08 2007.09

4.2 Pre-conditions or Major CARs

Pre-conditions are major corrective actions (Major CAR) that are defined in a forest operation after the initial evaluation, but before this operation is certified. The certification can not be awarded if there remains a pre-condition to be fulfilled.

The following pre-conditions were defined at JURUÁ during the initial evaluation. All of them were met and accepted by the evaluation team:

Background/Justifications: The Management Plan must be periodically updated so that the interested parties can be aware of the stage in which it stands.	
Major CAR 2007.01	Produce, up to September 30, 2007, the New Management Plan updated according to P7 and the legislation.
Reference	<i>FSC Criteria P7.c2 and P8.c4</i>
Company's Actions	
The company updated the Management Plan and submitted it to IBAMA and sent copies to the auditors.	
Position at the end of this audit:	
Pre-conditions met	

Background/Justifications: Although there is a chlorine dose gauge at the water tank of the camp, it was not in use. Thus, Juruá must have procedures to ensure potability of the water served to the workers.	
Major CAR 2007.02	Ensure up to September 30, 2007, the potability of the water served at the camp through procedures such treatment with chlorine or through periodic surveillance.
Reference	<i>FSC Criterion P4.c2</i>
Company's Action	
JURUÁ presented the report on camp water quality control and full potability was confirmed.	
Position at the end of this audit:	
Pre-conditions met	

Background/Justifications: The Regulations must be complied with by JURUÁ as well as by the contract services.	
Major CAR 2007.03	Include, up to September 30, 2007, the activities of Gramaq's in the PCMSO and PPRA.
Reference	<i>FSC Criterion P4.c2</i>
Company's Action	
JURUÁ presented the documents within the defined deadline	
Position at the end of this audit	
Pre-conditions met	

Background/Justifications: Procedures regarding labor safety must be improved, especially by fixing more road signs along the main road.	
Major CAR 2007.04	Increase the number of warning signs at the forest operation sites, fix road signs at the curves, and indications of speed limits at the main road, until September 30, 2007.
Reference	<i>FSC Criterion P4.c2</i>
Company's Actions	
JURUÁ prepared the mentioned signs and fixed them as determined in the Major CAR.	
Position at the end of this audit	
Pre-conditions met	

Background/Justifications: All items contained in the Collective Labor Agreement must be complied with. In this case, the document was missing from the billboard at the camp.	
Major CAR 2007.05	Fix a copy of the Collective Labor Agreement on the billboard at the camp and publicize its content to the workers until September 30, 2007.
Reference	<i>FSC Criterion P1.c1</i>
company's Actions	
JURUÁ fixed a copy of the Collective Labor Agreement on the billboard at the camp.	
Position at the end of this audit	
Pre-conditions met	

5.0 – DECISION ABOUT THE CERTIFICATION

5.1 – RECOMMENDATION ABOUT CERTIFICATION

As determined by the protocol of the SCS Forest Conservation Program, the evaluation team recommends that **JURUÁ FLORESTAL LTDA** be awarded a FSC 5 year recertification, with the respective certificate of “well managed forest”, subject to compliance with corrective actions requested, as described at item 5.2, for a period of five years (2007-2012). **JURUÁ FLORESTAL LTDA** has shown that its management plan can ensure that all required FSC - *Forest Stewardship Council for Upland Forest Management in the Brazilian Amazon Certification Standards* be met in the forest area subject to this management. JURUÁ has shown, also, that the described management system is being correctly conducted, in all areas covered by this evaluation.

5.2 – Initial Corrective Actions Required (CAR's)

Background/Justifications: JURUÁ must present new areas in order to characterize its long term operational investment strategy for long term economic sustainability of its forest management.	
CAR 2007.01	Until the audit in 2008, present a new management area, which will ensure continuity of harvesting for Fazenda Arataú.
Deadline	2008 Audit
Reference	FSC Criteria P1.c6.i3 and P5.c1.i2

Background/Justifications: There must be formalized procedures to hinder illegal activities such as hunting and land squatting in the management area.	
CAR 2007.02	Until the audit in 2008, present formal procedures to hinder illegal activities in the management area.
Deadline	2008 Audit
Reference	FSC Criteria P1.c5.i1 and P1.c5.i3

Background/Justifications: A number of illiterate workers were observed in the camp. Thus, JURUÁ must put effort in finding ways to improve the educational level of its workers. This will also make it easier to improve qualification of the employees.	
CAR 2007.03	JURUÁ must present an adult literacy program, within three months, in partnership with a public agency, in order to wipe out alliteracy among employees in at most 2 years. There must be a specific place for classwork in the camp, without compromising leisure areas.
Deadline	2008 Audit
Reference	FSC Criterion P7.c3.i6

Background/Justifications: Measures are due to improve the safety of the workers who deal with fuel, as well as the environmental and legal aspects of the activity.	
CAR 2007.04	As regard to the fueling area: a) improve the control on fuel spilling on the soil by directing the spill to retention boxes; b) ensure, in three months, the compliance with the legislation regarding the minimum distance allowed for the presence of persons to the access area.
Deadline	2008 Audit
Reference	FSC Principles P4.c2.i3 and P4.c2.i7

Background/Justifications: A major part of technical-scientific studies on surveillance, developed at Arataú, does not present conclusive results of the effect of management on plants and wildlife.	
CAR 2007.05	At the audit in 2008, present conclusive results of technical-scientific works, specifically for Fazenda Arataú, with possible recommendations and comments for the improvement of the forest management.
Deadline	2008 audit
Reference	FSC Criterion P6.c2.i5

Background/Justifications: According to Principle 7, the company must develop and implement a plan to publicize the Management Plan for the external public.	
CAR 2007.06	At the audit in 2008, present the Publication Plan of the Management Plan to the external public, with mechanisms to respond to any questions.
Deadline	<i>2008 Audit</i>
Reference	<i>FSC Criteria P7.c4.i2 and P7.c4.i3</i>

Background/Justifications: The edge effect on the corridors connecting the 5% preservation area to the FMU is fairly large because they are too narrow.	
CAR 2007.07	Regarding the wildlife corridors connecting the 5% preservation area to the rest of the management area, proceed as follow (P6.c4.i3): - Reduce the total width of the roads to the minimum necessary for the traffic and start land reclamation by planting native trees, specifically at the 800 m long corridor (2008 audit).
Deadline	<i>2008 Audit</i>
Reference	<i>FSC Criterion P6.c4.i3</i>

Background/Justifications: Although Jurua's initial assessments for HCVF attributes suggested that, with the exception of a rare species of caupuchin monkey (see CAR 2007.9), the assemblage of flora and fauna on Jurua is similar to those found throughout the Amazon. The initial stakeholder consultation did not result in suggestions of any other HCVF attributes. However, the Jurua forest is well known for its overall outstanding level of biodiversity, thus more analysis, survey work, and consultations are needed to identify some specific attributes of or conditions that create such diversity.	
CAR 2007.08	<p>Jurua Florestal must improve the level of conformance with the HCVF requirements of Principle 9. Progress will be demonstrated by Jurua Florestal:</p> <ol style="list-style-type: none"> 1. Defining all possible attributes that merit designation as high conservation value forest using as many sources of information as possible including: <ul style="list-style-type: none"> ○ Further analysis of the fauna and flora studies that have been conducted at Jurua Florestal ○ First-hand knowledge of unique forest areas known by Jurua Florestal staff and contractors; ○ Input from government agencies ○ Input from WWF, and other conservation organizations; ○ Other sources of information as Jurua Florestal sees fit 2. Prepare and implement a written protocol for how Jurua managers and field workers will screen the FMU for the attributes defined through completion of step 1. 3. Develop and implement appropriate guidelines for the management of identified areas of HCVF. 4. Develop monitoring protocols designed to assess the effectiveness of the HCVF management guidelines. 5. Establish protocols for continued consultation with stakeholders on the identification of HCVF and the techniques that will be used to maintain its presence.
Deadline	<i>2008 Audit</i>
Reference	<i>FSC Criteria P9</i>

Background/Justifications: Based on the initial research, the Capuchin Monkey and its habitat clearly fits the FSC definition of HCVF. However, Jurua Florestal has not yet identified it as HCVF.	
CAR 2007.09	Jurua Florestal must identify the Capuchin Monkey and its key habitat as HCVF. Using the best available science for the habitat needs of this species, Jurua Florestal must develop and implement a set of best management practices (e.g., leaving canopy bridges) to safeguard the Capuchin Monkey from logging impacts.
Deadline	<i>June 11, 2008</i>
Reference	<i>FSC Criteria P9</i>

5.3 – Recommendations

REC 2007.01 – Avoid sharp curves when planning roads.

REC 2007.02 – Perform Non-Timber Forest Products viability studies with foreign institutions (P5.c4.i3).

REC 2007.03 – Publicize the results from technical-scientific studies in the area in an accessible format to the internal lay public (P6.c2.i6).

REC 2007.04 – Include in the Management Plan the concern about edge effect due to neighboring pasture lands (P6.c5.i4).

REC 2007.05 – Researchers and technicians working in the area could present their results and topics related to the management to JURUÁ workers (P6.c5.i10; P7.c3.i4).

REC 2007.06 – The organic garbage should be separated from the inorganic waste, and could be used as fertilizer (P6.c7.i2).

REC 2007.07 – Develop viability studies on the use of logging residues in smelters and furniture factories (P5c2).

6.0 – EVALUATION OF SURVEILLANCE

6.1. THE 2008 ANNUAL AUDIT

6.1.1. Assessment Dates

Recertification Audit	August 20, 23, 2007
Annual Audit	September 22,24, 2008
Assessment to Increase Certification Scope	January 14,16, 2009

6.1.2. The Assessment Team

Ana Cristina Mendes de Oliveira is a graduate in Biological Sciences at Universidade Federal de Minas Gerais with M.Sc. in Animal Behavior at Universidade Federal do Pará and Doctor degree in Sustainable Development at Universidade Federal do Pará. She is an assistant professor in Vertebrate Ecology and Zoology at the Universidade Federal do Pará and coordinates a Graduate Course Program at the Museu Paraense Emilio Goeldi. She holds, also, the position of Cooperator Researcher at the Instituto de Pesquisa Ambiental da Amazonia. She has lived in the Amazon region for the last 13 years and has amassed knowledge in ecology, mainly of the local wildlife. She has participated in eight certification and re-certification processes in the Amazon Forest. She has also participated in evaluations of forest plantations in Southern Brazil.

Rossynara Marques is a forester graduated at the Instituto de Tecnologia da Amazonia and specialized in environmental technology by Universidade Federal do Amazonas – UFAM. She has a great experience in forest management in the Brazilian Amazon and in the management and follow-up of projects developed in partnership with timber companies and the community. She worked for five years as the coordinator of an IBAMA project, in charge of articulating among different spheres of forestry promotion in the Amazon region and establishment of Training Centers. She has in-depth knowledge in community forest management in Latin America. Since 2000, she has participated in a Working Group that follows and contributes to public policy proposals. She has experience in the forest certification sector, and has worked for IMAFLORA (Brazil) and for the *Centro de Investigación y Manejo de Recursos Naturales Renovables* – CIMAR (Bolivia). In the social area, she established and became responsible for the development of a community forest management plan in a Conservation Unit in the State of Pará. The major lines of action were to provide support and qualification, skill in adequate exploitation techniques that cause low impacts in the communities, encourage safety measures at work in community management. She is now the main adviser for the Instituto de Desenvolvimento de Florestas do Estado do Pará- IDEFLOR, and her main role is to set up a monitoring system for the areas that are in the process of forest concession in the State of Pará.

Josué Rogério de Souza (Trainee) is an agricultural technician from Escola Agrotécnica Federal de Inconfidentes (EAFI), in Inconfidentes, Minas Gerais and later graduated as a forester from the Universidade Federal Rural do Rio de Janeiro (UFRRJ) and M.Sc. in Forestry from the Universidade Federal do Amazonas. After 12 years of professional experience in sustainable forest management in the Amazon region, he has also acted as the coordinator of forest licensing for Mil Madeireira Itacoatiara, the first company to be awarded with FSC certification. His assignment included the role of a forest manager at this company for six years. His experience includes drafting, setting up, and monitoring of forest management projects in the Amazon region.

6.1.3. The Assessment Process

Fazenda Arataú FMU assessment process began with evaluation of documents and formal forest management at the company's headquarters in Novo Repartimento. The auditors evaluated the operational procedures in the field, in activities such as

harvesting, planning, logging, transportation and safety at work. The environmental aspects have also been assessed, according to the itinerary which will be described in the sequence.

The assessment team convened on the last day of audit in order to analyze the information collected during the field inspection and compare them to FSC Certification Principle, Criteria and Indicators. A series of Major CARs and CARs were raised and these were presented at the closing session with the company´s technical staff.

With the use of GIS (Geographic Information System), the assessment team checked the legal documentation and characterization of the management plans in real time in the field. On the same day, the assessment team verified the integrity of the preservation areas in the buffer zones around the National Forest (FLONA) which are located next to the FMU; the conditions of the control areas that had been indicated by the company were also assessed.

The assessment of FMU at Fazenda Pica Pau and Fazenda Sucupira began at the company´s camping area. The documents and characterization of the Management Plan were verified by entering data into the GIS by the auditors to check the field information in real time. The integrity of the preservation areas assigned by the company was assessed. Conditions such as lodging, food and safety at work were evaluated on this same day.

The following day, the assessment team visited Cupim communities in Prainha and Acarapi, near the FMU, where medical assistance was verified. The assessment team checked the Chain of Custody procedures and the impacts of the infrastructure on water streams and Permanent Preservation Areas; activities such as logging, skidding and road maintenance were inspected. At the end of the day, the team gathered to evaluate the results of the assessment and to establish new conditions (Corrective Actions Requested) to the company´s technical staff.

6.1.4 ITINERARY

Areas evaluated by the assessment team

Date	Itinerary	Auditor
Fazenda Arataú		
September 22, 2008	The company documents and management plan were verified.	Ana Cristina and Josué

September 23, 2008	<p>Verification of forest operations involving operational plan such as logging, cross-cutting, skidding, safety conditions, environmental precautions, opening of skidding paths, conservation and maintenance of roads.</p> <p>The ecological corridors that connect the 5% preservation areas to the FMU, Legal Reserves and Permanent Preservation Areas.</p> <p>The stands harvested in 2008 were audited. The main woodyard used to store logs was assessed.</p>	Ana Cristina
	<p>Assessment of forest operations involving operational plan such as logging, cross-cutting, skidding, safety conditions, opening of skidding paths, environmental precautions, conservation and maintenance of roads. Identification of stumps from different areas to keep chain of custody traceability.</p>	Josué
September 24, 2008	<p>A Chain of Custody assessment was conducted at the company sawmill in Novo Repartimento.</p> <p>Forest operation authorizations were analyzed.</p> <p>Closing meeting and introduction of the company assessment.</p>	Ana Cristina and Josué
Fazendas Pica-Pau e Sucupira		
January,14, 2009	<p>Assessment of the company and contractors documents and evaluation of the Management Plan.</p> <p>Characterization of the Management Plan through GIS for assessment.</p> <p>Meeting to arrange field assessment logistic plan.</p> <p>Interview with employees from the company staff in charge of the labor safety and with technicians.</p> <p>Checking of lodging, food, and safety conditions.</p> <p>Checking of the integrity of control and buffer areas.</p>	Rossynara and Josué

January 15, 2009	Acarapi and Cupim Communities were visited to interview the local leaders. Verification of medical assistance at Cupim community. Verification of the woodyard for shipment at Acarapi community and interview with the company employees. Analysis of the authorizations for forest management operations. Verification of forest operations involving operational plan, felling, cross-cutting, skidding, safety conditions, environmental precautions, opening of skidding paths, conservation and maintenance of roads. Identification of stumps from different areas to keep chain of custody traceability. Closing meeting to present the results to the company.	Rossynara Josué Rossynara and Josué
January 16, 2009	Assessment team headed to the runway at a farm nearby the FMU and returned to Belém.	Rossynara and Josué

6.1.5 – STATUS OF CORRECTIVE ACTIONS REQUESTED - CARS AND RECOMMENDATIONS

The table below shows the status of the open CARS and their evolution.

Background/Justifications: Juruá has to introduce new areas to characterize long term operational investments to ensure long term economic sustainability of its forest management.	
CAR 2007.01	The company must add a new management area by 2008 audit time to ensure continuity to Fazenda Arataú production processes.
Deadline	<i>2008 Audit</i>
Reference	<i>FSC Criteria P1.c6.i3 and P5.c1.i2</i>
Company's Actions	
There are two processes under way to obtain new harvesting areas. The first process involves two areas (5,651.527 ha) in Almeirim (Sucupira and Pica-Pau Farms). These are under evaluation to be included in the current certification scope. Both FMU went through a long verification process at the State Secretary of Environment (Secretaria Estadual do Meio Ambiente) and their management plans were approved in November/December 2008. The farms are located in areas with intensive logging activities; these are strategic sites for the company because Fazenda Pica-Pau is next to a Conservation Unit in the category meant for sustainable use (Paru State Forest). This forest is in preparation to be submitted for concession by the State of Pará in the future. The indication to include these two areas in the current certification scope solved the short term issue regarding the continuity of the forest management because the company plans to harvest 1,000 ha/year. The second process is being dealt with and involves an area of 350,000 ha.	
Situation at the end of the Audit	
CAR 2007.01 complied	

Background/Justifications: The company shall develop formal procedures to prevent illegal activities, such as hunting and squatting at the FMU.	
CAR 2007.02	The organization shall present, by 2008 audit, formal procedures to prevent illegal activities at the FMU area.
Deadline	<i>2008 Annual Audit</i>
Referência	<i>FSC Criteria P1.c5.i1 and P1.c5.i3</i>
Company's Actions	
The company produced posted sign boards with explanations and indications of restricted activities throughout the management areas, including the main roads to the FMU.	
Situation at the end of the Audit	
CAR 2007.02 complied	

Background/Justifications: The audit team observed that several workers in the field are illiterate. Thus, Juruá must make efforts to improve their educational level. This should improve the qualification of its employees.	
CAR 2007.03	Juruá Florestal shall introduce an adult education program in the next three months in order to eliminate illiteracy amongst its employees in at least two years. There must be a specific place for the classes in the field, apart from the recreation area.
Deadline	<i>2008 Annual Audit</i>
Reference	<i>FSC Criterion P7.c3.i6</i>
Company's Actions	
The company established a Youth and Adult Literacy Program with support from the Secretary of Education of the Municipality. The Secretary of Education considers the teaching activities by Juruá to be legally recognized. The company has set up classrooms at the lodging units at Fazenda Arataú where workers are given classes in different levels, three times a week at night. At the moment, there are 20 employees enrolled.	
Situation at the end of the Audit	
CAR 2007.03 complied	

Background/Justifications: The safety level of the workers who handle fuels shall be improved. The environmental and legal aspects regarding this activity shall be improved as well.	
CAR 2007.04	The company shall do the following in areas used to refuel vehicles: <ul style="list-style-type: none"> a) Improve fuel spillage control by directing its flow to contention boxes. b) Ensure that the minimum distance from the access areas to the presence of personnel is complied, according to the legislation. The company has a three-month deadline to comply.
Deadline	<i>2008 Annual Audit</i>
Reference	<i>FSC Principles P4.c2.i3 and P4.c2.i7</i>
Company's Actions	
The company has significantly improved its refueling system. It has also improved fuel spillage control by directing its flow to contention boxes. It has fenced an area and locked with chains to keep a safe distance to the personnel, according to the	

current legislation.
Situation at the end of the Audit
CAR 2007.04 complied

Background/Justifications: Most of the monitoring of technical-scientific surveys at Arataú has not shown any conclusive management effects over the wildlife and vegetation.	
CAR 2007.05	The organization shall present, by the 2008 audit, conclusive results of technical-scientific surveys, specifically for Fazenda Arataú, including possible recommendations and suggestions to improve forest management.
Deadline	<i>2008 Annual Audit</i>
Reference	<i>FSC Criterion P6.c2.i5</i>
Company 's Actions	
Despite the efforts by the company in seeking partnership with a research institution, it has not been successful yet. However, as a provisional alternative, it assigned its technical staff to analyze and interpret the data to make them more accessible and useful in their forest management. The company presented the processed data collected by several companies, including from Fazenda Arataú, in a technical report and in an article that was published in an international scientific journal. Furthermore, the company has indicated potential partner institutions, including those that had previously worked for Juruá, such as IPAM and Embrapa. These institutions were already contacted and further possible partnership is being analyzed.	
Situation at the end of the Audit	
CAR 2007.05 complied.	

Background/Justifications: According to Principle 7, the company shall elaborate a program to make its management plan available to the public.	
CAR 2007.06	The company shall present, at the 2008 annual audit, a procedure to make its management plan available to the public, including a mechanism to clear doubts.
Deadline	<i>2008 Annual Audit</i>
Reference	<i>FSC Criteria P7.c4.i2 and P7.c4.i3</i>
Company 's Actions	
The company has placed an issue of the public summary of the management plan at the Novo Repartimento Public Library and another at the company head office in Belém. In Belém, queries will be cleared by the company central office and, in Novo Repartimento, by the local technical staff. The company has been giving lectures at schools as part of the environmental education program.	
Situation at the end of the Audit	
CAR 2007.06 complied	

Background/Justifications: The edge effects on corridors connecting the preservation areas to the FMU are very strong because of their narrow shape.	
CAR 2007.07	With regard to the wildlife corridors connecting the preservation areas to the remaining management areas, the company shall do the following (P6.c4.i3): - Reduce the width of the road bed in order to restrict it to the existing traffic lane and start land reclamation by planting native

	species, specifically at the 800m-wide corridor.
Deadline	<i>2008 Annual Audit</i>
Reference	<i>FSC Criterion P6.c4.i3</i>
Company 's Actions	
The company engaged two forest technicians in training on this job and developed a program to restore the 800m-wide corridor. Mogno, paricá and amarelão seedlings were planted on both sides of the corridor in order to restrict the road bed closer to the existing lane.	
Situation at the end of the Audit	
CAR 2007.07 complied	

Background/Justifications: The initial Juruá Florestal surveys to determine the attributes to justify High Conservation Value Forest indicated that, except for a rare monkey species (see CAR 2009), the wildlife and vegetation are similar to those found in the Amazon region in general. The Stakeholder Consultation has not indicated any other attribute to characterize an HCVF. However, the forests managed by Juruá Florestal are known for the high biodiversity. This is an aspect observed throughout the Amazon Forest. Thus, it is necessary to perform more analyses, research and consultation to identify some specific attributes or conditions to characterize this biodiversity.	
CAR 2007.08	Juruá Florestal shall demonstrate levels of conformity with High Conservation Value Forest requirements from Principle 9. Improvements shall be demonstrated for the following issues: 1. Determination of all potential attributes that could characterize an HCVF by using all available sources including: <ul style="list-style-type: none"> – Additional information from the wildlife and vegetation surveys being done at Juruá Florestal. – First-hand information gathered by company employees and contractors about specific areas with distinct characteristics. – Knowledge from government environmental agencies. – Knowledge from WWF and other conservation agencies. – Other sources of appropriate information. 1. Preparation and establishment of a written protocol/document describing the way forest managers and field workers will define the FMU for the attributes defined by complementing the item 1 (above). 2. Development and establishment of appropriate management guidelines for areas identified as HCVF. 3. Development of a monitoring system of procedures to assess the effectiveness of HCVF management guidelines. 4. Establishment of procedures for continuous stakeholder consultation to identify HCVF and techniques for its conservation.
Deadline	<i>2008 Annual Audit</i>
Reference	<i>FSC Principle: P9</i>
Company 's Actions	
The company identified three possibilities to define HCVF. The first would be the presence of a distinct phytophysognomy called Lajeado, which is characterized by rock outcrops and presence of a large number of bromeliads. This kind of formation	

can be seen in three locations. Another attribute would be presence of mogno in clusters not seen in any other place. The third attribute is the possibility to spot some archaeological site once the area used to be the passway for Parakanã indians. However, these last two attributes require further verification and the proposed areas have not yet been defined as HCVF.

Situation at the end of the Audit

CAR replaced by Major CAR 2008-01

Background/Justifications: Based on the initial company surveys, capuchin monkey (*Cebus kaapori*) and its habitat fit clearly in the FSC definition of requirements to declare an HCVF. However, Juruá Florestal has not declared any HCVF yet.

CAR 2007.09	Juruá Florestal shall identify the presence of capuchin monkey (<i>Cebus kaapori</i>) and its habitat as attributes of an HCVF. By using the best information available regarding the habitat requirements for this species, Juruá Florestal shall develop and establish a set of good management practices (for example, by creating canopy connections/bridges within its habitat in order to protect it from the impacts of logging).
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Deadline	June 2008
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Reference	FSC Criteria
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Company´s Actions:

There is no scientific evidence indicating presence of this species in the company area. A survey conducted by a researcher from Museu Paraense Emílio Goeldi in 2001 did not show presence of this species in the area. Neither has the monitoring of wildlife since 2004 detected its presence in the area. The scientific knowledge about capuchin monkey indicates that it occurs along the right bank of Tocantins river. Because large rivers in the Amazon become geographic barriers to primates, it becomes more difficult for this species to live in the Fazenda Arataú area. The company has posted illustrations of the species at camp areas so that employees may help to spot its presence but to no avail. Therefore, there seems to be no scientifically based information to define an HCVF in the company areas.

Situation at the end of the Audit

CAR 2007.09 complied

6.1.6 – New CARs

The following conditions were raised during the assessment to increase certification scope and the annual audit:

Background/Justifications: A survey by the company indicated three possibilities to define HCVF. Some areas presented a distinct phytophysognomy called Lajeado, which is characterized by rock outcrops and presence of a large number of bromeliads. However, none of these areas were formally defined as HCVF.

CAR 2008.01 (Major)	The company shall present formal mechanisms for the maintenance of HCVF that had been defined, including: <ul style="list-style-type: none"> - Insertion, in the management plan, as well as in the public summary, of specific measures that ensure maintenance of conservation attributes that are applicable and consistent with
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	<p>the precautionary approach.</p> <ul style="list-style-type: none"> - Annual monitoring mechanisms shall be put into effect in order to verify the effectiveness of measures to maintain the appropriate conservation attributes of the HCVF.
Deadline	<i>90 days</i>
Reference	<i>FSC Critério P9c1i1; P9c3i1; P9c4</i>
Company 's Actions	
<p>The company has introduced a report defining the attributes of three Lagedo areas as HCVF and has mapped these areas which are clearly defined inside the management areas. The attributes that have been defined for the areas are the following:</p> <ul style="list-style-type: none"> - Areas of scenic value - Areas of special cultural value. <p>The company has also defined the monitoring procedures for the HCVF areas, as follows, according to the report:</p> <p>Monitoring of the Annual Production Unit that have already been exploited:</p> <ol style="list-style-type: none"> 1. Gather information of staff involved in pre-harvesting activities about HCVF occurrence. 2. Estimate the total HCVF area using GPS, compass and measuring tape. 3. Define the point in the HCVF, mark it with picket to collect geographic coordinators with a GPS. From this point it is parted from azimuth 360° (North), 45° (Northeast), 90° (East), 135° (Southeast), 180° (South), 225 ° (Southeast), 270 ° (West) and 315° (Northwest) up to the point where the ombrophil forest begins, and this distance is measured. 4. In order to estimate the HCVF polygon area, the final points of every straight line delineated by the azimuth are united. 5. Using the geographical coordinates as guideline, we plot in the property 's image map the places where there are HCVF. 6. Inside every HCVF we shall identify the species that dwell in the area through their vulgar and/or scientific name. <p>Monitoring of Future Operational Annual Unit</p> <ol style="list-style-type: none"> 1. During the inventory elaboration, the staff shall inform the occurrence of HCVF, so that we may put into practice the procedures that have been mentioned above, so that, during the next harvest, the physical integrity of HCVF areas is protected. 2. The maps associated with exploitation and logging shall contain all HCVF areas, so that it is possible to preserve their integrity. <p>At the end of the harvest, the company suggests promote work group for a new evaluation and possible inclusion of new HCVF areas. The documents introduced will be included in the company 's Management Plan.</p>	
Situation at the end of the Audit	
CAR 2008.01 (Major) Complied	

<p>Background/Justifications: The company continues to survey new HCVF possibilities, including mogno clusters and presence of archaeological sites.</p>

CAR 2008.02 (Major)	The company shall present, by the 2009 audit, formal conclusions about other two possibilities (mogno clusters and archaeological sites) as attributes for HCVF.
Deadline	<i>2009 Audit</i>
Reference	<i>FSC Principle P9</i>
Company 's Actions	
<i>On the same report that indicates the Lajeado areas as HVCF, the company has introduced a conclusive report about the other possibilities that have been gathered; it alleged that:</i>	
<i>1. The places where there are indigenous artifacts are all close to the river beds, or in other words, inside the permanent preservation areas; however, if any staff finds such place, it is required to inform the company 's board of directors.</i>	
<i>2. The Mogno species usually occur in Permanent Preservation Areas; moreover, they have been classified as protected areas inside the FMU; there is also a specific legislation that deals with its exploitation.</i>	
Situation at the end of the report writing	
CAR 2008.02 (Major) Complied	

Background/Justifications: Although the employees received training in forest firefighting, a continuous training program is needed.	
CAR 2008.03	The company shall provide a refreshment course or workshop on forest fire prevention and/or training on firefighting for company employees by the 2009 audit.
Deadline	<i>2009 Audit</i>
Reference	<i>FSC Criterion P6.c4.i4</i>

Background/Justifications: Juruá has been using a boat to shuttle its employees from Novo Repartimento to Prainha, the town closest to its FMU. The company bears the costs involved in renting the boat and in food provided during the trip. It also shares the responsibility for the employees' safety. Therefore it must look for changes in procedures to shuttle its workers to and from the FMU without incurring in unnecessary risks to the company regarding shuttle liability while, at the same time, ensuring safety and well-being to the workers.	
CAR 2009.01 (Major)	Juruá Florestal must ensure safety in shuttling its employees to and from their homes and improve the quality of food supplied during the trip.
Reference	<i>FSC Criterion P4.c2.i15</i>
Company 's Actions	
Juruá Florestal decided to shuttle the workers by road. When boat trip is chosen, it will be done with regular regional shipping lines and the company must provide road transportation to the workers between the UMF and the wharf. The auditors considered that the company made the best choice to prevent eventual labor liability problems related to safety of he employees and, at the same time, ensure safety and well-being during the trips.	
Situation at the end of the Audit	
CAR complied	

Background/Justifications: Because of delays in approval of the management plan and of the annual operational plan of Fazenda Pica-Pau and Fazenda Sucupira, Juruá Florestal did not have enough time to finish up its harvesting operations and to remove all the logs from the main woodyard. Instead, the logs are being removed gradually, in between the rain spells. In spite of the careful transport operations, some stretches of the road are in such a bad shape that field operations come to a halt. Therefore, the auditors concluded that the company must present a plan for the restoration of the road system for the sake of continuity in its harvesting and transport operation.	
CAR 2009.02 (Major)	Establish a plan of action with timetable for the recovery of the road system for harvesting operations to be carried out during 2008 and 2009, including the rainy season.
Reference	<i>FSC Criteria; P6.c5.i2; P6.c5.i6; P7.c1.i11</i>
Company's Actions	
Juruá Florestal presented a plan for the recovery of the road system to be executed starting in June 2009. The actual road repair work will take place in December and January in order to avoid problems of the kind they had in 2008/2009. At the next audit, the conformance of the work done to the road recovery plan, including bridges, will be verified, given the operational logistics adopted for critical periods.	
Situation at the end of the Audit	
CAR complied	

Background/Justifications: In the literature about forest mensuration, Francon method is not considered for the estimation of log volumes. Therefore, SEMA (the Secretary of Environment) of the State of Pará uses the geometric volume for approval to issue the appropriate log transport permit. However, Juruá Florestal has still been using Francon method to estimate wood volume and this has generated differences in credits between the company and SEMA estimates.	
CAR 2009.03	From 2009 on, the company shall record the wood harvested from the FMU in geometric volume to the effect of transport permit. This is to ensure that its chain of custody control system becomes adequate such that the actual volume transported conforms to the authorized by the environmental agency.
Deadline	<i>2009 Audit</i>
Reference	<i>FSC Criterion P1.c1.i1;</i>

Background/Justifications: The company built a number of bridges along the roads used also by other companies. However, most of them are short of compliance with safety requirements, mainly due to insufficient width. Other problem is that, because of lack of maintenance, there is excessive silting at permanent preservation areas. Therefore, adjustments are necessary in order to minimize environmental damages.	
CAR 2009.04	Juruá Florestal must rebuild the bridges built in the period of October 2008 to January 2009 for harvesting at UPA 01 at Fazenda Picapau and Fazenda Sucupira, ensuring: <ul style="list-style-type: none"> - Safety in transportation. - Minimum environmental damage. - Prevention of silting at Permanent Preservation Areas and rivers along the main and secondary roads, including devices to retain surface so that the normal water courses are not obstructed.

Deadline	<i>2009 Audit</i>
Reference	<i>FSC Criteria P4c2i1; P6c5i6, P7c1i1</i>

Background/Justifications: Since the relief at Juruá Florestal operation sites is steep, there is a considerable risk in log transport operations. Also, the roads lack proper signaling.	
CAR 2009.05	The company must post warning signs along the roads, mainly at the sites where risks of accidents are greater.
Deadline	<i>June 2008</i>
Reference	<i>FSC Criterion P4.c2.i14</i>

Background/Justifications: Juruá Florestal harvests large-sized trees such as maçaranduba and trees with large crowns such as piquiá. In spite of the careful felling techniques used, wide gaps are opened and many remnant trees in the surrounding are damaged when trees like piquiá are felled. Therefore, a previous assessment of the crown projection is necessary so that environmental damages can be minimized.	
CAR 2009.06	The company must establish a procedure to identify large-crowned trees during the forest inventory phase to help in the selection of trees for felling so that environmental damages by harvesting is minimized.
Deadline	<i>2009 Audit</i>
Reference	<i>FSC Criterion P6.c5.i8</i>

Background/Justifications: In 2009, Juruá Florestal plans to harvest an area managed by Vitória Régia company. This area next to two of Juruá Florestal farms so that the same harvesting operational structure will be used. Therefore it needs to establish a procedure to separate certified from non-certified logs. At the Acarapi community woodyard, the auditors observed the presence of logs belonging to two other companies (Sydney Rosa and Evandro). Therefore there must be a control procedure to keep Juruá logs apart from the others.	
Major CAR 2009.07	Juruá Florestal must adopt procedures, both at harvesting sites and at the woodyard, to separate logs coming from its own farms (Fazenda Picapau and Fazenda Sucupira) from the others, including those from Fazenda Vitória Régia. These procedures shall: <ul style="list-style-type: none"> - be formalized and put to practice during the felling operation, skidding, and transport. - use of distinct control forms for the harvesting operations - establishment of a specific, duly identified location for separate storage of certified and non-certified logs.
Deadline	<i>90 dias</i>
Reference	<i>FSC Criteria P8c3</i>

Background/Justifications: Juruá Florestal does not have any communication system in the field. Being liable for the safety of the workers, the company must consider the need to have an efficient communication system in order to act promptly in case of accidents as well as to make its logistics more efficient.	
CAR 2009.08	The company must have radios installed in vehicles are used at the FMU.
Deadline	<i>2009 Audit</i>

Reference	<i>FSC Criteria P4.c2.i1;P4.c2.i7; P4.c2.i9</i>
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Background/Justifications: Juruá Florestal maintains a complete chain of custody data bank, with sufficient information for the analysis of its operations and for the identification of the origin of the logs at any phase of the process. Therefore, the company must systematize and analyze these information to turn them useful as a tool to keep it abreast with the tendencies along the years and provide information to help in decisions to improve its harvesting operations for the sake of its business sustainability.

CAR 2009.09	The company must present information about productivity and yield of forest operations (areas and log volumes) at the closing of each UPA, such that they can be used for monitoring along the years and to provide data for decision making in regard to forest management and to the company policies.
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Deadline	<i>2009 Audit</i>
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Reference	<i>FSC Criteria P5.c3.i1; P8.c1.i1</i>
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Background/Justifications: The mapping of the neighboring properties makes it easier for assessment teams, as well as for the company to integrate with the local society and to look after the Parú State Forest that lies next to the company's FMU.

CAR 2009.10	Juruá Florestal shall present a map showing its neighboring areas.
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Deadline	<i>2009 Audit</i>
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Reference	<i>FSC Criterion P2.c2.i3.</i>
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Background/Justifications: The company has made an informal agreement with the employees and has been adopting a work schedule of 60 solid 8-hour days with just one day off on Sundays. Those living near the FMU are given one and a half day leave every fortnight. For those living in Tailândia and Novo Repartimento is given from 10 to 15 days leave every 60 days. However, the work schedule of 60 continuous days is generating uneasiness among the workers. The worker unions did not participate in the negotiations. Therefore, the company must look for agreements with the unions to ensure transparency and safeguard in the agreements.

CAR 2009.11	The company shall establish agreements with worker union representatives in order to formalize working hours of field employees.
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Deadline	<i>2009 Audit</i>
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Reference	<i>FSC Criteria P4c2i8;P4c2i22;P4c2i23;P4c2i29</i>
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Background/Justifications: After just three month in operation in the region, Juruá Florestal has already been interacting wit local Acarapi and Cupim communities. It has built facilities, helped to acquire food stuffs, hired local workers and, thus, helping the local market. However, there is a need to organize a set of actions to ensure sustainability of the support provided to the communities devoid of free giving character so as to increase their social and economic development potentials. The company needs also to improve its image in order to become differentiated from the other that operate in suspicious manner.

CAR 2009.12	The company must present an Interaction and Social Communication Program with Acarapi e Cupim communities by describing: <ul style="list-style-type: none"> - Actions, timetable, and budget anticipating activities to
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	<p>support income generation, health and education.</p> <ul style="list-style-type: none"> - Mechanisms to establish channels of communication with the communities.
Deadline	<i>2009 Audit</i>
Reference	<i>FSC Criteria P4c1i1;P4c1i4;P4c4i3; P6c5i10</i>

Background/Justifications: Juruá Florestal transports its logs across Acarapi river, which is a tributary of Parú river. It uses an area along the Acarapi river bank set aside by the Acarapi community for woodyard. The same area is used by two other companies for the same purpose. There is an informal agreement by which the company would support the community to build facilities in exchange for the use of the woodyard. However, this agreement has not yet been formalized and must be part of its social program to be established.	
CAR 2009.13	The company must formalize an agreement with Acarapi community for the use of the area as a shipping woodyard.
Deadline	<i>2009 Audit</i>
Reference	<i>FSC Criteria P2c3i1; P2c3i2</i>

Background/Justifications: Almost 70% of the workforce, mostly unskilled, comes from the communities nearby the FMU. The work requiring specialized skills is performed by employees relocated from Novo Repartimento FMU or by workers previously hired by the company. The employees have knowledge to perform their jobs but are unaware of the importance of integration to all phases of production, i.e., they do not know about chain of custody.	
CAR 2009.14	The company must establish a training and recycling program about log harvesting techniques and safety at work for its own and its contractor workers.
Deadline	<i>2009 Audit</i>
Reference	<i>FSC Criteria P4c1i2;P4c2i6;P7c3i3</i>

Background/Justifications: Medical assistance in the region is almost non-existent. Juruá Florestal has been using the meager structure at Cupim community to provide medical assistance to its employees. In case of sickness, the patient is transported to the ambulatory at Cupim community to be helped by a nursing technician. In more serious cases, it is transported to Prainha where there is a medical doctor available. Therefore, the company must set up a medical facility with all necessary equipment for first-aid in the area.	
CAR 2009.15	The company must establish a medical service structure for first-aid at the camp.
Deadline	<i>2009 Audit</i>
Reference	<i>FSC Criteria P4c2i9;P4c2i10</i>

Background/Justifications: The company has not presented documents on Internal Safety Commission, Occupational Health Program and Environmental Risk Prevention Program.	
CAR 2009.16	The company shall establish Internal Safety Commission, Occupational Health Program, and Environmental Risk Prevention Program in conformance with the current legislation.

Deadline	2009 Audit
Reference	FSC Criteria P4c2i1; P4c2i2; P4c2i6

Recommendation

Background/Justifications: Juruá Florestal is conducting procedures to restore areas adjacent to the main road that runs across the 800m-wide ecologic corridor. However, it is suggested that it keeps a close watch on the seedlings to ensure that weak or dead ones be replaced.	
REC 2008.01	Follow up the growth of seedlings planted in the 800m-wide corridor and replace those that show no signs of growth so that this area can be restored in the medium term. (P6.c4.)

Background/Justifications: At some places in Juruá farms, the relief is very steep and forest operations are difficult. In some cases, the half-slope system could reduce environmental impacts caused by the machinery. It is suggested that the company considers this possibility.	
REC 2008.02	The company should verify the possibility to reduce the impact of skidding and other machinery in areas with steep relief by better planning and opening of half-slope skidding trails. (P6.c5.)

Background/Justifications: During the assessment, a turnover of about 70 workers was observed in the camp and there is only one cook, with occasional help, to prepare their food. Therefore, work requirement is excessively hard and there is a need to increase the number of personnel specifically in the camp kitchen.	
REC 2009.01	The company should verify the possibility to increase the number of personnel involved and responsible for the supply food at the company camp (P4.c2.i1).

6.1.7 Alteration in the Certification Scope

Two new farms were evaluated and included in Juruá Florestal certification scope in January 2009, according to the table below:

Farm	Area 5 %	APP	Infrastructure	Others
Pica Pau	280,00	30,286	1.831,274	2.141,56
Sucupira	0,0	85,812	3.424,157	3.509,969
Total	280,00	116,098	5.255,431	5.651,53

7.0 SUMMARY OF THE SCS PROCEDURES REGARDING THE INVESTIGATION ON COMPLAINTS

The following is a summary of the SCS Complaint and Appeal Investigation Procedures; the full versions of the procedures are available from SCS upon request. The SCS Complaint and Appeal Investigation Procedures are designed for and available to any individual or organization that perceives a stake in the affairs of the SCS Forest Conservation Program and that/who has reason to question either the actions of SCS itself or the actions of a SCS certificate holder.

A **complaint** is a written expression of dissatisfaction, other than **appeal**, by any person or organization, to a certification body, relating to the activities of staff of the SCS Forest Conservation Program and/or representatives of a company or entity holding either a forest management (FM) or chain-of-custody (CoC) certificate issued by SCS and duly endorsed by FSC, where a response is expected (ISO/IEC 17011:2004 (E)). The SCS Complaint Investigation Procedure functions as a first-stage mechanism for resolving complaints and avoiding the need to involve FSC.

An “**appeal**” is a request by a certificate holder or a certification applicant for formal reconsideration of any adverse decision made by the certification body related to its desired certification status. A certificate holder or applicant may formally lodge an appeal with SCS against any adverse certification decision taken by SCS, within thirty (30) days after notification of the decision.

The written Complaint or Appeal must:

- Identify and provide contact information for the complainant or appellant
- Clearly identify the basis of the aggrieved action (date, place, nature of action) and which parties or individuals are associated with the action
- Explain how the action is alleged to violate an SCS or FSC requirement, being as specific as possible with respect to the applicable SCS or FSC requirement
- In the case of complaints against the actions of a certificate holder, rather than SCS itself, the complainant must also describe efforts taken to resolve the matter directly with the certificate holder
- Propose what actions would, in the opinion of the complainant or appellant, rectify the matter.

Written complaints and appeals should be submitted to:

Dr. Robert J. Hrubes
Senior Vice-President
Scientific Certification Systems
2200 Powell Street, Suite 725
Emeryville, California, USA94608
Email: rhrubes@scscertified.com

As detailed in the *SCS-FCP Certification Manual*, investigation of the complaint or appeal will be confidentially conducted in a timely manner. As appropriate, corrective and preventive action and resolution of any deficiencies found in products or services shall be taken and documented.