FINAL VERSION
[Nov./2013]

2014

FLORESTECA S/A – FOREST MANAGEMENT PLAN

www.floresteca.com.br

Summary

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1 INTRODUCTION

Floresteca S.A. (Floresteca) is a forest company focused on the sustainable and responsible management and exploitation of teak plantations in Brazil.

Floresteca is considered to be the world largest privately-owned producer of teak. Founded in 1994, the Company was established with the objective of developing and managing teak plantations in Brazil. Floresteca currently offers a broad line of teak wood products, including round logs and rough squared logs, sawn wood and fuel wood.

The Company's forest operations include site selection, improved seedlings production, teak tree planting, thinning, pruning, harvesting and trading of teak logs. Teak plantations into scope of agreement with Stichting Administratie- en Trustkantoor Tectona (SATT) are distributed through 22 teak farms, located in the southern portion of the Mato Grosso State. Floresteca's forest management techniques ensure a fully sustainable model that eliminates the need for harvesting native forests. The reforestation of existing land allowed the Company to be awarded with relevant environmental compliance certifications.

Figure 1 – Location of Mato Grosso State.

2 OBJECTIVE

This management plan establishes guidelines and strategies to achieve the company's commitment to sustainable production of teak, describing objectives, responsibilities, available resources and the environmental media which the enterprise is included.

There are objectives of this management plan:

- Establish and manage the plantations of Tectona grandis L. (Teak) improving the efficiency of activities and quality production;
- Improve the financial viability of activities;
- Ensure environmental responsible management, nature protection and full compliance with national laws and regulations;

- Generate a positive impact on the welfare of our employees and adjacent communities, fully assuming our responsibility as an employer and a member of these communities;
- Generate a continuous supply of high quality teak for sale in the domestic and international markets;
- Contribute to the economic development and prosperity of Brazil and its people.
- Providing added value and financial returns to all stakeholders

3 FARM DESCRIPTION

Floresteca was originally recorded as Floresteca Agroflorestal Ltda, number on the National Register of Federal Income (CNPJ) 74.301.482/0001-56.

The company started its plantations in 1994 in the Jangada municipality, which is 90 km from the capital of the state, Cuiaba in Mato Grosso.

Between 1994 to 1999 has expanded its management units in the Rosario Oeste municipality, neighbor of Jangada.

In 1997 the management of Floresteca received a Forest Management Certification , which is currently in the process of renewal. Part of the farms already have renewed certification.

From 1998 Floresteca began planting in areas of third parties through usufruct contract (Land use deal). Through this type of contract Floresteca plant teak on the property of the partner, providing, however, between 15 to 20% of the planted forest as payment for usufruct contract.

Between 1999 and 2000, the project expanded to the Cáceres and Porto Esperidião region, where there is greater availability of land suitable for development of teak.

Over the years the company has been through several changes in order to adept to changing legal and tax circumstances. The company therefor transformed to a Sociedade Anonima (SA) and is now called Floresteca S/A. and as the table below has the following CNPJ.

The tables below are only farms whose assets belong to the scope of teak forest stands with SATT and the certificateholders in SATT such as ATF-investors, Floresteca BV, Quadris and Global Forestry Growth Fund.

Table 1 - List of branches of Floresteca S/A.

FLORESTECA S.A			
Nº	**NAME**	**STATE REGISTRATION**	**CNPJ**
1	BURITI FARM	133238083	74.301.482/0001-56
2	BAMBU FARM	UNIFIED	74.301.482/0003-18
3	CÁCERES OFFICE	EXEMPT	74.301.482/0004-07
4	DUAS LAGOAS FARM	132755866	74.301.482/0005-80
5	CACIMBA FARM	132755734	74.301.482/0006.60
6	PANFLORA FARM	132620928	74.301.482/0007-41
7	BARRANQUINHO FARM	132755742	74.301.482/0009-03
8	SANTA FÉ FARM	UNIFIED	74.301.482/0011-28
9	INDAIATUBA OFFICE	EXEMPT	74.301.482/0010-47
10	TERRA SANTA FARM	132827336	74.301.482/0012-09
11	CASSANGE FARM	UNIFIED	74.301.482/0013-90
12	PAIOLANDIA FARM	UNIFIED	74.301.482/0014-70
13	CAPIM BRANCO FARM	UNIFIED	74.301.482/0015-51
14	PARAÍSO FARM	UNIFIED	74.301.482/0017-13
15	MUTUM FARM	133823040	74.301.482/0023-61
16	CACERES DEPOT	134414101	74.301.482/0025-23
17	SAWMILL	134981430	74.301.482/0026-04

Next table follows the administrative offices addresses of the of Floresteca S/A in Mato Grosso.

Table 2 - List of address of Floresteca´s offices.

CITY	ADDRESS	PHONE	E-MAIL
Cáceres	Avenida Marechal Castelo Branco, nº 242 CEP 78200-000	55 65 21224000	floresteca@floresteca.com.br
Jangada	Fazenda Buriti Rodovia BR 364 - Km 510 Caixa Postal 07 - CEP: 78490-000	55 65 99892744	

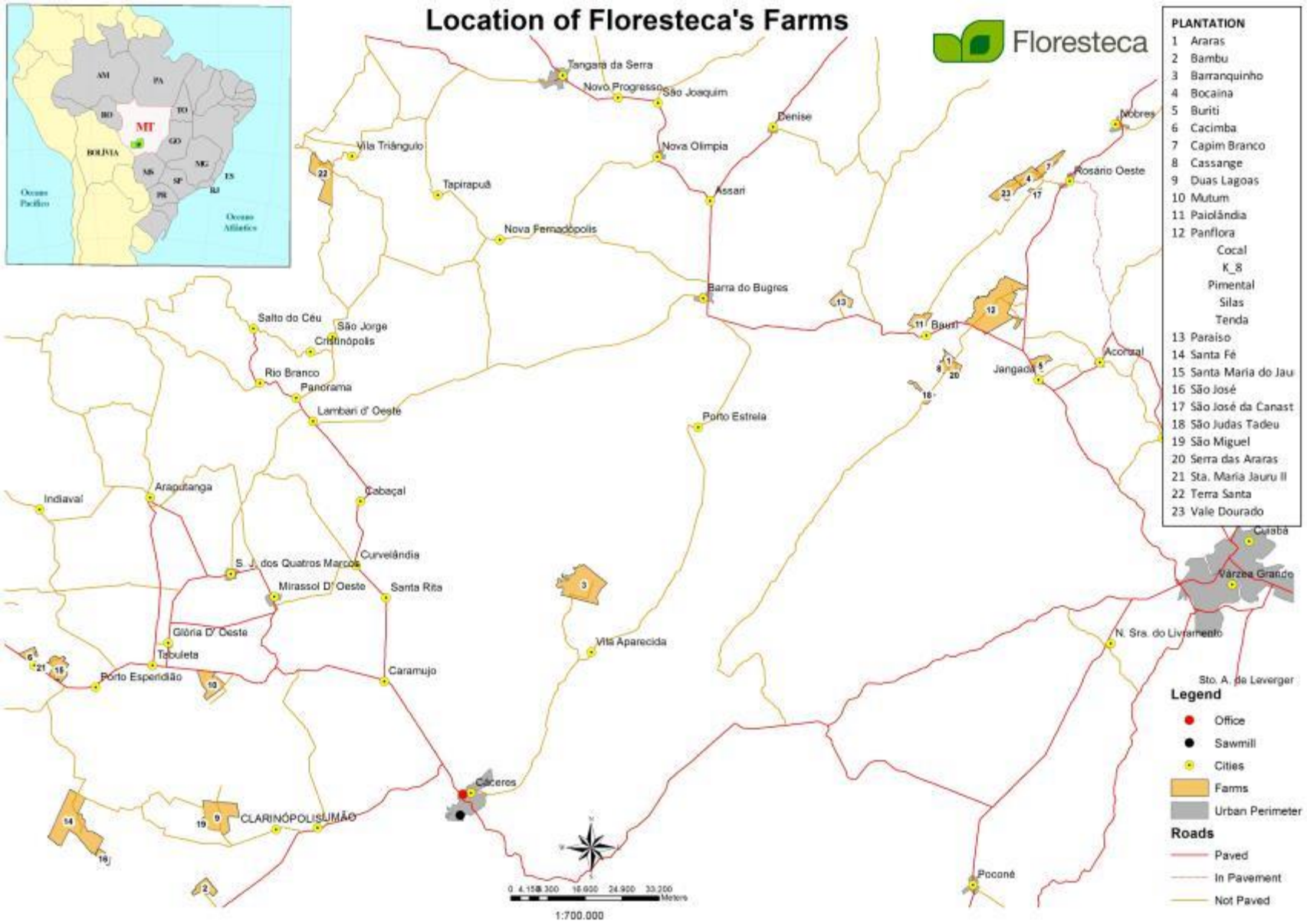

Figure 2 - Location map of the farms under management of Floresteca S/A in Mato Grosso State.

Table 3 – Land use of the farms under scope of Floresteca S/A management in Jangada region.

FARM	PROJECT	LAND STATUS	MINICIPALITY	PLANTING YEAR	TPA	TMA	CA /FR	OTHERS	TOTAL/FR
Araras	**Araras**	LUD	Rosário Oeste	1999	102,91	98,88	38,87	7,81	149,59
Bocaina	**Bocaina**	LUD	Rosário Oeste	1998	449,34	431,65	568,95	59,34	1.185,81
				1999	108,18	108,18			
Buriti	**Buriti**	OWN	Jangada	1994	603,1	592,29	325,59	43,47	972,16
Capim Branco	**Capim Branco**	OWN	Rosário Oeste	1999	510,55	507,87	564,1	59,36	1.135,00
Cassange	**Cassange**	LUD	Rosário Oeste	1999	103,07	88,49	148,58	10,48	262,13
Paiolândia	**Paiolândia**	LUD	Rosário Oeste	1997	332,36	297,92	338,06	63,10	838,58
				1998	105,06	93,95			
Panflora	**Silas**	OWN	Jangada	1995	615,37	582,80	1.561,68	280,19	4.481,60
				1998	25,62	24,41			
	K_8			1995	356,16	331,91			
	Pimental			1996	822,21	693,42			
	Tenda			1996	198,03	191,42			
	Cocal			1996	480,94	374,88			
				1998	135,97	133,84			
Paraiso	**Paraiso**	LUD	Barra dos Bugres	1997	573,20	555,05	164,98	46,20	784,38
São José da Canastra	**São José da Canastra**	LUD	Rosário Oeste	1998	85,56	44,62	9,47	4,87	99,90
São Judas Tadeu	**São Judas Tadeu**	LUD	Rosário Oeste	1998	45,66	26,76	2,50	28,00	76,16
Serras das Araras	**Serras das Araras**	LUD	Rosário Oeste	1999	109,18	105,01	22,59	13,62	145,39
Vale Dourado	**Vale Dourado**	LUD	Rosário Oeste	1998	463,18	351,68	132,91	42,90	687,58
				1999	48,59	48,59			
TOTAL OWN					**3.747,95**	**3.432,84**	**2.451,37**	**383,02**	**6.588,76**
TOTAL LUD					**2.526,29**	**2.250,78**	**1.426,91**	**276,32**	**4.229,52**

Table 4 – Land use of the farms under scope of Floresteca S/A management in Cáceres region.

FARM	PROJECT	LAND STATUS	MINICIPALITY	PLANTING YEAR	TPA	TMA	CA /FR	OTHERS	TOTAL/FR
Bambu	**Bambu**	LUD	Cáceres	1999	549,07	549,07	236,06	77,86	1.376,82
				2000	513,83	513,83			
Barranquinho	**Barranquinho**	LUD	Porto Estrela	2002	971,76	970,20	771,02	247,50	3.024,50
				2003	12,95	12,95			
				2004	1.021,27	1.021,27			
Duas Lagoas	**Duas Lagoas**	OWN	Cáceres	2000	1.527,51	1.527,51	1.604,56	349,67	6.109,93
				2001	2.136,42	2.136,42			
				2002	48,41	48,41			
				2005	207,67	207,67			
				2006	235,69	235,69			
São Miguel	**São Miguel**	OWN	Cáceres	2001	97,52	97,52	41,60	11,34	156,17
				2002	5,71	5,71			
TOTAL OWN					**4.258,93**	**4.258,93**	**1.646,16**	**361,01**	**6.266,10**
TOTAL LUD					**3.068,88**	**3.067,32**	**1.007,08**	**325,36**	**4.401,32**

Table 5 - Land use of the farms under scope of Floresteca S/A management in Porto Esperidião region.

FARM	PROJECT	LAND STATUS	MINICIPALITY	PLANTING YEAR	TPA	TMA	CA /FR	OTHERS	TOTAL/FR
Cacimba	**Cacimba**	LUD	Porto Espiridião	2002	572,65	571,08	299,80	98,26	980,90
				2003	10,19	10,19			
Santa Fé	**Santa Fé**	OWN	Cáceres	2003	2.563,74	2.562,71	1.482,55	236,45	4.282,74
Santa Maria do Jauru	**Santa Maria do Jauru**	LUD	Porto Espiridião	2002	1.085,59	1.085,18	542,52	113,26	1.949,24
				2003	207,87	207,87			
Santa Maria do Jauru II	**Santa Maria do Jauru II**	OWN	Porto Espiridião	2006	99,87	99,87	23,74	24,65	148,26
Terra Santa	**Terra Santa**	LUD	Barra do Bugres	2004	1.173,09	1.143,17	992,19	165,91	2.331,19
Mutum	**Mutum**	OWN	Gloria D'Oeste	2007	539,18	539,18	796,94	503,83	1.839,95
São José	**São José**	OWN	Cáceres	2007	301,30	301,30	285,92	110,35	697,57
TOTAL OWN					**3.504,09**	**3.503,06**	**2.589,15**	**875,28**	**6.968,52**
TOTAL LUD					**3.049,39**	**3.017,49**	**1.834,51**	**377,43**	**5.261,33**

LEGEND

TPA – Total Planted Area (ha);
TMA – Total Managed Area (ha). Refers to teak planted area which is currently under management;
CA/RF – Conservation Area under Floresteca responsibility (ha). Conservation Area is the sum of Legal Reserves, Permanent Preservation Areas and Native Remain areas under Floresteca´s management scope;
OTHERS – Roads, fire lanes, buildings, unprofitable areas inside teak stands etc;
TOTAL/FR - Only refers to the total area under the responsibility of Floresteca´s management.

Table 6 - Summary of the land use of the farms under Floresteca S/A management scope.

REGION	TPA	TMA	CA /FR	OTHERS	TOTAL/FR
JANGADA	6.274,24	5.683,62	3.878,28	659,34	10.818,28
CÁCERES	7.327,81	7.326,25	2.653,24	686,37	10.667,42
PORTO ESPERIDIÃO	6.553,48	6.520,55	4.423,66	1.252,71	12.229,85
TOTAL	**20.155,53**	**19.530,42**	**10.955,18**	**2.598,42**	**33.715,55**

For this scope, Floresteca has the responsibility to manage 33.715,55 of total area including teak plantation, Legal Reserves, Preservation Permanent Area, roads, fire lanes, buildings, unprofitable areas for teak plantation inside teak stands etc.

Land use maps of each farm follow attached of this document.

3.1 Certified farms

Currently, farms covered in tables 4, 5 and 6; whose management is already certified represent a total of 12.058,71 ha, only 7.363,62 of these with teak as shown below:

Table 7 – List of the farms and areas with management certification.

					AREA IN THE CERTIFICATION SCOPE			
FARM	PROJECT	LAND STATUS	MINICIPALITY	PLANTING YEAR	TMA	CA /FR	OTHERS	TOTAL/FR
Araras	**Araras**	LUD	Rosário Oeste	1999	67,73	38,87	11,18	117,78
Bambu	**Bambu**	LUD	Cáceres	1999	549,07	236,06	77,86	1.376,82
				2000	513,83			
Barranquinho	**Barranquinho**	LUD	Porto Estrela	2002	970,20	771,02	249,33	3.024,50
				2003	12,95			
				2004	1.021,00			
Buriti	**Buriti**	OWN	Jangada	1994	603,10	325,59	43,47	972,16
Cacimba	**Cacimba**	LUD	Porto Espiridião	2002	571,08	299,80	99,83	980,90
				2003	10,19			
Cassange	**Cassange**	LUD	Rosário Oeste	1999	34,60	148,58	26,38	209,56
Paiolândia	**Paiolândia**	OWN	Rosário Oeste	1997	285,40	334,46	81,65	782,23
				1998	80,72			
Santa Maria do Jauru	**Santa Maria do Jauru**	LUD	Porto Espiridião	2002	1.085,18	542,52	113,67	1.949,24
				2003	207,87			
São José da Canastra	**São José da Canastra**	LUD	Rosário Oeste	1998	44,62	9,47	4,87	58,96
São Judas Tadeu	**São Judas Tadeu**	LUD	Rosário Oeste	1998	9,88	2,5	9,10	21,48
São Miguel	**São Miguel**	OWN	Cáceres	2001	97,52	41,60	11,34	156,17
				2002	5,71			
Serra das Araras	**Serra das Araras**	LUD	Rosário Oeste	1999	49,80	13,07	14,88	77,75
Terra Santa	**Terra Santa**	LUD	Barra do Bugres	2004	1.143,17	992,19	195,80	2.331,16
				TOTAL	7.363,62	3.755,73	939,36	12.058,71

It is the company's commitment certify all of the managemed units; process being conducted to include other farms as the next audit visit of certification body. This is envisaged for February of 2014.

4 NURSERY

4.1 Seedling production

The description below relates how the production of seedlings that compose teak forests of Floresteca. Currently the nursery is inactive due to not currently be experiencing new plantation areas.

Floresteca founded Bioteca as its subsidiary and responsible for seedling production and biotechnology development.

Bioteca has installed capacity for producing 4 million seedlings per year, composed of tube and plastic bag type seedlings. It produces seedlings both from seeds collected from Floresteca's own seed producing sites and from clones derived from mother-trees that have the best production potential and stem straightness.

Floresteca's seed producing sites carry superior trees with greater productivity potential and stem quality. Seeds are collected manually and stored in locations suitable for preserving seed viability.

Bioteca has a micropropagation laboratory, clone gardens and clone mini-gardens maintained for producing clone seedlings, with the purpose of providing propagation material and serving as a clone bank.

Bioteca adopts strict quality control during the process to obtain healthy and quality seedlings.

According to Floresteca's regular policy, all significant environmental aspects of nursery activities are monitored, such as the influence of these activities on water quality, determined by comparing the physical and chemical parameters before and after collection, and also the monitoring of deep water (deep well water) quality and of the amount of chemical products applied, always in compliance with environmental laws. The amount of water consumed in nursery activities is also monitored as part of a reduction plan aiming at improving irrigation lines and systems, so as to avoid waste and use water more efficiently.

Heath and work safety regulations are strictly followed during the entire seedling production process.

Figure 3 – Production of improved teak seedlings.

5 ESTABLISHMENT

The description below relates how the establishment activities were conducted. Currently Floresteca is not performing the establishment of new teak stands.

5.1 Selection of the Planting Areas

Floresteca selects planting areas based on the following criteria:

- Chemical and physical characteristics of the soil – deep soil, good drainage, average clay content, low-acid-to-neutral pH and good fertility.
- Climate conditions favoring teak cultivation – average annual temperature ranging around 25^{o}C and annual rainfall of about 1,500 mm, with a dry season of 3 to 5 months.
- Favorable typography – flat to gentle slopes – avoiding steep slopes
- Infrastructure – access by good roads and bridges; nearby availability of electric power and labor.

The management plan is carried out by initially conducting an exploratory survey of the property, with the aid of satellite images and in-field confirmation. A map is drawn up with the macro planning and location of the intended planting areas, environmental conservation areas, river basins, areas for

Figure 4 – General pattern view of landscape.

building betterments, location of roads and safety strips, etc. The maps are made for the purpose of planning future operations, locating new roads and safety strips, and delimiting environment conservation areas. Planning the implementation is fundamental to optimizing soil use, management activities, timber transportation and the protection of legal reserves and of permanent preservation areas.

The plantations are established in former pasture or crop areas, thus preserving and protecting the remaining areas of native vegetation, in conformity with local and national environmental regulations.

It is important to stress that all the activities undertaken by Floresteca follow rules, thus guaranteeing both the health and safety of workers and the protection and prevention of the environment. All activities are in accordance with Brazilian laws.

5.2 Building and Maintaining the Infrastructure

5.2.1 Building and maintaining roads and safety strips

Figure 5 – Aerial view of teak plantation.

The building of roads and safety strips defines the size and shape of the units of area called blocks. However, soil conservation, protection and harvesting of the planted forest are aspects that must be taken into account.

The function of roads is to allow access and traffic of machinery, people and timber removal, and the function of safety strips is to isolate the growing blocks to prevent fire from spreading in the event of a possible forest fire in the area.

Well-located roads and safety strips allow a crop layout that optimizes soil use and facilitates future forest maintenance and harvesting operations.

Roads and safety strips are opened mechanically using crawler tractors and moto-graders, among other machinery, according to criteria for soil conservation, forest protection and optimization of vehicle and heavy machinery traffic.

The primary roads receive a layer of gravel that is leveled and then compacted to provide greater stability so that it can bear the more intense and heavier traffic of the vehicles and heavy machinery.

The secondary roads and safety strips are only leveled. In the case of the safety strips, the vegetable (grasses) and other vegetable residues, which serve as combustible material, are kept under control or removed.

The maintenance of roads and safety strips is performed only if necessary, seeking to maintain good traffic flow and fire protection. These maintenance actions depend mostly on the characteristics of the topography, soil, extent of road use and rainfall rates of the region.

5.2.2 Building and maintaining of betterments

The building and maintaining of betterments at the sites where the projects will be developed include civil works (mess halls, housing, workshops, storehouses, offices and other support facilities), electrical and telecommunications installations (extension of transmission lines, telephone and radio communication networks, etc.), hydraulic installations (wells, water pipelines, water boxes, etc.) and installations related to property security (fences).

5.3 Preparing the Area for Planting

Soil preparation activities aim at making the physical conditions of the soil suitable for planting, establishing the teak seedlings and allowing the smooth flow of traffic of people and machinery in future management activities within the block. The soil must be de-compacted and free from any vegetation that may block the sunlight from teak seedlings or the flow of traffic of people and machinery.

Figure 6 – Soil preparation activity.

The soil is prepared by removing and eliminating the vegetation (grasses and sparse shrub vegetation) and woody residues.

Harrowing and/or sub-soiling are carried out to de=compact and level the soil and also to eliminate weeds. Harrowing is performed with a harrow pulled by heavy tractors and is designed to control weeds, to de-compact the top soil and level the ground. The sub-soiling machine consists of a tine pulled by a heavy

Figure 7 – Aerial view of an area prepared to planting teak.

tractor that breaks and drag-cuts the soil as it is being pulled, thus de-compacting the subsoil and enabling the roots to reach down further into the ground to explore a greater volume of soil.

Pre-emerging herbicides may be used to control the weeds, adopting strict preventive regulations to protect the health of the worker and the environment.

Pre-emerging herbicides act on the seeds and shoots of weeds, preventing germination and sprouting.

In some cases (low acidity soils), it is important to correct the soil pH by liming, according to the dosage indicated by soil analysis results.

5.4 Planting

Planting involves the alignment and outlining of planting lines (if soil preparation includes sub-soiling, then outlining is conducted before sub-soiling), the opening of pits or planting furrows and the planting of seedlings per se.

Alignment defines the planting space, i.e., the distance between lines and plants. Ideal plant spacing is that which provides the space needed for optimum growth with the best cost/benefit ratio.

Alignment is performed by a tractor (with an implement) that draws a line on the soil, and may be guided either by a manually placed beacon or by a GPS satellite-monitored device.

Figure 8 – Plantation activity.

Planting is performed manually. In the case of tube seedlings, a manual planting may be used. When using this planting option, it is important that the seedlings be planted in such a way that part of its roots are not left out of the soil or that the aerial part of the plant is not buried, and the seedling should also be planted perpendicular to the soil.

The best seedlings for planting are those that observe the quality standards established for good survival and establishment of a teak forest of high productivity.

Planting occurs preferably at the beginning of the rainy season. From 1994 to 1997 the plantation happened to the spacing of 3 by 2 meters. Between the years 1997 to 1998 the spacing was changed to 3 by 3 meters and after plantation year 2006 the company planted 4 x 3 meters.

6 MAINTENANCE

This consists of a series of techniques that aim at guaranteeing optimum forest growth and the production of quality timber in a sustainable method.

6.1 Weed control

It is important to remove the vegetation that competes with teak for space, light, water and nutrients. Weeding is fundamental in the first couple of years to guarantee survival and good initial growth of the teak tree (startup). Teak is very sensitive to shading and competes for water and nutrients.

The weed-control process involves:

Manual crowning with a hoe, eliminating the weeds within a radius of 0.50 m around the young teak plants, followed by manual mowing using a brush hook to slash the weeds along the planting line.

Mechanical weeding – a rotary mower is pulled by light tractors between the rows.

Chemical weeding – performed with herbicides containing glyphosate, or manually using a backpack sprayer or a tractor sprayer between the rows. Use of herbicides complies with strict preventive regulations to protect the health of the worker and the environment, and observes certification requirements.

Figure 9 - Chemical weeding activities.

6.2 Pruning

Pruning consists of removing the lateral branches up to a certain height without affecting the formation of the tree crown so that the tree can achieve optimum growth, and also of cutting the branches level with the stem to ensure wood quality free from knots and other deformations.

A hand saw is used up to a height of 2.5 meters, and a saw coupled to an aluminum pole is used above this height. This activity can also be performed semi-mechanically using pole pruners, up to a height of 4.5 meters.

Figure 10 – Prunning activity.

6.3 Mechanical sprout mowing

After the thinning, teak stumps have a high budding vitality, a situation that is undesirable, because the sprouts of these stumps disturb activities inside the stand and may also compete with the remaining trees for nutrients and water.

The activities consist in the control and eliminate stumps sprouting in thinned teak may using a mowing machine with a tractor or a knife roll pulled by a tractor over the stumps.

6.4 Forest Protection – Preventive actions

6.4.1 Fire Prevention and Control

Foresteca has a fire brigade that is equipped and trained to deal with emergencies, and also has equipment, like walkie-talkies, tank trucks, water cannons, and watchtowers. In addition, risk areas are provided with safety strips as a preventive measure and to make it easier for the fire brigades to move about and fight the fire.

Figure 11 – Fire control training.

During high risk periods, there is a regular motorized patrol, in addition to worker cooperation in detecting and reporting blazes. The watchtowers aid in the patrolling effort and in the early detection of blazes. Strict control of access by visitors or strangers in planting sites is an important component of the safety measures.

6.4.2 Pest and disease monitoring - Ant control

The forest inventory staff inspects all planting sites on a yearly basis and evaluates the occurrence of potential pests and diseases. Regular monitoring allows the company to take managements measures to guard against and control pests and disease.

So far, the disease occurrence has not been significant (<5%).The company always adopts as a thinning criteria eliminate trees with any sign of relevant disease.

Besides pests, combatting of the leaf cutter ants requires attention.

Leaf cutter ants defoliate the tree crown and cut the main stem top. This may diminish the wood production of ant-attacked trees and cause stem forking.

These leaf cutter ants are monitored year-round and during the entire teak cultivation cycle. When ant control is required, it is carried out manually by applying products containing deltamethrin and sulfluramid, in compliance with strict preventive regulations to protect the health of the worker and the environment.

Figure 12 – Forest mensuration.

6.5 Monitoring/Forest Inventory

The main purpose of a forest inventory is to gather precise information on the current stock of timber, and on the quantitative and qualitative development of the stands.

A forest inventory makes it possible to assess current productivity and evaluate the changes throughout the years, thus allowing the planning of harvest activities and the supply of forest products, and also to provide information for making decisions on thinning schedules and on the production prognoses of the different site indexes.

This activity is conducted on a yearly basis as of the third year of plantings up until the final cut.

The inventory was planned and structuralized as a Continuous Forest Inventory, making possible the periodic determination of the quantitative and qualitative characteristics of the forest and guaranteeing the return to the same sample plot in future measurements.

Before 2013, all plots were located on a regular grid of 1 plot for every 5 hectares of planted Teak and they had fixed sizes, those being: 10,70 m radius for 3x3 m spacing and 12,60 m radius for 4x3m.

From 2013, we have carried out a change on our inventory methodology to improve our data quality and to have a more cost effective field procedure while still assuring the same statistical accuracy on the information.

On areas without prior measurements, the initial plot location is still done by systematic sampling, however, now based on a grid of 1 plot for every 10 hectares of planted area.

Each sample plot is located according to a rectangular grid points inside the blocks, following the method:

- The center of the sample plot are in the intersection point of the lines in the grid, identified with a navigation GPS.
- The sample plot center is identified in field through the use of props settled in the line of the plantation to the side of the central tree, which has its number painted on the trunk.
- The bordering trees of the plots are identified with blue latex paint, facilitating the visual localization for the periodic measurement or any another purpose.
- The trees previous and posterior of the central tree (to the side of the central prop) are identified through a "X" with blue color paint.

Where past measurements have already been performed, our team conducts a stratification of the area based on classes of total standing volume of the last available inventory. Inside each stratum, a selection of the plots is made so that we have a significant and sufficient sample set for it, considering our acceptable error margin of 10% at a 95% confidence level. This way we can reduce the number of plots measured and guarantee the quality of the assessment.

Another change on the methodology is regarding plot size. As thinnings are performed, we increase the plot size in order to keep approximately the same number of trees inside each plot. This way, we have better information on areas with very low trees per hectare values.

Below, we show a table with the evolution of the plot radius for each thinning.

Table 8 – Variation of plot radius according status of thinnings.

Thinning	Area (m^2)	Radius (m)
No thinnning	600	14
1P	950	17
1T	1.300	20
2D	1.650	23
3D	2.000	25

Thinning	Area (m^2)	Radius (m)
No thinnning	600	14
1D	1.067	18
2D	1.533	22
3D	2.000	25

6.6 Time Schedule

For 2014, table 8 establishes mainly schedule maintenance.

Table 9 – Schedule maintenance activities for 2014.

Project	Mechanical sprout mowing / Mannual Mowing/ Mechanical Mowing	Semi-mechanized prunning / Mannual Prunning	Road maintenance	Backburning maintenance	Ant Control	Forest protection (Fire readiness)	Infrastructure maintenance / Operational support
Araras	x		x	x	x		x
Bambu	x		x	x	x		x
Barranquinho	x		x	x	x	x	x
Bocaina				x			x
Buriti				x			x
Cacimba	x			x	x		x
S.J. da Canastra				x			x
Cassange	x			x	x		x
Panflora/Cocal				x		x	x
Capim Branco				x			x
Duas Lagoas	x	x	x	x	x	x	x

Continued on next page.

Project	Mechanical sprout mowing / Mannual Mowing/ Mechanical Mowing	Semi-mechanized prunning / Mannual Prunning	Road maintenance	Backburning maintenance	Ant Control	Forest protection (Fire readiness)	Infrastructure maintenance
Panflora/K_8				x		x	x
Mutum		x		x	x		x
Paiolândia			x	x	x		x
Paraíso				x	x		x
Panflora/Pimental				x		x	x
São José		x		x	x		x
Serra das Araras	x			x	x		x
Panflora/Silas				x		x	x
SJ Tadeu	x			x	x		x
São Miguel				x	x		x
SM do Jauru				x			x
SM do Jauru II		x		x	x		x
Santa Fé			x	x	x	x	x
Panflora/Tenda				x		x	x
Terra Santa	x			x	x		x
Vale Dourado				x			x

* Fields marked with an x indicate that the activity is scheduled to be held and empty fields indicate that there is no scheduled for its realization.

7 HARVEST AND THINNING

7.1 Forest Planning

The challenge of the forest planning is the production of wood in sustainability scheme providing the best value to the forest, with the lowest cost and meeting demand as a way to ensure a solid market at a fair price.

The decision for selection of projects eligible to be thinned annually passes through the analysis of several indicators to ensure the best result. The indicators assessed in the decision to thinning are: growth rate in diameter, basal area and volume increase - the sharp decrease in the rate of diameter growth, basal area and volume is unwanted and is usually related to competition between the trees, there arises the need for thinning. The ultimate goal is to maximize the NPV (net present value) of each project matching all operational and market constraints.

Tables 10 to 12 show a list of projects by region planned to be thinning in 2014, their estimated volume by class diameter and an estimate of thinning costs.

Table 10 – Projects for the planning of thinning 2014 in Jangada Region*.

					VOLUME (m^3)					
PLANTATION YEAR	AGE (YEARS)	PROJECT	THINNING	AREA (ha)	08-15	15-23	23-25	25-30	30-35	TOTAL
1997	17	Paraíso	3	31	178	366	84	50	-	678
1997	17	Paiolândia	3	183	560	1.409	336	590	69	2.964
1998	16	Paiolândia	3	94	567	1.212	273	341	32	2.425
1998	16	São Judas Tadeu	3	27	103	302	98	183	52	738
			TOTAL	334	1.408	3.289	791	1.164	153	6.805

Table 11 – Projects for the planning of thinning 2014 in Cáceres Region*.

					VOLUME (m^3)					
PLANTATION YEAR	AGE (YEARS)	PROJECT	THINNING	AREA (ha)	08-15	15-18	18-20	20-23	>25	TOTAL
2004	10	Barranquinho	1T	632	8.901	3.363	1.028	231	-	13.523
2007	7	São José	1D	301	9.930	4.410	561	-	-	14.901
			TOTAL	934	18.831	7.773	1.589	231	-	28.424

Table 12 – Projects for the planning of thinning 2014 in Porto Esperidião Region*.

					VOLUME (m^3)					
PLANTATION YEAR	AGE (YEARS)	PROJECT	THINNING	AREA (ha)	08-15	15-18	18-20	20-23	>25	TOTAL
2003	11	Santa Fé	1T	1.202	14.245	2.808	1.748	780	32	19.613
2004	10	Terra Santa	1T	565	8.991	5.301	4.324	1.414	24	20.054
			TOTAL	1.767	23.236	8.109	6.072	2.194	56	39.667

Legend for THINNING:

1 – First thinning, can be accomplished in two steps early (P), later (T) or in one step (D), 2 – Second thinning, 3 - Third thinning.

* Disclaimer: Projects related to thinning in table above is only a guideline for planning, adjustments may occur during the accomplishment in function to the operational and commercial constraints. According analysis of indicators to decision of thinning some projects can be thinned partly. Volumes and costs are estimated, they can vary in the performance of thinning activities. If there were occurrences of wind, lightning, disease or any other event outside the control of Floresteca that cause damage of teak trees may be added an extra thinning specific to cut out tree with damage by such events.

7.2 Volume

According the last forest inventory, tables 13 to 18 show growth data per project per region. Not all areas were inventoried in 2013, so the tables below are the latest available inventory for each farm (2013 and 2012).

Table 13 – Growth data of the stands in Jangada region according inventory of 2013.

PROJECT	PLANTING YEAR	TEAK MANAGED AREA (ha)	AGE (years)	DBH (cm)	HEIGTH (m)	DOMINANT HEIGHT (m)	BASAL AREA (m^2/ha)	NUMBER OF TREE (tree/ha)	TOTAL VOLUME (m^3/ha)	TOTAL VOLUME (m^3)
Cocal	1996	374,88	16,4	15,7	12,10	13,80	7,1	356	39,10	14.653
Paiolândia	1997	297,92	15,4	23,7	17,80	19,40	11,4	255	76,10	22.676
Paraíso	1997	555,05	15,5	19,9	15,00	16,40	8,7	275	56,60	31.405
Cocal	1998	133,84	14,6	29,5	21,40	22,40	11,2	162	96,90	12.970
Paiolândia	1998	93,95	14,6	25,6	19,40	20,90	11,4	218	88,70	8.336
São José da Canastra	1998	44,62	14,4	29,1	20,70	21,20	12,2	182	102,30	4.561
Araras	1999	98,88	13,7	23,8	18,30	19,80	10,6	225	80,00	7.915
Cassange	1999	88,49	13,7	25,6	19,10	20,10	12,4	229	97,10	8.589
Serra das Araras	1999	105,01	13,6	23,1	17,40	19,00	11,0	245	81,17	8.524
									TOTAL	119.629,00

Table 14 – Growth data of the stands in Jangada region according inventory of 2012.

PROJECT	PLANTING YEAR	TEAK MANAGED AREA (ha)	AGE (years)	DBH (cm)	HEIGTH (m)	DOMINANT HEIGHT (m)	BASAL AREA (m^2/ha)	NUMBER OF TREE (tree/ha)	TOTAL VOLUME (m^3/ha)	TOTAL VOLUME (m^3)
Buriti	1994	592,29	17,3	22,0	16,94	17,06	6,8	176	49,09	29.073,46
K_8	1995	331,91	16,5	27,0	20,01	21,48	10,1	186	86,68	28.768,83
Silas	1995/1998	607,21	16,7	29,6	21,54	22,54	10,2	160	88,54	53.761,87
Pimental	1996	698,26	15,7	27,0	19,75	20,75	9,5	166	76,00	53.068,51
Tenda	1996	191,42	15,0	22,3	15,50	15,58	6,8	172	46,53	8.907,46
Bocaina	1998	431,65	13,9	31,0	23,12	23,28	11,5	153	102,82	44.382,65
São Judas Tadeu	1998	26,76	13,5	28,0	22,02	22,36	13,1	212	106,97	2.862,50
Vale Dourado	1998	351,68	13,5	27,8	20,25	20,39	12,4	202	99,77	35.087,99
Bocaina	1999	108,18	13,0	31,8	22,86	22,99	13,0	162	114,00	12.331,99
Capim Branco	1999	507,87	12,7	28,4	21,64	21,82	12,0	187	99,35	50.457,26
Vale Dourado	1999	48,59	12,4	27,1	21,00	21,24	13,6	230	113,56	5.517,78
									TOTAL	324.220,30

Table 15 – Growth data of the stands in Cáceres region according inventory of 2013.

PROJECT	PLANTING YEAR	AREA (ha)	AGE (years)	DBH (cm)	HEIGTH (m)	DOMINANT HEIGHT (m)	BASAL AREA (m^2/ha)	NUMBER OF TREE (tree/ha)	TOTAL VOLUME (m^3/ha)	TOTAL VOLUME (m^3)
Bambu	1999	549,07	13,1	17,4	12,90	14,40	8,7	357	49,50	27.200
Bambu	2000	513,83	12,0	20,2	14,70	15,90	9,4	288	58,70	30.167
Barranquinho	2002	970,2	10,4	20,9	16,70	17,90	11,6	331	80,70	78.264
Barranquinho	2003	12,95	9,7	25,6	19,80	20,40	17,5	334	132,50	1.716
Barranquinho	2004	1021,27	8,4	18,2	15,20	16,60	12,9	482	85,20	86.984
									TOTAL	224.331,00

Table 16 – Growth data of the stands in Cáceres region according inventory of 2012.

PROJECT	PLANTING YEAR	AREA (ha)	AGE (years)	DBH (cm)	HEIGTH (m)	DOMINANT HEIGHT (m)	BASAL AREA (m^2/ha)	NUMBER OF TREE (tree/ha)	TOTAL VOLUME (m^3/ha)	TOTAL VOLUME (m^3)
Duas Lagoas	2000	1527,51	11,9	22,6	17,45	17,83	8,6	212	57,48	87.796,55
Duas Lagoas	2001	2136,42	10,9	18,6	13,67	14,07	7,0	268	40,69	86.930,77
São Miguel	2001	97,52	10,7	19,8	15,18	15,46	7,2	233	44,75	4.363,64
Duas Lagoas	2002	48,41	9,6	25,2	18,55	18,67	10,8	212	75,13	3.636,87
São Miguel	2002	5,71	9,6	20,6	17,11	17,54	8,0	239	53,40	304,93
Duas Lagoas	2005	207,67	6,3	16,0	13,44	13,76	11,0	531	63,41	13.167,95
Duas Lagoas	2006	235,69	5,2	16,0	12,50	12,91	9,7	472	52,62	12.401,62
									TOTAL	208.602,33

Table 17 –Growth data of the stands in Porto Esperidião region according inventory of 2013.

PROJECT	PLANTING YEAR	AREA (ha)	AGE (years)	DBH (cm)	HEIGTH (m)	DOMINANT HEIGHT (m)	BASAL AREA (m^2/ha)	NUMBER OF TREE (tree/ha)	TOTAL VOLUME (m^3/ha)	TOTAL VOLUME (m^3)
Santa Fe	2003	2562,71	9,7	19,9	15,40	16,60	12,5	395	76,10	195.030
Terra Santa	2004	1143,17	8,8	22,0	18,00	19,00	18,1	470	131,80	150.646
									TOTAL	345.676,00

Table 18 –Growth data of the stands in Porto Esperidião region according inventory of 2012.

PROJECT	PLANTING YEAR	AREA (ha)	AGE (years)	DBH (cm)	HEIGTH (m)	DOMINANT HEIGHT (m)	BASAL AREA (m^2/ha)	NUMBER OF TREE (tree/ha)	TOTAL VOLUME (m^3/ha)	TOTAL VOLUME (m^3)
Cacimba	2002	571,08	9,7	23,6	17,94	18,43	18,2	410	127,31	72.705,53
Santa Maria do Jauru	2002	1085,18	9,7	19,8	15,96	16,49	14,3	448	96,90	105.154,37
Cacimba	2003	10,19	8,6	23,0	18,95	19,31	19,3	462	139,53	1.421,78
Santa Maria do Jauru	2003	207,87	8,9	22,3	17,58	17,93	17,7	451	121,90	25.339,53
Mutum	2007	539,18	4,3	11,3	9,87	10,74	8,0	732	39,01	21.034,28
Sao Jose	2007	301,3	4,5	15,2	12,54	13,00	15,0	816	78,64	23.694,98
Santa Maria do Jauru II	2008	99,87	3,4	7,0	6,45	7,29	2,1	612	10,47	1.045,95
									TOTAL	250.396,42

7.3 Forest Harvesting

Forest harvesting consists of all the activities of thinning and final cut.

Thinning consists of a partial felling of trees considered to be the worst, with the intent of eliminating the competition of these trees with those that remain (those showing optimum growth and the best quality).

Final cut is the clear-cutting of all trees at the end of the cycle, understood as referring to the best trees

7.3.1 Selection and marking

This process consists of selecting and marking the trees to be felled with latex paint. Trees that are sick, crooked, forked and of smaller diameter are marked to ultimately allow an evenly spaced distribution of the remaining trees. This activity is carried manually, requiring workers to concentrate, observe and have a good sense of spacing. The selecting and marking process enables the best trees to be selected for the future, i.e., those having the best timber quality and yielding the best economic results.

Figure 13 – marking of trees to thinning.

7.3.2 Felling

This activity can be performed manually with chainsaw operators or mechanically by a forest tractor called Harvester. The trees are felled, the branches are removed and they are bucked into logs of a predetermined length.

Figure 14 – Mechanical cut.

After the trees are felled, the logs are piled up between planting rows for forwarding later on.

The fall of a tree cut by either a manual or mechanized system is directed toward spaces that are free of obstacles to prevent damage to the remaining trees and is

performed systematically to expedite future activities.

The residues (branches and leaves) left on the ground over the strip will receive the traffic from the harvester and other harvesting machinery, thus diminishing the soil compacting effect caused by machinery traffic during the forest harvesting activities.

7.3.3 Forwarding

This activity is carried out by a tractor equipped with a forest loader and a forest cart (forwarder) designed to remove the logs from the blocks and haul them to the roadside. The tractor consists of tongs driven by a hydraulic system that carries the logs piled up in the field to the forest cart and then unloads the logs from the tractor to the roadside, forming piles of timber.

Figure 15 – Mechanical forwarding.

The piles of timber are separated according to diameter and block, making it easier to transport the logs according to different end purposes (electric power, sawmill, etc.) and to keep track of the timber.

Part of the produced wood has dimensions to the market of logs, however, the logistics cost prevents their trade. In this case, to add more value to the wood and enhance the economic viability of the enterprise, Floresteca invested in the establishment of a sawmill which is located in the industrial district of Cáceres. Here the wood that is not viable to sell as logs to markets is processed into blocks and boards.

Figure 16 – Teak wood products.

8 SOCIAL AND ENVIRONMENTAL

Floresteca is a company committed to sustainable development, environmental conservation and the well-being of employees and workers. It has the mission of establishing and applying a sustainable management model for its business, based on actions of an economic, environmental and social issues and on compliance to the laws.

For details of Floresteca certification is possible to consult a copy of the public summary assessment recertification of Floresteca´s forest management, this can be obtained from the website http://info.fsc.org/.

Floresteca is certified under Certification Registration Code RA-FM/COC-005657 and FSC License Code FSC-C010728.

Floresteca seeks to engage in high levels of corporate governance. All financial results and statements are audited by KPMG. Forest management, in addition to forest certification, it also has technical and economic validation carried out by Poyry. Additionally, Floresteca developed an internal methodology of the Compliance Office, by applying the determinants of the FCPA - Foreign Corrupt Practices Act, trying to adjust their internal processes, ensuring that investments are made in accordance with the laws and other market mechanisms, avoiding potential losses and walking towards the review process more efficient.

8.1 Socio-Environmental Programs

8.1.1 Fauna Monitoring

The purpose of monitoring the fauna is to study the wealth, the abundance and the spatial distribution of the fauna and how it interacts with the local flora, as well as to determine how teak management influences this interaction and establish ways and change in the management of controlling this influence.

Figure 17 – Fauna monitoring.

8.1.2 Environmental Education

Figure 18 - Students attended by the socio-educational action.

Floresteca understands that education is the first point for transforming people and communities for life quality improvement. In this sense keeps Florescer Clarinópolis Project, located near of one of its management units, where keeps Florescer Project, which offers to the community a series of cultural, sports and leisure activities, as well as coordinating several socio-educational actions in adjacent areas .

Among the socio-environmental actions also highlight the program of environmental education, designed to take information about environmental topics to the schools around the company units.

Lectures and group dynamics sessions are held to show the importance of each individual in the environmental preservation process. After the lectures, there are workshops where students learn to make handicrafts from recyclable residues, thus arousing creativity in how to help preserve the environment.

8.1.3 Monitoring of Water

The influence of teak management on water quality is monitored, and the water consumed by the staff is analyzed chemically and physically every six months on all company properties.

8.1.4 Monitoring pre and post operating activities

This monitoring has focus in environmental and social aspect:

In environmental aspect; before the start of activities with significant impacts (harvest, for example) Floresteca conducts a survey on management unit before and after this activity.

Figure 19 – Aerial view of landscape with teak plantation and Conservations area.

This way it is possible to recommend preventive and mitigating negative impacts correcting this impact if this occurs.

In social aspect is conducted a survey in safety and health conditions of management unit and consultation to the surrounding communities, seeking to prevent and correct potential nuisance that a greater movement of people, trucks and machinery on site may cause and establish good relationship between the community and Floresteca.

8.1.5 Selective Waste Collection

Figure 21 – Waste bay.

Floresteca has a waste monitoring program that provides for a system to select, store and dispose of the wastes generated in its activities in an environmentally and legally correct manner.

The wastes separated through collective selection are selected and stored on site (waste bays) and later sent away for recycling, whereas the non-recyclable wastes are disposed of according to the assessment criteria set by suppliers and the current legislation, in order to guarantee correct disposal of the waste in question.

Figure 20 – Recycle bin.

9 RESEARCH AND DEVELOPMENT

Figure 22 – Matrix tree.

The research and development conducted by the company is designed to boost forest productivity, always committed to achieving a balance between the use of natural resources and production factors (human resources, inputs, machinery and equipment). Studies are developed to enhance seedling production and forest management systems as well as the genetic material used.

The Floresteca genetic improvement program is based on the selection and introduction of high quality materials. The criteria to choose high quality matrix trees involve stem straightness and shape, fewer lateral branches, greater growth, and timber quality and health.

Figure 23 – clonal seedling.

Tests are conducted, crossbreeding is performed among the best materials, and cloning is carried out later on. This boosts productivity since the cloned trees maintain the characteristics of the donor plant (matrix) and are more uniform.

State-of-the-art tissue culture techniques, such as micropropagation, are developed in the lab aiming at reducing the time for establishing enhanced populations.

In producing clone teak seedlings, studies are made to improve the production processes and establish a cloned mini-garden.

In forest management studies, actions have been sought for the effective use of natural resources and the suitable use of production factors. Among the experiments being conducted are studies on nutrition *(ex.:* Projeto Parcelas Gêmeas – *Twin Plots Project* – in partnership with ESALQ/US), use of water retainer gel on the plantings, studies to test different thinning intensities and ages, spacing studies, etc. Research & development aims at developing forest techniques that seek ongoing improvement and sustainability, and that make it possible to plant genetically superior materials for each site type, with the ultimate goal of producing teak wood of high quality in less time and with environmental responsibility.

Figure 24 – Clonal test.

10 GENERAL TIME SHCEDULE ENTIRE ROTATION

The standard schedule adopted by the company based on their historical management follows according tables bellow.

Table 19 - 3x3 meters spacing, considering 10% of mortality.

Age	Total Tree/ha	Thinning	Remain Tree/ha	% Thinning
4	1000	1P	550	45%
7	555	1T	330	41%
10	330	2D	230	30%
15	230	3D	160	30%
22	160*	CF	0	100%

Table 20 - 4x3 meters spacing, considering 10% of mortality.

Age	Total Tree/ha	Thinning	Remain Tree/ha	% Thinning
5	790	1D	434	45%
9	434	2D	239	45%
14	239	3D	155	35%
22	155*	CF	0	100%

* Floresteca is implanting tests to get better number of trees/ha which can ensure better yield in volume and return.