



**MONITORING REPORT OF PRODUCTION AND  
HARVESTING YEAR 2015**

***FREDERICO TUPINAMBÁ SIMÕES***

CREA: MT-024685

CONFEA 121.050.661-0

**SUMMARY**

1. INTRODUCTION .....	3
2. GENERAL INFORMATION .....	4
2.1. Owner Identification .....	4
2.2. Identification of Applicant.....	4
2.3. Identification of the Technical Responsible .....	4
2.4. Identification of the Executor .....	4
2.5. Property Identification .....	4
2.6. UTM Coordinates of the Evaluated Field .....	5
2.7. Lots Evaluated .....	6
3. METHODOLOGY .....	7
3.1. DATES OF VISITS .....	8
4. PRODUCTIVITY EVALUATION .....	9
4.1. Harvest Data per Diameter Class .....	9
5. EVALUATION OF AUDITED VOLUMES .....	10
5.1. Statistical analysis of data .....	10
6. CONCLUSION.....	13
ATTACHMENT I.....	14

**TABLES LIST**

<b>Table 1</b> – Number of lots and number of logs.....	7
<b>Table 2</b> – Harvesting Data per diameter class (Export).....	9
<b>Table 3</b> – Harvesting Data per diameter class (Domestic market).....	9
<b>Table 4</b> – Comparison of Volumes.....	10
<b>Table 5</b> – Statistical analysis of the blocks by diameter class.....	11

## 1. INTRODUCTION

The study area has 8,460.7463 ha, in which great part has *Tectona grandis* plantation. Currently, the stands of the Silas project are in the exploration phase, in which trees are felled and sectioned according to client demands. After, the cubing of logs take place, followed by log plating and classification in relation to their diameter, and lastly, they are grouped according to their destination.

In this context, the objective of this study is to present the results obtained from the year 2015, in the Silas project, by presenting volumetrics collected by the company, as well as to determine the accuracy of the surveys carried out in the year.

## 2. GENERAL INFORMATION

### 2.1. Owner Identification

**Company Name:** Floresteca S/A  
**Address:** Rodovia BR-163, Km 510 – Bairro: Bauxi (Fazenda Panflora),  
Rosário Oeste - MT  
**CNPJ:** 74.301.482/0007-41  
**I.E.:** 13.262.092-8  
**Contact:** Cassiano Sasaki  
**E-mail:** cassiano.sasaki@floresteca.com.br

### 2.2. Identification of Applicant

**Company Name:** Floresteca S/A  
**Address:** Rodovia BR-163, Km 510 – Bairro: Bauxi (Fazenda Panflora),  
Rosário Oeste - MT  
**CNPJ:** 74.301.482/0007-41  
**I.E.:** 13.262.092-8

### 2.3. Identification of the Technical Responsible

**Name:** Frederico Tupinambá Simões  
**Address:** Rua Batista das Neves, 585 – Centro – Ed. TopGeo – Sala 2 -  
Cuiabá – MT – CEP: 78.005-190  
**ID:** 012.665.256-29  
**Qualification:** Forest  
**Class Council n.º:** 121050661-0  
**Phone:** +55(65)98157-4874  
**E-mail:** fredericotupinamba@hotmail.com

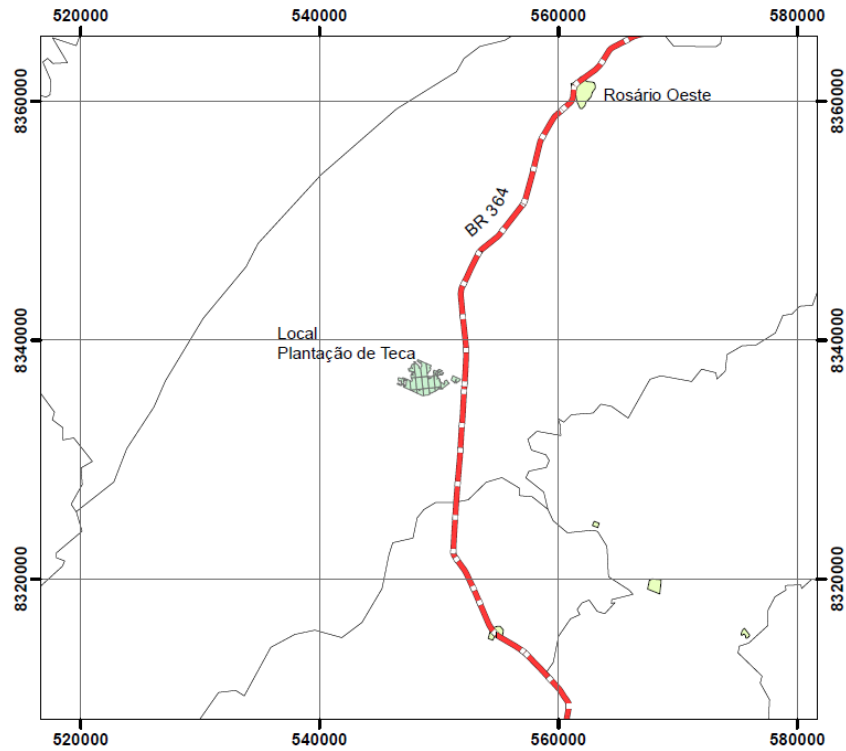
### 2.4. Identification of the Executor

**Name:** Augusto Cesar Braga Louzada  
**Address:** Rua Batista das Neves, 585 – Centro – Ed. TopGeo – Sala 2 –  
Cuiabá – MT – CEP: 78.005-190  
**ID:** 028.067.691-32  
**Qualification:** Forest  
**Class Council n.º:** 121263227-3  
**Phone:** (65) 98116-5924  
**E-mail:** gutolouzada@hotmail.com

### 2.5. Property Identification

**Name:** PANFLORA FARM  
**City:** Rosário Oeste - MT

**Locality:** The Project area is located in the city of Rosário Oeste, on the right side of Federal Highway – BR-364, 26.8 km from Rosário Oeste in the direction of the capital Cuiabá. according to the access sketch shown in Figure 1.



**Figure 1.** Location of the farm PanFlora, municipality of Rosário Oeste MT.

## 2.6. UTM Coordinates of the Evaluated Field

**Chart 1 – Central Coordinates of Evaluated Fields.**

Field	East (x)	North (y)	Zone
03	548400	8335620	21
04	548882	8335633	21
05	549365	8335767	21
09	548798	8336407	21
10	549312	8336434	21

## 2.7. Lots Evaluated

**Chart 2** - Lots evaluated at 2015.

Field	Area	Number of lots evaluated
03	22,5 ha	163, 164, 166 e 167
04	27,49 ha	46, 47 e 77
05	19,1 ha	276, 277 e 278
09	49,64 ha	106, 107, 108, 109, 159, 183, 189, 200, 201, 213 e 214
10	46,2 ha	33, 191, 192, 250, 251, 314, 315 e 318

### 3. METHODOLOGY

#### COLLECTION OF DATA

The process for collecting the information was based on the following steps:

##### **Planning:**

In 2015, 11 Fields were audited, of which 5 were already finalized in the audit process and the other 6 are being completed.

##### **Number of parcel:**

We randomly selected 29 lots to represent the fields 03, 04, 05, 09 and 10 throughout the year 2015.

For lumber destined for sawmills that did not form lots, we measured the wood stacks of the above-mentioned fields on the terraces and on some trucks together with the Floresteca team, on the days when our team was in the Silas project.

##### **Measurements:**

A total of 29 lots were measured for the fields 03, 04, 05, 09 and 10 throughout the year 2015, with a total of 2,302 wood logs. (Photos Annex I).

**Table 1 - Number of lots and number of logs.**

<b>Class</b>	<b>N° of Lots</b>	<b>N° of Logs</b>
COMP	13	450
25-30	01	173
25-33	03	496
30-35	01	97
33-36	05	592
36-39	02	199
39-42	02	84
> 40	01	144
> 42	01	67
<b>TOTAL</b>	<b>29</b>	<b>2,302</b>

### 3.1. DATES OF VISITS

Dates for the technical visits periods for fields 03, 04, 05, 09 and 10.

07/14/2015 - from 08:00 to 16:30 hs.

07/16/2015 - from 08:00 to 16:30 hs.

07/23/2015 - from 08:00 to 16:30 hs.

07/28/2015 - from 08:00 to 16:30 hs.

08/14/2015 - from 08:00 to 16:30 hs.

08/19/2015 - from 08:00 to 16:30 hs.

08/24/2015 - from 08:00 to 16:30 hs.

08/25/2015 - from 08:00 to 16:30 hs.

08/26/2015 - from 08:00 to 16:30 hs.

09/01/2015 - from 08:00 to 16:30 hs.

09/11/2015 - from 08:00 to 16:30 hs.

09/15/2015 - from 08:00 to 16:30 hs.



## 4. PRODUCTIVITY EVALUATION

### 4.1. Harvest Data per Diameter Class

In Table 2 Silas project results of loaded values by diameter class from the audit stands in the year of 2015 can be observed. The diameter class of 25 to 30 centimeters obtained a higher loaded value, followed by classes 35 to 40, 30 to 35, and higher than 40 centimeters of diameter, totaling the value of **9,281.41** cubic meters of exported timber.

**Table 2** – Harvesting Data per diameter class (Export).

<b>EXPORT</b>				
<b>Project</b>	<b>Year</b>	<b>Area (ha)</b>	<b>Diameter class</b>	<b>Volume (m<sup>3</sup>)</b>
<b>SIL</b>	<b>1995</b>	<b>164.9</b>	25-30	5,369.64
			30-35	1,349.032
			35-40	1,572.391
			> 40	990.352
<b>TOTAL</b>				<b>9,281.41</b>

For sawmills, four diameters classes were obtained, totaling the volume of **3,516.10** cubic meters.

**Table 3** - Harvesting Data per diameter class (Domestic market).

<b>SAWMILLS</b>				
<b>Project</b>	<b>Year</b>	<b>Area (ha)</b>	<b>Diameter Class</b>	<b>Volume (m<sup>3</sup>)</b>
<b>SIL</b>	<b>1995</b>	<b>164.9</b>	15-20	1,579.84
			20-25	1,366.86
			30-35	565.03
			Test	4.37
<b>TOTAL</b>				<b>3,516.10</b>

## 5. EVALUATION OF AUDITED VOLUMES

A total of 29 lots were compared relating the length and circumference. Table 4 shows the results of the volumes obtained by the company and the volumes obtained by the audit.

**Table 4** – Comparison of Volumes.

Project	Year	Area (ha)	Class of Diameter	Volume (m <sup>3</sup> )	
				Company	Audit
			Comp.	316.026	320.25
			25-30	24.101	24.431
			25-33	72.296	73.756
			30-35	24.178	24.452
<b>SIL</b>	<b>1995</b>	<b>164.9</b>	33-36	120.428	121.419
			36-39	48.244	48.585
			39-42	24.08	24.387
			> 40	48.295	48.55
			> 42	24.19	24.001
<b>TOTAL</b>				<b>701.838</b>	<b>709.831</b>

### 5.1. Statistical analysis of data

To compare and measure the lengths and circumferences of the wood logs, 29 lots were selected to verify that they are being correctly calibrated.

The Analysis of Variance and the Tukey Test were applied by class of diameter in the comparison of the volumes supplied by the company with the one audited.

**Table 5** - Statistical analysis of the blocks by diameter class.

STATISTICAL ANALYSIS								
Project	Year	Field	Area (ha)	Class of Diameter	F tabled	F calculated		Coefficient of variation (%)
SIL	1995	03	22.5	long	3.87	0.016	ns	20.04
				25-30	3.87	1.443	ns	10.53
SIL	1995	04	27.5	30-35	3.89	1.264	ns	7.03
				> 40	3.91	0.129	ns	11.00
SIL	1995	05	19.1	Comprida	3.89	0.236	ns	20.17
				Comprida	3.88	2.189	ns	17.36
				25-33	3.87	2.071	ns	13.08
SIL	1995	09	49.6	33-36	3.85	2.316	ns	6.46
				36-39	3.89	0.009	ns	5.68
				> 42	3.91	0.079	ns	15.09
				Comprida	3.91	0.009	ns	22.71
				25-33	3.86	3.619	ns	13.16
SIL	1995	10	46.2	33-36	3.88	3.704	ns	5.94
				36-39	3.89	3.519	ns	5.32
				39-42	3.9	2.882	ns	4.84
				> 40	3.91	2.939	ns	15.34

As can be seen, the F value Calculated in all classes is less than the Tabulated F. Therefore, the numerical differences observed between the means of the volumes in the treatments are not statistically significant. Thus, the average of the volumes obtained by the company in the lots do not have significant differences compared to the audited one.

## 6. CONCLUSION

According to the items verified during the audit, it can be seen that the company Floresteca S/A is a company well-structured to control its clearcutting and harvesting processes.

With the data obtained from the audit, in comparison with the data provided by the company, all timber collected and loaded of the year 2015 from the stands analysed were correctly measured in volume and quality, as this audit could verify.

Cuiabá, January 29<sup>th</sup> 2016.



**FREDERICO TUPINAMBÁ SIMÕES**

CREA: MT-024685  
CONFEA 121.050.661-0  
Código do INCRA: F9Y

# ATTACHMENT I – PHOTOGRAPHIC REPORT

