# REPORT ON ASSESSMENT OF THE STUDY AREA ON THE AFFORESTATION PROJECT IN CAPIIBARY, DEPARTMENT OF SAN PEDRO, REPUBLIC OF PARAGUAY

(APPRAISAL OF LAND AND STUMPAGE)

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JAPAN INTERNATIONAL COOPERATION AGENCY

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## APPRAISAL OF LAND AND STUMPAGE

# CONTENTS

			Page
1.	Circ	umstance of the Study Area	1
2.	Land	and Stumpage Appraisal	1
	(1)	Area of Study Area	1
	(2)	Area of Land and Stumpage Appraisal Area	2
	(3)	Appraisal Value	3



### 1. Circumstance of the Study Area

The study area was formerly possessed by "FINAN-CIIERA PICCOLO S.A." (FINAP for short), but its ownership was handed over to the "Banco Nacional de Fomento" (BNF) as a consequence of the bankruptcy of FINAP, because it was taken as a security. Later on, BNF handed over the study area to the national government and its jurisdiction is expected to be transferred again to the Servicio Forestal Nacional (SFN) of the Ministerio de Agricultura y Ganaderia (MAG), and the pertinent procedures are going through at the present time.

The transfer of jurisdiction without compensation was decided by the National Economy Council (CONSEJO NACIONAL DE COORDINACION ECONOMICA) held on October 27, 1983, and as a consequence it is not necessary to include the funds for acquisition of land and stumpage in the financial plan of the project scheduled for 1984.

However, the inclusion of the land and stumpage in the asset of the Capiibary Afforestation plan's authorities is a matter to be decided by the organs concerned of the government of Paraguay, by taking into consideration the conditions involved in the transfer of jurisdiction, the position of the project and other relevant factors.

### 2. Land and Stumpage Appraisal

### (1) Area of Study Area

The border of the study area was determined by transit surveying carried out by the "Banco Nacional de Fomento", and the relevant data are shown in the Table 2 and Fig. 1.

The principal border marks and the borderline were checked in the field survey by using also the aerial photograph, and it was confirmed that the study area has a size of 27,069 ha,  $6.813 \text{ m}^2$ ,  $3.076 \text{ cm}^2$  as a result of the surveying carried out by the "Banco Nacional de Fomento".

### (2) Area of the Land and Stumpage Appraisal Area

Area of the land and stumpage appraisal area is presented in Table 1 from a result of the surveying carried out by the "Banco Nacional de Fomento".

Table 1 Land and stumpage appraisal area

Classification		Area	
Surveyed area	27,249 ha	5,582 m <sup>2</sup>	9,000 cm <sup>2</sup>
National road	85 ha		
Outside area being included in survey area	94 ha	8,769 m <sup>2</sup>	5,924 cm <sup>2</sup>
Land and stumpage appraisal area	27,069 ha	6,813 m <sup>2</sup>	3,076 cm <sup>2</sup>

There are some following problems of the settlements in the survey area.

- 1) It is said that 81 pieces of land totaling 1,312 ha were sold in lots in the time of the ex-FINAP, but the registration of land ownership has not been carried out yet. Furthermore, the border of these pieces of land sold in lots is not clearly known.
- 2) It is also said that ex-FINAP failed to pay part of the wages due to its employees when it was in operation, and the employees were claiming

ownership of part of land upon pretext of compensation for the wages they were entitled. However, the areas and borders of these lots are not cleary known.

3) It is said that there are approximately 25 families of squatters living in the study area, but in reality there is no clear distinction between them and the cases 1) and 2). Furthermore, the places and areas of the lots occupied by these squatters are not clearly known.

The land ownership related to the transactions carried out in the time of the ex-FINAP has not been registered. It remained a problem that requires legal solution.

As for the other settlements, it shall be regarded as illegal claim of land ownership. In this connection however, the Servicio Forestal Nacional is considering the removal of these settlers and squatters to the settlement of "INSTITUTO BIENESTRE RURAL" (IBR) located adjacent to the study area.

### (3) Appraisal Value

According to the Government Ordinance No. 35,985 the official land appraisal value of "San Estanislao" district of the Department of "San Pedro" (including the Capiibary District) is Gs 4,000/ha. On the other hand, the prices of land actual transacted in Capiibary is of the order of Gs 24,000/ha to Gs 30,000/ha, which is approximately six to eight times as much as the official land appraisal value.

(Note: These land transactions include stumpage, and therefore the aforesaid prices of Gs 24,000 - 30,000/ha include the value of stumpage.)

Should the Capiibary Afforestation Plan be implemented in the future, the price of land would be expected to rise further in the implementation state, because there will be the drift of population to this area. On the other hand, there is also the influence of the inflation and other relevant factors on the price of land, but these factors and the rate of elevation of land price are not taken into consideration in the land appraisal value. Therefore, appraisal value in this study are the prices prevailing in the actual transactions.

The land appraisal area is sized 27,069 ha 6,813  $m^2$  3,076 cm<sup>2</sup> and the appraisal value is calculated as follows.

- o Calculation with the official land appraisal value:
  - $27,069 \text{ ha } 6,813 \text{ m}^2 3,076 \text{ cm}^2 \text{ x Gs } 4,000/\text{ha}$
  - = Gs 108,278,725
- o Calculation with the average land appraisal value prevailing at the present time:
  - $27,069 \text{ ha } 6,813 \text{ m}^2 3,076 \text{ cm}^2 \text{ x Gs } 27,000/\text{ha}$
  - = Gs 730,881,396

# Table 2 Results of Boundary Survey

PLANILLA DE CALCULOS DE SUPERFICIE DE LA FINCA NO199 DE SAN ESTANISLAO, PADRON NO378, PROPIEDAD DEL BANCO NACIONAL DE FOMENTO.-

Linea umbos Distancia Coseno Seno Y	stancia Coseno Seno	Seno	-	<b>&gt;</b> -		×	7.7	ΣX	LY Sen.	LX Cos.
370.00 - 217.99 -	- 217.99	1	- 29	298.97	00 0	00 0	- 217 99	- 298 97	+ 65172.4703	+ 65172 4703
800 00 - 249 61 -	- 249 61 -	1	- 76	20 092	- 217.99	- 298 97	- 685, 59	- 1358.00	+ 521089. 5354	+ 338970.38
1100 00 - 10 20 -	- 10 20 -	1	- 1100	1100 95	- 467.60	- 1059, 03	- 945 40	- 3219.01	+ 1040838 13	+ 32833 902
400 00 - 358 09 +	- 358 09 +	+	+ 178	178.25	- 477.00	- 2159.90	- 1313 69	- 4141.71	- 234165.2425	+ 1483104 933
4300 00 -3338 71 +	-3338 71 +	+		2709.80	- 835 89	- 1981 73	- 5010 49	- 1253 66	- 13577425.8	+ 4185607.178
4025.00 -3603.24 +	-3603 24 +	+	+ 179	1793 68	- 4174 60	+ 728 07	-11952 44	+ 3249, 82	- 21438852 57	- 11709881.41
S.W. 79° 58'10" 10315 20 -1796 05 -10157. 54	-1796 05		-1015	7.54	- 7777 84	+ 2521 75	-17352 33	- 5114 04	+176256986.	+ 9188139 966
4213 52   -1054 55   -	-1054 55 -	1		4079. 42	- 9574 49	- 7635 79	- 20203 53	-19351 00	+ 82418684 35	+ 20406597.05
- +5596 87 -	+5596 87	ı		1694 30	-10629 04	-11715 21	-15661 21	-25124 72	+ 26534788 1	-140619791.6
S.W.11°15'34" 2936 40 -2879 88 - 573	- 2879 88	1	- 573	3 34	- 5032.17	-13409 51	-12944 22	-27392 36	+ 7421439 094	+ 78886709 71
1008 20   - 678 72   -	- 678 72   -		- 74	745. 52	- 7912 05	-13982 85	-16502.82	-28711 22	+ 12303182 36	+ 19486879 23
1815.50 - 81.88 -	- 81.88	<u> </u>	- 181	1813 65	- 8590 77	-14728 37	-17263 42	-31270 39	+ 31309801 68	+ 2560419 533
1267.10 -1127.72 -	-1127.72	1	- 57	577 75	- 8672.65	-16542 02	-13473 02	-33661 79	+ 10672787.3	+ 37961073 81
922.49 + 355.75 -	+ 355.75 -	ı	- 85	851.13	- 9800.37	-17119.77	-19244 99	-35090 67	+ 16379988 33	- 12483505 85
N.E. 46° 37'00" 2447.75 +1681 30 + 1778 76	+1681 30 +	+		92	- 9444 62	-17970 90	-17207. 94	-34162 84	- 30612236 94	- 57437982 89
2185 00 +1573.52 -	+1573. 52	1	- 1516	1516 00	- 7763.32	~16191 94	-13953 12	- 33899. 88	+ 21152929 92	- 53342139.17
N.W. 72°25'00"   4254 00   +1285.10   - 4055 25	+1285.10		- 4055	22	- 6139.80	-17707.94	-11094.50	-39471 13	+ 44990971 12	- 50724349, 16
N.W. 56° 13'00" 1243 00 + 691.17 - 1033.11	+ 691.17	1		. 11	- 4904 70	-21763 19	- 9118 23	-44559 49	+ 9420134 595	- 30798182 7
N.W. 00° 05'32" 8303 38 +8303.37 - 1	+8303.37 -	1		13 36	- 4213 53	-22796.30	- 123 69	-45605 96	+ 1652 4984	-378683160 08
N.E.87°53'23" 9310 46 + 342 84 + 93	+ 342 84 +	+		9304 15	+ 4089.84	-22809 66	+ 8522 82	-36315 17	+ 79294804, 45	- 12450292.88
N.E. 24° 26'22" 2148 76 +1956. 23 + 8	+1956.23 +	+	+	10 688	+ 4432 68	-13505 51	-10821 59	-26122.01	+ 9620591, 725	- 41100659.62
N.E. 74° 35'07" 6361.83 +1691.00 + 61	+1691.00 +	+		6132.98	+ 6388 91	-12616.50	-14468.82	- 19100 02	+ 83736983 68	- 32298133 82
S.W. 25° 05'31" 3280 99 -2971.36 - 139	-2971.36	· · · · ·		1391.38	- 8079 91	- 6483.52	-13188 46	- 14358. 42	- 13350159.47	+ 42664034.85
S.E. 02° 15'25" 3804.06 -3801 11 + 14	-3801 11 +	+		149.81	+ 5108 90	+ 7874 90	+ 6415 99	- 15599, 99	+ 961179 4619	+ 59297277.98
S.E.80°23'38"   7834 95   -1307.44   + 772	-1307.44   +	+		7725.09	+ 1307.44	- 7725.09	+ 1307.44	- 7725 09	+ 10100091.66	+ 10100091.66
								2.5	- +544991165.8 2S	544991165 8
						Super	Superficie Poligonal·	······································	27249 ha 5582 m	- po 0006
						Super	Superficie Ruta		-85 " -	
						Superi	Superficie Intra Poligonal	ligonal	-94 " 8769 "	5924 "
						Super	Superficie Liquida	************	27069 ha 6813 m	3076 cm -

Superficie Liquida: Veintisiete mil sesenta y nueve hectårea con seis mil ochocientos trece metros cuadrados y tres mil setenta y seis sentímetro cuadrados.-



