



CARAJÁS IRON ORE PROJECT

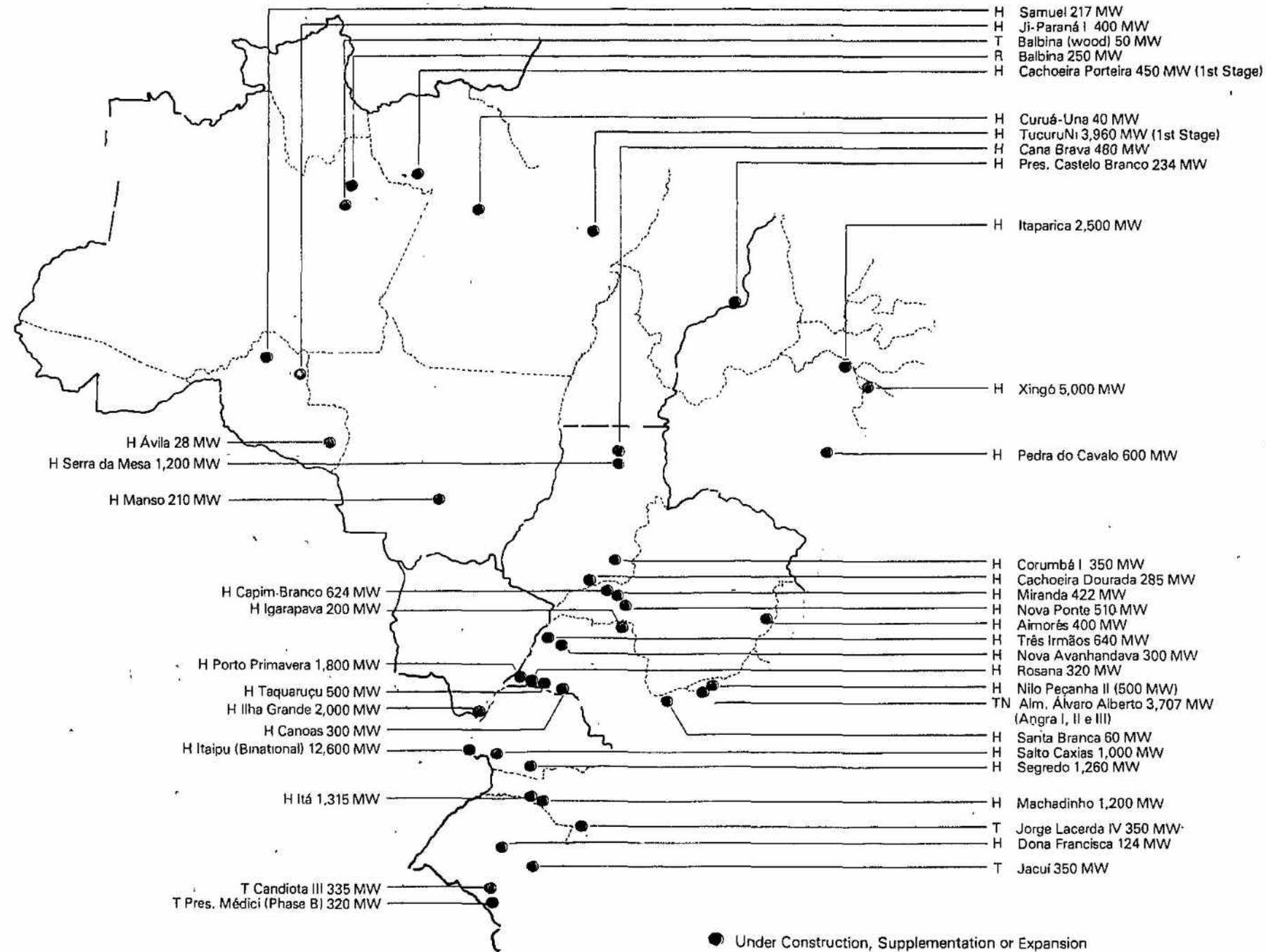
INDIAN RESERVATIONS WITHIN SPHERE OF INFLUENCE OF PROJECT

RESERVATION	INDIGENOUS GROUP	VILLAGES	POPULATION	< 18 YRS > 18 YRS	* DEATH RATE	* BIRTH-RATE	AREA KM <sup>2</sup>	AREA PER CAPITA
CATETÉ	XIKRIN	2	247	160 = 65% 87 = 35%	0%	7%	4,392	17.8 KM <sup>2</sup>
PARAKANĀ	PARAKANĀ	2	123	63 = 51% 60 = 49%	0%	7%	3,170	25.8 KM <sup>2</sup>
SORORŌ	SURUI	1	89	59 = 66% 30 = 34%	0%	1%	263	3 KM <sup>2</sup>
MĀE MARIA	GAVIĀO	1	162	89 = 55% 73 = 45%	1%	4%	625	3.9 KM <sup>2</sup>
APINAJĒ	APINAJĒ	2	447	241 = 54% 206 = 46%	2%	0%	1,010	2.3 KM <sup>2</sup>
KRIKATI	KRIKATI	1	297	138 = 46% 159 = 54%	1%	3%	1,366	4.6 KM <sup>2</sup>
GOVERNADOR	GAVIĀO GUAJAJARA	1	308	161 = 52% 147 = 48%	1%	8%	416	1.4 KM <sup>2</sup>
ARARIBŌIA	GUAJAJARA KRAHŌ	4	569	274 = 48% 295 = 52%	1%	4%	4,136	2 KM <sup>2</sup>
ANGICO TORTO	GUAJAJARA	8	1,084	642 = 59% 442 = 41%	1%	7%		
CANUDAL	GUAJAJARA	2	434	253 = 58% 181 = 42%	0.5%	2%		
GUAJĀ	GUAJĀ	1	29	18 = 62% 11 = 36%	3%	3%	<i>under investigation</i>	
CARU	GUAJAJARA GUAJĀ	5	118	52 = 44% 66 = 56%	3%	4%	1,727	14.6 KM <sup>2</sup>
ALTO TURIAÇU	URUBU- KAAPOR	5	312	115 = 37% 197 = 63%	1%	2%	5,305	17 KM <sup>2</sup>
RIO PINDARĒ	GUAJAJARA KRAHŌ	2	316	161 = 51% 155 = 49%	2%	9%	150	0.5 KM <sup>2</sup>
TOTALS & AVERAGES		37	4,535	2,426 = 53% 2,109 = 47%	1.2%	4.4%	22,560	5.0 KM <sup>2</sup>

\* OVER 1 YEAR PERIOD  
LATEST FUNAI CENSUS.

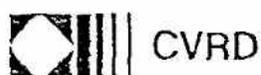
SOURCE: FUNAI (NATIONAL INDIAN FOUNDATION)

### MAJOR POWER PLANTS (UNDER CONSTRUCTION, SUPPLEMENTATION OR EXPANSION, OR IN THE STUDIES OR DESIGN PHASE)









CARAJÁS IRON ORE PROJECT  
SOCIOECONOMIC SUPPORT OF INDIAN RESERVATIONS - 1982-1986  
DEMOGRAPHIC DATA & ALLOCATION OF FUNDS

	RESERVATION	INDIAN GROUP	POPULATION	< 18 YEARS > 18 YEARS	DEATH RATE	BIRTH-RATE	US\$ 1,000 - DEC/81	
							TOTAL	/CAPITA
PARÁ	CATETE	XIKRIN	247	160=65% 87=35%	0%	7%	897.9	3.6
	PARAKANÁ	PARAKANÁ	123	63=51% 60=49%	0%	7%	1,251.2	10.2
	SORORÔ	SURUÍ	89	59=66% 30=34%	0%	1%	698.4	7.8
	MÃE MARIA	GAVIÃO	162	89=55% 73=45%	1%	4%	588.6	3.6
	MARABÁ AID STATION						755.6	
	SUBTOTAL		621	371=60% 250=40%			4,191.7	6.8
GOIÁS	APINAJE ✓	APINAJE ✓	447	241=54% 206=46%	2%	0%	928.1	2.1
	KRIKATI ✓	KRIKATI ✓	297	138=46% 159=54%	1%	3%	380.1	1.3
MARANHÃO	GOVERNADOR ✓	GAVIÃO ✓ GUAJAJARA	308	161=52% 147=48%	1%	8%	417.1	1.4
	ARARIBÓIA ✓	GUAJAJARA KRAHŌ	569	274=48% 295=52%	1%	4%	894.5	1.6
	ANGICO TORTO	GUAJAJARA	1,084	642=59% 442=41%	1%	7%	1,220.9	1.1
	CANUDAL	GUAJAJARA	434	253=58% 181=42%	0.5%	2%	453.0	1.0
	GUAJÁ ✓	GUAJÁ ✓	29	18=62% 11=38%	3%	3%	172.6	6.0
	CARU ✓	GUAJAJARA ✓ GUAJÁ	118	52=44% 66=56%	3%	4%	2,087.9	17.7
	ALTO TURIAÇU ✓	URUBU- KAAPOR	312	115=37% 197=63%	1%	2%	426.3	1.4
	PINDARÉ ✓	GUAJAJARA ✓ KRAHŌ	316	161=51% 155=49%	2%	9%	268.2	1.0
	6TH REGIONAL DELEGACY						933.5	
	SUBTOTAL		3,467	1,814=52% 1,653=48%			7,254.1	2.1
	MONITORING & CONTROL - WORLD BANK/FUNAI						1,221.5 (9% OF TOTAL)	
	TOTALS & AVERAGES		4,535	2,426=53% 2,109=47%	1.2%	4.4%	13,595.4	3.0

SOURCE: FUNAI (NATIONAL INDIAN FOUNDATION)



CVRD

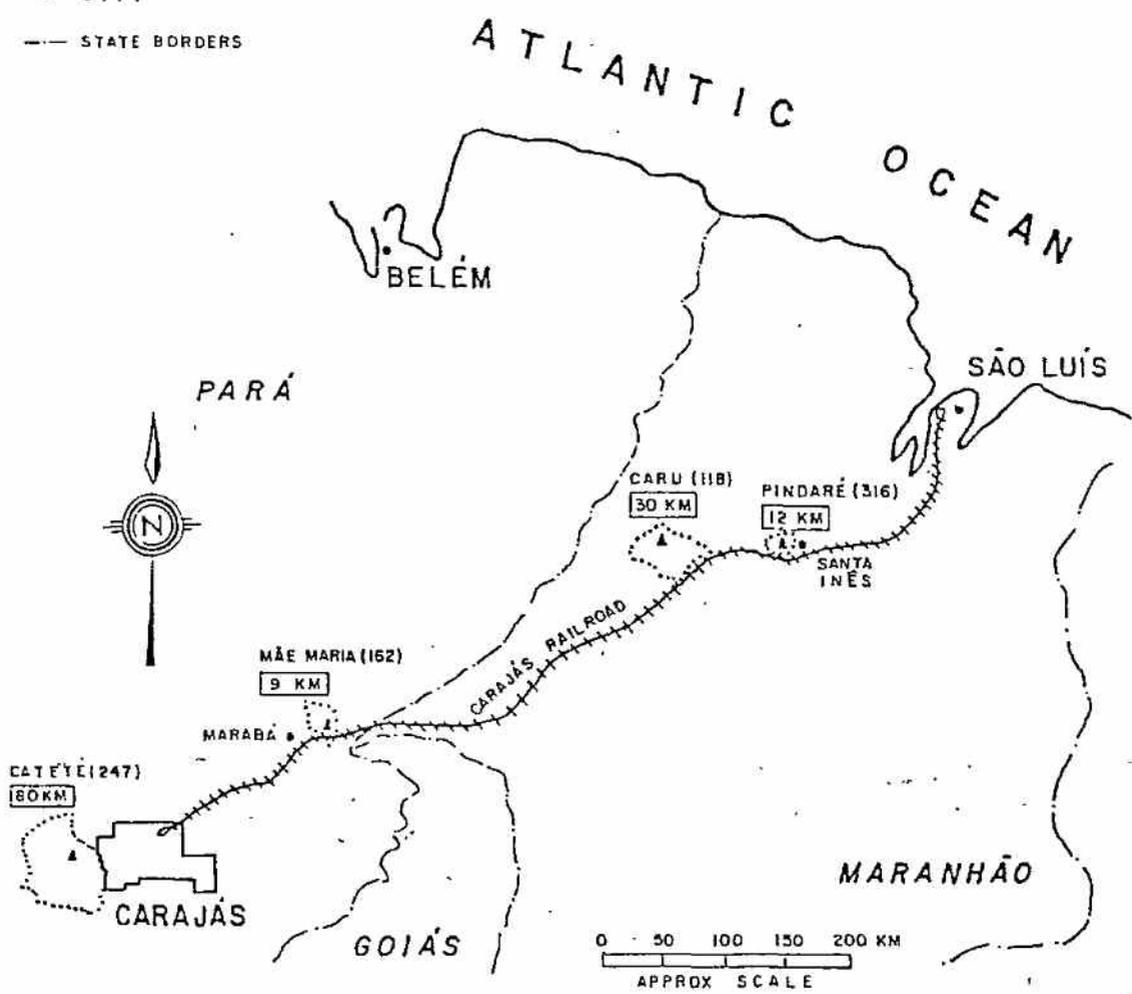
# CARAJÁS IRON ORE PROJECT

## INDIAN RESERVATIONS

### DIRECTLY INFLUENCED BY PROJECT

**LEGEND**

- DIRECTLY INFLUENCED
- ( ) INDIAN POPULATION
- ▲ MAIN INDIAN VILLAGE & POST
- DISTANCE OF ▲ FROM RR
- CITY
- STATE BORDERS



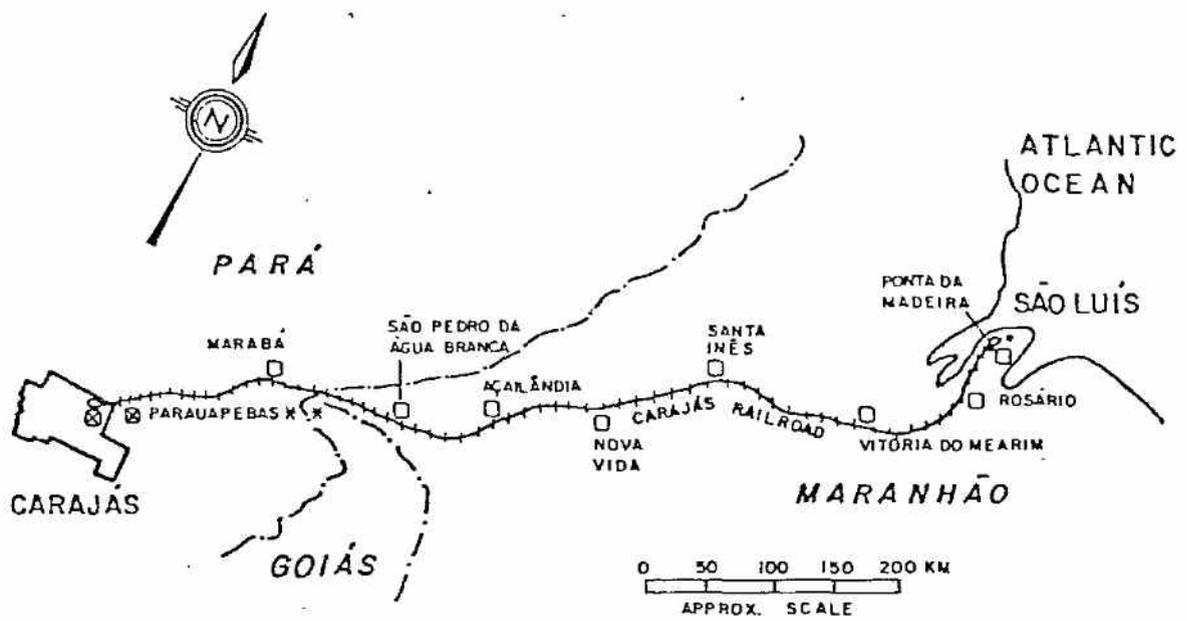
		% OF TOTAL
TOTAL INDIAN POPULATION OF BRAZIL	227,801	100
SOURCE CIMI - INDIAN MISSIONARY COUNCIL SEPT/80 CENSUS		
TOTAL INDIAN POPULATION CONSIDERED AS DIRECTLY INFLUENCED BY PROJECT	843	0.37
SOURCE FUNAI - NATIONAL INDIAN FOUNDATION 1981 CENSUS		

OBSERVATION: NO RESETTLEMENT OF INDIANS IS REQUIRED AS A CONSEQUENCE OF THE PROJECT



# CVRD CARAJÁS IRON ORE PROJECT

TOWNSITES ☒ HOUSING DIVISIONS □



	RR KM	URBANIZED AREA - HA	BUILDINGS AREA - M <sup>2</sup>			POPULATION FORESEEN
			RESID	NONRESID	TOTAL	
PONTA DA MADEIRA	0	2.3	2,430	—	2,430	100
ROSÁRIO	39	3.0	1,870	—	1,870	200
VITÓRIA DO MEARIM	145	5.1	3,460	—	3,460	200
SANTA INÊS	213	6.2	4,980	—	4,980	250
NOVA VIDA	384	8.4	8,760	—	8,760	550
AÇAILÂNDIA	513	4.6	3,230	1,710	4,940	640
SÃO PEDRO DA ÁGUA BRANCA	650	9.6	7,410	530	7,940	400
MARABÁ	738	5.0	4,910	2,100	7,010	1,700
PARAUPEBAS **	861	134.7	2,820	5,050	7,870	10,914*
CARAJÁS	890	388.6	119,630	16,160	135,790	15,545*
<b>TOTAL</b>		<b>567.5</b>	<b>159,500</b>	<b>25,550</b>	<b>185,050</b>	

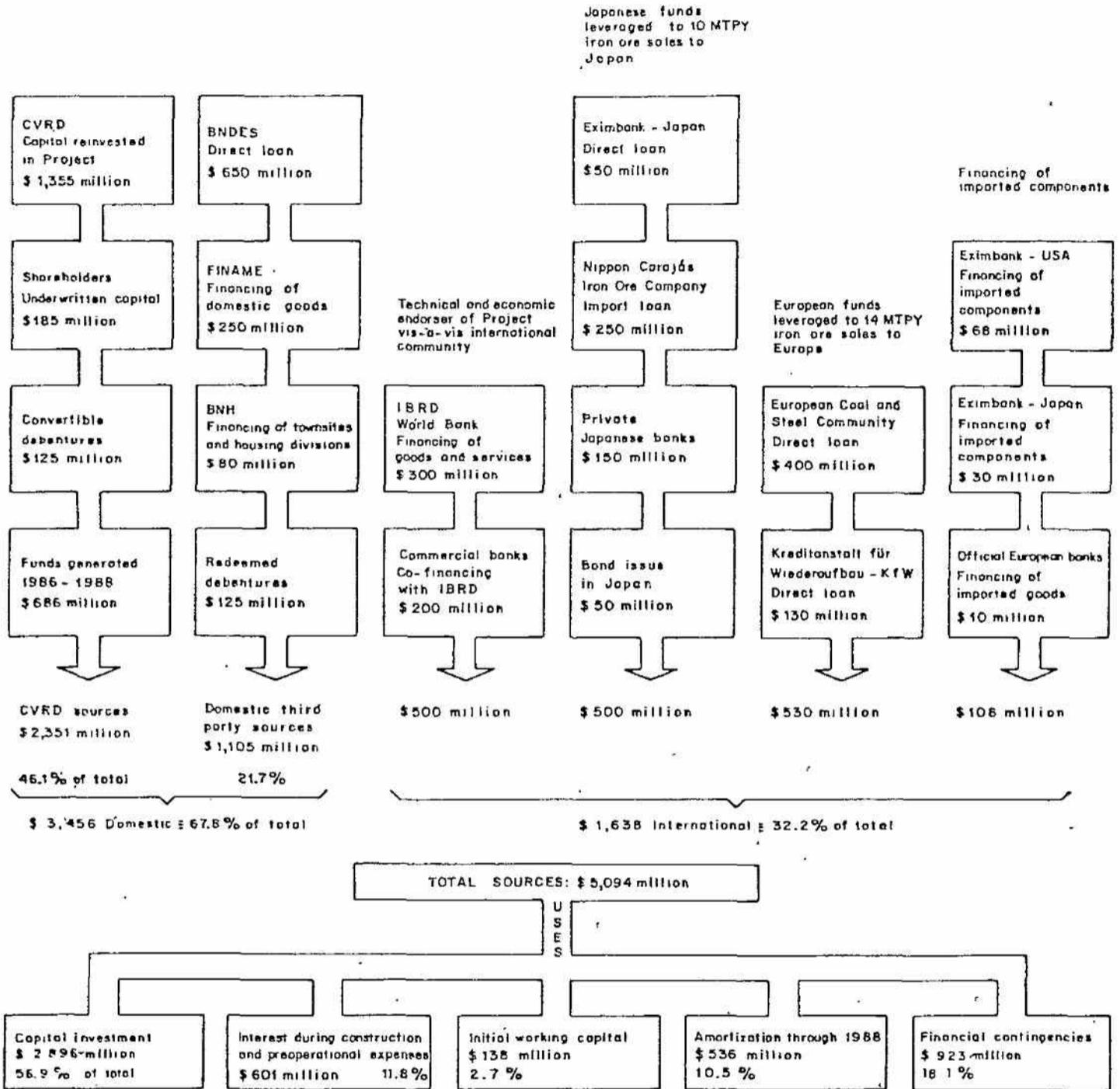
YEAR 2000 \*



CVRD

# Carajás Iron Ore Project

## SOURCES AND USES OF FUNDS THROUGH 1988



Source: CVRD - revista, June/83  
Revised mar/85, valid as of Jan/85

## PHOTO Nº 4

Circular Indian village of Mãe Maria Reserve, surrounded by the dense, high-canopy Amazon rain forest, comprising 33 brick dwellings and buildings including community center, currently also housing its elementary school. Since April/80, it is the lone settlement of the western Gavião Indians, located some 40 km from the city of Marabá in the state of Pará, and slightly over 9 km due north of the Carajás Railroad right-of-way. In April/83, the total indigenous population of this village was 165.

A 5-year CVRD/FUNAI - National Indian Foundation accord was signed in June/82, encompassing the socioeconomic support project presented by FUNAI in January/82 and fully endorsed by the World Bank, involving 14 Indian communities within the sphere of influence of the Carajás Iron Ore Project, that is, within a radius of 100 km from the Carajás Railroad right-of-way. A total indigenous population of 4,535 (1981 FUNAI census) will be benefitted through this accord aimed at upgrading their quality of life, for the total account of CVRD.

Of the total funds allotted to this village, based entirely on FUNAI's project, 17% are destined to upgrade health and sanitation facilities, 16% - education, 35% - agribusiness, 8% - transport and communication, and 23% - administration (including electric power line). A potable water and a sewage system (septic tanks) have already been implemented. The following buildings are currently under construction: 1) 10-bed infirmary, including a dental care section and quarters for a medical attendant to be contracted by FUNAI under the accord, seen at right of photo; 2) 2-room elementary school and quarters for teacher engaged by FUNAI long before the accord (two helpers to be engaged through the accord); Indian Post and quarters for FUNAI agent stationed on village site long before the accord.

Implementation of the accord is being monitored *in situ* by the SUCAR Environmental Management Coordinating Group (Rio) and CIMI - Internal Environmental Commission (Carajás). For the Indian communities directly influenced by the Project (Catetê, Mãe Maria, Caru and Pindarê), on-site consulting services are being provided by three professional anthropologists engaged by SUCAR after having consulted the Brazilian Association of Anthropology. A physician specialized and experienced in Indian health care is also providing SUCAR with on-site consulting services to the Catetê and Mãe Maria Indian communities.

FUNAI is implementing the US\$ 13,595,400 accord through on-site Indian Post agents, the Marabá Aid Station, the 2nd Regional Delegate headquartered in Belém-Pará, and the 6th Regional Delegate of São Luís-Maranhão. GEATAT-Executive Araguaia - Tocantins Land Group (Federal agency responsible for all aspects of land reform in the area) is also very active in the region, for example, having removed squatters and other trespassers from the Mãe Maria Reserve in September/82.

Worthy of special mention is the fact that resettlement of the western Gavião Indians is not required as a consequence of the Carajás Iron Ore Project, nor is it for the other three Indian communities directly under the influence of the Project.

For other information on the western Gavião Indians, see separate sheet following Photo Nº 4.

FOOTNOTES - PHOTO Nº 4 CAPTION

Gavião Indians belong to the Timbira Indian nation, pertaining to the Jê linguistic family. There are two subdivisions of the Timbira Indians: eastern and western. A part of the eastern Timbira Indians, Gavião Indians are also divided, eastern and western, the Mãe Maria Reserve Indians being the western Gavião Indian tribe, or in the Jê tongue, the *Parakatejê*. Indeed, the village in the photo is self-denominated the *Parakatejê Indian Community*.

Not too long ago, only a few dozen Gavião Indians remained in Brazil, reaching quasi-extinction. However, through the concerted efforts of FUNAI - National Indian Foundation, allied with church-affiliated missions, the Gavião Indian population increased substantially, with 165 survivors in the *Parakatejê* village alone, by April/83.

The Gavião Indians constitute the last Timbira group which still conserves its cultural and linguistic autonomy. Notwithstanding, the *Parakatejê* tribe is in an advanced stage of acculturation. It is in constant contact with *kupê* (non-Indians) due to its main economic activity of harvesting Brazil nuts in the some 64,000-hectare Mãe Maria Reserve. *Kupê* hands are hired by the tribe to harvest the nuts, and to care for cattle, horses and goats belonging to the tribe, pastured in suitable lands rented from *kupê*. Commercial operations are carried out by the tribe directly with *kupê* traders and banks. Furthermore, eight *kupê* were living in the village in April/83.

The Chief of the *Parakatejê* himself, *Krohokrenhum*, stimulated this *kupê*-ization, with the aid of one of his main assistants, *Pyrhrejimohre* (in all probability, in a herculean effort to attain self-sufficiency, and above all, for survival of his people, amidst the encroaching *kupê* pressures).

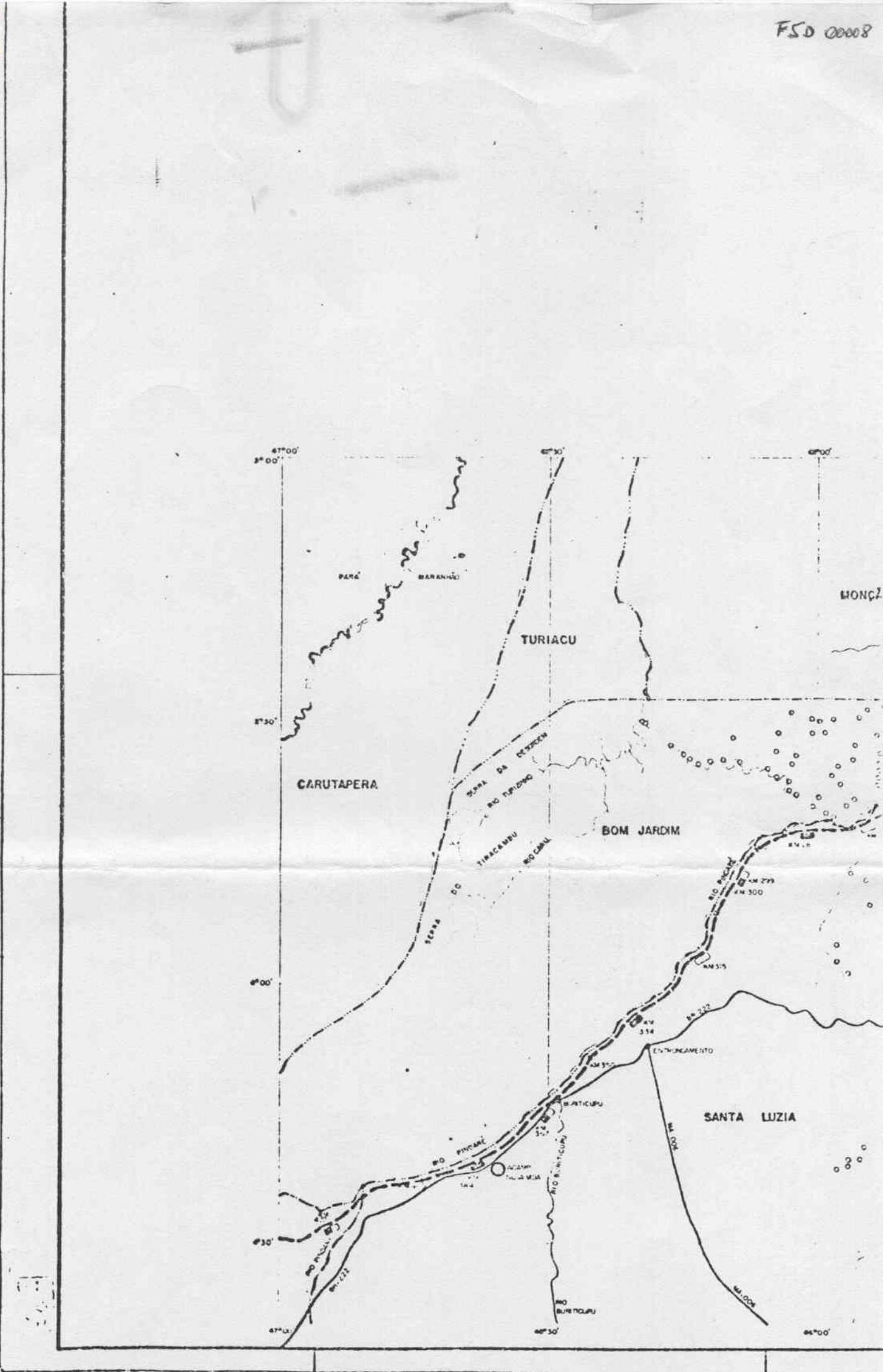
Nonetheless, paradoxical as it may seem, and despite all appearances (brick dwellings and facilities built with their own funds), *Krohokrenhum* is much concerned with his roots. He is engaged in strengthening the ethnic identity of the *Parakatejê*, for example, through *Pempetetê*, the starting point of the development of an important ritual cycle for masculine initiation. Indian youths are secluded for months in a babassu-straw hut located behind the brick dwelling of one of the ceremonial guides. They undergo special training, based on bravery and honor, to perpetuate the warrior ethos. Upon completion of the cycle, the *pemps* are considered as having reached maturity, and therefore apt to reproduce and continue the Gavião ethos. Noteworthy is the fact that this ritual cycle had been discontinued for some 25 years, as it requires a certain demographic density in certain age groups, attained only fairly recently. Given its recent history, the *Parakatejê* village, or in the Jê tongue, *Kaikature*, is evidently constituted predominantly of Indian children, youths and maidens, 36% (59) being 10 years of age and under, and 26% (43), 20 and under. (The remainder is composed of 18 Indians between the ages of 21 and 30, 28 between 31 and 40, 12 between 41 and 50, four between 51 and 60, and one, older than 60.)

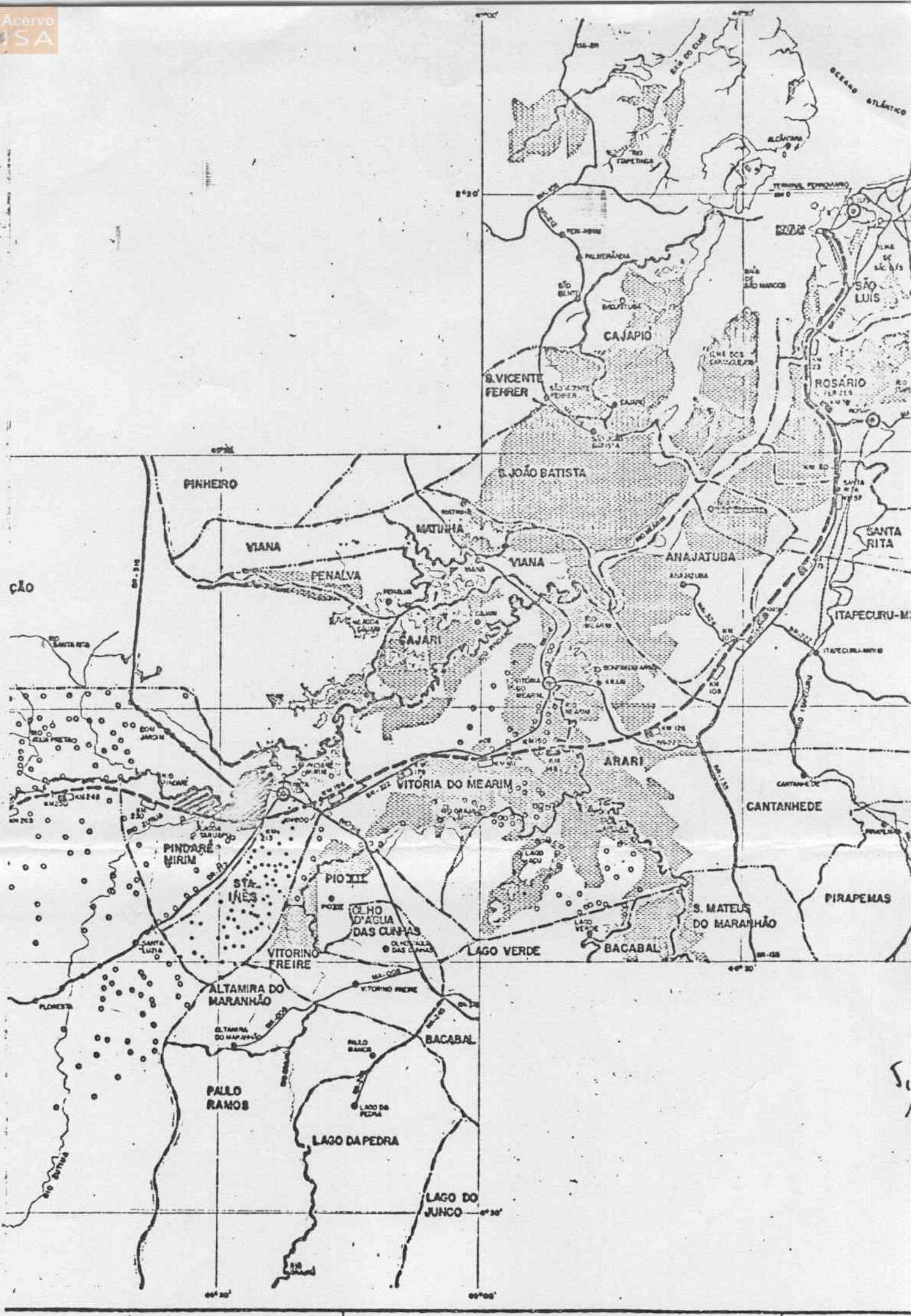
Another example of the ongoing return to its Gavião roots is the division of the *Parakatejê* tribe into ceremonial halves, *Pan* and *Húk*, which dispute traditional caber running games (somewhat similar to the game of caber tossing of the Scots), and archery competitions. There is even role inversion, whereby Indian maidens and women also compete.

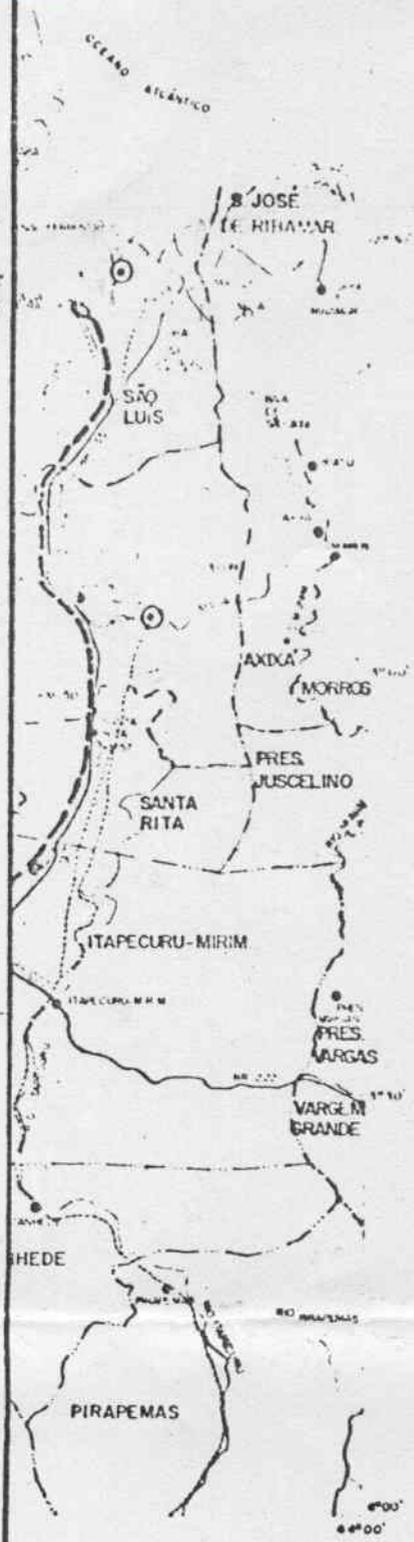
To reverse the trend among the *Parakatejê* children preferring the Portuguese language, and at the explicit request of Chief *Krohokrenhum*, FUNAI plans to edit a primer in their own tongue upon the conclusion of a linguistic study well under way by a researcher affiliated with the Federal University of Pará, who has been in contact with the *Parakatejê* for some 10 years. Perhaps, even a FUNAI bilingual training program may emerge to train monitors to teach the *Parakatejê* children, and in a later phase, the adolescents and adults of the village.

Without a doubt, much needs to be done on behalf of the *Parakatejê*, a now vigorous remnant of the Gavião Indians. CVRD is much gratified to be able to contribute, through the CVRD/FUNAI accord, towards alleviating the pressing and immediate needs of this tribe, enhancing the possibility of its permanent survival and self-sustenance.

Sources: FUNAI Indian Community Support Project, Jan/82  
Internal Reports, Consulting Anthropologist Iara Ferraz, July/82 and April/83



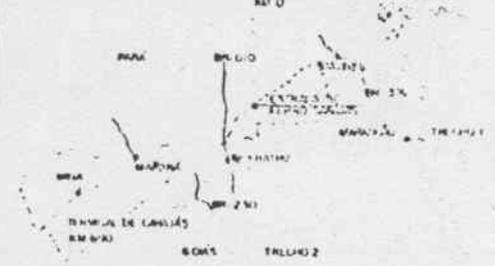




S.S. = 2, +  
1 = 1



PLANTA GUE



LEGENDA

- ESTRADA DE FERRO CARAJÁS
- DIVISA ESTADUAL
- DIVISA MUNICIPAL
- DIVISA DISTRITAL
- RODOVIAS FEDERAIS - BR
- RODOVIAS ESTADUAIS - PA/MA
- RODOVIAS MUNICIPAIS
- CIDADES
- VILAS
- BLOCOS URBANOS E/OU HABITACIONAIS CVRD
- PÁTIOS DE CRUZAMENTO
- R.F.F.M.A.
- ÁREA RESERVA

NOTAS

DESENHOS DE REFERÊNCIA

- MAPAS PLANIMÉTRICOS DO PARÁ - E.T.C. 1:250.000
- MAPAS CENSAIS DO IGBE - DIBS MUNICIPAIS ARRANJADOS - PARÁ
- MAPAS RODOVIAIS DO DNE R 1780 - ESTADOS DO PARÁ E MARANHÃO - E.T.C. 1:250.000
- ESTADA DE FERRO CARAJÁS - PLANTA E PERFIL DA OMETRIZ FERROVIÁRIA DES 87 2000 - 01-800 / REV 2

REV	DATA	TIPO	POR	DESCRIÇÃO DAS REVISÕES
1	18/08/81	C		REVISÃO GERAL
0	16/08/81	C		EMISSÃO ORIGINAL

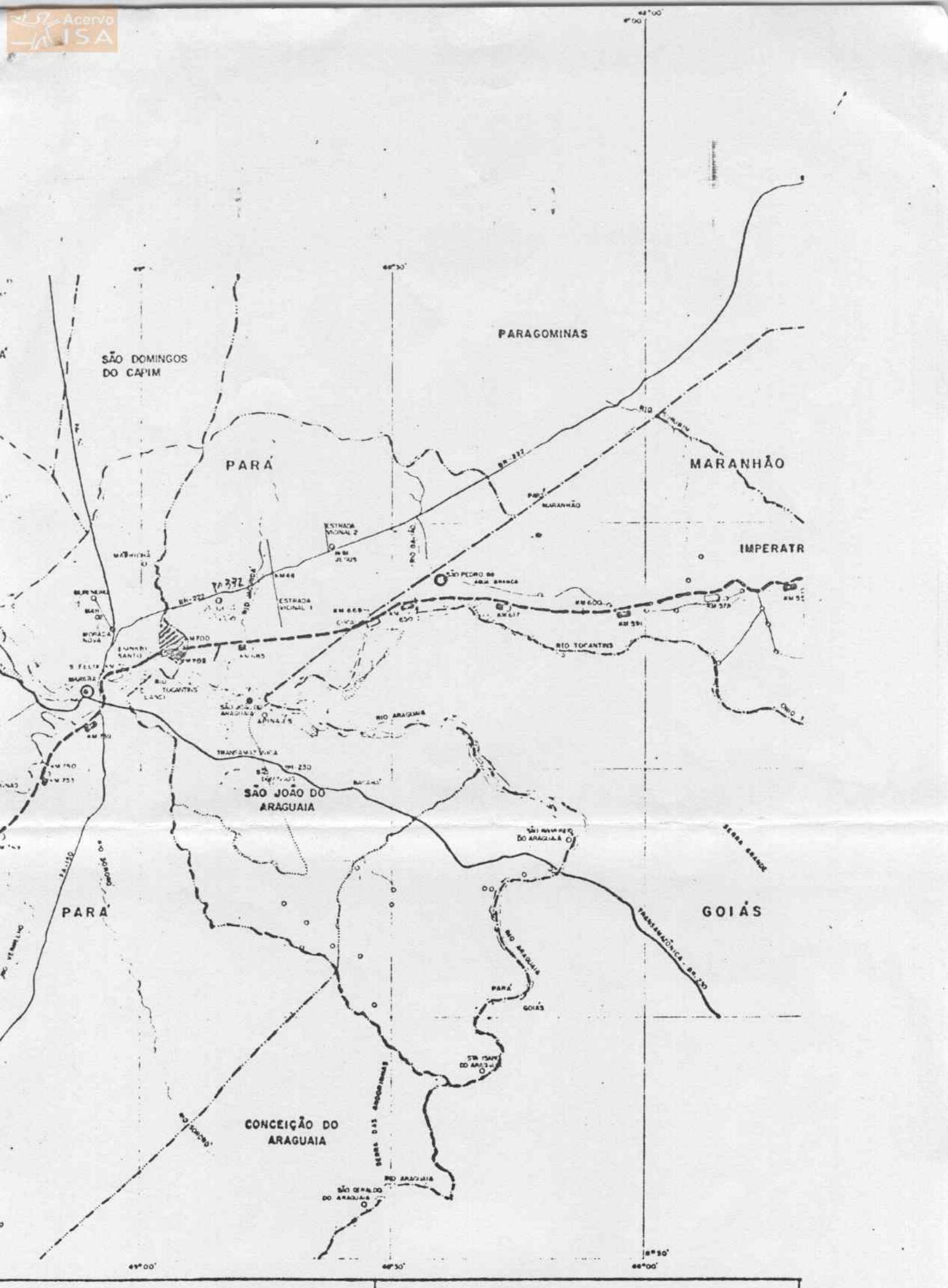
EMISSIONES

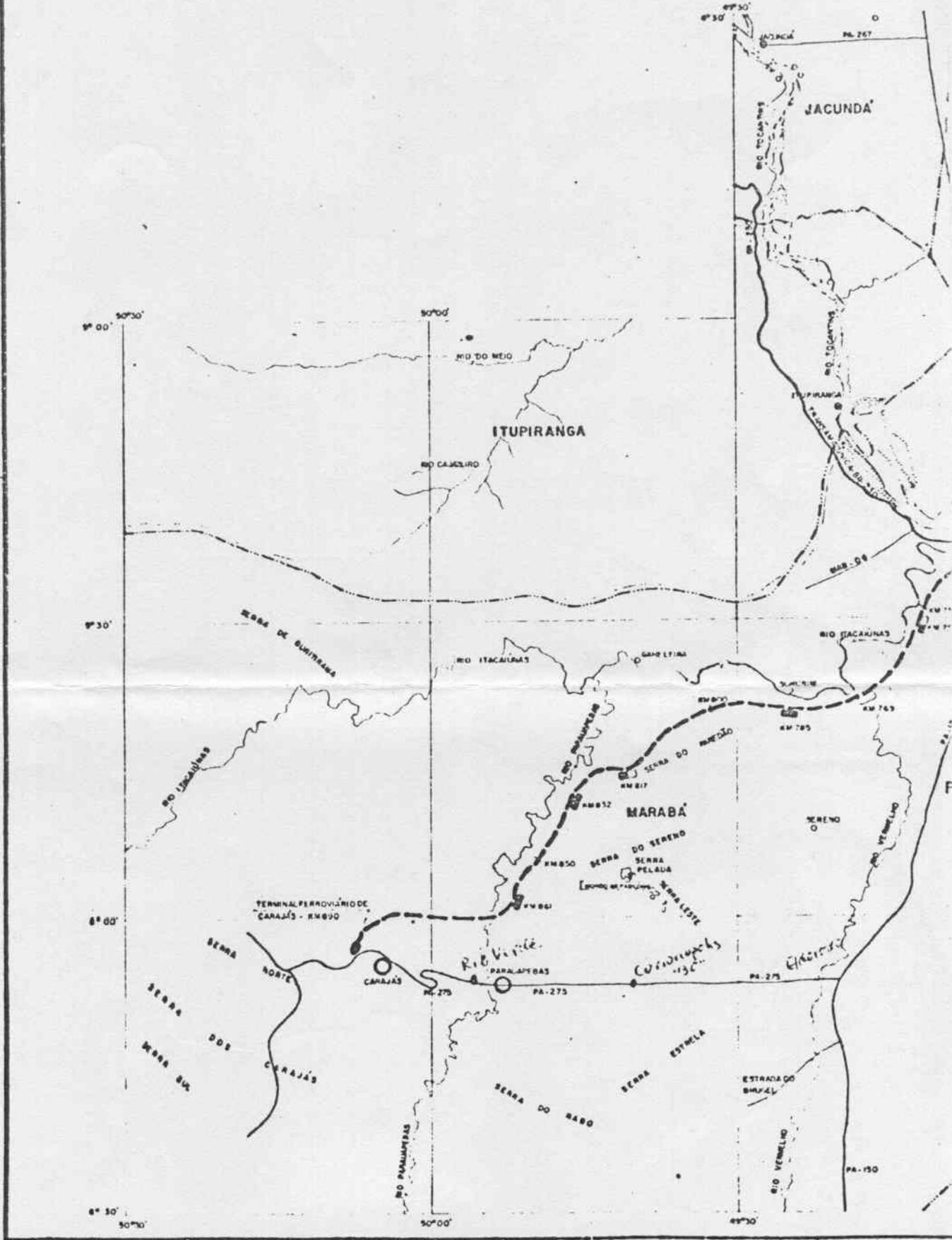
TIPO DE EMISSÃO	101 PROLIMINAR	102 PARA COTAÇÃO	103 CONFORME CONSTRUÇÃO
	101 PARA APROVAÇÃO	102 PARA CONSTRUÇÃO	103 CONCLUIDO
	101 PARA CONHECIMENTO	101 CONFORME CONSTRUÇÃO	101

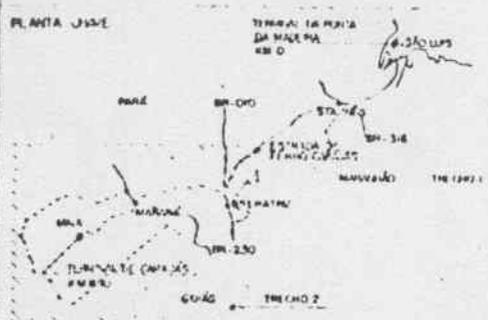
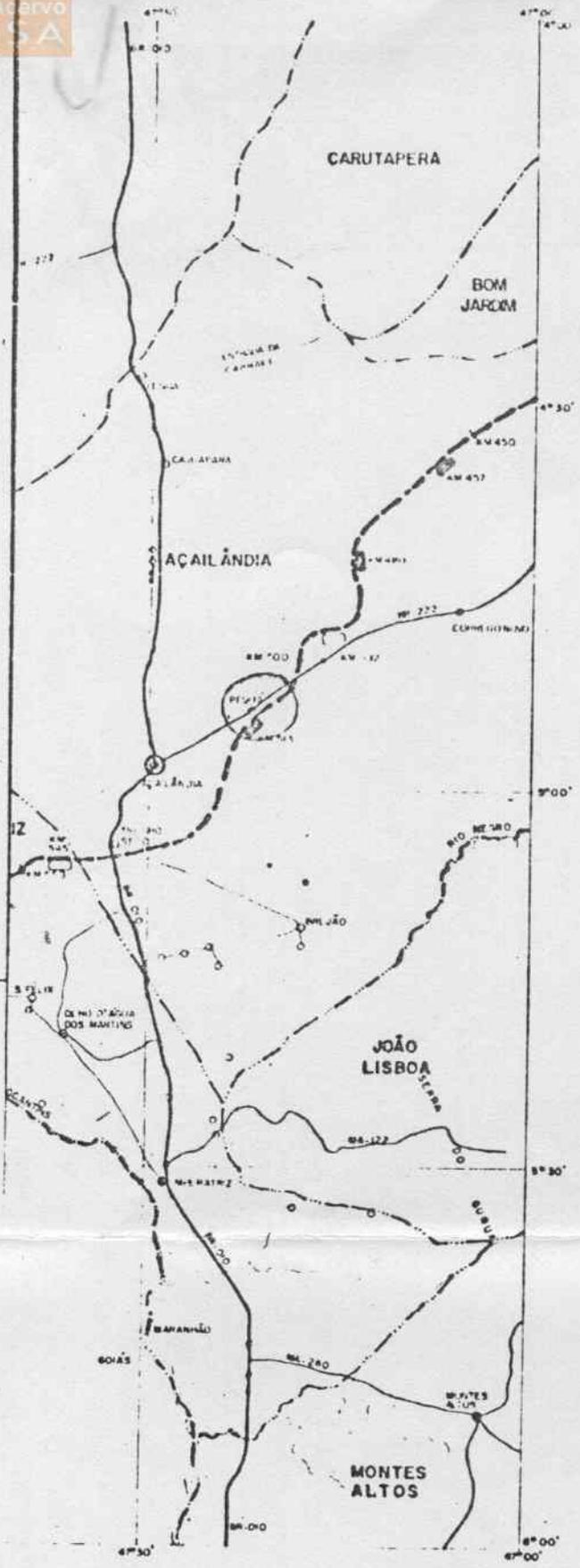
	<p><b>CVRD</b></p> <p>SUBSISTÊNCIA DE MANUTENÇÃO DO PROJETO CARAJÁS</p>	<p><b>Projeto Ferro Carajás</b></p>		
	<p>RESPONSÁVEL</p> <p>PROJ</p> <p>DES</p> <p>VER</p> <p>APROV</p>	<p>DATA</p> <p>16/08/81</p> <p>16/08/81</p> <p>16/08/81</p>	<p><b>ÁREA DE INFLUÊNCIA DA ESTRADA DE FERRO CARAJÁS - TRECHO I</b></p>	
		<p>ESCALA</p> <p>1:20.000</p> <p>4 = 0,49</p>	<p>NO. PROJ</p> <p>0000.00.907</p>	<p>REV</p> <p>1</p>

Guarata feiteira

MU 570 052







- LEGENDA**
- ESTRADA DE FERRO CARAJÁS
  - DIVISA ESTADUAL
  - DIVISA MUNICIPAL
  - DIVISA DISTRITAL
  - RODOVIAS FEDERAIS - BR
  - RODOVIAS ESTADUAIS - PA/MA
  - RODOVIAS MUNICIPAIS
  - CIDADES
  - VILAS
  - NUCLEOS URBANOS E/OU HABITACIONAIS CVD
  - PÁTIOS DE ORÇAMENTO
  - R.F.F.M.A.
  - ÁREA INFLUÊNCIA

**NOTAS**

**DESENHOS DE REFERÊNCIA**

- MAPAS PLANIMÉTRICOS DO RADAM - ESC. 1:250.000
- MAPAS CENSOGRÁFICOS DO IBGE DOS MUNICÍPIOS ANEXADOS - 1/25.000
- MAPAS RODOVIÁRIOS DO DNRE 1980 - ESTADOS DO MARANHÃO - ESC. 1:125.000
- ESTRADA DE FERRO CARAJÁS - PLANTA E PERFIL DA DIETRIZ FERROVIÁRIA DES. Nº 2000 - CN - S.C. 7 REV. 2

REV	DATA	TIPO	POR	DESCRIÇÃO DAS REVISÕES
6	18/07/81	C		REVISÃO GERAL
5	27/08/81	C		REVISÃO GERAL
2	24/08/81	C		REVISÃO GERAL
1	12/07/81	C		LOC. SERTÃO, INFLUÊNCIA DE MARANHÃO E IMP. MUNICIPAL
0	16/06/81	C		EMISSÃO ORIGINAL

**EMISSIONES**

TIPO DE EMISSÃO	101 PROJETO	102 PARA ESTUDO	103 CONDIÇÃO CONSTRUÇÃO
	101 PARA APROVAÇÃO	102 PARA CONSTRUÇÃO	103 EXECUÇÃO
	101 PARA CONHECIMENTO	102 CONDIÇÃO CONSTRUÇÃO	103



**Projeto Ferro Carajás**

SUPERINTENDÊNCIA DO PROJETO CARAJÁS		ÁREA DE INFLUÊNCIA DA ESTRADA DE FERRO CARAJÁS - TRECHO 2	
RESPONSÁVEL	DATA	ESCALA	Nº. VED. 0000.00.908
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VER	16/06/81		
APROV	16/06/81		

original  
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1 = 20  
1 = 20,4

Escala grafica

MUD. JTO. 052