

Figure 1 - The Amazon Region seen through a mosaic of Landsat TM images from year 2000 (Bands 3, 4, and 5).

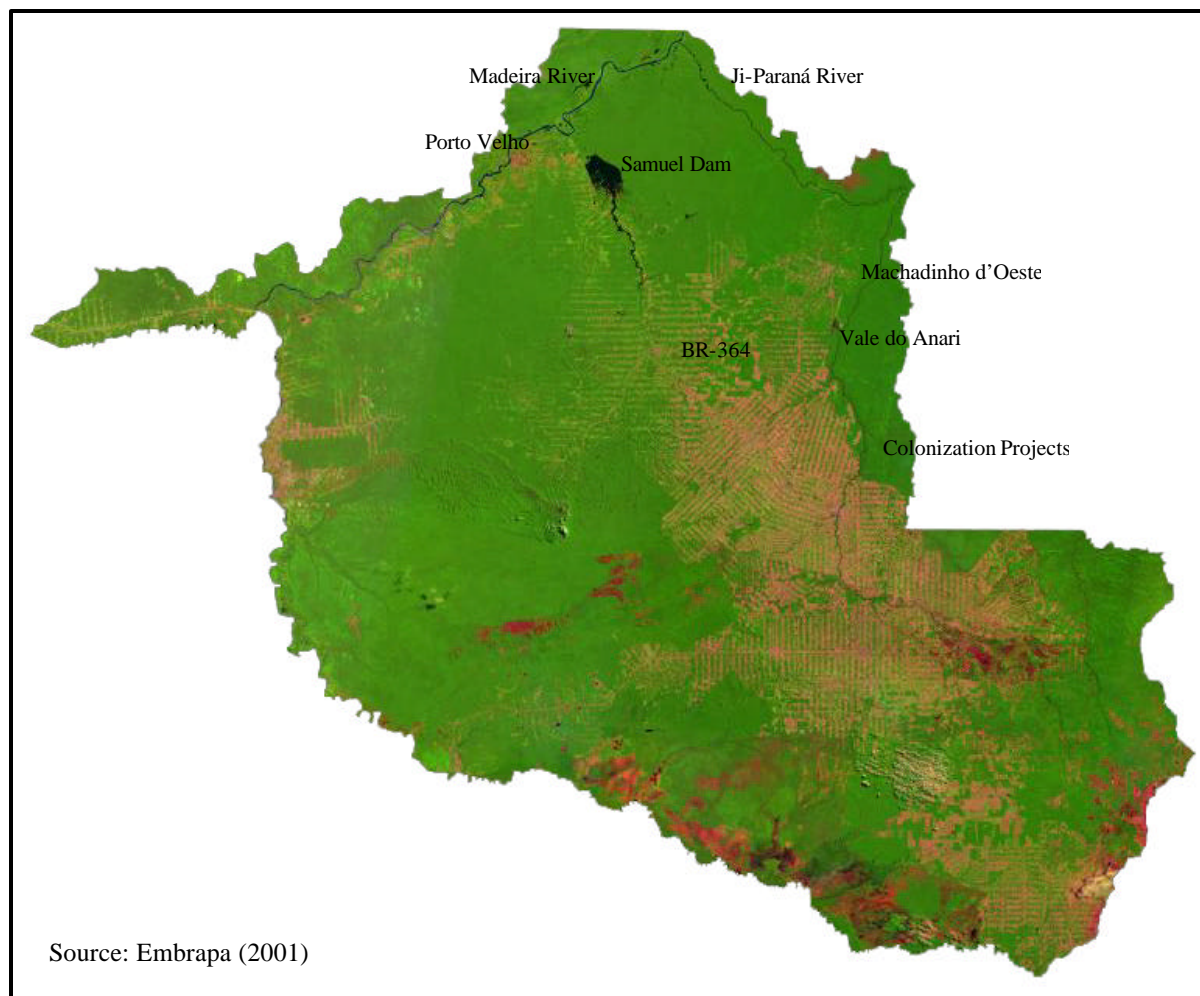


Figure 2 - The State of Rondônia seen through a mosaic of Landsat TM images from year 2000 (Bands 3, 4, and 5).

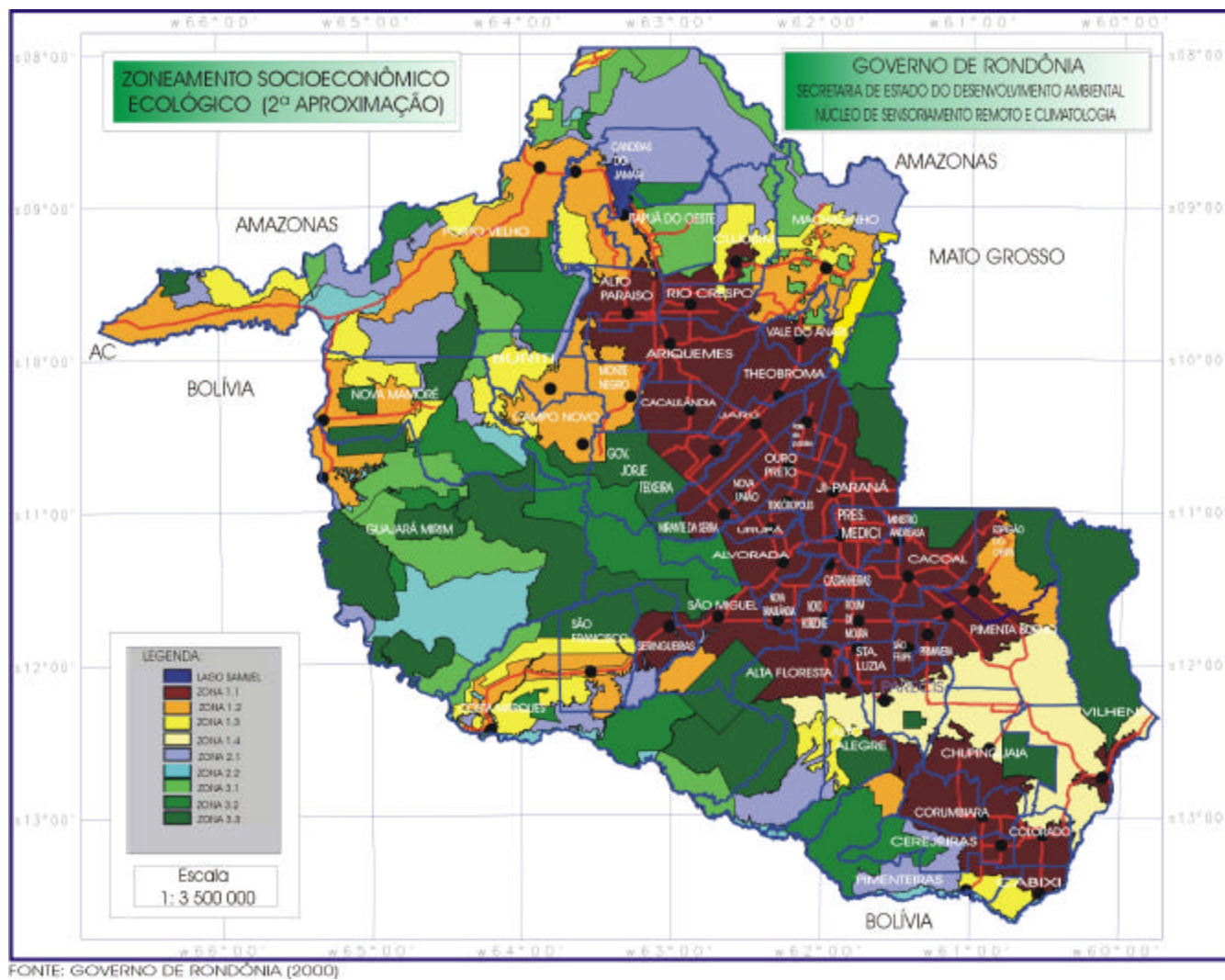


Figure 3 - Ecological-Economic Land Zoning of the State of Rondônia, 2nd Approximation (Rondônia 2000).

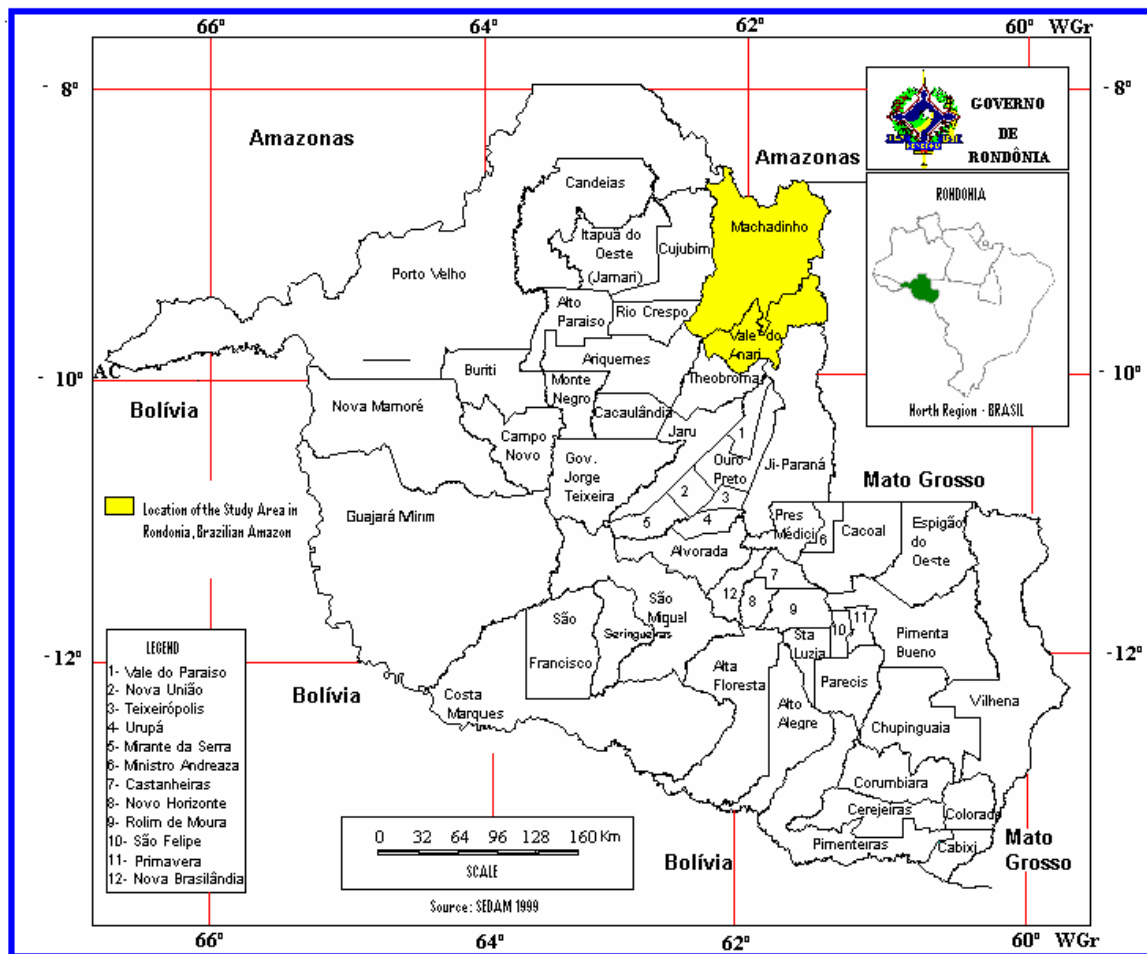


Figure 4 - Location of Machadinho d'Oeste and Vale do Anari in the State of Rondônia (adapted from Rondônia 1999b).



Photo 1 - Partial view of Machadinho d'Oeste (urban area).



Photo 2 - Partial view of Vale do Anari (urban area).



Figure 5 - Landsat TM image from 1998 (bands 3, 4, and 5) showing Machadinho d'Oeste and Vale do Anari distinct designs of colonization.

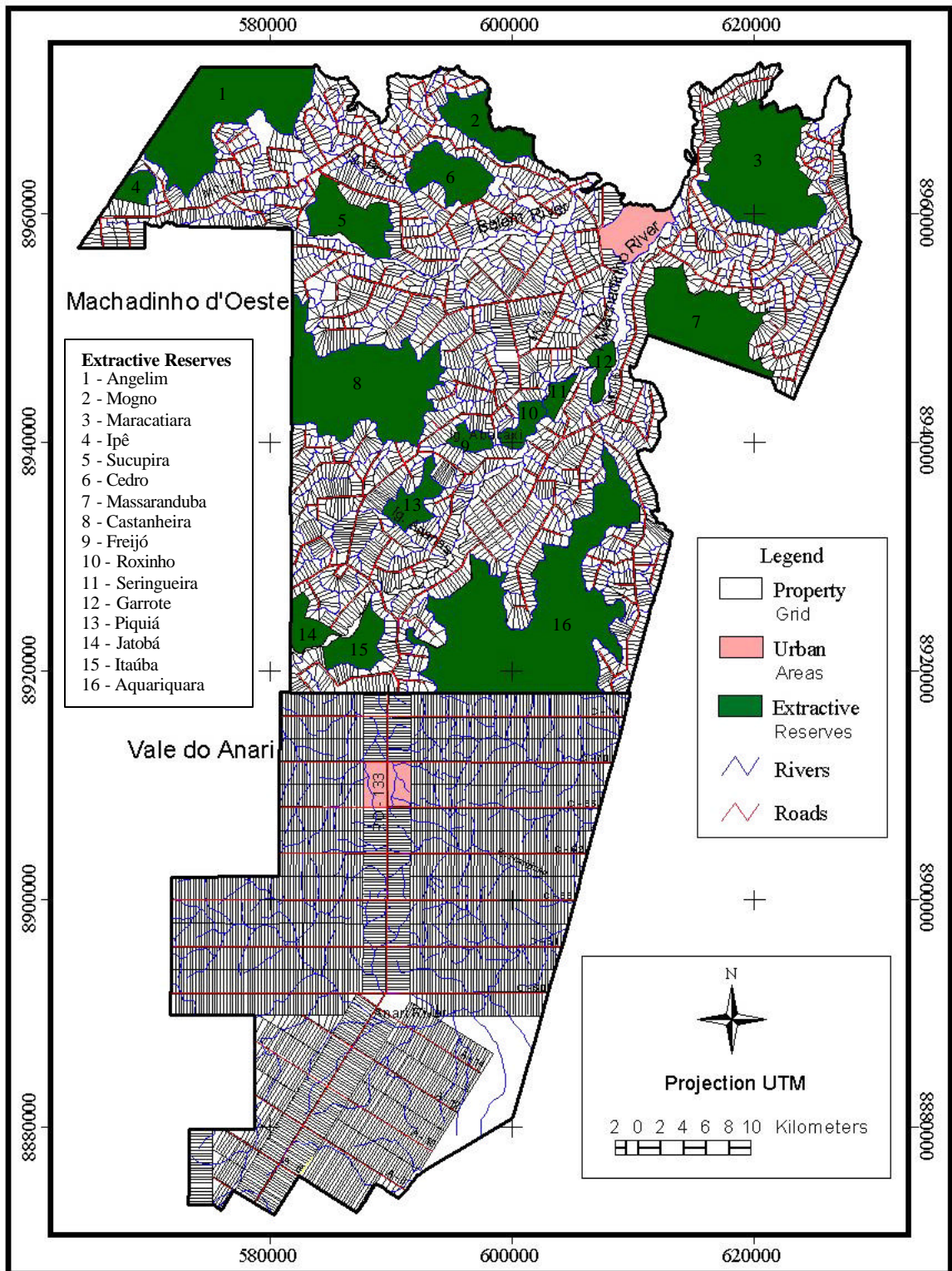
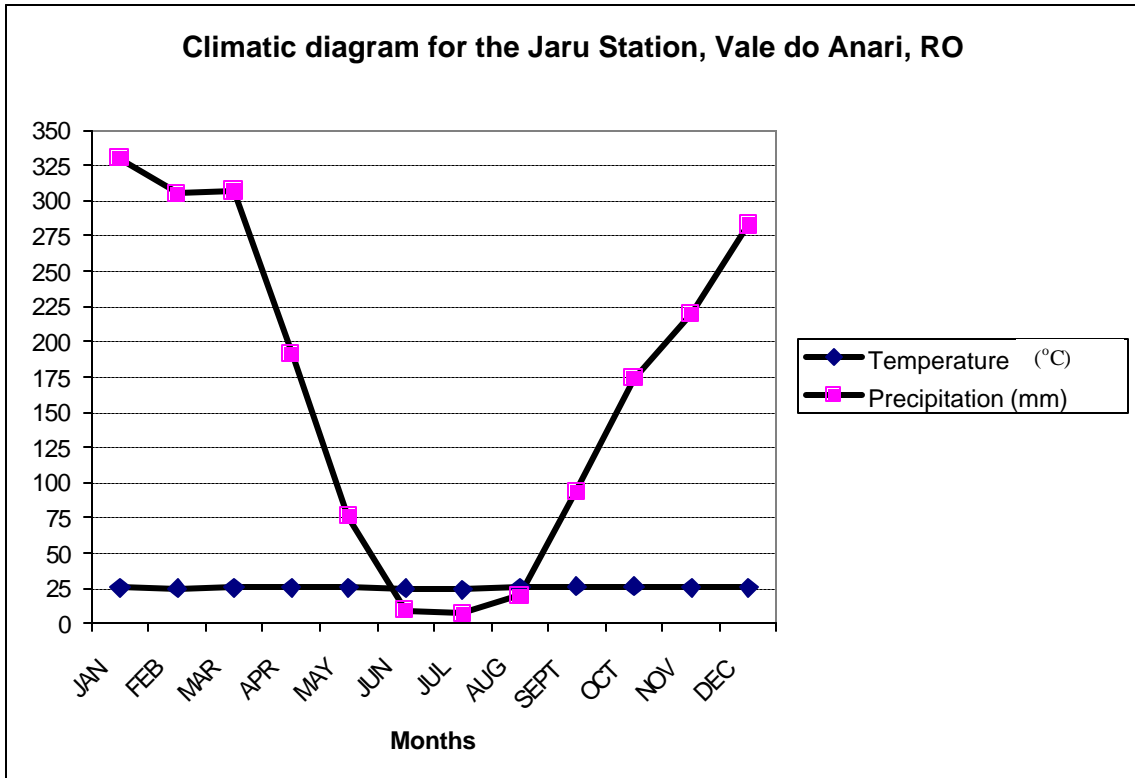


Figure 6 - Machadinho d'Oeste and Vale do Anari - Property Grids, Roads, Rivers, and Extractive Reserves.

Table 1 - Temperature, precipitation, and wind recorded at the Jaru Biological Reserve,
Rondônia, 1977 to 1996.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total / avg.
Avg. Temp. (°C)	25.3	25	25.3	25.3	25.8	24.9	24.2	25.6	26.4	26.8	25.8	25.3	25.5
Avg. Prec. (mm)	329.9	305.2	306.8	191.7	76.1	9.8	7.3	19.8	93.4	173.9	220	282.7	2016.6
S.D. (mm)	90.4	90.5	89.3	56.9	39	12.9	12.4	24.4	59.8	50.5	55.8	78.3	55.1
Wind (km/h)	4.8	4.7	4.3	4.0	4.4	3.6	4.9	4.7	4.6	4.7	4.7	4.7	4.5

Source: Rondônia (1998b)



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Figure 7 - Climatic diagram for the Jaru Biological Reserve, Rondônia, 1977 to 1996.

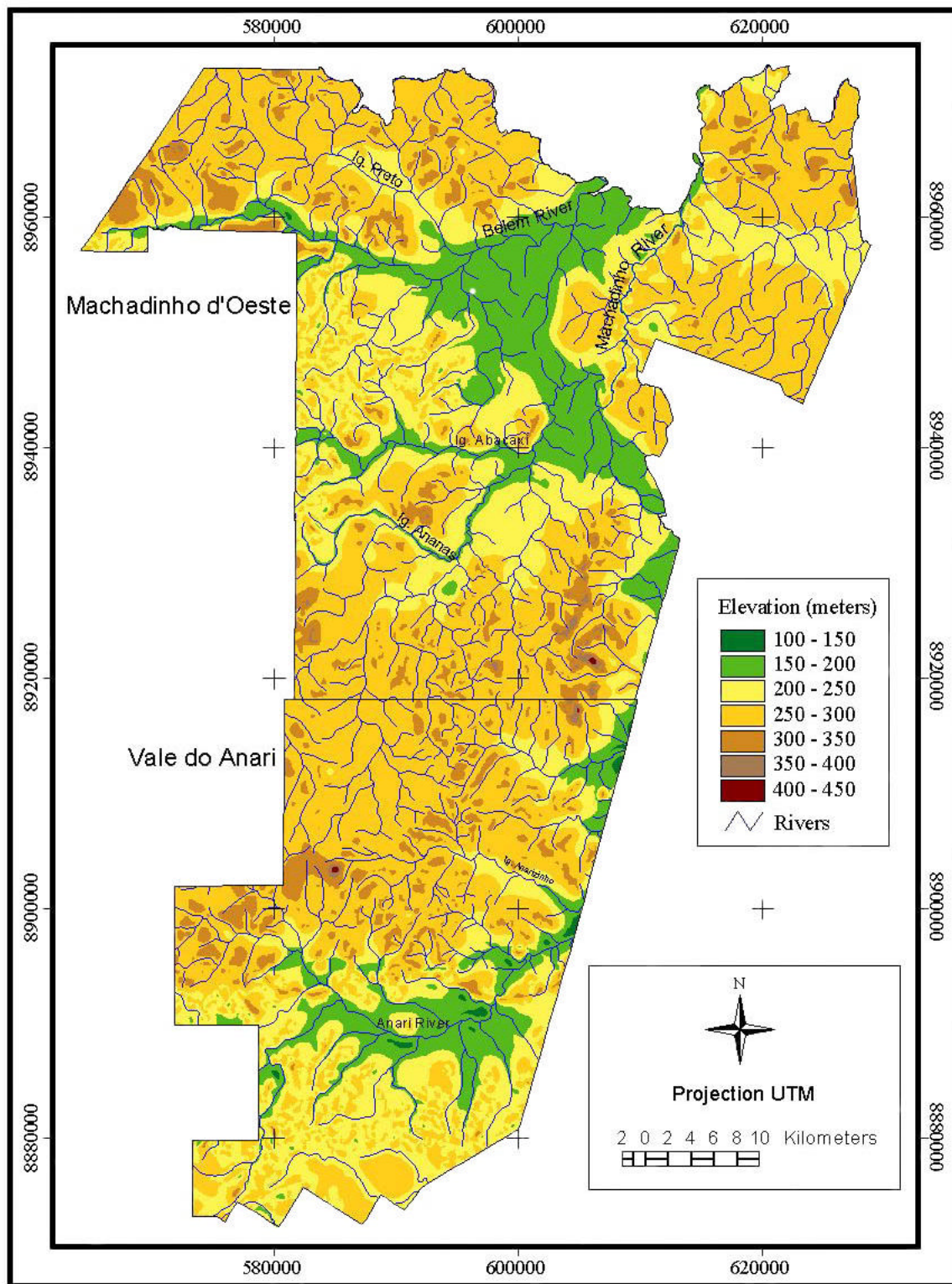


Figure 10 - Machadinho d'Oeste and Vale do Anari – Elevation Classes and Rivers.

Table 2 - Vegetation formations in the State of Rondônia, Brazilian Amazon
(Rondônia 1998h).

Vegetation Formations	Area (km²)	Percent of Total
Open Tropical Forest	127.620,4	53.7
Dense Tropical Forest	9.348,4	3.9
Savanna (<i>Cerrado</i>)	13.115,2	5.5
Semideciduous Forest	5.024,2	2.1
Transition Zone	19.809,2	8.3
Pioneer Formation under Fluvial Influence	8.743,0	3.7
Alluvial Formation (<i>Umirizal</i>)	571,1	0.24
White Sand Field (<i>Campinarana/Campina</i>)	40,8	0.02
Other Formations	53.173,7	22.4
Total	237.446,1	100

Table 3 - Farming and extraction activities in the rural areas of Machadinho d'Oeste and Vale do Anari.

PRODUCT	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Pastureland													
Pasture	1			slash trees, bushes, vines	slash trees, bushes, vines	fell	fell				seeding	seeding	
	2				cattle introduction	cattle introduction				clearing /burn	clearing/ burn		slash bushes, weeds
	3-10					slash bushes, weeds							slash bushes, weeds
Short Cycle Agriculture													
Corn	1			slash trees, bushes, vines	slash trees, bushes, vines	fell	fell	field preparation/ fallow	burn	burn	planting	planting	planting/ weeding
	2	harvest (sweet corn)	harvest (sweet corn)	harvest (sweet corn)				harvest (feed corn)					
Rice	1			slash trees, bushes, vines	slash trees, bushes, vines	fell	fell	field preparation/ fallow	burn	burn	planting	planting	planting/ weeding
	2	harvest / weeding	harvest	harvest									
Beans	1		herbicide	planting	planting	disease control	harvest						
Long Cycle Agriculture													
Manioc	1			slash trees, bushes, vines	slash trees, bushes, vines	fell	fell	field preparation/ fallow	burn	burn	planting	planting	planting/ weeding
	2-3	harvest / planting	harvest	harvest	harvest	harvest	harvest	harvest	harvest	harvest	harvest	harvest / replanting	harvest / replanting

PRODUCT	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Perennial Agriculture													
Coffee	1			slash trees, bushes, vines	slash trees, bushes, vines	fell	fell	seedling preparation	burn	burn	liming	liming	fertilization (NPK)/ planting in holes
	2	planting	replanting			weeding					weeding/ planting of rice		
	3		fertilization	herbicide			pest control			weeding	weeding/ fertilization	weeding	weeding/ fertilization
	4		fertilization				pest control				fertilization		fertilization
	5-9		fertilization	harvest	harvest	harvest	pest control				fertilization		fertilization
	10							pruning	pruning				
Cocoa	1			slash trees, bushes, vines	slash trees, bushes, vines	fell	seedling preparation		burn	planting		fertilization (NPK)	planting in holes
	2	planting in holes	slash bushes, weeds			slash bushes, weeds			pruning/ disease control	pruning/ disease control	slash bushes, weeds		slash bushes, weeds
	3-4	disease control	slash bushes, weeds/ pest control	slash bushes, weeds/ pest control	disease control	slash bushes, weeds			pruning/ disease control	pruning/ disease control	slash bushes, weeds		slash bushes, weeds
	5	disease control	slash bushes, weeds/ pest control	slash bushes, weeds/ pest control	disease control/ harvest	harvest	harvest		pruning/ disease control	pruning	slash bushes, weeds		slash bushes, weeds

PRODUCT	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Perennial Agriculture													
Guarana	1											seedling preparation	
	2			slash trees, bushes, vines	slash trees, bushes, vines	fell	fell		burn	burn			planting in holes
	3	planting in holes	weeding/fertilization			weeding/fertilization							
	4		weeding/fertilization			weeding/fertilization							
	5										harvest	harvest	pruning
Black pepper	1			slash trees, bushes, vines	slash trees, bushes, vines	fell	fell		seedling preparation	burn	liming	posting/fertilization (NPK)	planting in holes
	2	weeding/fertilization	fertilization (N)	weeding		weeding/mulching						weeding	
	3	weeding/fertilization	fertilization (N)	weeding		weeding/mulching						weeding	
	4-8	weeding/fertilization	fertilization (N)	weeding		weeding/mulching	harvest	harvest	harvest			weeding	
Cupuacu	1						seedling preparation				field preparation/fallow		planting in holes
	2	slash bushes, weeds/fertilization									slash bushes, weeds/fertilization		
	3												
	4				harvest	harvest	harvest						

PRODUCT	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Extraction													
Rubber	many	harvest	harvest	harvest	harvest	harvest	harvest	harvest			harvest	harvest	harvest
Logging													
Hard and soft wood	many				harvest	harvest	harvest	harvest	harvest	harvest	harvest		

Legend:  Field preparation

 Planting / Cattle introduction

 Maintenance

 Harvesting

Table 4 - Occurrence of cultivation systems within the farming systems in
Machadinho d'Oeste and Vale do Anari.

	Perennial	Cattle ranching	Annual	Agroforestry
Perennial agriculture	XXXX			
Cattle ranching		XXXX		
Perennial agriculture and small cattle ranching	XXXX	XXXX		
Perennial agriculture, annual agriculture, and cattle ranching	XXXX	XXXX	XXXX	
Agrosylvopastoralism	XXXX	XXXX	XXXX	XXXX