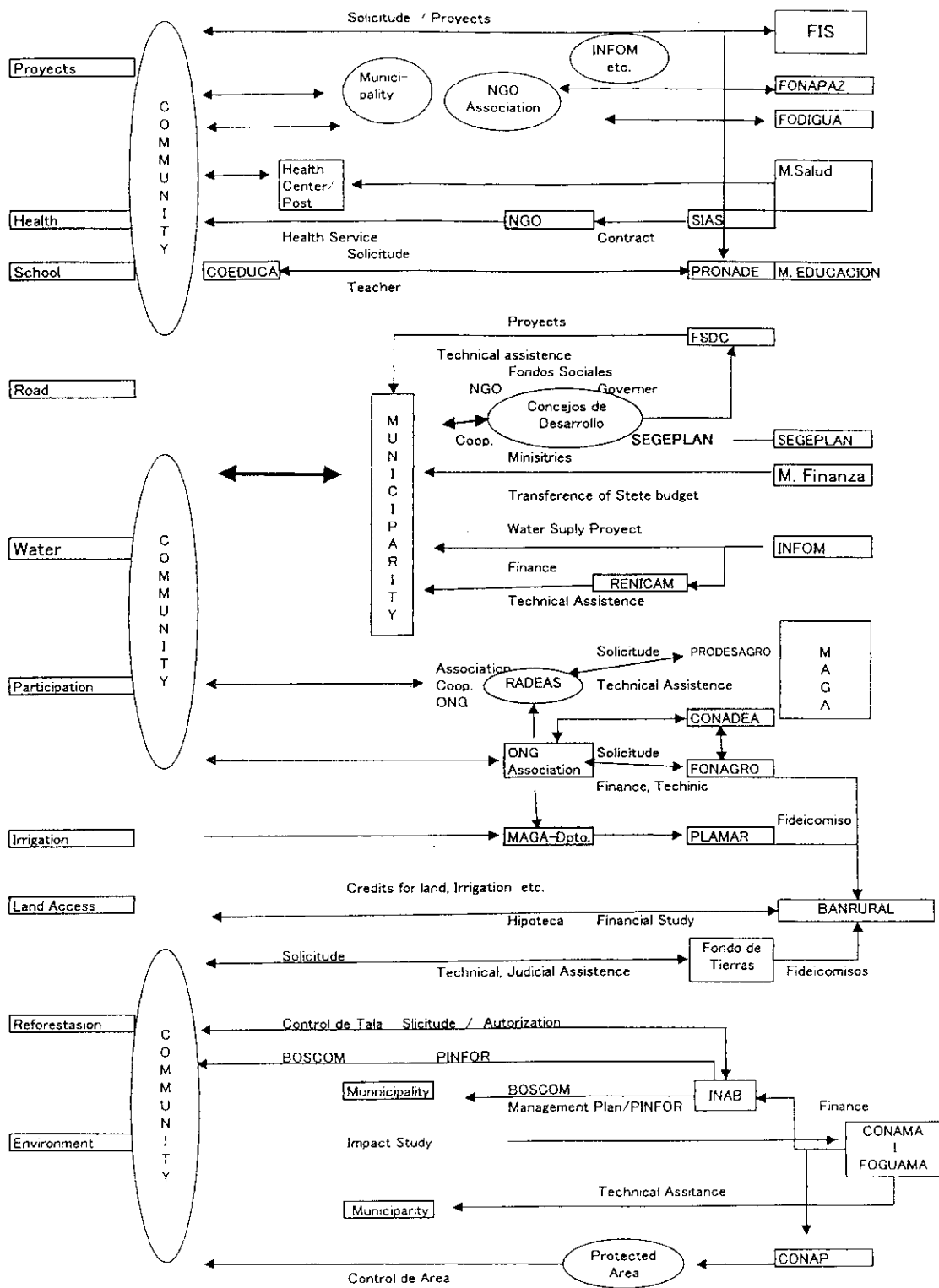


FIGURES

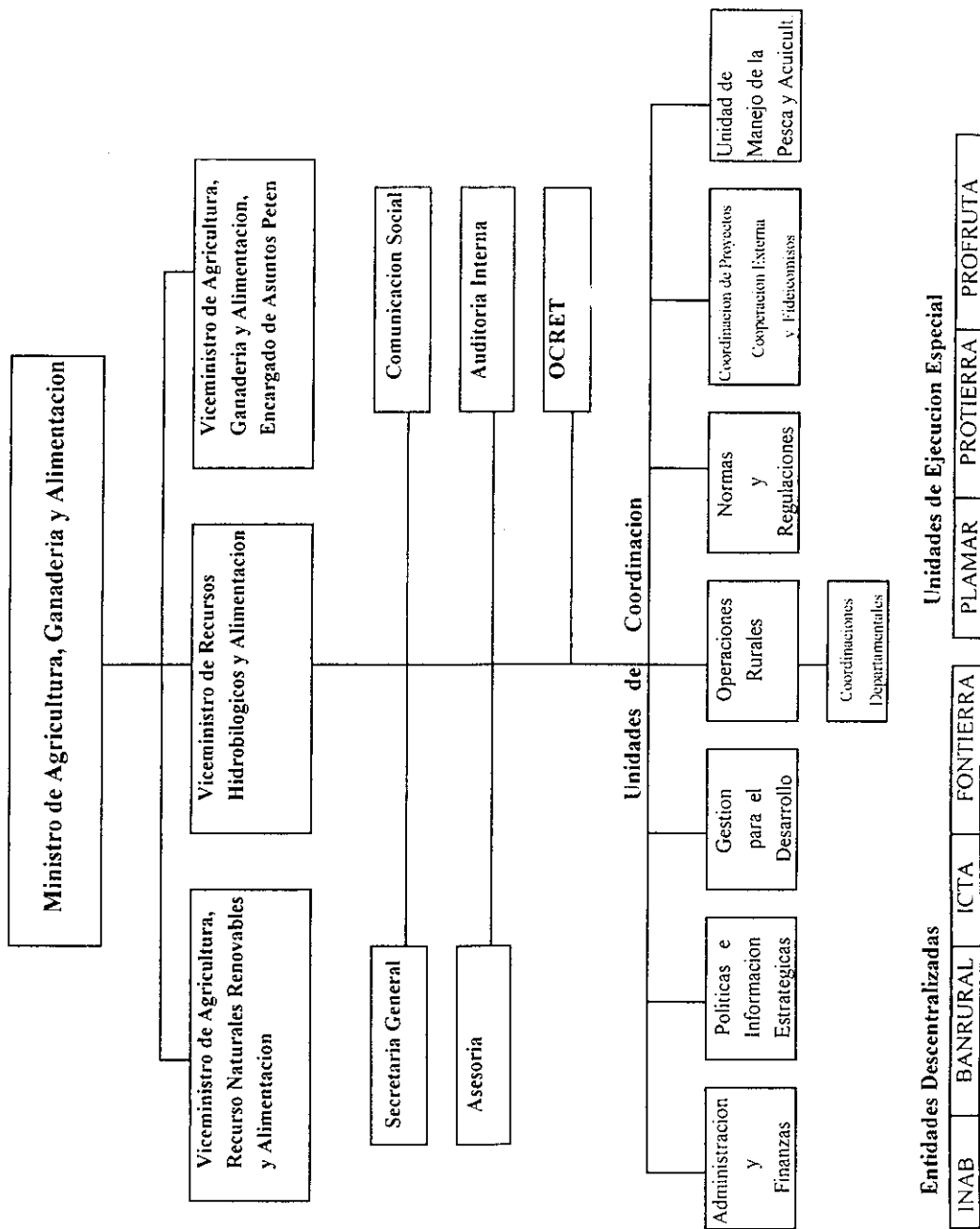


THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

Japan International Cooperation Agency (JICA)

Figure. 3.13(1)

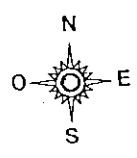
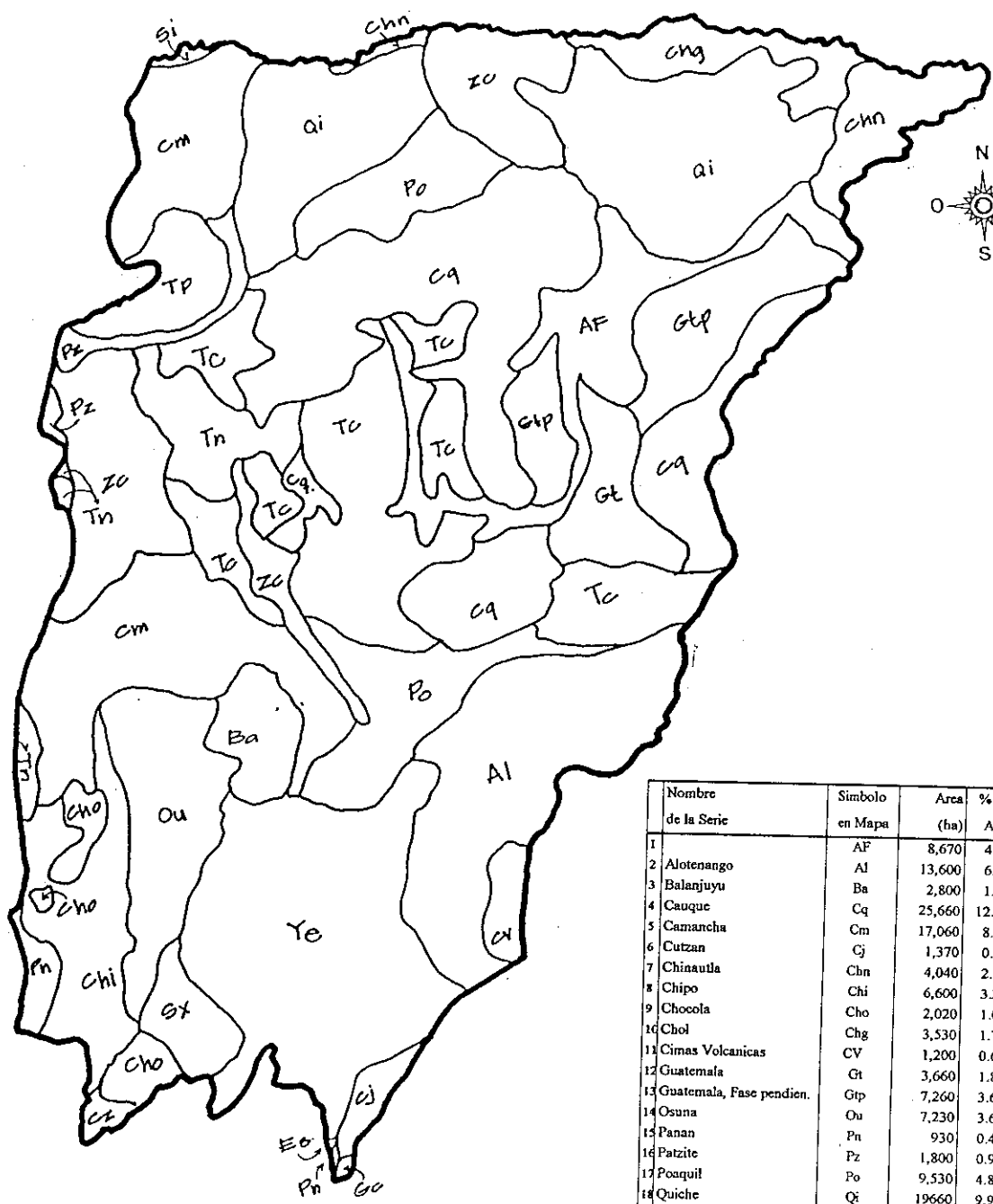
Organizations for Rural Development



THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

Japan International Cooperation Agency (JICA)

Figure. 3.1.3(2)
Organization Chart of Ministry of Agriculture, Livestock and Food

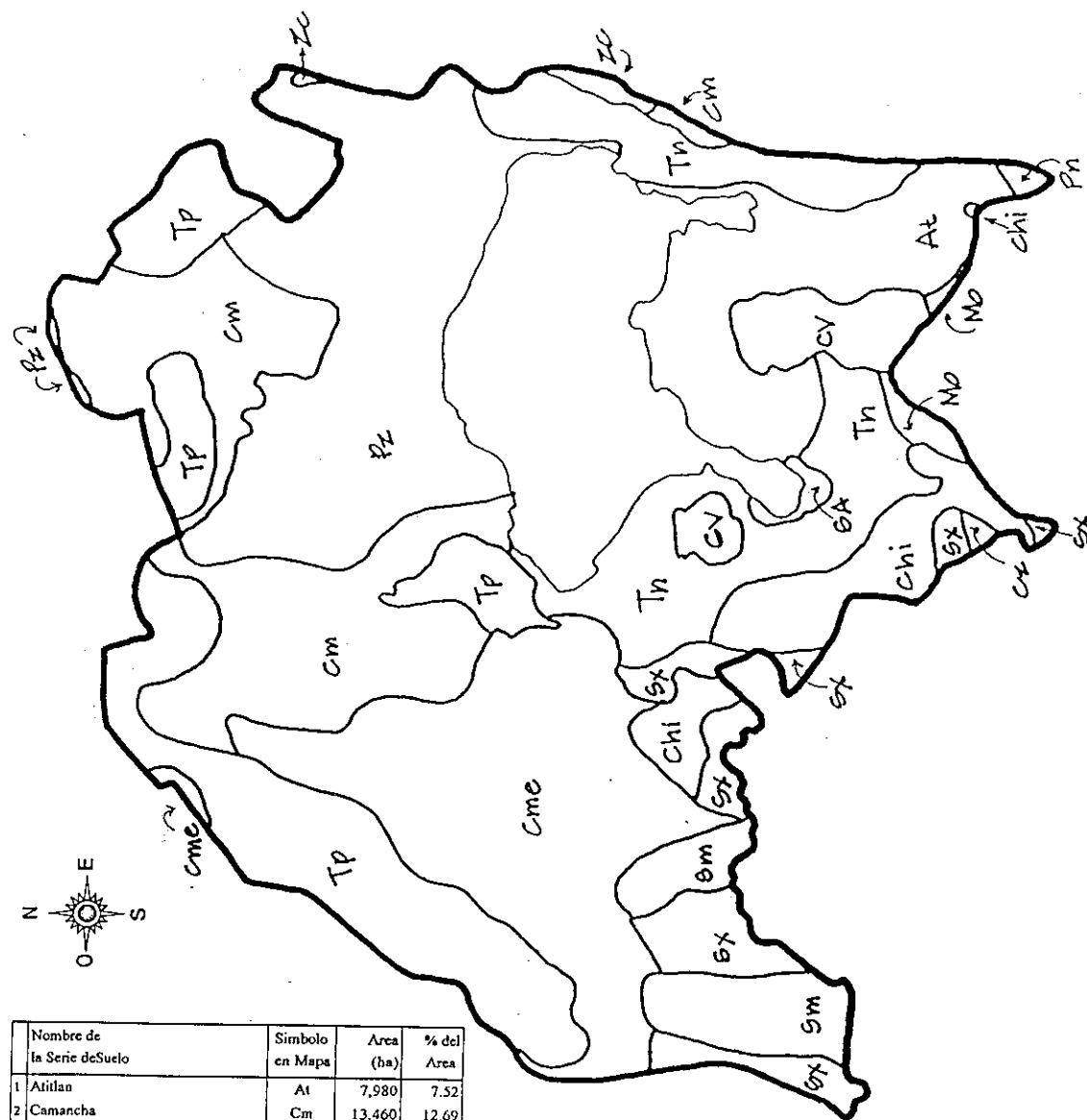


Nombre de la Serie	Simbolo en Mapa	Area (ha)	% del Area
1	AF	8,670	4.38
2 Alotenango	Al	13,600	6.87
3 Balanjuyu	Ba	2,800	1.41
4 Cauque	Cq	25,660	12.97
5 Camancha	Cm	17,060	8.62
6 Cutzan	Cj	1,370	0.69
7 Chinaulla	Chn	4,040	2.04
8 Chipo	Chi	6,600	3.34
9 Chocola	Cho	2,020	1.02
10 Chol	Chg	3,530	1.78
11 Cimas Volcanicas	CV	1,200	0.61
12 Guatemala	Gt	3,660	1.85
13 Guatemala, Fase pendien.	Gtp	7,260	3.67
14 Osuna	Ou	7,230	3.65
15 Panan	Pn	930	0.47
16 Patzite	Pz	1,800	0.91
17 Poaquil	Po	9,530	4.82
18 Quiche	Qi	19,660	9.93
19 Salama	Sl	180	0.09
20 Suchitepequez	Sx	2,270	1.15
21 Tecpan	Tc	19,400	9.80
22 Toliman	Tn	4,970	2.51
23 Totonicapan	Tp	3,070	1.55
24 Yepocapa	Ye	18,530	9.36
25 Zacualpa	Zc	12,860	6.50
Total		197,900	100

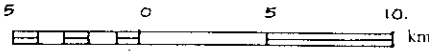
THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

Japan International Cooperation Agency (JICA)

Figure 3.1.4 (1)
Soil Map of Chimaltenango Province



Nombre de la Serie de Suelo	Símbolo en Mapa	Área (ha)	% del Área
1 Atitlan	At	7,980	7.52
2 Camancha	Cm	13,460	12.69
3 Camancha, Quebrada erosionado	Cme	15,110	14.24
4 Chipo	Chi	4,390	4.14
5 Cimas Volcanicas	CV	2,740	2.58
6 Moca	Mo	790	0.74
7 Panan	Pn	190	0.18
8 Patzite	Pz	15,510	14.62
9 Suelo Aluvial no diferenciado	SA	380	0.36
10 Suchitepequez	Sx	4,940	4.66
11 Samayac	Sm	3,610	3.40
12 Toliman	Tn	10,340	9.75
13 Totonicapan	Tp	13,700	12.91
14 Zacualpa	Ze	460	0.43
Lago Atitlan		12,500	11.78
Total		106,100	100

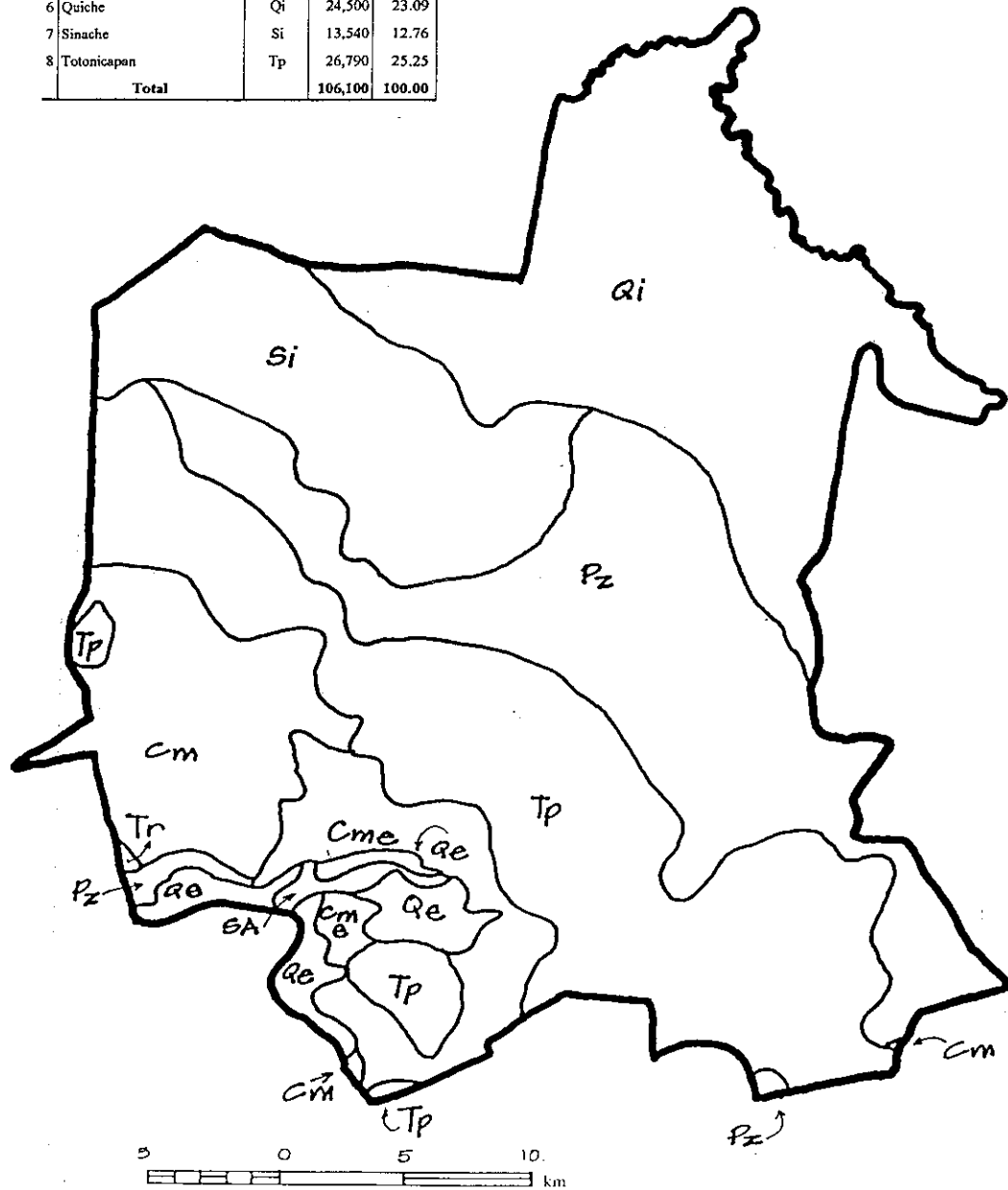
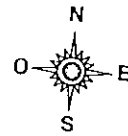


THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

Figure 3.1.4 (2)
Soil Map of Sololá Province

Japan International Cooperation Agency (JICA)

Nombre de Serie de Suel	Símbolo en Mapa	Area (ha)	% Area
1 Camancha	Cm	9,520	8.97
2 Camancha, Fase quebrada	Cme	6,585	6.21
3 Suelo Aluvial no diferenciado	SA	580	0.55
4 Quetzaltenango	Qe	3,085	2.91
5 Patzite	Pz	21,500	20.26
6 Quiche	Qi	24,500	23.09
7 Sinache	Si	13,540	12.76
8 Totonicapán	Tp	26,790	25.25
Total		106,100	100.00

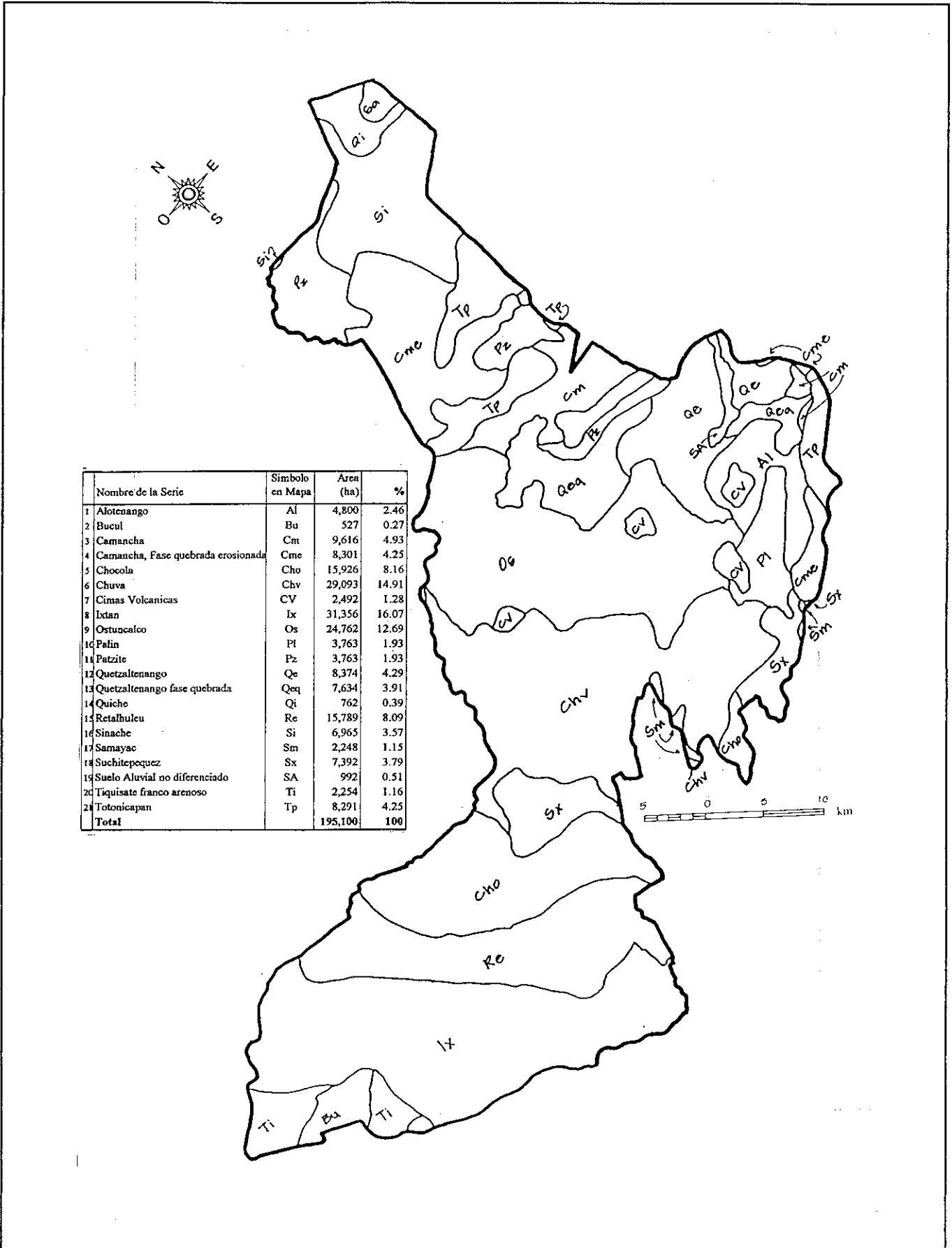


THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

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Figure 3.1.4 (3)

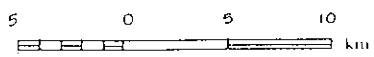
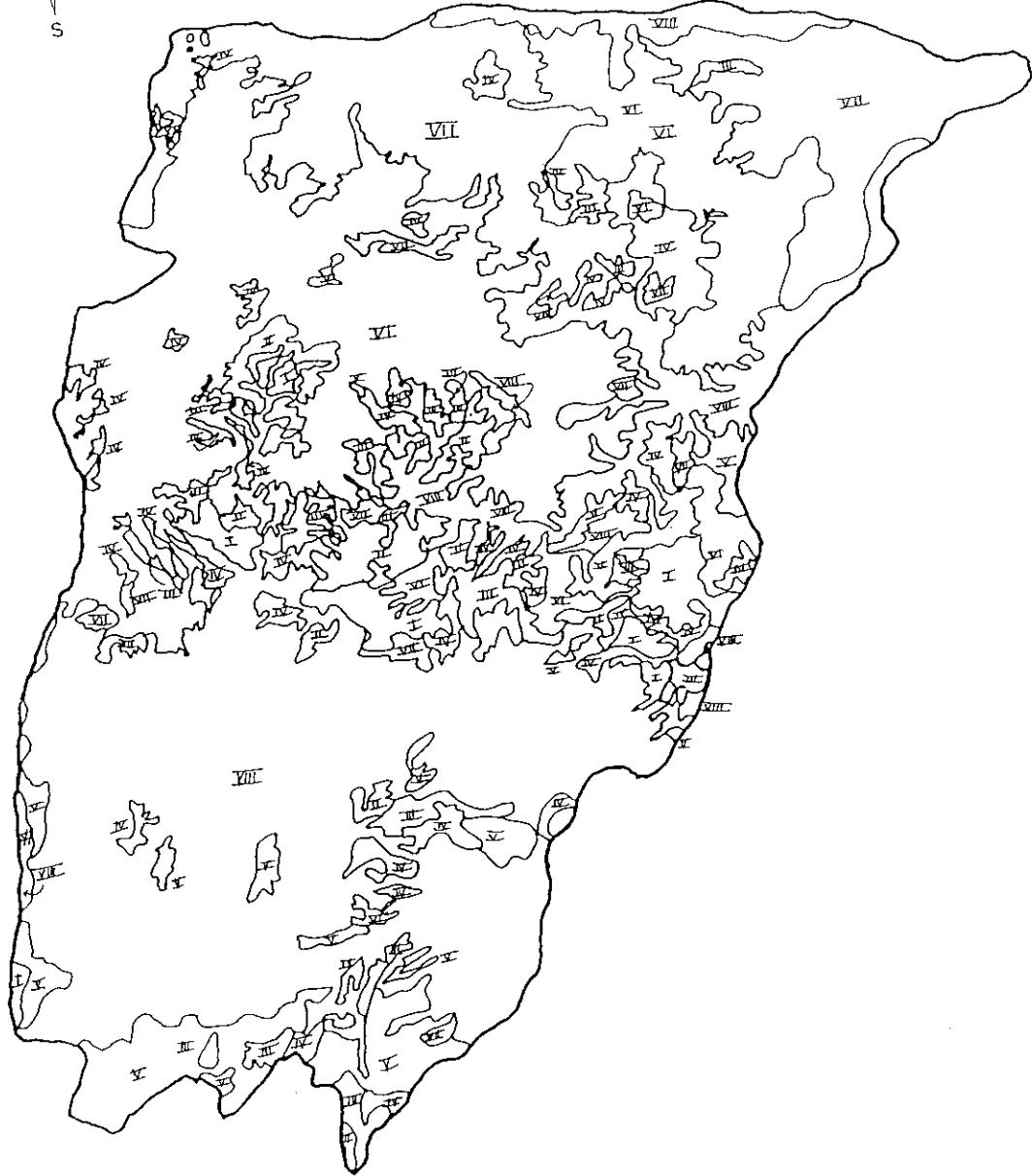
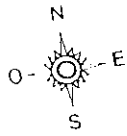
Soil Map of Totonicapán Province



THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

Figure 3.1.4 (4)
Soil Map of Quetzaltenango Province

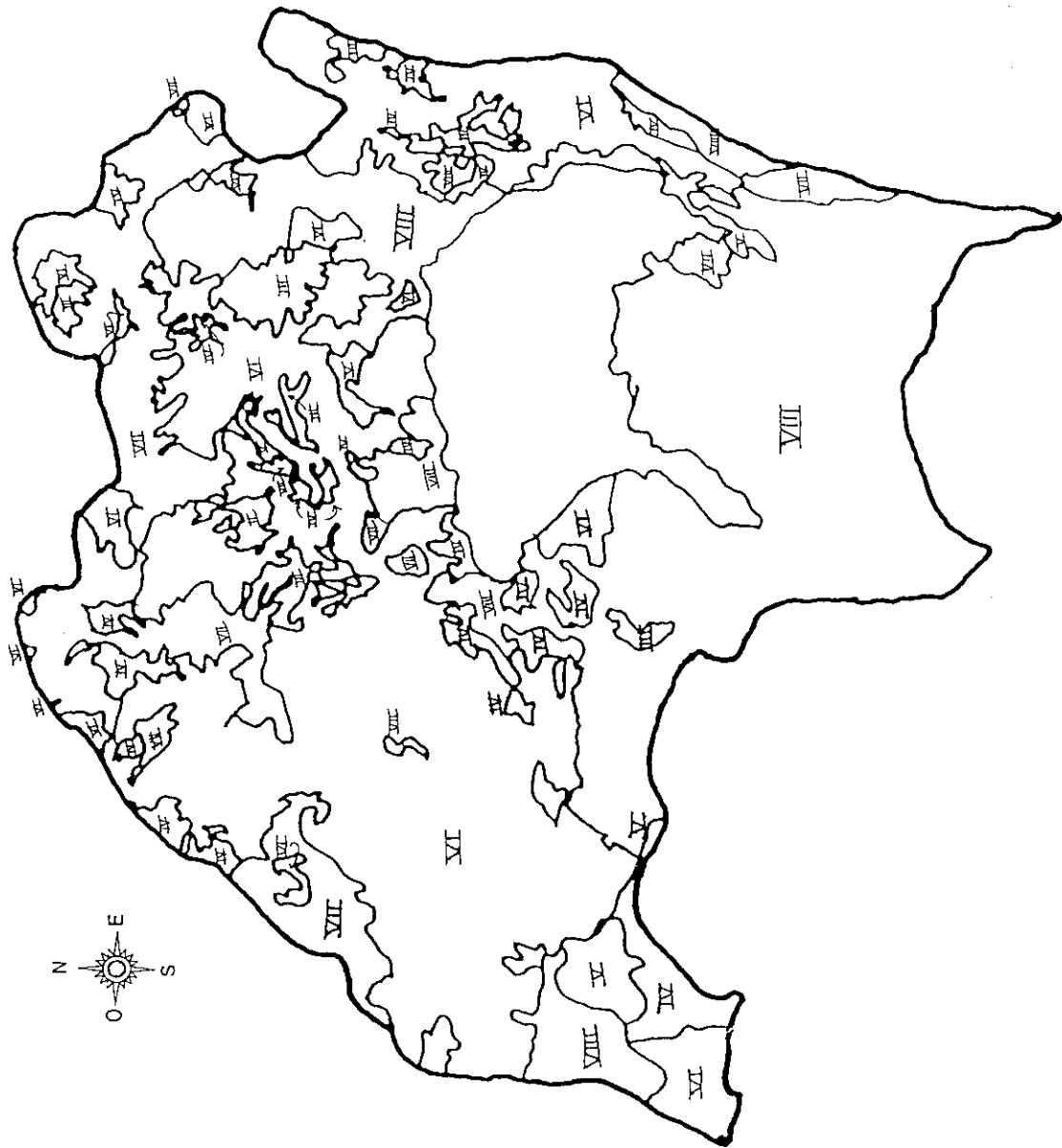
Japan International Cooperation Agency (JICA)



THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

Japan International Cooperation Agency (JICA)

Figure 3.1.4 (5)
Land Capability Map of
Chimaltenango Province

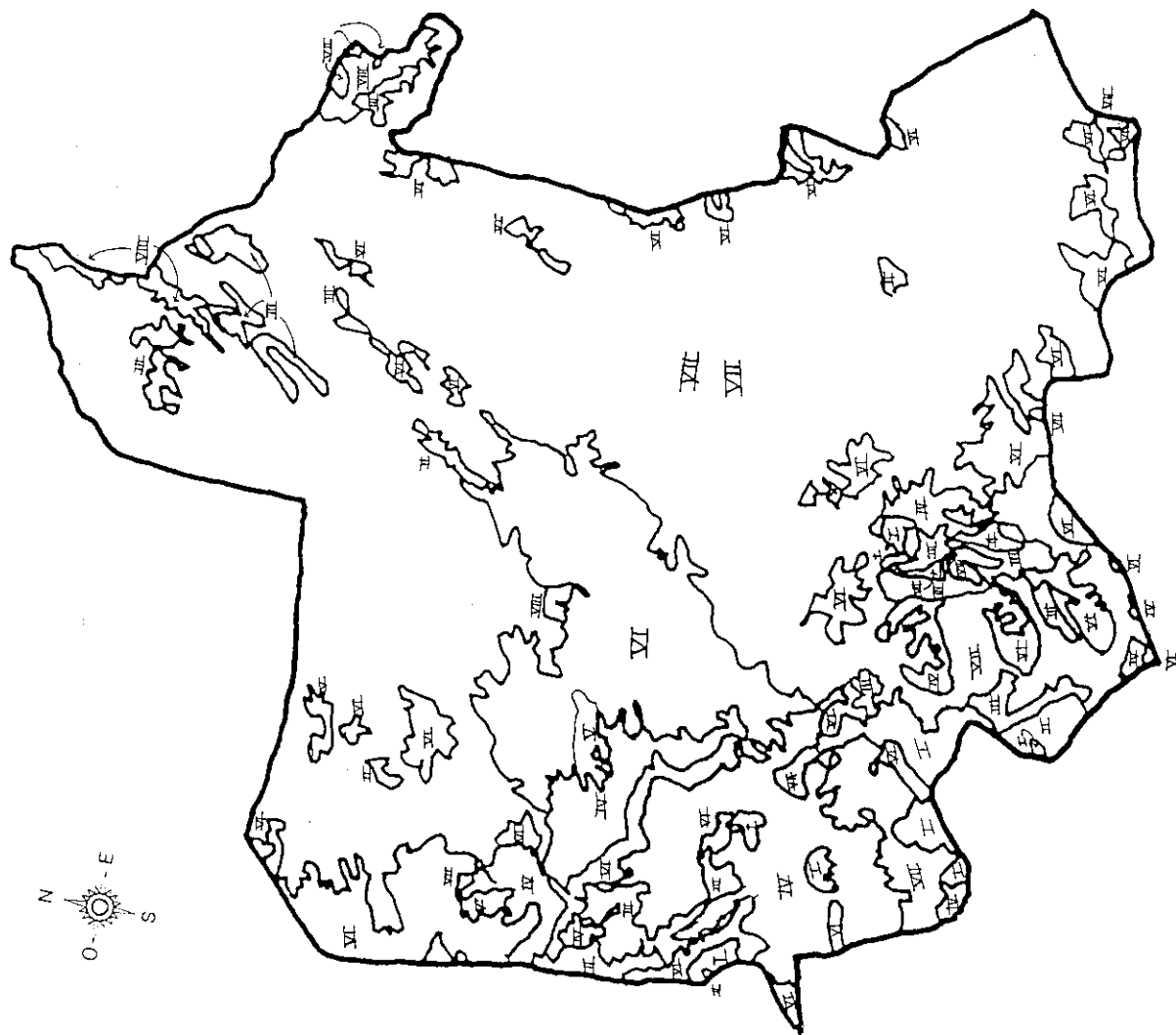


THE MASTER PLAN STUDY ON SUSTAINABLE RURAL
 DEVELOPMENT FOR THE REDUCTION OF POVERTY
 IN THE CENTRAL HIGHLAND REGION
 OF THE REPUBLIC OF GUATEMALA

Japan International Cooperation Agency (JICA)

Figure 3.1.4 (6)

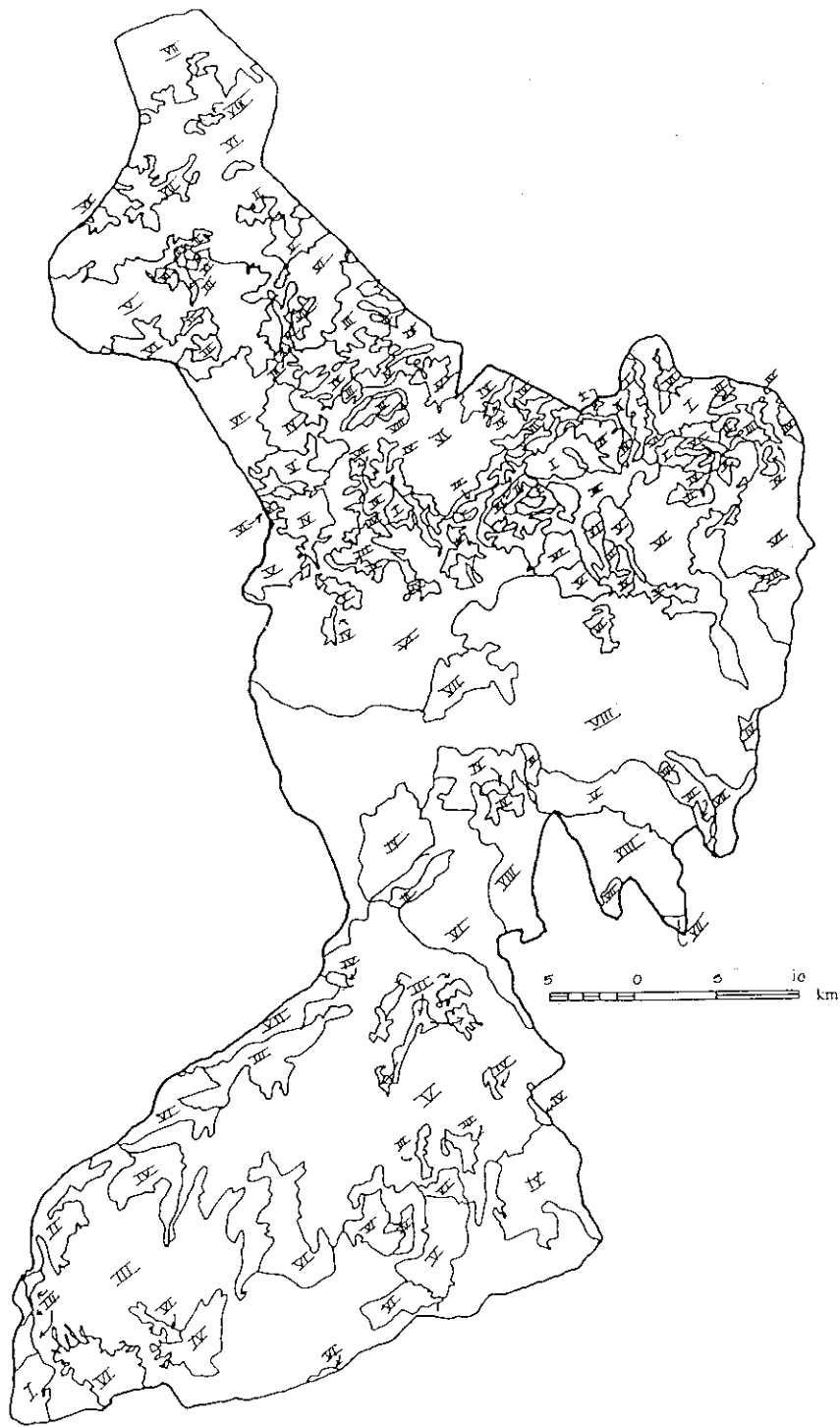
**Land Capability Map of Sololá
 Province**



THE MASTER PLAN STUDY ON SUSTAINABLE RURAL
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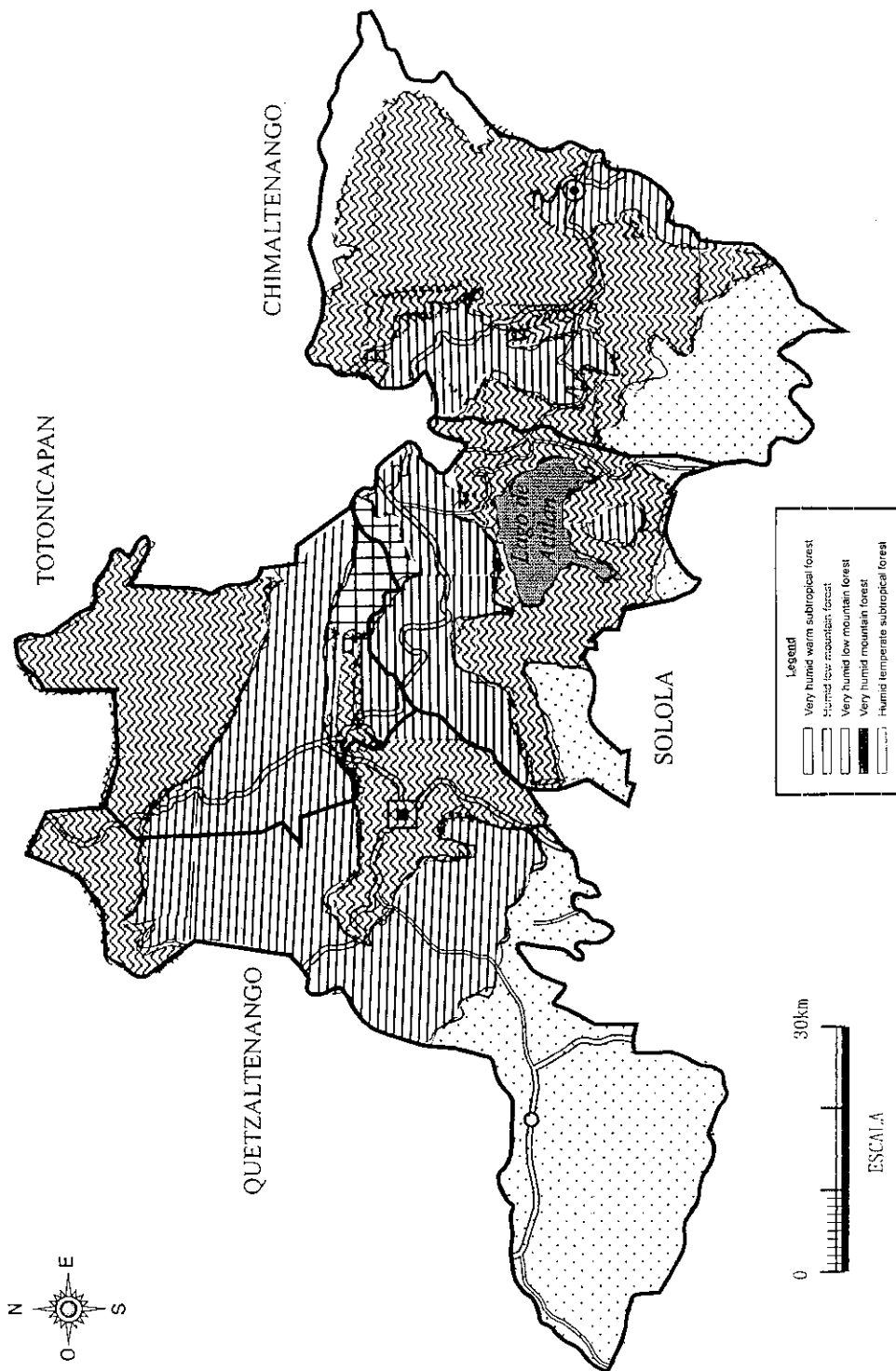
Figure 3.1.4 (7)
Land Capability Map of Totonicapán
Province



THE MASTER PLAN STUDY ON SUSTAINABLE RURAL
DEVELOPMENT FOR THE REDUCTION OF POVERTY
IN THE CENTRAL HIGHLAND REGION
OF THE REPUBLIC OF GUATEMALA

Japan International Cooperation Agency (JICA)

Figure 3.1.4 (8)
Land Capability Map of
Quetzaltenango Province



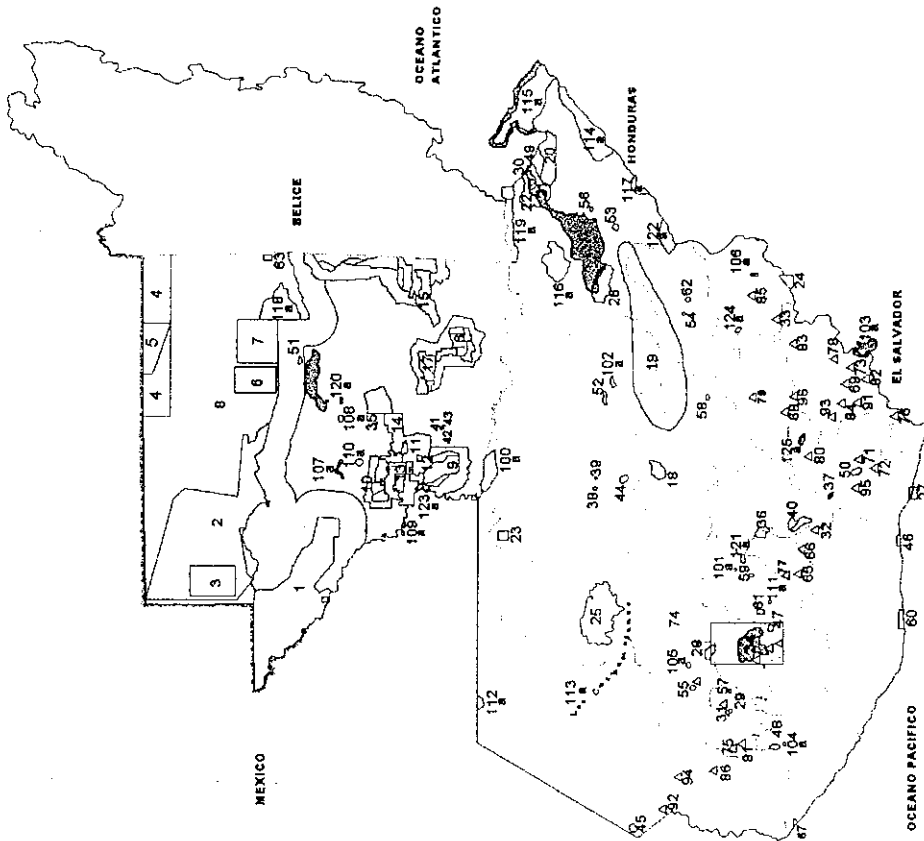
THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

Japan International Cooperation Agency (JICA)

Figure 3.1.4 (10)

Life Zone Distribution in the Study Area

SISTEMA GUATEMALTECO DE AREAS PROTEGIDAS



Según Decreto 4-89 y sus Reformas
Decretos 18-89, 110-96

CONSEJO NACIONAL DE AREAS PROTEGIDAS

PLANEAMIENTO, ESTUDIOS Y PROYECTOS
SISTEMA DE INFORMACIÓN GEOGRÁFICA

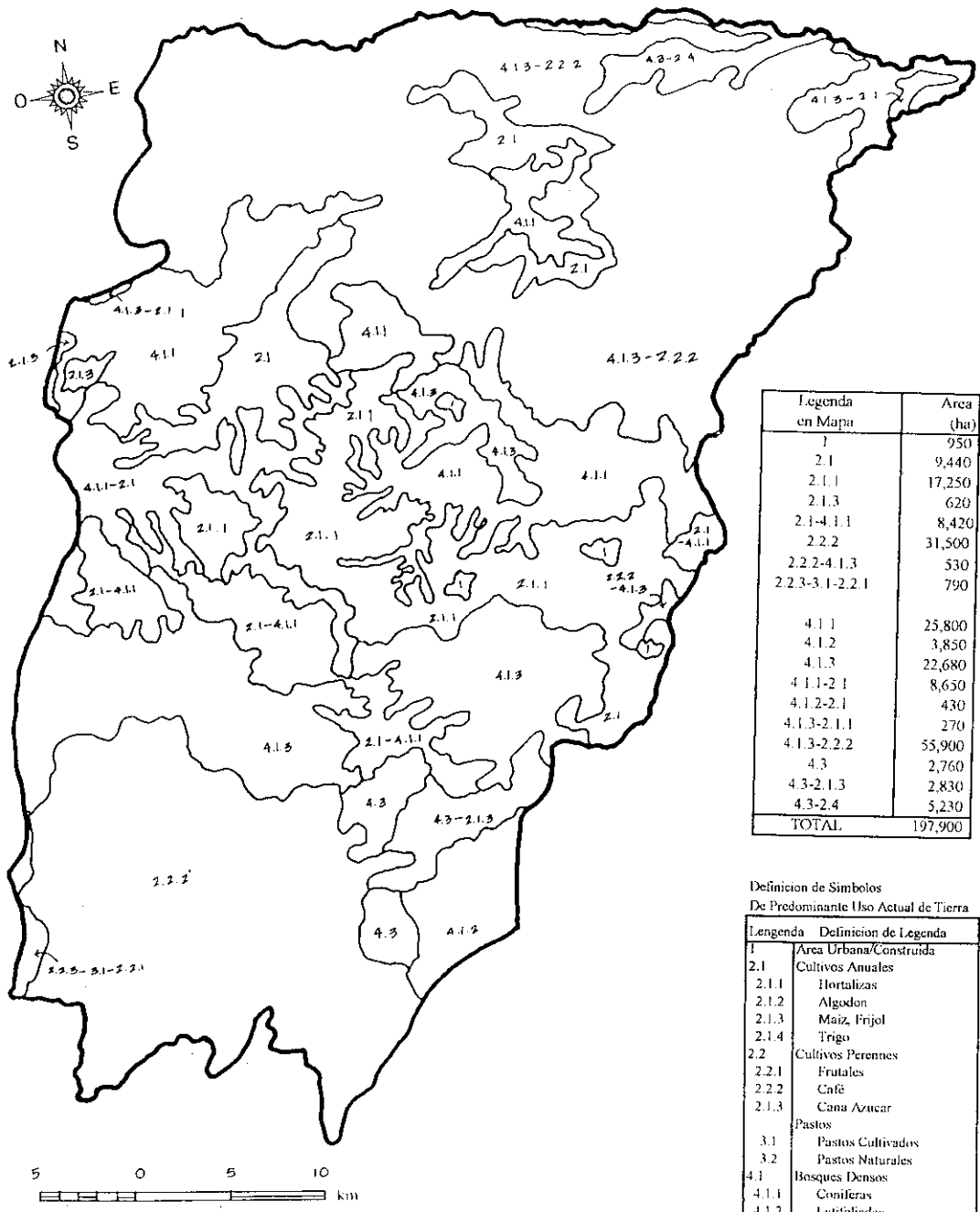


THE MASTER PLAN STUDY ON SUSTAINABLE RURAL
DEVELOPMENT FOR THE REDUCTION OF POVERTY
IN THE CENTRAL HIGHLAND REGION
OF THE REPUBLIC OF GUATEMALA

Japan International Cooperation Agency (JICA)

Figure 3.1.4 (11)

Protected Area System in Guatemala



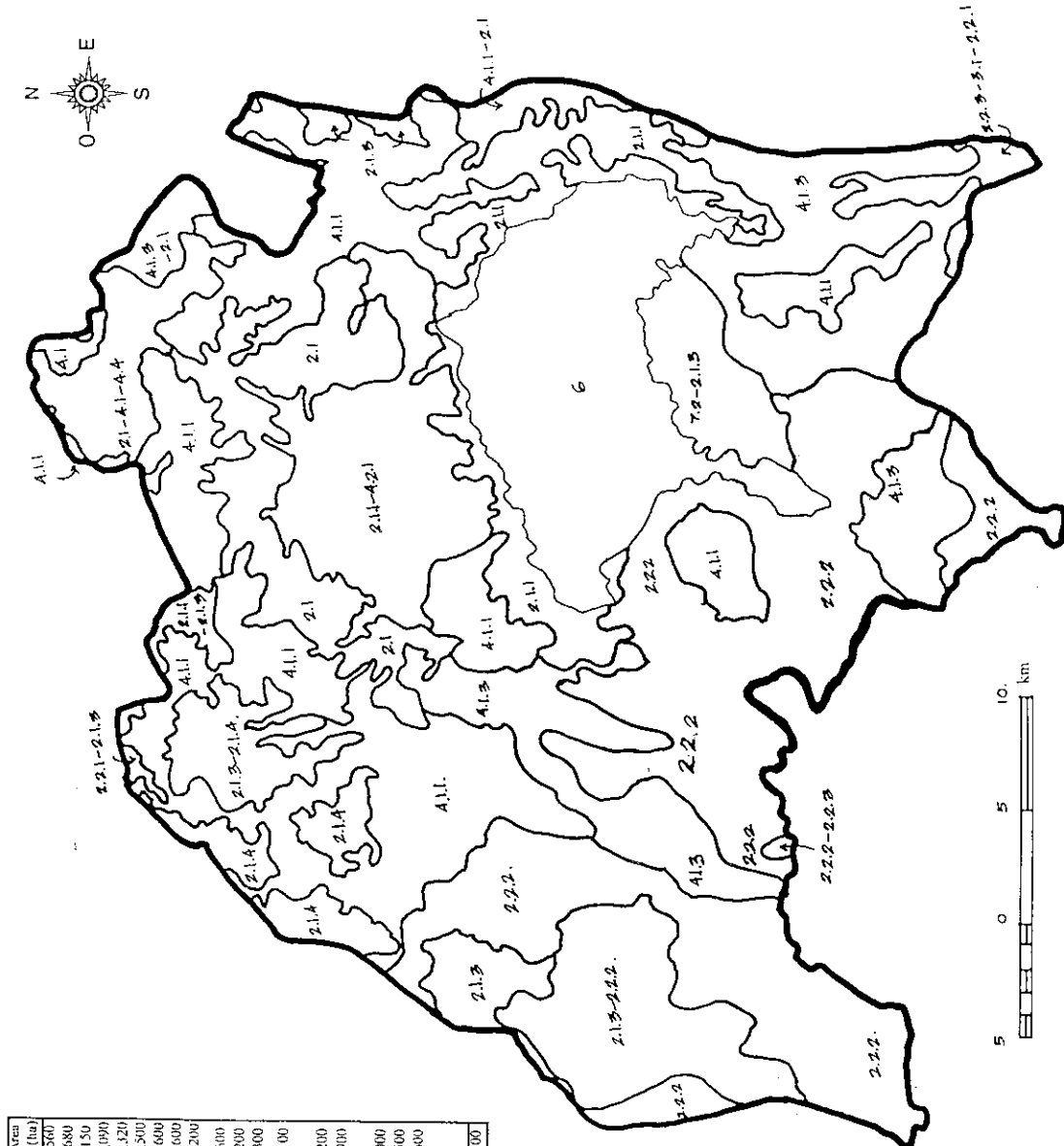
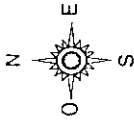
Definición de Símbolos
De Predominante Uso Actual de Tierra

Legenda	Definición de Legenda
1	Área Urbana/Construida
2.1	Cultivos Anuales
2.1.1	Hortalizas
2.1.2	Algodón
2.1.3	Maíz, Frijol
2.1.4	Trigo
2.2	Cultivos Perennes
2.2.1	Frutales
2.2.2	Café
2.1.3	Caña Azúcar
	Pastos
3.1	Pastos Cultivados
3.2	Pastos Naturales
4.1	Bosques Densos
4.1.1	Coníferas
4.1.2	Latifoliadas
4.1.3	Mixto
4.2	Bosques Dispersos
4.2.1	Coníferas
4.2.2	Latifoliadas
4.2.3	Mixto
4.3	Bosque Abierto

THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

Japan International Cooperation Agency (JICA)

Figure 3.2.2 (1)
Present Land Use Map of
Chimaltenango Province



Legenda en Mapa	Area (ha)
2.1.1	360
2.1.3	11,680
2.1.4	2,150
2.1.1-2.1	2,990
2.1.4-2.1	6,320
2.1.4-2.1.4	2,500
2.1.4-1.4	2,600
2.1.4-2.2	3,600
2.2.1-2.1.3	2,200
2.2.2	19,600
2.2.2-2.2.3	2,200
2.2.3-3.1-2.2.1	1,300
4.1.1	20,100
4.1.2	
4.1.3	12,200
4.1.1-2.1	900
4.1.2-2.1	
4.1.3-2.1.1	1,000
7.2-2.1.3	2,500
LAGO	12,600
4.3-2.1.3	
4.3-2.4	
TOTAL	106,100

Definición de Símbolos	De Predominante Uso Actual de Tierra
Legenda	Definición de Legenda
2.1	Area Urbana/Construida
2.1.1	Cultivos Anuales
2.1.2	Hortalizas
2.1.3	Algodon
2.1.4	Milaz, Frijol
2.2	Trigo
2.2.1	Cultivos Perennes
2.2.2	Frutales
2.2.3	Café
2.1.3	Cana Azucar
3.1	Pastos
3.2	Pastos Cultivados
4.1	Pastos Naturales
4.1.1	Bosques Densos
4.1.2	Coníferas
4.1.3	Lantfoliadas
4.2	MiSto
4.2.1	Bosques Dispersos
4.2.2	Coníferas
4.2.3	Lantfoliadas
4.3	MiSto
4.4	Bosque Abierto
7.2	Bosque Bajo Montano
	Lava o Reens

THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

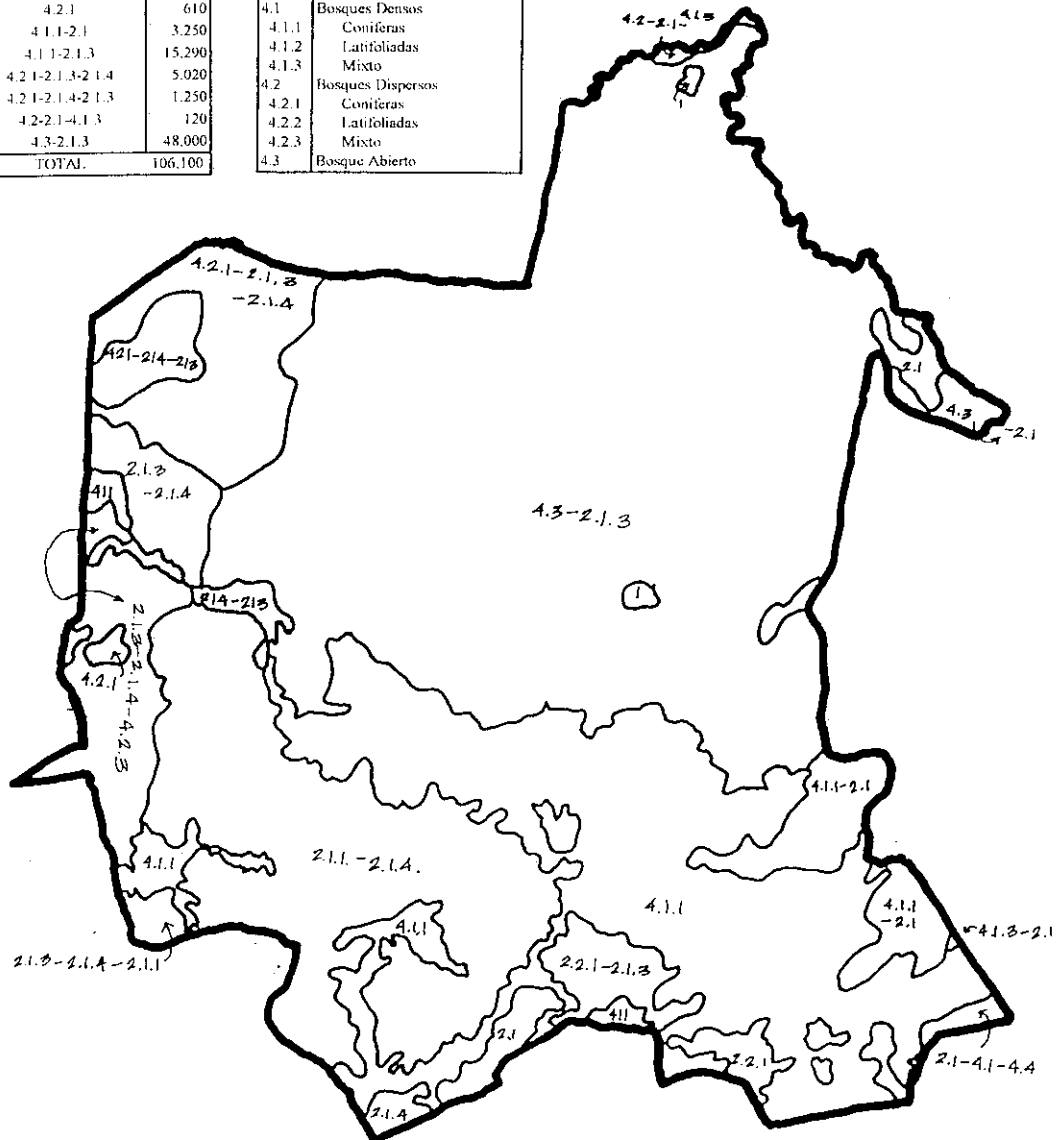
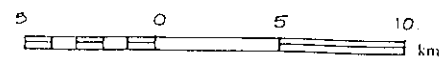
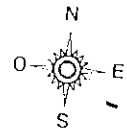
Japan International Cooperation Agency (JICA)

Figure 3.3.2 (1)
Present Land Use Map of Sololá Province

Legenda en Mapa	Area (ha)
1	680
2.1	1,460
2.1.1	600
2.2.1	690
2.1.4-2.1.3	930
2.1.3-2.1.4-2.1.1	440
2.1.3-2.1.4-2.2.3	5,000
2.1-4.1-4.4	470
2.2.1-2.1.3	1,130
2.2.2	0
4.1.1	21,160
4.2.1	610
4.1.1-2.1	3,250
4.1.1-2.1.3	15,290
4.2.1-2.1.3-2.1.4	5,020
4.2.1-2.1.4-2.1.3	1,250
4.2-2.1-4.1.3	120
4.3-2.1.3	48,000
TOTAL	106,100

Definición de Símbolos
De Predominante Uso Actual de Tierra

Legenda	Definición de Legenda
1	Area Urbana Construida
2.1	Cultivos Anuales
2.1.1	Hortalizas
2.1.2	Algodon
2.1.3	Maiz, Frijol
2.1.4	Trigo
2.2	Cultivos Perennes
2.2.1	Frutales
2.2.2	Café
2.1.3	Cana Azucar
	Pastos
3.1	Pastos Cultivados
3.2	Pastos Naturales
4.1	Bosques Densos
4.1.1	Coníferas
4.1.2	Latifoliadas
4.1.3	Mixto
4.2	Bosques Dispersos
4.2.1	Coníferas
4.2.2	Latifoliadas
4.2.3	Mixto
4.3	Bosque Abierto



THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

Japan International Cooperation Agency (JICA)

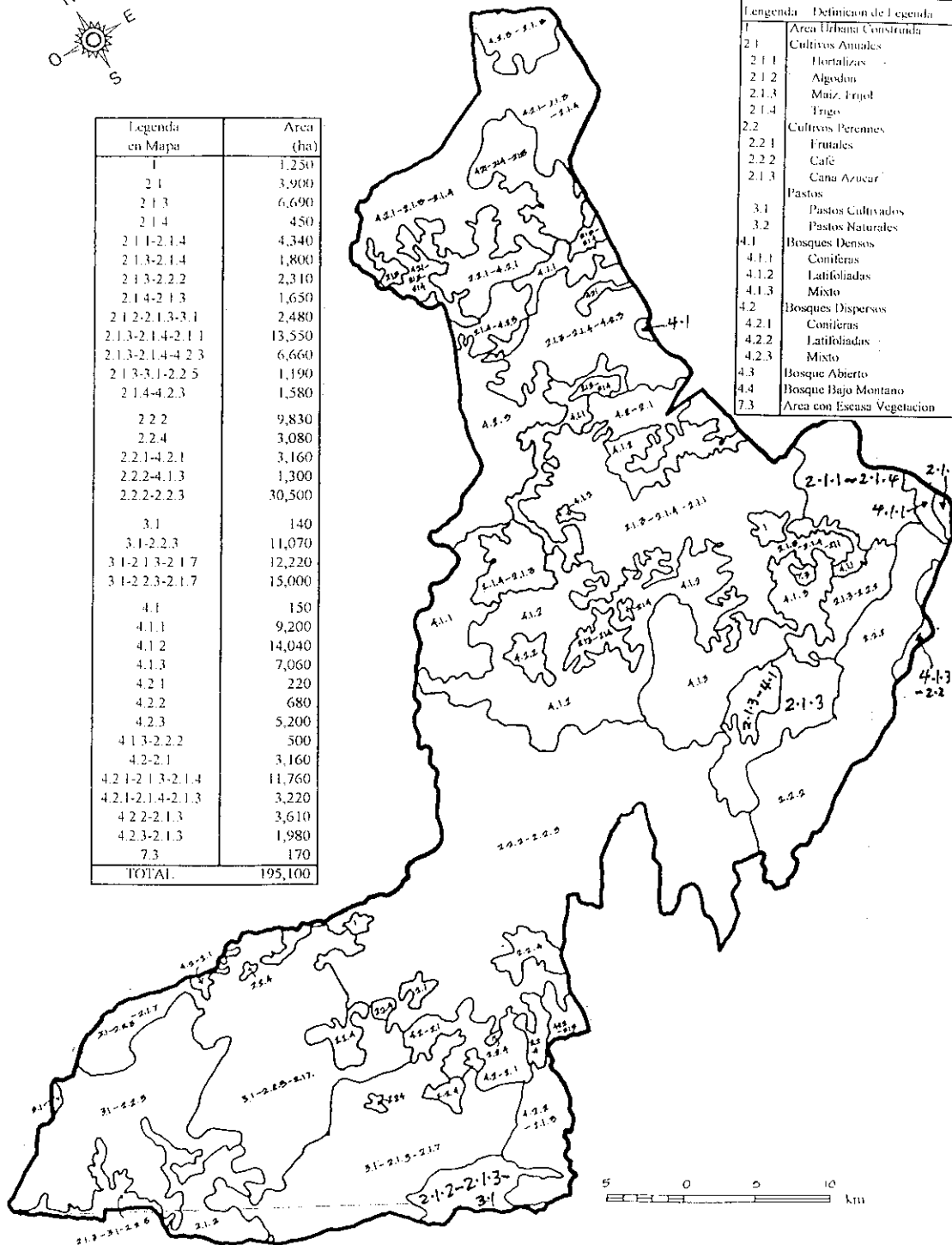
Figure 3.4.2 (1)
Present Land Use Map of Totonicapán Province



Legenda en Mapa	Area (ha)
1	1,250
2.1	3,900
2.1.3	6,690
2.1.4	450
2.1.1-2.1.4	4,340
2.1.3-2.1.4	1,800
2.1.3-2.2.2	2,310
2.1.4-2.1.3	1,650
2.1.2-2.1.3-3.1	2,480
2.1.3-2.1.4-2.1.1	13,550
2.1.3-2.1.4-4.2.3	6,660
2.1.3-3.1-2.2.5	1,190
2.1.4-4.2.3	1,580
2.2.2	9,830
2.2.4	3,080
2.2.1-4.2.1	3,160
2.2.2-4.1.3	1,300
2.2.2-2.2.3	30,500
3.1	140
3.1-2.2.3	11,070
3.1-2.1.3-2.1.7	12,220
3.1-2.2.3-2.1.7	15,000
4.1	150
4.1.1	9,200
4.1.2	14,040
4.1.3	7,060
4.2.1	220
4.2.2	680
4.2.3	5,200
4.1.3-2.2.2	500
4.2-2.1	3,160
4.2.1-2.1.3-2.1.4	11,760
4.2.1-2.1.4-2.1.3	3,220
4.2.2-2.1.3	3,610
4.2.3-2.1.3	1,980
7.3	170
TOTAL	195,100

Definicion de Simbolos
De Predominante Uso Actual de Tierra

Legenda	Definicion de Legenda
1	Area Urbana Construida
2.1	Cultivos Anuales
2.1.1	Hortalizas
2.1.2	Algodon
2.1.3	Maiz, Frijol
2.1.4	Trigo
2.2	Cultivos Perennes
2.2.1	Frutales
2.2.2	Cafe
2.1.3	Cana Azucar
Pastos	
3.1	Pastos Cultivados
3.2	Pastos Naturales
4.1	Bosques Densos
4.1.1	Coniferas
4.1.2	Latifoliadas
4.1.3	Mixto
4.2	Bosques Dispersos
4.2.1	Coniferas
4.2.2	Latifoliadas
4.2.3	Mixto
4.3	Bosque Abierto
4.4	Bosque Bajo Montano
7.3	Area con Escasa Vegetacion

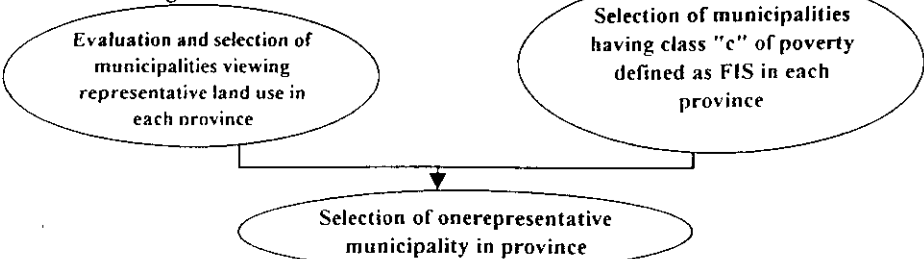


THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

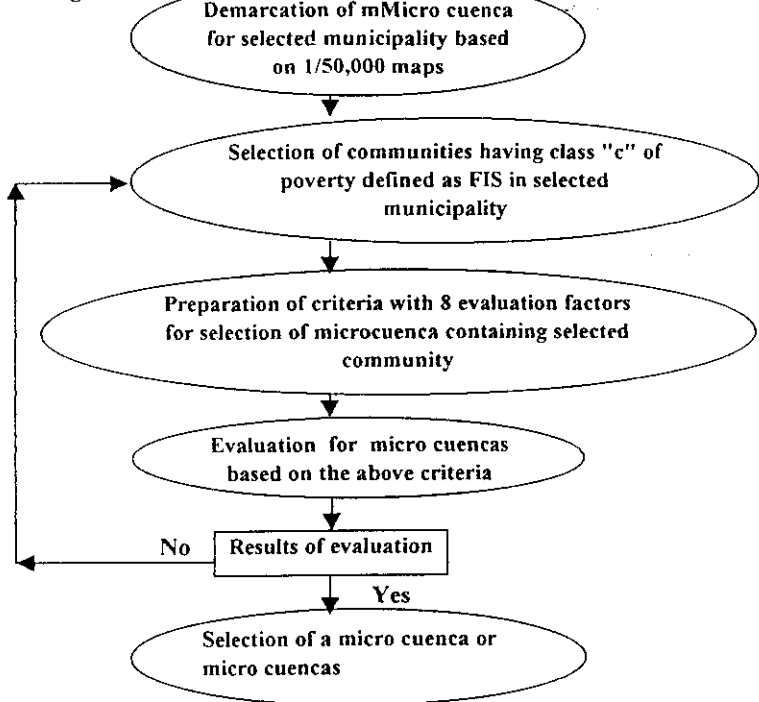
Japan International Cooperation Agency (JICA)

Figure 3.5.2 (1)
Present Land Use Map of Quetzaltenango Province

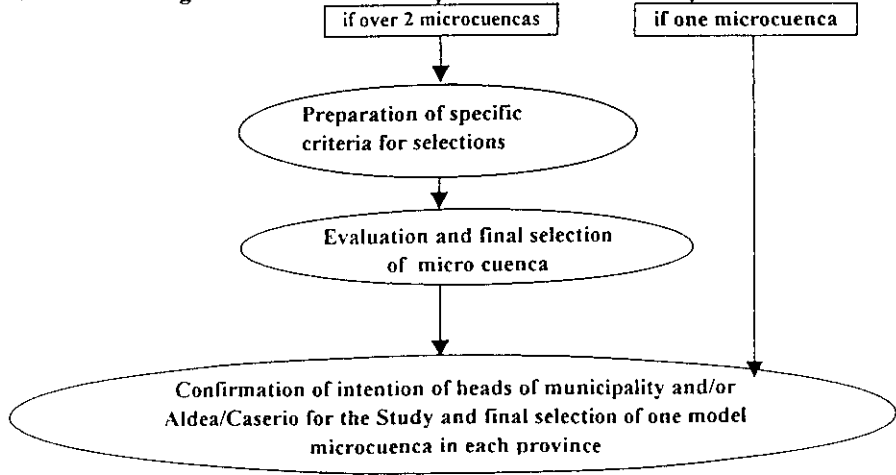
First Screening



Second Screening



Third Screening

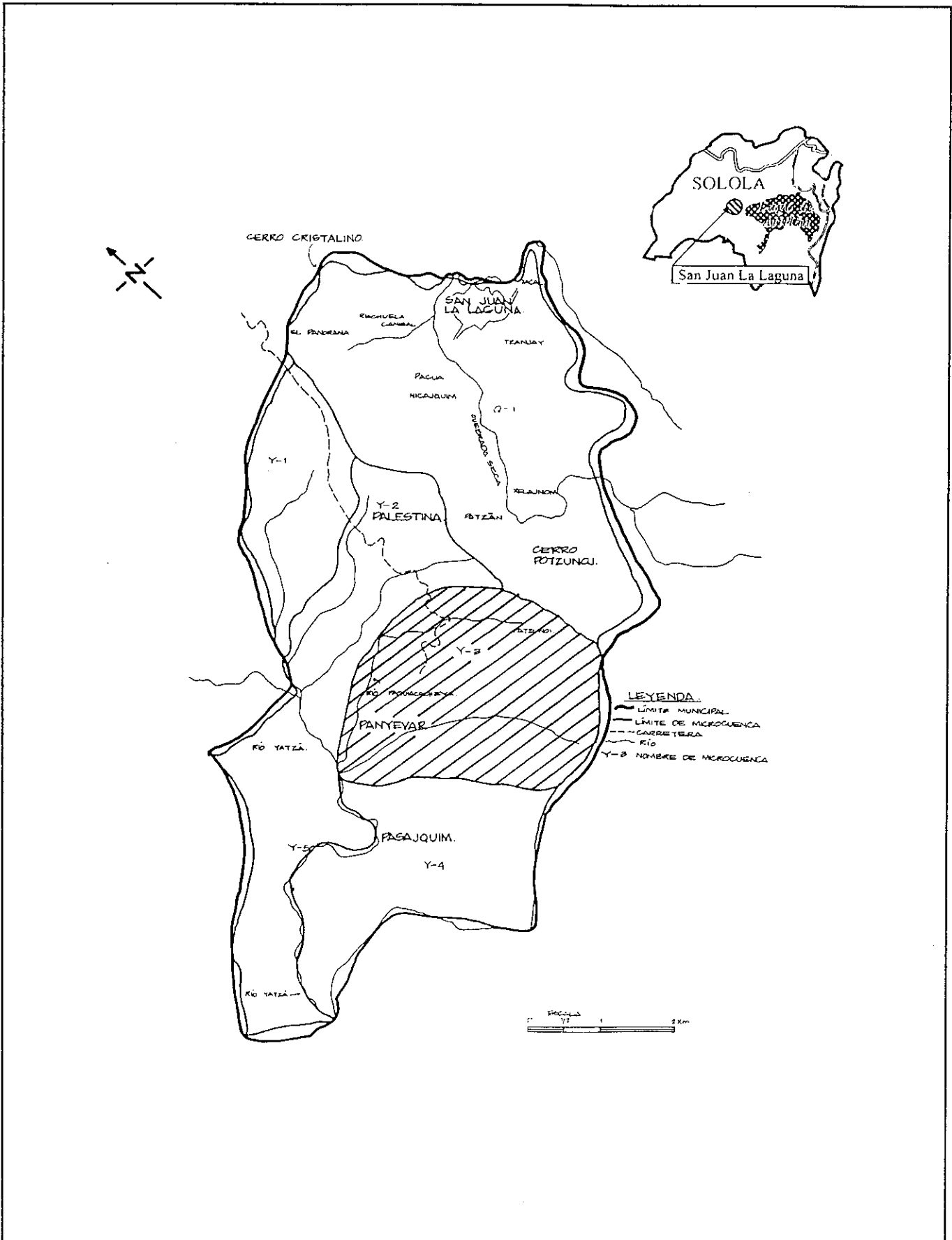


THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

Japan International Cooperation Agency (JICA)

Figure. 4.1.1(1)

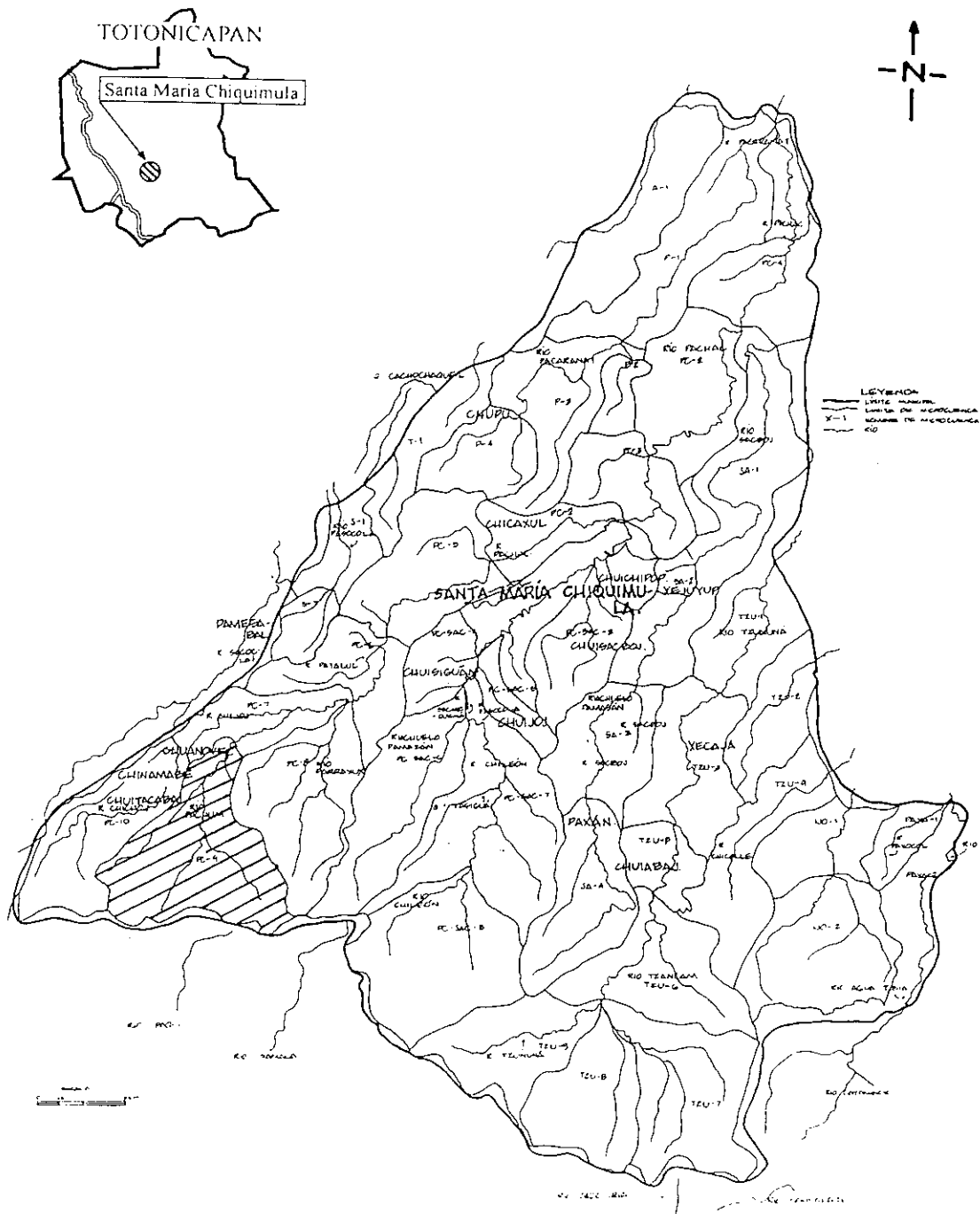
Flow of Selection of Model Micro-basin



THE MASTER PLAN STUDY ON SUSTAINABLE RURAL
DEVELOPMENT FOR THE REDUCTION OF POVERTY
IN THE CENTRAL HIGHLAND REGION
OF THE REPUBLIC OF GUATEMALA

Japan International Cooperation Agency (JICA)

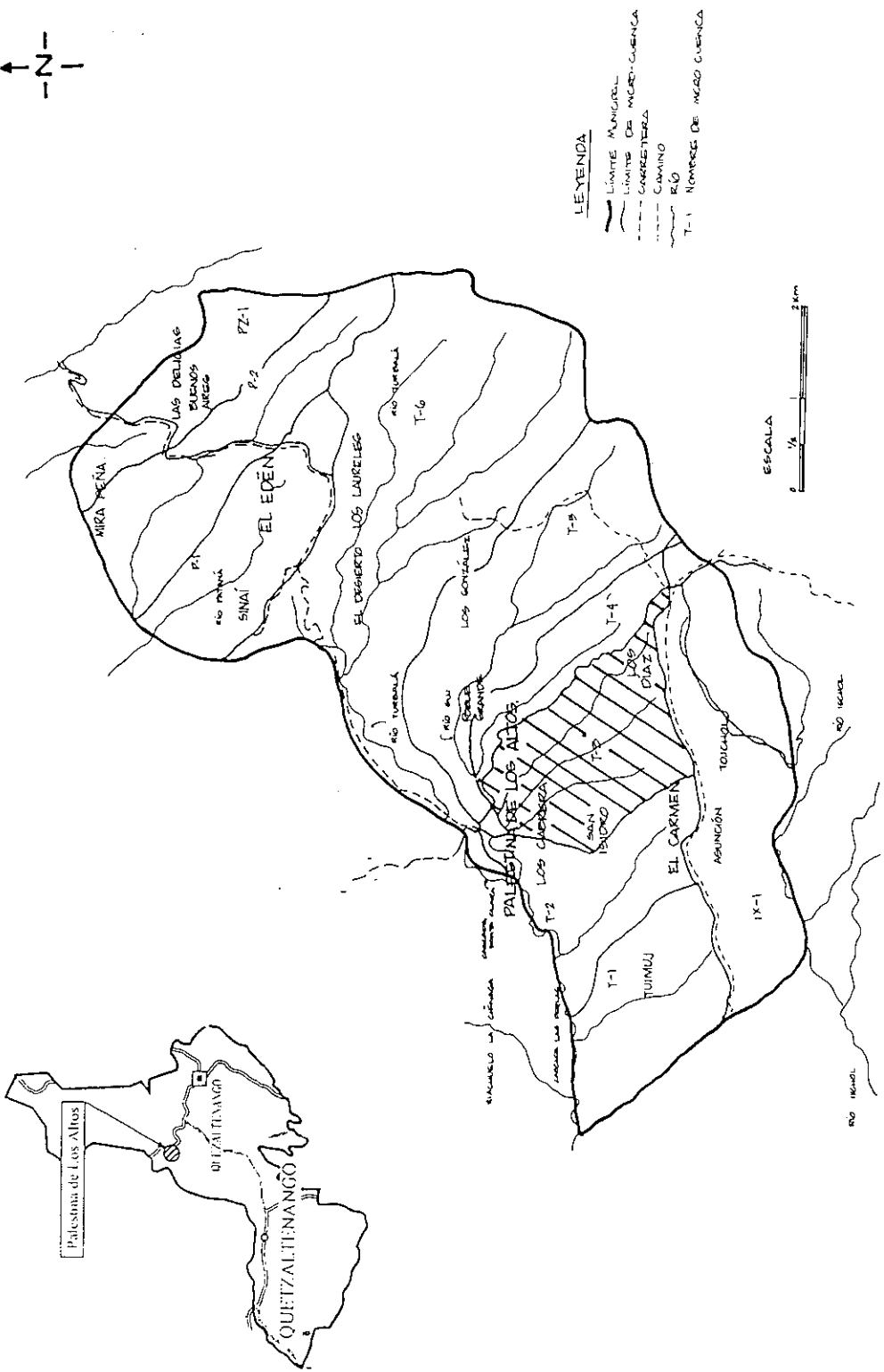
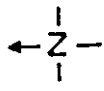
Figure. 4.2.2(1)
Micro-basin in San Juan La
Laguna



THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

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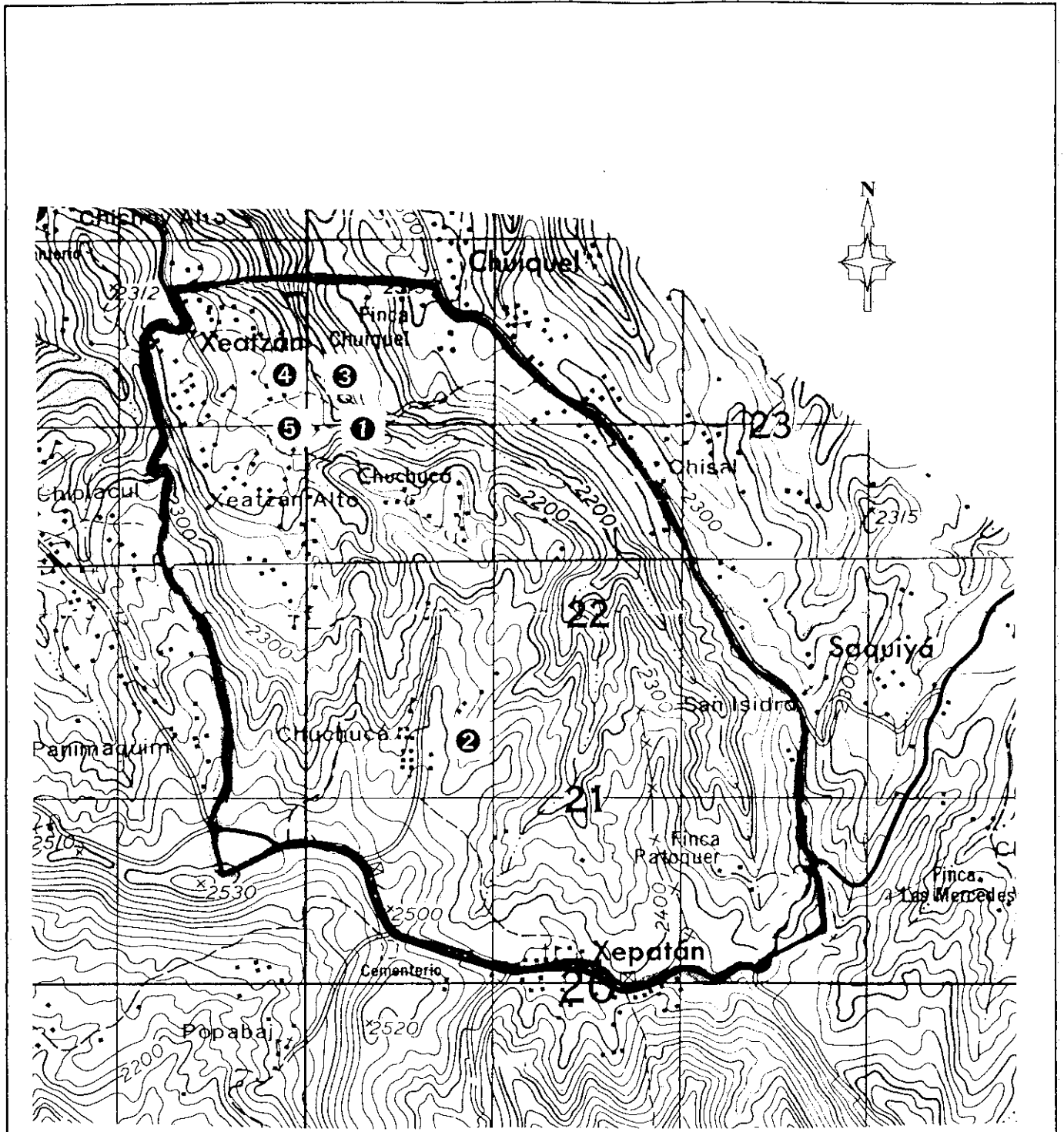
Figure. 4.2.3(1)
Micro-basin in Santa María Chiquimula



THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

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Figure. 4.2.4(1)
Micro-basin in Palestina de los Altos

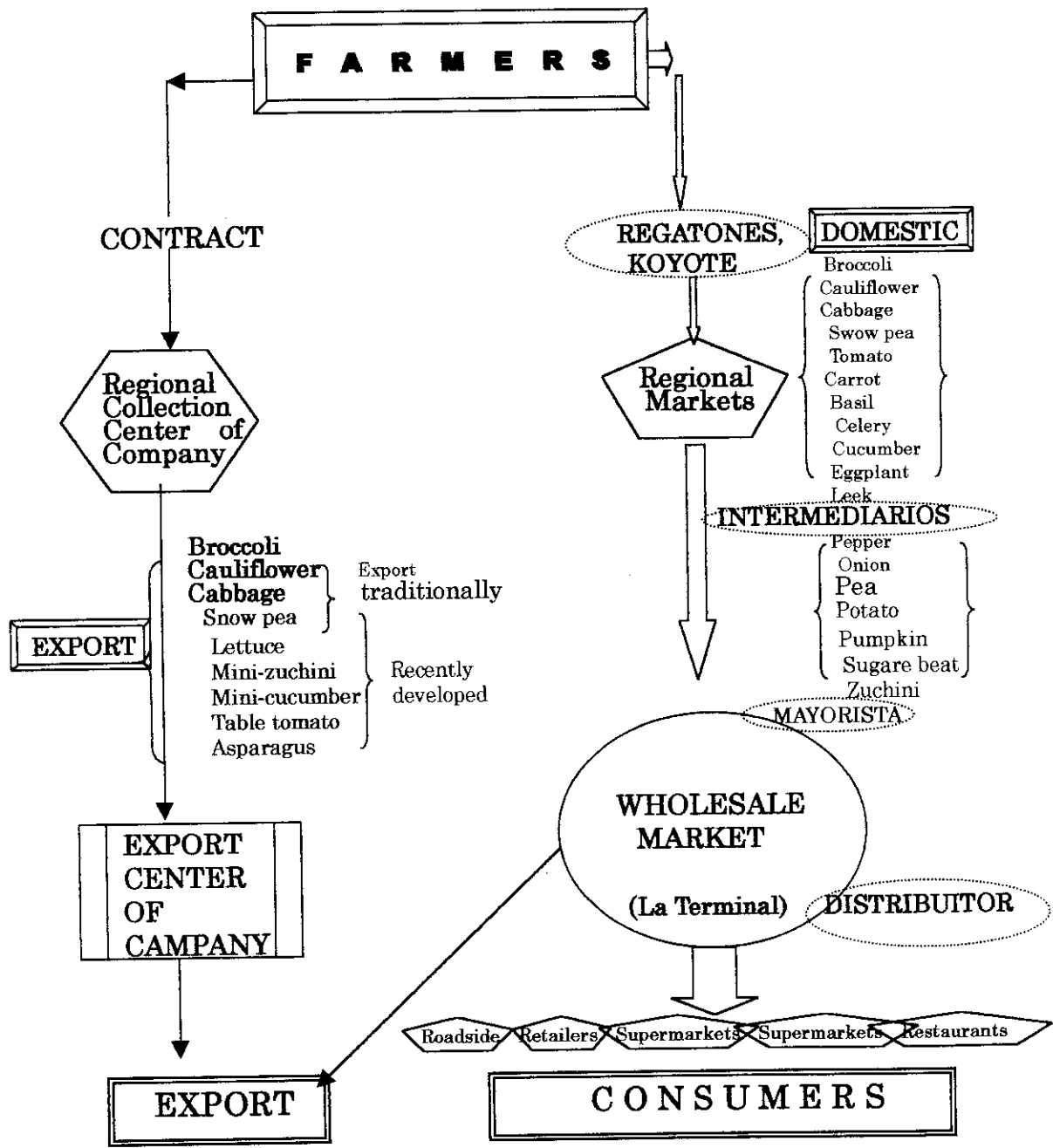


- Xetzan Bajo**
- | | |
|-----|-------------|
| No. | Spring |
| ① | Pachomochai |
| ② | Chuchuca |
| ③ | Chuacaaquix |
| ④ | Chitiyah |
| ⑤ | Pachor |

THE MASTER PLAN STUDY ON SUSTAINABLE RURAL DEVELOPMENT FOR THE REDUCTION OF POVERTY IN THE CENTRAL HIGHLAND REGION OF THE REPUBLIC OF GUATEMALA

Figure 5.1.1 (1)
Water Resources in Xetzan Bajo,
Chimaltenango

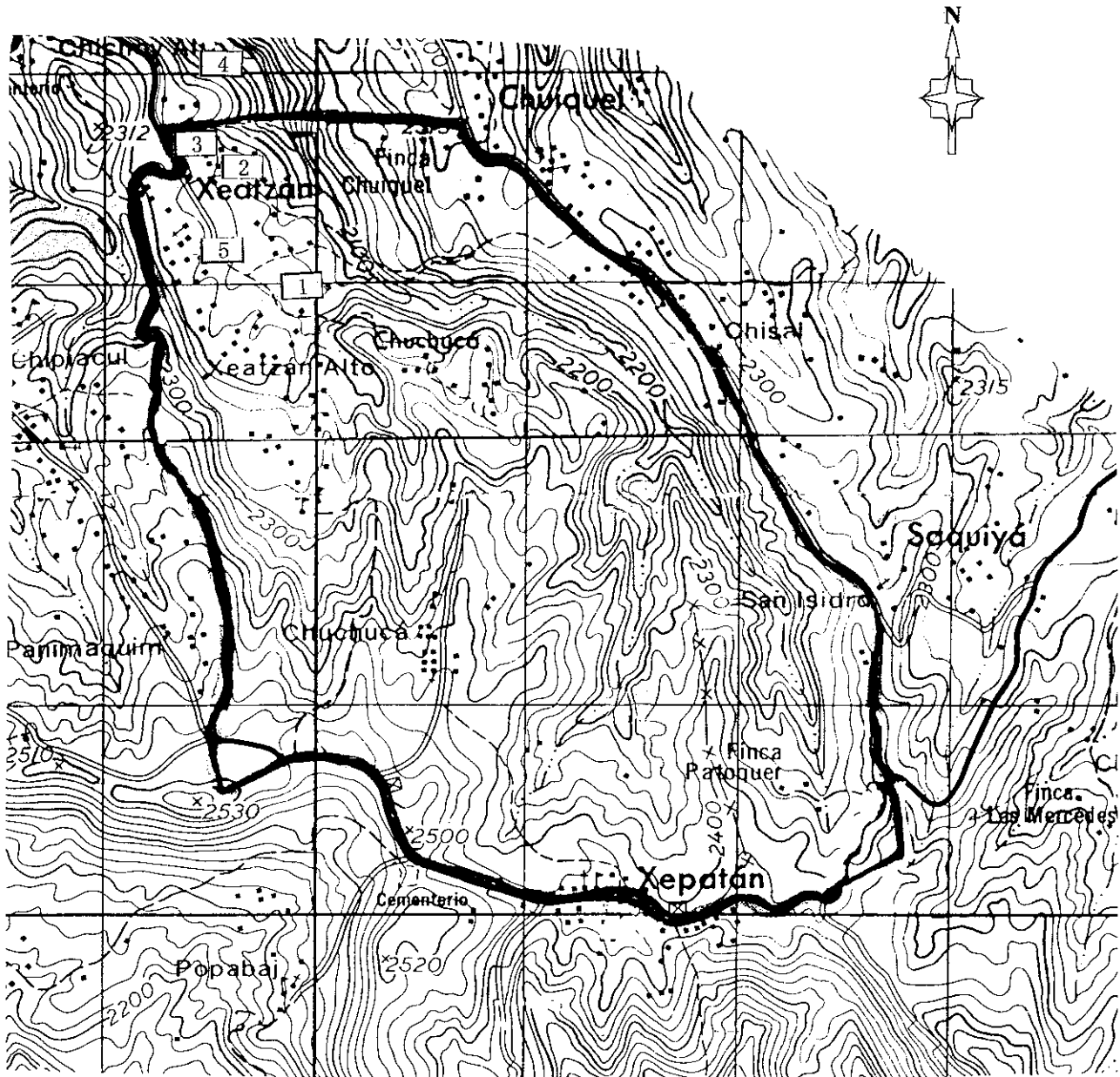
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Figure 5.1.3(1)
Marketing Flow of Vegetables

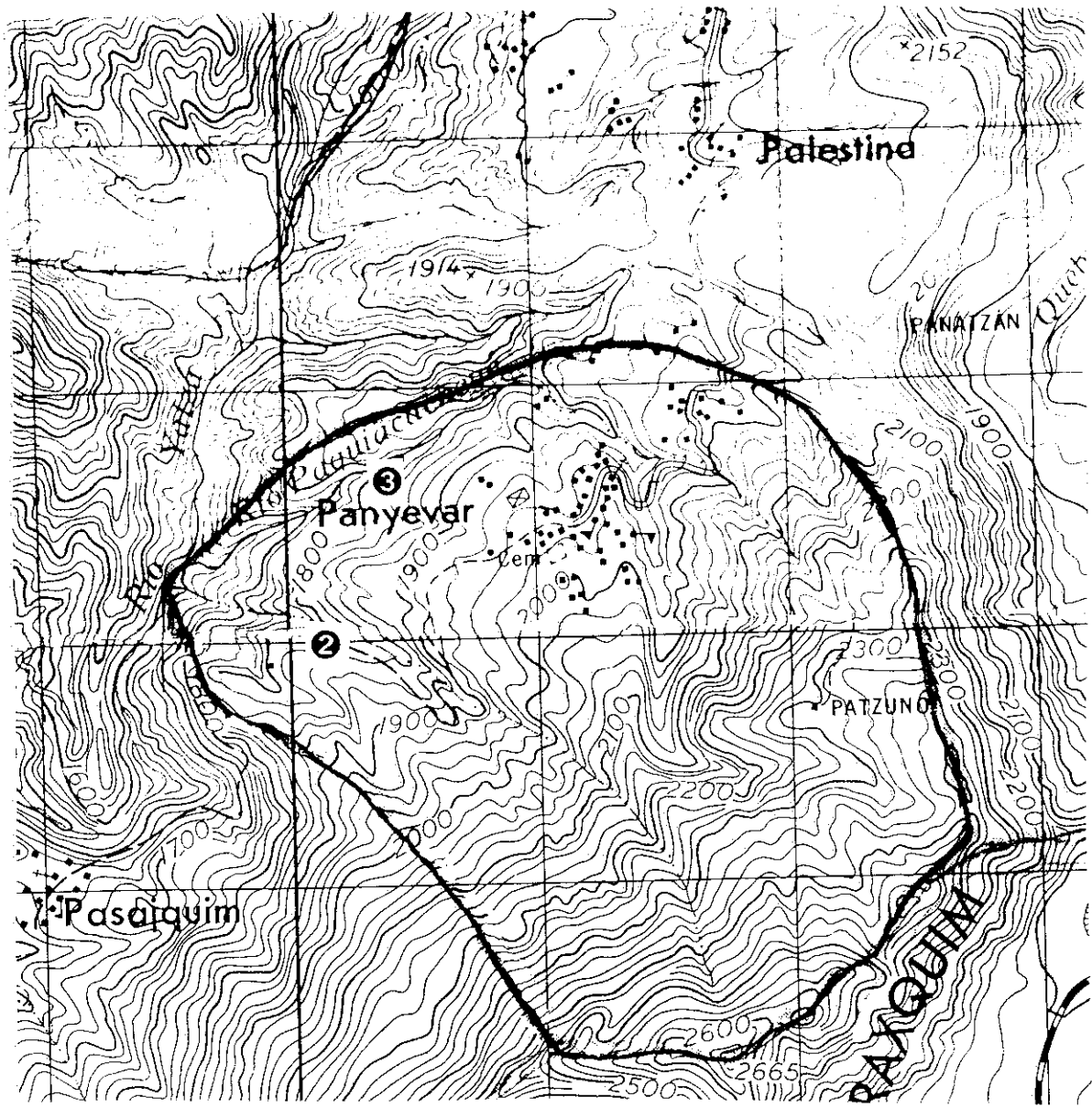
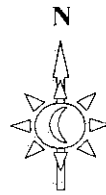


Xeatzan Bajo		
1	C-1	fountain
2	C-2	well
3	C-3	well
4	C-4	fountain
5	C-5	tap water

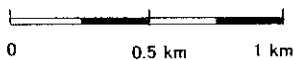
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Figure 5.1.7(1)
Water Sampling Points in Xeatzan Bajo, Chimaltenango



①



- Panyebar**
No. Spring
① Panan
② Silberio
③ Juan

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Figure 5.2.1 (1)
Water Resources in Panyebar, Sololá

Ripe Cherry

(moist. cont. 65~70%)

pulp	39%
mucilage	17
skin	7
bean	37

De-pulping

De-mucilage

Washing and Grading

Drying

PARCHMENT BEANS

----- **WET PROCESSING STAGE** -----

Final Processing

----- **DRY PROCESSING STAGE** -----

Packing and shipping

CLEAN COFFEE BEANS

{ moisture content: 11~12% }

(A) Receiving beans within 24 hr after harvest:

- (1) checking under-ripe, over ripe beans
- (2) weighing

(B) Dumping beans in receiving tank

- (1) softening beans
- (2) sorting by gravity

(C) Pulping machines

- (1) Removing pulp
- (2) Removing mucilage

(D) Passing into water channels

- (1) Gravity selection
- (2) Washing

(E) Concrete drying yard

- (1) drying, (2) cleaing

(F) Removal of silver-skin and polishing

- (1) Removing silver skins
- (2) Polishing
- (3) Final grading

(G) Packing, storage and shipping

- (1) Packing and marking
- (2) Storage
- (3) Shipping to domestic and export markets

FARMERS

Coyote (small)

Coyote (big)

Pulper

Transportation

Brokers

Dry Processing

Brokers

Agro-Export Co

Domestic Suppliers

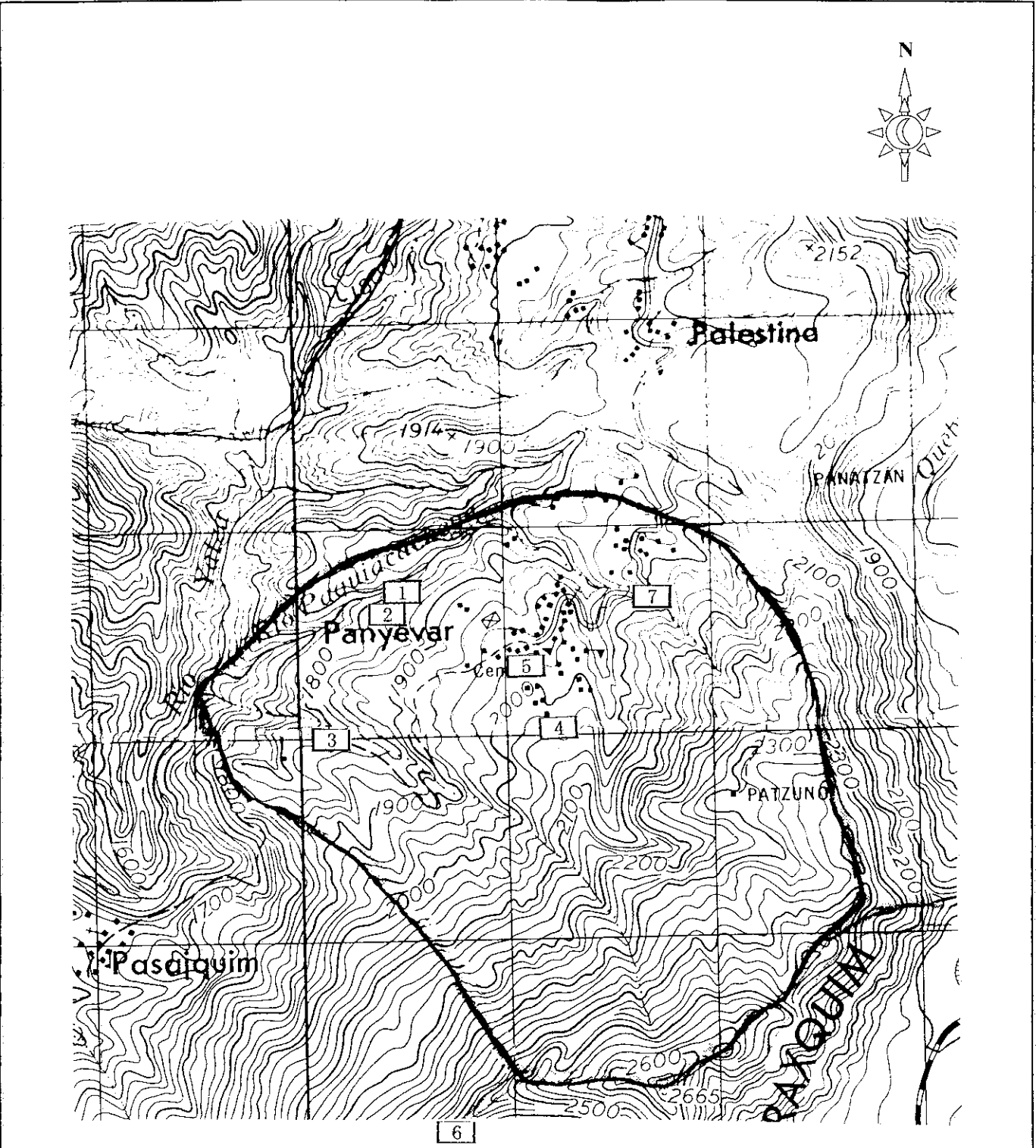
Consumers

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Figure 5.2.3(1)

Processing of Coffee Beans

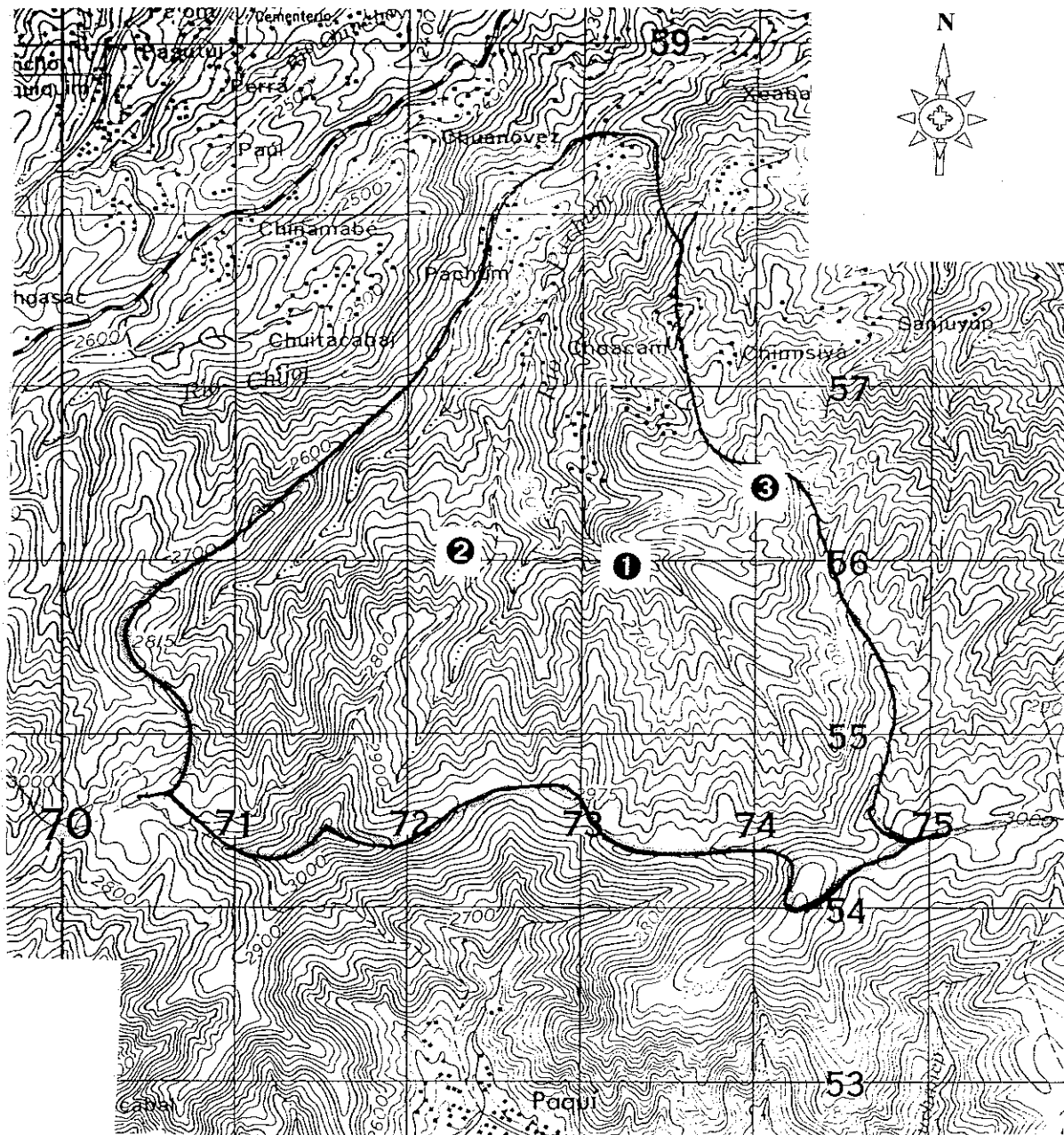


Panyebar		
1	S-1	fountain
2	S-2	fountain
3	S-3	fountain
4	S-4	fountain
5	S-5	water tank
6	S-6	fountain
7	S-7	river

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Figure 5.2.7(1)
Water Sampling Points in Panyebar, Solola

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Pachum

No. Spring

- ① Xecandelaria
- ② Pachum 2
- ③ Pachum 3

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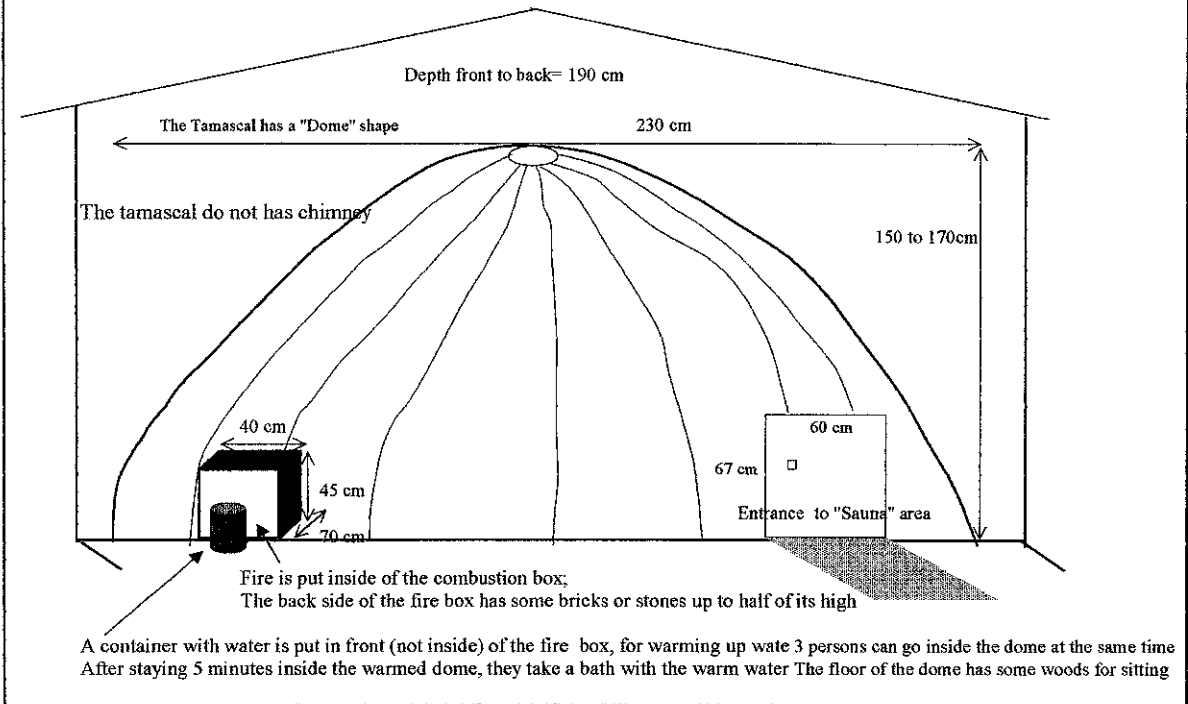
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**Figure 5.3.1 (1)
Water Resources in Pachum,
Totonicapan**

Tamascal Type-1 : Tamascal in Pachum area

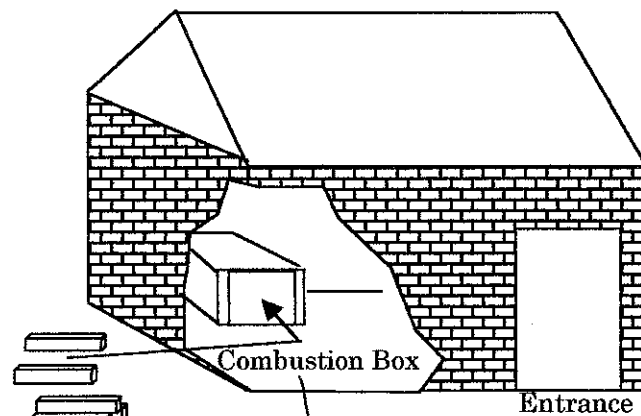
- 1) How to warm up inside de tamascal? They fire woods in the combustion box; Half of the back side is open to pass hot air to the Dome
- 2) The time required varies from 30 to 60 minutes, depending on the quality of wood.
- 3) Number of fire woods to be consumed is 15 to 20 pieces of about 50 cm long

They do not heat stones; just the direct heat from wood goes to the dome; Some of them spray water directly on top of fire to make vapor, but soon fire ends.



Tamascal Type-2 :Tamascal in other area, such as Palestina

Size : height 1.5m, width 2 m and 1.5m
made by concrete/clay blocks and clay



Firewood

Firewood to be consumed;
around 10-15 pieces for 1 hr preparation
Size is the same in the above.

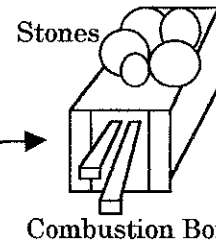
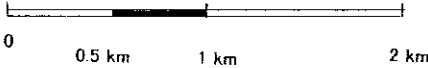
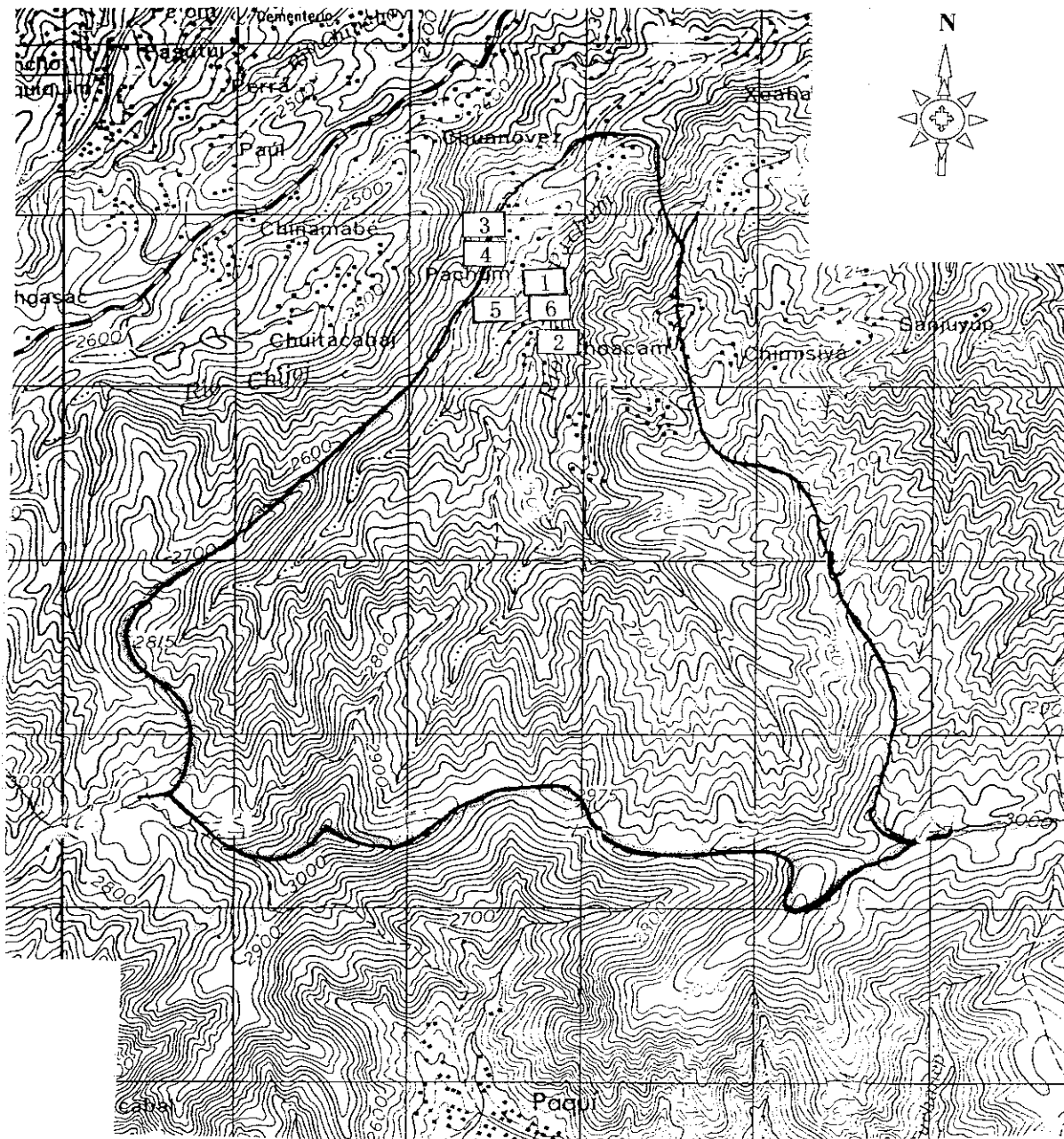


Figure 5.3.6 (1)

General Feature of
Sauna Bath "Tamascal"



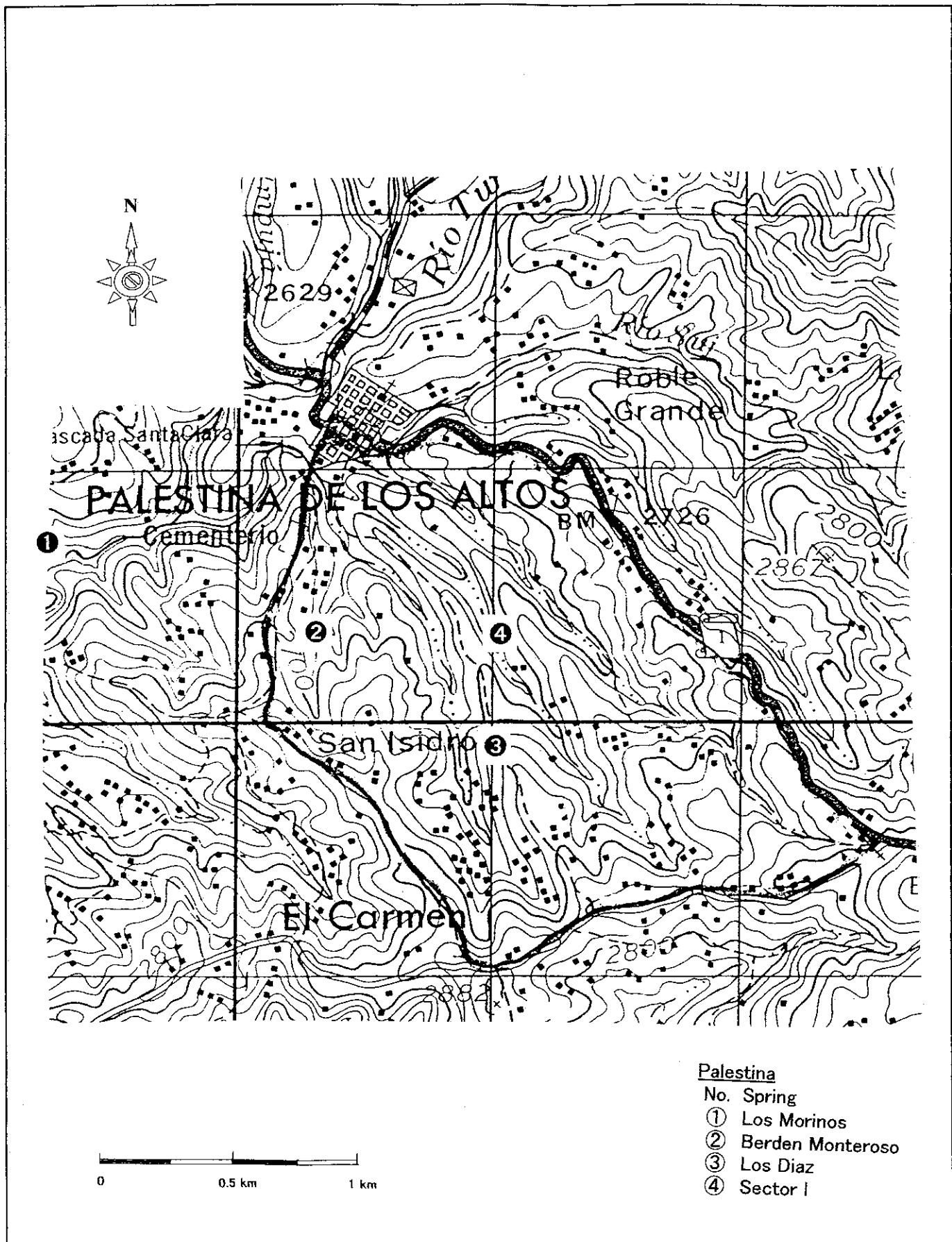
Pachum		
1	T-1	fountain
2	T-2	river
3	T-3	fountain
4	T-4	tap water
5	T-5	well
6	T-6	river

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Figure 5.3.7(1)

Water Sampling Points in Pachum, Totonicapan



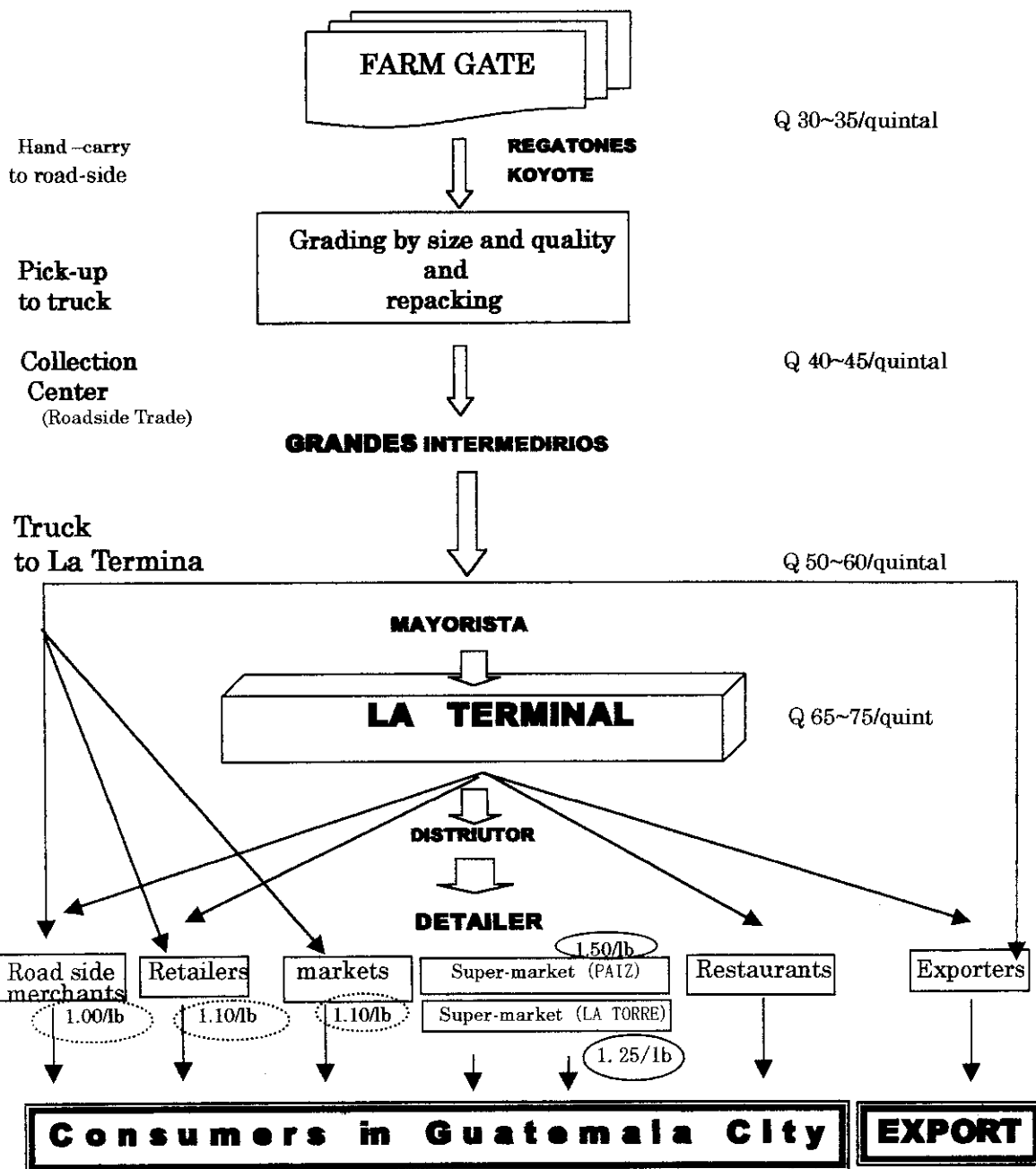
- Palestina**
- | | |
|-----|------------------|
| No. | Spring |
| ① | Los Morinos |
| ② | Berden Monteroso |
| ③ | Los Diaz |
| ④ | Sector I |

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Figure 5.4.1 (1)
Water Resources in Palestina de los Altos, Quetzaltenango

PRODUCTION AREA : Quetzaltenango
 Palestina de Los Altos, Caserio Los Perez
 CONSUMPTION AREA : Guatemala City
 DATE : 16, August, 2000
 COMODITY : Loman, washed, mediana



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Figure 5.4.3(1)

Price of Potato and Its Marketing Flow

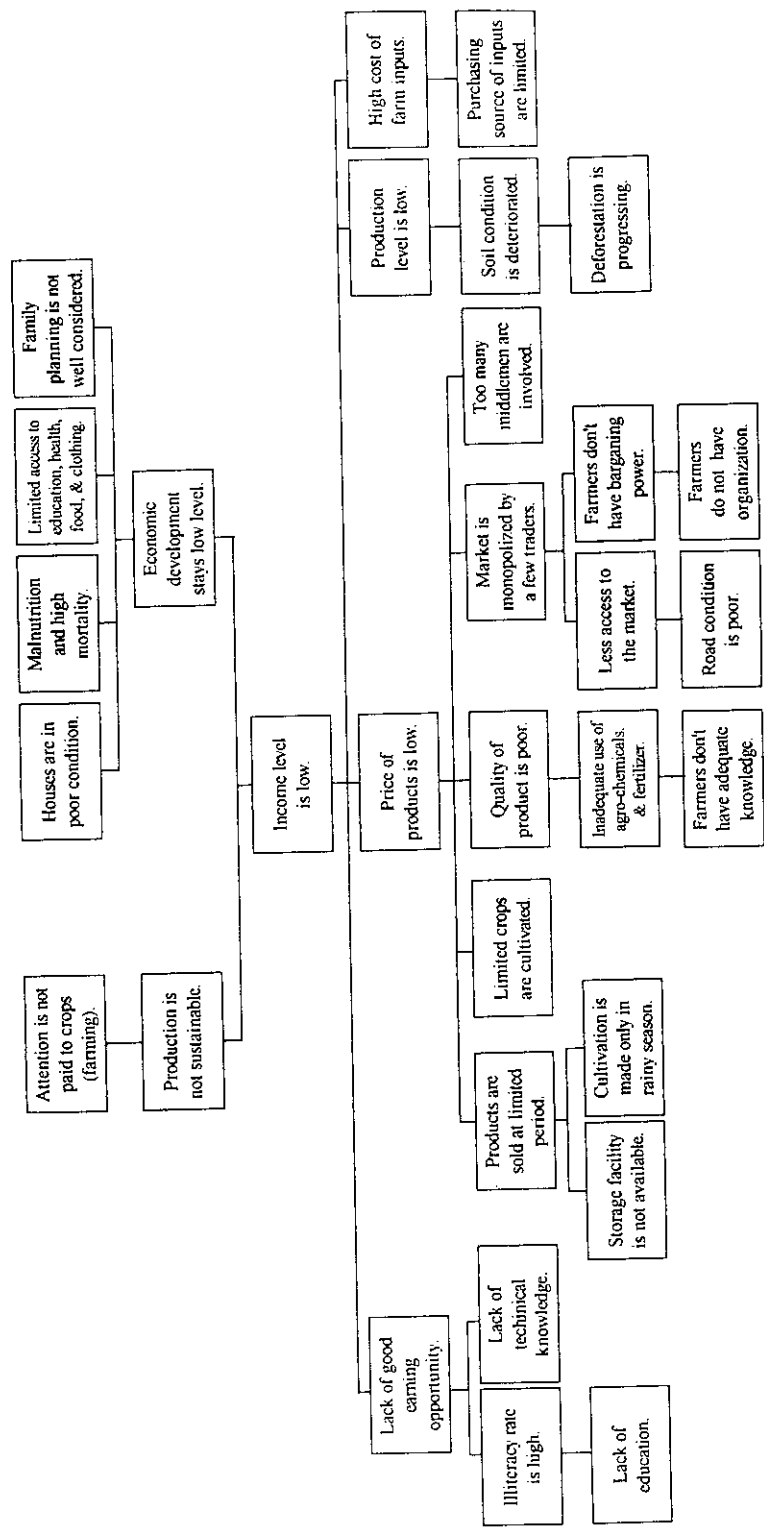


Palestina de Los Altos		
1	O-1	fountain
2	O-2	public tank
3	O-3	well
4	O-4	public tank
5	O-5	fountain
6	O-6	river
7	O-7	river

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Figure 5.4.7(1)
Water Sampling Points in Palestina de Los Altos, Quetzaltenango

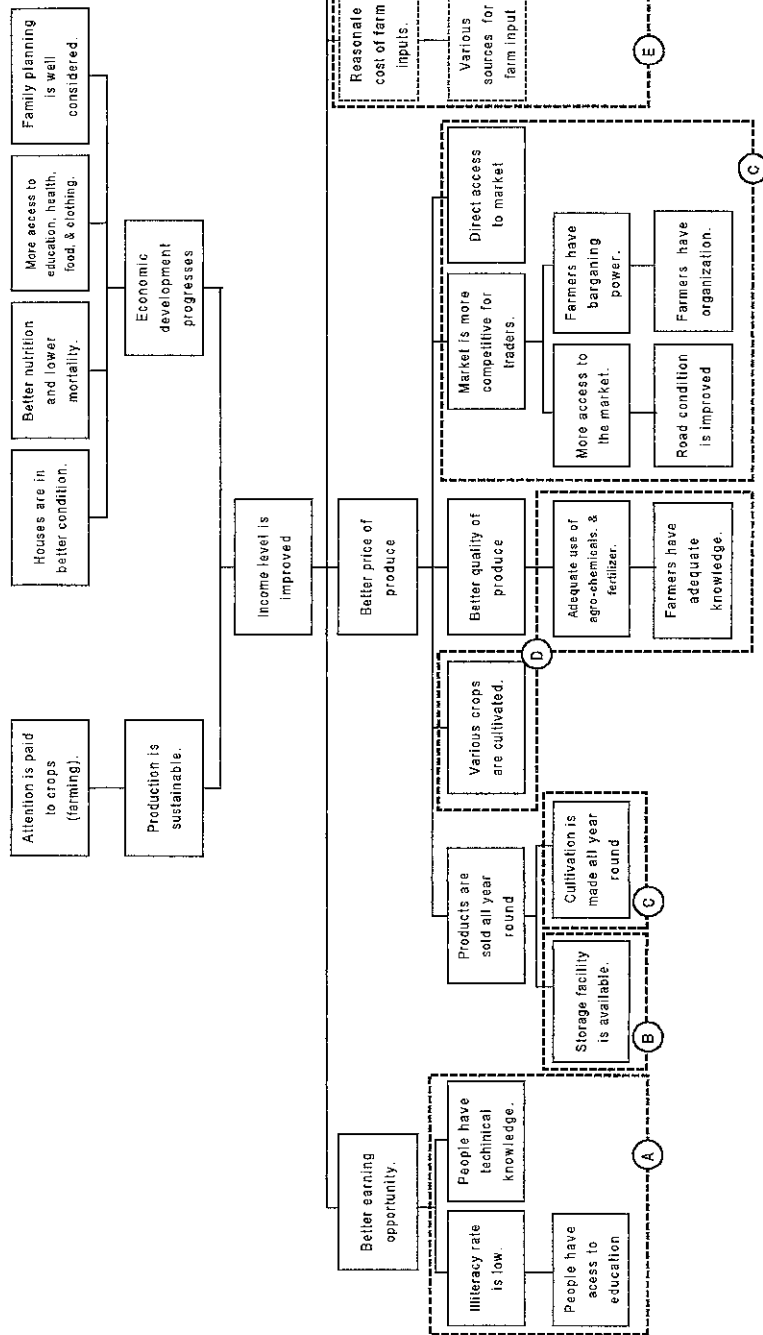


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Figure. 6.4.1(1)

Problem Tree for Xeatzán Bajo



E. Environment Conservation Approach

- Construction of drainage system

Needs for drainage was prioritized as one of the necessities. However, approach to *Deforestation* was not mentioned in the analysis.

C. Production Increase Approach

- Implementation of mini-irrigation project

D. Agricultural Capacitacion Approach

- Vocational school for technical orientation on agriculture
- Diversification of crop and crop rotation

A. People capacitation Approach

- Establish for market for selling textile products.

B. Market Improvement Approach

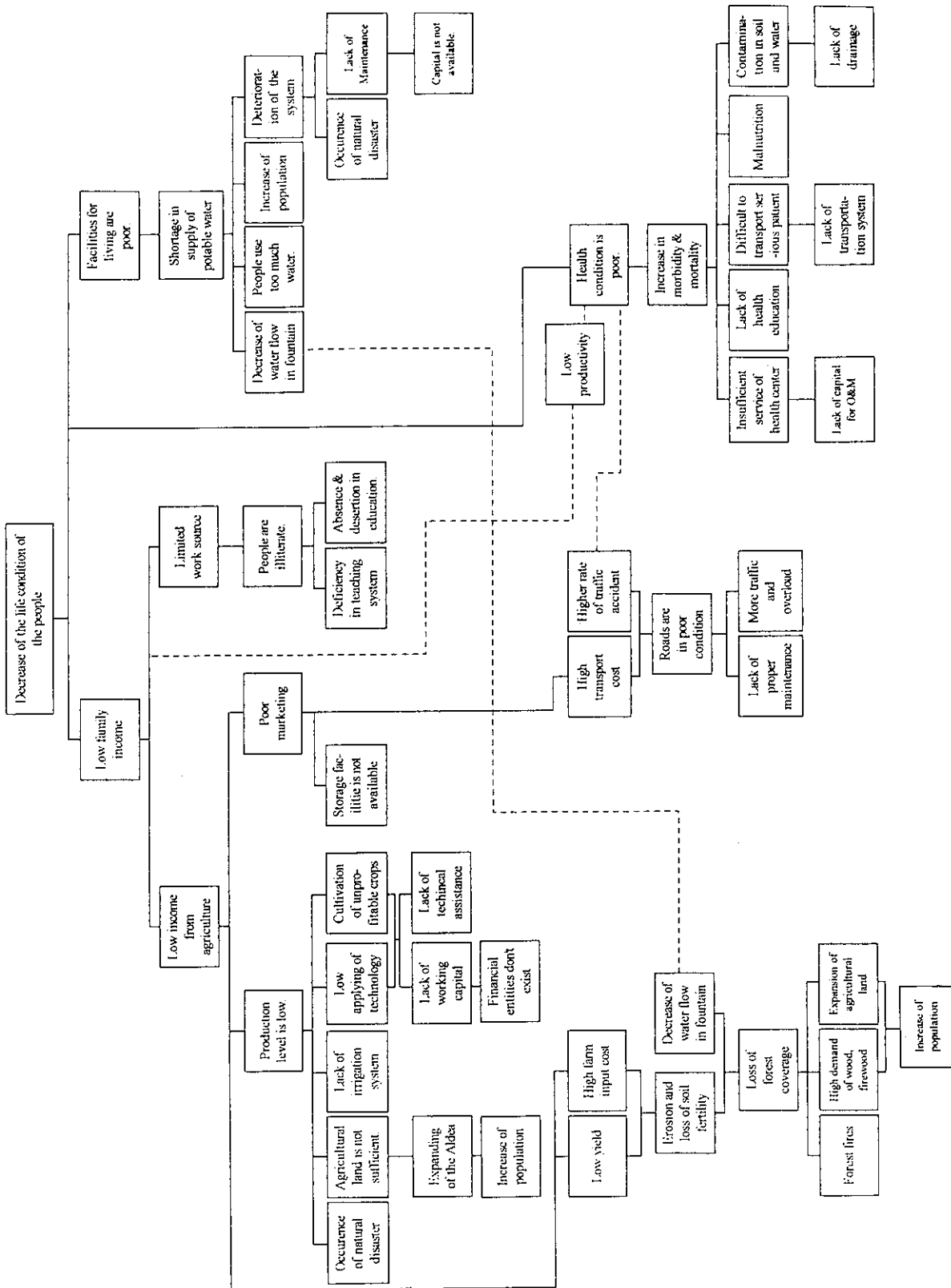
- Construction of storage and processing facility for agricultural produce
- Formulation of cooperative
- Paving road with asphalt.

These cards are added so that the villagers' necessity matches with objective tree.

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Figure. 6.4.1(2)
Objective Tree with Potential Development Approaches for Xeatzán Bajo

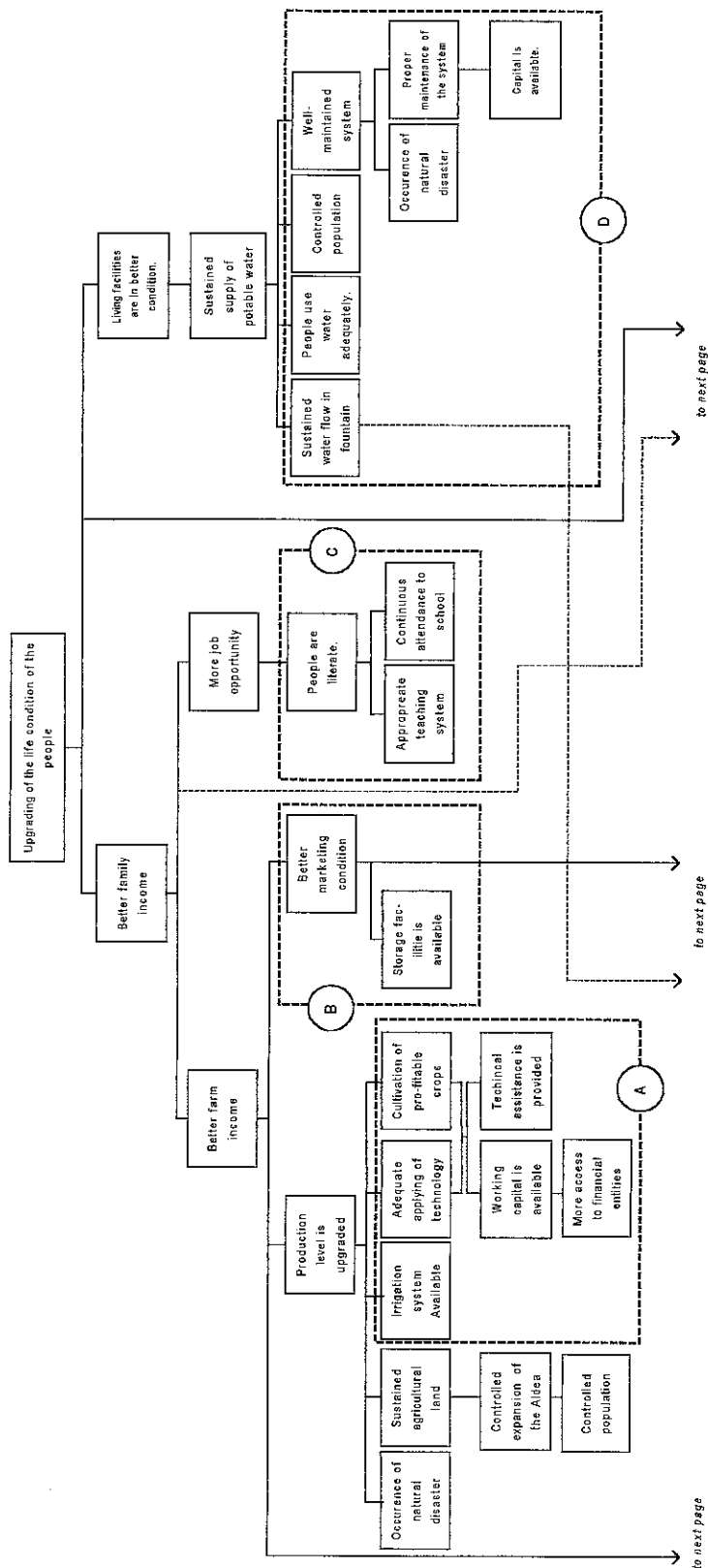


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Figure. 6.4.2(1)

Problem Tree for Panyebar



A. Agriculture Improvement Approach

- Credit assistance for agricultural activities
- Provision of technical assistance on production on coffee, vegetable.
- Implementation of mini-irrigation system

B. Market Improvement Approach

- Construction of storage

C. People Capacitation Approach

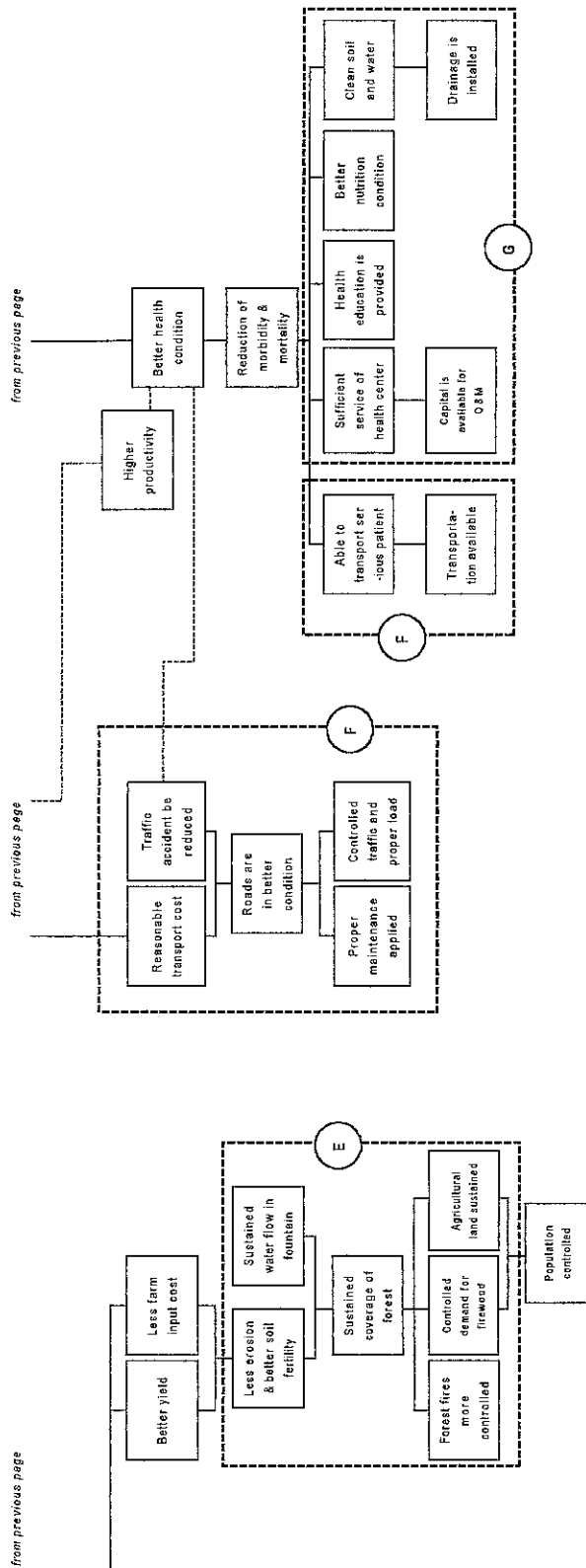
- Improvement of school facility and utilization of the facilities for children education and for training productive activities

D. Water Supply Improvement Approach

- Installation of Potable water supply system with the projection of 20 years projection of water consumption
- Protection of water source to maintain available water amount

Figure. 6.4.2(2)

Objective Tree with Potential Development Approaches for Panyebar (1/2)



E. Environment Improvement Approach

- Installation of infrastructure relating to environment such as treatment plant, latrine, and drainage.
- Implementation of soil conservation program
- Implementation of forest management program
- Implementation of environmental training program

F. Road Improvement Approach

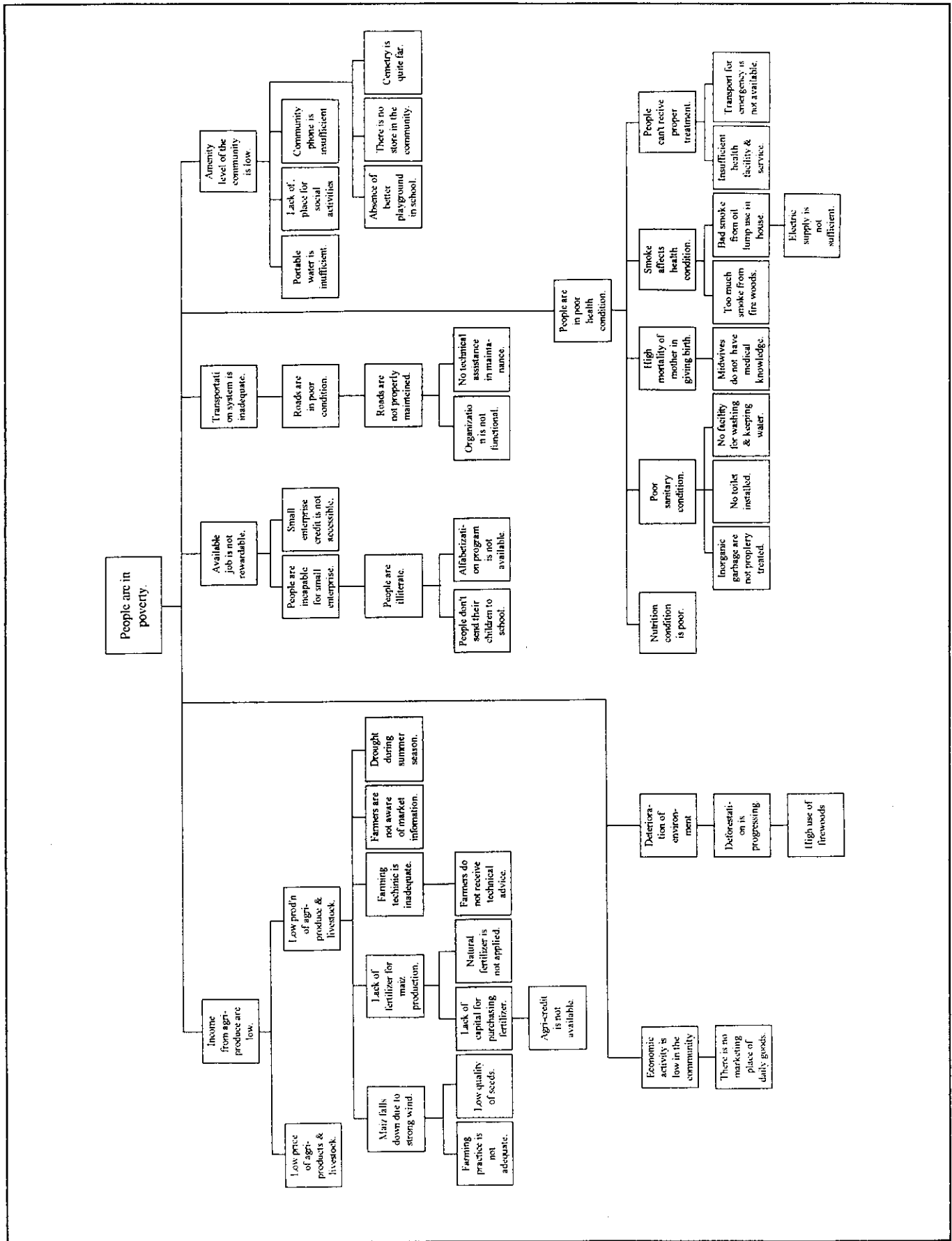
- Disposition of medical staff, medicine and transportation for serious patients

G. Health Improvement Approach

- Improvement of road from Panyebar to Santa Clara La Laguna

Figure. 6.4.2(2)

Objective Tree with Potential Development Approaches for Panyebar (2/2)

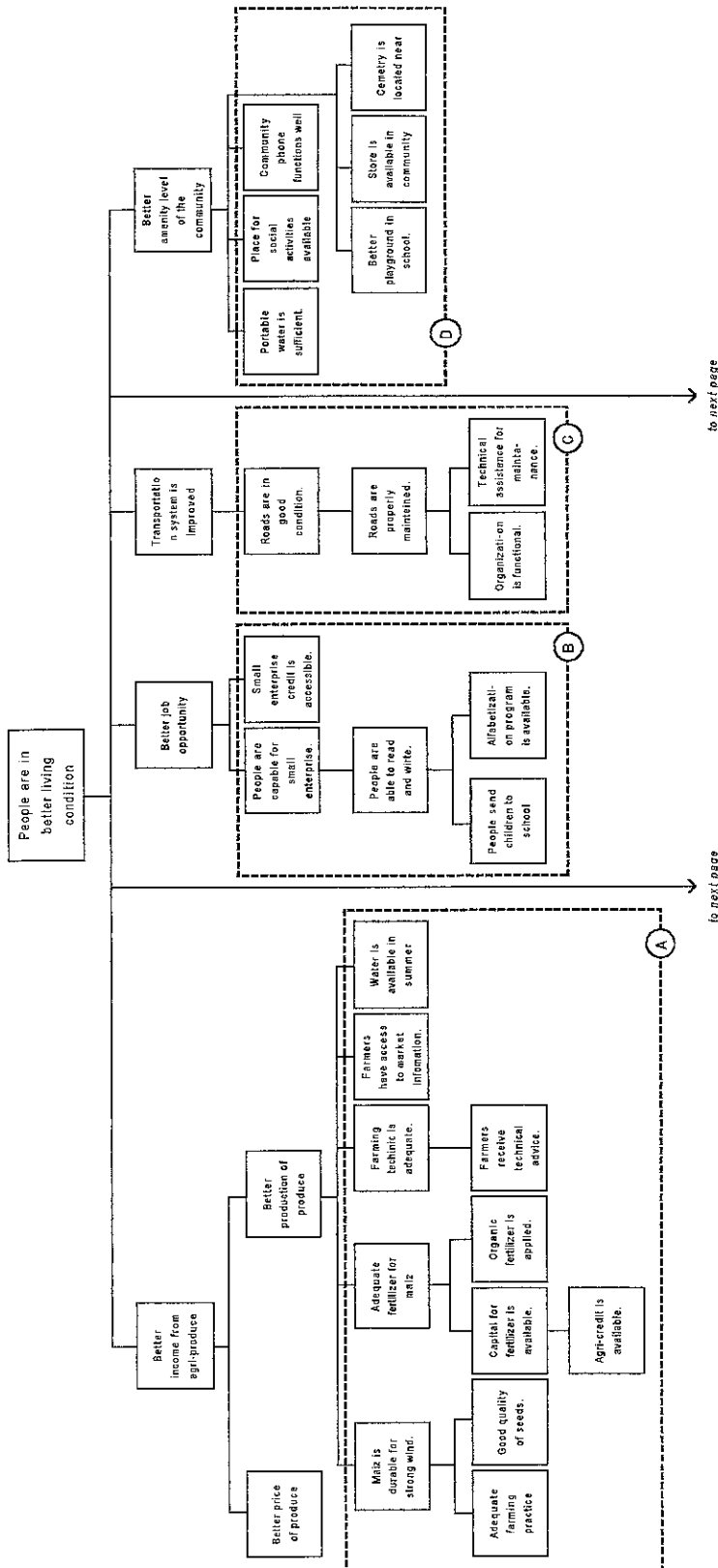


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Figure. 6.4.3(1)

Problem Tree for Pachum



D. Amenity Improvement Approach

- Improvement of tap water system
- Enhancement of electric service
- Diffusion of improved stove
- Improvement of school and housing
- Establishment of market in the community
- Establishment of cemetery

B. People Capacitation Approach

- Vocational training on non-agricultural activities (textile, carpenter, etc)
- Credit for commercialization of non-agricultural activities

A. Agriculture Improvement Approach

- Installation of mini-irrigation
- Technical assistance of agriculture
- Agricultural credit

C. Road Improvement Approach

- Improvement of road and maintenance

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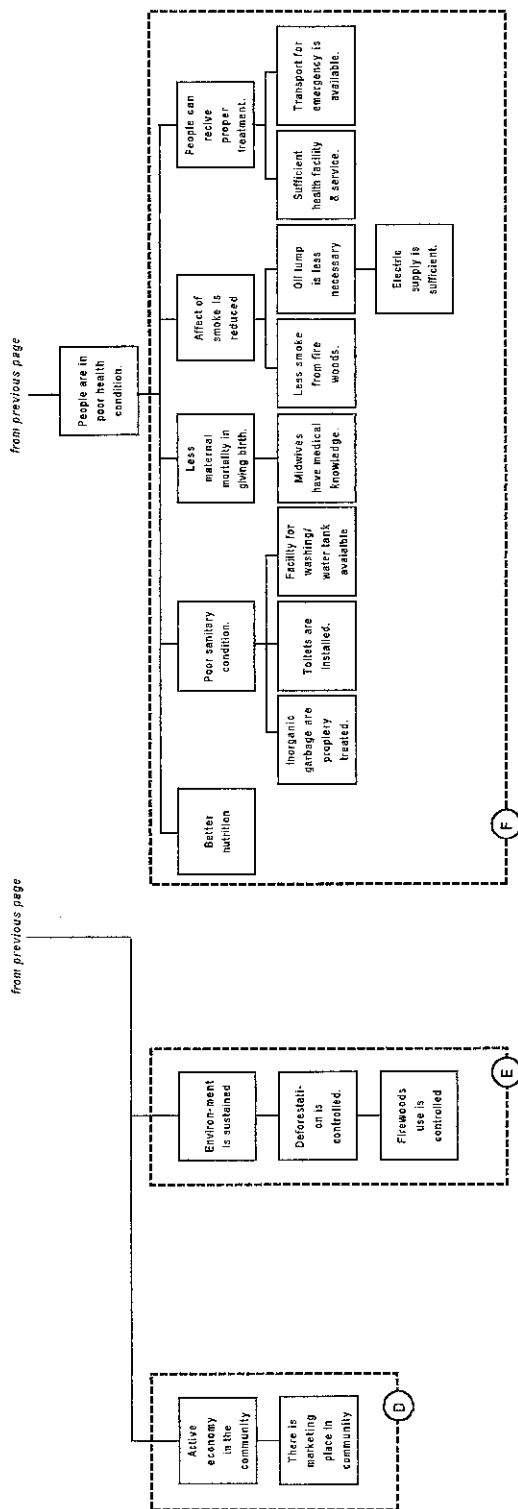
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Figure. 6.4.3(2)

Objective Tree with Potential Development Approach for Pachum (1/2)

Figure. 6.4.3(2)

Objective Tree with Potential Development Approach for Pachum (2/2)

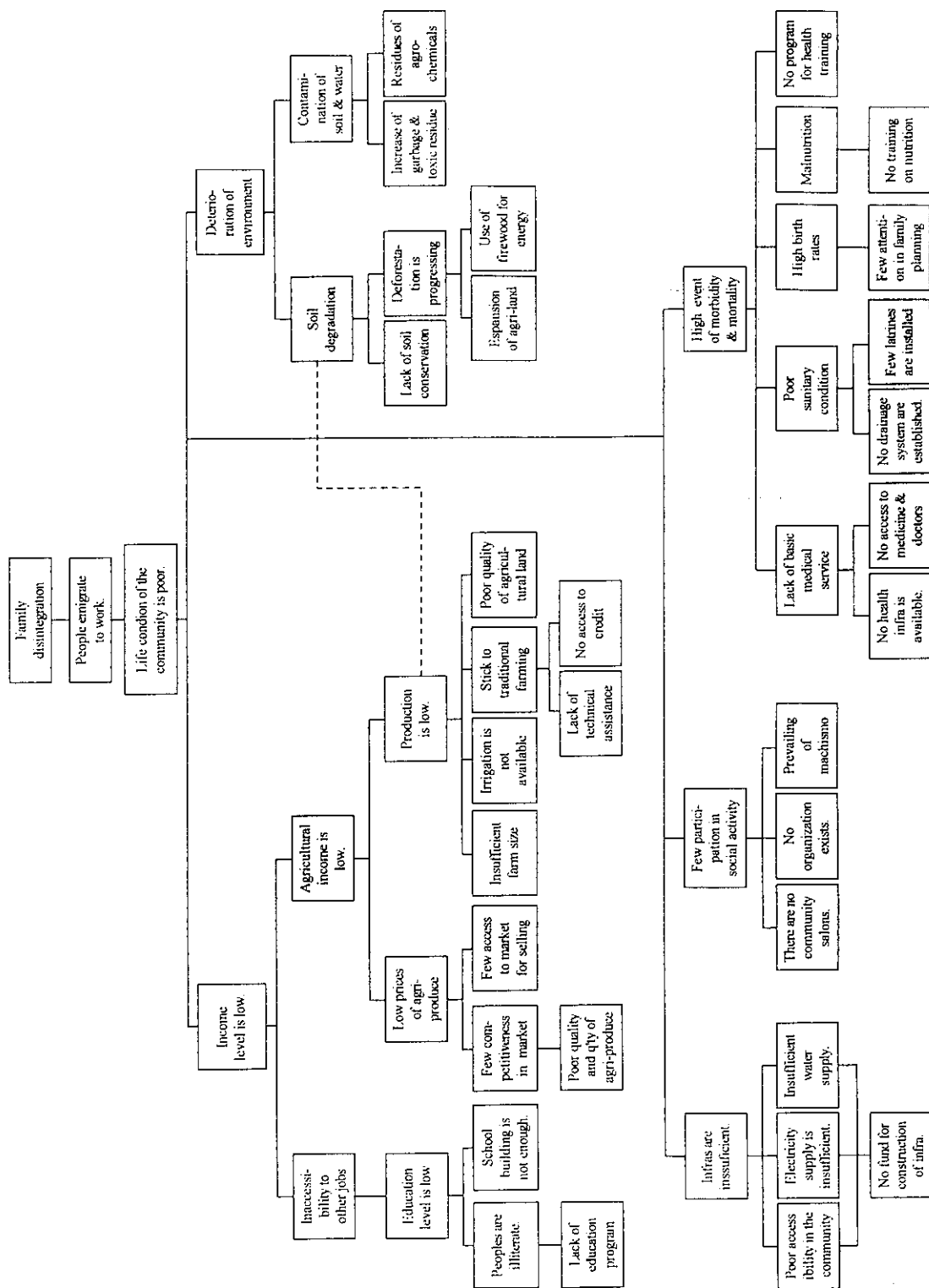


E. Environmental Conservation Approach

- Appropriate management of forest
- Appropriate treatment of inorganic garbage

F. Health Improvement Approach

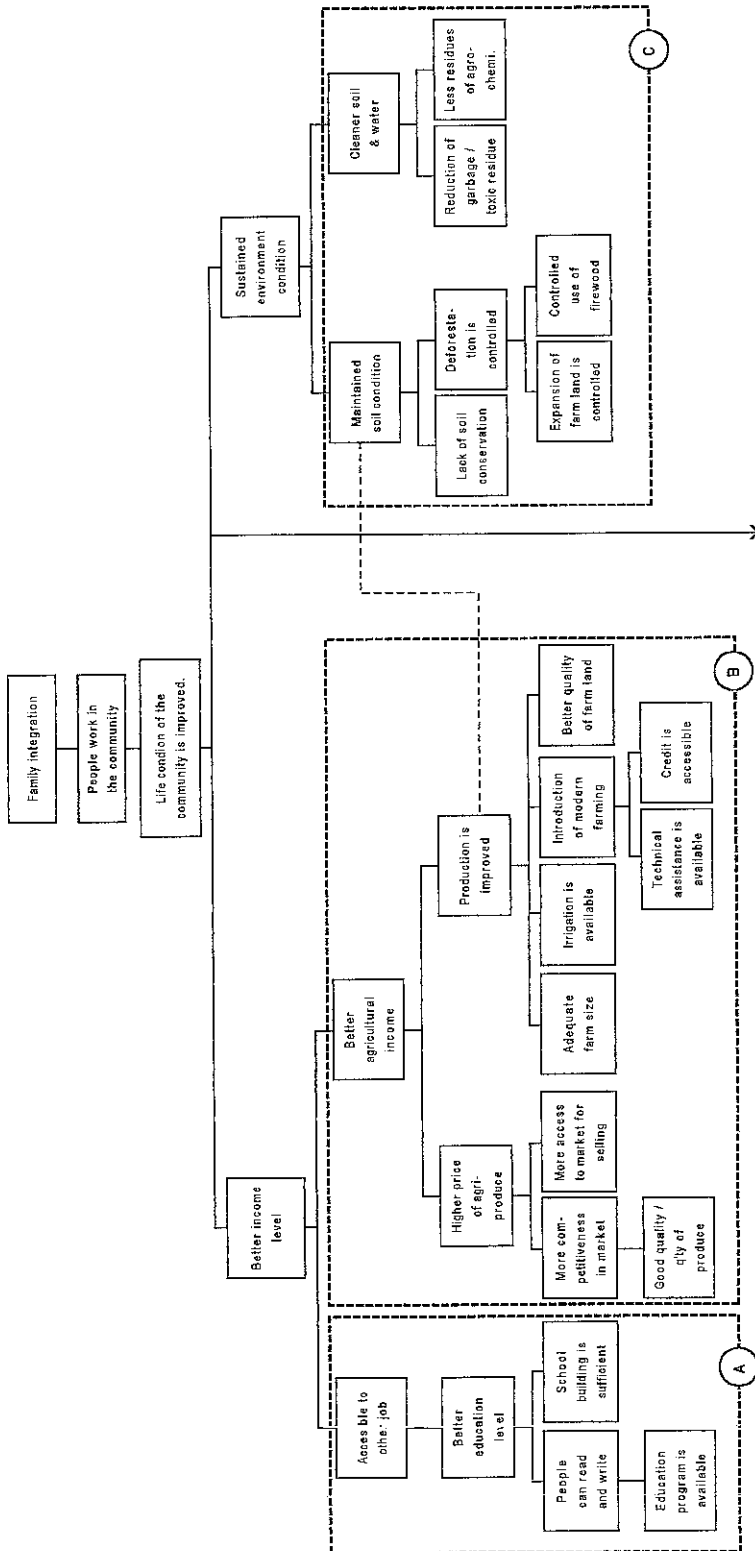
- Installation of medical unit with medicine and medical staff
- Nutrition improvement program
- Installation of latrine and drainage



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Figure. 6.4.4(1)
Problem Tree for Palestina de los Altos



to next page

C. Environment Conservation Approach

- Management of forest conservation
- Reforestation
- Management of soil conservation
- Management of agro-chemicals

B. Agriculture Improvement Approach

- Technical assistance for agriculture
- Introduction of improved seeds
- Provision of agricultural credit
- Promotion of commercialization of produce
- Installation of mini-irrigation system

A. People Capacitation Approach

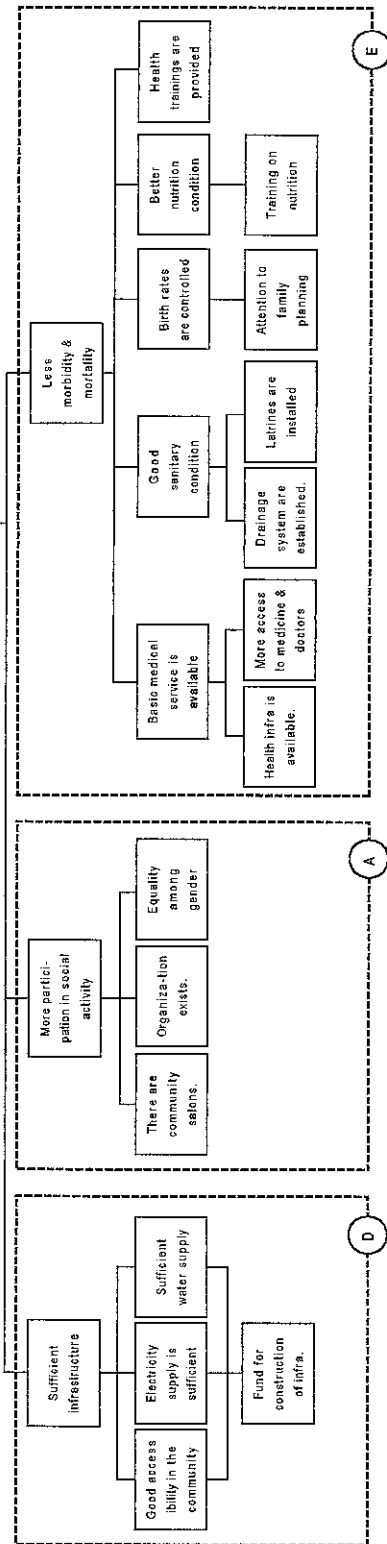
- Strengthening of community organization
- Implementation of training of productive activities
- Implementation of education program

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Figure. 6.4.4(2)
Objective Tree with Potential Development Approach for Palestina de los Altos (1/2)

from previous page



D. Infrastructure Improvement Approach

- Rehabilitation of water tank for washing
- Asphalt paving of road
- Enhancement of potable water supply system
- Constructin of drainage
- Enlargement of school facility

E. Health Improvement Approach

- Construction of health post
- Implementation of health education program
- Disposition of medical staff and medicine
- Establishment of communal pharmacy
- Establishment of medical unit

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Figure. 6.4.4(2)
Objective Tree with Potential Development Approach for Palestina de los Altos (2/2)