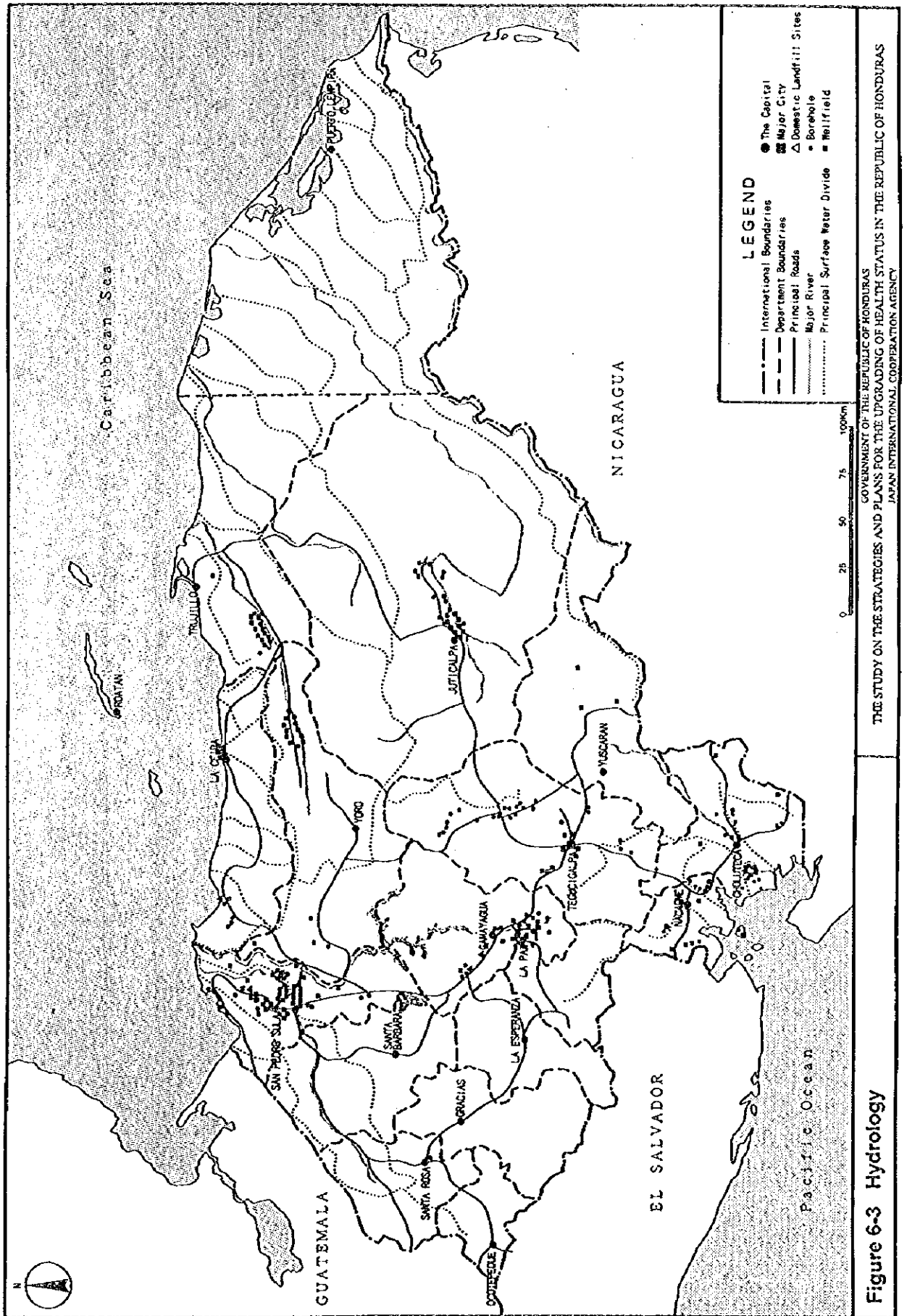


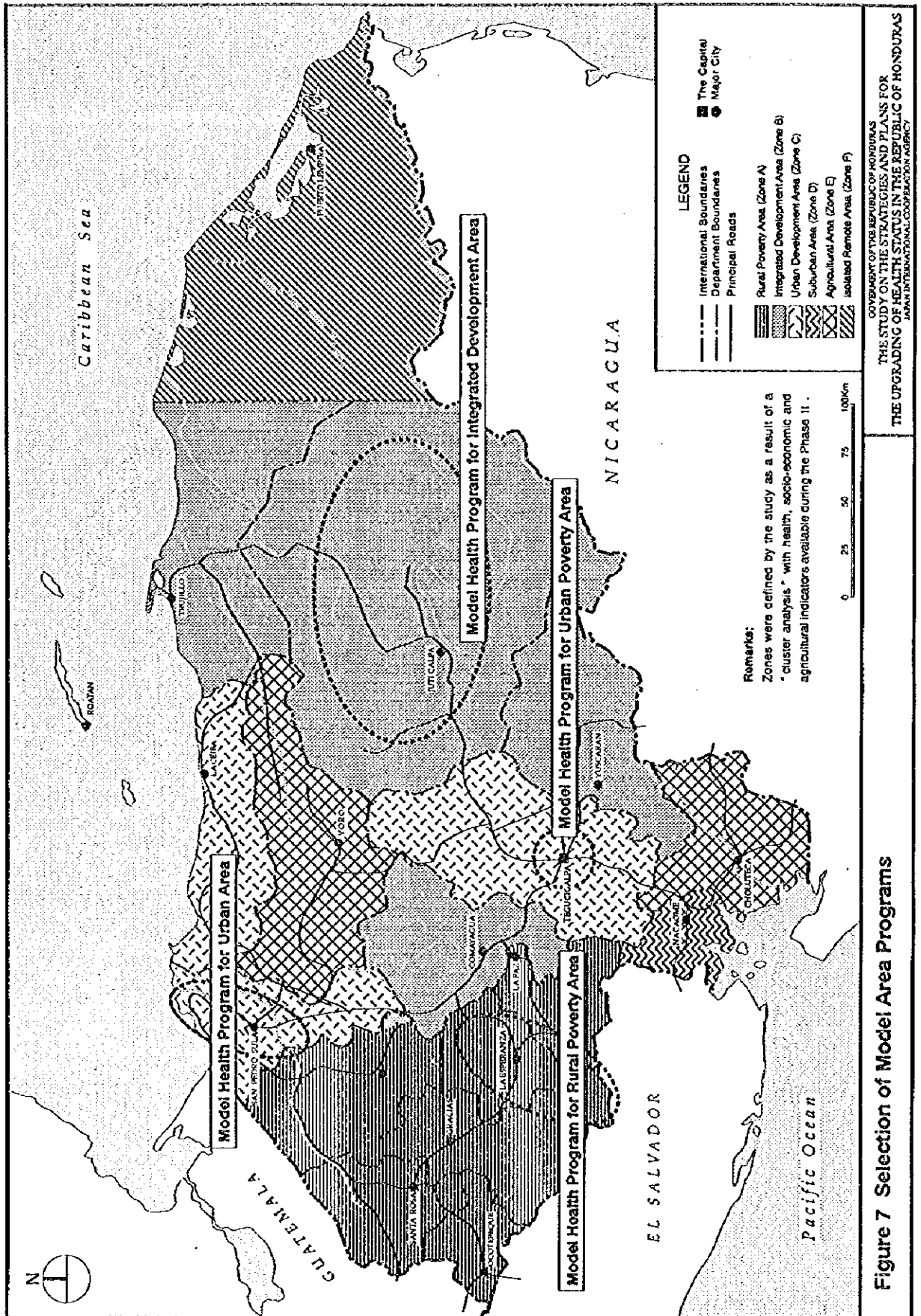
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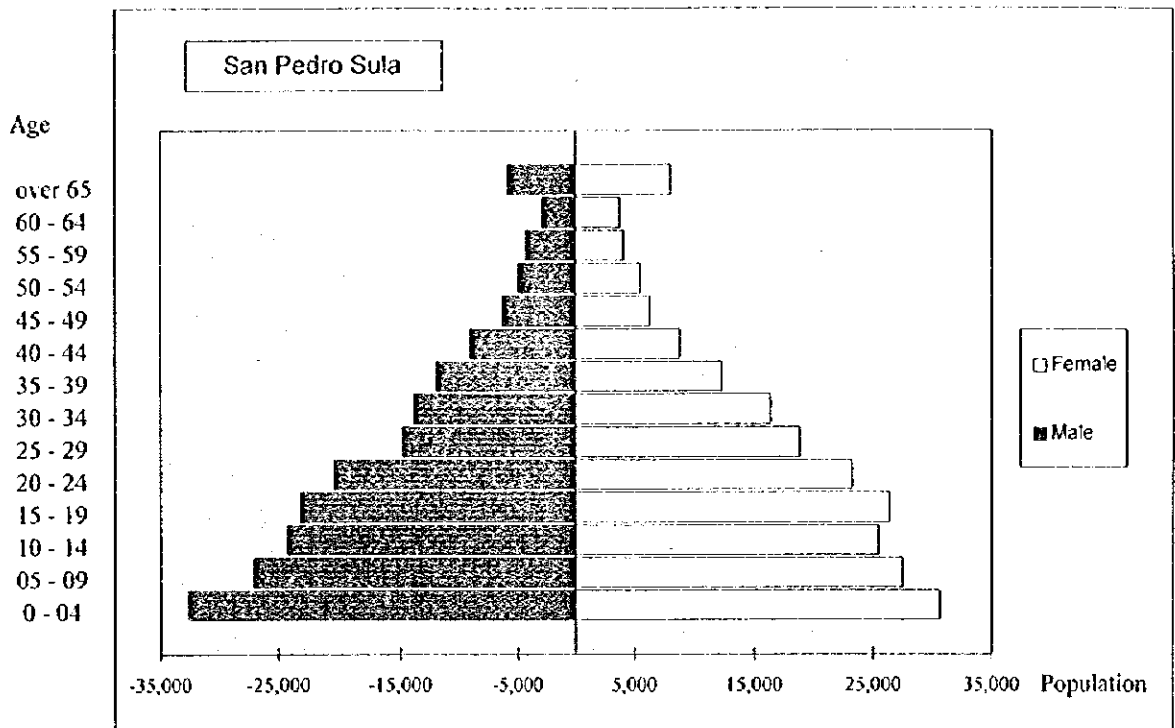
Figure 6-2 Precipitation



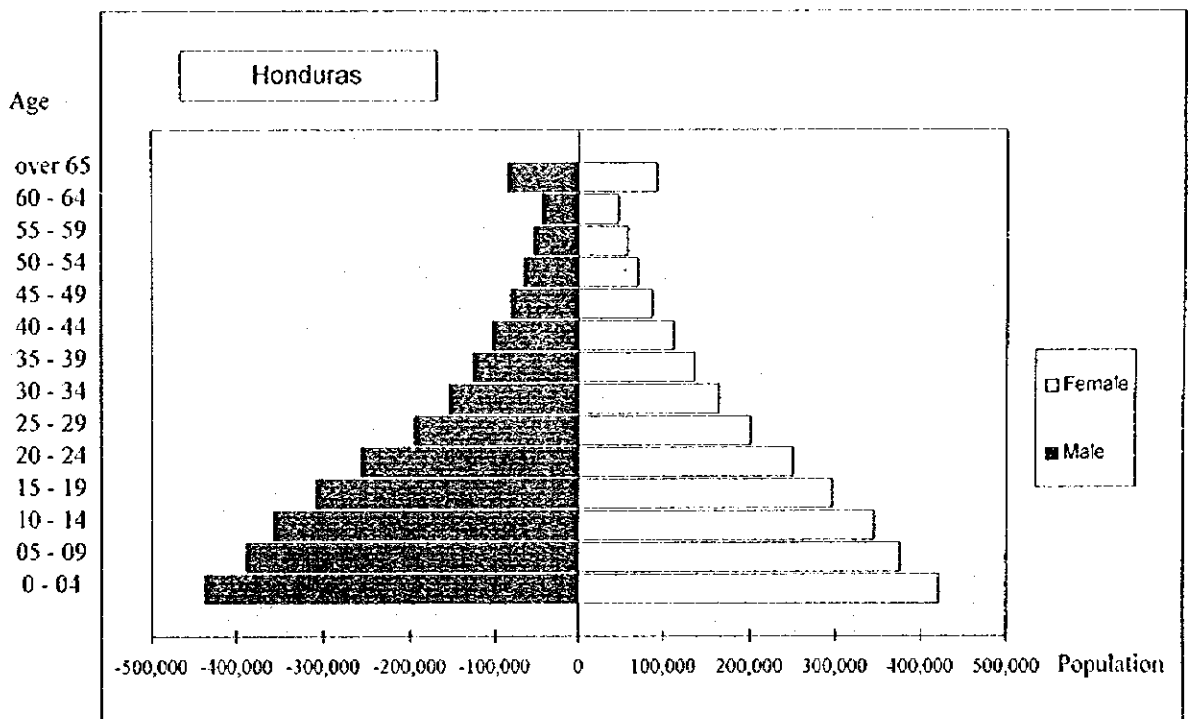
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Figure 6-3 Hydrology



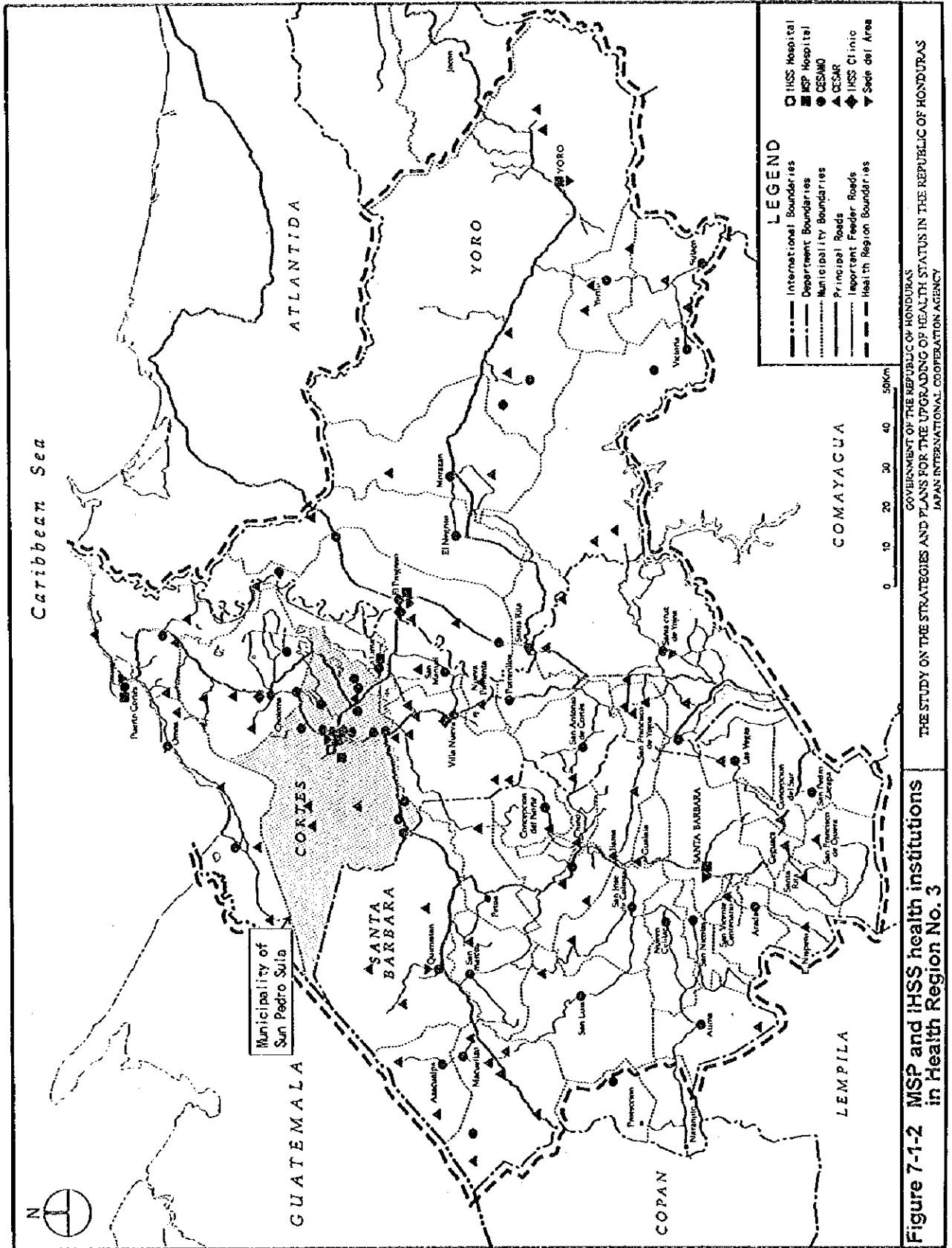


Source: Encuesta de Poblacion e Indicadores Socio-Economicos, San Pedro Sula 1994, Direccion de investigacion y estadistica municipal, SPS y FNUAP



Source: Proyecciones de poblacion de Honduras por sexo y edad 1988-2050, SECPLAN

Figure 7-1-1 Population Structure of San Pedro Sula and Honduras - 1994



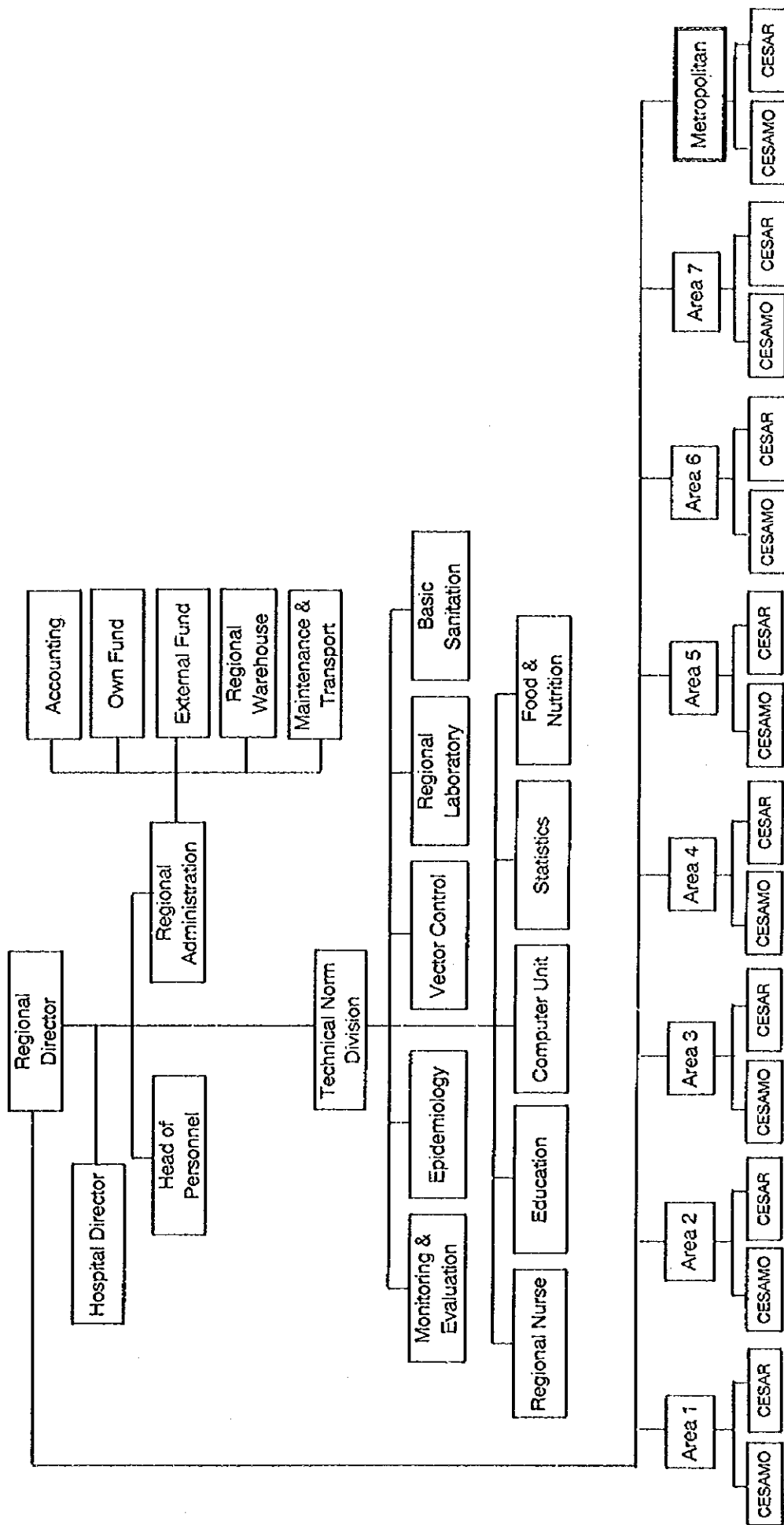
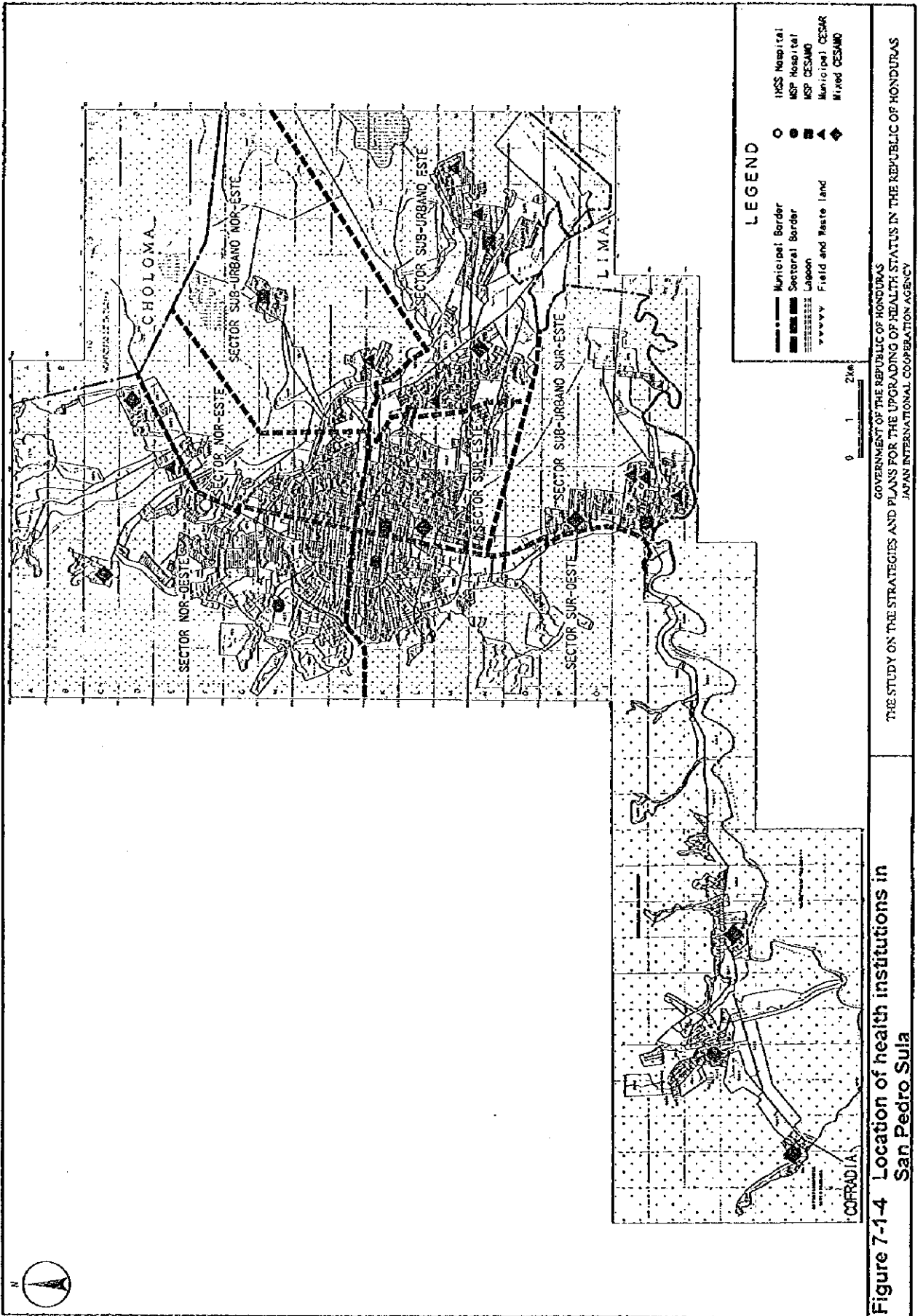


Figure 7-1-3 Organization structure of Health Region No.3



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Figure 7-1-4 Location of health institutions in San Pedro Sula

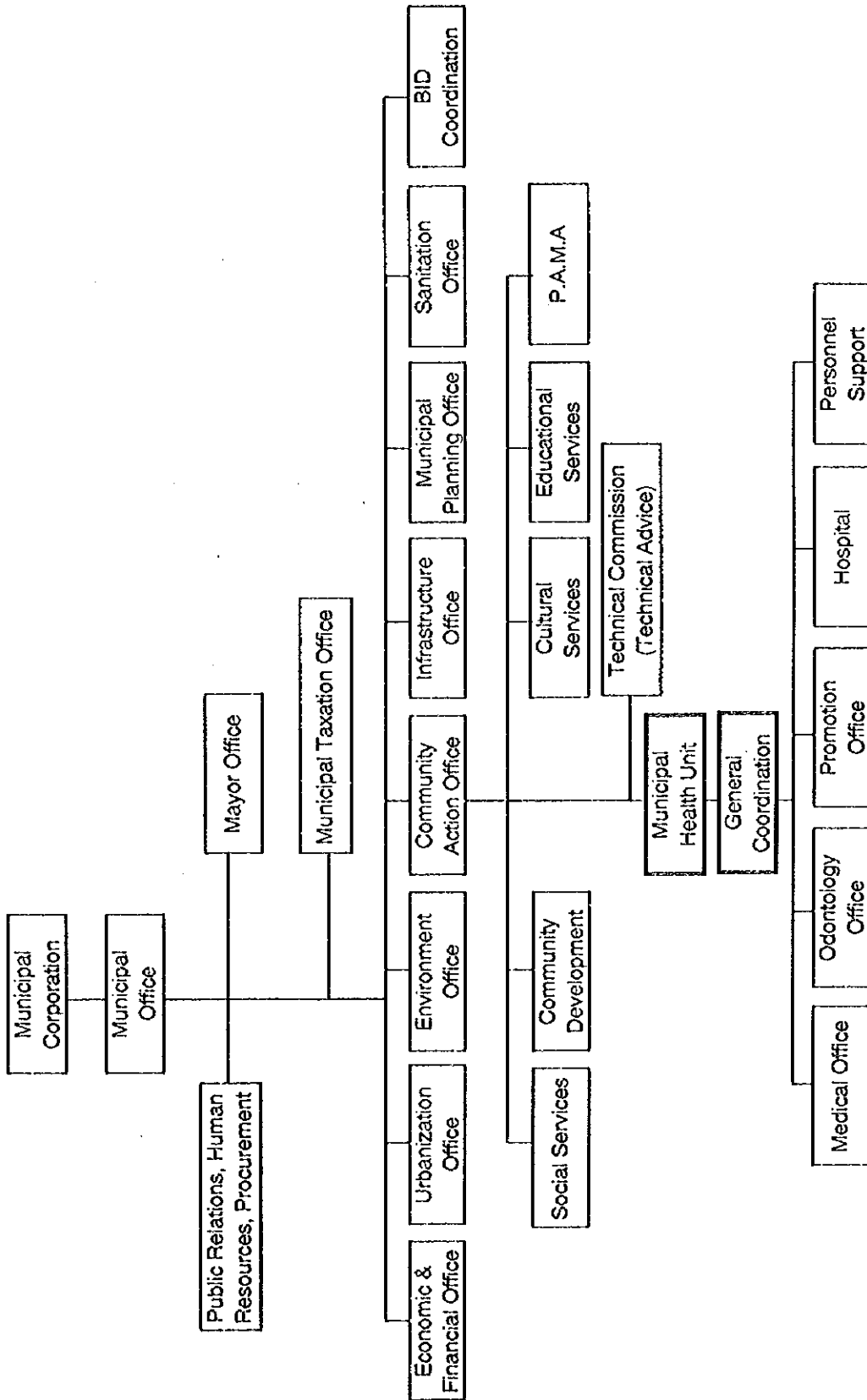


Figure 7-1-5 Organization structure of the Municipality of San Pedro Sula

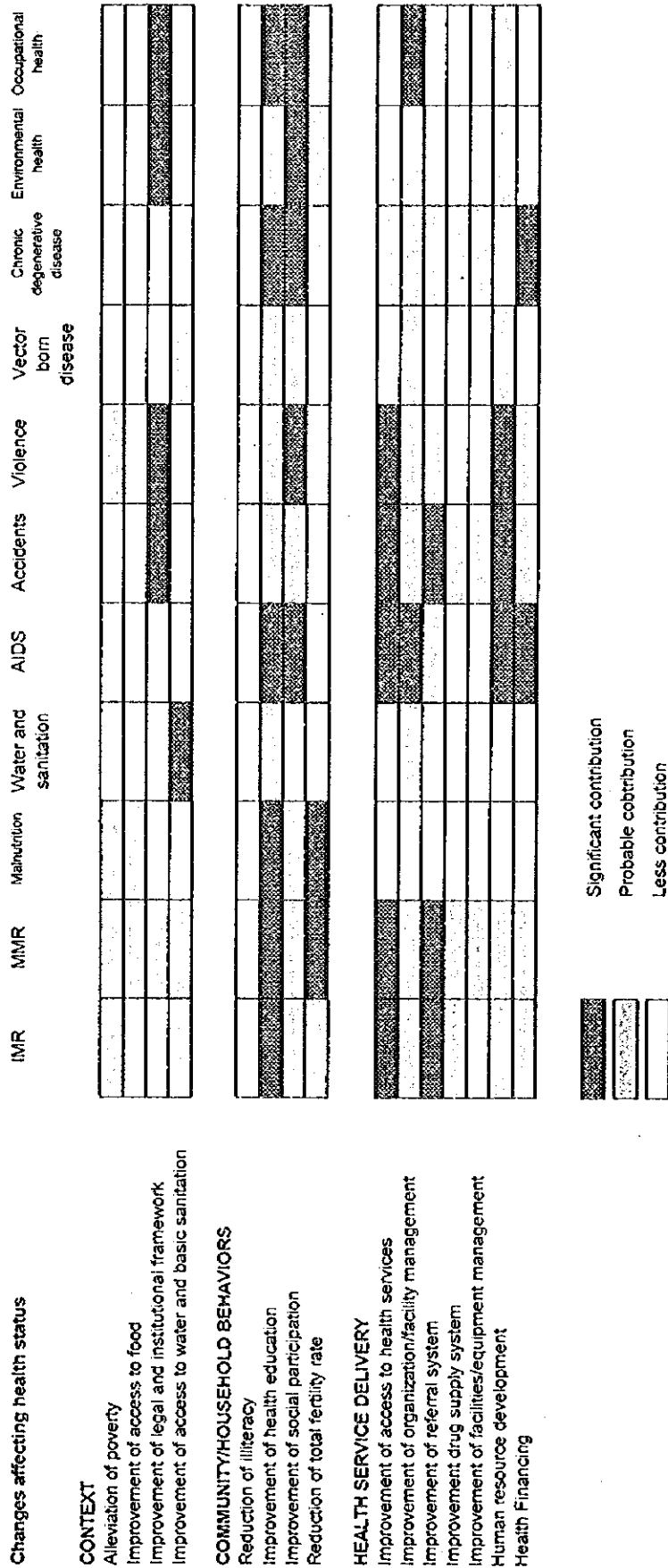


Figure 7-1-6 Contribution of 15 strategies to priority health problems in urban area

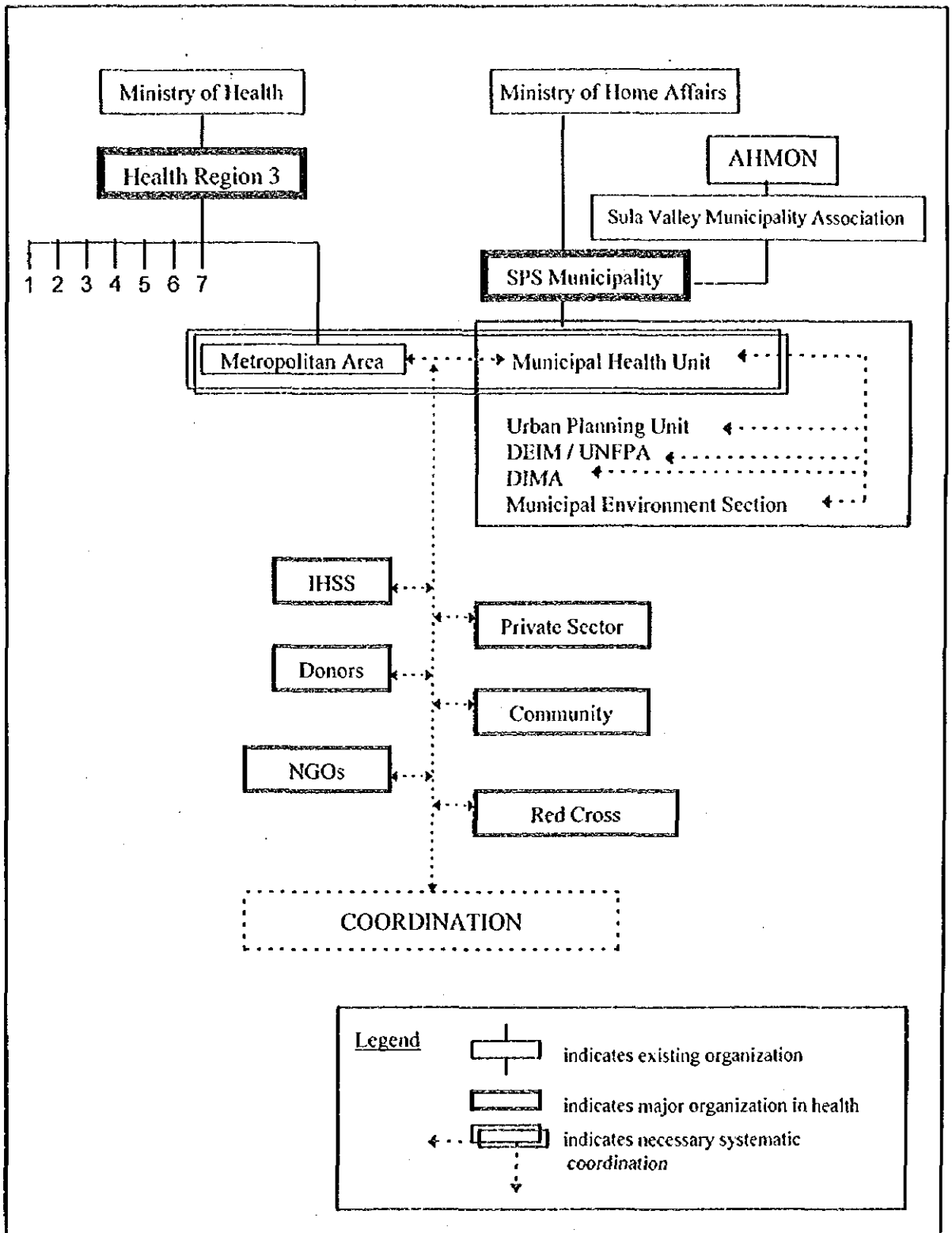


Figure 7-1-7 Coordination of various organization to achieve "Healthy City" for the urban area, San Pedro Sula

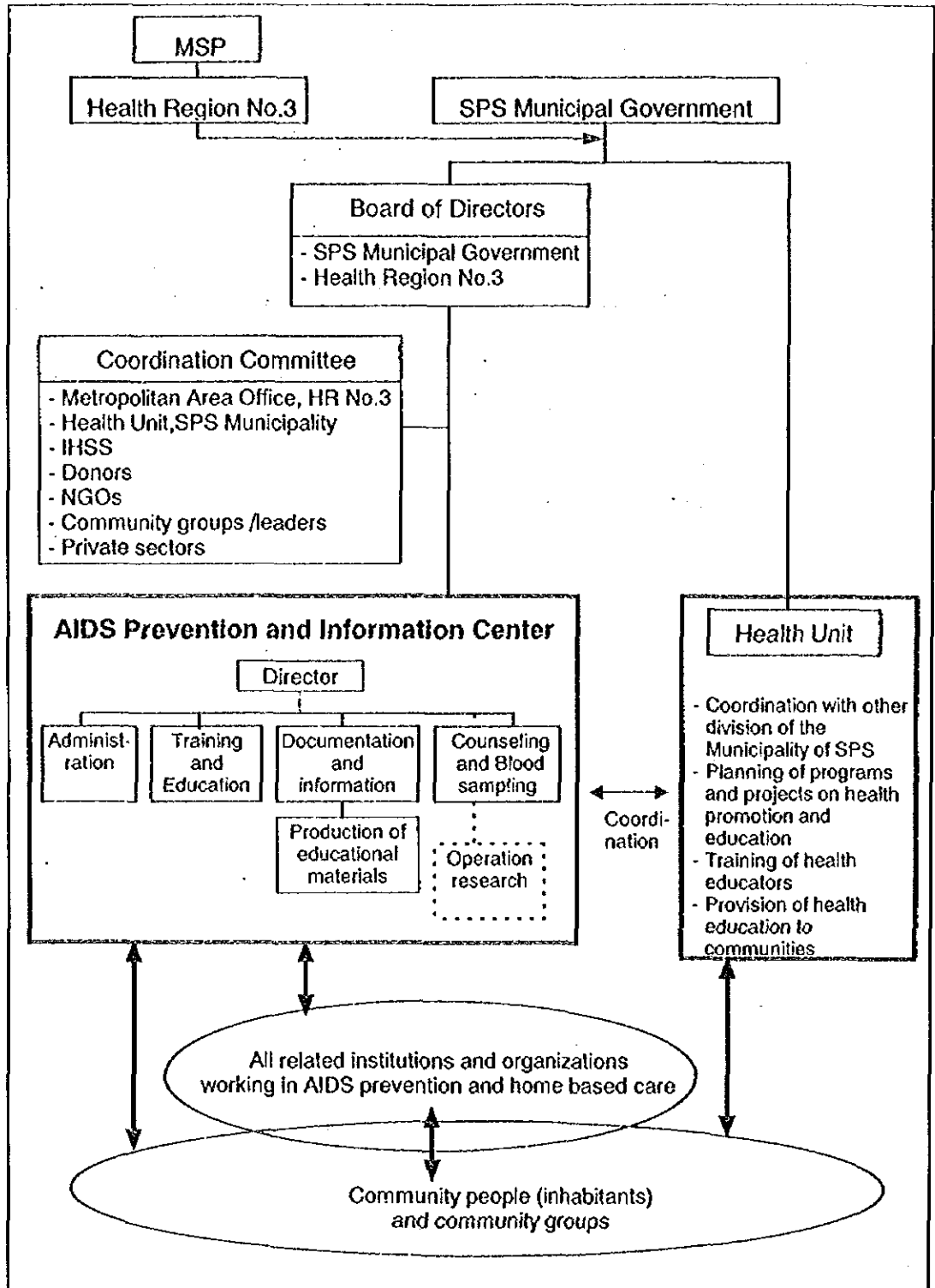


Figure 7-1-8a. Model project 1, option1 in urban area: "AIDS prevention and information center" and "Strengthening of the Health Unit of the Municipality of SPS in health promotion and education" (two sub-projects)

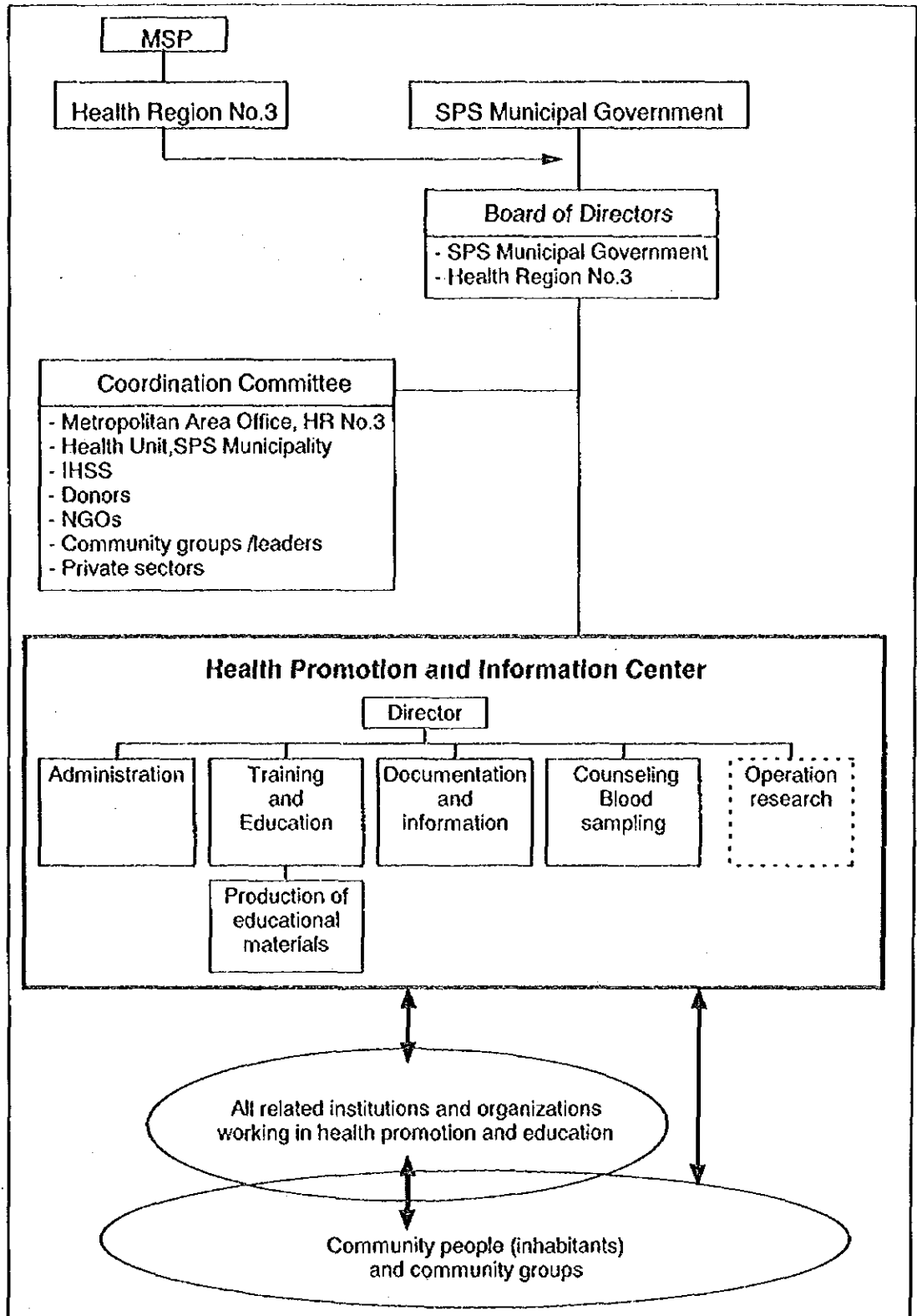


Figure 7-1-8b. Model project 1, option 2 In urban area: "Health Promotion and Information Center" (Integrated project)

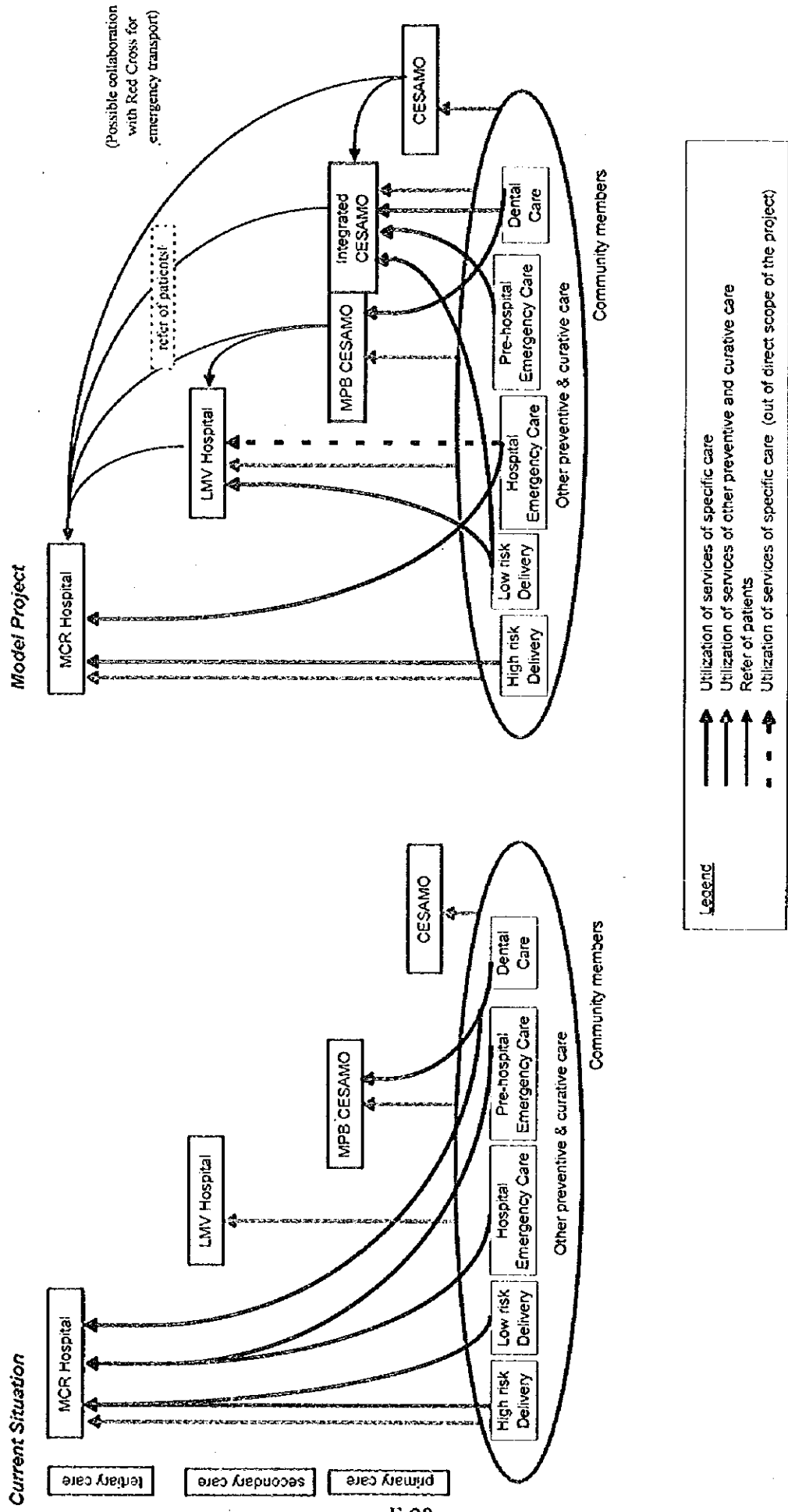


Figure 7-1-9 Current situation and Model project 2 for urban area: "Reinforcement of CESAMO's Function"

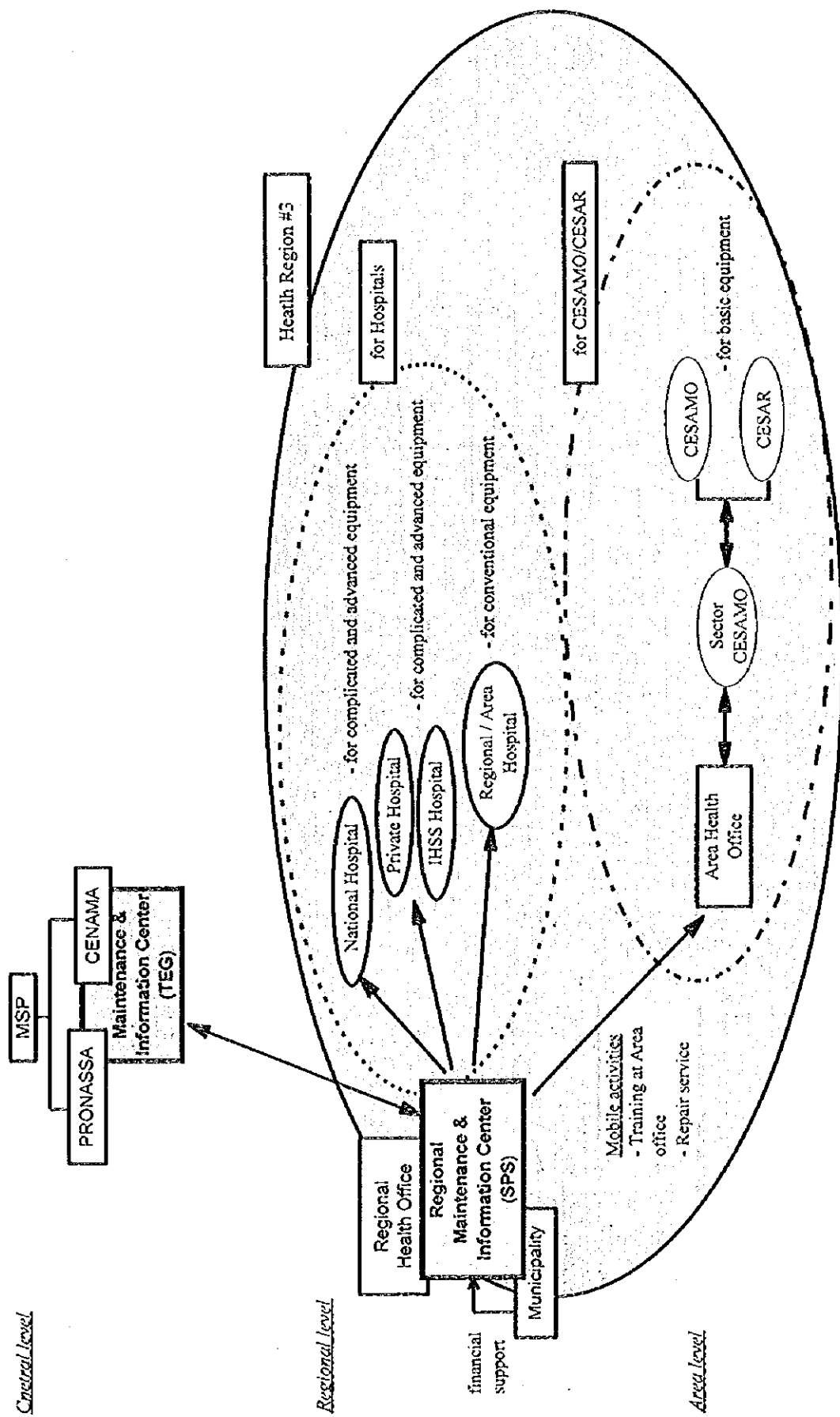
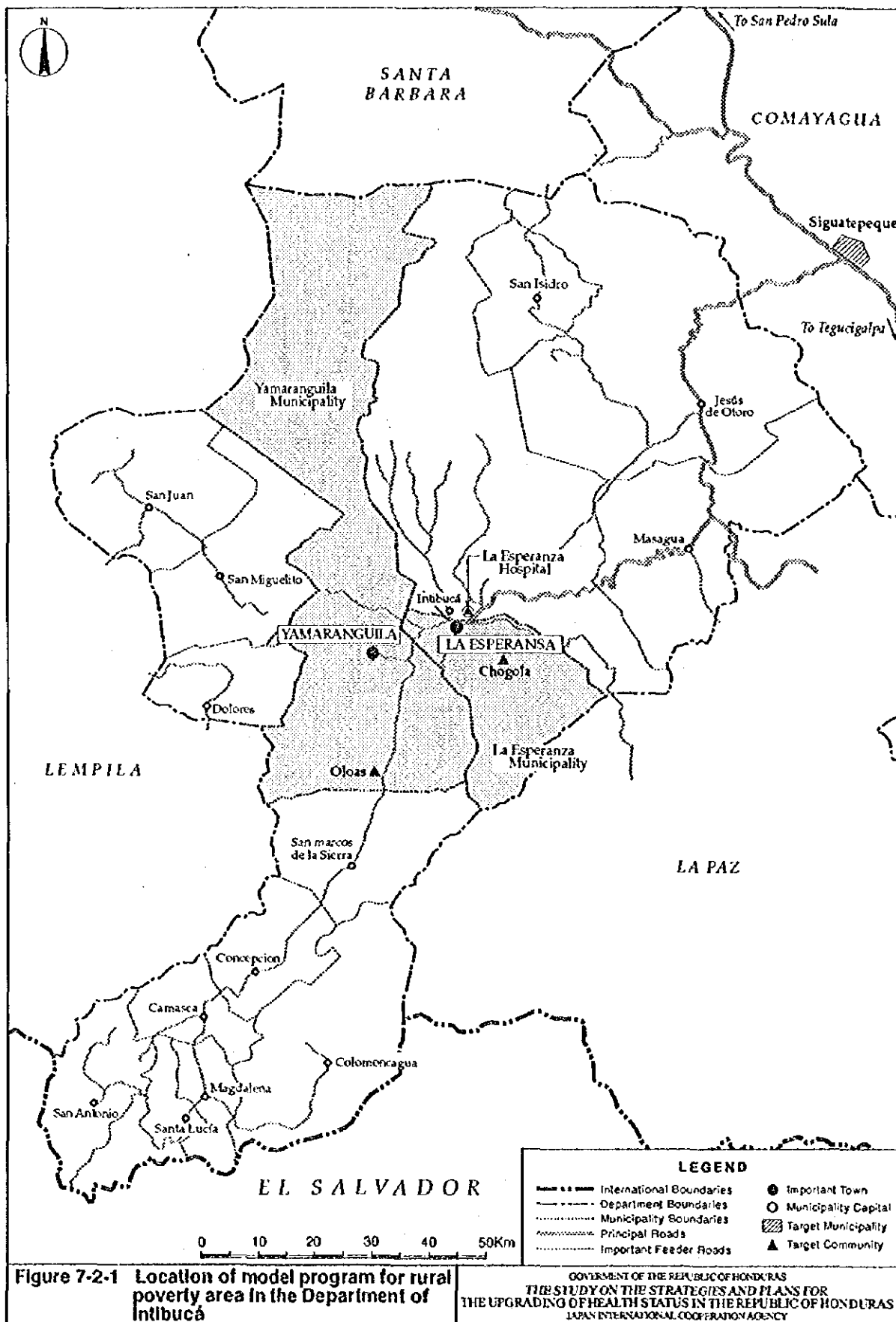
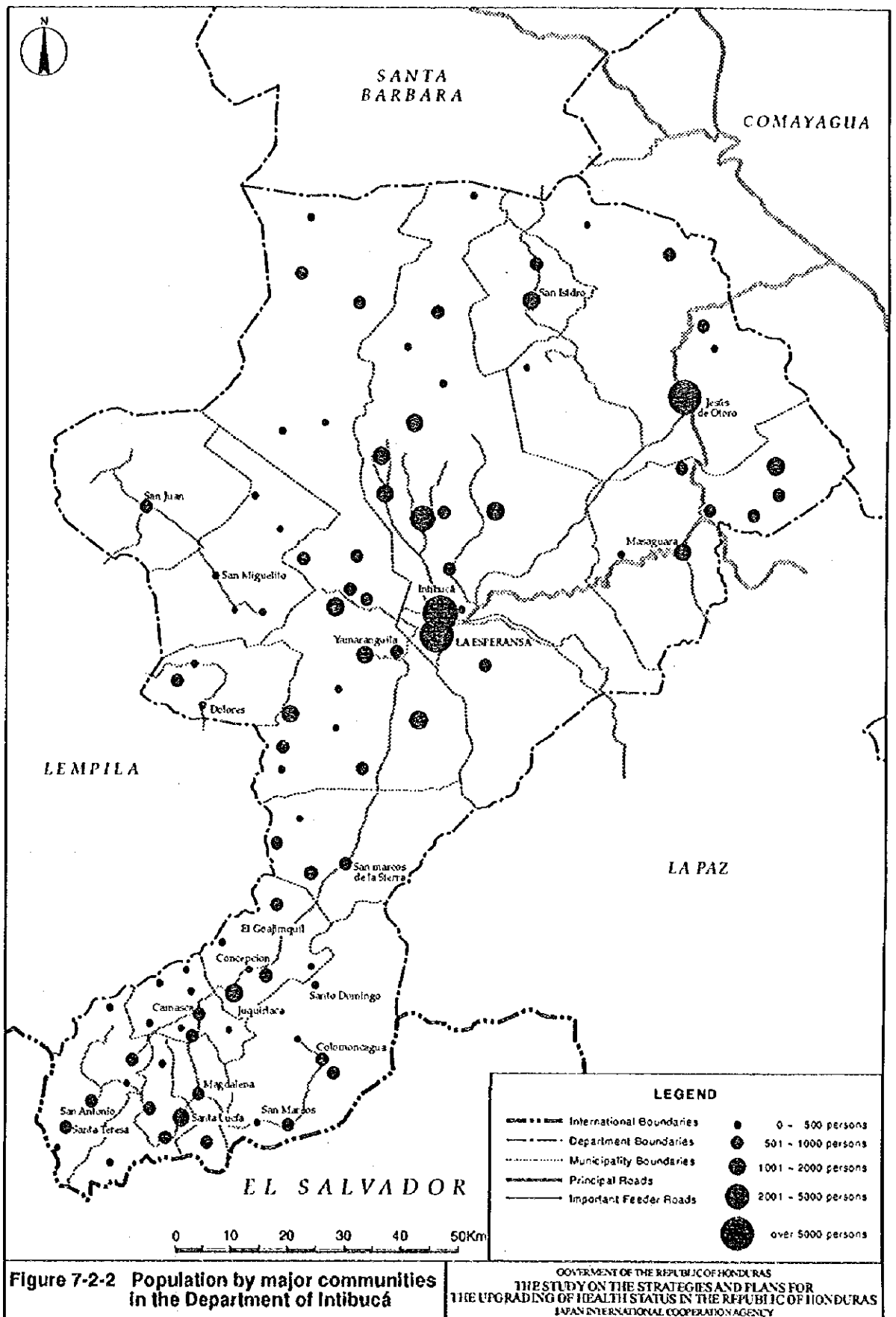


Figure 7-1-10 Model project 3 for urban area: "Maintenance and Information Center for Medical Facilities and Equipment"





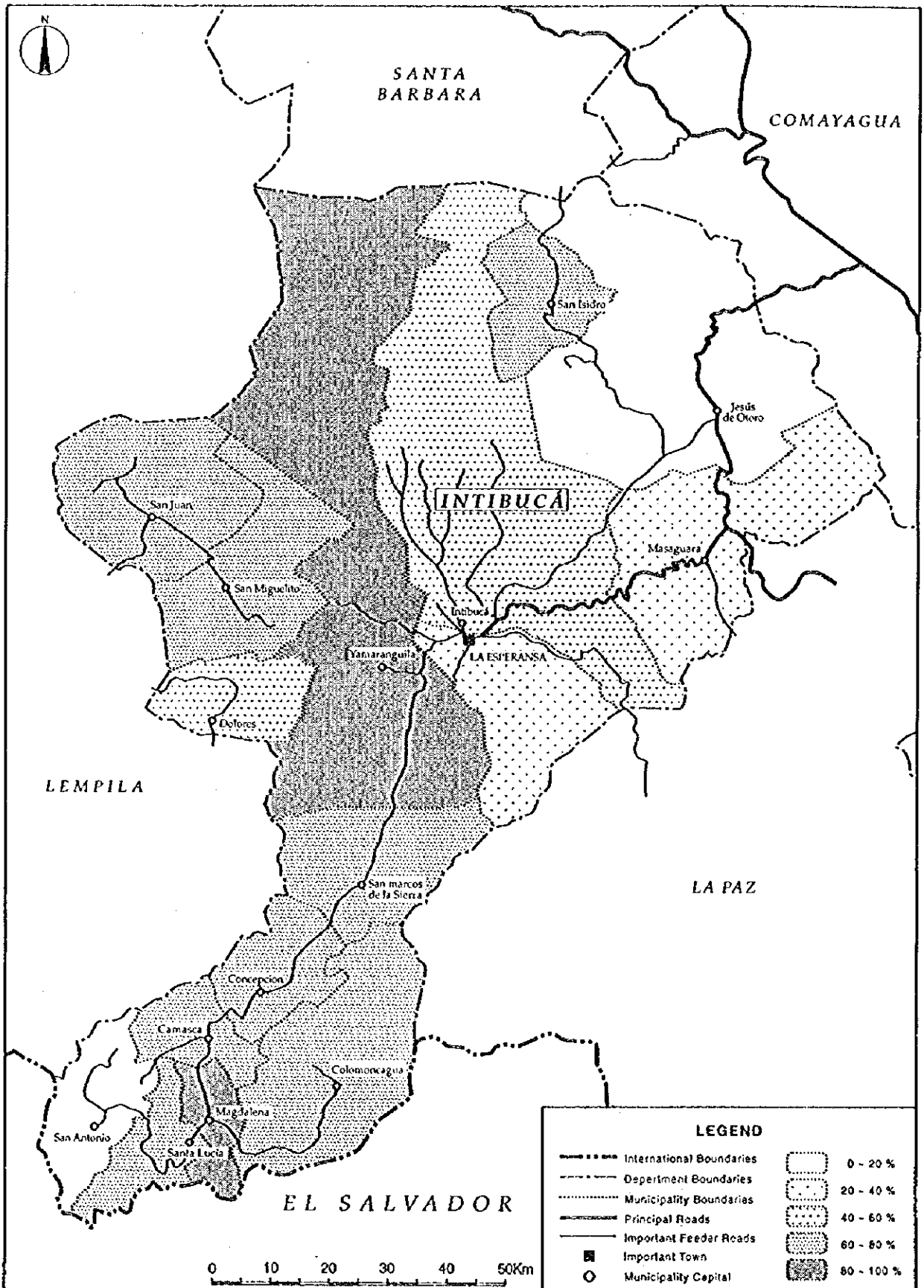


Figure 7-2-3 Percent of population at poverty strata No.4 and No.5

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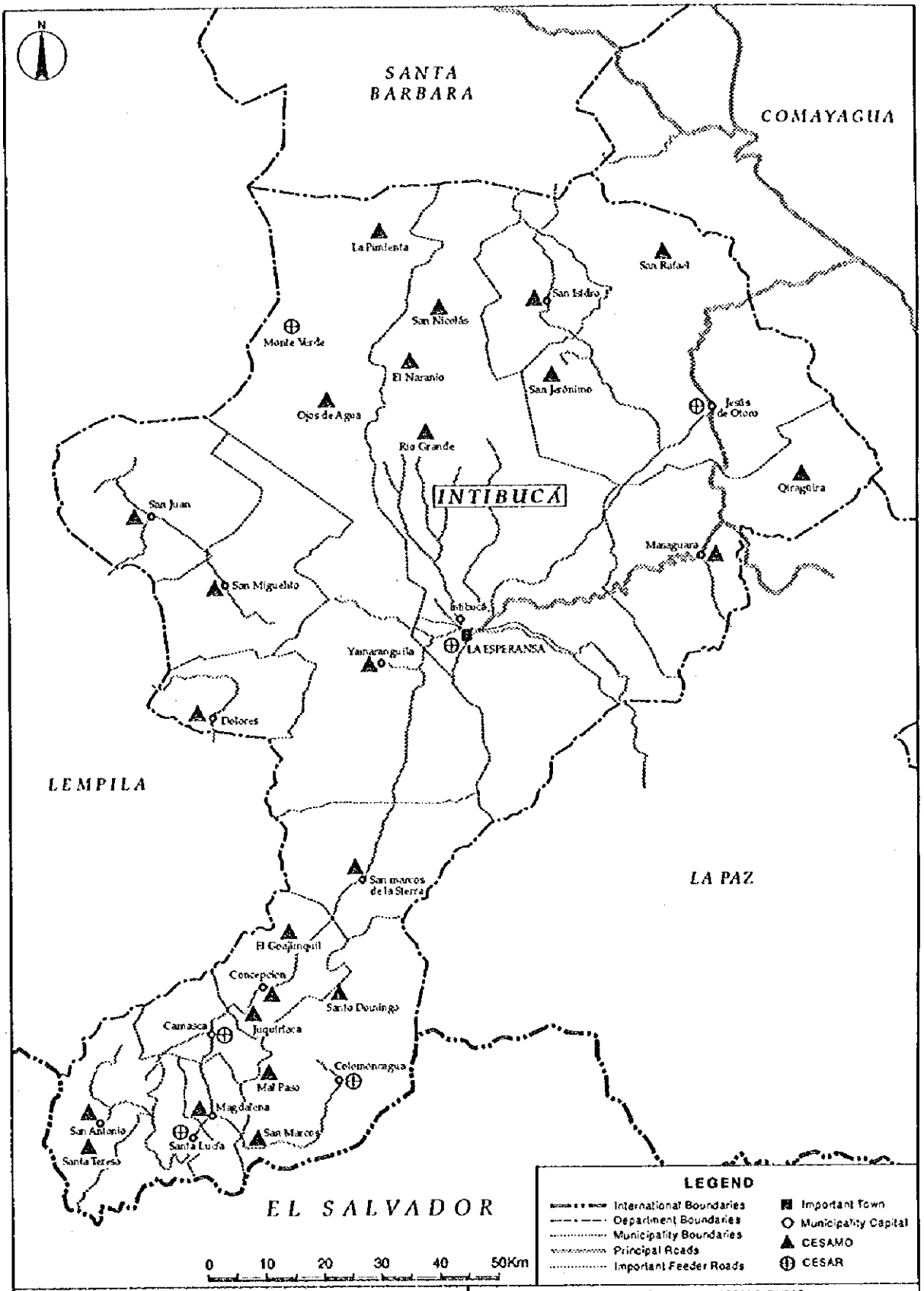


Figure 7-2-4 Location of CESAMOs/CESARs in the Department of Intibucá

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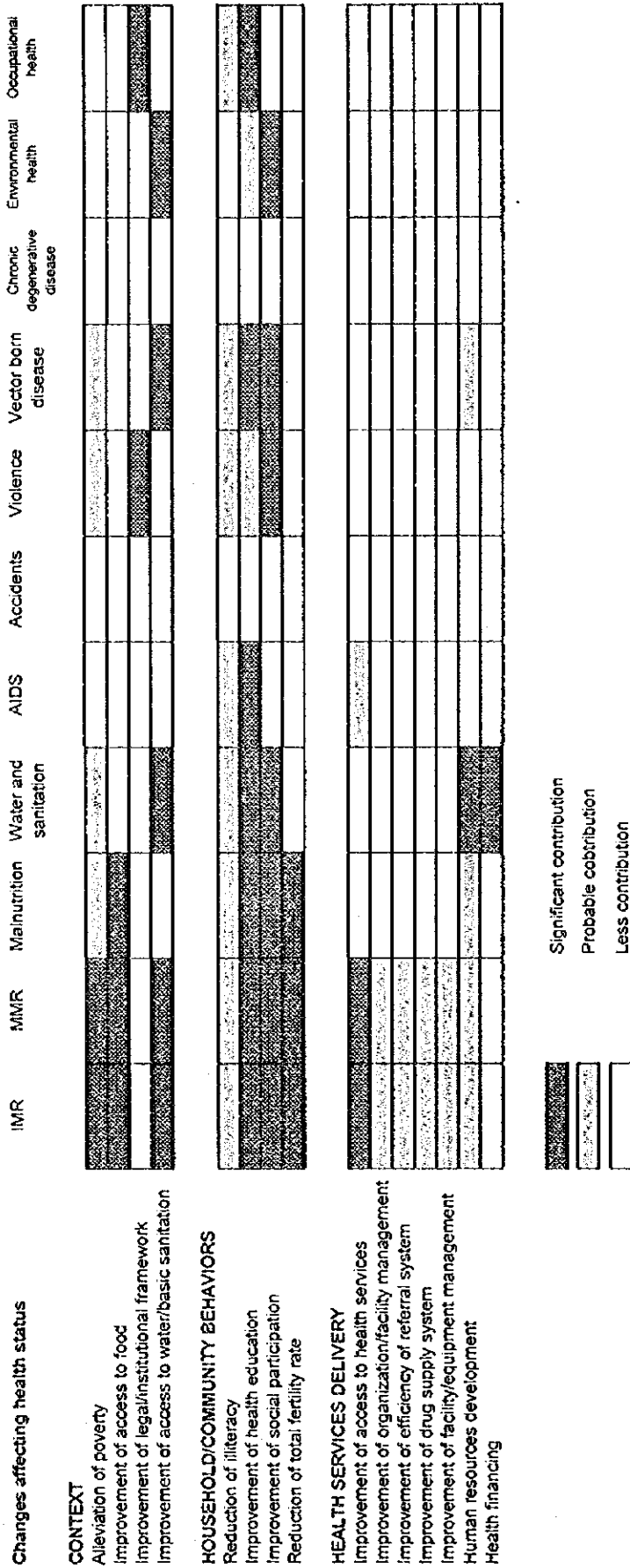


Figure 7-2-5 Contribution of 15 strategies to priority health problems in the rural poverty area

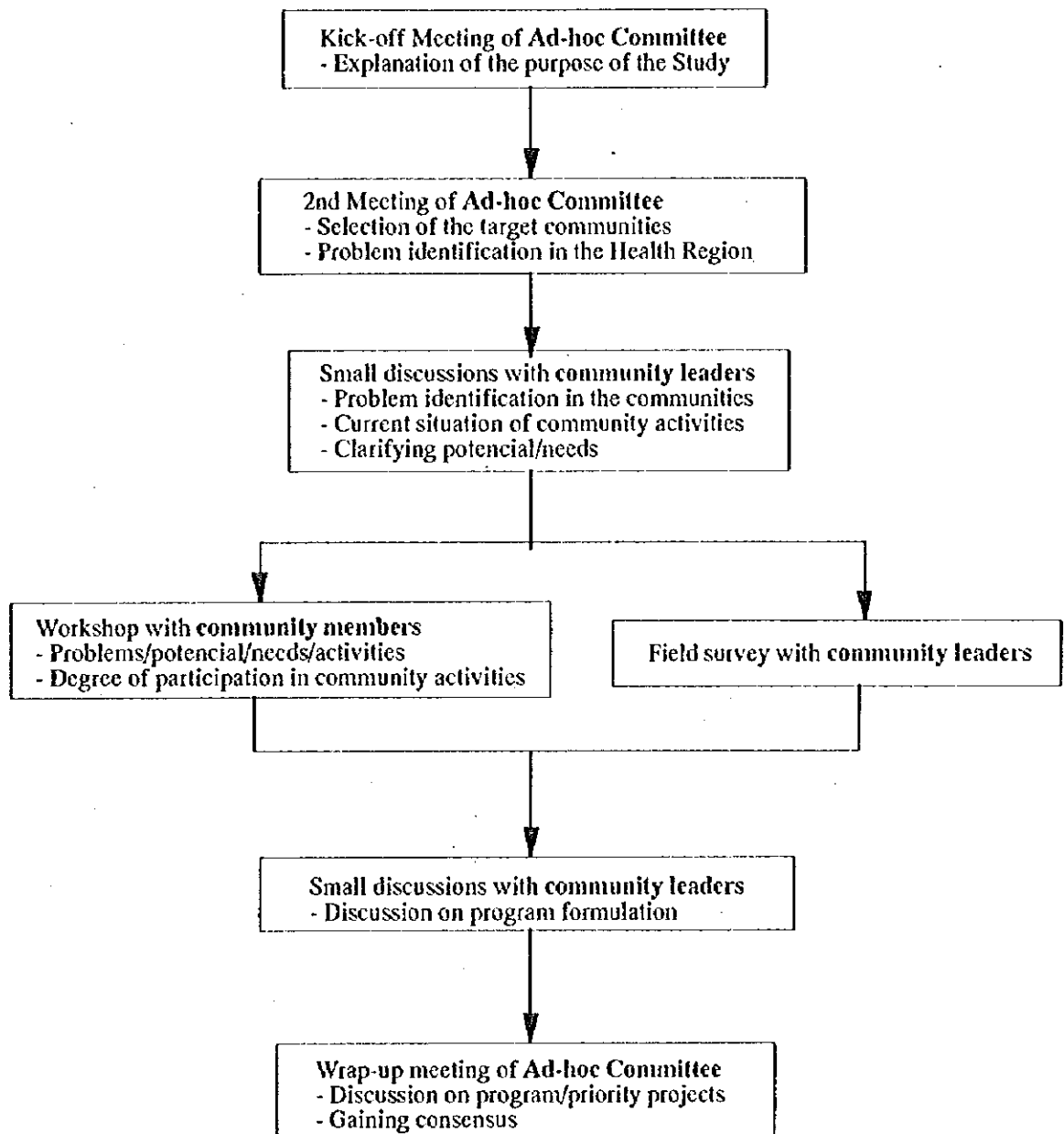


Figure 7-2-6 Process of developing a model health program for rural poverty area applied in the Phase III study

FEASIBILITY STUDY FOR DEVELOPMENT OF HEALTHY VILLAGE MODEL PROGRAM

<p>Improvement of accessibility to health infrastructure</p> <ul style="list-style-type: none"> - Improvement of hospital facilities/equipment - Improvement of CESAMO/CESAR's facilities/equipment - Improvement of maintenance system of facilities/equipment 	<p>Components Common to Project 1 and Project 2</p>	
<p>Improvement of accessibility to health-related infrastructure</p> <ul style="list-style-type: none"> - Improvement of accessibility of water/sanitation - Strengthening of environment protection systems - road conditions - public transportation systems - communication systems - energy supply systems (ex. electricity) 	<ul style="list-style-type: none"> - Provision of health education for community leaders - Training of health staff (midwives and health volunteers) - Improvement of preventive functions of CESAMOs, CESARes and Maternal Inns - Improvement of community members' interest in their health 	<p>Components of Project 2 Accessibility Improvement</p>
<p>Improvement of accessibility to agriculture technology and infrastructure</p> <ul style="list-style-type: none"> - production technology improvement - irrigation systems - promotion of farmers' cooperative activities - Marketing system (collection, transportation, producer's market, consumer's market) 	<p>Components of Project 1 Training and Extension Center</p>	<p>Components of Project 2 Accessibility Improvement</p>
<p>Improvement of accessibility to primary education systems</p>	<p>Community activity promotion</p> <ul style="list-style-type: none"> - Public relations for promoting community activities - Institutional strengthening of community organizations - Provision of information on community activities <p>For health promotion</p> <ul style="list-style-type: none"> - Provision of health and food preparation education - Supporting CESAMO/CESAR /Maternal Inn activities for health promotion activities - Technology transfer and equipment lending for water supply system development <p>For income generation</p> <ul style="list-style-type: none"> - Basic agriculture training - Demonstration farm - School gardening - Equipment lending - Food processing training - Training on marketing - Community fund - Establishing farmers' cooperatives - Provision on basic environment conservation 	<ul style="list-style-type: none"> - Institution building of health providers mainly for project management - Improvement of CESAMO and CESAR staff's outreach consultations to deprived communities (equipment provision and staff training) - Strengthening of CESAMO and CESAR functions to improve communities' interest in health services through health festivals, healthiest community award, and group medical check-ups etc.
<p>CORE PROJECTS</p>		
<p>Socio-economic status and KAP survey on inhabitants</p>	<p>Strengthening of women's participation in development activities</p>	<p>Enforcement of health-related institutions</p>

Figure 7-2-7 Scope of the two priority model projects and the feasibility study for development of the healthy village model program

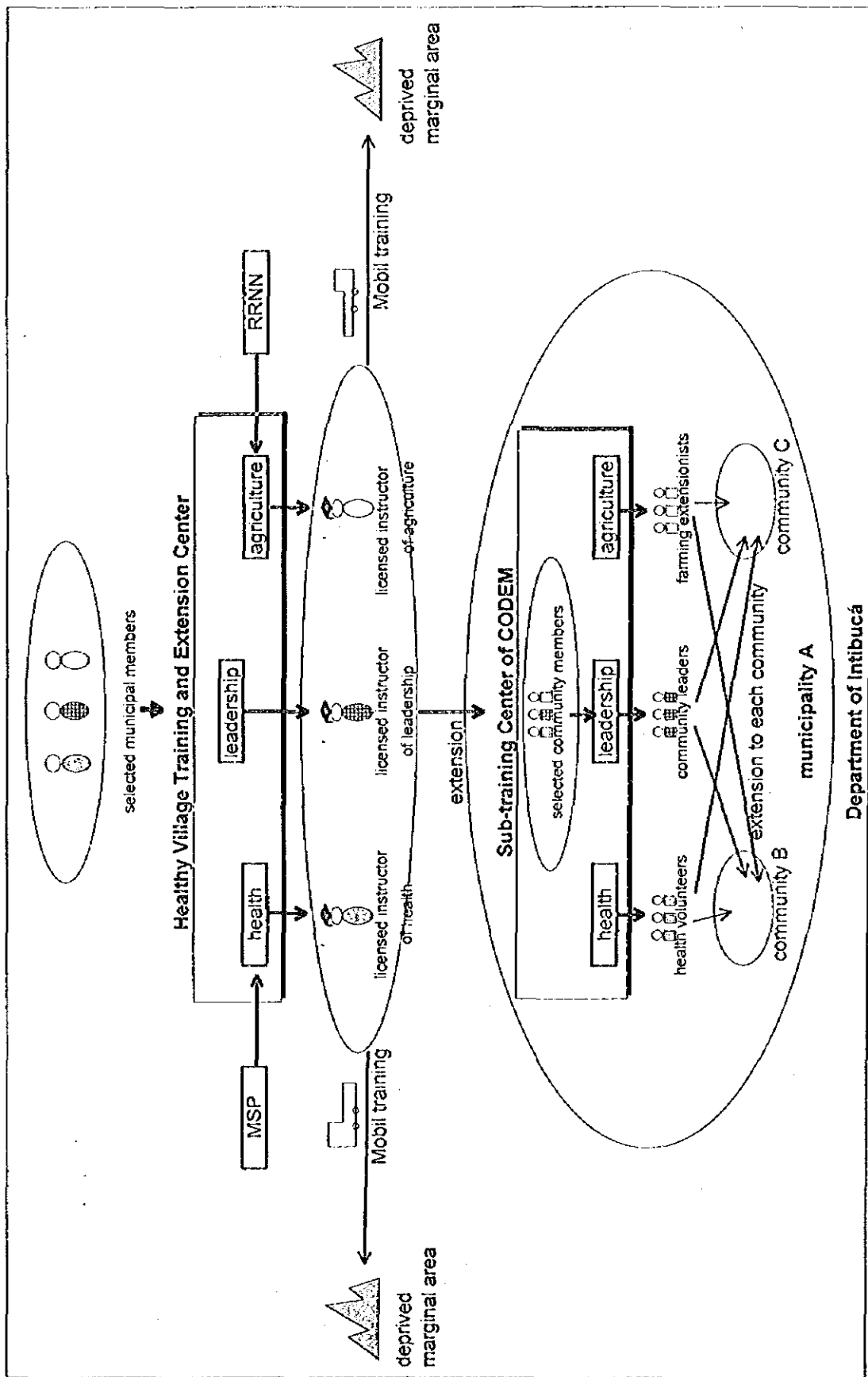
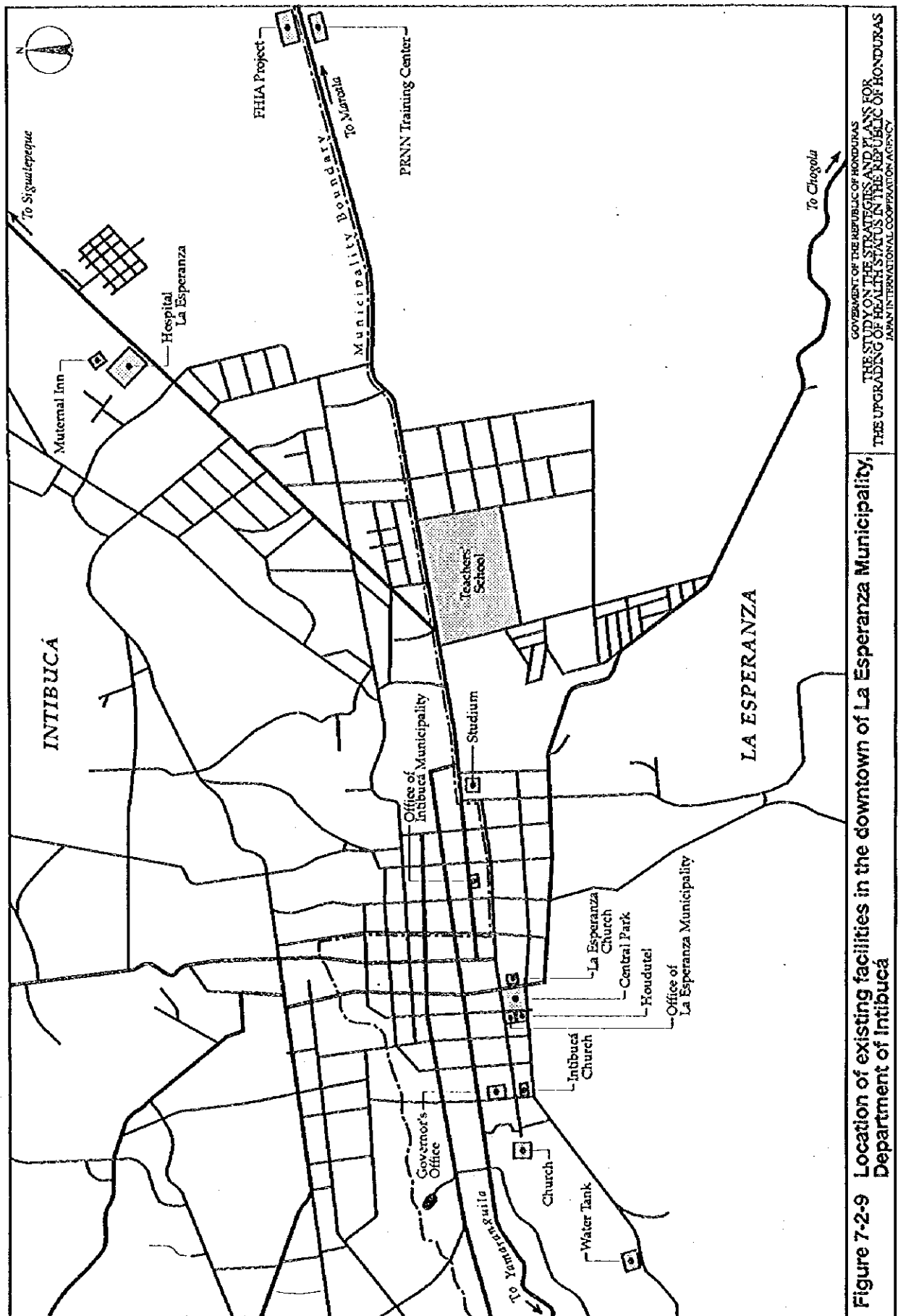


Figure 7-2-8 Model project 1: Establishment of "Healthy Village Training and Extension Center" in the rural poverty area, Department of Intibucá



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Figure 7-2-9 Location of existing facilities in the downtown of La Esperanza Municipality, Department of Intibuca

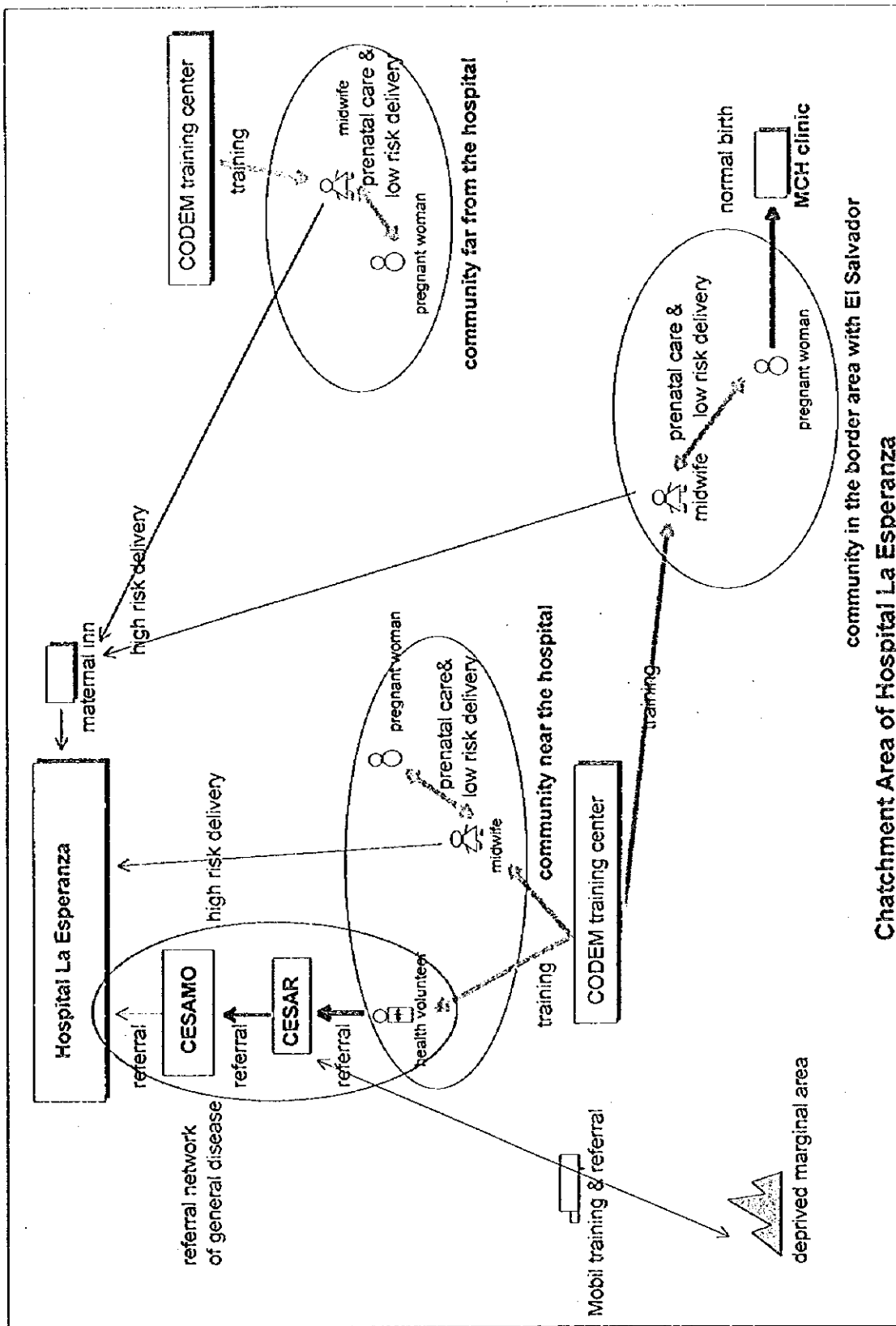


Figure 7-2-10 Model project 2: "Improvement of community members' accessibility to health services" in the rural poverty area, Department of Intibucá

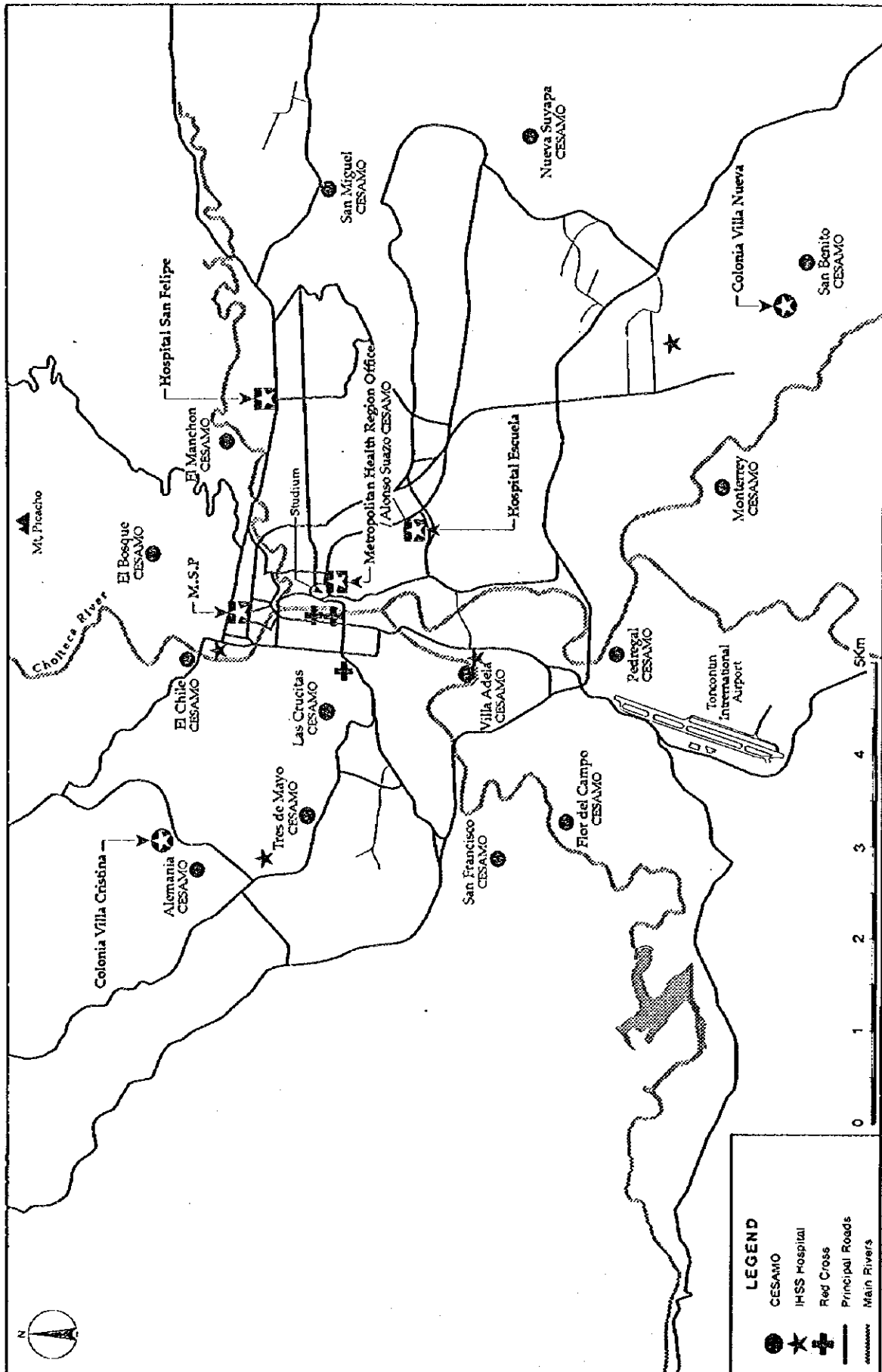


Figure 7-2-11 Location of health service facilities in the urban area of Tegucigalpa

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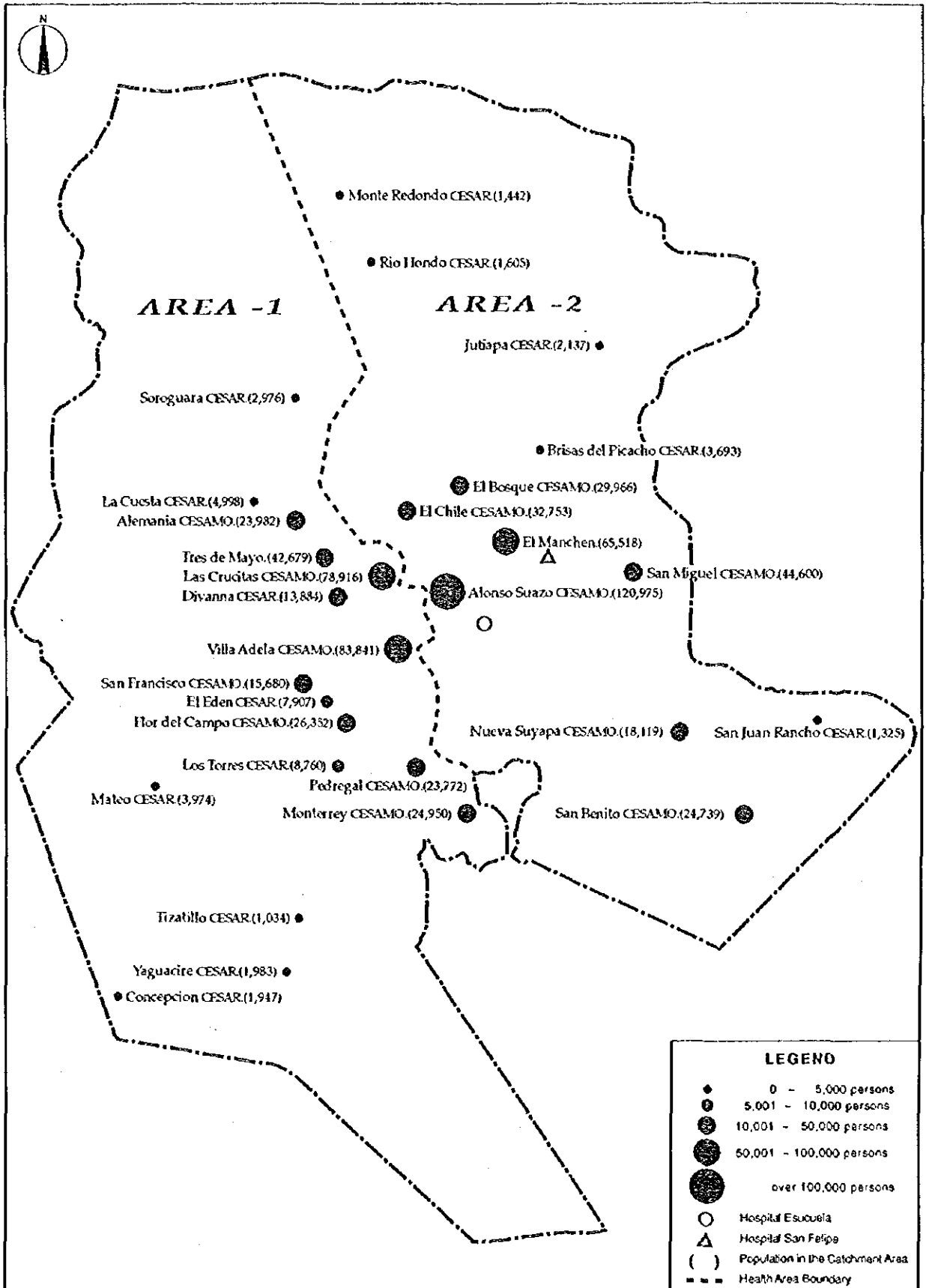


Figure 7-2-12 Population of catchment areas of CESAMO/CESAR in the urban area of Tegucigalpa

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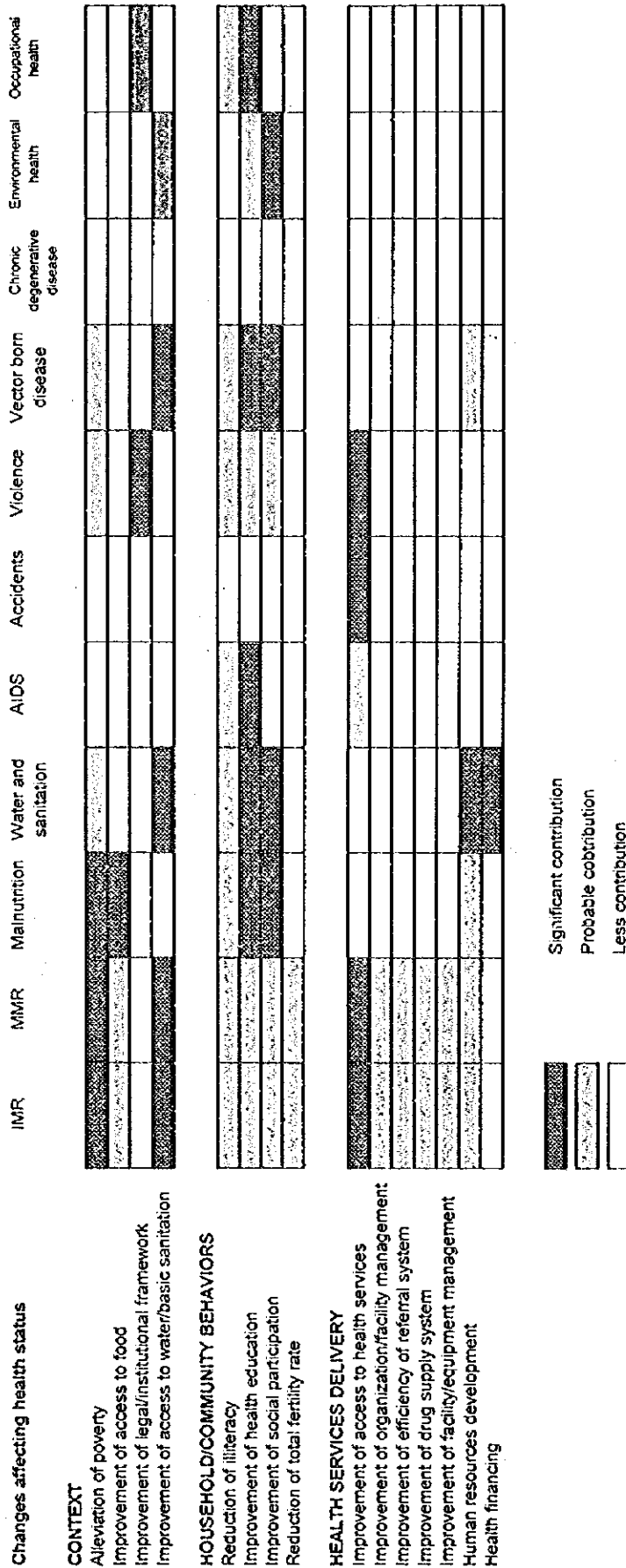


Figure 7-2-13 Contribution of 15 strategies to priority health problems in the urban poverty area

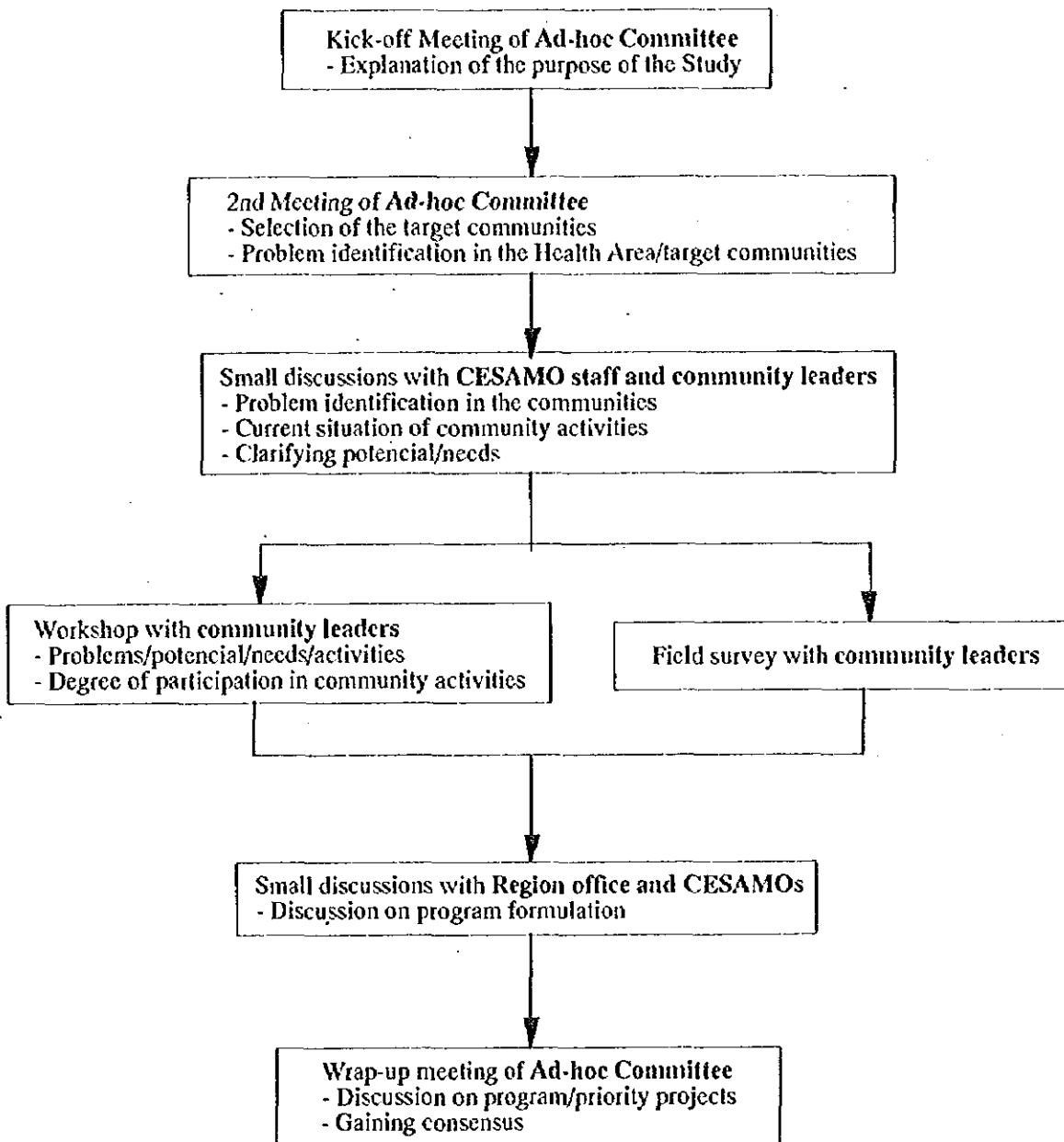


Figure 7-2-14 Process of developing a model health program for urban poverty area applied in the Phase III study

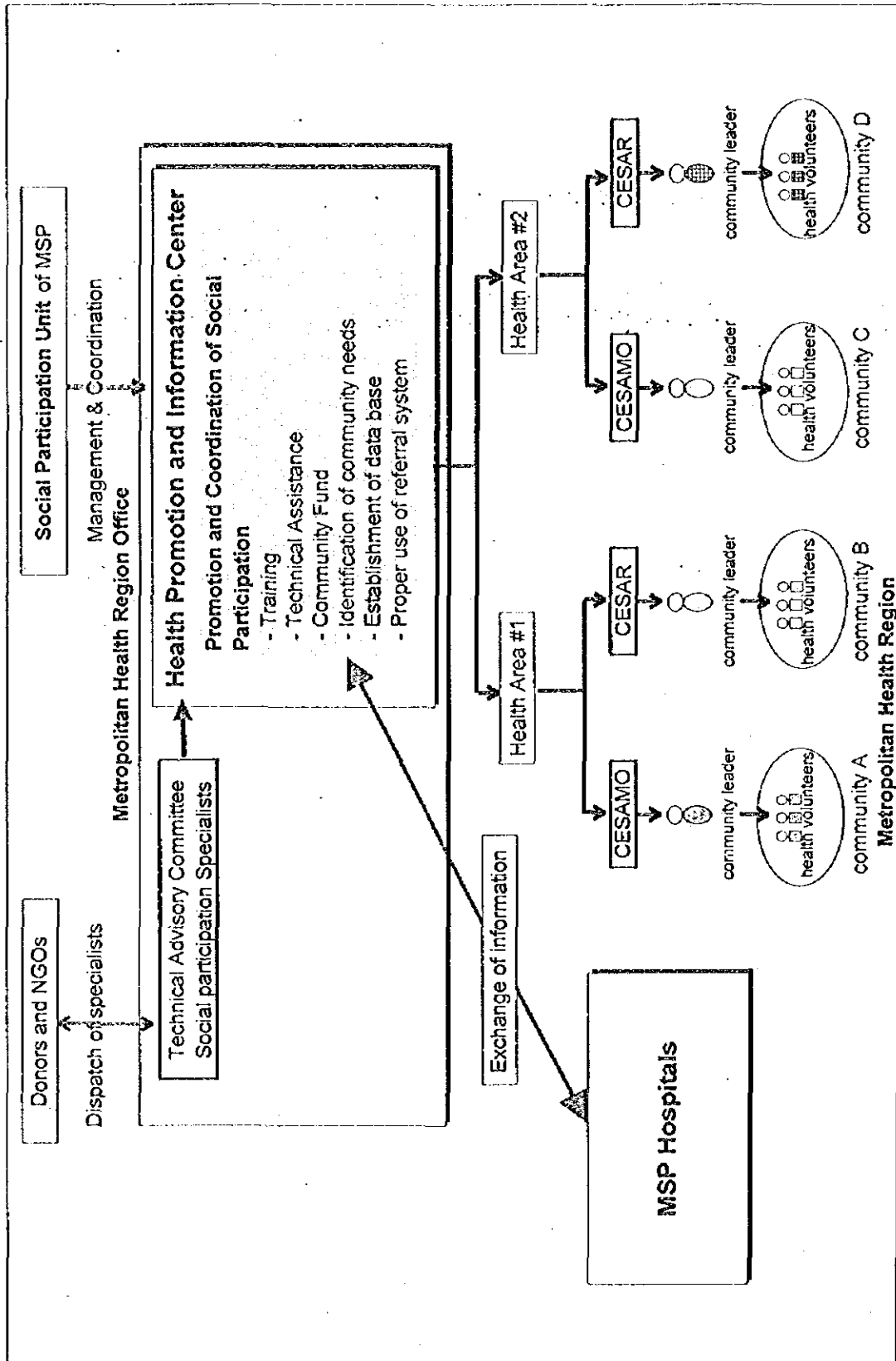


Figure 7-2-15 Model project 1: "Improved actions to promote social participation activities" in the urban poverty area, Tegucigalpa

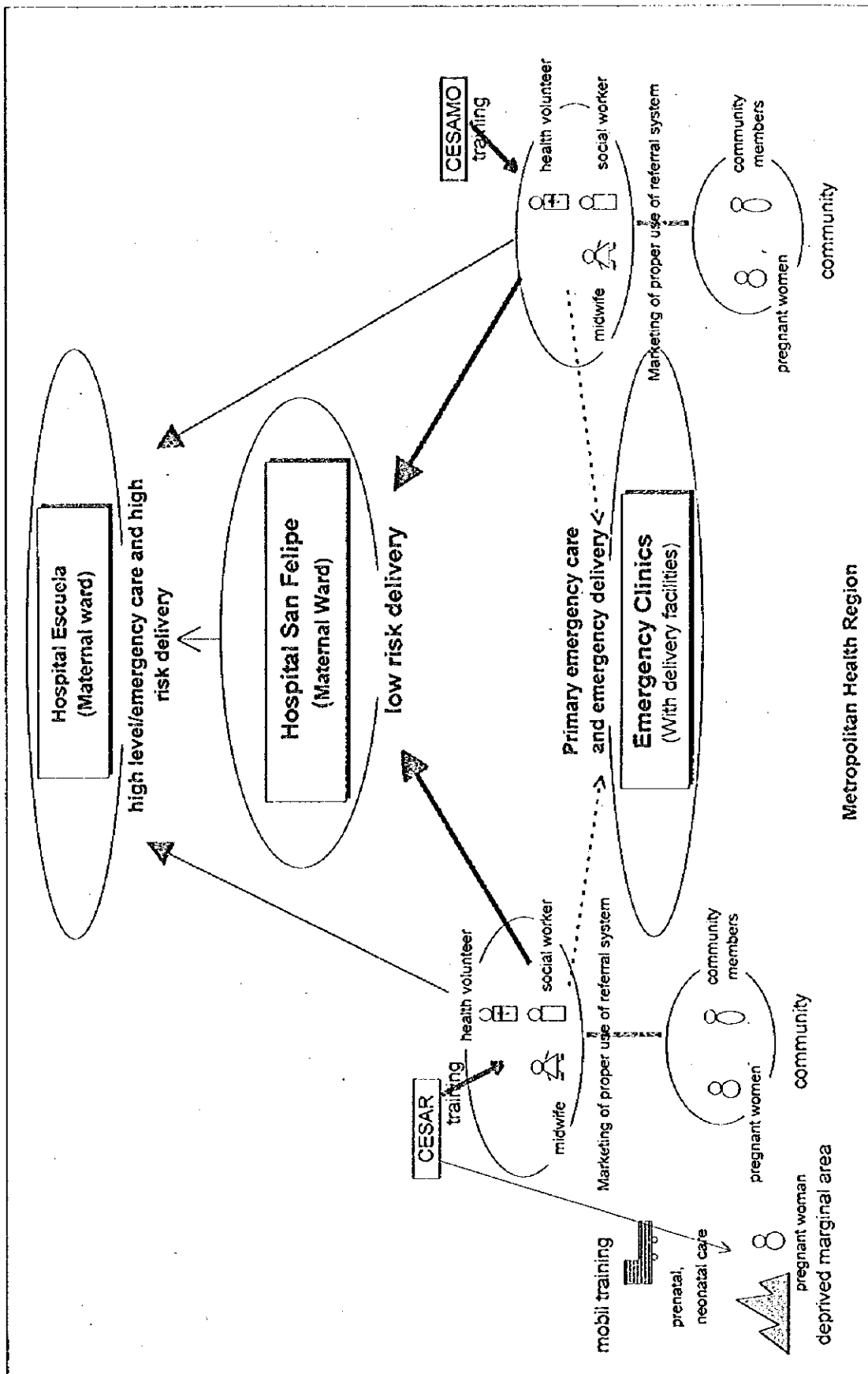
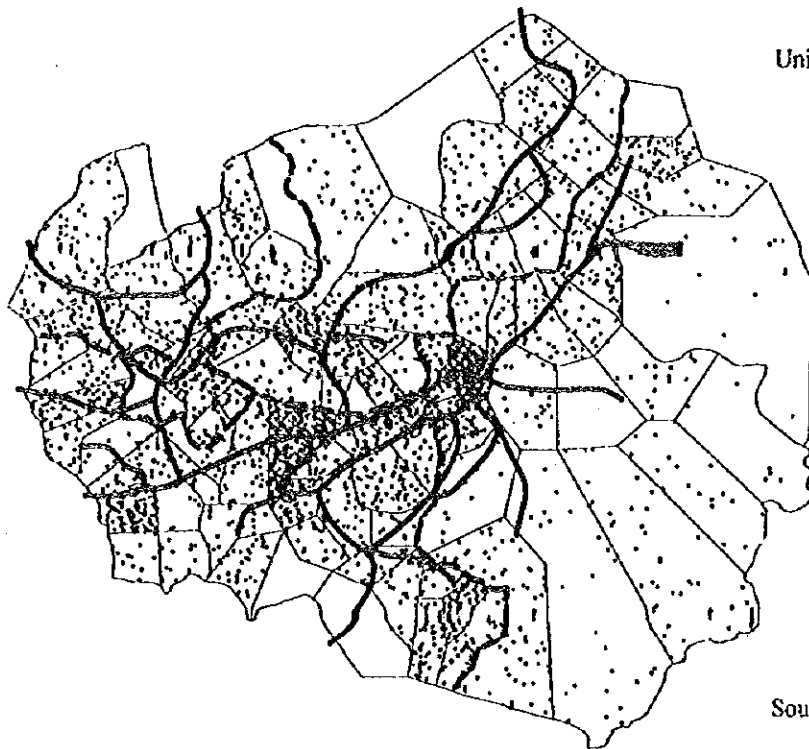


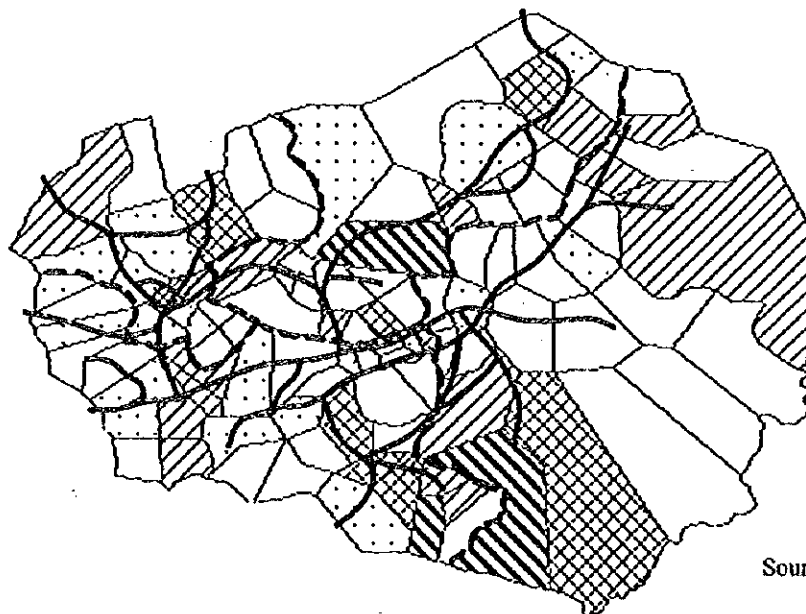
Figure 7-2-16 Model project 2: "Improvement of awareness and utilization of the health service network in the primary level" in the urban poverty area, Tegucigalpa



Unit: 1dot=100 person

Source: MSP, Health Region No.7

Figure 7-3-1 Population covered per UPS



AT95/MAX

- 0.00 to 0.25
- ▨ 0.26 to 0.50
- ▩ 0.51 to 0.75
- ▧ 0.76 to 1.00

Source: MSP, Health Region No.7

Figure 7-3-2 Number of first attention as percent of maximum service capacity per UPS - 1995

Table 4-1 Consumption per capita for major agricultural products - 1987

Products	unit : kg/year								
	Metropolitan	Urban	Rural	National	Central	North	South	East	West
Corn	69.7	82.0	170.4	132.6	177.2	99.6	212.6	159.4	181.6
Beans	15.4	18.7	25.0	21.7	25.8	20.3	19.9	30.2	24.9
Rice	18.6	18.5	13.3	18.9	12.8	19.2	12.1	15.7	13.2
Wheat	5.0	6.1	2.9	3.8	0.3	9.9	0.9	1.1	1.2
Vegetables	38.9	35.8	19.5	27.0	21.7	27.4	15.6	23.4	20.8
Meats	28.8	24.1	10.2	17.0	29.5	20.4	9.5	13.6	7.8
Fish	1.5	2.5	2.0	2.1	1.8	4.4	2.2	1.3	1.1

Source : Canasta Basica de Alimentos, SECPLAN

Table 4-2 Number of cases of vector-borne diseases by health region 1994-1995

Health Region	Malaria		Dengue		Cut. Leishmaniasis	
	1994	1995	1994	1995	1994	1995
Metropolitan	209	333	1,881	4,834	11	7
No. 1	8,584	4,895	370	2,142	69	41
No. 2	9,867	9,370	148	1,420	4	7
No. 3	14,009	9,330	123	1,718	147	72
No. 4	1,499	1,999	66	1,977	16	22
No. 5	876	950	56	1,330	7	1
No. 6	11,965	15,290	266	2,000	135	154
No. 7	12,494	14,065	144	2,705	632	798
No. 8	2,233	3,214	1	26	1	0
Total	61,736	59,446	3,055	18,152	1,022	1,102

Source: MSP -DETV - Telegrama Epidemiológico

Table 4-3 GDP real growth rate in Honduras 1980 - 1993

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
GDP	0.7	2.5	-1.4	-0.9	4.3	4.2	0.7	6.0	4.6	4.3	0.1	3.3	5.6	3.7	-1.4
per capita GDP	-2.6	-0.8	-4.7	-4.2	1.0	0.9	-2.6	2.7	1.3	1.4	-2.9	0.3	2.7	0.7	

Source: Ministerio de Hacienda y Obras Publicas

Table 4-4 Agricultural production 1974/1993

Department	Corn			Beans			Rice			Miscellaneous Grains		
	1974	1993	Average annual growth rate (1974-1993)	1974	1993	Average annual growth rate (1974-1993)	1974	1993	Average annual growth rate (1974-1993)	1974	1993	Average annual growth rate (1974-1993)
	Unit: ton											
1 Atlántida	22,625	25,148	0.8%	1,788	907	-4.7%	4,316	4,023	-0.5%	67	91	2.2%
2 Choluteca	14,987	19,729	2.0%	850	1,335	3.3%	1,539	307	-10.9%	9,648	8,820	-0.6%
3 Colon	18,953	29,197	3.1%	1,012	1,309	1.9%	1,560	4,720	8.2%	14	108	15.4%
4 Comayagua	13,871	26,938	4.9%	2,842	3,928	2.3%	1,219	6,925	13.2%	1,149	901	-1.7%
5 Copan	36,556	30,938	-1.2%	2,923	3,494	1.3%	1,355	2,248	3.7%	46	114	6.7%
6 Cortes	23,383	29,688	1.7%	1,905	1,656	-1.0%	2,217	9,415	10.9%	52	564	18.5%
7 El Paraíso	21,774	48,656	5.9%	4,511	3,175	-2.5%	168	489	7.9%	5,953	8,112	2.2%
8 Fco. Morazan	20,414	26,517	1.9%	4,193	4,826	1.0%	421	342	-1.5%	4,302	5,915	2.5%
9 Grac. a Dios	1,041	895	-1.1%	543	737	2.2%	1,178	4,431	9.9%	-	6	-
10 Intibuca	10,278	21,012	5.2%	955	2,185	6.2%	286	1,565	12.9%	4,352	5,301	1.4%
11 Isl. de la Bahía	154	36	-9.8%	13	1	-17.8%	21	-	-	-	-	-
12 La Paz	6,284	10,535	3.8%	466	790	3.8%	89	45	-4.8%	1,569	1,977	1.7%
13 Lempira	24,302	25,149	0.2%	1,190	2,227	4.6%	404	373	-0.6%	7,005	6,126	-1.0%
14 Ocotepeque	5,778	11,294	4.9%	220	527	6.4%	700	782	0.8%	22	38	3.8%
15 Olanchito	49,709	85,302	3.9%	5,617	8,108	2.7%	2,250	6,301	7.6%	66	9,449	42.6%
16 Sta. Barbara	29,741	40,589	2.2%	3,031	3,810	1.6%	441	1,473	9.0%	10	1,323	41.3%
17 Valle	7,799	8,724	0.8%	167	185	0.7%	227	70	-8.1%	6,408	4,920	-1.9%
18 Yoro	35,686	60,015	3.8%	2,017	4,076	5.2%	1,564	4,930	8.5%	49	1,061	24.6%
Whole Country	343,340	500,364	2.7%	34,226	43,276	1.7%	19,958	48,438	6.5%	40,717	54,826	2.1%

Source: Censo Nacional Agropecuario 1974, 1993

Table 4-5 Patterns of referral in MSP

1) Percent of referred patients to total number of patients

National hospitals		Regional hospitals		Area hospitals	
Mario Mendoza	27%	Hospital de Occidente	19%	Gracias	12%
Santa Rosita	23%	Hospital Atlántida	5%	El Progreso	10%
Mario Catarino Rivas	20%	Hospital San Francisco	2%	La Esperanza	8%
Instituto Nacional del Torax	18%	Hospital Santa Teresa	1%	San Marcos	8%
Hospital Escuela	15%	Hospital del Sur	0%	La Paz	4%
Hospital San Felipe	4%			Santa Bárbara	3%
				Danlí	2%
				Trujillo	1%
				Puerto Cortes	1%
				Tela	1%
				Tocoa	1%
				Roatan	1%
				Puerto Lempira	0%
Average	15.8%	Average	4.0%	Average	2.8%

Source: K. Ohara, Sistema de referencia nivel nacional de Honduras, 1994

2)-1 Origin of references from lower level of MSP health institutions to higher ones

From\To	National	Region	Area
Region	22%		
Area	17%	16%	
CESAMO	54%	65%	69%
CESAR	7%	19%	32%
Total	100%	100%	100%

2)-2 Origin of references from higher level of MSP health institutions to lower ones

From\To	Region	Area	CESAMO	CESAR	Total
National	8%	3%	85%	4%	100%
Region		2%	98%	1%	100%
Area			86%	14%	100%

Source: K. Ohara, Sistema de referencia nivel nacional de Honduras, 1994

3) Origin of references from MSP health institutions to national hospitals

From\To	Hospital Escuela	Hospital San Felipe	Instituto Nacional del Torax	Hospital Mario Mendoza	Hospital Santa Rosita	Hospital Mario Catarino Rivas
1. National Hospitals						
Hospital Escuela		26%	31%	31%		1%
Hospital San Felipe	12%		11%	7%		
Instituto Nacional del Torax	2%	1%		1%		
Hospital Mario Mendoza	1%	1%	0%		63%	
Hospital Santa Rita	1%	1%	0%	1%		
Hospital Mario Catarino Rivas	8%	5%	3%	4%	2%	29%
2. Regional Hospital						
Hospital Atlántida	6%	6%	3%	4%	2%	22%
3. Health Centers						
CESAMO	34%	14%	28%	23%	4%	15%
CESAR	5%	0%	4%	4%	3%	2%
4. Private						
Private	21%	30%	15%	15%	2%	21%

Source: K. Ohara, Sistema de referencia nivel nacional de Honduras, 1994

Table 4-6 MSP budget 1990 - 1995

	Unit: Lps 1,000					
	1990	1991	1992	1993	1994	1995
National Funds						
Total Central Government	2,665,559	3,115,595	3,694,241	4,131,124	5,147,234	6,169,742
Public Health	259,122	320,317	369,903	418,830	522,039	612,412
Public Health % of total	9.72%	10.28%	10.01%	10.14%	10.14%	9.93%
External Funds						
Total Central Government	585,193	393,019	1,220,458	1,948,658	1,882,579	2,021,490
Public Health	77,107	59,303	84,645	92,434	161,363	459,135
Public Health % of total	13.18%	15.09%	6.94%	4.74%	8.57%	22.71%
Total Funds						
Total Central Government	3,250,752	3,508,614	4,914,698	6,079,782	7,029,813	8,191,232
Public Health	336,229	379,619	454,548	511,264	683,402	1,071,547
Public Health % of total	10.34%	10.82%	9.25%	8.41%	9.72%	13.08%
Public Health w/o SANAA	256,789	298,884	374,708	406,994	568,622	701,293
% of Gov w/o SANAA	7.90%	8.52%	7.62%	6.69%	8.81%	8.56%
Share of National Resources						
Gross Domestic Product (GDP)	12,537,000	16,314,000	18,800,000	22,444,000	27,359,000	-
Central Government % GDP	25.93%	21.51%	26.14%	27.09%	25.69%	-
Public Health % GDP	2.68%	2.33%	2.42%	2.28%	2.50%	-

Remarks: data during 1990-1994 based on executed budgets, 1995 on approved budget

Source: Ministerio de Hacienda y Obras Publicas

Table 4-7 MSP Hospital cost recovery revenues 1991 - 1995

	Unit: Lps.			
	1991	1992	1994	1995
Revenues				
All MSP Hospitals	5,407,786	5,958,527	7,880,497	11,013,249
National Hospitals	2,881,564	3,017,718	3,526,836	4,860,859
Regional Hospitals	1,265,129	1,508,118	1,532,745	2,348,244
Area Hospitals	1,261,093	1,432,691	2,820,917	3,804,146
Percent of patients who pay				
National Hospitals	82.2%	83.2%	81.3%	-
Regional Hospitals	44.3%	50.3%	54.8%	-
Area Hospitals	54.3%	69.6%	47.5%	-
Average per Payer				
National Hospitals	3.6	4.5	6.2	-
Regional Hospitals	4.1	7.0	9.6	-
Area Hospitals	4.8	4.2	7.1	-
Percent of non-personnel budget				
National	5.3%	6.3%	7.4%	2.8%
Regional	7.5%	12.1%	12.0%	3.5%
Area	3.0%	10.9%	19.0%	5.0%

Remarks: Part of 1995 data is not available

Source: Ministerio de Hacienda y Obras Publicas

Table 4-8 Coverage, per capita revenue and expenditure of IHSS 1989-1995

Year	1989	1990	1991	1992	1993	1994	1995
Number of beneficiaries							
Total	685,857	793,243	893,311	997,039	1,076,816	1,164,084	1,233,929
Insured	272,036	311,277	350,497	389,728	437,130	490,297	519,715
Dependents	413,821	481,966	542,814	607,311	639,686	673,787	714,214
Total Revenues							
Per Beneficiary (Lps.)	165	170	196	206	233	251	292
Per Insured (Lps.)	417	434	499	526	532	624	694
Health Revenues Only							
Per Beneficiary (Lps.)	94	91	116	113	135	141	139
Per Insured (Lps.)	236	232	295	288	309	351	331
Total Expenditures							
Per Beneficiary (Lps.)	164	157	183	166	175	174	199
Per Insured (Lps.)	413	400	467	425	399	431	473
Health Expenditures Only							
Per Beneficiary (Lps.)	142	136	161	138	146	140	-
Per Insured (Lps.)	358	346	410	353	334	347	-

Source: Ministerio de Hacienda y Obras Publicas

Table 5-1 Projection of population growth 1988 - 2010

Case 1 (optimistic case) Unit : 1000 persons

	1988				1995				2000				2010			
	Male	Female	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female	Total	%
under 5	391	376	768	17.2	444	427	871	15.9	457	439	896	14.5	461	443	904	11.8
5 - 10	353	340	693	15.5	396	382	779	14.3	437	422	859	13.9	456	440	896	11.7
10 - 15	302	289	591	13.2	363	352	715	13.1	392	380	772	12.5	447	433	880	11.5
15 - 20	252	244	497	11.1	318	306	624	11.4	359	349	707	11.4	428	416	844	11.0
20 - 25	192	196	388	8.7	265	257	523	9.6	311	302	612	9.9	380	373	753	9.8
25 - 30	156	162	318	7.1	206	209	415	7.6	258	253	510	8.2	343	340	683	8.9
30 - 35	127	134	261	5.8	161	170	331	6.1	200	205	406	6.5	296	293	589	7.7
35 - 40	104	110	213	4.8	132	141	273	5.0	156	167	323	5.2	246	246	492	6.4
40 - 45	82	85	167	3.7	108	116	224	4.1	128	138	266	4.3	191	199	390	5.1
45 - 50	68	70	137	3.1	86	91	177	3.2	104	113	218	3.5	148	161	309	4.0
50 - 55	57	59	116	2.6	68	72	140	2.6	82	88	170	2.7	120	132	252	3.3
55 - 60	47	48	95	2.1	56	59	115	2.1	64	68	133	2.1	95	106	202	2.6
60 - 65	37	38	75	1.7	45	48	93	1.7	51	56	107	1.7	72	80	152	2.0
65 - 70	28	29	57	1.3	34	36	70	1.3	40	43	83	1.3	53	59	112	1.5
70 - 75	20	20	40	0.9	24	26	50	0.9	28	31	59	1.0	38	44	83	1.1
75 - 80	13	13	26	0.6	15	17	32	0.6	18	20	38	0.6	25	31	56	0.7
over 80	16	17	33	0.7	15	17	32	0.6	17	19	36	0.6	23	29	53	0.7
Total	2,245	2,231	4,476	100.0	2,737	2,726	5,463	100.0	3,101	3,094	6,195	100.0	3,822	3,827	7,649	100.0

Source : Proyecciones des Poblacion de Honduras por Sex y Edad 1988-2050, SECPLAN

Case 2 (pessimistic case) Unit : 1000 persons

	1988				1995				2000				2010			
	Male	Female	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female	Total	%
under 5	391	376	768	17.2	444	427	871	15.9	511	493	1,003	15.9	600	581	1,181	14.3
5 - 10	353	340	693	15.5	396	382	779	14.3	437	422	859	13.6	573	557	1,131	13.7
10 - 15	302	289	591	13.2	363	352	715	13.1	392	380	772	12.3	499	486	985	11.9
15 - 20	252	244	497	11.1	318	306	624	11.4	359	349	707	11.2	428	416	844	10.2
20 - 25	192	196	388	8.7	265	257	523	9.6	311	302	612	9.7	380	373	753	9.1
25 - 30	156	162	318	7.1	206	209	415	7.6	258	253	510	8.1	343	340	683	8.3
30 - 35	127	134	261	5.8	161	170	331	6.1	200	205	406	6.4	296	293	589	7.1
35 - 40	104	110	213	4.8	132	141	273	5.0	156	167	323	5.1	246	246	492	5.9
40 - 45	82	85	167	3.7	108	116	224	4.1	128	138	266	4.2	191	199	390	4.7
45 - 50	68	70	137	3.1	86	91	177	3.2	104	113	218	3.5	148	161	309	3.7
50 - 55	57	59	116	2.6	68	72	140	2.6	82	88	170	2.7	120	132	252	3.0
55 - 60	47	48	95	2.1	56	59	115	2.1	64	68	133	2.1	95	106	202	2.4
60 - 65	37	38	75	1.7	45	48	93	1.7	51	56	107	1.7	72	80	152	1.8
65 - 70	28	29	57	1.3	34	36	70	1.3	40	43	83	1.3	53	59	112	1.4
70 - 75	20	20	40	0.9	24	26	50	0.9	28	31	59	0.9	38	44	83	1.0
75 - 80	13	13	26	0.6	15	17	32	0.6	18	20	38	0.6	25	31	56	0.7
over 80	16	17	33	0.7	15	17	32	0.6	17	19	36	0.6	23	29	53	0.6
Total	2,245	2,231	4,476	100.0	2,737	2,726	5,463	100.0	3,155	3,147	6,302	100.0	4,131	4,135	8,266	100.0

Source : 1988 and 1995: Proyecciones des Poblacion de Honduras por Sex y Edad 1988-2050, SECPLAN

**Table 6-1 Projection of bed occupancy by specialty for selected hospitals
1993 - 2010**

Hospital	Population			Expected Bed Occupancy in 2010			
	1993	2010	Average annual growth rate	Pediatrics	Gynecology and Obstetrics	Internal Medicine	Surgery
Region level							
Atlantida	280,261	410,000	46.3%	100.2%	134.6%	131.8%	136.9%
Sta Teresa	286,713	425,000	48.2%	90.0%	126.4%	103.2%	138.7%
San Francisco	338,457	530,000	56.6%	115.6%	99.3%	85.5%	86.0%
Area level							
Danli	297,054	420,000	41.4%	120.6%	137.7%	109.7%	76.8%
El Progreso	389,307	580,000	49.0%	111.6%	163.7%	89.8%	93.1%
Puerto Cortés	764,559	1,080,000	41.3%	72.2%	72.5%	76.6%	71.6%
Tela	280,261	410,000	46.3%	105.3%	97.0%	102.0%	109.7%
Tocoa	178,059	290,000	62.9%	114.0%	99.7%	93.8%	51.6%
Trujillo	178,059	290,000	62.9%	115.6%	98.0%	74.6%	88.1%

Remarks: Projections assume linear relationship between population and bed occupancy.

Sources: 1) bed occupancy 1993: Hospital statistics, MSP,

2) Population projections per department, 1995, SECPLAN

Table 6-2 Projection of demand for health services 1995-2010

	1993	1995	2000	2005	2010
1. Hospitalizations					
Population	5,173,134	5,462,791	6,194,926	6,927,291	7,648,997
Hospitalization rate (/100person per year)	5.4	5.2	5.2	5.2	5.2
MSP Service statistics	197,300	191,840	217,551	243,270	268,614
IHSS Service statistics	46,708	55,952	63,451	70,952	78,344
Private sector	37,912	37,555	42,588	47,622	52,584
Total	281,920	285,346	323,589	361,844	399,542
2. Ambulatory care contacts					
Population	5,173,134	5,462,791	6,194,926	6,927,291	7,648,997
Contact rate (/100person per year)	112.6	112.6	112.6	112.6	112.6
MSP Service statistics	4,539,192	4,793,353	5,435,768	6,078,386	6,711,650
IHSS Service statistics	1,288,007	1,395,256	1,542,413	1,724,757	1,904,447
Total	5,827,199	6,188,609	6,978,181	7,803,143	8,616,097

Remarks: 1) Projection of demand has been conducted by the study on the strategies and plans

for the upgrading of health status in the republic of Honduras.

2) Estimate for private sector based upon 1,354 beds (Hospital Directory) and 28 then 27 discharges per bed per year (see table below IHSS statistics)

3) Population projections based upon SECPLAN

4) Hospitalization Rate: Survey data show 727 hospitalizations reported over two year period, with 64% in the first year before survey date, i.e., 467 episodes for a population of 12,531.

5) 1995, 2000, 2010 of MSP service statistics, IHSS service statistics and private sectors are calculated with the same proportions of each sector as of 1994.

6) JICA/Honduras survey includes only visits to MSP's CESAR, CESAMO and hospital and IHSS's clinics and hospitals.

Source : population: Proyecciones des Poblacion de Honduras por Sex y Edad 1988-2050, SECPLAN

Table 6-3 IHSS revenue projection 1994 - 2010

	Unit: 1000 Lps.			
	1994	2000	2005	2010
Covered workers	475,502	637,218	813,270	1,037,961
Dependents	706,120	946,269	1,207,706	1,541,372
Total beneficiaries	1,181,622	1,583,487	2,020,975	2,579,334
Projected total population		6,194,926		7,648,997
IHSS percent of population		25.56%		33.72%
Health Revenue per worker if 600 Lps.	351	419	486	563
Health Revenues	166,901	267,066	395,140	584,634
Health Revenue per worker if 1000 Lps.	495	591	685	794
Health Revenues	235,373	376,632	557,249	824,483
Health Revenue per worker if 1400 Lps.	571	682	790	916
Health Revenues	271,512	434,458	642,806	951,071
Health Revenue per worker if 2000 Lps.	862	1,029	1,193	1,383
Health Revenues	409,883	655,871	970,401	1,435,767

Remarks: 1) Projection has been conducted by the study on the strategies and plans for the upgrading of health status in the republic of Honduras.

2) Assumptions for 2000, 2005, 2010; IHSS. Insured workers will increase 5 % per year (half rate of period 1989-1994). Average health benefit premium per worker will increase 3% per year

3) Price at 1994

Source: 1994 IHSS budget

Table 6-4 Projection of national funds available for health sector based on strategies proposed in NMHP 1994 - 2010

	Unit: 1,000 Lps.				
	1994	1995	2000	2005	2010
Low GDP growth					
MSP (incl. SANAA)	522,039	612,412	626,982	737,491	867,477
MSP cost-recovery income	9,964	13,473	40,754	95,874	112,772
IHSS health revenues	166,884	171,815	376,632	557,249	824,483
Municipal funds	90	90	8,855	10,516	12,490
High GDP growth					
MSP (incl. SANAA)	522,039	612,412	660,546	811,412	996,736
cost-recovery income	9,964	13,473	42,935	105,484	129,576
IHSS health revenues	166,884	171,815	376,632	557,249	824,483
Municipal funds	90	90	9,329	11,459	14,076

Remarks: 1) Projection has been conducted by the study on the strategies and plans for the upgrading of health status in the republic of Honduras.

2) Price at 1994 Lps.

3) GDP growth: Low: 1994-2000 = 3.1%, 2000-2010 = 3.3%; High: 1994-2000 = 4.0%, 2000-2010 = 4.2%

4) MSP share of GDP projected unchanged

5) Cost recovery revenues: 10% of MSP service delivery budget by 2000, 20% thereafter. (equal to 25% and 50% of nonpersonnel budgets)

6) IHSS--premiums based on premium limit of 1000 lps in 1994

7) Municipal funds--future projections based on 10% of the transfer of 5% of central budget

Source: MSP and IHSS budget

**Table 7-1-1 Population of San Pedro Sula urban area and Honduras
1988 - 2010**

Year	(Unit: 1,000)					
	1988	1992	1994	2000	2005	2010
San Pedro Sula Population	287	362	419	540	657	791
Average annual growth rate		5.4%	7.6%	4.3%	4.0%	3.8%
Honduras population	4,476	5,029	5,029	6,195	6,927	7,649
Average annual growth rate		3.0%	2.9%	3.5%	2.3%	2.0%

Source: 1) Proyecciones de poblacion de Honduras por sexo y edad 1988-2050.

 Anuales 1988-2010 y quinquenales 2015-2050, SECPLAN, 1993

 2) Encuestas de poblacion e indicadores socio-economicos, DIEM, 1992 (EPIS'92)

 3) Encuestas de poblacion e indicadores socio-economicos, DIEM, 1994 (EPIS'94)

 4) The urban development plan 1992-2002

**Table 7-1-2 Number of public health institutitons of MSP and IHSS
in Health Region No.3 - 1995**

No.	Health Area	Percentage of covered population	Number of Health Institutions						
			Tertiary level		Secondary level		Primary level		
			MSP National Hospital	IHSS Hospital	MSP Regional Hospital	Area Hospital	CESAMO	CESAR	IHSS Clinic
Metro	SPS, Cofradia	27.7%	1	1	1		19	3	
1	Villanueva, La Lima, Choloma, etc	14.5%					5	14	2
2	El Progreso	15.8%				1	6	14	1
3	Puerto Cortes	7.2%				1	4	10	
4	Santa Barbara	11.7%				1	9	18	
5	Yoro	6.4%				1	6	9	
6	Santa Cruz de Yojoa	8.9%					5	11	
7	Valles de Quimistan	7.8%					6	13	
	Total	100.0%	1	1	1	4	53	90	3

Source: 1) Evaluacion annual 1995, Region de salud No.3: Analisis de la situacion de salud y sus servicios, San Pedro Sul Enero 1996

 2) Establecimientos dela region de salud No.3, 1996

Table 7-1-3 Number of health professionals by CESAMO and CESAR in Metropolitan Area, Health Region No.3 - 1995

Sector	Name of CESAMO/CESAR	Type*		Doctor	Odonto- logist	Prof. Nurse	Aux. Nurse	Health Promotor	Number of Health Personnel ¹⁾²⁾						Number of out-patients (1995) ³⁾
		I	II III						Health Educator	Vector Controler	Pharmacy Assistant	Micro- biologist	Labo. Technician		
1	Chamelecon	x		2	1	1	3	1		1					6723
	San Antonio Chamelecon	x		1	1	1	3	1		1					5322
	Ebenzer		x	1											
	15 de Septiembre		x	1											
	Col.Sabillon Cruz		x	1			1								
2	Cofradia	x		1	1	1	2	1	1	1	1	1	1	1	6283
	Brisas Del Valle		x	1			2	1		1					
	Naco		x	1			2			1					
3	Caipules	x		1	1	1	2	1		1					10100
	Sandoval Sorto		x	1			1								
4	Sureste	x		2	1	1	3	1	1	1	1	1	1	1	9205
5	Noreste		x	1			1								6081
	Lomas del Carmen		x	1			2								
	Aldca el Carmen		x	1			1								
6	NorOeste	x		1	1	1	1	1	1	1	1	1	1	1	8616
	Fesitranh		x	14	7	3	29	3	1	6	2	1	7	7	59579
	Miguel Paz Barahona		x	(1)			1								
	Armenta		x	1			1								
7	Rivera Hernandez	x		1	1	1	2	1	1	1	1	1	1	1	6159
	Seis de Mayo		x	1			1								
	Padre Claret		x	1			1								
8	Cordillera del Tomala De Cortes**	x					1								1613
	Merendon		x				1								1884
	Buenos Aires**		x				1								911
	Total		8 6 8	33	10	10	60	11	3	13	8	1	8	8	

Remarks: 1) *Type I: MSP health centers, Type II: Operate by MSP and a part of health personnel payed by the municipality, Type III: Municipal health centers

2) X-ray personnel data is not available

Source: 1) Recursos humanos en salud de la ciudad de SPS, UNDP proyect

2) Interview at the metropolitan health office

3) Annual evaluation, metropolitan area, 1995

Table 7-1-4a Deaths by 10 major causes in hospitals in San Pedro Sula and Health Region No.3 - 1995

	National hospital (Mario Catarino Rivas Hospital) (1995) ¹⁾		Regional hospital (Leonardo Martínez V. Hospital) (1995) ¹⁾		Consolidated data of all hospitals in Health Region No.3 (1995) ¹⁾			
1 Cardiorespiratory disease	110	38%	AIDS	29	94%	Cardiorespiratory dis.	117	23%
2 AIDS	36	13%	Cholera	1	3%	Sepsis	98	20%
3 Sepsis	32	11%	Tuberculosis	1	3%	Bronchial pneumonia	79	16%
4 Tuberculosis	23	8%				AIDS	78	16%
5 Neonatal choke	22	8%				Premature birth	41	8%
6 Premature birth	18	6%				Neonatal asphyxia	28	6%
7 Septic shock	18	6%				Obtio-fetal	22	4%
8 Bronchial pneumonia	17	6%				Cardiopatis	16	3%
9 Malnutrition G.III	4	1%				Pulmonary tuberculosis	13	3%
10 Diabetes	8	3%				Diarrheal syndrom	9	2%
Total	288	100%	Total	31	100%	Total	501	100%

Source: Evaluacion anual 1995, Region de salud No.3: Analisis de la situacion de salud y sus servicios, San Pedro Sula, Enero 1996

Table 7-1-4b Deaths by 10 major causes in national registry in Health Region No.3 1993, 1995

	National registry of SPS citizen (Jan.-May, 1993) ¹⁾		Consolidated data of Area 1, 2, 5 and 7 in Health Region No.3 (1995) ²⁾		
1 Accidents and violence	64	24%	by Violence	173	23%
2 Cardiac diseases	44	17%	not defined	155	21%
3 Malignant tumors	38	15%	Malignant tumors	80	11%
4 AIDS	24	9%	Pneumonia	66	9%
5 Cerebrovascular diseases	20	8%	A.C.V.	63	8%
6 Respiratory diseases	19	7%	AIDS	60	8%
7 Digestive diseases	19	7%	Homicide	57	8%
8 Complicated	14	5%	Diarrheal syndrom	41	5%
9 Sepsis shock	12	5%	Intstinal parasites	35	5%
10 shock hipovolimico	8	3%	Sepsis	21	3%
Total	262	100%	Total	751	100%

Source: 1) Registry nacional de las personas, Enero 15 - Mayo, 1993

2) Evaluacion anual 1995, Region de salud No.3: Analisis de la situacion de salud y sus servicios, San Pedro Sula, Enero 1996

Table 7-1-5a Hospitalization and external consultation by 10 major causes in Mario Catarino Rivas Hospital - 1994

Cause of hospitalization			Cause of external consultation MCR	
1 Normal delivery	3,017	60%	Arterial hypertension	-
2 Abortion	505	10%	Diabetes	-
3 Premature birth	424	8%	Gastritis	-
4 R.N. Afec. por T.P.	410	8%	Arthritis	-
5 Intestinal infection	173	3%	Urinary tract infection	-
6 Anemia	154	3%	Migraine	-
7 Direct hernia	100	2%	Intestinal parasites	-
8 Bronchial pneumonia	92	2%	-	-
9 Acute appendicitis	89	2%	Anemia	-
10 AIDS	67	1%	Otitis	-
total	5,031	100%	total	-

Remarks: Number of cases of external consultation is not available.

Source: Evaluacion anual, Hospital nacional "Dr. Mario Catarino Rivas", Año 1994

Table 7-1-5b Diseases by 10 major causes in CESAMO/CESAR in San Pedro Sula - 1995

Age under 5 years		Age 5 - 14 years	
Metropolitan area (SPS)	Health Region No.3	Metropolitan area (SPS)	Health Region No.3
1 Pharyngeal tonsillitis	R.C.	Common cold	P.I.
2 Common cold	Diarrhea	Pharyngeal tonsillitis	R.C.
3 Diarrhea	Malnutrition P.C.	Intestinal parasites	Pharyngeal tonsillitis
4 Intestinal parasites	Pharyngeal tonsillitis	Skin diseases	Skin diseases
5 Skin diseases	P.I.	Anemia	Anemia
6 Bronchial pneumonia	Skin diseases	Diarrhea	Malaria
7 Anemia	Otitis	Bronchial asthma	Diarrhea
8 Bronchial asthma	Asthma	Bronchitis	Asthma
9 Tuberculosis	Bronchial pneumonia	Otitis	Bronchitis
10 AIDS	Anemia	-	Urinary tract infection

Age 15 years and more

Metropolitan area (SPS)	Health Region No.3
1 Common cold	P.I.
2 Pharyngeal tonsillitis	R.C.
3 Intestinal parasites	Pharyngeal tonsillitis
4 Skin diseases	Skin diseases
5 Anemia	Anemia
6 Diarrhea	Malaria
7 Bronchial asthma	Diarrhea
8 Bronchitis	Asthma
9 Otitis	Bronchitis
10 -	Urinary tract infection

Source: Evaluacion anual 1995, Region de salud No.3: Analisis de la situacion de salud y sus servicios, San Pedro Sula, Enero 1996

Table 7-2-1 Socio-economic outline of the Department of Intibucá

Socio-economic Indicators	Department of Intibucá	Nation-wide
Demography		
Population/1995 (Projection)	154,152	5,462,791
Population density /1988	40.6/km2	39.5/km2
% of pop. living in urban/1988	12.4%	39.4%
% of pop. living in rural/1988	87.6%	60.6%
Net balance of migration/1988	-27,604	-
Population annual growth rate 1995 - 2010	2.2%	2.3%
Illiteracy		
Illiteracy rate of men/1988	34.8%	32.0%
Illiteracy rate of women/1988	46.8%	32.0%
Total no. of illiterates/1988	30,949	905,391
Education		
% of primary education/1988	52.8%	52.8%
% of secondary education/1988	5.7%	12.7%
% of houses with 3 or more unsatisfied basic human needs/1988	60.0%	31.0%
Health		
MMR (100,000 live births) /1990	534	221
% of pop./access to water/1988	32.56	56.58
% of pop./access to sanitation/1988	25.69	58.22

Source: 1988 National Census

Table 7-2-2 Population at poverty strata No.4 & No.5 by municipality in the Department of Intibucá - 1994

Municipality	Number of population	Percentage of population of poverty strata number 4 and 5
Intibucá	34,982	54.6%
La Esperanza	7773	23.7%
Yamaranguila	10,091	86.3%
Jesus de Otoro	17,495	9.2%
Concepcion	9,552	72.0%
Colomoncagua	12,849	74.9%
Masaguara	11,008	35.3%
Dolores	3,038	56.8%
San Marcos de la Sierra	5,446	63.3%
San Isidro	2,597	74.0%
Santa Lucia	4,870	66.5%
Camasca	708	67.8%
San Miguelito	4,348	95.0%
San Antonio	4,819	17.5%
Magdalena	3,784	84.0%
Total	146,050	100.0%

Remarks: 1) Poverty strata is a mixed indicator set by the Health Region No. 2, which reflects degree of malnutrition, accessibility of water and sanitation.

2) Data of San Juan and San Francisco de Opalaca are not available

Source: Poverty evaluation, 1995, Health Region No.2 Office

Table 7-2-3 Total number of patients visits to Hospital La Esperanza by municipality - 1995

Municipality	Total number of patients visits	percentage
Intibuca	872	25.0%
La Esperanza	609	17.5%
Yamaranguila	454	13.0%
Jesus de Otoro	339	9.7%
Concepcion	254	7.3%
Colomoncagua	109	3.1%
Masaguara	107	3.1%
San Juan	104	3.0%
Dolores	103	3.0%
San Marcos de la Sierra	101	2.9%
San Isidro	99	2.8%
San Francisco de Opalaca	96	2.8%
Santa Lucia	83	2.4%
Camasca	48	1.4%
San Miguelito	34	1.0%
San Antonio	24	0.7%
Magdalena	15	0.4%
Dept. of La Paz	13	0.4%
Dept. of Comayagua	7	0.2%
Dept. of Lempira	5	0.1%
Dept. of Santa Barbara	3	0.1%
Dept. of Francisco Morazan	2	0.1%
Dept. of Cortes	1	0.0%
Total	3,482	100.0%

Source: Evaluation - Hospital La Esperanza, 1995, Health Region No.2

Table 7-2-4 Morbidity of patients by diagnosis of Hospital La Esperanza -1995

Diagnosis	Number of patients	percentage
ARI	3,137	14.0%
Pregnancy	1,034	9.0%
Severe Diarrheal Syndrome	1,949	9.0%
Bronchial Pneumonia	1,352	6.0%
Cuts/Wounds	652	3.0%
Fractures	538	2.0%
Urinary Tract Infections	420	1.8%
Chronic Calculous Colecistitis	420	1.8%
Asthma	387	1.7%
Intestinal Parasites	264	1.1%
Peptic Acid Disease	263	1.1%
Diabetes Mellitus	228	1.0%
Arterial Hypertension	228	1.0%
Sinusitis	217	0.9%
Hernias	185	0.8%
Others	10,024	45.0%
Total	22,298	100.0%

Source: Evaluation - Hospital La Esperanza, 1995, Health Region No.2

Table 7-2-5 Causes of death among patients by diagnosis of Hospital La Esperanza - 1995

Diagnosis	Number of patients	percentage
Pneumonia	17	40.5%
Cerebral Vascular Accident	4	9.5%
3rd degree protein/caloric malnutrition	2	4.8%
Low birth weight infant death	2	4.8%
Cerebral hemmorrhagic parenquimitosis	2	4.8%
Phosphoric organ poisoning	2	4.8%
Chronic obstructive pulmonary disease	2	4.7%
Hemopneumothorax with hypovolemia	2	4.8%
Miliar tuberculosis	1	2.4%
Sudden death	1	2.4%
Massive intestinal parasites	1	2.4%
Terminal cervical cancer	1	2.4%
Neonatal sepsis	1	2.4%
Leukemia	1	2.4%
3rd degree burns	1	2.4%
Chronic alcoholism	1	2.4%
Hypertensive cardiopathy	1	2.4%
Total	42	100.0%

Source: Evaluation - Hospital La Esperanza, 1995, Health Region No.2

Table 7-2-6 Socio-economic outline of the Department of Francisco Morazan

Socio-economic Indicators	Department of Fco. Morazan	Nation-wide
Demography		
Population/1995 (Projection)	994,438	5,462,791
Population density /1988	104.2/km2	39.5/km2
% of pop. living in urban/1988	72.9%	39.4%
% of pop. living in rural/1988	27.1%	60.6%
Net balance of migration/1988	117,663	-
Pop. annual growth rate 1995 - 2010	2.6%	2.3%
Illiteracy		
Illiteracy rate of men/1988	18.4%	32.0%
Illiteracy rate of women/1988	19.2%	32.0%
Total number of illiterates/1988	103,168	905,391
Education		
% of primary education/1988	50.6%	52.8%
% of secondary education/1988	23.2%	12.7%
% of houses with 3 or more unsatisfied basic human needs/1988	21.0%	31.0%
Health		
MMR (100,000 live births)/1990	145	221
% of pop./access to water/1988	67.84	56.58
% of pop./access to sanitation /1988	77.07	58.22

Source: 1988 National Census

Table 7-2-7 Population by age and by catchment area of CESAMOs and CESARes in Metropolitan Health Region - 1996 (projection)

Name of CESAMO/CESAR	Number of infants			Number of population			General Total	Number of women reproductive age
	under 1	1 - 4	Total	5 - 11	12 - 49	over 50		
Tres de Mayo	1,375	4,482	5,857	8,250	25,417	3,155	42,679	12,718
Flor del Campo	980	2,890	3,870	4,675	15,896	1,911	26,352	7,853
Las Crucitas	3,218	8,127	11,345	13,534	48,234	5,803	78,916	23,517
Monterrey	1,119	2,546	3,665	3,850	15,093	2,342	24,950	7,435
Pedregal	853	2,517	3,370	3,862	14,149	2,391	23,772	7,084
Alemania	1,043	2,620	3,503	3,850	14,249	2,320	23,982	7,148
San Francisco	967	4,692	5,659	7,652	28,226	4,143	15,680	13,613
Villa Adela	1,845	8,881	10,726	14,663	53,273	10,179	83,841	26,475
Divanna	153	1,841	1,994	2,200	7,738	1,952	13,884	4,137
El Eden	318	749	1,067	1,168	4,476	1,196	7,907	2,356
Tizatillo	64	89	153	132	715	34	1,034	311
La Cuesta	190	459	649	792	2,978	579	4,998	1,489
Soroguara	69	252	321	490	1,594	571	2,976	886
Yaguacire	82	209	291	350	1,172	170	1,983	591
Las Torres	216	1,139	1,355	2,320	4,171	914	8,760	2,610
Mateo	196	392	588	635	2,371	380	3,974	1,184
Concepcion	38	108	146	335	996	470	1,947	580
Total of Area No.1	12,726	41,893	54,619	68,758	240,748	38,510	402,635	119,985
Alonso Suazo	2,810	13,615	16,425	20,565	72,222	11,763	120,975	36,060
San Miguel	1,501	595	2,096	7,582	26,626	8,296	44,600	13,291
El Bosque	743	4,668	5,411	5,494	17,889	1,172	29,966	8,930
El Chile	1,002	3,401	4,403	5,890	19,553	2,907	32,753	9,760
El Manchen	2,882	8,262	11,134	10,221	37,714	6,449	65,518	19,524
Los Pinos	1,100	2,569	3,729	4,418	15,090	1,502	24,739	7,372
Nueva Suyapa	881	1,881	2,762	3,080	11,866	411	18,119	5,399
Brisas del Picac	197	384	581	692	2,265	155	3,693	1,100
Aguacate	58	106	164	166	594	54	978	291
Jutiapa	81	218	299	363	1,276	199	2,137	637
Monte Redondo	79	145	224	270	861	87	1,442	430
Rio Hondo	75	169	244	272	958	131	1,605	478
San Juan Rancho	97	129	226	225	792	82	1,325	395
Santa Elena	36	58	94	160	270	70	594	180
Total of Area No.2	11,602	36,190	47,792	59,398	207,976	33,278	348,444	103,837
Total of the Region	24,328	78,083	102,411	128,156	448,724	71,788	751,079	223,822

Source: Evaluation 1995, Metropolitan Health Region Office

Table 7-2-8 Number of patients by 10 major causes in CESAMOs and CESARes in Metropolitan Health Region - 1995

Diagnosis	Number of Patients	Percentage
ARI	135,300	41.0%
Intestinal Parasites	30,112	9.0%
Malnutrition	19,653	6.0%
Diarrhea	19,502	6.0%
Anemia	11,801	4.0%
Dermatitis	10,313	3.0%
Cervicitis	3,529	1.0%
H.T.A.	2,748	0.8%
Allergy	1,736	0.5%
Bronchial Asthma	1,565	0.5%
Others	97,435	28.0%
Total	333,694	100.0%

Source: Evaluation 1995, Metropolitan Health Region Office

Table 7-2-9 Causes of death reported to Metropolitan Health Region Office (January - October, 1995)

Diagnosis	Number of Patients	percentage
Accidents and violence	596	34.0%
Pneumonia	110	6.2%
Cardiac diseases	99	5.6%
AIDS	80	4.6%
Sepsis	79	4.5%
Cancer	72	4.1%
Tuberculosis	53	3.0%
Premature	42	2.4%
Renal insufficiency	37	2.1%
Alcoholism	36	2.0%
Diabetes Mellitus	30	1.7%
Paro Cardio Respiratorio	29	1.6%
Accidente Cerebro Vascular	29	1.6%
E.P.O.C.	22	1.3%
Malnutrition	22	1.3%
Others	414	24.0%
Total	1,750	100.0%

Source: Evaluation 1995, Metropolitan Health Region Office

**Table 7-2-10 Number of death by information source
in Metropolitan Health Region (January - October, 1995)**

Information source	Number of death	percentage
Hospital Escuela	837	47.8%
Medicina Legal	576	32.9%
I. N. Torax	183	10.5%
I. H. S. S.	71	4.1%
Hospital San Felipe	54	3.1%
Comunidad	26	1.5%
Privado	2	0.1%
Hospital Santa Rosita	1	0.1%
Total	1,750	100.0%

Source: Evaluation 1995, Metropolitan Health Region Office

**Table 7-2-11 Percentage of households with 3 or more Unsatisfied Basic
Needs and IMR by UPS in Metropolitan Health Region - 1995**

UPS	% of households 3 or more NBI	IMR (/1,000)
Tres de Mayo	19.5%	20.87
Flor del Campo	16.5%	16.18
Las Crucitas	9.5%	19.15
Monterrey	12.6%	13.42
Pedregal	9.6%	20.44
Alemania	25.7%	26.14
San Francisco	18.3%	21.74
Villa Adela	0.8%	16.32
Total of Area No.1	12.5%	18.94
Alonso Suazo	1.7%	14.45
San Miguel	19.4%	11.52
El Bosque	7.6%	12.16
El Chile	8.9%	15.33
El Manchen	8.7%	24.92
Los Pinos	21.6%	25.16
Nueva Suyapa	24.9%	26.32
Total of Area No.2	9.1%	17.90
Total of the Region	12.2%	18.53

Source: Evaluation, 1995, Metropolitan Health Region Office

Table 7-3-1 Population by municipality in the Department of Olancho 1990 - 1995

Area	Municipality	1990	1991	1992	1993	1994	1995	average annual growth rate (1990-1995)
	Campamento	11,433	11,879	12,341	12,816	13,304	13,804	3.84%
	Concordia	5,820	5,901	5,982	6,062	6,140	6,216	1.33%
1	Guayape	12,485	12,957	13,445	13,947	14,460	14,986	3.72%
	Juticalpa	76,999	79,682	82,453	85,285	88,177	91,126	3.43%
	Patuca	11,045	11,430	11,827	12,234	12,648	13,071	3.43%
	San Francisco de Becerra	5,780	5,895	6,012	6,129	6,245	6,361	1.94%
	Catacamas	57,155	59,716	62,388	65,153	68,012	70,963	4.43%
2	Dulce Nombre de Culmi	15,707	16,347	17,012	17,697	18,402	19,125	4.02%
	Santa Maria del Real	6,651	6,861	7,076	7,295	7,518	7,744	3.09%
	Yocon	7,936	8,142	8,353	8,566	8,780	8,996	2.54%
	El Rosario	3,032	3,096	3,161	3,226	3,291	3,356	2.05%
	Guata	7,340	7,494	7,651	7,808	7,965	8,121	2.05%
	Jano	2,227	2,252	2,277	2,301	2,325	2,348	1.07%
3	La Union	4,407	4,548	4,693	4,841	4,991	5,143	3.14%
	Mangulife	6,559	6,724	6,893	7,063	7,234	7,406	2.46%
	Salama	6,276	6,380	6,486	6,591	6,695	6,797	1.61%
	Silca	6,357	6,578	6,806	7,040	7,278	7,521	3.42%
	Gualaco	11,748	11,903	12,060	12,213	12,363	12,510	1.27%
	Guarizama	5,611	5,720	5,830	5,939	6,048	6,157	1.87%
4	Manto	9,090	9,255	9,422	9,588	9,753	9,917	1.76%
	San Esteban	15,141	15,852	16,595	17,366	18,164	18,991	4.64%
	San Francisco de la Paz	13,869	14,245	14,631	15,020	15,414	15,810	2.66%
x	Esquipulas del Norte	3,938	4,049	4,162	4,277	4,393	4,511	2.75%
	Total	306,606	316,905	327,556	338,457	349,602	360,980	3.32%

Remarks : x in Health Region No.6

: MCH facility, functioning (Juticalpa : HSF)

: MCH facility, but not functioning

Source : SECPLAN

Table 7-3-2 Population, number of CESAMOs/CESARes and human resources by area in Health Region No.7 - 1996

office location	population	number of		Number of health personnel (1995)					MCH function (location of CESAMO)
		CESAMO	CESAR	doctors	nurses	auxiliary nurses	others	X	
Region No.7 Juricalpa	371,338	28	68	32	19	117	154		
(Hospital San Francisco)	35,000								X
Area No.1 Juricalpa	108,662	11	23	13	6	40	46	(x)	Nueva Palestina
Area No.2 Catacamas	104,200	3	20	6	5	33	56	x	
Area No.3 Salama	53,760	8	7	8	5	21	21	(x)	Yocon (La Union)
Area No.4 San Francisco de La Paz	69,716	6	18	5	3	23	31	(x)	San Esteban

Remarks : MCH function x : functioning

(x) : not yet functioning

Area No.1 : Nueva Palestina (Expansion is under construction.)

Area No.3 : Yocon (Facility has been prepared without additional personnel and equipment.)

Area No.4 : San Esteban (Facility has been prepared with operational plan by local CESAMO and community.)

Source : Ministry of Public Health, Health Region No.7 Office

Table 7-3-3 Availability of electricity, telephone, radio and transportation by health area and sector office in Health Region No.7 - 1996

		Electricity	Telephone	Radio	Transportation
Area No.1	Juticalpa	ok	ok	ok	2 cars, 6 motorcycles
(6 municipalities)					
Sector No.1	Jutiquire	ok	no	no	1 motorcycle
Sector No.2	Nueva Palestina	ok	no	ok	1 motorcycle
Sector No.3	Zopilotepe	no	no	no	no
Sector No.4	Campamento	ok	ok	no	1 motorcycle
Area No.2	Catacamas	ok	ok	no	2 cars, 10 motorcycles
(3 municipalities)					
Sector No.1	Santa Maria del Real	ok	ok		no
Sector No.2	Dulce Nombre de Culmi	(generator)	no	no	1 motorcycle
Sector No.3	Tutubicoche				
Sector No.4	(PREDISAN)				
Sector No.5	Catacamas	ok	ok	no	2 motorcycles
Area No.3	Salama	ok	no	ok	2 cars, 5 motorcycles
(8 municipalities)					
Sector No.1	Salama	ok	no	ok	2 cars, 5 motorcycles
Sector No.2	La Union	ok	no		
Area No.4	San Francisco de La Paz	ok	ok	no	1 car
(5 municipalities)					
Sector No.1	San Francisco de La Paz	ok	ok	no	1 car
Sector No.2	San Esteban	ok	ok		1 car
Sector No.3	Gualaco				
Sector No.4	(Honduras Outreach Inc.)				

Remarks: Information provided by Health Area office and/or Health Sector office during Phase III.

ok : facilitated

no : not facilitated or not accessible

Table 7-3-4 Population, staffing and first attention by UPS in Health Region No.7

	Number of health personnel						Attention				Performance		
	Population (1996)	doctors	nurses	auxiliary nurses	others (total)	population per doctor	population per nurse	1994	1995	95/94	* max capacity	capacity per population	attention per capacity (1995)
Area No.1	108,662	13	6	40	46	105	8,359	34,245	40,681	118.8%	155,760	143.3%	26.1%
Area No.2	100,556	6	5	33	56	100	16,759	31,942	34,960	109.4%	115,440	114.8%	30.3%
Area No.3	50,429	8	5	21	21	55	6,304	18,502	18,238	98.6%	107,760	213.7%	16.9%
Area No.4	66,600	5	3	23	31	62	13,320	23,545	28,794	122.3%	86,160	129.4%	33.4%
Hospital San francisco	35,000							34,533	25,873	69.1%	0	0.0%	-
Total	361,247	32	19	117	154	322	11,289	142,767	146,546	102.6%	465,120	128.8%	31.5%

Remarks : * number of doctors x 52 patients/day x 240 days/year

number of pro. nurses x 5 patients/day x 240 days/year

number of aux. nurses x 8 patients/day x 240 days/year

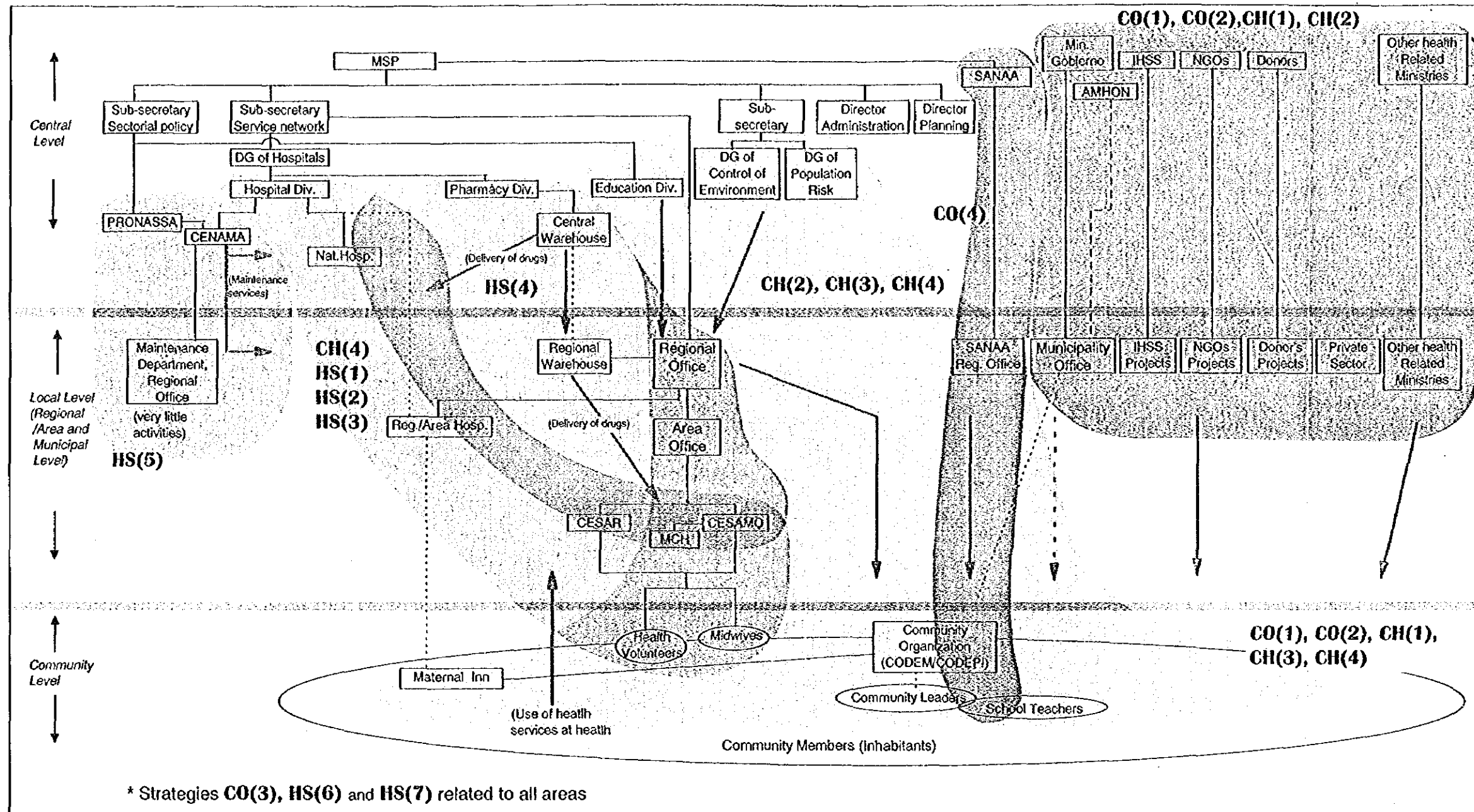
Source : Ministry of Public Health, Health Region No.7 Office

Table 7-3-5 MSP Executed Budget for Health Region No.7 1991-1995

(Unit: Lps.)

Cost Description	1991	1992	1993	1994	1995
Program 1-01 Environmental Sanitation (Basic Sanitation, Food Control, Vector Control)					
Non-personnel Services		7,577	6,889	10,802	10,801
Per diem (domestic trip)	285,000	275,544	253,347	275,120	275,482
Building (office) Rent	1,000	1,000	-	960	1,200
Maintenance of Transportation equipment	11,385	8,165	10,953	12,119	11,422
sub-total Group 2	297,385	292,286	271,189	299,000	298,905
Materials and Supplies	289,331	284,151	245,243	274,755	282,342
Tires and Pneumatics	50,134	46,024	48,127	59,948	59,101
Fuels	141,723	136,963	143,679	143,394	141,863
Medical Supplies and Pharmaceuticals	-	-	-	-	25,000
Tools for Physicians	5,801	6,910	3,187	7,768	7,981
Spare parts	120,495	79,522	68,440	74,227	78,040
sub-total Group 3	607,485	553,569	508,676	560,093	594,326
Machines and Equipment		79,200	0	5,072	19,249
Total Program 1-01	904,870	925,055	779,865	864,165	912,480
Program 1-02 Transmissible Diseases Control and Ambulatory Consultation					
Salary for Licensed Personnel	3,854	4,477	2,978	4,805	3,125
sub-total personnel services	3,854	4,477	2,978	4,805	3,125
Non-personnel Services	848	5,021	6,443	34,371	27,822
Per diem (domestic trip)	68,000	60,000	59,990	76,546	67,390
Building (office) Renting	2,500	0	9,963	6,080	9,999
sub-total Group 2	71,348	65,021	76,396	116,997	105,211
Materials and Supplies	98,970	149,748	222,072	325,919	473,796
Food	10,800	-	3,900	10,800	15,500
Fuels	65,500	77,880	68,839	83,810	102,977
Medical Production and Pharmacy	230,433	288,305	27,079	246,333	766,805
Tools for Physicians	168,301	143,853	410,743	451,342	672,749
sub-total Group 3	574,004	659,787	732,634	1,118,205	2,031,828
Machines and Equipment	4,237	5,168	65,527	245,100	287,089
Total Program 1-02	653,443	734,453	877,535	1,485,107	2,427,253
Total Budget	1,558,313	1,659,508	1,722,927	2,349,272	3,339,733

Source : Ministry of Public Health, Health Region No.7 office



NMHP: National Master Health Plan (15 Strategies)

CONTEXT

- CO(1): Alleviation of poverty
- CO(2): Improvement of access to food
- CO(3): Improvement of legal and institutional framework
- CO(4): Improvement of access to water and basic sanitation

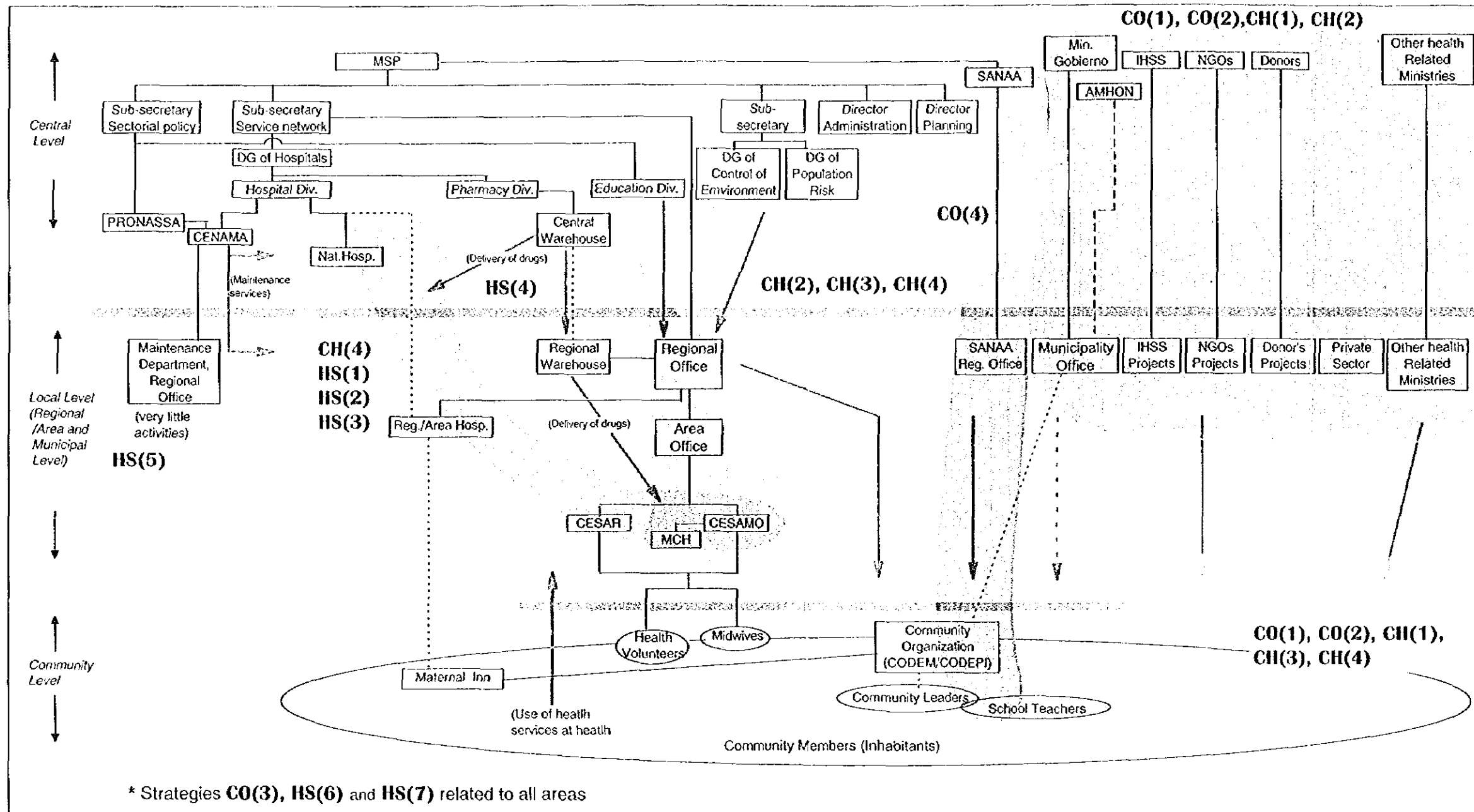
COMMUNITY/HOUSEHOLD BEHAVIORS

- CH(1): Reduction of illiteracy
- CH(2): Improvement of health education
- CH(3): Improvement of social participation
- CH(4): Reduction of total fertility rate

HEALTH SERVICE DELIVERY

- HS(1): Improvement of access to health services
- HS(2): Improvement of organization/facility management
- HS(3): Improvement of referral system
- HS(4): Improvement drug supply system
- HS(5): Improvement of facilities/equipment management
- HS(6): Human resource development
- HS(7): Health Financing

Figure 8-1 Institutional structure without programs/projects proposed by NMHP and Area Model Health Programs



NMHP: National Master Health Plan (15 Strategies)

CONTEXT

- CO(1): Alleviation of poverty
- CO(2): Improvement of access to food
- CO(3): Improvement of legal and institutional framework
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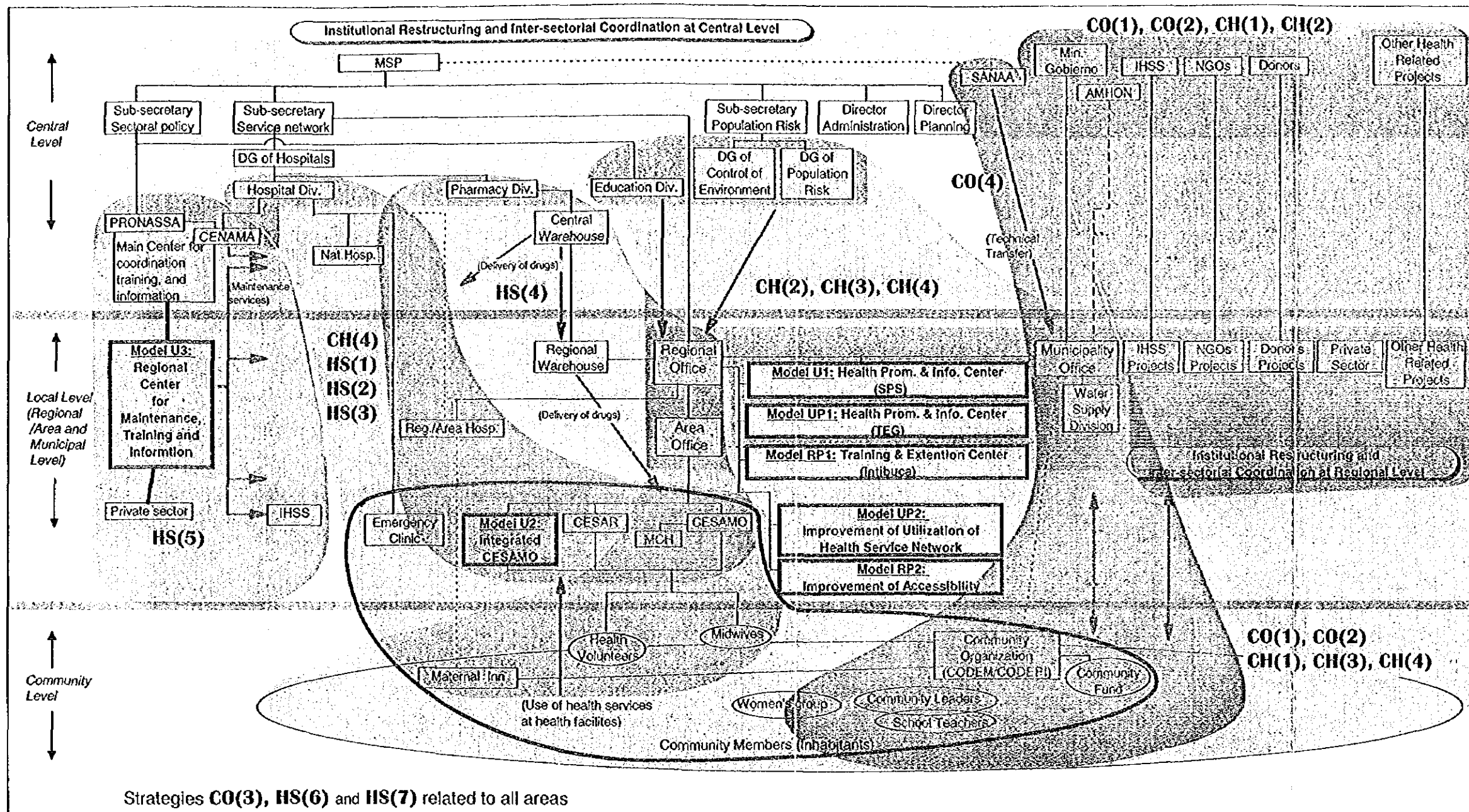
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HEALTH SERVICE DELIVERY

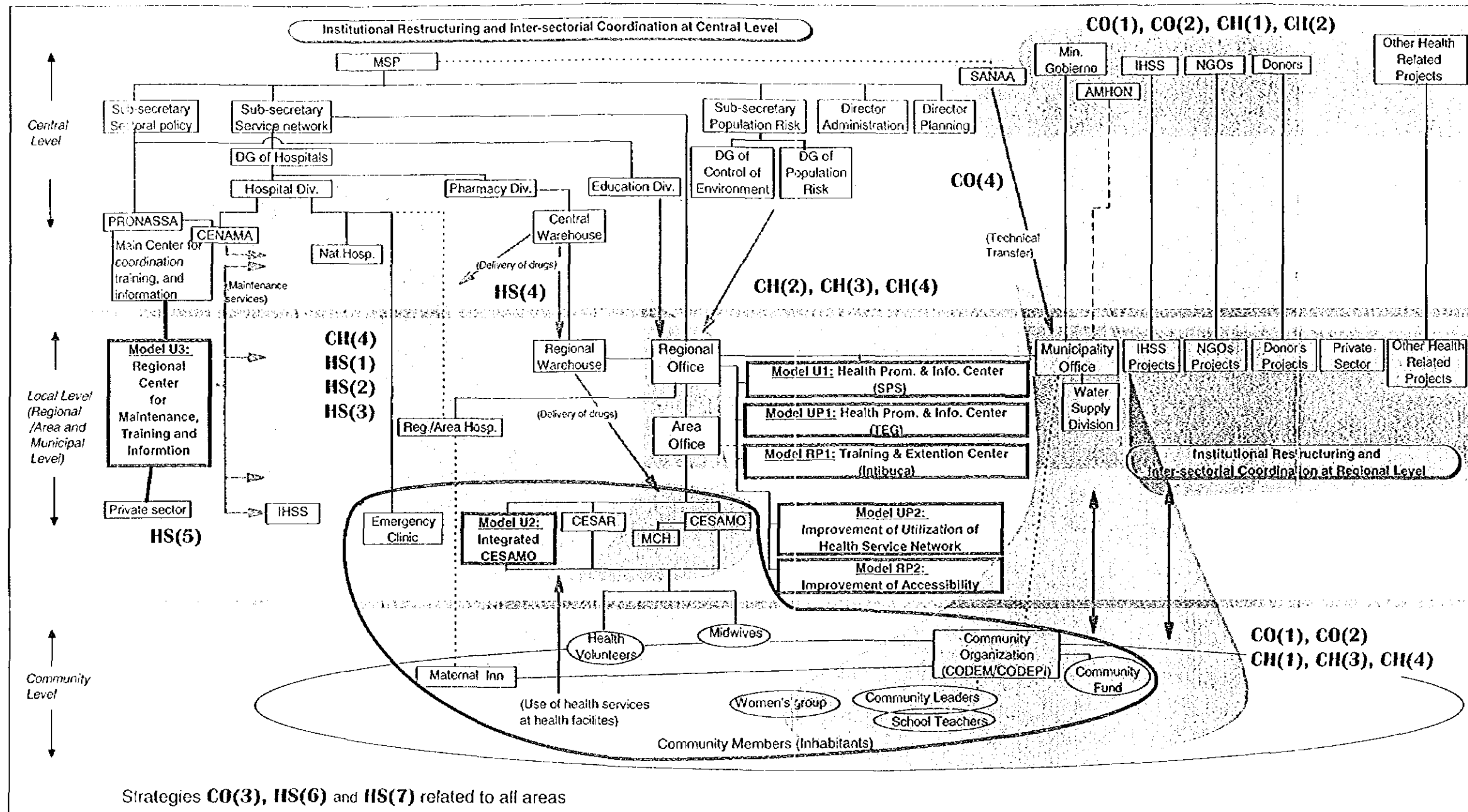
- HS(1): Improvement of access to health services
- HS(2): Improvement of organization/facility management
- HS(3): Improvement of referral system
- HS(4): Improvement drug supply system
- HS(5): Improvement of facilities/equipment management
- HS(6): Human resource development
- HS(7): Health Financing

Figure 8-1 Institutional structure without programs/projects proposed by NMHP and Area Model Health Programs



NMHP: National Master Health Plan (15 Strategies)		Area Model Health Programs (Model Projects)	
CONTEXT	HEALTH SERVICE DELIVERY	MODEL PROJECTS FOR URBAN AREA (in SPS)	
CO(1): Alleviation of poverty CO(2): Improvement of access to food CO(3): Improvement of legal and institutional framework CO(4): Improvement of access to water and basic sanitation	HS(1): Improvement of access to health services HS(2): Improvement of organization/facility management HS(3): Improvement of referral system HS(4): Improvement drug supply system HS(5): Improvement of facilities/equipment management HS(6): Human resource development HS(7): Health Financing	Model U1: Health Promotion and Information (AIDS Prevention and Information) Center Model U2: Reinforcement of CESAMOs' Function Model U3: Regional Center for Maintenance and Information of Medical Facilities and Equipment	
COMMUNITY/HOUSEHOLD BEHAVIORS		MODEL PROJECTS FOR RURAL POVERTY AREA (in Inatibuca)	
CH(1): Reduction of illiteracy CH(2): Improvement of health education CH(3): Improvement of social participation CH(4): Reduction of total fertility rate		Model RP1: Healthy Village Training and Extension Center Model RP2: Improvement of Community Members' Accessibility to Health	
		MODEL PROJECTS FOR URBAN POVERTY AREA (in Tegucigalpa)	
		Model UP1: Improved Actions to Promote Social Participation Activities Model UP2: Improvement of Awareness and Utilization of the Health Service Network	

Figure 8-2 Institutional structure with programs/project proposed by NMHP and Area Model Health Programs



NMHP: National Master Health Plan (15 Strategies)

CONTEXT

- CO(1): Alleviation of poverty
- CO(2): Improvement of access to food
- CO(3): Improvement of legal and institutional framework
- CO(4): Improvement of access to water and basic sanitation

COMMUNITY/HOUSEHOLD BEHAVIORS

- CH(1): Reduction of illiteracy
- CH(2): Improvement of health education
- CH(3): Improvement of social participation
- CH(4): Reduction of total fertility rate

HEALTH SERVICE DELIVERY

- HS(1): Improvement of access to health services
- HS(2): Improvement of organization/facility management
- HS(3): Improvement of referral system
- HS(4): Improvement drug supply system
- HS(5): Improvement of facilities/equipment management
- HS(6): Human resource development
- HS(7): Health Financing

Area Model Health Programs (Model Projects)

MODEL PROJECTS FOR URBAN AREA (in SPS)

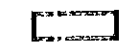
- Model U1: Health Promotion and Information (AIDS Prevention and Information) Center
- Model U2: Reinforcement of CESAMOs' Function
- Model U3: Regional Center for Maintenance and Information of Medical Facilities and Equipment

MODEL PROJECTS FOR RURAL POVERTY AREA (in Inatibuca)

- Model RP1: Healthy Village Training and Extension Center
- Model RP2: Improvement of Community Members' Accessibility to Health

MODEL PROJECTS FOR URBAN POVERTY AREA (in Tegucigalpa)

- Model UP1: Improved Actions to Promote Social Participation Activities
- Model UP2: Improvement of Awareness and Utilization of the Health Service Network

 Institutions strengthened and facilities renovated /established in the model projects

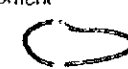
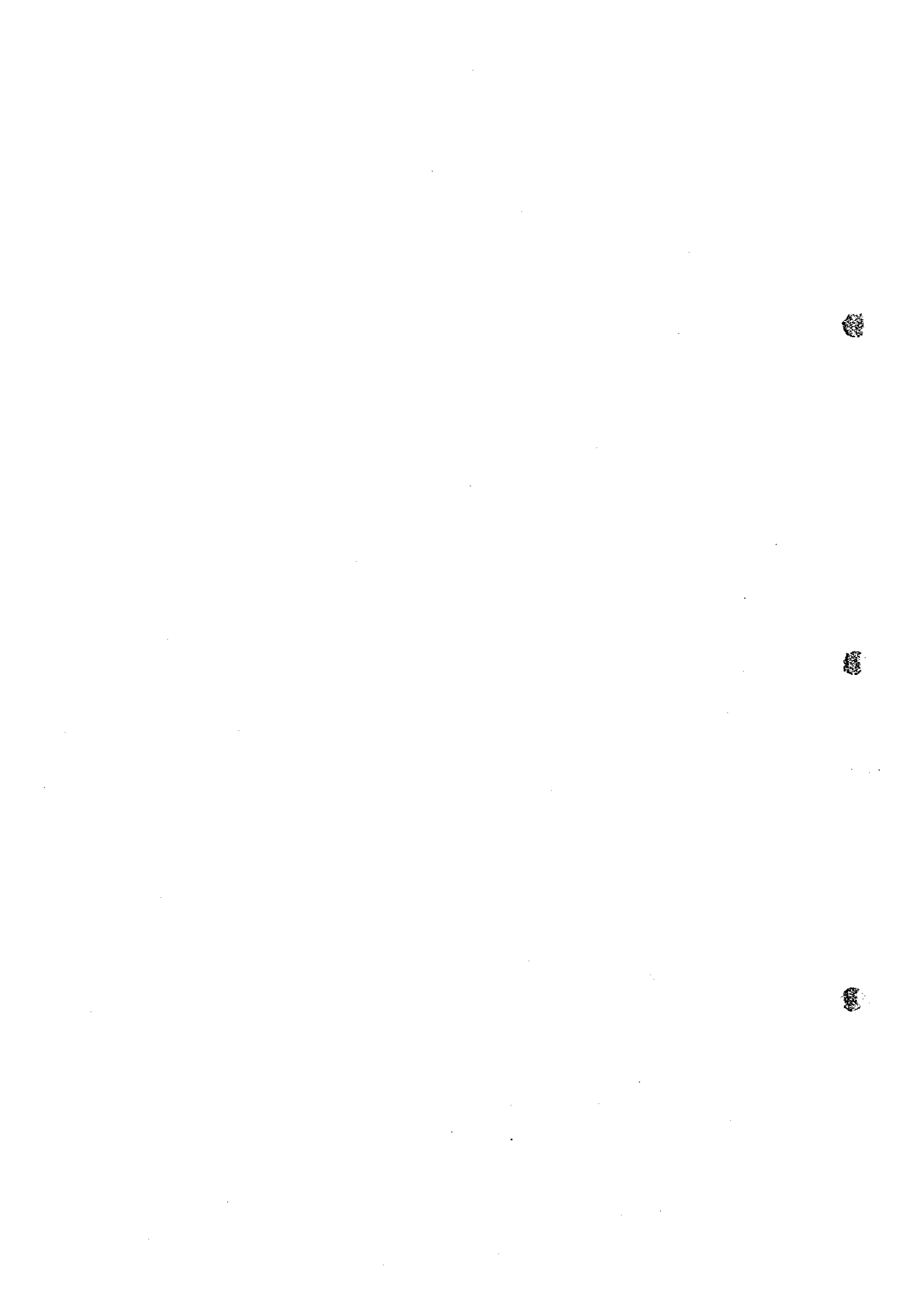
 Accessibility to and utilization of health service network will be improved

Figure 8-2 Institutional structure with programs/project proposed by NMHP and Area Model Health Programs





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