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### **A.3.5. Supporting infrastructure**

#### **A.3.5.1. Power supply**

##### **(1) Existing conditions**

State Commission of Electric (CFE) is the state-owned company operates and manages all electrical services in Mexico except the area operated and managed by Central Electric and Power Company (CLFC).

Electrical System in Mexico are divided in 9 electrical districts which are North-East, North, North-West, Central, West, East, Baja California, Peninsular, and CLFC covered area (Federal District, Hidalgo, Mexico, Morelos, Puebla).

The actual installed generation capacity in the country is 31,649MW in total. Peak power demand is 18,361MW, power consumption was approximately 137,522Gwh, and operating ratio at peak demand is 58.01% in year 1994. Table A.3. 39 shows growth and estimated future demand of actual generating capacity, gross generated capacity, peak demand and these ratio and indices. The system is characterized by a enough degree of required demand. Although there are 166 power stations, a large share of total generation comes from only a few modern plants. Table A.3. 40 shows number of existing power plant by type of fuel and actual capacity in each state in 1994.

The major share of energy generation was Hydro with 28.82% of the total, Thermo-electric for 66.66%, Geo-thermal for 2.38% and Nuclear for 2.13%..

The transmission & distribution voltages are so complicated that are consisted from 400kv, 230kv, 161kv, 150kv, 138kv, 115kv, 85kv, 69kv, 44kv, 34.5kv, 23kv, 13.8kv, 6.6kv, 4.4kv, and 2.4kV. Figure A.3. 16 shows national transmission/distribution network in 1995. The route length of transmission & distribution lines in 1994 is 363,250km.

The number of beneficiaries as of the end of 1994 were about 86.5 million peoples or 94.2% of populations are covered. Table A.3. 41 and Table A.3. 42 show service coverage ratio by area and population in 1994.

The system losses in the year 1992/3 have decreased to 23.4% of total generation, compared with 28.3% in the previous year 1991/2.

Table A.3.39 Growth of generating capacity, generated capacity and peak demand

Year	Installed Generating Capacity by Type of Fuel (MW)							Generated Capacity				Peak Demand		
	Hydro	Thermal	Geo-Thermal	Nuclear	Wind	Total	Indices	Total (GWh)	Indices	Operat'g Ratio	Total (MWh/h)	Index	Operat'g Ratio	
1980	5,992	8,483	150			14,625		61,868		48.29%	N.A.			
1981	6,550	10,666	180			17,396		67,879		44.54%	N.A.			
1982	6,550	11,635	205			18,390		73,225		45.45%	N.A.			
1983	6,532	12,267	205			19,004		74,831		44.95%	N.A.			
1984	6,532	12,623	205			19,360	1.00	79,509	1.00	46.88%	N.A.			
1985	6,532	13,850	425			20,807	1.07	85,352	1.07	46.83%	N.A.			
1986	6,532	14,199	535			21,266	1.10	89,383	1.12	47.98%	N.A.			
1987	7,546	14,949	650			23,145	1.20	96,310	1.21	47.50%	N.A.			
1988	7,749	15,505	700			23,954	1.24	101,905	1.28	48.56%	N.A.			
1989	7,761	15,984	700			24,445	1.26	110,103	1.38	51.42%	N.A.			
1990	7,805	16,119	700	675		25,299	1.31	114,317	1.44	51.58%	N.A.			
1991	7,932	17,472	720	675		26,799	1.38	118,412	1.49	50.44%	N.A.			
1992	7,932	17,731	730	675		27,068	1.40	121,897	1.53	51.32%	17,346		64.08%	
1993	8,171	19,618	740	675		29,204	1.51	126,566	1.59	49.47%	18,286		62.61%	
1994	9,121	21,098	753	675	2	31,649	1.63	137,522	1.73	49.60%	18,367	1.00	58.01%	
1995	9,633	21,768	753	1,350	2	33,506	1.73	147,836	1.86	50.37%	19,738	1.07	58.91%	
1996	10,077	22,818	753	1,350	2	35,000	1.81	158,150	1.99	51.58%	21,115	1.15	60.33%	
1997	10,105	22,818	803	1,350	2	35,078	1.81	168,464	2.12	54.82%	22,492	1.22	64.12%	
1998	10,105	23,557	803	1,350	2	35,817	1.85	178,779	2.25	56.98%	23,869	1.30	66.64%	
1999	10,165	23,782	1,003	1,350	2	35,302	1.88	189,093	2.38	59.46%	25,246	1.37	69.54%	
2000	10,165	25,164	1,003	1,350	2	37,684	1.95	199,407	2.51	60.41%	26,623	1.45	70.65%	
2001	10,420	26,514	1,003	1,350	2	39,289	2.03	209,721	2.64	60.94%	28,001	1.53	71.27%	
2002	10,930	27,414	1,003	1,350	2	40,699	2.10	220,035	2.77	61.72%	29,378	1.60	72.18%	
2003	11,248	29,252	1,003	1,350	2	42,855	2.21	230,349	2.90	61.36%	30,755	1.68	71.77%	
2004	11,806	30,527	1,003	1,350	2	44,688	2.31	240,664	3.03	61.48%	32,132	1.75	71.90%	

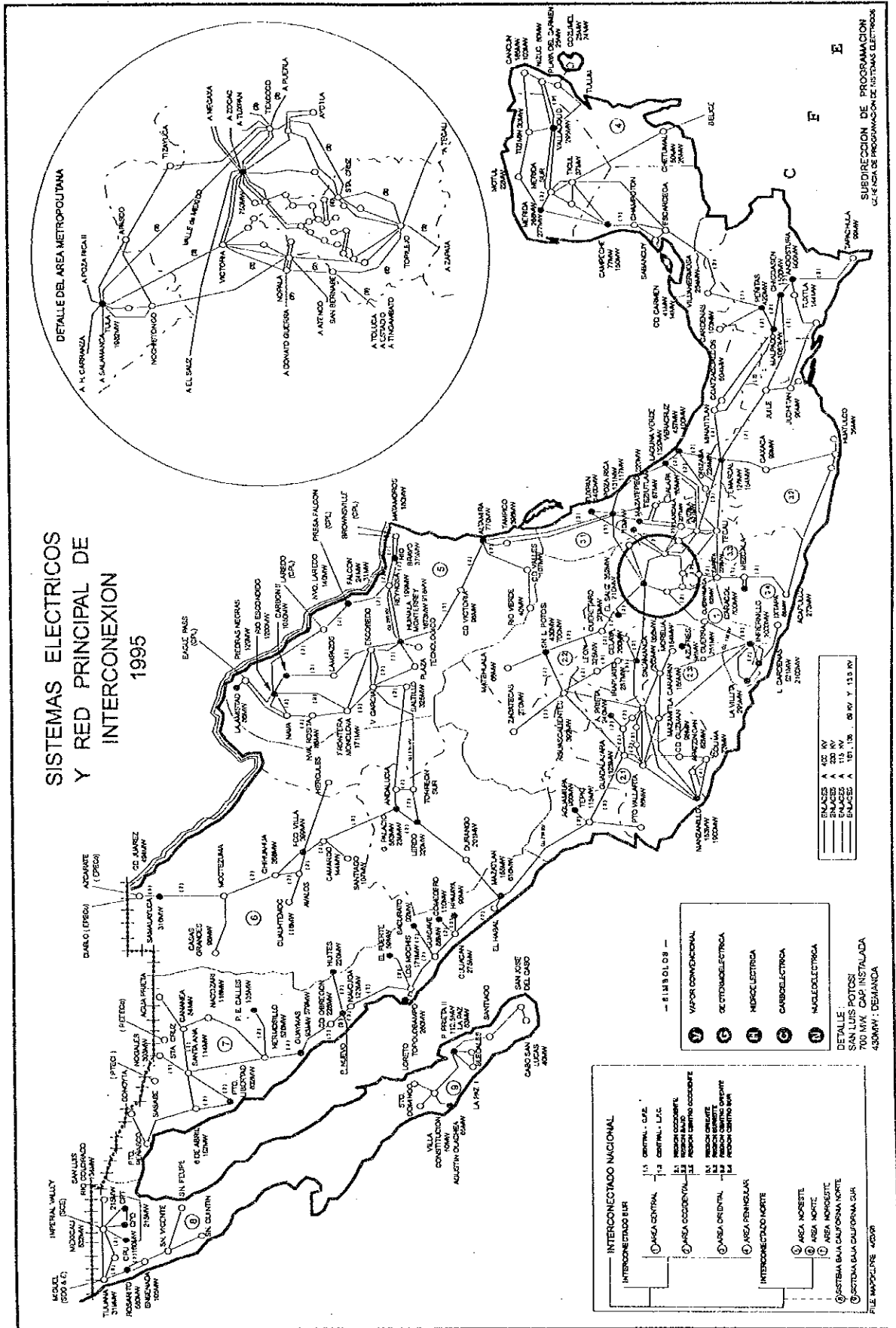
Source: JICA study team

Table A.3.40 List of existing power plant by state and type of fuel

	HYDRO		THERMAL		GEO-THERMAL		NUCLEAR		WIND		TOTAL	
	PLANT	Capacity (MW)	PLANT	Capacity (MW)	PLANT	Capacity (MW)	PLANT	Capacity (MW)	PLANT	Capacity (MW)	PLANT	Capacity (MW)
AGUASCALIENTES											0	0.00
BAJA CALIFORNIA NORTE			4	17 800.06	3	9 620.00					7	26 1,420.06
BAJA CALIFORNIA SUR			7	24 278.97							7	24 278.97
CAMPECHE			2	5 164.00							2	5 164.00
CHIAPAS	7	30 3,928.48									7	30 3,928.48
CHIHUAHUA	1	4 25.00	6	18 912.00							7	22 937.00
COAHUILA	1	2 66.00	6	17 2,048.96							7	19 2,084.96
COLIMA			2	6 1,900.00							2	6 1,900.00
DISTRITO FEDERAL			1	4 149.00							1	4 149.00
DURANGO			4	12 615.20							4	12 615.20
GUANAJUATO			2	7 908.00							2	7 908.00
GUERRERO	4	18 1,638.00	2	9 2,137.00							6	27 3,775.00
HIDALGO	2	3 3.97	2	11 1,982.00							4	14 1,985.97
JALISCO	6	16 330.12	2	7 26.66							8	23 416.76
MEXICO	12	25 348.06	4	15 1,200.00							16	40 1,548.06
MICHOACAN	11	27 597.97			1	12 97.90					12	39 605.87
MORELOS											0	0.00
NAYARIT	2	7 962.18	1	14 0.72							3	21 962.90
NUEVO LEON			7	19 1,003.66							7	19 1,003.66
OAXACA	2	6 156.48							1	7 1.57	3	13 158.05
PUEBLA	8	30 431.22			1	7 35.00					9	37 466.22
QUERETARO	1	1 1.60	1	4 218.00							2	5 219.60
QUINTANA ROO			4	10 233.00							4	10 233.00
SAN LUIS POTOSI	3	5 19.67	1	2 700.00							4	7 719.67
SINALOA	5	11 355.40	3	6 713.00							8	17 1,068.40
SONORA	3	6 163.80	7	21 1,286.55							10	27 1,450.35
TABASCO											0	0.00
TAMAULIPAS	1	3 31.50	3	9 1,169.00							4	12 1,200.50
TLAXCALA											0	0.00
VERACRUZ	7	19 91.55	3	13 1,917.00			1	1 675.00			11	33 2,683.55
YUCATAN			3	11 572.00							3	11 572.00
ZACATECAS			1	0.05							0	1 0.05
MOBILE PLANT											59	194.50
TOTAL	76	213 9,121.00	77	262 20,903.83	5	28 752.90	1	1 675.00	1	7 1.57	160	570 31,648.60

Source: ESTADISTICAS POR ENTIDAD FEDERATIVA, 1994

Figure A.3. 16 National transmission / distribution network in 1995



**Table A.3. 41 Grade of electrification**

Population Class	Total	NO. OF AREAS			
		Covered	%	Remaining	%
10,000 or more	642	642	100.00	0	
2,500 - 9,999	2,109	2,109	100.00	0	
500 - 2,499	14,270	13,269	92.99	1,001	7.01
499 or less	139,713	55,229	39.53	84,484	60.47
Total	156,734	71,249	45.46	85,485	54.54
Rural	153,983	68,498	44.48	85,485	55.52
Urban	2,751	2,751	100.00		

Source: Informacion Basica 1994, CFE

**Table A.3. 42 Electrical service coverage by state**

STATE	AREA			POPULATION		
	TOTAL	No. of COVERED	%	TOTAL	No. of COVERED	%
AGUASCALIENTES	1,357	921	67.87	853,454	823,622	96.50
BAJA CALIFORNIA NORTE	1,910	1,089	57.02	1,927,977	1,905,861	98.85
BAJA CALIFORNIA SUR	2,308	881	38.17	389,717	370,176	94.99
CAMPECHE	1,954	731	37.41	634,685	577,676	91.02
CHIAPAS	16,465	6,533	39.68	3,775,094	3,002,813	79.54
CHIHUAHUA	10,761	2,933	27.26	2,689,488	2,550,423	94.83
COAHUILA	3,666	1,922	52.43	2,250,250	2,224,494	98.86
COLIMA	948	579	61.08	488,888	480,272	98.24
DISTRITO FEDERAL	282	282	100.00	8,590,324	8,582,535	99.91
DURANGO	5,508	1,974	35.84	1,466,390	1,376,311	93.86
GUANAJUATO	6,622	4,242	64.06	4,523,985	4,284,690	94.71
GUERRERO	6,036	2,248	37.24	2,937,980	2,497,625	85.01
HIDALGO	3,868	2,139	55.30	2,098,418	1,822,437	86.85
JALISCO	8,730	3,644	41.74	6,431,590	6,164,557	95.85
MEXICO	4,014	3,068	76.43	11,474,291	11,034,701	96.17
MICHOACAN	7,716	3,933	50.97	3,908,001	3,812,830	97.56
MORELOS	721	602	83.50	1,387,265	1,362,766	98.23
NAYARIT	1,910	778	40.73	908,225	868,943	95.67
NUEVO LEON	5,123	2,419	47.22	3,550,764	3,465,135	97.59
OAXACA	7,218	4,023	55.74	3,347,668	3,118,715	93.16
PUEBLA	4,930	2,983	60.51	4,410,258	4,068,217	92.24
QUERETARO	1,473	796	54.04	1,205,217	1,136,395	94.29
QUINTANA ROO	1,303	500	38.37	687,060	633,020	92.13
SAN LUIS POTOSI	5,302	1,926	36.33	2,224,332	2,011,825	90.45
SINALOA	5,254	2,487	47.34	2,452,275	2,375,938	96.89
SONORA	6,177	3,071	49.72	2,044,432	2,001,671	97.91
TABASCO	2,475	1,641	66.30	1,750,785	1,610,966	92.01
TAMAULIPAS	6,803	2,357	34.65	2,437,646	2,380,677	97.66
TLAXCALA	794	602	75.82	872,329	861,946	98.81
VERACRUZ	17,390	6,683	38.43	6,982,439	6,100,379	87.37
YUCATAN	3,152	1,164	36.93	1,633,757	1,607,104	98.37
ZACATECAS	4,564	2,098	45.97	1,443,752	1,377,335	95.40
TOTAL	156,734	71,249	45.46	91,778,736	86,492,055	94.24

Source: ESTADISTICAS POR ENTIDAD FEDERATIVA, 1994

(2) Action and strategies

Table A.3. 43 and Table A.3. 44 shows future power plant development project until year 2005.

Sustainable development of the power sector would be required to meet the growing demand and for achieving reasonable economic development targets. It is estimated that the peak demand will be about 26,623MWh/h by the year 2000, 32,132MWh/h by the year 2004.

The basic strategy for national power development would be that development projects be implemented on schedule. Table E-7 shows comparison of electrical growth from 1984 to 1994 by each electrical district.

New regulation legislated in 1993 allows Independent Power Producers (IPPs) to generate power. Under this new law, private company can establish, own and operate power generation plant subject to sell all generated electric power to CFE based on the contract between that private company and CFE. The first project, Merida III, a 440 MW Plant in the Yucatan Peninsula is under implementing.

Table A.3. 43 Development budget summary for the electrical sector

	(Million Pesos in 1996)										Total
	1995	1997	1998	1999	2000	2001	2002	2003	2004	2005	
<b>Generation Plant</b>											
<b>by CFE</b>											
Hidro-Electric	297.3	8.4	0.0	508.6	1,344.5	2,420.0	3,403.1	2,784.4	1,220.1	250.8	12,237.2
Thermal	894.7	3,334.3	3,560.3	3,471.4	3,922.0	4,693.7	2,688.6	1,360.4	1,011.2	131.4	25,088.0
Geo-Thermal	203.1	779.3	1,034.7	104.3							2,171.4
Others	223.6	570.0	26.0					3,500.0	9,000.0	12,500.0	25,819.6
	1,418.7	4,692.0	4,691.0	4,084.3	5,266.5	7,313.7	6,091.7	7,644.8	11,231.3	12,862.2	85,316.2
<b>by Private Sector (BOT)</b>											
Thermal	12.8	0.0	831.2	2,890.5	2,539.2	3,813.5	5,920.1	4,851.6	1,465.7	138.6	22,463.2
<b>TOTAL OF GENERATION</b>	1,431.5	4,692.0	5,522.2	6,974.8	7,805.7	11,127.2	12,011.8	12,496.4	12,697.0	13,020.8	87,779.4
<b>Transmission Lines &amp; Substations</b>	3,880.0	5,760.0	2,814.0	2,168.0	2,325.0	2,540.0	3,496.0	3,511.0	3,215.0	3,478.0	33,187.0
<b>Distribution Lines &amp; Substations</b>	1,658.0	3,288.0	2,306.0	2,987.0	3,450.0	4,844.0	4,766.0	6,080.0	7,461.0	8,038.0	44,878.0
<b>Rehabilitation &amp; Maintenance</b>	726.0	2,094.0	1,361.0	1,562.0	1,753.0	2,276.0	2,151.0	2,581.0	2,932.0	3,021.0	20,457.0
<b>Administration Cost</b>	428.0	1,221.0	784.0	891.0	987.0	1,308.0	1,257.0	1,520.0	1,733.0	1,798.0	11,927.0
<b>TOTAL</b>	8,123.5	17,055.0	12,787.2	14,592.8	16,329.7	22,095.2	23,681.8	26,188.4	28,038.0	29,355.8	193,228.4

Source: Resumen del Programa de Inversiones 1995-2005, CFE

Table A.3. 44 Development schedule for power stations

(Million Pesos in 1996)

PROJECT	LOCATION	Capacity (MW)	ESTIMATE COST FOR INVESTMENT BY YEAR										Total
			1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
<b>by CFE</b>													
<b>Hydro Electrical</b>													
Temascal II, 1,2	Oaxaca	200	179.2										179.2
Zimapan U-1,2	Hidalgo	292	80.0										80.0
San Rafael	Nayarit	24			109.2	353.6							462.8
Huixtla (SV)	Chihuahua	210	29.7										29.7
La Parola, 1,2,3	Guerrero	255x3				209.3	946.1	1,701.9	1,548.7	745.3	162.2		5,313.5
Chilatan, 1,2 (SV)	Jarisco		8.4	8.4									16.8
El Cajon, 1,2	Nayarit	318x2				399.4	781.6	1,296.9	1,170.3	616.3	120.9		4,385.4
Copainala, 1,2,3	Chiapas	80x3						177.0	530.9	619.4	353.9	89.6	1,769.8
	sub total		297.3	8.4	0.0	508.6	1,344.5	2,420.0	3,403.1	2,784.4	1,220.1	250.8	12,237.2
<b>Thermal</b>													
Lopez Mateos, 5.6 (Tuxpan)	Veracruz	700	100.8										100.8
Puerto San Carlos, U-4,5	Baja Calif. Sur	37.5 x 2	2.7			111.1	124.1	113.5	124.1	7.4			482.9
Guerrero Negro U-1,6	Baja Calif. Sur	18						133.1					138.1
Carbon II, U-4	Coahuila	350	131.0	956.1	110.9								1,198.0
Petalcalco	Michoacan		74.9										74.9
Semalayuca II, U-1,2,3	Chihuahua	174x3	395.3	2,130.2	1,065.1	48.8							3,649.4
Rosario, U-1	Baja California	150		172.8	345.1	69.9							597.8
Rosario, P-1,2,3,4	Baja California	225x4		28.5	943.6	1,011.6	175.6	943.6	1,011.6	147.1			4,261.6
Montanay, P-1,2,3,4,5,6	Nuevo Leon	225x6		38.3	1,054.8	1,041.1	1,177.8	1,011.2	161.3	1,054.8	1,011.2	131.4	6,981.9
Chihuahua, P-1,2	Chihuahua	225x2		8.4	40.8	1,143.5	1,066.2	135.5					2,424.4
Valle de Mexico, P-1,2,3,4	Mexico	225x4				45.4	1,339.9	2,543.4	1,383.2	142.7			5,454.6
Salamanca	Guanajuato	225x2						8.4	8.4	8.4			33.6
	sub total		694.7	3,334.3	3,590.3	3,471.4	3,922.0	4,893.7	2,686.6	1,360.4	1,011.2	131.4	25,088.0
<b>Geo-Thermal</b>													
Cerro Prieto II, III, 3, 4	Baja California	25x4			296.2	646.0	85.5						1,027.7
Manitaro, U-1,2	Michoacan	25x2	195.4		218.0	100.4							513.8
El Chino, U-1,2	Michoacan	25x2			187.7	307.4	18.8						513.9
Tres Virgenes	Baja California	10	7.7	77.4	39.9								116.0
	sub total		203.1	779.3	1,084.7	104.3							2,171.4
<b>Others</b>													
Laguna Verde U-2, (Wind)	Veracruz	675	165.5										165.5
La Ventosa, U-1, (Wind)	Oaxaca	27			208.9								208.9
Environmental Protection Estimates for commercial operation after 2005					58.1	361.1	26.0						445.2
	sub total		223.6	570.0	26.0					3,500.0	9,000.0	12,500.0	25,000.0
										3,500.0	9,000.0	12,500.0	25,819.6
<b>by Private Sector</b>													
<b>Thermal</b>													
Merida III, P-1,2	Yucatan	220x2	12.8		577.0	1,183.1	326.1						2,099.0
Campesche II	Campesche	225			225.6	673.7	178.7						1,078.0
Rio Bravo, P-1,2,3	Tamaulipas	225x3			28.6	1,009.9	968.1	129.4	37.0	560.0	436.2	55.8	3,225.0
Leon-Ags, P-1,2,3,4	Agascalientes	225x4				23.8	1,005.6	1,347.1	1,197.6	1,351.7	200.4		5,106.2
El Sazul, P-1,2	Queretaro	225x2					23.8	1,005.6	1,331.7	192.0			2,553.1
Atamira, P-1,2,3	Tamaulipas	225x3					36.9	1,007.3	1,414.3	659.8	73.5		3,191.8
Hamosillo, P-1	Sonora	150					270.4	281.2	50.1				601.7
Hamosillo, P-2	Sonora	225						13.1	522.4	500.5	68.0		1,104.0
La Laguna, P-1,2	Durango	225x2						40.6	1,135.9	1,088.9	135.1		2,400.5
Valledobd, P-1	Yucatan	225								468.6	552.6	82.8	1,103.9
	sub total		12.8	0.0	831.2	2,800.5	2,539.2	3,813.5	5,920.1	4,851.6	1,465.7	138.6	22,463.2
<b>Total</b>			1,431.5	4,692.0	5,522.2	6,974.8	7,865.7	11,127.2	12,011.8	12,496.4	12,697.0	13,020.8	87,779.4

Source: Resumen del Programa de Inversiones 1995-2005, CFE

**Table A.3. 45 Comparison of electrical growth by electric district**

Electric District		Installed Generating Capacity (MW)	Generated Capacity (GWh)	Operating Ratio	Growth Ratio (94/84)		Peak Demand in 1994 (MWh/h)	Operating Ratio in Peak Demand
					Installed Generating Capacity	Generated Capacity		
National	1994	31,649	137,522	49.60%	1.63	1.73	18,361	58.01%
	1984	19,360	79,507	46.88%				
North-West	1994	2,518	11,475	52.02%	1.46	1.47	1,804	71.64%
	1984	1,723	7,780	51.55%				
North	1994	1,580	7,986	57.70%	1.50	1.66	1,722	108.99%
	1984	1,053	4,806	52.10%				
North-East	1994	4,280	24,356	64.96%	1.44	1.80	3,516	82.15%
	1984	2,967	13,541	52.10%				
Central	1994	4,361	21,341	55.86%	0.89	1.11	5,858	134.33%
	1984	4,926	19,289	44.70%				
West	1994	7,456	32,849	50.29%	2.78	2.57	4,526	60.70%
	1984	2,681	12,796	54.48%				
East	1994	7,042	21,686	35.15%	1.52	1.32	3,795	53.89%
	1984	4,635	16,458	40.53%				
Baja Cali	1994	1,687	8,135	55.05%	2.62	2.99	1,234	73.15%
	1984	644	2,724	48.29%				
Peninsular	1994	969	3,678	43.33%	1.96	2.32	666	68.73%
	1984	495	1,585	36.55%				
Nuclear	1994	675	4,239	71.69%				
	1984							
Independent	1994	16	62	44.24%	0.07	0.12		
	1984	236	528	25.54%				
Mobil Plant	1994	194	0.17	0.01%				
	1984							
	1994	871	1,715					

Source: JICA study team



### A.3.5.2. Water supply

#### (1) Existing conditions

National Water Commission (CNA) was newly established on January 1989 under the Ministry of Environment, Natural Resources and Fishing. Responsibilities of CNA are to control, coordinate and regulate for the utilization of water.

Based on the information of the INEGI and the CNA is estimated that, in 1995, of a population total of 91.6 million of habitants, 15.1 million lacked of drinking water service and 30.2 million of the sewer service.

Potable water services are covered 96% of total population in urban areas and 52.5% of rural areas in 1995. Sewerage services are covered 85.5%, 20.9% respectively. 95% of potable water are purified. 81% of beneficiaries are living in the areas which less than 2,500 population. Table A.3. 46 shows service coverage by size of area in 1995 and Table A.3. 47 shows estimated proposed service coverage in the year 2000.

**Table A.3. 46 Service coverage by size of area in 1995**

Population Class	No. of Areas	No. of Population (million)	Potable Water		Sewerage Line	
			Coverage Ratio (%)	Covered Population	Coverage Ratio (%)	Covered Population
<b>Urban</b>						
80,000 or more	103	42.1	97.80	41.2	92.10	38.8
50,000 - 79,999	43	2.9	96.30	2.8	92.60	2.7
5,000 - 49,999	1,135	15.1	95.10	14.4	79.20	12.0
2,500 - 4,999	1,509	5.2	84.30	4.4	47.10	2.4
sub total	2,790	65.3	96.03	62.7	85.53	55.9
<b>Rural</b>						
1,000 - 2,499	4,661	8.4	67.60	5.7	31.00	2.6
1 - 999	149,152	17.9	45.40	8.1	16.20	2.9
sub total	153,813	26.3	52.47	13.8	20.91	5.5
<b>Total</b>	<b>156,603</b>	<b>91.6</b>	<b>83.54</b>	<b>76.5</b>	<b>67.01</b>	<b>61.4</b>

Source: Agua Potable y Saneamiento Basico, 1995, CNA

**Table A.3. 47 Proposed service coverage by size of area in 2000**

Population Class	No. of Areas	No. of Population (million)	Potable Water		Sewerage Line	
			Coverage Ratio (%)	Covered Population	Coverage Ratio (%)	Covered Population
<b>Urban</b>						
80,000 or more	103	45.6	97.80	44.6	92.10	42
50,000 - 79,999	43	3.2	96.30	3.1	92.60	3
5,000 - 49,999	1,135	16.3	95.10	15.5	79.20	12.9
2,500 - 4,999	1,509	5.7	84.30	4.8	47.10	2.7
sub total	2,790	70.8	96.03	68	85.53	60.6
<b>Rural</b>						
1,000 - 2,499	4,661	9.0	80.00	7.2	60.00	5.4
1 - 999	149,152	19.4	60.00	11.6	50.00	9.7
sub total	153,813	28.4	66.37	18.8	53.18	15.1
<b>Total</b>	<b>156,603</b>	<b>99.2</b>	<b>87.53</b>	<b>86.8</b>	<b>76.26</b>	<b>75.6</b>

Source: Agua Potable y Saneamiento Basico, 1995, CNA

Considering the current service coverage, is part of 83,54% for drinking water and 67.01% for the sewer service, and is outlined to increase them to 87.53% and 76.26% respectively, in the period 1995-2000. The population served for the year 2000 with these coverage, it will be of 86.8 million of inhabitants with drinking water and 75.7 million with sewer, as is shown in Table A.3. 47.

Though the water balance by volume between total demand and total available water sources (surface water & ground water) are well balanced in national level (see Table A.3. 48), 80% of total annual rainfall downs to the areas that the only 24% of population are living, 10% of irrigated areas are covering, 30% of industrial products are generating and 23% of GDP are creating.

**Table A.3. 48 Water balance in Mexico**

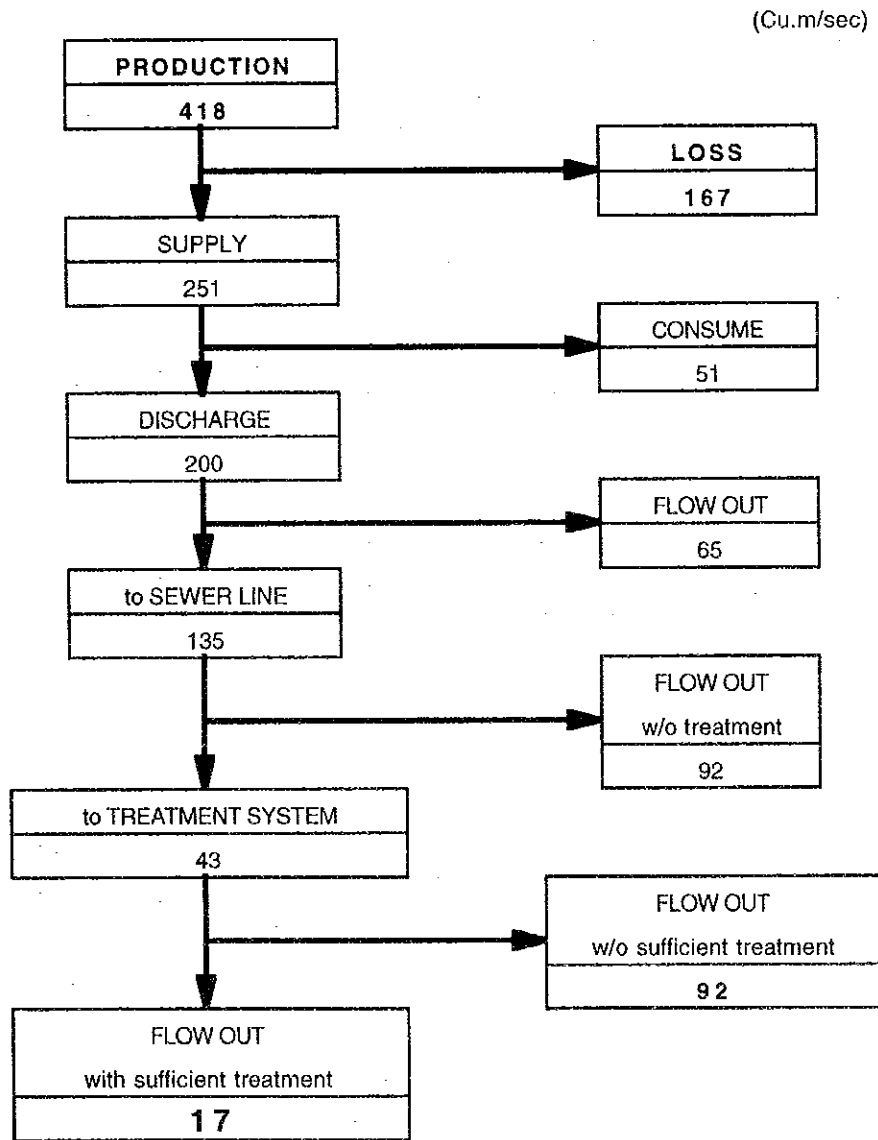
	(Billion Cu.m/year)
Rain Fall	1,530
Evaporate	1,075
Supply	455
Surface Run off	410
Percolate to Underground	45
Percolate by Irrigation	15
Ground Water Availability	60
Total Water Availability	470
Total Present Demand	191
Irrigation	66.7
Urban	10.4
Industrial	7.3
for Hydro-Electric	106.4

Source: CNA Estrategias, marzo de 1995

## (2) Present problems

- In-completion of infrastructures due to the lack of inadequate investment
- Inadequate operation and maintenance of facilities due to the lack of technologies. Waste water treatment plant are being functioned 40% of its total capacity due to the above reasons
- Total production of potable water is 418 cum/sec in 1995, nevertheless only 251 cum/sec are supplied to the users because almost 40% of potable water are lost by leak and steal during delivery. Figure A.3. 17 shows the present situation of potable water flow.

Figure A.3. 17 Present situation for portable water



**(3) Actions and strategies**

- To widen and effective the action of technical support to users in operation, maintenance and conservation of the infrastructure
- Full utilization of built facilities
- To complete the incomplete works
- Establishment of 1,189 small pumping station, rehabilitation of 556 wells and pumping systems and modernization of 633 irrigation systems are being accomplished in 1995.
- To execute a follow-up program in wells and pumping stations
- To accomplish training programs before the accomplishment of the facility construction, so that upon completion of the facilities these are operated and managed adequately

- 
- To promote and educate on the appropriate technologies for the efficient use of the water and its facilities
  - To promote the organization and participation of the beneficiaries in the analysis of the problems, the identification of feasible solutions and the execution
  - To strengthen the economic participation of the state government and beneficiaries

**(4) National Development Plan 1995 - 2000**

Objectives of the CNA in the National Development Plan are;

- To impel the satisfaction for the potable water needs of the peoples' consumption, hygiene and other domestic activities
- To strengthen the control and management systems for drainage
- To contribute to achieve coverage levels in the potable water services, sewer and drainage services that to prevent the epidemics spread
- To assure the satisfaction of the water demand in quantities and sufficient quality
- To intensify the installation of treatment systems of domestic sewerage water
- Confront the accelerated diseases in particular the cholera by the extension of the service coverage to the rural areas and adequate management of drainage water and improve the lavatories maintenance with the involving of the peoples

**A.3.5.3. Telecommunication**

**(1) Existing conditions**

Mexico lags behind in the development of telecommunication network. Mexico has only 8 telephone lines per 100 inhabitants in 1992, placing it as the 70th country in the world in terms of telephone density.

Telmex was privatized in 1990, however until 1996 Telmex will continue to be the only public service long-distance carrier. Cellular telephone services are started in 1990 by private firms and currently 9 regional service companies and 1 nation-wide service company are being operated.

Almost 9 million lines will be connected as of end of 1996, and it is approximately 70 percent growth from 1990 that was 5.3 million lines were connected. The density will also achieved 11 lines per 100 inhabitants in 1996, see Table A.3. 49. Target density in the year 2000 is 20 lines per 100 inhabitants but according to the SCT, this target is not authorized. Number of back-logs of telephone are achieved more than one million or 10% of existing telephones.

Annual growth of Local telephone calls are 29% and long distance and international calls are 11.9%, 18.4% respectively. More than 1,380 million long distance conferences and 330 million international conferences are generated in 1992.

Subscribers of cellular phone are also rapidly increased that is 70,000 in 1990 to over 600,000 subscribers in 1995.

Telemex had obligation that the capacity of telephone systems should be increased 12% per year from the start as private company until year 1994. Nevertheless from the year 1995, there are no duties or obligations to increase or to develop the capacity of telephone systems by themselves (Telemex and other private company which will enter in to this business). The state government should be considered the establishment of telephone systems in the isolated areas because private company will not prepare telephone systems such areas which can not generate the profit.

Table A.3. 49 Connected telephone lines

(Unit; 1,000)

STATE	No. of Telephone Lines			Telephone Densities		
	1994	1995	1996	1994	1995	1996
AGUASCALIENTES	76.8	83.8	86.9	10.7	11.6	10.1
BAJA CALIFORNIA NORTE	274.4	301.5	320.1	16.6	18.2	15.2
BAJA CALIFORNIA SUR	45.9	46.8	49.1	14.5	14.7	13.1
CAMPECHE	33.0	34.0	35.9	6.2	6.4	5.6
COAHUILA	222.5	227.6	235.3	11.3	11.5	10.8
COLIMA	50.3	52.5	53.9	11.8	12.4	11.1
CHIAPAS	89.6	97.0	100.7	2.8	3.0	2.8
CHIHUAHUA	293.3	306.2	315.3	12.0	12.5	11.3
DISTRITO FEDERAL	2,133.6	2,185.4	2,204.0	25.0	26.5	26.0
DURANGO	95.7	99.2	102.8	7.1	7.3	7.2
GUANAJUATO	908.4	994.9	1,041.4	22.8	25.0	23.7
GUERRERO	258.5	273.2	283.4	9.9	10.4	9.7
HIDALGO	136.5	146.8	155.7	7.3	7.8	7.4
JALISCO	92.3	98.8	102.0	1.7	1.9	1.7
MEXICO	699.2	732.0	754.0	7.1	7.5	6.4
MICHOACAN	214.1	229.2	238.7	6.1	6.5	6.2
MORELOS	136.0	148.1	155.3	11.4	12.4	10.8
NAYARIT	61.2	61.5	65.2	7.5	7.5	7.3
NUEVO LEON	581.7	594.4	589.5	18.8	19.3	16.6
OAXACA	84.5	91.7	97.5	2.8	3.0	3.0
PUEBLA	258.3	271.5	282.8	6.3	6.6	6.1
QUERETARO	95.5	101.3	104.0	9.1	9.7	8.3
QUINTANA ROO	53.0	57.7	63.0	10.7	11.7	9.0
SAN LUIS POTOSI	123.6	127.9	131.8	6.2	6.4	6.0
SINALOA	205.3	205.6	210.6	9.3	9.3	8.7
SONORA	222.1	223.9	228.6	12.2	12.3	11.0
TABASCO	76.3	78.6	79.9	5.1	5.2	4.6
TAMAULIPAS	262.0	272.9	279.9	11.7	12.2	11.1
TLAXCALA	38.9	43.9	45.3	5.1	5.7	5.1
VERACRUZ	361.6	368.7	376.1	5.8	5.9	5.6
YUCATAN	120.0	123.9	127.0	8.8	9.1	8.2
ZACATECAS	50.7	55.8	58.5	4.0	4.4	4.4
TOTAL	8,354.8	8,736.3	8,974.2	10.3	10.8	11.1

Note: Telephone Densities indicate Number of Lines per 100 persons

Source: Elaborado por la Coordinación de Asesores de la SCDT con datos de la DGRR

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### A.3.6. Tourism promotion and activities

#### A.3.6.1. Tourism promotion system

##### (1) Tourism promotion by SECTUR (Organization and activities)

As for international and domestic tourism promotion, the SUBSECRETARIA DE PROMOCION TURISTICA takes the responsibility for these duties. The DIRECCION GENERAL DE MERCADO TECNIA, which is the subordinate organization of the above, is responsible for drawing up policy and strategy for the tourism promotion, and overall internal coordination in terms of promotional efforts while the DIRECCION GENERAL DE OPERACION PROMOCIONAL, another subordinate organization of SUBSECRETARIA, is assigned to implement actual promotional activities. In addition the DIRECCION GENERAL DE MERCADOTECNIA is in charge of the matters related to the FONDO MIXTO which promotes international and domestic visitors to local tourism-oriented areas. In implementing promotional activities regarding such tourism products as Beach Resort Program, Mundo Maya, Colonial Cities, Barranca del Cobre - National Park Program, and North Border, necessary operation are conducted by the SUBSECRETARIA DE PROMOCION TURISTICA in cooperation with the SUBSECRETARIA DE DESARROLLO TURISTICO.

In order to make a tourism promotion much more positively and effectively in the international market, SECTUR has also 15 representatives in such cities of foreign countries as: New York, Chicago, Los Angeles, Miami, Houston, Montreal, Toronto, Vancouver, Tokyo, London, Paris, Madrid, Frankfurt, Rome and Buenos Aires.

##### a. Promotional activities implemented by SECTUR

###### For international market

Basically, SECTUR has been making every effort to promote all places of Mexico in the international markets. However, it is emphasizing on the following places in accordance with each market's character.

- North America: Beach resorts
- Lain America: All areas are equally promoted. But in Brazil and Argentina, the Pacific coast is strategically stressed.
- Europe: Archaeological and Historical places plus Beach resorts
- Asia ( Japan): Beach resorts and/or Archaeological, Historical and Cultural places

Followings are main activities implemented by SECTUR.

- Advertisement in Newspaper, Magazine and Television  
(The above are done mostly in USA, Canada and Latin America through the contracted advertisement agencies)
- Implementation of Seminars for travel trade sector  
(This has been mostly done by the SECTUR's representatives in foreign countries in large quantity.)
- Participation in Travel Trade Show  
( Main ones in 1995: PATA General Assembly in New Zealand, ACTA in Hong Kong, ASAE in Washington, SITIV in Montreal, ASTA in Philadelphia, JATA Congress in Osaka, FITUR in Madrid, BIT in Milan, ITB in Berlin, SMV in Paris and CONGRESO ABAV in Brasilia, etc. )
- Organization of "Tianguis Truistico "  
(The above is a travel trade show with the aim of promoting Mexico in the international markets, which takes place in the port of Acapulco each year. In 1995, the function of "Eurobolsa," which aimed at Mexican tourism promotion in Europe and was canceled in 1995, is combined in this travel trade show.)

- 
- Implementation of "COOPS" program  
(This is a joint promotion campaign with private sectors such as airlines and tour operators, etc. by bearing the cost on an equal basis.)
  - Dispatch of Tourism Missions  
(Main missions: "CARAVANA TURISTICA" in Brazil, Argentina, Chile and Colombia, "Work Shop" in Peru, Colombia, Dominica and Guatemala, etc.)
  - Familiarization trips for both mass media and influential persons, and travel trade sector
  - Participation in travel festivals for consumer sector ( mainly in USA)
  - Production of printed materials  
(The SECTUR's common pamphlets for all markets were made in English by the advertisement agency in USA and translated into French, Spanish, Italian, German and Japanese. Other brochures have been also made by each representative in foreign country in accordance with its market character. )
  - Issuance of magazine ( " Travel Hotline Mexico " )
  - Providing of travel information by the video documentaries in Spanish, English, German, French and Japanese
  - Press release
  - Tourist Information Services by toll free-telephone from USA and in Mexico  
( Operating for 24 hours per day all the year round)

#### For domestic market

SECTUR has been playing a major role as the federal government organizations in the field of domestic tourism promotion.

The object of the federal government's involvement in domestic tourism promotion is as follows.

- Promotion of better understandings among Mexican nationals of their beautiful natural resources such as beaches, mountains and forests, traditional old cities, historical monuments, and indigenous cultures
- Vitalization of each region's economy by stimulating tourism traffic to the regions concerned

Based on the tourism promotion agreements or "Coordination" concluded between SECTUR and state governments, SECTUR has been almost always implementing the projects and a half of joint promotion costs for the each state has been borne by SECTUR.

#### **b. Promotion with Fondo Mixto**

"Fondo Mixto" is the matching fund for the purpose of promoting international visitors and Mexican travelers to each local tourist-oriented area, and of publicizing it internationally and domestically.

#### Fund contribution

The fund is basically contributed by the federal government, each related state government and such private sectors in each area as hotel, travel agent, restaurant, car-rental company and financial institution on an equal basis. In regard to the contribution from the federal government, the main contributor is SECTUR while FONATUR has been occasionally sharing the portion of the federal government's contribution to certain limited area with SECTUR. It could be particularly mentioned that SECTUR is able to contribute a fund to each area exceeding its quota in case where a promotional project of each Fondo Mixto complies with the policy planned by SECTUR, and that SECTUR has been providing often each Fondo Mixto with much more money than the originally planed quota. Among the

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total budget for all Fondo Mixtos in FY 1995 (103.1 million Pesos), 60.4 million Pesos is contributed by SECTUR.

#### Location of Fondo Mixto

At present, the Fondo Mixto is established in the following 33 areas, and for four special programs of "Mundo Maya", "Colonial Cities", "Mar de Cortes", and "Caminos del Rio".

Cancun, Acapulco, Mazatlan, Loreto, Ixtapa-Zihua., Los Cabos, Puerto Vallarta, Cozumel, Cd. de Mexico, Manzanillo, Taxco, Nuevo Leon, Huatulco, Veracruz, Morelos, Cd. de Oaxaca, Guadalajara, Puebla, San Luis Potosi, Guanajuato, Michoacan, Rosarito, La Paz, C.D. de Juarez, Chihuahua, San Carlos, Tampico, Tijuana, Pto. Escondido, Nayarit, Ensenada, Mexicali, San Felipe

#### SECTUR's roles in Fondo Mixto

In SECTUR, promotion activities with Fondo Mixto are mainly handled and administrated by a section in "Direccion General de Mercadotecnia" in "Subsecretaria de Promocion Turistica".

SECTUR is a member of each Fondo Mixto's technical committee which is the supreme decision-making body, and through which SECTUR has been planning and implementing its promotional program in compliance with the policy of SECTUR as much as possible. In addition to the above function, SECTUR has been coordinating each related Fondo Mixto in searching for an effective implementation of joint promotion, especially for international market.

### **(2) Tourism promotion by local organization**

#### **a. State level**

Most state government have been positively implementing tourism promotional activities for both international and domestic market by themselves or in cooperation with such organizations as SECTUR, municipalities, related Fondo Mixtos, and private sector.

The following promotional activities are mainly implemented by most states.

#### For international market

- Participation in Travel Trade Shows  
(Most states have been participating in ones held in main cities of USA and Tianguis in Acapulco. And some states also in trade shows such as ITB Berlin, WTM, FITUR and JATA Congress etc.)
- Participation in tourism missions to Europe, Latin America organized by SECTUR
- Familiarization trip for both mass media and travel agents  
( The above has been often done in cooperation with SECTUR, airlines, hotels and Fondo Mixtos.)
- Production of video and printed materials
- Distribution of newsletters to mass media and travel agents
- Operation of tourist information office to visitors
- Coordination of tourism promotions implemented by each tourism area in the state concerned

#### For domestic market

As mentioned before, a great part of each state government's domestic tourism promotion has been implemented in accordance with the agreement or "Coordination" concluded by SECTUR and the state governments.



- 
- Advertisements in newspapers and magazines for general consumers sector
  - Television campaigns  
( Television campaigns have been carried out for some states by utilizing the so-called " Official Time" without any costs except expenses for the production of videos )
  - Production of printed materials  
(For the purpose of publicizing each state's tourist attraction, about 3.5 million brochures with 350 kinds were produced in 1994 by the coordination program. )
  - Familiarization trip for mass media
  - Organization of travel events and/or travel festivals for consumer sector  
(These have been held at such places as shopping centers and bustling streets in major tourist generating cities. )
  - Distribution of newsletter
  - Coordination of the joint tourism promotions implemented by tourist areas in the states concerned

With regard to the cooperation between the state governments, it could be particularly noted that four states of Baja California Sur, Sonora, Chihuahua and Sinaloa have been carrying out joint tourism promotions for international and domestic markets since 1992 by establishing the Fond Mixto called "Barranca del Cobre Y Mar de Cortes." The aim of this program is to publicize such attractive places as Beaches in Los Cabos, Copper Gorge and Coastline of the Sea of Cortes, etc. as one whole destination.

**b. Tourism destination level**

It could be said that most municipalities have not been positively implementing tourism promotion from outside to their regions, though the Fondo Mixtos have played a major roll in this part.

Each Fondo Mixto has been carrying out following promotional activities for both domestic and international markets by themselves and/or in cooperation with such organizations as SECTUR, state governments concerned, related municipalities and private sectors.

- Advertisements in newspaper, magazine ( including travel trade magazine ), television ( in case of conducting domestic campaign, the so-called " Official Time " is often utilized.), radio
- Public relations such as familiarization trip for mass media and press release
- Participation in travel trade shows such as ITB Berlin, WTM in London, BIT in Milan, FITUR in Madrid, ASTA, JATA congress in Japan, Tianguis in Acapulco and Eurobolsa as well as ones organized at main cities in Mexico
- Organization of seminars for travel industry in USA and Mexico, etc. and familiarization trip for travel agent
- Subsidy to airlines operating the regular flights between cities in foreign countries ( mainly in USA ) and locations of Fondo Mixtos ( if specify, Los Cabos and Huatulco )
- Production of pamphlets, posters flyers
- Participation in tourism mission to foreign countries ( mainly Europe and Latin America ) organized by SECTUR, etc.
- Organization of tourism related events and cooperation to sports events and festivals, etc.

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### A.3.6.2. Tourism promotion programs

In addition to the above, SECTUR has been implementing the following projects.

#### (1) Mundo Maya program

The Mundo Maya (or Mayan World) program represents the integration of tourism with one of the most precious cultures of the Americans- and the Mayan- culture. The Mundo Maya extended from Mexico to Belize, El Salvador, Guatemala and Honduras. The program includes culture, history, ecology and tourism in one package with emphasis on such the region's diversity as archaeology, traditional cultures, beaches/reefs and jungles, colonial cities and various ethnic groups.

##### a. Purpose

- To promote regional integration in the five countries which will help to reserve the vestiges of the Mayan civilization.
- To create a new concept of tourism which offers a variety of natural and cultural attractions to international and local visitors alike.
- To promote tourism development of regions and communities which have been merged.
- To contribute through tourism to the protection of the natural resources: water, plants, wildlife as well as the archaeological and cultural inheritance of the region.

##### b. Areas

The following twenty three sites are designated as ecological and archaeological projects.

- Campeche: Calakmul, Balamku, Nadzcaan, Xpuhil, Becan, Chicanna, Hormiguero, Rio Bec.
- Chiapas: Tenam-Puente, Chinkultic, Junchavin
- Quintana Roo: La Laguna, Chchan-ha, Chacchoben
- Tabasco: La Venta, Malpasito, Comalcalco, Pomona., Reforma
- Yucatan: Izamal, Dzibilchaltun, Uxpal, Labna

##### c. Promotional activities

From 1991 to 1994, promotional activities have been made by mainly participating in major international travel trade shows with the distribution of about 784,000 printed materials. A new promotion and advertising campaign is also being implemented for the specific segments of the market whose concerns are the preservation and respect of the sites. Main financial source of this project is the Mundo Maya Fondo Mixto.

Followings are main activities in 1995.

- Organization of Trade Show
- Special Trade Show in Washington, USA  
( Organized by the Mundo Maya Organization )
- "Second Encounter with Mundo Maya" in Honduras  
( Organized by the five related countries )
- "Mercado Mundo Maya" in Mexico City, Guadalajara and Monterrey
- Organization of Marketing Seminar in Tabasco
- Participation in Trade Show  
(Tiangius in Acapulco, ITB Berlin, WTM in London, BIT in Milan)

- 
- Familiarization Trip for press attending the Tianguis
  - Production of several printed materials including sales manual

**d. Other projects**

Besides the above, the ecological and archaeological projects are implemented in order to make new tourist destinations by both letting local people to participate in restoration work and improving the access and infrastructure of various sites concerned.

The financing for the projects comes from the following institutions:

- SECTUR
- Instituto Nacional de Antropología e Historia
- Gobiernos de Los Estados

**(2) Colonial cities**

With the purpose of driving the development of the historic cities of Mexico, the Colonial Cities program started in 1991 by establishing the Fondo Mixto. Its concrete aim is to promote and commercialize following destinations in the international and domestic markets.

The promotion has been implemented by means of publicity campaigns in these markets, showing several attraction that these cities offer, such as important archeological centers, gastronomy, costumes and traditions, in addition, natural places where the Mexican flora and fauna constitute the ecological reserves.

**a. Participating cities**

Following fifty six cities located mostly in the central part of Mexico have been participating in this program. (As of November 1995)

- Aguascalientes: Aguascalientes
- Campeche: Campeche
- Coahuila: Saltillo
- Chiapas: Comitán, Chiapa de Corzo, San Cristobal de las Casas, Tuxtla Gutierrez
- District Federal: Ciudad de Mexico
- Estado de Mexico: El oro, Ixtapan de la sal, Malinalco, Tenancingo, Toluca, Valle de Baravo,
- Guanajuato: Dolores Hidalgo, Guanajuato, San Miguel de Allende
- Guerrero: Taxco,
- Jalisco: Chapala, Guadalajara, Lagos de Moreno, Tlaquepaque, Tonalá
- Michoacan: Morelia, Patzcuaro, Uruapan
- Morelos: Cuernavaca, Tepoztlan
- Oaxaca: Oaxaca
- Puebla: Cholula, Huejotzingo, Puebla, Tehuacan, San Andres Cholula, San Pedro, Cholula
- Queretaro: Queretaro, San Juan del Rio, Tequisquiapan,
- San Luis Potosi: San Luis Potosi,
- Sonora: Alamos,
- Tlaxcala: Atlihuetzia, Huamantla, Santa Ana Chiautempan, Tepeyanco, Tlaxcala, Tlaxco ,

- 
- Veracruz: Antigua, Coatepec, Cordoba, Tlacotalpan, Veracruz, Xalapa,
  - Yucatan: Izamal, Merida, Valladolid
  - Zacatecas: Zacatecas

\*Adding to the above, 144 private companies ( 115 from hotels, 27 from travel agents and 2 from Airlines) are joining this program.

**b. Main promotional activities**

- Participation in travel trade show
- ( ITB Berlin, FTUR in Madrid, BIT in Milan, JATA congress in Japan, WTM in London, TOPRESA in Latin America)
- Advertisements in newspaper, magazine ( Europe, USA, Canada, Mexico )  
( Since this program started, the above had been implemented. But, it is not carried out in this year. )
- Production of various kinds of printed materials in Spanish, English and Japanese
- Production of tour packages in cooperation with land operators television campaigns in Mexico by utilizing "Official Time"

**c. Other activities**

With the aim of vitalizing tourism traffic to each city, it has been making an effort to beautify its streets and buildings, etc. in cooperation with SECTUR and related organizations.

SECTUR also produced the uniformed pictographs or sign for tourist facilities and attractions, etc. for the cities concerned, with which visitors are able to recognize easily them, and is promoting their installations by the cities and related organizations.

**Table A.3. 50 Table of the colonial city program**

States	Name of designated cities	Founded year	Altitude (m)	Pop. (1000s)	Themes of program							
					P1	P2	P3	P4	P5	P6	P7	
1 Baja California												
2 Baja California Sur												
3 Sonora												
4 Sinaloa	Alamos	1540	432	9								
5 Chihuahua												
6 Coahuila	Saltillo*	1577	1599	600								
7 Durango												
8 Nuevo Leon												
9 Tamaulipas												
10 Zacatecas	Zacatecas*	1548	2445	195								
11 Aguascalientes	Aguascalientes*	1575	1800	520								
12 San Luis Potosi	San Luis Potosi*	1592	1860	680								
13 Nayarit												
14 Jalisco	Guadalajara* Chapala Lagos de Moreno Tlaquepaque Tonala	1542  1563	1563	4000 20								
15 Colima												
16 Michoacan	Morelia* Patzcuaro Uruapan	1541 1534 1533	1910 2175 1650	429 60 220								
17 Guanajuato	Guanajuato* Dolores Hidalgo San Miguel de Allende	1552	2017 1840	100 40 80								
18 Queretaro	Queretaro* San Juan del Rio Tequisquiapan	1532	1762	454 62 19								
19 Hidalgo												
20 Mexico	Toluca* Ixtapan de La Sal Malinalco Tenancingo El Oro Valle de Bravo		2680 1925	490 13  50								
21 Distrito Federal	Mexico City	1521	2240	20000								
22 Morelos	Cuernavaca* Tepoztilan		1542 1701	450 12								
23 Tlaxcala	Tlaxcala* Huamantla Santa Ana Chlautempan Tepeyanco Atlixhuetzia Tlaxco	1525 1534	2252	50								
24 Puebla	Puebla* Huejotzingo Cholula Tehuacan San Andres Cholula San Pedro Cholula	1531	2162	1500  140 40								
25 Veracruz	Veracruz Coatepec Cordoba Tlacotalpan Antigua Jalapa*	1519 1618	924	1000 150 15 400								
26 Guerrero	Taxco	1529	1755	60								
27 Oaxaca	Oaxaca*	1532	1550	220								
28 Tabasco												
29 Chiapas	Tuxtla Gutierrez* Chiapa de Corzo San Cristobal de Las Casas Comitan		532	300 32 70 84								
30 Campeche	Campeche*	1540		185								
31 Yucatan	Merida* Izamal Valladolid	1542 1533 1543		600 40 80								
32 Quintana Roo												
Total		56 cities										8

Programa de Ciudades Coloniales:  
 (P1) Del Mar de Cortes  
 (P2) Del Norte  
 (P3) De Tesoros Coloniales del Bajío  
 (P4) De la Ruta de Cortes  
 (P5) De la Ruta de la Independencia  
 (P6) Del Mundo Huasteco  
 (P7) Del Mundo Maya

Old city name  
 (Tenochtitlan)

(Villa Rica de Veracruz)

(Villa Real)

Note: Capital cities

Source: Políticas sectoriales y acciones concurrentes en la promoción turística; SECTUR 27-11-1995

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### (3) Northern border

This program started in 1991 involving six border states (Baja California, Sonora, Chihuahua, Coahuila, Nuevo Leon and Tamaulipas) with USA and their 2 nearby states (Baja California Sur and Sinaloa) for the purpose of reevaluating the border states with strong tourist potential, increasing the expense by the visitors, and promoting visitors to the interior of the country.

Basically, each project has been implemented by related Fondo Mixto and SECTUR has been playing a major role in coordinating with such related organization as state governments, municipalities and private sectors as well as other federal government's organizations.

#### a. Main projects

- Tijuana - Ensenada ( Baja California )
- Camino del Rio (Tamaulipas )
- Mar de Cortes ( Baja California Sur, Chihuahua, Sonora, Sinaloa )
- Cruces Fronterizos ( Baja California, Sonora, Chihuahua, Tamaulipas )

#### b. Kinds of their main activities

- Beautification of cities and towns
- Improvements of tourist-related infrastructure and facilities
- Investment campaigns
- Tourism promotions such as production of printed materials, etc.
- Providing of tourist information services
- Creation of conventional tourist circuit
- Developments of an alternative tourism (such as ecological tourism, adventure tourism, sports fishing and historical tourism )
- Implementation of marketing study
- Speed-up of immigration check
- Holding of coordination meeting with border states of USA, and Mexican federal and states' governments, municipalities, etc. for the improvements of reception services

### A.3.7. Tourism administration

#### A.3.7.1. Tourism organizations

##### (1) Federal government organizations

The Federal Government is made up following 3 powers.

- Executives
- Judicial
- Legislative

Mexican federal governmental structure comprises eighteen organizational units as shown below. The ministry with jurisdiction over tourism is Secretaria de Turismo (SECTUR; Secretariat(=Ministry) of Tourism).

- The Secretariat of the Interior
- The Secretariat of Foreign Affairs
- The Secretariat of National Defense

- The Secretariat of Navy
- The Secretariat of Finance and Public Credit
- The Secretariat of Social Development
- The Secretariat of Environment, Natural Resources and Fishing
- The Secretariat of Energy, Mines and State owned Enterprises
- The Secretariat of Trade and Industrial Promotion
- The Secretariat of Agriculture, Live-stock and Rural Development
- The Secretariat of Communication and Transportation
- The Secretariat of Administrative Control and Development
- The Secretariat of Public Education
- The Secretariat of Health
- The Secretariat of Labor
- The Secretariat of Agrarian Reform
- The Secretariat of Tourism

**(2) Secretariat of Tourism (SECTUR)**

The major roles of SECTUR are:

- to establish strategies, policy and action of the national tourism development and promotion,
- to prepare the Tourism Sector Development Program,
- to promote international and domestic tourism, and
- to operate and improve tourist reception services (tourist security, tourist information, training for personnel employed by tourism industry, etc.).

After applying the decentralization and restructure policy according to the new Federal Tourism Law revised in 1992, SECTUR has not longer mandatory responsibility and has applied rather mitigated controlling systems to ensure and develop their international competitiveness by the private sector.

SECTUR has 15 numbers of the tourist offices in the main market countries. The total budget of SECTUR in 1996 is \$694,915,000(US\$92,655,000).

The function of each sub-secretaria level is as follows:

**A.3.7.2. Other governmental organization**

Here presents some of organizations which have not been given details in volume one of this report.

**(1) The executive tourism commission**

This commission was established based on the Article-6 of the Federal Tourism Law as follows:

“The Executive Tourist Commission shall have as objective to have knowledge, attend and resolve matters of tourist nature related to the jurisdiction of two or more Ministries or Public Corporations; as well as a consulting agency for matters the Secretariat (SECTUR) considers oportune to submit to its consideration.”

“The commission shall be presided by the Secretary of Tourism and shall be Ministries and their equals in the Public corporations, in accordance to the applicable provisions. The principal sector organizations of tourism shall also participate, in accordance to that established by the regulatory provisions.

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Universities, institutions and other public, private and social entities, federal or local, associations and other persons related to tourism as determined may be invited.”

The meeting of this commission is held twice a year. This has seven working groups as shown below and each of which has a meeting every month:

- Vessels
- Hunting
- Immigration
- Transportation
- Sport fishing
- Convention
- Ecology

## **(2) Mexican Tourism Promotion Council (CMPT)**

### **a. Establishment of CMPT**

The establishment of Mexican tourism promotion council (CMPT) was declared on January 31, 1996 under the name of minister of tourism. According to an official bulletin containing the decree, CMPT is an organization jointly established by public and private sectors for tourism promotion and for improvement of the image of Mexico by using both financial resources, and CMPT is supposed to play a major role in tourism promotion at the national level.

CMPT started its projects in February 1996. Fideicomiso, which is an private organization to inspect CMPT from the private sector side, was established on June 19, 1996

The objectives of CMPT described in the document are as follows:

- to maximize tourism promotion of Mexico through alliance with the government and private sector,
- to heighten quantity and quality of tourism promotion of Mexico by utilizing existing resources,
- to develop policies and strategies to improve image of Mexico,
- to promote tourism sector, and
- to acknowledge importance of tourism activity to the public.

The functions of CMPT described in the document are as follows:

- to set up and propose policies and strategies for promotion and commercialization,
- to conduct studies and analysis on major international tourism markets,
- to increase the amount of funds for Mexican tourism promotion, and
- to formulate strategies coordinated with social communication and to develop a mechanism of permanent evaluation on the effectiveness of its impacts.

### **b. More involvement of private sector to CMPT**

It is pointed out that although the private sector is direct beneficiaries, the private tourism sector has been poorly represented in the processes of decision-making of raising and utilizing of funds, and formulation of plans and programs. In fact, it seems inappropriate that CONCANACO-Servytur (Service industry committee of Chamber of Commerce), Consejo Nacional Empresarial Turistico (National council



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of tourism enterprises), and CANAERO (Chamber of Airlines ) are CMPT's associated members who do not possess voting rights.

**c. Relationship with other organizations**

Future orientation of roles of CMPT is related to its capacity how they can coordinate other tourism organizations. There is no effective tourism promotion without cooperation in federal level and in state level.

**d. Fund from SECTUR to CMPT**

The orientation of CMPT is also depend on its budget permitted by government. It is reported that SECTUR gives financial supports to CMPT only in 1996, but SECTUR will not give any further financial assistance to CMPT from the next year. As a result, CMPT will have to raise funds by themselves from private sources.

It is a large question whether CMPT's activities would reflect SECTUR's policies and strategies for tourism development and promotion or not. And also it is a question whether the roles of promoting Mexico's tourism as a country would be adequately played by CMPT without any financial support from SECTUR.

**(3) National Fund for Tourism Promotion  
(FONATUR ; Fondo Nacional de Fomento al Turismo)**

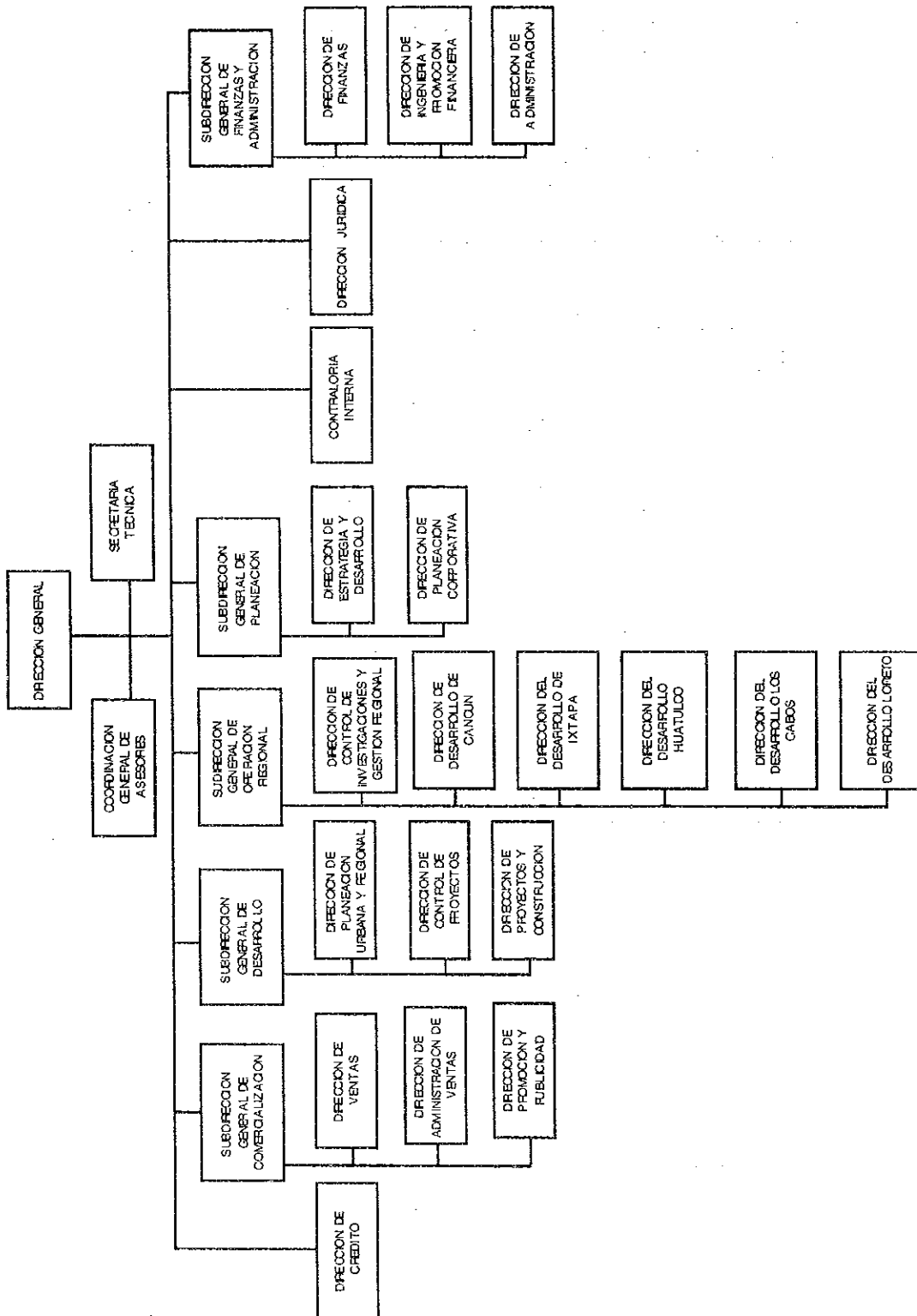
**a. Organizational structure**

FONATUR was established according to the revised Federal Tourism Law in 1972 as a trust fund of the Federal Government, in the limitation within the tourism sector.

FONATUR combines the government funds, international and Mexican financing, and its own internally-generated resources and they are applied encouraging and guiding developments of the tourism in Mexico. An important income source of FONATUR is the sale of hotel sites housing sites.

The organization chart of FONATUR is shown in Figure A.3. 18. Activities of FONATUR is decided under the supervision of the Corporate Board of Directors and the Technical Committee as the highest decision maker of which members are SECTUR, Secretaria de Desarrollo Social (SEDESOL; Ministry of Social Development), Secretaria de Hacienda y Credito Publico (SHCP; Ministry of Finance), and Banco de Mexico in chairmanship of the Minister of SECTUR.

Figure A.3. 18 Organization chart of FONATUR



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The head of FONATUR is the Direccion General. Under the Direccion General there are Coordinacion General de Asesores, Secretaria Technica, and five Subdirecciones General with 16 Direccion. Total number of the staff in FONATUR is 552 which was reduced from 900 by and in December, 1995. It is planned that further restructuring FONATUR will be conducted in January 1996.

**b. Basic functions of FONATUR**

The followings are the basic functions of FONATUR:

- Development and consolidation of CIP; (5 CIPs, at present, of Cancun, Los Cabos, Loreto, Ixtapa and Huatulco) which is the large scaled integral regional tourism development for new integrated tourism resort including preparing a master plan, procurement of land, planning and engineering, with urban development, zoning, and marketing, and management, sales promotion, and selling and leasing the developed lands,
- Financing to tourism related development projects including hotel construction, expansion and renovation as well as other tourism development projects throughout the country,
- Promotion of private investors for joint investment in developments of infrastructure and basic tourist stocks such as hotels, golf courses, shopping areas, convention facilities and other facilities which are deemed to encourage tourist centers by supporting through the investments, and
- Promotion for the awareness of new tourism centers developed by FONATUR as a travel destination through participating or supporting Fondo Mixto. Recently FONATUR has put priority on this function.

**c. Restructuring of FONATUR**

Because of the new government policy, and in an effort to make any institutions related to public administration more effective, the following restructuring activities have been applied to FONATUR:

- Eliminated any functions that did not belong to them and should be supported or helped by other institutions that would handle or do that work more efficiently, such as promotion and collection of tourist data. Another objective was to increase effectiveness by making clear goals and measuring the achievements of each area and introducing a "feelings" or the "concept" of profit in the management of the Fund. Restructuring FONATUR is still underway.

The staff of the following sections are most reduced:

- Direccion de Promocion y Publicidad (Section of Promotion and Data Supply) due to that the function has been taken by SECTUR,
- Direccion de Mantenimiento de Infraestructura Urbana (Section of maintaining Urban infrastructure) due to the function has been taken over by the local government.

In order to improve its financial situation, FONATUR has intention to join with private investors for tourism development even taking risks as well as profit, and to create jobs related to advising tourism of other countries during their tourism planning and development stages.

**(4) Private sector organizations**

There are several associations presenting the interest of the tourism related industry. The followings are major private organizations which have relations with the tourism sector :

- Confederation of National Chambers of Commerce, Subcommittee of Service and Tourism

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(CONCANACO; Confederacion de Camaras Nacionales de Comercio, SERVYTUR; Servicios y Turismo)

- Mexican Travel Agency Association (AMAV; Asociacion Mexicana de Agencia de Viajes)
- All Mexican Hotel and Motel Association (AMHM; Asociacion Mexicana de Hoteles y Moteles, CD. de Mexico, A.C.)
- National Chambers of Restaurant and Food industries (CANIRAC; Camara Nacional de la Industria de Restaurantes y Alimentos Condimentados)
- National Council of tourism enterprises (Consejo Nacional Empresarial Turistico, A.C.)

**(5) Organization in tourism destinations**

**a. Public sector organization**

Governments

The public sectors responsible for the tourism in each tourism destinations are as follows:

- State Government
- Municipality

Governmental development organizations

FONATUR Regional Offices are located in the CIP destinations only and continuing their development and sales promotion.

Some states have their own tourism development organization as shown below:

Guerrero state has such organization named Promocion de Turismo (PROTUR; Tourism Promoter of Guerrero) which has been developing "Acapulco Diamante".

Quintana Roo state also has an organization of Fideicomiso Caleta de Xel-Ha y del Caribe (Xel-Ha Bay and Caribbean Development Trust).

Nayarit state established Nuevo Vallarta, S.A. de C.V. which has developed Nuevo Vallarta and is developing Framingo Area and Costa Bandera.

**b. Fondos Mixtos**

Fondos Mixtos was established according the proposals by Acapulco and Mazatlan and expanded to other destinations for the purpose to promote international and domestic tourism of respective destination. Each Fondos Mixtos is composed of equal amount of funding from SECTUR, the state government and the private sector of each tourist destination, but in few case FONATUR is participating.

The main participation of the private sector is the hotel association(s), therefore, the most presidents of the Fondos Mixtos are the president of the hotel associations. This means the activities of Fondos Mixtos are lead by the private sectors.

Most Fondos Mixtos are not jointly cooperating with each other, due to the difficulties of the existing system, even though the case they have the same or similar products to the same or similar market segments. It is expected to modify the system to have productive competing with each other.

However, Fondos Mixtos of Acapulco and Oaxaca have started the joint promotion since they have different characterized products which can be supplementing each other. It may be easier than the cooperation between destinations which have the same or similar products.

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**(6) Examples of tourism organizations in Japan**

**a. Japan National Tourist Organization (JNTO)**

Roles of JNTO

JNTO has responsibility mainly on the inbound tourism promotion. Its roles are as follows:

- To conduct publicity in order to boost foreign tourist arrivals to Japan,
- To operate tourist information centers for foreign tourists,
- To furnish information on travel safety to Japanese overseas tourists,
- To conduct investigation and research on international tourism,
- To issue publications on international tourism, and
- To perform activities incidental to the above-mentioned items.

Activities performed by JNTO

JNTO's primary activities are as follows:

1) Promotional activities

- Advertising,
- Public relations,
- Media assistance,
- Activities for travel trade (Travel seminar, Travel trade familiarization tour),
- Regional tourism promotion fairs; (
- Promotion activities featuring traditional local entertainment,
- Overseas fairs and exhibitions,
- Information service,
- Internet information service.

2) Conventions and incentive travel promotion

3) International cooperation

4) Reception services for foreign visitors

5) International tourism exchange project

6) Japan tourism development project

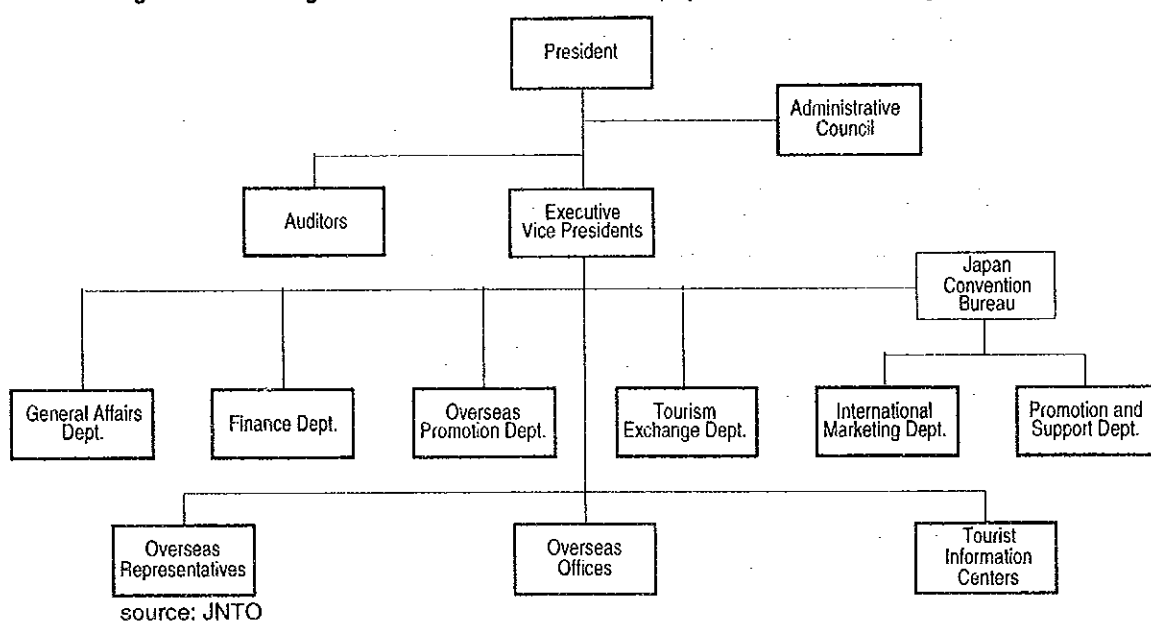
7) Activities for Japanese overseas tourists

8) Research and statistics

9) Consignment activities

The organization chart of JNTO is shown in Figure A.3. 19.

Figure A.3. 19 Organization chart and roles of JNTO (Japan National Tourist Organization)



#### b. Japan Tourist Association (JTA)

JTA is mainly in charge of domestic tourism promotion. Its roles are as follows:

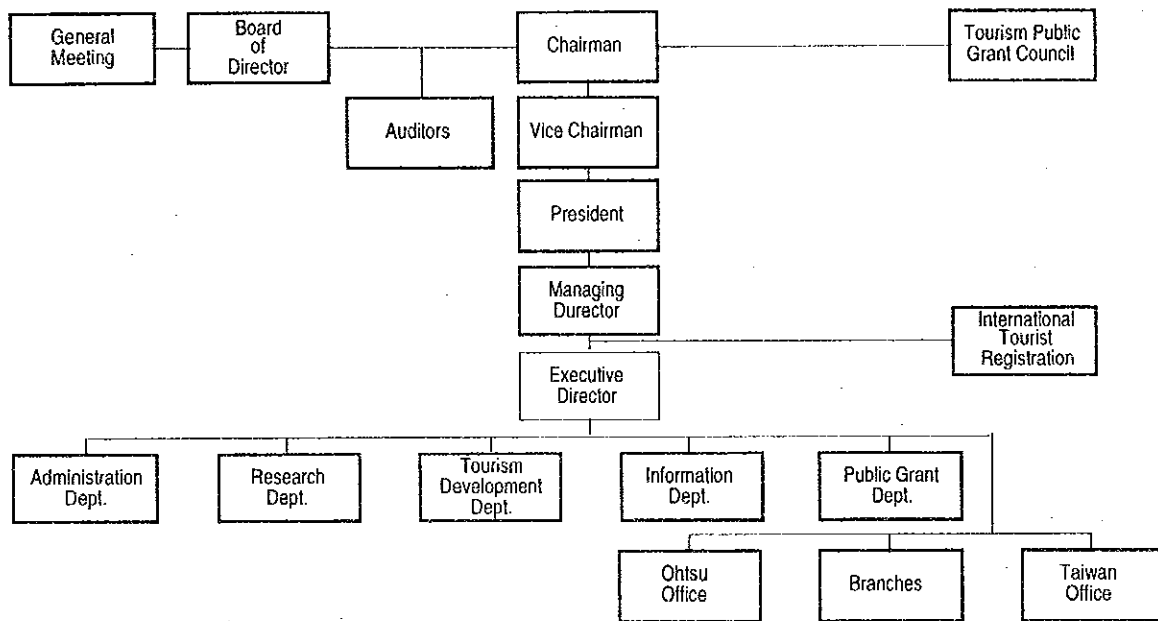
- to help improve tourist sites,
- to meet information needs of tourists,
- to cooperate with regional tourism promotion programs, and
- to cultivate good hospitality and provide educational programs all over Japan

Current tasks of JTA are as follows:

- to create favorable travel conditions through various projects, research and studies, both entrusted and independent,
- to develop and administer clean and inexpensive lodgings, organize reception services for international visitors
- to plan and implement tourism events with local governments, and encourage international exchange through tourism,
- to collect and maintain tourism database,
- to set up an information network,
- to conduct and publicize tourism-related studies,
- to protect, foster, and utilize historical and natural tourism resources,
- to conduct research on tourism resources, and encourage activities for their protection
- to improve tourist sites, and provide the sites with necessary equipment
- to create awareness of the importance of tourism through educational programs and plan a special "Tourism Week"

The organization chart of JTA is shown in Figure A.3. 20.

Figure A.3. 20 Organization chart and roles of JTA (Japan Tourist Association)



Source: JNTO

### A.3.7.3. Tourism information system

For the tourism data and information, two sections are involved in SECTUR. One is the Direccion General de Coordinacion Y Enlace (Directorate General of Coordination and Enlace) for the registration and licensing for operation of hotels and travel agencies, and another is the Directora de Estudio Turisticos y Estadistica (Section of Tourism Study and Statistics) for tourist profiles.

#### (1) Tourism facility and service information

##### a. Data collection systems

It is stipulated by law that hotels, time-share condominiums, camping areas and trailer parks as well as travel agencies, both wholesalers and retailers, are to be registered and licensed by SECTUR before starting their operations, while permissions for the development or construction of them are given by the municipalities.

The all information of the facilities and business of travel agencies can be precisely collected at the registering or licensing stages. However, the procedures of them are handled by the tourism section of each state which is executing proxy of SECTUR after abolishing SECTUR State Office. The information are collected and processed by a computer system by the state and sent to SECTUR with a diskette in monthly basis. The computer program is given by SECTUR to each state in order to keep the same system with SECTUR.

For restaurants, there is no system as mentioned above. They are under the supervision of the Ministry of Welfare.

Since so many data have been available at the present in agencies concerned, therefore, it is required to establish coordination systems with such agencies to supply the data to SECTUR. For the restaurants as an example, it is easy to collect information or data once the coordination system will be established since the information of them are available by the Municipality for their application of construction or by the Ministry of Health when it gives licenses.

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**b. Data arrangement systems**

The data are incorporating to the data base of SECTUR and processed by SECTUR to various data in every month.

However, there are some problems in this procedures, for example for the classification of hotel star ranking, since criteria for the ranking is not applied equally or properly in the states and/or SECTUR, some data have discrepancies.

**c. Data supply systems**

The data are being applied for the annual tourism statistic book of SECTUR and supplied to the public together with other information. SECTUR is under providing its own home pages including all information of tourism areas; tourism resources/products, tourism facilities, services and etc., of Mexico for the public especially tourists.

**(2) Tourist profiles**

**a. Data collection systems**

International visitors

At the present SECTUR has three data sources as follows:

- Banco de Mexico (Mexico Central Bank) for the visitors at the borders,
- Ministry of Interior for the visitors at the airports, and
- Data by questionnaire surveys conducted periodically with cooperation of INEGI.

The numbers of visitors through the borders are calculated based on the numbers of vehicles-types by Banco de Mexico.

The data at the airports are supplied after arranged by the Ministry of Interior based on the embarkment/disembarkment cards.

Domestic tourists

The data of the number of guests to hotels and nights of stay (including foreign guests) are sent to SECTUR every month through the tourism section of each state in the same way of the tourism facility information.

Travel expenditures, purpose, interests, type, etc. are collected by questionnaire surveys conducted by SECTUR with cooperation of INEGI every 4 months with 5,200 samples.

**b. Data arrangement and analysis systems**

The data supplied from Banco de Mexico, the Ministry of Interior, the states and INEGI are incorporated to the data base of SECTUR.

The data can be accessed by every sections of SECTUR to make necessary analysis by them.

For numbers of visitors to Mexico, the data by domestic and international visitors and by origin region are available, but by origin country are unavailable, and similarly for numbers guest by the state or the tourist destination, by origin country are unavailable, except Cancun and Puerto Vallarta during the stay of the study team in Mexico.

While the Mexico tourism is going to apply the strategies of diversification of products and markets according to the Sector Program, it is essential that the data to be analyzed in more detail. Since such information has been available in the embarkment/disembarkment cards and hotel check in cards, some modifications in the data collection system should be made.



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For the data of visitors through the borders, it would be required to establish a system to collect more precise data by person, but not by vehicle-type.

**c. Data supply systems**

The data are being utilized to incorporate for the annual tourism statistic book of SECTUR and supplied to the public together with other information.

Beside the statistic book, more detailed data are supplied to the public with a diskette.

**A.3.7.4. Legal institutions**

**(1) Federal tourism law**

**a. Basic aspects of the new federal law of tourism**

This new Federal Law, which was adopted on December 31, 1992, arose from the desire of the President of the Republic and of the Secretary of Tourism to modernize the function of the public sector in the area of national tourism as well as to improve their relationship to businesses and tourist associations.

The law reiterates the importance of the public sector in the national economy and it also confirms the direction and promotional functions of the Secretary of Tourism. Also it strengthens the coordination of the Secretary with the private sector as well as the tourism education and training programs.

The characteristic elements of this law are to simplify, decentralize and privatization, which will facilitate the development and encouragement of tourism activities, while avoiding over regulation which could discourage tourism.

The verification of correct operation of services, in part, is conserved as well as the application of sanctions when infractions occur. This will ensure that the tourist are protected.

The public sector and the tourist businesses are obligated to issue (ortoguen) clear and sufficient information to the tourists so that they will be able to make their decisions under the best possible conditions. It was determined that the SECTUR should reclassify the national hotel stock within a period of 15 months, which will be realized in a wide coordination with the private sector which will later adopt the classifying functions.

The statistic information which is obtained by the public sector and that which the private sector will voluntarily furnish will continue to be concentrated in the national Tourist Register.

Large emphasis is given to the promotional aspect through efforts of the government and both national and international organizations. The promotion of social tourism promotes the constitution and operation of tourist businesses of members of the social sector.

Finally, it should be mentioned that the public sector acquires to facilitate the access to the attractions, installations and tourist services of the country under adequate conditions.

The following demonstrates a comparison between the old and the new laws so that there will be a better understanding between them and of the benefits and advantages that the new law presents for national tourism.

**b. Comparison between previous and new laws**

Table A.3. 51 shows comparisons of the revised items from the previous law to the new laws.

**Table A.3. 51 Comparison list between previous and new laws**

Revised Items	Previous Tourism Law	New Tourism Law
Catalog of tourism service providers to be regulated	Travel agencies, land and sea transportation, car rentals, boating piers, tourist marinas, lodging establishments, time sharing, restaurants and the like, tourists guides, diving and diving operators.	These providers are excluded from being regulated since they are regulated by other governmental offices.
Previous operation permits	Are demanded from all service providers	Previous operation permits are eliminated as well as tourist certificates.
Price lists and prices	The <b>SECTUR</b> authorizes the prices and price lists of tourist services.	The previous permits and price lists are eliminated by the <b>SECTUR</b> .
National tourism register	Obligatory for all service providers.	Becomes optional
Classification	<b>SECTUR</b> sets categories and classification of tourism services.	The national regulating organizations issue the Mexican standards of quality and classification. During a period of change, the <b>SECTUR</b> will transfer the program of classification to the mentioned organizations.
Decentralization	Coordination and support of the Federal Delegation of Tourism in the activities of operation.	The operational aspects of the state government will be decentralized according to the established law.
Tourist protection	The <b>SECTUR</b> intervenes in the differences the advise between the providers and the tourists.	This responsibility is eliminated and is transferred to the <b>PROFECO</b> .
Verification	The <b>SECTUR</b> checks that regulations are met for correct operation of services.	Previous visits are eliminated and verifications are strengthen the control of fulfillment of rules and regulations.
Sanctions	Derived from verifications and complaints. Fines, temporary or definite closure government orders or credentials are issued in a highly discreet manner.	Fines systems from 500 to 3,000 times the daily minimum salary according to 3 degrees more clearly defined to lower the degree of discreteness in which the fines are applied.
Agreements and coordination	Through agreements Fondos Mixtos and the Executive Tourism Commission.	Participation of <b>SECTUR</b> in national regulating committees. The Executive Commission is created.(made up of the public, private and social sectors)
Promotion	The Secretary is responsible for stimulating and promoting tourism, helped by other public agencies especially <b>FONATUR</b> .	General objectives are maintained.
Social Tourism	The Secretary is the promoter and coordinator of the social tourism.	The Secretary is maintained and strengthened, promoting the creation of tourism businesses formed by members of the social sector.

Regulations	Scheme of regulations for each service.	Scheme of specific regulations that complement the official Mexican standards(NOM; Norma Oficial Mexicana) and Mexican standards(NMX; Norma Mexicana).
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Source: Compiled by JICA study team

**c. Objectives of the new federal tourism law**

The objectives of the law stipulated in Article 2 are as mentioned below:

- To Program tourist activity
- To elevate the economic, social and cultural level of habitants in states and municipalities with tourist affluence;
- To establish coordination with state and municipal governments for the application and execution of the present Law,
- To determine the mechanisms for creation, preservation, improvement, protection, promotion and use of natural resources and national tourist attractions, preserving the ecological and social balance of tourist locations,
- To orient and help national and foreign tourists;
- To optimize the quality of tourist services;
- To promote national and foreign investment in tourist services;
- To propitiate the mechanism for the private and social sectors in the execution of the objectives of the present Law, and
- To promote social tourism, as well as enforce historical and cultural heritage of each region of the country.

**(2) Authorities for permission of development plans and implementation**

Examples of the approving authorities of development plans and their implementation are as follows:

Urban developments

by Secretary of Social Development (Secretaria de Desarrollo Social)

Environmental prevention in the federal zone

by Secretary of Environment Natural Resources and Fishing (Secretaria de Medio Ambiente, Resorsos Naturales y Pesca)

Transport facilities

by the Secretary of Communications and Transportation for such as an airport of a dock.

Tourism projects

If it is a tourism project, it is advised that approval should be received form SECTUR.

SECTUR provides permission or denial in the area of tourism. However, any other project must receive permission according to the legislation. It is normal that projects should be adjusted in size and nature before receiving all authorizations.

SECTUR is in charge of structuring the National Tourism Plan and promoting any public or private actions which will help achieve their goals and objectives, it also

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takes the coordinating role of statistics and National-wide Framework of tourism development.

#### Entrepreneur

Basically promoters must receive local approvals, for example, construction permissions, operating permissions, subdivisions of land permissions, etc. according to the local legislation depending on type of business.

#### Technical support and studies required

Every permission needs a special support of study according to the nature and characteristics of the project.

### **(3) Incentives to industry**

#### **a. General incentives**

It is possible for international investors to maintain 100% ownership in industries such as travel agencies, cruise ship lines, restaurants and night clubs. Foreign investors also may own up to a 49% share of marinas and 25% of the equity in domestic and specialized air transportation businesses.

The foreign Investment Law allows foreign investors who wish to purchase land in unrestricted areas of the country to do so without government approval.

#### **b. Incentives for tourism industry**

Loans for construction of hotels, condominiums of time-share units and restaurants are facilitated by FONATUR.

FONATUR acts as an intermediary between a person who is soliciting credit and commercial Banks so that the market offers.

The major incentives for hotel and other facility developers in Mexico are preferential interest rates and longer than normal amortization of loans.

Banco Nacional de Obras Publicas (BANOBRAS; National Bank of Public Works) provides lower interest rates than those of the market to projects such as sewage, drinkable water, roads, bridges, electricity, etc. This Bank also finances the state government and municipal government on tourism activities such as transportation.

Direct fiscal incentives such as exemption from income taxes for periods of time, are not given by Federal Government in tourist projects, but Municipals offer land tax reduction to some projects.

Because of freedom of exchange there is no difficulty for foreign hotel chain operators in securing timely remittance of their management fees and in repatriating profits earned.

### **A.3.8. High-quality services and human resources**

#### **A.3.8.1. Related services for tourists**

##### **(1) Green Angels**

The Green Angels, a kind of highway patrol belonging to SECTUR, has a staff of around 1,000 with 300 vehicles. Being skilled mechanics, periodically they take training courses in first aid, English and also tourism. Their major function is to give mechanical services, most of which are free of charge, to motorists including tourists on major highways all over the country. Moreover, they provide tourists with information.

##### **(2) Tourist police**

The tourist police is organized as a special team in the police based on application from municipality. It comprises some selected policemen, who take obligatory

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training program of English, and also basic knowledge of tourism. In Puerto Vallarta and Acapulco, the tourist police has been already organized.

**(3) First aid**

The S.N.I.T., which was developed by SECTUR and has been practically used since the beginning of 1994, has the information of 1,852 hospitals in the entire country. This system could be applied for first aid hereinafter.

At present the regional hospitals managed by the Secretariat of Public Assistance carry out first aid with no serious problems.

**A.3.8.2. Tourism information system**

**(1) Tourist information center**

According to the S.N.I.T., there exist a total of 134 information centers in the entire Country, which provide various kinds of information for both Mexican and foreign visitors. An outline of tourism information centers is presented below.

**a. Tourism information centers managed by SECTUR**

SECTUR established four tourism information centers, three in Mexico city and one at the Benito Juarez International Airport jointly managed by SECTUR and the Immigration office. The core facility among them is the "Tourism Information Bureau", of which outlines are as follows:

- The number of staff is around 20, most of whom can speak English and some persons are fluent in French or Italian.
- The following are the tourism-related information provided: accommodation, transportation (access), restaurant, explanation on tourism spot, shopping, package tours and so on
- Furthermore, hotel room-reservation service is available upon request
- Many kinds of pamphlets, produced in some related departments of SECTUR, are available in Spanish. Some limited pamphlets are in English, French, German and Czech. These printed materials are delivered by hand, and also by mail.
- Information service by telephone called "Travelers Hotline" is provided. The service is available 24 hours a day all the year round by toll-free telephone within Mexico as well as USA.

**b. Tourism information centers managed by local governments**

Some state and municipal governments established tourism information centers in the central area of cities. Most of these centers seem to have a limited number of staff who are able to speak foreign languages, including English.

It could be particularly mentioned that the State of Oaxaca provides tourism information by Inter-net on a trial basis.

**(2) Signs and symbols**

Signs and symbols have generally two roles in tourism. One is to indicate directions and available functions, and also to explain some interesting matters. Another is to be a component of landscape and to improve amenity in a tourism destination.

From the first point of view, road signs are fairly well provided on the whole, though a further completion of them for tourists is required in major tourist spots and around.

In tourism spots, such as museums and archaeological sites, guide signs tend to be lacking. Furthermore, though these signs are mostly written in Spanish at present (in some archaeological sites, signs are written in both Spanish and English), these signs are to be written at least in English other than in Spanish, considering most of all tourists cannot read Spanish.

From the second point of view, some studies were carried out. In 1991, for example, "Colonial City Program" proposed a consolidated plan of signs and symbols including already popularized ones, which were partly realized in a few tourism destinations. These efforts are expected to be continued.

### A.3.8.3. Tourism education system

#### (1) Training courses

There are three levels of tourism training in Mexico as follows:

- Professional level (University level)
- Middle level (High school level)
- Technical level (Such as for maid, bell boy, etc.)

Total number of schools, students, graduates and teachers are shown in Table A.3.52. The table shows that the education for the technical level is remarkably poor while the middle management level has high education capacity. However the teacher for the middle management level is short compare with the other levels.

**Table A.3.52 Total numbers of tourism class in the country**

Level	Funded by	No. of Schools	No. of Students	No. of Graduates	No. of Teachers
University	Private	96	8,260		815
	Public	30	(22 %)	2,832	(10.1 S/T)
High School	Private	104	27,899		1,016
	Public	155	(75 %)	21,901	(27.5 S/T)
Technical School	Private	7	1,181		107
	Public	46	(3 %)	5,108	(11.0 S/T)
Total		411	37,340	29,841	1,938

source: SECTUR

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## **(2) Tourism education**

### **a. Existing conditions of employment**

The employment conditions are as follows:

Employment ratio : approx. 35 %

Employment : approx. 53,000/year

98 % of employment of the graduates are provided by hotels and restaurants.

### **b. Employment characteristics**

The sector is dominated by men (70%). Employment of management level is small.

### **c. Qualification**

Graduates get diplomas, however there is no qualification system which gives confidence to employers regarding the level of course, its quality and standard.

In its efforts to initiate a new program SECTUR is studying existing British and Australian systems as models.

### **d. Constraints in the area of tourism training in the country**

There are few offers of job compared with the number of graduates. (Ratio of recruitment is approximately 35% only.) There are too many schools to match with the industry's demand.

According to our visiting survey, the areas particularly to be improved are:

- foreign language (English above all) and the excellence of service (hospitable service) to client in technical level training
- Training for SECTUR officers to develop their expertise
- Poorly trained personnel:  
According to information available from the National Survey of Jobs and Tourist Training, hardly 16.7% of people who work in tourist companies have received any training course, regardless their academic backgrounds.
- Human resources are not adequately considered at companies, as a competitive advantage. :  
Generally speaking, companies organized in chains are the only ones that consider training as a strategic factor where all hotels belonging to a chain, both five stars and great tourism category, stated having training programs. This does not happen in lower category and family owned hotels that base their competitiveness on price, advertising, costs or distribution channels.
- Low education level:  
Development of people working in the tourism sector should be sought both at personal and professional level. In the tourism sector, the percentage of people who only attended grammar school is very high, 55%. 7% of the sector workers, have not studied at all, 12% have attended high school, 12% have attended technical schools, and only 10% of them have attended universities. As well, only 4% of the total has a bachelor's degree in tourism. This low percentage of people who have attended schools at higher levels, limits the efficacy of training courses, including those intended for specific jobs.
- There is no relation between human resources quality and productivity indicators:  
Most tourist companies lack of mechanisms that can measure people productivity, which has prevented the adequate applications of incentives.

### A.3.9. Tourism economy

Tourism in Mexico has played very significant role in national economic development such as contribution to GDP growth, employment creation and increase of external revenue and investment by foreigners. In this chapter, the effects to regional economy are analyzed to formulate the strategies of tourism development.

#### A.3.9.1. Tourism sector in the regional/destination economy

##### (1) Economic situation in six states

The table shows the changes of GRDP(Gross Regional Domestic Product) and its structure in each state.

Table A.3. 53 GRDP and its structure of the six states

			BCS	Sinaloa	Jalisco	Guerrero	Oaxaca	Q. Roo
GRDP	current price million \$	1980	17.4	89.3	280.8	71.3	60.1	17.2
		1985	189.5	1,052.9	3,157.5	823.5	840.0	241.7
		1988	1,821.2	8,763.8	26,463.4	7,352.1	6,690.0	2,815.4
	constant price in 1980 (million pesos)	1985	19.7	109.3	327.8	85.5	87.2	25.1
		1988	22.8	109.6	331.0	92.0	83.7	35.2
		1988/80	1.3	1.2	1.2	1.3	1.4	2.0
Structure of GRDP in 1988 (%)								
Agriculture			12.1	23.6	11.1	13.2	20.7	5.0
Mining			12.7	1.0	1.0	1.5	0.6	0.5
Manufacturing			7.7	10.9	28.3	5.1	15.4	5.1
Construction			4.0	3.4	4.0	4.9	3.7	3.2
Electricity, gas, water			0.8	1.9	0.5	2.0	0.5	0.6
Commerce, restaurants,			34.5	31.8	28.0	41.6	29.6	58.6
Transportation,			6.2	6.6	7.7	8.2	7.0	9.2
Financial services, real			7.5	6.5	7.9	7.2	7.2	5.4
Social and community			15.2	15.4	13.1	17.1	15.9	13.2
GRDP of Restaurants and hotels (constant price in 1980)	1980		1.4	4.3	11.9	12.8	1.8	6.7
	1985		2.2	5.4	14.1	10.8	2.7	7.3
	1988		2.7	8.4	19.5	18.4	3.4	14.6
	1988/80		2.0	1.9	1.6	1.4	1.9	2.2
Share of Restaurants and hotels	1980		7.8	4.9	4.2	18.0	3.0	38.6
	1985		11.0	4.9	4.3	12.6	3.0	29.1
	1988		12.1	7.6	5.9	20.0	4.0	41.4

Source: INEGI

The table points out the following characteristics of each state.

- Jalisco state is the biggest state in the six states from the aspect of GRDP. On the other hand, BCS(Baja California Sur) is the least state.
- Quintana Roo state has grown most highly in GRDP, which is more than double in eight years in the period from 1980 to 1988. In the economic growth, Jalisco state is the lowest in the six states.
- In five states, commerce, restaurants and hotels is major industry, though in Jalisco it is next to manufacturing industry.
- In Sinaloa state and Oaxaca state, agriculture is still major industry next to commerce.
- In Baja California Sur state, mining is major industry next to commerce.



- GRDP of restaurants and hotels grew higher than whole GRDP in all state. In Quintana Roo state, it is clear that tourist development contributed the economic growth of state.

The following table shows the share of tourist industry in service industries from the viewpoint of capital formation, which relates to investment closely.

**Table A.3. 54 Capital formation in each region/destination (unit: million pesos)**

	by State					
	BCS	Sinaloa	Jalisco	Guerrero	Oaxaca	Q.Roo
Whole service industry	22.6	57.1	154.0	84.8	15.3	193.2
Tourist industry	16.1	25.2	93.7	72.2	8.2	181.8
Share of Tourist industry (%)	71.2	44.1	60.8	85.1	53.5	94.1
	by Municipality					
	Los Cabos	Mazatlan	P.Vallarta	Acapulco	Huatulco	Cancun
Whole service industry	12.8	16.7	46.7	64.2	2.8	177.4
Tourist industry	12.3	11.6	44.0	58.8	2.7	155.4
Share of Tourist industry (%)	95.8	69.2	94.1	91.7	98.5	87.6
Concentrate rate to the destination(%)	76.3	46.0	46.9	81.5	33.2	85.5

Note: The figures of tourist industry in destinations are a little bigger than those of actual ones because the detailed classified data can not be got from census reports.

Source: INEGI

In Quintana Roo, Guerrero and Baja California Sur, the share of tourist industry is big and its capital formation is concentrated to the studied destinations.

The census data of population also points out that the destinations such as Los Cabos, Puerto Vallarta and Cancun depend on the tourist industry.

**Table A.3. 55 Employed workers and Composition in 1988**

	Los Cabos	Mazatlan	P.Vallarta	Acapulco	Huatulco	Cancun
Number	15,384	103,168	39,008	181,989	31,477	67,104
Composition (%)						
Restaurant and Hotel	21.76	10.51	26.63	15.45	4.84	25.08
Commerce	10.56	16.04	15.65	16.88	4.96	16.35
Agriculture	12.03	12.23	5.08	7.38	64.29	1.80
Mining	0.20	0.11	0.12	0.25	0.16	0.08
Extract. of Petro. & Gas	0.01	0.48	0.02	0.09	0.01	0.01
Manufacturing	6.14	12.50	6.34	8.21	5.22	5.87
Electricity & Water	0.70	0.96	0.62	0.82	0.20	0.79
Construction	13.28	7.06	8.52	8.64	5.22	10.56
Transport	6.13	7.64	7.71	7.10	2.17	8.38
Financial Service	1.99	2.64	2.19	1.52	0.24	2.20
Public Administration	4.24	4.68	2.91	5.28	3.67	3.53
Social Service	5.07	8.68	5.19	8.79	3.58	4.35
Professional Service	1.44	1.97	1.99	1.84	0.43	2.18
Personal Service	10.99	11.05	11.66	13.24	2.83	11.62
Not Specified	5.45	3.46	5.37	4.51	2.18	7.20

Source: Annual Statistics of the Each State, 1994, INEGI

It was difficult to gather the historical data of investment and benefits of each destination on the same level, therefore the following table is only the result of trial calculation under assumptions.

**Table A.3. 56 Comparison of investment and benefit**

		Los Cabos	Mazatlan	P.Vallarta	Acapulco	Huatulco	Cancun
Investment (million US\$)		763	2,036	1,391	1,981	486	3,352
FONATUR	Infrastructure	181				303	511
	Hotel	2				15	2
State			457	246	531		
Private	Hotel	273	358	540	337	123	1,602
	Residential house	260	894	482	1,039	38	1,000
	Others	47	327	122	74	7	237
Benefit							
Employment (person)	Direct	3,602	4,090	6,169	3,847	1,791	18,303
	Indirect	9,005	10,225	15,423	9,618	4,478	45,758
Expected Currency (million US\$)		82	87	113	235	11	350

Source: JICA study team

Major assumptions are as follows.

- The investment is calculated based on increment of hotel rooms and populations in proportion to the investment in Cancun.

**Table A.3. 57 Base data to calculate the investment in destinations**

		Los Cabos	Mazatlan	P. Vallarta	Acapulco	Huatulco	Cancun
Population	1970	15,231	167,616	32,290	238,713	5,675	12,622
	1990	43,920	314,345	111,457	593,212	12,645	176,765
	1990-1970	28,689	146,729	79,167	354,499	6,970	164,143
Hotel room	1975	0	3,902	2,687	13,800	0	1,322
	1994	3,602	7,992	8,856	17,647	1,791	19,625
	1994-1975	3,602	4,090	6,169	3,847	1,791	18,303
Capital formation	Hotel	10,564	6,046	35,852	48,230	2,355	449,091
	Service	12,253	11,577	43,984	58,844	2,713	1,495,151

Source: INEGI, FONATUR

- As the population data of Puerto Vallarta in 1970 have not gathered, the figures in 1964 was used.
- The investment of Los Cabos, Huatulco and Cancun is quoted from the pre-survey report of JICA.
- The investment of state is calculated based on the increment of population and investment cost of infrastructure in Cancun.
- The investment of Condominium is calculated based on the time sharing industry in Mexico.
- The investment of Restaurants and bars is calculated based on the capital formation in 1988 in proportion to that of hotel.
- As concerns benefit, direct employment is calculated based on the increment of hotel rooms. Number of employees in hotel industry per hotel room is one (1).
- Indirect employment is calculated in the same proportion, 2.5 times of direct employment.
- Currency is calculated based on the foreign tourist accumulated and average stay days in the destination.

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### **A.3.9.2. Tourism industry and related industries**

SECTUR specified "Tourist industry" based on the detailed classification of economic activities. But it was more difficult to gather and to analyze these data of each destination on the same level, therefore the qualitative analysis has taken in this study.

#### **(1) Los Cabos**

It is said that three quarters of material are imported from USA. The promotion of related industries creates economic benefit for regional economy. Los Cabos located in the point of desert peninsula, therefore it is difficult to cultivate vegetables or livestock for the demand of tourist industry. New bio-technology should be introduced and suitable agriculture in desert area should be established. The special hood and souvenir using cactuses also will be developed.

#### **(2) Mazatlan**

Mazatlan is a commercial center with variable industries. Tourist industry is not so important industry in the municipality. But Sinaloa state wants to promote tourist industry in order to develop the regional economy. Therefore Mazatlan should play role in the core and shopping center of various circuit tourism.

#### **(3) Puerto Vallarta**

Puerto Vallarta has various fascination such as traditional colonial town and developing marine leisure spots. In the hinterland, there are wide agriculture area and Indians village. Some companies organize the production and distribution system of Indian traditional textiles. On the other hand, Puerto Vallarta is famous of the production place of good clay. Promoting new design and production of craft, tourist industry should play the significant role to bring up the craft industry and other related industries.

#### **(4) Acapulco**

Acapulco is the world-famous traditional resort which has various attractions. Guerrero state has very famous place of silver product, Taxco, therefore various circuit tours are organized around Acapulco. Finding out new regional industries and promoting successors of craftsmen is important role of tourist industry.

#### **(5) Huatulco**

Huatulco is developing resort. The subject of Huatulco is how create the specific industries in the surrounding areas introducing the know-how stocked in Oaxaca. The master plan of Huatulco designed agriculture zone in contiguous area. It is important but difficult to secure farmers to develop the agro-industries. Forestry behind the planned area is another important industry related to tourism.

#### **(6) Cancun**

Cancun is also world-famous resort but rapidly developed, therefore it has same subject as Huatulco. Design and textile of Maya is very specific, but it needs to settle and develop the goods production suit to the modern usage. Continuous efforts by tourist industry is necessary to promote related industries. Social issues

### **A.3.10. Promotion strategy for the Japanese market**

Mexico has excellent tourism resources as well as warm hospitality and agreeable infrastructure. All these seem to be quite positive to attract a large number of Japanese visitors to Mexico. In spite of this, only less than 20 thousand Japanese visitors visit Mexico against three million Japanese visitors to USA. This section discusses proposals to improve this situation.

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### **A.3.10.1. Important points for attracting Japanese tourists**

The choice of destination is, of course, a personal decision for tourists. But there are five major criteria that affect the choice of overseas travel destinations. They are awareness, accessibility, safety, comfort and prices.

#### **(1) Awareness**

“JTB Report ‘95” which is one of the reliable publications on the Japanese outbound market shows that Australia is the most preferred tourism destination by the Japanese market. It is followed by Hawaii, Switzerland, France, Canada, and West Coast of USA. The name of Mexico can not be found among top 20 list of the survey result.

Interviews with Japanese travel agencies revealed that one of the serious obstacles for selling tour packages to Mexico is the poor awareness of Mexico among the Japanese customers. The JICA study team had impressions that even the staff of travel agencies do not have sufficient knowledge about Mexico as a tourism destination. Cancun is becoming popular among young people but it is reported by some interviewees that many of their customers think it is somewhere in the Caribbean. Besides archeological tourism resources such as Teotihuacan and Mayan ruins are considered to be for the special interest groups rather than general interest cultural tourism.

In order to vitalize tourism from Japan to Mexico, Mexico should make every possible efforts to create the market awareness through public relations and trade stimulation activities.

#### **(2) Accessibility**

Mexico is a long-haul destination from Japan as it takes about 16 hours from Japan. Popular beach destinations such as Guam, Hawaii and Thailand can be reached within 4 to 6 hours from Japan. Flights to USA and Europe take 9 to 13 hours. Mexico is an up-market destination for the Japanese market, and the Mexican travel trade has to provide tourism products and services that meet the needs of up-market tourists.

#### **(3) Safety**

Japanese tourists are extremely sensitive to safety issues as the examples of a train accident in China, terrorist attacks in Egypt, plague in India, and cholera in Bali shows.

Most of Japanese travel agents interviewed by the study team seemed to concern about the security condition in Mexico. Tourism related organizations should refute against unreasonable negative press, and, at the same time, maintain safety in tourism destinations through measures such as tourist police and increase of guards in the compounds of accommodations.

Giving advance information on the prevention of accidents and sickness to both visitors and the travel trade in Japan is also important. If there is an accident or an event that could be negative to the safety of visitors, the destination side should take immediate counter measures to ensure the safety of tourists.

#### **(4) Comfort**

Japanese travelers put much importance on comfort which includes convenience of transportation, smooth processing through customs, immigration, and quarantine, standards of hotel facilities and services, provision of tourism information, sign and explanation system in tourist facilities, food, as well as the quality of shopping items. Observations by the study team concludes that these factors do not always satisfy the Japanese standard in Mexico, and needs improvement. Volume 1 discusses more details about this aspect.

## (5) Prices

Prices of package tours to Mexico from Japan is expensive because air fare is high due to the long distance, and Japanese travel agents can not have the scale merit due to a small volume of visitors to Mexico. Therefore Mexico is an up-market destination for the Japanese, and tourists who choose Mexico expect quality tourism products and services.

The travel trade in Mexico may need to support Japanese tour operators to produce cheaper package tours in view of its future potential.

**Table 3. 1 Price range for package tours from Japan to overseas destinations**

Destination	Duration	Price Range (Peso)
Hong Kong	4 days	4,700 ~ 7,300
Guam	4 days	4,000 ~ 7,000
Hawaii	6 days	5,300 ~ 12,000
Thailand	6 days	5,300 ~ 10,000
West Coast (USA)	7 days	8,600 ~ 13,000
East Coast (USA)	7 days	9,300 ~ 16,000
<b>Mexico</b> (DF, Cancun, Chichen Itza etc.)	<b>8 days</b>	<b>12,000 ~ 23,000 (G.T. Hotel)</b>
London & Paris	8 days	10,000 ~ 17,000 (Breakfast include.)

Note: (1) No meals included/Using 4 star hotel  
(2) Compiled by Tour Catalogue Publication "AB Road"

### A.3.10.2. Organizations for Japanese market promotion

#### (1) Necessity of National Tourist Office with appropriate number of staff

There are more than 65 foreign national tourist offices in Tokyo to promote tourism from Japan while competing with each other. They conduct sales promotion activities for the mass media as well as the travel trade, and give follow-up services. Though Mexico has a regional office in Tokyo, it has only one staff and this inevitably limits the capability of the office. It is reported by a few of interviewees that, when it decreased the number of the staff, it gave a considerable negative impression to the trade. JTB Report '95 shows that more than 60% of Japanese overseas travelers use package tours, while the figures for the countries in Europe and North America are around 30%. This means the relative importance of the Japanese travel trade to influence Japanese consumers. Tourist office has a special importance in influencing the Japanese travel trade that has traditionally been dependent on the offices. In this context, it is strongly recommended that SECTUR would increase the number of staff in the office

#### (2) Asian market section

Before the restructuring of SECTUR took place, there was a section in charge of the Asian market in the Direction General de Promocion para Norteamerica y Asia. After the restructuring, no section for the market exists in SECTUR, and this should be improved as soon as possible. It is also recommended that SECTUR should have an expert on the market in view of its future potential.

### A.3.10.3. Appropriate promotion measures

In general, sales promotion activities in Japan should be conducted with the close cooperation among public sector organizations such as SECTUR and local

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governments, as well as the private sector in Mexico. Followings are principal measures which are considered to be appropriate to employ.

**(1) Approach to the travel trade**

This is one of the most important measures as Japanese consumers are relatively dependent on travel agents when they travel abroad. Interviews conducted by the study team shows that familiarization trips is the most needed by the trade. As already pointed out, even tour operators do not have basic knowledge about Mexico, and this would improve if familiarization trips are conducted. At the initial stage, inviting tour planners from tour operators and tour operating section of travel agents should have the first priority.

Travel seminar that provides participants with basic knowledge on the travel conditions and the know-how to arrange travel is also an effective measure to stimulate the trade.

Japan Association of Travel Agents hosts JATA Conference and World Travel Fair in Tokyo, both of which are held every two years and aim to promote Japanese overseas travels. They are influential for the travel trade and consumers, therefore SECTUR should participate in the trade shows to improve the poor market awareness.

**(2) Public relations**

Among the activities of this category, the assistance to shooting crews of TV and movies, and cooperation to journalists including the provision of familiarization trips are cost effective ways to influence consumers.

**(3) Advertisement**

Considering the current market size of travelers to Mexico, the advertisement in newspaper and magazine for the general public is not viable. However, joint advertisement in newspapers with the travel trade and airline companies would be possible. Advertisement in travel trade magazine will be also feasible, and this would be supported by the fact that the trade stimulation measures are relatively important in the Japanese market.

**(4) Approach to special interest groups**

As Japan has a sizable population who are interested in diving, climbing, fishing, music, archaeology, nature and wild life, all of which Mexico can provide. SECTUR should approach to these groups to solicit them to organize special interest tours (SIT). This could be done by issuing news releases and providing model tour itineraries for the groups

**(5) International exchange program**

International exchange program is worth a consideration to promote the Japanese market. Many local governments in Japan are interested in the program, and are looking for the partners for "internationalization" and revitalization of their community.

The year 1997 will be the 100 years anniversary since Japan and Mexico established the diplomatic relationship. The opportunity should be made use of by SECTUR, as well as the travel trades in both countries.

**(6) Printed materials and videos**

Many brochures and videos used in Japan seem to be translated from US versions, and in consequence they does not always meet Japanese customers' taste. These materials need to be produced by target market to have good results.

Since very limited number of people speak foreign language in Japan, good city maps are appreciated by Japanese travelers. Improving the availability and quality of the maps would be positive to attract the Japanese market.

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**(7) Provision of statistics**

SECTUR does not have accurate statistics on the number of visitors by nationality/country of residence. SECTUR obtains the number of departures from Japan to Mexico from the Japanese side statistics but it is actually the number of the Japanese who reported Mexico as their first place of disembarkation. It means that a certain percentage of those who combined USA with Mexico are not included in the statistics. This underestimate the importance of the Japanese market. Improvement of the statistics system is strongly needed.

**A.3.10.4. Promotion measures with consideration of market segment and tourism products**

JTB Report '95 shows that "middle-aged group" (men and women between 45 and 59) occupies 27.5 % of the Japanese overseas travelers. It is followed by "elderly group" (men and women aged more than 60, 16.5%), "married men" (married men between 18 and 44, 13.7%), "single working women" (single working women between 18 and 29, 10.9%) and "students" (male and female students 18 and over, 7.8%). Followings are proposals to increase the number of Japanese tourists by above market segment.

- The highest potential segments for Mexico might be "elderly group" and "single, working women" because they relatively have free time and disposable income.
- "Elderly group" tends to be interested in culture and history, therefore they may be interested in archeological sites and colonial cities in Mexico. To reach the market segment, it would be effective to make indirect approach through travel agents as they tend to participate in package tours when they travel overseas.
- "Single working women" is another prospective market segment. They are considered to be an innovator in the travel market. Recommended destinations for the segment might be beach resorts combined with appropriate attractions in the neighboring area. Since USA is a very popular destination for the segment, it would be an idea to promote the Japanese travel trade to combine Mexico with USA. Magazines that are closely related to their life styles is quite influential to the market segment. Inviting writers of the magazines to Mexico, and providing them with press releases and necessary information would contribute to increase the awareness within the market segment.
- Travel agents reports that "Middle aged group" women are interested in culture and history, and the segment shows a relatively high percentage of participation in organized tour packages. Public relations activities such as familiarization trip to Mexico for writers from newspapers and magazines to Mexico, and various cooperation to the mass media, would be effective to the market segment.
- "Middle aged group" men and "married men group" seems to have less opportunity to enjoy vacation in long haul destinations because of poor holiday entitlement. This segment, however, has a good possibility to make overseas travel for business. Providing information on excursion trip from major cities in USA during the off-duty time might be effective.
- FIT (foreign individual travel) is becoming popular among the young generation. "Student" is the segment that is the most interested in this style of travel as they have much time to spare for travel but have less money than other market segments. Mass media such as TV, movies, and magazines are considered to be influential to the market segment. Hence, cooperation to shooting crews of TV and movies, as well as cooperation to writers for the magazines that represent their life styles, and travel guidebooks for FIT travelers, would influence them to visit Mexico.
- "Honey moon market" is an profitable market in Japan. Though its volume is comparatively small but the travel cost is quite high (about 46,000 pesos per trip per person versus 28,000 pesos in average / JTB report '95). As honey moon

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couples tend to choose a long haul beach destination, Mexico may one of the most suitable destination for the market segment. The most effective promotional methods will be familiarization trip for both mass media and travel trade.

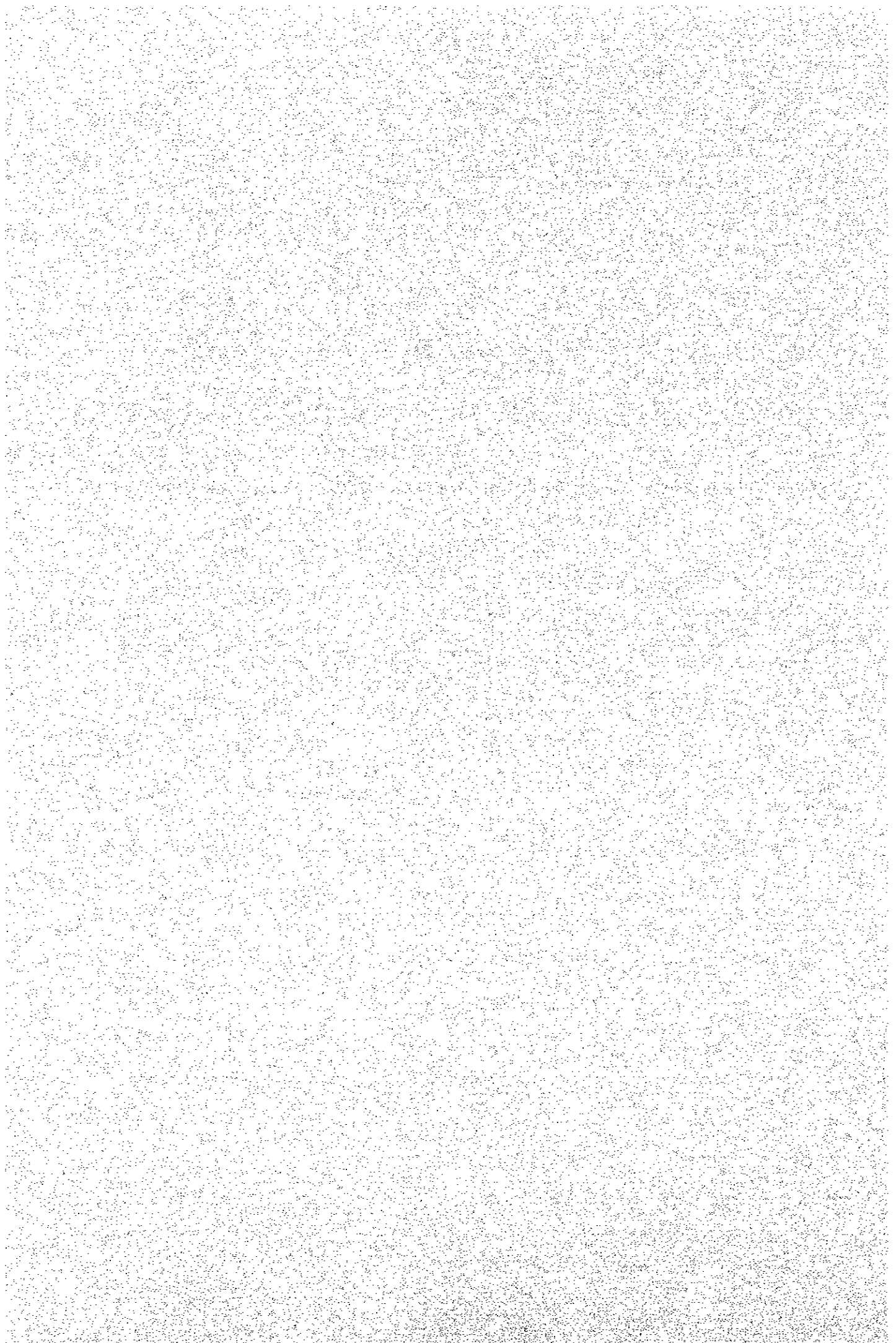
Mexico city is an important destination for the Japanese market as it is the principal gateway from Japan and the city and its surrounding area abounds in important tourism resources. To promote the Japanese market to Mexico, SECTUR should put more emphasis to promote and improve the image of the city.



**Appendix -2:**

**A.4. General conditions of Mazatlan**

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## A.4. General conditions of Mazatlan

### A.4.1. Profile of Mazatlan

#### A.4.1.1. Natural and social conditions

Sinaloa state occupies a territory of 58,000 square km, with 650 km of coastline, 221,600 hectares of coastal lagoons and 57,000 hectares of continental waters. 23% of the land are used for agriculture, 45 % for pasture, 16% forests and 16% roads, urban zones.

Total population in 1990 was 2,204,000, of which the central zone constitutes 45%, the north zone 34.5%, and the south zone 22.93%. The most populous municipalities include Culiacan, Mazatlan, Ahome, Guasave and Navolato. The population growth projection for year 2000 is 19% and from 2000 to 2010 is 14.3%. The amount of GRDP in the state was \$ 25.02 million and GRDP per capita was \$ 11,352 in 1990.

Manufacture, agriculture and tourism sectors are the main income sources for the state. The state is one of the most important agricultural areas in Mexico, which supplies for the tourism sector not only in the state but also in some neighboring states. Sinaloa is a well-balanced state in terms of economic development.

The tourism sector constitutes 31.8% of the gross regional domestic product (GRDP). Tourism has created 20,000 direct employment and 45,000 indirect employment. It attracts 6.2% of the international visitors to Mexico. Domestic visitors constitute 78% of the total arrivals, and international visitors 22%. 44% of the total tourism income, however, comes from international visitors. 54% of accommodations in the state concentrate in Mazatlan.

**Table A.4. 1 Profile of Mazatlan**

Natural conditions			Socio-economic conditions		
Temperature and rainfall			Population	Persons	AAIR (%)
Observ. stn.	Mazatlan		1994		
	Temp.(°C)	Rain.(mm)	1990	314,345	2.3
Jan	19.9	12.5	1960	249,988	4.1
Feb	19.7	7.5	1970	167,616	
Mar	20.2	2.6	Employment; 1990	Persons	Comp.(%)
Apr	21.9	0.6	Total	103,168	
May	24.6	0.8	Primary	12,621	12.2
Jun	27.0	32.8	Secondary	21,778	21.1
Jul	28.1	173.4	Tertiary	65,197	63.2
Aug	28.2	218.6	n.c.	3,572	3.5
Sep	27.9	253.2	Difference*		20.8
Oct	27.0	65.4			
Nov	23.9	16.0			
Dec	21.1	28.7			
Ave./total	21.1	812.0			

Source: SECTUR

#### A.4.1.2. Past visitor inflows

Table A.4. 2 shows the changes in visitor inflows corresponding to the main destinations (Mazatlan).

**Table A.4. 2 Profile of Mazatlan (Visitor inflows)**

Tourist inflow (1995, 1000persons)		(Mazatlan)		
		Domestic	Foreign	Total
	1994p	674.7	211.6	886.3
	1990	632.2	243.9	876.1
	1985	620.8	198.5	819.3
	1980	404.8	200.8	605.6
	1975	312.8	154.9	467.7

Passengers by airplane (1994p, 1000 persons)		(Mazatlan)		
		Domestic	Intern'l	Charter
	Passengers	196.3	80.3	56.9
	Comp.(%)	59	24	17.0

Source: SECTUR data

### **A.4.1.3. General development plan**

Regional development plans, including the tourism sector, have been formulated by state and municipality, and are described in this section.

#### **(1) Regional development plan of Sinaloa (1993 - 1999)**

##### **a. Objectives**

Objectives of the State development plan are set as two fold:

- to attain solidary social well-being, reactivate the economy, and strengthen municipalities,
- to increase productivity, competitiveness and quality in exports to take advantage of Free Trade Agreement and expand export activity to Pacific basin and Europe.

##### **b. Actions**

Strategies for Regional development plan are as follows:

- Social renovation is the strategic alignment, based on social and economic renovation, which implies decentralizing production, geographic diversification of investment, consolidation of the domestic market.
- A more active participation in international markets, as well as a greater participation of society in political and social matters.

##### **c. Specific objectives and actions**

###### Water supply

Water supply must be enhanced and improved. More needy zones and regions must have this service. In order to execute this objective, the State will reinforce the State commission for drinking water and sewage, with the following considerations; 1) to carry out technical studies of needy population centers and optional water sources, 2) to preserve and enlarge the system, 3) to promote social participation.

###### Transportation and communication

Communication systems and air transportation must be modernized; mainly rural roads in Choix, El Fuerte, Sinaloa, Mocerito, Angostura, Badiraguato, Cosala and San Ignacio. Air, railway, and sea transportation must be promoted. Telecommunications must be enlarged and improved.

To execute the State plan, this sector will 1) improve and modernize above said roads, 2) implement programs to restore and modernize vehicles of public services,

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3) modernize and build terminal building 5) rehabilitate federal highway between Mexico - Nogales, Mazatlan- Durango, finish highway between Mazatlan - La Concha, 6) build road from Los Mochis and Mazatlan, 7) build a parallel bridge over Rio Sinaloa, and a grade crossing in Leon Fonseca highway, 8) build highways between Culiacan - Navolato and its enlargement to Altata, 9) build highway Costa Rica- San Pedro and finish Los Mochis - Ahome.

#### Natural environment

So as to coordinate ecological preservation with development, it is necessary to 1) integrate ecological regulation in development, 2) control pollution, 3) re-establish ecological balance, 4) administer natural resources, 5) promote education and research in ecological subjects as well as awareness.

The Development plan requires; 1) the establishment of State, regional and special plans and programs, 2) integrating a State system of protected areas, 3) prevention and control of water pollution, 4) register of public and private establishments that contaminate, 5) to promote establishment of water treatment plants, 6) to support recycling plants, 7) to carry out studies on dumping spaces, 8) to monitor handling of dangerous materials

### **(2) Tourism development plan of Sinaloa (1993 - 1999)**

#### **a. Objectives**

Objectives of the State development plan are:

- To contribute to reactivate economy of State,
- to develop balanced visitor growth,
- to renew tourism image, and
- to promote tourism education among population.

Specific objectives for strengthening are: 1) to promote regional development, 2) to renew visitor supply, 3) to stimulate investment flows, 4) to analyze legal framework, 5) to impulse tourism in Mazatlan, 6) to finance regional development with tourism income, 7) to preserve natural resources and cultural patrimony, 8) to enhance tourism infrastructure, 9) to improve promotion campaigns and 10) total guarantee of quality in services.

#### **b. Actions**

- 1) Agreements among Federal Government, State Government, Municipalities, private sector and society to realize programs for tourism development and promotion of Fondo Mixto.
- 2) Availability of financing and credit to increase investment also, the promotion of competitive tourism centers to be established.

The goals are to increase to 4 or 4.3 percentage points tourism contribution to GDP, increase lodging supply in 3.5%, hotel occupancy of 60% annually, and 100% improving of tourism signals.

#### **c. Strategy policy framework**

Development policies that pertain to the Tourism sector and can be considered as strategic policy are summarized as follows:

Target growth of 350,700 in 2000, and 396,300 international visitor arrivals in 2010,

Target growth of 2,314,800 in 2000, and 4,116,900 domestic visitor arrivals in 2010,

Target average length of stay of 5.3 days for international and 3.2 days for domestic visitors,

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Target average spending per day of international visitors to US\$ 100.00 to gain revenues of US\$ 210 million by the end of 2010,

To induce regional development and integrate tourism into the overall development of the State,

To increase to 4 or 4.3 % points tourism contribution to GDP; increase lodging supply in 3.5%, hotel occupancy of 60% annually, 100% improving of tourism signals.

To continue with Fondo Mixto with, 25% increase in Fond Mixto participation in circuit of Mar de Cortes - Barrancas del Cobre; to design a promotion program for the Campaign "Allow Mexico to conquer you"

Target number is referred to study by FONATUR (Programa de infraestructura para areas de desarrollo turistico) edited in July, 1993

### **(3) Tourism development plan of Mazatlan municipality**

#### **a. General objectives**

General objectives of the Municipal Government of Mazatlan will pursue:

- 1) to improve living standard, mainly through improving public services,
- 2) to strengthen the Municipal Government,
- 3) to provide bases for the construction of a new Mazatlan,
- 4) to modernize public administration,
- 5) to preserve natural resources.

For tourism sector, two objectives are set:

- 1) Mazatlan must be promoted at national and international levels so as to create employment and attract foreign exchange, without hindering natural resources,
- 2) to promote Mazatlan as North-West strategic center of the State to support trade, financial and services operations.

Municipal Government will carry out promotion programs at national and international levels with regard to tourism, infrastructure for Congresses, conventions, shows, etc., as well as Archaeological Museum, Aquarium, Historical Center, and other tourism sites., establish annual working programs with neighboring cities, coordinate with State Government and private sector the construction and by-laws of the Historical center, support activities related to Celebration of Carnival, promote city tour.

#### **b. Strategy policy framework**

Development policies that pertain to the Tourism sector and can be considered of the strategic policy are summarized as follows;

Target growth of 290,000 in 2000, and 326,900 international visitor arrivals in 2010;

Target growth of 926,000 in 2000, and 1,693,200 domestic visitor arrivals in 2010;

Target average length of stay of 5.3 days for international and 3.2 days for domestic visitors;

Target average spending per day of international visitors to US\$ 100 (assumed) to gain revenues of US\$ 17.3 million by the end of 2010;

Target number is referred to study by FONATUR (Programa de infraestructura para areas de desarrollo turistico) edited in July, 1993

#### A.4.1.4. Infrastructure

Existing situation and future plan are summarized from Table A.4. 3 to Table A.4. 8.

It seems that there is no serious obstacles for tourism on the whole.

**Table A.4. 3 Airport facilities and capacity of Mazatlan (1)**

Elements	Unit	Capacity	Existing 1993	Demand (High Estimate)			
				1995	2000	2005	2010
Runway	Op/Hr	22	18	20	23	26	28
Platforms	Posic.Sim	10	10	12	14	16	17
Buildings	Pas/Hr	1,100	944	1,007	1,118	1,217	1,276
Parkings	Lot	186	154	167	185	203	214

Note: 1.Platforms, Buildings & Parkings are for commercial use only in this Table.

Source: Sistem Estadistico Aeroportuario,1994, ASA.

**Table A.4. 4 Airport facilities and capacity of Mazatlan (2)**

Access to City Center Distance / time Taxi & bus service	<b>A</b>	(4 lanes highway) 18 km / 25 min.
Airport Facility Runway operable Aircraft Operation Hour Terminal Building.	<b>A</b>	(improvement is required near future) 2700 m x 45m x 1. B-747 24 hrs., 13,120 m <sup>2</sup> .
Capacity and Demand. Runway Platform Building Parking	<b>B</b> <b>B</b> <b>B</b> <b>A</b>	(increasing is required after 2000) (increasing is required after 2000) (increasing is required after 2000) (enough)
Future Improvement Plan. Main Improvement  Project Cost		Master Plan, 1992 (1993-2010) Access Road to Runway Increasing of Platform and Buildings (unsettled)

Note: The signs mean as follows: **A**/good or enough, **B**/some improvement is required in near future, **C**/improvement or countermeasure is required soon.

Source: JICA study team

**Table A.4. 5 Airport passenger changes and future demand (Mazatlan)**

Year	Domestic	International	Charter	Transit	Total
1980	373,783	309,366	0	0	683,149
1985	598,087	252,281	51,662	324,074	1,226,104
1990	454,479	306,194	80,463	334,477	1,175,613
1993	380,704	172,102	139,854	299,449	992,109
1995 (High Estimate )	456,303	201,868	160,009	321,224	1,139,404
2000 ( ditto )	415,088	264,450	202,342	366,960	1,248,840
2005 ( ditto )	743,713	315,129	236,635	404,009	1,699,486
2010 (High Estimate )	851,827	357,727	265,459	435,150	1,910,163
2010 ( Low Estimate )	552,722	250,599	144,261	426,354	1,373,936

Source: Sistema Estadistico Aeroportuario, ASA

**Table A.4. 6 Road facilities in Mazatlan**

Principal Road Condition around Tourism Site	<b>A</b>	<ul style="list-style-type: none"> <li>- Federal No 15 (4 lanes) toll road very good.</li> <li>- Federal No 15 (2 lanes freeway) good.</li> <li>- Federal No 40 (2 lanes) good.</li> </ul>
Urban Area Road Condition	<b>B</b>	<ul style="list-style-type: none"> <li>- On the whole, good however, improvements of access roads to some tourism spots are required.</li> </ul>
Signals & Roads Signs	<b>A</b>	<ul style="list-style-type: none"> <li>- As a whole, good further completion is required as to signals in urban area and road signs for visitors.</li> </ul>
Connecting Road to Major cities.		<ul style="list-style-type: none"> <li>- To Guadalajara. Fed. freeway 288Km. Fed. highway 216Km (incl. toll road). Total 504 Km. (7.05hrs)</li> <li>- To Monterrey Fed. freeway 322Km. Fed. highway 563Km (incl. toll road) Total 885Km (12:50hrs).</li> </ul>
Future Plan		<ul style="list-style-type: none"> <li>- Highway Construction. Tepic-Mazatlan. (of 2. to 4 lanes 227 Km) Mazatlan-Durango. (of 2 to 4 lanes 270 Km)</li> </ul>

Note: The signs mean as follows: **A**/good or enough, **B**/some improvement is required in near future, **C**/improvement or countermeasure is required soon.

**Table A.4. 7 Other transportation facilities**

Bus Service	Service Level	<b>B</b>
(Long Distance Tourist Bus)	No. of Rutes.	13
	No. of Operating Company	6
	No. of Operations/day	36
	Major Destinations.	Guadalajara 6
	No. of Operations/day	México 6
		Monterrey 6
		Los Mochis 5
Railway	Availability for Tourism	Connected with principal line (Méx-USA) however, large scale improvement is required
Ferry Service.	Route, time, No. of operations, passengers in 1994.	Mazatlán - La Paz 392 km, 18hrs/one way 683 op/year, Two way (aprox.10p/day, one way), 129.866 pass/year.
Cruiser.	No. of Embarkation 1994.	125
	No. of passengers in 1994	151,640
	Max. No. of Embarkations	243 (in 1992)
	Max. No. of Passengers	236,260 (in 1992)
	Future plan.	n.a.

Note: The signs mean as follows: **A**/good or enough, **B**/some improvement is required in near future, **C**/improvement or countermeasure is required soon.

**Table A.4. 8 Supporting infrastructure**

Electrical	Service coverage is 95% in Mar. 1990 (63,123 per 66,772 households)
Water	Service coverage is 90% in March 1990 (60,392 per 66,772 households)
Telecommunication	No. of cellular-phone subscribers are 2,090 in end of 1993

**A.4.1.5. Tourism promotion activities**

Following tables show the inventory of tourism promotion activities conducted by Fondo Mixto in Mazatlan.



**Table A.4. 9 Fondo Mixto in Mazatlan**

Year of establishment	1991
<b>Members</b>	
SECTUR	X
STATE GOVERNMENT	X
<b>PRIVATE SECTOR</b>	
Hotel association	X
- No. of member hotels	12
- No. of non-member hotels	23
Restaurant association	-
Travel agencies association	-
Financial institute	1
Others	-
FONATUR	-
OTHERS	-
<b>Budgets in total (1,000 Pesos)</b>	
1991	14,819.0
1992	4,939.0
1993	15,751.0
1994	14,819.0
1995	8,472.0

Source: Compiled by JICA study team

**Table A.4. 10 Inventory of promotion activities (for the international market)**

	Amount (1,000 Pesos)
Advertisement in newspapers or magazine	23,328.0
Campaign on TV and/or Radio	43,200.0
Participation in travel trade show	96.0
Seminar or presentation	2,280.0
	Amount (1,000 Pesos)
Production of printed materials	3,020.0
Production of video	512.0
Tourist Information services by computer network	1,926.0
	Amount (1,000 Pesos)
Subsidy to airline(s)	1,536.0
	Amount (1,000 Pesos)
Support to events (sports, festival, etc.)	5,760.0

Source: JICA study team

**Table A.4. 11 Inventory of promotion activities (for the domestic market)**

	Amount (1,000 Pesos)
Advertisement in newspapers or magazine	707.0
Seminar or presentation	300.0
Press release	257.0
Production of printed materials	280.0
Organizing travel festival for consumers' sector	20.0

Source: JICA study team

#### A.4.1.6. Tourism administration and institution

##### (1) State level

The tourism administration and institution of Sinaloa state government level at the present are summarized in Table A.4. 12. The followings are general outline of them:

Sinaloa state has its own tourism section in its government. It also has a committee to prepare the tourism development plan and/or to make consultation and technical support to the private sectors.

Sinaloa state is following the Federal Tourism Law, because it does not have its own laws or guidelines for tourism development.

For the tourism education or training, Sinaloa state has courses in the state for the higher management level to basic level.

**Table A.4. 12 Inventory of tourism administration (State level)**

Name of the department or section for the tourism administration		Coordinacion General de Turismo
Other Organizations related to Tourism Administration	Name	COPLADE (Committee of Planning and Design of the State development)
Governmental or sem-governmental organization of the state related to tourism development	Name	PROMOTUR
State laws, guidelines, etc. on tourism Development		No specific law
Training and education system to tourism (No. of facility and students)	Superior level	3
	Medio-superior	5
	Bacico	1

Source: JICA study team

##### (2) Municipal/destination level

Table A.4. 13 shows the existing tourism administration and institution in the municipal or destination. The followings are outlines of them:

Mazatlan municipality has not section for tourism administration in their organization, but a committee on the consultation and technical support has been established.

Mazatlan municipality has no specific tourism sub-laws or guidelines after the Federal Tourism Law and no specific income source from and to the tourism developments.

For the tourism training in the destination level, some courses are provided by Fondo Mixto. A principle tourism education is conducted in the primary and secondary schools using a textbook prepared by SECTUR to teaching pupils the significance of the tourism.

**Table A.4. 13 Inventory of tourism administration (Municipality & destination level)**

Name of the department or section for Tourism Administration	CODETUR(Comision de Promocion y Desarrollo Turistico de Mazatlan)	
Other Organizations related to Tourism Administration	Name	Tourism Autonomy Committee
	Activity	Consulting & technical support
Tourist police	No	
Municipal laws, guidelines on tourism Development	No specific law	
Specific income sources (i.e. tax) related to tourism	No specific income source by tourism	
Numbers of Associations and their members (in number)	Hotelier	N.A.
	Travel Agency	N.A.
	Restaurant	N.A.
Training and education system	by Fondo Mixto for personnel working in tourism related industry	

Source: JICA study team

#### A.4.1.7. Social issues

##### (1) Population and labor force

###### a. Internal migration

In Mexico, over 4 million or 5% of population migrated from 1985 to 1990. But Sinaloa was net out-flow as well as Guerrero and Oaxaca, while Quintana Roo, Jalisco and Baja California Sur were net in-flow.

Sinaloa State was net out-flow of migration, but Municipality of Mazatlan is attracted the second or the third number of migrants in the state.

###### b. Population structure

###### Pre-school and school age population

The national average of school age population (14 years-old or less) ratio is 38.3% in 1990. This ratio in Mazatlan is 35.6%.

The population ratio of 4 years-old or less is 12.5% in national, and Mazatlan is same level.

###### Indigenous population

In Mexico indigenous population is estimated as 8.7 million or 10.7% of total population in 1990. Sinaloa is not indigenous people place, so the ratio is under 2%.

###### c. Labor force

State total economic activities population is 47% of 12-years and over population.

In Mazatlán, participation rate of economic activities is higher than national average, While unemployment ratio is lower than national average.

##### (2) Housing conditions and development

The availability of basic services in the Mexican homes has increased. Of every ten houses, 9 have electricity, 8 have safety water and 6 have sanitary facilities.

Mazatlan are better conditions than national average. But rapid growth of tourism causes un-planned urban expansion because many peoples come to find job in tourism and related industries. In many cases, they are poor and start to live on cheap land which do not have enough basic services.

### (3) Social services

In Mazatlan, social security institutes provide health and medical services for their members, covered ratio is almost 100%, while average in Mexico is 55%.

**Table A.4. 14 1990 population in Mazatlan by living place in 1985**

Municipality of Mazatlan	
Total	276,696
Same State (Sinaloa)	260,185
Out of the State	14,232
Nayarit	1,943
Federal District	1,897
Sonora	1,013
Baja California	837
Oaxaca	718
Guerrero	587
Veracruz	567
Other States	6,670
Out of Mexico	484
Not Specified	1,795

Source: National institute of statistics, geography and informatics

**Table A.4. 15 Population by age structure and indigenous groups in Mazatlan**

Municipality of Mazatlan	Population by Age Group					Indigenous Population(5-)
	Total	0-5	6-11	12-14	15-	
Municipality of Mazatlan	314,345	37,649	51,479	22,665	202,552	1,345

Source: "Annual statistics, 1994" of Sinaloa state, INEGI

**Table A.4. 16 Labor force in Mazatlan**

Municipality of Mazatlan	Population 12 yrs.+	Economic Activity Population	Working Population	
			Total	Restaurant & Hotel
Municipality of Mazatlan	225,217	105,562	103,168	10,840

Source: "Annual statistics, 1994" of Sinaloa state, INEGI

**Table A.4. 17 Housing conditions in Mazatlan**

Municipality of Mazatlan	Percentage of Houses with Service of		
	Water	Electricity	Sewerage
Municipality of Mazatlan	90.4%	94.5%	77.6%

Source: "Annual statistics, 1994" of Sinaloa state, INEGI

**Table A.4. 18 Gross enrollment ratio of school and covering ration of social securities in Mazatlan**

Municipality of Mazatlan	Number of Students in 1992		Covering Population of Social Security
	Primary	Secondary	
Municipality of Mazatlan	49,773	17,696	315,568

Source: "Annual statistics, 1994" of Sinaloa state, INEGI

#### A.4.2. Prospects for Mazatlan

This section discusses the prospects for, and constraints of Mazatlan and Sinaloa State. The development prospects presented in this chapter are for the alternative studies in the next section therefore includes full possibilities of respective destinations.

### A.4.2.1. Development framework

About 2.8% of the total visitor arrivals to Mexico, or 2,717,000 visitors (2,367,000 domestic and 350,000 foreigners) is expected to visit Mazatlan in the years 2010. (refer to Table A.4. 19)

**Table A.4. 19 Target number of visitor arrivals to Sinaloa state**

(Unit: thousand)

Municipality	Domestic					International				
	1993	1994	2000	2005	2010	1993	1994	2000	2005	2010
Mazatlan	663.2	674.7	925.0	1,287.0	1,649.0	224.3	211.6	244.0	270.5	297.0
Ahome	151.8		235.0	363.5	492.0	5.5		66.0	68.5	71.0
Culiacan	192.6					6.8				
Sub total	1,007.6		1,160.0	1,650.5	2,141.0	236.6		310.0	339.0	368.0

Note: 1993 =INEGI state statistic report, 2000 ,2005 and 2010= JICA study team

Source: JICA study team

**Table A.4. 20 Accommodation requirement in Sinaloa state**

(Unit: rooms)

Municipality	Existing rooms by category (1993)								Total	2000	2005	2010
	CEs	GT	5	4	3	2	1	CEc				
Mazatlan			1,950	2,377	618	1,045	616	2,500	9,106	9,055	1,007	11,086
Ahome				392	245	235	194	15	1,081	1,966	2,366	2,766
Culiacan				477	522	368	527	92	1,986			
Sub total	0	0	1,950	3,246	1,385	1,648	1,337	2,607	12,173	11,021	3,373	13,852

Note: 1993 =INEGI state statistic report, CEs = special class, GT =gran turismo, CEc= economy class

Source: JICA study team

### A.4.2.2. Marketing prospects

#### (1) Destination concept

- Nature-oriented beach destination with the Mexican ambiance
- Seafood capital on the Mexican Pacific
- A base for the ecotourism circuit of Mar de Cortes

#### (2) Target markets

- General interest tourists who are interested in marine wildlife
- Domestic visitors for beaches, especially from the northern part of Mexico including Monterrey
- Southbound market, especially from neighboring states of USA

#### (3) Marketing strategies

- Make efforts to diversify origin markets although US and Canada will continue to be the core demand for the area. Northern Mexico is an immediate opportunity if the transportation link with Mazatlan is improved.
- Establish a link with the ecotourism circuit of Mar de Cortes to attract visitors from more distant markets.
- Establish a link with Los Cabos to attract visitors who want to experience more Mexican ambiance. Develop more attractions that provide visitors with authentic Mexican experiences in the old town of Mazatlan and its surrounding rural area as well.
- Create an image of a gourmet resort destination by making better use of local fishery and marine product industry.

- 
- Promote activity holidays centered on game fishing and golf targeting at neighboring US states.

#### **A.4.2.3. Tourism development prospects**

##### **(1) Tourism structure at the state level**

Mazatlan is the main tourism destination in the Sinaloa state. The secondary tourism destinations are Culiacan and Los Mochis. The port infrastructure is adequate to cruisers that come mainly from San Diego and Los Angeles, in California. It maintains a sea link with La Paz, Baja California Sur.

The tourism circuit of Mar de Cortes and Barranca del Cobre is to be promoted. Other tourism circuits are;

- Los Mochis - El Fuerte - Choix,
- Los Mochis - Topolobampo - El Maviri,
- Los Mochis - El Carrizo- Culiacan - Altata,
- Culiacan - Guamuchil - Mocorito,
- Culiacan - Cosala,
- Mazatlan - surrounding potential areas such as Concordia - Copala, etc.

The state had 1,509,600 visitors in 1992, of which 80% visited Mazatlan.

Marina Sabalo and Marina Mazatlan are mega development projects in Mazatlan.

This State has three integrated large scale ongoing tourism development projects, located in the northern and south parts of Mazatlan.

##### **(2) Tourism structure of Mazatlan**

Mazatlan was one of Mexico's earliest coastal tourism centers. In 1975, the number of hotel rooms was 3,902 ; by the end of December 1994, there were 7,992 hotel rooms, in varying degrees of luxury.

Mazatlan is mainly a beach destination. Its port facility is adequate for commercial and tourist ship arrivals. It is an important cruiser destination from the USA . Sport fishing is a main tourism attraction. There is also an aquarium, botanical garden, and carnival in February and March is National attraction.

The Plan Mazatlan, for the consolidation of the city as a tourism center and regional pole for development of the state, specifies;

- to restore the historic central district of Mazatlan,
- to construct Marina del Sabalo and Marina Mazatlan, and
- to continue the development of Marinas of Altata and Barras de Piaxtla, the ecological tourism corridor of Mar de Cortes and Barranca del Cobre.

Tourism circuits are identified as follows;

- Mazatlan - Concordia - Copala - Panuco for Colonial architecture, hot spring waters, archaeological sites, and handicrafts,
- Mazatlan - Villa Union - Rosario - Chametla for colonial architecture, handicrafts, hot spring waters, archaeological sites,
- Mazatlan - Escuinapa - Teacapan with extension to beaches in North Nayarit, and
- Mazatlan - Dimas - Barras de Piaxtla for fishing, hunting, beaches, and archaeological sites.

##### **(3) Development strategies**

Tourism in the Sinaloa state is led by Mazatlan. When ongoing large-scale tourism development projects are completed, Mazatlan would be one of the major resort centers on the Pacific coast.

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Further expansion of accommodation base for nature lovers is recommended because of the interesting natural setting therefore the development should be environmentally sound one.

Culiacan and Ahome, designated as second tourism centers should expand accommodation bases for hinterland and coastal sightseeing routes. The development should be a mixture of international and economy-class accommodations.

Existing railway should be upgraded to include sleeper cars that can cater for visitors. The rail should connect Mazatlan and Los Mochis to make up for the limited capacity of air links between the cities. Air excursions from Mazatlan should also be introduced to promote tourism in the remote areas of the state.

Copper Canyon project will bring a new tourism opportunity to Los Mochis as the terminal for the luxurious tourist train journey from the canyon to the Pacific Coast. It is an important project at the national level, and is considered to contribute to hinterland tourism development. Sinaloa's opportunity is not only limited to the transit function but also the possibilities to introduce excursions within the state. Los Mochis should develop luxurious international class hotel accommodations in the medium term.

Tourism investment should concentrate in urban infrastructure improvement, and the study of environmental conservation and ecotourism is needed. Followings are the major development components to support and improve the tourism development in the state.

**a. Examination and upgrading of existing tour routes**

- Inter-Regional tourist route development should be carried out including highway development between Mazatlan and Durango and rail transport development between Los Mochis and Chihuahua.
- Water surface link development should be strengthened with improvement of tourist piers and services of the hydrofoil high speed boat at Topolobampo
- Rail transport development with improvement of train stations at the tourism centers, and the services of an express train in the long term.
- Improvement of existing air links for air excursions for nature and highland resorts from primary tourism centers to El Fuerte, Mocorito, Cosala, Altata, El Dorado, and San Ignacio.

**b. Nature information center development with monitoring and database functions.**

**c. Urban development**

- Urban infrastructure and facilities and amenities should be improved..
- Historical building conservation and utilization for tourism purposes.
- Nature information center with environmental monitoring and data base function integrated with the existing Sinaloa Science Center in Culiacan.

**d. Ecotourism development**

- Teacapan
- El Fuerte,
- Cosala, and
- San Ignacio.

**e. Highland tourism development**

- El Fuerte,
- Cosala,
- San Ignacio

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Above development should be integrated with ecotourism development.

Figure A.4. 1 shows tourism and tourism-related development plans up to the year 2000. Figure A.4. 2 shows the full development possibilities in the state.



Figure A.4. 1 Planned developments up to 2000 in Sinaloa state

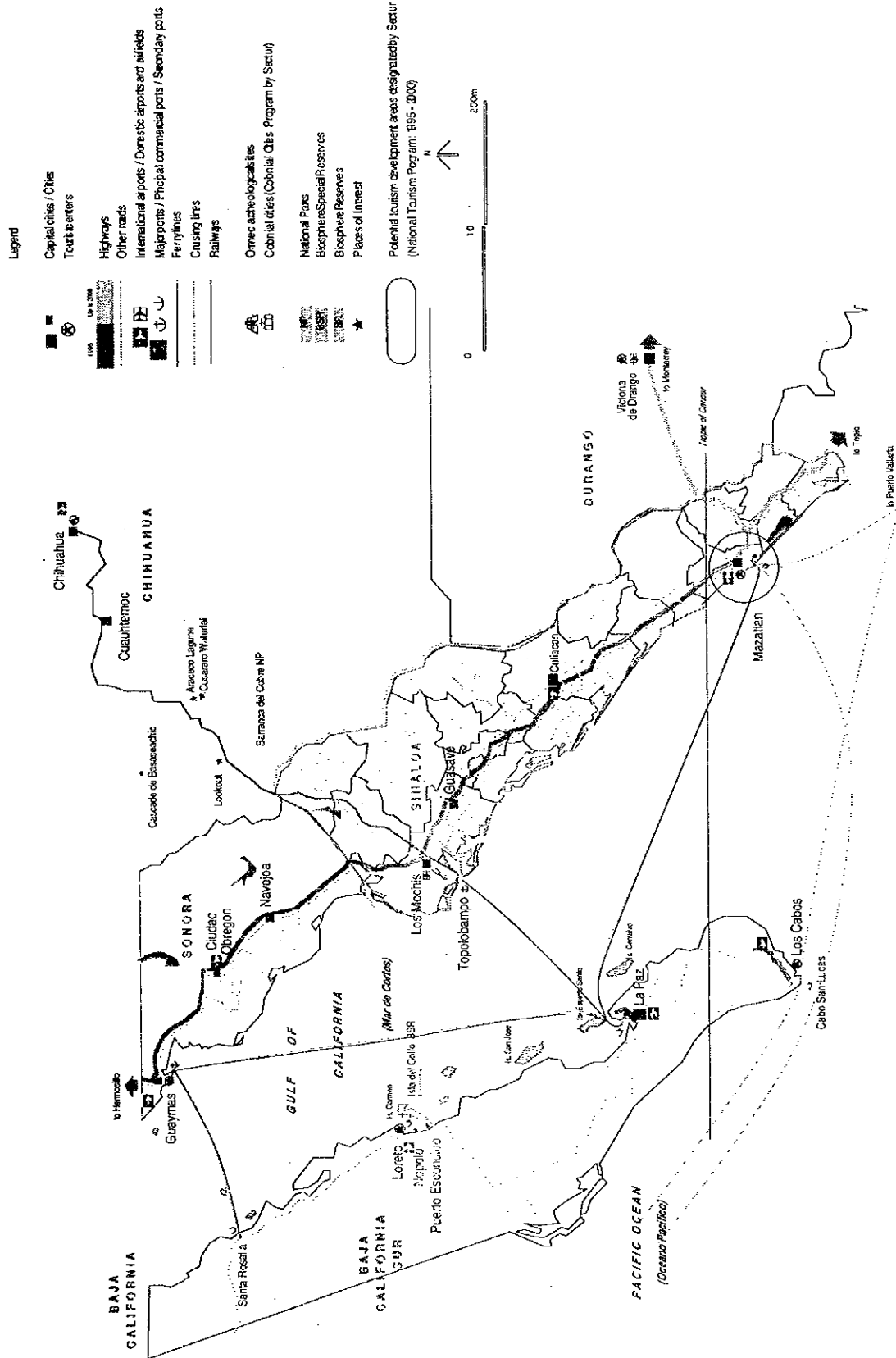
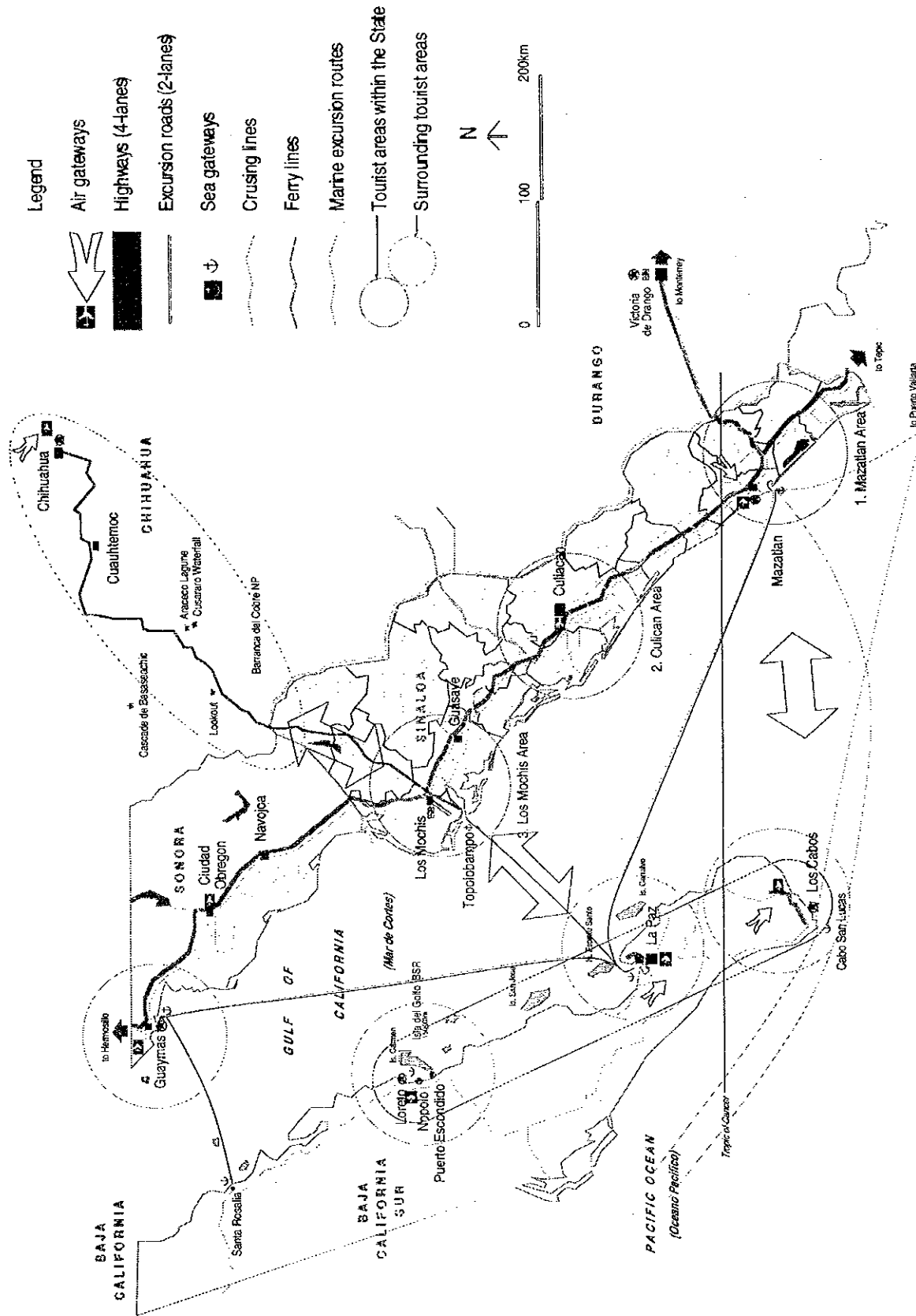


Figure A.4. 2 Tourism development possibilities in Sinaloa state



### A.4.3. Development scenarios for Mazatlan

This section discusses the adequacy of tourism development and promotion scenarios for Mazatlan and Sinaloa State. The study team has assessed alternative scenarios based on marketing and development prospects for Mazatlan and Sinaloa State as mentioned in former section.

#### A.4.3.1. Alternative scenarios

Three alternative scenarios are set for Mazatlan and Sinaloa as follows;

(1) **Alternative 1: Concentration in beach development in Mazatlan**

Concentrates most development efforts in Mazatlan, sub-beach centers, and traditional villages in the hinterland.

(2) **Alternative 2: Mazatlan and Los Mochis; Two centers development**

Develops Los Mochis as a new tourism center as a nodal point of a route between Baja California Sur and Barranca del Cobre (Copper Canyon), and that for hunting tourism along the coast between Los Mochis and Mazatlan.

(3) **Alternative 3; Mazatlan, Culiacan and Los Mochis 3 center development and touring circuit formation**

Develop Culiacan as an addition to the above as well as to combine beaches in Sinaloa with Copper Canyon and inland historical city of Durango.

Figure A.4.3 Alternative scenarios (Sinaloa)



Source: JICA study team

#### A.4.3.2. Assessment of the alternatives

(1) **Tourism development aspect**

Mazatlan is the only existing tourism center in the state but there are two potential centers, namely Los Mochis which is the center of the Northern Sinaloa, and Culiacan; the state capital and the center of the Central Sinaloa. If Barranca del Cobre or Copper Canyon is included into the Tourism Sector Development Program as a priority development area and is actually developed, Los Mochis may have some tourism opportunities although it could only be an transit point from the canyon to Los Cabos/La Paz.

For an effective tourism investment, it is safer to concentrate development efforts in Mazatlan which has the most opportunities for the tourism development in the state.

(2) **Tourism marketing aspect**

Mazatlan lacks in anchor tourism attractions that could be attractive to international visitors and feasible to be combined with the beach destination. Combination of

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Mazatlan and Copper Canyon sounds like a possible scenario but the travel time from Los Mochis to Mazatlan (4-5 hours) makes it difficult to sell it as a tour package.

Mazatlan is one of the nearest Mexican beach destinations to USA and Canada, and this strength should be emphasized in the development strategies for the beach destination. Domestic market is also important, especially for those living in the northern inland such as Durango, Chihuahua and Monterrey.

### (3) Conclusion

Above assessment concludes that **Alternative 1** is the most appropriate scenario for Mazatlan (Sinaloa state).

Tourism development and promotion issues for Mazatlan (Sinaloa state) by the target year of 2010 are as follows;

- To concentrate the state's tourism development in the Mazatlan area that still has room for development in the northern and southern parts, though it should be subject to careful environmental assessment,
- To promote diversification of origin market, in particular, domestic market in Northern Mexico, although USA and Canada will continue to be the core demand for the area,
- To establish and promote the tourism circuit of Mar de Cortes under the coordination with the neighboring states/destinations,
- To establish and promote a local ecotourism circuit that links Isla de Venados - Isla de Los Chivos - Isla de Los Pajaros with Mazatlan, with sufficient considerations to conserve the environment and tourism resources in the islands,
- To establish and promote a link with the Los Cabos/La Paz region to attract visitors who want to have experiences of more Mexican ambiance; to develop the old district of Mazatlan and its surrounding areas for an authentic Mexican experience, subject to the assessment of the urban environment, and
- To make promotion efforts to utilize the local color of Mazatlan such as fishery, marine product industries, handicraft and so on.

Linkage of Mazatlan with Los Mochis and Culiacan may be taken into account in a development stage after 2010.