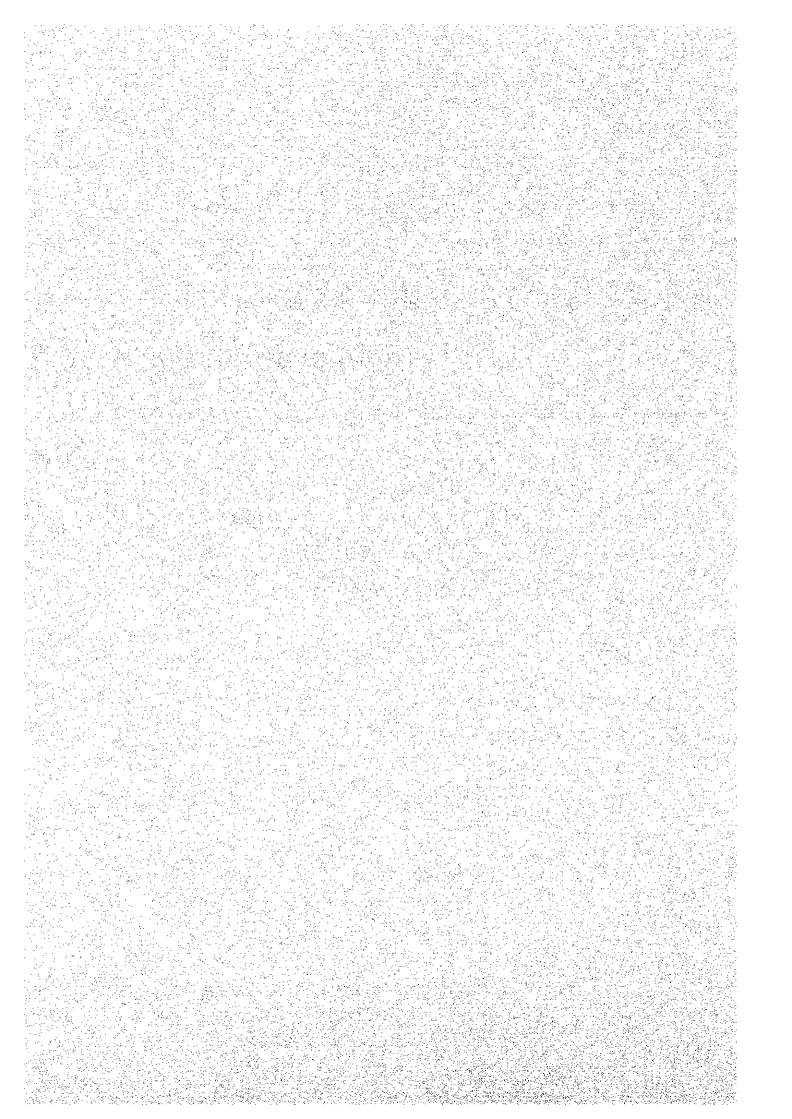
Chapter 4.

Tourism promotion plan



4. Tourism promotion plan

4.1. Issues and future directions for existing promotional measures

4.1.1. Production of basic promotional tools

(1) Printed materials

a. Brochures

As already discussed, there are two types of tourism brochures, namely, image brochures that stimulate consumers to visit a destination, and information brochures that provide visitors with practical information and know-how to travel. Tourism related organizations in Mexico tends to put importance on the production of the former type, and the quantity of the latter, if available, is quite limited at present.

When producing image brochures, SECTUR and other tourism related organizations should produce image brochures by market segment taking into account the differences in market characteristics. Many of the brochures are produced with the US market as the target, and other languages versions are produced simply by translating the US version. This process fails to reflect the difference of markets.

As already discussed, the long-haul market is supposed to increase its importance in the future. To promote tourism from the market, image brochures that cover a whole tourism region, which roughly corresponds to the area they actually travel in a trip, need production.

Insufficient quality and quantity of information brochure is an issue for SECTUR and other tourism organizations to improve. The airport survey shows that greater part of the visitors to Mexico are individual travelers and this rationalizes to put more emphasis on this type of brochures. A good example would be the "something else" series produced in the Guanajuato state. It is noted that availability of information brochures has more priority over its quality.

b. Manual for the travel trade

This type of material is crucial to promote convention and incentive tourism. It should contain information on hotels, exhibition haul, conference room, restaurant, local transportation, translator and guide, customs clearance and immigration formality, and travel information.

c. Map

Maps, in particular, city maps could be an important promotion material. Though SECTUR distribute road maps, it should distribute city maps both in Spanish and English as well.

d. Poster

Poster is an important tool for promotion. Photo contest as will be discussed later could serve to collect photos for the poster.

(2) Video

Travelogue video is effective to stimulate all markets. Like the case of printed materials, SECTUR produced videos with themes such as colonial cities, beach resorts, and Mayan world. In addition to the above, SECTUR should produce videos for the whole country, and/or by tourism region for better appeal to the long-haul market. Videos should not be the translation from the US version but produced to cater for each market's needs. In general, as market become more long-haul, it is preferable to focus not only tourism resources but also ordinary people's life and cultures.

(3) Color slide

Many of SECTUR's overseas office does not have color slides for rent to the travel trade and the mass media. They should have a photo library for the use for tour brochures, articles for newspapers and magazines. Photo contest would be useful to increase the number of collections in the library.

4.1.2. Advertisement

(1) TV & Radio

This is only feasible for the mass market as the cost is huge. Hence, this would be effective for the short haul markets such as the domestic and the southbound markets.

(2) Newspaper, magazine for general public and special interest group

Advertisement in newspaper and magazine for the general public would be effective for the domestic and southbound markets. Advertisements in travel magazines and special interest magazines that are associated with travel to Mexico would be useful even for the long-haul market.

4.1.3. Public relations activities

Public relations activities aim to increase market awareness, and to create favorable tourism image, of destinations through the approaches to, and cooperation with, the media such as newspapers, magazines, TV and radio programs, and movies. It is effective for all markets, and is one of the most cost effective measures to influence consumers. It consists of following activities:

- Cooperation to journalist (arrangements of appointments, accommodation, transportation, etc.)
- familiarization trip for mass media
- publication of press release, and
- cooperation to shooting crews of TV and movie.

4.1.4. Approach to the travel trade

(1) Seminar/presentation

This is effective for all markets, in particular, for the promotion of convention and incentive tourism. In case of hosting seminars for the travel trade in the long haul market, cooperation among local governments, Fondos Mixtos, and the private sector within the same tourism region would be inevitable considering the cost and the travel patterns in the market.

(2) Participation in travel trade shows

Although participation in travel trade shows is quite popular, few local tourism organizations participate in the trade shows held in Europe and Asia. In view of the potential of the long-haul market, SECTUR should promote the participation by soliciting cooperation among several Fondos Mixtos, and local governments.

(3) Hosting of travel trade mart

"Tianguis" (it means travel trade mart in Spanish) has been held for decades and contributed greatly to promote tourism to Mexico. This is effective for all markets. The study team recommends to host Tianguis not only in Acapulco but take turns to host it in various tourism destinations to publicize different tourism sites to its participants, though it assumes the improvement of convention facilities in the destinations.

Another consideration is not to neglect markets other than the North American market as the current trade show is excessively streamlined for the natural market of Mexico.

(4) Familiarization trip

Familiarization trip for the travel trade is extremely useful to stimulate international markets. Although most of the tourism destinations conduct familiarization trips, interviews with the travel trade revealed that quality and results of the trips are varied, which suggests the necessity to spread the know-how to standardize and raise the standard.

Through the interviews with the US travel trade, the study team had an impression that more travel agents who directly influence consumers' decision and has less knowledge of Mexico should be invited to the trip rather than tour operators who already know Mexico. As has been discussed, tour operators and travel agents should be invited from more various areas such as Europe, Latin America, and Asia.

In conducting familiarization trips, hosting a meeting where participants meet with the local travel trade to exchange information on the market side and the destination side is quite useful. Some familiarization trips to Mexico is reported that they did not have enough opportunities for the communication, which needs improvement.

(5) Joint promotion

Joint promotion is a promotion activities conducted jointly by the public and the private sectors. As several organizations share the expense, it is one of the most cost effective methods to promote the long-haul market. Coop Program that has been conducted jointly by SECTUR and the private sector like travel agents, airline company, and hotel, is a typical example.

It may be a good idea if SECTUR would appeals to the travel trade for contributions to organize package tours with special promotional prices to develop new markets.

(6) Tourism mission

Tourism mission which generally comprises of members from the public and the private sectors, is dispatched to tourist-generating countries to publicize a destination by directly approaching to the travel trade and consumers. It has been conducted in Mexico, but more emphasis should be placed on the long-haul market.

4.1.5. Travel week

Travel Week is an event for the general public held at places like department store, public space, or exhibition hall to introduce Mexican culture such as traditional dance, foods, and handicrafts. It is effective to increase the awareness of Mexico. It would be better if it is combined with sales mission or participation in a travel trade show for effective use of budget.

4.1.6. Approach to special interest group

SECTUR and the other tourism organizations should issue news releases for organizations and individuals that are interests in topics like wild birds, fishing, archeology, scuba diving, sailing, climbing, rail roads, deserts and ecology. Occasional contribution of articles by professional writers would be preferable..

4.1.7. Photo contest

Hosting of annual photo contest is a popular measure for promoting tourism. The contest would be covered by the mass media, which makes good advertisement of destinations. Excellent photos chosen for the prizes may be used for the production of other promotion materials and the inclusion into photo libraries.

4.2. Additional tourism promotion programs

4.2.1. "Mexican Air Pass"

Introduction of "Mexican Air Pass", similar to that of "Eurail Pass", enables international travelers to use any regular domestic flights in Mexico during fixed periods would promote individual tourists to Mexico. Following is an example of the specification of the airline pass.

- Duration: 1 week pass and 2 weeks pass,
- Places of issue and person entitled to purchase: person living in foreign countries and visiting on pleasure to Mexico (Tourists),
- Fares: 20% higher than round trip fares of between Mexico City and Cancun

4.2.2. International exchange program

This program is to promote cultural exchange between Mexico and foreign countries, most popular of which would be sister city program. Assistance from SECTUR and other related organizations in intermediating appropriate organizations and local governments on both sides would promote the exchange. This is an effective way to create awareness of Mexico, in particular, in the countries where awareness of Mexico is very limited. Themes for the exchange could be cultural assets (music, dancing, handicrafts, foods, traditional building, agriculture, etc.), history, archeology, nature, wild life and sports (diving, fishing, sailing, football, golf).

"Home visit system" is a program conducted in some countries that facilitates tourists from abroad to visit ordinary families in a country, and aims to promote mutual understanding. This has the similar effects as other cultural exchange programs. To obtain good cooperation from local governments is crucial to implement this program.

4.2.3. Commendation scheme - "Mexican Tourism Award"

SECTUR should introduce a commendation scheme in expectation of the publicity by the media. It is recommended to host an annual commendation ceremony for individuals and/or organizations that has contributed to the Mexican tourism, or any appropriate themes that are considered positive to Mexican tourism. This could sometimes results in good coverage by the media and free promotion of Mexican tourism through newspapers, TV and radio.

4.3. Directions by regional market segment

4.3.1. Domestic market

To promote the domestic tourism, SECTUR and related organizations should create and improve the following tourism environment in order to facilitate a more wider range of people to enjoy travel.

- provision of reasonably-priced accommodation, transportation (in particular, air flight) and tourism related facilities,
- positive creation of tourism opportunity by organizing compulsory school excursion and group tours by member of labor unions and staff of company,
- promotion of convention and incentive tours,
- provision of information enabling reasonable priced tours for the general public,
- promotion of family travel, and
- education of tourism importance among the general public.

Since the domestic market is the largest market segment, even direct advertisement toward the general public through the mass media like newspaper, magazine and on TV, radio would be feasible.

4.3.2. Paisano market

There are many clubs and organizations for Mexican residents in USA(who are called Paisano). They do not only generate the VFR (visit friends and relatives) visits but could influence their friends and business acquaintances in the country to visit Mexico if approached properly by SECTUR, Fondos Mixtos, or local governments. A possibility would a "bring home friends" campaign that let Mexican residents in the USA publicize their home country by giving them small incentives."

4.3.3. Southbound market (North America)

Beach resort tourism from the market has the greatest importance for the Mexican tourism sector therefore most of the advertising measures as will be discussed later would be applicable to promote the tourism from the market. "Value for money" would be an important point to appeal to the market as Mexico has an advantage in geographical location from the market.

Indirect approaches such as public relations activities and the approaches to special interest groups would be suitable to promote the rest of the market segments such as archeological ruins, colonial cities, festivals and special events,

Convention and incentive tourism seems the most promising in the southbound market compared with other regional market segments. Hence, promotion of convention and incentive tourism needs special emphasis on the regional market.

As there are a huge number of independent travelers in the northern border region, it is quite important to provide them with detailed travel information through tourism offices, brochures, and internet. Providing the information on road conditions, location of gas stations, auto camping sites, traffic rules in Mexico would be appreciated by those who make overland trip from USA to Baja California.

4.3.4. Northbound market (Latin America)

Indirect approach to the market such as public relations activities and approach to the travel trade and the mass media would be suitable measures to stimulate the market.

Mexico requires visitors from many countries of the region to obtain visa, and it is reported that procedure to obtain visa is often complicated, or simply difficult to pass the examination. It would be advisable for SECTUR to request the concerned authorities to streamline the process for the benefit of the Mexican tourism sector, and provide the travel trade in the countries with sufficient information and assistance to clear the procedure. It would be also useful to implement international exchange program by utilizing Mexican history, archeological ruins, sports and culture.

4.3.5. Westbound market (Europe)

Like the case of the northbound market, public relations activities, approaches to the travel trade, special interest groups, and the mass media would be important. Providing sufficient information for special interest groups and conducting familiarization trips for journalists who contribute articles for special interest magazines are recommendable measures as there is a sizable volume of special interest market.

One of the tough competitors for Mexico in the beach resort tourism is the Caribbean therefore Mexico needs to stress the tourism resources such as archeological sites, indigenous cultures, spectacular land formation, foods and handicraft, which they lack in. International exchange program will be also effective as in the nourthbound market.

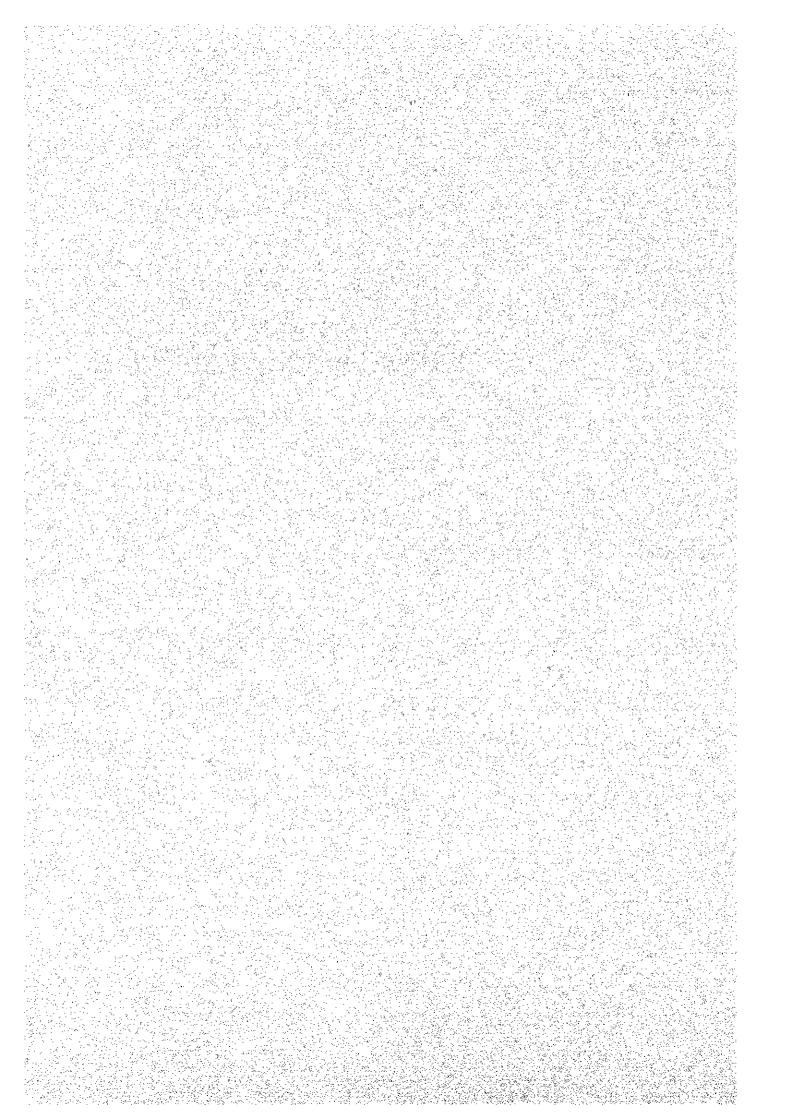
4.3.6. Eastbound market (Asia & Pacific)

Since the market lacks in awareness of Mexico and its volume is relatively small at present, familiarization trip for the travel trade, in particular, for tour planners, and public relations activities such as familiarization trip for the mass media and cooperation to TV and movie shootings are considered to be effective to promote the market. Seminars for the travel trade that provide basic know-how to arrange travels to Mexico would contribute to better awareness of Mexico within the trade.

SECTUR should approach to special interest groups as there is a good number of people who are interested in diving, mountain climbing, fishing, music, archaeology, history, and nature and wildlife. International exchange programs like sister city program are also recommendable for the market.

Chapter 5.

Strategy of tourism development framework



5. Tourism development framework

5.1. Tourism development framework

The numbers of visitor arrivals to hotels are set as a development framework for the JICA study at the target years. The framework provides a target that should be achieved through efforts of SECTUR, other tourism-related agencies and the private sector.

Various methods for forecast are tested such as past trend analysis, multi-regression analysis, and share estimation in socioeconomic framework. Different methods are applied to domestic and international forecasts due to the limitation in data availability. Several forecasts are evaluated as references to determine an adequate development framework.

5.1.1. Framework at the national level

(1) Framework of domestic tourism

A multi-regression analysis method was applied for domestic tourism forecast using the past data up to 1995. The method is the same as the one employed by the study by FONATUR and IDB in 1992 (FONATUR-IDB study, hereinafter). The data on the domestic arrivals are taken from the statistics on hotel arrivals.

a. Independent variable

Independent variables and data sources used for the analysis are as follows:

- Population (data sources: the FONATUR-IDB study for 1981-1990 and estimation for 1991-1995 based on the data of Bank of Mexico, 1995),
- Disposable income (data source: GDP per capita calculated from the data from Bank of Mexico),
- Travel costs (data sources: transportation operation costs from the FONATUR-IDB study, and exchange rates of Peso/US\$ from Bank of Mexico), and
- Statistical factor (data source: the FONATUR-IDB study).

b. Forecasts

The past growth rates of GDP are employed as the criterion to set different projections. As shown in Table 5. 1, the past growth rates are calculated in the intervals of 5 years, 10 years and 15 years which correspond to the periods of the three phases: the short-term (1995-2000), the middle-term (2001-2005) and the long-term (2006-2010), respectively. Three growth rates (the highest, the average, and the lowest) are used to set different projections in each intervals as marked in Table 5. 1.

Forecast-D1 (High growth case of GDP in the future)

The past highest GDP growth rate of each period is used to estimate the number of domestic visitor arrivals to hotel in each phase (shown in Table 5. 1).

Forecast-D2 (Medium growth case of GDP in the future)

The average growth rate of each period is used to estimate the number of the domestic visitor arrivals to hotel in each phase (shown in Table 5. 1).

Forecast-D3 (Low growth case of GDP in the future)

The lowest growth rate of each period is used to estimate the number of the domestic visitor arrivals to hotel in each phase (shown in Table 5. 1), but the negative figures are disregarded.

Table 5. 2 and Figure 5. 1 show the results of regression analyses for respective methods of forecasts, and increase rates from the base year of 1995, and annual growth rates of hotel arrivals in each period for the total demand for outbound and domestic travels of the Mexicans.

Table 5. 1 Past growth rates of GRDP used for forecast

	,	5 yea	ars Interval	T	10 ye	ars Interval		15 ye	as Interval	_
Year	Mexico (pil. N\$)	year	Average growth rate (%	6)	year	Average growth rate		year	Average growth rate	
1975	3 2 3 8 . 0			T						
1976	3,376.0			П						
1977	3,491.0			- 1						_
1978	3,780.0			- 1			Leg	end of grow to	rate:]
1979	4,126.0						0	Highest		
1980	4,470.0	80/75	6.66				Δ	Av era ge		L
1981	4,862.0	81/76	7.57	٥I				Lowest		<u> </u>
1982	4,832.0	82/77	6.72	- 1					1	_
1983	4,629.0	83/78	4.14	1						
1984	4,796.0	84/79	3.06	ļ						
1985	4,920.0	85/80	1.94		85/75	4.27	0			
1986	4,736.0	86/81	-0.52		86/76	3.44			Ī	
1987	4,824.0	87/82	-0.03	- 1	87/77	3.29				
1988	4,884.0	88/83	1.08	- 1	88/78	2.60				
1989	5,047.0	89/84	1.03	- 1	89/79	2.04				
1990	5,272.0	90/85	1.39		90/80	1.66		90/75	3.30	0
1991	5,463.0	91/86	2.90		91/81	1.17		91/76	3.26	
1992	5,616.0	92/87	3.09		92/82	1.51		92/77	3.22	
1993	5,649.0	93/88	2.95		93/83	2.01		93/78	2.71	
1994	5,848.0	94/89	2.99		94/84	2.00		94/79	2.35	
1995	5,442.0	95/90	0.64		95/85	1.01		95/80	1.32	
A v era ge			2.85	Δ		2.27	Δ		2.70	Δ

Note: The negative figures are disregarded for the lowest growth rate.

Source: JICA study team

c. Assessment of forecasts for setting the framework of the domestic tourism

The JICA study team recommended a forecast of hotel arrivals as shown in Table 5. 2 and Figure 5. 1, based on the following considerations:

- Forecast-D1 shows that the total domestic tourism demand in 2010 becomes 3.6 times as large as that of 1995, and the domestic tourism demand in 2010 becomes 3.0 times as large as that of 1995. It is considered that the increase is too high, even though the growth of income is considered.
- Indication-D3, on the contrary, shows the increases from 1995 to 2010 are only 1.23 times of the total tourism demand and 1.03 times of the domestic tourism demand, respectively. These may be too low considering the economic situation of Mexico in 2010.
- Indication-D2 may be considered as a moderate increase both for the total tourism demand and the domestic tourism demand; 2.11 times and 1.74 times, respectively. The domestic tourism demand seems reasonable considering that the increase of the domestic tourism demand for the past 14 years between 1981 and 1995 was 1.71 times.

Based on Indication D2, the JICA study team sets 70,000,000 hotel arrivals for the domestic tourism (approximately 2.0 times larger that of 1995) and the total tourism demand of 95,000,000 in the year 2010.

Table 5, 2 Forecast of domestic visitor arrivals to hotels

Descriç	otion					By pas	t trend o	COP gr	owth						Recor	nn ded	
		fo	eçast-D1	i (high		Fo	recast-D	2 (mid.		Fo	recast-D	3 (iow.]	fore	cast	
Item	Period	A		В		/	Ą		8		A		В	,	4		В
Growth Rates	1995-2000		7.	57			2	.85			0.	64			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
of GDP applied	2001-2005		4.	27			2	27		<u> </u>	1,	01		Ì			
to analysis	2006-2010		3.	30			2	70			1.	32					
Actual growth	1995-2000	15.	.04	11	.91	7.	20	3.	80	3.	.59	0.	02	8.	66	4	93
rates of tourism	2001-2005	6.	79	6.	42	3.	.59	3.	23	1.	.59	1.	16	6.	10	4	.56
in the results	2006-2010	5.	52	5.	06	4.	.55	4.	21	2	.36	1,	97	4.	02	4.	.94
	Average	9.	04	7.	76	5.	10	3.	75	2	.51	1.	05	6.	24	4.	.81
Yea	l r	demand (x 1000)	change (y://95)	arrivals (x 1000)				arrivais (x 1000)		demand (x 1000)		arrivals (x 1000)	change (yr/'95)	demand (x 1000)		arrivals (x 1000)	
198	0	24,159	0.63	20,200	0.58	24,159	0.63	20,200	0.58	24, 159	0.63	20,200	0.58	24, 159	0.63	20,200	0.58
198	5	23,731	0.62	21,000	0.61	23,731	0.62	21,000	0.61	23,731	0.62	21,000	0.61	23,731	0.62	21,000	0.61
199	0	40,876	1.07	36,555	1.06	40,876	1.07	36,555	1.06	40,876	1.07	36,555	1.06	40,876	1.07	36,555	1.06
199	5	38,291	1.00	34,588	1.00	38,291	1.00	34,588	1.00	38,291	1.00	34,588	1.00	38,291	1.00	34,588	1.00
200	0	77,153	2.01	60,724	1.76	54,202	1.42	41,679	1.21	45,684	1.19	34,626	1.00	58,000	1.51	44,000	1.27
200	5	107,150	2.80	82,898	2.40	64,653	1.69	48,862	1.41	49,429	1.29	36,676	1.06	78,000	2.04	55,000	1.59
201	0	140,198	3.66	106, 129	3.07	80,761	2.11	60,064	1.74	55,534	1.45	40,426	1.17	95,000	2.48	70,000	2.02
2002 (Actio	on plan)	87,985	2.30	68,734	1.99	58,163	1.52	44,424	1.28	47,146	1.23	35,455	1.03	65,297	1.71	48,108	1.39

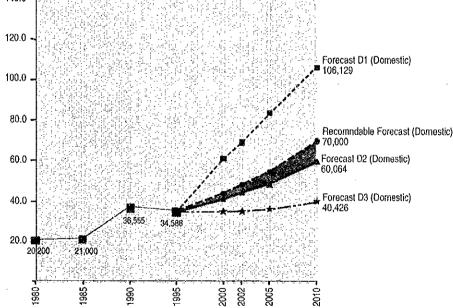
Note: A (left column) shows the total domestic tourism demand including outbound tourism. B (right column) shows domestic hotel arrivals in Mexico.

Source: JICA study team

Figure 5. 1

million 140.0

Forecast of domestic visitor arrivals to hotels



Source: JICA study team

Framework of international tourism to Mexico

A trend analysis method based on the past data (1985-1995) of international visitor arrivals to Mexico was employed for making three forecasts. A multi-regression analysis was also conducted to make one forecast.

a. Projections based on the past trend of international visitors to Mexico

A similar method as the forecast of the domestic tourism was used for the forecasts of the international tourism, employing the past growth rates of international visitor arrivals to Mexico, instead of the growth rates of GDP. The result is shown in Table 5. 3.

Table 5. 3 Growth rates of the past international visitor arrivals to Mexico used for forecasting

	International	5 ye	ars Interval	10 y	rears Interval		15 ye	ars Interval	l
Year	tourists to Mexico(1,00¢	year	Average growth rate (%)	year	Average growth rate		year	Averag growth rat	
1980	12,965.3								
1981	13,189.3								
1982	12,633.6					į		i !	_
1983	13,552.2					Leç	gend of gro	wth rate:	į
1984	12,646.2				i	0	Highest		
1985_	12,850.3	85/80	-0.18			Δ	Average		1
1986	12,258.1	86/81	-1.45				Lowest		j
1987	14,361.3	87/82	2.60			-			
1988	14,140.0	88/83	0.85		<u> </u>			1	
1989	14,964.1	89/84	3.42		į			! :	
1990	17,171.7	90/85	5.97 o	90/85	2.85			ļ 	
1991	16,066.8	91/86	5.56	91/81	1.99		 		
1992	17,146.2	92/87	3.61	92/82	3.10		-	1 i	
1993	16,440.0	93/88	3.06	93/83	1.95			 	
1994	17,181.9	94/89	2.80	94/84	3.11				
1995	20,161.8	95/90	3.26	95/85	4.61	0	95/80	2.99	00
Average)		2.68 ▲		2.94	Δ	<u> </u>	2.99	Δ (

Source: JICA study team

Forecast-F1 (high case)

The past highest growth rate of each period was chosen to estimate the number of international visitor arrivals to Mexico in each period.

Forecast-F2 (middle case)

The past medium (average) growth rate of each period was chosen to estimate the number of international visitor arrivals to Mexico in each period.

Forecast-F3 (the low case)

The past lowest growth rates of each period was chosen to estimate the number of international visitor arrivals to Mexico in each period.

b. Forecast by multi-regression analysis method

A multi-regression method was conducted to provide a forecast, in addition to the three forecasts by the trend analysis as described in the previous section.

Although the FONATUR-IDB study made forecasts considering a single market of USA, the JICA study team made forecasts taking into account of eight international market segments as shown in Table 5. 4.

Independent variables

Independent variables and data sources used for the multi-regression analysis are as follows:

- Population (data source: "World Development Report, 1990-1995", World Bank),

- Disposable income (data source: GDP per capita calculated from the "International Financial Statistics Yearbook, 1995", IMF, but adjusted by the data from "World Development Report, 1992", World Bank),
- Travel costs (data source: IATA's air fares between Mexico and each region/country, the data on air yield used the FONATUR-IDB study, and actual exchange rates of Peso/US\$ by Bank of Mexico),
- Earthquake factor (data source: based on the FONATUR-IDB study),
- Regional factor (based on the preparatory multi-regression analysis using four independent variables of population, disposable incomes, travel costs, and earth-quake factor; this factor implicates affinity between a market region and Mexico from the viewpoint of tourism).

Due to the limitation in data availability, representative countries for GDP and the representative cities for travel cost are chosen as follows:

Table 5. 4 Countries and cities to represent market segments for independent viable

Markets segment	Country that represent region's GDP	City that represents region's transportation costs to Mexico
USA	USA	average costs from Los Angels, New York, Chicago, Miami, Washington and Houston
Paisano	Estimated from statistics on household income of Hispanic families in USA	same as USA
Canada	Canada	Toronto
Europe	France	Paris
Latin America	Argentina	Buenos Aires
Asia and others	Korea	Seoul
Boarder tourism	same as USA	same as USA

The result of the analysis is shown as Forecast-F4.

The result of the regression analysis

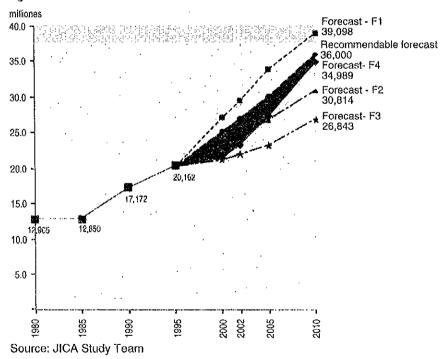
Three forecasts by trend analysis, and one by regression analysis are shown in Table 5. 5 and Figure 5. 2.

Table 5. 5 Forecast s of international visitor arrivals

Descrip	tion	by Past	growth ra	tes of inte	ernational	tourists to	o Mexico	Forec	ast F4	Recon	nnded
		Forec	ast F1	Forec	ast F2	Forec	ast F3	by N	Aulti-	fore	cast
Item	Period	High	case	Mid.	case	Low	case	regre	ession		
Actual growth	1995-2000	5.	97	2.	68	0.	85	0.	96	4.	40
rates of tourism	2001-2005	4.	61	2.	94	1.	95	5.	05	3.	71
in the results	2006-2010	2.	99	2.	99	2.	99	5.	21	3.	71
	Average	4	51	2.	87	1.	93	3.	.72	3.	94
Yea	ır	inflow (x 1000)	changes (year/95		changes (year/95		changes (year/'95		changes (year/'95		changes (year/'95
198	30	12,965	0.64	12,965	0.64	12,965	0.64	12,965	0.64	12,965	0,64
198	35	12,850	0.64	12,850	0.64	12,850	0.64	12,850	0.64	12,850	0.64
199	90	17,172	0.85	17,172	0.85	17,172	0.85	17,172	0.85	17,172	0.85
199	 95	20,162	1.00	20,162	1.00	20,162	1.00	20,162	1.00	20,162	1.00
200	00	26,942	1.34	23,015	1.14	21,036	1.04	21,217	1.05	25,000	1.24
200)5	33,747	1.67	26,597	1.32	23,169	1.15	27,142	1.34	30,000	1.49
201	10	39,098	1.94	30,814	1.53	26,843	1.33	34,989	1.73	36,000	1.79
2002 (Acti	on plan)	29,482	1.46	24,386	1.21	21,865	1.08	23,397	1.16	26,891	1.33

Source: JICA Study Team

Figure 5. 2 Forecast of international visitor arrivals



c. Assessment of forecasts

WTO's forecast for the world tourism was taken as a major criterion to evaluate various forecasts that the JICA study team did. Table 5. 6 shows Mexico's shares of the world tourism for respective forecasts.

- Growth rates of the world tourism market are calculated as shown in (2) of (A).

- (B) shows the number of international visitor arrivals to Mexico in the case that international visitors will grow with the same pace as the growth of the world tourism market and the Mexican tourism will continue to keep the current share in the world tourism market.
- In the bottom line of (b) of each indication, the share of the Mexican tourism to the world tourism is shown being divide the forecast figure of Mexican tourism of each indication (shown in the top line) by figure of world tourism shown in line of (B).

Table 5. 6 Comparison of forecasts of international visitor arrivals

		Items	1995	2000	2005	2010	2002
(A)) WTO Estimates	(1) No. of tourists (million)	551	661	787	937	705
		(2) changes to 1995	1.00	1.20	1.43	1.70	1.28
(B)	Conversion to Mexico Tourism	(3) No. of tourists (x 1,000)	20,162	24,199	28,811	34,303	25,810
	Indication-F1	(4) No. of tourists (x 1,000)	20,162	26,942	33,747	39,098	29,482
	(High case)	change of share (4) / (3)	1.00	1.11	1.17	1.14	1.14
Sign	Indication-F2	(5) No. of tourists (x 1,000)	20,162	23,015	26,597	30,814	24,386
(C) Indications	(Mid. case)	change of share (5) / (3)	1.00	0.95	0.92	0.90	0.94
2	Indication-F3	(6) No. of tourists (x 1,000)	20,162	21,036	23,169	26,843	21,865
<u>ට</u>	(Low case)	change of share (6) / (3)	1.00	0.87	0.80	0.78	0.85
	Indication-F4	(6) No. of tourists (x 1,000)	20,162	21,144	27,052	34,879	23,317
	(Regression analysis)	change of share (6) / (3)	1.00	0.87	0.94	1.02	0.90
Rec	ommendation	(8) No. of tourists (x 1,000)	20,162	25,000	30,000	36,000	26,891
		change of share (8) / (3)	1.00	1.03	1.04	1.05	1.04

Note: The numbers of tourism of WTO estimates in 2002 is calculated from the average growth rate between 1994 and 2010.

Source: JICA Study Team

Comments on each forecast are as follows:

- Forecast-F1 shows that Mexico's share of the world tourism market (the world's total number of visitor arrivals) becomes 14 % higher than the present. It might require great concerted efforts of SECTUR and other agencies. Such high growth rates and such high shares of Mexico seem too ambitious considering that market competition in world tourism would become much tougher than the present,
- Forecast-F2 and F3 assume that Mexico loses its market competitiveness, and
- Forecast-F4 takes the current level of shares in 2010, although the shares decrease in short and middle terms.

The followings are considered to select a recommended forecast for the development framework:

- Mexican tourism should keep to take its share of the world tourism market. In this sense, Forecast-F2 and F3 are inappropriate for the development framework, and
- Forecast-F4 shows moderate expansion which still requires certain efforts.

d. Framework of the international tourism

As shown in Table 5. 6 and Figure 5. 2, the study team recommends to set a target slightly higher than the figure based on WTO's estimate of the world tourism market (approximately 5.0 % higher than the WTO estimates), considering Mexico's tourism potential as follows:

- Although Mexico has a variety of tourism resources that could be appreciated by long-haul international visitors, most of them have not yet been properly exploited to develop tourism products, probably due to the past emphases on beach resort tourism for the North American market.
- The current Tourism Sector Development Program, however, stresses the importance of utilization of tourism resources other than beaches, and upgrading of the Mexican tourism sector with various policies.
- SECTUR's inter-agency coordination and various attempts by public-private joint ventures are expected to boost the Mexican tourism in the near future.

e. Forecasts by regional market segment

The number of international visitor arrivals by regional market segment are estimated by regression analysis as shown in Table 5. 7.

Table 5. 7 International visitor arrivals to Mexico for each segment

Descr	ription	US	SA	Pisa	ino	Can	ada	Eur	ope	Latin A	merica	Asia and	Others	Border 1	lourism
Annuai	1995-2000	3.5	96	4.	95	9.	93	13	.68	8.	33	21.	90	3.8	35
growth	2001-2005	3.	65	2.	54	2.	71	8.	86	4.	12	20.	19	3.5	51
rates	2006-2010	3.	49	2.	41	2.	55	8.	.69	3.	96	20.	01	3.3	36
	Average	3.	70	3.	30	5.	01	. 10).38	5.	45	20	.70	3.9	57
Υε	ear		changes (year/95)	1	changes year/'95)		changes (year/'95)	l	changes (year/95)		changes year/95)		changes year/95)	intlow (x 1000)(changes year/95)
19	980	2,947	0.60	496	0.27	170	0.87	241	0.71	254	0.57	37	0.93	8,821	0.71
19	985	3,037	0.62	504	0.27	193	0.98	146	0.43	301	0.68	27	0.66	8,643	0.70
19	990	4,144	0.84	1,454	0.79	294	1.49	189	0.56	277	0.62	36	0.90	10,779	0.87
1:	995	4,922	1.00	1,841	1.00	197	1.00	339	1.00	445	1.00	40	1.00	12,378	1.00
20	000	5,976	1.21	2,345	1.27	316	1.61	643	1.90	664	1.49	108	2.69	14,948	1.21
2	005	7,149	1.45	2,659	1.44	361	1.83	983	2.90	812	1.83	271	6.75	17,766	1.44
2	010	8,488	1.72	2,995	1.63	409	2.08	1,490	4.40	986	2.22	674	16.81	20,958	1.69
2002 (A	ction plan)	6,425	1.31	2,467	1.34	333	1.69	762	2.25	720	1.62	156	3.89	16,028	1.29

Source: JICA study team

5.1.2. Framework at destination/state level

Development frameworks for the three study areas/state are set by distributing the national total of visitor arrivals to each state, by multi-regression analyses. Assumptions for the distribution are as follows:

- The study is based on the recommended forecast of domestic hotel arrivals and international visitor arrivals to Mexico,
- An index to show attractiveness of tourism regions/states was employed as one of the criteria to distribute the domestic and international demands,
- Figures from the FONATUR-IDB study were used to determine current attractiveness of each region/state. The attractiveness in 2010 is estimated by the JICA study team,
- Assessment of attractiveness in the future is based on the total sum of attractiveness in a state rather than the number of tourism resources. Since the details of the evaluation criteria of the FONATUR-IDB study is not provided at present, some discrepancies between the current and the future may occur, and
- Since data of the visitor trip distribution among the states/destinations were not available, the trip distributions was taken from the FONATUR-IDB study which was conducted for 10 regions. The JICA study team used a 2-step method for

distribution of tourism demand: first, distribution to the region, and second, distribution from the region to the states.

The basic flows of the analysis and the future forecasts to the 3 study areas/states, as well as other states are shown below.

(1) Distribution of domestic visitor arrivals

As shown in Figure 5. 3, the increased portion of the domestic hotel arrivals in the regions (10 regions in the FONATUR-IDB study) are distributed using a multi-regression analysis (Distribution Model-D1). The model adopts factors of attractiveness, travel distance and time. Travel demand in each region/state in 2010 was estimated by the trends of population and GRDP in the regions.

Another regression analysis (Distribution Model-D2) is conducted to distribute the increased arrivals to each state in parallel with the Model-D1 analysis. Model-D2 analysis intends to get an allocation rate to the state for redistribution of the calculated arrivals to the tourism region by Model-D1 analysis.

The distributed domestic hotel arrivals to every state are shown in Table 5. 8.

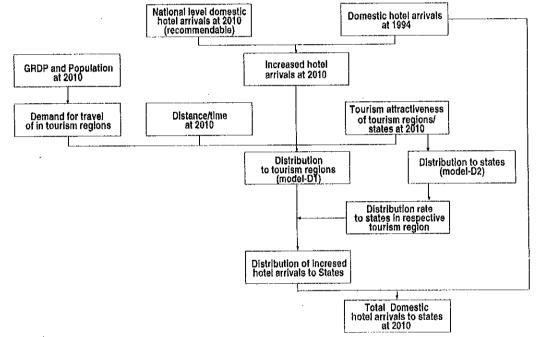


Figure 5. 3 Flow of distribution of domestic hotel arrival to states

Source: JICA study team

(2) Distribution of international visitor arrivals

The procedure flow for distributing Mexico's international visitor arrivals for the states are shown in Figure 5. 4. Increased number of Mexico's international visitor arrivals between 1994 and 2010 was distributed to states by using multi-regression models.

The multi-regression analysis, Distribution Model-F1, estimates the growth rates of Mexico's international visitor arrivals from each market segment (10 regions, namely, USA, Paisano, Canada, Europe, Latin America, Asia and Border).

Distribution Model-F2 is based on attractiveness of states. It aims at estimating the distribution of international visitor arrivals to respective states. It re-distributes the visitor arrivals to regions which are calculated by the Model-F1.

The number of Mexican's hotel arrivals and the international visitor arrivals to Mexico distributed to every state are shown in Table 5. 8.

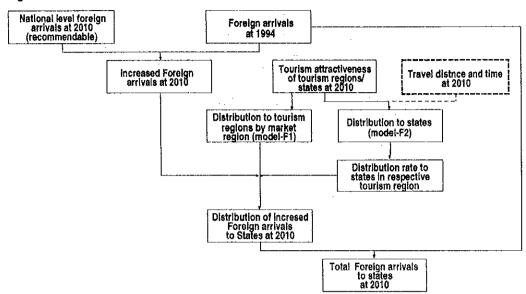


Figure 5. 4 Flow of distribution of international visitor arrivals to Mexico to states

Note:

The item in the dotted frame is not applied in the analysis due to the limitation of available data, although this item may be minor factor for the international visitors distribution since most of them are determined their travel itinerary before coming to Mexico.

Source: JICA study team

Numbers of domestic and international arrivals to hotels by state in 2010 Table 5. 8

-	State	•			ibution			tribution
	State	Rgn	Hotel arrival	s (x 1,000)	Increase	Tourist arrival	ls (x 1,000)	Increase
		1	1994	2010	(times)	1994	2010	(times)
1	Baja California	ı	1,474.4	2,037.6	1.38	754.7	2,681.8	3.55
2	B.C.Sur	i	253.5	733.2	2.89	402.2	3,367.9	8.37
3	Sonora	I	964.8	2,435.9	2.52	148.0	835.4	5.64
4	Sinaloa		1,223.0	2,307.3	1.89	261.7	1,070.5	4.09
5	Chihuahua	M	1,371.5	3,390.7	2.47	196.8	1,247.2	6.34
6	Coahuila		629.9	1,448.6	2.30	66.4	523.8	7.88
7	Durango		633.4	1,360.0	2.15	14.8	139.8	9.44
8	Nuevo Leon	IV	939.7	1,797.3	1.91	158.2	291.2	1.84
9	Tamaulipas	-	1,090.9	2,249.7	2.06	79.2	705.2	8.91
10	Zacatecas	٧	498.2	1,103.5	2.21	26.6	140.0	5.27
11	Aguascalientes	:	307.3	805.8	2.62	14.1	79.8	5.65
12	San Luis Potosi		570.2	1,272.2	2.23	54.6	302.0	5.53
13	Nayarit	VI	353.3	1,466.2	4.15	107.8	323.6	3.00
14	Jalisco	Ì	3,247.0	5,979.3	1.84	630.4	2,615.5	4,15
15	Colima		447.0	1,582.8	3.54	52.5	243.4	4.64
16	Michoacan		1,791.6	3,127.9	1.75	90.7	264.3	2.91
17	Guanajuato	VII	1,096.4	2,173.0	1.98	84.8	591.7	6.98
18	Queretaro		519.7	1,700.2	3.27	12.6	458.3	36.47
19	Hidalgo		747.0	1,285.1	1.72	13.5	104.3	7.72
20	Mexico		1,033.6	2,170.0	2.10	77.2	908.8	11.77
21	D.F.		3,830.5	6,833.8	1.78	1,251.9	3,387.7	2.71
22	Morelos	ļ	873.8	1,893.6	2.17	47.3	555.5	11.73
23	Tlaxcala		218.4	708.5	3.24	2.1	111.1	54.20
24	Puebla		868.5	2,002.2	2.31	57.6	392.3	6.80
25	Veracruz	VIII	3,358.7	7,063.6	2.10	168.3	773.6	4.60
26	Guerrero	X	2,030.1	3,691.3	1.82	475.6	2,445.1	5.14
27	Oaxaca	!	709.8	2,260.8	3.18	193.4	551.4	2.85
28	Tabasco	Х	432.8	730.5	1.69	32.8	389.6	11.86
29	Chiapas		552.9	1,355.5	2.45	174.5	1,505.4	8.63
30	Campeche		361.7	827.2	2.29	61.5	661.7	10.76
31	Yucatan		403.1	762.5	1.89	270.6	1,311.6	4.85
32	Quintana Roo		655.8	1,444.6	2.20	1,791.7	7,020.5	3.92
	Total		33,488.6	70,000.0	2.09	7,774.1	36,000.0	4.63

Note: Above figures include visitor arrivals to all types of accommodation. Source: JICA study team

5.2. Frameworks of tourism related facilities

Based on the framework of visitor arrivals described previously, this section presents the framework of tourism related facilities.

The framework of tourism related facilities should include several kinds of indicators, such as accommodation, employment and consumption. These indicators are used for the basis of estimating the scales of required tourism facilities, training, infrastructure and so on.

Since the data obtained through the study are rather limited, this framework study needed to confine to only one parameter, the number of hotel rooms, in order to keep data continuity and compatibility. This is used as the indicator for tourism related facilities. This methodology is applicable to calculation of other tourism related facilities.

5.2.1. Framework of hotel rooms

In this section present the study of setting requirement of hotel rooms in Mexico as well as for each of the state according to the recommended volume of the tourism both international to and domestic in Mexico set in the Section 2.3 of this report.

The parameters on hotel rooms are defined as the number of star-hotels (those with one-star and over), because they are more important than others (economy class and without-classification) in tourism.

Hotels are classified into the following three categories, according to the existing hotel classification system:

- High class: special category, grand tourism and 5 stars,

Middle class: 4 stars and 3 stars,
Low class: 2 stars and 1 star.

The framework of hotel rooms needs to comprise the following parameters:

- Numbers of total hotel rooms in the whole country of Mexico in 2000, 2005 and 2010.
- Numbers of hotel rooms by hotel class in the whole country of Mexico in 2000, 2005 and 2010,
- Numbers of hotel rooms by hotel class and state in 2010.

(1) Number of hotel rooms in the whole country of Mexico in 2000, 2005 and 2010

a. Methodology and basic assumptions

Basic ideas and major assumptions for estimation of the number of hotel rooms in the whole country of Mexico are as follows:

- Firstly, the numbers of guest-nights by domestic and international visitors are estimated. Secondly, the total number of guest-nights is estimated by adding these figures. Lastly, required numbers of hotel rooms are calculated by applying the average occupancy ratio and the average number of guest per room,
- The number of annual domestic hotel arrivals at those of economy class and without-classification in the future is assumed to be 4 million, which is approximately the same as the estimated one based on SECTUR's data in the recent years. Therefore, the number of domestic visitor arrivals at one star and over hotels is estimated by subtracting 4 million from the overall domestic visitor arrivals.
- The international visitors to Mexico have different behaviors by market segment, such as length of stay, ratio of using hotels. Therefore, the estimation of the required number of hotel rooms, which should be based on the visitor arrivals to hotels, has to take into consideration such differences by market segment.

- Table 5. 9 shows the conversion of the numbers of Mexico's international visitor arrivals to the numbers of hotel arrivals for each market segment. The number of domestic and international visitors are calculated from their hotel arrivals by using the average length of stay at hotels.
- Proportion hotel rooms by hotel class, which are to be constructed in the future is set based on the trend in recent years,

In this framework study, both occupancy ratios and required numbers of hotel rooms are determined simultaneously by trial and error. The followings are assumed as approximate targets in this process: Occupancy ratio is around 60% and annual increment of the number of hotel rooms is less than 20,000 rooms, according to the past data. This means that both of them are not simple projections but targets of tourism policy.

Table 5, 9 Conversion of international visitor arrivals to hotel arrivals

		Т	ourist arri	vals (24 h	ors exce	ot boarder)	Border	
Description	Year	South bound	West bound	North bound	East bound	Paisano	Total	(24-72 hours)	Total
(a) Forecast original international tourists	1995	5,119	339	445	40	1,841	7,784	12,378	20,162
to Mexico (Recommodable)	2000	6,292	643	664	108	2,345	10,052	14,948	25,000
•	2005	7,510	983	812	271	2,659	12,235	17,766	30,000
	2010	8,897	1490	986	674	2,995	15,042	20,958	36,000
	(2002)	6,758	762	720	156	2,467	10,863	16,028	26,891
(1) Nights spent in Mexico		9.8	21.0	12.8	16.1	11.8		1.5	
(2) Ratio of stay nights to hotels in Mexico	(%)	39.3	47.7	44.5	57.3	13.9		3.5	
(3) Average stay nights in a hotel		3.39	3.39	3.39	3.39	3.39		1.5	
(4) Conversion rate from "International tourists" to "Hotel arrivals" (1) x (2)/(3)		1.14	2.95	1.68	2.71	0.49		0.035	
(b) Converted hotel arrivals from inter-	1995	5,843	999	746	109	895	8,592	438	9,030
national tourists to Mexico ((a) x (4))	2000	7,182	1,897	1,113	293	1,139	11,625	747	12,372
	2005	8,573	2,900	1,361	735	1,292	14,861	888	15,750
	2010	10,156	4,399	1,653	1,830	1,455	19,493	1,048	20,541
÷	(2002)	7,714	2,250	1,207	424	1,199	12,794	801	13,595

Source: SECTUR/JICA Study Team

b. Results

Table 5. 10 shows the number of hotel rooms in the future. The total hotel rooms required in 2010 is about 490,000 (1.69 times of 1995) when a target average occupancy rate of 60% is attained.

Table 5. 10 Required numbers of star class hotel rooms in 2000, 2005 and 2010

	Description	1995	2000	2005	2010	2010/1995
Bed-	night					:
Dor	mestic	İ	:			: -
(1)	Hotel arrivals (x1,000)	30,810	40,000	51,000	66,000	2.14
(2)	Bed nights (x1,000)	58,539	76,000	96,900	125,000	2.14
Inte	rnational					:
(3)	Hotel arrivals (x1,000)	9,211	12,372	15,750	20,541	2.23
	General tourists	8,592	11,625	14,861	19,493	2.27
	Border tourists	619	747	888	1,048	1.71
(4)	Bed nights (x1,000)	30,055	40,529	51,711	67,635	2.25
	General tourists	29,126	39,409	50,379	66,081	2.27
	Border tourists	928	1,120	1,332	1,572	1.69
Dor	nestic and International		_			
(5)	Bed nights (x1,000)	88,594	116,529	148,611	192,635	2.17
(6)	Guest persons per room	1.80	1.80	1.80	1.80	1.00
Hotel						:
(7)	Occupancy Rate (%)	47.1	50.7	54.9	59.9	1.27
(8)	Hotel Rooms (rooms)	289,874	350,000	410,000	490,000	1.69
	High class (5 stars and over)	75,530	89,159	104,159	124,159	1.64
	Middle class (3 and 4 stars)	128,122	160,911	196,911	244,911	1.91
	Low class (1 and 2 stars)	96,222	99,930	108,930	120,930	1.62
(9)	Annual increament of hotel rooms (rooms)		12,133	12,000	16,000	

Source:

JICA Study Team

(2) Number of hotel rooms by state in 2010

Basic ideas and major assumptions for estimation of the number of hotel rooms by state are as follows:

- The estimation method is basically the same as that used for the whole country of Mexico,
- The numbers of guest-nights for economy class and without-classification are assumed to be proportional to the total numbers of guest-nights,
- The proportion of hotel classes in each state is assumed based on the past trend in each state.

The result is shown in Table 5. 11.

Table 5. 11 Requirement of hotel rooms of star hotels by state in 2010

	State		199	15			201	0		1995 - 2	2010
		High	Middle	Low	Total	High	Middle	Low	Total		Change
1.	B.California	2,384	5,688	2,201	10,273	3,441	8,307	3,024	14,772	4,499	1.44
2.	B.C.Sur	3,366	1,975	747	6,088	6,769	7,308	1,730	15,807	9,719	2.60
3.	Sonora	982	5,173	1,571	7,726	2,266	8,666	2,634	13,566	5,840	1.76
4.	Sinaloa	2,508	5,179	2,525	10,212	4,164	9,283	3,815	17,263	7,051	1.69
5.	Chihuahua	1,630	4,377	2,720	8,727	2,621	6,833	3,492	12,946	4,219	1.48
6.	Coahuila	1,038	2,996	852	4,886	1,503	4,261	1,237	7,001	2,115	1.43
7.	Durango	320	959	1,575	2,854	612	1,831	1,870	4,313	1,459	1.51
8.	Nuevo Leon	2,622	3,163	1,273	7,058	3,222	4,510	1,643	9,375	2,317	1.33
9.	Tamaulipas	598	5,011	3,938	9,547	1,342	7,184	4,762	13,287	3,740	1.39
10.	Zacatecas	209	1,538	1,363	3,110	445	2,228	1,625	4,298	1,188	1.38
11.	Aguas.	535	1,244	731	2,510	1,165	2,805	1,222	5,191	2,681	2.07
12.	S.Luis Potosi	833	1,985	1,169	3,987	1,502	3,643	1,690	6,834	2,847	1.71
13.	Nayarit	1,164	1,972	1,482	4,618	2,542	4,933	2,447	9,922	5,304	2.15
14.	Jalisco	8,442	10,245	9,338	28,025	12,107	19,328	12,193	43,628	15,603	1.56
15.	Colima	712	2,584	799	4,095	1,895	5,322	1,613	8,830	4,735	2.16
16.	Michoacan	512	5,328	3,915	9,755	1,404	7,714	4,694	13,813	4,058	
17.	Guanajuato	1,284	5,521	2,341	9,146	1,930	7,278	2,876	12,084	2,938	1.32
18.	Queretaro	1,224	2,195	1,196	4,615	2,470	5,282	2,166	9,918	5,303	2.15
19.	Hidalgo	271	1,460	1,810	3,541	577	2,353	2,149	5,078	1,537	1.43
20.	Mexico	1,040	4,047	2,094	7,181	2,794	8,394	3,460	14,648	7,467	2.04
21.	D.Federal	10,228	13,894	14,240	38,362	15,923	28,464	18,748	63,135	24,773	1.65
22.	Morelos	1,045	1,920	2,721	5,686	1,999	4,175	3,627	9,801	4,115	1.72
23.	Tlaxcala	169	507	486	1,162	565	1,663	924	3,152	1,990	2.71
24.	Puebla	897	2,813	2,765	6,475	1,740	5,051	3,536	10,327	3,852	1.59
25.	Veracruz	2,083	7,851	7,112	17,046	5,301	16,459	9,923	31,683	14,637	1.86
26.	Guerrero	8,611	9,432	3,648	21,691	13,464	19,112	5,284	37,859	16,168	1.75
27.	Oaxaca	2,627	3,736	3,468	9,831	3,989	7,112	4,529	15,631	5,800	
28.	Tabasco	396	1,473	1,180	3,049	837	2,593	1,546	4,977	1,928	1.63
29.	Chiapas	423	2,619	2,892		1,189	4,579	3,499	9,267	3,333	
30.	Campeche	0	1,305	801	2,106	458	2,550	1,180	4,187	2,081	1.99
31.	Yucatan	1,154	2,642	1,684	5,480	1,514	3,533	1,964	7,011	1,531	1.28
32.	Q.Roo	16,223	7,290	1,585	25,098	23,816	22,436	4,145	50,397	25,299	
	Total	75,530	128,122	86,222	289,874	125,562	245,191	119,247	490,000	200,126	1.69

Source: JICA study team

5.2.2. Framework of hotel employees

(1) General

Tourism industries including the hotel industry are labor-intensive. Although the hotel industry is capital-intensive in one sense, this section focuses on labor-intensive aspects of the hotel industry. And the required number of hotel employees is provisionally examined due to the limited availability of data.

General description of hotel employees per room

The number of hotel employees per hotel room is a basic parameter for planning, of which general conditions are briefly presented below.

In developed countries, the number of hotel employees per hotel room (EPR) is around 1.0. This level of employment is possible by introducing labor-saving systems including advanced systems of computer and intensive training of employees. Socio-economic background of the low EPR countries are as follows:

- High labor costs make it profitable to introduce such labor-saving system, and
- Higher education levels of people are available, and job opportunities are fairly large.

On the contrary, in certain developing countries where no labor-saving system is introduced, the conditions of two employees per room are not so rare.

(2) Existing conditions of hotel employment in Mexico

Statistics of hotel facilities, which has been prepared by SECTUR, are not so reliable in terms of continuity and consistency.

On the other hand, statistics of employment has been prepared by INEGI under the Economic Census (Censos Economicos) in 1988 and 1993. Both the statistics of the whole country and regions are published, except regional statistics in 1993. However, as for statistics of the whole country, the data on occupation is not well prepared.

The data of EPR (The number of hotel employees per hotel room) in the six tourism destinations in 1988 was prepared by the JICA study team as shown in Table 5. 12. The figures are distributed between 1.11 and 1.71 with the average of 1.22.

Table 5, 12 Employees of star hotels per room in 1988

Destination	(A)Hotel rooms*	· · (B)Employee	(C)=(B)/(A)
Los Cabos	1,672	2,852	1.71
Mazatlan	7,468	9,431	1.26
P.Vallarta	7,036	8,597	1.22
Acapulco	16,607	18,514	1.11
Huatulco	592	774	1,31
Cancun	11,891	15,272	1.28
Total	45,266	55,440	1.22

Note: *: Hotels of 1 star and over is included

Source: Hotel rooms: SECTUR JICA Study Team, Employee: Censos Economics, INEGI

The EPR figure of 1.22 is considered rather low, and it might be reflected on poor quality of services found in Mexico's hotels. It is considered that the service levels with 1.5 EPR are categorized not bad in Mexico. The following conditions were assumed to estimate the required numbers of hotel employees.

1.5 EPR: to be achieved by 2002, since required to respond to the current criticism against poor service levels of hotels in Mexico.

1.2 EPR: to be achieved in 2010, because the ability of employees will be improved and some labor-saving system will be introduced to a certain

degree.

(3) Results and implications

The required number of employees is estimated as shown in Table 5. 13.

In 2010, the number of required hotel employees in the whole country is estimated to be 588,000.

The average annual increment of hotel employees from 1995 to 2002 is 30,500. The number seems rather high, but the employment increase in the hotel industry is required to improve the service level of hotels in Mexico. The annual increase of 3,400 employees will be required from 2003 to 2010, with the conditions that some labor-saving systems are introduced and employees' ability is improved through efforts at education and training both in the public sectors and in the private sector.

Table 5. 13 Further requirement of star class hotel employees by/in 2010

description		1995	2000	2002	2005	2010
Required Hotel Rooms	(rooms)	289,874	350,000	374,000	410,000	490,00
Employee per room	(persons/room)	1.2	1.4	1.5	1.4	1.2
Required employees	(persons)	347,800	490,000	561,000	574,000	588,00
Average Annual increment	(persons/year)	2	8,400 3	5,500 4	300 2	,800

Source: JICA Study Team

The employment in other sub-categories of the tourism sector is also required to increase in the similar proportion as that of hotel employment. The large number of new employment certainly contributes to increase of job opportunities in Mexico.

The increase of employment opportunities requires to expand the capacity of manpower training. Otherwise, Mexico's tourism sector might lose its competitive power in the international tourism market. Among training programs to be provided, the education of manager class should not be neglected. In addition, the collaboration of employees between different sections is also a priority area which needs improvement. Chapter 6.

Environment and social considerations

6. Environmental and social considerations

6.1. Natural and urban environmental considerations

6.1.1. Institutional framework concerning natural and urban environment

(1) Introduction

This section will provide basic information on the institutional framework for environmental administration, which is related to tourism development. In the next section, general environmental issues around tourism development will be reviewed. Furthermore, in Volume Two, environmental conditions and problems specific to several tourism destinations will be discussed.

(2) National environmental policy

Among the objectives of the new national development plan are economic growth and sustainable development, including environmental sustainability. Immediate objectives of the national development plan include encouragement of respecting norms and standards of environmental protection. In relation to poverty alleviation, which is also one of the immediate objectives, the national plan recognizes the importance of providing basic infrastructure, such as water supply and sewage treatment. The national development plan also puts emphasis on optimal landuse and on rehabilitation of polluted urban environment.

(3) Environmental law and institutions

In January of 1988, a new general law of environment, Ley General del Equilibrio Ecologico y la Proteccion al Ambiente (LGEEPA), was established. The new environmental law gives federal and local governments formal power for preventing and regulating environmental pollution, based on which the following new measures are introduced:

- Environmental impact assessment (EIA),
- National, regional and local ecological ordinances,
- Participation of state and municipality governments, and
- Participation of local people

Having experienced a series of restructuring, at present INE, PROFEPA and Comicion Nacional del Agua (CNA or National Water Commission) are under Secretaria de Medio Ambiente, Recursos Naturales y Pesca (SEMARNAP, or Secretariat(=Ministry) of Environment, Natural resources and Fishing). Each of these federal agencies still plays an important role in formulating and implementing environmental policies and protection.

(4) Pollution control and environmental monitoring

Environmental monitoring is very important for effective environmental management, including pollution control activities. Federal Agency for Environmental Protection (PROFEPA), National Water Commission (CNA), and Ministry of Health (SS) are to fulfill the needs and tasks of environmental monitoring.

However, these agencies have different missions. PROFEPA watches violations of the federal environmental law and regulations, including development projects. On the other hand, CNA monitors water quality of sources of water supply. SS is oriented to environmental health of residential areas, as well as working conditions in manufacturing industries. As a result, the water pollution of sea and lagoons has not been regularly monitored by any federal government agencies. That is, less attention has been paid to the environment of sea and lagoons which is essential tourism resources.

In most bathing areas of beach resorts in Mexico, almost no regular monitoring has been done. Among a few exceptions is the effort at sea water quality monitoring by a researchers' group in Puerto Vallarta's Banderas Bay. The monitoring effort is basically supported by chemical scientists and laboratory equipment of Mexican Navy, as well as by university professors/students volunteers.

Recently, CNA recognizes the importance of monitoring the water of see and lagoons, especially in tourism destinations. In fact, CNA conducted an evaluation study of water quality of Nichupte Lagoon in Cancun in 1992. Since then a local branch office of CNA has conducted environmental monitoring of sea and lagoon water in tourism destinations. Besides the Nichupte Lagoon, CNA is considering to start environmental monitoring activities in other tourism destinations.

(5) Sewage collection and treatment

In Mexico sewage collection and treatment systems have been constructed and operated in a variety of ways. Below four types of sewage management are reviewed.

a. FONATUR's sewage treatment system

For its own development projects of large-scale tourist areas, FONATUR has prepared its own sewage collection and treatment systems. After the development stages, FONATUR has operated and maintained the sewage systems, by using its subsidiary company, in order to keep high standards of services and quality of tourism destinations. However, under increasing tendency of privatization in Mexico, FONATUR is now faced with budget reduction from the central government and is required to increase its efficiency. So FONATUR is considering to transfer its existing plants to municipality governments or private companies.

b. Hotels' own sewage treatment system

In some special cases, such as in Los Cabos Corridor, hotels are required for having their own sewage treatment plants. In this case, treated water is utilized for irrigating their gardens and golf courses.

c. Local governments' sewage treatment system

State and municipal governments are supposed to provide sewage systems to their people. However, the subsidy given to states or municipalities by the federal government is much smaller than the required costs for constructing appropriate sewage treatment systems.

The federal government has made efforts at encouraging local governments by giving credits for construction of sewage treatment plants in urban areas. On the one hand, CNA has assisted planning and design of sewage treatment plants. On the other hand, Banco Nacional de Obras y Servicio Publicos (BANOBRAS) gives loans to local governments for construction of sewage systems. Table 6. 1 shows relatively rapid increase of the number of municipal waste treatment plants and their capacity. However, the efforts have not kept up with rapid urbanization of most of tourism destinations.

Table 6, 1 Increase of municipal waste treatment plants

Year	Number of Plants	Volume of Treated Sewage (m3/sec.)		
1988	223	14.0		
1989	256	15.2		
1990	310	19.3		
1991	361	25.1		
1992	577	29.1		
1993	650	34.8		
1994	825	38.4		

Source: Mexico: Informe de la situacion general en materia de equilibrio ecologico y proteccion al ambiente 1993-1994, secretaria de Desarrollo social, instituto nacional de ecologia

Acapulco is one of the typical examples where tourism development has induced rapid urbanization and sewage pollution. Since it has not provided enough sewage services to the increasing local population, Acapulco's quality of tourism destination has deteriorated enormously, causing decline of foreign tourists' arrival.

d. Current regulatory framework for private investment in sewage infrastructure

Sewage regulations have been modified to attract private domestic and foreign investments. Currently 20 states' water laws already accept private participation in sewage system. In fact, Jalisco State's subsidiary company on water, SEAPAL has started involving private company in construction and operation/maintenance of a new sewage treatment plant for Puerto Vallarta Municipality. In the future, in more urban areas, private companies will play larger roles in sewage treatment.

Private involvement is more reasonable in construction and operation of sewage treatment facilities, rather than in construction of sewer collecting systems. The latter is more time consuming and containing uncertain aspects. So it is to be conducted by governments.

(6) Solid waste disposal

Solid waste (garbage) collection and disposal are urban services to be provided by municipal governments. This work is relatively less costly than other urban services, such as water supply, electricity, and sewage systems. Garbage collection is usually subcontracted to private companies, and garbage disposal is done mostly by open dumping. Land acquisition is still easy in most tourism destinations except in Acapulco. Incineration plants of garbage are not yet necessary at present for most of tourism destinations. However, in some cases, open dumping might cause pollution of groundwater and lagoon water.

(7) Environmental impact assessment

The concept of environmental impact assessment got legal foundation in Mexico by establishment of the general law of environment (LGEEPA) in January, 1988. For its actual implementation, a regulation for EIA was also issued in June, 1988.

Most projects of land development, hotel construction, marina development in large-scale tourist facility development are subject to EIA. Those who intend to implement such projects have to submit preventive reports and EIA Reports to Direction General de Normatividad Ambiental of INE. INE reviews a submitted EIA report and decide whether the project should be accepted or not in three forms: 1) to be accepted as it is, 2) to be accepted on certain conditions, and 3) to be rejected.

Since the EIA system started, some tourism projects were rejected by INE and some had to be modified to satisfy the conditions which INE requested. Although private developers tend to complain about delays of project implementation caused by EIA

procedures, the EIA system seems to be effective in respect to asking project owners to take precaution measures against possible environmental deterioration.

(8) Ecological ordinance

a. Objectives

The objective of ecological ordinances is to give certain regulations by which federal and local governments can prevent some development activities from damaging natural environment or guide proper landuse. SEDESOL has been engaged in technical assistance to state and municipal governments in preparing local and regional ecological ordinances.

b. Judicial foundation

The general law of environment (LGEELA) established in 1988 specifies federal and local government's roles in formulating national and local ecological ordinances (Article 8 in LGEELA).

c. Ecological ordinances oriented to tourism development

Depending on actual local conditions, each ecological ordinance is made through coordination among several institutions, such as SEDESOL, SECTUR, FONATUR, state government, municipality government, and other federal agencies.

Local or regional ecological ordinances have been already established in 40 local areas (or regions). Among these, the following 15 ordinances were formulated by active participation of federal government agencies for tourism development, which are SECTUR and FONATUR:

- Corredor Tihuana-Ensenada, B.C.
- Microrregion la Bufadora-Punta Banda, B.C.
- Municipios de Los Cabos, B.C.S.*
- Corredor Los Cabos, B.C.S.*
- Corredor Loreto-Nopolo-Puerto Escondido, B.C.S.
- Presa La Amistad, Coah
- Costa Alegre, Jal.
- Bahia de Banderas, Nav.
- Bahias de Huatulco, Oax.
- Corredor Cancun-Tulum, Q. Roo.*
- Sistema lagunar de Nichupte, Q. Roo.*
- Bahia de San Francisco (Soldado de Cortes, Son.
- Puerto Penasco, Son.
- Microregion de La Pesa, Tamps.
- Panuco, Tamps.-Ver.

Note: Areas with asterisk (*) are in our study areas.

The ordinances delineate ecologically protected areas and certain types of development density of tourist facilities such as hotels in development areas. The following is an example of the legend for landuse regulations set by the ecological ordinance of Corredor Cancun-Tulum:

- Suitable area for ecological protection,
- Suitable area for wildlife conservation, rural development of low-density (below 5 inhabitants/ha. or 1 residence/ha.),
- Suitable area for tourism development of low-density (below 10 rooms/ha.)
- Suitable area for environmentally very restrictive wildlife conservation, not allowing development over 15 rooms/ha.
- Suitable area for urban development of low-density (below 100 rooms/ha.)
- Suitable area for urban development of middle-density (below 300 rooms/ha.)

(9) Natural conservation

a. National system of nature protected areas (SINAP)

The general law of environment delineates the necessity to strengthen the national system of nature protected areas (SINAP).

Objectives of SINAP

- To preserve natural environment, especially fragile ecosystems in different regions,
- To protect endangered wildlife species to keep gene diversity,
- To secure rational use of ecosystems,
- To provide proper areas for scientific investigation of ecosystems,
- To innovate technology enabling rational and sustainable use of natural resources, and
- To protect natural zones, archeological sites, and cultural monuments.

Categories of nature protected areas of SINAP

The major instruments to support SINAP are to specify and manage nature protected areas. There are 9 types of nature protected areas as follows:

- Biosphere Reserve
- Special Biosphere Reserve
- National Park
- Natural Monument
- National Marine Park
- Natural Resources Protection Area
- Protection Area of Flora, Fauna and Aquatic Life
- Urban Park
- Ecological Conservation Zone

The number of nature protected areas was 62 and their areas amount to about 1.2 million ha. in 1988. Since the establishment of the general law of environment in 1988, the federal and local governments have put efforts to expand nature protected areas. As a result, in 1994, Mexico became to have 82 nature protected areas with about 9.7 million ha. At present, many proposal are formulated basically by local initiatives, including local governments and local NGOs.

b. World bank assistance

World Bank is now financially assisting management and institutional building for the following 10 natural reserve areas:

-	Sian Ka'an, Quintana Roo *
	Montes Azules, Chapas

- El Vizcaino, Baja California Sur
- Calakmul, Campeche
- Rio Lagartos, Yucatan
- Isla Conty, Quintana Roo *
- Mariposa Monarca, Edo. Mexico, Michoacan
- Islas del Golfo de California, Baja California
- Sierra de Manantlan, Jalisco, Colima
- El Triunfo, Chiapas

Note: Natural Reserves with asterisk (*) are in our study areas.

Biosphere Reserve Biosphere Reserve Biosphere Reserve Biosphere Reserve Special Biosphere Reserve Special Biosphere Reserve Special Biosphere Reserve

Special Biosphere Reserve Biosphere Reserve Biosphere Reserve

In this field, Mexico needs to accept more international assistances for improving and increasing management efforts in natural protected areas.

c. Existing strategies for utilizing private investors' initiatives for nature conservation

Besides increasing nature protected areas, INE prepares technical information of 66 nature protected areas in order to attract investment proposals from the private sectors. The existing nature protected areas lack economic resources both for scientific investigations and for ecological management. If private investors agree to certain management guidelines, INE intends to give concessions of utilizing nature protected areas for various activities including eco-tourism.

It seems that INE's eagerness to invite private sectors to tourism use of part of nature protected areas tend to overshadow its roles of nature conservation. More steady strategies of involving private sectors even for eco-tourism in nature protected areas are really required. In order to increase INE's input for nature conservation, it might be necessary to utilize external assistance resources of ODA.

(10) Archeological site management for tourism

Mexico is very rich in archeological wealth. INAH has made serious efforts at investigation and restoration of archeological sites. As a result, the number of archeological sites which are open to the public has increased gradually. Of course, INAH has well managed ruins. Sometimes there are disturbances outside archeological sites. Since such ruins are well managed and open to the public, they are attractive to private investors for constructing hotels and condominiums just near the sites.

For example, a hotel is constructed so close to Coba ruins that if those who climb up to the top of one ruin find the hotel disturbing their sights. INAH has learned lessons from this case. Now, INAH tries to secure as much land as possible surrounding ruins, by negotiating with landowners, such as ejidatarios and the federal government. Sometimes, INAH purchase lands large enough surrounding ruins from private landowners in order to keep outside disturbances away from the ruins. By doing so, INAH tries to keep archeological sites in good conditions including their surroundings.

At present, INAH encourages such private investors to consult with INAH in order to improve project design to be appropriate to archeological and natural setting. However, INAH legally cannot intervene in activities outside INAH's archeological sites.

In principle, environment impact assessment (EIA) could play certain roles in such development projects near important archeological sites. INAH should cooperate INE to review EIA reports of the projects related to archeological sites. Furthermore, governments should established a system of legally supported procedures to assess and guide development activities outside archaeological ruins.

6.1.2. Environmental issues in tourism development

(1) Quality deterioration of tourism destinations: urbanization and deterioration of tourism resources

Environmental and social aspects in tourism destinations are closely related to the quality of tourism destinations.

We found most tourism destinations have some environmental and social problems which are related to tourist activities. As shown in Figure 6. 1, the environmental and social problems have been caused by the growth of tourist activities through the process of uncontrolled urbanization. Such environmental and social problems might deteriorate not only the actual quality but also images of tourism destinations.

(2) Attacking urban problems for improvement of quality of tourism destinations

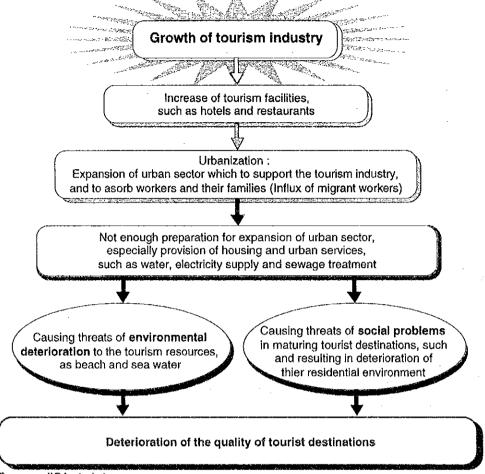
The tendency by which the tourism sector regards urban problems as not their own problems is dangerous. Indeed, the tourism sector or tourism industry is not in

charge of providing urban services for local population, but it is apparent that local population, directly or indirectly, rely on tourism for their livelihood in most major tourism destinations, and local people's living conditions are determinant factors of urban environment which constitutes important part of tourism environment and tourism resources.

Acapulco could provide good lessons to other tourism destinations. It is true that Acapulco is very special in many respects, but "small Acapulco" is found everywhere in Mexico. To improve and sustain quality of tourism destinations is inevitable in Mexican tourism. This seems to be obvious to most of those who play important roles in Mexican tourism. In order to achieve quality improvement of tourism destinations, attacking urban problems is essential. And implementing this strategy could have good effects not only for enhancement of local people's living conditions, but also for enrichment of local culture, which could be eventually another important tourism resources.

To attack urban problems including sewage and garbage problems is essential to sustain the quality of tourism destinations.

Figure 6. 1 Linkages among tourism industry, unplanned urbanization, and deterioration of tourism destination



Source: JICA study team

(3) Tourism sector's efforts for quality improvement of tourism destinations

For improving quality of tourism destinations, there are various ways for the tourism industry and tourists to do. In this section, several options will be shown.

a. Blue flag program

A Spanish non-governmental organization initiated to improve and sustain the quality of beach resorts. Its program, called Blue Flag Program, gives certificates to beach resorts to show that they have satisfied a certain criteria in various aspects as follows:

- 1) Good water quality and monitoring,
- 2) Environmental information and education,
- 3) Various efforts to keep beach and water environment clean,
- 4) Safety and emergency measures,
- 5) Facility access to handicapped people
- 6) Clinic services,
- 7) Prohibition matters,
- 8) Sign boards,

- 9) Potable water availability,
- 10) Access control of motor vehicles, and
- 11) No pets and no camping.

There is a plan to conduct a pilot study to evaluate Cancun, as a model case, for Blue Flag Program. It is necessary to modify the scope of the Blue Flag Program in order to establish a similar type of certificate system for Mexico's tourism sector. But at least the items from 1) to 4) above must be covered by the certificate system for Mexico. It is recommended that all the major beach resorts should have certain types of certificates both for appealing their quality of international markets and for sustaining their quality in terms of environmental safety and environmental protection.

b. Environmental code of conduct for tourism

In many countries, tourist industry associations, governments, and NGOs have some kinds of voluntary codes of conduct concerning environment. Since the tourism industry is composed of various types of firms, in terms of size and activities, it is understandable that self-regulation by having such voluntary codes of conduct is more acceptable and effective than strict enforcement of rules.

UNEP has taken initiatives to encourage more countries to have voluntary environmental codes of conduct for their tourism industry and to implement the codes. Mexico has not yet had such an environmental code of conduct for tourism industry. It is highly recommended to established an environmental codes of conduct specially for the tourism industry.

c. Tourist codes of conduct

Tourists have to be aware that there are some cases in which their misconduct might have serious negative impacts on local environment, including natural and social ones.

In Mexico, SECTUR made a pamphlet named "Codes of Conduct to Enjoy Fully The Unique Experience of Gray -Whale Watching." INAH and other institutions made a pamphlet named "Rules of the Archeological Zone of Sierra de San Francisco." These kinds of pamphlets are available in tourism destinations, and they could be useful tools for appealing to tourists and tour operators in environmental impacts of their misconduct. It is highly recommended that the availability of pamphlets of such tourist codes of conduct should be improved.

d. Citizens' initiatives for improving downtown environment in Cancun

This is a case of citizens' initiatives for improving urban environment, but it is not the case of pollution. A urban council in Cancun has worked out a problem of its downtown area. Before their program started, many restaurants and souvenir shops invaded sidewalks to expand their commercial activities. This prevented people from smooth and lively walking in the downtown. Disturbed by this kind of situations, some good restaurants moved to the hotel zone.

The members of the urban council are composed not only local government officials, business people, but also good citizens who love Cancun. They decided they have to take actions to rehabilitate the downtown to be a lively place for citizens, as well as for tourists. The council ordered the shops who invaded sidewalks to remove their private things from the public space.

In addition to hotel zones, downtown where local people's livelihood are seen are important tourism resources. The living environment of downtown in tourism destinations should be improved in order to diversify tourism resources. Moreover, citizens' initiatives should be enhanced for those purposes.

6.2. Social considerations

6.2.1. Tourism impacts on local communities

Tourism is often compared with fire. It cooks your food but could burn down your house. Tourism has two-way impacts on local communities as summarized below:

(1) Positive impacts

Increase of income

Visitors' expenditure such as transportation, accommodation, food and beverage could be income to the community, and these incomes has a trickle-down effect as well.

Increase of employment

The increase of income results in the increase of local employment that reduces population outflow from local communities.

Boosting of morale

Experiences shared by community members to tackle a tourism project develop a sense of unity among members and boost their morale.

Re-evaluation of own identity

Influx of tourists to a community encourages member's awareness of their own characteristics. Through further exchange with people from the outside, community members come to a better understanding of themselves and re-evaluate their own identity. This, in turn, serves to conserve local traditions that could be tourism resources.

(2) Negative Impacts

Price hike

Influx of tourists could trigger price hike of commodity and land. This affects negatively, in particular, those who do not receive tourism benefit.

Social changes caused by influx of income

Tourism development accompanies the penetration of market economy. This could cause abrupt social changes in rural communities where people have lived almost in self-sufficiency.

Enlarged gap between the rich and the poor

Tourism development could enlarge the income gap between those who enjoy benefits from tourism and those who do not. This could lead to the confrontation between the two groups, and in consequence, affect the community's integrity.

Cultural deterioration

Influx of tourists could introduce westernized life style and sense of values to host communities. This could impair traditional culture contrary to the optimistic view of tourism impacts as previously discussed.

Moral corruption

Hedonistic life style of tourists could adversely affect local people's diligence. Increased opportunities for easy income could corrupt public morals.

As has been discussed, tourism impacts on local communities are two-faced, and depends largely on how tourism is planned by development organizers. Following considerations should be made to guide tourism to a positive direction for host communities.

6.2.2. Co-live with local communities

(1) Co-live with the urban communities

In the past, some vacant areas were developed by FONATUR based on master plans. In these areas, there were only small communities and the development had not brought serious problems. In the early development stage of these cases, small surrounding communities were involved in the tourism sector to supply their agricultural or fisheries products, or to supply labor force for construction. FONATUR made efforts to combine local communities and the tourism sector, and trained local peoples to share profit from the development.

At present, however, there are large urban communities surrounding tourist centers, since tourism and related industries provide huge employment opportunities. In this case, local communities have a function to supply work force for the tourism sector. For workers in tourism sector, the communities are the places to live, rest and recuperate for their work. Therefore, basic social infrastructure should be developed to acquire healthy human resources for the industry.

It is required to develop residential area together with tourism development. In general, land acquisition takes long time to reach agreement among land right holders, developers and affected groups. For future expansion of tourist areas and urban areas, efforts should be made to attain mutual consent among related groups.

(2) Co-live with traditional communities

In case of developing adjacent areas of traditional communities, in particular, indigenous communities, their living space should not be disturbed. The tourism sector, however, provides opportunities to improve their livelihood. Tourists are also interested in their culture.

To connect the both interests, tourism facilities should be developed with certain distance from the communities, financial and technical assistance should be provided for local people with careful attention to protect their social and cultural life.

6.2.3. Conservation of tourism resource and local community

Tourism is supported primarily by tourism resources. They, therefore, should be strictly protected and conserved. These heritage, however, have to be shown to the public in appropriate ways.

A zoning system should be applied or reinforced to the natural and cultural tourism resources to control activities and development, for instance;

- Zone-1: Sanctuary area; no development area which allows only visiting but no development allowed,
- Zone-2: Limited development area for only light structures, and
- Zone-3: Environmental conservation area; some development is allowed subject to maintain the environment.

The zoning should be determined according to the carrying capacity of respective resources and their surroundings and other criteria depending on the characteristics of the resources. An important consideration is to designate a zoning to an specific area as widely as possible, after which a detailed study should follow.

There are many examples of once attractive villages that were deteriorated by tourism. Negative impact of tourism on the social aspect should be carefully considered and prevented.

On the community side, they have the right to receive benefit from their resources. In other words they have the right to sell their lands, their forests, and their environment to upgrade their economic status. Therefore the solution is to protect and conserve the resources by providing them with measures to maintain and

upgrade their economic status without selling their resources. Governmental subsidy had been often provided in the past, but many examples show that the subsidy spoils the people.

It is considered, as the best way at this moment, that the government should support the development of their own industry including tourism to improve their economical status with their own efforts although slow it may seem. Such attempts can be seen in many places in the world.

6.2.4. Measures to protect local communities

Above statement show that it is crucial to provide measures to support local tourism SMEs. Details of the measures are discussed in Chapter 3 of this report. Local communities should not be treated as a source of labor force but as active participants in tourism development by adopting a strategy different from that of large enterprises.

On the contrary, introduction of theme parks as proposed in the same chapter is a measure to protect local communities from mass tourism. This, however, does not imply that any types of tourism should be rejected in rural areas but a certain type of visitors who have more capability to adapt to local norms and traditions should be attracted through marketing activities different from those of beach resort tourism. Ecotourism, which is also detailed in Chapter 3, is the type of tourism that is the most suitable to promote local participation.

Other than the above measures to promote local participation in tourism, Environmental Impact Assessment (EIA), which encompasses not only the assessment of impacts on natural environment but also on social environment, should be conducted when tourism is introduced.



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