
3. Strategy of Los Cabos

3.1. Existing conditions

This tourism region lies along the southern portion of the California Peninsula with the Pacific Ocean to the west and Mar de Cortes to the east in the state of Baja California Sur. This area has attracted attention since FONATUR began large-scale beach resort development in Los Cabos in 1980. Before this development, La Paz, the state capital 220 km to the north, had been a successful resort but has lost some business after the development of Los Cabos. FONATUR has begun development of a large-scale resort in Loreto 360 km to the north of La Paz, but this has not proven to be very successful as yet.

As this is a desert region, there had been practically no development of tourism products outside of the beach resort areas, but in recent years, there was increased interest in whale-watching off the Pacific coast. Across the Mar de Cortes lies Los Mochis, which is the gateway to Copper Canyon in the mountains of Chihuahua, part of FONATUR's tourism master plan for the region.

Figure 10 in the next page shows the existing conditions of Los Cabos tourism region. Los Cabos constitutes of two tourism sub-centers, namely, Cabo San Lucas and San Jose del Cabo. The area between the sub-centers is called Los Cabos Corridor.

Los Cabos - La Paz Resort Belt is a coastal area that includes Los Cabos Corridor , East Cape, and La Paz. Los Cabos - Copper Canyon Circuit is a touring route between Chihuahua and Los Cabos via Los Mochis in the Sinaloa state.

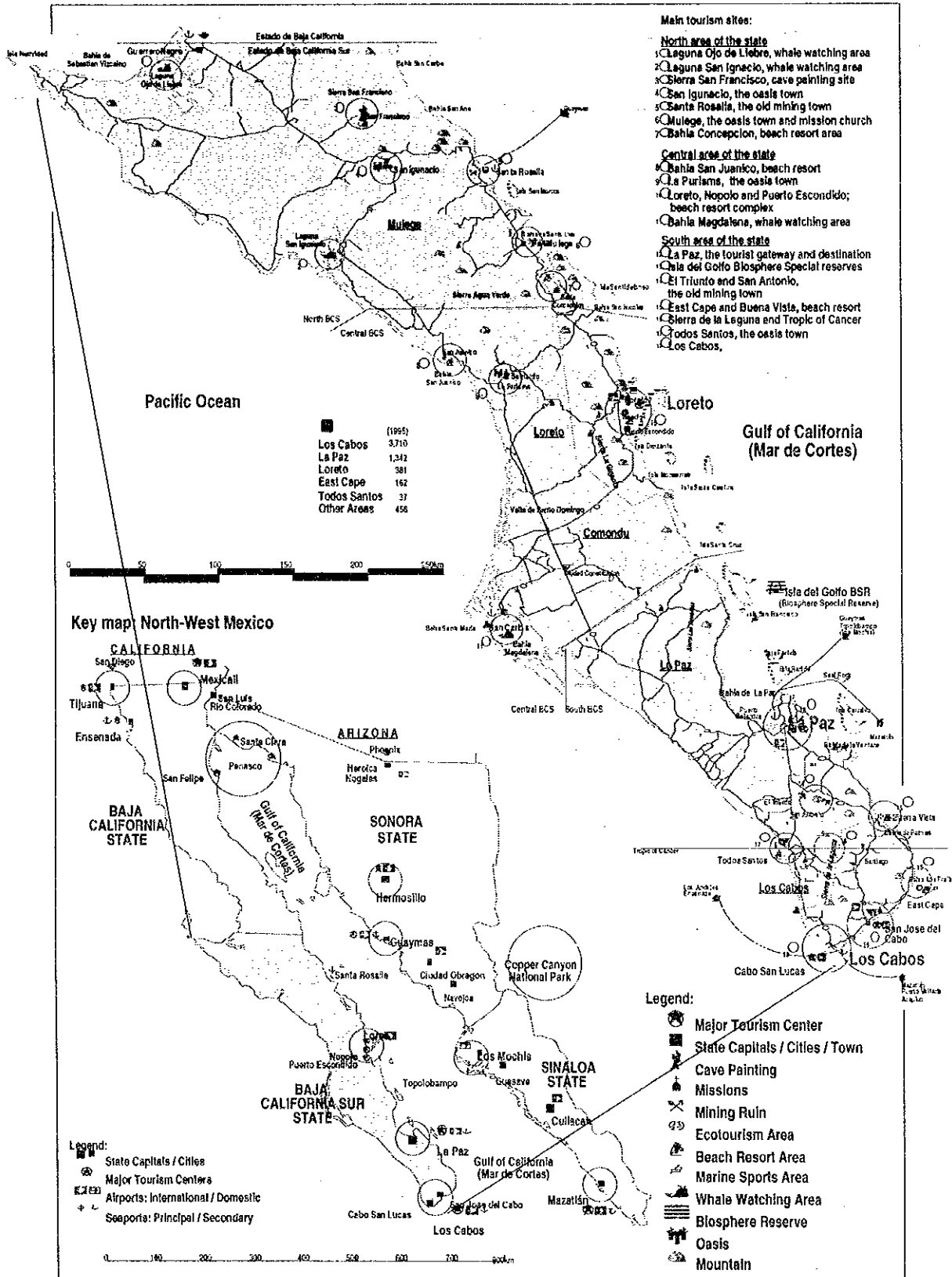
Table 11 defines areas that belong to respective levels of the hierarchical system of the tourism region.

Table 11 **Levels of the study areas**

Level	Coverage	Function
Level-1	Los Cabos; Cabo San Lucas, San Jose del Cabo	Tourism center
Level-2	Los Cabos - La Paz area	One-day trip area
Level-3	Baja California Sur state	Tourism corridor / tourism zone (Short excursion)
Level-4	BCS, Baja California, Sinaloa, Sonola and Chihuahua	Tourism region (One-week tourism circuit)

Source: JICA study team

Figure 10 Existing conditions of Los Cabos tourism region

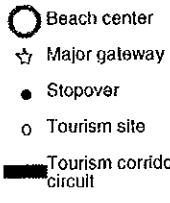
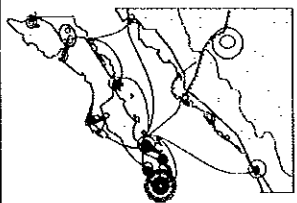
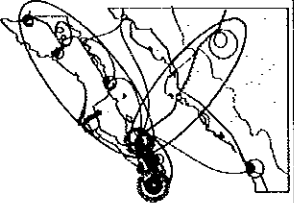
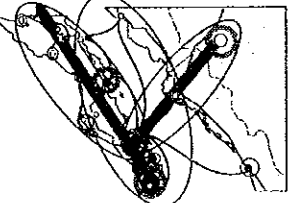


Source: JICA study team

3.2. Assessment of alternative scenarios

Three alternative scenarios for Los Cabos were set as detailed in Figure 11.

Figure 11 Alternative scenarios for Los Cabos tourism region

	Alternative-1	Alternative-2	Alternative-3
Legend: 			
Diversification of tourism products	Diversification level: low - Development of Los Cabos Corridor and East Cape for beaches and activities	Diversification level: medium - Development of Los Cabos-La Paz Resort Belt for beaches/activities - Baja Ecotourism Circuit including whale watching, desert trekking - Mar de Cortes Eco-cruise - La Paz-Copper Canyon Corridor	Diversification level: high - Development of Los Cabos-Loreto Resort Belt for beaches/activities - Baja Ecotourism Circuit including whale watching, desert trekking - Mar de Cortes Eco-cruise - La Paz-Copper Canyon Corridor
Target markets	- Concentration on the traditional market; North America	- Expansion of the traditional market; North America - Development of new markets; Asia, Europe, Domestic, Latin America	- Consolidation of the traditional market; North America - Development of new markets; Asia, Europe, Domestic, Latin America
Tourism administration	- Easiest coordination for development and promotion	- Easy coordination for development and promotion - Coordination of Fondos Mixtos in the state	- Difficult coordination of neighboring states for development - Coordination of Fondos Mixtos in neighboring states
Development/ tourism promotion costs	- Development cost; small - Tourism promotion cost; small - Investment concentration effects; high	- Development costs; medium - Tourism promotion cost; medium - Investment concentration effects; medium	- Development cost; large - Tourism promotion cost; large - Investment concentration effects; low

Source: JICA study team

- After assessment of the scenarios from the view point of resort life cycle, potential and types of tourism resources, and development possibilities, Alternative 2 would be the best scenario for Los Cabos. The rationale for this choice is as follows:
- Los Cabos is at the initial stage of the resort life cycle which generally requires investment on existing tourism centers to assure its further growth.
- There are potential areas for beach resort development within the one-day trip area such as East Cape and La Paz.
- Tourism resources within the one-day trip area are not very competitive, while several nature sites in the tourism corridor area have good tourism potential.
- Copper Canyon located in the tourism circuit area is extremely competitive for the long-haul market, which could not be neglected from the strategy of Los Cabos.
- Los Cabos has a geographical advantage in the Asian market due to better accessibility by way of Los Angeles than other Mexican destinations.
- Considering Los Cabos' potential, Alternative-1 is too humble a scenario while Alternative-3 is not appropriate as Los Cabos is at the initial stage of resort life-cycle and needs investment on existing beach centers. Therefore, Alternative-2 is the best scenario for Los Cabos tourism region.

3.3. Tourism strategy of Los Cabos tourism region

3.3.1. Tourism development and promotion strategy

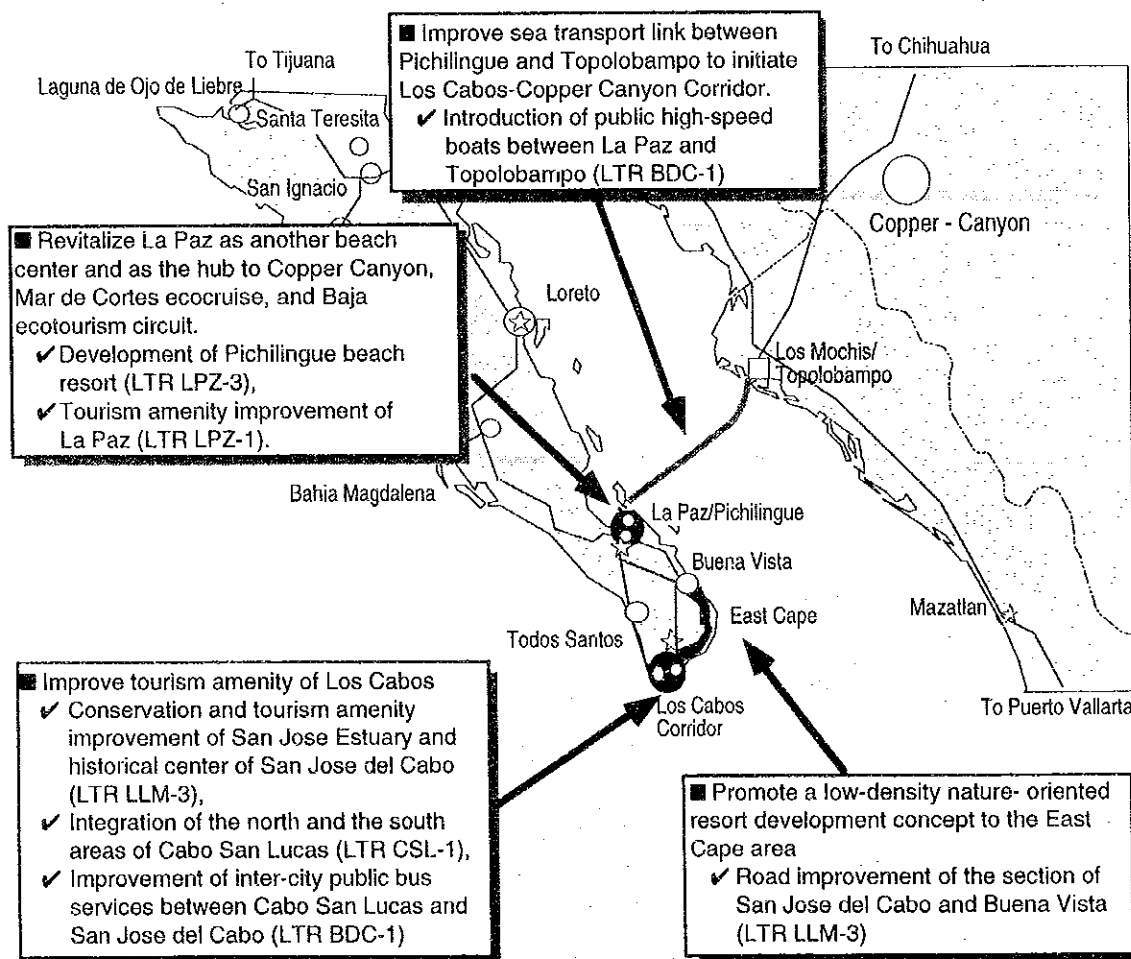
The overall goal of Los Cabos tourism region is to establish Los Cabos - La Paz Resort Belt as the base for beach resort tourism, and Los Cabos - Copper Canyon Corridor as the anchor touring circuit, and to combine them as a competitive set of tourism products.

Since Los Cabos is at the initial stage of the resort life cycle, tourism amenity improvement in Los Cabos Corridor and development of new tourism products within its one-day trip area are important. Integration of tourism and local economy is another issue for tourism destination at the initial stage. In view of increasing nature-orientation among consumers, it is necessary to introduce an alternative type of beach resort development along Mar de Cortes, and to introduce nature-based attractions such as Mar de Cortes Eco-cruise and Baja Ecotourism Circuit.

(1) Action plan strategy by 2002

At the action plan stage, Los Cabos should concentrate its development efforts on the one-day trip area (Level-2). It is also necessary to prepare for the future stage: to develop infrastructure for more nature-oriented development in the East Cape area, and for linkage with Copper Canyon. Revitalization of La Paz is important to improve its hub function for touring circuits that will be stressed in the long-term strategy. Figure 12 details the action plan strategy and action projects.

Figure 12 Action plan strategy of LosCabos tourism region



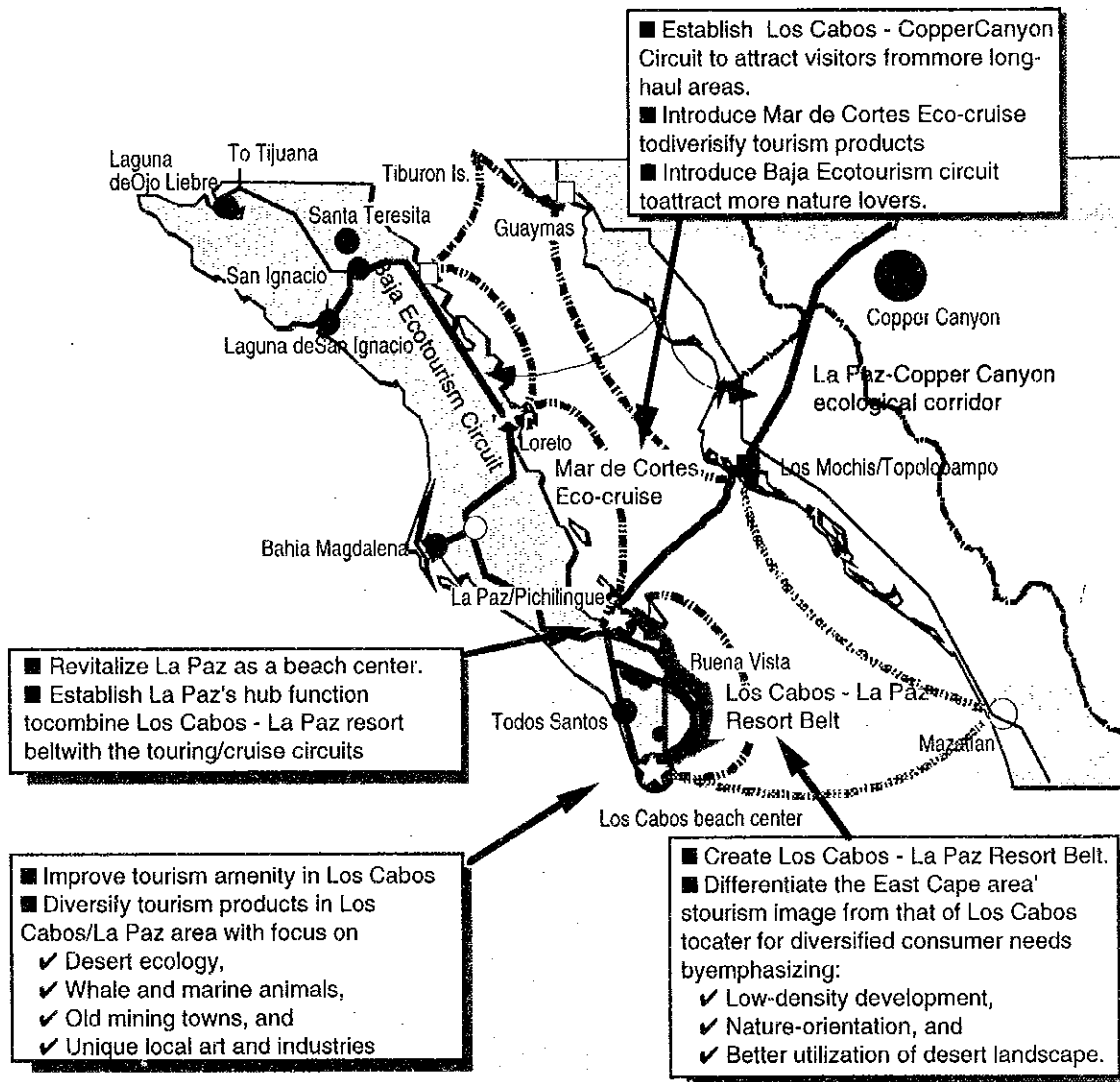
Source: JICA study team

(2) Long-term strategy by 2010

By the target year of 2010, Los Cabos should formulate Los Cabos - La Paz Resort Belt with three touring/cruise circuits of Los Cabos - Copper Canyon Corridor, Mar de Cortes Eco-cruise, and Baja Ecotourism Circuit. The coastal area between Los Cabos and La Paz along Mar de Cortes should be established as an alternative beach resort area that should be characterized by nature orientation and exclusive low-density development contrasted with existing beach centers.

Within the one-day trip area, a variety of tourism products should be developed to strengthen the competitiveness of Los Cabos. These tourism products should focus on the two aspects, namely, wise use of the nature for tourism, and integration of tourism with local economy. Figure 13 details the long-term strategy.

Figure 13 Long - term strategy of Los Cabos tourism region

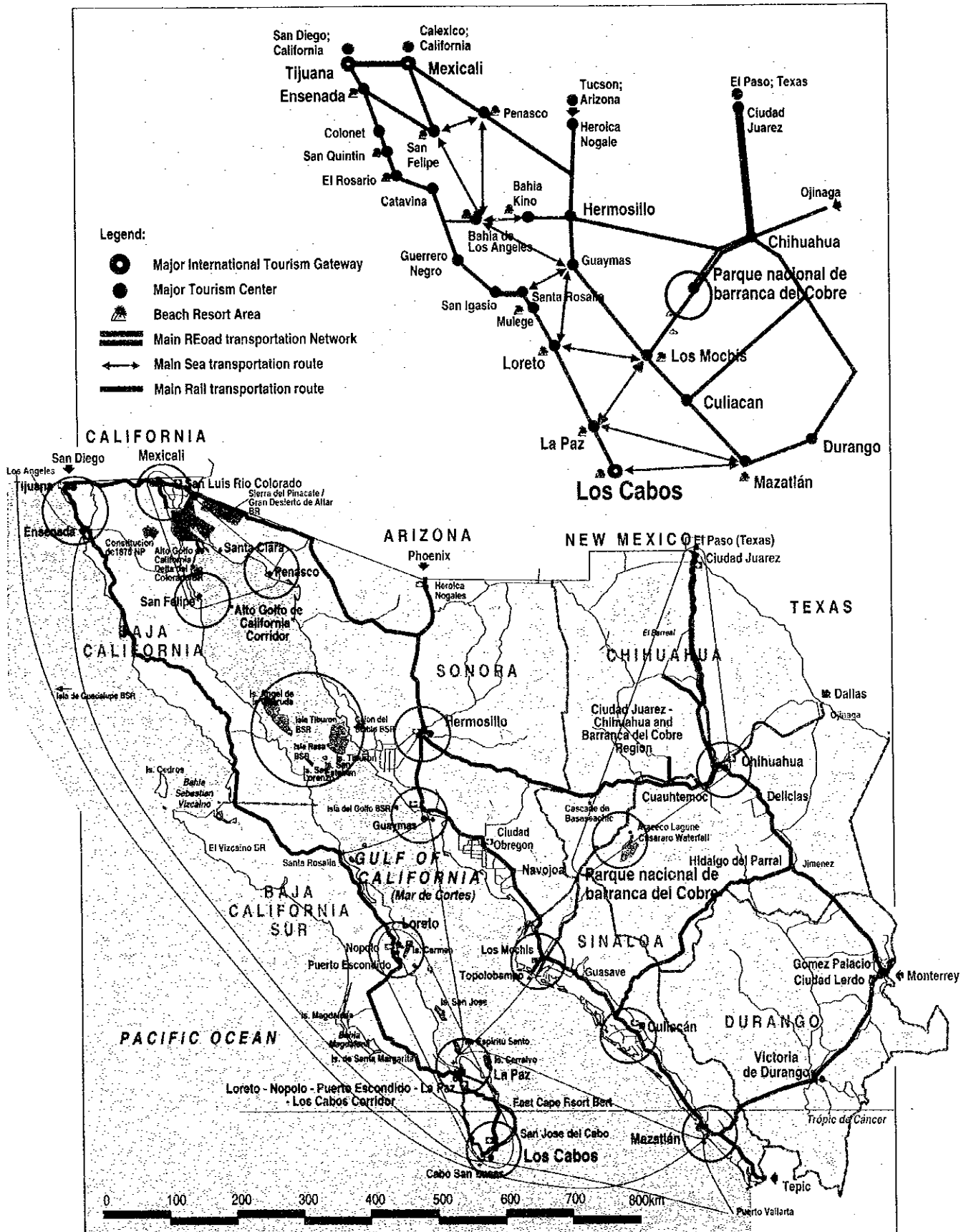


Source: JICA study team

3.3.2. Spatial tourism structure

Proposed spatial structure of Los Cabos tourism region in the target year 2010 is shown in Figure 14.

Figure 14 Spatial structure of Los Cabos tourism region



3.3.3. Marketing directions

(1) **Los Cabos tourism region should create the following tourism images for advertisement in accordance with the strategy discussed in the previous section.**

- Exclusive beach resorts in the wilderness of desert landscape.
- Ecotourism destination centered on "desert" and "marine animals," and
- Golf and game fishing destination.

(2) **Target markets of the Los Cabos tourism region**

Los Cabos tourism region's target markets are identified as follows:

- People who are interested in nature and wildlife, and are willing to participate in ecotourism,
- Beach resort tourists from North America, in particular, long-weekend tourists from the neighboring states of USA, and
- Asian tourists who seek the beach and nature.

North America will continue to be the most important market of the region though shares of other markets are expected to grow faster than the short-haul market. The Asian market has relative importance in Los Cabos due to its advantageous location to the market compared with other Mexican destinations.

(3) **Prospect of tourism products and geographical market segments**

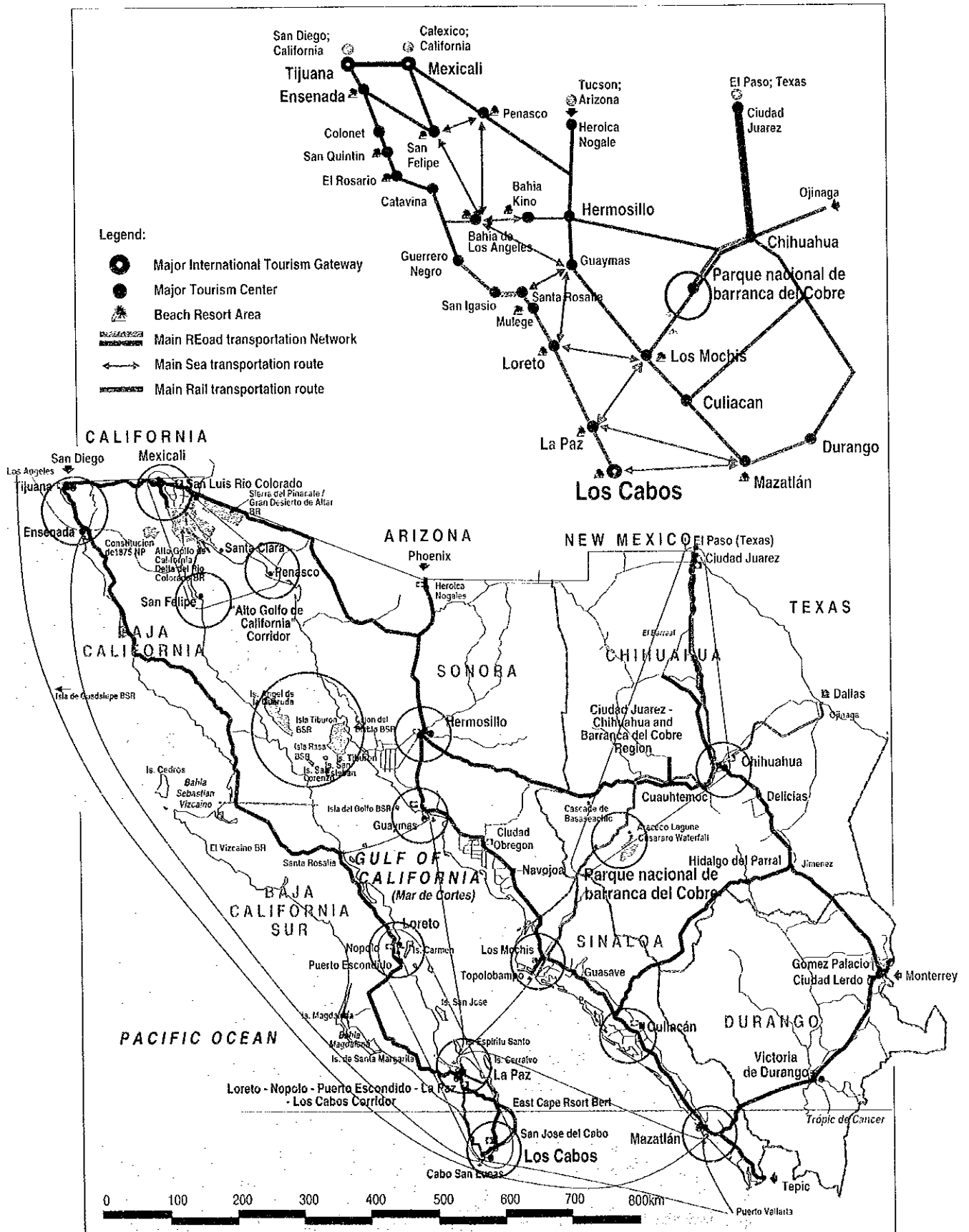
Table 12 summarizes prospect of tourism products in the Puerto Vallarta tourism region by geographical market segment.

Table 12 Prospect of tourism products by geographical market segment

	Domestic	Southbound (North America)	Northbound (Latin America)	Westbound (Europe)	Eastbound (Asia)
Archaeological tourism	○	○	○	○	○
Cultural Touring	-	-	-	-	-
tourism Unique towns & villages	○	○	○	○	○
Tourism local industry complex	○	○	○	○	○
Alternative accommodation	-	-	-	-	-
Regional cultural museums	-	-	-	-	-
Nature and wildlife Touring		○	○	⊙	⊙
Nature excursion	○	○	○	○	○
Ecology museum	○	○	○	○	○
Alternative accommodation		○		○	○
Cruise ship tourism	○	⊙	○	○	○
Resort tourism	⊙	⊙	○	○	⊙
Activities	○	⊙			○
Theme park	-	-	-	-	-
Convention/Incentive	○	○			○
Ecotourism		○		○	○

Note: ⊙ = very prospective, ○ = prospective, blank = not very prospective, - = not available
Source: JICA study team

Figure 14 Spatial structure of Los Cabos tourism region



The table shows that touring of nature sites such as whale watching, sea excursion or Eco-cruise, trekking, and most of all Copper Canyon would appeal to the long-haul market. It is noted that Asian market has relative importance in Los Cabos, and diving is also a prospective tourism product for the market.

3.3.4. Development framework

The development framework of visitor arrivals and hotel room requirement for Los Cabos tourism region is given in Table 13. Since Los Cabos tourism region is at the initial stage of tourism development, development efforts should concentrate on the one-day trip area (Level-2) in accordance with the strategy of the tourism region.

Table 13 Development framework of Los Cabos tourism region

Tourism Destinations	Hotel Arrivals (x1,000)										Hotel rooms				
	Domestic					International					1995	2000	2002	2005	2010
	1995	2000	2002	2005	2010	1995	2000	2002	2005	2010					
La Paz	148	196	218	251	340	50	66	75	88	121	1,342	1,703	1,855	2,081	2,682
	1.00	1.33	1.48	1.70	2.30	1.00	1.31	1.49	1.76	2.41	1.00	1.27	1.38	1.55	2.00
Loreto	12	25	31	41	65	24	55	74	102	170	381	480	575	718	1,004
	1.00	1.98	2.50	3.28	5.25	1.00	2.35	3.14	4.32	7.24	1.00	1.26	1.51	1.88	2.64
Los Cabos	58	91	107	131	194	390	589	704	877	1,302	3,710	5,201	6,060	7,348	10,423
	1.00	1.55	1.83	2.25	3.33	1.00	1.51	1.80	2.25	3.34	1.00	1.40	1.63	1.98	2.81
East Cape	n.a.	31	43	59	103	n.a.	40	55	77	131	162	435	490	572	788
	n.a.	1.00	1.36	1.90	3.27	n.a.	1.00	1.36	1.91	3.25	1.00	2.69	3.03	3.53	4.86
Todos Santos	n.a.	6	8	11	17	n.a.	7	9	11	17	37	84	97	115	162
	n.a.	1.00	1.25	1.62	2.56	n.a.	1.00	1.24	1.61	2.50	1.00	2.28	2.61	3.10	4.38
Others	n.a.	36	43	54	63	n.a.	27	33	40	47	456	502	571	675	748
	n.a.	1.00	1.20	1.49	1.75	n.a.	1.00	1.19	1.48	1.71	1.00	1.10	1.25	1.48	1.64
Baja California Sur	274	385	450	547	781	503	785	949	1,196	1,789	6,088	8,406	9,647	11,509	15,807
State Total	n.a.	1.00	1.17	1.42	2.03	n.a.	1.00	1.21	1.52	2.28	1.00	1.38	1.58	1.89	2.60

Source: SECTUR, BCS state, JICA study team

3.4. Tourism development and promotion projects

3.4.1. Action projects

(1) Tourism development projects

Based on the action plan strategy, following projects are chosen as action projects in Los Cabos tourism region.

Table 14 List of action projects and their costs

Action projects	Unit	Cost (1,000)			
		Total	Federal	State/city	Private
Road improvement of the section of San Jose del Cabo-Buena Vista (LTR LLM-3)	Peso US\$	102,300 13,640	94,500	7,800	
Development of Pichilingue beach resort (LTR LPZ-3)	Peso US\$	3,250 433		3,250	
Tourism amenity improvement of La Paz (LTR LPZ-1)	Peso US\$	3,500 467		3,500	
Conservation and tourism amenity improvement of San Jose Estuary and historic center of San Jose del Cabo (LTR SJD-1)	Peso US\$	54,900 7,320	43,200	11,130	570
Integration of the north and south areas of Cabo San Lucas (LTR CSL-1)	Peso US\$	8,000 1,067		800	7,200
Improvement of inter-city public bus services between Cabo San Lucas and San Jose del Cabo (LTR LCC-1)	Peso US\$	13,100 1,747		13,100	
Introduction of public high-speed boats between La Paz and Topolobampo (LTR BDC-1)	Peso US\$	272,925 36,390	2,925		270,000
Total	Peso US\$	457,975 61,063	140,625 18,750	39,580 5,277	277,770 37,036

Source: JICA study team

(2) Tourism promotion programs

General tourism promotion measures are applicable to Los Cabos tourism region such as production of tourism promotion materials, advertisement through mass media, public relations activities, approaches to the travel trade and consumers, and campaign and events including "Visit Los Cabos Year."

Through the tourism promotion activities, tourism images of marine animals, desert ecology, and sports activities should be highlighted. For the long-haul market, Los Cabos should be promoted long with Copper Canyon. Taking into account the types of tourism resources in the tourism region, approaches to potential organizers of special interest travels may be of relative importance.

Total cost of tourism promotion programs is Peso 238,466,000 or US\$ 31,795,000.

(3) Institutional and organizational programs

Following programs should be implemented as action projects to achieve the strategy of the tourism region.

- 1) Introduction of development guidelines to, and promotion of nature-oriented development in, Los Cabos - La Paz Resort Belt
- 2) Establishment of an inter-state organization for coordination of sales promotion,
- 3) Periodical visitor surveys at airports,
- 4) Establishment of a financial assistance system for small and medium sized enterprises, and
- 5) Introduction of a training system for ecotourism.

3.4.2. Tourism development projects for implementation by 2010

(1) Tourism development projects

Development costs for the proposed projects including action are summarized by type and category in Table 15. Total amount of the development cost is Peso 8,359,318 or US\$ 1,114,576.

Table 15 Summary of development projects by type and phase

Types of Projects	Units	Short term	Medium term	Long term	Total
		1997-2000	2001-2005	2006-2010	1997-2010
Category-A					
Tourism attraction	Peso	57,964	100,637	21,575	180,176
	US\$	7,729	13,418	2,877	24,023
Environmental & social	Peso	3,200	0	0	3,200
	US\$	427	0	0	427
Tourism facilities	Peso	78,250	104,000	32,000	214,250
	US\$	10,433	13,867	4,267	28,567
Hotel accommodation	Peso	1,450,060	1,826,180	2,663,740	5,939,980
	US\$	193,341	243,491	355,165	791,997
Land development	Peso	0	110,000	110,000	220,000
	US\$	0	14,667	14,667	29,333
Transport	Peso	117,400	286,100	139,700	543,200
	US\$	15,653	38,147	18,627	72,427
Utility services	Peso	0	0	0	0
	US\$	0	0	0	0
Total of Category-A	Peso	1,706,874	2,426,917	2,967,015	7,100,806
	US\$	227,583	323,589	395,602	946,774
Category-B					
Transport	Peso	669,200	121,852	82,200	873,252
	US\$	89,227	16,247	10,960	116,434
Utility services	Peso	292,260	93,000	0	385,260
	US\$	38,968	12,400	0	51,368
Total of Category-B	Peso	961,460	214,852	82,200	1,258,512
	US\$	128,195	28,647	10,960	167,802
Total of Category-A & B	Peso	2,668,334	2,641,769	3,049,215	8,359,318
	US\$	355,778	352,236	406,562	1,114,576

Note: Upper line is in 1,000 Pesos, Lower line is 1,000 US\$

Source: JICA study team

(2) Tourism promotion and institutional programs

Table 16 summarizes tourism promotion and institutional programs to be implemented by the target year of 2010 including action projects.

Table 16 Summary of tourism promotion projects by type

Types of Projects	Units	Short term	Medium term	Long term	Total
		1997-2000	2001-2005	2006-2010	1997-2010
Publicity (preparation of materials)	Peso	2,781	8,042	5,487	16,310
	US\$	371	1,072	732	2,175
Advertisement	Peso	67,147	111,912	111,912	290,971
	US\$	8,953	14,922	14,922	38,796
PR activities	Peso	11,990	19,984	19,984	51,958
	US\$	1,599	2,665	2,665	6,928
Approach to trade sector	Peso	17,618	30,411	30,411	78,440
	US\$	2,349	4,055	4,055	10,459
Approach to consumers	Peso	5,722	14,169	14,169	34,060
	US\$	763	1,889	1,889	4,541
Campaign and events	Peso	4,325	4,813	4,813	13,951
	US\$	577	642	642	1,860
Institutional /organizational programs	Peso	2,262	3,769	3,769	9,800
	US\$	302	503	503	1,307
Total	Peso	111,844	193,098	190,543	495,486
	US\$	14,913	25,746	25,406	66,065

Note: Upper line is in 1,000 Pesos, Lower line is 1,000 US\$
Source: JICA study team

3.5. Economic and financial analyses

3.5.1. Economic analysis of Los Cabos tourism region

An economic internal rate of return (EIRR) indicates the viability of projects from the viewpoint of the national economy and is used as an criteria for loan by international financing agencies such as World Bank. A project with more than 10% of EIRR is acceptable in general. The EIRR of Los Cabos is estimated at 11.1 %. The following table shows the result of sensitivity analysis based on the EIRR of 11.1 %.

Table 17 Economic internal rate of return (EIRR)

Cases of sensitivity analysis	EIRR (%)
Base Case	11.1
Increase of Total Benefit (+20%)	30.7
Decrease of Total Benefit (-20%)	-1.4
Increase of Total Cost (+20%)	-10.7
Decrease of Total Cost (-20%)	35.5

Source: JICA study team

In case of benefit increase or cost reduction, economic viability improves significantly. The main cause of benefit increase is increase of tourists inflow and their expenditure. However, there is a certain relationship between tourists increase and cost by item. In general, investment for infrastructure and facilities are required to receive tourists increase, and effective tourism promotion attracts more tourists.

Therefore, sensitivity analysis by combination of cost increase and benefit increase is conducted to clarify cost capacity for benefit increasing. If 5% increase of cost generates 10% increase of benefit, the future EIRR will be 15.9 % and economic viability will be improved. In order to ensure economic viability with 20% of benefit increase, total cost is allowed 10% increase. As such, further efforts to attract more tourists is required for sound growth of the tourism industry.

Table 18 Sensitivity analysis of EIRR by cost and benefit increase

Cases	Cost: +5%	Cost: +10%	Cost: +20%
Benefit: +20%	25.2 %	20.2 %	11.1 %
Benefit: +10%	15.9 %	11.1 %	
Benefit: +5%	11.1 %		

Source: JICA study team

3.5.2. Results of financial analysis

(1) Revenue and expenditure (R/E)ratio

The efficiency of public investment is evaluated by the revenue and expenditure (R/E) ratio with the assumption of an 8.5% discount rate. The R/E ratio of the public sector of the Los Cabos tourism region is 2.62, which is sufficient to justify the validity of the public investment.

(2) Financial internal rate of return

The financial internal rate of return (FIRR) of the private sector is 19.9%. A sensitivity analysis was made as shown in Table 19 based on the base case of 19.9%.

Table 19 Financial internal rate of return (FIRR)

Cases of sensitivity analysis	FIRR (%)
Base Case	19.9
Increase of Revenue (+20%)	34.8
Decrease of Revenue (-20%)	-1.4
Increase of Expenditure (+20%)	2.8
Decrease of Expenditure (-20%)	38.0

Source: JICA study team

If the business income tax is counted for expenditure, FIRR becomes 17.2%.

In order to check whether the proposed investment plan is optimum or not, the sensitivity analysis of investment for hotels and/or other facilities are done as follows.

Table 20 Sensitivity analysis of FIRR by private investment of hotels or other facilities

Private	-10 %	0 %	+10 %	Hotel
-10 %	21.9 %	20.3 %	19.0 %	
0 %	21.4 %	19.9 %	18.6 %	
+10 %	20.9 %	19.4 %	18.1 %	
Other facilities				

Source: JICA study team

In the Los Cabos tourism region, investment plan with less hotels and more other facilities is more suitable from the financial view point under the assumption that the demand elasticity is 0.5.

4. Strategy of Puerto Vallarta

4.1. Present Situation

This tourism region is situated in the middle western part of the country in the northwest part of the state of Jalisco along the Bay of Banderas, centered on the city of Puerto Vallarta. Puerto Vallarta was a small port town until the 1960s when tourism was introduced. Puerto Vallarta is not an integrally planned tourism destination but developed into an anchor tourism destination by way of the efforts of the private sector and local governments. Recently, tourism development in Nuevo Vallarta to the north has been under way in the state of Nayarit.

Guadalajara, the state capital of Jalisco, is situated some 340 km to the east. Guadalajara, the second largest city in Mexico, is a gateway to historical cities on the Central Highland of Mexico. This region is also known as the birthplace of mariachi music, tequila, and a number of folk arts and local handicrafts. 285 km to the south of Puerto Vallarta is a traditional resort town of Manzanillo.

Figure 15 in the next page shows the existing conditions of the Puerto Vallarta tourism region. The figure hints a triangle of Puerto Vallarta, Guadalajara, and Manzanillo. The JICA study team refers to the triangle as Jalisco Tourism Triangle. Three sides of the triangle are called as follows:

- Puerto Vallarta - Guadalajara Corridor,
- Guadalajara - Manzanillo Corridor, and
- Costalegre Resort Belt.

Mexican Cities Circuit is a touring circuit that visits historical cities in the Central Highland such as Guadalajara, Zacatecas, Guanajuato, San Miguel de Allende, Queretaro, Mexico City, Taxco, Morelia, and Patzcuaro. It meets Jalisco Tourism Triangle at Guadalajara.

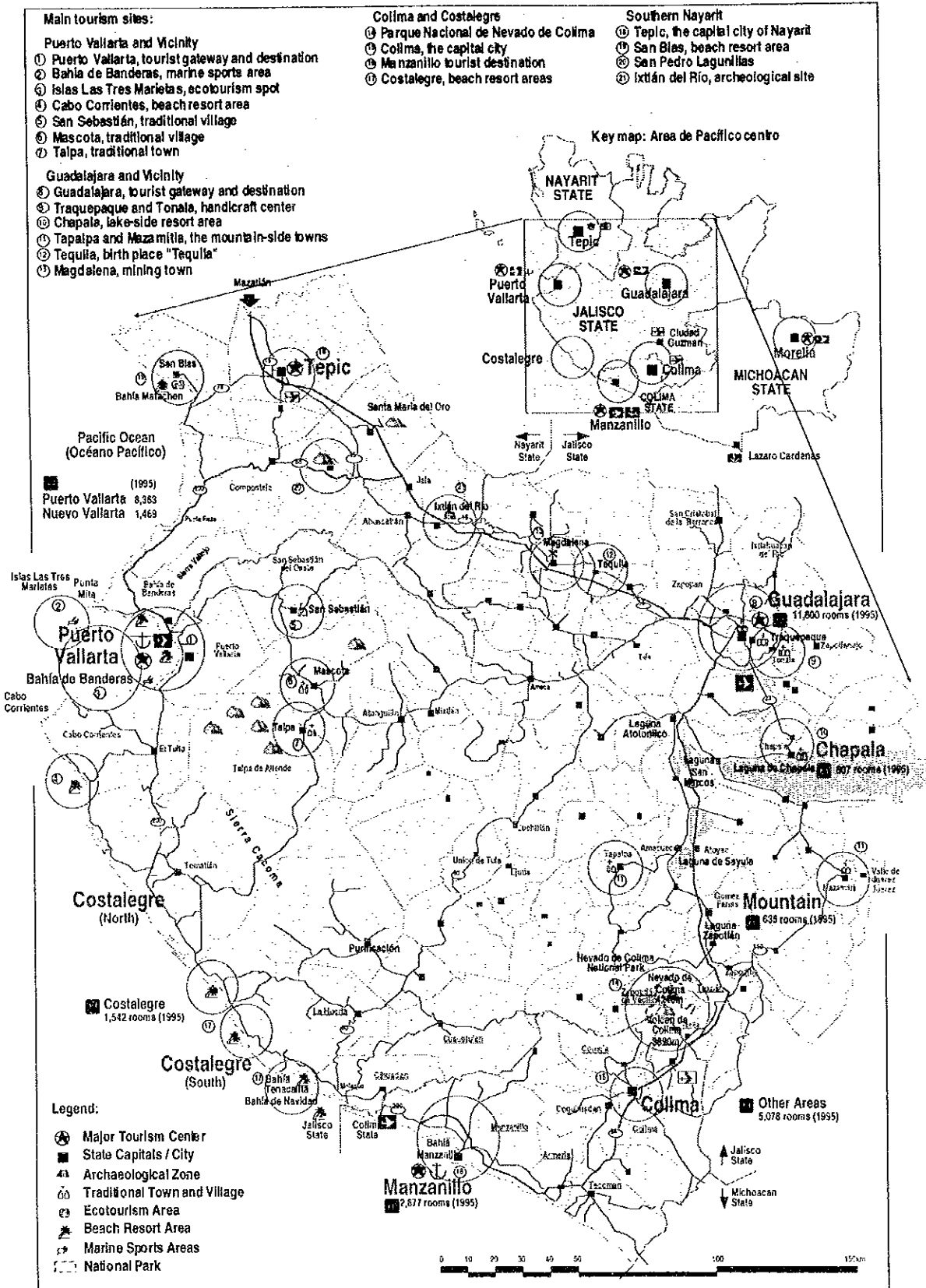
Table 21 defines areas that belong to respective levels of the hierarchical system of the tourism region.

Table 21 Hierarchy of the Puerto Vallarta tourism region

Levels	Coverage	Function
Level-1	Puerto Vallarta	Tourism center
Level-2	Vicinity of Puerto Vallarta including southern part of Nayarit	One-day trip area
Level-3	Jalisco Tourism Triangle	Tourism corridor /Tourism zone (Short excursion)
Level-4	Inter-states; including Nayarit, Colima, and inland historical cities	Tourism region (One-week tourism circuit)

Source: JICA study team


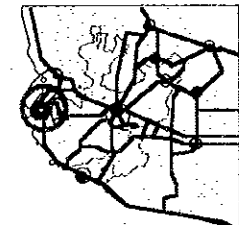
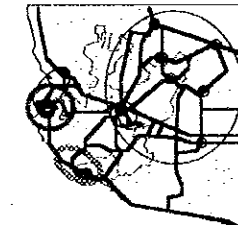
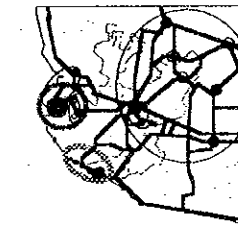
Figure 15 Existing conditions of Puerto Vallarta tourism region



4.2. Assessment of alternative scenarios

Three alternative scenarios for the Puerto Vallarta were set as detailed in Figure 16.

Figure 16 Alternative scenarios for the Puerto Vallarta tourism region

	Alternative-1	Alternative-2	Alternative-3
Legend: 			
Diversification of tourism products	Diversification level: low - Development of Banderas Bay for beaches and activities - Village tourism	Diversification level: medium - Development of Costalegre Resort Belt for beaches/activities - Village tourism - Ecotourism in Costalegre - Convention/incentive tourism - Some linkage with Mexican Cities Circuit	Diversification level: high - Development of Costalegre Resort Belt for beaches/activities - Village tourism - Ecotourism in Costalegre - Convention/incentive tourism - Intensive linkage with Mexican Cities Circuit
Target markets	- Expansion of the traditional market: North America	- Expansion of the traditional market: North America, domestic - Development of new markets: Europe, Latin America	- Consolidation of the traditional market; North America, domestic - Development of new markets; Europe, Latin America, Asia
Tourism administration	- Coordination within the municipality for development and tourism promotion	- Coordination in the state for tourism development - Coordination of Fondos Mixtos in the neighboring states for tourism promotion	- Coordination of neighboring states for development - Close coordination of Fondos Mixtos in the neighboring states for tourism promotion
Development/ tourism promotion costs	- Development costs; small - Tourism promotion costs; small - Investment concentration effect; high	- Development costs; medium - Sales promotion costs; medium - Investment concentration effect; medium	- Development costs; large - Tourism promotion costs; large - Investment concentration effects; low

Source: JICA study team

After assessment of the three scenarios, the JICA study team concludes that Alternative-2 is the best scenario for Puerto Vallarta due to the following reasons.

- Puerto Vallarta is assessed to be at the growth stage of tourism destination life cycle. This stage would need diversification of source markets.
- Land in the Puerto Vallarta proper is limited for further expansion. Hence, tourism development must be planned outside of the existing tourism center.
- Since tourism resources within the one-day trip area is limited, Puerto Vallarta should consider establishing linkage with competitive tourism resources outside of the one-day trip area to enhance its attractiveness.
- The most competitive tourism resources outside of the one-day trip area are historical cities and quaint villages with typical Mexican ambiance though they have less appeal to the long-haul market compared to archaeological sites.
- Puerto Vallarta's proximity to the Central Highland implies the importance of the domestic market that is less inclined to combine a beach trip with touring.
- Hence, over-emphasis on the long-haul market would not be an appropriate strategy for Puerto Vallarta.
- Therefore, neither Alternative-1 nor Alternative-3 is not the appropriate scenario for Puerto Vallarta. In conclusion, Alternative-2 is the best scenario

4.3. Tourism strategy of the Puerto Vallarta tourism region

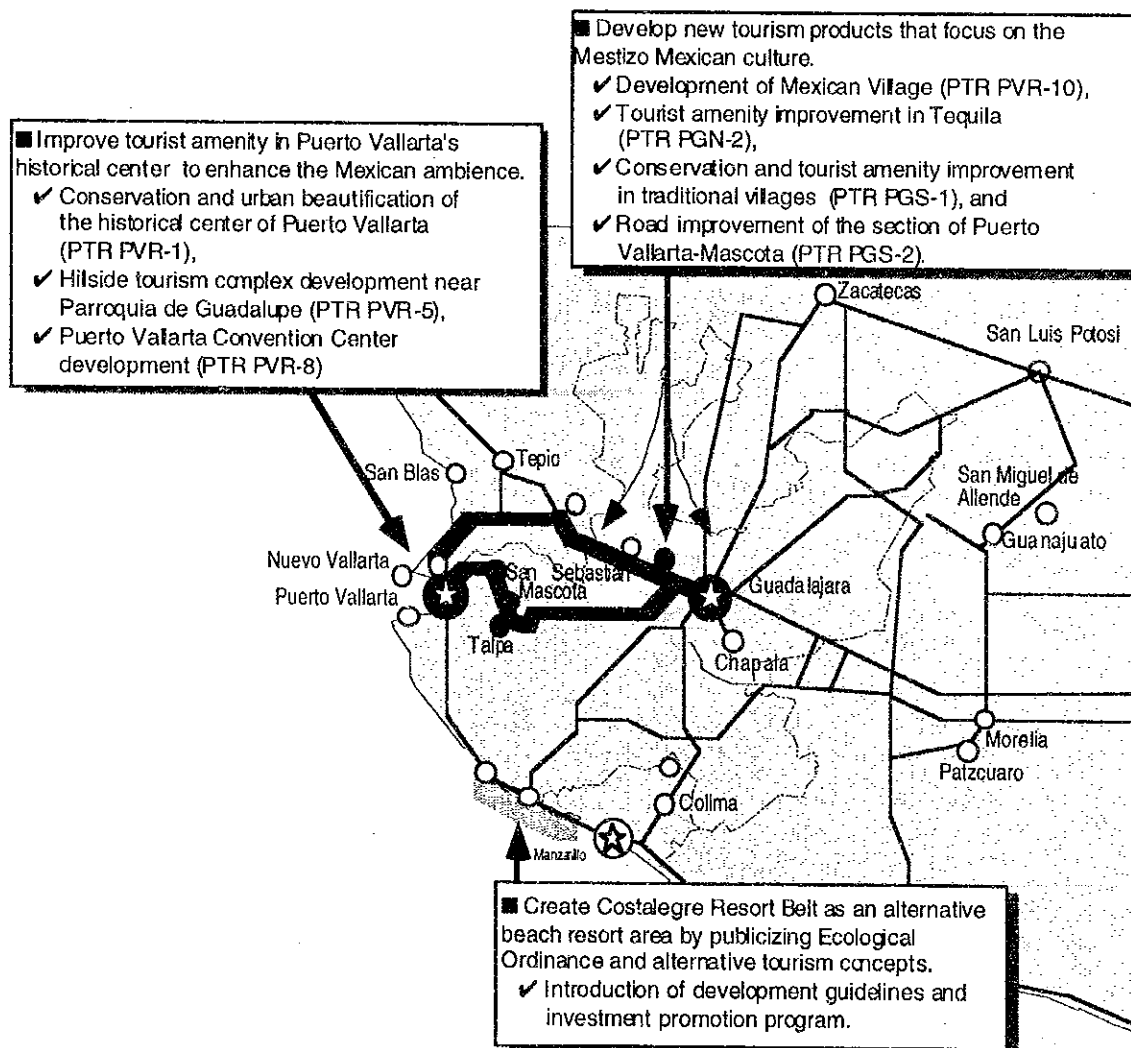
4.3.1. Tourism development and promotion strategy

Puerto Vallarta's beaches are not comparable to those of Cancun and Los Cabos, while Puerto Vallarta's strength is its quaint historical center, and good access to tourism resources that represent the typical Mestizo Mexican culture just outside of one-day trip area. Hence Puerto Vallarta should strive to be the "most-Mexican" beach destination, and enhance linkage with the cultural tourism resources. Costalegre is important to introduce alternative beach resort concepts to cater for diversified consumers' needs in the future. Convention and incentive tourism is an untapped opportunity for Puerto Vallarta therefore should be emphasized in the strategy.

(1) Action plan strategy by 2002

At the action plans stage, Puerto Vallarta should concentrate its development efforts on its one-day trip area, Puerto Vallarta - Guadalajara Corridor, and Costalegre. It is important at this stage to conserve the nature from uncontrolled development in Costalegre. Figure 17 details the action plan strategy and action projects.

Figure 17 Action plans strategy of the Puerto Vallarta tourism region

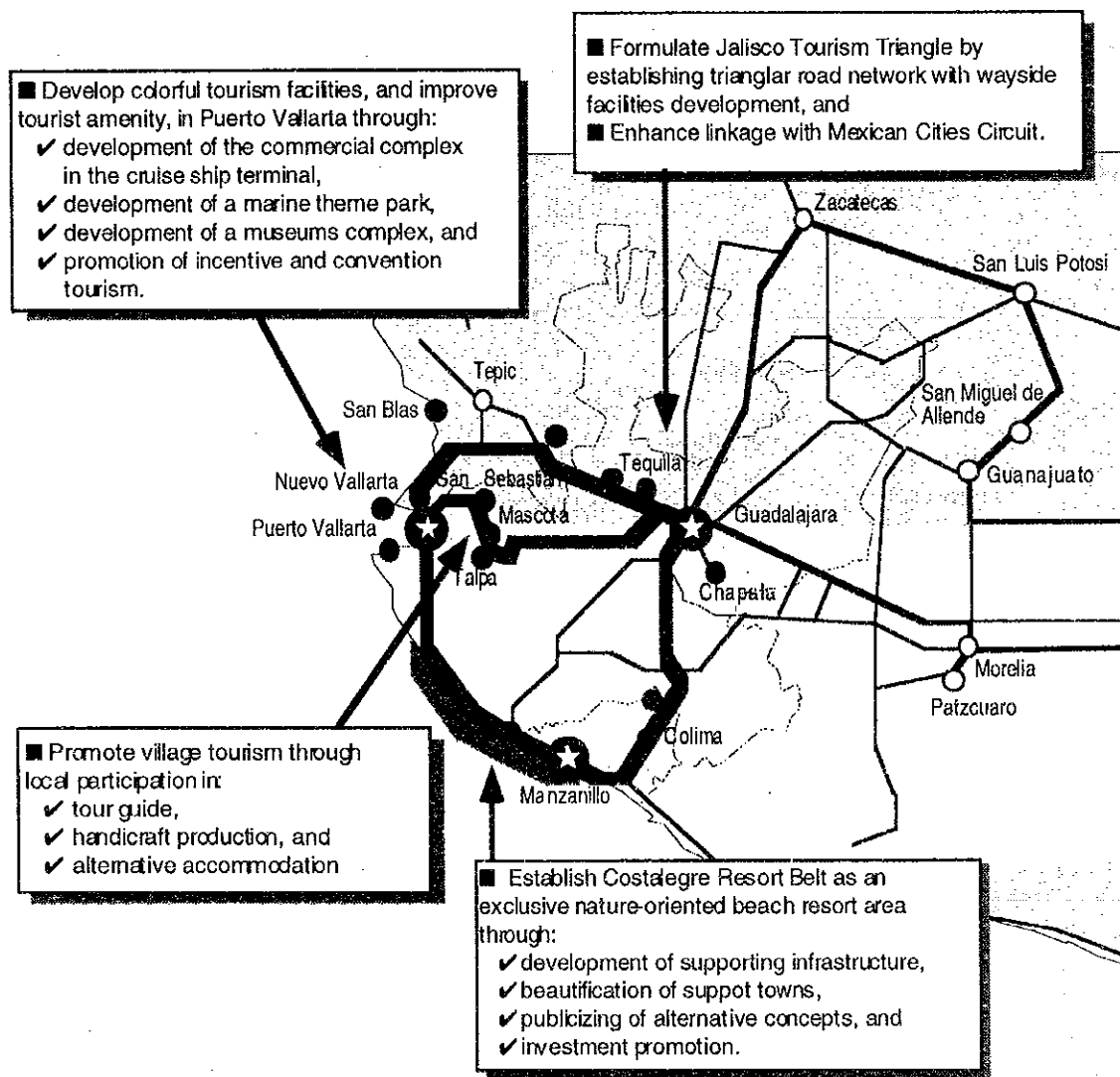


Source: JICA study team

(2) Long-term strategy by 2010

By the target year of 2010, Puerto Vallarta should formulate Jalisco Tourism Triangle and connect to the Mexican Cities Circuit. Costalegre Resort Belt should be established by the year as a nature-oriented resort area with exclusive accommodations differentiated from those in the existing beach centers. Puerto Vallarta proper should also be thriving with introduction of various tourist facilities as well as conserved Mexican ambiance. Figure 18 details the long-term strategy.

Figure 18 Long-term strategy of the Puerto Vallarta tourism region

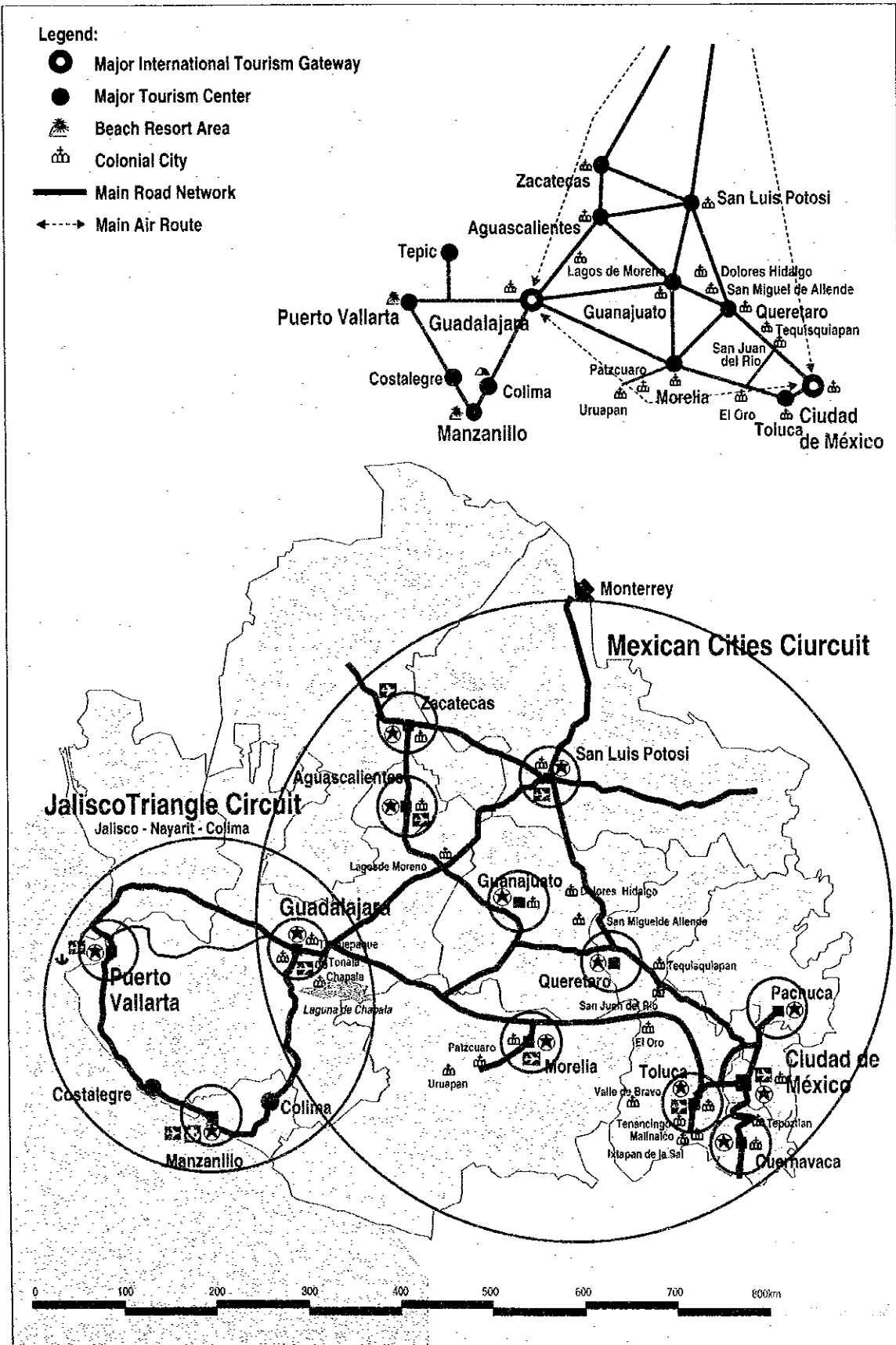


Source: JICA study team

4.3.2. Spatial structure of tourism

Proposed spatial structure of the Puerto Vallarta tourism region in the target year 2010 is shown in Figure 19 at respective levels of the tourism hierarchical system.

Figure 19 Spatial tourism structure of Puerto Vallarta tourism region



4.3.3. Marketing directions

(1) Tourism images of the Puerto Vallarta tourism region

- The "most-Mexican" beach destination in Mexico,
- Combination of a beach and quaint Mexican towns, and
- Expanse of blue sea viewed from lush green hillside

(2) Target markets of the tourism region

- Mexicans from the Central Highland area,
- Beach resort tourists from North America,
- Latin Americans who are interested in Mexican historical cities and the Mestizo Mexican culture, and
- General interest tourists who are culturally motivated both from the long-haul and the short-haul markets.

Due to Puerto Vallarta's proximity to Guadalajara and the Bajio area, the domestic market is relatively important compared with Cancun and Los Cabos. Visitors from Latin America would be relatively important since survey shows they are the most interested in the Mexican culture and historical cities.

(3) Prospect of tourism products and geographical market segments

Table 22 summarizes prospect of tourism products in the Puerto Vallarta tourism region by geographical market segment. It shows Mexican Cities Circuit as the principal tourism product that would appeal to the long-haul market. Domestic market has more importance for Puerto Vallarta than for Los Cabos and Cancun.

Figure 19 Spatial tourism structure of Puerto Vallarta tourism region

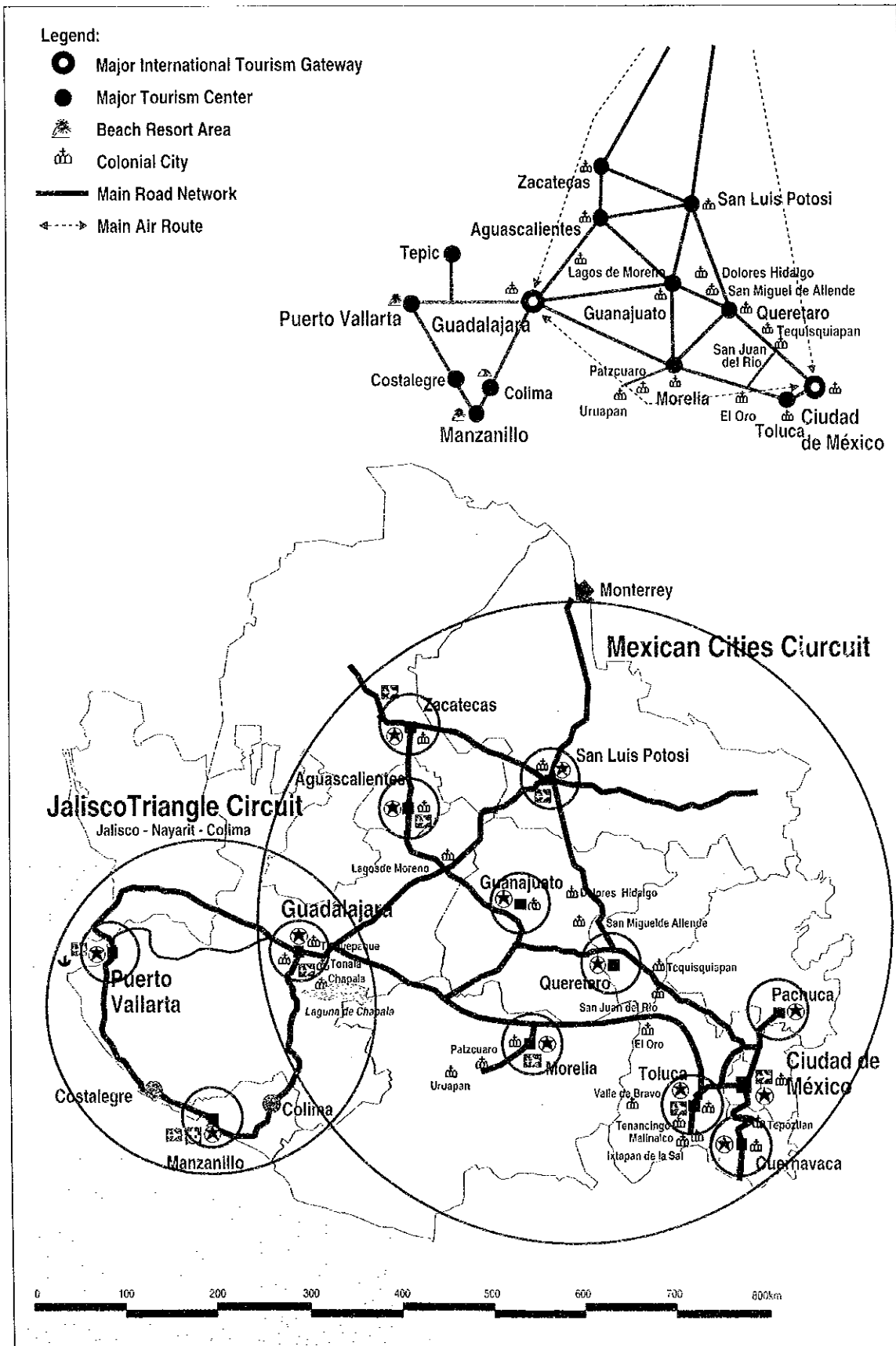


Table 22 Prospect of tourism products by regional market segment

		Domestic	Southbound (North America)	Northbound (Latin America)	Westbound (Europe)	Eastbound (Asia)
Archaeological tourism		○	○			
Cultural tourism	Touring of Mexican cities		○	⊗	⊗	⊗
	Unique towns & villages	○	○	○	○	○
	Tourism local industry complex	○	○	○	○	○
	Alternative accommodation		○		○	○
	Regional cultural museums	○	○	○	○	○
Nature and wildlife	Touring of nature sites	-	-	-	-	-
	Nature excursion	○	○			
	Ecology museum	-	-	-	-	-
	Alternative accommodation		○		○	
Cruise ship tourism		○	⊗		○	
Resort tourism		⊗	⊗	⊗	○	○
Activities		⊗	⊗			
Theme park		⊗	⊗	○	○	○
Convention/ incentive		⊗	⊗			
Ecotourism			○		○	○

Note: ⊗ = very prospective, ○ = prospective, blank = not prospective, - = not available

Source: JICA study team

4.3.4. Development framework

Development framework of visitor arrivals to the tourism region and hotel room requirement at each development phase are shown in Table 23. Target of visitor arrivals in 2010 is 6.9 million (domestic; 5.5 million, international; 1.4 million), which require 44,000 hotel rooms.

Table 23 Development framework of the Puerto Vallarta tourism region

Tourism Destinations	Hotel arrivals (x1,000)										Hotel room requirement				
	Domestic					International					1995	2000	2002	2005	2010
	1995	2000	2002	2005	2010	1995	2000	2002	2005	2010					
Guadalajara	1,231	2,086	2,283	2,579	3,192	135	189	211	244	312	11,600	14,206	15,732	18,021	22,334
	1.00	1.69	1.85	2.10	2.59	1.00	1.40	1.57	1.81	2.32	1.00	1.22	1.36	1.55	1.93
Puerto Vallarta	468	588	597	609	639	362	372	378	387	400	8,363	8,830	9,138	9,602	10,620
	1.00	1.26	1.28	1.30	1.37	1.00	1.03	1.05	1.07	1.11	1.00	1.06	1.09	1.15	1.27
Costalegre	n.a.	132	184	263	422	n.a.	41	61	91	150	1,542	1,843	2,133	2,568	3,320
	n.a.	1.00	1.40	1.99	3.20	n.a.	1.00	1.49	2.22	3.68	1.00	1.20	1.38	1.67	2.15
Chapala	n.a.	120	136	160	210	n.a.	44	50	58	77	807	921	1,022	1,174	1,450
	n.a.	1.00	1.13	1.34	1.75	n.a.	1.00	1.13	1.34	1.75	1.00	1.14	1.27	1.45	1.80
Mountain area	n.a.	125	130	137	154	n.a.	21	36	57	101	635	663	736	844	1,003
	n.a.	1.00	1.04	1.10	1.24	n.a.	1.00	1.69	2.72	4.76	1.00	1.04	1.16	1.33	1.58
Others in Jalisco State	n.a.	638	677	736	881	n.a.	123	170	241	406	5,078	5,110	5,124	5,146	5,209
	n.a.	1.00	1.06	1.15	1.38	n.a.	1.00	1.38	1.95	3.30	1.00	1.01	1.01	1.01	1.03
Total of Jalisco state	2,683	3,689	4,007	4,485	5,498	552	790	905	1,078	1,445	28,025	31,573	33,886	37,355	43,934
	1.00	1.38	1.49	1.67	2.05	1.00	1.43	1.64	1.95	2.62	1.00	1.13	1.21	1.33	1.57
Nuevo Vallarta	23	62	83	114	189	77	99	110	128	169	1,469	2,598	3,076	3,794	5,344
	1.00	2.74	3.67	5.06	8.34	1.00	1.28	1.43	1.65	2.19	1.00	1.77	2.09	2.58	3.64
Manzanillo	264	436	527	664	988	60	70	76	84	104	2,677	4,035	4,437	5,041	6,242
	1.00	1.65	1.99	2.51	3.74	1.00	1.18	1.27	1.41	1.75	1.00	1.51	1.66	1.88	2.33

Source: SECTUR, Jalisco state, JICA study team

4.4. Tourism development and promotion projects

4.4.1. Action projects

(1) Tourism development projects

Based on the action plan strategy, the following projects are chosen as action projects in the Puerto Vallarta tourism region. Total cost of the projects is Peso 420,075,000 or US\$ 56,010,000.

Table 24 Cost of action projects

Action projects	Unit	Cost (1,000)			
		Total	Federal	State/city	Private
Conservation and urban beautification of old town of Puerto Vallarta	Peso US\$	21,815 2,909		11,587	10,228
Hillside tourism complex development near Parroquia de Guadalupe	Peso US\$	3,750 500		3,750	
Puerto Vallarta convention center development	Peso US\$	111,500 14,867		38,000	73,500
Development of Mexican Village in Guadalajara	Peso US\$	34,000 4,533			34,000
Tourism amenity improvement of Tequila town	Peso US\$	4,900 653		3,000	1,900
Conservation and tourism amenity improvement of the traditional three traditional villages	Peso US\$	69,510 9,268	24,700	44,810	
Road improvement of the section of Puerto Vallarta-Mascota	Peso US\$	174,600 23,280	174,600		
Total	Peso US\$	420,075 56,010	199,300 26,573	101,147 13,486	119,628 15,950

Source: JICA study team

(2) Tourism promotion programs

General promotion measures are applicable to the Puerto Vallarta tourism region including the campaign "Visit Puerto Vallarta Year." Through the tourism promotion activities, Puerto Vallarta should create a tourism image of the most typical Mexican destination. It is noted that Puerto Vallarta's appeal to the long-haul market is the Mestizo-Mexican culture rather than the nature.

Total cost for tourism promotion programs is Peso 420,075,000 or US\$ 56,010,000.

(3) Institution and organizational programs

Following programs should be implemented as action projects.

- 1) Introduction of development guidelines and investment promotion of ecotourism development,
- 2) Establishment of an inter-state tourism liaison council of the Puerto Vallarta tourism region
- 3) Establishment of an alliance of Fondo Mixtos of the Puerto Vallarta tourism region,
- 4) Periodical visitor surveys at airports,
- 5) Establishment of a financial assistance system for tourism SMEs,
- 6) Establishment of a convention bureau, and
- 7) Training system for ecotourism.

4.4.2. Tourism development projects for implementation by 2010

(1) Tourism development projects

Proposed projects for the implementation by 2010 are summarized by type and category in Table 25. Total amount of the development cost is Peso 17,456,297 or US\$ 2,327,506.

Table 25 Summary of development projects at Level-1 and 2

Types of Projects	Units	Short term	Medium term	Long term	Total
		1997-2000	2001-2005	2006-2010	1997-2010
Category-A					
Tourism attraction	Peso	28,347	112,838	58,400	199,585
	US\$	3,780	15,045	7,787	26,611
Environmental & Social	Peso	700	6,560	3,500	10,760
	US\$	93	875	467	1,435
Tourism facilities	Peso	112,400	453,150	200,750	766,300
	US\$	14,987	60,420	26,767	102,173
Hotel accommodation	Peso	721,730	3,229,430	3,098,840	7,050,000
	US\$	96,231	430,591	413,179	940,000
Land development	Peso	0	0	0	0
	US\$	0	0	0	0
Transport (TRP-1)	Peso	0	49,400	7,000	56,400
	US\$	0	6,587	933	7,520
Utility services (UTL-1)	Peso	0	0	0	0
	US\$	0	0	0	0
Total of Category-A	Peso	863,177	3,851,378	3,368,490	8,083,045
	US\$	115,090	513,517	449,132	1,077,739
Category-B					
Transport (TRP-2)	Peso	335,100	3,776,085	1,295,100	5,406,285
	US\$	44,680	503,478	172,680	720,838
Utility services (UTL-2)	Peso	153,260	3,698,707	115,000	3,966,967
	US\$	20,435	493,161	15,333	528,929
Total of Category-B	Peso	488,360	7,474,792	1,410,100	9,373,252
	US\$	65,115	996,639	188,013	1,249,767
Total of Category-A and B	Peso	1,351,537	11,326,170	4,778,590	17,456,297
	US\$	180,205	1,510,156	637,145	2,327,506

Note: Upper line is in 1,000 Pesos, Lower line is 1,000 US\$

Source: JICA study team

(2) Tourism promotion and institutional programs

Table 26 summarizes the costs of tourism promotion projects to be implemented by 2010 including those in action projects. Total cost of the projects is Peso 632,168 or US\$ 84,289.

Table 26 Summary of tourism promotion projects by type

Types of Projects	Units	Short term	Medium term	Long term	Total
		1997-2000	2001-2005	2006-2010	1997-2010
Publicity (preparation of materials)	Peso	3,819	11,157	7,564	22,540
	US\$	509	1,488	1,009	3,005
Advertisement	Peso	91,808	153,015	153,015	397,838
	US\$	12,241	20,402	20,402	53,045
PR activities	Peso	15,595	25,992	25,992	67,579
	US\$	2,079	3,466	3,466	9,011
Approach to trade sector	Peso	20,096	34,902	34,902	89,900
	US\$	2,679	4,654	4,654	11,987
Approach to consumers	Peso	5,722	14,169	14,169	34,060
	US\$	763	1,889	1,889	4,541
Campaign and events	Peso	4,325	4,813	4,813	13,951
	US\$	577	642	642	1,860
Institutional and organizational programs	Peso	1,800	1,800	2,700	6,300
	US\$	240	240	360	840
Total	Peso	143,165	245,848	243,155	632,168
	US\$	19,089	32,780	32,421	84,289

Note: Upper line is in 1,000 Pesos, Lower line is 1,000 US\$

Source: JICA study team

4.5. Economic and financial analysis

4.5.1. Economic analysis of the Puerto Vallarta tourism region

The economic internal rate of return (EIRR) is 12.4 %. Table 27 shows results of the sensitivity analysis based on the EIRR of 12.4 %.

Table 27 Economic internal rate of return (EIRR)

Cases of sensitivity analysis	EIRR (%)
Base Case	12.4
Increase of Total Benefit (+20%)	30.5
Decrease of Total Benefit (-20%)	-4.5
Increase of Total Cost (+20%)	-1.8
Decrease of Total Cost (-20%)	35.2

Source: JICA study team

In case of benefit increase or cost reduction, economic viability improves significantly. Therefore, sensitivity analysis by combination of cost increase and benefit increase is conducted to clarify cost capacity for benefit increasing. If a 5% increase of cost generates a 10% increase of benefit, the future EIRR will be 16.6% and economic viability will improve. In order to ensure economic viability with 20% of benefit increase, total cost is allowed 10% increase. Hence, further efforts to attract more tourists is required for sound growth of the tourism sector.

Table 28 Sensitivity analysis of EIRR by cost and benefit increase

Cases	Cost: +5%	Cost: +10%	Cost: +20%
Benefit: +20%	25.2 %	20.4 %	12.4 %
Benefit: +10%	16.6 %	12.4 %	
Benefit: +5%	12.4 %		

Source: JICA study team

4.5.2. Financial analysis

a. Revenue and expenditure ratio (R/E)

The revenue and expenditure (R/E) ratio of public sector for the Los Cabos tourism region is 1.03 in case of discount rate is 8.5%, which is not sufficient but viable to justify the validity of the public investment.

b. Financial internal rate of return

The financial internal rate of return (FIRR) of private sector is 19.2%. A sensitivity analysis was made as shown in Table 29 based on the base case of 19.2 %.

Table 29 Financial internal rate of return (FIRR)

Cases of sensitivity analysis	FIRR (%)
Base Case	19.2
Increase of Revenue (+20%)	29.7
Decrease of Revenue (-20%)	5.8
Increase of Expenditure (+20%)	8.3
Decrease of Expenditure (-20%)	32.0

Source: JICA study team

If the business income tax is counted for expenditure, FIRR becomes 16.3%.

In order to check whether the proposed investment plan is optimum or not, the sensitivity analysis of investment for hotels and/or other facilities are conducted as follows.

Table 30 Sensitivity analysis of FIRR by private investment of hotels or other facilities

Private	-10 %	0 %	+10 %	Hotel
+10 %	21.0 %	19.6 %	18.4 %	
0 %	20.7 %	19.2 %	18.0 %	
-10 %	20.3 %	18.9 %	17.6 %	
Other facilities				

Source: JICA study team

In the Puerto Vallarta tourism region, investment plan with less hotels and more of other facilities is more suitable from the financial view point under the assumption that the demand elasticity is 0.5.

5. Strategy of Cancun

5.1. Present Situation

Until the large-scale tourism development by FONATUR in the 1970s, Cancun was a small village on the Yucatan Peninsula facing the Caribbean Sea, having practically nothing to do with tourism. Cancun, as FONATUR's first project, was located near a traditional beach resort, Cozumel, and the Mayan ruins of Chichen Itza. Rich in archaeological tourism resources, Cancun is now flourishing as one of the leading beach resorts in the world.

Mexico and four Central American countries; Belize, Guatemala, Honduras, and El Salvador, launched international tourism promotion program of Mundo Maya that emphasizes ecological tourism. Cancun is expected to be the principal gateway of Mundo Maya.

Figure 20 shows the existing conditions of the Cancun tourism region. Tulum Corridor is the coastal area between Cancun and Tulum where tourism development projects are under way. The JICA study team proposes to extend the corridor to the south to formulate Cancun - Costa Maya Resort Belt that includes Cancun - Tulum Corridor and newly proposed development site of Costa Maya.

Mundo Maya Circuit is a multi-country touring circuit that extends over the Quintana Roo, Yucatan, Campeche, Tabasco, and Chiapas states in Mexico, as well as Guatemala, El Salvador, Honduras, and Belize. Cancun-Merida Corridor is part of the circuit. A smaller circuit of Cancun - Merida- Campeche- Chetumal is referred to as Northern Mundo Maya Circuit in this study.

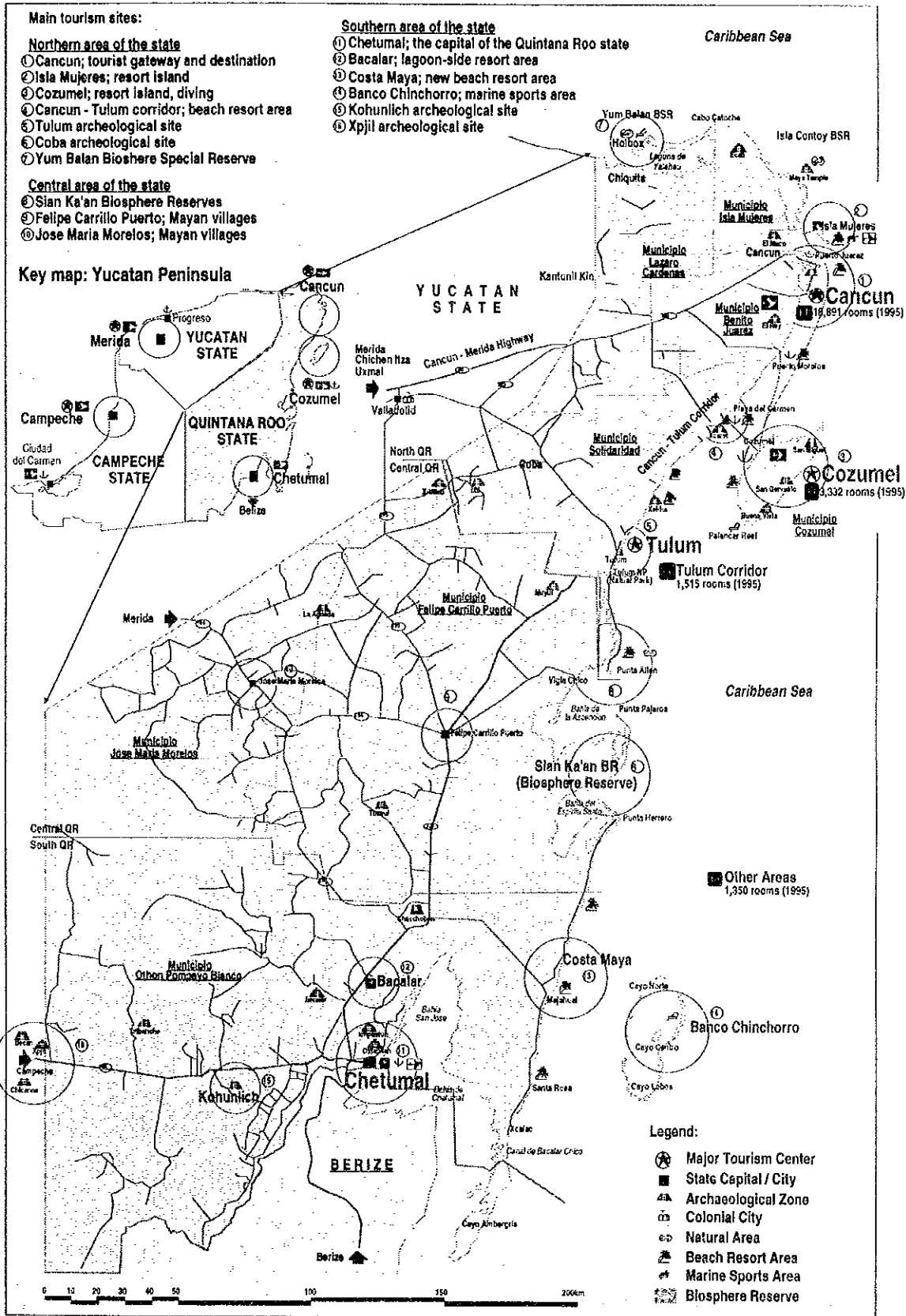
Table 31 defines areas that belong to respective levels of hierarchical system of the tourism region.

Table 31 Hierarchy of the Cancun tourism region

Levels	Coverage	Main discussions
Level-1	Cancun	Tourism center
Level-2	Vicinity of Cancun (Part of the state)	One-day trip area
Level-3	Quintana Roo, Yucatan	Tourism corridor / tourism zone
Level-4	Inter-state: Quintana Roo, Yucatan, Campeche, part of Tabasco, part of Chiapas	Tourism region (One-week touring circuit)

Source: JICA study team

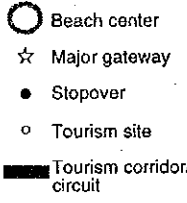
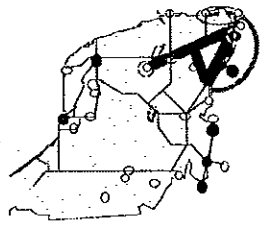
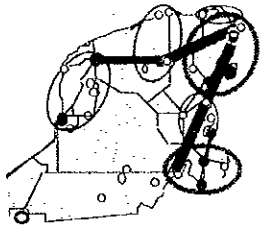
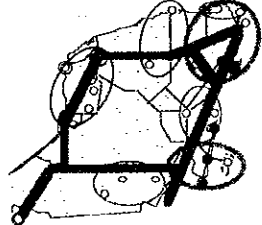
Figure 20 Existing conditions of Cancun tourism region



5.2. Assessment of alternative scenarios

Three alternative scenarios for Cancun were set as detailed in Figure 21

Figure 21 Alternative scenarios for the Cancun tourism region

	Alternative-1	Alternative-2	Alternative-3
Legend: 			
Diversification of tourism products	Diversification level; low - Development of Cancun-Tulum Corridor for beaches/activities - Archeological tourism in the north - Ecotourism in biosphere reserves	Diversification level: medium - Development of Cancun-Costa Maya Resort Belt for beaches/activities - Archeological tourism in the north - Ecotourism in biosphere reserves - Some linkage with Mundo Maya Circuit	Diversification level: high - Development of Cancun-Costa Maya Resort Belt for beaches/activities - Archeological tourism in the north - Ecotourism in biosphere reserves and archaeological sites - Close linkage with Mundo Maya Circuit
Target markets	- Concentration on the traditional market; North America	- Expansion of the traditional market; North America - Development of new markets: Europe, Asia, Latin America, domestic	- Consolidation of the traditional market; North America - Development of new markets: Europe, Asia, Latin America, domestic
Tourism administration	- Easiest coordination for development and promotion within Greater Cancun	- Coordination in the state for development - Coordination of Fondos Mixtos in the neighboring states for tourism promotion	- Coordination of neighboring states for development - Coordination of Fondos Mixtos in the neighboring states for tourism promotion - Coordination of international Mundo Maya program
Development/ tourism promotion costs	- Development costs; low - Sales promotion costs; low - Investment concentration effect; high	- Development costs; medium - Sales promotion costs; medium - Investment concentration effect; medium	- Development costs; high - Sales promotion costs; high - Investment concentration effect; low

Source: JICA study team

The JICA study team concludes that Alternative-3 is the best scenario for Cancun tourism region. The rationale for this choice is summarized as follows.

- Cancun is at the maturity stage of resort life cycle which needs introduction of new types of development and revitalization of existing tourism centers.
- Alternative-1 is not an appropriate scenario as the share of the long-haul market in Cancun is already the highest of all the Mexican tourism destinations.
- The Cancun tourism region has very competitive tourism resources which strongly appeal to the long-haul market.
- Many of archaeological and natural tourism resources are located in the tourism circuit area (Level-4). Their tourism potential rationalizes the necessity to establish a touring circuit that covers these tourism sites.
- Cancun is most frequently combined with touring itineraries.
- Promotion of Mundo Maya Circuit is a national policy.
- Considering the high tourism potential of Mundo Maya Circuit and Cancun - Costa Maya Resort Belt, Alternative-2 is still a humble scenario. Therefore, Alternative-3 is the best scenario for the Cancun tourism region.

5.3. Tourism strategy of the Cancun tourism region

5.3.1. Tourism development and promotion strategy

Since Cancun is reaching its maturity stage, its strategy for the next century should be two-pronged; to maintain the high image of Cancun on one hand, and to create Cancun - Costa Maya Resort Belt to distribute sun seekers to a wider area, and make the resort belt serve as the base to explore Mundo Maya Circuit on the other.

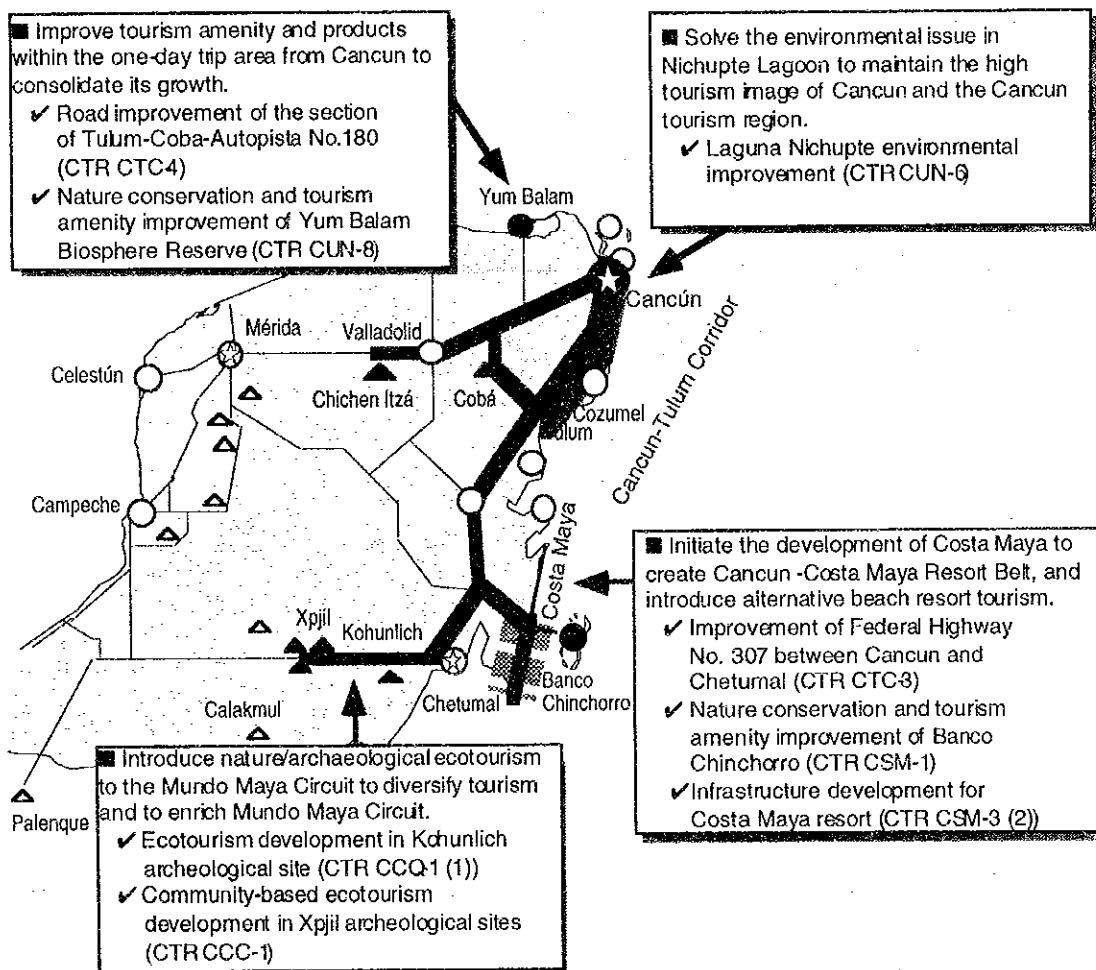
The high-profile image of Cancun would make a prerequisite for the strategy of the Cancun tourism region. In this sense, solving urban and environmental problems, and introducing measures to revitalize the aging hotel zone in Cancun is important. It is necessary to introduce an alternative type of beach development to Cancun - Costa Maya Resort Belt and ecotourism to Mundo Maya Circuit to diversify tourism markets for the sustainable growth of the tourism region.

(1) Action plan strategy by 2002

At the action plan stage, solving the environmental issue in Nichupte Lagoon has the first priority to sustain the growth of the Cancun tourism region.

On the other hand, Cancun should improve tourism network and tourism products within its one-day trip area, prepare infrastructure to develop Costa Maya, and to introduce ecotourism in the Mundo Maya Circuit as detailed in Figure 22.

Figure 22 Action plan strategy of the Cancun tourism region



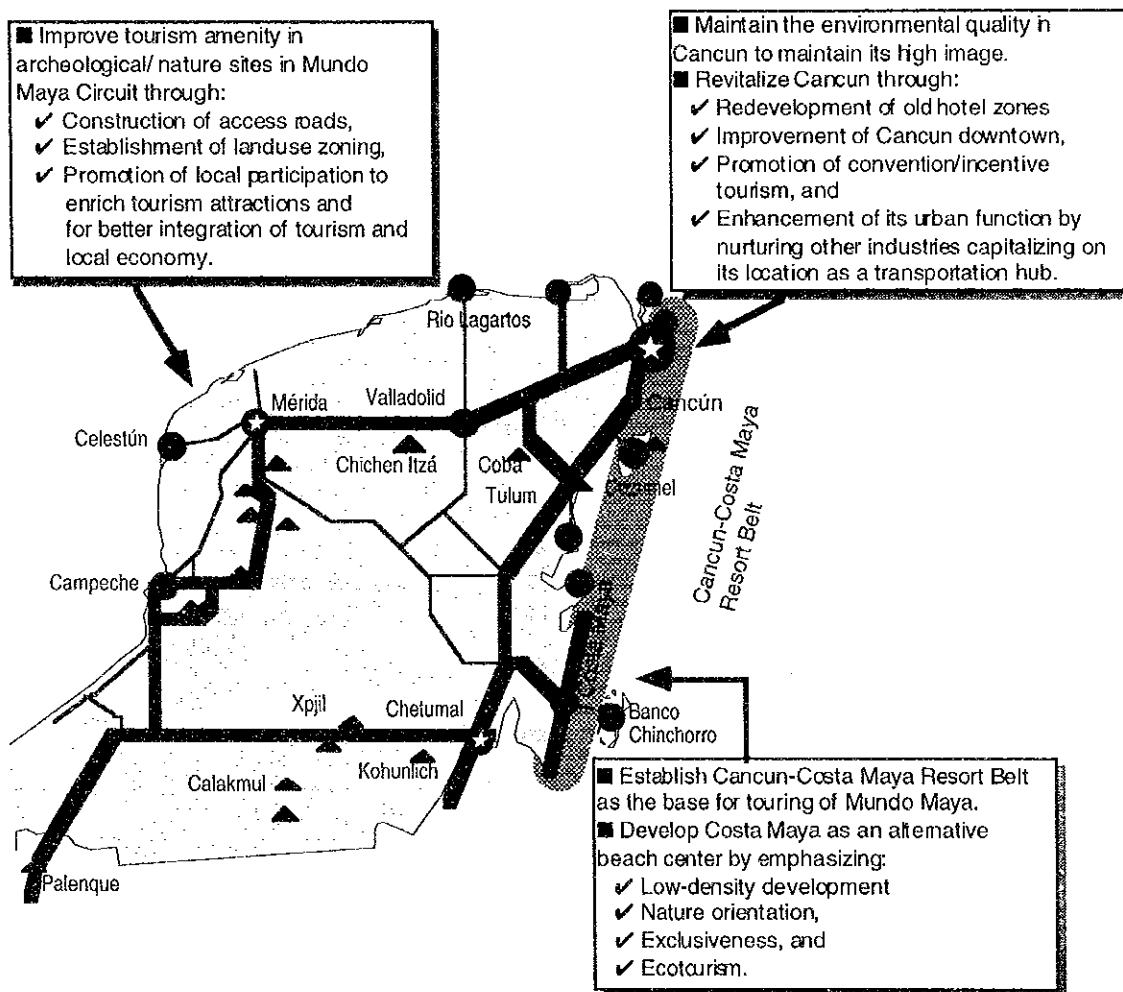
Source: JICA study team

By the target year of 2010, the Cancun tourism region should develop Costa Maya as another beach center, and formulate Cancun - Costa Maya Resort Belt. The resort belt should include various types of beach resort development from high-rise hotels in the Cancun hotel zone to an exclusive eco-lodge style accommodation in Sian Ka'an thus catering for different types of visitors.

Community-based ecotourism combined with archaeological tourism should be thriving at various sites along Mundo Maya Circuit. Banco Chinchorro should be introduced as another diving destination comparable to Cozumel.

In spite of the expansion policy of the tourism region, revitalization of Cancun is another important issue. Convention and incentive tourism would be an important target of old Cancun. The resort city should enhance its urban function to be a hub of transportation and communication for further development like the case of Miami in the USA. Figure 23 details the long-term strategy.

Figure 23 Long-term strategy of the Cancun tourism region

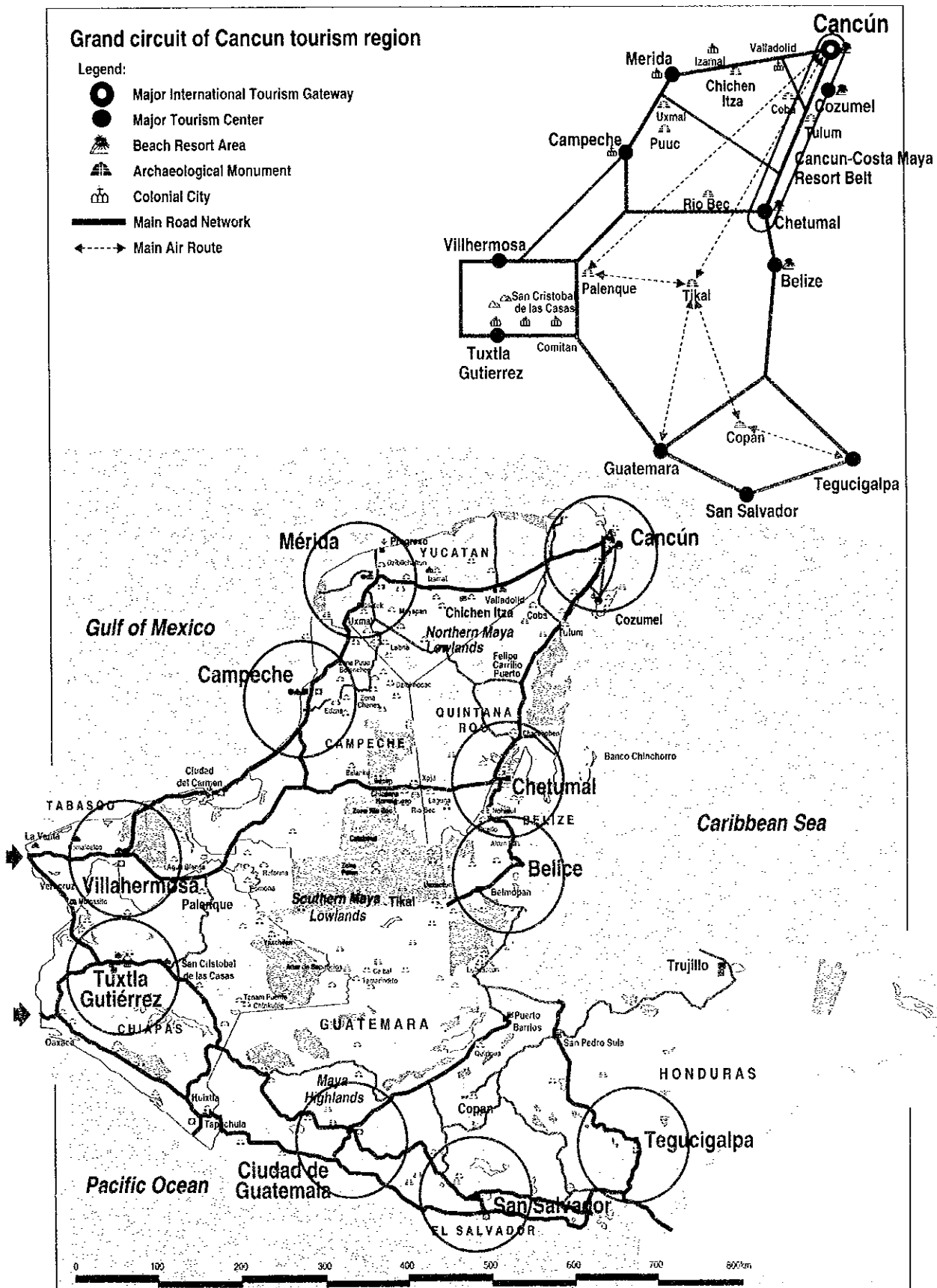


Source: JICA study team

5.3.2. Spatial structure of tourism

Proposed spatial structure of the Cancun tourism region in the target year 2010 is shown in Figure 24

Figure 24 Spatial structure of Cancun tourism region



5.3.3. Marketing directions

(1) Tourism images of the Cancun tourism region

- The gateway to the Mayan World,
- The destination with an ideal combination of coral beaches and exotic pre-Hispanic cultures,
- Tropical rain forest.

Mayan culture is more important for the long-haul market than the short-haul market. The image of tropical rain forest would be increasingly important as ecotourism becomes popular.

(2) Target markets of the Cancun tourism region

Cultural tourists who are interested in archaeology and the indigenous culture but prefer to rest and relax after touring the Mayan World,

- People who are interested in diving and underwater scenery,
- Long-weekend tourists from the southeastern part of USA, and
- Convention and incentive tourism.

As the strategy of the tourism region specifies, the long-haul market has relative importance in the Cancun tourism region.

(3) Prospect of tourism products by geographic market segment

Table 32 summarizes prospect of tourism products in the Cancun tourism region by geographical market segment. It is noted that archaeological tourism and resort tourism would be appreciated by all the market segments.

Table 32 Prospect of tourism products by geographical market segments

	Domestic	Southbound (North America)	Northbound (Latin America)	Westbound (Europe)	Eastbound (Asia)
Archaeological tourism	◎	◎	◎	◎	◎
Cultural tourism	○	○	○	○	○
Touring	○	○	○	○	○
Unique towns & villages	○	○	○	○	○
Tourism local industry complex		○		○	○
Alternative accommodation		○		○	○
Regional museums	-	-	-	-	-
Nature & wildlife					
Touring of nature sites	-	-	-	-	-
Nature excursion	○	○	○	○	○
Ecology museum	-	-	-	-	-
Alternative accommodation	○	○	○	○	○
Cruise ship tourism	○	◎	◎	◎	○
Resort tourism	◎	◎	◎	◎	◎
Activities	◎	◎	○	○	○
Theme park	◎	◎	○	○	○
Convention/Incentive	◎	◎	○	○	○
Ecotourism		○		○	○

Note: ◎ = very prospective, ○ = prospective, blank = not very prospective, - = not available

Source: JICA study team

5.3.4. Development framework

The development framework of visitor arrivals and the number of hotel room requirement for the tourism region are shown in Table 33. Target of visitor arrivals in 2010 is 5.6 million (domestic; 1.3 million, international; 4.3 million), which requires 50,000 hotel rooms excluding non-star hotels, condominiums and other types of accommodations like camping facilities.

Table 33 Development framework of the Cancun tourism region

Tourism Destinations	Hotel Arrivals (x1,000)										Hotel rooms				
	Domestic					International									
	1995	2000	2002	2005	2010	1995	2000	2002	2005	2010	1995	2000	2002	2005	2010
Cancun	489	546	576	621	734	1,666	1,788	1,845	1,929	2,148	18,891	20,150	20,838	21,870	24,557
	1.00	1.12	1.18	1.27	1.50	1.00	1.07	1.11	1.16	1.29	1.00	1.07	1.10	1.16	1.30
Cozumel	67	80	86	97	123	243	297	326	370	480	3,332	3,882	4,206	4,693	5,906
	1.00	1.19	1.29	1.45	1.84	1.00	1.22	1.34	1.52	1.97	1.00	1.17	1.26	1.41	1.77
Tulum Corridor	7	62	95	143	263	108	358	503	719	1,259	1,515	4,083	5,637	7,968	13,878
	1.00	8.90	13.51	20.42	37.59	1.00	3.31	4.65	6.65	11.64	1.00	2.69	3.72	5.26	9.16
Costa Maya	n.a.	16	19	25	43	n.a.	49	61	80	147	10	543	694	920	1,764
	n.a.	1.00	1.22	1.54	2.69	n.a.	1.00	1.26	1.64	3.02	1.00	54.30	69.36	91.95	176.35
Others	n.a.	39	61	93	161	n.a.	78	112	163	254	1,350	1,782	2,246	2,942	4,292
	n.a.	1.00	1.54	2.35	4.10	n.a.	1.00	1.44	2.10	3.26	1.00	1.32	1.66	2.18	3.18
Total of Quintana Roo State	589	744	837	977	1,324	2,113	2,570	2,847	3,262	4,286	25,098	30,440	33,620	38,392	50,397
	n.a.	1.00	1.13	1.31	1.78	n.a.	1.00	1.11	1.27	1.67	1.00	1.21	1.34	1.53	2.01

Source: SECTUR, Jalisco state, JICA study team

5.4. Tourism development and promotion project

5.4.1. Action plan

(1) Tourism development projects

Based on the action plan strategy, the following projects are chosen as action projects in the Cancun tourism region. Total cost of the projects is Peso 3,198,044,000 or US\$ 426,406,000.

Table 34 Cost of action projects

Action projects	Unit	Cost (1,000)			
		Total	Central Gov.	State/ City	Private
Laguna Nichupte comprehensive environmental improvement (CTR CUN-6)	Peso US\$	853,100 113,747	853,100		
Improvement of Federal Highway No. 307 between Cancun and Chetumal (CTR CTC-3)	Peso US\$	1,900,000 253,333	1,900,000		
Road improvement of the section of Tulum-Coba-Autopista No.180 (CTR CTC)	Peso US\$	86,300 11,507	86,300		
Nature conservation and tourism amenity improvement of Yum Balam Biosphere Reserve (CTR CUN-8)	Peso US\$	4,000 533		4,000	
Nature conservation and tourism amenity improvement of Banco Chinchorro (CTR CSM-1)	Peso US\$	32,500 4,333	22,500	10,000	
Ecotourism development in Kohunlich archeological site (CTR CCQ-1 (1))	Peso US\$	70,750 9,433	28,350	29,200	13,200
Community-based ecotourism development in Xpjiil archeological site () (Campeche state)	Peso US\$	80,594 10,746		80,594	
Infrastructure development for Costa Maya resort (CTR CSM-3 (2))	Peso US\$	170,800 22,773		170,800	
Total	Peso US\$	3,198,044 426,406	2,890,250 385,367	294,594 39,279	13,200 1,760

Source: JICA study team

(2) Tourism promotion projects

General tourism promotion measures are applicable to the Cancun tourism region. Through the promotion activities, the images of Mundo Maya or Mayan World and tropical rain forest should be publicized widely. Multi-country cooperation would be crucial to promote Mundo Maya. The long-haul market has relative importance in Cancun compared with Los Cabos and Puerto Vallarta.

Total cost of tourism promotion projects is Peso 335,680 or US\$ 44,757,000.

(3) Institutional and organization programs

Following programs should be implemented as action projects to realize the strategy of the tourism region.

- 1) Introduction of development guidelines to, and promotion of nature-oriented development in, Cancun - Costa Maya Resort Belt,
- 2) Establishment of an inter-state organization for coordination of tourism administration,
- 3) Establishment of an inter-state organization for coordination of sale promotion,
- 4) Periodical visitor surveys at airports,
- 5) Introduction of the financial assistance system for tourism SMEs,
- 6) Establishment of a convention bureau, and
- 7) Training system for ecotourism.

5.4.2. Tourism development projects for implementation by 2010

(1) Tourism development projects

Table 35 summarizes by type and category the proposed projects including action projects to be implemented by the target year of 2010..

Table 35 Summary of development projects by type in Level-1 and 2

Types of Projects	Units	Short term	Medium term	Long term	Total
		1997-2000	2001-2005	2006-2010	1997-2010
Category-A					
Tourism attraction	Peso	42,250	83,780	2,400	128,430
	US\$	5,633	11,171	320	17,124
Environmental & Social	Peso	283,000	596,350	0	879,350
	US\$	37,733	79,513	0	117,247
Tourism facilities	Peso	227,050	357,656	223,320	808,026
	US\$	30,273	47,687	29,776	107,737
Hotel accommodation	Peso	3,821,250	5,711,620	8,647,940	18,180,810
	US\$	509,500	761,549	1,153,059	2,424,108
Land development	Peso	203,500	854,500	837,000	1,895,000
	US\$	27,133	113,933	111,600	252,667
Transport	Peso	169,100	122,050	0	291,150
	US\$	22,547	16,273	0	38,820
Utility services	Peso	57,500	57,500	0	115,000
	US\$	7,667	7,667	0	15,333
Total of Category-A	Peso	4,803,650	7,783,456	9,710,660	22,297,766
	US\$	640,487	1,037,794	1,294,755	2,973,035
Category-B					
Transport	Peso	2,280,550	514,020	1,999,830	4,794,400
	US\$	304,073	68,536	266,644	639,253
Utility services	Peso	50,000	102,650	51,600	204,250
	US\$	6,667	13,687	6,880	27,233
Total of Category-B	Peso	2,330,550	616,670	2,051,430	4,998,650
	US\$	310,740	82,223	273,524	666,487
Total of category-A & B	Peso	7,134,200	8,400,126	11,762,090	27,296,416
	US\$	951,227	1,120,017	1,568,279	3,639,522

Note: Upper line is in Pesos 1,000 , Lower line is in US\$1,000

Source: JICA study team

(2) **Tourism promotion and institutional programs**

Table 36 summarizes tourism promotion and institutional programs to be implemented by the target year of 2010.

Table 36 Summary of tourism promotion projects by type

Types of Projects	Units	Short term	Medium term	Long term	Total
		1997-2000	2001-2005	2006-2010	1997-2010
Publicity (preparation of materials)	Peso	5,499	16,197	10,924	32,620
	US\$	733	2,160	1,457	4,349
Advertisement	Peso	125,737	209,562	209,562	544,861
	US\$	16,765	27,941	27,941	72,648
PR activities	Peso	20,077	33,461	33,461	86,999
	US\$	2,677	4,461	4,461	11,600
Approach to trade sector	Peso	29,844	51,148	51,148	132,140
	US\$	3,979	6,820	6,820	17,619
Approach to consumers	Peso	5,495	13,602	13,602	32,699
	US\$	733	1,814	1,814	4,360
Campaign and events	Peso	4,325	4,813	4,813	13,951
	US\$	577	642	642	1,860
Institutional & organizational programs	Peso	2,908	4,846	4,846	12,600
	US\$	388	646	646	1,680
Total	Peso	193,885	333,629	328,356	855,870
	US\$	25,851	44,484	43,781	114,115

Note: Upper line is in 1,000 Pesos, Lower line is 1,000 US\$

Source: JICA study team

5.5. Economic and financial analysis

(1) Economic analysis of Cancun tourism region

The economic internal rate of return (EIRR) is 24.7 %. Table 37 shows results of the sensitivity analysis based on the EIRR of 24.7%

Table 37 Economic internal rate of return (EIRR)

Cases of sensitivity analysis	EIRR (%)
Base Case	24.7
Increase of Total Benefit (+20%)	47.2
Decrease of Total Benefit (-20%)	2.5
Increase of Total Cost (+20%)	6.3
Decrease of Total Cost (-20%)	53.3

Source: JICA study team

In case of benefit increase or cost reduction, economic viability is improved significantly. The main cause of benefit increase is increase of tourists inflow and their expenditure. However, there is a certain relationship between tourists increase and cost by item. In general, investment for infrastructure and facilities are required to receive tourists increase, and effective tourism promotion attracts more tourists.

Therefore, sensitivity analysis by combination of cost increase and benefit increase is conducted to clarify cost capacity for benefit increasing. If 5% increase of cost generate 10% increase of benefit, the future EIRR will be 29.9 % and economic viability will be improved. In order to ensure economic viability with 20% of benefit increase, total cost is allowed 10% increase. As such, further efforts to attract more tourists are required for sound growth of the tourism industry

Table 38 Sensitivity analysis of EIRR by cost and benefit increase

Cases	Cost: +5%	Cost: +10%	Cost: +20%
Benefit: +20%	40.5 %	34.6 %	24.7 %
Benefit: +10%	29.9 %	24.7 %	
Benefit: +5%	24.7 %		

Source: JICA study team

(2) Results of financial analysis

Revenue and expenditure ratio (R/E)

The revenue and expenditure (R/E) ratio of public sector for the Los Cabos tourism region is 1.84 in case of discount rate is 8.5%, which is sufficient..

Financial internal rate of return

The financial internal rate of return (FIRR) of private sector is 27.5 %. A sensitivity analysis was made as shown in Table 39 based on the base case of 27.5 %.

Table 39 Financial internal rate of return (FIRR)

Cases of sensitivity analysis	FIRR (%)
Base Case	27.5
Increase of Revenue (+20%)	43.2
Decrease of Revenue (-20%)	7.4
Increase of Expenditure (+20%)	11.2
Decrease of Expenditure (-20%)	46.8

Source: JICA study team

If the business income tax is counted for expenditure, FIRR becomes 23.3%.

In order to check whether the proposed investment plan is optimum or not, the sensitivity analysis of investment for hotels and/or other facilities are done as follows.

Table 40 Sensitivity analysis of FIRR by privat investment of hotels or other facilities

Private	-10 %	0 %	+10 %	Hotel
+10 %	30.4 %	28.2 %	26.3%	
0 %	29.6 %	27.5 %	25.6 %	
-10 %	28.8 %	26.7 %	24.9 %	
Other facilities				

Source: JICA study team

In the Cancun tourism region, an investment plan with less hotels and more of other facilities is more suitable from a financial view point under the assumption that the demand elasticity is 0.5

6. Recommendations

6.1. Recommendations at the regional level

It is necessary to implement the proposed projects by the target year of 2010. The followings are major points for consideration for the implementation of the projects.

- 1) Close coordination with related agencies at national and regional levels,
- 2) Privatization of profitable projects,
- 3) Conduct of detailed feasibility study prior to the implementation of each project,
- 4) Better utilization of FONATUR funds,
- 5) Conduct of Environmental and Social Impact Assessment prior to the implementation ,
- 6) Establishment of inter-states tourism organizations for tourism administration and tourism promotion,
- 7) Establishment of a financial assistance system for tourism SMEs to encourage local participation in tourism , and
- 8) Introduction of an education system of ecotourism to promote local participation and tourism diversification.

6.2. Recommendations at the national level

SECTUR should undertake a significant role to implement the proposed projects. The followings are major responsibilities of SECTUR.

- 1) Enhancement of the coordination function of SECTUR among the federal government agencies,
- 2) Strengthening of assistance function to local governments for the tourism development and promotion,
- 3) Introduction of an inter-state coordination system for tourism administration system and tourism promotion
- 4) Restructuring of SECTUR by introducing semi-governmental or privatized organizations,
- 5) Establishment of a financial assistant system for tourism SMEs,
- 6) Establishment of a certification system linked with the wage structure for tourism employees, and
- 7) Preparation of guidelines and training programs for the education of ecotourism, which is to be conducted by local governments.

JICA