

No.

**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)**

**INSTITUTO COSTARRICENSE DE TURISMO (ICT)  
THE GOVERNMENT OF THE REPUBLIC OF COSTA RICA**

**THE STUDY FOR THE LAND USE PLAN IN  
THE COASTAL ZONES OF THE TOURIST PLANNING UNITS  
IN THE REPUBLIC OF COSTA RICA**

**LUPLANT-ZMT21**

**FINAL REPORT**

**VOLUME 2  
MAIN TEXT**

**JANUARY 2001**

**PACIFIC CONSULTANTS INTERNATIONAL  
YACHIYO ENGINEERING CO.LTD.**

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The exchange rates applied in this study are:

USD\$ 1.00 = 309.61 Costa Rica Colon

## PREFACE

In response to a request from the Government of the Republic of Costa Rica, the Government of Japan decided to conduct the Study for the Land Use Plan in the Coastal Zones of the Tourist Planning Units in the Republic of Costa Rica and entrusted the Study to the Japan International Cooperation Agency (JICA).

JICA selected and dispatched a study team headed by Mr. Hideyuki Sasaki of Pacific Consultants International and consist of Pacific Consultants International and Yachiyo Engineering Co.Ltd. to Costa Rica, three times between February 2000 and December 2000. In addition, JICA set up an Advisory Committee headed by Professor Yukio Nishimura of Tokyo University between January 2000 and January 2001, which examined the Study from Specialist and technical point of view.

The Study Team held discussions with the official concerned of the Government of Costa Rica and conducted field surveys at the study area. Upon returning to Japan, the Study Team conducted further studies and prepared this final report.

I hope that this report will contribute to tourism development and promotion in Costa Rica, and to the enhancement of friendly relationship between our two countries.

Finally, I wish to express my sincere appreciation to the officials concerned of the Government of Costa Rica for their close cooperation extended to the Study Team.

January 2001



Kunihiko SAITO  
President  
Japan International Cooperation Agency

January 2001

Mr. Kunihiro SAITO  
President  
Japan International Cooperation Agency  
Tokyo, Japan

## Letter of Transmittal

Dear Sir,

We are pleased to formally submit herewith the Final Report of “The Study for the Land Use Plan in the Coastal Zones of the Tourist Planning Units in the Republic of Costa Rica.”

This report compiles the results of the Study which was undertaken in the Republic of Costa Rica from January 2000 through January 2001 by the Study Team organized jointly by Pacific Consultants International and Yachiyo Engineering Co. Ltd. under the contract with the JICA.

This report compiles General Land Use and Tourism Development Plans for South Guanacaste and Corcovado-Golfo in order to promote sustainable tourism development.

We would like to express our sincere gratitude and appreciation to all the officials of your agency, the JICA advisory Committee, and Ministry of Foreign Affairs. We also would like to send our great appreciation to all those extended their kind assistance and cooperation to the Study Team, in particular, the Costa Rican counterpart agency.

We hope that the report will be able to contribute significantly to tourism development in Costa Rica.

Very truly yours,



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Hideyuki SASAKI  
Team Leader,  
The Study Team for the Study for the  
Land Use Plan in the Coastal Zones of  
the Tourist Planning Units in the  
Republic of Costa Rica

## **INTRODUCTION**

This is the summary of the Final Report of the Study for the Land Use Plan in the Coastal Zones of the Tourist Planning Units in the Republic of Costa Rica. This study project was conducted as a joint effort of the JICA Study Team and Costa Rican counterpart personnel, for technical cooperation between the Japan International Cooperation Agency (JICA) and Instituto Costarricense de Turismo (ICT), over the period from January 2000 to January 2001.

The Final Report is comprised of the following volumes:

Volume 1: Summary

Volume 2: The Main Text

Volume 3: Appendix

Planning Atlas in GIS

In the course of the study, not only Costa Rican counterparts but also participants in stakeholder meetings actively and largely contributed to the study and their own local processes for seeking sustainable tourism and regional development.

In peripheral regions of Costa Rica, which have experienced severe declines of their leading economic sectors, it is expected that tourism development could revitalize regional economies and promote social development. It is sincerely hoped that the Final Report could suggest desirable and realistic directions for sustainable tourism development and provide effective measures and tools by which local and central stakeholders could take responsible actions.

January 2001, Tokyo, Japan

## **PROFILE OF THE JICA STUDY**

### ***BACKGROUND***

In response to the request of the Government of the Republic of Costa Rica (hereinafter referred to as "GOC"), the Government of Japan (hereinafter referred to as "GOJ") decided to conduct "The Study for the Land Use Plan in the Coastal Zones of the Tourist Planning Units in the Republic of Costa Rica" (hereinafter referred to as "the Study"). The Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of technical cooperation programs of GOJ, undertook the Study in close cooperation with the authorities of GOC.

On the part of GOC, Instituto Costarricense de Turismo (hereinafter referred to as "ICT") shall act as the Counterpart Agency for the JICA Study Team. ICT coordinated the implementation of the Study with other related government agencies and non-governmental organizations.

### ***OBJECTIVES OF THE STUDY***

1. To formulate land use plans in order to promote sustainable tourism development in the coastal zones with a view to ensuring environmental quality;
2. To prepare the necessary measures for sustainable tourism development; and
3. To carry out the relevant technology and knowledge transfer.

### ***THE STUDY AREAS***

South Guanacaste Tourism Planning Unit and Corcovado-Golfito Tourism Planning Unit

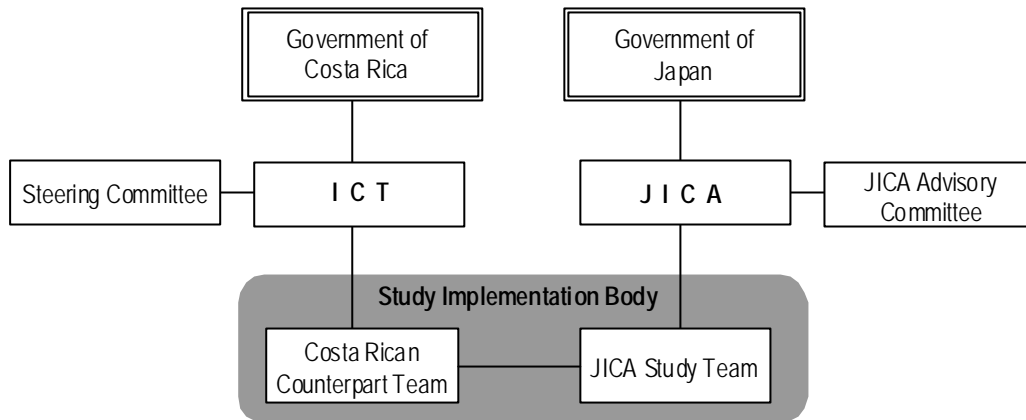
### ***BASIC APPROACH OF THE STUDY***

1. Comprehensive and Integrated Planning Approach
2. Approach based on the Understanding of Natural and Environmental Conditions
3. Participatory Consultative Processes for Planning
4. Utilization of Geographic Information System (GIS) for Land Use Planning

### ***STUDY IMPLEMENTATION BODY***

The Study was carried out as a joint effort of the JICA study team and Costa Rican counterparts. The JICA study team was composed of 16 experts from Pacific Consultants International (PCI) and Yachiyo Engineering Co. Ltd. (YEC). The Costa Rican counterpart team was composed of 16 experts from ICT, INVU, IGN and ICAA.

**Figure 1 Study Organization**



***BASIC FLOW OF THE STUDY***

The basic workflow of the Study is shown in Figure 2. The study is composed of the following four phases:

- Phase 1 Analysis of Existing Conditions
- Phase 2 Identification of Issues of Coastal Land Use and Tourism Development
- Phase 3 Formulation of Draft Land Use Plans in the Coastal Areas
- Phase 4 Formulation of Master Plans for Land Use and Tourism Development in the Coastal Areas

**Figure 2 Basic Flow of the Study**

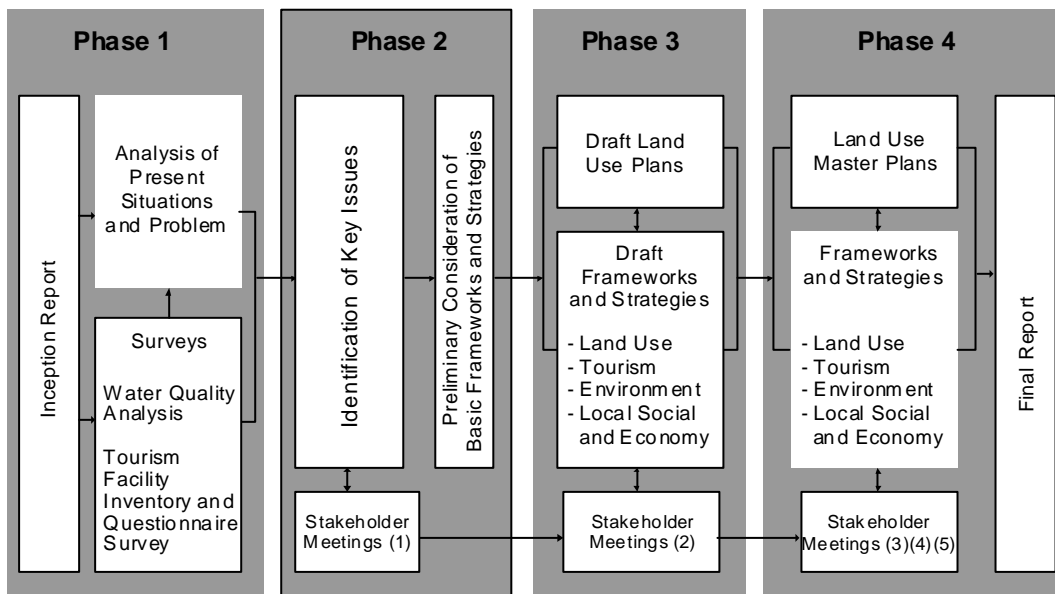
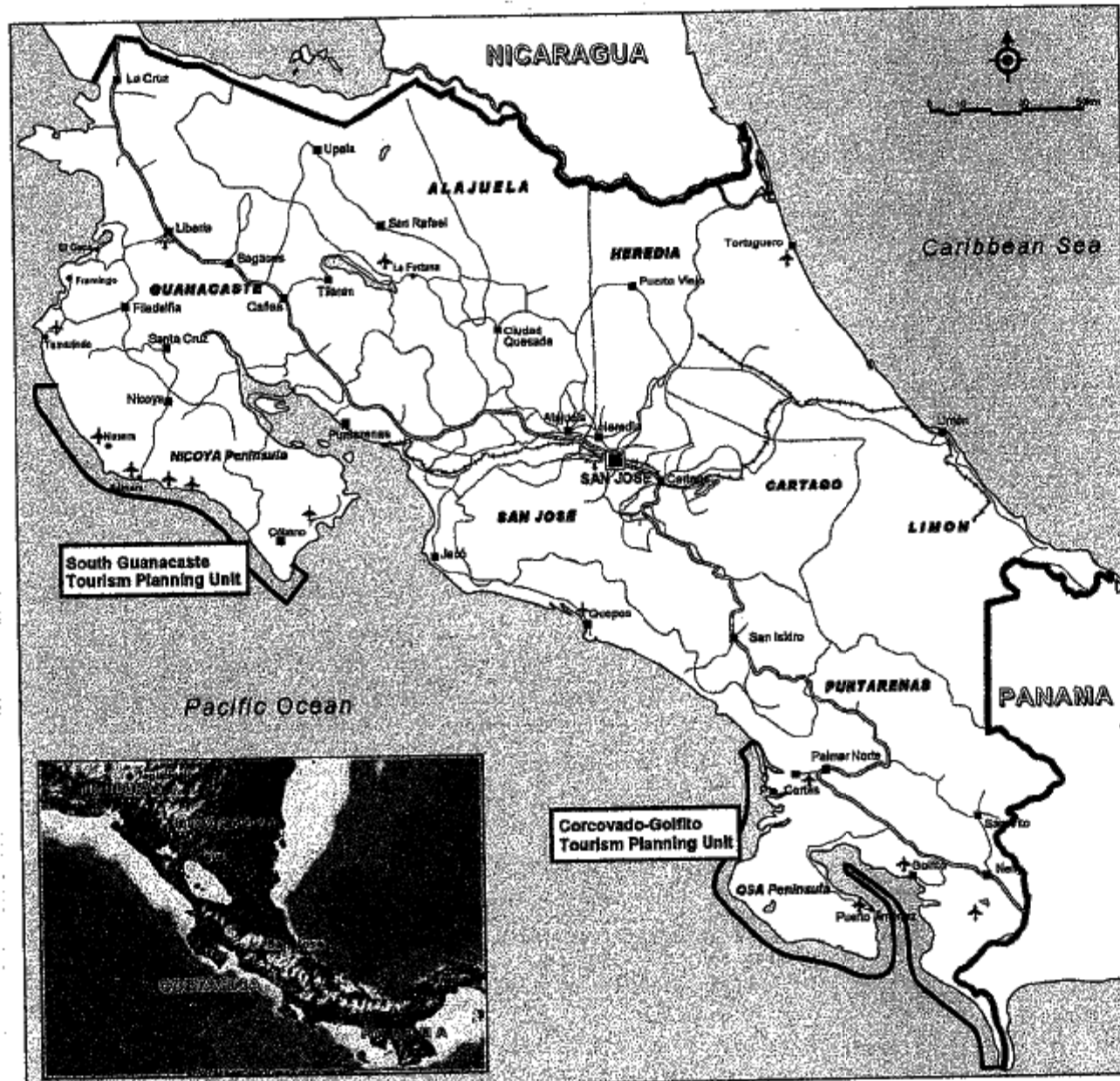


Figure 3 Study Area Map



<b>Legend</b>		Capital City		Inter-American Highway		International Airport
		Major City/Town		Other Roads		Domestic Airport
		Other Town		Railways		
		International Boundary		Rivers		
		Provincial Boundary				



# **EXECUTIVE SUMMARY OF THE STUDY RESULTS**

The outline of the study results will be given in the following order:

- (1) Background of the Study
- (2) Characteristics and Issues of Costa Rica's Tourism
- (3) Characteristics and Issues of Regional Tourism Development in the Study Areas
- (4) New Planning Methodology and New "General Plan" for Sustainable Tourism Development
- (5) Recommended Actions
- (6) Conclusion

## **BACKGROUND OF THE STUDY**

### **BACKGROUND**

#### **Role of Tourism Sector: Foreign Currency Earning and Regional Development**

As for the national economy, Costa Rica's tourism industry is one of the most important economic sectors in terms of foreign currency earning and of economic income generation. Since there is a large disparity between the Greater San José and other regions in the income levels and living standards of the people, for the regions outside the Greater San José, tourism development is expected to contribute to employment generation. In fact, due to the decline of cattle production on the Nicoya peninsula and the closure of banana plantations in the Golfito area, more attention has been paid to the role of tourism development.

#### **Growth of Ecotourism and "Sun and Beach" Tourism**

Costa Rica's tourism is famous for ecotourism, which began developing rapidly in the 1980s based on its rich environmental resources, such as flora and fauna found in upland rain forests and lowland mangrove forests. At the same time, especially in recent years, there are an increasing number of international tourists attracted by conventional "sun and beach" tourism products. Although Costa Rica's beaches and coastal zones are not so splendid as other major international beach tourism destinations (Mexico, Cuba or Dominica), they have comparative advantages because of the relatively good accessibility to ecotourism sites from the beach resorts, as well as because of relatively undisturbed beauty and peacefulness.

### **Unordered Development of Coastal Areas**

In Costa Rica's coastal zones, tourism facilities and real estate development have been gradually increasing in the last ten years. Some of the tourism-related developments have caused environmental destruction and deterioration of both terrestrial and marine components of the coastal zones. This is partly due to the absence of land use plans that identify and protect the most sensitive habitats and natural attractions and therefore can be used for guiding coastal development in an orderly and sustainable manner.

### **Impact of Environmental Deterioration on Tourism**

At present, more than 40 % of the international tourists to Costa Rica are considered to be ecotourists, who are conscious of the environmental quality and sensitive to the deteriorated environment even outside ecotourism destinations, such as national parks and private nature reserves. Since the combination of ecotourism products and "sun and beach" tourism products is considered to continue to be the main attraction of Costa Rica's tourism, the environmental damage, either to coastal zones or to ecotourism sites, might have serious negative impacts on international tourist arrivals to Costa Rica.

### **Need for Tourism Development and Land Use Master Plans**

South Guanacaste Region and Corcovado-Golfito Region, which are on the Pacific Coast, were selected as the study areas. It is partly because these two regions have certain levels of tourism development potential, and partly because it is considered that the formulation of new tourism and land use master plans still could lead to guiding coastal tourism development in sustainable ways. On the other hand, the Pacific Coastal regions other than these two regions have already experienced a substantial level of tourism development and it is difficult to renew tourism development over the past development patterns. In these situations, the coastal zones of South Guanacaste and Corcovado-Golfito require effective and implementable master plans of tourism development and land use, in order to realize sustainable tourism development.

## **CHARACTERISTICS AND ISSUES OF COSTA RICA'S TOURISM**

In view of the characteristics and issues of Costa Rica's tourism, the role of coastal tourism in Costa Rica will be discussed.

### **BASIC DIRECTIONS OF COSTA RICA'S TOURISM IN THE FUTURE**

#### **Directions of Evolution of Costa Rica's Tourism**

Costa Rican tourism should seek a unique position in the world tourist market and evolve into "a multi-faceted tourist destination with a difference – strong nature tourism appeal" or in other words, "a nature-based tourism destination with many other attractive options and activities."

#### **Diversification of Tourism Products and Tourism Markets**

Such tourism product development encompasses far larger market segments and potentials - from general interest tour circuit (volcanoes, hot springs, scenic wonders), soft adventures (rafting, canoeing), marine activities (surfing, diving, snorkeling, sport-fishing), health/curative holiday, to conference/incentives or beach holiday.

### **TOURISM IN COASTAL AREAS OF COSTA RICA**

#### **Congestion and Overcapacity of Existing Ecotourism Sites**

Rapid growth in tourism in recent years has brought about the problems of congestion, overcapacity and concerns for deterioration of the limited number of popular national parks and nature reserves (e.g., Monteverde, Manuel Antonio) within an easy access from San Jose, the sole gateway of international regular flights to Costa Rica. It is necessary to disperse more tourists to less known and less visited tourism areas to mitigate concentration and degradation of much visited areas and resources.

#### **Combination of "Sun and Beach" Tourism and Nature Tourism**

"Sun and beach" tourism (coastal tourism) is not and will not be the frontline product of Costa Rican tourism, since the Costa Rican beach holiday product is less appealing than those in other competitive beach destinations. However, "sun and beach" tourism can be a very powerful instrument in broadening the market potential of Costa Rica from the present narrow ecotourism segment.

### **Diversification and Expansion of Markets**

“Sun and beach combined with nature experiences” is a definitively attractive product proposal to new and growing market segments of affluent senior citizen groups and MICE tourism (meetings, incentives, conferences and exhibits).

## **CHANGES OF TOURISM PROMOTION STRATEGIES**

### **Need for Promotion of Specific Tourism Products and Regions**

Since Costa Rica is so well established in the world market as a leading ecotourism destination, much further market expansion is not anticipated by pursuing the same ecotourism-focused promotion. Also the past promotional approaches are weighed more on general image building.

### **Changes in Targets of Tourism Promotion from Consumer to Organizations**

In order to broaden her market base from niche ecotourism, more focused promotional efforts are recommended to potential target market segments by offering new products and attractive proposals (specific activities, adventures, conferences and seminars, health holidays, meet-the-people programs, combined with nature experience and/or sun and beach, or specific regions/locales combined with specific activities/themes/events).

## **CHARACTERISTICS AND ISSUES OF REGIONAL TOURISM DEVELOPMENT IN THE STUDY AREAS**

Tourism development potential and constraints of South Guanacaste and Corcovado-Golfito will be discussed.

## **TOURISM DEVELOPMENT POTENTIAL IN SOUTH GUANACASTE**

### **Potential and Constraints of “Sun and Beach” Tourism**

The existence of many potential beaches and the dry tropical climate puts South Guanacaste in an advantageous position as the second best-placed candidate region to develop “sun and beach” type of tourism, following North Guanacaste. However, the largest constraint to tourism development in South Guanacaste is its remote location from two international gateways, San Jose and from Liberia, even with the prospective opening of the Tempisque Bridge and future pavement of access roads. Moreover, the beaches of South Guanacaste are not so splendid as those of Northern Guanacaste.

### **Strategies to Differentiate South Guanacaste from Other Beach Resorts**

Therefore, one of the issues is how to differentiate the “sun and beach” tourism of South Guanacaste from other beach resorts. Among possible solutions is to combine “sun and beach” tourism with nature tourism by retaining nature along the coast and in inland areas.

### **Nature Conservation: Within and Outside Nature Protected Areas**

Adequate visitor facilities and a management plan should be put in place on a sustainable basis for several national parks/wildlife reserves, such as Ostional Wildlife Refuge, Camaronal Wildlife Refuge and Cabo Blanco Absolute Nature Reserve.

## **TOURISM DEVELOPMENT POTENTIAL IN CORCOVADO-GOLFITO**

### **Beyond Niche Markets of Ecotourism**

Corcovado National Park, the Golfo Dulce and the Pacific Ocean are the three dominant draws for the Corcovado-Golfito Region, which at present receives only a rather small niche market of hard-core (some soft-core) eco/nature-based tourists and some activity tourists (sport-fishing, sea kayaking and surfing), constrained by poor access (road, air and sea/river) and limited capacity (almost the only available accommodation at present being cabins or bungalows of 10-20-room size).

### **Diversification of Nature Tourism Products and Types of Tourists**

Since the former main industries in Corcovado-Golfito, such as banana plantations and gold mining, had declined by the mid-1980s, tourism development should be guided and promoted in order to enhance employment generation and local economic development for a wide range of people and economic sectors, by diversifying nature tourism products and by attracting varied types of tourists.

### **Tourist Facility Improvement and Natural Resources Management**

Adequate visitor facilities and a management plan should be put in place on a sustainable basis for national parks (Corcovado and Piedras Blancas) and mangrove wetland (Sierpe Estuary) in order to hold a larger number of nature tourists at soft-core level on top of the niche market hard-core ecotourists that these parks/reserves now receive. Adequate visitor facilities include better trail systems, visitor/orientation center, self-guiding signs, interpretative signposting, trail maps/brochures, well-informed/trained park rangers/guides and emergency refuges/huts.

## **NEW PLANNING METHODOLOGY AND NEW “GENERAL PLAN” FOR SUSTAINABLE TOURISM DEVELOPMENT**

The JICA Study recommended a new planning methodology for coastal tourism development and land uses, and formulated new general plans based on the new methodology.

### **NEW “GENERAL PLAN” FOR TOURISM DEVELOPMENT IN COASTAL AREAS**

#### **Conventional Planning System: Physical Development and Land Use Plans**

The conventional planning system for coastal tourism in Costa Rica is composed of two levels of planning. One is a General Land Use Plan at the regional level, and the other is a Regulatory Plan at the local level. Both of these plans are very much oriented to physical development and land use plans.

#### **Recommendation of New Planning Methodology**

The major outputs of the JICA Study are General Land Use Plans and Tourism Development Plans for South Guanacaste and Corcovado-Golfito. The JICA Study recommended that a new methodology should be introduced for planning of sustainable tourism development and land use management in coastal regions.

#### **Planning from Three Perspectives**

For seeking sustainable tourism, the JICA Study dealt with a variety of issues (shown below) from three different perspectives, namely 1) tourism development, 2) natural resources management and 3) local socio-economic development and established the following frameworks of development and nature conservation (objectives, basic strategies and measures):

- Framework for Tourism Development
- Framework for Local Socio-Economic Development
- Framework for Natural Resources Management
- Framework for Infrastructure Provision
- Framework for Land Use Management

#### **Roles of New “General Plans”**

The basic roles of the General Plans are as follows:

- To provide guidelines for formulating regulatory land use plans, and to revise existing regulatory land use plans, for guiding tourism facility development and tourism land uses in appropriate scales and locations,

attractive tourism areas,

- To secure areas for existing people and communities so that local people can stay in the areas, and
- To accommodate relocated people from the areas for hotels, amenity cores and existing people.

### **New Land Use Zones for General Land Use Plan**

Large Land Use Zone	Detailed Land Use Zone
Tourism Development Zone [T]	Tourism Amenity Core Area (TAN) Planned Tourism Development Area (TAP) Spontaneous Tourism Development Area (TAE) *Local Tourism-Related Commercial Area (TAC) *Local Cabin Development Area (TCD)
Mixed Zone [M]	Mixed Tourism and Community Area (MIX)
Community Zone [C]	Community Core Area (CAN) Community Residential Area (CAR) *Small Area for Local Residents (CAP) *Artisanal Fishermen's Base (CBP)
Other Zone [O]	Other Land Use Area (OAT)
Future Zone [F]	Future Development Area (FAD)
Nature Zone [N]	ICT-Municipality Natural Area (NIM) Private Natural Area (NAP) *Daytime Tourism Activity Base (NAD)
Wetland [H]	
SINAC's Nature Protected Natural [S]	
Urban Zone [U]	
Indigena Reserve [I]	
Limited Zone of Frontier Protection [P]	

Note: An asterisk (\*) indicates spot land allocation. The zone names without asterisk marks mean areal zoning.

## **RECOMMENDED ACTIONS**

Seven actions are recommended as follows:

### **STRATEGIES FOR LAND USE PLANNING AND MANAGEMENT USING GENERAL LAND USE PLANS**

#### **Formulation of a New Integrated Regulatory Plans for each Tourism Center**

Each tourism area or tourism center should be covered by an integrated regulatory land use plans, which is in accordance with the General Land Use Plan. In the past more than several regulatory plans were made covering a single tourism area. The new integrated regulatory land use plan should be formulated by revising the existing regulatory plans covering small parts of the Tourism Center and by making new regulatory plans for the parts in which no regulatory plans have been established.

#### **Formulation of Regulatory Plans to Cover the Whole Area of a Tourism Center**

The JICA Study identified important areas for tourism development as Tourism Centers. The Tourism Centers have boundaries covering both MTZs and their hinterlands. The general land use plan for MTZs is in according with the MTZ law. On the other hand, the land use plan relating to MTZ hinterlands could be utilized as a reference when formulating prospective regulatory plans.

### **ESTABLISHMENT OF AN INSTITUTIONAL NETWORK FOR GUIDING PRIVATE INVESTMENT IN TOURISM FACILITIES**

#### **Guiding Location and Scale of Tourism Facilities**

ICT, INVU, CINDE and Municipalities need to establish an institutional network for guiding and locations and scale of private investment in tourism facilities in order to capture the information of private investment in tourism facilities at the earlier stage. For such guidance of location and scale, and providing information, the General Land Use Plans should be fully utilized.

#### **Formulation of Tourism Centers covering both MTZ and MTZ's hinterlands**

At the same time, ICT, INVU and Municipalities should consider not only MTZ but also MTZ's hinterlands for guiding locations of tourism facilities within Tourism Centers. The JICA Study Team formulated land use plans covering the hinterlands of MTZ within Tourism Centers as a future reference.



## **PRIVATE INVESTMENT PROMOTION IN TOURISM FACILITIES**

### **Alliance of ICT, CINDE and Municipalities for Private Investment Promotion**

The general land use and tourism development plan is a powerful tool for showing tourism development potential and constraints, allowing private investors to consider investment opportunities in the region. For each region as a whole, the cooperation of ICT, CINDE and Regional Tourism Chamber is essential. For each Tourism Center, the cooperation of ICT, CINDE, municipality and ALDETUS (Local Association of Sustainable Tourism Development) including local tourism chambers is important.

## **PUBLIC INVESTMENT PROMOTION IN INFRASTRUCTURE**

### **ICT's Coordination with Government Agencies in Charge of Infrastructure**

ICT should play key roles in appealing the importance of infrastructure to the government agencies in charge of infrastructure provision, such as MOPT, ICAA and ICE. Especially, road, water supply, sewerage and solid waste disposal are key infrastructure for sustainable tourism development. From long-term (more than 20 years) and mid-term (10 years) perspectives, the JICA Study selected priority action projects and recommended to start them within five years.

### **Strict Implementation of Road Improvement based on Plans**

Improvement of road access is the key factor to promote tourism development in selected areas (tourism centers) both in South Guanacaste and Corcovado-Golfito. The most important principle for regional road development is to construct and maintain only those roads that are part of a planned network.

### **Road Sections to be Improved and Road Sections not to be Improved**

The JICA Study recommended the improvement of selected regional roads from Major National Roads to Primary and Secondary Tourism Centers in both South Guanacaste and Corcovado-Golfito. The JICA Study Team did not recommend a coastal highway for South Guanacaste. In Corcovado-Golfito, the JICA Study did not recommend maintaining the road between Rincon and Drake, but recommended to provide an alternative access to Drake Secondary Tourism Center, based on the combination of river bus in Sierpe River and a road from Sierpe river mouth to Drake.

### **Public Water Supply and Sewage Treatment Systems**

Furthermore, provision of public water supply systems is the essential factor to sustain the development of tourism centers. Water resource development is crucial especially in South Guanacaste because the region has geologically limited aquifer. On the other hand, sewage

treatment systems are inevitable to avoid the deterioration of the environment of tourism centers in coastal areas.

## **LOCAL TOURISM PROMOTION AND COMMUNITY DEVELOPMENT**

### **Local Tourism Development Efforts through Consultative/Participatory Processes**

More efforts should be made at cooperation among local stakeholders for promoting tourism development, solving environmental problems, improving tourism amenities and promoting local social-economic development. The consultative and participatory processes that have been facilitated by the JICA study should be continued and utilized at the stage of implementing the general land use plans.

### **ALDETUS (Local Association for Sustainable Tourism)**

ALDETUS (Local Association for Sustainable Tourism) is a key organization and movement for local tourism promotion and community development. ALDETUS should cover a variety of groups of people with different interests. ALDETUS could be organized on the basis of the stakeholder meetings in each tourism area. The following actions are of priority:

- Local Tourism Promotion
- Improvement of Tourist Amenities in Tourism Centers (Samara, Nosara Town, Garza Town, Santa Teresa)
- Pollution Prevention in Tourism Centers
- Tourism-Based Community Development

## **ESTABLISHMENT AND UTILIZATION OF NATURAL AREAS**

### **Establishment of Nature Areas in MTZs**

For both South Guanacaste and Corcovado-Golfito, nature-oriented tourism is the key for attracting tourists; therefore, natural resources are the most important to sustain tourism-based regional and local development. In addition to MINAE's nature protected areas, Natural Zones should be designated along the coast in order to retain and if necessary restore natural vegetation. In the General Land Use Plans, Tourism Development Zones were mostly allocated within the Tourism Centers. Natural Zones (ICT-Municipality Natural Areas) were allocated between these tourism centers.

### **Utilization of Natural Areas**

In addition to conservation of the Natural Areas in coastal areas, low or moderate-impact utilization should be allowed and promoted the Natural Areas for attracting nature tourists. Adequate visitor facilities are needed for utilization of the Natural Areas, including trail systems, visitor centers, observatory and parking lots.

## **IMPORTANCE OF CONSULTATIVE AND PARTICIPATORY PROCESSES**

### **Need for Consultative/Participatory Processes (1): Theoretical Reasons**

The JICA Study Team has promoted consultative and participatory planning processes at the regional and local levels while its multi-disciplinary experts were conducting data/information collection and analysis. Through this process, especially by organizing stakeholder meetings, the JICA Study Team tried to get local information, knowledge, views and opinions in order to reflect them in strategies and actual plans. It is important for theoretical reasons to promote local people's consultation and participatory planning to encourage ownership, transparency and shared roles not only at the stages of planning but also during the implementation of plans.

### **Need for Consultative/Participatory Processes (2): Situations of Economic and Political Disadvantages**

Both South Guanacaste and Corcovado-Golfito Regions are remote from the Central Valley, and comprise peninsulas and their surroundings. These two regions are historically difficult areas in terms of their economy, and efforts of the central government at improvement of infrastructure and social services have been far behind the other regions. Even with recent strong political support to the regions, especially Osa Peninsula and Golfito area, it is considered that such economic and political disadvantages will remain for years. In these situations, it is impossible for stakeholders, including local business and community, simply to rely on central and local governments in the making and implementation of plans. Rather than simply demanding and waiting for government support, it is essential for local stakeholders to take various concrete actions on their own initiatives. In order to encourage this, it is essential for local stakeholders to participate in formulating and implementing plans, to share responsibility, and to play a leading role in strong local initiatives.

### **Need for Continuing Consultative and Participatory Processes**

The JICA Study Team organized a series of stakeholder meetings and activated local initiatives to continue the processes among stakeholders. Furthermore, the JICA Study Team tried to transfer skills and methodologies to ICT counterparts so that they can continue to facilitate and encourage the local processes that the JICA Study Team initiated or activated. The JICA Study also identified priority actions for the two regions, as well as for individual tourism areas. Such priority actions should be taken in the course of the consultative and participatory processes in the future.

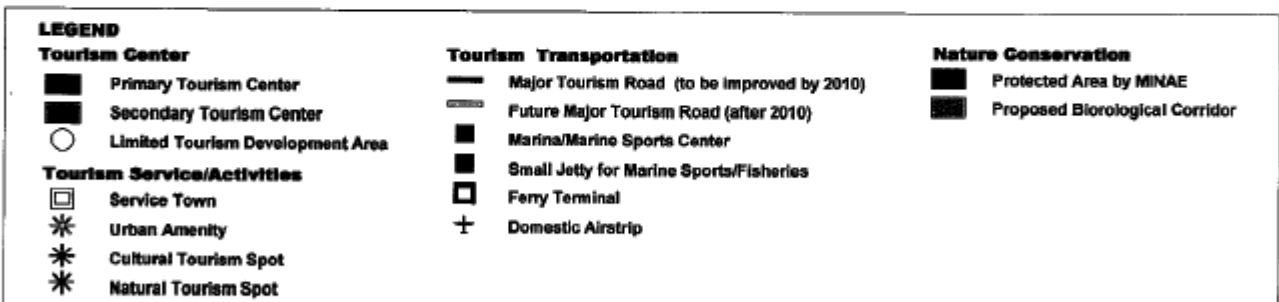
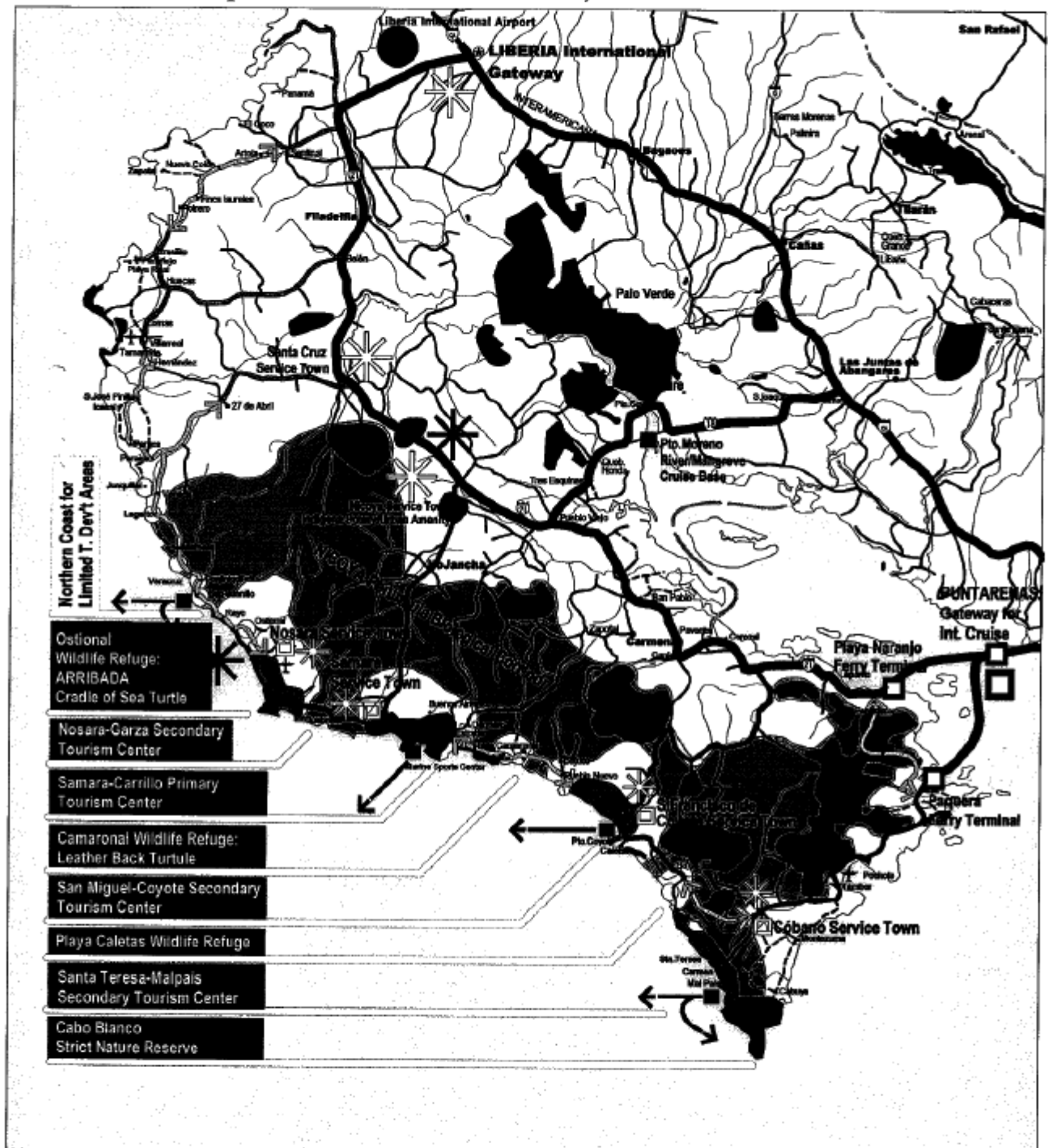
## CONCLUSION

### CONCLUDING REMARK

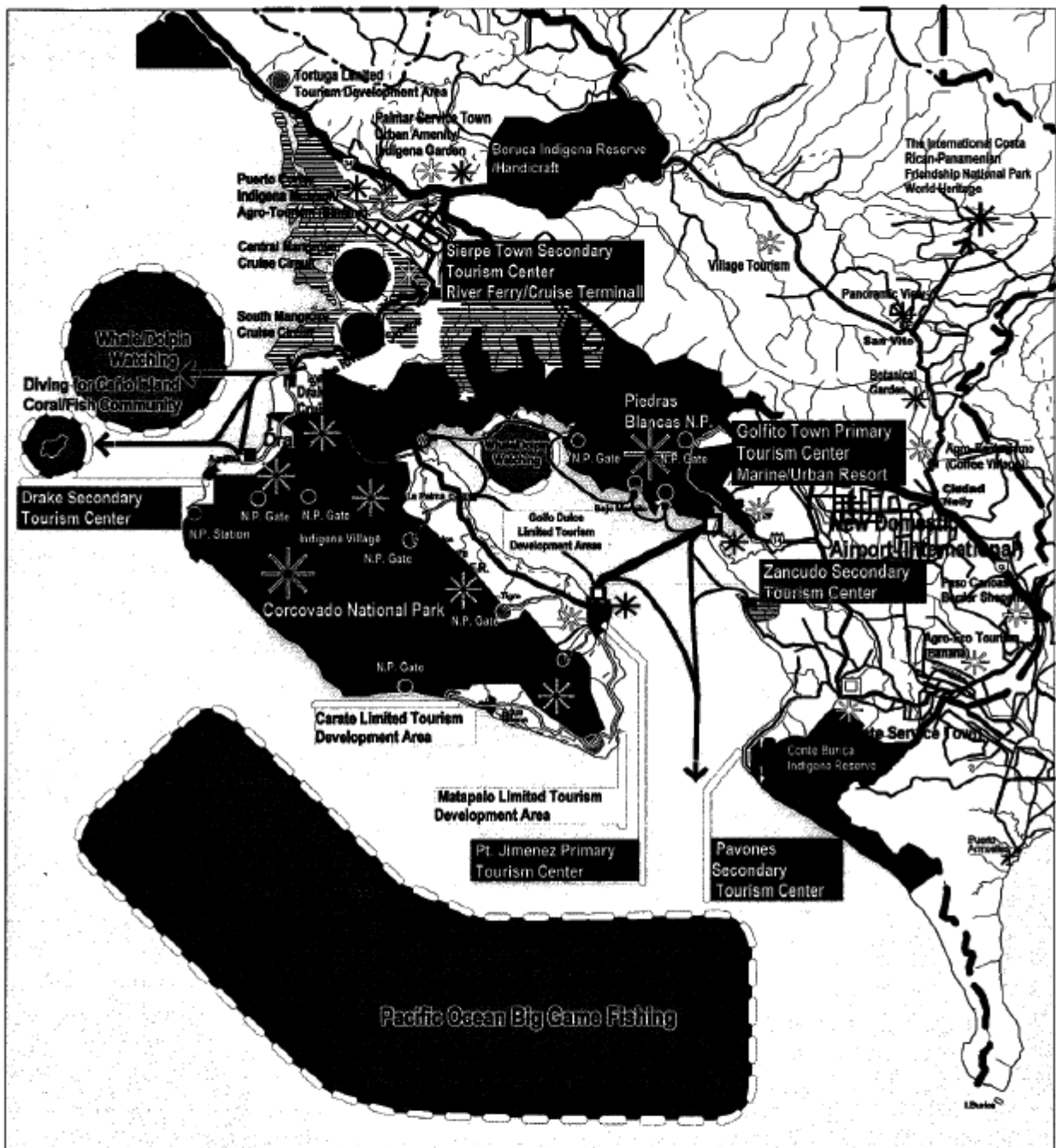
#### **From Study Areas to the Country as a Whole**

The recommendations and methodologies for the General Plans in the two regions, South Guanacaste Region and Corcovado-Golfito Region, should be utilized to enhance the capacity of sustainable tourism development in other regions, too. Consequently, Costa Rica's tourism development is expected to be more sustainable in the country as a whole.

## Spatial Structure of Tourism, South Guanacaste



## Spatial Structure of Tourism, Corcovado-Golfito



LEGEND		
<b>Tourism Center</b>	<b>Tourism Transportation</b>	<b>Designated Conservation/Reservation Area</b>
■ Primary Tourism Center	— Major Tourism Road (to be improved by 2010)	■ National Park by MINAE
■ Secondary Tourism Center	— Future Major Tourism Road (after 2010)	■ Other Nature Protection Area by MINAE
○ Limited Tourism Development Area	□ New Ferry/River Bus Terminal	■ Indigena Reserve
<b>Tourism Service/Activities</b>	■ Marina/Marine Sports Center	
□ Tourism Service Town	■ Small Jetty for Marine Sports/Fisheries	
* Urban/Rural Amenity	✈ Domestic Airport (Semi-International)	
* Historical/Cultural Tourism Spot	✈ Domestic Airstrip	
* Inland Natural Tourism Spot		
* Mangrove Cruise Tourism Spot		
* Marine Natural Tourism Spot		

- To show infrastructure needed for development of attractive tourism areas,
- To show opportunities of private investment in tourism facilities and other tourism-related businesses,
- To provide basic strategies for natural resources management, and
- To show needs for land allocation and other measures for supporting local socio-economic development in relation to tourism development

### **General Plans for Sustainable Tourism Development**

In view of this, the General Plans can be called “General Plans for Sustainable Tourism Development.” The general land use plan is part of the General Plan for Sustainable Tourism Development. The general land use plan could provide very basic tools for management of development and natural resources.

## **DEVELOPMENT PATTERNS IN COASTAL AREAS**

### **Focal Development Patterns**

For both South Guanacaste and Corcovado-Golfito, no scattered development patterns but focal development patterns are recommended for the following purposes:

- To maintain or restore the natural habitat as much as possible in the coastal areas so as to enhance the potential for combining “sun and beach” tourism and nature tourism for South Guanacaste, and to sustain more diversified nature-oriented tourism for Corcovado-Golfito,
- To promote land development only for necessary development of tourism facilities and infrastructure in coastal areas (in other words to reduce land speculation), and
- To promote efficiency in infrastructure provision in view of budget constraints of central and local governments.

### **Tourism Centers and Limited Tourism Development Areas**

The focal development patterns are based on strategically selected tourism areas. In South Guanacaste four (4) tourism Centers and eight (8) limited Tourism Development Areas are identified for Year 2010. In Corcovado-Golfito, six (6) Tourism Centers and thirteen (13) Limited Tourism Development Areas are identified for Year 2010.

## **NEW LAND USE ZONES FOR GENERAL LAND USE PLANS**

### **Recommendation of Action-Oriented New Land Use Zoning**

The JICA Study Team recommended a new system of land use zones for the general land use plan to pay attention to the following aspects:

- To secure lands for attracting private investment for hotels, especially middle-sized hotels,
- To prepare amenity cores of tourism areas for promoting the development of

# FINAL REPORT

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## GLOSSARY OF ABBREVIATIONS AND ACRONYMS

ACAV:	<i>Asociación Costarricense de Agencias de Viajes :</i> Costa Rican Association of Tour Agents
ACFOTUR:	<i>Asociación Costarricense de Formadores Turísticos:</i> Costa Rican Association of Tourism Teachers
ACOT:	<i>Asociación Costarricense de Operadores de Turismo:</i> Costa Rican Association of Tour Operators
ACOPROT:	<i>Asociación Costarricense de Profesionales en Turismo:</i> Costa Rican Association of Tourism Professionals
ALDETUS	<i>Asociación Local para el Desarrollo Turístico Sostenible</i> Local Association for Sustainable Tourism Development
ASADAS:	<i>Asociación Administradora del Acueducto:</i> Administrative Association of Aqueducts
CAARS:	<i>Comités Administradores de Acueductos Rurales:</i> Rural Water Administration Committee
CABEI:	<i>Banco Centroamericano de Integración Económica:</i> Central American Bank for Economic Integration
CACORE:	<i>Cámara Costarricense de Restaurantes y Afines:</i> Costa Rican Chamber of Restaurants and Related Businesses
CANAMET:	<i>Cámara Nacional de la Microempresa Turística:</i> National Chamber of Tourism Microenterprises
CANATUR:	<i>Cámara Nacional de Turismo:</i> National Chamber of Tourism
CATIE:	<i>Centro Agronómico Tropical de Investigación y Enseñanza:</i> Tropical Agriculture Research and Training Center
CENADA:	<i>Centro Nacional de Abastecimiento y Distribución de Alimentos:</i> National Center of Food Supply and Distribution
CCH:	<i>Cámara Costarricense de Hoteles:</i> Costa Rican Chamber of Hotels

CCSS:	<i>Caja Costarricense de Seguro Social:</i> Costa Rican Social Security Institute
CINDE:	<i>Coalición Costarricense de Iniciativas de Desarrollo:</i> Costa Rican Investment Board
CNDDTA:	<i>Comisión Nacional de División Territorial Administrativa:</i> National Commission of Territorial Administrative Division
CNE:	<i>Comisión Nacional de Emergencias:</i> National Commission of Emergency
CNP:	<i>Consejo Nacional de Producción:</i> National Production Council
CONAI:	<i>Comisión Nacional de Asuntos Indígenas:</i> National Commission of Indigenous People's Affairs
CONAVI:	<i>Consejo Nacional de Vialidad:</i> National Road Council
DGEC:	<i>Dirección General de Estadística y Censos, Ministerio de Economía, Industria y Comercio:</i> General Direction of Statistics and Census, Ministry of Economy, Industry and Commerce
DINADECO:	<i>Dirección Nacional de Desarrollo de la Comunidad:</i> National Directorate for Community Development
EBAIS:	<i>Equipos Básicos de Atención Integral en Salud:</i> Basic Group of Integrated Healthcare
FIT:	<i>Turistas de Comodidad</i> Foreign Independent Tourist
GEF:	<i>Instalaciones Globales para el Ambiente</i>  Global Environmental Facility
GTZ:	<i>Agencia Alemana de Cooperación Técnica:</i> German International Cooperation Agency
IBRD:	<i>Banco Internacional de Reconstrucción y Desarrollo</i> International Bank of Reconstruction and Development

IDB/BID:	<i>Banco Interamericano de Desarrollo:</i> Inter-American Development Bank
ICAA:	<i>Instituto Costarricense de Acueductos y Alcantarillados (AyA):</i> Costa Rican Institute of Waterworks and Sewage Treatment
ICE:	<i>Instituto Costarricense de Electricidad:</i> Costa Rican Institute of Electricity
ICT:	<i>Instituto Costarricense de Turismo:</i> Costa Rican Tourism Board
IDA:	<i>Instituto de Desarrollo Agrario:</i> Institute of Rural Development
IGN:	<i>Instituto Geografico Nacional:</i> National Geographic Institute
IMAS:	<i>Instituto Mixto de Ayuda Social:</i> Institute of Mixed Social Assistance
INA:	<i>Instituto Nacional de Aprendizaje:</i>  National Learning Institute
INBio:	<i>Instituto Nacional de Biodiversidad:</i> National Biodiversity Institute
INCOPESCA:	<i>Instituto Costarricense de Pesca y Acuicultura:</i> Costa Rican Institute of Fisheries and Aquaculture
INVU:	<i>Instituto Nacional de Vivienda y Urbanismo:</i> National Institute of Housing and Urban Planning
JICA:	<i>Agencia de Cooperación Internacional del Japón:</i> Japan International Cooperation Agency
MAG:	<i>Ministerio de Agricultura y Ganadería:</i> Ministry of Agriculture and Livestock
MIDEPLAN:	<i>Ministerio de Planificación Nacional y Política Económica:</i> Ministry of National Planning and Economic Policy

MINAE:	<i>Ministerio del Ambiente y Energía:</i> Ministry of Environment and Energy
MOPT:	<i>Ministerio de Obras Públicas y Transportes:</i> Ministry of Public Works and Transportation
MTZ:	<i>Zona Marítimo Terrestre:</i> Maritime Terrestrial Zone
NGO:	<i>Organización No Gubernamental</i> Non-Governmental Organization
RECOPE:	<i>Refinadora Costarricense de Petróleo:</i> Costa Rican Petroleum Refinery Company
SENARA:	<i>Servicio Nacional de Aguas Subterráneas, Riego y Avenamiento:</i> National Services of Groundwater and Irrigation
SINAC:	<i>Sistema Nacional de Áreas de Conservación:</i> National System of Conservation Areas
SIT:	<i>Turistas de Interés Especial</i> Special Interests Tourist
UNDP:	<i>Programa de las Naciones Unidas para el Desarrollo (PNUD):</i> United Nations Development Programme



# **Part I**

## **INTRODUCTION**

# **Chapter 1**

## **INTRODUCTION**

### **1.1 INTRODUCTION**

In response to the request of the Government of the Republic of Costa Rica (hereinafter referred to as “GOC”), the Government of Japan (hereinafter referred to as “GOJ”) decided to conduct “The Study for the Land Use Plan in the Coastal Zones of the Tourist Planning Units in the Republic of Costa Rica” (hereinafter referred to as “the Study”).

The Japan International Cooperation Agency (hereinafter referred to as “JICA”), the official agency responsible for the implementation of technical cooperation programs of GOJ, undertook the Study in close cooperation with the authorities of GOC.

On the part of GOC, Instituto Costarricense de Turismo (hereinafter referred to as “ICT”) acted as the Counterpart Agency for the JICA Study Team. ICT coordinated the implementation of the Study with other related government agencies and non-governmental organizations.

### **1.2 BACKGROUND**

San José and its surrounding areas, Greater San José, accommodate two thirds of Costa Rica’s population, and have accumulated a large number of relatively high-value economic activities. As a result, there is a large disparity in the income levels and living standards of the people between the Greater San José area and other regions.

As for the national economy, Costa Rica’s tourism industry is one of the most important economic sectors in terms of foreign currency earning and of economic income generation. For the regions outside the greater San José area, tourism development is expected to contribute to employment generation. In fact, due to the decline of cattle production on the Nicoya peninsula and the closure of banana plantations in the Golfito area, more attention has been paid to the role of tourism development, based on their rich environmental resources including beaches, for local economic development.

Costa Rica's tourism is famous for ecotourism, which began developing rapidly in the 1980s based on its rich environmental resources, such as flora and fauna found in upland rain forests and lowland mangrove forests. At the same time, especially in recent years, there are an increasing number of international tourists attracted by conventional "sun and beach" tourism products. Costa Rica's beaches and coastal zones have comparative advantages not simply because of their beauty and peacefulness, but also because of the relatively good accessibility to ecotourism sites from the beach tourism areas.

However, in Costa Rica's coastal zones, tourism facilities and real estate development have been gradually increasing in the last ten years. Some of the tourism-related developments have caused environmental destruction and deterioration of both terrestrial and marine components of the coastal zones. This is partly due to the absence of land use plans that identify and protect the most sensitive habitats and natural attractions and therefore can be used for guiding coastal development in an orderly and sustainable manner, especially for the construction of tourism facilities, such as hotels and lodges, in the coastal zones at the most appropriate locations. Under the present circumstances of no guidance by land use plans, private developers and investors have proposed tourism-related development plans, some of which have been already approved by the national and/or local government.

At present, more than 40 % of the international tourists to Costa Rica are considered to be either passive or active ecotourists, who are conscious of the environmental quality and sensitive to the deteriorated environment even outside ecotourism sites, such as national parks and private nature reserves. Since the combination of ecotourism products and conventional "sun and beach" tourism products is considered to continue to be the main attraction of Costa Rica's tourism, the environmental damage, either to coastal zones or to ecotourism sites, might have serious negative impacts on international tourist arrivals to Costa Rica.

In these situations, the coastal zones of South Guanacaste and Corcovado-Golfito require effective and implementable master plans of tourism development and land use, in order to realize sustainable tourism development in the coastal areas.

### 1.3 STUDY OBJECTIVES

The objectives of the Study are as follows:

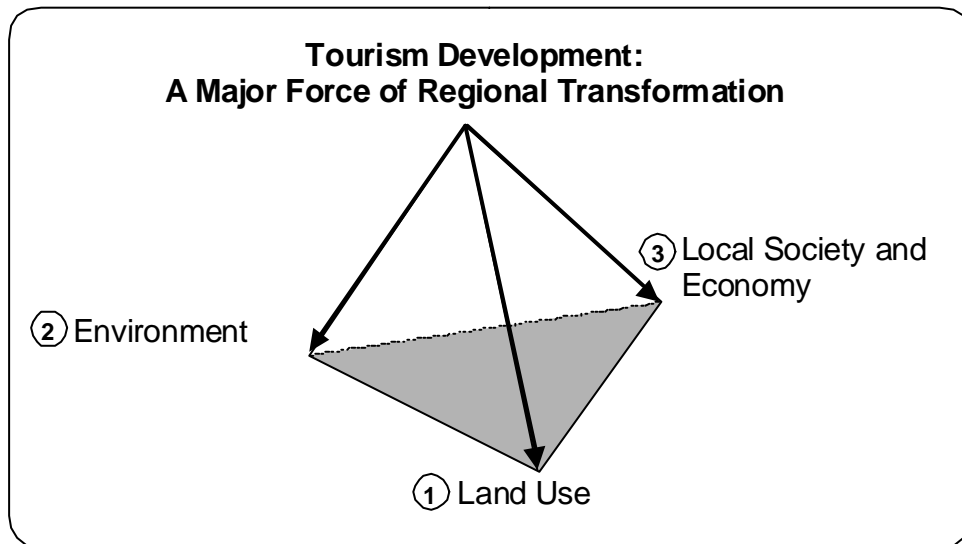
1. To formulate land use plans in order to promote sustainable tourism development in the coastal zones with a view to ensuring environmental quality;
2. To prepare the necessary measures for sustainable tourism development; and
3. To carry out the relevant technology and knowledge transfer.

### 1.4 BASIC APPROACH OF THE STUDY

#### 1.4.1 Comprehensive and Integrated Planning Approach

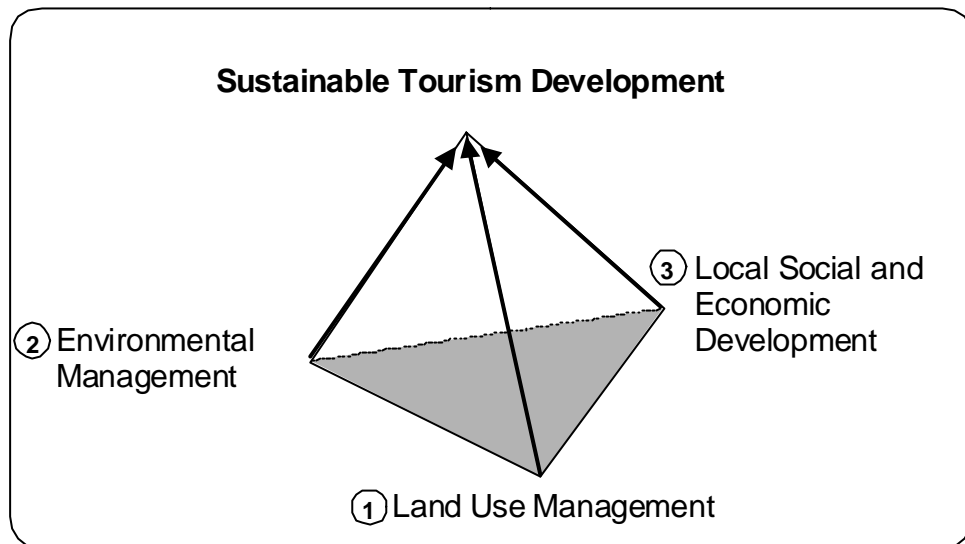
Since the coastal zones in the Study Area have substantial potential for tourism development, tourism development is likely to be one of the major forces that will transform land uses, environmental conditions, and local society and economy. Therefore, sustainable development and conservation efforts in such coastal zones should be planned in strong relation to the plans for sustainable tourism development.

**Figure 1.1 Three Major Impacts of Tourism Development  
(A Major Force of Regional Transformation)**



However, sustainable tourism requires not only the implementation of adequate measures for tourism development and promotion, but also comprehensive provision for 1) land use management, 2) environmental management, including nature conservation and pollution control, and 3) local social and economic development in relation to tourism development.

**Figure 1.2 Three Major Efforts Supporting Sustainable Tourism Development**

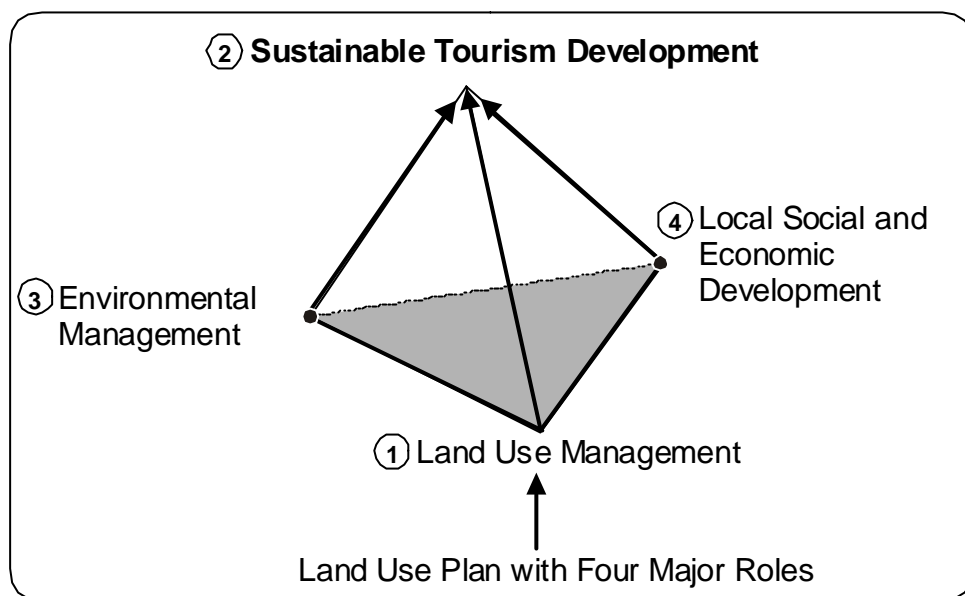


This is partly because the environmental quality within the tourism sites and in their surrounding areas influences the attraction of international ecotourists and ecology-conscious tourists, and partly because some of the environmental resources constitute the important elements of tourism attractions. As for the local social and economic development, it is simply considered to be one of the goals of sustainable tourism. Without substantially positive impacts on the local society and economy, tourism development becomes the exploitation of the local resources for outsiders' benefits. This in turn can lead to social deprivation, resentment, crime and conflict in such a way that the tourism industry itself is threatened.

In this context of coastal development and conservation, land use plans could be formulated as effective tools for achieving the following four roles:

1. A tool for land use management,
2. A tool for guiding tourism facility development and tourism land uses in appropriate scales and locations (including a function of guiding private investment),
3. A tool for environmental management for both natural conservation and pollution control, and
4. A tool for encouraging local communities and entrepreneurs to seek local social and economic development, including participation in tourism development, and to promote community-based environmental management.

**Figure 1.3 Four Major Roles of Land Use Plans**



This approach to land use planning is a comprehensive and integrated planning approach intended to achieve sustainable development and conservation in the coastal zones.

#### 1.4.2 Four Types of Planning Areas in the Coastal Areas

The Study will cover four different types of planning areas, as shown in Figure 1.4. For the different types of planning areas, the Study will formulate different kinds of land use plans and spatial plans, as suggested in Table 1.1.

Under the Maritime Terrestrial Zone Law (*Ley Sobre la Zona Maritimo Terrestre*), land use plans should be established for the land area of 200 m width from the coastal line (the coastal belt). The established land use plans are to stipulate the guidelines and regulations of land uses and development activities in the coastal belt.

However, in coastal areas of substantial tourism development potential, such as in North Guanacaste, the development of tourism facilities has extended beyond the 200 m coastal belt, and the accumulation of such tourism facilities has become large enough to form urbanizing areas including supporting towns for tourism destinations.

Such high accumulations of tourism facilities and the development of supporting towns are considered to cause negative impacts from sewage and solid waste on the environment (both in the sea and on the land).

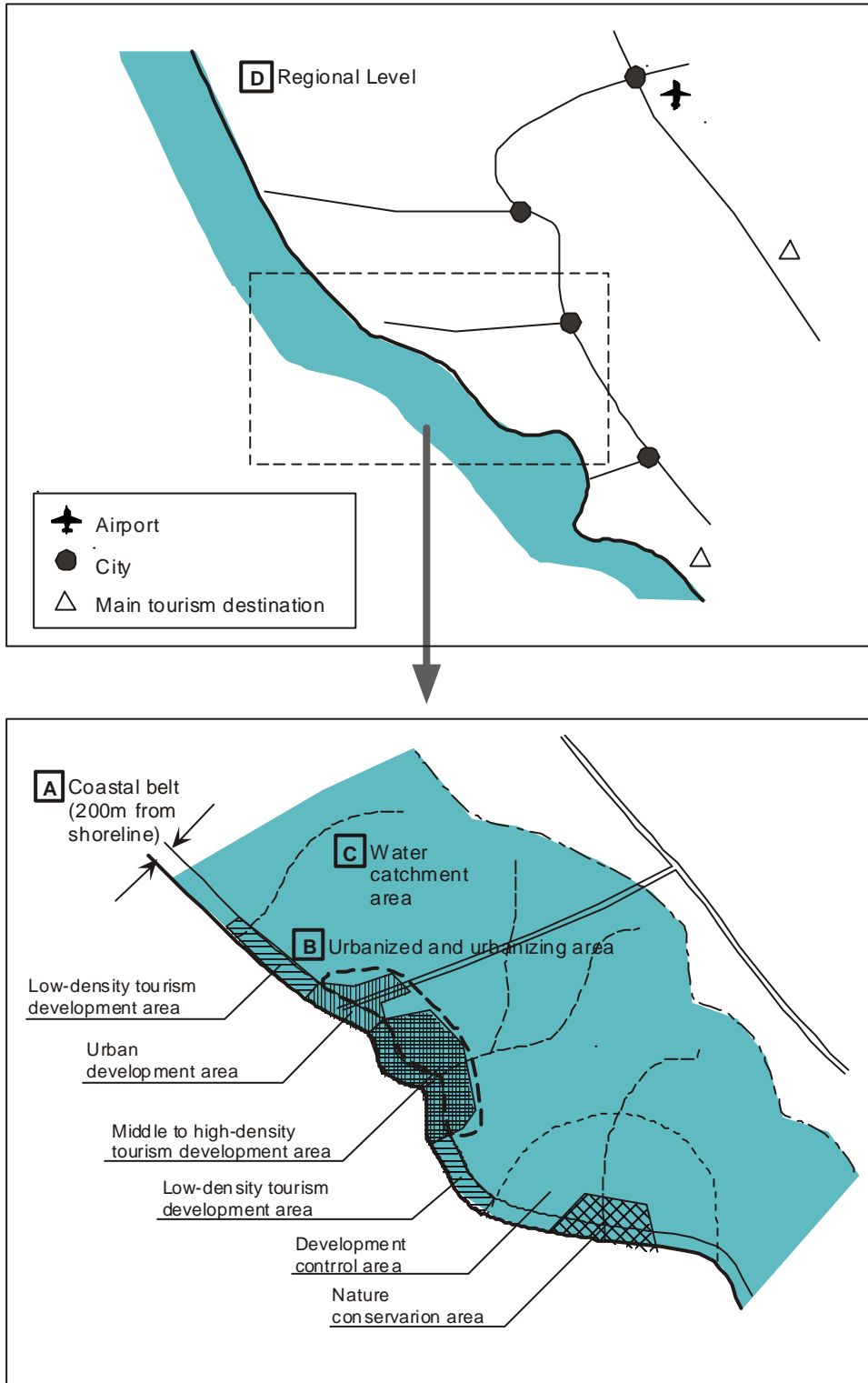
Furthermore, the environmental deterioration of upper and middle stream catchment areas that are linked to coastal areas also has negative impacts on the coastal environment. On the other hand, ecotourism products could be made of the environmental resources in the catchment areas. At the same time, ecologically-minded tourists tend to evaluate their tourism destinations according to the quality of those catchment areas.

At the regional level beyond the catchment areas, international airports, major urban centers, other tourism resources / destinations and major transportation infrastructure and systems are key elements of the planning context for coastal tourism. Regional spatial structure plans will be formulated by considering the location and features of those elements, and access networks connecting those elements to and within the coastal zones.

**Table 1.1 Four Types of Planning Areas and their Output Images**

	Planning Area	Planning Items	Planning Output Image	Authorities Concerned /Laws Concerned
<b>A</b>	Coastal Belts (within 200m from the shoreline)	Land use plans to be utilized for judgment, guidance and approval of regulatory plans	Zoning maps for land use management, including suggestions of possible tourism activities and types of tourism development	ICT, Provincial and Municipal Governments, Law on the Maritime Terrestrial Zone ( <i>Ley Sobre la Zona Maritimo Terrestre</i> )
<b>B</b>	Urbanized and urbanizing areas in the hinterlands of the coastal belt (urban/tourism development areas)	Urban plans for regulating land use and development for pollution control and for sustaining the environmental quality of tourism destinations	Suggestions for the preparation of urban plans including the delineation of urban areas, zoning maps specifying land uses and the scale of urban development, and Infrastructure provision required, including suggestions of possible tourism activities and types of tourism development	National Institute of Housing and Urban Planning, Municipal Governments, Urban Planning Law
<b>C</b>	Water catchment areas (middle and upper stream areas)	Indicative land use plans covering the water catchment areas	Structure map of the water catchment areas	Ministry of Environment and Energy, Ministry of Agriculture & Livestock, Ministry of Planning
<b>D</b>	Region (including international airports, other tourism destinations, etc.)	Regional structure plans for regional infrastructure and urban centers	Structure map of a wide region	Ministry of Public Works & Transport, Ministry of Planning, Municipal Governments

**Figure 1.4 Four Types of Planning Areas**



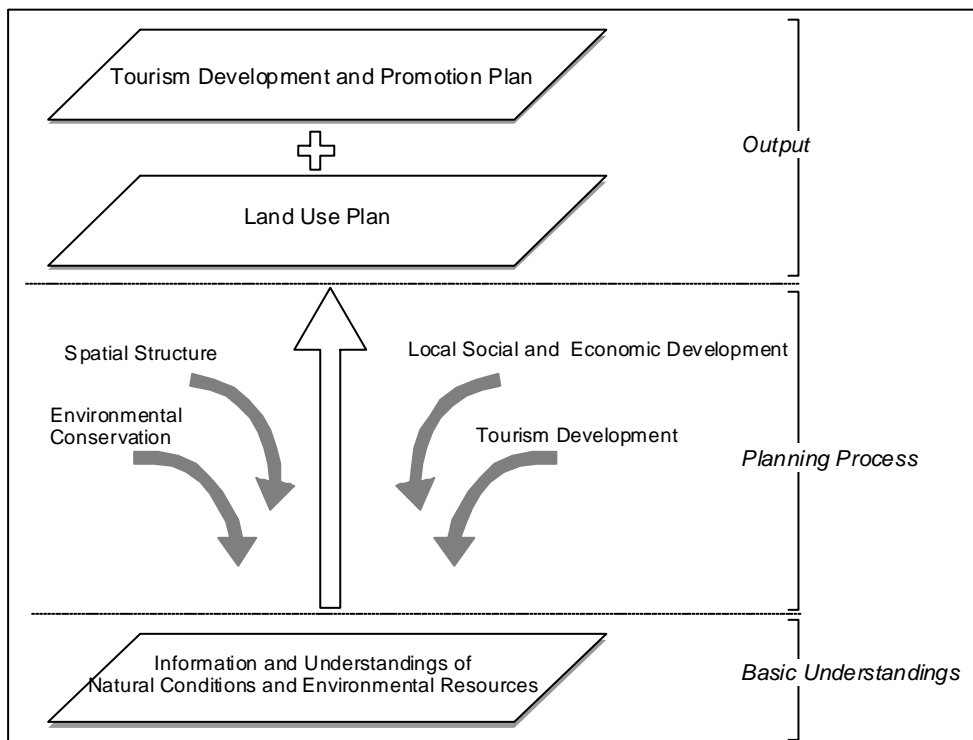


### 1.4.3 Approach based on the Understanding of Natural Conditions and Environmental Resources

Although the four aspects (land use, tourism, environment, and local society and economy) are comprehensively covered and integrated, the Study should base the planning process on the understanding of natural conditions and environmental resources. In the course of the Study, the information and understanding of various aspects will be added to the basic environmental knowledge and information.

First of all, the environmental knowledge and information will be acquired from a range of documented and local sources, collated and shared as a basis of the Study among the Study Team members. Then the Study Team and Costa Rican counterparts will disseminate their first conclusions on areas and resources of environmental/conservation significance in the coastal zones to stakeholders for review. The participation of the Costa Rican counterparts and stakeholders will be encouraged in the land use planning processes through sharing environmental information. Local NGOs and communities often have good knowledge of local resources, even if they are not all managed or exploited in a sustainable manner.

**Figure 1.5 Approach Based on the Understanding of the Environment**



#### **1.4.4 Consultative and Participatory Processes for Land Use Planning**

In relation to development and land uses in the coastal zones, which are endowed with rich and precious environmental resources, there are various stakeholders who have different interests. Different stakeholders might have conflicting interests and visions of tourism development, environmental management, or local economic development. The stakeholders might include tourism policy makers of the central government, related central government agencies, academic institutions, local governments, international investors, national associations of businesses, local associations of tourism-related businesses, local business leaders, fishermen and other resource users, local communities and their representatives, international and local environmental NGOs, and international and local community development NGOs,

Even the same terms, such as “sustainable tourism development” and “sustainable utilization of environmental resources”, would have different meanings for different groups and people. It is not always easy for stakeholders to reach consensus or coordinated visions.

The land use plans, without any efforts at serious consensus building among major stakeholders, would be less effective in guiding land uses. Successes in land use and environmental management can be attributed not so much to the publication of a management plan, but to the process of producing it. Sound plan-making should not just be a technocratic process driven by scientists and planners with access to data, geographic information systems (GIS) etc, but a participatory process with national and local stakeholders – i.e. with those people and institutions who will have to understand, implement, comply with, monitor and update the plan. During the plan-making process, it may be necessary for disparate and sometimes opposing institutions and individuals to meet, discuss and resolve difficult issues. Compromises may be necessary but should prove workable. In the process the stakeholders can come to understand better the complexity with which they are dealing and to realize that by working together they can best safeguard their own interests as well as promoting the sustainability of the land use planning areas and their precious resources.

Plans, in which little provision has been made for participation and consultation, and use of local knowledge, may not lead to well-balanced development based on sustainable tourism development, environmental management, as well as local social and economic development.

Therefore, it is necessary for the stakeholders to share the future visions and goals of tourism development and conservation in the coastal zones, and to feel they have ‘ownership’ of the plan, by being involved in efforts to reach a broad consensus about practical, realistic and sustainable directions for development and conservation. These processes of consensus

building and conflict resolution will be organized through a series of stakeholder meetings to be organized in the Study Area.

Nevertheless the process of land use planning will utilize “maps” and GIS, not just to facilitate the analysis of data but also to facilitate communication and coordination in stakeholder meetings since the maps make a visible impact.

#### **1.4.5 Utilization of Geographic Information System (GIS) for Land Use Planning**

The land use plans of the coastal zones will be prepared in GIS forms. In the course of the land use planning, the existing GIS data will be collected and utilized as much as possible, and supplemented by newly digitizing the maps which are not yet available in GIS forms.

The collected and supplemented GIS data will be utilized for preparing a preliminary environmental conditions map, which could be a basis for analysis for land use potential and constraints. In addition to the natural and environmental conditions, socio-economic and administrative data will also be used for the land use analysis. The usage of GIS will help planners with land use analysis and the investigation zoning and other planning options.

A simple planning support system based on GIS will be made for accommodating the monitoring of changes in land use and other conditions in the coastal zones, and the updating of the data to be used for the future land use planning. The GIS-based planning support system will be designed to be interactive, but not fully automatic.

## 1.5. STUDY AREAS

### 1.5.1 Study Areas and Tourism Planning Units

ICT's Strategic Plan for Sustainable Tourism Development 1995-1999 delineates nine tourism planning units in Costa Rica as shown in Figure 1.6 and Table 1.2. The Study Areas cover the two tourism planning units of South Guanacaste and Corcovado-Golfito as shown in Figure 1.7. The Planning Areas (A) in the Study Areas, which are proposed in the earlier section, are the maritime terrestrial zones (MTZ) of the two tourism planning units. The Planning Areas (B) in the Study Areas are some urbanized and urbanizing areas behind the 200m maritime terrestrial zones.

**Table 1.2 Nine Tourism Planning Units and their Length of Coastlines**

Location	Name of Tourism Planning Units	Type	Length of Coastline	Area Designation	
				From	To
Coastal	1 North Guanacaste	CTE	171km	Nicaragua Border (La Cruz Canton)	Punta Cerritos (Santa Cruz Canton)
	2 South Guanacaste	CTE	143km	Punta Cerritos (Santa Cruz Canton)	Cabo Blanco (Puntarenas Canton)
	3 Puntarenas, Beaches and Islands of Gulf	CTE	195km	Cabo Blanco (Puntarenas Canton)	Punta Loros (Garabito Canton)
	4 Central Pacific	CTE	160km	Playa Pogeres (Garabito Canton)	Boca Coronado (Osa Canton)
	5 Corcovado-Golfito	CTE	362km	Boca Coronado (Osa Canton)	Punta Burica (Golfito Canton)
	6 Caribbean	CTE	212km	Rio San Juan (Pocosi Canton)	Rio Sixaola (Talamanca Canton)
Inland	7 Central Valley	ZT			
	8 North Llanuras	ZT			
	9 Monteverde	UT			

Notes: CTE: Tourism Corridor, ZT: Tourism Zone, UT: Tourism Unit

### 1.5.2 Study Areas and Administrative Units

ICT's tourism planning units do not always correspond to the administrative units of Costa Rica. The Study Areas are located in two (2) provinces, namely Guanacaste Province and Puntarenas Province, and in seven (7) cantons, namely Santa Cruz Canton, Nicoya Canton, Hojanca Canton, Nandayure Canton, Puntarenas Canton, Osa Canton and Golfito Canton. See Figure 1.8.

### **1.5.3 Study Areas and MIDEPLAN's Planning Regions**

In according to MIDEPLAN's Planning Regions, the Study Areas are located in Chorotega Region, Central Pacific Region and Brunca Region, as shown in Figure 1.9.

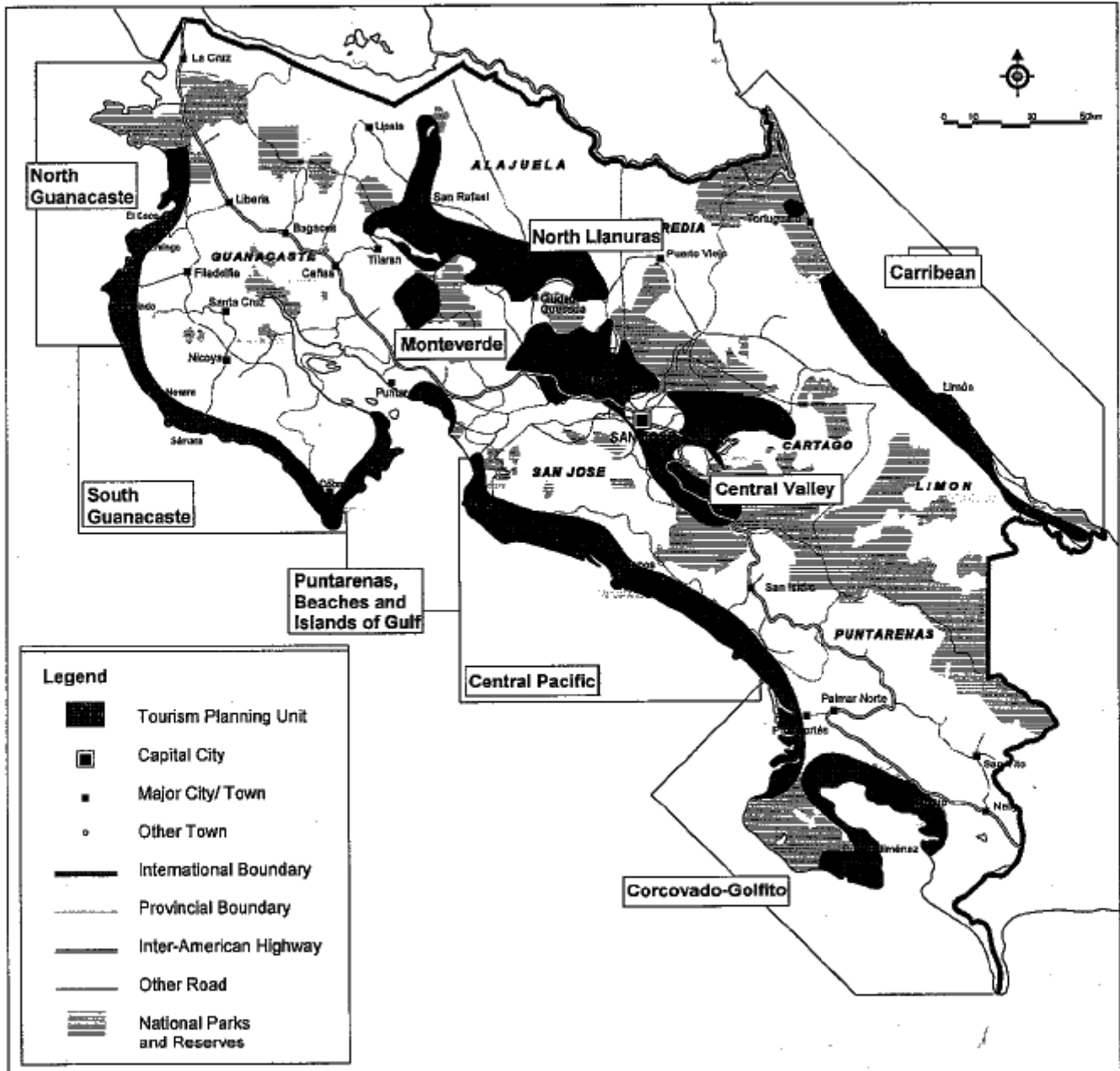
### **1.5.4 Study Areas at the Level of Water Catchment Areas**

The Planning Area (C) consists of catchment areas. In South Guanacaste, we define the Planning Area (C) as the water catchment areas of the maritime terrestrial zones of South Guanacaste Tourism Planning Unit, as shown in Figure 1.10. On the other hand, in Corcovado-Golfo, we define the Planning Area (C) as shown in Figure 1.11, excluding the upper stream area of Grande de Terraba River, so that this area includes most of the water catchment areas of the maritime terrestrial zones of Corcovado-Golfo Tourism Planning Unit.

### **1.5.5 Study Areas at the Regional Level**

The Planning Area (D) is concerned with access networks and major tourism destinations at the regional level. In South Guanacaste, we define the Planning Area (D) as the area covering the Nicoya peninsula and MIDEPLAN'S Chorotega Region, as shown in Figure 1.12. In Corcovado-Golfo, we define the Planning Area (D) as MIDEPLAN's Brunca Region, as shown in Figure 1.13.

**Figure 1.6** Nine Tourism Planning Units in Costa Rica

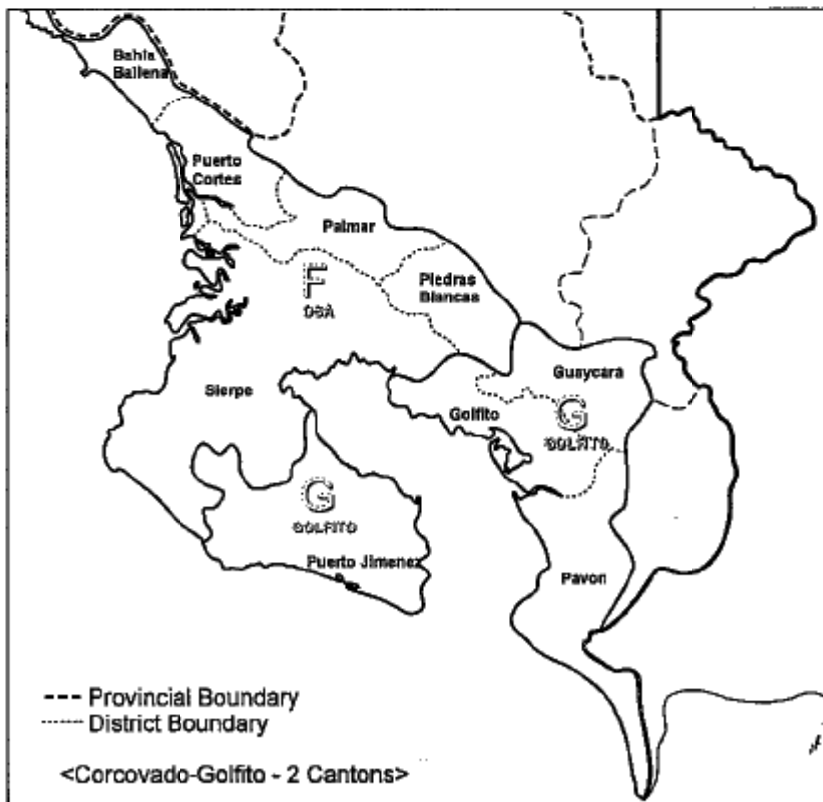
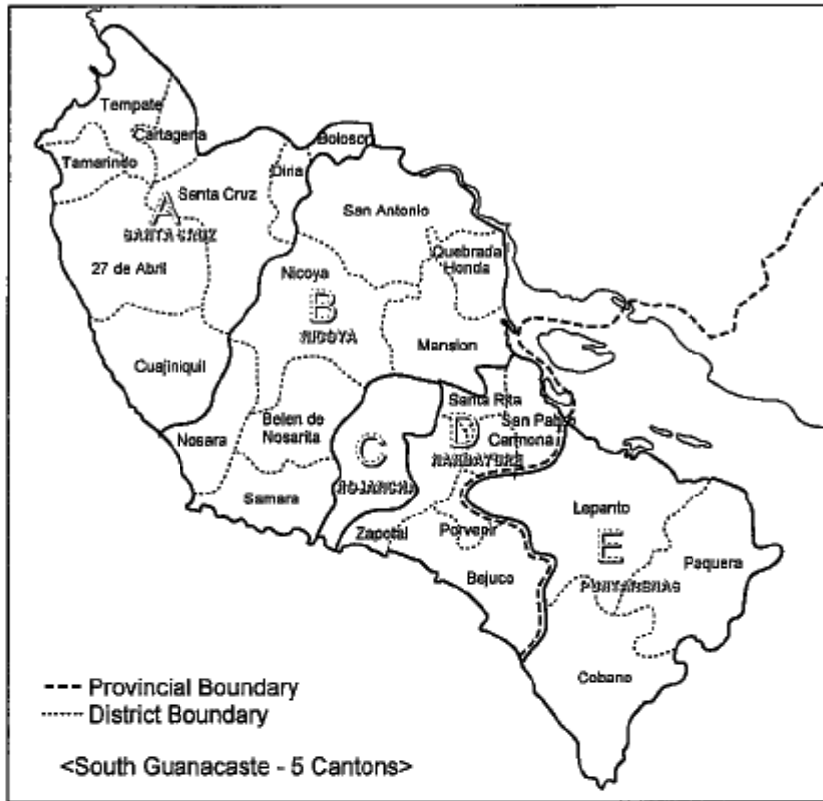


**Figure 1.7 Planning Areas (A) at the Level of Maritime Terrestrial Zone in South Guanacaste Tourism Planning Unit and Corcovado-Golfito Tourism Planning Unit**



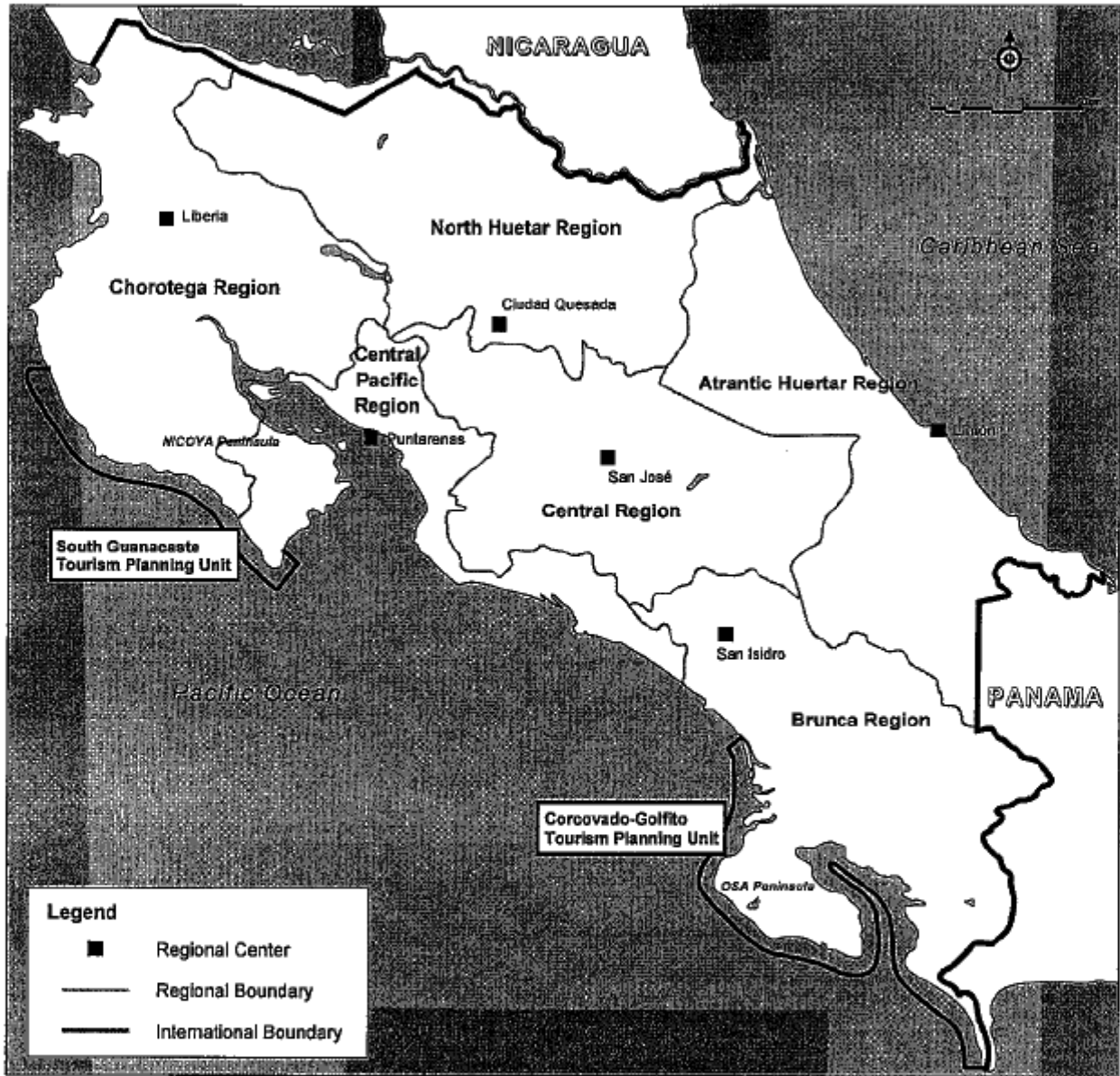
<b>Legend</b>	Capital City	Inter-American Highway	International Airport
	Major City/ Town	Other Roads	Domestic Airport
	Other Town	Railways	
	International Boundary	Rivers	
	Provincial Boundary		

**Figure 1.8 Study Areas and Administrative Units**

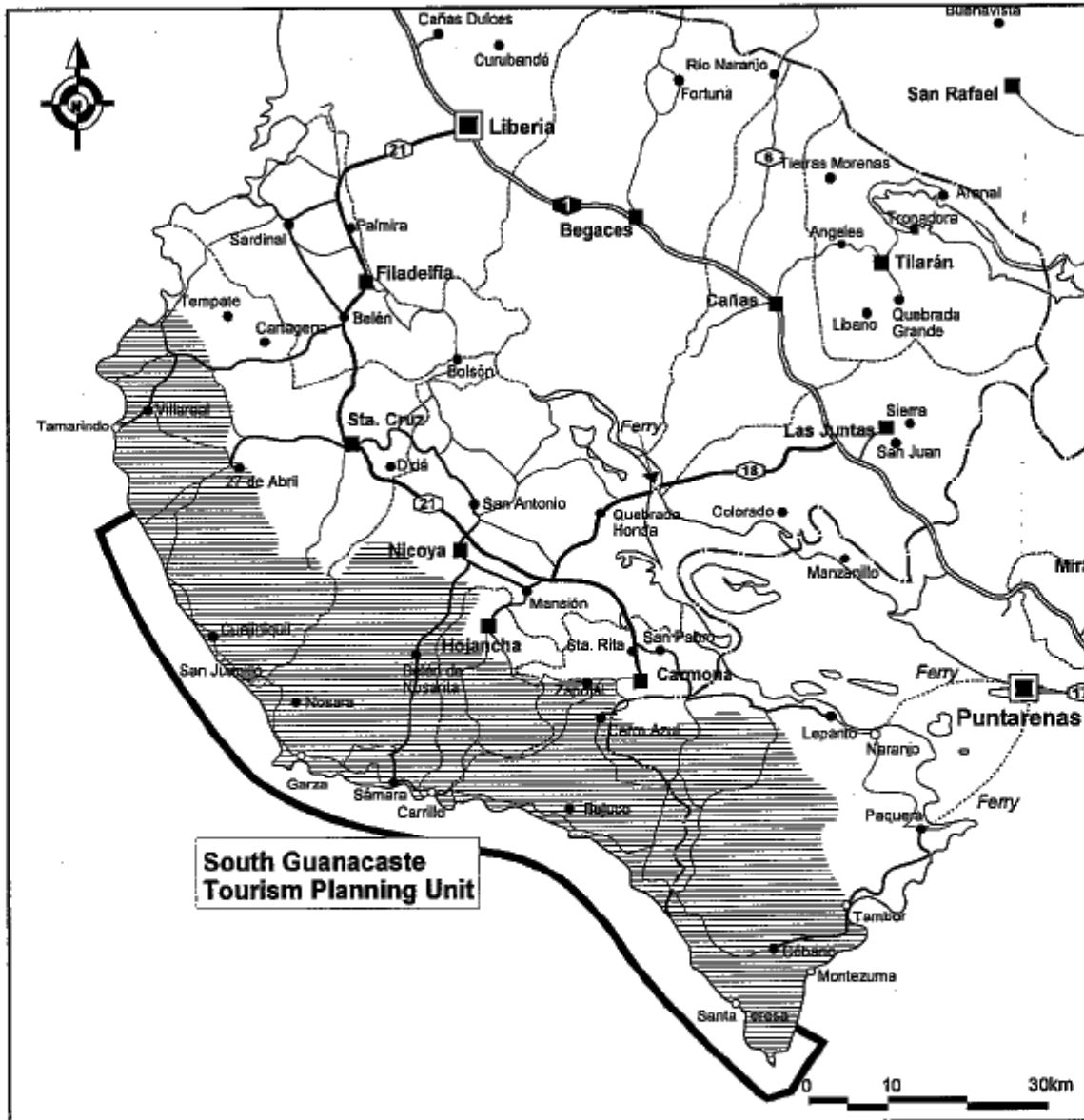




**Figure 1.9 Study Areas and MIDEPLAN's Planning Regions**



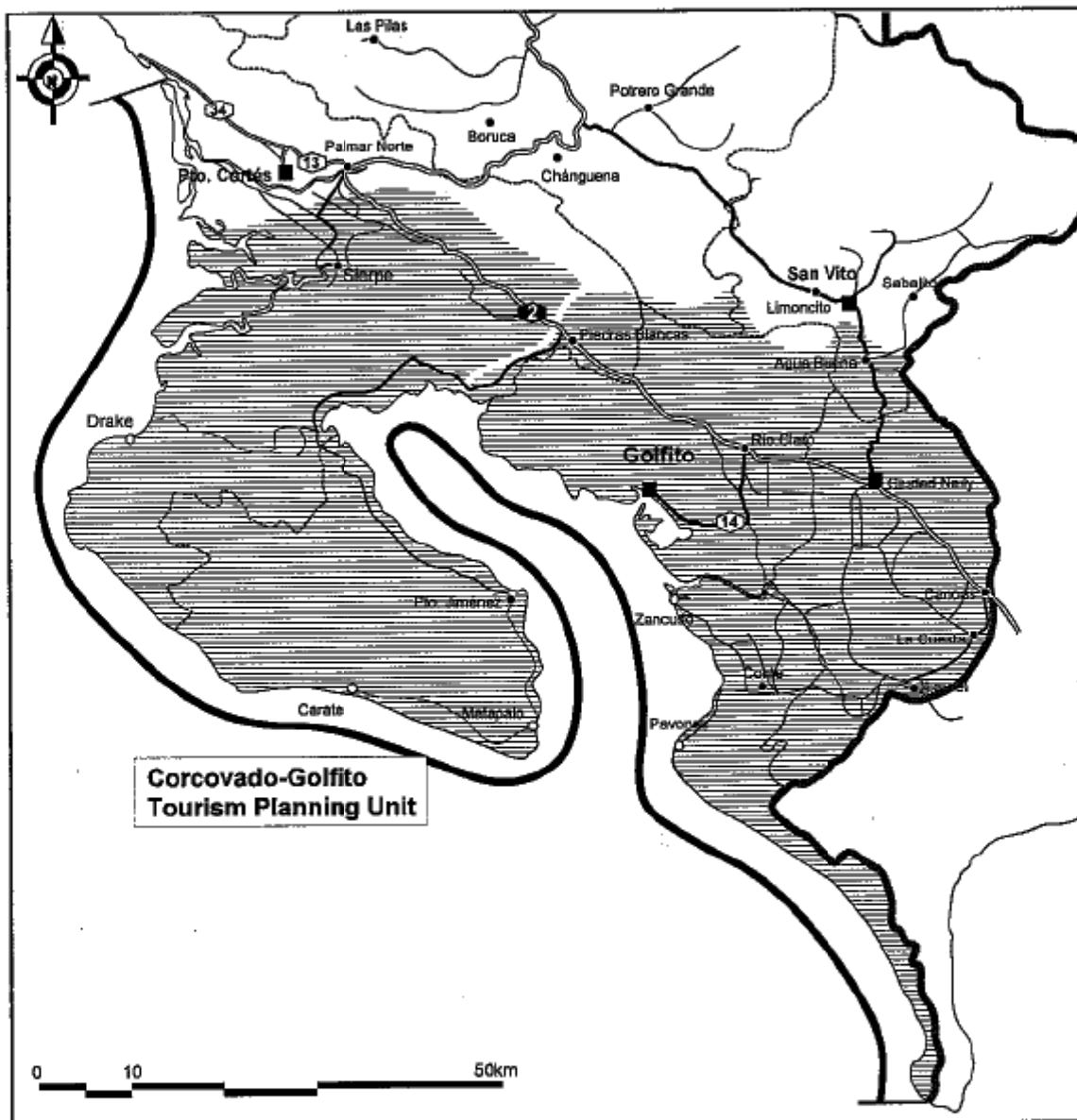
**Figure 1.10 Planning Area (C) at the Level of Water Catchment Area in relation to South Guanacaste Tourism Planning Unit**



**Legend**

- |                   |                       |                           |
|-------------------|-----------------------|---------------------------|
| ■ Regional Center | --- Regional Boundary | == Inter-American Highway |
| ■ Canton Center   | ..... Canton Boundary | — Major Road              |
| ● District Center |                       | ▨ Catchment Area          |
| ○ Other Town      |                       |                           |

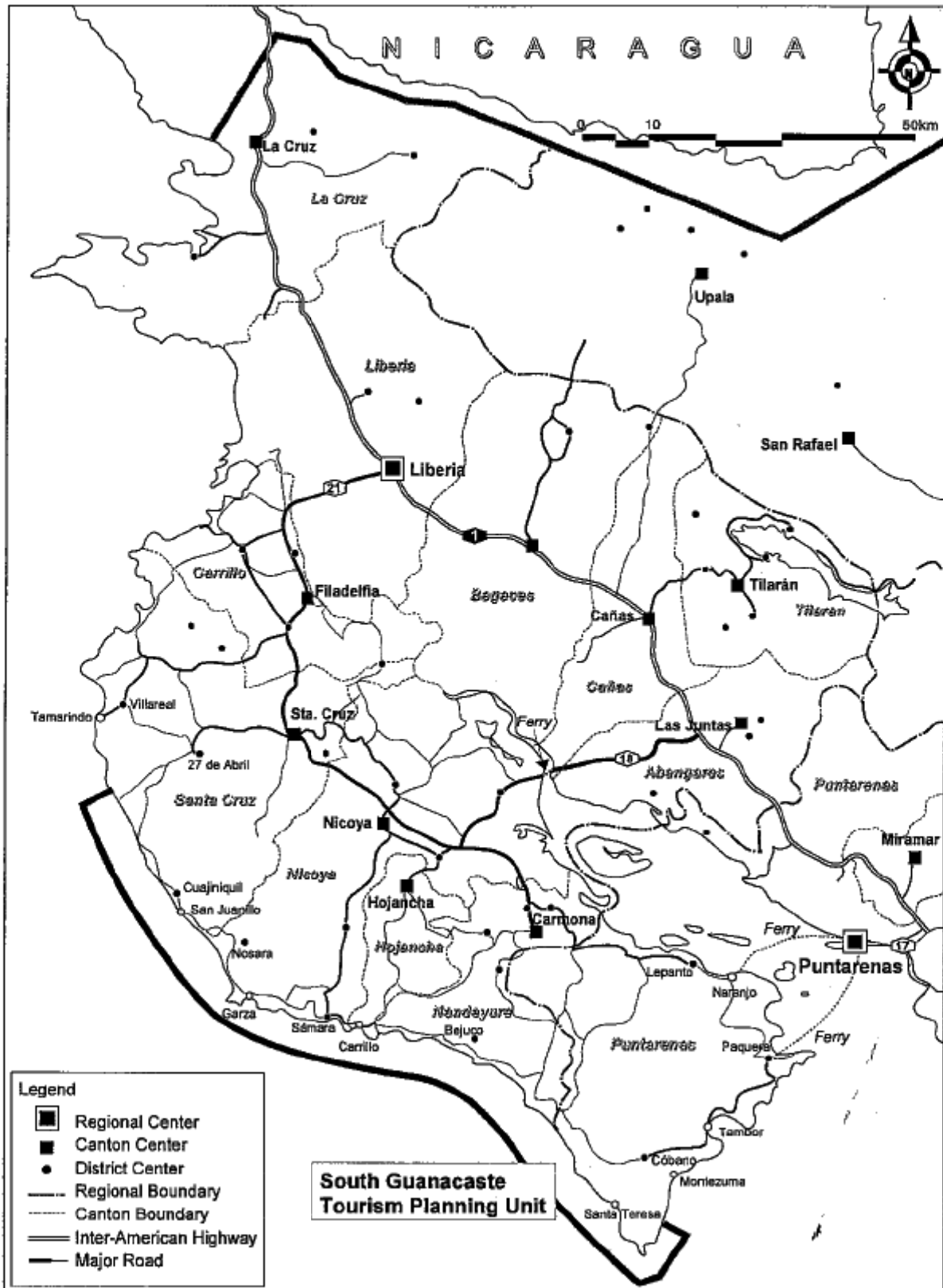
**Figure 1.11 Planning Area (C) at the Level of Water Catchment Area in relation to Corcovado-Golfito Tourism Planning Unit**



**Legend**

- |                   |                           |                           |
|-------------------|---------------------------|---------------------------|
| ■ Regional Center | --- Regional Boundary     | == Inter-American Highway |
| ■ Canton Center   | - - - - - Canton Boundary | — Main Road               |
| ● District Center |                           | ▨ Catchment Area          |
| ○ Other Town      |                           |                           |

**Figure 1.12 Planning Area (D) at the Regional Level  
 in relation to South Guanacaste Tourism Planning Unit**



**Figure 1.13 Planning Area (D) at the Regional Level  
in relation to Corcovado-Golfito Tourism Planning Unit**



# Chapter 2

## PROGRESS OF THE STUDY

### 2.1 PHASES OF THE STUDY

The basic workflow of the Study is shown in Figure 2.1. In order to achieve the study objectives, the study is composed of the following four phases:

Phase 1 Analysis of Existing Conditions

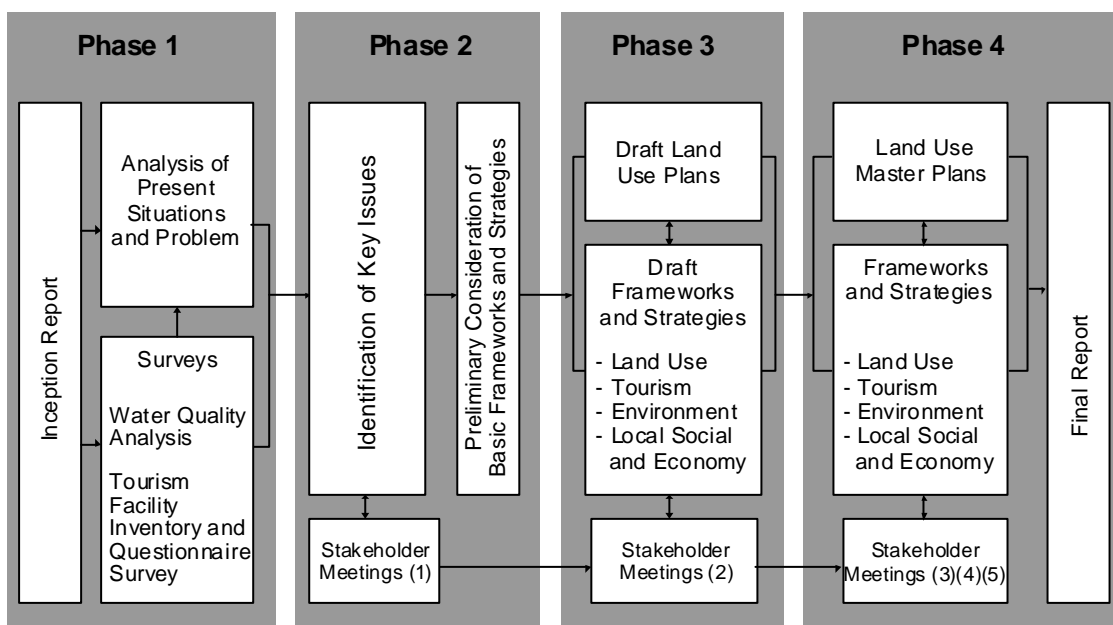
Phase 2 Identification of Issues of Coastal Land Use and Tourism Development

Phase 3 Formulation of Draft Land Use Plans in the Coastal Areas

Phase 4 Formulation of Master Plans for Land Use and Tourism Development in the Coastal Areas

This report, the Final Report is based on the study results in Phases 1, 2, 3 and 4.

**Figure 2.1 Basic Flow of Study**



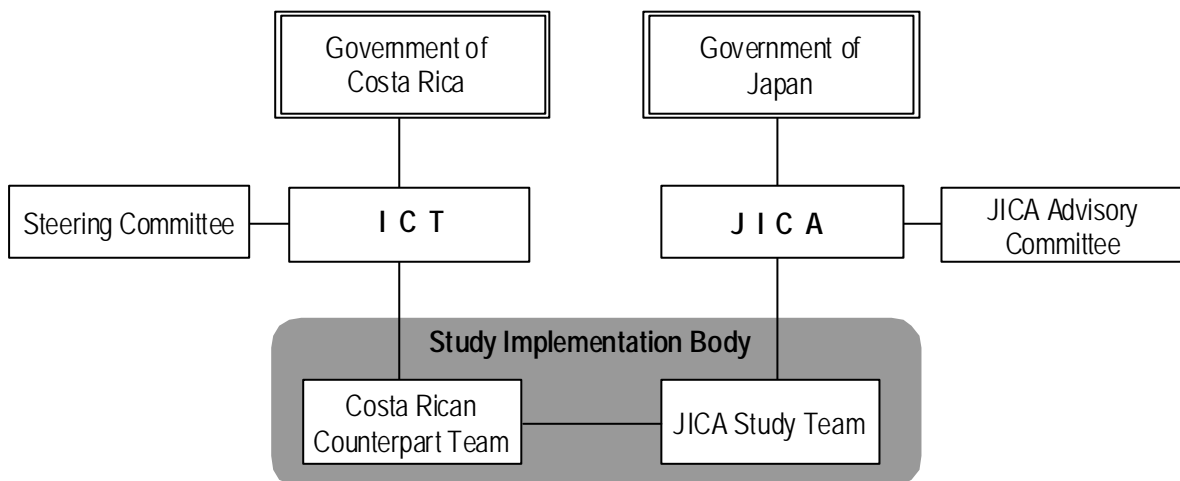
## 2.2 STUDY ORGANIZATION ESTABLISHED

The Study was carried out as a joint effort of the JICA study team and Costa Rican counterpart personnel, which form a study implementing body. The JICA study team was comprised of members from Pacific Consultants International (PCI) and Yachiyo Engineering Co. Ltd. (YEC). The Costa Rican counterparts were delegated from relevant Costa Rican government agencies.

The Steering Committee was to guide and advise the JICA study team on overall study directions and policy-related matters. Figure 2.2 shows the relations among the Steering Committee, JICA and the study implementing body (the JICA study team and Costa Rican counterparts). The Steering Committee was chaired by ICT and comprised of relevant agencies related to land uses in the Coastal Areas.

The Steering Committee and the counterpart team have been established as shown in Tables 2.1 and 2.2.

**Figure 2.2 Study Organization**



**Table 2.1 Members of Steering Committee**

Organization	Person in Charge
Instituto Costarricense de Turismo (ICT)	Mr. Rodolfo Lizano R.
Ministry of Environment and Energy (MINA E)	Mr. Alberto Fernandez S.
Institute of National Geography (IGN)	Mr. Carlos Elizondo
National Institute of Housing and Urban Planning (INVU)	Mr. Miguel A. Wong Sanchez
Ministry of Planning (MIDEPLAN)	Mr. Egerico Porras

**Table 2.2 Members of the Costa Rican Counterpart Team**

Name	Assignment	Organization
Mr. Rodolfo Lizano R.	Leader of the Costa Rican Counterpart Team	Director of Planning Direction, ICT
Mr. Alberto Sanchez Saenz	Tourism Resources	Coordinator, Department of Natural Resources, ICT
Mr. Oscar Villalobos Charpentier	Land Use Planning	Commission of Maritime Terrestrial Zone, ICT
Mr. Luis Madrigal	Demand Analysis and Statistics	Head, Department of Statistics, ICT
Ms. Catalina Brenes	Tourism Administration	Head, Department of Concession, ICT
Mr. Antonio Farah Matarrita	Land Use Planning	Commission of Maritime Terrestrial Zone, ICT
Ms. Anabelle Araya Garcia	Data Base and GIS	Department of Geography, IGN
Mr. Alberto Salas Roiz	Tourism Facility and Infrastructure Planning	Head, Department of Formation, ICT
Mr. Ricardo Mora Ugalade	Natural Conservation Planning	Department of Natural Resources, ICT
Ms. Maria Eugenia Poveda Conejo	Local Economic Development and Community Development	Director, Direction of Tourism Small and Micro-Enterprises, ICT
Mr. Victor Ramirez Montero	Participatory Planning	Head, Department of Coordination, ICT
Mr. Miguel A. Wong Sanchez	Urban Planning	Director of Urban Planning Direction, INVU
Ms. Maria de los A. Romero Araya	Legal Analyst	Coordinator, Commission of Maritime Terrestrial Zone, ICT
Dr. Dagner A. Mora Alvarado	Pollution Control and Environmental Consideration	Coordinator, Central Laboratory, ICAA
Ms. Grethel Fernandez Parmona	Marina Development	Inter-institutional Commission of Marina, ICT
Mr. Geovani Solera Córdoba	Participatory Planning	Department of Coordination, ICT



**Table 2.3 Members of the Study Team and Assignments**

Name	Assignment
Mr. Hideyuki SASAKI	Team Leader, Tourism Development Planning and Regional Planning
Mr. Kanao ITO	Deputy Team Leader and Tourism Resources Evaluation
Mr. Yasutaka NAGAI	Deputy Team Leader and Land Use Planning
Mr. Kiyooki TAKAKUWA	Tourism Market Analysis and Demand Forecast
Mr. Susumu HARAYAMA	Tourism Administration
Mr. Ariyoshi SATO	Tourism Promotion
Ms. Junko OKAMOTO	Land Use Planning
Mr. Yoshinori TAKAHASHI	Database and GIS
Mr. Makine KUSANO	Tourism Facility and Infrastructure Planning
Dr. Robert WHITCOMBE	Nature Conservation Planning
Dr. Nicholas CLARKE	Marine Environment
Mr. Akitoshi IIO	Water Supply and Waste Management
Mr. Keiichi YOSHIDA	Local Economic Development and Community
Ms. Akiko OKITSU	Participatory Planning
Mr. Tirso R. MALDONADO	Environmental Management
Ms. Mihoko OGASAWARA	Project Administration and Urban Planning

### **2.3 WORK ENVIRONMENT ESTABLISHED**

The JICA study team has established the following project office in San Jose:

#### **JICA Study Project Office**

OfiMall Executive Center 2<sup>nd</sup> Floor, Mall San Pedro, San Jose, Costa Rica

Tel. and Fax: +506-280-9617, Tel.: +506-280-8815

## **2.4 MAJOR STUDY ACTIVITIES IN PHASE 1 AND PHASE 2**

### **2.4.1 Inception Meetings**

The JICA study team held the following inception meetings with ICT over a period of five days from February 2 to 8, 2000.

February 2:	JICA study team presentation of the Inception Report to ICT
February 3:	ICT comments on Inception Report, with response by JICA study team
February 4:	Further discussions between ICT and JICA study team
February 7:	Discussions between ICT and the JICA study team in presence of JICA advisory committee members
February 8:	Further discussions between ICT and JICA study team, and signing Minutes of Meetings

### **2.4.2 Participatory Planning Exercise**

On March 22, a participatory planning exercise was conducted for both ICT counterparts and the JICA study team members at the office of ICT. The exercise included the following:

- Discussion on the objectives of the participatory and consultative process through stakeholder meetings
- Listing of stakeholders
- Analysis of characteristics of stakeholders

### **2.4.3 Organizations Visited**

The members of the JICA study team have extensively visited the following organizations to collect information and exchange views:

#### **(1) Central Government Agencies**

Costa Rican Social Security Institute (CCSS)  
National Commission of Emergency (CNE)  
National Commission of Indigenous People's Affairs (CONAI)  
General Direction of Statistics and Census (DGEC)  
Local Clinic (EBAIS) Samara  
Costa Rican Institute of Waterworks and Sewage Treatment (ICAA)  
Instituto Costarricense de Turismo (ICT)  
National Institute of Geography (IGN)  
Institute of Mixed Social Assistance (IMAS)  
National Learning Institute (INA)  
Costa Rican Institute of Fisheries and Aquaculture (INCOPESCA)

National Institute of Housing and Urban Planning (INVU)  
Ministry of Agriculture and Livestock (MAG)  
Ministry of National Planning and Economic Policy (MIDEPLAN)  
Ministry of Environment and Energy (MINAE)  
Ministry of Public Works and Transportation (MOPT)  
National Services of Groundwater, Irrigation, and Drainage (SENARA)

**(2) Local Governments**

Municipality of Nicoya  
Municipality of Santa Cruz  
Municipality of Hojancha  
Municipality of Nandayure  
Municipality of Puntarenas  
Municipality of Golfito  
Municipality of Osa  
Municipality of San Jose

**(3) International Agencies**

Tropical Agriculture Research and Training Center (CATIE)  
Instituto Interamericano de Cooperacion para la Agricultura (IICA)

**(4) Project Offices**

Estado de la Nacion Proyecto  
Proyecto de Desarrollo Agricola de la Peninsula de Nicoya  
TERRA Program, MINAE-RECOPE

**(5) Non-government Organizations and People's Organizations**

Neotropical Foundation  
Cecropia Foundation  
Red Costarricense de Reservas Naturales  
PROMAR  
Instituto Nacional de Biodiversidad (INBio)  
Centro para el Derecho Ambiental y Recursos Naturales (CEDARENA)  
Red de Reservas Privadas  
Asociacion Desarrollo Integral Ostional (ADIO)  
IUCN-Wetland Program  
Foundation of National Parks  
ORDES  
FEDEAGUA  
Union Cantonal de Asociaciones de Desarrollo Comunal de Santa Cruz  
Centro Agricola Cantonal de Santa Cruz  
Unidad Regional Chorotega

**(6) Universities**

National University, School of Geographic Science  
University of Costa Rica, School of Biology  
Universidad Interamericana  
Universidad Latina de Costa Rica

**(7) Associations**

Costa Rican Association of Tourism Professionals (ACOPROT)  
National Chamber of Tourism (CANATUR)  
National Chamber of Tourism Micro-enterprises (CANAMET)  
Costa Rican Association of Travel Agencies (ACAV)  
Costa Rican Tour Operator Association (ACOT)  
Costa Rican Chamber of Hotels (CCH)  
Costa Rican Chamber of Restaurants and Related Businesses (CACORE)  
Costa Rican Airline (LACSA)  
Local Chamber of Tourism in Puntarenas (CAPUT)  
Local Chamber of Tourism in Samara (CASATUR)  
Local Chamber of Tourism in Santa Cruz  
Local Chamber of Tourism in Golfito  
Local Chamber of Tourism in Pueruto Jimenez  
Regional Union of Local Tourism Chambers in the South Pacific

**(8) Private Sectors**

Paloma Lodge, Drake Bay  
Aguila de Osa, Drake Bay  
Lapa Ríos Lodge, Matapalo  
Hotel Punta Islita, Islita  
Agua Rica, Tamarindo  
Hotel Villas Playa Samara, Samara  
Hotel Tango Mar Beach & Country Club  
Hotel Guanamar Sportfishing Resort  
Tourism Chamber, Playa Conchal  
Hotel Melia, Playa Conchal  
Guanacaste Hotel Development, Santa Cruz  
Crocodile Bay Lodge  
Rain Forest Lodge & Reserve  
Grand Circle Travel  
Horizontes Nature Tours  
Costa Rica Sun Tours  
Costa Rica Expeditions  
Costa Rican Petroleum Refinery Co. Ltd. (RECOPE)  
DEPPAT  
ECOPLAN

#### **2.4.4 Field Surveys**

The JICA study team carried out extensive field surveys. The surveys were formulated for field reconnaissance for the following three groups:

- Tourism and Land Use Group: March 6 – March 15, 2000
- Environment Group: March 11 – March 17, March 21 – March 24, 2000
- Community Development Group: February 23 - February 25, February 27 - March 3, March 29 - April 8, 2000

The objectives of the surveys were to see actual circumstances of regulatory plans, various types of land uses, tourism and other economic activities and to understand natural and social conditions in the study areas.

The study area is huge and has limited accessibility, and the time available for the Phase 1 & Phase 2 study was too limited to visit all of the coastal areas in the study areas. Therefore, we combined observations by three transport modes (land, air and water transport). Sometimes all the study team members, as well as counterparts, participated in the field surveys and sometimes part of the team. In addition, the study team members visited municipality governments, local chambers of tourism, local NGOs, hotels and communities during the field surveys.

On March 11, an aerial observation was conducted by charter aircraft, covering the coastal areas of Tamarindo – Cabo Blanco – Puntarenas – Manuel Antonio – Dominical – Drake – Isla del Cano – Carate – Puerto Jimenez – Rincon – Esquinas – Golfito – Zancudo – Punta Burica.

#### **2.4.5 The First Round of Stakeholder Meetings**

The objectives of the first round of stakeholder meetings were as follows:

- To create a partnership among stakeholders including ICT,
- To enable each stakeholder to understand each other's interests and problems,
- To create a mechanism to discuss common issues and different opinions among stakeholders, and
- To reflect stakeholders' opinions and information on general land use plans and tourism development plans

The study team held the following three stakeholder meetings in the study area:

Date		Place
March 31, 2000	Stakeholder Meeting for Nicoya Canton	Nicoya
April 1, 2000	Stakeholder Meeting for Nandayure Canton	Carmona
April 7, 2000	Stakeholder Meeting for Golfito Canton and Osa Canton	Golfito

#### 2.4.6 Issue Discussion Meetings

The JICA study team had a series of issue discussion meetings with the ICT counterparts. Issues of tourism development, environmental management, community development and land use management were discussed in separate meetings as follows:

Discussion Group	Date
Tourism Group Discussion Meeting	April 12, 2000
Environment Group Discussion Meeting	April 12, 2000
Community Development Group Discussion Meeting	April 13, 2000
Land Use Group Discussion Meeting	April 14, 2000

#### 2.4.7 Additional Surveys

The following two types of surveys are being prepared for implementation, on a local sub-contract basis, to supplement the existing data:

Surveys	Progress Made
Analysis of water quality of river water and ground water	TOR drawn up, and the surveys started.
Inventory of tourism facilities and questionnaire surveys	TOR drawn up, and the surveys were started.

#### **2.4.8 Counterpart Meeting and Steering Committee Meeting for Discussion on the Progress Report**

The JICA study team held the following meetings for discussion on the Progress Report:

##### Counterpart Meeting

On May 5, 2000, the JICA study team presented and discussed the Progress Report with ICT counterparts.

##### Steering Committee Meeting

On May 9, 2000, the JICA study team presented and discussed the Progress Report with the Steering Committee.

## 2.5 MAJOR STUDY ACTIVITIES IN PHASE 3

### 2.5.1 Additional Surveys and Small-Scale Studies

#### (1) Surveys based on Sub-Contracts

The following 2 types of surveys were conducted, on a local sub-contract basis, to supplement the existing data:

Surveys	Progress Made
Analysis of water quality of river water and ground water	The survey was conducted in South Guanacaste and Corcovado-Golfito.
Inventory of tourism facilities and questionnaire surveys	The surveys were conducted in South Guanacaste and Corcovado-Golfito.

#### (2) Small-Scale Studies

The following 6 small studies were conducted by the JICA study team with the assistance of local groups of experts:

- Water resource study
- Marine mammal study
- Turtle study
- Coastal geomorphology study
- Flora and fauna study
- Coastal community socio-economic study

A brief description of these small-scale studies is given in Appendix.

### 2.5.2 The Second Round of Stakeholder Meetings

The objectives of the second round of stakeholder meetings were as follows:

- To create a partnership among stakeholders including ICT,
- To enable stakeholders to understand each other's interests and problems,
- To create a mechanism for discussing common issues and sharing opinions among stakeholders, and
- To reflect stakeholder opinions and information on general land use planning and tourism development planning

The JICA study team and ICT counterparts held the following four stakeholder meetings in the study area:



Date	Stakeholder Meetings	Place
June 29, 2000	Stakeholder Meeting for Nicoya Canton and Santa Cruz Canton	Samara
July 1, 2000	Stakeholder Meeting for Nandayure Canton and Cobano District of Puntarenas Canton	Jabilla
July 11, 2000	Stakeholder Meeting for Osa Canton	Sierpe
July 12, 2000	Stakeholder Meeting for Golfito Canton	Pt. Jimenez

In this second series of stakeholder meetings the JICA study team presented three kinds of ideas for actions or plans from three perspectives, namely tourism development, local socio-economic development and natural resources management. The participants in the meetings gave a variety of comments and opinions to the JICA study team based on their local knowledge and visions. Their local knowledge and visions deepened and broadened the planning outputs of the JICA study team very significantly.

At the same time, the stakeholder meetings themselves started a process of planning and action for tourism development, local development and natural resources management. Some of the participants were extremely interested in continuing the process. For example, in the Samara meeting, the participants would like to organize a local committee to coordinate and plan the actions of stakeholders.

In the second series of stakeholder meetings, the topics and subjects of discussion were still very wide-ranging. In the next stage of the stakeholder meetings more attention should be paid to the general land use plan, and to the necessary actions in relation to land use management based on the general land use plan.

### **2.5.3 Planning Discussion Meetings with ICT Counterparts**

The JICA study team had a series of planning discussion meetings with the ICT counterparts. Planning ideas for tourism development, environmental management, community development and land use management were discussed prior to the stakeholder meetings as follows:

Planning Discussion	Date
Planning Discussion Meeting prior to the Stakeholder Meeting in Samara and Jabilla	In the morning, June 27, 2000
Planning Discussion Meeting prior to the Stakeholder Meeting in Sierpe and Pt. Jimenez	In the morning, July 7, 2000

#### **2.5.4 Counterpart Meeting and Steering Committee Meeting for Discussion on the Interim Report**

The JICA study team held the following meetings for discussion on the Interim Report:

##### Counterpart Meeting

On August 8, 2000, the JICA study team presented and discussed the Interim Report with ICT counterparts.

##### Steering Committee Meeting

On August 10, 2000, the JICA study team presented and discussed the Interim Report with the Steering Committee.

#### **2.5.5 The First ICT-JICA Tourism Seminar**

The JICA study team and ICT counterparts held the following seminar:

##### Seeking Sustainable Tourism of Costa Rica in the 21 Century

August 11, 2000, in Hotel Herradura. The JICA study team invited around 100 people from government agencies, tourism-related businesses and associations, local consultant companies, investors, NGOs and universities.

The objectives of the seminar were as follows:

- To discuss about the future of Costa Rica's tourism
- To discuss about the direction of sustainable Costa Rica's tourism
- To present JICA study's results to wider audience

## 2.6 MAJOR STUDY ACTIVITIES IN PHASE 4

### 2.6.1 The Third Round of Stakeholder Meetings

The objectives of the third round of stakeholder meeting were as follows:

- To have stakeholder meeting at first visit place
- To discuss about the regional interests and problems
- To establish and create the meetings by ICT counterparts

The JICA study team and ICT counterparts held the following four stakeholder meetings in the study area:

Date	Stakeholder Meetings	Place
September 28, 2000	Stakeholder Meeting for Golfito Canton	Pavones
September 30, 2000	Stakeholder Meeting for Osa Canton	Drake
October 18, 2000	Stakeholder Meeting for Santa Cruz Canton	San Juanillo
October 20, 2000	Stakeholder Meeting for Cobano District of Puntarenas Canton	Santa Teresa

### 2.6.2 Planning Discussion Meeting with ICT Counterparts

The JICA study team and ICT counterparts held the following discussion meeting for planning:

#### 1<sup>st</sup> Planning Discussion Meeting

On September 26, 2000, the objectives are as following

- Overall Working Schedule of Phase 4
- How to approach Private Investors: Coordination with CINDE
- Preparation for the 3<sup>rd</sup> Round Stakeholder Meetings
- Precarista Issues in General and Pavones in particular

#### 2<sup>nd</sup> Planning Discussion Meeting

On October 4, 2000, the objectives are as following

- Detailed Discussion on the Interim Report
- Confirmation of the South Guanacaste Tourism Planning Unit and the Corcovado-Golfito Tourism Planning Unit

### 3<sup>rd</sup> Planning Discussion Meeting

On October 5, 2000, the objectives are as following

- Necessity of Technical Notes of Tourist Demand Forecast
- Inventory Data of Tourist Accommodation Facilities
- Nosara Town, and Ostional Village in the Region's Tourism Structure
- Golfito Town in the Region's Tourism Structure
- Incentives to Private Investors for Attracting Tourism Centers in South Guanacaste and Corcovado-Golfito

### 4<sup>th</sup> Planning Discussion Meeting

On October 12, 2000, the objectives are as following

- Further Discussion on the Interim Report
- On-going Additional Hearings from Government Institutions
- Collaboration between the ICT-JICA Project and Other Government Institutions
- Formation of Task Forces of ICT-JICA Counterparts for Special Topics
- Data of Coastal Conditions (Environmental Conditions, Beach Potential for Tourism and Community Conditions)
- Schedule and Agenda of the 2<sup>nd</sup> ICT-JICA Tourism Seminar
- New Members to the Steering Committee

### 5<sup>th</sup> Planning Discussion Meeting

On November 2, 2000, the objectives are as following

- Detailed Schedule of the Latter Part of Phase 4
- Action Projects/ Programs
- Demonstration of the Methodology for Coastal Land Use Planning

### 6<sup>th</sup> Planning Discussion Meeting

On November 14, 2000, the objectives are as following

- New Land Use Zones for General Land Use Plan
- New General Land Use Plan for Drake, Pto. Jimenez, Pavones, Samara and Santa Teresa

## **2.6.3 Planning Work Sessions together with ICT Counterparts**

The JICA study team and ICT counterparts held the following work sessions for finding out

Date	Meeting
November 3,2000	1 <sup>st</sup> Work Session for South Guanacaste Area
November 6, 2000	2 <sup>nd</sup> Work Session for Corcovado-Golfito Area

#### 2.6.4 Additional Hearings from Government Agencies and Others

Ministry of National Planning and Economic Policy (MIDEPLAN)  
National Directorate for Community Development (DINADECO)  
Costa Rican Investment Board (CINDE)  
National Commission of Indigenous People's Affairs (CONAI)  
Agenda 21 for Osa Program  
National Services of Groundwater, Irrigation, and Drainage (SENARA)  
Costa Rican Institute of Waterworks and Sewage Treatment (ICAA)  
National Museum  
Institute of Agricultural Development (IDA)  
National Learning Institute (INA)

#### 2.6.5 The Fourth Round of Stakeholder Meetings

The objectives of the fourth round stakeholder meetings were as follows:

- To discuss about the regional and community development
- To establish and create the meetings by ICT counterparts

Date	Stakeholder Meetings	Place
November 8, 2000	Stakeholder Meeting for Santa Cruz Canton	San Juanillo
November 9, 2000	Stakeholder Meeting for Cobano District of Puntarenas Canton	Santa Teresa
November 22, 2000	Stakeholder Meeting for Osa Canton	Drake
November 24, 2000	Stakeholder Meeting for Golfito Canton	Pto. Jimenez

#### 2.6.6 Counterpart Meeting and Steering Committee Meeting for Discussion on the Draft Final Report

The JICA study team held the following meetings for discussion on the Draft Final Report:

##### Counterpart Meeting

On December 4, 2000, the JICA study team presented and discussed the Draft Final Report with ICT counterparts.

##### Steering Committee Meeting

On December 5, 2000, the JICA study team presented and discussed the Draft Final Report with Steering Committee.

### **2.6.7 The Second ICT-JICA Tourism Seminar**

The JICA study team and ICT counterparts held the following seminar:

On December 7, 2000, in Hotel Herradura, the JICA study team and ICT invited around 80 people from government agencies, tourism-related businesses and associations, local consulting companies, investors, NGOs and universities.

The objectives of the seminar were as follows:

- To present the results of the Draft Final Report including the General Plan (including general land use plans)
- To discuss about the actions needed for 1) land use management, 2) public investment in infrastructure, 3) private investment in tourism facilities, 4) tourism-based community development and 5) establishment and utilization of natural areas.

### **2.6.8 The Fifth Round of Stakeholder Meetings**

The objectives of the fifth round of stakeholder meetings were as follows:

- To present and discuss the draft final report and draft general plans (including general land use plans) with stakeholders
- To encourage stakeholders to continue the consultative and participatory processes based on the general plans (including general land use plans)

Date	Stakeholder Meetings	Place
December 9, 2000	Stakeholder Meeting for South Guanacaste Region	Nicoya
December 13, 2000	Stakeholder Meeting for Drake	Drake
December 14, 2000	Stakeholder Meeting for Corcovado-Golfito Region	Golfito

# **Part II**

## **NATIONAL TOURISM DEVELOPMENT AND COASTAL LAND USE PLANNING**

# **Chapter 3**

## **POTENTIAL AND PROSPECTS OF COSTA RICA'S TOURISM DEVELOPMENT AND PROMOTION**

### **3.1 POTENTIAL AND PROSPECTS OF COSTA RICA'S TOURISM**

#### **3.1.1 Basic Directions at which Costa Rican Tourism should Aim**

Costa Rican tourism should seek a unique position in the world tourist market and evolve into “a multi-faceted tourist destination with a difference – strong eco/nature tourism appeal.” Costa Rican tourism should take advantage of its already established market perception - “an eco/nature-based tourism destination in a peaceful and democratic socio-political environment.” It should not seek a simple numerical growth in tourist arrivals, but aim at sustainable tourism development based on its unique and varied tourist resources, while making every effort to diversify its line of products on offer from the current narrow eco/nature tourism perspective. Costa Rica should cultivate a potential market with more sophisticated approaches and strengthen its tourist industries in order to keep up with the ever-changing needs of the potential tourist market.

#### **3.1.2 Tourism Resources and Products On Offer**

Costa Rica has already enjoyed a well-established market perception as “an ideal ecotourism destination.” Costa Rican tourism needs to broaden its perception into “an eco/nature-based tourism destination” and ultimately “an eco/nature-based tourism destination with many other attractive options and activities.” Such tourism product development encompasses far larger market segments and potentials - from general interest tour circuit (volcanoes, hot springs, scenic wonders), soft adventures (rafting, canoeing, kayaking), marine-related activities (surfing, diving, snorkeling, sport-fishing), health/curative holiday, to conference/ incentives or beach holiday (sun and beach).

Rapid growth in tourism in recent years has brought about the problems of congestion, overcapacity and concerns for deterioration of the limited number of popular national parks and nature reserves within an easy access from San Jose, the sole gateway of international



regular flights to Costa Rica (e.g., Monteverde, Manuel Antonio). It is necessary to disperse more tourists to less known and less visited areas and sites (parks/reserves included) to mitigate concentration and ensuing degradation of much visited areas/sites/resources. To facilitate this effort, the two-gateway policy of San Jose and Liberia is recommended because it will open a vast new potential for a multi-corridor tourism development in Costa Rica, with the definitively rewarding side effects of a) dispersing tourists to other areas or less visited areas, and b) eventuating effective use of untapped or unutilized resources. From a tourism development perspective, the Liberia gateway is very beneficial to the less known/visited/developed Nicoya Peninsula (particularly to the Coastal Guanacaste, the southern part of which this JICA study is focused on).

Admittedly “sun and beach” is not and will not be the frontline product of Costa Rican tourism, since the Costa Rican beach holiday product as it is (mainly in Central Pacific, North Guanacaste and South Guanacaste) is less appealing than those on offer in other established and competitive beach destinations (e.g., Mexico, Cuba or Dominica), particularly in terms of facilities (level and size), quality-price relations, amenities and infrastructure (access, especially road). However, “sun and beach” can be a very powerful instrument in broadening the market potential of Costa Rica from the present narrow eco/nature-tourism segment, when it is marketed, as long as the above-cited deficiencies are properly addressed. Nature tourism and beach tourism can complement each other, contrary to some arguments often heard locally that beach tourism will harm the established ecotourism perception. (The past airport questionnaire surveys over the years confirm that “sun and beach” is the top activity chosen over “flora/fauna, nature walk, or birdwatching.”) Rather, beach holiday products will add an edge to Costa Rican tourism by offering potential customers, who are now choosing a simple beach holiday in Mexico, a different and more attractive Costa Rican holiday option of “sun and beach combined with a unique nature tourism experience.”

### **3.1.3 Tourism Market**

The market for Costa Rican tourism expanded from the initial hard-core ecotourists (academia, eco/nature enthusiasts satisfied with basic amenities) to the soft-core eco/nature-based tourism (less tolerant of discomfort in travel or amenities), which have a larger market base in recent years, including some soft adventure/activity (surfing, rafting, kayaking, or sport-fishing) and sun and beach, in most cases combined with nature experiences.

The broader nature experience tourism in lieu of hard-core ecotourism is now appealing to new and growing market segments of affluent senior citizen groups (learning holiday), as well as student groups (educational/intercultural holiday).

Another very lucrative high-spender market segment is MICE (meeting, incentive, conference and exhibit) tourism or simply conference tourism. Many “incentive houses” (professional incentive organizers) are trying to introduce a new destination with a difference – away from commonplace beach destinations found elsewhere.

“Sun and beach combined with nature experiences” is a definitively attractive product proposal to all above new market segments.

Most of these new market segments come in larger groups (in groups of 20/40/more persons, some in 100/more persons – e.g., incentive groups) than hard-core eco/naturalists, who tend to come in groups of 10/15 persons, often organized in a series of successive departures. Existing 2/3-star cabins/bungalows of less than 10 rooms (the national average) are inadequate, from a tour operational viewpoint, for the new market in terms of quantity/availability of uniform standard rooms and level of amenities/services. There is a need for 4/5 star hotels of 100 or more rooms to cater to a new potential market demand.

International hotel operators bring along their own sophisticated marketing network and know-how, as well as sufficient promotional resources, from which Costa Rica tourism industries can benefit. More international operators need to be solicited by ensuring a favorable investment environment.

### **3.1.4 Promotion**

Since Costa Rica is so well established in the world market as a leading ecotourism destination, much further market expansion is not anticipated by pursuing the same ecotourism-focused promotion. Also, the past promotional approaches are weighed more on general image building (typically the current “No Artificial Ingredients” promotion) and less on particular products or regions. In order to broaden her market base from niche ecotourism, more focused promotional efforts are recommended to potential target market segments by offering new products and attractive proposals (specific activities, adventures, conferences and seminars, health holidays, meet-the-people programs, combined with nature experience and/or sun and beach, or specific regions/locales combined with specific activities/themes/events).

Given the limited resources available (budget, know-how, and contact), promotional efforts should be focused on more rewarding and tangible trade sales in the major markets (tour operators, incentive houses, organizers/associations of various nature – senior citizens, educational institutions, students, etc.) rather than the direct consumer approach (e.g.

advertisement placement in leading travel magazines). Across-the-industry joint efforts by ICT and the private sector who hold trade contacts are the key for its success.

Concerted and persistent efforts are needed, in particular to hard-sell the so-called “green season,” eradicating the prevailing notion that plagues Costa Rican tourism industry - “The rainy season won’t sell.” To most visitors coming from the Northern Hemisphere (North America/Europe, or East Asia), the weather in general in the beginning and the end of the wet season (April to early May, and late October to November) are far from their perception of the rainy season, particularly in the dry Nicoya Peninsula where almost all-the-year-round dry weather is assured. These relatively favorable months should be marketed in earnest by offering an attractive “shoulder season” package proposals jointly developed through across-the-industry/tourist region cooperation (reduced prices, add-on benefits, features and incentives, etc.). One of the key factors contributing to the comparatively high tour cost in Costa Rica, the constant source of grievance from tourists as well as overseas tour operators, lies in the short 4-month high season (December to March) on the revenue of which every tourist operator has to depend to survive the remaining 8-month long low season.

### **3.1.5 Tourism Administration**

To promote tourism at the regional level, there is an apparent lack of coordination and experience/know-how among the related central government agencies, municipalities and private organizations concerned. ICT’s initiatives and input of expertise are needed to solidify tourism-related coordination in the region. To appoint regional officers (officers in charge of certain tourism regions) of ICT is highly recommended.

There is too small a budgetary allocation from the central government sources to the region. In order to achieve an increased resource allocation, it is necessary to formulate a prioritized tourism development plan attractive enough to wet investors’ appetite.

Complacency prevails now in Costa Rican tourism industry in a relatively uncompetitive sellers’ market environment (niche ecotourism market with the limited supply/capacity for a short high season). It is necessary to build up a more solid industry resilient enough to be competitive in the international destination rivalry.

There are no official tourist information centers in the major tourist hubs/centers, except in San Jose. Practical site-specific information, handouts and pamphlets are lacking in national parks, nature reserves, tourist sites and towns. This situation needs to be improved.

Because of the increased importance of tourism revenues in the national economy, more forceful awareness campaigns are needed at the national level to remind the general populace of the importance of every single tourist to Costa Rica. One single incidence of petty crime against tourists, not to mention of serious nature (e.g., recent death of American girls) results in an incalculable loss by the most damaging “word-of-mouth” negative publicity against the long established good image of Costa Rica as “a safe and peaceful destination.” At the national level, much attention and high spotlight awareness campaigns on this issue are needed.

### **3.1.6 Tourism Facilities, Industry and Related Micro-enterprises**

Costa Rica’s recent tourist growth is reaching a point where small-scale cabins and bungalows, the main supplier of accommodation sector thus far, cannot cope with the quantity and quality of changing market demand for higher service/amenity requirements. The absence of medium-range hotels is creating a polarized market distribution between the budget-priced, basic amenity cabin clientele and the expensive up-market boutique lodge clientele, resulting in Costa Rica’s loss of a precious market development opportunity for a much larger market segment of tourists who would prefer moderate priced hotels with more comfort.

The relatively competition-free environment in the Costa Rican tourism industry has created a certain complacency among many operators of accommodation facilities, enjoying supply-side pricing. This unusual price/quality relation needs to be rectified so that Costa Rican tourism can become truly competitive in the global market, particularly for sun and beach products. The often-voiced concerns that larger properties will drive small cabin and bungalow operators out of the market is not valid, as has proven in many other developed tourist destinations, where many conscientious small-scale hotel/lodge operators with good facility/service levels prosper side by side with larger, sometimes internationally affiliated hotels.

Tourism is in a fiercely competitive environment, not only at the international level but also at the national level, among competing regions, areas, beaches or specific sites and attractions. Fragmented efforts by individual hotels, beaches or tourist sites will bear little fruit. Regional alliance among tourism-related actors is an effective approach to promote a region collectively to gain better/wider exposure (particularly for new tourist regions, such as South Guanacaste). With assistance from JUDESUR, a regional union of eight local tourism chambers has jointly made promotional efforts for the South Pacific region. This is a good model example in this respect.

The importance of micro-enterprises in tourism and related fields should not be neglected, especially at the local community level, where appropriate supportive measures need to be invested from the central and local government sources.

### **3.1.7 Tourism Support Infrastructure**

Poor road access (e.g., lack of paved roads, road maintenance) and lack of tourist-friendly signposting are serious. These have been always pointed out as the top problems by ICT's bi-annual tourist questionnaire surveys. Probably tourists gained their impression of poor access by traveling on the bad and long road to the popular Monteverde, of which some 35 km road from the Inter-American Highway is described as "gut-jolting, vertiginous dirt road" by the authoritative and well-read Costa Rica Handbook Guide. The road to Monteverde has not yet been paved with intent, due to the split in opinions within the Monteverde community. The problem of unpaved roads is especially prevalent in coastal regions, including South Guanacaste and Corcovado-Golfito.

There is little awareness of the importance of San Jose, as the sole gateway and by far the largest urban center. The tourists' impression of San Jose as it is today is different from his/her expectation of a capital of "a clean and green eco/nature tourism destination." Serious efforts to "Keep San Jose Clean and Green" need to be initiated, both at law enforcement level (stricter control of noxious motor bus/vehicle exhaust fumes, garbage, litter, etc.) and public awareness level. The authoritative and well-read Lonely Planet Guide quotes the speech of MINAE's minister in 1996 saying that "the capital's level of air pollution was far higher than recommended international standards and getting worse."

Poor level of infrastructure provision negatively affects the image and appeal of Costa Rica as an attractive destination as a whole, which in turn results in reducing her competitive edge over other destinations to attract private investment from abroad.

There is no clear prioritization indicated as to the planned infrastructure development, resulting in discouragement on the part of potential investors, particularly in the tourism-related field, and leading to fragmented and isolated land speculations. As a result, the government has little control over the development of potential areas.

ICT's function needs to be strengthened as the sole tourism supervisory authority to coordinate the different, sometimes conflicting interests of various related central and local government agencies with regard to infrastructure provision and maintenance, in particular, for the planned tourism development regions.

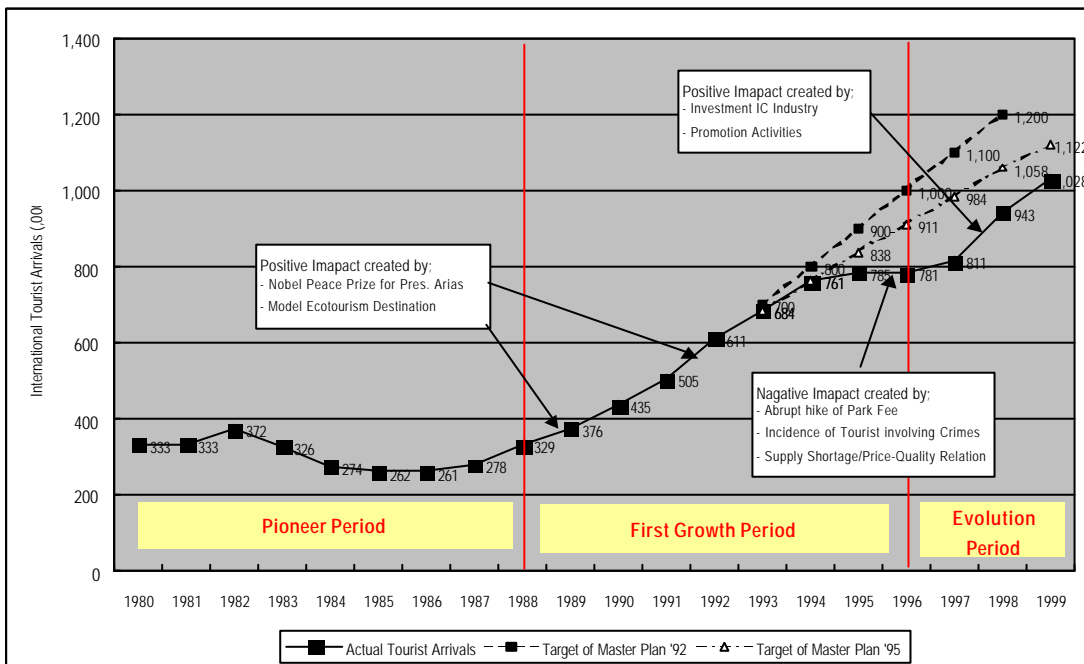
### 3.2 EVOLUTION OF COSTA RICAN TOURISM MARKET FROM THE 1980'S TO 2000

Costa Rica's tourism has been through the great transition, as shown in Figure 3.1 and Figure 3.2.

#### Development Stages of Cost Rican Tourism Market

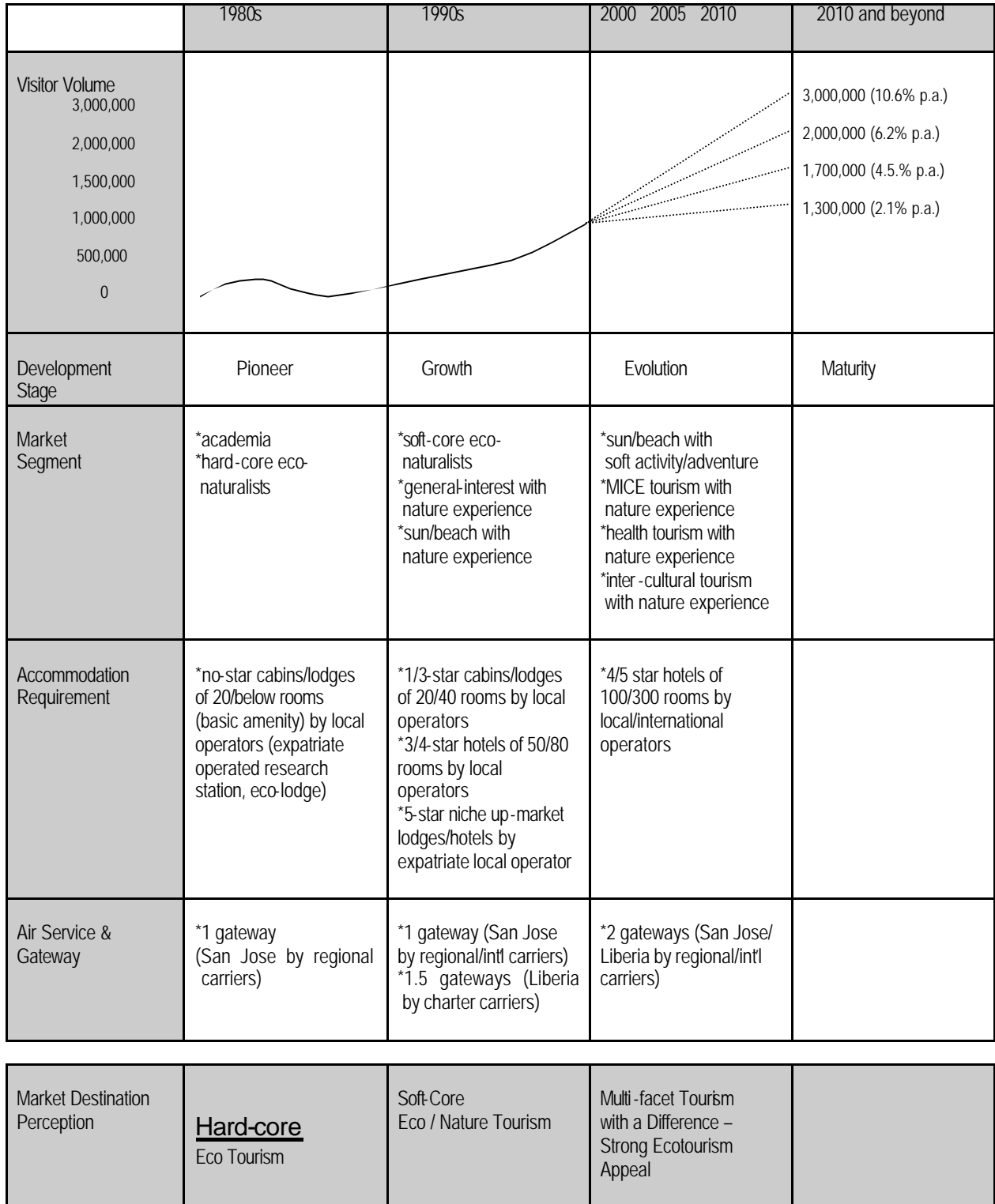
- Up-to 1987: Pioneer Period of Ecotourism
- 1988-1994: Growth Period
- After 1994: Evolution Period from Ecotourism Destination to Nature-based Tourism Destination

**Figure 3.1 Past Trend and Targets of International Tourist Arrivals to Costa Rica**



Source: JICA Study team's interpretation using the data from ICT

**Figure 3.2 Development Stages of Costa Rican Tourism: the 1980s - 2010**



### 3.3 SWOT ANALYSIS OF COSTA RICAN TOURISM

Costa Rican Tourism as it stands now is analyzed by SWOT (FODA) method.

#### (1) Strength (Fortalezas)

- Well-established “ecotourism” destination image/perception in the world market, with pioneer eco-research stations/reserves/lodges initially developed by expatriate scientists.
- Proximity to major source markets (North Americas, and relatively to Europe).
- Political climate of peaceful and stable democracy.
- Diversity of tourist resources within a relatively confined national boundary.
- Potentials for combination of beach holiday with eco/nature/activity tourism.
- High awareness toward “ecotourism” among the tourism industry as well as the general populace (relatively).
- Costa Rican hospitality (each and every tourist destination boasts of the hospitality of the people, so this strength does not count much aside from commonplace publicity message).

#### (2) Weakness (Debilidades)

- Poor tourism-support infrastructure (notably the road, road/tourist signs).
- Poor visitor management and facilitation (overall trail systems, interpretative signs/self-guiding signs, visitor centers, orientation map/brochure, guide/ranger training, visiting hours, etc.)
- Relative unattractiveness of urban centers (notably San Jose), coupled with lack of awareness toward “keep my city/town clean” among the general public (littering, garbage, polluted air by antiquated motor vehicle exhaust) – veritable anticlimax to well-publicized “green, ecotourism destination” perception.
- Deep-rooted “fixed perception” among tourism industry (both government and private) that “rainy season won’t sell,” and consequent lack of concerted/sophisticated effort to hard sell so-named “green season”.
- Lack of “world heritage” class historic/cultural monuments to highlight Costa Rican tourism, aside of “ecotourism” (relative to market competition with Mexico/Guatemala).

#### (3) Opportunities (Oportunidades)

- Diversification of tourism products on offer - from a smaller niche/SIT market of ecotourism to a much larger market base of general interest, intercultural exchange, sun/beach, theme vacations – conference, health/spa, etc., all combined with Costa Rica’s strong nature based tourism appeal (inclusive of ecotourism and soft activity/adventure tourism).
- Introduction of “shoulder season package” by across-the-industry alliance/cooperation, followed up with hard-sell campaign in the source markets (North Americas/Europe).



- Generally stable political climate in the region (Central America) in recent years—free from civil war/unrest in the past.

**(4) Threats (Amenazas)**

- Apparent complacency over Costa Rica's established ecotourism destination perception, and consequent lack of effort to further polish up Costa Rica as “clean, green and peaceful” destination.
- Infrequent, yet very regrettable incidence of tourist-involved crimes (from petty thefts to serious mugging/killing) – very harmful to the “peaceful and safe destination” image. Persistent social awareness campaign toward the importance of tourism to C.R. needs to be strengthened.

### 3.4 CHANGING MARKET NEEDS

Four/five star hotels with a larger capacity (100/more) and specialty facilities (conference, golf, and spa) are rapidly increasing; many of which are either affiliated with or under management/operation contract with international hotel operators. Many of new property openings/expansions have taken place in the recent five years between 1995 and 1999.

This development will bring about a dramatic change in the Costa Rican tourism landscape in the coming five years, with further addition of several more large-scale properties planned and ongoing (in Papagayo– Four Seasons/Ramada-Renaissance/ others, and Marriott in San Jose - by 2002).

Planning Unit	City/Playa	Name of Property (number of rooms)	Specialty Facilities	Note
North Guanacaste	Papagayo	Occidental (300)	Conference	Former Caribbean Village, open in early 2001. 60-room expansion completed in late 99.
	Papagayo	Blue Bay (160)	Conf/Spa	
	Hermosa	Occidental Costa Smeralda (160)	Golf-18, Conf/Casino	2nd stage expansion ongoing (golf, condo lots) Opened Nov. 99.
	Hermosa	Melia Sol Hermosa (100)		
	Conchal	Melia Conchal (310)		
	Langosta	Barcelo Langosta (72)		
South Guanacaste	Tambor	Barcelo Tambor (402)	Golf-9	Golf-9 more holes planned. Holiday villa estate. Share golf with Tambor.
	Tambor	Barcelo Delfines (64)		

Greater San Jose	Alajuela	Melia Cariari (220)	Golf –18/Conference Conf (51,000 ft.sq) Conference Conf/ Spa Conference Conf/ Casino Conf/ Casino/ Spa Conf/ Casino/ Spa Conf/ Casino/ Spa Conf/ Casino/ Spa Conf/ Casino	Share Golf-18 with Cariari.
	Alajuela	Herradura (90)		
	Alajuela	Marriott (252)		
	Heredia	Occidental La Condesa (96)		
	Escazú	Camino Real Intercontinentl (261)		
	San Jose	Aurola Holiday Inn (201)		
	San Jose	Radisson Europa (115)		
	San Jose	Melia Confort Corbici(200)		
	San Jose	Barcelo SJ Palacio (254))		
	San Jose	Barcelo Amon Plaza (90)		
San Jose	Best Western Irazu (350)			

<b>Central Pacific</b>	Puerto. Caldera Pta. Leona Pya.Herradura Jaco Jaco Jaco Jaco Quepos	La Roca Beach Club (1,000) Punta Leona (181) Los Suenos Marriott (220) Barcelo Amapola (53) Best Western (130) Fiesta (80) Paradise (153) Parador (60)	Golf-27, theme park, Mini-golf, RV camp Golf-18, Conference Casino  Casino, Minigolf	Under construction (Pta. Corralillo)  Opened Dec. 99.  40-room expansion ongoing.
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### 3.5 NUMERICAL FRAMEWORK OF COSTA RICA'S TOURISM DEVELOPMENT

#### 3.5.1 Alternative Projections of International Tourist Arrivals to Costa Rica<sup>1</sup>

Based on the past data for international tourism arrivals and previous discussion of various issues, the following five projections for international tourist arrivals are provided for the purpose of discussing alternative scenarios shown in Table 3.2. The past trend and these future projections are shown in Figure 3.3.

**Table 3.1 Alternative Projections of International Tourist Arrivals to Costa Rica**

Unit: million tourists

Projection	Types of Projection	Basic Year	Short-Term	Mid-Term	Annual Average Growth Rate	Reference Years
		1999	2005	2010		
Projection 1	High Growth Trend	1.0	1.9	3.1	10.6%	1987-99
Projection 2	Mid Growth Trend		1.5	2.0	6.2%	1994-99
Projection 3	Mid Logistic Growth		1.6	2.0	Logistic	1994-99
Projection 4	Lower Growth Trend		1.4	1.7	4.5%	1989-99
Projection 5	Lowest Growth Trend		1.2	1.3	2.1%	1994-97

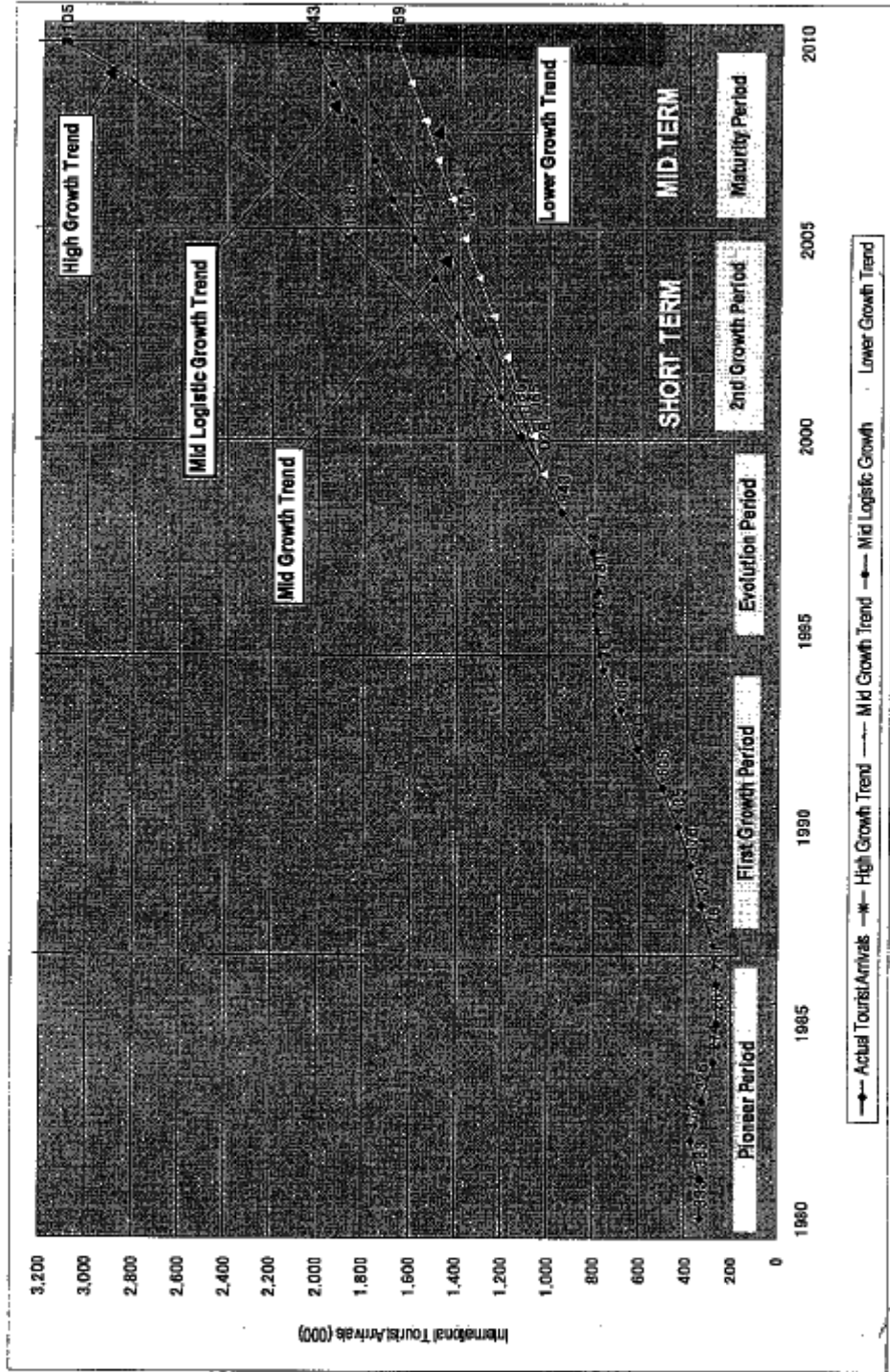
Source: JICA Study team's projections using the statistical data of ICT

The JICA study team rejects Projection 1 (with the target of 3 million in 2010) and Projection 5 (with the target of 1.3 million in 2010) because 3 million is so large that Costa Rica's share in the Central America's international tourist arrivals would be excessively high considering the world market situation (See Figure 3.4), and because Costa Rica cannot provide enough accommodation facilities and human resources to support such rapidly increasing tourism demands. On the other hand, 1.3 million is too low as a target number in view of the efforts of the Costa Rican tourism sector, in comparison with 1.0 million international tourist arrivals in 1999.

The difference between Projection 2 and Projection 3 is the shape of growth curve. In Projection 3, higher growth rates are set in the beginning than Projection 2. Since Projection 3 is more likely than Projection 2, Projection 2 is rejected.

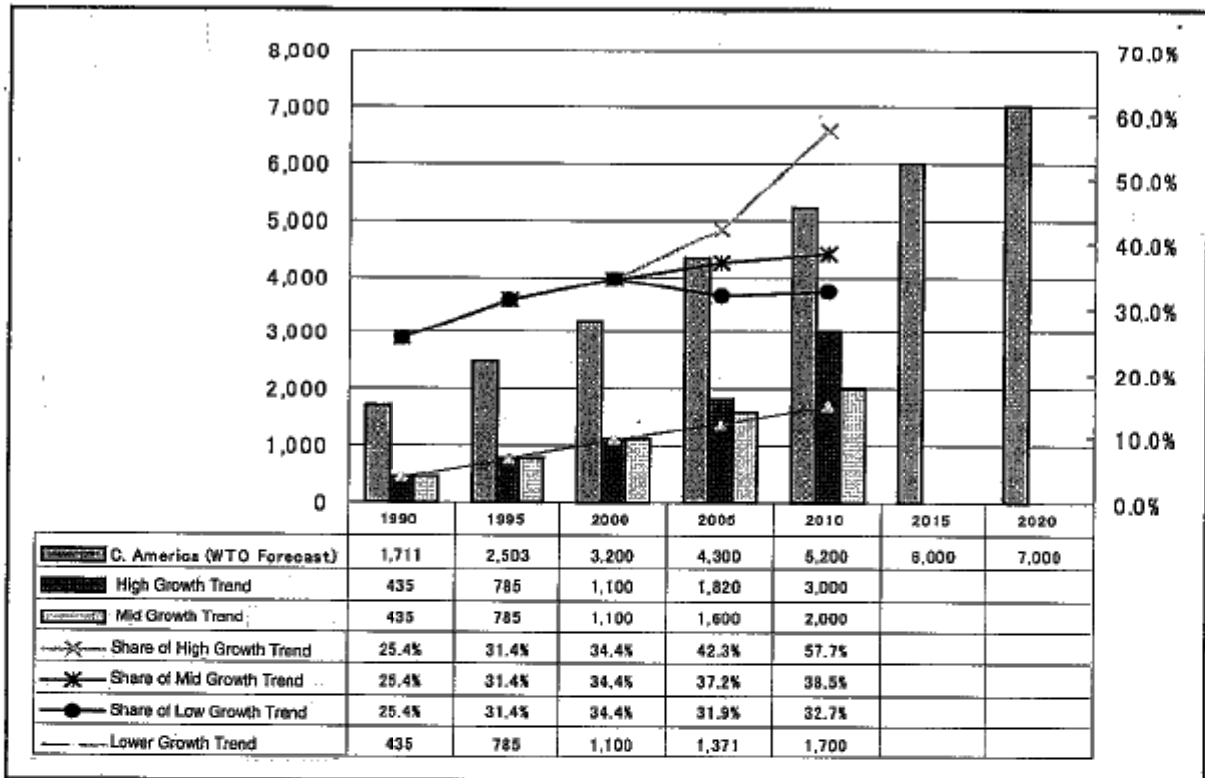
<sup>1</sup> The projections (presented in this Chapter) are made for setting the future framework of Costa Rican tourism, but not simply for forecasting the future demands. The future framework is to present a kind of targets rather than forecasts.

**Figure 3.3 Past Trend and Future Projections of International Tourist Arrivals to Costa Rica**



Source: JICA Study team's projections using the data from ICT

**Figure 3.4 Share of the International Tourist Arrivals to Costa Rica in the International Tourist Arrivals to Central America**



Source: Tourism Statistical Yearly Report 1998, ICT, Global Tourism Forecast to the Year 2020 by WTO, and Study Team

### 3.5.2 Alternative Scenarios for National Tourism Development

To compare the two remaining projections, Projection 3 (2.0 million in 2010) and Projection 4 (1.7 million in 2010), the meaning of the difference in the target numbers in 2010 needs to be considered. The distribution of tourist arrivals among tourism regions is especially important.

With the combination of projections, four scenarios for national tourism development are identified, as shown in Table 3.2. Scenario 2 with Projection 3 (2.0 million international tourist arrivals in 2010) is recommended.

**Table 3.2 Alternative Scenarios of National Tourism Development in Costa Rica**

Scenario	Projection	Types of Scenario
Scenario 1	Projection 1 High Growth 3.0 million in 2010	Excessive and too rapid development scenario
Scenario 2 (Recommended)	Projection 3 Mid Logistic Growth 2.0 million in 2010	Scenario for promoting wider eco/nature-based tourism combined with “sun and beach” and other motivations, diversifying tourism products on offer and destinations outside the already developed tourism regions.
Scenario 3	Projection 4 Lower Growth Trend 1.7 million in 2010	Scenario relying on development of ecotourism destinations and North Guanacaste’s beaches
Scenario 4	Projection 5 Lowest Growth Trend 1.3 million in 2010	Scenario aimed at development of ecotourism destinations more than other general interest tourism

It might be argued by some people that 2 million international tourist arrivals or doubling in 10 years is too rapid a growth to sustain the environment and communities, as well as the tourism industry. However, considering the necessary and likely improvement in business operation of the tourism industry, the present Costa Rican tourist hotels and cabins, which now accommodate 1.0 million international tourists, can absorb as many as 1.2 million tourists. This means that the incremental volume of international tourists in 2010 from 1999 is 0.5 million in the case of Projection 4, and 0.8 million in the case of Projection 3.

This difference in the total target number of international tourists has a significant impact on the development of some potential regions, which are still underdeveloped, as shown in the comparison between Scenario 3 and Scenario 2.

The 2010 target number of 1.7 million set by Scenario 3 with Projection 4 is based on the following regional distribution of international tourist arrivals:

- Moderate increase in number of tourists to the existing much visited ecotourism destinations,
- More development (with high growth rates) in North Guanacaste’s beach destinations, and
- Slight growth in other less visited tourism regions.

The 2010 target number of 2.0 million set by Scenario 2 with Projection 3 is based on the following regional distribution of international tourist arrivals:

- Moderate increase in number of tourists (with mid growth rates) to the existing tourist destinations,
- More development (with high growth rates) in North Guanacaste's beach destinations, and
- More development (with mid growth rates) in other coastal tourism regions, such as South Guanacaste and Corcovado-Golfito

Scenario 2 with Projection 3 (2 million) tries to diversify tourism products and destinations for promoting "nature and activities tourism." Scenario 2 would have larger impacts on regional tourism development outside the already developed ecotourism sites and beach resorts.

On the other hand, with the target of 1.7 million international tourist arrivals set in Scenario 3 with Projection 4, the tourist demands are not large enough to stimulate the presently underdeveloped tourism regions. Scenario 3 does not allow for the promotion of tourism development in the regions outside the existing tourist destinations. As a result, more congestion to the already developed ecotourism sites and to now developing North Guanacaste beaches would occur.

### **3.5.3 Hotel Rooms: 2010 Target and Regional Distribution**

The required number of hotel/accommodation rooms in the year 2010 is estimated at around 52,000 for the targets of 2.0 million international tourists and 1.3 million domestic tourists. This estimate is based on various assumed parameters. See the assumptions in Tables 3.4 through 3.10.

The incremental number of hotel and accommodation rooms is 24,000 rooms for a period of 11 years from 1999 to 2010. (The average annual hotel development produces around 2,200 rooms.)

On the other hand, almost of the present stock of hotel/accommodation should be also renovated and up-graded to adapt to the international and domestic standards within the period.

The regional distribution of hotel rooms estimated is shown in Table 3.3.



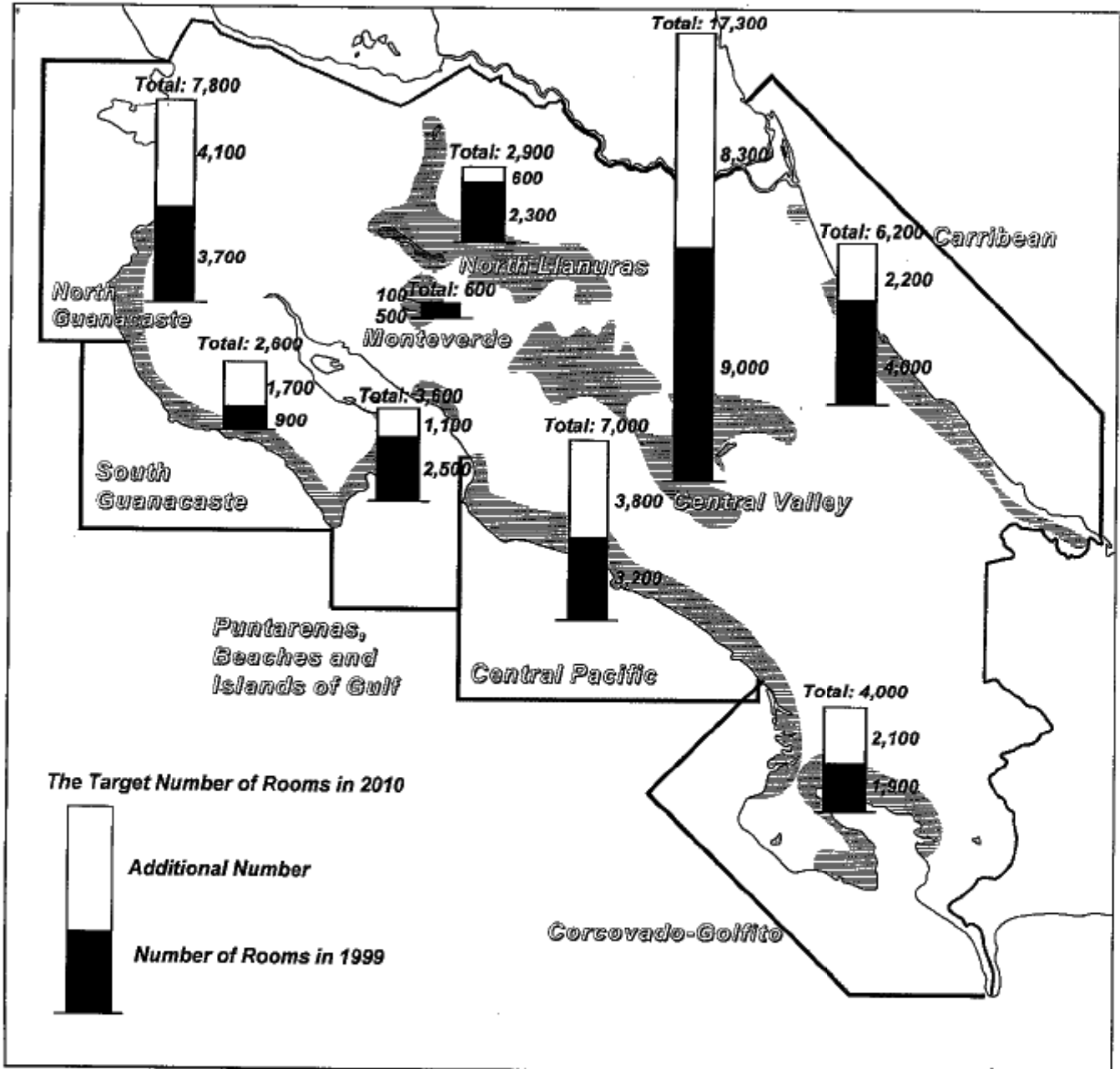
**Table 3.3 Regional Distribution of Hotel Rooms: Present and Future Target**

Tourism Planning Unit	1992 Strategic Plan 1998 Target (%) *1)	1999 Present (%) *2)	2010 Target (%) *3)	Additional Increment (%)
Total	30,668 (100%)	28,000 (100%)	52,000 (100%)	24,000 (100%)
1 Central Valley	12,637 (41%)	9,000 (32%)	17,300 (33%)	8,300 (35%)
2 North Llanuras	863 (3%)	2,300 (8%)	2,900 (6%)	600 (3%)
3 North Guanacaste	3,461 (11%)	3,700 (13%)	7,800 (15%)	4,100 (17%)
4 South Guanacaste	801 (3%)	900 (3%)	2,600 (5%)	1,700 (7%)
5 Carribean	3,984 (13%)	4,000 (14%)	6,200 (12%)	2,200 (9%)
6 Puntarenas, Beaches and Islands in Gulf	3,100 (10%)	2,500 (9%)	3,600 (7%)	1,100 (5%)
7 Central Pacific	3,951 (13%)	3,200 (12%)	7,000 (13%)	3,800 (16%)
8 Corcovado-Golfito	1,384 (5%)	1,900 (7%)	4,000 (8%)	2,100 (9%)
9 Monteverde	487 (2%)	500 (2%)	600 (1%)	100 (0%)

Source: 1) 1992 Strategic Plan for Sustainable Tourism Development in Costa Rica

2) ICT Data 1999, and \*3) Study Team

**Figure 3.5 Target Numbers of Hotel Rooms in 2010**



**Table 3.4 Projections of Domestic Tourist Arrivals**

Domestic Projection		Target Number of Tourists in 2010	Annual Average Growth Rate
Domestic Projection 1: High Growth	GDP Growth Rate	1.7 million	7.0 % per annum
Domestic Projection 2: Mid Growth	GDP per capita Growth Rate	1.3 million	4.8 % per annum
Domestic Projection 3: Low Growth	Population Growth Rate	1.0 million	2.2 % per annum

Source: The JICA study team

**Table 3.5 Length of Stay of International Tourists: Trend and Future Target**

	1992 Strategic Plan *1)	Actual *2)	Target *3)
1993	9.4		
1998	12.0	10.8	
2010			11.5

Source: 1) 1992 Strategic Plan for Sustainable Tourism Development in Costa Rica  
2) Tourism Statistical Yearly Report 1998, and \*3) Study Team

**Table 3.6 Expenditure by International Tourists: Trend and Future Target**

Unit: US\$/day/tourist	1992 Strategic Plan *1)	Actual *2)	Target *3)
1993	76.8		
1996	84.0	86.3	
1998	89.1(3.0%)	95.6(4.5%)	
2010			130.0 (2.6%)

Source: 1) 1992 Strategic Plan for Sustainable Tourism Development in Costa Rica  
2) Tourism Statistical Yearly Report 1998, and \*3) Study Team

**Table 3.7 Share of Hotel/Accommodation Users: Trend and Future Target**

	1992 Strategic Plan *1)	Target *2)
1993	50%	
1998	60%	
2010		65%

Source: \* 1) 1992 Strategic Plan for Sustainable Tourism Development in Costa Rica, and \*2) Study Team

**Table 3.8 Number of Tourists per Room: Present and Future Target**

Unit= Tourists per Room	International	Domestic
1998 Present	1.7	3.5
2010 Target	1.7	2.0

Source: The JICA study team

**Table 3.9 Occupancy Rates: Present and Future Target**

	Occupancy Rate
Estimated Average Yearly Room Occupancy Rate at present	45%
Target Room Occupancy Rate in 2010	60% City Hotel: 75% Resort Hotel: 65% Others: 55%

Source: The JICA study team's estimation using the data from ICT's Tourism Statistical Yearly Report

**Table 3.10 Share of International Tourist Arrivals by Major Market Region: Present and Future Target**

	1992 Actual		1998 Target	1999 Actual		2010 Target	
	*1	*2	(1992 Strategic Plan)	*1	*2	*1	*2
Northern America	45%	48%	43%	45%	49%	45%	48%
Central America	31%	26%	19%	31%	25%	24%	19%
Share of Nicaraguan Migrants	6%			8%		6%	
Caribbean	1%	1%	1%	1%	1%	1%	1%
Southern America	7%	7%	6%	7%	8%	7%	7%
Europe	14%	15%	31%	14%	15%	22%	23%
Other	2%	2%	1%	2%	2%	2%	2%
Total	100%	100%	100%	100%	100%	100%	100%

\*1: shares include the major migrants from Nicaragua

\*2: shares exclude the major migrants from Nicaragua

Source: 1992 Strategic Plan for Sustainable Tourism Development in Costa Rica, Tourism Statistical Yearly Report 1998, and the JICA Study Team

## **Chapter 4**

# **INSTITUTIONAL MEASURES FOR SUSTAINABLE REGIONAL TOURISM DEVELOPMENT**

### **4.1 ISSUES ON REGIONAL TOURISM DEVELOPMENT AND PROMOTION**

#### **(1) Constraints of ICT in Regional Tourism Development and Promotion**

Although ICT has a policy to promote regional tourism development including coastal areas, it has not been able to conduct enough activities to make a substantial effect in this area. ICT has made efforts to promote Costa Rican tourism as a whole through publicity campaigns. However, ICT has not implemented clear strategies to promote certain tourism products and tourism destinations/ regions yet.

With the exception of two national border offices, ICT does not have regional offices and regional staffs to administrate regional tourism development and promotion. Although the 1992 Strategic Plan for Sustainable Tourism Development recommended a plan to establish five regional offices, the plan was not implemented. Since Costa Rica's government still suffers budget deficits and needs to improve administrative efficiency, it will be difficult to create regional offices by increasing the size of ICT's staff. At the same time, given that political and administrative reforms aim at decentralization to local governments, it is not so easy to install regional offices and staff of a central government agency, like ICT.

#### **(2) Constraints of Municipal Governments in Regional Tourism Development and Promotion**

Although the devolution of central government's functions to municipal governments has been gradually implemented, municipal governments are not yet ready to achieve even decent performance. While the municipal governments that have coastal areas have a special department and staff dealing with maritime terrestrial zones, in many cases they do not have any policies or activities for promoting tourism in their areas. Due to their limited budgets and technical staff, it will be hard for municipal governments to improve the situation for regional tourism development and promotion in five years or so.

### **(3) Possible Conflicts among Stakeholders in Coastal Tourism Development**

In the coastal areas of the Nicoya Peninsula, the present municipal governments are based on the people and economy in the upland areas. Those who are doing tourism and tourism-related businesses in coastal areas are newcomers to the region. The local people who live in coastal areas also have different economic interests from those in the upland areas, and from those of tourism businesses. Environmental NGOs and researchers, as well as local communities are seriously concerned with negative impacts resulting from tourism development.

In the Corcovado-Golfito area, the capital towns of the Golfito municipality and the Osa municipality are located far away from major tourism development areas. This geographic distance creates different interests in the types and directions of regional tourism development. At the same time there are land disputes between foreign investors and local people.

#### **4.2 RECOMMENDED INSTITUTIONAL EFFORTS FOR REGIONAL TOURISM DEVELOPMENT AND PROMOTION**

Under the circumstances described above, the following directions are identified for improving the administration of tourism:

- 1) ICT needs to consider how to play a coordinating role among stakeholders in the region, and how to encourage concerted effort among the stakeholders, in order to bring about smooth and sustainable tourism development given the current difficulties to expand government budgets and staff.
- 2) ICT, as well as other government agencies needs to consider how to increase financial and other assistance to local governments and communities in order to promote smooth and sustainable tourism development under the current difficulties to expand government budgets and staff.
- 3) ICT needs to play an essential coordinating role in promoting public investment in infrastructure for encouraging regional tourism development, among central government agencies in charge of infrastructure provision. The general land use plan should be formulated and utilized for showing major potential and priority of regional tourism development.
- 4) ICT, INVU, CINDE and municipalities need to promote private investment in tourism facilities in identified potential tourism regions and areas. At the same time, they should coordinate each other in guiding location and scale of tourism facility development. The general land use plan should be formulated and utilized for showing major potential and priority of regional tourism development.

- 5) Municipalities need to consider how to promote tourism more, and how to improve infrastructure, for example, by making collective efforts with adjacent local governments. This would be a partial solution to the current limited availability of tourism experts and engineers, and the difficulty to increasing the staff in the medium and long-term.
- 6) The private tourism sector needs to consider how to make more concerted efforts to promote tourism in its region, and to coordinate with ICT and other central government agencies. It might, for example, form a group of local tourism chambers in a region or a tourism planning unit.

## **Chapter 5**

# **COASTAL LAND USE MANAGEMENT AND PLANNING SYSTEM FOR SUSTAINABLE TOURISM**

### **5.1 PRESENT SITUATION OF LAND USE MANAGEMENT AND PLANNING IN SOUTH GUANACASTE**

#### **5.1.1 Present Situation of Declaration of Tourism Zones and Non-Tourism Zones**

The total length of coastline in the South Guanacaste is about 143.4km. Of this, the Maritime Terrestrial Zone under the jurisdiction of ICT is about 102.0km long (71.1%). The remaining parts are about 41.4km long (28.9%), and consist of protected areas under the jurisdiction of MINAE, such as Cabo Blanco Absolute Natural Reserve, Ostional Wildlife Refuge, and Camaronal Wildlife Refuge. (Table 5.1)

Nineteen zones, which cover 79.2km coastline in total, had been declared tourism zones by 1977. However, some tourism zones have been canceled or changed to non-tourism zones, because new protected areas were designated by MINAE in this region and ICT started to declare non-tourism zones in 1980s. At present, an area with 65.2km of coastline (64% of MTZ) is declared tourism zones and an area with 22.5km of coastline (22% of MTZ) is declared non-tourism zones. (Table 5.1)

The coastal wetlands and tidal rivers are also part of Maritime Terrestrial Zones. They are regarded as public zones. The 150m areas behind the wetlands/on the banks of the tidal rivers are restricted zones, which are to be regulated by ICT and municipal governments. The approximate length of the restricted zoned behind the wetlands is 54 km in the South Guanacaste , in the measurement of the JICA Study Team.



**Table 5.1 Length of Coastline in the South Guanacaste by Different Jurisdiction**

(Unit:km)

Year	Coastline of Maritime Terrestrial Zone except Wetland				Other Authorities			Composition		Grand Total
	Tourism Zone	Non-tourism Zone	Undeclared Area	Sub Total	MINAE	INVU	Sub Total	ICT	Others	
1977	79.2 62.1%	-	48.3 37.9%	127.5 100%	15.9	-	15.9	88.9%	11.1%	143.4
2000	65.2 63.9%	22.5 22.1%	14.3 14.0%	102.0 100%	41.4	-	41.4	71.1%	28.9%	143.4

Source: JICA Study Team's measurement of ICT data (2000) and MINAE data on 1:50,000 scale map.

Table 5.2 shows the situation of declaration of tourism zone by district. Most of the coastal zone in the southern part of the South Guanacaste, including Hojanca, Bejuco and Cobano, has been already declared. All the declared coastal zones in Cobano district are tourism zones, of which the total length is the longest among the districts. Non-tourism zones are mainly located between Samara to Bejuco.

**Table 5.2 Declaration of Tourism Zone by District**

Administrative unit		Length of coastline (km)				Remarks: (The length of coastlines not included in the measurement shown in the left columns)
Canton	District	Tourism zone	Non-tourism zone	Undeclared area	Total	
Santa Cruz	27 de Abril	2.2 (55.0%)	- (-)	1.8 (45.0%)	4.0 (100%)	
	Quajin iquil	12.4 (74.7%)	0.9 (5.4%)	3.3 (19.9%)	16.6 (100%)	Ostional National Wildlife Refuge (6.2km)
Nicoya	Nosara	3.4 (57.6%)	- (-)	2.5 (42.4%)	5.9 (100%)	Ostional National Wildlife Refuge (12.5km)
	Samara	11.2 (51.9%)	4.5 (20.8%)	5.9 (27.3%)	21.6 (100%)	
Hojancha	Hojancha	2.6 (36.6%)	4.5 (63.4%)	-	7.1 (100%)	
Nandayure	Zapotal	- (-)	- (-)	- (-)	- (-)	Camaronal National Wildlife Refuge (3.4km)
	Bejuco	14.4 (52.9%)	12.6 (46.3%)	0.2 (0.7%)	27.2 (100%)	Camaronal National Wildlife Refuge (3.4km)
Puntarenas	Cobano	19.0 (96.9%)	- (-)	0.6 (3.1%)	19.6 (100%)	Cabo Blanco Strict Natural Reserve (15.9km)
Total		65.2 (63.9%)	22.5 (22.1%)	14.3 (14.0%)	102.0 (100%)	

Source: JICA Study Team's compilation based on the information from ICT (2000)

## 5.1.2 Present Situation of Regulatory Plans

The first regulatory plan in South Guanacaste was made by ICT for Playa Samara in 1981. There were only three regulatory plans approved in 1980s and all of them were for the coastal zone in Nicoya canton. In total 30 plans have been approved by ICT so far, of which around 40% have already been approved by municipalities. (Table 5.3)

**Table 5.3 Number of Approved Regulatory Plans**

Year of approval	Approved by ICT				Approved by INVU	Approved by Municipality
	Tourism zone	Non-tourism zone	Non-tourism & Tourism	Total		
1980-1989	2	1	0	3	1	1
1990-2000	18	6	3	27	19	12
Total	20	7	3	30	20	13

Source: The JICA Study Team's compilation of ICT's data (2000)

Table 5.4 shows the situation of approved regulatory plans by district. More than half of regulatory plans are located in the southern part of the South Guanacaste, Bejuco district and Cobano district. The lengths of coastline covered by regulatory plans in these two districts are much longer than those in other districts. Samara district and Cuajinquil district are the second largest group in the number of plans and the length of coastline covered by those plans.

**Table 5.4 Regulatory Plans by District**

Administrative unit		No. of regulatory plans				Length of Coastline (km) covered by regulatory plans			Length of Coastline (%) (regulatory plans/zone total)		
Cantons	Districts	Tourism zone	No tourism zone	Mixed zone	Total	Tourism zone	No tourism zone	Total	Tourism zone	No tourism zone	Total
Santa Cruz	27 de Abril	-	-	-	-	-	-	-	-	-	-
	Cuajinquil	4	-	1	5	5.6	0.3	5.9	45.2	33.3	44.4
Nicoya	Nosara	-	-	-	-	-	-	-	-	-	-
	Samara	4	1	-	5	9.2	0.5	9.7	82.1	11.1	61.8
Hojancha	-	1	2	-	3	0.5	1.4	1.9	19.2	31.1	26.8
Nandayure	Zapotal	-	-	-	-	-	-	-	-	-	-
	Bejuco	1	4	2	7	9.1	10.2	19.3	63.2	81.0	71.5
Puntarenas	Cobano	10	-	-	10	11.5	-	11.5	60.5	-	60.5
Total		20	7	3	30	35.9	12.4	48.3	55.1	55.1	55.1

Note: The regulatory plans, which have been covered by MINAE's protected areas after the approval of the plans, are not included in the table.

A list of regulatory plans in South Guanacaste is shown in Chapter 13.

Source: The JICA Study Team's compilation of ICT's data (2000)

### 5.1.3 Analysis of Present Situation of Declared Zones and Regulatory Plans

The present accommodation density has been estimated as very low, only 11.1 rooms/km, as the coastal zone declared as tourism zone is extremely long (65km) in relation to the amount of existing tourist accommodation (721 rooms). Even if all the regulatory plans were realized, the accommodation density would reach only 93.9 rooms/km, which means 6.3 rooms/ha. (Table 5.5)

It can be said that the area of declared tourism zones is too large and the declaration system is not functioning effectively as a guide to development according to a plan. The low-density tourism development covers a wide area and therefore needs huge investment in infrastructure developments, such as road networks. Scattered tourism development could have a negative influence on the natural environment or landscapes.

The scale of existing regulatory plans is also too large. Those plans have 8 times more rooms (accommodation facilities) than currently. This assumes excessive tourism demand. If all of the envisaged accommodation facilities were built, severe price competition among them would occur, and many enterprises would collapse.

**Table 5.5 Quantitative Comparison of Existing and Planned Accommodations**

Canton	No. of tourist accommodations (1999)				Existing tourism zone		Scale of existing regulatory plans		
	(A)		(B)		(C)	(D)=(B)/(C)	(E)	(F)=(E)/(B)	(G)=(E)/(C)
	Hotels	(%)	Rooms	(%)	Length of tourism zone (km)	Accommodation density (Rooms/km)	Capacity of regulatory plans* (Rooms)	Comparison (existing /planned) (Times)	Accommodation density (Rooms/km)
Santa Cruz	3	4.6	13	1.8	14.6	0.9	800	61.5	54.8
Nicoya	45	69.2	501	69.5	14.6	23.5	1,400	2.8	95.9
Hojancha	4	6.2	75	10.4	2.6	28.8	100	1.3	38.5
Nandayure	5	7.7	50	6.9	14.4	3.5	1,400	28.0	97.2
Puntarenas	8	12.3	82	11.4	19.0	4.3	1,700	20.7	89.5
Total	65	100.0	721	100.0	65.2	11.1	5,400	7.5	82.8

Notes: \* estimated on the assumption that the development density is 10 rooms/ha

Source: JICA Study Team

## 5.2 PRESENT SITUATION OF LAND USE MANAGEMENT AND PLANNING IN CORCOVADO-GOLFITO

### 5.2.1 Present Situation of Declaration of Tourism Zone and Non-tourism Zone

The total length of the coastline in the Corcovado-Golfito tourism planning unit is about 362 km. Of this, the coastal length of the Maritime Terrestrial Zone which is under the jurisdiction of ICT is about 293.0km (81.0%). The remaining parts are about 68.8km long (19.0%), and consist of protected areas under the jurisdiction of MINAE, such as Corcovado National Park and Terraba-Sierpe Wetland, and Golfito town under the jurisdiction of INVU. (Table 5.6)

Seventeen zones, which covers 112.2km coastline in total, had been declared tourism zones by 1977. Since then, those within the Corcovado National Park have transferred to MINAE jurisdiction, and new and altered declarations of both tourism and non-tourism zones have been made. At present, an area with 149.8km of coastline (51% of MTZ) is declared tourism zones and an area with 41.0km of coastline (14% of MTZ) is declared non-tourism zones. 35% of the Maritime Terrestrial Zone still remains to be declared. (Table 5.6)

The coastal wetlands and tidal rivers are also part of Maritime Terrestrial Zones. They are regarded as public zones. The 150m areas behind the wetlands/on the banks of the tidal rivers are restricted zones, which are to be regulated by ICT and municipal governments. The approximate length of the restricted zoned behind the wetlands is 75 km in the Corcovado-Golfito, in the measurement of the JICA Study Team.

**Table 5.6 Length of Coastline in the Corcovado-Golfito by Different Jurisdiction**

(Unit:km)

Year	Coastline of Maritime Terrestrial Zone except Wetland				Other Authorities			Composition		Grand Total
	Tourism Zone	Non-Tourism Zone	Undeclared Area	Sub Total	MINAE	INVU	Sub Total	ICT	Others	
1977	112.2 31.6%	-	242.7 68.4%	354.9 100%	-	6.9	6.9	98.1%	1.9%	361.8
2000	149.8 51.1%	41.0 14.0%	102.2 34.9%	293.0 100%	61.9	6.9	68.8	81.0%	19.0%	361.8

Note: The border area of 2km from Panama border is included in the Tourism zone (Declaration in 1996)  
Source: JICA Study Team's measurement of ICT data (2000) and MINAE data on 1:50,000 scale map.

Table 5.7 shows the situation of declaration of tourism zone by district. No declarations have been made for most of Golfito canton and of Osa canton (gulf-side). These cantons are located

on the northern Golfo Dulce, where protected areas, such as Golfo Dulce Forest Reserve, Piedras Blancas National Park and Golfito Wildlife Refuge, are close to the coastline.

Pavon district, Puerto Jimenez district and Sierpe district (ocean-side) have longer coastal zones declared as tourism zones. Non-tourism zones are mainly located in Puerto Cortes district due to the mangroves, and in Pavon district on the side of Pacific Ocean due to the steep slopes.

**Table 5.7 Declaration of Tourism Zone by District**

Administrative unit		Length of coastline (km)				Remarks: (The length of coastlines not included in the measurement shown in the left columns)
Canton	District	Tourism Zone	Non-Tourism Zone	Undeclared Area	Total	
Osa	Puerto Cortes	2.9 (20.0%)	10.6 (73.1%)	1.0 (6.9%)	14.5 (100%)	
	Sierpe (Ocean-side)	30.4 (66.1%)	4.0 (8.7%)	11.6 (25.2%)	46.0 (100%)	Terraba-Sierpe Wetland (8km) Corcovado National Park (17.3km)
	Sierpe (Gulf-side)	9.9 (38.2%)	- (-)	16.0 (61.8%)	25.9 (100%)	Wetland (3.5km)
Golfito	Puerto Jiménez	48.7 (61.3%)	3.6 (4.5%)	27.2 (34.2%)	79.5 (100%)	Corcovado National Park (22.6km) Laguna & Wetland (9.0km)
	Golfito	4.2 (8.2%)	0.9 (1.7%)	46.4 (90.1%)	51.5 (100%)	Wetland (1.5km) Golfito town (6.9km)
	Pavón	53.7 (71.0%)	21.9 (29.0%)	- (-)	75.6 (100%)	
Total		149.8 (51.1%)	41.0 (14.0%)	102.2 (34.9%)	293.0 (100%)	

Source: JICA Study Team's Compilation of ICT data (2000)

### 5.2.2 Present Situation of Regulatory Plans

Most of the regulatory plans in the Corcovado-Golfito were made after 1997. In total 16 plans have been approved by ICT so far, of which one third have already been approved by municipalities. (Table 5.8)

**Table 5.8 Number of Approved Regulatory Plans**

Year of Approval	Approved by ICT				Approved by INVU	Approved by Municipality
	Tourism Zone	Non-tourism Zone	Non-tourism & Tourism	Total		
1980-1989	0	1	0	1	1	0
1990-2000	12	2	1	15	9	7
Total	12	3	1	16	10	7

Source: JICA Study Team's compilation of ICT data (2000)

Table 5.9 shows the situation of approved regulatory plans by district. More than half of the regulatory plans are for the Pavón district. Five regulatory plans were made for this district by ICT, including the one which is in evaluation process by ICT. The ocean side of Sierpe district has a comparatively long coastline covered by regulatory plans. There are no regulatory plans for the northern Golfo Dulce.

**Table 5.9 Regulatory Plans by District**

Administrative Unit		No. of Regulatory Plans				Length of Coastline (km) Covered by Regulatory Plans			Length of Coastline (%) (regulatory plans/zone total)		
Cantons	Districts	Tourism Zone	No Tourism Zone	Mixed Zone	Total	Tourism Zone	No Tourism Zone	Total	Tourism Zone	No Tourism Zone	Total
Osa	Pt. Cortés	-	1	-	1	-	0.7	0.7	-	6.6	5.2
	Sierpe (Ocean)	1	2	1	4	3.6	3.4	7.0	11.8	85.0	20.3
	Sierpe (Gulf)	-	-	-	-	-	-	-	-	-	-
Golfito	Pt. Jiménez	2	-	-	2	1.5	-	1.5	3.1	-	2.9
	Golfito	-	-	-	-	-	-	-	-	-	-
	Pavón	9	-	-	9	17.8	-	17.8	33.1	-	23.5
Total		12	3	1	16	22.9	4.1	27.0	15.3	10.0	14.2

Note: The regulatory plans, which are canceled/in process of evaluation by ICT, are not include in the table. A list of regulatory plans in Corcovado-Golfito is shown in Chapter 22.

Source: The JICA Study Team's compilation of ICT's data (2000)

### 5.2.3 Analysis of Present Situation of Declared Zones and Regulatory Plans

The present accommodation density has been estimated as very low, only 8.8 rooms/km, as the coastal zone declared as tourism zone is extremely long (149.8km) in relation to the number of existing tourist accommodation (1,316 rooms). Even if all the regulatory plans were realized, the accommodation density would reach only 31.5 rooms/km, which means 2.1 rooms/ha. (Table 5.10)

It can be said that the area of declared tourism zones is too large and the declaration system is not functioning effectively as a guide to development according to a plan. Low-density tourism development covering wide area needs huge investment in infrastructure developments, such as road networks. Scattered tourism development could have a negative influence on the natural environment or landscapes.

The existing regulatory plans have 2.6 times more rooms (accommodation facilities) than currently. The scale of the existing regulatory plans in terms of accommodation capacity is realistic from the point of view of tourism demand, partly because relatively few investors have paid attention to the potential of tourism development in the area so far.

**Table 5.10 Quantitative Comparison of Existing and Planned Accommodations**

Cantons District	No. of Tourist Accommodations (1999)				Existing Tourism Zone		Scale of Existing Regulatory Plans		
	(A)		(B)		(C)	(D)=(B)/(C)	(E)	(F)=(E)/(B)	(G)=(E)/(C)
	Hotels	(%)	Rooms	(%)	Length of Tourism Zone (km)	Accommo- -dation Density (Rooms/km)	Capacity of Regulatory Plans (Rooms)	Comparison (existing /planned) (Times)	Accommo- -dation Density (Rooms/km)
Osa**	42	29.8	433	32.9	43.2	10.0	500	1.2	11.6
Pt. Jimenes	24	17.0	159	22.0	48.7	3.3	200	1.3	4.1
Golfito***	75	53.2	724	55.0	57.9	12.5	2,700	3.7	46.6
Total	141	100.0	1,316	100.0	149.8	8.8	3,400	2.6	22.7

Notes: \* estimated on the assumption that the development density is 10 rooms/ha

\*\* Sierpe district and part of Puerto Cortes

\*\*\* Golfito district and Pavon district

Source: JICA Study Team's compilation of ICT data (2000)

### **5.3 MAJOR ISSUES ON LAND USE MANAGEMENT AND PLANNING SYSTEM IN COASTAL AREAS**

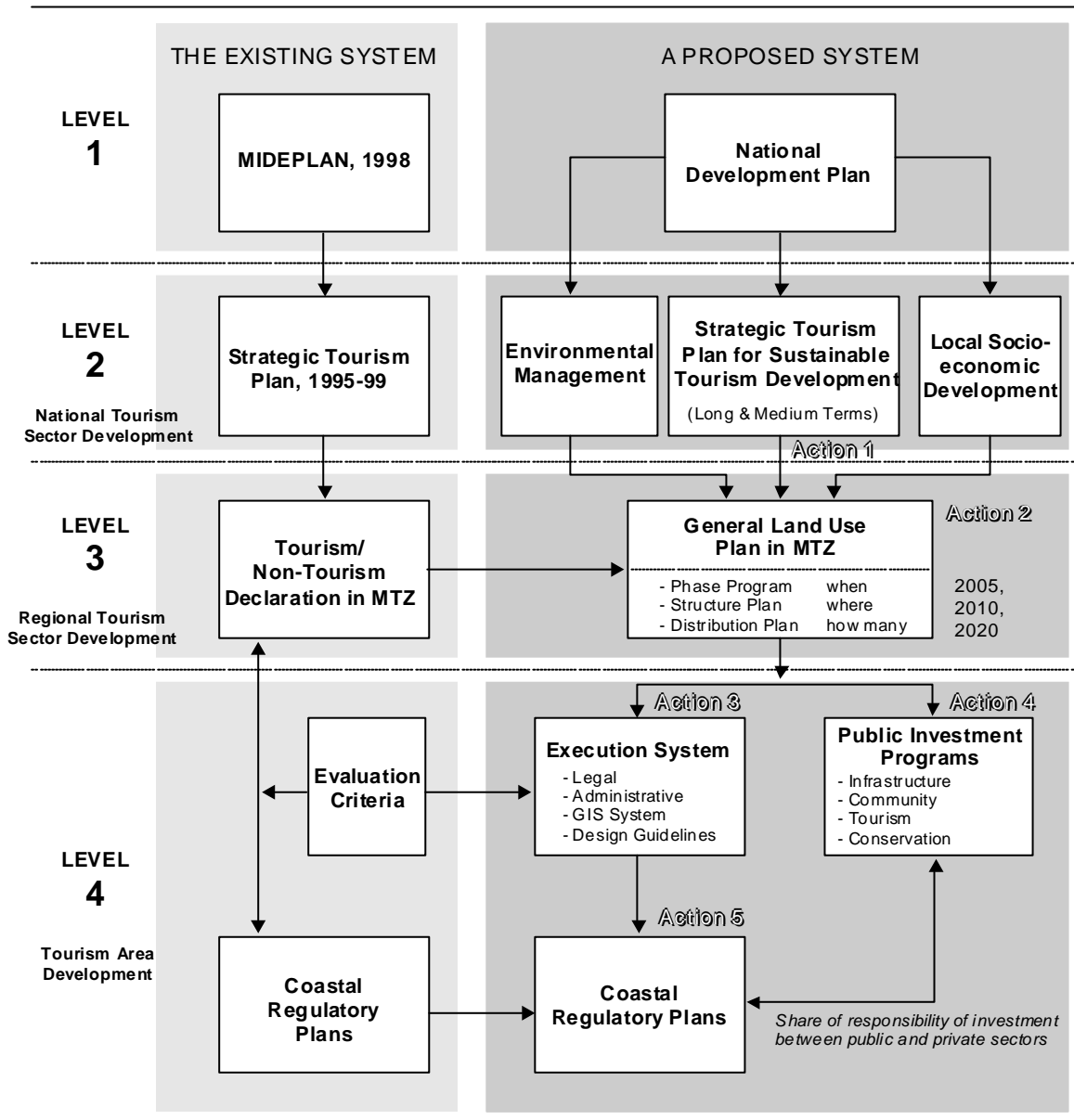
The following issues are identified based on the reviews concerning the “land use planning system” and the analysis of the present situation in the study areas:

- There are no long-term tourism development scenarios at the national level or the regional level with target numbers for tourist arrivals and tourism accommodation facilities.
- The coastal zones declared as tourism zones are excessively large and the regulatory plans are at scattered locations. The declarations are not guiding or controlling tourism development effectively. The infrastructure cannot be developed efficiently for low-density tourism developments scattered over wide areas. In addition, the scattered development can have a negative influence on the natural environment and landscapes.
- The overall scale of existing regulatory plans is not realistic in terms of number of tourist accommodation rooms, and assumes excessive tourism demand. This is caused by the zone declaration system that does not show priority areas with timeframes. If all of the envisaged accommodation facilities were built, severe price competition among them would occur, and many enterprises would collapse.
- The demarcation of the roles of public sector and private sector is not clear, both for each region and each tourism development area. In terms of public sector, there is no development plan and/or investment program for the whole region reflecting public interest, and the regulatory plans do not include adequate development plans to be carried out by the public sector in the public interest.
- The land use management or regulation system for private lands is not clear. There are private lands within the MTZ, however those lands cannot be identified easily. Some tourism developments would cover not only MTZ but also the private land on hinterland, which are shown in some of existing regulatory plans.

The existing planning system should be modified in a way shown in Figure 5.1 to address the above issues.



**Figure 5.1 Existing Coastal Land Use Planning System and Proposed Coastal Land Use Planning System**



**Action 1** To review tourism development strategies/ scenarios for regions

**Action 2** To establish general land use plans with time dimensions

**Action 3** To review the execution system

**Action 4** To establish public investment programs

**Action 5** To review the existing tourism regulatory plans, if necessary, in accordance with the general land use plans

## **5.4 DIRECTIONS OF MODIFICATION OF THE LAND USE MANAGEMENT AND PLANNING SYSTEM**

To address the above issues, the following three challenges need to be met for smooth and sustainable tourism development:

- To modify the existing land use planning system,
- To adopt the modified planning system for improving the situations of land use management, and
- To promote the general land use and tourism development plan, based on the modified planning system, to related government agencies and private investors so that they understand the benefits and use it as a framework for development.

The prerequisites for these land use planning and management challenges to be met are as follows:

### **LEVEL 2: NATIONAL TOURISM SECTOR DEVELOPMENT**

- (1) Regional tourism development scenarios (strategies) need to be established for providing each region with the target capacity of tourist accommodation facilities and target numbers of tourist arrivals.

### **LEVEL 3: REGIONAL TOURISM SECTOR DEVELOPMENT**

- (2) A general land use plan for each region should be prepared, aiming at sustainable tourism and considering not only tourism development aspects, but also environmental and local socio-economic aspects. For that purpose the participation of stakeholders is essential. Not only coordination and conflict resolution among the different stakeholders at the stage of planning, but also the sustained participatory and consultative process at the stage of post-planning or implementation should be considered.
- (3) The general land use plan to be prepared for a region should have time dimensions, by suggesting priority development areas. At the same time, in accordance with the regional target capacity of tourist accommodation facilities to be given by the regional tourism development scenario, a general land use plan should be prepared.
- (4) The general land use plan should include strategies to attract a substantial amount of private investment, and should be utilized to attract private investment into the region. The plan should be opened widely in order that investors can access it easily.
- (5) The prepared general land use plan should be utilized for monitoring developments and land use changes in coastal areas. Instruments and responsibility for monitoring should be considered.

- (6) The general land use plan should have regulations and should be enforced, even on private lands in hinterlands as well as in MTZ in case of need, by means of effective cooperation between related agencies.

#### **LEVEL 4: TOURISM AREA DEVELOPMENT**

- (7) Public infrastructure investment programs should be prepared in accordance with the priority development areas to be specified by the general land use plan. In order to implement the plan, ways of encouraging the central government agencies in charge of infrastructure should be considered. The general land use plan to attract private investment is one of the key means by which the central government agencies should become serious about public investment in infrastructure for regional tourism development.
- (8) The general land use plan should be utilized as a guideline for modifying the existing or approved regulatory plans as well as for examining newly proposed regulatory plans and suggesting modifications to them. Ways of promoting the modification of the existing regulatory plans in accordance with the general land use plan, especially with regard to the funding of it, should be considered.

## **5.5 CONSIDERATIONS ON LAND USE ZONING SYSTEMS FOR GENERAL LAND USE PLANS**

### **5.5.1 Introduction**

In the earlier sections of Chapter 5, the kinds of land use plans needed for sustainable coastal development and conservation, including tourism development, were discussed. In Section 5.5, the kinds of land use zoning needed at the level of general land use plans are investigated by analyzing the implications and proposals from three different perspectives (tourism development, local socio-economic development and natural resources management).

### **5.5.2 Zoning System Changes Considered from a Tourism Development Perspective**

#### **(1) Introducing a Time Dimension and a Focused Development Concept to the Present Tourism Declaration System for New Land Use Zones for Maritime Terrestrial Zone**

Under the present system of coastal land use planning, the Maritime Terrestrial Zone (MTZ) is divided into two categories, namely 1) tourism zone and 2) non-tourism zone. However, some MTZ areas have not been declared as either category. This system is called the tourism declaration system for MTZ. Using these categories of zones, ICT and municipal governments decide which MTZ areas are allowed to start the process of making coastal regulatory plans. That is, the MTZ's tourism declaration system is to specify the particular areas in which tourism development is allowed in the MTZ.

However, most of the MTZ areas fall into the tourism zone category, and the areas in the tourism zone are much larger than the actual land demands for tourism facilities by 2010. This means that the present land use system does not show in which areas tourism development should be prioritized.

Another major issue highlighted above is that the present land use planning system has no time dimension. The present tourism zone is just an indication of approval for tourism development. The tourism declaration system does not take into account when tourism development should take place.

In addition to the above, because of the following reasons, a more limited allocation of land for tourism development is needed in the coastal land use system:

- To promote land development only for necessary development of tourism facilities and infrastructure in coastal areas,
- To promote efficiency in infrastructure provision in view of budget constraints of central and local governments,

- To maintain or restore the natural habitat as much as possible in the coastal areas to enhance the potential of nature tourism.

For these reasons, it is recommended that a “concept of focal development” should be introduced into the land use zoning system for the general land use plan.

## **(2) Strengthening of Control of Development over Larger Areas of the MTZ**

The proposed zoning system in the previous section deals only with the problem that the present system allows tourism development to be spread widely across the MTZ. However, our tourism facility inventory survey reveals that tourism facilities have been constructed not only in MTZs but also in the areas behind MTZ. For the MTZ areas coastal regulatory plans are supposed to regulate land use and development. On the other hand, the areas behind MTZ have no effective measures of land use control. This means that even though the general land use plan stipulates certain areas for tourism development, such accumulation of tourism facilities might not occur partly because of negative affects (ex. land problems) of MTZs and partly because of more potential areas for tourism facilities outside MTZs.

In order to deal with these problems, it is necessary to create an integrated measure or method to achieve the following:

- To guide focused development in the MTZ along the coast by reducing the size of the tourism zone common under the present system of tourism declaration, and
- To introduce some measures of land use control behind the MTZ.

One way to meet both these needs is to introduce a system of “Tourism Centers” to coastal areas covering both MTZs and their immediate hinterland.

### **5.5.3 Zoning System Changes Considered from a Local Socio-Economic Development Perspective**

The land use zoning in the existing system declares only “tourism use” and “no tourism use.” The land use for community settlements and local socio-economic development is not explicitly considered in the formulation of coastal regulatory plans. In many cases, land uses and development opportunities for local communities are not secured through the formulation of coastal regulatory plans. Concerning this, the following three points are considered for land use zoning changes.

#### **1) Local Community Settlements and Public Facilities**

The general land use plan should designate the zones for local community settlements and their public facilities if there are communities in/behind the MTZ. According to the general

land use plan, the lands for local people's settlements and public facilities have to be included in regulatory plans and the concessions will be given to the local people.

## 2) Public and Commercial Space

The general land use plan should designate Public and Commercial Space, in which the public spaces with small-scale commercial facilities (restaurants, cafés, souvenir shops, etc.) will be developed to create attractive venues for local community activity, as well as for tourists. Lands will be reserved as public lands, and municipalities or other public institutions should develop and manage the lands.

## 3) Community-Based Tourism Development

The general land use plan should designate tourism development zones for local communities. It particularly favors developments carried out as community initiatives. At the level of regulatory planning, lands will be reserved as public lands for the following land uses:

- Tourism accommodation facilities managed by communities or cooperatives
- Indigena handicraft centers, Indigena museum, etc.

### 5.5.4 Zoning System Changes Considered from a Nature Resources Management Perspective

The maritime terrestrial zone (MTZ) is divided into the following six (6) land use zones, to reflect the different environmental conditions that occur in or adjacent to the MTZ. Some areas are considered suitable for various types of tourism development, while other areas require conservation or special controls to protect the natural resources, in addition to the existing natural protected areas of MINAE.

#### **MINAE's Conservation Zones**

**SINAC's Nature Protected Areas** – National Park, Wildlife Refuge, Wetlands (Humedales), Protected Zone etc (and including internationally designated sites, e.g. Ramsar Sites).

**Wetlands** – Those that are legally protected and mostly registered by MINAE.

## **Nature Zone in the MTZ**

**(1) ICT-Municipality Nature Areas** – Areas of the MTZ in which natural vegetation is retrained or restored by not allowing further development. However, existing houses and facilities can remain.

The JICA Study Team prepared maps to show environmental sensitivity in coastal areas. Based on the environmental sensitivity, the general land use plan should designate natural zones in which natural vegetation is retrained or restored by not allowing developments.

Furthermore, the environmental sensitivity suggests what kinds of development in coastal areas are voided and necessary mitigation measures for certain developments.

## **5.6 GENERAL LAND USE PLAN AND REGULATORY PLANS**

### **5.6.1 Key Points Of General Land Use Plan To Guide Regulatory Plans: Considerations On Land Use Zones**

The General Land Use Plan is made at the regional level. It is to guide the formulation of regulatory plans at the local level. While General Land Use Plan cannot be used as an administrative and legal instrument for directly regulating actual land uses, the regulatory plan does have such administrative and legal functions. For this reason the General Land Use Plan should be prepared carefully to guide the preparation of regulatory plans.

As described in the earlier sections of this chapter, a number of regulatory plans have been made to cover a large part of the coastal areas both in the South Guanacaste Region and the Corcovado-Golfito Region. However, many of the existing regulatory plans have some problems.

In view of this, the General Land Use Plans for South Guanacaste and Corcovado-Golfito should provide key points to guide the review and revision of the existing regulatory plans. New regulatory plans in the regions should also comply with these key points of the general land use plans.

The General Land Use Plan should indicate the following in order to guide the formulation of both existing and new regulatory plans:

- (1) At the regional level, where to develop in the next 10 years, where to retain or restore natural features, and where to develop in the future after the next 10 years

The General Land Use Plan should clearly show the areas in which any requests for regulatory plans for the purpose of any type of development must not be allowed. In the General Land Use Plan, Nature Zones and Future Development Zones should be set for such areas.

- (2) Within each Tourism Area (or Tourism Center), where to locate a central place for tourism amenities (or more than one central place) for the tourism area, and where to intensively develop tourist facilities, such as hotels

The General Land Use Plan should clearly specify the areas in which tourism amenity core areas are located in each Tourism Center. It also should show the areas in which intensive development of tourism facilities should be located. In the existing regulatory plans and general land use plans, there are no clear indications of such areas. In this sense, the existing regulatory plans and general land use plans have not helped the



formation of attractive tourism centers. The JICA Study will recommend new land use zones to solve this problem.

- (3) Within each Tourism Area (or Tourism Center), where to secure lands for public facilities and settlement areas for local people.

In order to allow for tourism amenity cores and intensive tourism facility development, some existing houses and public facilities for local communities have to be relocated. To facilitate smooth development and avoid serious social problems, it is important for regulatory plans to secure special areas for such relocations within the MTZs, while it is necessary to try to find lands for relocation outside the MTZs.

### **5.6.2 Utilization of Regulatory Plans for the Formulation of Tourism Centers**

The JICA Study identified important areas for tourism development as Tourism Centers in the South Guanacaste Region and the Corcovado-Golfito Region. The Tourism Centers have boundaries covering both Maritime Terrestrial Zones and their hinterlands. For the MTZs, the Maritime Terrestrial Zone Law gives ICT the authority to draw up general land use plans. The present General Land Use Plans are made in accordance with this law.

At the same time, this JICA Study has formulated general land use plans for the hinterlands of MTZs within Tourism Centers, which are similar to the MTZ General Land Use Plans. In actuality, the two parts of the general land use plans are integrated to form a Tourism Center. The part of the Plan relating to MTZ hinterlands could be utilized as a reference when formulating prospective regulatory plans.

It is recommended that either one of the following two systems of regulatory plans should be utilized to cover the whole area of a Tourism Center with regulatory plans:

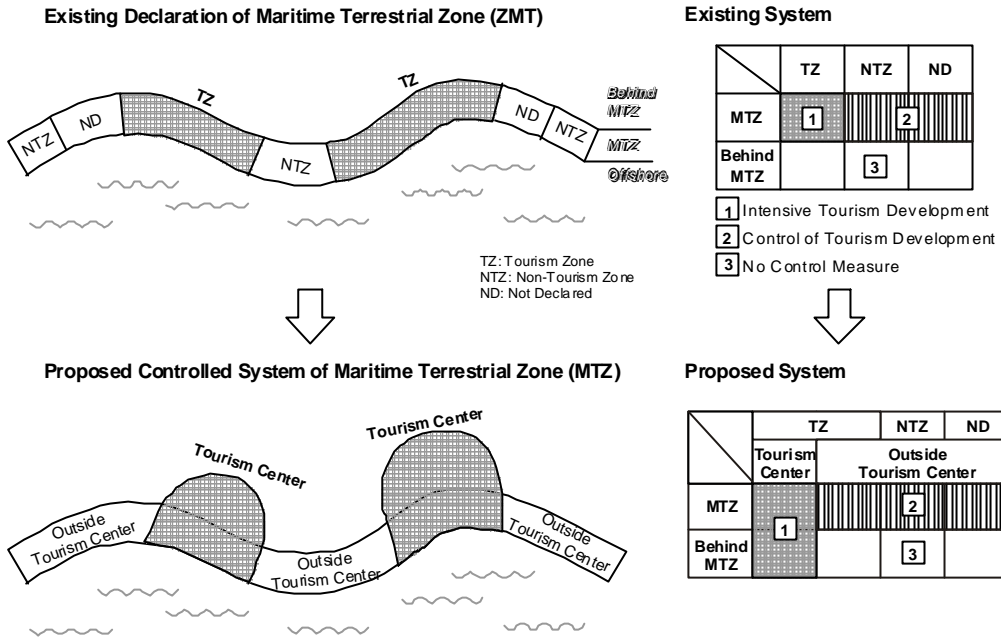
#### **(1) The existing system of urban regulatory plans**

The existing system of urban regulatory plans should be applied to the hinterlands of MTZs, which are mostly part of urban districts in the Study Areas. On the other hand, the MTZs of a Tourism Center could be covered by the existing system of coastal regulatory plans. As a result, the whole area of a Tourism Center can be covered by two regulatory plans, under the two different systems.

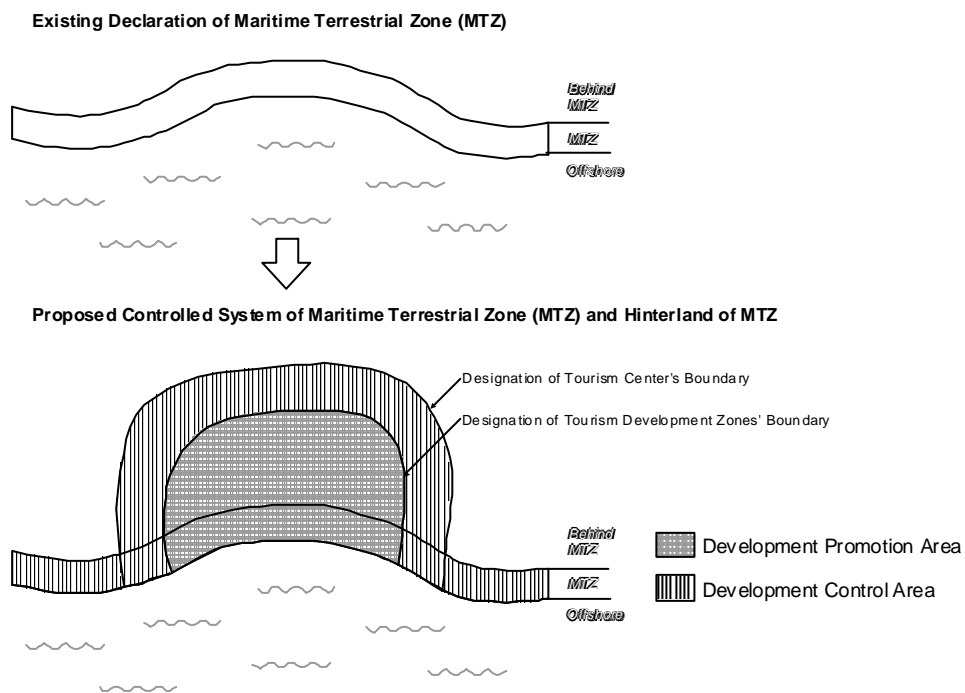
#### **(2) A new system of regulatory plans to cover the whole Tourism Center**

A new system of regulatory plans should be invented in order to make one integrated regulatory plan covering both MTZs and their hinterlands within identified Tourism Centers.

**Figure 5.2 Establishment of Tourism Centers**



**Figure 5.3 Formulation of Tourism Centers and Utilization of Regulatory Plans**



## **5.7 RECOMMENDED LAND USE ZONES FOR GENERAL LAND USE PLANS**

### **5.7.1 A Land Use Zoning System for General Land Use Plans in Maritime Terrestrial Zones**

Based on the discussions shown in Sections 5.5 and 5.6, a land use zoning system consisting of the following land use zones is recommended for general land use plans:

#### **(1) Tourism Development Zone: *Zona de Desarrollo Turístico* [T]**

Tourism Amenity Core Area: *Área Núcleo para Atracciones Turísticas (TAN)*

Planned Tourism Development Area: *Área Planificada para el Desarrollo Turístico (TAP)*

Spontaneous Tourism Development Area: *Área para el Desarrollo Turístico Espontáneo (TAE)*

\*Local Tourism-Related Commercial Area in Tourism Amenity Core Area: *Área Comercial relacionada con Turismo Local en el Área Núcleo para Atractivos Turísticos (TAC)*

\*Local Cabin Development Area: *Área de Desarrollo de Cabinas Locales (TCD)*

#### **(2) Community Zone: *Zona para la Comunidad* [C]**

Community Core Area: *Área Núcleo para la Comunidad (CAN)*

Community Residential Area: *Área Residencial Comunitaria (CAR)*

\*Small Area for Local Residents: *Área Pequeña para Residentes Locales (CAP)*

\*Artisanal Fishermen's Base: *Base para Pescadores Artesanales (CBP)*

#### **(3) Mixed Zone: *Zona Mixta* [M]**

Mixed Tourism and Community Area: *Área Mixta para el Turismo y la Comunidad (MIX)*

#### **(4) Nature Zone: *Zona Natural* [N]**

ICT-Municipality Natural Area: ***Área Natural del ICT (NIM)***

\*Daytime Tourism Activity Base: *Base de Actividades Turísticas de Día (NAD)*

#### **(5) Future Zone: *Zona Futura* [F]**

Future Development Area: *Área para Desarrollo Futuro (FAD)*

Note: An asterisk (\*) indicates spot land allocation. The zone names without asterisk indicate areal zoning.

**Table 5.11 Land Use Zones for General Land Use Plan**

Large Land Use Zone	Detailed Land Use Zone
Tourism Development Zone [T]	Tourism Amenity Core Area (TAN) Planned Tourism Development Area (TAP) Spontaneous Tourism Development Area (TAE) *Local Tourism-Related Commercial Area (TAC) *Local Cabin Development Area (TCD)
Mixed Zone [M]	Mixed Tourism and Community Area (MIX)
Community Zone [C]	Community Core Area (CAN) Community Residential Area (CAR) *Small Area for Local Residents (CAP) *Artisanal Fishermen's Base (CBP)
Other Zone [O]	Other Land Use Area (OAT)
Future Zone [F]	Future Development Area (FAD)
Nature Zone [N]	ICT-Municipality Natural Area (NIM) Private Natural Area (NAP) *Daytime Tourism Activity Base (NAD)
Wetland [H]	
SINAC's Nature Protected Area[S]	
Urban Zone [U]	
Indigena Reserve [I]	
Limited Zone of Frontier Protection [P]	

Note: An asterisk(\*) indicates spot land allocation. The zone names without asterisk marks mean areal zoning.

### 5.7.2 Description of Land Use Zones Recommended for MTZs in General Land Use Plans

**Tourism Amenity Core Area (TAN):** Center of the tourism zone, with commercial facilities (restaurants, cafes, bars, souvenir shops, grocery stores) and public facilities (public space for food and souvenir stalls, tourist information center, public parking lots, bus station, public showers, toilet facilities and litterbins)

**Planned Tourism Development Area (TAP):** Areas with relatively high and middle density development of hotels. Larger lots of land and infrastructure should be prepared to attract private investments in middle-sized hotels. Existing residents and others should be relocated from these areas.

**Spontaneous Tourism Development Area (TAE):** Areas with relatively low-density development of tourism facilities (hotels, cabins and other tourism-related businesses). However, no planned efforts are made to attract tourism facilities here.

**Mixed Tourism and Community Area (MIX):** Areas with relatively low-density development of tourism facilities (hotels, cabins and other tourism-related businesses) , allowing existing community areas (housing and public facilities) and small businesses (cabins and stores) to remain. As a result, relatively small-scale and low-density development of mixed tourism and community would be induced.

**\*Local Tourism-Related Commercial Area in Tourism Amenity core Area (TAC):** This should not cover the whole area that is specified, but the designation indicates that in the area there is a need for special land allocation for tourism-related commerce for local communities, at the stage of regulatory planning.

**\*Local Cabin Development Area (TCD):** This should not cover the whole area that is specified, but the designation indicates that in the area there is a need for special land allocation for cabin development by local communities' initiatives, at the stage of regulatory planning.

**Community Core Areas (CAN):** Areas in which existing public facilities and commercial areas for local people should be preserved. If necessary, additional lands for these functions should be secured at the stage of regulatory planning, especially for the relocation of existing public facilities from the areas designated as TAN and TAP.

**Community Residential Areas (CAR):** Areas in which existing settlement areas for local people should be preserved. If necessary, additional lands for this purpose should be secured at the stage of regulatory planning, especially for the relocation of local people's houses from the areas designated as TAN and TAP.

**\*Small Area for Local Residents (CAP):** This should not cover the whole area that is specified, but the designation indicates that in the area there is a need for special land allocation for existing housing areas for local people at the stage of regulatory planning. This land use category is specified in the areas outside the Tourism Center. Since it is difficult to identify all the existing houses, they should be studied carefully to delineate these areas at the stage of regulatory planning.

**\*Artisanal Fishermen's Base (CBP):** This should not cover the whole area that is specified, but the designation indicates that in the area there is a need for special allocation of land for an artisanal fishermen's base, such as a fish collection center and boat mooring space.

**ICT-Municipality Natural Area (NAI):** Areas in which natural vegetation should be retained or restored by not allowing further development. However, existing houses and facilities could remain in the area. Daytime tourism and recreational activities are allowed.

**\*Daytime Tourism Activity Base (NAD):** This should not cover the whole area that is specified, but the designation indicates that even in the area of NIM, special land allocation for daytime tourism and recreational activities is allowed.

**Future Development Area (FAD):** Areas reserved for future development after the next 10 years. In order to decide if the areas of FAD could be used for development or not, it is necessary to review the general land use plan.

We consider that these land use zones could be applied not only to the South Guanacaste Region and the Corcovado-Golfito Region, but also to other coastal regions of tourism development potential in Costa Rica.

Although SINAC's nature protected areas and coastal wetlands are not part of Maritime Terrestrial Zones, they are delineated in the General Land Use Plan.

**SINAC's Nature Protected Area (S):** Nature Protected Areas under SINAC of MINAE.

**Wetland (H):** Coastal wetlands registered by MINAE, or identified by the JICA Study.

### **5.7.3 Land Use Zones for General Land Use Plans in Hinterlands of Maritime Terrestrial Zones**

The same categories of land use zones for MTZs can be used for general land use plans of hinterlands of MTZs. Some categories, such as TAC and CBP, are not applicable to the hinterlands.

In addition to the land use zones above, the following land use category is used for the hinterlands:

**Other Land Use Areas (OAT):** Areas for types of land use or development other than tourism. Agriculture, husbandry and wood plantation could be included in this category.

## **Chapter 6**

# **CONSULTATIVE AND PARTICIPATORY PROCESS FOR TOURISM DEVELOPMENT AND COASTAL LAND USE PLANNING**

### **6.1 INTRODUCTION**

The JICA Study Team has endeavored to promote consultative and participatory planning processes at the regional and local levels while its multi-disciplinary experts were conducting data/information collection and analysis. Through this process, especially by organizing stakeholder meetings, the JICA Study Team tried to get local information, knowledge, views and opinions in order to reflect them in strategies and actual plans, to keep the transparency of the planning process and to enhance local people's sense of ownership over the planning process, as well as the plan.

Furthermore, the Study Team aimed to empower local people not only to rely on governmental and/or other external supports, but also to organize themselves and play a role in dealing with their problems, according to the general plan being drawn up.

It is important for theoretical reasons to promote local people's consultation and participatory planning to encourage ownership, transparency and shared roles not only at the earlier stages of planning but also during the implementation of plans. However, it was found that there are other reasons that are more important than the theoretical ones.

To summarize these, the difficult conditions that are found especially in the study areas, as well as in the coastal tourism development and in land use management, make a conventional planning process for drawing up general land use plans unlikely to succeed.

What are these conditions? Why will conventional planning methods not work? Why and how do the plans utilizing the methods of consultation and participation have a greater chance of solving the problems? We will try to answer to these questions below.

## **6.2 THE ORIGINAL SYSTEM OF LAND USE PLANNING AND MANAGEMENT IN COASTAL AREAS**

According to the Maritime Terrestrial Zone Law enacted in 1977, the 200m width areas from the coastline are public lands, for which two levels (regional and local levels) of land use plans should be established to manage land uses and to promote tourism development in coastal areas. In this original system of land use planning and management a general land use plan should be drawn up at the regional level to guide local-level regulatory plans. In addition coastal regulatory plans should be established at the local level in compliance with the general land use plan.

ICT, a central government institution, is in charge of formulating general land use plans at the regional level and coastal regulatory plans at the local level, while municipal governments (local governments) are in charge of implementing the plans and enforcing the law.

## **6.3 REALITY OF LAND USE PLANNING AND MANAGEMENT IN COASTAL AREAS**

By the early 1980s, just after the Maritime Terrestrial Zone Law was enacted, the government's financial and administrative capability was large enough to follow the original idea of land use planning and management for the coastal public lands. However, in those days, tourism development was not so active in coastal areas. Therefore, no general land use plans were made in accordance with the MTZ Law from 1977 to the early 1980s.

After the fiscal crisis in the 1980s, the central governmental functions were largely reduced; therefore ICT could not make general land use plans. However, the need for regulatory plans at the local level gradually increased because of the increase in demand for tourist accommodation in coastal areas. Without the guidance of general land use plans, regulatory plans were rushed through in the latter half of 1990s by private promoters responding to the needs for coastal lands. They bore the costs of planning and controlled the contents of planning. In most cases, private promoters hired consultants to formulate regulatory plans under the technical guidance of ICT and INVU. Municipal governments then approved some of the plans after holding public hearings. This kind of private initiative is the basis of coastal regulatory planning at present, rather than planning for the public interests.

The demand for coastal lands for tourist accommodation (both for international and domestic tourists), resort houses (for foreigners), and summerhouses (for wealthy Costa Ricans) increased gradually. As a result of these increased demands for coastal lands, more and more



informal or illegal land transactions increased, and in some cases, an inappropriate level of concentration of coastal development occurred.

This land use planning study was requested by ICT to JICA, in order to improve the existing situation, firstly by formulating general land use plans and secondly by using the general land use plans to guide private promoters and consultants who are making regulatory plans. It was thought that land use at the local level would be well planned and managed once the general land use plans were formulated, and all matters concerning planning and management could be attended by both central and local governments.

However, a study of the reality of coastal land use indicates that this approach to solving problems by means of government initiated top-down land use planning works unsatisfactorily, or not at all.

The actual situation can be summarized as follows. Many regulatory plans have already been drawn up. As a result, more than 55% of ICT-declared coastal areas in South Guanacaste and more than 14% in Corcovado-Golfito are covered by regulatory plans. In addition, there are many cases in which municipalities gave concessions/rights of use without going through regulatory planning and many land lots were sold, although concessions for lands in MTZs should be given based on regulatory plans approved by ICT, INVU and municipal governments according to the law and regulations.

Limited coastal areas of tourism potential are open to the formulation of new regulatory plans. This means that new general land use plans are useful in guiding regulatory plans in these limited coastal areas. Moreover, even though regulatory plans are established, municipal governments would be unlikely to use and enforce the established regulatory plans properly.

What makes things worse is that both South Guanacaste and Corcovado-Golfito Regions are remote from the Central Valley, and comprise peninsulas and their surroundings. These two regions are historically difficult areas in terms of their economy, and efforts of the central government at improvement of infrastructure and social services have been far behind the other regions. Even with recent strong political support to the regions, especially Osa Peninsula and Golfito area, it is considered that such economic and political disadvantages will remain for years.

In conclusion, the government-based and top-down strategy of formulation of general land use plans to guide the drawing up of regulatory plan in those areas still without regulatory plans is not effective enough to manage land use properly and to promote sustainable regional tourism development.

#### **6.4 A PROPOSED SYSTEM OF PLANNING FOR SUSTAINABLE TOURISM DEVELOPMENT AND LAND USE IN COASTAL AREAS**

In view of the above situation, it is impossible for stakeholders, including local business and community, simply to rely on central and local governments in the making and implementation of plans. Rather than simply demanding and waiting for government support, it is essential for local stakeholders to take the following kinds of concrete action on their own initiatives:

- Actions which local stakeholders can take by organizing themselves and by following well-considered plans,
- Actions for which local stakeholders need to rely on resources from municipal governments in accordance with well-considered plans, and
- Actions for which local stakeholders need to rely on resources from central government agencies in accordance with well-considered plans.

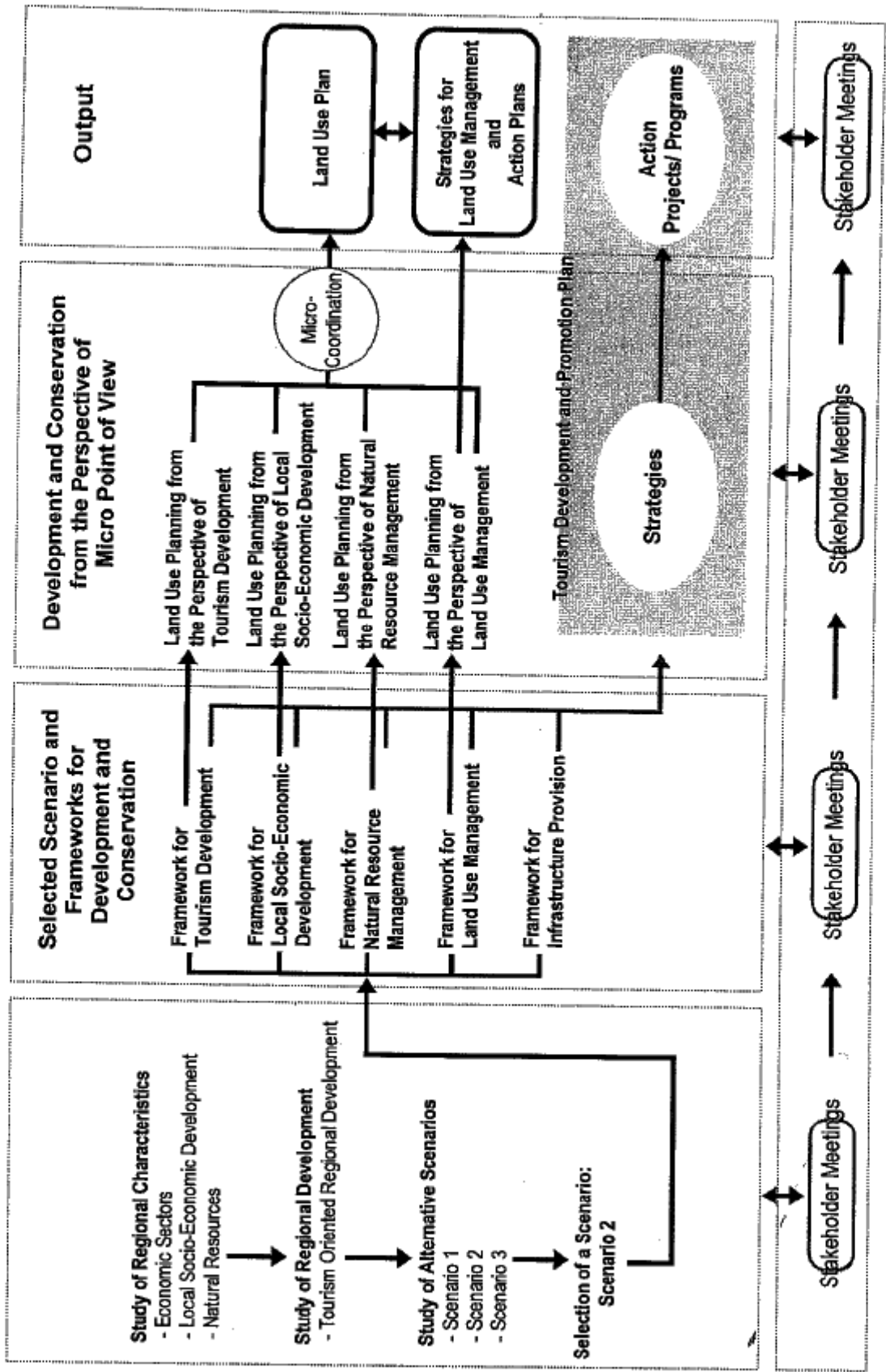
In view of this, it is essential that associations/organizations of stakeholders take actions to improve the problems by themselves and request external resources to assist them in implementing plans which are shared among stakeholders. In order to encourage this, it is essential for local stakeholders to participate in formulating and implementing plans, to share responsibility, and to play a leading role in strong local initiatives.

In this study, a consultative and participatory process has been utilized for general land use planning, not only in order to have local people's information, opinions and comments on the plan, but also to share the plan and its process with stakeholders and to enable them to keep the plan and discussion points in mind. The Study Team aimed to reduce stakeholders' reliance on the government. Instead it encouraged them to monitor land uses and land use changes locally, among themselves, to organize local associations to make rules of land use, and to ask for external resources to develop necessary infrastructure, based on the shared plan.

## **6.5 NEED TO DEAL WITH A VARIETY OF ISSUES ARISING FROM USE OF STAKEHOLDER MEETINGS**

As a consequence of adopting this kind of consultative and participatory approaches, a wide range of topics in tourism development, local socio-economic development, natural resources, and pollution controls, were discussed in the stakeholders meetings. The Study Team was required to understand various situations and problems, and to provide strategies/plans to deal with them. Essentially, general land use plans and regulatory plans should be formulated not only as tools for land use management, but also as tools for sustainable development efforts including natural resources management, local socio-economic development, and tourism development. Therefore, it is appropriate to adopt a comprehensive planning approach dealing with a variety of issues from different perspectives, while focusing on tourism development.

**Figure 6.1 Flow for Planning of Land Use and Other Various Sectors based on a Consultative and Participatory Approach**



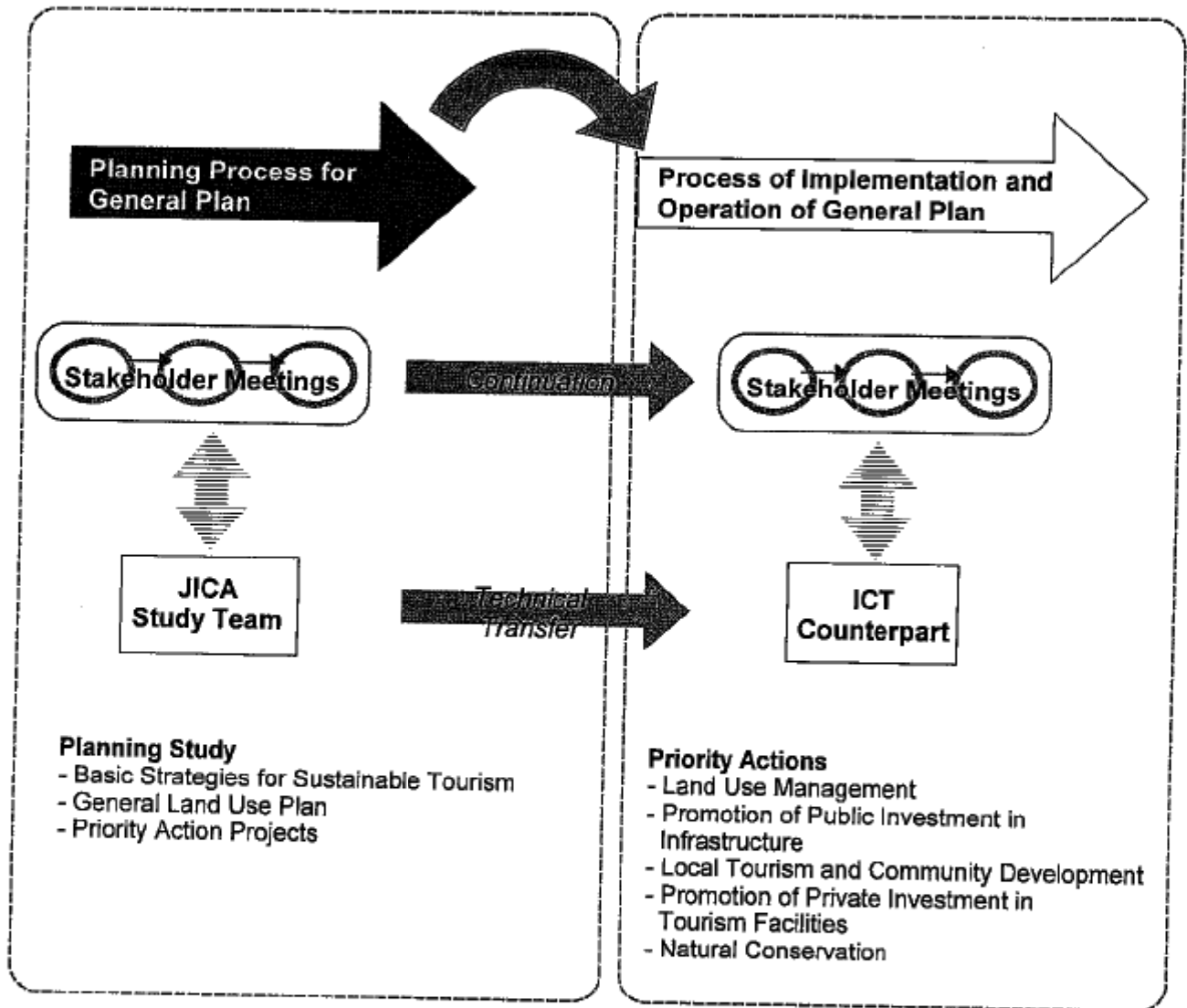
## **6.6 LAND USE PLANS AS A BASIC TOOL**

General land use plans can designate areas appropriate for development and conserving natural resources at the regional level. At the same time, the general land use plans can designate land uses within Tourism Centers, for example, where private investors should be attracted, where tourism facilities should be located, and where community settlements and public facilities should be secured. In view of this, the land use plans could provide very basic tools for management of development and natural resources. Further effective action for regional and local tourism promotion, including local development and natural resources management, can be designed on the basis of the land use plans.

## **6.7 FURTHER PROCESSES BASED ON GENERAL PLANS**

The JICA Study Team has studied and formulated basic strategies on a variety of issues concerning sustainable tourism. At the same time, the Team organized a series of stakeholder meetings and activated local initiatives to continue the processes among stakeholders. Furthermore, the JICA Study Team tried to transfer skills and methodologies to ICT counterparts so that they can continue to facilitate and encourage the local processes that the JICA Study Team initiated or activated. The JICA Study also identified priority actions for the two regions, as well as for individual tourism areas. Such priority actions should be taken in the course of the consultative and participatory processes in the future.

**Figure 6.2 Consultative and Participatory Planning Process Based on Stakeholder Meetings and Further Process Based on General Plan**



# **Chapter 7**

## **LAND USE PLANNING METHODOLOGY**

### **7.1 INTRODUCTION**

In the previous chapter, a planning methodology or planning philosophy based on consultative and participatory processes is explained. In this chapter, more technical aspects of the planning methodology, including data sources and data preparation, will be described. The technical characteristics of the planning methodology that will be explained in this chapter are needed because we tried to conduct planning in more open, more consultative and more participative ways.

### **7.2 TECHNICAL ASPECTS OF PLANNING METHODOLOGY INTEGRATING THREE DIFFERENT PERSPECTIVES**

#### **7.2.1 Overlaying Techniques**

The basic technique of conventional land use planning is to overlay different kinds of data and information on maps. Overlaying of a variety of data on maps allows planners to carry out spatial evaluation of potential and constraints of development and conservation. Usually trained and skilled senior planners synthesize results of overlaying map-data in order to formulate land use plans. The conventional planners have implicit values and criteria by which to evaluate the data and alternative plans. In the conventional planning, the values and criteria for evaluation are implicit and well understood by one planner or within a group of planners. The planners do not have to reveal their criteria in open discussion and planning processes, but have to share the criteria only with their clients or decision makers.

The planning methods used for consultative and participatory planning processes are still based on overlaying of different kinds of data. But the data to be used should be open to stakeholders, and the analysis and evaluation of the data is also open to stakeholders. This kind of process enables planners to get access to local knowledge and information through stakeholder meetings.

Together with the consultative and participatory planning approach, the JICA Study has adopted an approach from three different perspectives, namely tourism development, natural resources and local socio-economic development, as explained in earlier chapters.

The ICT-JICA planning study team is designed to consist of four groups, namely a coordination/land use planning group, a tourism development group, a natural resources group and a local development group. Each of these groups has to work together with their own stakeholders. For example, the tourism group works with tourism business people in the region. The community group gets information and opinions from community organizations and people, and gives information and ideas to them.

## **7.2.2 Zonification flow of Land Use Planning**

### **(1) Regional Level**

At the regional level, potential areas for tourism development are identified based on various data and information from tourism development perspective, such as accessibility, beach quality and physical capacity. On the other hand, environmental conditions or environmental sensitivity is analyzed and determined based on data from environmental perspective, such as wetlands, natural vegetation, steep slope, etc. Through these analyses, areas for Tourism Centers development are identified, as well as areas for nature protection and future development.

### **(2) Within Each Tourism Center**

0. Environmental Conditions [NIM], [H], [S]  
The environmental conditions within Tourism Center are determined.
1. Identification of central places for tourism amenities [TAN]  
The areas for tourism amenity core are identified mainly based on the access to the Tourism Center and the local access roads network within the Tourism Center.
2. Identification of intensive development areas of tourism facilities [TAP]  
The areas for intensive development of tourism facilities are identified mainly based on data of the physical capacity of development and beach quality.

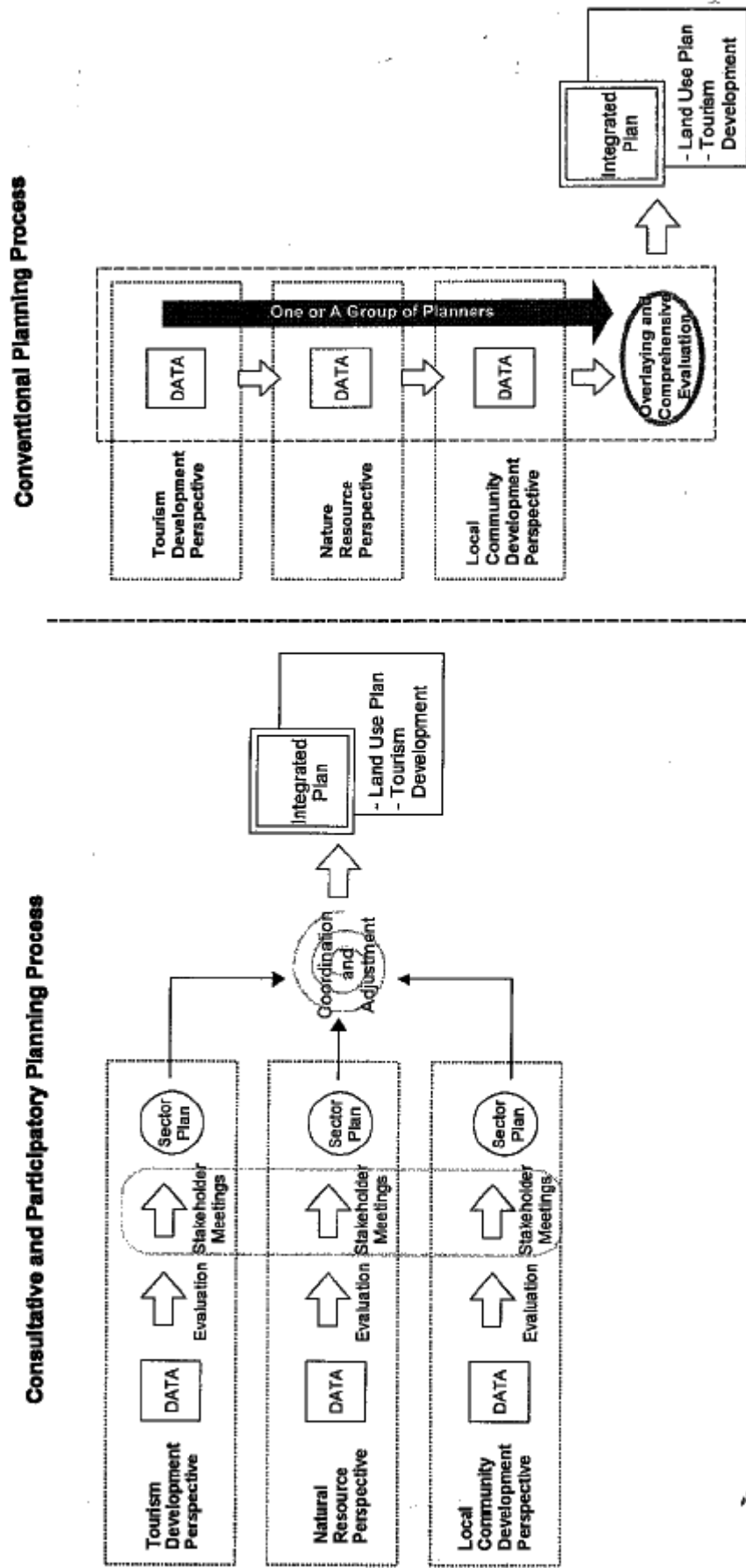


In the case that the existing communities' public facilities and/or local people's houses are located in the identified zones of TAN and TAP, Community Core Area [CAN] and/or Community Residential Area [CAR] should be allocated for relocation.

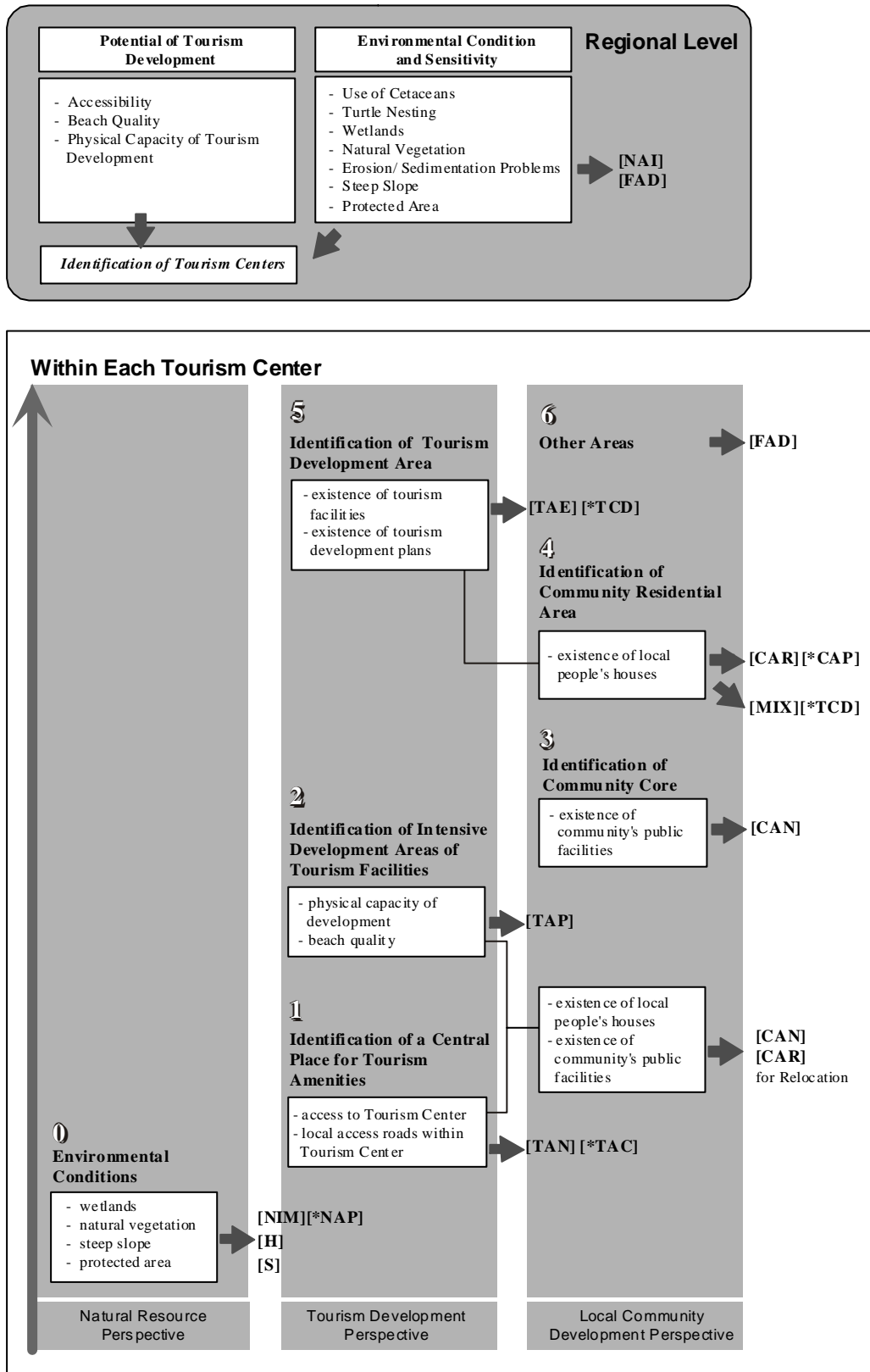
3. Identification of community core [CAN]  
The areas for communities' public facilities are identified based on data of existing public facilities.
4. Identification of community residential area [CAR]  
The areas for community settlements are identified based on data of existing local people's houses.
5. Identification of tourism development area [TAE], [MIX]  
Other tourism development areas are identified as spontaneous tourism development areas mainly based on data of existing tourism facilities and existing tourism facility deployment plans. If local people's houses are located in the areas, a MIX zone should be allocated.
6. Other area [FDA]  
Other tourism development areas are identified as future development areas.

Figure 7.1 shows the zonification flow of land use planning. The details of data and information used for the land use planning are described in the following sections.

**Figure 7.1 Comparison of Flows of Planning between Conventional Methods and Consultative/Participatory Methods**



**Figure 7.2 Zonification Flow of Land Use Planning**



### **7.2.3 Data and Information Used for Land Use Planning**

The following three kinds of data from three perspectives are prepared for overlaying:

- Environmental Conditions from a Perspective of Natural Resources
- Beach Potential from a Perspective of Tourism Development
- Community Situations from a Perspective of Local Socio-Economic Development

According to different geomorphological, environmental and socio-economic/ administrative conditions that occur in coastal areas, the coastlines are divided into segments, which are composed of one beach (or part of beach), one headland (or part of headland), wetland (or part of wetland) and so on. These segments are units of analysis. These segments are determined for convenience of analysis. In some cases, smaller segments are required for natural resources analysis. And in some cases, beach analysis for tourism potential needs smaller segments. The coastlines of the South Guanacaste are divided into 135 segments. Those of the Corcovado-Golfoito are divided into 212 segments.

## **7.3 DATA FOR EVALUATING ENVIRONMENTAL CONDITIONS**

### **7.3.1 Seven Parameters**

From a natural resources perspective, the following seven aspects/ parameters are selected to analyze and determine the environmental conditions or environmental sensitivity for coastal areas:

- Use of Cetaceans
- Turtle Nesting
- Wetlands
- Natural Vegetation
- Erosion/ Sedimentation Problems
- Steep Slope
- Protected Area

The ways of scoring and classifying these parameters are described below:

**(1) Use of Cetaceans**

Score	Classification	Conditions
0	Normal	Sections of coast where the inshore waters may or may not contain populations of cetaceans
1	High	Sections of coast where the inshore waters are important to cetacean populations (feeding and calving)

**(2) Turtle Nesting**

Score	Classification	Conditions and Implications
1	Very High Nesting Activity	These beaches (e.g. Ostional, Camaronal and Playa Caletas in South Guanacaste) have all been decreed wildlife sanctuaries or reserves, and management plans need to be implemented. [Tourist access may be allowed and should be officially regulated, but no tourism facilities should be permitted in the MTZs.].
2	High Nesting Activity	E.g. Playa San Miguel, Estero Jabilla and Playa Coyote in South Guanacaste and Madrigal and Carate in Corcovado-Golfito. [These may be able to support strictly regulated tourist development and activity. In order to sustain the nesting of turtle populations, it is recommended that illumination and construction behind the beaches is controlled and that this can be achieved through the preparation of regulatory plans that take into account the sensitivity of turtle nesting by <i>inter alia</i> (i) restoring and protecting natural vegetation for 20m behind the Public Zone, as well as in the Public Zone; (ii) locating most tourism accommodation and facilities towards the rear of (and behind) the MTZ and (iii) limiting the overall density of development, while allowing carefully planned ‘pockets’ of higher density facilities. Nighttime tourist access to the beaches during the nesting season needs to be regulated].
3	Low to Medium Nesting Activity	E.g. Playas San Juanillo, Garza, Pencal and Hermosa in South Guanacaste, and Drake and Zancudo in Corcovado-Golfito. [These beaches may support tourist development under a basic regulatory regime. Measures to control construction and illumination are needed. Overall low density tourism development is the preferred, least-risk environmental option, but carefully planned and designed medium density developments may be accepted where justified by social and economic benefits and other environmental impacts are low].
4	Little or No Nesting Activity	[Unit where no special regulations are required.]

**(3) Wetlands**

Score	Classification	Conditions
0	Not Wetlands	
1	Wetlands	Mangrove, Marsh/ Swamp, Estuary/ River Mouth, and Lagoon. (Wetlands are distinguished in terms of their predominant vegetation (mangrove, marsh/swamp), or on the basis of their physical form (estuary/river mouth, lagoon). Some freshwater wetlands may only be subject to seasonal, rather than permanent, inundation. For instance in Guanacaste Sur mangroves occurs in sections of Nosara and Rio Garza beaches, while in Corcovado Golfito besides Terraba-Sierpe, mangroves occur at river mouths such as Rincon, Esquinas, and Coto 47. Marshes and swamps are found in Caletas, Guiones and Barco beaches. The term river mouth is applied to those sections of coast where rivers open seasonally to the sea. In Guanacaste Sur where the rainfall and thus river flows are more seasonal, the mouths of many rivers (specially the smaller ones) become blocked by sand/silt berms during the dry season. Lagoon, includes an open body of water that is not connected to the sea for much of the year, for example Pejeperro and Pejeperrito in southern Peninsula de Osa.)

**(4) Natural Vegetation (Potential for Retaining or Restoring Natural Vegetation for Forming Biological Corridors)**

Score	Classification	Conditions
0	Not Significant	The existing vegetation is either in poor condition or still partly intact but appears to be threatened by clearance or other unsuitable land use.
1	Significant	The existing vegetation is in good condition or appears to be recovering from damage/clearance. Thus the vegetation may be primary forest (rarely) or secondary growth of woody vegetation that contains some mature trees and/or is well established such that ground cover is high.

**(5) Erosion/ Sedimentation Problems**

Score	Classification	Conditions
0	Normal	Absence of Observed erosion/ sedimentation problems
1	High	Presence of Observed and/ or potential erosion/sedimentation problems. Such is the case of some beaches in Corcovado-Golfito, where sedimentation is a problem, leading to reductions in beach quality (increased silt/mud levels), difficulties in boat access, damage to/death of coral communities, etc. Such sedimentation is often associated with activities outside the MTZ (gold mining, erosion from logging roads, deforestation and extraction of construction materials from river beds).

**(6) Steep Slope**

Score	Classification	Conditions
0	Not So Steep Slope	The slope is less than 25 %.
1	Steep Slope	The slope is more than 25%. [Development activities on the steep slopes risk causing serious natural deterioration, as well as landslides and erosion. ]

**(7) Protected Area by Decree under MINAE/ CONAI**

Score	Classification	Conditions
0	No Protected Area	
1	Protected Area	National Park, Biological Reserve, Wildlife Refuge, Ramsar Site, Wetlands, Indian Reserve, Protective Zones, Limited Zone for Frontier Protection (Inalienable Zone). National Parks and Biological Reserves have the highest level of protection.

**7.3.2 Overall Environmental Sensitivity**

The overall environmental sensitivity or importance for each segment is considered in the light of these data. The environmental sensitivity is divided into the five following categories:

- Very High Sensitivity
- High Sensitivity
- Moderate Sensitivity
- Low to Moderate Sensitivity
- Low Sensitivity

A variety of criteria are used to determine the overall environmental importance or sensitivity of an MTZ segment, from very high to low. This gives an indication of the sensitivity of a segment of coast to tourism development. Some tourism development may be possible in the

more sensitive units, provided that building density is adjusted according to sensitivity and/or other mitigation measures are applied to reduce environmental impact. See Table 7.1 for details.

For a section of MTZ to qualify as a Very High Sensitive Area, turtle nesting must be high (2) or two or more of criteria 4 to 7 should apply or turtle nesting should be medium (3) with at least one more criterion from 4 to 7. Other than day facilities, there should be a presumption against any expansion of tourism development (hotels, residential accommodation etc) in these areas, unless there is very good justification, supported by a favorable environmental impact assessment study.



**Table 7.1 Criteria Used to Classify the Maritime Terrestrial Zone According to Environmental Condition and Sensitivity**

General Sensitivity Classification	Detailed Classification	Evaluation Criteria						
		1. Use by Cetaceans	2. Turtle Nesting	3. Wetlands: Mangrove Marsh Swamp Estuary / River Mouth	4. Biological Corridor Potential	5. Steep Slope	6. Erosion / Sedimentation Problems	7. Protected Area, by Decree. Under MINAE/ CONAI
Legally Protected Areas	Synthesis of Criteria 1 to 7	0 Normal 1 High	1 Very High 2 High 3 Medium 4 Low/None	0,1	0 Normal 1 High	0 Normal 1 High	0 Normal 1 High	0,1
	MINAE	0,1	1	0,1	0,1	0,1	0,1	1
	CONAI	0,1	2,3,4	1	1	0	0,1	0,1
	Wetland#	0,1	2,3	0,1#	0,1	1	0,1	0
	Very High	0,1	3,4	0	0,1	0	0,1	0
	High	0	2,3,4	0	0,1	0	0,1	0
	Moderate	0,1	3,4	0	0,1	0	0,1	0
	Low to Moderate	0,1	4	0	0,1	0	0,1	0
	Low	0	4	0	0	0	0	0
	Urban	0	4	0	0	0	0	0

## 7.4 DATA FOR EVALUATING BEACH POTENTIAL FOR TOURISM DEVELOPMENT

### 7.4.1 Data for Evaluating Beach Quality

The beach quality is evaluated by taking into account the following five parameters:

- Beach Type,
- Sand Quality,
- Beach Width,
- Beach Slope, and
- Risk of Swimming

#### (1) Beach Type

**Scores and Classification of Beach Type**

Score	Classification	Conditions
1	Sandy	Sandy beach is all over the beach segment.
0.75	Partly Rocky	The beach has both sandy parts and rocky parts.
0.5	Rocky Reef	The beach segment has both sandy beach and rocky reef s.
0	Rocky	Rocks cover all over the beach.

The sources of this data are the field surveys by the JICA Study Team (2000), videotape taken by the aerial survey of the JICA Study Team (2000), aerial photographs of TERRA Project (1996/1997/1998), IGN topographic maps (1: 50,000) and TERRA Project GIS maps (1: 25,000).

#### (2) Sand Quality

The sand quality is evaluated by considering both sand color and sand grain. The sand is classified into five colors. The sand is also classified into five grain sizes. The following is the matrix of sand color and sand grain for evaluating the sand quality:

**Matrix of Sand Color and Sand Grain**

		Sand Color				
		Bright				Dark
Sand Grain	Small	5	5	5	3	3
		4	4	4	3	3
		3	3	3	2-2	2-2
		2-1	2-1	2-1	1	1
	Large	2-2	2-2	2-2	1	1

The sources of these data are sand samples of sand taken in the field survey by the JICA Study Team (2000). For the beaches for which sand samples are not available, videotapes and photographs taken in the aerial survey by the JICA Study Team (2000) are used for evaluating the sand quality of beaches.

#### Score and Classification of Sand Quality

Score	Classification
5	Excellent
4	Good
3	Moderate
2	Quite poor
1.5	Bad Poor
1	Very poor

### (3) Beach Width

Wider beaches get higher scores and higher evaluation.

#### Score and Classification of Beach Width

Score	Classification	Examples
3	Wide	Playa Ostional
2	Medium	Playa San Miguel
1	Narrow	Playa San Juanillo

The sources of this data are the field survey by the JICA Study Team (2000), videotapes taken by the aerial survey by the JICA Study Team (2000), aerial photographs of TERRA Project (1996/1997/1998), IGN topographic maps (1: 50,000) and TERRA GIS maps (1: 25,000).

### (4) Beach Slope

Gentler slopes get higher scores and higher evaluation.

#### Score and Classification of Beach Slope

Score	Classification	Examples
3	Gentle	Playa Ostional
2	Medium	Playa Barrigona
1	Steep	Playa San Juanillo

The sources of this data are the field survey by the JICA Study Team (2000), videotapes taken by the aerial survey by the JICA Study Team (2000), IGN topographic maps (1: 50,000) and TERRA GIS maps (1: 25,000).

**(5) Combined Evaluation of Beach Width and Beach Slope**

The wider beaches with gentler slopes get higher scores and higher evaluation.

**Matrix of Beach Width and Beach Slope**

		Width		
		Wide	Medium	Narrow
Beach Slope	Gentle	5	4	3
	Medium	4	3	2
	Steep	3	2	1

**(6) Risks of Swimming**

**Scores and Classification of Risks of Swimming**

Score	Classification	Examples
0	No Risk	Playa Pitahaya
1	Low Risk	Playa Samara, Playa Carrillo
2	Medium Risk	Playa Pleito
3	High Risk	Playa Caretas

The sources of this data are the evaluation by a well-trained senior Costa Rican geomorphologist, based on his fieldwork (2000).

**7.4.2 Overall Evaluation of Beach Quality**

The overall evaluation of beach quality is conducted using the following formula:

$$[\text{Overall Evaluation of Beach Quality Score}] = [\text{Beach Type Score}] \times ([\text{Width \& Slope Score}] + [\text{Sand Quality Score}] \times 1.5)$$

Rank	Score	Evaluation
1	0-2.50	Bad
2	2.51-5.00	Unsuitable
3	5.01-7.50	Moderately suitable
4	7.51-10.00	Suitable
5	10.01-12.50	Excellent

**7.4.3 Data for Evaluating Physical Capacity of Tourism Development**

Beaches are ranked in terms of the physical capacity of tourism development, based on beach length and hinterland size. The beach length and hinterland size are measured on the TERRA GIS maps (1: 25,000).

### Beach Length

Rank	Beach Length (m)
1	0-50
2	51-150
3	150-350
4	351-550
5	> 551

### Hinterland

Rank	Hinterland Length (m)
1	0
2	1-200
3	201-400
4	401-600
5	> 601

## 7.5 DATA FOR ASSESSING COMMUNITIES' CONDITIONS

The following three parameters are prepared and used for land use planning:

- Existence of Communities within or close to MTZ,
- Existence of Community's Public Facilities, and
- Existence of Artisanal Fishing Activities.

### (1) Existence of Communities within or close to MTZ

Score	Classification	Conditions
0	No Local People	Population: 0
1	Presence of Small Community	Population: less than 50
2	Presence of a Middle Sized Community	Population: 50~200
3	Presence of a Large Community	Population: more than 200

The sources of this data are EBAIS data (2000), TERRA Project's GIS Maps (at a scale of 1:25,000), Population Census Maps (DGEC) and the field survey by the JICA Study Team (2000).

**(2) Existence of Community's Public Facilities**

Score	Classification	Conditions
0	No Public Facilities	
1	Presence of Community's Public Facilities	A Plaza, a Primary School, Churches and other public facilities are located in a central area of the community.

The sources of this data are TERRA Project's GIS Maps (at a scale of 1: 25,000), Population Census Maps (DGEC) and the field survey by the JICA Study Team (2000).

**(3) Existence of Artisanal Fishing Activities**

Score	Classification	Conditions
0	No Artisanal Fishing Activities	
1	Presence of Artisanal Fishing Activities	Artisanal fishermen are active, and in some cases, they have a fish collection center.

The sources of this data are Population Census Maps (DGEC) and the field survey by the JICA Study Team (2000).