

THE KINGDOM OF THAILAND
THE TOURISM AUTHORITY OF THAILAND

The Study on Potential Tourism Development
for the Southern Region of Thailand

PHUKET, KRABI & PHANG NGA

Greater Phuket

FINAL REPORT, March 1989

Volume 2:

CONTENTS OF THE FINAL REPORTS

Summary

- Part I: TOURISM DEVELOPMENT IN SOUTHERN REGION
- Part II: TOURISM DEVELOPMENT IN GREATER PHUKET

Volume 1: Southern Region

- SUMMARY
- Chapter 1: INTRODUCTION
- Chapter 2: OBJECTIVES OF THE TOURISM DEVELOPMENT
- Chapter 3: SOUTHERN REGION TOURISM DEVELOPMENT STRATEGIES
 - 3.1 Tourism and Regional Development Policy
 - 3.2 Tourism Attractions
 - 3.3 Tourism Market and Projection
 - 3.4 Regional Tourism Structure
 - 3.5 Transport Network
 - 3.6 Environmental Considerations on Beach Resort Development
 - 3.7 Tour Package and Tourism Promotion
 - 3.8 Economic Impacts and Development Opportunities
- Chapter 4: DEVELOPMENT GUIDELINE IN TOURISM CLUSTERS
 - 4.1 Phuket Cluster
 - 4.2 Surat Thani Cluster
 - 4.3 Songkhla/Hat Yai Cluster
- Annex-1 1) Minutes of Meeting on Inception Report
- Annex-2 2) Minutes of Meeting on Interim Report-I
- Annex-3 3) Study Staff

Volume 2: Greater Phuket

- SUMMARY
- Chapter 1: INTRODUCTION
- Chapter 2: GREATER PHUKET TOURISM DEVELOPMENT
 - 2.1 Tourism Market and Projections
 - 2.2 Tourism Development Policy and Strategies
 - 2.3 Tourism Resources and Spatial Development Framework
 - 2.4 Infrastructure Development Cultural Tourism Development
 - 2.5 Cultural Tourism Development
 - 2.6 Tourism Promotion
 - 2.7 Plans and Projects to be Implemented
- Chapter 3: STUDY OF SELECTED AREA TOURISM DEVELOPMENT
 - 3.1 Thai Muang Resort Development Project
 - 3.2 Sea Network Development Project-Phuket Marine Center
 - 3.3 Institutional Arrangements
- Chapter 4: ECONOMIC AND FINANCIAL EVALUATION
 - 4.1 Economic Impact
 - 4.2 Economic Analysis
 - 4.3 Financial Analysis
- Annex-1 Minutes of Meeting on Interim Report-II
- Annex-2 Minutes of Meeting on Draft Final Report
- Annex-3 Study Staff

Volume 3: Appendices

- Chapter 1: DATA AND INFORMATIONS OF THE VOLUME 1 REPORT
- Chapter 2: DATA AND INFORMATIONS OF THE VOLUME 2 REPORT

THE KINGDOM OF THAILAND
THE TOURISM AUTHORITY OF THAILAND

The Study on Potential Tourism Development
for the Southern Region of Thailand

PHUKET, KRABI & PHANG NGA

Greater Phuket

FINAL REPORT, March 1989

Volume 2:

JICA LIBRARY



1074150[2]

19128

JAPAN INTERNATIONAL COOPERATION AGENCY

PREFACE

In response to a request from the Government of the Kingdom of Thailand, the Government of Japan decided to conduct a study on Potential Tourism Area Development for the Southern Region in Thailand and entrusted the study to the Japan International Cooperation Agency(JICA).

JICA sent to Thailand a study team headed by Mr. Sohiko Yamada, comprising experts from JCP Inc. and Pacific Consultants International, on four occasions during the period from November 1987 to December 1988.

The team held discussion with the officials concerned of the Government of the Kingdom of Thailand and conducted field surveys.

After the team returned to Japan, further studies were made and the present report has been prepared.

I hope that this report will serve for the development of the project and contribute to the promotion of friendly relations between our two countries.

I wish to express my sincerest appreciation to the officials concerned of the Government of the Kingdom of Thailand and for their close cooperation extended to the team.

March 1989

Kensuke Yanagiya

Kensuke Yanagiya
President
Japan International Cooperation Agency



SUMMARY

1. TOURISM DEVELOPMENT POLICIES AND STRATEGIES

The Sixth National Plan has placed special emphasis on international tourism promotion realizing that the tourism industry will contribute greatly to boosting the national economy and reducing the country's trade deficit. The tourism sector enjoyed a 12.2% growth rate during the Fifth National Plan period, and the Sixth Plan has aimed at a target of 7.5% growth per annum on the average. However, based on foreign tourist arrivals in 1986 and 1987 which are greater in number than expected, the government has recently amended the target to 4.65 million foreign tourists in 1991 (the end year of the Sixth Plan), instead of the original target of 3.70 million. Thus, the internationalization of tourism has been given great emphasis in the national economic development strategies.

Phuket tourism is assessed to be potentially capable of playing an important role in achieving this national target. The specific tourism development strategies are identified as follows:

- 1) Promotion of International Markets
- 2) Creation of a Greater Phuket Resort Zone to be Promoted as an International Resort Center
- 3) Establishment of an Organization for Tourism Development
- 4) Conservation of the Environment
- 5) Up-Grading of Socio-Cultural Environment and Resources
- 6) To Encourage and Cater to the Domestic Thai Tourists

● Refer to Chapter 2, p. 12

2. PHUKET AS AN INTERNATIONAL TOURISM DESTINATION

Thailand has enjoyed a great growth in the tourism sector. It accommodated 3.5 million international tourists in 1987 with a 23.6% growth from the previous year. Thailand is undoubtedly becoming one of the leading countries in the Asian and Pacific region in tourism sector.

As a significant international tourism destination in Thailand, Phuket has been growing particularly since 1986. This is demonstrated by the fact that Phuket's share in the Thai tourism market has increased drastically year by year in terms of percentages of international tourists: 4% in 1983; 6.2% in 1984; 6.4% in 1985; 9.0% in 1986; and 11.5% (estimate) in 1987.

Such a drastic growth in the Phuket tourism industry has been brought about mainly by favorable supply factors, i.e., a hotel construction boom took place in 1985 and there are about 8 thousand rooms including luxurious class hotels in 1987. Including rooms under construction and proposed, there will be more than 11,000 hotel rooms in the near future. Such momentum in private sector investment in tourism will continue for the time-being, since it will be supported, in turn, by a push effect of the demand side economy.

In assessing the nature of market demands, it is specially noted that Asian tourists, especially from Asian NIEs and Japan, have been significantly predominant in Phuket tourism. Thai domestic tourists have also been a large market. It is recognized that Phuket tourism now needs a shift in response to such a change in the demand structure.

Greater Phuket, including the three provinces of Phuket, Phang Nga and Krabi, is endowed with a wide variety of tourism resources, beside fascinating beaches. These latent resources have not been developed adequately yet. Integrating these resources into "Greater Phuket" will expand its tourism development potential as well as its tourism attractiveness to a considerable extent, thereby making it be a more versatile destination. Emphasis should be placed on fully utilizing the existing endowments in a planned manner while eliminating constraints and bottle-necks in development.

Based on demand analysis, it is anticipated that demand will increase at a high rate in response to supply in the short run, but that such a steep increase will gradually shift to a moderate increase in the long run. The number of tourists to Greater Phuket will be about 1.6 million in 1991, 2.2 million in 1996 and 3.0 million in 2001, compared with 655 thousand in 1987.

● Refer to Chapter 2, p.5

3. HOTEL ROOMS REQUIREMENT

Based on the demand projection, future hotel room requirements were examined. In 1987, there were 7,939 rooms in Phuket Island, and about 3,300 rooms are reportedly under construction or being planned.

Considering such a rush momentum in hotel construction in the short run, the nature of the business cycle, and the effects of a control policy to be undertaken in the long run, it is estimated that the number of hotel rooms will be about 16 thousand in 1991, 22 thousand in 1996 and 30 thousand in 2001 in Greater Phuket.

● Refer to Chapter 2, p.9

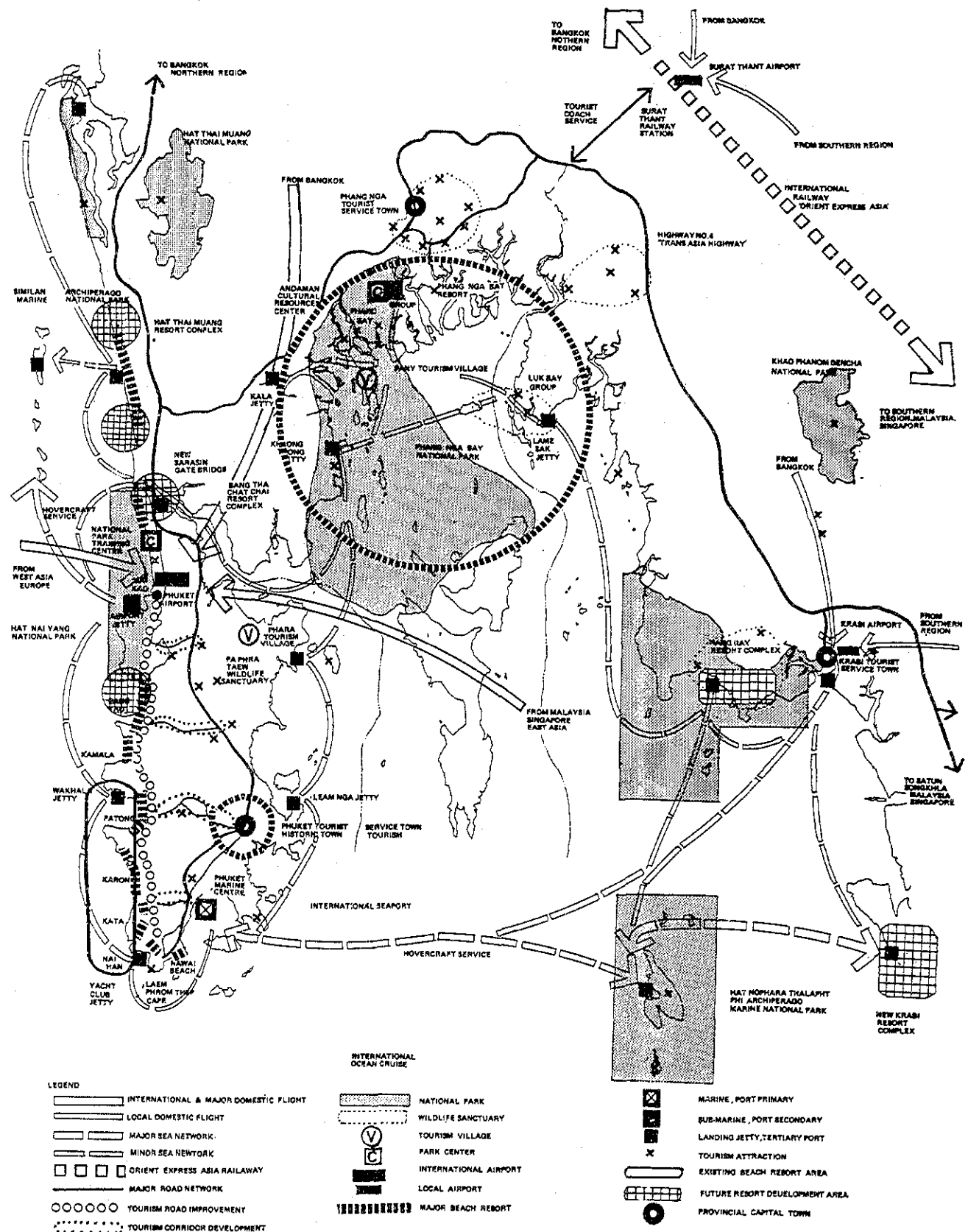
4. TOURISM PROMOTION

A questionnaire survey was conducted in the stream of the Study in July and August, 1988 at three major destinations in Thailand; Bangkok, Pattaya and Phuket. Based on the results of the survey, several programs for tourism promotion in Greater Phuket are suggested as follows;

- 1) To expand accommodation facilities so as to meet increasing demand in Greater Phuket, to extend the length of stay, and to diversify quality and service;

- 2) To provide a major gateway terminal providing up-to-date information materials and promoting Greater Phuket as a destination representing all typical tourist attractions in Thailand;
- 3) To fully utilize the various resources (natural, cultural) available in the region so as to attract tourists who visit in any season;
- 4) Some of the areas where improvement is urgently required are:
 - a. Promotion of ideal diving spots;
 - b. Development of Phuket Town as a tourism center; and
 - c. Development of fully qualified golf courses.
- 5) To strategically promote the basic movement of visitors who are in groups of 3-5 persons, the spatial development of the supporting facilities and models of movement patterns in Greater Phuket have to be provided to have them stay for several days ranging from a minimum of 4 night and 5 days;
- 6) "Environment" is Phuket's key selling point. An environmental design criteria must stipulate the scale, layout, design, height, color of the afore-mentioned facilities, and top priority should be given to the conservation of the beach front areas, including artificial measures where necessary to reinstate the natural environment.
- 7) The demand for quality restaurants is very large. Although the quality standard of the guest rooms available in Phuket is fairly high, there is much room to improve the meals, facilities and services of restaurants.

FIG. 1 SPATIAL DEVELOPMENT CONCEPT



5. RESOURCES

There is a tremendous amount of tourism resources in Greater Phuket. It is recommended that the following resources be integrated into the entire Greater Phuket tourism project so that these will facilitate tourism development without any deteriorating the present value:

- 1) Cultural Resources;
 - Historical architecture and streets in Phuket Town and
 - Cultural resources in Phang Nga and Krabi.
- 2) Natural Resources;
 - Khao Lampi-Hat Thai Muang National Park in Phang Nga,
 - Mu Ko Similan National Park,
 - Ao Phang Nga National Park,
 - Hat Nai Yang National Park and
 - Hat Nopharat Thara-Mu Ko Phi Phi National Park.
- 3) Village/Indigenous Resources;
 - Panyee Village (oceanic village) in Phang Nga,
 - Phara Village (rubber woody village) in Phuket,
 - Lipon Village (pottery industry) in Phuket and
 - Ban Kuan Village (rattan baskets and furniture) in Phuket.

● Refer to Chapter 2, p.15

6. SPATIAL DEVELOPMENT CONCEPT

Greater Phuket consists of two areas connecting with each other by a comprehensive transport network system: The "Phuket Resort Belt" and the "Phang Nga Bay Circuit".

The Phuket Resort Belt faces the Andaman Sea, with 100 km (60 miles) of beautiful beaches from the western coastal strip of Phuket Island through the Hat Thai Muang National Park in the west part of Phang Nga. This Resort Belt offers a number of international marine/beach resorts in harmony with nature. The Phuket International Airport, located in the middle of this belt, functions as an international gateway.

The Phang Nga Bay Circuit is the vast marine-inland area enclosed by Phuket Island, Phang Nga, Krabi and Phi Phi Island. This circuit consists of various tourism resources: pearl culturing farms in Phuket; archipelago with fantastic features in Phang Nga; a number of invaluable cultural assets associated with natural resources in Krabi and beautiful coral beaches on Phi Phi Island.

● Refer to Chapter 2, p.17

7. TOUR ROUTE FORMATION

A number of tour routes in Greater Phuket are recommended to be provided. Sea and land excursion routes should be stressed. Potential sea routes are the ones between Phang Nga Bay with natural and cultural attractions, Phi Phi and Similan islands. Land excursion routes offering a wide variety of historic, cultural and natural attractions must be attractive as well.

● Refer to Chapter 2, p.17

8. LAND USE

The land use study shows that the land for expansion to meet further accommodation requirements will be limited especially in the southern part of Phuket, where the rush tourism development has been taking place. The available land for beach resort facilities in this area, including 12 potential beaches, is assessed to be only 136 hectares. If all the land were developed with a favorable density of 32.5 rooms/ha (gross), it could accommodate about 4,400 rooms additionally. Since about 10 thousand hotel rooms are projected to be necessary in Phuket before 1996, a land shortage will apparently occur.

New land development should, therefore, be deliberated. Potential areas are located in the northern part of Phuket and the western part of Phang Nga. It is recommended that these areas be developed for anticipated future expansion, paying attention to environmental conservation.

A "New Resort Development Zone" should be designated in order to promote planned development and control disorderly development. This zone involves the coastal areas from Bang Tao Beach in Phuket through the southern boundary of the Hat Thai Muang National Park. This may include large-scale resort complex projects initiated by both the private and public sectors, associated with the development of public beaches and related communities. The following projects are major components in this zone:

- 1) Bang Tao Integrated Development,
- 2) Hat Nai Yang Public Beach Development,
- 3) Tha Chat Chai Integrated Development,
- 4) Khok Kloi Public Beach Development and
- 5) Thai Muang Integrated Development.

The built-up areas of the southwest coast of Phuket such as Patong, Karon/Kata Beaches should be designated as a "Development Control Zone" with much emphasis on upgrading the environment, the services and infrastructures rather than further development of resort facilities.

● Refer to Chapter 2, p.23

9. INTEGRATION OF LOCAL COMMUNITIES

Tourism development should be associated with the development of local communities to support tourism activities on the one hand, and to positively receive the benefits from tourism development on the other hand. Related to the development of the Phuket Resort Belt, "Beach Town Communities" may be planned in the following order:

● Refer to Chapter 2, p.35

- 1) Community I :Phuket Urban Center, a city size tourist community to serve Greater Phuket;
- 2) Community II :Sub-Center of "Thalang" to serve the northern part of Phuket;
- 3) Community III :Sub-Centers of "Khok Kloi" and "Thai Muang" to serve the new potential tourism areas in the western part of Phang Nga.

10. ENVIRONMENT

Environmental Preservation is strongly required to maintain the value of Phuket tourism in the long run. A balanced development system should be explored with attention being paid more to the environment than to development.

For this purpose, the government has an extremely significant role to play in terms of legislative, monitoring, supervising and directing actions. More local institutions are needed to respond to matters which are taking place at the local level, especially for controlling the environmental standard of sewage effluent. Environmental issues to be tackled inherently vary and cover broad areas, thereby requiring inter-governmental coordination. Beside the institutional arrangement, five projects are recommended with an aim at putting environmental preservation policies into action:

- 1) Road erosion protection project;
- 2) Ex-tin mining land rehabilitation projects;
- 3) Environmental monitoring system formation projects;
- 4) National park management project; and
- 5) Coastal corrosion protection project.

The most crucial one is a road erosion protection project particularly for the Phuket West Coast Link (Surin to Rawai) which is scheduled to be developed as a scenic drive. The road-side shoulders and cut-slopes should be protected with covering plants or by some engineering methods. A special budget should be allocated for this project.

● Refer to Chapter 2, p.37

11. AIR TRANSPORT

Air transportation is crucial simply because it directly affects the scale of development as an international tourism destination. In terms of air transportation development, emphasis should be placed firstly on upgrading the navigation safety level for large scale aircraft so as to meet the ICAO standard for international airports, and secondly on improving the airport facilities so as to increase a carrying capacity to meet future demand. In addition to the on-going project for Phuket International Airport, several new projects are recommended from this point of view.

The demand study shows that since half of the tourists visiting Phuket are estimated to use air transportation, air transport will account for approximately 2.2 million passengers in 1996 and 3.0 million in 2001, compared with 764 thousand in 1987. This means that demand in the coming decade will be three times as large as that at present.

After completion of the on-going project, the Phuket International Airport will be greatly improved in terms of navigation safety and terminal passenger handling capacity. However, it will still be vulnerable from a safe operation point of view. Four additional projects for the Phuket International Airport are recommended to improve safety:

- 1) Development of a parallel taxiway;
- 2) Expansion of the runway strip (from 150 m to 300 m);
- 3) Improvement of navigation aids; and
- 4) Clearance of obstacle limitation surface.
- 5) Creation of "Sense of Arrival"

Aircraft availability limitation is another issue. Some administrative measures should be undertaken to increase the carrying capacity.

Meanwhile, it is recommended that Krabi Airport with its 1,200 m long and 12m wide runway, which has been closed since 1987, be utilized as a feeder airport connecting with the major cities in Southern Region such as Phuket, Surat Thani and Hat Yai. For this purpose, with an emphasis on upgrading the safety level, the following projects are recommended:

- 1) Widening the runway from 12 m to 30 m, including improvement of the existing runway;
- 2) Widening the runway strip to 150m;
- 3) Improving the access road to the terminal and renovation of the terminal building.

● Refer to Chapter 2, p.43

12. WATER DEVELOPMENT

Although the total volume of raw water that can be caught and stored on the island is sufficient for present and future demand, even in the long run, water is a chronic problem on Phuket Island. Much effort should, therefore, be made to develop a comprehensive water supply system, not only for tourism, but also for all local development on Phuket Island.

It is estimated that in 2011 water demand for the whole island will be 16.2 million cbc.m/year (mcm) including the demands of residents, hotels, public facilities and industrial facilities. The present supply capacity including Bang Wat Dam and Phuket municipal facility is 7.4 mcm, hence, new water supplies of about 8.8 mcm should be obtained by 2011.

For meeting this anticipated demand, out of 7 possible Dam sites identified by the RiD in the island, 3 sites with a total capacity of 9.7 mcm are recommended to be developed in a planned phased manner, and should be commenced as soon as possible. The three dams are:

- 1) for serving the northern part of Phuket,
-Ban Nieo Dam (4.4 mcm);
- 2) for serving the southern part of Phuket,
-Bang Tao Sung Dam (2.7 mcm), and
-Pak Bang Dam (2.0 mcm).

Two sites for purification plants, concomitant with the dams, will be required: the one with a treatment capacity of 20,000 cbc.m/day for serving the northern part of Phuket Island; the other with 20,000 cbc.m/day for the southern part including the Phuket municipality.

Some temporal measures to promptly meet the apparent demand at present are also needed. Utilization of ex-tin mining ponds and deep well underground water should be explored for this purpose.

● Refer to Chapter 2, p.53

13. LAND TRANSPORT

Highway network, bus transport and railway connection are major issues in the land transport development.

1) Highways:

A number of improvement projects of major highways have been outlined in the Sixth Plan to strengthen the highway network in the region. If all projects are completed on schedule, major problems on the highway network would be almost resolved except for the following requirements:

- a. Development of the East-West Highway Link (Surat Thani - Phuket) with 206 km in length and a high design standard to strengthen an inter-regional linkage, especially with Bangkok;
- b. Improvement of the access road to the Phuket International Airport (Route 4026), and the junction with Route 402 with attention to landscape to promote a "Sense of Arrival";
- c. Environmental Protection of the Phuket West Coast Link;
- d. Provision of a promptly responsive system for improvement of local roads to maintain tourism areas in favorable condition.

2) Bus Transport:

There are three issues to be tackled in terms of improvement of bus transport system, referring to basic requirements of tourists: safety, time-conservation, and comfort.

Buses should be reliable, safe transportation. Improvement of a safe operation system including drivers management programs and an inspection institution of coaches should be urgently undertaken by the relevant agencies. A thoughtful passenger insurance system for compensation of accidents should also be provided.

Regarding time-conservation, highway improvement is associated with this goal. Given the East-West Highway Link, the travel time from Bangkok to Phuket would be reduced by 2 hours.

Pursuing comfort of bus transport, it is recommended that even for the fixed route buses, more luxurious coaches be used to cater to the public.

3) Railway Connection:

The Phuket Line diverting at Surat Thani and running into the Phuket Deep-Sea Port is an idea that has been proposed in several studies previous to this one. However, this study cannot recommend this project, because such a huge investment could not be justified from purely a tourism point of view. Instead, establishment of a smooth connection/transfer system at Surat Thani Station is recommended in order to attract international tourists using the forthcoming "Orient Express Asia" and passengers of the southern line from Bangkok. A joint promotion of railway and coach transportation should be encouraged by inviting the private sector's participation.

● Refer to Chapter 2, p.48

14. SEA TRANSPORT

A nautical circuit system should be developed in order to provide a wide variety of sea excursions. This includes development of tourist ports/jetties classified into three categories as follows:

- 1) Primary Port : "Marine Center" as a focal point of Greater Phuket Resort at Chalong Bay;
- 2) Secondary Ports : as sea excursion centers at three locations, namely, Phang Nga Bay, Krabi Town Port, and Phuket International Airport;
- 3) Stop-Over Ports : as landing spots with jetty and small-scale terminal at fourteen locations around Greater Phuket.

High-speed tourist boats such as "Hovercraft" or "Hydrofoil" are recommended to be introduced for the major sea transport link services, by initiation of the public sector. A nautical circuit system is proposed.

● Refer to Chapter 2, p.51

15. SANITARY UTILITIES

Poor development of sanitary facilities is one of the crucial constraints to be overcome in order for Phuket to become an outstanding international resort.

1) Sewage Treatment System:

For planning, it is recommended to designate a "treatment service zone" where a centralized treat-

ment system may serve, in accordance with the land use plan. In Phuket Island, seven zones are identified. Taking into account the economy of scale and efficiency of the facility, the centralized system with a treatment plant should be applied when the tributary population density is more than 30-40 persons per hectare. Until the area reaches that level, an individual treatment system shall be enforced in accordance with NEB regulations. From an environmental point of view, attention should be paid to the following aspects:

- a. The existing environmental regulation on sea water quality (NEB), which has been applied only to the Karon/Kata beaches (to protect coral), should be in effect for all beaches with tourism potential in Greater Phuket.
- b. A definite standard for accommodation facilities should be prepared as soon as possible. Until then, the strict standard with D rank should be applied for all areas regardless of the number of rooms.
- c. A well-organized monitoring system is necessary to check whether the standard is being kept. At the same time, a training program should be prepared for fostering environmental specialists at the local level.

Another problem is the training of personnel who can properly manage the facility at the local government level. A national organization responsible for personnel training needs to be established.

2) Solid Waste Management:

The problems in Phuket are threefold: 1) capacity limit of the existing dumping site; 2) illegal dumping activities; and 3) inefficiency of solid waste management system.

As for problem 1), there is only one dumping site with a sanitary land fill system in the Sapanhin area, the southern end of the Phuket municipality at present. All solid waste collected by all organizations is dumped there, however, it will be full in 5 to 7 years. A new dumping site on a long term perspective should be prepared at an early stage.

In order to solve problems 2) and 3), a centralized management system is recommended to be established in such a way that an organization shall be responsible for collecting waste in the whole provincial area and managing the legally designated dumping site in a proper manner.

One possible scheme to consider would be that establishment of an organization (e.g., the Phuket Solid Waste Management Company) involving the private sector's participation with some public subsidy.

3) Fire-Fighting System:

The following measures are recommended to be taken into account:

- a. Development of a "Zone Defense System"
- b. Installation of Hydrants
- c. Utilization of Pool Water: The water stored in a swimming pool of dimensions 15 m x 15 m x 1 m can be used for 2 to 3 hours of extinguishing activity. This can contribute greatly to quickly and effectively extinguishing a fire.

● Refer to Chapter 2, p.61

16. TELECOMMUNICATION

The major subscribers in the tourism sector are hotels. An increase in the number of lines must be a basic requirement for them. The future demand for telecommunication lines in the tourism sector can be estimated, based on a premise that one hotel requires at least 5 lines on the average. The result indicates that a total of about 1,600 lines will be additionally required by hotels in year 2001.

Including the demands for telecommunication lines for residential use, about 19 thousand lines will be additionally needed in Phuket Island. This means that the lines should be increased at a 11.1 % growth rate per annum. This is a considerably large figure. Special emphasis needs to be given to Phuket development.

Along with the tourism development in the Thai Muang and Khok Kloi areas, facilities for telecommunication services are also required. A capacity of about 400 lines will be necessary only for this large-scale tourism development with 4,000 hotel rooms. A new exchange station might be required to meet this demand. The convenience of international calls is essential. The new system, which is to be applied, is expected to be developed on schedule.

● Refer to Chapter 2, p.64

17. TOWN TOURISM

The Phuket Town tourism development is recommended to be undertaken as a package development with a view of strengthening its cultural assets. By developing the historic area as one tourism resource, the tourism patterns at Phuket could be further diversified and this could attract more international tourists, particularly Asian tourists who favour shopping, sightseeing, and cultural performances.

In the central part of Phuket town, centering on the Thalang Road, there are a number of architecturally unique buildings which were built during the island's most prosperous era in the 19th century. This is a rare example where historically valuable cultural assets are still in use in Thailand. These buildings, however, are now unable to meet the needs of the owners in terms of function, durability and appearance. At the same time, there are no defined preservation institutions to protect against the economic pressure for change. A system is needed to preserve the buildings while recognizing the residents' needs, and creating harmony between the old and new.

The area selected will contain the most significant concentration of buildings that offer the greatest tourism potential and feasibility for conservation development. The buildings located mainly along Thalang Road are considered.

● Refer to Chapter 2, p.67

18. VILLAGE TOURISM

The principal objectives of facilitating village tourism are: 1) to bring economic benefits of tourism more directly to village residents; 2) to stimulate local socio-economic activities through tourism impacts; and 3) to encourage the local people's participation in the tourism sector, thereby creating more employment and earning opportunities. As a result of assessment of the potential for village tourism in the above sense, two types of village tourism are recommended to be further developed in Greater Phuket: Panyee Oceanic Village and Phara Woody Village.

1) Panyee Oceanic Village (Phang Nga)

Panyee village, with 1.5 ha and a 1,500 population, offers its peculiar settlement, unique community and traditional type of fishery. It is located in the Phang Nga Bay and conveniently accessible by boat from both Phuket and Phang Nga, given a Phang Nga Bay Sea Excursion Route.

Attention should be paid first not to impose on the existing villagers' lives by the introduction of mass-tourism. Since this village is a small community, it would inherently be susceptible to changes from external impacts. Based on this recognition, a concept is proposed: a new tourism village on the deck be developed with the same characteristics of structure as those of the existing village, connecting with the original village. A visitor center, a number of restaurants, shops and exhibition place are planned to be in the new village.

2) Phara Woody Village (Phuket)

The village of Phara in the Thalang district is one of the outstanding rubber growing villages, located in the northeastern part of the Phuket Island, and presenting a comfortably woody life atmosphere and refreshing "woody bath".

This village tourism program includes development of a traditional and cultural world with an exhibition hall of rubber processing, information center, shops and restaurants with unique styles of architecture in the well-managed rubber forest. Villagers' participation is a basic requirement, the initial investment for improvement of basic infrastructure, technical guidance, and promotion activities are the public sector's roles.

● Refer to Chapter 2, p.73

19. CULTURAL TOURISM AND ANDAMAN CULTURAL RESOURCES CENTER

Apart from the natural attractions of beautiful beaches, clear waterfalls, and magnificent limestone cliffs that have long been familiar to tourists, there is a wide variety of less well-known cultural attractions in Phuket, Phang Nga and Krabi provinces. The rich cultural resources of the region have the potential to attract many tourists.

1) Andaman Cultural Resources Center

The proposed Andaman Cultural Resources Center will function as a resource center for both natural history and cultural research, and will provide both research and exhibition facilities. It will provide a forum for the sharing and exchanging of ideas and knowledge for both experts and lay people who are involved or interested in Andaman cultural history.

As more international tourists visit the Andaman Coast, especially Phang Nga Bay, with its magnificent natural formations and unique rock painting sites, their curiosity will be satisfied at the Andaman Resource Center. Although both the natural and cultural sites are scattered around the Andaman sea, the center makes a good departure point for visiting sites in the Andaman coastal region. The proposed site is convenient for visitors and its readiness for development makes this site both feasible and practical.

2) Project objectives of the center are as follows:

- To give information about the Andaman cultural and natural heritage
- To preserve the Andaman cultural and natural heritage
- To promote scientific and socio-cultural research
- To train skilled staff such as inspectors/guides/guards/etc.

3) Project Function

Visitors to the Andaman Center will be able to gain a fuller understanding and appreciation of the region's natural and human culture history, the wildlife, and the marine resources through modern and visually stimulating exhibits. Handicraft displays and demonstrations, revived traditional festivals, seminars and conferences will operate intermittently. A selection of unique souvenirs and informative literature will be available at the gift shop. A library and research section will serve as a central depository for multi-disciplinary research projects directly related to the large Andaman coastal region. It will further provide dependable information for the people who are seeking a more comprehensive understanding of their surroundings. Existing information, expanded and temporary exhibits, and interpretations will be supported and broadened through continuous research. A research vessel is proposed for marine-life studies and underwater archaeology.

The Andaman Center will be the initial and final stop for visitors interested in exploring the Andaman Coast at Phang Nga Bay. Organized tours by speed boat, preferably a hydrofoil, and helicopters will depart from the pier and helicopter landing pad.

The proposed site will be located on the bank of the Phang Nga Estuary, Phang Nga province. The site will cover an area of 105,991 sq m. (66 rai).

● Refer to Chapter 2, p.77

20. NATIONAL PARK

There are five National Parks in the greater Phuket area which are under management of the central government. The five National Parks have different features according to their surrounding environments. The parks have simple outdoor recreation facilities and park offices. To deal with a growing number of tourists in the future, development plans should be worked out for sufficient management of the parks, while considering their unique features.

1) Preparation and Implementation of Management Plans

The preliminary research has already been completed for the five National Parks, and the management plan was studied only for Mu Ko Phi Phi in 1987. The area should be developed according to the management plan along with implementation of the plan. Meanwhile, it is necessary to formulate management plans for the following four parks at an early date.

- a. Hat Thai Muang National Park
- b. Hat Nai Yang National Park
- c. Ao Phang Nga National Park
- d. Mu Ko Similan National Park

2) Establishment of Training Centers

It is necessary to train staff to take charge of the five National Parks. The government is studying the establishment of two training centers in Thailand for the management of 55 numbers of National Parks. One will be set up in the northern part of Thailand and the other is in the southern part. Considering the fact that marine-related parks are mainly located in the south, the center in the south are proposed in the Hat Nai Yang Marine National Park in Phuket.

3) Urgent Action Plans

It is proposed that the basic facilities for the improvement of National Parks in the Greater Phuket area be constructed mainly in Phase I.

4) Pier Construction in the Hat Nai Yang National Marine Park

The construction of a pier has many advantages. A new pier will facilitate trips to islands in the Greater Phuket West Coast area, integrate facilities in the Hat Nai Yang National Park, and provide easy access to the airport. However, the marine park is a very sensitive area from an environmental point of view. Therefore, full consideration should be given to site selection, development scale, design and construction methods.

Recommendation

It is necessary to work out National Park management plans and at the same time map out long- and medium-term plans for fund raising and management. Some facilities in the National Parks might be constructed and operated by the private sector to accommodate an increasing number of domestic and international tourists.

● Refer to Chapter 2, p.83

21. TOURISM RELATED INDUSTRY

According to the tourist expenditure survey conducted by the TAT, apart from "accommodation", "shopping" is the major item of the expenditure (more or less 30%), followed by "food and drink" (around 20%). These two sectors are recognized as significant benefit receivers.

1) Restaurants:

In order to meet the international tourist requirements, there is much room for improving in terms of hygiene, variety of foods and training of waiters. The following measures are recommended to be taken by the public sector in this sense:

- a. to establish a vocational school for hotel and restaurant business and supply educated personnel to this sector;
- b. to prepare standards/guide-lines for equipment, facilities and services to meet the recommendable hygienic and service levels;
- c. to provide seminars or instruction meetings occasionally for the restaurant managers regarding improvement and betterment of the business to meet international requirements.

Beside the above measures, it is also recommended that an internationally famous food center of a large scale be developed as a tourist spots on Phuket Island.

2) Souvenir Shops and Industry

It is difficult to find original local souvenirs except some kinds of shell work and pearls. The existing local souvenir products in the Greater Phuket are mainly produced by home manufacturing industry. There is also much room for improving the technique in processing, the quality in package and the design of products. It is recommended to receive some technical assistance and guidance on design and processing from advanced foreign experts and designers.

A "Souvenir Center" is proposed to be established by the initiation of the public sector. This center would have various roles to play in promoting and boosting the industry as a whole: as a technical, training and educational center as well as a sales center.

Another policy should be undertaken that is related to the local industry: a joint promotion of tourism and local industry. Potential activities are pearl culture farming in the surrounding islands of the Phuket Island and rubber plantation and its processing.

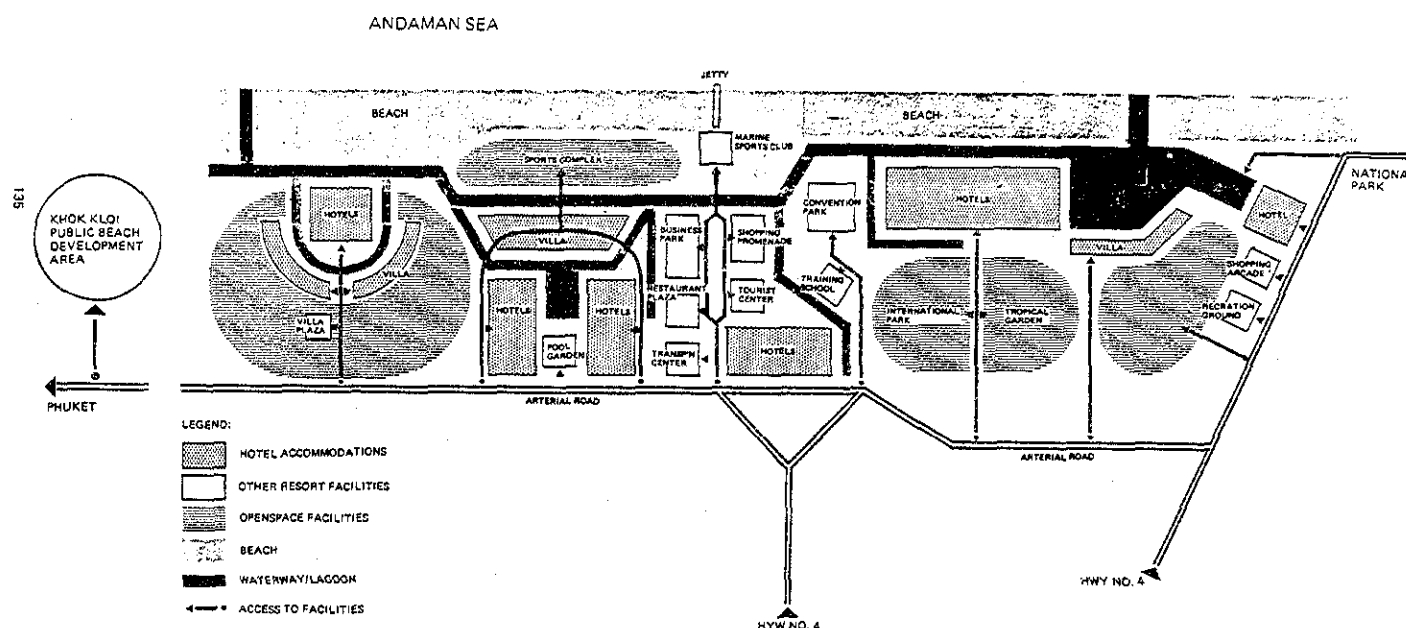
● Refer to Chapter 2, p.87

23. THAI MUANG/KHOK KLOI RESORT DEVELOPMENT

- 1) The proposed project is a unique and challenging development in Phuket area having the following objectives;
 - a. Creation of a new resort center in the south-west coast of Phang Nga Province, which is not yet developed, would provide a tourism development core in the north part of greater Phuket to stimulate the private investors and realize an integrated resort complex.
 - b. The two proposed development areas are:
 - Thai Muang International Resort Complex Development Area. Accommodating 5,000 high class hotel rooms and other related resort facilities mainly for international tourists.
 - Khok Kloi Public Beach Development Area. Accommodating 1,000 economy class hotel rooms and other related resort facilities mainly for domestic and budget tourists.
 - c. The execution and management of the project is the responsibility of the newly organized 'Public Tourism Corporation' proposed in the Study, composed of TAT, Ministry of Interior and local government.
- 2) The following are the development concept for the resort development of Thai Muang Beach.
 - a. Integration of tourism and regional development involving the provision of region-wide infrastructure, improvement of local communities and regional socio-economic development.
 - b. Construction of a large-scale resort complex offering year round resort life activities with high quality services and also providing facilities for long-stay guests.
 - c. Introduction of an environmental sound development approach so as to develop an artificial resort in harmony with the sensitive natural beauty and environment.
- 3) The proposed Thai Muang resort development area is composed of one tourist's amenity core block and four hotel accommodation blocks with the following characters;
 - a. Block-00: Thai Muang tourist's amenity core(Phase-II/III),
 - b. Block-N2: Hotel accommodations with golf course and water recreation park(Phase-II),
 - c. Block-N1: Hotel accommodations with convention park(Phase-III),
 - d. Block-S1: Hotel accommodations with indoor/outdoor sports complex(Phase-III) and
 - e. Block-S2: Hotel accommodations with 36-hole championship golf course(Phase-III).

● Refer to Chapter 3, p.115

FIG. 3 THEMED FACILITY DEVELOPMENT IN THAI MUANG



● Refer to Chapter 3, p.141

24. MARINE CENTER

A nautical circuit system development would have a significant role to play in the Greater Phuket tourism activities. This would make full use of the endowment of Greater Phuket, and incorporate the dispersed tourism assets into the entire Phuket resort.

A primary port with a wide variety of marine facilities is recommended to be developed with special emphasis as a focal project. It is called "Phuket Marine Center". The Phuket Marine Center will be a gateway to accept international cruising tourists and become a symbol of Phuket tourism. This will provide the following services: yacht harbor, tourist boat terminal, workshop of marine boats/ships, marine recreational center, logistic station of oceangoing nautical activities and so on.

The Phuket Marine center is proposed as a primary port consisting of the following facilities;

- a. Yacht harbor for mooring 200 ships and yacht club,
- b. Yacht storage and work shop,
- c. Tourist boats piers including a Hovercraft landing station,
- d. Hotel accommodations with 200 rooms
- e. Marine center building with restaurants, supermarket, shops, festival hall, amusement center, clinic, information office and administration office,
- f. Fuel station and
- g. Parking.

The total area is assumed to be 100 hectares, of which 50 hectares are to be reclaimed. For this reclamation, a governmental coordination with the Harbor Department is indispensable.

25. IMPLEMENTATION AND INSTITUTIONAL ASPECTS

There are four major issues to be tackled regarding institutional arrangements in implementation and organization: 1) public and private coordination in terms of the implementation of and financing of the planned development; 2) structuring of a proper governmental organization effective in managing the planned development; 3) financial arrangements required for the execution of the development; 4) legislative preparation for environmental conservation, land use, construction of building and public facilities to ensure balanced development.

Regarding the first issue, it should be noted that the principal role of private sector in tourism development embraces idea generation, financial risk taking and the management of operation. With a common recognition of public benefits, the governments role is to positively initiate and invite the private sector's participation in selected tourism development projects. Joint ventures, subsidies and incentive schemes should be prepared for this purpose.

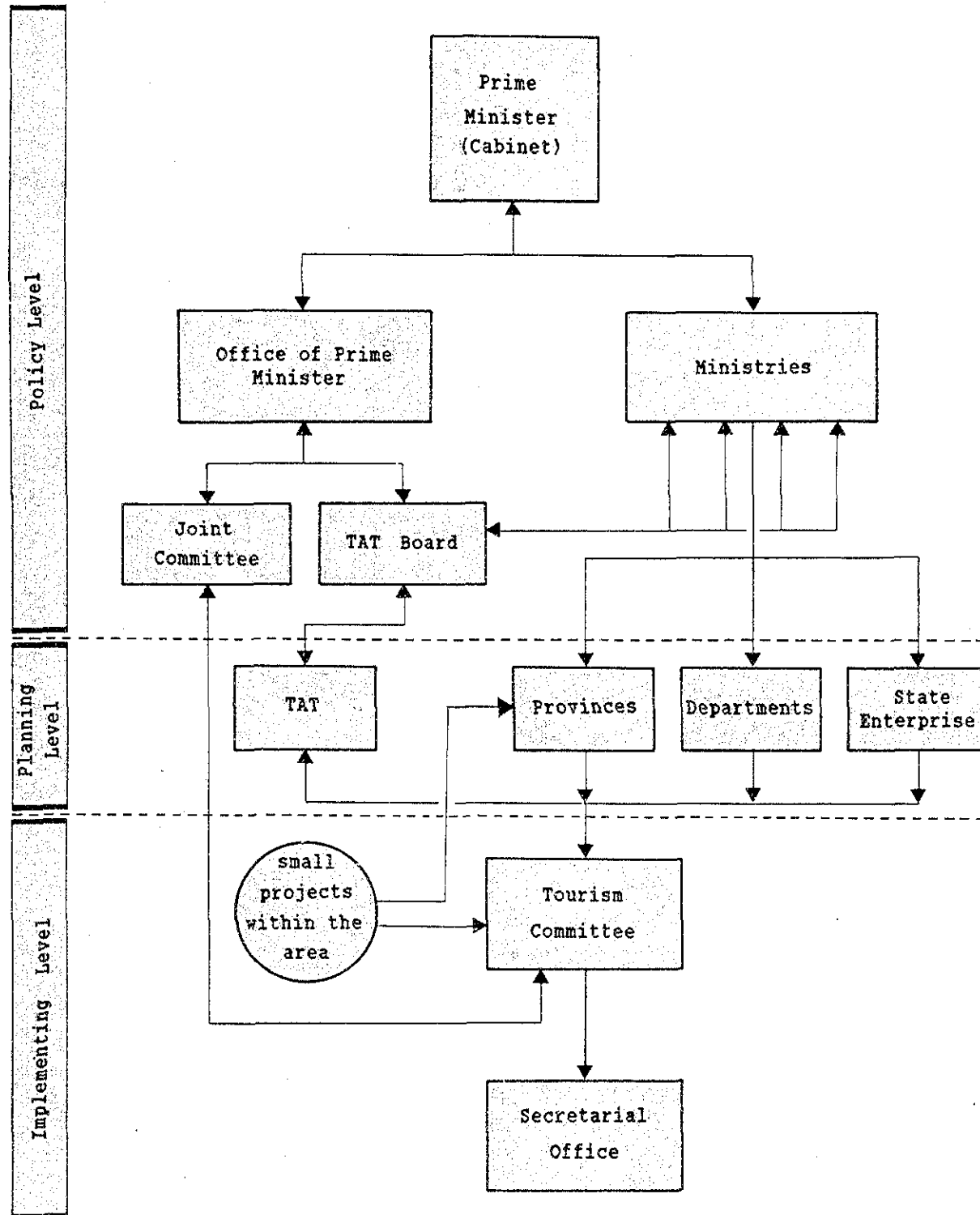
As for the second issue, both vertical and horizontal inter-governmental coordination is needed. Particularly, since tourism development in Greater Phuket involves three provinces, emphasis on inter-provincial coordination will be needed. A well-functioning organization to perform these coordinations should be established, centering on TAT.

As for the third issue, a thoughtful mobilization of available funds is significant. Private banks, the statutory financial institutions, and international financial organizations should be fully involved to raise the necessary capital. Beside this, introduction of a bond system should be explored to utilize the growing national economy.

As for the fourth issue, people's values and social acceptance are a core consideration deliberate decisions are required for these legislative arrangements. Bearing in mind that it would cost very much to take back what is lost.

● Refer to Chapter 3, p.145

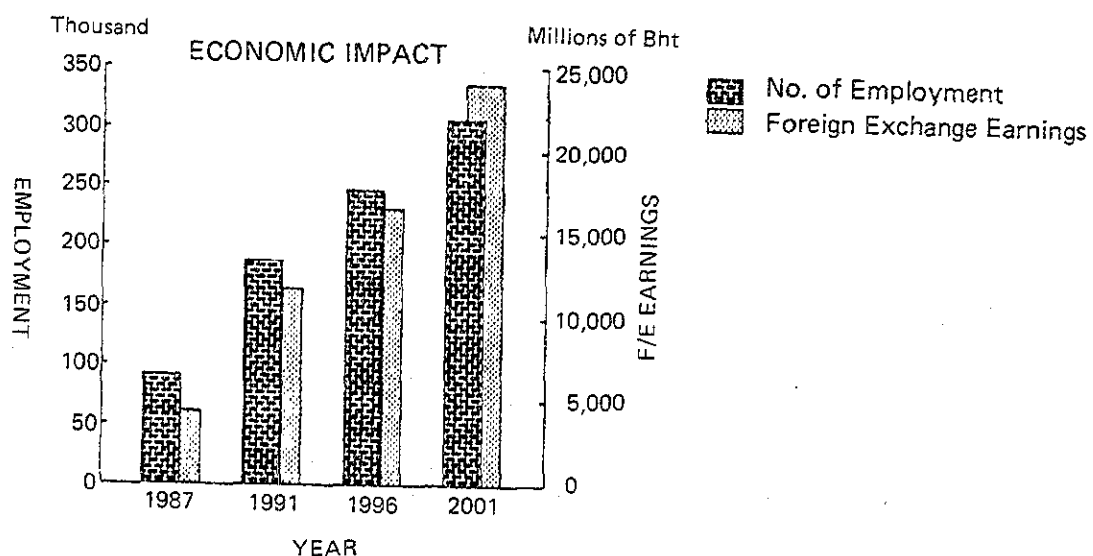
FIG. 4 SUGGESTIONS ON ORGANIZATION



26 ECONOMIC IMPACT

The tourism development projects can contribute to the economy and society of Greater Phuket area as mentioned below:

- 1) Per capita GRP will increase by 26.8 percent in 1991, 55.4 percent in 1996, and 86.6 percent in 2001, compared with that in 1987;
- 2) Employment created by tourism development will double in 1991, 2.7 times in 1996, and 3.3 times in 2001, compared with the 1987 level.
- 3) Net foreign exchange earnings will increase 2.7 times in 1991, 3.7 times in 1996, and 5.5 times in 2001 over the 1987 level.



● Refer to Chapter 4, p.151

27 ECONOMIC FEASIBILITY

An economic feasibility study was conducted for both Greater Phuket projects including all proposed projects and the Phang Nga West and Phuket Marine Center projects. The EIRR shows that tourism development in these areas is quite feasible.

| | EIRR |
|---|-------|
| 1) Greater Phuket Project | 34.6% |
| 2) Phang Nga West Project (Thai Muang and Khok Kloi) | 37.9% |

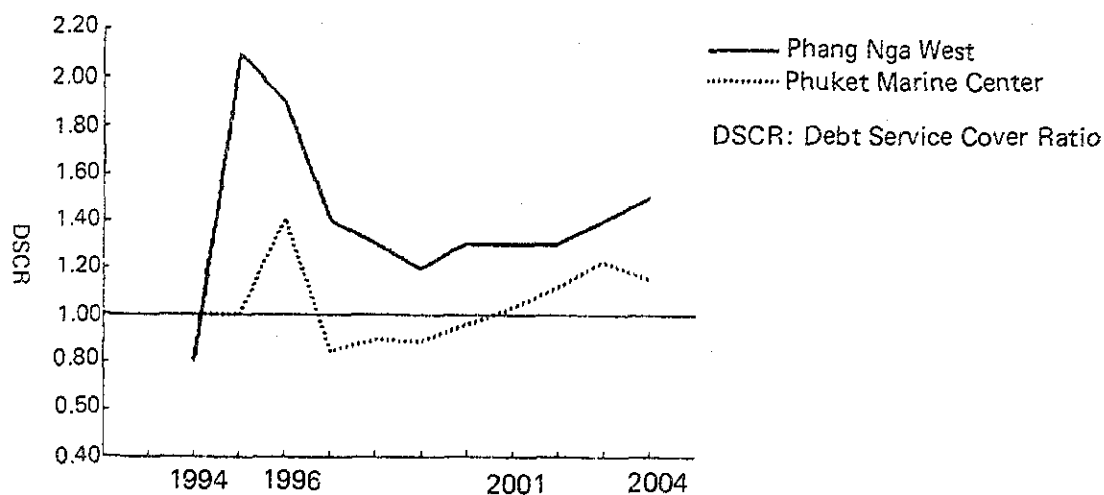
● Refer to Chapter 4, p.156

28 FINANCIAL FEASIBILITY

A financial feasibility study was conducted of the Phang Nga West project and the Phuket Marine Center project. These two projects are feasible in terms of financial profitability.

| | FIRR |
|---------------------------------|-------|
| 1) Phang Nga West Project | 12.9% |
| 2) Phuket Marine Center Project | 13.4% |

As for fund repayment ability, the Phang Nga West project is viable, while the Phuket Marine Center project may have some difficulties in repaying loans. The important factor is equity. If the development body fails to raise equity equal to 30 percent of the total amount of the initial investment, the repayment ability is not stable for either of the two projects.



● Refer to Chapter 4, p.161

**TABLE OF CONTENTS
FOR FINAL REPORT-VOLUME 2 (PART-II STUDY)**

SUMMARY

ABBREVIATIONS

CHAPTER 1 INTRODUCTION

| | |
|-----------------------------------|---|
| 1.1 BACKGROUND OF THE STUDY | 1 |
| 1.2 STUDY OBJECTIVES | 1 |
| 1.3 SCOPE OF THE STUDY | 1 |
| 1.4 STUDY AREA | 1 |

CHAPTER 2 GREATER PHUKET TOURISM DEVELOPMENT

| | |
|--|-----|
| 2.1 TOURISM MARKET AND PROJECTION | 5 |
| 2.2 TOURISM DEVELOPMENT STRATEGIES | 12 |
| 2.3 TOURISM RESOURCES AND SPATIAL DEVELOPMENT FRAMEWORK | |
| 2.3.1 RESOURCES | 15 |
| 2.3.2 DEVELOPMENT IMAGE | 17 |
| 2.3.3 PHYSICAL DEVELOPMENT FRAMEWORK | 23 |
| 2.3.4 LOCAL COMMUNITY DEVELOPMENT | 35 |
| 2.3.5 ENVIRONMENTAL CONSIDERATIONS | 37 |
| 2.4 INFRASTRUCTURE DEVELOPMENT | |
| 2.4.1 AIR TRANSPORT | 43 |
| 2.4.2 LAND TRANSPORT | 48 |
| 2.4.3 SEA NETWORK | 51 |
| 2.4.4 WATER SUPPLY | 53 |
| 2.4.5 SEWAGE | 59 |
| 2.4.6 SOLID WASTE | 61 |
| 2.4.7 OTHER UTILITIES | 64 |
| 2.5 CULTURAL TOURISM DEVELOPMENT | |
| 2.5.1 TOWN TOURISM | 67 |
| 2.5.2 VILLAGE TOURISM | 73 |
| 2.5.3 CULTURAL TOURISM | 77 |
| 2.5.4 NATIONAL PARK | 83 |
| 2.5.5 TOURISM RELATED INDUSTRIES | 87 |
| 2.6 TOURISM PROMOTION | |
| 2.6.1 MARKET CHARACTERISTICS | 91 |
| 2.6.2 TOURISM PROMOTION PROGRAM | 91 |
| 2.7 PLANS AND PROJECTS TO BE IMPLEMENTED | |
| 2.7.1 PROJECT MENU | 93 |
| 2.7.2 NATIONAL AND REGIONAL PROJECTS AND PROGRAMES | 99 |
| 2.7.3 DETAILED COST AND IMPLEMENTATION SCHEDULE | 104 |

CHAPTER 3 STUDY OF SELECTED TOURISM DEVELOPMENT

| | |
|--|-----|
| 3.1 THAI MUANG RESORT DEVELOPMENT PROJECT | |
| 3.1.1 GENERAL CONTEXT | 115 |
| 3.1.2 LAND USE PLAN | 117 |
| 3.1.3 FACILITY PLAN | 125 |
| 3.1.4 TRANSPORTATION PLAN | 127 |
| 3.1.5 UTILITIES PLAN | 127 |
| 3.1.6 ENVIRONMENTAL/LANDSCAPE PLAN | 129 |
| 3.2 SEA NETWORK DEVELOPMENT PROJECT-PHUKET MARINE CENTER | |
| 3.2.1 GENERAL CONTEXT | 141 |
| 3.2.2 PHUKET MARINE CENTER | 141 |
| 3.2.3 FACILITY PLAN | 141 |
| 3.3 INSTITUTIONAL ARRANGEMENTS | |
| 3.3.1 PUBLIC AND PRIVATE COORDINATION | 145 |
| 3.3.2 ORGANIZATION | 146 |

CHAPTER 4 ECONOMIC AND FINANCIAL EVALUATION

| | |
|---|-----|
| 4.1 ECONOMIC IMPACT | |
| 4.1.1 IMPROVEMENT OF REGIONAL INCOME | 151 |
| 4.1.2 EMPLOYMENT CREATION | 153 |
| 4.1.3 INCREASE IN FOREIGN EXCHANGE EARNINGS | 155 |
| 4.2 ECONOMIC ANALYSIS | |
| 4.2.1 GENERAL | 156 |
| 4.2.2 MAJOR ASSUMPTIONS | 156 |
| 4.2.3 RESULTS AND CONCLUSIONS | 159 |
| 4.3 FINANCIAL ANALYSIS | |
| 4.3.1 GENERAL | 161 |
| 4.3.2 MAJOR ASSUMPTIONS | 161 |
| 4.3.3 RESULTS AND CONCLUSIONS | 164 |

| | |
|------------------------------------|----|
| ANNEX 1 : Minutes of Meeting | A1 |
| 2 : Study Staff | A5 |

LIST OF FIGURES

| | | | | | |
|-------------|--|----|-------------|---|-----|
| FIG. 1-1-1 | STUDY AREA..... | 3 | FIG. 3-1-1 | SITE LOCATION MAP..... | 116 |
| FIG. 1-1-2 | MAJOR FIELD SURVEY AREAS IN PART 2 STUDY..... | 3 | FIG. 3-1-2 | ZONING SYSTEM TO ADOPT IN THE PROPOSED DEVELOPMENT AREA..... | 118 |
| FIG. 2-1-1 | FLOW CHART OF HOTEL DISTRIBUTIONS..... | 10 | FIG. 3-1-3 | IMAGE SECTION OF THAI MUANG INTERNATIONAL RESORT COMPLEX..... | 122 |
| FIG. 2-3-1 | TOURISM RESOURCES MAP..... | 16 | FIG. 3-1-4 | LAND USE PLAN..... | 122 |
| FIG. 2-3-2 | DEVELOPMENT IMAGE OF GREATER PHUKET..... | 18 | FIG. 3-1-5 | WATER SUPPLY SYSTEM DEVELOPMENT PLAN..... | 123 |
| FIG. 2-3-3 | DESTINATIONS AND POTENTIALS..... | 22 | FIG. 3-1-6 | SEWAGE TREATMENT SYSTEM DEVELOPMENT PLAN..... | 123 |
| FIG. 2-3-4 | TOURISM DEVELOPMENT ZONING..... | 24 | FIG. 3-1-7 | ELECTRIC DISTRIBUTION FOR THAI MUANG RESORT..... | 123 |
| FIG. 2-3-5 | DISTRIBUTION OF THE PRESENT TOURIST ACCOMMODATION IN PHUKET..... | 24 | FIG. 3-1-8 | ELECTRIC DISTRIBUTION, KHOK KLOI/THAI MUANG..... | 123 |
| FIG. 2-3-6 | TOURISM DEVELOPMENT OF PATONG BEACH..... | 24 | FIG. 3-1-9 | DEVELOPMENT PHASING..... | 124 |
| FIG. 2-3-7 | TIN MINING OF PHUKET PROVINCE..... | 26 | FIG. 3-1-10 | PHASE II AREA IN THE THAI MUANG RESORT..... | 124 |
| FIG. 2-3-8 | GENERAL PLAN OF PHUKET PROVINCE..... | 26 | FIG. 3-1-11 | FACILITY LAYOUT DIAGRAM..... | 126 |
| FIG. 2-3-9 | RUBBER PLANTATION OF PHUKET PROVINCE..... | 26 | FIG. 3-1-12 | THEMED FACILITY DEVELOPMENT IN THAI MUANG..... | 127 |
| FIG. 2-3-10 | FOREST MAP OF PHUKET PROVINCE..... | 26 | FIG. 3-1-13 | ROAD HIERARCHY AND SECTIONS..... | 128 |
| FIG. 2-3-11 | GENERAL LAYOUT PLAN OF NEW DEVELOPMENT ZONE..... | 30 | FIG. 3-1-14 | ROAD NETWORK PLAN..... | 128 |
| FIG. 2-3-12 | PRESENT STRUCTURE OF RESORT DEVELOPMENT IN PHUKET AND PANG NGA..... | 31 | FIG. 3-1-15 | LANDSCAPE DEVELOPMENT IN THAI MUANG..... | 130 |
| FIG. 2-3-13 | FUTURE STRUCTURE OF RESORT DEVELOPMENT IN PHUKET AND PANG NGA..... | 32 | FIG. 3-2-1 | LOCATION MAP..... | 142 |
| FIG. 2-3-14 | LAND USE CLASSIFICATION - LANDSAT IMAGE (PHUKET/PHANG NGA)..... | 33 | FIG. 3-2-2 | FACILITY PLAN..... | 143 |
| FIG. 2-3-15 | LANDSAT IMAGE (KHOK KLOI/THAI MUANG)..... | 34 | FIG. 3-3-1 | STRUCTURE OF THE PRESENT TOURISM DEVELOPMENT MANAGEMENT..... | 146 |
| FIG. 2-3-16 | LOCAL COMMUNITIES AND TOURIST CENTERS..... | 36 | FIG. 3-3-2 | SUGGESTIONS ON ORGANIZATION..... | 148 |
| FIG. 2-3-17 | MAP OF KARON BAY..... | 38 | FIG. 4-1-1 | PER CAPITA GRP..... | 151 |
| FIG. 2-3-18 | CLASSIFICATION OF COASTAL WATER QUALITY IN PHUKET WEST COAST..... | 42 | FIG. 4-2-1 | PROCESS OF THE ECONOMIC ANALYSIS..... | 156 |
| FIG. 2-3-19 | COASTAL PROTECTION..... | 42 | FIG. 4-3-1 | PROCESS OF THE FINANCIAL ANALYSIS..... | 161 |
| FIG. 2-3-20 | LOCATION OF WATER SAMPLING STATION..... | 42 | FIG. 4-3-2 | DEBT SERVICE COVER RATIO (DSCR) TEST..... | 165 |
| FIG. 2-3-21 | PROPOSED PHUKET LINK ROAD SIDE TREATMENT SCHEME..... | 40 | FIG. 4-3-3 | SENSITIVITY TEST..... | 167 |
| FIG. 2-3-22 | EXISTING CONDITION OF THE PHUKET LINK ROAD (UNDER-CONSTRUCTION)..... | 40 | | | |
| FIG. 2-3-23 | ENGINEERING MEASURE FOR PROTECTION FROM COASTAL CORROSION..... | 39 | | | |
| FIG. 2-4-1 | RELATION BASED ON THE ANGLE OF DESCENT OF AIRCRAFT..... | 45 | | | |
| FIG. 2-4-2 | ON-GOING PROJECT OF PHUKET INTERNATIONAL AIRPORT..... | 46 | | | |
| FIG. 2-4-3 | ROAD PROJECTS ON GREATER PHUKET..... | 50 | | | |
| FIG. 2-4-4 | ROAD PROJECTS ON PHUKET PROVINCE..... | 50 | | | |
| FIG. 2-4-5 | SEA TRANSPORT SYSTEM..... | 52 | | | |
| FIG. 2-4-6 | DIVISION OF SERVED AREAS..... | 54 | | | |
| FIG. 2-4-7 | SELECTED POTENTIAL WATER RESOURCES..... | 56 | | | |
| FIG. 2-4-8 | WATER DEMAND AND SUPPLY IN PHUKET - NORTHERN AREA..... | 56 | | | |
| FIG. 2-4-9 | WATER DEMAND AND SUPPLY IN PHUKET - SOUTHERN AREA..... | 56 | | | |
| FIG. 2-4-10 | CONCEPT ON WATER SUPPLY SYSTEM DEVELOPMENT..... | 57 | | | |
| FIG. 2-4-11 | WATER DISTRIBUTION SYSTEM IN PHUKET ISLAND..... | 58 | | | |
| FIG. 2-4-12 | PATONG SEWAGE TREATMENT SYSTEM AND PHASES..... | 60 | | | |
| FIG. 2-4-13 | SEWAGE TREATMENT SERVICE ZONE..... | 60 | | | |
| FIG. 2-4-14 | SEWAGE TREATMENT SYSTEM DEVELOPMENT IN KARON/KATA ZONE..... | 61 | | | |
| FIG. 2-4-15 | SEWAGE TREATMENT SYSTEM DEVELOPMENT IN PHUKET TOWN ZONE..... | 61 | | | |
| FIG. 2-4-16 | SOLID WASTE DUMPING SITES..... | 62 | | | |
| FIG. 2-4-17 | SANITARY LANDFILL METHOD AND STRUCTURE OF FACILITIES..... | 63 | | | |
| FIG. 2-4-18 | TELE-COMMUNICATION ACTIVITIES..... | 65 | | | |
| FIG. 2-5-1 | PHUKET HISTORIC DISTRICT AND ADMINISTRATIVE BOUNDARY..... | 68 | | | |
| FIG. 2-5-2 | PHUKET HISTORIC DISTRICT - EXISTING LAND USE..... | 69 | | | |
| FIG. 2-5-3 | PHUKET HISTORIC DISTRICT - BUILDING PRIORITY..... | 69 | | | |
| FIG. 2-5-4 | PHUKET HISTORIC DISTRICT - PROPOSED PLANNING..... | 71 | | | |
| FIG. 2-5-5 | PHUKET HISTORIC DISTRICT - STATE OF IMPLEMENTATION..... | 71 | | | |
| FIG. 2-5-6 | CONCEPT OF HISTORIC DISTRICT..... | 70 | | | |
| FIG. 2-5-7 | PROPOSED PRIORITY PROJECT - PEDESTRIAN MALL..... | 72 | | | |
| FIG. 2-5-8 | PROPOSED PEDESTRIAN MALL..... | 72 | | | |
| FIG. 2-5-9 | GENERAL FEATURES OF SELECTED 2 TOURISM VILLAGES..... | 73 | | | |
| FIG. 2-5-10 | PANYEE OCEANIC TOURISM VILLAGE..... | 75 | | | |
| FIG. 2-5-11 | PROPOSED ORGANIZATION FOR VILLAGE TOURISM..... | 74 | | | |
| FIG. 2-5-12 | PHARA WOODY TOURISM VILLAGE CONCEPT SCHEME..... | 76 | | | |
| FIG. 2-5-13 | CULTURAL TOURISM RESOURCES AND DEVELOPMENT PHASES..... | 80 | | | |
| FIG. 2-5-14 | PROPOSED ORGANIZATION CHART..... | 82 | | | |
| FIG. 2-5-15 | PROPOSED AREA FOR ANDAMAN RESOURCES CENTER..... | 82 | | | |
| FIG. 2-5-16 | LOCATION MAP OF NATIONAL MARINE PARKS..... | 84 | | | |
| FIG. 2-5-17 | HAT NAI YANG NATIONAL PARK LAND USE PLAN..... | 84 | | | |
| FIG. 2-5-18 | PROPOSED NATIONAL PARK TRAINING CENTER..... | 84 | | | |
| FIG. 2-5-19 | NOPHARAT THARA - MU KO PHI PHI NATIONAL PARKS..... | 86 | | | |
| FIG. 2-5-20 | KHAO LAMPI - HAT THAI MUANG NATIONAL PARKS..... | 86 | | | |
| FIG. 2-7-1 | KEY MAP OF PROJECT MENU..... | 94 | | | |
| FIG. 2-7-2 | IDENTIFIED DEVELOPMENT PROJECTS PHASE I-II-III..... | 95 | | | |
| FIG. 2-7-3 | IDENTIFIED DEVELOPMENT PROJECTS PHASE I(1986-'91)..... | 96 | | | |
| FIG. 2-7-4 | IDENTIFIED DEVELOPMENT PROJECTS PHASE II(1992-'96)..... | 97 | | | |
| FIG. 2-7-5 | IDENTIFIED DEVELOPMENT PROJECTS PHASE III(1992-'01)..... | 98 | | | |

LIST OF TABLES

| | | | | | |
|--------------|--|-----|--------------|--|-----|
| TABLE 2-1-1 | INTERNATIONAL TOURISTS TO THAILAND BY COUNTRY OF RESIDENCE IN 1987..... | 5 | TABLE 3-1-1 | HOTEL ROOMS DISTRIBUTION..... | 117 |
| TABLE 2-1-2 | FOREIGN TOURIST TARGET DURING 6TH NATIONAL SOCIAL AND ECONOMIC DEVELOPMENT PLAN (1987-1991)..... | 6 | TABLE 3-1-2 | NUMBER OF ASSUMED VISITORS IN THAI MUANG/KHOK KLOI ON AN AVERAGE/PEAK DAY..... | 117 |
| TABLE 2-1-3 | PROJECTED HOTEL GUESTS IN PHUKET CLUSTER..... | 7 | TABLE 3-1-3 | LAND USE AREA REQUIREMENT..... | 117 |
| TABLE 2-1-4 | SPECIFIC MARKETING TARGETS FOR DISTRIBUTION OF REQUIRED ROOM..... | 7 | TABLE 3-1-4 | BRIEF DESCRIPTION OF ZONING AND BUILDING REGULATIONS..... | 118 |
| TABLE 2-1-5 | EXISTING AVAILABLE ROOMS IN PHUKET, PANG NGA AND KRABI..... | 8 | TABLE 3-1-5 | SUMMARY OF LAND USE TABLE THAI MUANG RESORT..... | 119 |
| TABLE 2-1-6 | ANTICIPATED HOTEL DISTRIBUTIONS..... | 9 | TABLE 3-1-6 | LAND USE AREA LIST OF THAI MUANG RESORT DEVELOPMENT AREA..... | 119 |
| TABLE 2-1-7 | CONCEPTUAL DEVELOPMENT STRATEGIES FOR EACH DISTRICT..... | 11 | TABLE 3-1-7 | LANDSCAPE DEVELOPMENT SCHEME..... | 131 |
| TABLE 2-3-1 | COMPONENTS OF A COMPREHENSIVE TRANSPORT NETWORK DEVELOPMENT..... | 17 | TABLE 3-1-8 | THAI MUANG INTERNATIONAL RESORT PROJECT DEVELOPMENT PROGRAM..... | 134 |
| TABLE 2-3-2 | SCHEDULED AND PACKAGED TOURS AVAILABLE AT PRESENT..... | 22 | TABLE 3-1-9 | BLOCK-N2 DEVELOPMENT PROGRAM..... | 135 |
| TABLE 2-3-3 | PROPOSED TOUR AND ROUTE..... | 22 | TABLE 3-1-10 | BLOCK-N1 DEVELOPMENT PROGRAM..... | 135 |
| TABLE 2-3-4 | AVAILABILITY OF LAND..... | 27 | TABLE 3-1-11 | BLOCK-O0 DEVELOPMENT PROGRAM..... | 136 |
| TABLE 2-3-5 | AVAILABLE LAND FOR RESORT ACCOMMODATION..... | 27 | TABLE 3-1-12 | BLOCK-S1 DEVELOPMENT PROGRAM..... | 137 |
| TABLE 2-3-6 | HOTEL ROOM DENSITY..... | 28 | TABLE 3-1-13 | BLOCK-S2 DEVELOPMENT PROGRAM..... | 137 |
| TABLE 2-3-7 | NUMBER OF ADDITIONAL HOTEL ROOMS AVAILABLE..... | 29 | TABLE 3-1-14 | BLOCK-XX DEVELOPMENT PROGRAM..... | 138 |
| TABLE 2-3-8 | COASTAL WATER QUALITY STANDARDS FOR KARON BAY, PHUKET..... | 38 | TABLE 3-1-15 | IMPLEMENTATION SCHEDULE OF THAI MUANG AND KHOK KLOI RESORT DEVELOPMENT..... | 139 |
| TABLE 2-3-9 | CLASSIFICATION OF COASTAL WATER QUALITY STANDARD (1)..... | 41 | TABLE 3-2-1 | PROJECT COSTS OF PHUKET MARINE CENTER..... | 142 |
| TABLE 2-3-10 | CLASSIFICATION OF COASTAL WATER QUALITY STANDARD (2)..... | 41 | TABLE 4-1-1 | PER CAPITA GNP..... | 151 |
| TABLE 2-3-11 | DRINKING WATER STANDARD..... | 41 | TABLE 4-1-2 | INDUSTRIAL STRUCTURE OF THE TRI-PROVINCE..... | 152 |
| TABLE 2-3-12 | ARSENIC, COPPER CADMIUM, MANGANESE AND IRON CONTENTS IN PHUKET AND PANG NGA WEST COAST..... | 41 | TABLE 4-1-3 | GROSS DOMESTIC PRODUCTS (WHOLE KINGDOM)..... | 152 |
| TABLE 2-4-1 | ANNUAL PASSENGERS CARRIED AT PHUKET INTERNATIONAL AIRPORT..... | 44 | TABLE 4-1-4 | EFFECT ON REGIONAL INCOME IN GREATER PHUKET..... | 152 |
| TABLE 2-4-2 | INTERNATIONAL PASSENGERS DIRECTLY TO/FROM PHUKET INTERNATIONAL AIRPORT..... | 44 | TABLE 4-1-5 | PER CAPITA GRP IN GREATER PHUKET..... | 153 |
| TABLE 2-4-3 | PASSENGERS CARRIED BY CHARTER FLIGHTS AT THE PHUKET AIRPORT..... | 44 | TABLE 4-1-6 | UNEMPLOYMENT RATIO IN 1985..... | 153 |
| TABLE 2-4-4 | AIR TRANSPORT DEMAND FORECAST..... | 44 | TABLE 4-1-7 | EFFECT ON EMPLOYMENT IN GREATER PHUKET..... | 153 |
| TABLE 2-4-5 | SCHEDULE ON THE IMPROVEMENT OF THE LANDING SYSTEM BY ICAO..... | 45 | TABLE 4-1-8 | EMPLOYMENT PROJECTION..... | 154 |
| TABLE 2-4-6 | NATIONAL AND PROVINCIAL HIGHWAY PROJECTS IN THE 6TH FIVE YEAR PLAN..... | 50 | TABLE 4-1-9 | REVENUE FROM TOURISM AND EXPORTS IN 1987..... | 155 |
| TABLE 2-4-7 | FIXED ROUTE BUS SERVICES FOR INTER-CITY NETWORK..... | 50 | TABLE 4-1-10 | FOREIGN EXCHANGE EARNING EFFECT..... | 155 |
| TABLE 2-4-8 | SERVED POPULATION ESTIMATES..... | 54 | TABLE 4-2-1 | INDIRECT TAXES AND IMPORT DUTIES AND TAXES..... | 158 |
| TABLE 2-4-9 | NUMBER OF HOTEL ROOMS..... | 54 | TABLE 4-2-2 | TOURIST EXPENDITURE..... | 158 |
| TABLE 2-4-10 | UNIT DEMAND OF WATER SUPPLY..... | 54 | TABLE 4-2-3 | PERCENTAGE OF OPERATING COSTS TO THE REVENUE..... | 159 |
| TABLE 2-4-11 | WATER DEMAND OF WHOLE PHUKET..... | 54 | TABLE 4-2-4 | CASH FLOW TABLE-GREATER PHUKET..... | 160 |
| TABLE 2-4-12 | POSSIBLE DAM SITES IN PHUKET ISLAND..... | 56 | TABLE 4-2-5 | CHANGES IN ECONOMIC PROFITABILITY..... | 159 |
| TABLE 2-4-13 | BALANCE BETWEEN WATER DEMAND AND TREATED WATER SUPPLY IN PHUKET..... | 56 | TABLE 4-2-6 | CHANGE IN ECONOMIC PROFITABILITY..... | 160 |
| TABLE 2-4-14 | ESTIMATE OF WASTE GENERATION..... | 63 | TABLE 4-2-7 | CHANGE IN ECONOMIC PROFITABILITY..... | 160 |
| TABLE 2-4-15 | CURRENT SITUATION OF DOMESTIC TELE-COMMUNICATION FACILITIES IN GREATER PHUKET..... | 65 | TABLE 4-3-1 | COMPARISON OF TYPE OF ORGANIZATION..... | 162 |
| TABLE 2-4-16 | TELE-COMMUNICATION ACTIVITIES..... | 65 | TABLE 4-3-2 | TERMS OF LOANS..... | 163 |
| TABLE 2-4-17 | DEMAND FOR TELE-COMMUNICATION LINES IN PHUKET..... | 65 | TABLE 4-3-3 | CHANGES IN PROFITABILITY..... | 164 |
| TABLE 2-5-1 | MANAGEMENT PLANS OF NATIONAL PARKS..... | 85 | TABLE 4-3-4 | CASH FLOW TABLE-PANG NGA WEST (BASE CASE)..... | 165 |
| TABLE 2-5-2 | DISTRIBUTION OF TOURIST CONSUMPTION EXPENDITURE 1984-1986..... | 88 | TABLE 4-3-5 | PROFIT AND LOSS STATEMENT-PANG NGA WEST (BASE CASE)..... | 166 |
| TABLE 2-5-3 | NUMBER OF RESTAURANTS, EATING AND DRINKING PLACES BY SIZE OF PERSONS ENGAGED 1984..... | 88 | TABLE 4-3-6 | CHANGES IN FINANCIAL POSITION - PHANG NGA WEST (BASE CASE)..... | 166 |
| TABLE 2-5-4 | NUMBER OF BUSINESS ESTABLISHMENTS BY SIZE OF PERSONS ENGAGED 1984..... | 88 | TABLE 4-3-7 | CHANGES IN FIRR..... | 167 |
| TABLE 2-7-1 | SUMMARY OF PROJECT MENU PHASE I, II, III..... | 93 | TABLE 4-3-8 | CASH FLOW TABLE-PHUKET MARINE CENTER (BASE CASE)..... | 168 |
| TABLE 2-7-2 | PROJECT LIST-PHUKET SOUTH-BEACH..... | 100 | TABLE 4-3-9 | PROFIT AND LOSS STATEMENT-PHUKET MARINE CENTER (BASE CASE)..... | 168 |
| TABLE 2-7-3 | PROJECT LIST-PHUKET SOUTH-CHALONG..... | 100 | TABLE 4-3-10 | CHANGES IN FINANCIAL POSITION-PHUKET MARINE CENTER (BASE CASE)..... | 169 |
| TABLE 2-7-4 | PROJECT LIST-PHUKET SOUTH-TOWN..... | 100 | | | |
| TABLE 2-7-5 | PROJECT LIST-OTHERS..... | 100 | | | |
| TABLE 2-7-6 | PROJECT LIST-PHUKET NORTH-BANG TAO..... | 101 | | | |
| TABLE 2-7-7 | PROJECT LIST-PHUKET NORTH-HAT NAI YANG..... | 101 | | | |
| TABLE 2-7-8 | PROJECT LIST-PHUKET NORTH-THA CHAT CHAI..... | 101 | | | |
| TABLE 2-7-9 | PROJECT LIST-PHUKET NORTH-OTHERS..... | 101 | | | |
| TABLE 2-7-10 | PROJECT LIST-PHANG NGA WEST-KHOK KLOI..... | 101 | | | |
| TABLE 2-7-11 | PROJECT LIST-PHANG NGA WEST-THAI MUANG..... | 102 | | | |
| TABLE 2-7-12 | PROJECT LIST-PHANG NGA BAY..... | 102 | | | |
| TABLE 2-7-13 | PROJECT LIST-KRABI..... | 103 | | | |
| TABLE 2-7-14 | PROJECT LIST-PHUKET WHOLE AREA NATIONAL/REGIONAL LEVEL..... | 103 | | | |
| TABLE 2-7-15 | PROJECT LIST-KRABI WHOLE AREA (NATIONAL/REGIONAL LEVEL)..... | 103 | | | |
| TABLE 2-7-16 | IMPLEMENTATION SCHEDULE AND COSTS-PHUKET AIRPORT..... | 105 | | | |
| TABLE 2-7-17 | IMPLEMENTATION SCHEDULE AND COSTS-KRABI AIRPORT..... | 105 | | | |
| TABLE 2-7-18 | COST ESTIMATION FOR PHUKET WATER SUPPLY..... | 107 | | | |
| TABLE 2-7-19 | IMPLEMENTATION SCHEDULE AND COSTS-PHUKET WATER SUPPLY..... | 107 | | | |
| TABLE 2-7-20 | RECOMMENDED HIGHWAYS DEVELOPMENT IN GREATER PHUKET..... | 108 | | | |
| TABLE 2-7-21 | COST ESTIMATION OF SECONDARY PORT, 3 LOCATIONS..... | 108 | | | |
| TABLE 2-7-22 | COST ESTIMATION OF STOP-OVER PORT, 15 LOCATIONS..... | 108 | | | |
| TABLE 2-7-23 | PROJECT COST ESTIMATION..... | 109 | | | |
| TABLE 2-7-24 | PROJECT COST ESTIMATION FOR ELECTRICAL WORKS..... | 109 | | | |
| TABLE 2-7-25 | COST OF PHUKET TOWN TOURISM DEVELOPMENT PROJECT (PHASE I)..... | 110 | | | |
| TABLE 2-7-26 | COST ESTIMATION OF PANYEE OCEANIC TOURISM VILLAGE-PANG NGA BAY..... | 110 | | | |
| TABLE 2-7-27 | COST ESTIMATION OF PHARA WOODY TOURISM VILLAGE..... | 110 | | | |
| TABLE 2-7-28 | COST ESTIMATION OF PHUKET, PHK/N/0-311, 312, 313 AND 321..... | 111 | | | |
| TABLE 2-7-29 | COST ESTIMATION OF PHANG NGA, PNG/B-311, 321, 322 AND 323..... | 111 | | | |
| TABLE 2-7-30 | COST ESTIMATION OF KRABI, KR8-3212, 322 AND 323..... | 112 | | | |
| TABLE 2-7-31 | COST ESTIMATION OF NATIONAL PARK IMPROVEMENT PROJECTS..... | 113 | | | |

ABBREVIATIONS

| | |
|-------|--|
| AAT | Airport Authority of Thailand |
| BOI | Board of Investment |
| CAT | Communications Authority of Thailand |
| CIPO | Center for Integrated Plan of Operation |
| DMR | Department of Mineral Resources |
| DOA | Department of Aviation |
| DOF | Department of Fisheries |
| DOH | Department of Highways |
| DOLA | Department of Land Acquisition |
| DTCP | Department of Town and Country Planning |
| DTEC | Department of Technical and Economic Cooperation |
| EGAT | Electricity Generating Authority of Thailand |
| ESCAP | United Nations Economic and Social Commission for Asia and the Pacific |
| ETA | Expressway and Rapid Transit Authority of Thailand |
| FAD | The Fine Arts Department |
| HD | Harbor Department |
| IEAT | Industrial Estate Authority of Thailand |
| JICA | Japan International Cooperation Agency |
| JNTO | Japan National Tourism Organization |
| LDD | Land Development Department |
| LG | Local Government |
| LTD | Land Transport Department |
| MCOT | The Mass Communication Organization of Thailand |
| MOAC | Ministry of Agriculture and Cooperatives |
| MOTC | Ministry of Transport and Communications |
| MOE | Ministry of Education |
| MOF | Ministry of Finance |
| MOI | Ministry of Industry |
| MOIN | Ministry of Interior |
| MP | Municipality |
| MUN | Municipality |
| NEB | National Environmental Board |
| NESDB | National Economic and Social Development Board |
| NHA | National Housing Authority |
| NSO | National Statistical Office |
| PAT | Port Authority of Thailand |
| PEA | Provincial Electricity Authority |
| PWA | Provincial Waterworks Authority |
| PWD | Public Works Department |
| RFD | Royal Forestry Department |
| RID | Royal Irrigation Department |
| SD | Sanitary District |
| SRT | State Railways of Thailand |
| TAI | Thai Airways International Ltd. |
| TAC | Thai Airways Co., Ltd. |
| TAT | Tourism Authority of Thailand |
| TCL | The Transport Company Ltd. |
| TDRI | Thailand Development Research Institute |
| TISTR | Thailand Institute of Scientific and Technological Research |
| TOT | Telephone Organization of Thailand |

Exchange Rate (As of April 1988) Adopted in This Report:

- Japanese Yen : US\$1=Y 124.93
- US Dollar : US\$1=B 24.146

CHAPTER 1 INTRODUCTION

- 1.1 BACKGROUND OF THE STUDY
- 1.2 STUDY OBJECTIVES
- 1.3 SCOPE OF THE STUDY
- 1.4 STUDY AREA

1.1 STUDY OBJECTIVES

- 1) The primary objective of the Part II study is to identify and assess the potential of tourist assets in the Phuket cluster, taking into consideration natural, cultural and historic conservation, and to formulate a tourism development plan for the selected area along with implementation programs and recommendations.
- 2) To assist the national and provincial governments in formulating systems of regional integrated development in conjunction with the above mentioned tourism development.
- 3) To illustrate possible tourism facilities included with the pre-feasibility study and the implementation program.

1.2 SCOPE OF THE STUDY

The followings are the major items to be studied in Part II.

- a. Formulation of policies and strategies for tourism development,
- b. Examination of the present states of the infrastructure,
- c. Assessment of tourism resources and facilities,
- d. Demand forecasting and market research,
- e. Assessment of the tourism promotion (system),
- f. Identification of current constraints and anticipated problems,
- g. Establishment of alternative conceptual tourism development plans including;
 - land use plan;
 - infrastructure improvement plan;
 - tourism facilities plan;
 - tourism promotion systems (Facilities); and,
 - preliminary cost estimates
- h. Evaluation of conceptual tourism development plans, and
- i. Preparation of an implementation program with recommendations.

Part II Study consists of:

1) STEP I STUDY - WORK IN THAILAND:

To conduct a second field survey and analyze the constraints and opportunities on tourism development for the selected potential areas in Study Part I, and to establish alternative conceptual tourism development plans of the selected potential area.

2) STEP II STUDY - WORK IN JAPAN:

To select an optimum plan and prepare a project implementation program based on the study of the financial, physical, etc., aspects for resort development.

1.3 STUDY AREA

Part II of the Study covers the tourism potential in Phuket, Phang Nga and Krabi which are considered significant as future tourism areas. This area is called "Greater Phuket".

1.4 THE STUDY REPORTS

In accordance with the technical cooperation for the Potential Tourism Area Development Planning Study for Southern Region between JICA and TAT, the JICA study team (hereinafter referred to as The Study Team) commenced the required work on 17th November, 1987.

1) INCEPTION REPORT

Inception Report was submitted to TAT on 20 November, 1987. Presentation and explanation of Inception Report was made by the Study Team at the meeting with TAT staff held from 20th to 22nd November, 1987 which was attended by the Deputy Governor of TAT and counter parts staff concerned with the project.

2) INTERIM REPORT I

The Study Team submitted 30 copies of the Interim Report I in English comprising Summary-Key Issues, Main Report, and Appendices, to TAT on March 18, 1988, prior to having the Steering Committee meeting.

The Steering Committee chaired by the Governor of TAT, Mr. Dharmnoon Prachuabmoh was held at TAT on March 23, 1988 with attendance of the Steering Committee members, the JICA Advisory Committee members, the Study Team members and the relevant members.

The overall direction of the Interim Report I, which is in conformity with the Scope of Work, was accepted by the Steering Committee of the Thai Government. The Guidelines and the various recommendations for tourism development in Southern Region as a whole presented by the Study Team were principally accepted with several comments and suggestions by the Steering Committee as well.

It was agreed that the Phuket cluster was assessed to be the priority area where the government strategic intervention is required, and that the Phuket cluster, as an international tourism center/gateway of Southern Region, is to be taken up for further detailed studies in Part II of the Study, based on the concept of tourism development explained by the Study Team.

3) INTERIM REPORT II

The Study Team submitted 30 copies of the Interim Report II in English comprised of Summary Key Issues, Main Report, Graphic Issue and Appendices to TAT on September 7, 1988.

The Steering Committee meeting chaired by the Governor of TAT, Mr. Dharmnoon Prachuabmoh was held at TAT on September 12, 1988 with attendance of the Steering Committee members, the JICA Advisory Committee members, officials from the relevant agencies and the Study Team.

The overall direction explored in the Interim Report II which is in conformity with the Scope of Work, was accepted by the Steering Committee of the Thai Government.

4) DRAFT FINAL REPORT

The Study Team submitted 30 copies of the Draft Final Report to TAT on 1988, consists of the following three volumes:

VOLUME I : Southern Thailand
VOLUME II : Greater Phuket
VOLUME III : Appendices

The Steering Committee Meeting chaired by the Governor of TAT, Mr. Dharmnoon Prachuabmoh was held at TAT on December 15, 1988 with Attendance of the Steering Committee members, the JICA Advisory Committee members, officials from the relevant agencies and the Study Team. The overall direction explored in the Draft Final Report which is conformity with the Scope of Work, was accepted by the Steering Committee of the Thai Government.

Under the acceptance of the Steering Committee, TAT held a seminar on December 16, 1988 at President Melidien Hotel with attendance of the Steering Committee members, the JICA Advisory members, officials from the relevant agencies, the Study Team and representative Private sector concerned.

5) FINAL REPORT

The Final Report is compiled to reflect the comments of the Steering Committee and consists of the following four volumes.

VOLUME IV : Summary
VOLUME I : Southern Thailand
VOLUME II : Greater Phuket/Phuket, Phang Nga, Krabi
VOLUME III : Appendices

- a. The Volume I is updated of the Draft Final Report Volume I, and contains the results of the macro-scale study on tourism development strategies in the whole southern region. It also shows the Guidelines for each province in Phuket, Surat Thani and Songkhla/Hat Yai clusters from the viewpoint of tourism development.
- b. The Volume II is updated of the Draft Final Report Volume II and contains conclusions and recommendations of formulating tourism development for each sector in the Greater Phuket area after in-depth study of the Phuket cluster.
- c. The Study has dealt with an airport, water and environment as critical issues for the Greater Phuket area. Apart from local roads, a road network also should be developed under a national project shown Chapter 2. In this respect, the implementation program is separated projects from general tourism-related development projects.
- d. For the Thai Muang Resort Development Project and the Phuket Marine Center Project are selected for pre-feasibility study, detailed plans and programs are proposed with an financial analysis, shown in Chapter 3 and 4. The implementation of management organizations for the projects are shown in the Chapter 3. After all, however, it is necessary for the Thai Government to conduct detail study on practical organizations and management.
- e. Economic evaluation of project menu which was carried out comprehensively with economic assessment is shown in the Chapter 4.
- f. The Volume III provides the reference materials and data to justify the Volume I and II. This volume consists of two chapters. The Chapter 1 contains supporting materials for the Volume I and the Chapter 2 includes supporting materials for the Volume II.

FIG. 1-1-1 STUDY AREA

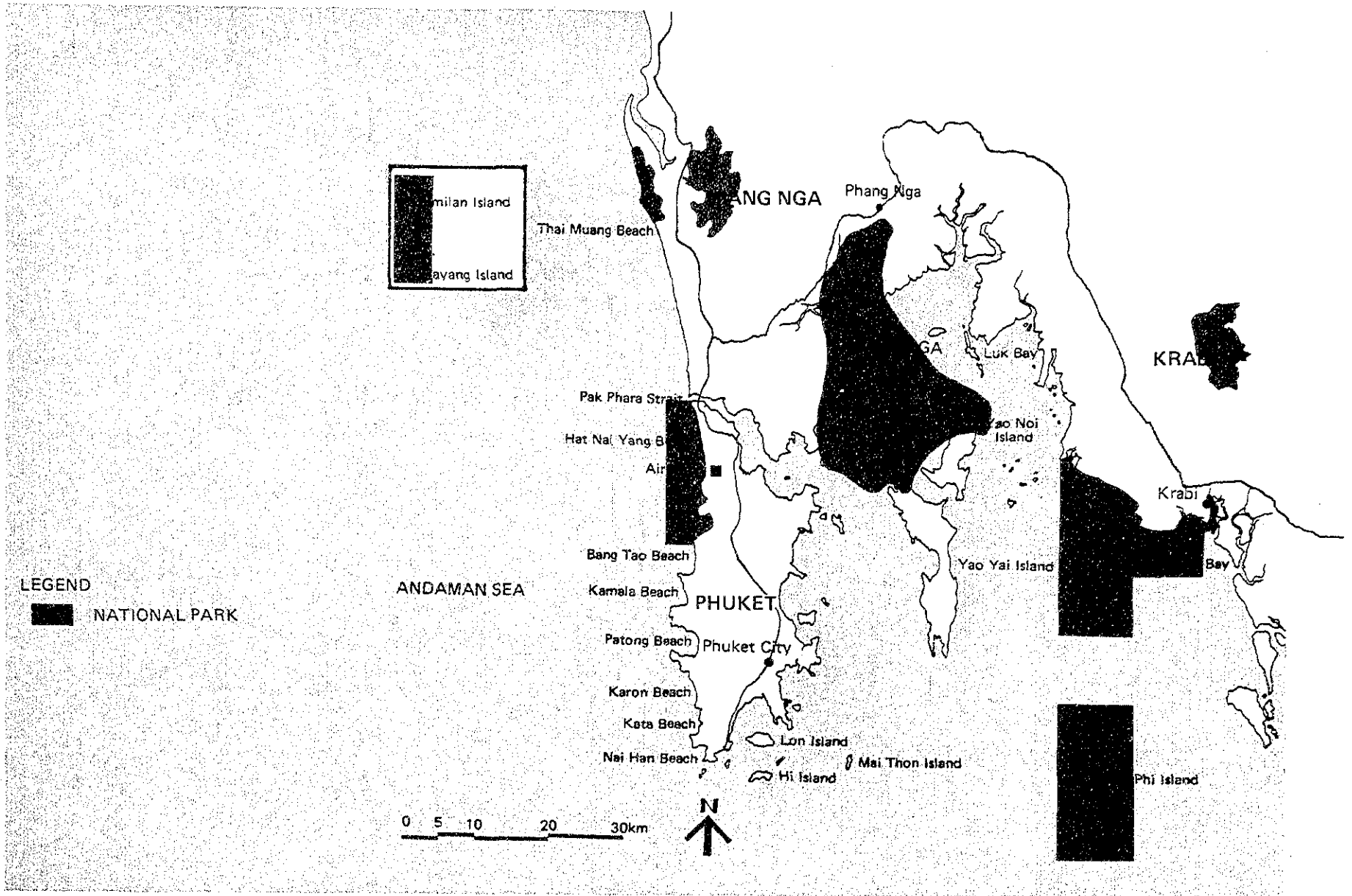


FIG 1-1-2 MAJOR FIELD SURVEY AREAS IN PART 2 STUDY

