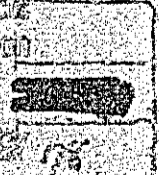


REPUBLIC OF INDONESIA
NORTH AND WEST SUMATRA
TOURISM STUDY
EXECUTIVE SUMMARY
FINAL REPORT April 1978



Introduction
Planning Concept and Principles
Guidelines for Execution
Proposed Projects
Plan of Urgent Action

JAPAN INTERNATIONAL COOPERATION AGENCY



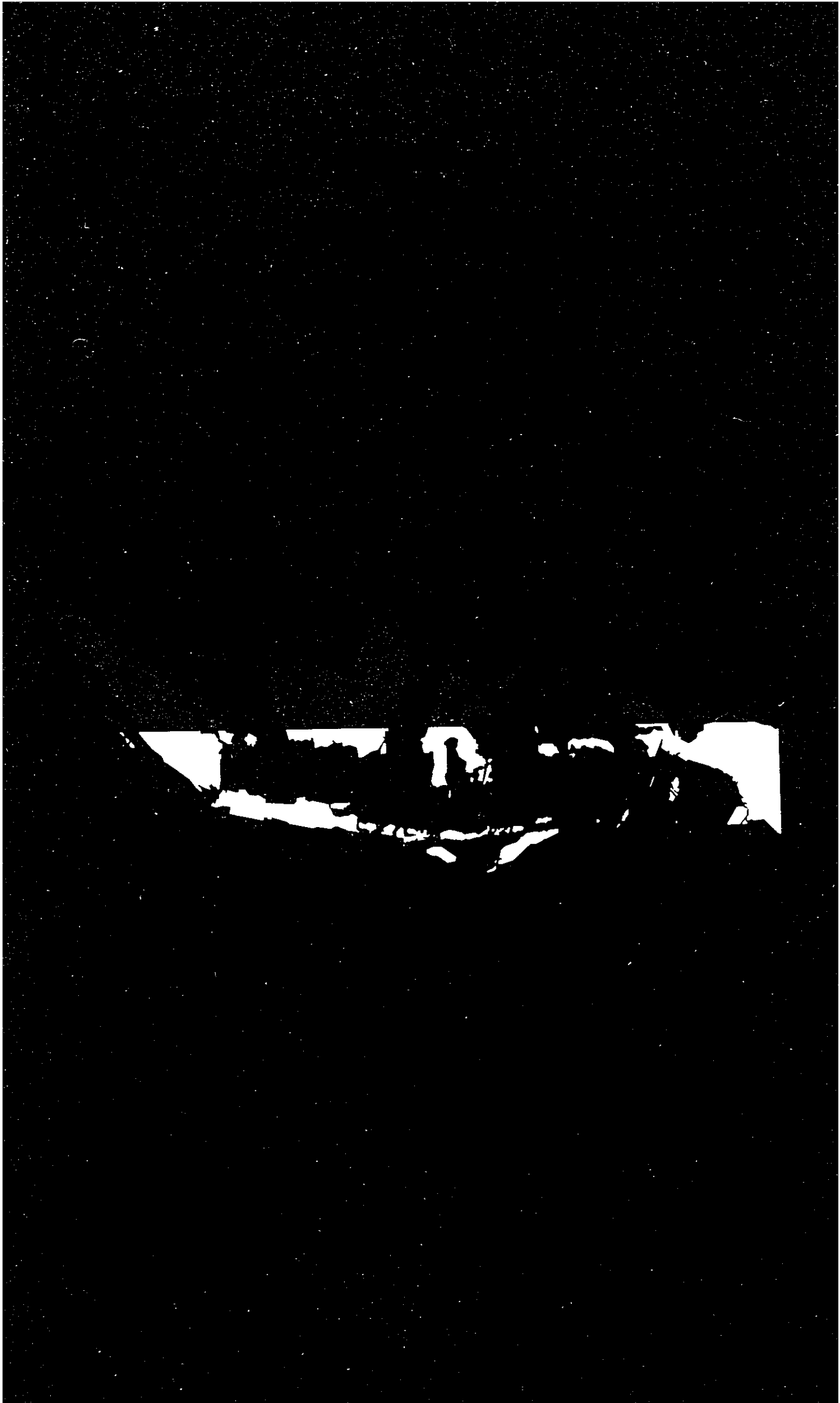
JICA LIBRARY



1055663171

國際協力事業団	
53.5.18	2/00
	1995
	S.D.C.

国際協力事業団	
受入 月日 '84. 5. 22	108
	75.9
登録No. 06831	SDC



Preface

At the request of the Government of the Republic of Indonesia, the Government of Japan decided to conduct a study on master plan for the Tourism Development in the North and West Sumatra provinces, and the study was carried out by the Japan International Cooperation Agency (JICA).

In view of the importance of the project, JICA dispatched a preliminary study team in December 1976 to ascertain the introduction of the authorities concerned of Indonesia. Thereafter a field survey was conducted from May to July 1977, an interim report was submitted and explained in November 1977, supplementary field survey of ecological aspect was conducted, studies were made in Japan, the JICA study team held discussions with Indonesian authorities concerned on the draft final report which had been submitted in February 1978. The report has now been finalized for submission to the Government of Indonesia.

I hope that the present study will serve to expedite the implementation of the project and contribute to strengthening friendly relations between Indonesia and Japan.

I would like to take this opportunity to express my heartfelt appreciation to all the people who participated in this study and to all the Indonesian authorities concerned for their cooperation.

March 1978



Shinsaku HOGEN
President
Japan International Cooperation Agency

Contents

Introduction	
Terminology	1
JICA Study	2
Team Organization	3
Planning Concept and Principles	
Definition of the Plan	5
Significance of Tourism Master Plan	7
Planning Goals and Methods	11
Strategies and Tactics for Development	15
Establishment of Development Targets	17
Guidelines for Execution	
Tourism Promotion	26
Creation of Tourism Region	28
Construction of Tourist Towns	32
Improvement of Transportation Network for Tourists	35
Natural and Cultural Conservation	37
Construction of Tourist Facilities	39
Institutional Arrangements	42
Implications for Development Feasibility	43
Proposed Projects	
Project Profile: Karo Plateau	47
Project Profile: Lake Toba Area	49
Project Profile: Minang Highlands	51
Project Profile: Miscellaneous	53
Total Project Costs	53
Plan of Urgent Action	
Immediate Undertakings	55
Institutional Requirements	56
Further Studies for Priority Projects	57

Acknowledgements

It is my great pleasure to present this final report on the master plan study for the tourism development of the provinces of North and West Sumatra.

The study was carried out from May 1977 through March 1978 by a team of planning specialists and advisors on behalf of the Japan International Cooperation Agency (JICA).

During my recent visit to the area I was fascinated by the view of lakes and mountains surrounded by clean air and sunshine flowing through blue-white curtains of mountain mist, all of which conjured up a mysterious highland dreamland to my mind.

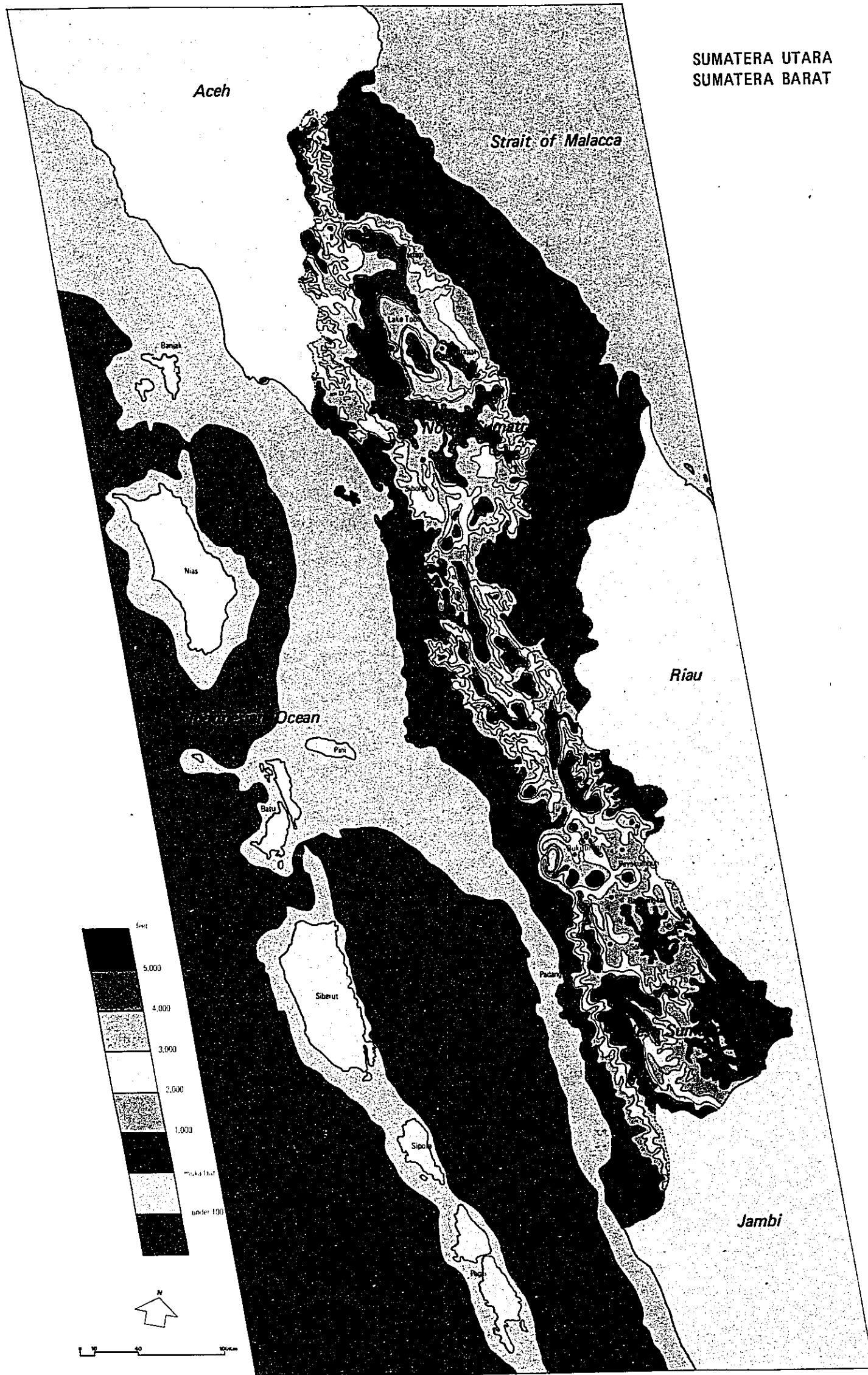
I sincerely hope that such in "Shangri-La" enchantment will not be detracted from in the course of implementation of the tourism development program set forth in this report, the aim of which is the achievement of harmony between development and conservation.

I should like to take this opportunity to commend the fine teamwork displayed by the study team and to thank the members of the Japanese Work Supervision Committee for devoting so much of their valuable time to the study. My thanks go in addition to all those at JICA who have participated in this endeavor and to Mr. Tirtosudiro, Mr. Prajogo, the other members of the Indonesian Steering Committee and the members of the Indonesian counterparts team from the Directorate General of Tourism and the Tourism Offices of both provinces.

Finally, I should like to express the sincere hope that this report will serve as a guideline for future tourism development throughout Indonesia as well as contribute tangibly to the overall regional development of North and West Sumatra.



Isamu IGARASHI
Chairman
Japanese Work Supervision Committee



JICA Study

(1) Scope of the Study

The purpose of the current study is to establish a basis for strategic tourism development in the North and West Sumatra provinces, taking into consideration the conservation of the natural, social and cultural environment and the improvement of basic infrastructure. The output is a fifteen-year master plan for tourism development extending up to 1995 and covering such selected areas as the Karo Plateau area, the Lake Toba area, and the Minang Highlands area.

(2) Role of the Present Study

Normally, an integrated regional development plan providing policy and strategies for various sections is a necessary prerequisite to sectorial planning in any sector, including the tourism sector.

This study on the tourism development of North and West Sumatra, however, has been carried out in the absence of such an integrated regional development plan to serve as a larger framework.

Accordingly, the study has had to deal with various matters of policy and strategy pertaining to the tourism sector and other sectors as well. Normally such policy and strategy would be givens, and the study would concern itself chiefly with proposing tourism development projects which fit in with present policy on a higher level.

For this reason, the proposals that are set forth in this report should be considered as nominal requirements from the tourism sector to be considered on the integrated regional development planning level. In other words, the present study has resulted in what is to a large extent an administrative master plan.

(3) Course of the Study

A field investigation and data collection by the study team were undertaken during the period from May 16 to July 10, 1977, in the provinces and in Jakarta on the basis of the agreed Terms of Reference. The data and information obtained in the field survey were subsequently fully studied and analysed. The study took into full consideration the results of two previous surveys, one in 1975 by the Japan Transportation Consultants Association and another in 1976 by the Contract Mission of the Japanese Government.

An Interim Report was prepared and submitted at the beginning of November 1977 for the purpose of presenting a basic framework of the master plan and of obtaining comments on it from the Ad-hoc Steering Committee consisting of representatives of the various Indonesian government offices concerned. At the same time, a supplemental field survey was carried out by the study team.

Then a Draft Final Report was prepared on the basis of the comments made in interim discussions and on the results of the supplemental survey and was submitted at the end of February 1978 to be thoroughly reviewed once again by the same committee. The conclusions reached in this second review with respect to the master plan and its components have been fully incorporated in this Final Report for submission to DGT at the end of March 1978.

Japanese Work Supervision Committee

Chairman:	Isamu Igarashi	Executive Director, Japan National Railways Mutual Aid Association
Member:	Kohei Kitada Takeshi Kawashima Akira Otake Shigeki Yamamoto Toshiaki Kurihara Shigeki Wada Kunio Kikuchi	Tourism Department of Ministry of Transport Tourism Department of Ministry of Transport International Section of Ministry of Transport Technical Survey Section of Ministry of Construction Tourism Department of Ministry of Transport Nature Protection Bureau of Environment Agency Nature Protection Bureau of Environment Agency
Liaison and secretarial work handled by:		
	Shoji Shimbo Tomio Ohnuki	Social Development Corporation of JICA Social Development Corporation of JICA

Indonesian Steering Committee

Chairman:	A. Tirtosudiro	Director General of DGT, Department of Transport, Communications and Tourism
Vice Chairman:	N. Ganjar	Secretary Director General of DGT
Secretary:	Sukarsono	Chief of Implementation of Research and Development of DGT
Members:	H. Hartono B. Sinurat J. Muslihum A. Mappisameng Marjyatno S. Kodijat U. Candrasasmita E. H. Daao Pardede Widianto B. Girsang N. Sidin	Director of Tourism Facilities and Services Development of DGT Director of Research and Development of DGT Chief of Special Tourism of DGT Chief of Planning of DGT Chief of Marketing Materials of DGT Department of Public Works Department of Education and Culture Department of Transport, Communications and Tourism Department of Interior BAPPENAS Chief of DIPARDA in North Sumatra Chairman of BAPPARDA in West Sumatra
Ex-Chairman:	M. J. Prajogo	Ex-Director General of DGT
Ex-Member:	K. Tarigan	Ex-Chief of Tourism Office in North Sumatra

Study Team

Project Management:	Takao Ichimiya Sohiko Yamada	Project Management Tourism Planning
Economic Studies:	Yoshiaki Kamiya Takayoshi Umeshita Hisashi Yamaguchi Sachihiko Kobori Hiroyuki Fujiwara Yasuhiro Minami Terumi Takahashi Takashi Fujii	Development Economics Financial Economics Regional Economics Project Economics Institution Planning Market Analysis Social Planning Supervision of Economic Studies
Physical Studies:	Takashi Kikkawa Daitaro Hashimoto Akio Morikawa Hiroshi Matsuo Shinji Yamada Kanao Itoh Yasutaka Nagai Takero Ogawa Kazutaka Nakano	Physical Planning Infrastructural Planning Transportation Planning Land-use Planning Facility Planning Physical Frame Planning Town Planning Landscape Planning Ecological Analysis

Planning Concept and Principles

Definition of the Plan

Significance of Tourism Master Plan

Planning Goals and Methods

Strategies and Tactics for Development

Establishment of Development Targets

In line with the aims of this study, the present chapter deals with a broad spectrum of aspects of the plan ranging from the basic ideas on which it is based to specific development goals. Included are (1) the setting of the scope and goals of the plan, (2) confirmation of the significance and role of the present tourism development program in relation to national and regional planning, (3) identification of the major tasks involved in the plan and indication of the possible directions of solution, (4) indication of strategy and tactics for attainment of the development goals, and (5) determination of phased development goals for the next fifteen years on the basis of tourist demand projections, the economic and physical planning frames, etc.

Definition of the Plan

The purpose of this plan is to establish a basis for the strategic tourism development in the North and West Sumatra Provinces on a long-term basis. The period is up to 1995, which covers the remainder of current 2nd Five-year Plan and the periods of three future five-year plans. The plan not only concerns the tourism industry but is a part of regional development planning, and therefore ranges over many other related sectors as well.

The principles of tourism development in the North and West Sumatra Provinces argued in this study are as follows:

(1) Tourism in the two provinces will be developed in line with national tourism policy so as to contribute to national tourism activity as much as possible. National tourism policy, as explained to the team, is, briefly:

- To enhance foreign exchange earnings,
- To create employment and achieve a better distribution of income,
- To develop tourism facilities and related infrastructure, provided that such development have to be a part of national development,
- To introduce the people, land, and culture of Indonesia to the world and those of each locality to the others,
- To contribute to national unity.

(2) The framework of planning of tourism development in the two provinces will be so designed as to have a maximum overall effect of linking the two provinces. Such an effect could not be expected if the tourism development of each province were to be planned separately.

(3) Tourism resources and potentials in the two provinces will be fully developed to attract as many tourists as possible and to prolong their duration of stay as much as possible. Expenditures of tourists will be increased by the combined effect of increased numbers and prolonged stays.

(4) Tourism facilities as well as infrastructure relating to other sectors will be developed to meet regional requirements. Thus tourism development will become an indispensable and integral part of the regional development program in the two provinces.

(5) However, nature will have to be conserved, and the environment must not be jeopardized. These matters have to be given fully consideration in the plan.

(6) Also, the social and cultural fabric of the two provinces must be enhanced by tourism development. This, too, have to be fully considered in the plan.

(7) For the implementation of such an integrated development program, an adequate implementation program and phasing geared to institutional systems and organizations are required.

(8) The possible magnitude of development investment will have to be examined in the light of overall financial autonomy as it relates to the financial positions of the central and local governments. It will be circumscribed by the need to balance revenues and expenditures. In examination and appraisal of the plan attention will be given to this point.

Planning Procedure

The following diagram shows in outline from the sixteen steps that have been followed in the study. The products of the steps are contained in separate chapters in the summary edition and sectorial planning volume of the Final Reprt.

Planning Procedure	Contents of Report														
	Executive Summary	Planning Concept and Principles	Guidelines for Execution	Proposed Projects	Plan of Urgent Action	Technical Study Papers	Tourist Demand Analysis	Tourist Distribution Plan	Tourism Resources and Tour Program	Park Conservation Plans	Tourist Towns and Other Development Areas	Tourism Facilities	Network and Infrastructure	Institution, Promotion and Implementation	Economic and Financial Analysis
1. Analyses of Existing Conditions							○	●	○	○	○	○	○	○	○
2. Identification of Problems	○			○			○	●	○	●	●	●	●	●	●
3. Projection of Future Orientation	○	○					○	○	●	●	●	●	●	○	○
4. Setting of System of Goals and Objectives	○	○					○	○	●	○	●	●	●	●	○
5. Proposal of Development Strategies	○	○		○			○								○
6. Setting of Planning Standards									○	○	○	○	○		
7. Clarification of Administrative Hierarchy							○								○
8. Provision of Projects List			○	○					○	○	○	○	○	○	○
9. Setting of Criteria									○	○	○	○	○		
10. Evaluation of Effectiveness															○
11. Checking of Intersectoral Consistency							○			○				○	○
12. Identification of Priorities			○	○											
13. Selection of Project Scheme									○	○	○	○	○		
14. Chiecking With National and Regional Macroframework							○								
15. Identification of Bottlenecks for Implementation			○	○											○
16. Provision of Means and Measures for Implementation			○	○											

Note: ○ indicates that the planning step in question is the main topic of that chapter, and ● indicates that it is touched upon or has a bearing up the same.

Significance of Tourism Master Plan

(1) Importance of National Goals

Of paramount importance to the Republic of Indonesia, a nation of innumerable islands strewn over a vast area, are a greater national awareness on the part of its people, further political integration, and stronger national unity.

A nation is a system consisting basically of its territory and its people, and all plans and projects for it must meet three basic conditions: (1) maintain the conditions for the formation of the system, (2) foster the conditions for continuity of operation of the system, and (3) provide the conditions for further development of the system on the basis of (1) and (2).

All nations have a system of national plans covering national security, administration and public finance, comprehensive national land development, social and economic development, resource and environmental conservation, etc. They take precedence over agricultural development, transportation, and other "functional" plans because they must ensure that the above three conditions are met for the smooth operation of the entire system.

Needless to say, the present Master Plan is a functional plan concerning mainly tourism development. Nevertheless, its significance and role must be measured in terms of criteria embodied in the system of national plans, and that is why the above three conditions have been kept in mind in its formulation.

Firstly, the Master Plan must prevent uncontrolled and disruptive development and sprawl by means of a system of development controls which includes national recreational park laws and regulations and designation of special protection areas, thereby contributing to the maintenance of the environmental conditions of the national system.

Secondly, in order to enhance the authority of the Central Government, strengthen its administrative capacity, and thereby reinforce the whole system of centralization, it is important that adequate networks of main transportation and communication lines be provided. Furthermore, it is vital that Central Government administration of national projects in various provinces be strengthened through supervision of such projects by authorities or other entities directly under the Central Government in order to prevent interregional fragmentation.

Thirdly, considering the fact that national awareness on the part of the people is a basic condition for national unity, it is important that there be active exchanges between people of different provinces in order to foster not only awareness and pride of individual local cultures and values but also awareness and pride of common national cultural values. In this connection, it is necessary that steps be taken to reduce interregional gaps and equalize the living conditions and opportunities of all Indonesians.

Indonesia's national goals up to now have been set forth in Pelita I and Pelita II, its first and second 5-year development plans. Since the present Master Plan cover the 15-year period from the conclusion of Pelita II up to 1995, it is to be hoped that the suggestions it contains can be incorporated in the following three 5-year development plans.

(2) Importance of Regional Goals

The two major considerations in the management of the Indonesian economy are (1) promotion of a national system for national unity based on centralization and (2) enhancement of economic development potential through economic integration of the regional level in order to strengthen such a national system. In other words, the strengthening of regional economies is important not only for the sake of regional development but also for the attainment of national goals, and herein lies the need for regional goals to be geared to national goals.

The regional economies of the country must therefore be integrated by increasing their interdependence for the sake of the development of the national economy.

There are two kinds of economic development on the regional level: autonomous development and policy-induced development. If a regional development plan is "independent," i.e., geared only to the region itself, it can be called an autonomous development plan. If, however, it is considered to be a part of overall national planning, it should be supported by the Central Government through subsidies and guidance as benefiting not only the region but also the national economy as a whole.

(3) Importance of Financial Autonomy

There are three possible cases with respect to the financial condition of a project that is going to be implemented as a national project.

The first possibility is that the project cannot be expected to be of much economic benefit to the region but nevertheless is to be implemented for the sake of attaining national goals. In this case both project construction and subsequent operation and maintenance have to be accomplished through Central Government expenditures. Although some employment may be created, the project will in other respects have almost no bearing on the region.

A second possibility is that the project can be expected to increase tax revenues from the region. If project construction is undertaken with funds from the Central Government by subsequent operation and maintenance and redemption of construction cost are carried out on the basis of regional financial autonomy, the project can in a sense be considered a national project, but in terms of continuity it is a regional project.

The third possibility is that the continuity of the project is guaranteed by private financing.

Actually, however, all sorts of projects representing different combinations of these three possibilities are included in a regional development plan. In other words, a master plan for regional development seeks both to attain national goals and to promote regional development with such an assortment of project types having the overall effect of satisfying both requirements. While the individual projects each represent one of these possibilities or a combination of them, the master plan can be considered financially feasible and operational continuity will be assured if it is possible to maintain overall financial autonomy.

When it comes to the stage of implementation of the master plan, it is necessary to study in detail the feasibility and bankability of each individual project. This is the difference between economic or financial analysis at the master plan stage and at the implementation stage. In other words, at the master plan stage, financial feasibility is considered in terms of operational continuity, whereas in the implementation stage it is scrutinized from the standpoint of what type of financing--national, regional, private, or a combination of these--is most suitable for the individual project.

(4) The Tourism Master Plan as a Component of Regional Integrated Development Plan

Tourism is basically a matter of human mobility. Tourism mobility induces social mobility, business mobility, and mobility in daily life, all of which serve as a basis for regional development and economic integration.

One of the purposes of tourism as an industrial sector is to translate human mobility into economic activity. Therefore a tourism master plan is a good example of a functional plan as opposed to a national plan. As such, it is a tool of national or regional development planning.

The tourism master plan includes its own specific projects, but it is dependent on national or regional development planning with respect to conditions of supply for meeting foreseen demand and institutional and policy considerations.

What the tourism master plan can do is to indicate the level of income and revenue that effective tourism demand can result in. Three categories of income or other economic benefit are involved here. The first is direct income from operation of airports, passage duties, hotel operation, and services, whether government revenues, private income, or other classification of income. The second is income, production, and other indirect effects relating to stimulation of employment and consumption in the regional and national economies. The third is increased tax revenues on both the regional and national levels.

If individual projects are feasible in terms of such income and revenue, they may be considered as independent tourism projects, but they cannot constitute a tourism master plan in themselves.

The tourism master plan is a functional plan that is incorporated in national or regional development planning. At the national or regional planning level there are plans for airports, road networks, environmental conservation, land use, water control, and so on for their own sake. The tourism master plan, on the other hand, has to show how it will contribute to financial circulation since the tourism that it deals with must justify itself as an industry. If it is feasible as a package with other aspects of development—for instance, an airport or road project—such other projects will also be feasible. The significance of the integrated master plan as opposed to the functional plan that a tourism master plan represents is that it identifies such projects, and the tourism master plan, in turn, provides a list of the various conditions in a whole range of fields necessary for tourism development.

The inflow of tourists into a region is an external factor to regional development planning. It is to tourism what foreign investors and foreign markets are to other industries. As such, it is of extreme importance to development planning on the national or regional level for its “pump priming” effect. To show how to encourage the inflow of tourists is therefore one of the major responsibilities of the present Master Plan.

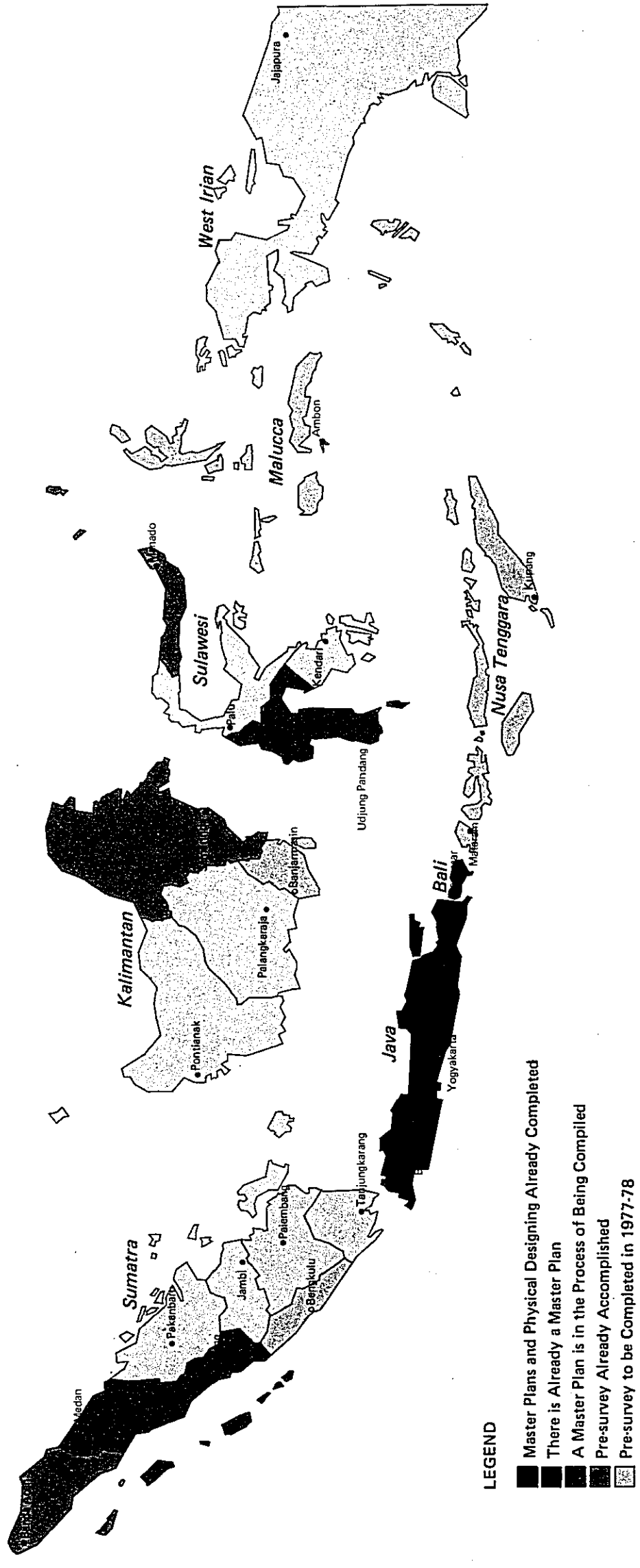
(5) The Role of the North and West Sumatra Tourism Master Plan in National Tourism Planning

Along with Bali and Central Java, North and West Sumatra are one of the three major tourism areas of Indonesia. Bali, with its rich endowment of tourism resources, is Indonesia’s “face” to the outside world and international tourists. Central Java, on the other hand, is richly endowed with historical assets that are not merely tourist attractions but also a symbol of the national cultural heritage. For this reason it also attracts considerable attention on the part of international tourists as well as being the foremost area of domestic historical tourism. And, naturally enough, the Central Java tourism master plan has accentuated this feature.

The tourism master plan for North and West Sumatra, however, has a somewhat different nuance. Although this is to some extent an international tourism area, it is not in the mainstream of international tourism, as indicated by the fact that domestic tourists have outnumbered international tourists there. That is why its tourism master plan is strongly characterized as a functional plan that should be incorporated into planning on a higher level.

Bali and Central Java have been given special tourism orientations. In North and West Sumatra, however, the orientation set by the present Master Plan will be a general one, and in this sense it will serve as a precedent for tourism planning integrated with regional development planning in other areas of Indonesia.

Nationwide Plans and Surveys of the Directorate General of Tourism



PLANNING GOALS AND METHODS

The following are the five central themes of the physical planning of the present study.

- How Can the Attractiveness of the Tourism Development Zones be Enhanced?
- How Can Tourist Mobility be Increased?
- How Can Tourism Development at the Same Time Contribute to Preservation of the Natural and Cultural Heritage of the Area?
- How Can Local Culture be Fostered?
- How Can Tourism Development Also Contribute to the Overall Development of the Area?

These themes are important not only in terms of administrative planning guidelines for development implementation on the basis of a tourism master plan as described in the above but also as guidelines for selection of strategic projects for concretization of ideas regarding the future direction of tourism development in the areas concerned.

How Can the Attractiveness of the Tourism Development Zones be Enhanced?

Findings:

North and West Sumatra rate very high in comparison to other areas of Indonesia with respect to their tourism resource endowment. In fact, they can stand comparison even with world renowned Bali Island and Central Java in this regard. Such tourism resources include such natural tourism assets as pleasant climate, rich topographical variation, including volcanic peaks, crater lakes, and waterfalls, interesting wildlife and vegetation, and fascinating scenery in general as well as the cultural heritages of the Batak and Minangkabau peoples and seaside, highland, and mountain environs ideal for recreational use. For future tourism purposes it will be advisable to further enhance and diversify the area's tourism resource potential and increase its capacity to accommodate visitors.

Solutions:

- (1) Preservation and maintenance of natural, cultural, and other tourism assets as well as discovery and development for tourism use of tourism assets that have not yet been utilized.
- (2) Development of new tourist facilities to satisfy a diversity of tourist needs.
- (3) Encouragement of a tourism orientation for agriculture, forestry, fisheries, and other local industry.

How Can Tourist Mobility be Increased?

Findings:

One of the purposes of this tourism development plan for North and West Sumatra is to make it possible for tourists from outside the area as well as visitors from within the area to reach the places that they wish to visit for sightseeing purposes in an orderly and efficient manner and with as much comfort and pleasure as possible. This being the case, it is necessary to formulate well thought out programs offering a range of choice with respect to routes and destinations to satisfy different budgets, tastes, and itineraries (lengths of stay) and to develop appropriate routes and provide adequate transportation to make such programs feasible.

Solutions:

- (1) Designation of 5 standard long-distance tour routes linking the three tourism development zones (Karo Plateau, Lake Toba, and Minang Highlands) with the gateway cities Medan and Padang.
- (2) Continuing development of optional tour routes for greater diversity, for instance, a tour to Nias Island.
- (3) Development of air, water, and land transportation systems to serve as a basis for such tour routes and provision of ports, terminals, and other facilities as integral parts of such transportation systems.
- (4) Planning of model excursion courses within the three tourism development areas.

How Can Tourism Development at the Same Time Contribute to Preservation of the Natural and Cultural heritage of the Area?

Findings:

The Karo Plateau area, the Lake Toba area, and the Minang Highlands area, which includes the Agam, Limapuluh Kota, and Tanah Datar kabupatens, are each separate ecological spheres in terms of terrain, climate, etc., as well as social and cultural spheres with their own identity.

Accordingly, their development must be within a comprehensive land-use framework and must take into full account the particular characteristics of each area.

Solutions:

- (1) Adoption of a national recreation park system for the three development zones corresponding to these three areas for comprehensive management and control of the natural environment, the land, and other resources.
- (2) Formulation of comprehensive land-use plans for the designated park areas and implementation of use regulation.
- (3) Protection, preservation, restoration, maintenance, and management and control of natural resources (particularly forests and lakes) in the park areas and ecological surveys and monitoring of water quality, forests, soil, and flora and fauna.
- (4) Setting of regulations for maintenance of the quality of the scenery of the park areas, designation of spots with particularly magnificent views and scenic corridors along roads, and implementation of landscaping and other works for improvement of the same.

How Can Local Culture be Fostered?

Findings:

North and West Sumatra have many distinct cultural spheres, including that of the seven Batak peoples (Toba, Karo, Daili, Pakpak, Simalungun, Mandailin, and Angkola) in the highlands and mountains of North Sumatra, that of the Minangkabau people throughout West Sumatra, the Nias cultural sphere on the island of that name off the shore of West Sumatra, and the Hindu cultural sphere at Portibi with ruins dating back to the twelfth century. In many cases these cultures are still very much alive in the present day and clearly evident in unique local life styles and traditions. In the planning of the tourism development of the two provinces particular attention should be given to ways of encouraging the thriving and continuation of such local cultures as well as ways of taking advantage of them as tourism resources.

Solutions:

- (1) Discovery, designation, restoration, and management and control of tangible cultural assets, including historical buildings and traditional villages and houses, as well as opening them to the general public.
- (2) Designation of dance, song, music, and other intangible cultural assets to be found in different locales in the area, encouragement of them so that they can be passed on to future generations, and encouragement of their use for tourism purposes.
- (3) Surveys and research on mythology, local geographical descriptions, local cultural annals, and oral traditions and compiling and publishing of such information for the purpose of encouraging the passing on of local culture to future generations.
- (4) Discovery and designation of traditional handicraft techniques that have been passed down from generation to generation in different locales, encourage of training of prospective successors to present masters, and stimulation of development of tourist souvenir industries based on such techniques.

How Can Tourism Development Also Contribute to the Overall Development of the Area?

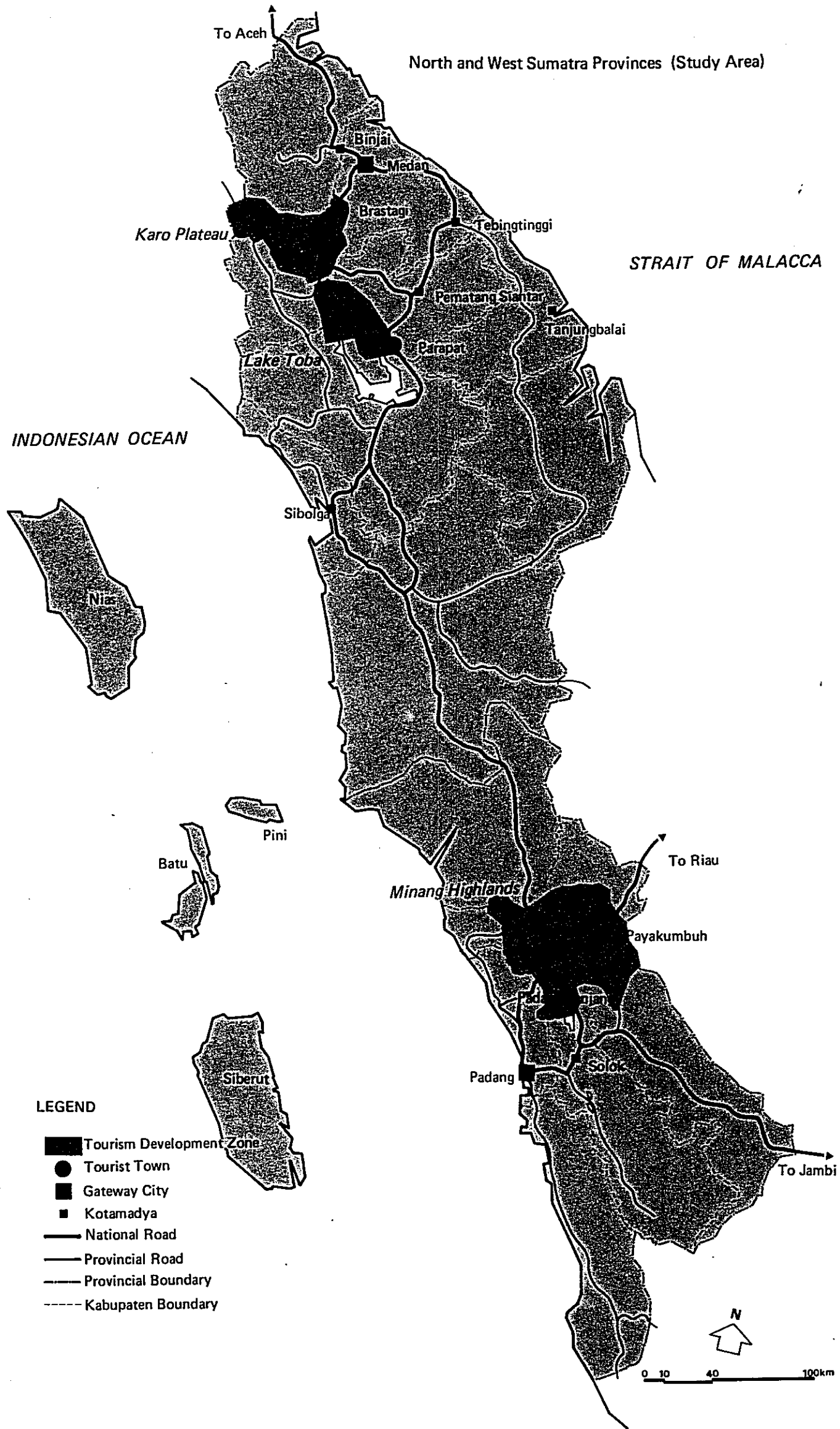
Findings:

Ordinarily, in regional development each sector should have its own distinct role on the basis of an integrated development plan, with the overall effect being greater than the sum of the effects of the individual sectors. In the case of the present study, however, a development plan for the tourism sector has had to be formulated in the absence of such an integrated development plan, which has made matters extremely difficult.

This being the case, an effort has been made to vest the present plan with the objectivity that characterizes integral planning by introducing development conditions that are as integral as possible for each of the three development zones as planning assumptions and assessing the requirements of the tourism sector proper on this basis. Accordingly, the implementation of the present plan urgently requires implementation of higher-echelon and earlier plans and cross-checking with them.

Solutions:

- (1) Adjustment of the present tourism sector plan with tourism development plans on the national level, Pelita II and/or III, and integrated development planning for Sumatra.
- (2) Reconsideration of individual integrated plans for each of the development zones: an integrated plan for Kabupaten Karo, a Lake Toba watershed integrated plan, and an integrated plan for the three kabupatens comprising the Minang Highlands area.



Strategies and Tactics for Development

(1) The two provinces constitute the largest tourism area in Indonesia after Bali and Central Java, foreign visitor arrivals to it recently accounting for approximately one-seventh of the total for Indonesia. Intensive tourism development is under way in Bali and Central Java, but such development has not yet commenced in this area. Nevertheless, through intensive development it will be possible to raise this percentage to one-sixth or one-fifth. When the growth rates of Bali and Central Java eventually fall off, this area will help to sustain the growth rate for Indonesia as a whole.

(2) To raise the area's share in the total for Indonesia, it is necessary to take full advantage of the tourism potential of the study area. This plan has to be drawn up in such a way as to allow for the development of the two provinces in unison. Two strategies have been conceived and adopted for this purpose. One is to equalize the tourism development levels of the two provinces, and the other is to strengthen the linkage between them.

(3) Tourism development in West Sumatra is in an earlier stage than that in North Sumatra. Thus, the development program must be weighted so that the level of West Sumatra can be brought up to that of North Sumatra in the shortest possible time. Institutional means must be provided for smooth coordination in the implementation of such a program. Also, special consideration must be given to financial autonomy in terms of revenue from and investment in tourism development, the two provinces again being considered as a single unit. West Sumatra will require more intensive investment in the early years, and its revenues will come more slowly than those of North Sumatra.

(4) As for linkage of the two provinces, especially important is transportation between them, chiefly by air and partly by road. To encourage visits to both provinces, it would be a good idea to provide a special round-trip rate. Improvement of the highway linking the two provinces is also of high priority.

(5) The tourism sites in the two provinces are concentrated in three core areas: the Karo Plateau, the Lake Toba area, and the highlands around Bukittinggi (hereinafter referred to as the Minang Highlands). Few tourism resources are located outside these three areas except for those of which the tourism value has not yet been confirmed. The tourism development plan will therefore concentrate on these three core areas.

(6) The greater part of the tourist influx into the two provinces is by air, very few tourists coming by land or sea. Therefore smooth growth of the tourist influx into the two provinces depends almost solely on a smooth expansion of air transportation services. Such expansion will be possible by increasing the number of regular and chartered flights and expanding the ground facilities to accommodate them. Chartered flights can be especially effective in this respect because of their discounted fares.

(7) From an ecological point of view, nature conservation in the area will have to cover three items: vegetation, water quality of lakes, and plant and animal life. In respect of vegetation, the area has already undergone considerable change due to human activities, and very few locales remain substantially as they used to be. It is therefore essential that no further damage be done to the natural vegetation through tourism development or other activity, particularly because of its value as a tourism resource in terms of scenery. Ecological preservation and tourism are complementary rather than being at odds with one another.

(8) Three major lakes in the area--Toba, Maninjau and Singkarak--are noteworthy for their oligotrophic state and beautiful clear water. Strict measures will have to be taken to preserve such water quality both from an aesthetic standpoint and from the standpoint of its value as a tourism resource. Water quality deterioration is due primarily to influx of nitrogen and phosphorus compounds in agricultural drainage and urban sewage. Therefore all development in the watersheds of the lakes will have to be accompanied with best possible facilities for sewage purification. Also, the water quality of the lakes will have to be constantly monitored for control of pollution, and these principles will have to be incorporated in the master plan.

(9) Both provinces have their own unique cultures, including traditional ethnic art and folklore, which will have to be preserved, protected, and taken greater advantage of as important tourism resources.

(10) Also important are the traditional social systems of the two provinces, which will have to be protected from the adverse effects of tourism development.

Establishment of Development Targets

The development targets of this plan have been set as follows on the basis of the development principles and strategy already discussed.

(1) Foreign Tourist Demand

The possible ranges of future tourist arrivals have been forecasted and analysed as described elsewhere in this report. Generally speaking, the future trend of foreign tourist arrivals to North and West Sumatra will be basically influenced by the future trend of international tourist arrivals in ASEAN countries. A minimum demand level can be forecasted on this basis. Moreover, with comprehensive and systematic development under this plan, it should be possible to raise this minimum level somewhat. How much will depend on the volume and quality of the development envisioned by it. As a basis of planning, the demand forecast should be conservative rather than optimistic. With this in mind, we have employed the following target figures for foreign tourist inflow to the core areas:

	1980	1985	1990	1995
North Sumatra	43,200	65,200	89,000	110,500
West Sumatra	10,900	20,500	32,800	46,400

In North Sumatra an effort will have to be made to maintain the level of visitors from other ASEAN countries, and in West Sumatra much more attention will have to be paid to this market.

(2) Domestic Tourist Demand

Demand targets for domestic tourists are more tentative at this stage because of scantiness of data indicating the present level domestic tourists, which has had to be roughly estimated on the basis of available passenger data, on-the-spot traffic surveys, and information obtained from selected hotels.

Growth indices for population, income, and number of motor vehicles have served as a basis for forecasting basic future domestic tourist demand. An additional number of domestic tourists will be induced by the development foreseen in this plan. However, considering the inaccuracy of the present data on domestic tourists, the planning target for domestic tourists has been set conservatively as follows.

	1980	1985	1990	1995
Interregional				
North Sumatra	58,600	99,500	169,400	288,400
West Sumatra	18,600	32,700	57,500	100,900
Local				
Karo	27,400	67,800	91,600	139,000
Toba	64,000	65,000	91,600	113,800
Minang	20,000	27,300	36,500	53,800

(3) Day Tripper Demand

According to estimates based on available passenger data and the data obtained from the traffic survey carried out by the study team, there are a considerable number of day trippers to the core areas. Considering that recreational activities of local people should be encouraged from the standpoint of achievement of social stabilization, it is anticipated that the number of day trippers will grow steadily. A projection has been made which takes into consideration population and income within the radii of accessibility of the core areas as well as frequency of school excursions, and the following figures have been adopted as planning targets.

	1980	1985	1990	1995
Karo	849,000	915,000	1,169,000	1,470,000
Toba	461,000	665,000	851,000	1,130,000
Minang	436,000	740,000	930,000	1,190,000

(4) Economic Macroframe

Indonesia had an average annual GDP growth rate of 8.12% during 1970-75. Judging from several estimates, GDP will grow at an average annual rate of 7 - 8% in the coming ten years and will stabilize to 6% after 1995. The economic structure is expected to change gradually during the coming ten years. With a relative decline of the agricultural sector, the manufacturing and service sectors should become more important in the national economy.

Indonesia's population growth rate has been gradually declining. It is estimated that it will fall to about 2.2% per annum after 1985, which means that the national population will approach 210 million by 1995.

The economy of North Sumatra had average annual growth rate of 12% in 1970-75. In a long range, this rate is estimated conservatively to decline gradually and then to stabilize at about 7%. The population of North Sumatra has grown at an average annual rate of 2.9% in recent years. It is estimated that the population of outer islands will grow at higher rates in the coming twenty years. The population of North Sumatra can be expected to reach 13 million in 1995.

The economy of West Sumatra has grown at an average annual rate of 7.5% over the last 5 years, which is lower than the growth rate of the national economy. Furthermore, it is expected to fall to 5% per annum by 1995. West Sumatra's population, too, has grown at a lower rate than the national average, but in accordance with the general tendency of the outer islands, the population growth rate of West Sumatra will gradually rise and reach a level of 4.5 million by 1995.

In both provinces, agriculture has been and will continue to be the predominant socio-economic sector. Although tourism has only third priority, behind agriculture and industry, the encouragement of economic sectors other than agriculture is required to some extent in order to diversify economic activities in the area.

Considering that the provinces concerned are endowed with relatively remarkable tourism resources, tourism development can be expected to stimulate economic activity. Income generated directly from the tourism sector need not necessarily represent a larger portion of the regional income. Even the comprehensive development based on the master plan may produce only 1.5 - 3% of total regional income. The impact of tourism development on the regional economy will be relatively greater in West Sumatra than in North Sumatra.

Besides the direct impact of increase in regional income, linkage effects and associated effects can be expected. Tourism development according to this plan should stimulate regional development. Greater human mobility due to tourism development will encourage trade between Sumatra and the rest of Indonesia and with foreign countries. It will also stimulate commodity distribution in the region and encourage agriculture and related industries such as food production and processing and material manufacturing industries.

The employment effect of tourism development will also be considerable.

(5) Physical Planning Frame

Foreign and interregional tourist allocation by tour type and the average duration of stay of these categories of tourists have been set as follows on the basis of the planning targets corresponding to anticipated demand.

Foreign and Interregional Tourist Allocation by Tour Type (%)

	1985	1995
Toba tour	31	19
Karo tour	10	13
Minang tour	22	23
Karo-Toba tour	34	40
Karo-Toba-Minang tour	3	5

Average Duration of Stay (days)

	1976	1985	1995
North Sumatra			
Foreign	2.92	3.25	3.41
Interregional	2.49	3.31	3.49
West Sumatra			
Foreign	1.83	2.15	2.50
Interregional	1.83	2.15	2.50

On the basis of these figures, the following have been obtained for the number of overnight visitors, required accommodation capacity, and number of daytime visitors in each tourism development zone.

Number of Visitors Staying Overnight on Average Day

	1980	1985	1990	1995
Karo	200	340	710	1,130
Toba	720	1,080	1,660	2,480
Minang	180	330	580	950

Number of Rooms Needed for Tourist Accommodation

	1976	1980	1985	1990	1995
Karo	236	335	607	910	1,300
Toba	809	1,037	1,585	2,200	2,765
Minang	321	374	553	795	1,095

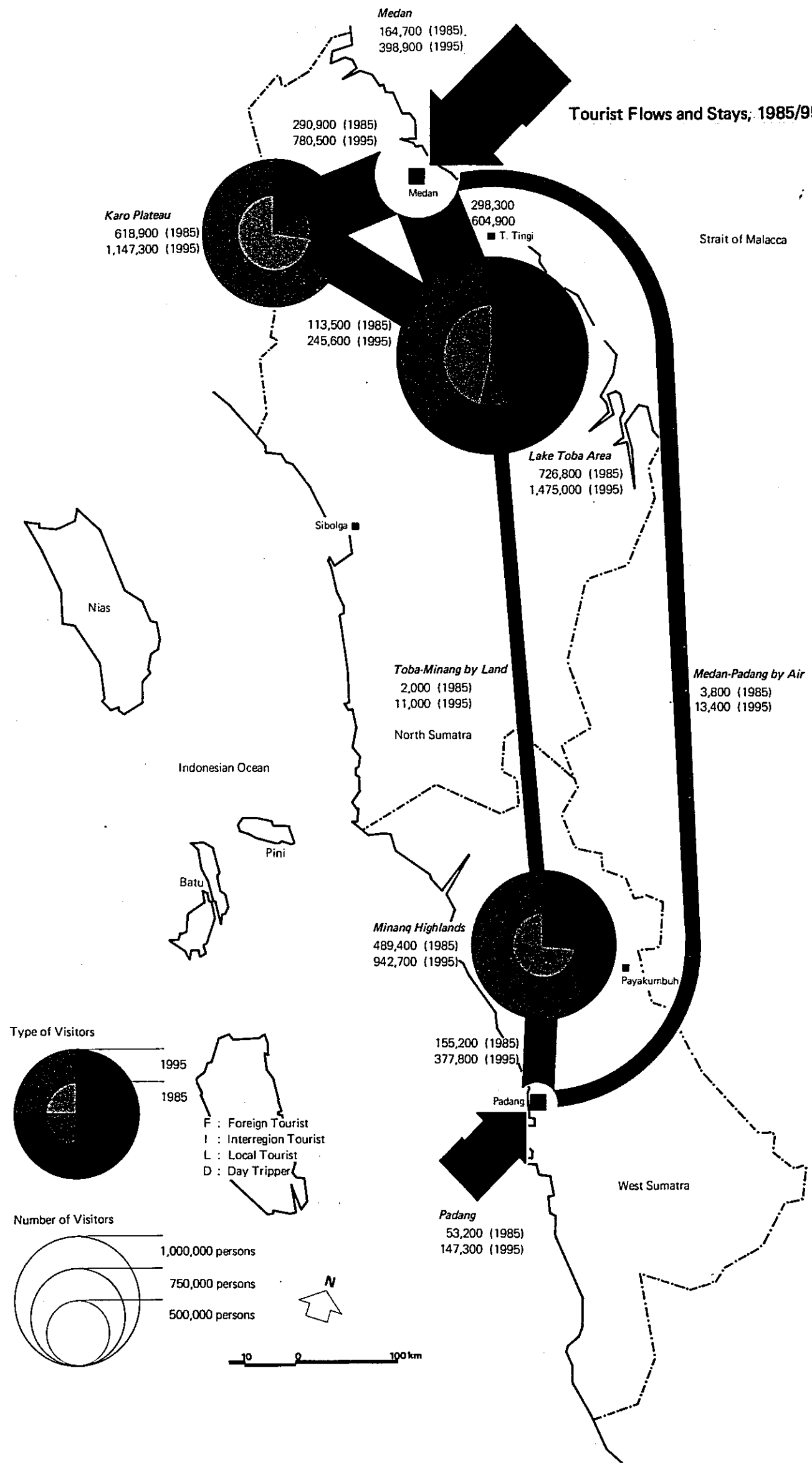
Number of Daytime Visitors per Day

	1980	1985	1990	1995
Karo	1,360	1,700	2,310	3,140
Toba	1,350	1,990	2,830	4,020
Minang	780	1,340	1,840	2,580

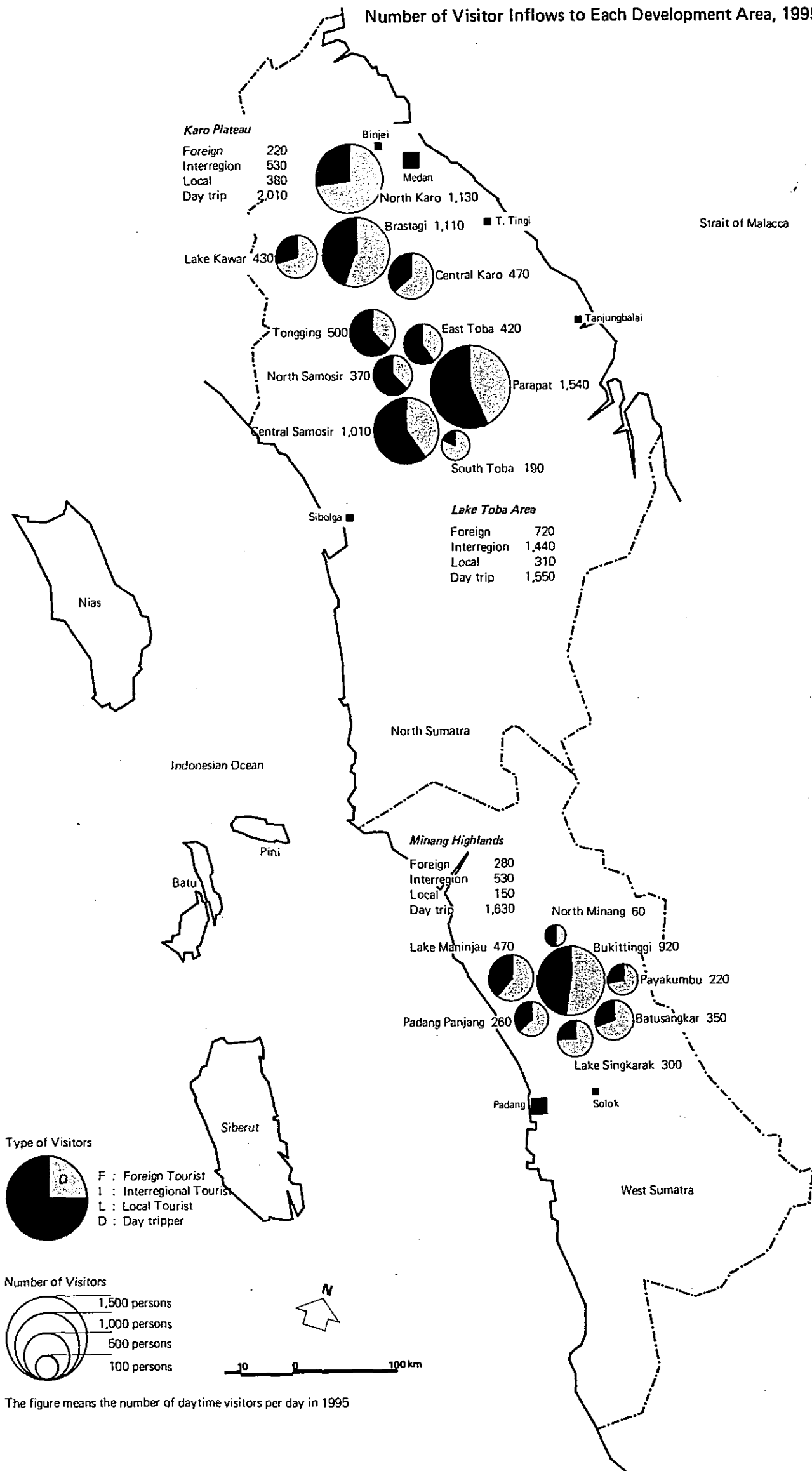
The ratio of the number of visitors staying overnight (and the ratio of the number of rooms needed) between Karo, Toba, and Minang and the ratio between them with respect to the number of daytime visitors have been set at 25:54:21 and 32:41:26 respectively, as a reflection of the day tripper emphasis in the development of the Karo area and the tourist overnight accommodation emphasis in the development of the Lake Toba area.

As for the accommodation capacity that will be required at different stages in the period covered by the study, if the requirement for 1995 is assigned an index of 100, the present stock is 26, and the requirements for 1980, 1985 and 1990 will be 34, 53, and 76 respectively.

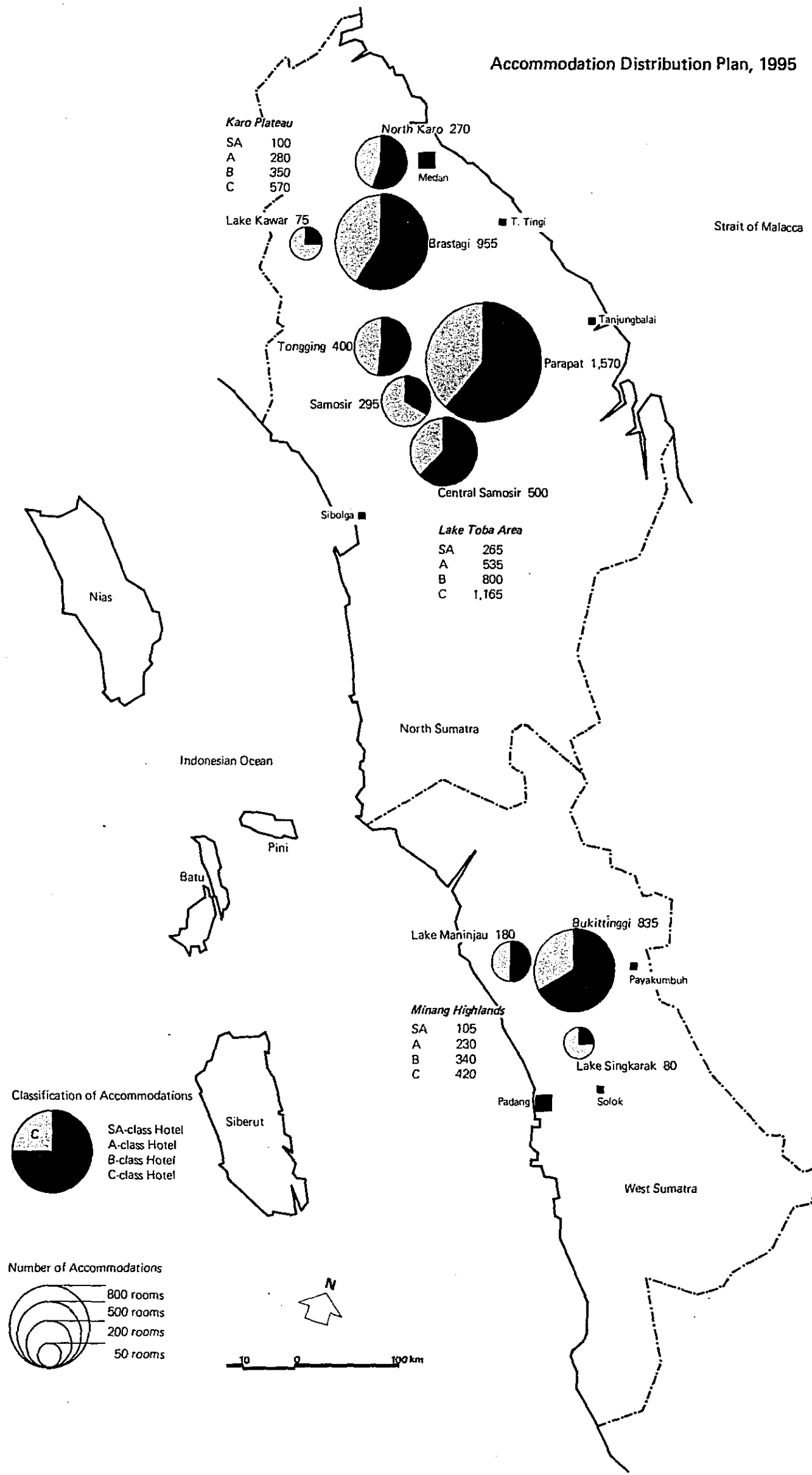
Tourist Flows and Stays, 1985/95



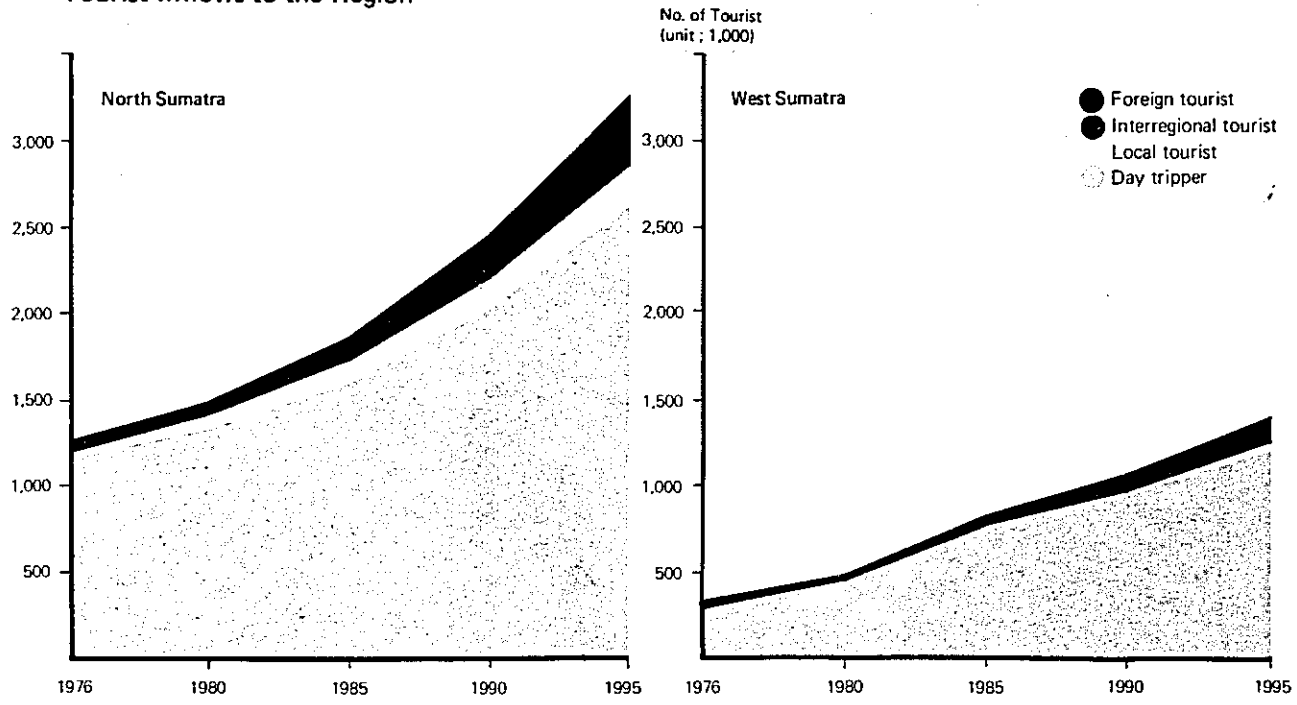
Number of Visitor Inflows to Each Development Area, 1995



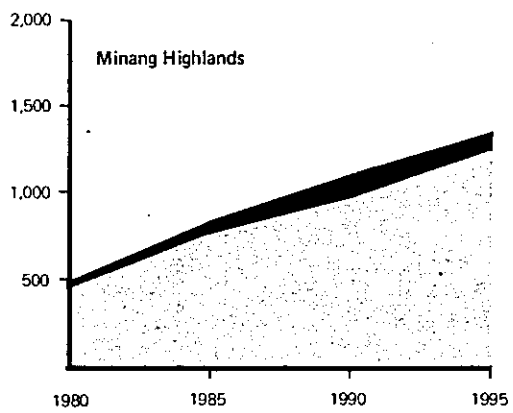
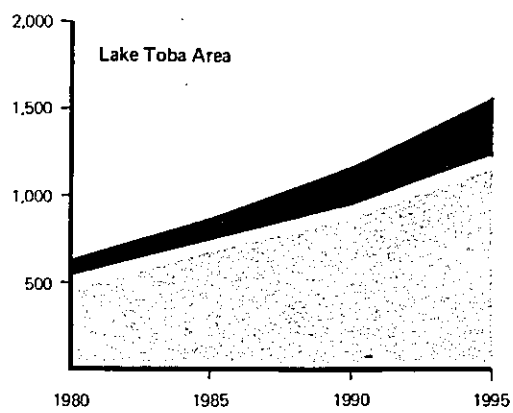
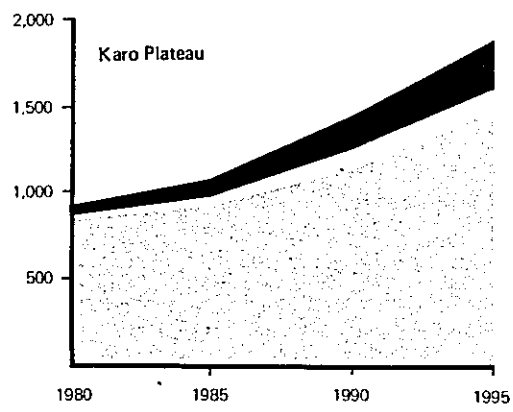
Accommodation Distribution Plan, 1995



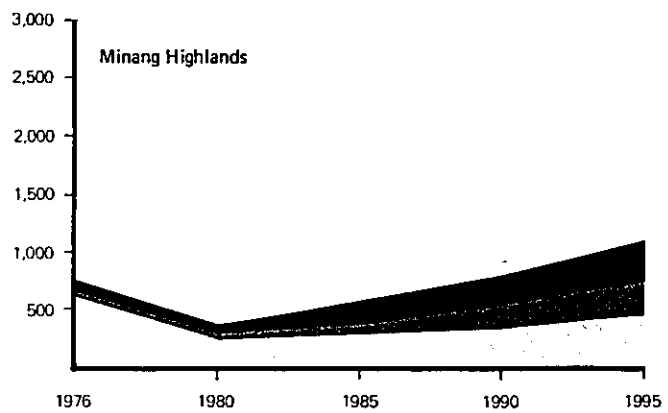
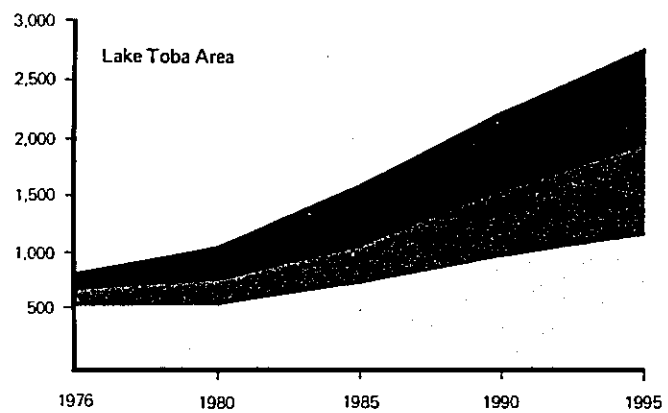
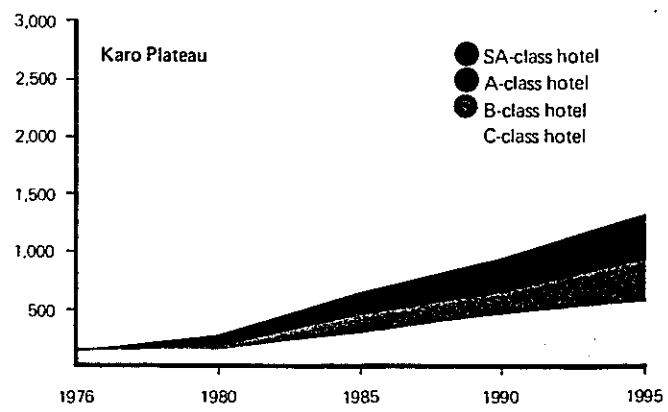
Tourist Inflows to the Region



Tourist Inflows to the Development Zones



Tourist Accommodation Demand



Guidelines for Execution

Tourism Promotion

Creation of Tourism Region

Construction of Tourist Towns

Improvement of Transportation Network for Tourists

Natural and Cultural Conservation

Construction of Tourist Facilities

Institutional Arrangements

Implications for Development Feasibility

The 33 items listed in this chapter are the major specific measures for tourism development of the study area that are proposed on the basis of the policy assumptions set forth in the preceding chapter on planning concept and principles.

They include (1) measures for attracting visitors and increasing mobility, (2) measures for achieving unity of image of tourism areas and which therefore have a bearing on the quality that will be attained in the formation of tourism areas, (3) designation of development areas, physical distribution of tourism investment, and strategy regarding development priorities, (4) the establishment of national and quasi national parks and measures for natural, cultural, and scenic conservation, (5) guidelines for provision of tourism base facilities, transportation network, etc., and (6) measures for improving organization relating to tourism administration.

Tourism Promotion

- No.1 Promotion of International Tourism
- No.2 Promotion of Domestic Tourism
- No.3 Promotion of Local Tourism and Recreation
- No.4 Establishment of Tourism Information System
- No.5 Provision of Tour Program

Creation of Tourism Region

- No.6 Formation of Tourism Region
- No.7 Proposal for National Recreational Parks
- No.8 Karo Plateau - Paradise of Flowers and Birds in a Setting Fringed by Volcanic Peaks
- No.9 Lake Toba - Mystical Lake Toba and Batak Culture
- No.10 Minang Highlands - Home of the Hospitable Minangkabau People
- No.11 Diversification of Tourist Activity Through Development of Optional Tour Routes

Construction of Tourist Towns

- No.12 Active Investment in Three Tourist Towns
- No.13 Brastagi - The Spirit of Karo Plateau
- No.14 Parapat - The Rose of Lake Toba
- No.15 Bukittinggi - The Heart of the Minang Highlands
- No.16 Upgrading of Urban Infrastructure
- No.17 Improvement of Medan and Padang as Gateway Cities

Improvement of Transportation Network for Tourists

- No.18 Improvement of Airports
- No.19 Improvement of Road Network
- No.20 Provision of Various Transportation Facilities

Natural and Cultural Conservation

- No.21 Conservation of Natural Assets in the Parks
- No.22 Encouragement of Traditional Culture
- No.23 Outstanding Local Scenery in the Parks
- No.24 Pilot Projects for Restoration of Villages

Construction of Tourist Facilities

- No.25 Supply Program for Tourist Accommodation Facilities
- No.26 Construction of Tourist Service Facilities
- No.27 Provision of Public Recreational Facilities

Institutional Arrangements

- No.28 Establishment of Organization for Execution and Operation
- No.29 Provision of Investment Incentives
- No.30 Establishment of Vocational Training Institutions
- No.31 Role of Directorate General of Tourism

Implications for Development Feasibility

- No.32 Financial Implications
- No.33 Socioeconomic Implications

Promotion of International Tourism (No.1)

At present North and West Sumatra are far less well known in the world than areas like Bali of Central Java. A considerable amount of money will therefore have to be spent in the initial stage to publicize this area abroad. After such intensive publicity in the first few years, however, the budget for this purpose can be gradually reduced, provided that the publicity has been effective.

Such publicity should be concentrated primarily in countries with highest potentials for generation of visitors to the area. Since these potentials may vary from year to year, publicity distribution will have to be revised from time to time on the basis of the latest trends with regard to the nationalities of visitors to the area.

At present the most likely countries in this respect are Common Market countries, especially Germany and France, ASEAN countries, especially Malaysia and Singapore, Oceanian countries, especially Australia and New Zealand, and the U.S. and Japan. Trends will have to be monitored, however, on a continuing basis so that changes can be detected and tactics can be appropriately altered. In any case, it is probable that ASEAN (especially Malaysia and Singapore) and those countries in which Indonesian tourism promotion offices are located will generate the largest number of visitors to the area even in later years.

Such publicity will be undertaken by DGT through existing facilities, including some overseas offices, and also by travel agents and airline companies. DGT will provide information and guidance to the latter and monitor their activities. The most suitable media will have to be selected for such publicity efforts. In general, the agent publicity is effective with regard to package tours, and general publicity through the media is effective with regard to individual tourists. For the immediate undertakings, it is necessary to execute the ranking of existing hotels and consequent price control from the marketing viewpoint.

Regional publicity in cooperation with international organizations such as PATA, ASEAN, and SEAP is also important.

Promotion of Domestic Tourism (No.2)

Indonesian visitors to the core areas who stay there more than one night are mainly families, young people, and students on study tours. They come from inside and outside the area in roughly the same numbers. It is these groups, therefore, at which domestic tourism promotion publicity should be directed.

DGT will propagate the awareness of tourism aiming at making the people participate in the tourism and motivating people for travelling. However, the promotion to increase visitors from other provinces will be made by the respective provincial governments.

The number of young visitors would grow steadily. For latent demand from this age group is considered to be fairly substantial as the result of past promotion of youth tours by GDT. For these young visitors youth hostels are indispensable as cheap and comfortable accommodation. As there are no youth hostels located in North or West Sumatra as yet, two are proposed for each of these provinces in this master plan. Naturally, efforts will have to be made to ensure that they are operated and administrated properly.

Youth hostels are also suitable for study tour students. In this case, qualified guidance personnel will have to be trained. Also a reservation system should be developed.

Until such preparatory works are put on rail, DGT will let the growth of youth and study tourism spontaneous.

Promotion of Local Tourism and Recreation (No.3)

Tourism and recreational activities are of benefit both to the individual and to society. By getting away temporarily from the stresses of everyday life, the individual is able to refresh himself both mentally and physically and "recharge his batteries" for better performance when he gets back. Society, too, gains in that the overall cultural level of the community rises when people, through tourism and recreational activities, get a better appreciation of their natural, cultural, and historical surroundings and an awareness of the need to protect them as well as a heightened sense of having a great deal in common with their fellow citizens--in other words, more community spirit.

In order to promote such activities, there should be a government organization on the provincial level responsible for identifying tourism trends in the region through surveys, questionnaires, and other means, forecasting future potential tourism demand, and formulating long-term tourism policy and policy on how to encourage people to use their free time as a part of overall regional planning. The following are some of the points that such policy should cover:

- Improvement of transportation to make tourism spots more accessible
- Provision of inexpensive public recreational facilities to make it easier for people in general to participate in tourism and recreational facilities
- Training of personnel capable of providing guidance in recreational activities
- Promotion of tourism through the media and provision of specific information on transportation, accommodation, etc., for the benefit of tourists
- Encouragement of school excursions and outdoor youth activities
- Development of tourism resources

In formulating such policy, moreover, it is important that the viewpoint of tourists and recreationists themselves be always kept in mind.

Establishment of Tourism Information System (No.4)

An efficient tourist information system is needed in order (1) to provide consistent and accurate tourism-related information to tourists and all tourism-related organizations and (2) to collect, process, and analyze such information.

The tourism-related information meant here is quantitative information regarding tourism-related facilities and tourism-related industries and information on the quality and state of services provided by them, information about tourists themselves (such as the amount of money they spend in tourist activities, and what they want to get out of (and their attitudes toward) sightseeing, and even information on the amount of free time that people in general have and on how families spend their incomes. Besides immediate use of such information by tourists and tourism-related organizations, it can be analyzed by government authorities as an important aid in formulating long-term tourism policy.

In this respect it is proposed that visitor centers be set up in Medan, Brastagi, Parapat, Bukittinggi, and Padang (one each) to function under the DIPARDA and KANWIL (Kantor Wilayah Pariwisata) of Medan and Padang.

Major functions of the branch offices are as follows:

- Collection and analysis of information from the visitor centers
- Provision of tourism information to the visitor centers
- Conducting of surveys of tourist activity in North and West Sumatra
- Overall control of reservations for public recreation facilities
- Public relations activities aimed at domestic tourists by means of posters, guidebooks, maps, etc.

The visitor centers will have the following functions:

(1) Provision of tourism information to tourists

- Suggestions on what tourism areas the tourists who come to the center seeking information might visit and what routes they might follow
- Providing information on and taking reservations for public recreation facilities in the area
- Giving information on available transportation and acting as a ticket agency for it
- Giving information on hotels and other available accommodation and service facilities and taking reservations for them

(2) Collection and filing of information on tourism in the area

- Surveys on recent conditions in various tourism-related industries in the area, including transportation accommodations, and services
- Surveys on tourist movements in the area
- Getting tourists in the area to answer questionnaires on their impressions and preferences

In order for these public tourism information facilities to function successfully it is necessary that they enlist considerable cooperation on the part of private airlines, bus and taxi companies, hotels, travel agencies, and other tourism service facilities. Furthermore, public relations activities can be more effective if there is cooperation and coordination between the branch office and visitor centers, on the one hand, and other government offices and private enterprises.

Provision of Tour Program (No.5)

The program of tours in the study area must be so arranged as to take into account the convenience and enjoyment of tourists and accommodate a variety of tourist goals and interests with a variety of tourism resources and route combinations.

It should be formulated by DIPARDA in cooperation with private tourism-related organizations, and in its implementation there should be cooperation between the two in terms of promotional efforts and counter service.

Five extensive tourism routes are proposed: Karo, Toba, and Karo-Toba tours from Medan, a Minang tour from Padang, and a tour to all three of these areas. Which one to choose will depend on the individual tourist's schedule and interests.

It will also be necessary to provide for a variety of excursion routes within each of the three areas in accordance with the nature of the available tourism resources and the interests of individual tourists, among the possibilities being routes emphasizing appreciation of nature, discovery of traditional culture, and visitation of places of historical interest.

Formation of Tourism Region (No.6)

Both to increase and to cope with future tourism demand in the study area, the following specific development policies have been adopted on the basis of the target figures for the number of visitors and other elements of the physical framework and a comprehensive analysis of natural conditions, tourism resources, transportation networks, tourism-related infrastructure, and other relevant factors.

(1) Designation of Medan and Padang as Gateway Cities

Expansion of the tourist service facilities and reinforcement of the transportation node function of Medan and Padang as gateway cities to the study area and as cities which already have a considerable accumulation of urban functions. Particularly expansion and improvement of the two airports.

(2) Strategic Development in Three Zones

Strategic tourism development investment in the Karo Plateau, Lake Toba, and Minang Highlands "tourism development zones."

(3) Active Investment in Three Tourist Towns

Active tourism development investment in the towns of Brastagi, Parapat, and Bukittinggi as the major towns in the three tourism development zones.

(4) Concentration of 12 Development Areas Within the Development Zones

Preservation and development of tourism resources in twelve other "development areas" in the three tourism development zones and provision of accommodation and other tourist facilities in some of them.

Proposal for National Recreational Parks (No.7)

It is proposed that the Lake Toba development zone be designated as a national recreational park and that the Karo Plateau and Minang Highlands development zones be designated as quasi national recreational parks, with the tentative names of "Lake Toba National Recreational Park," "Karo Plateau Recreational Park," and "Minang Traditional and Cultural Recreation Park."

Since these three areas are among the most outstanding nationwide in terms of natural and cultural setting and have already been provided with a considerable amount of recreational facilities, it is appropriate that they be further developed and preserved as recreation spots for Indonesians and foreign tourists alike.

The best way for these areas to be developed and preserved for the maximum public benefit is for the Central Government to assume a controlling and coordinating function in their development while at the same time respecting local ownership and other property rights, and this can be accomplished most effectively if the areas are designated as national and quasi national recreation parks.

Such designation will entail the following action:

- Cooperation and coordination between the different ministries concerned, including the Ministry of Public Health, the Ministry of Agriculture, the Ministry of Transportation and Communications, the Ministry of Public Works, and the Ministry of Culture and Education, with respect to necessary organizational, financial, and legal measures.
- Comprehensive surveys of the areas in question on the basis of the above measures and formulation of plans for resource protection and utilization of the areas.
- Implementation of park development works on the basis of the above planning with guidance, control, and coordination of the different kinds of development, and establishment of entities for operation of the parks.

Karo Plateau - Paradise of Flowers and Birds in a Setting Fringed by Volcanic Peaks (No.8)

Since this area is a mere 66 km from the gateway city of Medan, which is expected to have a population of 2 million by 1995, it is not only suited for the standard tour type of a one-night stay but also should be developed as a tourism area for day trippers from that city.

Considering its ideal climate (average annual temperature of 19 deg.C at an altitude of 1,400 m above sea level), the main emphasis in its tourism development should be placed on outdoor recreation, including a country club for high-class tourists staying in the area one night, sports facilities for youths, outdoor educational facilities, and health and recreation facilities for promotion of the physical well-being of the people of the province.

The development is to take place in four specific areas: on the northern slopes of Mt. Sibayak (the North Karo area), in Brastagi and on the mountain slopes on the northwest side of the town where there are abandoned slash-and-burn fields (the Brastagi area), the Lake Kawar area, and the South Karo Area around Kabanjahe.

In Phase-1 maximum utilization should be made of existing tourism resources through the provision of necessary tourist service facilities, including transportation, information, and accommodation facilities in Brastagi and redevelopment of its main street and establishment of a rava museum and other facilities for the use of such tourism resources as Lingga and Barusjahe villages as well as excavation and surveys of natural and cultural assets and formulation of tourism resource utilization and protection programs.

Phase-2 should concentrate on the provision of outdoor sports and recreation facilities, including an international class country club for foreign and domestic high-class tourists staying overnight complete with a golf course, a horseback riding facility, and swimming pools, comprehensive sports grounds for local tourists, and various cycling, mountain climbing, and hiking courses.

In Phase-3 there should be improvement of facilities in Brastagi as an international tourism town, construction of a youth vacation village in the Lake Kawar area for outdoor education and recreation, and provision of a tourism farm/ranch to be visited by tourists and to contribute to the promotion of local farming as well as completion of the Brastagi-Lake Kawar mountain skirts development axis.

Lake Toba - Mystical Lake Toba and Batak Culture (No.9)

This large (650 km²) development zone on the shores of mystical Lake Toba will be one of the chief resort areas in Southeast Asia. The visitor to it will be able to experience not only an awe-inspiring natural setting but also the rich cultural legacy of this Batak homeland.

The visitors to the park will be mainly international and domestic tourists of the long-stay type, and its focal point will be Parapat, which will be developed as an international resort town. Besides Parapat, there will be two accommodation centers on Samosir Island characterized by land and aquatic sports facilities. Tongging, too, will be provided with accommodation facilities as a transit point for visitors from the Karo area.

In Phase-1, Parapat will be provided with the necessary transportation, information, and accommodation facilities, and its waterfront will be redeveloped. In addition, accommodation facilities will be provided at Tomok on Samosir Island across the lake, a ferry service will come into operation between the two areas, a speed boat course will be opened between Parapat and Tongging, and both sides of the road linking the two will be landscaped.

In Phase-2, recreational park facilities will be provided on the Parapat peninsula and land sports facilities will be provided at Tomok for diversification of tourist activities in the area. Furthermore, a village museum treating Batak arts and handicrafts will be built in order to enhance the cultural image of the area, and accommodation and auxiliary service facilities will be provided at Tongging.

In Phase-3, water front development, including hotel construction, will be undertaken at Simanindo at the northern extremity of Samosir Island, facilities will be provided on nearby Tao and Toba islets for musical and dance performances in order to complete the development of the north Samosir development area, and the Hutaginjang observation area in South Toba will be landscaped and provided with park facilities, with special emphasis on provision of recreation facilities for day trippers from Sibolga and Tarutung.

Minang Highlands - Home of the Hospitable Minangkabau People (No.10)

The emphasis in this area, as in the case of the Karo Plateau development zone, will be on tourism development for utilization by regional residents. Nevertheless, a diversity of tourism facilities will be provided as well for international and domestic tourists staying over 1 - 3 nights along with improvement of tourism resources.

As this area is one of the most interesting culturally in Indonesia, there will be maximum utilization of cultural assets in its characterization. These cultural assets fall into three major categories: industrial arts such as silver work, textiles, and woodcarving; ethnic music, dancing and other performing arts; and traditional architectural and historical ruins. Each of these categories of cultural assets will be enhanced through the establishment of an activity center for it.

Bukittinggi, which is already the tourism center of the area will undergo urban renewal and be provided with a new hotel zone complete with recreational and amenity facilities.

In Phase-1 transportation, information, and accommodation facilities will be developed in existing urbanized districts of Bukittinggi, three of the "Seven Hills" that are to highlight the development of the town (the Market Hill, the Observation Hill, and the Arts and Crafts Hill) will be developed, and high-standard hotels will be built in the new hotel zone in order to complete the basic tourist town structure. Elsewhere, chief emphasis will be placed on maximization of utilization of existing tourism resources, particularly through construction of hotel and recreational facilities at Lake Maninjau to make it the most important tourist destination in the area in this phase. In addition, as in the case of the other two development zones as well, wildlife and plant life surveys and cultural asset excavation surveys will be carried out as a basis for formulation of protection and restoration programs.

In Phase-2, tourist activities in the area will be diversified by providing SL train service between the Anai Valley, Padang Panjang, and Bukittinggi and developing a recreational forest, a craft village, mountain climbing routes, observation points, and scenic corridors along the way.

In Phase-3, the increase in the number of visitors and diversification of tourist activities will be coped with through development of areas away from Bukittinggi, including Lake Singkarak as a water sports center, Batusangkar as a performing arts center, and Solok as a picnic area for day trippers from around Padang.

Diversification of Tourist Activity Through Development of Optional Tour Routes (No. 11)

Besides the tourism assets in the three tourism development zones, there are a good number of other tourism assets in various other parts of the study area, the most notable being those of Nias Island, the Portibi Hindu temples, the large stretch of forests in the Gunung Lessor natural reserve, Asahan Valley, and the beaches along the Strait of Malacca and Indonesian Ocean, all of which have considerable potential as future tourism and recreation spots.

Although not many visitors are expected at these spots for a while, it will eventually be necessary to develop them and provide them with facilities along the same lines as those planned for the three tourism development zones.

(1) Nias Island

This island is the largest of the Mentawai island group off the Indonesian Ocean coast of North Sumatra Province. In the south part of the island is to be found a distribution of historical monuments representative of the Nias culture the utilization of which for educational tourism could very well be promoted along with preservation efforts.

In this respect it would be a good idea (1) to carry out scientific surveys of Bawomataluo and Hilisameitano villages and of the Gomo megalithic monuments as soon as possible in order to formulate plans for protection of cultural assets and their future utilization for tourism purposes as well as (2) to improve facilities for sea travel by tourists (domestic cruise) between mainland and Teluk Dalam and air travel between Medan and/or Sibisa and Gunung Sitoli when it becomes necessary and (3) to provide better tourism service facilities on the island with respect to transportation, accommodation and information.

(2) Portibi Hindu Temples

These temples, located in Tapanuli Kabupaten in the southern part of North Sumatra Province and dating from the eleventh to twelfth centuries A.D., are in such a poor state of repair that it is hard to tell what they originally looked like. It is therefore urgent that the government take steps for their restoration and preservation as is being done for the Borobudur Temple and other important historical monuments throughout the country. Specifically, the following measures are needed:

- Continuation of the present scientific survey for early formulation of a restoration and preservation program.

- Active attraction of educational tours and provision of better service facilities for visitors.
- 76 km of local road improvement between Portibi and Gunungtua on the Trans-Sumatra Highway.
- Provision of a concentration of facilities needed by the area as a transit point between North and West Sumatra.

(3) Gunung Lesser Natural Reserve and Asahan Valley

In the northern part of North Sumatra Province and adjacent areas of the Ache Special District there is an extensive forest belt rich in flora and fauna. On the northern edge is to be found the Bohorok Orang Utan Rehabilitation Center, which is open to ordinary visitors.

With a view to increasing the tourism and recreational use of this forest belt, ecological and tourism resource surveys should be carried out with respect to it, and a study should be made of the possibility of building a road between Lake Kawar and Boholok and developing an indirect "adventure" tourist route between the Karo area and Medan that passes through the forest belt.

Another area whose development for tourism use should be considered is the Asahan Valley with its beautiful scenery and relaxing cool climate. Such development should be considered in the context of the overall tourism development of the south Toba area.

(4) Beaches Along the Strait of Malacca and Indonesian Ocean

There are several recreation beaches along the 100 km stretch of coastline between Belawan and Tanjung Balai, including Percut, Pantai Cermini, Sialang Buah, and Tanjung Tirâm, which should be further developed as recreational spots for residents of the Medan area as a seaside complement to the highland recreational sports planned for them on the Karo Plateau.

On the Indonesian Ocean side there are also several beautiful beaches with white sands and coconut palms that are ideal for bathing, including Dandan Beach near Sibolga and the Teluk Dalam and Lagundri beaches on the southern shores of Nias Island. In fact, Australians and Europeans already come to Lagundri beach to enjoy the fine surfing, although in small numbers as yet. It would be a good idea to include these beaches in optional tours. Then again, there is the fishing industry base that is planned for Bungus Beach south of Padang. Once its facilities are completed, it can also serve as a base for recreational fishing in trawlers and other craft.

Active Investment in Three Tourist Towns (No.12)

There should be a concentration of tourism development in the towns of Brastagi, Parapat, and Bukittinggi as the major towns in the three tourism development zones.

Each of the development zones has its own character in terms of climate, terrain, scenery, history, culture, tourism resources, and so forth. The major town in each of them will therefore be the arrival point of tourists and the place where visitors from other countries and other parts of Indonesia are introduced to the local area and get to know the local people.

Among the necessary tourist town functions will be adequate accommodation, central transportation and communication functions, the function of serving as a base for excursion routes to nearby tourism resources, and the function of accommodating an additional tourism service population.

It is therefore necessary that tourism investment in these towns be directed toward satisfaction of these requirements, the following being particularly important in this respect:

- Bringing the towns up to "international" tourism standards (facility-wise).
- Encouragement of improvement of tourism service functions.
- Urgent formulation of land-use plans geared to expected future town expansion.
- Improvement of the urban infrastructure and the living environment.
- Accommodation of new tourism-related industrial population.

Brastagi, the Spirit of the Karo Plateau (No.13)

Brastagi is a charming town along the provincial road between Medan and Kabanjahe on the scenic Karo Plateau in North Sumatra which is characterized by expansive orchards and flower fields and a pleasant green knoll (Gundaling Hill). Its future development orientation will be as a tourism center for the whole Karo Plateau area and a recreation center for day trippers from nearby Medan.

Visitors will arrive in town at a new bus terminal to be built at the northern end of the downtown area surrounded by greenery and tourist facilities. Tree-lined, brick-paved sidewalks will lead southward through the downtown area, and all over town vest pocket parks will be in evidence. To the west will be a recreational park centering on Gundaling Hill, and to the north will be an area dotted with historical buildings dating from colonial days which can be visited at a leisurely space along pleasantly landscaped footpaths, which also lead to the recreation park. In short, Brastagi will be a plateau town clothed in verdure and attractive to residents and tourists alike.

By 1995 the town is to have an area of 700 ha and a population of 16,000, with the tourism service population accounting for 4,500. Since the average number of visitors per day will be 1,100 persons, 500 of whom will stay overnight, 325 high-class and 380 standard-class hotel rooms will be needed to accommodate them.

Tourism-related urban development in the town will have to include: approximately 7.3 ha of hotel site preparation; 16.6 ha of site preparation for housing development to accommodate an additional population inflow of about 11,500 persons; construction of a downtown tourism service facility complex to include a bus terminal, parking space, and a visitor center; town greenification, including a recreational park, vest pocket parks, and footpaths; and a sports park (about 100 ha) at the north end of the downtown area in conjunction with the hotel complex.

Parapat, the Rose of Lake Toba (No.14)

Parapat, along the shore of a peninsula jutting into Lake Toba, the largest in Southeast Asia, and enjoying a fine view of Samosir Island across the lake, will be developed as a lake resort town and will continue to be a nodal point for both lake and overland transportation.

Tourists will arrive at the terminal, which will be a mixed facility consisting of a bus terminal, parking space, port facilities, and marina facilities as a lake recreation center as well as a variety of tourism service facilities. On the landward side of the town are mountains of medium height, and a recreational park offering a wonderful view from small hills with abundant landscaped greenery will be developed at the base of the peninsula. There will also be golf, tennis and other land sports facilities, and visitors will be able to stroll between these facilities, the recreational park, and the marina facilities on pleasant pathways, enjoying the scenery around them, which will be particularly attractive at sunset.

By 1995 the town is to have an area of 400 ha and a population of 12,500, with the tourism service population accounting for 6,900. Since the average number of visitors per day will be 1,500 persons, 1,000 of whom will stay overnight, 360 high-class and 500 standard-class hotel rooms will be needed to accommodate them.

The urban development for expansion of Parapat as a tourist town will have to include: about 10 ha of site preparation, including that for redevelopment of existing hotel sites; 100 ha of site preparation for housing development to accommodate an additional population inflow of 5,600 persons, including those to be relocated from the developed area along the waterfront; construction of a tourism service facility complex to include a port facility, a marina, a bus terminal, parking space, a visitor center, and other related facilities in order to strengthen the town's lake and overland transportation terminal function; provision of a land recreation facility complex on the higher ground inland of the town; and construction of water recreation facilities along the waterfront.

Bukittinggi, the Heart of the Minang Highlands (No.15)

Bukittinggi is located in the Minang Highlands, which consists of three basins. It is located on a hill, as its name implies, with Mt. Merapi and Mt. Singglang visible to the south and Sianok Valley to the west. Its future development orientation will continue to be as the chief tourism center in the study area, giving cohesion to the three tourism development zones.

Visitors will arrive at the new bus terminal to be built at the southern entrance to the present urbanized part of town, from which point they will get a view of five well-developed hillocks situated inside the town, each with its own development theme, as well as sense the bustling vitality of the downtown area with its network of pedestrian ways along which they can stroll from amenity to amenity while enjoying the scenery on the hillocks. Two other hillocks to the northwest will be developed as a "Citizens' Hill," providing various service facilities for town residents, and a "Tourist Hill," with accommodation and other facilities, for a total of seven developed hillocks in the town, which, together with the pedestrian network and the town's existing historical and cultural background, will afford visitors much of interest in cultural terms.

By 1995 the average number of visitors per day will be 900 persons, 430 of whom will stay overnight, and 230 high-class and 230 standard-class hotel rooms will be needed to accommodate them.

As the administrative center of Kabupaten Agam, Bukittinggi is expected to grow to a population of over 100,000 in the near future. In order to improve its tourist function, it will be necessary to undertake redevelopment of its downtown area and expansion of its developed area on the higher ground on its northwest side, 400 ha being involved in all. Besides preparation of the seven hills mentioned above, a new bus terminal, a large parking facility, a visitor center, a pedestrian network, and other facilities will have to be provided.

Upgrading of Urban Infrastructure (No.16)

Considering the number of tourist arrivals and population of the three tourist towns Brastagi, Parapat, and Bukittinggi, it is necessary to provide a water supply system, a refuse disposal system, and a sewage system to raise the standard of living of local inhabitants.

For water supply, it is necessary (1) to develop water resources, (2) to provide distribution systems and (3) to control water quality. The water supplies to be developed by 1995 are as follows:

Brastagi	300 m ³ /day
Parapat	1,000 m ³ /day
Bukittinggi	4,800 m ³ /day

As for refuse disposal, collection of refuse is to be thorough, and it will be necessary to build refuse disposal plants.

The following refuse disposal plant capacities will be required by 1995 considering the number of tourist arrivals and regional population projected for then.

Brastagi	15 tons/day
Parapat	14 tons/day
Bukittinggi	75 tons/day

At present waste water is collected by open ditches and discharged into rivers without treatment. Sanitary sewage is collected in individual septic tanks. It is necessary to provide sewage system for Parapat in order to protect the water of Lake Toba against pollution. By 1995 the volume of sewage will reach about 5,900 m³ per day.

Improvement of Medan and Padang as Gateway Cities (No.17)

Medan (pop. 1.1 million) and Padang (pop. 230,000) are the capitals and the administrative, industrial, and transportation centers of their respective provinces as well as the ports of entry of international and domestic tourist visitors to the area. As tourism demand grows, this "gateway" function will become increasingly important, and it will be necessary to improve the variety of services in them that will support the flow of visitors to and from the three tourism development zones in the area in the following ways:

- Improvement of airports and seaports for entry to and exit from the area
- Improvement of traffic terminals within the area for smoother flow of visitors to and from the tourism development zones
- Construction of tourist centers for the provision of local tourism information
- Building of additional tourist accommodation facilities
- Development of tourism resources and construction of new tourism facilities in the towns themselves

Specifically, the following measures are deemed necessary.

(1) Medan

Restoration of Maimoon Palace and the surrounding area, including Kolam Raya (Great Pond) and other old buildings representing unique Malay architecture and frequently visited by international tourists, especially the passengers of the Dutch cruiser "MS Prinsendam", which has been calling at Belawan (26 km from Medan) every two weeks since January 1974.

(2) Padang

Improvement of Air Manis Beach, known for the Malinkungang Stone, the Taman Siti Nurbaya park on Mt. Padang, the downtown museum and other tourism assets in the town and organization of tours to them.

Improvement of Airports (No.18)

(1) Medan Polonia Airport

This airport is one of five international airports in Indonesia and ranks third in number of foreign visitor arrivals and departures. It is linked with three foreign airports and eight domestic airports by regular flights. It has a 2,445 meters long runway to allow takeoff of aircrafts of DC-9 class. In 1976, this airport handled 0.45 million passengers. The capacity of existing facilities is estimated at 1.40 million passengers per year.

According to the projection of future increase of passengers, the existing capacity may become inadequate sometime between 1983 and 1986. Hence, it will be necessary to complete the extension of existing facilities by that time. Among the items which will require extension are the runway, taxiways, loading aprons, terminal building, and parking areas. The length of the runway will have to take into consideration the types of aircraft which will be operated by Indonesian and foreign airlines.

In addition to growth of the number in passengers in general, growth in the number of tourist passengers will have to be considered as well. A steady increase in tourist arrivals from abroad will take place along with growth in the number of passengers in general. Also growth of foreign visitor arrivals usually depends very much on whether or not reduced air fares are available on chartered flights. The airport facilities will therefore have to be able to accommodate the aircraft commissioned for such flights as well.

In this connection, it is necessary to begin a survey and study as soon as possible to determine the extent and timing of extension of facilities at Polonia Airport.

(2) Padang Tabing Airport

This airport is linked with *one foreign and five domestic airports* by regular flights, but it is not designated as an international airport. It has a 1,850 m long runway to accommodate aircrafts of DC-9 class (light load condition). In 1976 this airport handled 0.13 million passengers. The capacity of existing facilities is estimated at 0.35 million passengers per year.

According to the projection of future increase of passengers, the existing capacity may become inadequate sometime between 1983 and 1986. Hence, it will be necessary to complete the extension of existing facilities by that time. Among the items which will require extension are the runway, taxiways, loading aprons, the terminal building, and parking areas.

In this connection, it is necessary to begin a survey and study as soon as possible to determine the extent and timing of extension of facilities at Tabing Airport.

(3) Small Airports

A small airport is under construction at Sibisa 14 kilometers from Parapat. It will have a 850 meter runway to accommodate small aircraft with about 20 seats and will be a minor gateway to the Lake Toba and Karo Plateau areas. Since the Minang Highlands area has no such small airport, it is suggested that the abandoned airport at Gadut near Bukittinggi be restored. It would have a runway about 800 meters long. These two small airports will make it possible to link the core areas in the two provinces, thus allowing for greater diversity of optional tours.

Improvement of Road Network (No.19)

Taking a broader view of the road network in the area, it is necessary to upgrade the trunk and secondary routes linking the bases. Especially important is the upgrading of the Trans-Sumatra Highway where it links North and West Sumatra.

It is necessary to regulate the road network in the area in such a way as to minimize conflict between general and tourist traffic, one possibility being construction of approach roads to tourist sites.

The tourist bases in the area are urban areas. In them it is therefore necessary to separate sidewalks from traffic lanes and to plan for parking areas, open space, etc.

The road on the eastern bank of Lake Toba is to be upgraded as a tourism road. It will be the shortest route connecting Parapat and Brastagi and will also serve as a scenic route for viewing the lake and Samosir Island. Accordingly, it will be provided with panoramas and parking areas.

It is worthwhile to consider the construction of a new road between Lake Kawar and Brastagi which might serve as a tourist route as well as contributing to the development of the mountain skirt area of Sibayak.

Provision of Various Transportation Facilities (No.20)

(1) Speed Boat Service and Jetty Improvement

Considering the tourist flow with respect to lake Toba, it will be necessary to provide speedboat service between Parapat and Tongging and large ferryboat service between Parapat and Tomok. This will entail improvement of jetties at Parapat, Tongging and Tomok. Speedboat service will not only reduce travel time but will also represent a form of recreation in itself.

Concerning the development of North Samosir, it will be necessary to provide a North Samosir-Tongging speedboat service route and to improve jetties in North Samosir.

Diversification of tourism activities will be achieved through such improvement of the transportation network on the lake.

In the case of Lake Maninjau, it is necessary to arrange boat sightseeing tours, which will entail improvement of the Maninjau jetty.

(2) Provision of Bus, Taxi, and Rent-a-Car Service

It is necessary to establish a bus network which will be used by the majority of tourists. The following points are to be considered in this respect.

- Important routes will be the following:

- Medan - Brastagi
- Medan - Parapat
- Padang - Bukittinggi

- More importance will be attached to the new direct route Brastagi - Parapat than to the route via Pematang Siantar.

- Consideration should be given to a long-distance Medan - Parapat - Bukittinggi - Padang route.

It is necessary to provide bus terminals as the number of tourist arrivals and departures will increase.

It is necessary to improve taxi and rent-a-car services for wider tourist travel and greater variety of optional tours. Taxi and rent-a-car operational centers will have to be provided at each tourist town.

Conservation of Natural Assets in the Parks (No.21)

While all three of the tourism development zones are located in agricultural production areas, they nevertheless are still extremely well endowed with natural assets, including the broad expanses of Lake Toba, the waters of which have the highest degree of transparency of any lake in Southeast Asia, subtropical climax growth, so seldom found in tropical areas, and a large number of other rare flora and fauna in their primeval forests. Needless to say, these natural assets, by providing each of the zones with its own characteristic natural scenery, enhance its tourism value.

It is therefore necessary that such natural assets be protected from the ravishes of natural forces (floods, strong winds, landslides, etc.) and man (agricultural, forestry, tourism, housing and other development), and this can only be accomplished through proper maintenance and control of the natural environment.

Particularly important in this respect will be the following measures.

(1) Lake Conservation

Water quality surveys and monitoring of water pollution is to be carried out during the period 1981 - 1985 with respect to Lake Toba (1,770 km²), Lake Maninjau (100 km²), and Lake Singkarak (130 km²) with a view to formulation of a program for maintaining the quality of the waters of each.

(2) Water resource conservation and prevention of erosion

A 15-year program for water resource conservation and prevention of erosion is to be carried out in the tourism development zones, with the tourism development areas and areas important for their scenery receiving first attention. An important component of this program is afforestation of a total of 8,750 ha on the slopes of the Sibayak Mountains from the Gunung Lessor Natural Reserve area in North Sumatra to Brastagi, on the steep slopes overlooking Lake Toba, along the canyons in West Sumatra, and on the slopes and slash-and-burn fields in the vicinity of Lake Maninjau.

(3) Surveys should be carried out initially during the period 1981 - 1985 with respect to wildlife and subtropical climax growths more than 1,500 m above sea level and around volcano craters with a view to formulation of a program for their protection and utilization for tourism purposes.

Encouragement of Traditional Culture (No.22)

The Karo Plateau and Lake Toba area, the heartland of the seven Batak peoples (present pop. 7.5 million), and the Minang Highlands, the homeland of the Minang Kabau (present pop. 3.5 million), are both areas that have high-quality traditional cultural heritages.

These cultural heritages are comprised of tangibles such as traditional architectural structures and industrial art products and of intangibles such as the skills embodied in individual craftsmen and artists and dances and other performing arts.

They should be thoroughly surveyed for their discovery, protection, and encouragement and active utilization for tourism purposes, policy decisions in this regard lying primarily with the Ministry of Education and Culture.

In this connection the following steps are proposed.

- (1) Designation of the architectural structures and other tangibles as cultural assets in the *Lingga and Barusjahe villages of the Karo Plateau, the Simanindo, Ambarita, Pematang Purba, and South Toba villages of the Lake Toba area, and the Pagaruyung and Tanjung Sungajang villages of the Minang Highlands* and their control and restoration and landscaping within the designated areas and provision of various facilities for tourist use.
- (2) Preservation of traditional industrial arts and ethnic materials through the establishment of a museum and an ethnic research center in the *Karo Plateau area, a Batak village museum in the Lake Toba area, and an arts and crafts center, crafts village, etc., in the Minang Highlands.*
- (3) Encouragement of traditional performing arts and ceremonies through subsidies, construction of performing arts centers, and establishment of a system of remuneration of artists and performers and groups for the *preservation and encouragement of performing arts.*
- (4) Surveys for the discovery, protection, and tourism utilization of historical remains, natural monuments, and unexcavated cultural assets, including the provision of facilities for the utilization of existing historical monuments (courts, palaces, forts, etc.), excavation surveys and archeological park planning for *Candi Portibi and other historical monuments, and surveys for excavation of other natural monuments and cultural assets.*

Outstanding Local Scenery in the Parks (No.23)

The three tourism development zones generally are endowed with the best scenery in the study area.

In order to take full advantage of it, it will have to be protected, improved, restored where it has deteriorated, and discovered anew where it has not been fully apparent, and routes whereby tourists can see it will have to be provided. All this will require financial, legal, and organizational efforts.

In this vein, the following projects are proposed.

- (1) Construction of 28 "scenery points" by 1995, 10 of them to be completed by 1985. It will be necessary for landscaping to be undertaken within a radius of approximately 3 km of each point, an average of 100 ha being covered in each case. This translates to 1,000 ha of landscaping by 1985, and 2,800 ha by 1995.
- (2) Designation of a total length of scenic corridors of 115 km, with development and improvements to be made along approximately 108 km, of which 57 km are to be completed by 1985. Except along lakes and in areas with particularly outstanding scenery, the landscaping will extend to 30 - 60 m from the road on both sides, which means that a total of 1,200 ha will have to be landscaped by 1995, of which 566 ha should be finished by 1985.

Pilot Projects for Restoration of Villages (No.24)

The tourism-related investment in the three tourism development zones will not only benefit the tourism sector but also have a development effect on local communities. In fact, it should be a part of tourism development strategy to improve social infrastructure. This being the case, the following steps are to be taken for the active channeling of the secondary effects of tourism development in the direction of village modernization in the Lake Toba tourism development zone.

In connection with the establishment of a national recreational park in the Lake Toba area, the scattered villages on the northwest side of the lake are to be regrouped for a more orderly pattern of land use and to give residents a chance to participate in tourism development.

As a part of such a villagization effort, six village centers are to be established in that vicinity and each provided with public facilities adequate for a community of 2,000 - 3,000 persons. These village centers are to include elementary schools, polyclinics, markets, and jetties, and where facilities already exist, continuing use is to be made of them after they are improved.

Of the six village centers, those at Tongging, Haranggaol, and Tigaras are particularly urgently needed in view of their close connection with tourism development. If possible, they should be ready by 1990.

Supply Program for Tourist Accommodation Facilities (No.25)

It is necessary to provide comfortable accommodation for different types of tourists with different objectives and different budgets. The two following points are to be given particular consideration in the planning of such facilities.

- To provide a hotel of the highest international standard.
- To provide comfortable economical accommodation facilities for local people in order to promote their tour activities.

The two provinces are together expected to require a tourist accommodation capacity of about 3,400 rooms by 1995.

The accommodation facilities can be classified as follows.

- Class SA: Highest international standard. This class of accommodation is not yet represented in Sumatra. A hotel of this class will serve as a core for the development of international tourism in Sumatra.
- Class A: Offering services and facilities of medium international standard.
- Class B: Providing economical and comfortable accommodation suitable for long stays.
- Class C: Providing all basic accommodation facilities at low cost. In this class are youth hostels, public accommodation facilities and camp sites. Indispensable for promotion of domestic tourism.

The guidelines of scale of operation for each class are given in the table below.

Classes	Construction cost/room (\$)	Room area (m ²)	Room rate (\$)	Bed occupancy rate (%)	Profit rate (%)
SA	70,000	80	29.0	60	18
A	35,000	80	13.3	60	17
B	15,000	60	7.2	50	15
C	5,000	60	3.1	30	15

Different types of accommodation facilities will be used by different types of tourists and travellers. The number of rooms that will be needed in each class has been calculated as per the table below. Where to locate the accommodation facilities should depend considerably on the nature of each tourism spot.

Phases	Provinces	Accommodation Classes				Total
		SA	A	B	C	
1981 - 85	North Sumatra	150	265	304	348	1,067
	West Sumatra	45	50	95	-	190
1986 - 90	North Sumatra	215	283	223	214	935
	West Sumatra	60	86	174	42	362
1991 - 95	North Sumatra	-	80	401	299	780
	West Sumatra	-	20	40	28	88
Total	North Sumatra	365	628	928	861	2,782
	West Sumatra	105	156	309	70	640

The following measures will be necessary in connection with provision of such accommodation facilities:

(1) Measures to bring SA and A Class accommodation up to internationally competitive standards.

- Improvement of sales points
(Diversification of menu, folk and cultural shows, selection of location, etc.)
- Consideration of accommodation scale allowing for introduction of package tours.
- Attraction of foreign hotel capital.

(2) Measures for upgrading hotel industry.

- Vocational training for the large number of workers who will be needed in the future.
- Examination of various standards of sanitary, emergency equipment, architectural design, environment, etc.

(3) Measures for participation of small capital and for sound operation and maintenance.

- Reduction of cost through introduction of consortium system.
- Systematization of promotion system through introduction of the referral chain system.

(4) Measures for the promotion of domestic tour activities.

- Private operation of youth hostels and public accommodation facilities.
- Vocational training for guidance personnel, including tour instructors.

Construction of Tourist Service Facilities (No.26)

The purpose of planning for tourist service facilities is to make sure that the facilities provided are adequate in terms of quantity, attractiveness, pleasantness, and safety. This being the case, it will be necessary to provide fire extinguishing and crime prevention systems.

The flow of tourists will consist mainly of movement from place to place throughout the area. Importance should therefore be attached to the development of transportation facilities and scenic spots. From this standpoint, the traffic systems on lakes Toba and Maninjau will be important projects.

In addition to such facilities of the round-trip type, facilities for long-stay tourists should also be provided. In this respect amusement facilities, utilities, and improvement of landscape as well as improvement of existing tourism spots are very important.

Places around Brastagi and Bukittinggi are suitable for highland sports facilities. Facilities for water sports should be provided on lakes Toba, Maninjau, and Singkarak.

Facilities in the vicinity of accommodation bases should include promenades, parks, and planted areas along streets.

At existing tourism spots deficiencies are to be made up with respect to access roads, toilets, rest houses, parking areas, information facilities, etc.

The above-mentioned facilities are those directly utilized by tourists. In addition, it is necessary to provide facilities for workers in the tourism industry who come from other provinces. It is estimated that the number of such workers will be about 5,200 (4,000 households) in North Sumatra and 1,200 (1,100 households) in West Sumatra. Housing and related facilities and educational and cultural facilities are to be provided for them nearby the tourism accommodation bases. These facilities are to be properly planned. Otherwise they could detract from the atmosphere of the tourist resorts.

Provision of Public Recreational Facilities (No.27)

In the context of overall government policy for the improvement of national welfare and particularly for the fostering of sound minds and bodies, the government should provide recreational facilities of various kinds, including those for social education, sports and physical exercise, and rest and relaxation, in areas easily accessible by anyone who wants to utilize them as well as furnish adequate recreational guidance, train personnel to act as leaders in this field, and see to it that sufficient information is made available concerning the location and procedures for use of such facilities to facilitate maximum utilization of them by the general public. The subsequent management and operation of the facilities is preferably to be undertaken by local authorities.

In this respect the following facilities are recommended for North and West Sumatra as fitting in well with local conditions.

(1) Youth Vacation Village

A youth vacation village in the Lake Kawar development area of the Karo Plateau as a facility for health youth recreation in a fine natural setting will make for outdoor fun, comradeship with other young people, and, in the long run, a healthier younger generation in both mind and body.

(2) Sibolangit Outdoor Recreational Center

This facility, to be developed on the existing jamboree site in the North Karo development area of the Karo Plateau, will provide all age groups with the opportunity to engage in healthy outdoor activities.

(3) Comprehensive Sports Grounds

This facility, consisting of a variety of grounds for different kinds of outdoor sports, will be located in the Brastagi area of the Karo Plateau. Expert advice and guidance will be provided there for the purpose of promoting wider participation in sports on the regional level.

(4) Solok Picnic Grounds

These grounds, to be located at Solok in the Minang Highlands, will offer healthy outdoor recreation in a wonderful natural setting for groups of young people and families.

(5) Recreational Forests

Such forests, with necessary facilities for their protection and utilization by the general public, will be provided at Jumaraja on the Karo Plateau, at Hutaginjang in the Toba Lake area, and in the Anai canyon in the Minang Highlands.

(6) Tourism Farm/Ranch

This facility on the slopes of Mt. Sibayak outside of Brastagi on the Karo Plateau will make it possible to utilize the well-developed agricultural and grazing activities of the area for tourism purposes by affording visitors the opportunity to engage in such activities and thereby experience at first hand the bounty of nature and the joy of the harvest. Not only will tourism be benefitted, but agriculture itself will in turn be promoted by such a facility.

(7) City Parks

City parks should be developed in the tourism towns of Brastagi, Parapat, and Bukittinggi to provide town residents an opportunity for outdoor recreation and relaxation in their everyday environment.

Establishment of Organization for Execution and Operation (No.28)

An organization should be established for execution, coordination, monitoring, operation, and management in connection with implementation of the proposed development plan. It should be under the direct control of the Directorate General of Tourism and control the executive bodies to be established in the two provinces for implementation of the plan, each with its own staff and advisors, including representatives of all government offices concerned and especially DIPARDA and KANWIL (Kantor Wilayah Pariwisata).

The new organization to be established for implementation of the master plan will have various functions, including planning, development execution, research, finance, etc. Execution and management of crucial development projects such as those for tourist towns and the tourism development zones should be undertaken either directly by the organization itself or under its direct supervision.

The organization should be flexible in order to be able to handle varying amounts of work in the course of development. An effort should also be made to ensure clarity of division of functions and responsibilities among existing administrative organizations.

Provision of Investment Incentives (No.29)

Investment incentives should be established for encouragement of private investment in such tourism-related fields as hotels, catering, handicrafts, and travel services.

The following are some of the possibilities.

- Subsidized lease of facility sites prepared by the government and equipped with basic infrastructure such as water, sewage, power, and employee housing.
- Easy loans and credits.
- Exemption or reduction of corporation taxes, import duties, property taxes, etc.
- Indirect tax incentives in the form of accelerated depreciation, loss-profit offsetting, etc.

Although such incentive systems have already been established by the Foreign Investment Law, the Local Investment Law, and the BKPM (Investment Bank), they should be improved for better applicability to tourism development. Since regulations regarding hotel standards, sanitation, safety, etc. are necessary in order to upgrade service, an effective balance will have to be found between investment incentives and regulation control. Such systems should be operated on the national level, but for the time being at least action should be taken on the regional level for improvement of the credit systems of regional development banks and for more effective tax incentives.

Efforts should also be made to ensure that benefits of tourism development accrue to smaller local enterprises as well. One way of accomplishing this is to organize consortiums qualifying for various incentive privileges.

Establishment of Vocational Training Institutions (No.30)

Local people should be given as great an opportunity as possible to participate in the tourism sector so that they, too, might benefit from its development. In this connection, as well as from the standpoint of improvement of amenities, training of employees for the tourism sector is an indispensable component of implementation of the master plan. In order to ensure high-quality training, it is desirable that training centers managed by the Central Government be established in both provinces.

Assuming that each training course lasts one year, some 500 people in North Sumatra and 150 people in West Sumatra are expected to complete such courses each year in the core areas. Later on it will be possible to gradually extend the training programs to cover trainees outside the core areas as well.

Initially, it will be necessary for the government to grant subsidies to employers since it will be difficult to cover the whole cost of operation and maintenance of the training institutions with tuition fees only. It will also be necessary to require employers to have a certain portion of their employees trained at such institutions.

Study should be given to the possibility of obtaining foreign technical assistance for their establishment and operation.

Role of Directorate General of Tourism (No.31)

In the initial stage of the period covered by the master plan the role of the DGT will include the following.

- Establishment of necessary organizations to act under the direction of DGT to coordinate, implement, monitor and administrate the tourism development in North and West Sumatra.
- Promotion of establishment of the institutional systems, organizations, and regulations posed in the master plan as being necessary for tourism development in the two provinces in terms of advising ministries and other government offices and which are to be under their direction.
- Incorporation of important projects into higher-echelon plans such as future five-year plans and the regional development plan for Development Area A, consisting of the Aceh, North Sumatra, West Sumatra, and Riau provinces.
- Implementation of some urgent projects and undertakings under its direct supervision in the framework of the administrative system. The vocational training center is included in this category.
- Negotiation with other ministries or organizations with respect to such matters and undertakings as air transportation policy, customs regulations, and so forth.

After such initial steps are taken, DGT will monitor, promote and coordinate the overall progress of tourism development in the two provinces. The following are some of the matters that will be involved in this respect.

- Administration of projects receiving foreign or international assistance.
- Ongoing monitoring of activities initiated in the initial stage.
- Periodical or occasional review of the master plan on the basis of the state of progress of development and the results or outcomes thereof.

Financial Implications (No.32)

As a comprehensive tourism development plan, this master plan consists not only of pure tourism projects but also of social projects which are interdependent with tourism development. Such being the case, analysis of its financial feasibility can best be accomplished by means of a comprehensive approach rather than separate analysis of the individual projects.

By its very nature, the plan will require a considerable amount of government investment, both central and local. Accordingly, its financial feasibility, which will be a measure of the justifiable magnitude of public investment, must be analysed in terms of the relationship between the government expenditures it will entail and the tax revenues that it can be expected to produce from the region. It is also reasonable that the financial evaluation cover a longer return period, say, twenty-five to thirty years, with a lower discount rate of 5% - 8.5%, considering that the master plan includes projects of a social nature which will bring various intangible benefits outside the tourism sector.

Financial analysis on the basis of such conditions has led to the following conclusions:

- In the case of North Sumatra, the master plan will be financially feasible from the government's point of view even at a discount rate of 8.5%.
- In the case of West Sumatra, the master plan will be feasible at a discount rate of 5%, although probably not at 8.5%.

This suggests the following two policy alternatives for West Sumatra.

- To go ahead only with the priority projects, deferring the rest to a later stage. (If 80% of the proposed investment is accounted for by such priority projects, they will be feasible even at a discount rate of 8.5%)
- To go ahead with the whole plan on the basis of subsidies from the standpoint of narrowing the economic gap between the two provinces and of achieving national social minimums.

Analysis has also been made of the balance between expenditures for provincial projects and provincial government tax revenues. Assuming that 40% of the total public investment will be for provincial projects, about 30% of the funds for provincial projects will have to be provided by the Central Government. This will be possible since its tax revenues from income generated by the master plan in other parts of the country will more than cover the deficit with respect to the two provinces in question.

It can be concluded, therefore, that the master plan as a whole is financially feasible from the standpoint of the government.

Socioeconomic Implications (No.33)

Since the proposed tourism development program is of a comprehensive nature, its socioeconomic effects will be multiple. Various benefits will be derived from the social infrastructure development as well as the tourism development itself, including the income effect, inducement of investment, foreign exchange earnings, creation of employment, and other intangible effects.

One of the major objectives of development from an economic viewpoint is the stimulation of consumption and investment through inducement of effective demand in terms of greater tourist expenditures.

If targets with respect to the number of tourists that visit the area are realized, the following gross annual expenditures could be expected from them:

(million Rps.)	1980	1985	1990	1995
North Sumatra				
Foreign tourists	2,328	4,305	6,788	9,705
Domestic tourists	914	2,229	4,984	10,878
West Sumatra				
Foreign tourists	421	922	1,658	2,632
Domestic tourists	217	512	1,166	2,689

Such tourist expenditures and induced private investment are expected to directly generate net annual income in the following amounts, leakage deducted.

(million Rps.)	1980	1985	1990	1995
Nationwide	8,165	18,193	20,575	21,584
North Sumatra	3,963	12,776	21,778	37,770
West Sumatra	1,751	3,203	5,548	10,201

As the proportion of generated income that will go to the area itself depends on the propensity to import, either from abroad or other regions of Indonesia, efforts should be made to increase the self-sufficiency of the region in order to maximize the benefits to the local economy. In this connection, import-substitution industries such as food processing and manufacture of construction materials should be encouraged.

Income generated directly and indirectly will increase demand and induce private investment, the figures for the latter being estimated as follows:

(million Rps.)	Direct	Indirect
Regional	21,767	19,482
Nationwide	5,752	73,598

Foreign exchange earnings are one of the biggest aims of development from the viewpoint of the national economy. Assuming that the number of foreign tourist expected to visit the area do in fact do so, the gross increment of foreign exchange receipts from them could amount to US\$470 million over thirty years. However, implementation of the plan and operation and maintenance of the completed facilities will require a considerable amount of foreign exchange. Consequently, net foreign exchange earnings, after deduction of leakage, are expected to be US\$290 million over the same period. In this same connection, efforts should also be made to minimize imports.

Development will contribute to the creation of additional jobs during both the investment and the operation and maintenance stages. It is estimated that construction works will require 2.2 million man-days of labor annually on the average, and that an additional 6,630 jobs will be available in the operation and maintenance of tourist facilities. Furthermore, income generated through the linkage effects of development will create additional job opportunities.

Development may have various other effects as well-although they are difficult to quantify -including enhancement of related industries such as agriculture, cottage industries, and transportation, and the plan will also contribute to nature and culture conservation, acceleration of provision of social infrastructure, and furtherance of national unity through greater human and economic mobility.

Proposed Projects

Project Profile: Karo Plateau

Project Profile: Lake Toba Area

Project Profile: Minang Highlands

Project Profile: Miscellaneous

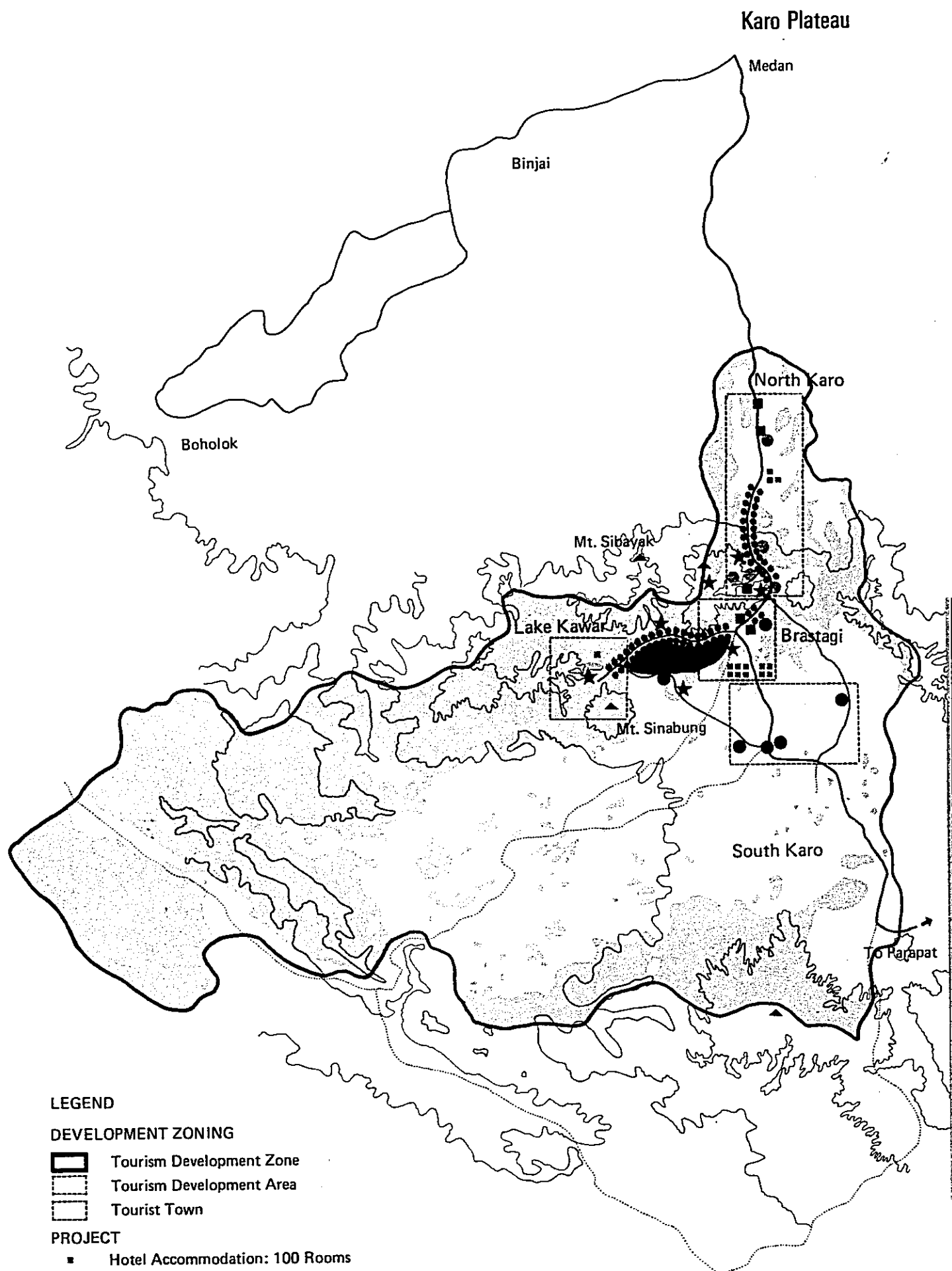
Total Project Costs

The projects necessary for the tourism development of North and West Sumatra are listed below. Their main purpose is the realization of the future picture of tourism in the study area deemed most desirable as a result of the physical planning of the present study. Their implementation will not be immediate but rather distributed over time according to growth in demand. Since, however, these projects are based on the policy and strategy measures discussed in Chapter 2, they will have to be changed, cancelled, or at least undergo a change in implementation schedule should any of the various proposals or recommendations in that chapter be rejected. In other words, rather than each being indispensable in itself, these projects should be considered as a set of assumptions designed to afford an understanding of the overall picture of future tourism development of the study area.

Project Profile: Karo Plateau

Project name	Timing of materialization				Classification and cost indication (in US\$ million)		
	80	85	90	95	TD	SD	PD
(1) Conservation of Nature							
Survey of precious wildlife and plants	○	○	○	○	-	0.02	-
Afforestation	○	○	○	○	-	1.16 (0.35)	-
(2) Conservation of Scenery							
Development of scenic spots	□	□	□	□	0.52 (0.09)	-	-
Development of scenic corridors	□	□	□	□	0.65 (0.13)	-	-
Preservation and development of landscape areas	□	□	□	□	0.09 (0.02)	-	-
(3) Conservation of Cultural Heritage							
Improvement of traditional houses of Karo Batak	□	□	□		0.11	-	-
Extension of Raya museum in Kabanjahe	□	□	□		0.14	-	-
Karo Batak Center		□	□	□	0.01	-	-
(4) Development of Infrastructure and Network							
New road between Brastagi and Lake Kawar		□	□	□	6.29 (0.76)	-	-
Improvement of access roads to tourism assets	□	□	□	□	0.80 (0.14)	-	-
Water supply in Brastagi	□	□	□	□	0.05	0.12	-
Refuse disposal facility in Brastagi	□	□	□	□	0.28	0.80	-
(5) Development of Tourism Facilities							
Private tourism facilities and accommodations	□	□	□	□	-	-	6.21
Public tourism facilities		□	□	□	0.03	-	-
Housing for tourism service population	□	□	□	□	-	6.32	-
(6) Development of Brastagi Tourist Town							
Private tourism facilities and accommodations	□	□	□	□	-	-	29.50
Public tourism facilities	□	□	□	□	0.71	-	-
Housing for tourism service population	□	□	□	□	-	4.67	-
Organization for development execution	□	□	□	□	0.05 (0.78)	-	-
(7) Promotion of Recreational Activities for Inhabitants							
Provision of Karo sports ground		□	□	□	-	0.85 (0.34)	-
(8) Promotion of Tourism Industry and improvement of Local Community							
Improvement of facilities for marketing system			□	□	-	0.86	-
Total						60.24 (2.61)	

Remarks TD Tourism Development by the Government
SD Social Development by the Government
PD Development by Private Enterprise
Figures in the Parenthesis Indicate Annual Operation and Maintenance Costs
□ Construction Costs
○ Other Development Costs



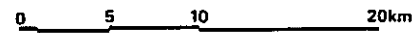
LEGEND

DEVELOPMENT ZONING

- Tourism Development Zone
- Tourism Development Area
- Tourist Town

PROJECT

- Hotel Accommodation: 100 Rooms
- Afforestation Area
- ★ Scenic Spot
- Scenic Corridor
- Scenic Area
- Cultural Conservation
- Amusement Recreational Facility
- Transportation Service Facility

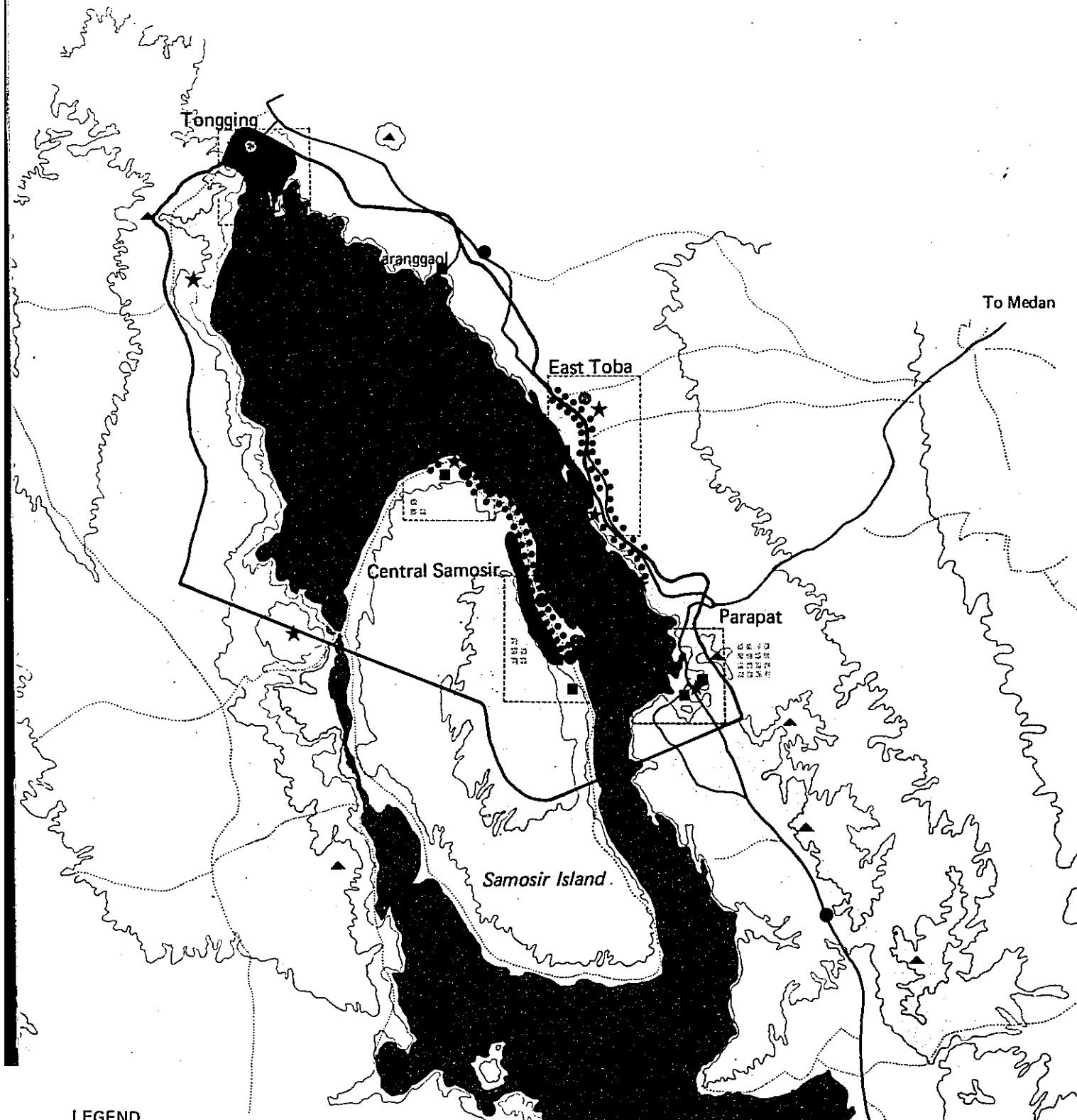


Project Profile: Lake Toba Area

Project name	Timing of materialization				Classification and cost indication (in US\$ million)		
	80	85	90	95	TD	SD	PD
(1) Conservation of Nature							
Monitoring survey of water quality for Lake Toba	○○○○○				-	0.17 (0.09)	-
Survey of precious wildlife and plants	○○○○○				-	0.01	-
Afforestation	○○○○○	○○○○○	○○○○○	○○○○○	-	2.58 (0.77)	-
(2) Conservation of Scenery							
Development of scenic spots	□□□□□	□□□□□	□□□□□	□□□□□	0.81 (0.14)	-	-
Development of scenic corridors	□□□□□	□□□□□	□□□□□	□□□□□	0.95 (0.19)	-	-
Preservation and development of landscape areas	□□□□□	□□□□□	□□□□□	□□□□□	0.15 (0.03)	-	-
(3) Conservation of Cultural Heritage							
Improvement of traditional villages and historical spots in Samosir Island			□□□□		0.26 (0.01)	-	-
Installation of Batak village museum		□□□□			0.23	-	-
(4) Development of Infrastructure and Network							
Improvement of road along Toba lake-side	□□□□				-	4.05 (0.89)	-
Improvement of access roads to tourism assets	□□□□	□□□□	□□□□	□□□□	1.58 (0.29)	-	-
Waters supply in Parapat	□□□□	□□□□	□□□□	□□□□	0.30	0.51	-
Refuse disposal facility in Parapat	□□□□	□□□□	□□□□	□□□□	0.45	0.77	-
Sewage system in Parapat	□□□□	□□□□	□□□□	□□□□	2.69	4.57	-
Improvement of lake transportation network	□□□□	□□□□	□□□□	□□□□	-	-	3.89
(5) Development of Tourism Facilities							
Private tourism facilities and accommodations	□□□□	□□□□	□□□□	□□□□	-	-	10.15
Public tourism facilities		□□□□	□□□□	□□□□	0.03	-	-
Housing for tourism service population	□□□□	□□□□	□□□□		-	8.24	-
(6) Development of Parapat Tourist Town							
Private tourism facilities and accommodations	□□□□	□□□□	□□□□	□□□□	-	-	28.81
Public tourism facilities	□□□□	□□□□	□□□□		6.67 (1.11)	-	-
Housing for tourism service population	□□□□	□□□□	□□□□		-	7.45 (0.45)	-
Organization for development executions	○○○○○	○○○○○	○○○○○		0.05 (0.78)	-	-
(7) Promotion of Tourism Industry and Improvement of Local Community							
Construction of village centers	□□□□	□□□□	□□□□		-	6.00	-
Total						91.37 (4.75)	

Remarks TD Tourism Development by the Government
SD Social Development by the Government
PD Development by Private Enterprise
Figures in the Parenthesis Indicate Annual Operation and Maintenance Costs
□ Construction Costs
○ Other Development Costs

Lake Toba Area



LEGEND

DEVELOPMENT ZONING

- Tourism Development Zone
- Tourism Development Area
- Tourist Town

PROJECT

- Hotel Accommodation: 100 Rooms
- Afforestation Area
- Scenic Spot
- Scenic Corridor
- Scenic Area
- Cultural Conservation
- Amusement Recreational Facility
- Transportation Service Facility
- Lake Transportation Facility
- Speedboat
- Ferryboat
- Pleasureboat

To Sibolga

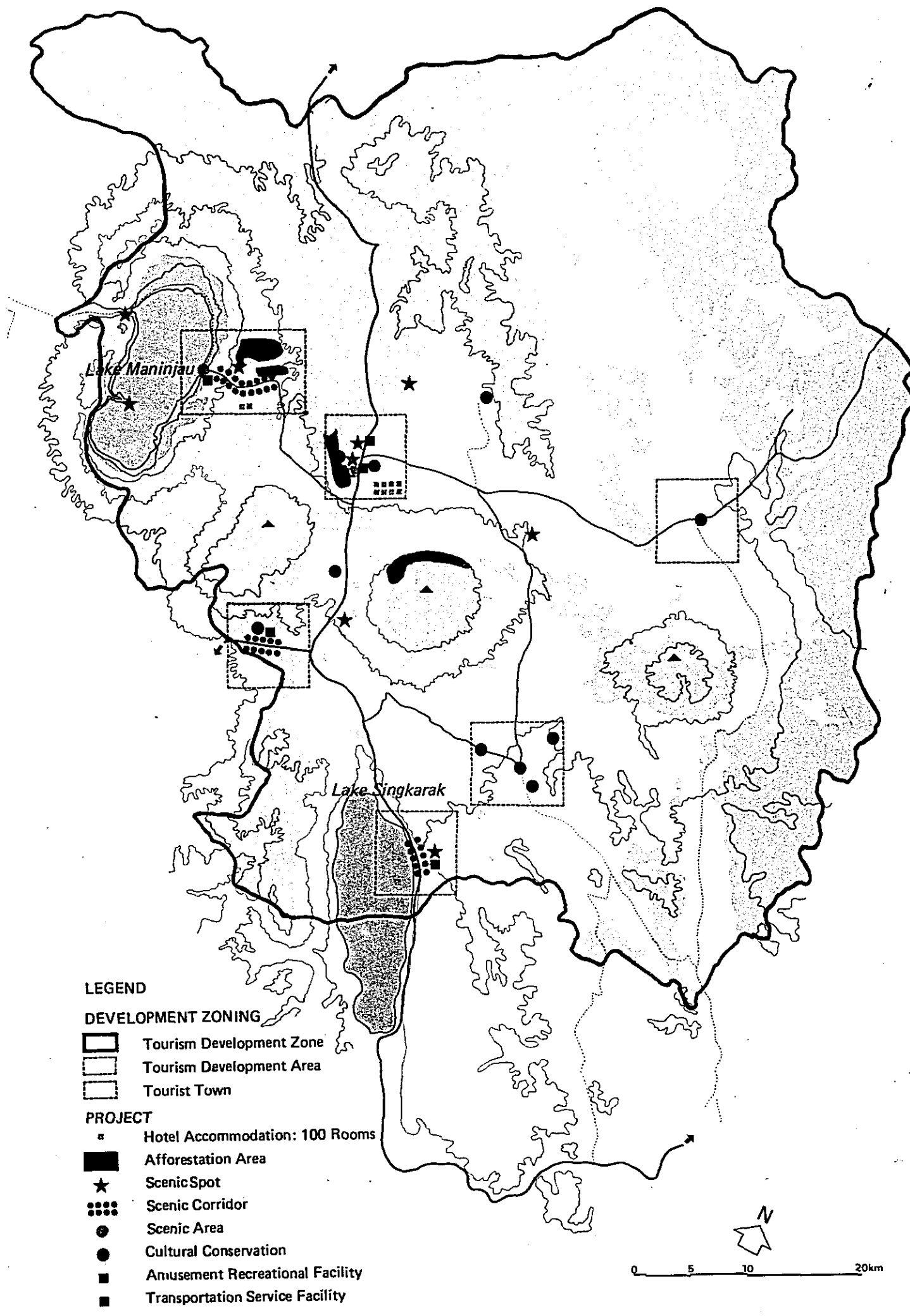


0 5 10 20km

Project Profile: Minang Highlands

Project name	Timing of materialization				Classification and cost indication (in US\$ million)		
	80	85	90	95	TD	SD	PD
(1) Conservation of Nature							
Monitoring survey of water, quality for lakes Maninjau and Singkarak	○○○○○				-	0.17 (0.21)	-
Survey of precious wildlife and plants	○○○○○				-	0.12	-
Afforestation	○○○○○○○○○○○○○○○○○○				-	0.77 (0.12)	-
(2) Conservation of Scenery							
Development of scenic spots	□□□□□□□□□□□□□□				0.90 (0.15)	-	-
Development of scenic corridors	□□□□□□□□□□□□□□				0.55 (0.09)	-	-
Preservation and development of landscape areas	□□□□□□□□□□□□□□				0.24 (0.04)	-	-
(3) Conservation of Cultural Heritage							
Provision of craft center	□□□				-	-	1.17
Improvement of craft village		□□□□□			0.05	-	-
Auditorium for traditional art in Payakumbuh				□□□	0.40	-	-
Outdoor performance facilities			□□□		0.01	-	-
Improvement of traditional villages of Minangkabau		□□□			0.01	-	-
Subsidy for promotion of arts and crafts	○○○○○○○○○○○○○○○○○○				-	0.22	-
Subsidy for intangible properties	○○○○○○○○○○○○○○○○○○				-	0.90	-
Discovery of cultural heritage		□□□□□			0.07	-	-
Establishment for promotion of culture	○○○○○○○○○○○○○○○○○○				-	0.05 (0.78)	-
(4) Development of Infrastructure and Network							
Restoration of Gadut Airport				□□□□□	-	1.70	-
Improvement of access roads to tourism assets	□□□□□□□□□□□□□□				1.23 (0.26)	-	-
Water supply in Bukittinggi	□□□□□□□□□□□□□□				0.14	1.93	-
Refuse disposal in Bukittinggi	□□□□□□□□□□□□□□				0.36	4.81	-
Improvement of lake transportation network		□□□□□			-	-	1.04
(5) Development of Tourism Facilities							
Private tourism facilities and accommodations	□□□□□□□□□□□□□□				-	-	4.52
Public tourism facilities		□□□□□□□□□□			0.05 (0.02)	-	-
Housing for tourism service population	□□□□□□□□□□				-	1.62 (0.96)	-
(6) Development of Bukittinggi Tourist Town							
Private tourism facilities and accommodations	□□□□□□□□□□□□□□				-	-	15.85
Public tourism facilities	□□□□□□□□□□				1.57	-	-
Housing for tourism service population	□□□□□□□□□□				3.64 (1.02)	-	-
Organization for development executions	○○○○○○○○○○○○○○○○○○				0.05 (0.70)	-	-
(7) Promotion of Recreational Activities for Inhabitants							
Picnic park in Solok			□□□□□		-	0.40	-
Total						44.54 (4.67)	

Minang Highlands



Project Profile: Miscellaneous

Project name	Timing of materialization				Classification and cost indication (in US\$ million)		
	80	85	90	95	TD	SD	PD
North Sumatra Province							
Discovery of cultural heritage		○○○○○			0.07	-	-
Subsidy for promotion of arts and crafts	○○○○○○○○○○○○○○○○○○				-	0.14	-
Subsidy for intangible cultural properties	○○○○○○○○○○○○○○○○○○				-	0.20	-
Establishment for promotion of culture	○○○○○○○○○○○○○○○○○○				-	0.05	-
						(0.78)	
Extension of Polonia Airport	□□□□□□□□□□□□□□				-	27.78	-
Provision of recreational facilities	○○○○○○○○○○○○○○○○○○				-	(0.60)	-
Market promotion by the Government	○○○○○○○○○○○○○○○○○○				3.14	-	-
Vacational training center for tourism service population	○○○○○○○○○○○○○○○○○○				1.40	-	-
Subtotal						32.78	
						(1.38)	
West Sumatra Province							
Extension of Tabin Airport	□□□□□□□□□□□□□□				-	9.15	-
Market promotion by Government	○○○○○○○○○○○○○○○○○○				1.15	-	-
Vacational training centers for tourism service population					0.83	-	-
						(2.34)	
Subtotal						11.13	
						(2.34)	
Total						43.91	
						(3.72)	

- Remarks
- TD Tourism Development by the Government
 - SD Social Development by the Government
 - PD Development by Private Enterprise
 - Figures in the Parenthesis Indicate Annual Operation and Maintenance Costs
 - Construction Costs
 - Other Development Costs

Total Project Costs

Project groups	(unit:US\$ million)	
	Development costs	Operation and maintenance costs
North Sumatra Province		
Karo Plateau	60.24	2.61
Lake Toba Area	91.37	4.75
Miscellaneous	32.78	1.38
Total	184.39	8.74
West Sumatra Province		
Minang Highlands	44.34	4.67
Miscellaneous	11.13	2.34
Total	55.67	7.01
Grand Total	240.06	15.75

Plan of Urgent Action

Immediate Undertakings
Institutional Requirements
Further Studies for Priority Projects

This final chapter discusses the urgent action that should be taken on the basis of the proposals, conclusions, and recommendations already made. Included are the action that should be undertaken at the administrative level in the preparatory stage of development; the organization and roles of such administrative efforts for tourism development; and suggestions regarding the implementation of feasibility studies for the realization of the projects of highest priority of those proposed in the present plan.

Immediate Undertakings

(1) Incorporation with the Integrated Development Plans

Many of the proposals and proposed projects are to be incorporated in due time in long-term plans of higher echelon such as future five-year plans and integrated regional development plans so that they can be implemented through such plans.
such plans.

(2) Promotion Campaign

There will be some delay of development activity until the first group of activities takes effect. However, it is necessary to raise the growth rate of visitor arrivals even during this period of delay, and necessary steps will have to be taken right away in this respect.

In general, the capacities of existing accommodation and other facilities and infrastructure, except in a few cases, are greater than current demand. It is essential to raise their occupancy or utilization rates even before the effects of development are felt.

In view of these considerations, it is suggested that a promotion campaign be launched immediately, with DGT and travel agents and air lines playing a direct role. Necessary information will be issued by DGT to travel agents and distributed through various media. It will include practical data on the basis of which travellers can plan the length and cost of their trips. Such information distribution will be weighed in favor of West Sumatra since it has been poorer off in this respect than North Sumatra. Distribution of information abroad will concentrate on countries with the highest potential for generating visitors to the area such as ASEAN countries (especially Malaysia and Singapore), Common Market countries (especially Germany and France), Oceania, the US, and Japan.

(3) Upgrading of Existing Tourism Conditions

At the same time, existing tourism conditions which can be improved relatively easily will have to be upgraded without delay. Transportation from gate cities to the core areas will be improved by means of more frequent and more comfortable vehicles. Hotel service will be upgraded to international standards, and the variety of available food increased. Sanitary conditions too, will be improved. For the realization of such improvements, establishment of control regulations is recommended. Steps are also to be taken to lower air fares by introducing a round-trip system.

(4) Improvement of Statistic System

Immediate improvement is also necessary with respect to tourism statistics including the collection and compilation of more exact data. Such data should cover domestic and foreign tourist arrivals, number of local tourists and day trippers, number of hotel bed-nights, purpose of visit, general and tourism traffic, and so forth. It is also suggested that tourism development plans be updated whenever sufficient data has been accumulated.

Institutional Requirements

(1) Establishment of Executive Organization

As mentioned in another chapter, major institutional arrangements include organization for execution and operation of projects, training institutions, and institutional arrangements for preservation of culture. It is necessary that DGT begin preparatory work for the early establishment of the first two and undertake promotional and coordinating work with other authorities concerned for the institutional arrangements regarding preservation and promotion of culture. This will ensure establishment of the executing organization before commencement of the development.

(2) Preparatory Works by Executing Organization

Although further studies for implementation of development of tourism facilities are still to be carried out, development sites have to be selected at an early stage, and it is necessary to take action to reserve land for potential development in order to prevent land speculation. It is also necessary that the executing organization or DGT itself cater to the motivations and wishes of potential investors and undertake adequate promotional activities for realization of the development.

(3) Preparation for Establishment of Training System

It is also urgent to start necessary arrangements for the establishment of training institutes. For the purpose of increasing skilled manpower, tentative training courses need to be urgently organized and operated by DIPARDA. DGT is to assist DIPARDA in providing qualified instructors and in subsidizing the initial working capital.

(4) Improvement of Investment Incentives

It is an urgent requirement to prepare a favourable environment for private investors. As mentioned in the relevant chapter, necessary arrangements for improvement of the system of investment incentives should be made as soon as possible.

Further Studies for Priority Projects

Among the proposed undertakings, there are several which are indispensable, large in scale and time consuming in various aspects. They will have highest priority. Urgent action is required to prepare for their realization.

National and Quasi National Recreational Park Studies

The aim of the proposed national and quasi national recreational parks goes beyond that of tourism development per se to include land-use planning over wide areas for the public benefit, protection and fostering of valuable resources, and improvement of the regional industrial and community living infrastructures. It is therefore necessary to formulate, as soon as possible, regional integrated development plans for the Karo Plateau, Lake Toba, and Minang Highlands areas and at the same time carry out more detailed studies regarding the proposed recreational parks, the following being an outline of the scope of such studies:

(1) Institutional planning on the part of a national recreation park preparatory committee
Determination of whether or not the proposed areas will be suitable for such recreational parks from a national standpoint, i.e., in comparison to other areas throughout the country; study of legal, fiscal, and organizational requirements that will be entailed; and coordination and adjustment with integrated regional planning and other related planning.

(2) Inventory of the Three Development Zones

The following surveys in particular will be necessary for the purpose of reexamining in greater detail the suitability of the areas temporarily selected on the basis of initial studies and area designation:

- Ecological survey of natural resources
- Survey for the excavation of cultural resources
- Topographical survey and mapping on a scale of 1:25,000
- Surveys of local industry and local living conditions
- Other surveys necessary for integrated development planning

(3) Formulation of recreational park plans

- *Conservation planning - Determination of basic guidelines for the conservation of the resources identified in the above-mentioned surveys, designation of the areas in which the conservation measures are to be taken, and identification of the facilities that such conservation will require.*
- *Use planning - Identification of spots suitable for development and utilization, determination of capacities thereof and traffic volumes that can be expected in the parks, and determination of other relevant aspects of land use planning with respect to them.*
- *Park operation and control planning - Determination of the types and extent of management and control that the resources, land, and facilities within the parks will require and the management facilities that will be necessary for this purpose.*

Tourist Town Studies

Also necessary for implementation of the tourism development program outlined in the present report are detailed studies of the three "tourist towns" Brastagi, Parapat, and Bukittinggi, which are of strategic importance and therefore have been given the highest priority ranking in their respective tourism development zones, these studies to be coordinated with those proposed above for the national and quasi national recreational parks. Besides the overall trigger effect of tourism development in general in their respective areas, each of the towns should be provided as soon as possible with a master plan incorporating guidelines for the town's own urban development as well as economically and technically feasible plans for other undertakings involving them.

The following is an outline of the scope of such further studies.

- Topographical surveying and mapping
Preparation of topographical maps on a scale of 1:5,000 and with 1 m contour intervals after surveying a total of 15 km² (Brastagi 7 km², Parapat 4 km², and Bukittinggi 4 km²) in the vicinity of the three towns.
- Socioeconomic surveys
Collection of basic data and materials and conducting of social, economic, industrial, community structure, and other surveys necessary for town planning.
- Landownership survey
- Water resource, irrigation network, geology, vegetation and soil, traffic, land-use, and other technical surveys
- Coordination with higher echelon planning and existing plans on all levels
- Determination of scale of development
- Preparation of master plans covering land use, transportation networks, facility location, public utilities, and so forth
- Proposal of tourism development and other related projects in the context of town planning

Studies for Improvement of Airports

It is suggested in the present report (Proposal No.18) that the Medan Polonia Airport and the Padang Tabing Airport should be improved since their facility capacities will become inadequate towards the end of the next five-year plan period and both or one of the airports may be required to accommodate larger aircraft on regular or chartered flights.

This being the case, extension or improvement of their facilities will have to be completed in time to cope with the new requirements. Extension items may include the runway, taxiways or parallel taxiways, loading apron, terminal building, parking areas, and so forth.

Items of improvement of new installation may include ASC (airport surveillance radar), ILS (instrument landing system), and so on.

In the case of the Medan Polonia Airport, it may be necessary to consider relocation of the airport considering the fact that the topography might be an obstacle to adequate extension and the fact that proximity to the center of Medan might give rise to noise pollution as the number of flights increases.

Such improvements and extensions will first require careful planning to determine the scope, scale and timing. Then a detailed feasibility study will be necessary before implementation.

Considering the time required for the preliminary planning, the detailed feasibility study and implementation as well as for the necessary administrative and financial arrangements to be made, it is recommended that the preliminary planning begin immediately, especially in the case of the Medan Polonia Airport, so that the detailed feasibility study can commence at the start of the next five-year plan period.

Editing Team

Direction: Japan City Planning

Technical Staff: Kanao Itoh
Yasutaka Nagai
Hiroshi Matsuo
Hiroshi Ishida
Seiji Kagawa
Hisayoshi Itoh
Makine Kusano
Takashi Kikkawa

Editing Design: Reiko Yano

Translation: Michael Sedgley

Typing: Yoko Toyofuku
Chuo Type

Printing: Keyaki Printing
Toshikazu Kato

