



Technical Assistance Report

Project Number: 40549
December 2007

Kingdom of Thailand: Planning for the Sustainable Development of Southern Thailand

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 29 November 2007)

Currency Unit	–	baht (B)
B1	=	\$0.0325
\$1	=	B30.800

ABBREVIATIONS

ADB	–	Asian Development Bank
CDO	–	Competitiveness Development Office
EA	–	executing agency
IA	–	implementing agency
IMT-GT	–	Indonesia-Malaysia-Thailand Growth Triangle
IPO	–	Infrastructure Project Office
NESDB	–	National Economic and Social Development Board
TA	–	technical assistance

TECHNICAL ASSISTANCE CLASSIFICATION

Targeting Classification	–	General intervention
Sectors	–	Multisector (transport and communications, industry and trade, agriculture and natural resources)
Subsectors	–	Multimodal transport and sector development, industry, environment and biodiversity
Themes	–	Sustainable economic growth, environmental sustainability, inclusive social development
Subthemes	–	Fostering physical infrastructure development, environmental policy and legislation, policy/institutional/legal/regulatory reform

NOTE

In this report, "\$" refers to US dollars.

Vice President	C. Lawrence Greenwood, Jr., Operations Group 2
Director General	A. Thapan, Southeast Asia Department (SERD)
Country Director	J. P. Verbiest, Thailand Resident Mission, SERD
Team leader	J. Lynch, Principal Country Economist, SERD
Team members	H. Jenny, Senior Urban Development Specialist, SERD O. Jetwattana, Private Sector Economic Officer, SERD M. Lindfield, Principal Urban Development Specialist, Regional and Sustainable Development Department

I. INTRODUCTION

1. The Government of Thailand has requested technical assistance (TA) from the Asian Development Bank (ADB) to support the National Economic and Social Development Board (NESDB) in preparing a strategic development plan for Southern Thailand.¹ A TA grant in the amount of \$300,000 has been included in ADB's 2007 assistance program for Thailand, and the country partnership strategy identifies infrastructure planning and environmentally sustainable development as core areas of cooperation between the Government and ADB. A fact-finding mission was in Southern Thailand from 31 July to 4 August 2007 and consulted with key stakeholders in six southern provinces. This report reflects the findings of the mission and the understandings reached with the Government and NESDB on the scope, impact, outcome, outputs, financing arrangements, cost, and implementation arrangements of the TA.² The TA design and monitoring framework is in Appendix 1.

II. ISSUES

2. Thailand's 10th National Economic and Social Development Plan gives considerable emphasis to sustainable development. It also recognizes how much long-term growth depends on a vibrant, competitive, and responsible industrial sector. Since the early 1980s, industrial investment in Thailand has been concentrated along the Eastern Seaboard, the country's largest industrial zone.³ In view of the limited carrying capacity of the Eastern Seaboard to accommodate further industrial development in an environmentally sustainable manner, NESDB has identified Southern Thailand as a potential new export and industrial production base. Southern Thailand is a region that is geographically diverse in economic activity, natural resources, environmental conditions, population distribution, and cultural heritage. The introduction of large-scale industrial development must therefore be highly selective, sensitive to its potential social and environmental impact, and compatible with core economic activities in the south like tourism, plantation agriculture, and fisheries.

3. Several planning studies for Southern Thailand, though limited to specific economic sectors or geographic areas, have been done over the past 10 years.⁴ These have proposed important initiatives, but no comprehensive regional strategy since the early 1990s. Now poised to face increased development pressures, the region needs a new strategic planning framework. This framework must identify appropriate industrial activities, incentives for investment, infrastructure and public service needs, a clear spatial strategy, and environmental protection measures, and it must be anchored on solid and sustainable community participation and support.

4. The economic issues center on three important strategic considerations. First, the types of industries that should be promoted in Southern Thailand must be determined; the industries targeted under the 10th Plan, the views of investors in the Eastern Seaboard, and trends in foreign direct investment should be considered. Second, a sustainable approach to attracting

¹ For this TA, Southern Thailand refers to the 14 provinces of Chumphon, Krabi, Nakhon Si Thammarat, Narathiwat, Pattani, Phangnga, Phattalung, Phuket, Ranong, Satun, Songkhla, Surat Thani, Trang, and Yala.

² The TA first appeared in *ADB Business Opportunities* on 5 September 2007.

³ The Eastern Seaboard comprises the three provinces of Chachoengsao, Chon Buri, and Rayong.

⁴ Including the possible introduction of an energy "land bridge" for transporting crude oil between the western Andaman Coast and the Gulf of Thailand; and ADB. 2005. *Technical Assistance to the Kingdom of Thailand for Preparing a Development Plan for the Tsunami Affected Andaman Region*. Manila (TA 4564-THA, approved on 9 February, for \$1.7 million).

new industries must be developed. To mobilize new investment, critical physical infrastructure, skilled labor, and economic incentives will have to be made available. Third, the economic drivers of the region—tourism, rubber, palm oil, and fisheries—must be further optimized. These industries provide an important foundation for diversifying into higher-value, downstream products and services.

5. The social issues relate, first of all, to the need to involve local people in planning, to foster a sense of ownership of the plans, to cultivate support for the proposed development projects, and to ensure that the new industries, as far as possible, do not adversely affect the environment, the communities, and the quality of life. Economic development should also reduce, and not worsen, the threatened economic and social alienation of the three predominantly Muslim southernmost provinces of Yala, Pattani, and Narathiwat. More effective integration of the far south is vital for the well-being of Southern Thailand as a whole, and must be a key element of any comprehensive, long-term development plan for the region.

6. The key environmental issue concerns the preservation of the outstanding scenery, tropical forests, and integrity of the western coast, with its huge potential for tourism, as well as the creation of new industrial areas that blend with, rather than dominate, the natural and built environment. Some of the new energy plants in the region, which are discreet and self-contained, offer important precedents in this regard. Comprehensive spatial planning that combines conservation, leisure uses, and economic development through vigorous land use planning controls will be essential. Examples of successful industrial planning in other countries will be a useful reference point, as will important lessons in the Eastern Seaboard on the spatial, environmental, and social impact of large-scale industrialization.

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

7. The TA will assist NESDB in meeting the objectives of the 10th Plan by promoting the long-term, sustainable, and balanced economic and social development of Southern Thailand. The principal outcome will be a road map for preparing and implementing a fully comprehensive regional development plan for the next 20 years. This road map will be based on preliminary regional planning concepts, manifested in a draft preliminary structure plan, sector assessments, and an implementation strategy. The implementation strategy will identify the necessary actions that will move the planning process forward: institutional support for the plan, an effective participatory framework for planning, more detailed studies to justify key investment decisions, and further plans and policies to support the development of Southern Thailand.

B. Methodology and Key Activities

8. The TA will use various disciplines to address issues that are both common and distinctive to the subregions of Southern Thailand. Dividing the region into development zones, each one consisting of provinces with similar characteristics, will provide a useful analytical framework for data collection and analysis, consultations with key stakeholders, and the preparation of regionally integrated planning recommendations. Ample consideration must also be given to the key findings and recommendations of NESDB's ongoing planning studies for high-potential development areas and growth corridors in Thailand. As outlined below, the key activities of the TA will be undertaken in four separate, yet interrelated, stages.

9. **Stage 1: Defining Needs, Constraints, and Opportunities.** An overall profile will be drawn up for the region and its future needs assessed, given the constraints and opportunities in each development zone. For this purpose, plans and policies affecting the region and the roles and responsibilities of government agencies (national, provincial, and local), the private sector, and donor agencies in planning and shaping future development will be reviewed. Constraints, such as poor coordination between agencies and duplication or inconsistencies in planning, will be identified. The capacity of provincial and local institutions (public and private) to plan and implement development activities will be assessed. Special tools for attracting investment, as well as existing and planned infrastructure in the region, will also be reviewed and likely development trends will be mapped. Careful consideration will be given to new investment and development opportunities resulting from Southern Thailand's inclusion in the Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT).⁵

10. Existing economic sectors and new industries to be redirected to Southern Thailand will be reviewed. The prospects for these activities will be compared against critical needs like land, energy sources, synergies (within the region and with neighboring countries), transport and utility infrastructure, human resources, and investment incentives. From this analysis the potential for expanding economic activities (and the likely demand for new activities) can be determined. As the scale and location of potential new development must be weighed against the region's carrying capacity, the geographic areas that are most conducive to new development will be identified on the basis of their land use, environmental, natural resource, and social profile. A cluster analysis of economic activities will also include an assessment of links with neighboring countries and a review of international best practices for introducing and managing sustainable industrial development.

11. **Stage 2: Building Scenarios and Consulting Key Stakeholders.** In this stage, key stakeholders, including the public, will participate in planning. The catalyst for the participation will be workshops to be held in the development zones to gauge opinions, obtain comments, and actively involve local stakeholders in the planning process. Various government agencies, nongovernment organizations, the private sector, women, and community groups will be represented in the workshops. From the needs, opportunities, and constraints defined in stage 1, two scenarios will be presented for discussion: (i) a trend-based scenario, wherein development follows current planning procedures and trends; and (ii) a balanced-growth scenario, in which new development is selectively accommodated, on the basis of location criteria and potential impact on the environment, natural resources, and local communities.

12. Feedback on the different development scenarios will be considered in preparing concept plans for the development zones. The concept plans will fully incorporate local issues and concerns identified by the workshop participants. These concept plans will give rise to a preferred development option for the region, presenting a clear vision of what all stakeholders aspire to in Southern Thailand. This regional development vision will, in turn, form the basis for the preliminary structure plan to be prepared in stage 3.

13. **Stage 3: Preparing a Preliminary Structure Plan and Implementation Strategy.** Broad assessments of the primary economic sectors of the region—tourism, rubber, palm oil, tropical fruits, fisheries, minerals, and possibly niche segments (e.g., halal foods)—will indicate trends in demand, as well as the potential for upgrading into higher-value, downstream products and services. The assessments will also show the physical and soft infrastructure needs of

⁵ The IMT-GT is a "special economic cooperation area" within which concerted and systematic efforts will be taken over the next 5 years to (i) facilitate and promote trade and investments within and between IMT-GT countries; (ii) promote the growth of agriculture and agro-industry and tourism; (iii) strengthen infrastructure links and support; (iv) address cross-sectoral concerns; and (v) strengthen institutional arrangements and mechanisms. See IMT-GT Secretariat and ADB. 2007. *IMT-GT Roadmap (2007–2011)*. Manila.

these sectors, to support future growth and higher value addition. In accordance with these broad sector assessments, a preliminary structure plan will be prepared for the entire region. This 20-year plan will identify appropriate areas for land-intensive activities like plantation agriculture or bio-fuel hubs, and designate possible development clusters or corridors to accommodate concentrations of agro-industries, energy-based industries, fisheries, tourism development, and so on. By also considering improved logistics through road, rail, air, and sea transport infrastructure, the plan will be a blueprint guiding the nature, distribution, and intensity of development in the region.

14. A broad strategy will be prepared to define the type of institutional support that is required to implement the structure plan. The strategy will address key actions needed to facilitate the growth of sectors identified for expansion, using as a starting point the existing, ongoing, and committed infrastructure investments in Southern Thailand. Economic and administrative incentives will be recommended to attract new industries and bolster existing ones (particularly by facilitating higher-value-added production). Crucial to the implementation strategy will be proposals to organize effective land use management and development controls in and around designated growth areas. These controls will allow the region to remain a high-quality leisure and tourist destination, and a desirable place to work and live, even as large-scale industrial development is introduced.

15. **Stage 4: Defining a Road Map for Implementing a Regional Development Plan.** With the preliminary structure plan, the initial planning recommendations can be further justified and strengthened into a robust and comprehensive regional development plan. More detailed studies will have to be done to prepare targeted strategies for the key economic sectors, and situate the strategies. For a properly phased and spatially integrated regional development plan with definitive infrastructure and land use recommendations, more detailed plans will also have to be prepared for each development zone. The Sub-regional Development Plan for the Tsunami Affected Andaman Region can guide such planning. There may also be a need to prepare more detailed and updated local plans to accommodate special economic zones or the introduction of new infrastructure in sensitive areas. The work required to refine the structure plan and to strengthen it with supporting plans in key areas will be spelled out in the road map for comprehensive regional development planning for Southern Thailand.

C. Cost and Financing

16. The total cost of the TA is estimated to be \$400,000 equivalent, of which \$300,000 will be funded on a grant basis from ADB's TA funding program. The Government will finance the remaining \$100,000 equivalent in kind, with counterpart and other support facilities and services. The cost estimates and financing plan are in Appendix 2.

D. Implementation Arrangements

17. NESDB will be the Executing Agency (EA) for the TA, and its Infrastructure Project Office (IPO) and Competitiveness Development Office (CDO) will be the primary Implementing Agencies (IAs). NESDB's internal committee for Southern Thailand and dedicated project team, comprising representatives from other government ministries and agencies, will provide comments, suggestions, and guidance at different stages of the TA implementation. Inception, interim, draft final, and final reports will be submitted to ADB, the IAs, and the secretary-general of NESDB for guidance and necessary action. IPO and CDO will each appoint a project director to assist with the daily implementation of the TA, and manage the provision of counterpart staff and other support services required by the consultants. To facilitate data collection and the

conduct of the consultation workshops, NESDB intends to field a team of national consultants and engage the services of universities from Southern Thailand.

18. The TA will require 11 person-months of international consultant inputs over 7 months, from February to August 2008. The consulting services will be provided by a team of four international consultants: (i) a team leader/regional planner (3.5 person-months), (ii) an infrastructure/industry specialist (3 person-months), (iii) a land use/environmental planner (2.5 person-months), and (iv) a human resources/social development specialist (2 person-months). To ensure that the experts are of high caliber, have worked previously in Thailand, and meet the Government's expectations, the consultants will be recruited individually, rather than through a firm, and will be hired by ADB according to its *Guidelines on the Use of Consultants* (2007, as amended from time to time). Outline terms of reference are in Appendix 3.

19. NESDB will provide office space within its premises to enable the international and national consultants to work together as a team in close coordination with IPO and CDO staff. Within 2 weeks of mobilization, the consultants will prepare an inception report, which will include a detailed work plan and a schedule of deliverables agreed on with ADB and the IAs. Interim reports will be submitted within the deadlines specified in the work plan. The draft final report will incorporate feedback from the EA, IAs, other relevant offices and agencies, and ADB. To solicit input from other stakeholders, consultation workshops will be held in each of the development zones over the implementation period. To further facilitate the dissemination of the TA findings and recommendations, the final report will be provided both in hard copy and in electronic format. An indicative outline for the final report is in Appendix 4.

IV. THE PRESIDENT'S DECISION

20. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$300,000 on a grant basis to the Government of Thailand for Planning for the Sustainable Development of Southern Thailand, and hereby reports this action to the Board.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Impact Strategic development plan for Southern Thailand driven by government policies to redirect new industries into the region, to expand existing economic activities, and to reduce socioeconomic disparities</p>	<p>The Government endorses, adopts, and funds a comprehensive planning and implementation program for promoting economic growth and social development in Southern Thailand (Q4 2008)</p>	<ul style="list-style-type: none"> • Regional structure plan is prepared and consistent with the strategic directions of the 10th National Economic and Social Development Plan • NESDB appointed as the Executing Agency for the implementation of the regional development plan 	<p>Assumption</p> <ul style="list-style-type: none"> • NESDB has the necessary resources to prepare and implement strategic development and investment plans for Southern Thailand. <p>Risk</p> <ul style="list-style-type: none"> • Political and institutional support is not sufficient for sustainable implementation.
<p>Outcome Detailed implementation program supporting feasibility studies, and stakeholder consensus for a 20-year regional development plan</p>	<p>Government and NESDB endorsement of the preliminary proposals and the road map, such that a comprehensive regional development plan can be prepared and launched (Q3 2008)</p>	<ul style="list-style-type: none"> • Medium-term infrastructure investment plans, socioeconomic data, and environmental studies from line ministries and government agencies • Government feedback on TA reports • Provincial, local, and community support for recommendations and action plans 	<p>Assumption</p> <ul style="list-style-type: none"> • Relevant government agencies, local communities, and the private sector are not fully engaged in planning and implementation. <p>Risk</p> <ul style="list-style-type: none"> • The political situation in the southernmost provinces deteriorates, adversely affecting private investment in Southern Thailand.

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Outputs</p> <p>1. Situational analysis of Southern Thailand and statement of needs, constraints, and opportunities</p> <p>2. Development scenarios presented and refined through consultation workshops in each development zone</p> <p>3. Assessments of key economic sectors and definition of a preliminary structure plan and implementation strategy</p> <p>4. Implementation road map defining the procedures for institutional support, a participatory approach to planning, requirements for more detailed studies, and needs for supporting plans and policies</p>	<ul style="list-style-type: none"> • Profiles of key economic sectors and feedback from the Government and key stakeholders on the stage 1 report (Q2 2008) • Formulation of concept plans for the different development zones that incorporate of comments on the development scenarios (Q2 2008) • Refinement of spatial location of new infrastructure and economic activities, along with broad strategic approach to implementation (Q3 2008) • Refinement of the details of the road map for regional development planning, with the help of comments received on the draft final report (Q4 2008) 	<ul style="list-style-type: none"> • Government data, satellite imagery, maps, plans, interviews, and field reconnaissance documented in the stage 1 report • Results of consultations with local stakeholders and concept plans documented in the stage 2 report • Preliminary structure plan supported by sector assessments and implementation strategy documented in stage 3 report • Input to draft final report leading to the refinement of an implementation road map documented in the final report • Dissemination of final report at the end of the study 	<p>Assumptions</p> <ul style="list-style-type: none"> • Information and data are made available to the consultants, and the formulation of preliminary concepts is consistent with government objectives. • The Government is committed to addressing institutional change for economic development and planning in Southern Thailand. • The Government is committed to promoting a participatory approach to planning. • NESDB provides sufficient counterpart staff and other support to meet the TA milestones and objectives. <p>Risks</p> <ul style="list-style-type: none"> • There is lack of access to data and information required for comprehensive assessments and the preparation of development scenarios. • The participation of the Government and key stakeholders in the development of concept plans for the development zones is inadequate.

Activities with Milestones	Inputs
<p>Stage 1: Defining Needs, Opportunities, and Constraints</p> <p>1. Situational Analysis (completed by month 1.5)</p> <ol style="list-style-type: none"> 1.1 Review existing plans and policies. 1.2 Review current planning responsibilities. 1.3 Review existing economic incentive tools. 1.4 Profile key economic sectors (existing and proposed). 1.5 Identify new potential industrial sectors. 1.6 Profile existing and planned infrastructure. 1.7 Profile environment, land use, and social composition. 1.8 Profile links with neighboring countries. <p>2. Assessment of Needs, Opportunities, and Constraints (completed by month 2.0)</p> <ol style="list-style-type: none"> 2.1 Determine development trends. 2.2 Assess demand, by sector. 2.3 Determine physical infrastructure needs. 2.4 Determine soft infrastructure needs. 2.5 Determine potential industrial clusters. 2.6 Establish carrying capacities and location criteria. <p>Stage 2: Building Scenarios and Consulting Stakeholders^b</p> <p>3. Definition of Development Scenarios through Stakeholder Consultations (completed by month 3.5)</p> <ol style="list-style-type: none"> 3.1 Define two scenarios (trend-based and balanced-growth). 3.2 Disseminate international experience in industrial planning. 3.3 Hold workshops in the development zones. 3.4 Prepare concept plans for the different development zones. 3.5 Define and articulate a regional vision for development. <p>Stage 3: Preparing a Preliminary Regional Structure Plan</p> <p>4. Preparation of Structuring Plan and Implementation Strategy (completed by month 5.0)</p> <ol style="list-style-type: none"> 4.1 Assess economic sectors. 4.2 Draft a preliminary structure plan. 4.3 Prepare a broad implementation strategy. <p>Stage 4: Developing a Road Map for Implementing a Regional Plan^d</p> <p>5. Development of Road Map for Implementing a Regional Plan (completed by month 6.0)</p> <ol style="list-style-type: none"> 5.1 Define procedures for institutional support. 5.2 Set up a participatory framework for planning. 5.3 Identify the need for and scope of further detailed studies. 5.4 Identify the necessary support plans and policies. 	<ul style="list-style-type: none"> • ADB provides grant financing of \$300,000 for 11 person-months of international consultants, with additional support to include guidance on TA implementation, comments on reports, and review missions. • The Government provides in-kind contributions equivalent to \$100,000 through NESDB for engaging counterpart staff, national expertise, and the services of local universities to assist with data collection, technical analysis, field reconnaissance, organization of consultation workshops, and communication with other key government agencies. • Provincial, local, and community beneficiaries will participate in consultation workshops. • Private sector representatives will participate in the consultations and share information about investment plans, constraints, and opportunities.

ADB = Asian Development Bank, NESDB = National Economic and Social Development Board, TA = technical assistance.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Total Cost
A. Asian Development Bank (ADB) Financing^a	
1. International Consultants	
a. Remuneration and Per Diem	240.0
b. International and Local Travel	30.0
2. Workshops	10.0
3. Surveys	5.0
4. Translation and Interpretation	5.0
5. Contingencies	10.0
Subtotal (A)	300.0
B. Government Financing	
1. Office Accommodation and Transport	20.0
2. Remuneration and Per Diem	
a. Counterpart Staff	30.0
b. National Consultants	20.0
c. University Support	25.0
3. Others	5.0
Subtotal (B)	100.0
Total	400.0

^a Financed by ADB's technical assistance funding program.
Source: ADB estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

A. Scope

1. The technical assistance (TA) will require a total of 11 person-months of input from four international consultants. The scope of consulting services corresponds to the four stages of the TA as follows: (i) defining needs, constraints, and opportunities; (ii) building scenarios and consulting key stakeholders; (iii) preparing a preliminary structure plan and implementation strategy; and (iv) developing a road map for implementing a regional development plan. The TA deliverables are outlined in para. 19 of the main text of this report.

B. Individual Consultants

2. The consultants must demonstrate expertise in their respective fields and must have worked previously in Thailand. The qualifications required for each of the individual consultants and their outline terms of reference are presented below.

1. Team Leader/Regional Planner (international, 3.5 person-months)

3. The team leader will be a regional planner responsible for managing the TA to completion, and providing the necessary technical inputs in regional development planning, particularly in tourism and institutional matters. The general and technical responsibilities of this position are detailed below.

a. General Responsibilities

- (i) Supervise the activities of the international and national consultants and ensure the timely delivery of outputs.
- (ii) Set up the Project, confirm the overall work plan, refine the work programs for each expert.
- (iii) Assess the quality of all outputs produced by the experts and discuss necessary revisions and amendments.
- (iv) Write and edit an inception report and interim reports as set out in the work plan. The reports will be as follows: a regional status report at the end of stage 1; a development scenario and consultation report at the end of stage 2; a draft preliminary structure plan at the end of stage 3; and the draft final and final reports, with the implementation road map, at the end of stage 4.

b. Technical Responsibilities

- (i) Coordinate the situation analysis after a review of national, regional, and subregional plans and policies and an assessment of planning and implementation procedures, including the National Economic and Social Development Board's (NESDB's) ongoing planning studies for high-potential development areas and growth corridors in Thailand.

- (ii) Determine current development trends and assess, in conjunction with the infrastructure/industry specialist and the land use/environmental planner, the future need for new or upgraded physical infrastructure and its location.
- (iii) Identify key stakeholders, as part of the definition of needs, opportunities, and constraints in stage 1, to ensure their participation throughout the planning process.
- (iv) Consider new investment and development opportunities resulting from Southern Thailand's inclusion in the Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT).
- (v) Review tourism resources in Southern Thailand with the land use/environmental planner, appraise current tourism products and trends, and identify constraints and opportunities in the region.
- (vi) Prepare a tourism sector analysis and suggest a broad tourism strategy for Southern Thailand, identifying tourism priority zones and priority products including niche segments like community-based tourism.
- (vii) Refine the strengths, weaknesses, opportunities, and threats (SWOT) analysis for each development zone.
- (viii) Advise on international best practice for planning industrial zones and coordinate the preparation of development scenarios with other experts.
- (ix) Help synthesize, with other experts, the development zone concept plans devised in the workshops and prepare a report on the consultation proceedings.
- (x) Refine the preferred development option and devise an overall vision for Southern Thailand
- (xi) Coordinate the preparation of a draft preliminary structure plan showing the general spatial development, priority areas, and phasing.
- (xii) Devise an implementation strategy for creating a comprehensive regional development plan.
- (xiii) Propose principles and key steps for establishing an effective institutional and management framework for implementing, monitoring, reviewing, and updating the regional development plan (including likely responsibilities and actions) as part of the road map.
- (xiv) Identify the need for further studies in regional planning, tourism, environmental impact, and institutional matters.

2. Infrastructure/Industry Specialist (international, 3 person-months)

4. Under the general direction of the team leader, the infrastructure/energy specialist will be responsible for undertaking all economic work, covering the situation analysis, demand and sector assessments, scenario building, and assessment and recommendation of infrastructure needs. The specialist will also contribute to the preparation of the preliminary structure plan. The specific responsibilities of this position are outlined below.

- (i) Confirm the work program and TA deliverables in coordination with the team leader.

- (ii) Review in broad terms the economic profile of Southern Thailand as regards its industrial and agricultural sectors, using secondary data, and draw conclusions about the potential for expansion in these and other new industries, particularly those proposed to be redirected from the Eastern Seaboard.
- (iii) Determine what types of industries should be promoted in Southern Thailand, taking into account the industries targeted under the 10th Plan, the views of investors in the Eastern Seaboard, and trends in foreign direct investment.
- (iv) Consider new investment and development opportunities resulting from Southern Thailand's inclusion in the IMT-GT.
- (v) Review current economic incentives and related administrative procedures, and recommend how these can be improved or expanded in Southern Thailand.
- (vi) Help profile existing physical infrastructure and assess the constraints and opportunities vis-à-vis existing, committed, and planned economic developments.
- (vii) Determine, in collaboration with the team leader, the nature and extent of new infrastructure support needed, particularly port facilities and road and rail infrastructure.
- (viii) Assess the economic links with neighboring countries and recommend ways of strengthening these ties.
- (ix) Identify, in collaboration with the land use/tourism planner, potential industrial clusters in Southern Thailand and highlight opportunities for strengthening these agglomeration economies.
- (x) Contribute to the buildup of three development scenarios for discussion at workshops.
- (xi) Prepare sector assessments for key agro-industrial activities, including rubber, oil palm, fisheries, fruit, energy-based industries, and specialist products as identified, with emphasis on downstream, higher-value products and services.
- (xii) Identify possible national and international sources of investment.
- (xiii) Propose measures to support small and medium-sized enterprises (SMEs) and community-based economic activities.
- (xiv) Assess the need for more detailed economic and physical infrastructure studies, to be carried out after the TA, including those related to likely economic impact.

3. Land Use/Environmental Planner (international, 2.5 person-months)

5. Under the general direction of the team leader, the land use/environmental planner will be responsible for addressing land use and environmental issues for the situation analysis, broad demand assessments, and the preparation of physical plans, particularly the development zone concepts, preferred option, and the preliminary structure plan. The specific responsibilities of this position are outlined below.

- (i) Confirm the work program and TA deliverables in coordination with the team leader.
- (ii) Draw up an overview of all the mapping requirements of the study, making use, where appropriate, of geographic information systems (GIS) for the analysis of

land use data, including environmental conditions and the location of natural resources and sensitive areas.

- (iii) Review in broad terms the land use, settlement pattern, and demographic structure of Southern Thailand.
- (iv) Prepare broad environmental profiles of the region, identifying sensitive zones and areas with greater environmental carrying capacity.
- (v) Review the tourism resources in Southern Thailand with the team leader and appraise current tourism products and trends, identifying constraints and opportunities in the region.
- (vi) Contribute to the economic cluster analysis in coordination with the infrastructure/industry specialist.
- (vii) Carry out a sieve analysis of the region to identify potential development areas.
- (viii) In coordination with the team leader, prepare spatial recommendations for the preliminary structure plan.
- (ix) Identify the need for supporting plans and policies, including those at the subregional level and for local priority areas.
- (x) Identify the need for more detailed studies in land use, environmental, and natural resource planning.

4. Human Resources/Social Development Specialist (international, 2 person-months)

6. Under the general direction of the team leader, the human resources/social development specialist will be responsible for all issues relating to “soft” infrastructure, particularly including human resources development and such social and community-related issues as public participation in planning, the impact of development on vulnerable groups, and livelihood creation and regeneration. Special focus will be placed on leveraging the benefits of future development to reduce social disparities within the region. The specific responsibilities of this position are outlined below.

- (i) Confirm the work program and TA deliverables in coordination with the team leader.
- (ii) Draw up a socioeconomic profile of the population in the region (by province and city, and disaggregated by ethnicity and gender) as part of the situational analysis.
- (iii) Identify and draw up a profile of vulnerable groups, including women and sex workers, and threats against these from such factors as potential change in land and property value (particularly in tourism), community displacement as a result of economic development, loss of cultural identity and abandonment of traditional livelihood, and out-migration.
- (iv) Describe the issues surrounding future requirements for migrant labor and assess the potential social costs associated with the future growth and development of Southern Thailand.
- (v) Draw up a profile of available social services and determine the constraints on their provision.

- (vi) Define the human resource development capacity and the shortfall vis-à-vis current and new potential economic activities (particularly including the tourism and agro-industrial sectors).
- (vii) Define the human resources development and capacity-building needs of the national, provincial, and local governments.
- (viii) Set up a participatory framework to empower local communities and give them a greater sense of ownership in development planning, and help identify key stakeholders.
- (ix) Devise strategy directions to support underprivileged subregions and spread the benefits of economic development more equally.
- (x) Identify the need for and scope of further detailed studies with regard to human resources and social development.

OUTLINE OF THE FINAL REPORT

EXECUTIVE SUMMARY

- I. SITUATIONAL ANALYSIS
 - A. Planning Context
 - B. Demographic and Employment Profile
 - C. Land Use and Environmental Conditions
 - D. Broad Environmental Profile
 - E. Key Economic Sectors
 - F. Prospects for New Industries and Services
 - G. Physical Infrastructure, Existing and Planned
 - H. Human Resources Development and Education
 - I. Social Development Programs
 - J. Links with Neighboring Countries
 - K. Economic Incentives and Tools
 - L. Planning Mechanisms

- II. DEVELOPMENT NEEDS, CONSTRAINTS, AND OPPORTUNITIES
 - A. Strengths, Weaknesses, Opportunities, and Threats
 - B. Development Trends
 - C. Cluster Analysis of Economic Activities
 - D. Sieve Analysis of Potential Development Areas
 - E. Broad Demand Estimates, by Sector
 - F. Assessment of Physical Infrastructure Needs
 - G. Human Resources and Social Infrastructure Needs
 - H. Institutional Capacity for Implementation and Constraints

- III. SCENARIO BUILDING AND CONSULTATIONS
 - A. Development Scenarios
 - B. Consultations

- IV. STRUCTURING PLANS AND STRATEGY DIRECTIONS
 - A. Goal and Objectives
 - B. Sector Assessments
 - C. Preliminary Structure Plan
 - D. Implementation Strategy

- V. ROAD MAP FOR REGIONAL PLANNING
 - A. Procedures for Institutional Support
 - B. Community Participation
 - C. Scope of More Detailed Studies
 - D. Necessary Support Plans and Policies
 - E. Next Steps