

ASIAN DEVELOPMENT BANK

TAR: THA 32440

TECHNICAL ASSISTANCE

TO THE

KINGDOM OF THAILAND

FOR

PREPARING A MEDIUM-TERM RECOVERY STRATEGY

December 1999

CURRENCY EQUIVALENTS

(as of 30 November 1999)

| | | |
|---------------|---|-----------|
| Currency Unit | – | Baht (B) |
| B1.00 | = | \$0.02563 |
| \$1.00 | = | B39.01 |

ABBREVIATIONS

| | | |
|-------|---|--|
| NESDB | – | National Economic and Social Development Board |
| NFYP | – | Ninth Five Year Plan |
| TA | – | Technical Assistance |

NOTES

- (i) The fiscal year (FY) of the Government ends on 30 September.
- (ii) In this report, "\$" refers to US dollars.

I. INTRODUCTION

1. On several occasions in discussions with consultation missions, the Government of Thailand has asked for Bank assistance in preparing a recovery strategy that is based on an assessment of the impact of the economic crisis. Accordingly, an advisory technical assistance (TA) for this purpose was included in the 1999 country assistance plan. It was also decided that the National Economic and Social Development Board (NESDB) would be the appropriate Executing Agency for the TA. Subsequently, in consultations with the Bank on the occasion of the 1999 Annual Meeting in Manila, the secretary general of NESDB indicated that the assistance should be specifically directed at providing support for the preparation of the Ninth Five-Year Plan (NFYP). Accordingly, the Bank Fact-Finding Mission visited Thailand from 29 July – 5 August 1999 to assess the needs of NESDB, and reached an understanding with the Government on the scope, cost, and implementation arrangements for the TA.¹ The TA framework is presented in Appendix 1.

II. BACKGROUND AND RATIONALE

2. Institutionally, NESDB has traditionally been responsible for coordinating the planning process and the preparation of the five-year plans. NESDB also serves as the secretariat for Cabinet committees charged with the management of Thailand's ongoing development process (e.g., Economic Cabinet). Earlier TA provided to NESDB has significantly contributed to its traditional planning capacities.² However, the preparation of the NFYP will entail a significant shift from traditional central planning to a more effective system of strategic economic management. The preparation for the NFYP comes at an especially critical time, when the regional economic crisis has shaken confidence in the very approach to development and economic management of the countries in the region. The challenges posed by the recession, the weakened financial and corporate sectors, and adverse social consequences of the crisis are all too clear. At the same time the preparation for the NFYP within the framework of the new constitution, with its emphasis on participatory and decentralized governance, provides an excellent opportunity to develop a medium-term strategic framework for Thailand's development that builds on the lessons of the crisis, and prepares the foundation for economic renewal and sustained growth. If properly undertaken, the NFYP can set the stage for defining policies and programs that can translate the broad strategic objectives of economic recovery into actual results. However, this would entail a complete shift from the traditional type of detailed central planning, which has proved to be quite ineffective in most developing member countries, to a much more selective and market-oriented strategic planning approach that addresses only key development challenges, and focuses on the operational-institutional aspects of effective implementation.

3. This transition to a new kind of strategic planning is a major turning point for NESDB. The organization will have to reinvent itself, build capacity to deal with new approaches to planning, acquire new skills, and possibly adopt a new organizational structure. These new approaches will focus on specific problem areas that will confront Thailand in the future. These

¹ The TA first appeared in *ADB Business Opportunities* in August 1999.

² TA THA 1959: *Strengthening Poverty Reduction and Income Redistribution Policy Analysis and Planning*, for \$285,000, approved on 30 September 1993; TA THA 2428: *Strengthening Postevaluation Capability*, for \$413,000, approved on 23 October 1995; TA THA 2744: *Technical Assistance for Institutional Strengthening of the Development Evaluation Division*, for \$470,000, approved on 31 December 1996; TA THA 2813: *Strengthening NESDB's Role in National Economic Planning and Analysis*, for \$100,000, approved on 18 June 1997; and TA THA 2995: *Capacity Building for Social Sector Reform*, for \$700,000, approved on 12 March 1998.

include natural resource management, quality of life, competitiveness, poverty reduction, social protection, technology development, and good governance.

4. In an informal division of responsibilities for external assistance, NESDB has asked the Bank to help implement the new approach to planning for the NFYP, and asked the World Bank to help with NESDB reorganization and skills development.

5. Following staff consultation and discussions with the senior NESDB staff, including the secretary-general, the Bank decided to concentrate its assistance in areas in which it has experience and capacity, and is able to provide sufficient support to make a difference in NFYP formulation. The Bank will provide assistance in four areas: (i) strategic planning and management, (ii) decentralization and multilevel planning, (iii) poverty reduction and social protection, and (iv) natural resource management. In addition there is strong interest in undertaking an impact assessment and evaluation of development projects. This last focus is in line with the Government's interest in developing a better way to prioritize development projects to be incorporated in the NFYP. It will also make possible an assessment of the development impact of different types of projects, including externally assisted projects.

III. THE TECHNICAL ASSISTANCE

A. Objectives

6. The objective of the TA is to strengthen the NESDB's capacity to undertake a new, more relevant approach to development planning for the purpose of preparing a medium-term recovery strategy. The new approach will focus on key challenges and implementation through a decentralized, multilevel planning process.

B. Scope

7. The TA will include five subprojects that constitute important subcomponents of NFYP preparation. These were identified keeping in view ongoing or planned assistance from other external assistance agencies, e.g., World Bank assistance for studies on Thailand's competitiveness.

1. Preparation of the Strategic Planning and Management Framework

8. The priorities of the NFYP will be identified through a participatory process. These priorities will then be incorporated in a strategic planning framework. It will be a selective framework, as distinct from the traditional macroeconomic and detailed comprehensive development planning exercises, which were not effective in their implementation. Institutionalizing the strategic planning approach will entail the following: (i) review the NESDB planning process, and introduce the required best practice elements for strategic planning; (ii) identify feasible information requirements for strategic planning; and (iii) develop an institutional framework and management mechanism within and outside NESDB to implement the strategic planning approach. To ensure strong ownership of the whole TA, and this subproject in particular, these exercises will be undertaken under the guidance of a group of eminent persons, all Thai nationals held in high public regard. To ensure the adoption of best practices, meetings and workshops will be organized both in Thailand, as well as abroad, with corporate and public organizations that have successfully implemented strategic planning.

2. Decentralization and Multilevel Planning

9. Based on the 1997 Constitution, decentralization and increased popular participation in development are occurring in Thailand. This means that the role of NESDB in terms of development planning will change significantly. Planning will be multi-level and occur in a variety of agencies, and it will be more participatory based. The Parliament has moved quickly by passing a law to establish a National Decentralization Committee (NDC), to be based in the Prime Minister's office. This Committee will guide the operationalization of decentralization in terms of allocation of functions, fiscal decentralization guidelines, etc. The Ninth Plan will provide further guidance on the priority issue of decentralization.

10. In this context, this subproject will focus on the developmental and public investment planning consequences of decentralization. There will be: (i) systemic study and analysis of these planning functions at different levels of government, (ii) recommendations concerning needed changes in these planning functions consistent with decentralization, and (iii) recommended actions to make such planning more participatory, pertaining to NESDB and different levels of government (i.e., national, provincial, local). This activity will require understanding of the national decentralization action plan to be prepared by NDC.

3. Poverty Reduction and Social Protection

11. Given the recent increase in poverty incidence because of the financial crisis, an overriding goal for the NFYP is poverty reduction.³ Recovery and sustained growth should help restore the quality of life to the pre-crisis level, and then continue to raise living standards. However, growth-mediated poverty reduction is a long-term process. There is also a need in the short term to directly address the needs of the vulnerable groups in society, through adequate social protection programs that are fiscally sustainable. In this context four activities are planned: (i) develop a method to measure the effects of growth on poverty; (ii) conduct a technical analysis to evaluate the impact of different growth processes on poverty; (iii) translate the results in terms of actual policies and programs to be incorporated in the NFYP; (iv) conduct an impact analysis of existing poverty reduction projects to improve the design of policies and direct intervention programs of the NFYP; and (v) formulate social protection systems, e.g., pension plans, unemployment benefits, etc., suitable for Thailand.

4. Natural Resource Management

12. Thailand's high growth in recent decades was achieved at considerable cost to the country's natural environment. It placed severe pressure on the ecosystem, overexploited nonrenewable resources, and polluted air and water. Thus, management of the country's economic recovery must also recognize the need for effective natural resource management. In 1998 the Government drafted an environmental and natural resource management plan. However, the plan was not implemented, partly as a result of the crisis. The NFYP now provides an opportunity to integrate an environmental and natural resources management plan with the economic plan, to ensure a path to economic recovery that is also environmentally sustainable. There will be three interrelated tasks in this exercise: (i) analyze and evaluate the environmental implications of various levels and patterns of growth; (ii) conversely, analyze and evaluate the growth implications of the completed environment and natural resources management plan for Thailand; (iii) integrate the results of (i) and (ii) into a strategy of recovery toward

³ Poverty incidence monotonically declined in recent years to a minimum of 11.4 percent in 1996, but then rose to 12.9 percent in 1998.

environmentally sustainable development; and (iv) specify an institutional framework for more effective protection of the environment, based on community participation as well as market instruments, and comprehensive cross-sectoral environment management.

5. Impact Assessment and Evaluation

13. The preparation of a national development plan, which includes guidance of public investments, is often fraught with arbitrariness because of lack of adequate, timely information on outputs, impacts, and effectiveness of key national policies, strategic thrusts, and critical programs. To fill this important gap in development information systems, this sub-project will assist the NESDB in developing monitoring and assessment methodologies (in conjunction with other relevant information agencies) focused on the relationship between national development performance (e.g., outputs, impacts, effectiveness) and policy incentive frameworks, strategic thrusts, and critical programs.

C. Cost Estimates and Financing Plan

14. The TA is estimated to cost \$1,000,000 equivalent, of which \$830,000 is the foreign exchange cost and \$170,000 equivalent is the local currency cost (Appendix 2). The Bank will provide \$900,000, to cover the entire foreign exchange cost of \$830,000, and support for local currency expenses in the amount of \$70,000. This financing will be provided on a grant basis from the Bank-funded TA program. The Government will fund local currency costs (\$100,000 equivalent) representing provision of counterpart staff, office facilities, supplies, and transport.

D. Implementation Arrangements

15. The Executing Agency will be NESDB. The Executing Agency will designate a Project Director, who will be responsible for coordination of the overall TA, under the direction and guidance of the Secretary General, who will be responsible for the overall implementation of the TA. Each subproject will be managed and implemented by a task force constituted to implement the subproject and led by a senior executive at the level of either deputy secretary general or assistant secretary general. NESDB will coordinate activities under the TA with other ministries and departments of the Government, and other institutions, as required. In view of the close link between this TA and planned assistance to be provided by the World Bank, regular meetings will be scheduled with the World Bank to discuss implementation issues and maximize the synergy between the two activities.

16. The TA will be implemented over 15 months, from March 1999 to June 2001. The TA will require 28 person-months of international consulting (senior advisers or international consultants) and 45 person-months of domestic consulting (domestic consultants or eminent persons), to be provided by a consulting firm or institution of international reputation. The outline terms of reference are included in Appendix 3. The consultants will be engaged by the Bank in accordance with its *Guidelines on the Use of Consultants*. Equipment required under the TA will be procured by the Bank and NESDB in accordance with the Bank's *Guidelines for Procurement*. The consultants will prepare an inception report by the end of the second month following the inception meeting, a midterm report, and a draft final report two months prior to the conclusion of the implementation period. A tripartite inception meeting will be held at the outset of the TA. Two further tripartite meetings will be held to discuss the midterm and draft final reports. The TA is also expected to provide input at critical points during the preparation of the NFYP.

17. The Government has assured the Bank that it will provide the necessary resources and logistical support required for TA implementation. This will include access to office accommodation, office supplies, secretarial services, equipment, documents, and other information required to carry out the TA. NESDB will provide qualified interpretation and translation services as required for the TA.

IV. THE PRESIDENT'S DECISION

18. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance, on a grant basis, to the Government of the Kingdom of Thailand in an amount not exceeding the equivalent of \$900,000 for the purpose of Preparing a Medium-Term Recovery Strategy, and hereby reports such action to the Board.

TECHNICAL ASSISTANCE FRAMEWORK

| Design Summary | Targets | Monitoring Mechanisms | Risks and Assumptions |
|--|---|--|---|
| I. Goal Effective recovery during the Ninth Five-Year Plan (NFYP) | Sustained increase in Gross Domestic Product growth | Quarterly and annual national income estimates | Delays in reform Ineffective recovery strategy External/natural shocks |
| II. Purpose Capacity building within National Economic and Social Development Board (NESDB) to introduce strategic planning, and its implementation through multilevel planning | Subproject implementation time lines | Technical Assistance (TA) Review Mission, Back-to-Office Reports (BTORs) Subproject implementation reports (interim and final) Steering committee review | Inadequate ownership by NESDB Delays in implementation Reorganization ineffective |
| III. Outputs Introduction of strategic planning framework Adoption of multilevel planning approach Strategy for poverty reduction and social protection Sustainable development strategy Framework for development project impact assessment | Subproject output deadlines | TA review mission, BTORs Subproject implementation reports (interim and final) Steering committee reviews | Inadequate ownership by NESDB Delays in delivery of outputs by project team Poor quality of delivered outputs |

(Reference in text: page 1, para. 1)

| Design Summary | Targets | Monitoring Mechanisms | Risks and Assumptions |
|---|--|---|--|
| <p>IV. Activities</p> <p>Review of NESDB planning process</p> <p>Identification of feasible information requirements</p> <p>Development of a framework for strategic planning</p> <p>Analysis of appropriate planning functions at different levels of government</p> <p>Specification of institutional changes required for decentralized planning</p> <p>Action plan for transition to multilevel planning</p> <p>Preparation of multilevel plan</p> <p>Development of a model of growth poverty linkage</p> <p>Impact analysis of antipoverty program</p> <p>Development of policies and program for social protection in NFYP</p> <p>Analysis of growth-environment interaction</p> <p>Application of this analysis for a sustainable development strategy</p> | <p>Activity specific time lines of each subproject</p> | <p>TA review mission BTORs</p> <p>Subproject implementation reports (interim and final)</p> <p>Steering committee reviews</p> | <p>Delays in implementation by NESDB or concerned Government agencies</p> <p>Delays caused by project teams</p> <p>Poor quality of accomplished activities</p> |

| Design Summary | Targets | Monitoring Mechanisms | Risks and Assumptions |
|---|----------------------|------------------------------|---|
| <p>Specification of an institutional framework for effective environment protection</p> <p>Development of methodology for policy and program assessment</p> <p>Micro level impact research to develop indicators</p> <p>Application of indicators for prioritization of development policies and programs</p> | | | |
| V. Inputs | | | |
| Staff time | 20 months | Liquidation | Staff counterpart staff reassignment and time constraints |
| International consultants | 20 months | Documentation | Delays/implementation failures by consultants |
| Domestic consultants | 68 months | | Delays in flow of other services, equipment availability |
| Advisory Services | tbd | | |
| Eminent persons | tbd | | |
| Trainings, seminars, conferences | tbd | | |
| Government counterpart staff | tbd | | |
| Foreign exchange financing | \$912,000 equivalent | | |
| Local cost financing | \$80,000 equivalent | | |
| Reports and communications | tbd | | |
| Equipment | tbd | | |

COST ESTIMATES AND FINANCING PLAN
(\$'000)

| Item | Foreign Exchange | Local Currency | Total Cost |
|--|-----------------------------|---------------------------|-----------------------|
| A. Bank Financing | | | |
| 1. Consultants | | | |
| a. Remuneration | | | |
| i. International Consultants (28 mo) | 500 | 0 | 495 |
| ii. Domestic Consultants (45 mo) | 125 | 25 | 150 |
| b. International and Local Travel | 60 | 10 | 70 |
| 2. Reports and Communications | 10 | 0 | 10 |
| 3. Equipment | | | |
| a. Computer Hardware and Software (Five PC sets) | 0 | 20 | 20 |
| b. Other Equipment | 0 | 10 | 10 |
| 4. Training, Seminars, Conferences | | | |
| a. Workshops/Seminars | 10 | 5 | 15 |
| b. International Meetings | 15 | 0 | 15 |
| c. Training | 5 | 0 | 5 |
| 5. Contract Negotiations | 5 | 0 | 5 |
| 6. Contingencies | 100 | 0 | 100 |
| Subtotal (A) | 830 | 70 | 900 |
| B. Government Financing | | | |
| 1. Remuneration and Per Diem of Counterpart Staff | 0 | 70 | 70 |
| 2. Office Facilities, Supplies, and Transport | 0 | 30 | 30 |
| Subtotal (B) | 0 | 100 | 100 |
| Total | 830 | 170 | 1,000 |

(Reference in text: page 4, para. 14)

OUTLINE TERMS OF REFERENCE

A. Senior Advisers (International Consultants)

1. Each senior adviser will be a team leader for one of the subprojects. In that capacity the senior adviser will be responsible for the successful and timely completion of the subproject, and oversee and coordinate the work of other consultants recruited for the subproject. The senior adviser will be responsible for arranging workshops, short courses, and meetings, as required; coordination with key ministries and agencies; and organizing acquisition and processing of necessary data and information required to implement the subproject, and other related tasks. Officials from the National Economic and Social Development Board (NESDB) are expected to provide timely guidance and support for the senior advisers to implement each subproject effectively and efficiently. The senior advisers will report to Bank staff assigned to manage the technical assistance (TA).

1. Senior Adviser on the Preparation of the Strategic Planning and Management Framework

2. The senior adviser will be an economist with extensive experience in development planning in the region, strategic planning and development management, and will be responsible for developing a strategic policy planning and management framework. Specifically, the senior adviser will undertake the following:

- (i) Prepare an assessment of the existing planning process to provide a detailed assessment of the existing, traditional process undertaken by NESDB, including its methodological and information base.
- (ii) Identify and assess best practice guidelines for strategic planning and management, built on selected case studies, and from both government and private sector experiences.
- (iii) Determine the information and methodological requirements for strategic planning. This will include the determination of information gaps, needs, and ways of closing these gaps, and responding to these needs in terms of sources of relevant information and developing methods and formats for structuring and presenting information.
- (iv) Prepare an institutional and management system for plan implementation that formulates and assesses the options in institutional and management frameworks/mechanisms to link issue-based or thematic strategic planning, to implementation of associated policies and programs.

2. Senior Adviser on Decentralization and Multilevel Planning

3. The senior adviser will be a specialist in public economics with extensive experience in development planning, public administration, and project development. The Senior Adviser will lead a team of consultants that will be responsible for determining how the constitutional goal of decentralization is translated into planning activities in preparation for the Ninth Five-Year Plan (NFYP). In particular the senior adviser will undertake the following:

(Reference in text: page 4, para. 16)

- (i) Study and analyze whether a particular content of decentralization is implicit or explicit in the Constitution and relevant laws.
- (ii) Work with the different ministries, local governments, and other bodies in determining the existing planning and project functions at different levels.
- (iii) Specify the required institutional changes and structures in NESDB and different levels of government (central, provincial, and local) to begin a process of decentralized multilevel planning.
- (iv) Participate along with NESDB, and elsewhere as required, in providing assistance to other agencies to align their functions to a decentralized multilevel planning system.
- (v) Formulate an action plan for the transition from a centralized plan formulation system to a multilevel planning system arising from (i) through (iv), which is consistent with the strategic planning approach.

3. Senior Adviser on Poverty Reduction and Social Protection Analysis

4. The senior adviser will be an economist with demonstrated experience in economic growth theory, poverty analysis, and economic modeling, preferably computable general equilibrium (CGE) modeling. The senior adviser will lead a team of consultants in defining alternative growth processes to achieve alternative poverty targets. In particular, the senior adviser will undertake the following:

- (i) Develop a method to measure the effects of growth on poverty (assuming poverty itself has been operationally defined).
- (ii) Apply the method developed in (i) to conduct a technical analysis to evaluate the impact of different growth processes on poverty, i.e., sensitivity analysis of growth on poverty.
- (iii) Translate the results in terms of actual policies and programs to be incorporated in the NFYP.
- (iv) Conduct a review and impact analysis of existing poverty reduction projects for the purpose of designing policies and direct intervention programs in the NFYP.
- (v) Formulate, especially in the light of (i)-(iv), social protection systems, e.g., pension plans, unemployment benefits, etc., suitable for Thailand.

4. Senior Adviser on Natural Resources Management

5. The senior adviser on natural resources management will be an environmental economist with extensive experience in natural resources management at a senior government policy level. The senior adviser will lead a team of consultants in ensuring that the NFYP supports environmentally sustainable development. Specifically, the senior adviser will undertake the following:

- (i) Review and evaluate the growth implications of the completed 1998 Thailand Natural Resource Management Plan (NRMP).
- (ii) Analyze and evaluate the environmental implications of various levels and patterns of growth envisaged in the NFYP.
- (iii) Integrate the results of (i) and (ii) into a strategy of recovery to environmentally sustainable development.
- (iv) Specify an institutional framework for more effective protection of the environment, based on both community participation and market instruments.

5. Senior Adviser on Impact Assessment and Evaluation

6. The senior adviser on impact assessment and evaluation will be an economist with extensive experience in research management, analysis of development policies and programs, and program evaluation. The senior adviser will lead a team of consultants in conducting an impact assessment of a wide range of development policies and programs using a common framework. Specifically, the senior adviser will undertake the following:

- (i) Formulate a methodology for measuring the effects of a variety of development policies and programs, covering all major sectors, on Thailand's human centered development concerns.
- (ii) Conduct microlevel impact research (short studies) on the impact of key development policies and programs (including those promoted under Bank-financed projects).
- (iii) Utilize the indicators developed in (i) and (ii) in policy and program identification and prioritization at the national and local levels to improve resource allocation in the NFYP.

B. Consultants

1. Strategic Planning and Management

7. This subproject will require an eminent person, an elder statesperson of high repute from Thailand, with vast experience in strategic decision making at the cabinet/ministerial level. The eminent person will provide guidance and support for effective introduction of the strategic planning approach.

2. Decentralization and Multi-Level Planning

8. In addition to a senior adviser for this subproject, three domestic consultants/experts are to be recruited. This subproject will also require an eminent person who can provide important leadership and support for more effective implementation of the subproject.

a. Domestic Consultant/Legal Expert

9. A lawyer with experience in constitutional law and local government will undertake the following tasks under overall guidance of the senior adviser:

- (i) Review all provisions in the new constitution and in other legal documents (national and local) that pertain to decentralization, devolution of powers, and other related jurisprudence, including the state of implementation or the required codes and rules for implementation.
- (ii) Identify possible gaps in the legal mandate providing for decentralized functions of government, devolution of government services, and power sharing.
- (iii) Assist the senior adviser in preparing the recommendations for changes in structure of NESDB and different levels of government to respond to the needs of decentralization.

b. Domestic Consultant/Expert on Development Administration

10. An economist or public administrator with extensive experience in government operations as a senior official, who has broad knowledge of the working relationship between various levels of government and line ministries will undertake the following tasks under overall guidance of the senior adviser:

- (i) Survey existing planning and project functions in different levels of government, and assess which functions are national, and which functions can be devolved, and to what levels of government/offices.
- (ii) Identify which planning and project functions have not been included in the various decentralization/devolution schedules.
- (iii) Assist NESDB and other line ministries and local governments in amending their mandates to align with a proposed decentralized multilevel planning system drawn up by the senior adviser.
- (iv) Prepare a plan for transition from central planning to decentralized planning, involving all agencies of the Government and local governments, including time schedules, necessary administrative orders to carry it out, and identifying necessary steps (e.g., training).

c. Domestic Consultant/Economist/Budget Expert

11. An economist or financial expert with extensive experience and knowledge of the budgetary operations of the government at various levels and ministries will undertake the following tasks under overall guidance of the senior adviser:

- (i) Examine existing links between planning and budgeting, budget preparation and budget releases, contracting authorities, and other related functions to be able to indicate what changes need to be instituted to carry out a decentralized and multilevel planning system.
- (ii) Lay out the specific steps required (including the necessary administrative orders) to tie-in multilevel planning with the appropriate resource requirements coming from the national Government and the associated local revenue sources.

d. Eminent Person

12. The eminent person will be requested to
 - (i) Initiate and chair high-level meetings meant to advocate decentralization and multilevel planning across different ministries and levels of government, and
 - (ii) support strengthening and linking a network of institutions, individuals, officials and other concerned citizens on decentralization and participatory governance.

3. Poverty Reduction and Social Protection

13. In addition to a senior adviser for this subproject, one international consultant and one domestic consultant will be recruited to be part of the team.

14. The international consultant/expert on poverty analysis will be an economist or econometrician familiar with modeling, and with extensive experience in measuring poverty through both surveys and income-expenditure data. Experience in Thailand is essential. This expert will undertake the following tasks under overall guidance of the senior adviser:

- (i) Conduct empirical measurement of the effects of different growth processes on poverty incidence in Thailand overall, and by certain categories (e.g., provinces, families, occupation).
- (ii) Assist the senior adviser in translating the results of the empirical measurement into actual programs and policies to reduce poverty.

15. The domestic consultant/economist will be an economist or social scientist with strong quantitative background and extensive experience in analysis of development projects. This expert will undertake the following tasks under overall guidance of the senior adviser:

- (i) Conduct a comprehensive list of development projects that may have an impact on poverty during a given planning period.
- (ii) Develop a methodology for measuring the impact of these development projects on poverty.
- (iii) Assess the implications of the results on development policies and the preparation of projects.

4. Natural Resources Management

16. In addition to a senior adviser for this subproject, a domestic consultant, or economist, will be recruited to undertake specific tasks. This local consultant should be familiar with technical analysis of environment and growth, have extensive research and program experience on environment issues, and have work experience with government environment-related programs and projects. This expert will undertake the following tasks under overall guidance of the senior adviser:

- (i) Analyze the various environmental impacts of growth during a time period specified by NESDB. The meaning and scope of environmental impact will be further delineated by NESDB.

On the basis of the results, and with guidance from the senior adviser, formulate a strategy for environmentally sustainable growth for the next five-year plan.

- (ii) Examine the appropriateness of the institutional setting for environmentally sustainable growth in Thailand.

5. Impact Assessment and Evaluation

17. In addition to a senior adviser for this subproject, two domestic consultants will be recruited as part of the team. The consultants are all expected to be economists or social scientists with substantial experience in program analysis and evaluation, have extensive knowledge of the specific programs being assessed, and be familiar with government procedures in policy formulation. These experts will undertake the following tasks under overall guidance of the senior adviser:

- (i) Assist the senior adviser with the impact assessment by taking on specific programs for analysis and evaluation using a methodology developed by the senior adviser.
- (ii) Formulate the framework and procedure for carrying out the research.
- (iii) Collect the necessary empirical data to validate the framework used, and attribute (where appropriate) the impact of development policies and programs.
- (iv) Draw up recommendations for program preparation.