

X D- ABF-212-11  
8083

**FINAL REPORT**

**MIDTERM EVALUATION**

**DEVELOPMENT STUDIES PROJECT II**  
**(497-0340)**

**February 27, 1992**

*Evaluation done by:*

*Brandon Robinson*

**The cooperation and assistance of numerous officials in Bappenas, the Central Bureau of Statistics, USAID and the consultants and staff who make up the DSP II Team are gratefully acknowledged.**

11

## Preface

This evaluation of the Development Studies Project II and the suggestions concerning possible Development Studies Project III, were written during the period of February 3 - 27, 1992.

The observations, conclusions and recommendations are based on the review of project documents, on the USAID program, Indonesian development problems and programs, and on interviews with officials in BAPPENAS (The National Development Planning Agency), BPS (The Central Bureau of Statistics), USAID, and the DSP II advisors.

Although I have used very many of the observations and suggestions of these individuals, I am responsible for all of the conclusions and recommendations in the evaluation.

Brandon Robinson

## Table of Contents

	<u>Pages</u>
I. Introduction	
A. The USAID Program in Indonesia and the Development Studies Project II (DSP II)	1
B. BAPPENAS, BPS, and the Formulation of Government Policies	1 - 2
C. The Two Purposes of the Evaluation	3 - 4
II. Evaluation of DSP II: March 1989 - January 1992	
A. Introduction	4 - 5
B. BAPPENAS	
1. The Two Basic Objectives	
a. Assessment	5 - 6
b. Recommendations	
2. Technical Assistance	
a. Assessment	7
b. Recommendations	
3. Research Agenda	
a. Assessment	7 - 8
b. Recommendations	
4. Policy Studies	
a. Assessment	8 - 9
b. Recommendations	
5. The Use of Analytical Findings in the Formulation of Policies	
a. Assessment	10 - 11
b. Recommendations	
6. Institution-Building, Technology Transfer, and Training	
a. Assessment	11 - 13
b. Recommendations	

	<u>Pages</u>
7. Data Processing Equipment	
a. Assessment	13
b. Recommendations	
C. BPS (Central Bureau of Statistics)	
1. Technical Assistance	
a. Assessment	13
b. Recommendations	
2. Helping BPS Improve Major Socioeconomic Data Sets	
a. Assessment	14 - 16
b. Recommendations	
3. Institution-Building, Technology Transfer and Training	
a. Assessment	16 - 17
b. Recommendations	
4. Data Processing Equipment	
a. Assessment	17
b. Recommendations	
D. Summary of Conclusions and Recommendations	17 - 20
E. USAID Monitoring and Review	20
III. DSP III	
A. Introduction	21
B. BAPPENAS	21 - 23
C. BPS	23

## I. Introduction

### A. The USAID Program in Indonesia and the Development Studies Project II

Economic deregulation in Indonesia has been a central USAID Mission concern. The strengthening and continuous expansion of the private sector; high, sustained, overall growth rates; steady increases in the amounts and proportions of the remuneratively employed, and concomitant reductions in the proportions of underemployed in the national labor force, and broader participation in the nation's economic and social decision-making process are among the Indonesian objectives that the USAID Mission supports.

DSP II was designed in 1986, the year in which the GOI carried out a significant devaluation. The GOI followed this move with policies that included major shifts toward deregulation and decentralization. Most DSP activities have been dedicated to improving the data base and carrying out the empirical research that can provide the information with which these broad GOI policies can be improved, refined and more thoroughly implemented.

When DSP is compared to the other means and techniques available to the USAID Mission to help the GOI pursue these objectives, it becomes clear that the project is an unusually effective foreign assistance instrument with potentially great multiplier effects. The project provides policy makers with analytical findings that are of immediate utility for the formulation of policy, and helps BPS and BAPPENAS develop their capabilities in the collection and tabulation of data and in the design and execution of policy-oriented research and analysis. BAPPENAS directly manages the project and their sense of ownership of the project is noteworthy.

Although Indonesia receives an unusually large amount of foreign assistance from various donors, and although the USAID Mission is a comparatively small donor, providing only about three percent of total foreign assistance, it is significant that the GOI has selected the U.S. Government, and other American institutions, such as the Harvard Institute for International Development, as the principal providers of technical assistance in the areas of data quality and assessment, and policy-oriented analysis. In sum, this evaluation of DSP II begins with an acknowledgment of the project's importance and unusually privileged position.

### B. BAPPENAS, BPS, and the Formulation of Government Policies

The three basic responsibilities of BAPPENAS (the National Development Planning Agency) are the following: (1) to formulate the GOI's long-range plans, most notably, the five-year plan, REPELITA; (2) to review and authorize every individual public sector investment in the annual budgets of the ministries and government agencies; (3) to participate as members of interministerial teams that formulate policies.

This is an unusual combination of functions for a national planning agency. The detailed investment-by-investment approval function provides BAPPENAS with potentially strong enforcement powers. Conceivably, by exercising these powers BAPPENAS could make sure that detailed ministerial and sector investments are in conformance with the five-year plan (REPELITA), and BAPPENAS policies.

Unfortunately, the need to review and approve over 5,000 investment proposals per year absorbs an extremely large portion of the professional working time in BAPPENAS, reducing available professional energies for analysis and planning. The large portion of public investment that is constituted by foreign assistance should be pointed out here. In 1990/91, development expenditures totalled Rp.16,225 billion, of which Rp.11,289 billion (70%) was program and project aid. The forecast for 1991/92 is Rp.19,998 billion, of which foreign assistance will be an estimated Rp.10,372 billion (52%). Under current procedures, the approval of foreign assistance contributions often calls for an initial BAPPENAS review of a proposed project, and subsequent reviews when project components appear in the proposed annual investment budget of the involved ministry or government agency.

BPS (the Central Bureau of Statistics) is a statistical agency with about 10,000 employees nation-wide, of which perhaps 2-3,000 are in the central office in Jakarta. BPS has branch offices in the 27 provinces and in every one of 301 kabupatens (counties) and 3,500 kecamatans (districts). The data collected by BPS is unusually extensive and detailed for a country at Indonesia's stage of economic development. One of the resident advisors suggested that Indonesia is "rich in data and sparse in analysis." Although much of the data may not be ready for reliable and fruitful policy-oriented analysis, the geographic extension of BPS, and the magnitude of its data collection activities are truly noteworthy. "Rich in data and sparse in analysis" is, therefore, a characterization that helps highlight some of the available means, as well as the impediments, that confront the effort to improve policy-making.

It is widely expected that future Indonesian policies will build on the generally sound macroeconomic policies carried out by the GOI since 1983, continue to improve the climate and regulatory framework for competitive enterprise, contribute to the expansion of private enterprise and to the attainment of high, sustained, overall growth rates. It is also expected that new or changed GOI policies will attempt to bring about sustained increases in remunerative employment, and to improvements in the distribution of the national product. These policy changes would take place under the broad GOI guidelines of deregulation, decentralization, and what is referred to in the five-year plan, REPELITA, as "de-bureaucratization."

### C. The Two Purposes of the Evaluation

The last evaluation of DSP II (March 1, 1990) pointed out that DSP II has undergone three phases. In the first phase (June 1987 - August 1988) the project began operating as a research center or think tank, with lines of communication to, and exchange of documents with, various ministries, government agencies, and academic institutions, as well as BAPPENAS and BPS.

A redefinition of the project took place under the new BAPPENAS leadership and constituted the second phase (August 1988 - March 1989). Inquiry was continued in most of the research areas of the prior phase, but the main responsibility for selecting research areas and specific topics of inquiry was shifted to BAPPENAS. Procedures were established for more restrictive dissemination and more confidential treatment of studies. Although this change in operating procedures has reduced the locus of exchange and discussion, it has strengthened the collaborative relationship among DSP advisors and BAPPENAS.

The March 1, 1990, evaluation states that the third and ongoing phase of DSP II began in March 1989, and "was formulated by BAPPENAS." The evaluation calls for "the development of close and more confidential working relationships between team members and their counterparts in BAPPENAS."

The present evaluation builds on the prior evaluation of March 1, 1990, and has two parts. The first part covers the period March 1989 - January 1992, and provides assessments of the main project elements or components during this period. The recommendations that appear under each element or component are intended to apply to the remaining period of the project which (after approval of the recently requested extension) will have a termination date of December 1994.

The second part of this evaluation responds to the section in the evaluator's statement of work that appears below:

"Project extension and/or future DSP III:

Based on the knowledge learned from the above work, the evaluator will recommend whether or not the project should be maintained and followed on with an extension or a future DSP III project. And if the evaluator recommends a future DSP III, the evaluator will outline his/her views of the structure of a DSP III and/or Amendment."

A new government that will involve personnel changes at the higher levels of the GOI, including BAPPENAS and BPS, will be formed in March 1993. Under this timetable, and assuming that request for extension to December 1994 will be approved, the new Administration will profit from 12-15 months of experience of DSP II before deciding whether it would like to initiate a DSP III. Were USAID and the GOI to agree in principle

on the desirability of a DSP III, there would still be an interval of various months that could be dedicated to the collaborative design of a new project. The design of a new project should build on the accomplishments of DSP II, and specify the remaining collaborative tasks to be carried out in the areas of policy-oriented research and analysis, and the strengthening of the data collection and analytical capabilities needed for the formulation of policy.

## II. Evaluation of DSP II: March 1989 - January 1992

### A. Introduction

DSP II is designed to provide support to the Government of Indonesia in the development of improved policy analysis, formulation and implementation in industry, trade, employment and regional areas, and to strengthen data bases and analysis in those areas.

Specifically, DSP II has three aims:

- to assist BAPPENAS in evaluating existing trade, industrial and employment strategies and policies and in considering new strategies,
- to assist BAPPENAS in the formulation and management of research on policy issues, and,
- to assist BPS in the strengthening of key data bases and analysis in the areas of trade, industry and employment and to respond to specific data requests in support of BAPPENAS policy studies.

The Project is located within the policy analysis and implementation divisions at BAPPENAS and associated data support groups at BPS.

BAPPENAS plays a critical role in drafting the Broad Guidelines of State Policy (GBHN) and in the formulation of the Five Year Development Plans (REPELITA), which are based on the GBHN. These two documents set objectives, targets and resource assessments for sectoral policies and programs. BAPPENAS also conducts annual reviews and makes approval decisions on all activities for development budget funding.

Within BAPPENAS, DSP II works primarily with the Deputies for Economic Affairs, Fiscal and Monetary Affairs, Human and Natural Resources Development and Regional Affairs.

BPS is not under the jurisdiction of any ministry and reports directly to the President. It is responsible for the collection and maintenance of government statistics.

DSP II was authorized by amendment to DSP I on June 6, 1986. Research activities started in January 1988. Although it began as an independent "think tank" operation, DSP became a demand driven group that carries out the policy-oriented research and analyses specified by BAPPENAS. Following the ministerial change at BAPPENAS in March 1988, close and confidential relationships with deputies were established. The main task of DSP became that of carrying out policy oriented research and analysis and building on the improvement in data bases developed in the early phase of the project, in addition to providing on-the-job training for Indonesian policy researchers.

Currently, DSP II staff is comprised of four technical policy advisors, one each in the areas of employment policy, industrial policy, trade policy, and regional policy; two senior statistical data advisors; three local hire consultants; two Indonesian research associates; four Indonesian research assistants; and administrative support staff. Additional assistance is provided by short term consultants who are assigned to specific projects.

## B. BAPPENAS

### 1. The Two Basic Objectives

#### a. Assessment

DSP II has two basic functions in BAPPENAS: (1) to provide analytical findings and conclusions that are of immediate utility for the formulation of policy; (2) to strengthen BAPPENAS capabilities in policy-oriented research and analysis. For some assignments and activities the two purposes can be complementary and mutually reinforcing; for some activities, this is not the case. Although the second function was not specified in the original project design, it has become an increasingly important feature of the work carried out under DSP II.

There are research tasks that require more extended periods of time and more teamwork. On-the-job training of BAPPENAS staff is more likely to take place when BAPPENAS leadership gives a research assignment that requires extended working time and numerous analysts for its successful completion. An example of this is the macroeconomic accounting model that has been developed and set up on BAPPENAS computers and has involved the acting DSP II team leader, the Deputy for Fiscal & Monetary Affairs, the Head of the Bureau of Monetary & Public Finance, and nine additional BAPPENAS staff members. The use, maintenance and updating of this model, has made it a central and extremely useful part of BAPPENAS' ongoing analytical operations.

Among the DSP assignments that are less likely to involve BAPPENAS staff and the associated on-the-job training are studies carried out solely by one or more advisors, such as the agriculture/industry forward and backward linkages study. In this case, participation of BAPPENAS staff would call for a discussion of the paper written by the DSP advisor, with a view to increasing awareness of possible areas of importance for inquiry. This kind

of participation has occurred with less frequency.

What are the views of BAPPENAS officials concerning these two basic objectives: the DSP studies or products, and the internalization of the process of research and analysis?

Interviews with these officials, under this evaluation, indicate that there is general satisfaction with the amounts and quality of the completed studies. There does not appear to be a similar consensus concerning the task of internalization and staff training. Some of officials expressed satisfaction; others just as clearly expressed their dissatisfaction.

The officials who expressed their dissatisfaction with the internalization process almost invariably associated the perceived shortfall with BAPPENAS' heavy workload and the demanding investment approval process. Some of these officials seem to view BAPPENAS' current functions as proper or unalterable; others seem to think that it is subject to assessment and change.

#### b. Recommendations

Whether or not DSP should make a greater effort to internalize processes of research and analysis in BAPPENAS will depend on future BAPPENAS decisions. BAPPENAS could decide it will dedicate more of its professional staff time to analysis and policy-making. In this case, it would appear appropriate for DSP to increase the number of studies that involve on-the-job training in BAPPENAS. Were BAPPENAS to call on other Indonesian institutions, such as the universities and research centers, to carry out a greater amount of policy-oriented research, attention might be given to the DSP role in strengthening the capabilities of these institutions. This would not preclude the possibility of on-the-job and formal training for BAPPENAS officials responsible for the assessment of studies prepared by other Indonesian organizations.

It seems probable that the steady expansion of the private sector will call for the design of radically altered regulatory frameworks, and will be followed by the monitoring and analysis of how the new regulatory frameworks operate in practice. It also seems likely that a reduction in oil revenues and a greater dependence on tax revenues will concentrate greater analytical and policy attention on the shift of production and service activities to the private sector, and on increasing the efficiency of those activities that remain in the public sector. If so, it would not seem premature to begin considering how DSP could provide BAPPENAS with increased institution-building and technology transfer support.

## 2. Technical Assistance

### a. Assessment

An unusually capable and highly dedicated technical assistance team has been assembled for DSP II. It is a group of competent professionals, each of whom has been trained in some specialized area and has demonstrated the necessary breadth and versatility to apply his or her disciplinary knowledge and skills in different kinds of research and analysis. Guidance and direction of the technical assistance has been carried out very ably by the team leadership. The age, working experience and professional level of the team are in appropriate relation to those of their counterparts, BAPPENAS deputies and bureau chiefs, almost all of whom are Ph.D. economists.

The spirit of inquiry among team members is strong. The morale and working relations appear to be unusually good. The team's composition or pattern of specialization is in conformity with BAPPENAS' research agenda.

In the past the mix of resident advisors and short-term consultants was too heavily weighted on the short-term, and led to insufficient direction and guidance of short-term consultants from BAPPENAS and resident DSP staff. The relevant BAPPENAS Deputies and the resident advisors are of the opinion that this past error has been corrected.

### b. Recommendations

BAPPENAS and the Development Economics Group (DEG; a joint venture company between Boston Institute for Development Economics and Development Alternatives Inc.) have been successful in assuring that the DSP resident advisors and the short-term consultants are a competent and appropriate combination of specialists. Guidance from BAPPENAS and high-level members of DEG should therefore be continued.

Technical assistance is most useful when competence is reinforced on both sides by effective communication. The field activities of the U.S. advisors and their interaction with some GOI officials requires considerable use of the Indonesian Language. Resident advisors should be provided with 4-6 weeks of intensive language training upon arrival in country.

## 3. Research Agenda

### a. Assessment

The Project Paper Amendment of June 1986 stated that "the objective of the Amendment is to provide long term technical assistance to the National Development Planning Agency (BAPPENAS) and the Central Bureau of Statistics (BPS) to undertake policy research and analysis in the areas of employment, industry and trade." The August 1990 amendment stated that "the objective of the DSP II is to assist the GOI with the examination of key

issues faced by the government and affecting its plans for national development in employment, trade and industry and other related policy areas."

Changes in the pattern of studies and the composition of technical studies provided since 1986 have responded to the need to address an increasing number of social and economic issues in order to support BAPPENAS in its pursuit of the broad GOI objectives of growth, stability, and equity.

A national development planning board, such as BAPPENAS, is responsible for the formulation of various social and economic policies and the pursuit of various national objectives. In a nation as large, regionally varied, and complex as Indonesia, a pursuit of the selected objectives leads to the exploration of many kinds of issues. The central concern with which DSP was initiated was the generation of remunerative employment, and the exploration of trade and industry as areas of potential growth.

DSP inquiries into the potential for increasing private investment and expanding industry has served to highlight a large number of additional constraints, impediments, and opportunities, and has led to the analysis of related problems and areas, such as, the consequences of deregulation measures, infrastructure, urbanization, informal sector employment, regional disparities, the decentralization of government, the efficiency of public sector activities, with particular attention to education and health.

This expansion of the research agenda has been a proper one. Project resources are scarce, however, and there is always the danger that topics will proliferate needlessly, and that the study of socioeconomic problems and areas of lesser importance will serve to reduce the continued attention to problems and areas in which a fuller understanding is needed for the formulation of policy.

#### b. Recommendations

It is recommended that sustained, long-range increases in both growth and employment constitute the final objectives pursued by the DSP II studies, and that these two long-range objectives serve as basic criteria for the preparation of the research agenda.

#### 4. Policy Studies

##### a. Assessment

The 52 studies and reports produced by DSP II during the period 1989-1991 are documents of great utility for the national planning process. First, the research and analyses are concentrated on socioeconomic areas in which different policy alternatives and planning options can be adopted or taken. Second, the studies are predominantly empirical and, as a result, underlying conceptual and theoretical elements are checked and tempered by confrontation with facts. Third, the descriptions of the inquiry and the presentation of

- 12

findings are almost invariably clear and understandable.

The value of the studies has been increased by improvements in quality and the elimination of gaps in the data sets on which national and regional measurements of growth, welfare and income depend. It is the use of collected data for purposes of analysis and policy-making that serves to identify errors and inconsistencies, and contributes thereby to improvements in data collection, data entry, processing and editing. Data flows from BPS to DSP and BAPPENAS, and back from BAPPENAS to DSP and BPS have contributed to the improvement of these national data sets.

Conclusions, findings and recommendations of importance have emerged from the DSP II studies. Among the problem areas of greatest significance for the formulation of policy are the following: (1) sectors and sub-sectors in which Indonesia has comparative advantage; (2) sectors and sub-sectors of greatest actual and potential industrial growth; (3) preliminary review of the effectiveness of different styles of firm management in Indonesia; (4) forward and backward linkages between agriculture and manufacturing; (5) a possible approach to decentralization, and to planning at the regional level; (6) on-farm and off-farm sources of rural income; (7) the development of a health sector management information system; (8) some of the consequences of financial deregulations; (9) some of the consequences of inter-island shipping deregulation; (10) review and assessment of urban policies, laws and regulations; (11) preliminary considerations regarding infrastructure, urban policies, and the informal sector as a source of employment; (12) identification of the key socioeconomic issues of the next 25 years, including consideration of key issues in the human resource development sectors.

#### b. Recommendations

The present stage of DSP II would appear an appropriate one for consideration of the following: (1) how the different lines of inquiry that have been followed to date can and should be further explored and deepened with a view to arriving at additional analytical findings of importance for BAPPENAS policy; (2) how the different lines of inquiry that have been followed to date can and should be linked to one another.

Consideration should also be given to the possibility of translation into Indonesian for those documents that BAPPENAS wants to distribute to other officials.

Preparation of REPELITA VI will begin in 1993. BAPPENAS and DEG should start reviewing the research agenda, and discussing how to execute and use studies most effectively to help BAPPENAS in the preparation of REPELITA VI.

## 5. The Use of Analytical Findings in the Formulation of Policies

### a. Assessment

It is becoming increasingly evident that major changes in socioeconomic policy, including those involving transitions to a more open and deregulated economy, need to be closely monitored, and periodically adjusted, when necessary, in the light of macroeconomic and sectoral analysis findings.

This is a task that is managerially and intellectually demanding, particularly so in a society that is as large and diverse as Indonesia.

Assessment of the policy discussions and the use of analytical findings that have taken place under DSP II should therefore begin with a recognition of the difficult task that is confronted by BAPPENAS. This is a difficulty that is compounded by the BAPPENAS responsibility for reviewing every annual investment proposal of every ministry and government agency. As a result, of the heavy BAPPENAS workload, deputies and bureau chiefs often lack sufficient time for careful review and discussion of relevant studies, including DSP documents.

Some of the studies and findings appear to be receiving insufficient attention in BAPPENAS. This is particularly true of inquiries that are carried out by U.S. advisors without the participation of BAPPENAS staff. For example, comparatively little attention seems to have been given to the possible policy implications of the studies of industrial sub-sector growth, inter-island deregulation, and backward and forward agriculture/industry linkages.

A different response to a completed analysis seems to take place when the BAPPENAS staff participates. The most obvious example is the macroeconomic model of the Indonesian economy that is run in BAPPENAS and is used to estimate the impact of policy changes on factors such as production, investment, employment, inflation and the balance of payments. The health management information system which was collaboratively designed is another example of successful utilization.

In sum, the task of internalizing the analytical process has not been carried out in full, and needs to be given greater priority.

### b. Recommendations

DSP advisors have recently been working on new ways in which to summarize and extract study conclusions and findings. Oral presentations are being given more frequently, and these are backed up with the latest graphic presentation software. More emphasis is also being given to the preparation of executive summaries. The preparation of a 50-page paper may have a 10-page and a one-page version, with the 10-page version corresponding to the

oral presentation. This is a commendable initiative, and should be continued.

The resident advisors should meet bi-weekly to discuss problems and progress of the project viewed as a whole - as distinct from the problems encountered and progress achieved in the individual studies. These meetings should be concerned with identifying the constraints and opportunities confronting institutional development, as well as needed additions to the policy-oriented informational base, and with providing team suggestions to officials in BPS and BAPPENAS.

## 6. Institution-Building, Technology Transfer, and Training

### a. Assessment

The previous sections on technical assistance, the research agenda, policy studies, and the use of conclusions and findings in the formulation of policy have touched on some of the institution-building and technology transfer issues. As has been pointed out, the current BAPPENAS functions and workload have the effect of seriously restricting the amount of research and analytical work that can be carried out or reviewed in BAPPENAS.

Individual interviews for this evaluation were held in BAPPENAS with three Deputies and two Bureau Chiefs. Every one of these officials indicated that the GOI needed to continue studies and analyses of the kinds now carried out under DSP II, and that Indonesian participation in this research should be increased. Within this broad consensus there were somewhat different views concerning the best way to internalize and consolidate the research and analytical process. This is not surprising. Considerable time for the exchange of views in BAPPENAS will be required to develop new approaches to institution-building, technology transfer and training. Some of the viewpoints expressed were the following:

*BAPPENAS is now over-concentrated on the short-term, and some organizational changes may be needed for a more thorough execution of the planning function. The need to improve the quality of education is an example of a particularly difficult problem the solution of which requires sustained, high-level attention.*

*The studies should involve a more thorough mix of Indonesians and expatriates.*

*The ability of DSP staff to respond quickly to information needs has been very valuable. An example of this was the field study related to a large-scale proposal for Health Maintenance Organizations.*

*The confidentiality of the studies should not be viewed as an either-or, yes-or-no issue. The appropriate Deputy should decide.*

*The BAPPENAS workload is excessive, and more attention needs to be given to the Planning and R & D Divisions in selected Ministries.*

*At present 90% of BAPPENAS time is dedicated to budget implementation and 10% to planning.*

*DSP II has been very successful in carrying out certain technology transfer and institution-building tasks. About 20 BAPPENAS staff members have learned how to carry out field studies. Other staff members have received valuable training in the development and use of the macroeconomic model. This model will have an important role in the preparation of REPELITA VI.*

*BAPPENAS should not do original research. It may be some time before the kinds of studies needed by BAPPENAS can be carried out by Indonesian universities and research centers. Such organizations may not be the right ones. In order to be effective, analysis and research must be linked to day-to-day operations. Perhaps professors could spend six months of the year in BAPPENAS, and six months in the university.*

*The studies have been very useful, and should be followed up more intensely. An example is the study of the inter-island shipping deregulation. There is a pending or remaining task -- a closer examination of the impacts on the smaller, eastern ports. There is a need to make more transitions from findings to the formulation of policy.*

#### b. Recommendations

A major BAPPENAS task in 1993 will be to prepare REPELITA VI. The macroeconomic model, the continuing improvement of industrial and household survey data, the work on regional planning and decentralization, the identification of the major issues of the next 25 years, the health management information system, and the studies of urbanization and education are among the current DSP II activities that will serve to highlight basic issues and to provide conclusions and findings of utility for the next five-year plan, REPELITA.

The completion of REPELITA VI should provide new insights into the strengths and limitation of DSP II with respect to both product and process -- to the completed studies and to the process of technology transfer and institution-building. In 1994 an assessment of DSP II by a group of BAPPENAS officials and DSP advisors could help establish final criteria for a possible DSP III. The last section of this evaluation will set forth some ideas concerning DSP III. The priority issues and topics requiring exploration, the organizational arrangements and procedures in BAPPENAS and DSP, and the role of ministerial Planning and R & D divisions in carrying out needed and comprehensive sectoral inquiries would appear to be among the topics that should be considered in a final evaluation of DSP II in 1994. However, discussion of these issues should begin now.

Reconsideration of the question of the confidentiality of the DSP studies may now be appropriate. There seem to be studies which BAPPENAS officials would like to distribute to other selected GOI officials, as well as studies which are deemed more sensitive and confidential. Consideration might be given to a system under which each completed study would be classified and its distribution specified by one or more BAPPENAS officials.

## 7. Data Processing Equipment

### a. Assessment

The expansion of research and analysis has brought about an increase in data processing. About \$20,000 of data processing equipment has been provided to BAPPENAS under DSP II. A total of 19 microcomputers or personal computers have been delivered to BAPPENAS and the DSP office. They are used by BAPPENAS officials, DSP advisors, and Indonesian DSP research assistants, and have contributed to the strengthening of programming and analytical skills. For example, the macroeconomic model in BAPPENAS is run on donated personal computers and, as the amount and kinds of data increase, the model will continue to be run on the personal computers, through the use of interconnections of a local area network.

### b. Recommendations

Since the project-funded personal computers have been an essential element in DSP training and technology transfer, and since the equipment is being used intensely and productively, no change in current procedures is recommended.

## C. BPS (Central Bureau of Statistics)

### 1. Technical Assistance

#### a. Assessment

DSP has assigned two resident advisors to BPS and brings in short-term consultants, as needed. The resident advisors, both Ph.D. economists, have provided excellent assistance to the Central Bureau of Statistics. They are competent and dedicated economists and statisticians who have developed good working relations with their Indonesian counterparts in BPS, and with the U.S. advisors working for BAPPENAS. Their close attention to statistical detail is unflagging and rigorous. Their documentation of new or expanded data collection, processing, and editing procedures is thorough and well-written.

## b. Recommendation

The outstanding performance of these advisors can be attributed to their dedication and skills, and to the fact that they are economists, as well as statisticians. Statisticians who are more narrowly trained are more likely to overlook the final administrative, analytical and policy-making purposes of data collection, processing and tabulation and, as a consequence, to be less concerned with the crucial importance of relevant and accurate data. It is recommended that a minimum of two economists with strong statistical backgrounds continue to occupy these important advisory positions.

### 2. Helping BPS Improve Major Socioeconomic Data Sets

#### a. Assessment

As has been pointed out, BPS has branch offices in each of the 27 provinces, 301 kabupatens; and 3,500 kecamatans, and collects unusually large amounts of different kinds of data. It should also be pointed out that the Academy of Statistics is a part of BPS.

The technical assistance of the two DSP resident advisors has been concentrated on four major data sets: (1) the quarterly and annual survey of large and medium manufacturing (over 20 workers); (2) the quarterly labor force survey, SAKERNAS; (3) the annual socioeconomic survey, SUSSENAS, which contributes to a measurement of poverty, and; (4) the occasional production survey of small and cottage industry.

With the support of the advisors and the use of backcasts that drew on the economic census, BPS identified defects in collection and editing, eliminated these defects, and developed a system which quickly and accurately identifies problems of coverage and editing. As a result of corrections, annual industrial growth rates for the period 1982-1986 underwent a significant upward revision.

To minimize future undercoverage, the advisors developed, in a collaborative effort with BPS staff, a new system for continual updating of the Directory (the complete listing of manufacturing establishments).

Significant progress was also made on the quarterly survey of large and medium manufacturing establishments, which is the main source of data for estimating manufacturing GDP. Improvement of the survey has required changes in sampling procedures, questionnaire design, and computation procedures. A new fully computerized system or set-up, also a collaborative effort with BPS staff, has been used by BPS to produce the latest quarterly manufacturing growth rates.

Obviously, analyses and studies of industrial growth, the impacts of deregulation, Indonesian comparative advantage, infrastructure requirements and the spatial distribution of industry would be dangerously unreliable in the absence of good manufacturing data. Indeed, there

is now a growing interest in BAPPENAS and BPS in supplementing the production data with data on investment and capital in order to arrive at more accurate estimates of productivity.

The operations involved in the quarterly labor force survey of 65,400 households, and the annual socioeconomic survey, SUSSENAS, which provides information on subjects such as income, education and health, have also received technical assistance under DSP II. With the BPS improvement of large and medium manufacturing data nearing completion, greater attention is likely to be given to these other two data sets.

DSP II work has also been carried out on the fourth data set, small business and cottage industry. The Bureau Chief of Agriculture and Industry Statistics, expressed interest in this data set. However, the degree of attention that will be given to it has yet to be decided in BPS.

The Bureau Chief of Agriculture and Industry Statistics and the National Accounts Bureau Chief expressed their appreciation for the services rendered by the resident advisors and a short-term consultant in sampling. The Agriculture and Industry Bureau Chief expressed interest in receiving assistance in construction surveys, and the National Accounts Bureau Chief stated that he would like assistance in the improvement of regional statistics.

The possibility of a DSP III and what its priority tasks should be were discussed at some length with the Deputy Director General for Planning and Analysis, and the Bureau Chief of the Analysis and Methodology Development.

It was suggested that three activities that might be given special attention: (1) the review and improvement of BPS publications; (2) the tabulation and publication of data at lower levels of aggregation; (3) staff training and the review of procedures in the social and economic divisions in the Analysis and Methodology Development Bureau.

The Deputy Director General also specified and discussed four broad statistical areas on which it might be advisable to concentrate technical assistance: (1) poverty; (2) income; (3) financial flows and services related to the external account; (4) computerized mapping.

With respect to poverty, emphasis was placed on the need for poverty identification and monitoring at the district and sub-district (kabupaten and kecamatan) levels. Reference was made to the Potensi Desa (Village Potential) census that is conducted every three years which involves the work of BPS kecamatan staff (mantri) in Indonesia's 68,000 villages, and to the policy-maker interest of GOI policy-makers in village-level information for the purpose of targeting assistance. The demands on BPS can be excessive at times. How the needed disaggregate or village-level information can be provided without placing an unnecessarily heavy burden on BPS is likely to be a central issue, according to the BPS officials.

The SAKERNAS surveys and employment issues more generally were part of the second broad statistical area discussed. BPS suggested that consideration of the informational needs in the two areas of poverty and employment might be carried out together. There was also a discussion of the need to improve estimates of income.

The need for forecasting and econometric modelling was mentioned in relation to the third problem area -- financial flows and services related to the external account. BPS indicated the removal of foreign exchange controls has led to a need for new ways to monitor international financial flows.

At present the mapping of kecamatan is done manually. It is a laborious process that takes about three years, and by the time they are ready, the maps are often out-of-date. Computerized mapping was proposed as a fourth problem area for possible technical assistance.

During the discussion of DSP III, the Director General made clear that he will need two resident advisors, but does not foresee a need for more than two. He believes that some of the assistance needs under a possible DSP III could be provided in the form of short-term consultancies.

#### b. Recommendations

It is recommended that DSP II data improvement work be limited to the three sets originally selected, and to the fourth set, if BPS approves. This could include the downstream analysis of these data in the form of Input/Output Tables, and work on Price Indices.

It is also recommended that the three possible areas of concentration under DSP III that have been suggested by the Deputy Director for Planning and Analysis be reviewed and discussed by the interested parties in BPS and DSP during the remaining period of DSP II. A concentration on the adequacy and reliability of statistics on poverty and income would appear to be more appropriate to DSP work in BAPPENAS than work on statistics related to the external account and computerized mapping.

### 3. Institution-Building, Technology Transfer, and Training

#### a. Assessment

The provision of technical assistance to an institution such as BPS is most effective when it helps introduce needed changes in the organization's procedures and provides on-the-job training to the officials so that they can carry out the altered procedures, adjust and improve them, as needed. Although the various improvements related to large and medium industry data, described in the previous section, appear to be fairly well consolidated in BPS, some additional training may be advisable.

The provision of training should not be viewed as tantamount to a guarantee that the procedural changes and additional tasks aimed at assuring data quality will be carried out and maintained. Training is often a necessary but insufficient condition, and attention also needs to be given to the pattern of rewards and incentives that may be required to bring about and consolidate significant changes in operations.

BPS seems to have given its closest attention to the incentive issues that are involved in data collection, and there are additional work areas that could be profitably reviewed from the perspective of training, staff retention and career advancement. As suggested by the Deputy Director General, the relevant training and fuller DSP involvement of the social and economic divisions of the Analysis and Methodology Development Bureau will be a DSP II concern during its remaining two & 3/4 years, and a possible issue for project design if there is a DSP III.

b. Recommendation

It is recommended that these institution-building issues be discussed in BPS.

4. Data Processing Equipment

a. Assessment

About \$110,000 of data processing equipment have been provided to BPS under DSP II. A total of 12 microcomputers or personal computers have been delivered.

The provision and use of personal computers have helped BPS carry out its decentralization policies. For example, six of the major provinces have received personal computers under the project and are being used successfully to update the provincial directories for large and medium industry. Tasks that were previously obliged to take the next place on a queue, and wait for their data processing turn on the mainframe, are now being done on the personal computers and freeing up the mainframe for other work.

More importantly, the microcomputers have helped various divisions do their own inquiries and trouble-shooting and thus realize greater quality control. The use of microcomputers by BPS officials has strengthened their programming and data processing skills, and there is also some evidence that it has led to more preparation of texts in which data are reviewed and interpreted, thus contributing to an improvement in the writing of reports.

b. Recommendation

Throughout the whole world, the increasing use of personal computers has led to more tabulation of data, the analysis of these data, and word-processed reports concerning these analyses. DSP II should continue to contribute to this aspect of BPS modernization. The amount and destination of additional personal computers will depend on final decisions

concerning the main remaining statistical tasks that will be carried out under DSP II.

#### D. Summary of Conclusions and Recommendations

##### a. Conclusions

- (1) Under this project U.S. advisors carry out policy-oriented research and analysis, and provide conclusions and findings to high-placed GOI policy-makers. The selection of the U.S. government for the technical assistance would appear to be a mark of trust.
- (2) BAPPENAS has two main functions: planning & policy-making and the review of Ministry investment projects & proposals. This latter task occupies most of the professional time in BAPPENAS. Some BAPPENAS officials feel that the staff skills and capabilities in planning and policy analysis should be enhanced, which could entail a reallocation of time and resources between the two main BAPPENAS activities.
- (3) BPS is a large statistical agency with branch offices at each level of government, and has good potential for providing most of the information that is needed for the formulation of sound national policies.
- (4) In Indonesia "data is abundant, analysis is scarce."
- (5) A new government will take power in March, 1993. If the project extension is approved, as expected, DSP II will terminate in December 1994. This project timetable will provide the new government with considerable DSP II experience and the needed time to decide if it wants a DSP III.
- (6) Some of the studies are collaborative; others are being carried out by advisors with limited participation of BAPPENAS officials. Some of the BAPPENAS Deputies and Bureau Chiefs would like to see greater participation of BAPPENAS officials.
- (7) The team of DSP II resident advisors to BAPPENAS is excellent in every respect. The leadership is first-rate. The mix of resident advisors and short-term consultants is now satisfactory.
- (8) The project studies should stick to the original concern with remunerative employment and a broad sharing of the benefits of economic expansion. Proper analysis and long-range policy-making treatment of this objective has required an expansion of problem areas and the investigation of additional issues.
- (9) The 52 studies carried out from 1989 through 1991 are sound analytical documents that have considerable policy-making value. Some call for follow-up or closely linked inquiries that should be undertaken.
- (10) A significant portion of the studies are still carried out by one or two resident advisors

and do not, therefore, contribute to an internalization of the analytical process in BAPPENAS.

(11) High-placed BAPPENAS officials have conflicting views concerning what should be the extent of policy-oriented research and analysis carried out in BAPPENAS.

(12) Provision of personal computers to BAPPENAS has had a high pay-off.

(13) The project has two outstanding resident advisors in BPS.

(14) DSP assistance in the improvement of large and medium industry data has been an important contribution to analysis and policy-making.

(15) Effective institution-building in BPS calls for an incentive and rewards system that will reinforce the changes in practice and behavior promoted through technical assistance and training.

(16) Provision of personal computers to BPS has helped to improve the work and to decentralize data processing tasks to the provinces.

#### b. Recommendations

(1) The privileged position of DSP II in GOI operations should be kept in mind when considering the project's continuation.

(2) From now to the end of DSP II, careful thought should be given to how to make DSP III a more effective instrument for strengthening the analytical process and for increasing and improving the information needed for the formulation of policy.

(3) Although some BAPPENAS officials have been deeply involved in collaborative analysis and planning, it would be useful to widen this participation.

(4) The involvement and supervision of the older, more experienced professionals in Boston University and Development Alternatives, Inc. should be continued and brought to bear on the following: (a) the maintenance of a high-level technical assistance team competence; (b) the negotiation of the more sensitive project design issues that may be coming down the pike.

(5) Four to six weeks of intensive Indonesian language training should be given to the resident advisor when he or she arrives in country. The employment of a translator and the translation of selected studies into Indonesian should be given consideration by BPS and BAPPENAS.

(6) Sustained growth and large, sustained increases in remunerative employment should

continue to be the final criteria for the research agenda and selection of topics for inquiry.

(7) DSP leadership, including BPS, BAPPENAS & DEG, should explore ways to review studies, conclusions and findings; identify appropriate empirical and analytical follow-up studies. How institution-building and technology transfer can be best accomplished should receive continuing attention during the remaining period of DSP II.

(8) The preparation of REPELITA should be viewed as an opportunity to review the possible analytical and planning roles of institutions that are outside of BAPPENAS.

(9) The time may be right for a reconsideration of the issue of document confidentiality. Although this a matter that BAPPENAS should decide, the issue should not be viewed as taboo. BAPPENAS should give thought to the possibility of a classification and distribution system.

(10) BPS resident advisors should continue to be Ph.D. economists concerned with the quality of data and its analytical utility.

(11) BPS advisors should continue to concentrate on the improvement of three, and possibly four data sets -- large & medium industry, labor force survey, socioeconomic survey, and small business and cottage industry.

(12) The DSP response to the BPS Deputy Director's request for assistance in the improvement of publications, the tabulation and publication of local level and other kinds of disaggregate data, and the training and procedural improvement of the two divisions in the Analysis & Methodology Development Bureau should begin during DSP II. This should help provide a clearer view of needs when designing a possible DSP III.

(13) The review of internalization and institution-building in BPS should include the discussion of rewards and the career advancement systems.

#### E. USAID Monitoring and Review

As USAID capital transfers to Indonesia have diminished and the USAID program has become more concentrated on technical assistance, the Mission has concerned itself more intensely with monitoring and review issues. Nonetheless, day-to-day management of DSP II has been the responsibility of the DSP leadership, under the direction of BAPPENAS, and USAID has intervened only when necessary. This approach has proven successful. Relations between USAID and the GOI appear to have had the right mix of involvement and distance. All the interviewed parties expressed satisfaction with it. BAPPENAS' sense of ownership of the project is extremely strong.

USAID monitoring of DSP II during the remaining duration of the project should be centered around issues of relevance to a possible DSP III. At least two issues would appear

to be of particular interest to USAID: (1) the GOI contribution; (2) the extent to which DSP III will concentrate on institution-building.

### III. DSP III

#### A. Introduction

To decide whether the Development Studies Project should be continued beyond December 1994, and to determine what should be the nature of a possible DSP III, will call for reviews of Indonesian problems and issues and USAID Mission objectives. Very few of the issues can be considered in this introduction.

The benefits of a possible DSP III will depend in great part on the extent to which a successor project can help broaden the GOI and BAPPENAS policy-making process. This broadening would involve both an expansion in the range of pertinent socioeconomic information used in the formulation of policy, and an increase in the number of participants who carry out the studies and the analyses.

For the foreseeable future underemployment will be a basic Indonesian problem. The Development Studies Project II was designed by USAID as a means of helping BPS and BAPPENAS come to better grips with this problem, and to identify the policies that would increase remunerative employment. The USAID Mission recognized that economic growth could not be counted on as a sufficient means of resolving the underemployment problem, and that fuller information and a better understanding of issues in industry and trade were needed for the formulation of policy. Analytical work in these areas served to identify basic issues in other related sectors, and inquiry was extended to areas such as infrastructure, the informal sectors, regional planning, education and health.

The gravity and the fundamental nature of the employment problem has not changed, and there is a continuing need for the kinds of collaborative policy-oriented studies and analyses that have been produced under DSP II. Future macroeconomic and sector policy reforms will require more information than the broad reforms recently carried out. In Indonesia, as in other countries, it has become evident that a considerable amount of data is required to monitor, assess, and implement deregulation and decentralization policies.

Researchers and policy-makers have had a fruitful collaboration under DSP II. The potential contribution of DSP III to the improvement of policy-making justifies thorough discussion of this possible project over an extended period of time.

## B. BAPPENAS

Two and 3/4 years of DSP II remain at the time of this writing (assuming AID/W approval of the request for an extension), and many changes can take place during this period. Since the kind of situation in which the future design would take place cannot be known at this time, the recommendations that follow start from the assumption that the GOI will want to strengthen and broaden its analytical and policy-making process, and will be willing to engage in a frank and thorough discussion of how this can be most effectively done.

DSP III should have three basic objectives: (1) to carry out studies and provide analytical findings of utility for the formulation of policy; (2) to strengthen BAPPENAS capabilities for analysis, and for critical reviews and assessments of the completed studies and analyses that are carried out by other organizations; (3) to help establish a self-reliant and continuing analytical and review process in BAPPENAS, and in any other organization designated by BAPPENAS.

The scope of policy-oriented research and analysis to be carried out under DSP III should be defined in the project agreement.

Consideration should be given to the possibility that DSP III have direct access to the Minister of BAPPENAS. In this case, the resident team leader should be a well-known, widely published economist with substantial developing country experience.

The Team Leader should be deeply involved in the discussions with the GOI concerning the DSP III project agreement. During the design and negotiation of the new project it may be important to emphasize that the U.S. advisors will not be in Indonesia to formulate policy. Their tasks will be to carry out policy-oriented research and analyses, and to strengthen BAPPENAS capabilities for carrying out and reviewing such analyses.

The work of the U.S. advisors will depend partly on the direction in which the main functions of BAPPENAS evolve. Consequently, a basic issue for discussion will be the extent to which analytical and policy-making functions are to be broadened, i.e., adopted by, or strengthened and enlarged in, other government organizations. As Section II.A.6. makes clear, there are different views in BAPPENAS regarding the amount of research and analysis that BAPPENAS can and should carry out. On the other hand, there is broad agreement on the need for a considerable amount of policy-oriented research and analysis.

A national planning board, particularly in a country as large and complex as Indonesia, should not be expected to lay down the detailed specifications of the analyses needed at sectoral levels, much less carry out all these analyses. A division of labor is needed. A more balanced distribution of the government's analytical and policy-making workload is a precondition of significant improvements in performance.

The redistribution of this workload should be one of the topics discussed during the design

of DSP III. BAPPENAS may wish to give special attention to the possible strengthening of capabilities in the two key divisions of selected ministries: the planning division and the research & development division.

For example, a considerable amount of analysis and planning is now taking place in the education sector, but most of the inquiry appears to be partial, and the planning predominantly piecemeal. The kinds of information needed to design a coherent sector strategy, such as a full accounting of education expenditures, enrollment flows, and graduation rates, do not seem to be available.

Preparation of comprehensive sector analyses and strategies by the Ministry of Education should serve to reduce the BAPPENAS workload. At present BAPPENAS reviews each individual investment proposal (whether financed from public revenues or from foreign assistance). A review of a comprehensive strategy that specifies the connections among education levels over time, and that specifies areas of proposed savings should help make the review process less burdensome and more effective.

In sum, the design of DSP III should take into account the possibility of an expanded analytical and planning role for the planning and research and development divisions of key ministries.

### C. BPS

The three basic objectives to be pursued in BPS under a possible DSP III would be: (1) the improvement of procedures to make data more consistent and reliable; (2) the strengthening of BPS capabilities in data collection, processing, and analysis; (3) the establishment and consolidation of the processes that will continue and facilitate these two basic tasks.

Obviously, the data sets that should be selected for improvements and refinements under DSP III cannot be specified at this time. It is quite possible, however, that the disaggregate measurement of poverty, incomes, employment and underemployment will require additional attention. These are data collection, processing, editing, tabulating and publishing tasks that confront great difficulties, and the magnitude of these tasks in a country as large and complex as Indonesia should not be underestimated.

Decentralization is a topic that should probably be discussed at some length during the design of DSP III. The ministries and other government agencies continue to make enormous demands from BPS for data, and decentralization would appear to provide one of the ways to bring about a redistribution of the collection and tabulation workload. There may be a need to develop procedures for controlling quality, assuring accuracy and consistency. The development of a program for the training of trainers from the provinces, the kabupaten, and the kecamatan may also be desirable.

## INTERVIEWS WITH DR. BRANDON ROBINSON, DSP II EVALUATOR

### BAPPENAS

1. Dr. Boediono - Deputy for Fiscal and Monetary Affairs
2. Dr. Sayuti Hasibuan - Deputy for Human and Natural Resources Development
3. Dr. Soekirman - Deputy for Social & Cultural Affairs
4. Dr. Mustopadidjaya - Deputy for Administration
5. Dr. Soekarno Wirokartono - Head, Bureau of Monetary Affairs and State Finance
6. Dr. Budhy Tjahjati - Chief, Bureau of Social-Economic and Spatial Development Planning

### BPS

1. Soegito, MA - Deputy Director General for Planning and Analysis
2. Soegiarto, MA - Bureau Chief of Analysis and Methodology Development
3. Suwandi, SE - Bureau Chief of Agricultural and Industrial Statistics
4. Kusmadi Saleh - Division Chief, National Accounts

### DSP

1. Bill Wallace - Consultant Team Leader
2. Alex Korns - Economic Statistics Advisors
3. Yahya Jammal - Statistical Analyst
4. Michael Romanos - Regional Policy Advisor
5. Kenneth Chomitz - Employment and Human Resources Advisor
6. Alec Hansen - Infrastructure Policy Advisor
7. Sabdono Y. Wibowo - Office Manager
8. Heliati Bambang - Research Associate
9. Edison Hulu - Research Associate
10. Lana Soebandi - Research Assistant
11. Vivi Alatas - Research Assistant
12. Ahmady Satriawan - Systems Manager
13. James Taylor - Research Collaborator
14. Lawrence Dolan - Urban Planner
15. Stephanie Martin - Research Associate

## **USAID**

1. LP Reade - Director
2. Edward Greeley - Program and Project Support Office
3. Gary Bricker - Program and Project Support Office
4. Steve Parker - Economic Policy Support Office
5. Lee Ann Ross - Economic Policy Support Office

## **OTHERS**

1. Joe Stern, HARVARD