

# A.I.D. EVALUATION SUMMARY PART I

(BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS)

A. REPORTING A.I.D. UNIT (Mission or AID/W Office) \_\_\_\_\_

B. WAS EVALUATION SCHEDULED IN CURRENT FY ANNUAL EVALUATION PLAN?   
 yes  slipped  ad hoc

C. EVALUATION TIMING   
 interim  final  ex post  other

(ES: \_\_\_\_\_)

D. ACTIVITY OR ACTIVITIES EVALUATED (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report)

Project #	Project/Program Title (or title & date of evaluation report)	First PROG or equivalent (FY)	Most recent PAC (mo/yr)	Planned LOP Cost ('000)	Amount Obligated to Date ('000)
	Education Policy and Planning: An Integrated Information Systems Approach. A Mid Term Evaluation. July 11, 1987. (497-0344)	FY84	9/90	\$6,500	\$6,500

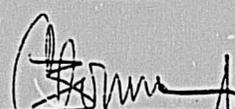
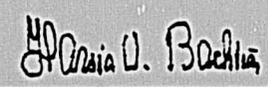
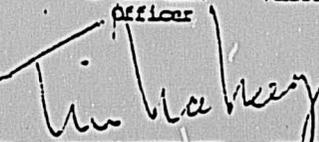
E. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

Action(s) Required	Name of officer responsible for Action	Date Action to be Completed
1. An organizational study of Balitbang as recommended is judged unnecessary in light of previous efforts. Rather, the existing plan for the re-organization of Balitbang will be retrieved from the Minister's office, reviewed and revised as appropriate. This review will involve the participation of the acting EPP Chief of Party and will use both the evaluation report and the recommendations of EPP consultant Jerry Van Sant as a reference. Particular attention will be given to the needs of the Informatics Center. This revised plan will then be re-submitted to the Minister for his consideration.	Sec, Balitbang EPP COP (Acting)	12/31/87
2. The recently established Policy Analysis Group (PAG) now consists of representatives of each of Balitbang's Centers, and reports directly to the "Rapat Inti," chaired by the Head or Secretary of Balitbang. A conceptual framework and terms of reference is to be developed, after which the PAG will become operational. This is a pilot effort which, based on experience gained, could be broadened to span all of Balitbang with each Center eventually having separate but coordinated PAGs.	Head, Policy Analysis Group	10/31/87

(Attachments, if necessary)

F. DATE OF MISSION OR AID/W OFFICE REVIEW OF EVALUATION: mo 7 day 8 year 87

G. APPROVALS OF EVALUATION SUMMARY AND ACTION DECISIONS:

Signature Typed Name Date	Project/Program Officer	Representative of Borrower/Grantor	Evaluation Officer	Mission or AID/W Office Director
	 Cameron Bonner	 Prof. Harsja Bachtia	 Tim Mahoney	 David N. Merrill



This mid-term evaluation covers the first two years of the Educational Policy and Planning (EPP) Project. The purpose of this project is to assist the Government of Indonesia in improving education policy making and planning based on better information, policy research and policy analysis. In meeting this purpose, the EPP project has established plans for an integrated information system and the acquiring of the requisite skills to provide more complete and accurate information. In the project, AID assists the Ministry of Education and Culture (MOEC) and its R&D arm, Balitbang, by providing technical assistance, training and commodities to the project.

In their findings, the evaluators cited several positive accomplishments of the project. First, Balitbang's Information Center developed and obtained MOEC approval for a comprehensive Management Information System (MIS) plan which includes all major units of the MOEC. Second, initial attempts have been made with three of the MOEC's provincial offices to begin the development of MIS systems which may later serve as information hubs for dealing with education issues within their respective provinces. Third, Balitbang's Policy Research Center conducted a number of studies which resulted in a proposal for an MOEC project monitoring system, a model for evaluating the education component of Repelita IV, and a guide to mid-term manpower planning for the MOEC. Specific problems with the project include delays in meeting targets set by a number of work plans, the early departures of the Chief of Party and the long-term Policy Research Analyst, and depletions of Balitbang professional staff because of training abroad. The major problem cited is that there is not yet a satisfactory integration of the work of the Information and Policy Research Centers.

Recommendations for the EPP project were made in three areas. In the area of the institutional development of Balitbang, the team recommends that a study be conducted of Balitbang's organization and management, and that a phased approach be undertaken to achieve operational linkages of the Information and Policy Research Centers. In the area of external linkages of Balitbang, it is recommended that the Steering Committee meet at a minimum of every six months, the membership of this committee be expanded to include the head of the Policy Research Center, that the Technical Committee meet at least four times a year, and that a structured program of mutual education be developed between senior staff of the Directorate Generals and Balitbang. In the area of developing educational planning and policy capabilities at the provincial level, the team recommends that EPP concentrate its assistance at the provincial level on three pilot provincial education offices, that efforts be made to further develop the MIS in the three pilot provinces, and that the recently chartered research networks be activated.

I. EVALUATION COSTS

1. Evaluation Team

Name	Affiliation	Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (US\$)	Source of Funds
1. Dr. Harold Freeman	AID/ANE/TR/HRD	21 work days	\$ 8,800	OE-(Mission and AID/W)
2. Dr. Donald Adams	U.Pittsburgh	"	\$15,000	Project
3. Dr. Terance Bigalke	MUCIA	"	\$15,000	Project

2. Mission/Office Professional Staff Person Days (estimate) 10

J. Donor-or-Grantee Professional Staff Person-Days (estimate) 15

# A.I.D. EVALUATION SUMMARY. PART II

J. SUMMARY OF EVALUATION FINDINGS, CONCLUSIONS AND RECOMMENDATIONS (Try not to exceed the 3 pages provided)  
Address the following items:

- o Name of mission or office
- o Purpose of activity (ies) evaluated
- o Purpose of the Evaluation and Methodology Used
- o Findings and Conclusions
- o Recommendations
- o Lessons learned

## Name of Mission

USAID/Indonesia, Office of Education and Human Resources

## Purpose of Activity Evaluated

The goal of the \$9.5 million (AID: \$6.5 million; GOI: \$3.0 million) Educational Policy and Planning Project (EPP) is to improve the efficiency and quality of education and training in Indonesia. The project's purpose is to assist the Government of Indonesia in the improvement of educational policy making and planning based on better information, policy research, and policy analysis. EPP assumes that a central means to achieve these goals is the establishment of an integrated information system and the requisite skills to provide more complete and accurate information. AID contributes technical assistance, training, and commodities (e.g., computers and supporting software) to the project.

## Purpose of Evaluation and Methodology Used

This mid-term evaluation covers Phase One (approximately the first two years) of the project. This phase was designed to be a period of experimentation and exploration in the establishment of an information system to support policy formulation and long-term planning. The evaluation of the project serves both as a review of the EPP implementation strategy and the assumptions on which it is based, and as an assessment of the effectiveness of the project's management system.

The team of three evaluators spent three weeks in Indonesia following two days of briefings in AID/Washington. They reviewed all pertinent background materials on the project, reviewed progress reports, and held discussions with relevant parties on project strategy and performance. They also observed the implementation of project-supported activities, both at the MOEC and in the three pilot provinces. Because of the limited time allotted to the evaluation, structured interviews and extensive data collection were not conducted. Instead, the evaluators used a case study approach which focused on a few key project efforts and held in-depth interviews with key officials in the Ministry of Education and Culture (MOEC), particularly with Balitbang (the R&D arm of the MOEC) and Kanwil (Provincial Education Office) staff.

## Findings and Conclusions

Findings. The efforts of Balitbang's Information Center resulted in the development and subsequent approval of a comprehensive Management Information System (MIS) plan which includes all major units of the MOEC. Although the headquarters of the MIS and the core strategic data base will be in the Information Center, an attempt will be made to decentralize the operational side to each office or unit concerned. Initial attempts have been made with three of the MOEC's provincial offices to begin the development of MIS systems which eventually may serve as information hubs within the selected provinces. A significant amount of software and in-country training programs have been developed to support these objectives.

Date this summary prepared: August 28, 1987

Under Phase One, Balitbang's Policy Research Center conducted a number of studies which resulted in a proposal for an MOEC project monitoring system, a model for evaluating the education component of Repelita IV (Indonesia's fourth five-year national development plan), and a guide to mid-term manpower planning for the MOEC. It is also currently testing the design of a major study on the quality of basic education.

In addition to these project accomplishments, significant problems were uncovered by the evaluators. There were delays in meeting a number of the targets set in work plans, the Chief of Party resigned after 14 months for personal reasons, the long-term Policy Research Analyst resigned after 12 months (primarily due to the inability of the advisor to fulfill his scope of work as judged by his Indonesian counterparts), and depletions of Balitbang professional staff because of training abroad. The major problem, however, focuses directly on the internal and external relationships of Balitbang. There is not yet a satisfactory integration of the work of the Information and Policy Research Centers.

Conclusions. Balitbang could provide more dynamic leadership in its prescribed role of providing policy research and analysis support to the decision making units of the MOEC. Also, the interaction between Balitbang and the provinces needs to be more closely associated with the structure and process of the national system of annual planning.

#### Recommendation

Institutional Development of Balitbang. First, a study should be conducted of the organization and management of Balitbang, focusing on the structural and managerial changes necessary to coordinate the work on information development, policy analysis and policy research to make Balitbang more effective in accomplishing its mandates. Second, unless otherwise recommended by the proposed study, a phased approach should be undertaken to achieve operational linkages between the Information and Policy research Centers. As an interim measure, the Policy Analysis Group should be reconstituted to include two senior researchers from the Policy Research Center and the two Center heads. This group should be placed directly under the Balitbang secretary.

External Linkages of Balitbang. First, the Steering Committee should meet at a minimum of once every six months. Its agenda should include a review of progress made toward the realization of project objectives, discussion and agreement on a project work plan for the following six months, and the formulation of instructions, as necessary, to the technical committee. Second, the membership of the Steering Committee should be expanded to include the head of the Policy Research Center. Third, the Technical Committee should meet at a minimum of four times a year. Two of these meetings should take place immediately following the meetings of the Steering Committee. Fourth, a structured program of mutual education should be developed between senior staff of the Directorate Generals and Balitbang. This would include an internship program which temporarily assigns senior research staff to MOEC Directorate Generals to observe the needs of decision makers, joint seminars and workshops for staff of Balitbang and MOEC units focused on the uses of information and research, and attachment of Directorate General staff members to research and analysis teams.

#### Development of Educational Planning and Capabilities at the Provincial Level.

First, for the immediate future, EPP should concentrate its assistance at the provincial level on the three pilot provincial education offices. Extension to any provinces and the readiness of the other provinces to participate (West Sumatra may be a candidate for early inclusion). Provision of micro-computers and related training to other provinces might be considered if warranted by special circumstances, such as the transfer of already oriented provincial office heads to other regions. Second, efforts should be made to further develop the MIS in the three pilot provinces. Such development should be integrated with the process of implementation and monitoring of the national system of annual educational plans.

Third, the recently redesigned provincial research networks involving Kanwils and other interested educational and planning bodies should be activated. The research undertaken should focus on provincial educational problems and assist educational officials in their contribution to the formulation of annual plans.

#### EPP Amendment

Sometime between six months and one year from now, after further experience of the pilot provinces in the utilization of information and research in the formulation and implementation of annual plans, the Mission should determine whether sufficient progress has been made to warrant a programmatic amendment to "decentralize" the project. On the other hand there may be need for an administrative amendment, apart from the issue of provincial involvement, in order to extend the project completion date to provide Ph.D. participants time to complete their programs and add funds to the project to finance further in-country training, additional short-term expertise and, most important, the cost of retaining the services of the three long-term advisers for sufficient time to insure adequate continuity to the project.

#### Lessons Learned

Three lessons are cited by the evaluators. First, the role of the foreign technical advisor should not be taken for granted. Rather, this role needs to be examined at length, in reference to the context in question, and mutually agreed upon by all parties concerned. Second, the timing and sequencing of technical assistance may be significant to project success. There is, for example, a danger that technical advisors may serve as operational replacements for those persons in long-term training. The advisor may thus be finishing his tour of duty by the time the trainees return, losing the opportunity for collaboration and the opportunity for the advisor to serve as a mentor. Third, the elaborate sequence of USAID preparatory steps, culminating in the detailed project paper, has given an illusion of certainty to the expected outcomes of EPP. A specific example is the assumed linear relationship between certain increased institutional capabilities and the effectiveness of national planning and policy making. The relationship between the availability and use of knowledge is not highly predictable. However, the inability to avoid risk should not obscure the importance of EPP engaging in carefully designed efforts intended to effect changes in this important area.

ATTACHMENTS (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier)  
Freeman, Harold, Don Adams and Terry Bigalke. Education Policy and Planning: An Integrated Information Systems Approach — A Mid Term Evaluation. Presented to The Agency for Research and Development, Ministry of Education and Culture, Republic of Indonesia and The United States Agency for International Development, Jakarta, Indonesia. July 11, 1987.

COMMENTS BY MISSION, AID/W OFFICE AND BORROWER/GRAUNTEE

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Date: July III, 1987

1 - submit  
7/10/87.

EDUCATION POLICY AND PLANNING:  
AN INTEGRATED INFORMATION SYSTEMS APPROACH

A MID TERM EVALUATION

Presented to The Agency for Research and Development  
Ministry of Education and Culture  
Republic of Indonesia

and

The United States Agency for International Development  
Jakarta, Indonesia

Submitted by:

Harold Freeman, Team Leader

Don Adams, Educational Economist

Terry Bigalke, Educational Planning Specialist

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## EXECUTIVE SUMMARY

The overall purpose of the Educational Policy and Planning Project (EPP) is to assist the Government of Indonesia in the improvement of educational policy making and planning based on better information, policy research and policy analysis. EPP is a \$9.5 million project in cooperation with Balitbang -- the R&D arm of the Ministry of Education and Culture (MOEC) -- extending over a six year period (July, 1984 to September, 1990). Project funds consist of \$6.5 million from AID (\$4.990 million loan and \$1.510 million grant) and \$3 million (in rupiah equivalent) from the Government of Indonesia. The contributions of AID to the Project are essentially in the form of technical assistance, training and the purchase of commodities, e.g., computers and supporting software. This report is a mid term evaluation covering approximately the first two years of the Project and serves both as a review of the Project implementation strategy and the assumptions on which it is based, and as an assessment of the effectiveness of the Project's management systems. The Executive Summary focuses on the issues and directions to be taken in the improvement of Balitbang and in enhancing the potential of provincial offices to engage in educational decision making.

An assessment of accomplishments during Phase One must take into consideration the brevity of the period under review. Although the loan agreement was executed in June 1984, the grant agreement was not signed until February, 1985; the first group of Indonesian participants departed for graduate study in the United States in September 1985; and the first long term technical adviser arrived in January 1986. Compounding the constraints on the operational time frame of the Project, two of the three long term advisers did not complete their tours of duty. The Chief of Party left after 14 months for personal reasons. The Senior Policy Analyst left after one year.

There is much to praise about Phase One progress. The efforts of Balitbang's Information Center resulted in the development and subsequent approval of a comprehensive MIS plan which includes all major units of MOEC. Although the headquarters of MIS and the core strategic data base will be in the Information Center, an attempt will be made to decentralize the operational side to each office or unit concerned. Initial attempts have been made with three of the MOEC's provincial offices to initiate development of MIS systems which eventually may serve as information hubs for the selected

provinces. A significant amount of software and in-country training has been developed to support these efforts.

Under Phase One of EPP, Balitbang's Policy Research Center conducted a number of studies which resulted in a proposal for a MOEC project monitoring system, a model for evaluating the education component of Repelita IV and a guide to manpower planning for the MOEC. It is also currently testing the design of a major study on the quality of basic education.

Nevertheless, many major and continuing problems have been uncovered by a review of Phase One. There were delays in meeting a number of the targets set in work plans, early departures of long term advisers and depletions of Balitbang professional staff because of training abroad. The major problem, however, focuses directly on the internal and external relationships of Balitbang. There is not yet a satisfactory integration of the work of the Information and Policy Research Centers. Moreover, Balitbang could provide more dynamic leadership in its prescribed role of providing policy research and analysis support to the decision making units of the MOEC. Finally, the interaction between Balitbang and the provinces needs to be more closely associated with the structure and process of the national system of annual planning.

Recommendations:

INSTITUTIONAL DEVELOPMENT OF BALITBANG

1. A study should be conducted of the organization and management of Balitbang. The focus of the study should be on the structural and managerial changes necessary to coordinate the work on information development, policy analysis and policy research and to make Balitbang more effective in accomplishing its mission.

2. Unless otherwise recommended by the proposed study, a phased approach should be undertaken to achieve full integration of the Information and Policy Research Centers. As an interim measure the Policy Analysis Group should be reconstituted to include two senior researchers from the Policy Research Center and the two Center heads. This group should be placed directly under the Balitbang secretary.

### EXTERNAL LINKAGES OF BALITBANG

1. The Steering Committee should meet a minimum of once every six months. Its agenda should include: a review of progress toward the realization of project objectives; discussion and agreement on a project workplan for the following six months; and the formulation of instructions, as necessary, to the technical committee.

2. The membership of the Steering Committee should be expanded to include the head of the Policy Research Center.

3. The Technical Committee should meet a minimum of four times a year. Two of these meetings should take place immediately following the meetings of the Steering Committee.

4. A structured program of mutual education should be developed between senior staff of the Directorates General and Balitbang. This would include: an internship program which temporarily assigns senior research staff to MOEC Directorate Generals to observe the needs of decision makers; joint seminars and workshops for staff of Balitbang and MOEC units focused on the uses of information and research; and attachment of DG staff members to research and analysis teams.

### DEVELOPMENT OF EDUCATIONAL PLANNING AND POLICY CAPABILITIES AT THE PROVINCIAL LEVEL

1. For the immediate future EPP should concentrate assistance at the provincial level on the three pilot provincial education offices. Extension to any province should proceed as justified by the quality of development within the pilot provinces and the readiness of the other provinces to participate. (West Sumatra may be a candidate for early inclusion.)

2. Efforts should be made to further develop the MIS in the three pilot provinces. Such development should be integrated with the process of implementation and monitoring of the national system of annual educational plans.

3. The recently redesigned provincial research networks involving Kanwils and other interested educational and planning bodies should be activated. The research undertaken should focus on provincial educational problems and assist educational officials in their contribution to the formulation of annual plans.

## BACKGROUND

This report is a mid term evaluation of the project titled "Education Policy and Planning: An Integrated Information and Systems Approach (EPP). The general goal of EPP is to improve the efficiency and quality of education and training in Indonesia. The more immediate goal is to contribute to better formulation, implementation and monitoring of educational policies and plans by assisting the Ministry of Education and Culture (MOEC) in strengthening its capacity for policy research and analysis. EPP assumes that a central means to achieve these goals is the establishment of an integrated information system and the requisite skills to provide more complete and accurate information. Within MOEC the role of the Agency for Research and Development (Balitbang) is considered particularly important in the generation, management and dissemination of policy relevant data and information.

EPP is a \$9.5 million project in cooperation with MOEC extending over a six year period (July, 1984 to September, 1990). The Project loan agreement and Project grant agreement were signed in June, 1984 and February, 1985 respectively, and provided a total AID contribution of \$6,500,000 to cover technical assistance (long and short term), training (U.S., third country and in-country), commodities (computers, data processing equipment and vehicles), special studies and other costs (evaluations, contingency, inflation). By the time the grant agreement was signed in February, 1985 the grant/loan mix was revised to take into account a somewhat higher estimation of technical assistance costs (from \$1.0 to \$1.510 million) but the total remained the same. The contribution of the Government of Indonesia for both cash and in-kind support costs (in rupiah equivalent) was \$3,000,000. Technical assistance funds have been earmarked through the "buy-in" to AID/Washington's IEES Project.

Implementation of the Project is divided into two phases. Phase One (covering approximately the first two years of the Project) was designed to be a period of experimentation and exploration in the establishment of an information system to support policy formulation and long term planning. Phase Two will be focussed on the implementation of an agreed upon plan.

Although some training and commodity purchases took place in CY1985, Project activities under Phase One became operational upon the arrival of the first long term consultant during the first quarter of CY1986. Therefore, this "mid term" evaluation covers a period of less than 18 months of actual Project operations. The evaluation provides a review and assessment of (1) the major assumptions of the Project, (2) the Project implementation strategies, and (3) the Project management system. The concern is thus with the overall conceptualization of the Project, its technical decisions and the design of its leadership and management mechanisms. Most fundamentally the evaluation of Phase One considers the potential of the Project, as currently structured or with modifications, to improve long term educational planning and policy making.

## ACHIEVEMENTS TO DATE: ACTUAL VERSUS PLANNED

Anticipated Phase One outputs listed in the Loan and Grant Agreements are (1) increased capacity for policy analysis to be accomplished through overseas and in-country training programs, (2) strengthened institutional organization and management of Balitbang, including a review and subsequent development of new groupings and relationships, (3) at least two special studies, including an evaluation of programs during Repelita IV and planning a centralized MOEC information system, (4) increased capacity of the Information Center, including training and (5) development at the provincial level to identify information needs and determine how provincial planning capacities can be strengthened.

Table 1 shows that, while many specific activities were initiated in Phase One, it is mainly the overseas and in-country training programs that have met their targets. Besides important observational visits to other countries, nine long term and three short term participants have been sent abroad for training. The plan is to select four graduates from among those currently enrolled in Master's programs to continue their studies for the Ph.D. degree. Additionally, between June, 1985 and May, 1987 a total of 371 participants, selected from both MOEC and the provinces, have participated in eleven in-country short courses. Participants were carefully screened by a committee composed of Balitbang staff, Directors General and other MOEC staff. Those sent abroad for advanced study with only one exception are proceeding roughly on schedule, although an amendment to extend the Project completion date will be needed to enable Ph.D. candidates to complete their programs within the life of the project.

In the case of the MIS, the Contractor's Annual Report for CY1986 lists ten major activities to be undertaken to develop the project's MIS along with many sub-activities for each activity category. The Contractor's Action Plan for CY1987 (same document) lists twenty new activities, again broken down into many sub-activities. Most of these tasks might have been accomplished as planned if the Steering Committee had been able to meet to approve Balitbang's Management Information Plan shortly after it was completed in February 1987. Instead the Committee did not meet until June, 1987, as time was needed for

national and provincial staffs to review the Plan. This caused a delay in some important MIS activities -- the implementation of MIS model development for the provinces, reorganization and functional realignment of Balitbang's Information Unit, formalization of a major code system of the Ministry, the development of an appropriate educational indicator system for the Ministry, review of current data collection instruments and the development of MIS policies related to MIS management, including hardware/software acquisition and data/information management -- which are either behind the CY1987 Action Plan schedule or not yet approved as specific items, though general approval was given to the MIS Plan at the June, 1987 meeting.

Nevertheless, by the end of Phase One approximately \$120,000 or 10% of the commodities budget has been spent. Without waiting for the development and approval of the overall MOEC MIS plan, 19 microcomputers were purchased for use by the Information Center of Balitbang, the office of the technical assistance team, the three pilot provinces and line departments in the MOEC. Shortly after their arrival, technical assistance was provided to train trainers and users in their use. Visits to the Information Center and to the three pilot provinces, have reinforced the evaluation team's initial findings from the review of status reports that the computers are being utilized. The head of Balitbang's Information Center envisages a steady progression from basic training and software development to an eventually integrated management information system. The computers have thus far been used to study a number of policy issues for the Directors General, have been installed in the Minister's Operations Room and have served administrative purposes in the three pilot provinces.

Finally, technical assistance under the first phase of EPP consisted of three long term resident technical advisers, one TCN computer programmer/trainer (for one year) and three short term advisers, or roughly one-third of the person years allocated for the project. Achievements to date have been less than anticipated. One of the major tasks of the Chief of Party was to strengthen the linkages among the many players and units of this project. Such coordination is a requisite not only for project success but also for achievement of the medium and long term goals of Balitbang. The extent to which the Chief of Party promoted improved horizontal coordination

of the Echelon II units within Balitbang is not clear. Such coordination also should have been a primary task of the Senior Policy Analyst, who ideally should have kept a foot in both the Information and Policy Research Centers of Balitbang. This is not to understate the difficulty and delicacy of the role of a foreign adviser, which is always dependent on the good will of one's hosts. This role calls for a high level of maturity, sensitivity, and self-confidence. It also calls for flexibility in seeking an appropriate mix between responding to day-to-day emergencies with which the host unit could use a hand, and a steadfast fix on the broader institutional objectives of the project. The current MIS adviser appears to be doing a successful job of balancing these demands. A thorough orientation should precede the assignment of the two new long term advisers, and a seasoned Chief of Party should be sought.

In May, 1987, after 14 months of service by the Chief of Party, and June, 1987, 12 months for the long term policy research analyst, both resigned from their positions. In the case of the latter, the resignation was primarily due to the inability of the adviser to fulfill his scope of work as judged by his Indonesian counterparts. These departures, while distressing and causing delays in the momentum of the project, give the project a chance to make more appropriate consultant selections. At the outset the mix of skills represented by the long term advisers appeared to be quite appropriate; i.e., backgrounds in management information systems, economics, national planning and country-specific knowledge. However, experience to date has indicated that what is also needed from the team as a whole is more breadth and depth in the field of education as it relates to economic analysis, planning, policy analysis and policy research. Equally important is the need for a Chief of Party who can guide his contract team, play a leadership role in the deliberations of the Steering Committee, command respect from MOEC senior staff and, finally, have a clear vision of the project's overall objectives and how to achieve them.

In terms of judging the eventual institutionalization of the systems and procedures which EPP is supporting, some important outputs for Phase One have not been met; e.g., reviews of organizational and management strategies and structures (although recommendations in these areas were put forward by the TA team), and establishment of at least one working group has not been realized. These critical problems of linkages and relationships will be discussed throughout this report.

Table 1

OUTPUTS

Activity	Approx. Quarterly Timeframe	Status
GOI funded workshops on introduction to computerized MIS	9/84	Completed
Review of Management and Organization of Information Center	12/84	Only Information Center of Balitbang reviewed and no known action taken on recommendations.
In-country training plans at IKIP Yogyakarta developed	3/85	completed
Strategy for pilot work at provincial level drafted		Completed.
IEES Sector Assessment underway;	9/85	Initiated.
Contract for EPP signed with IEES; 12 senior MOEC officials attend 1 week Executive Seminar at AIT, Bangkok		Completed.
Training Plan for 1985-86 developed and approved by Steering Committee;		Completed.
Three participants sent abroad for long term training and three for short term, including one for 9 month course in education planning		Completed.
Computer programmer/trainer hired for 1 year to computerize school statistics	3/86	Completed.
COP & MIS long term advisers arrive in country;		Completed.
EPP team workplan approved by MOEC;		Completed.
IEES Sector Assessment;		Completed.
Initial Balitbang Research agenda formulated;		Based on Sector Assessment.
Training plan for 1986-87 developed & approved.		Completed.
In-country training in data analysis techniques.		Ongoing.
Work initiated on microcomputer model.		—
Procurement begun for microcomputers to initiate pilot activities at provincial & national levels.		Initiated.
INPLAN National Projection Model for Education	7/86	Completed. Being used by Inf. Ctr. & Bridges adapting for provinces.

Activity	Approx. Quarterly Timeframe	Status
Third long term consultant arrived (June 86); Education sector assessment printed & distributed in English, Indonesian version being developed.	9/86	Completed
Two short term consultancies (IEES funded): 1. Design of MOEC project monitoring system 2. Model for evaluating Repelita Four		In process.
Data base policy research model developed. and tested.		On-going. Not considered sufficiently comprehensive. Completed.
Design of three long term research studies begun: (Quality, Internal & External Efficiencies).		Titles of latter two studies changed; further design work pending arrival of replacement L/T advisers.
Working groups established in MIS management, modeling and software development.		Ongoing.
Microcomputers purchased for Balitbang units and 3 pilot provinces.		Completed.
S/T consultant developed training modules on computer based education planning and trainers trained in their use.		Ongoing.
Six participants entered U.S. graduate programs, and one a nine month course in education planning.		Completed.
Short term training/observations to RTI		Completed.
Development of a comprehensive plan for an integrated MIS for education policy and planning.	3/87	Approved by Steering Committee on 6/87
Consultant Report on Development of the Statistical System		Completed.
Design, Field testing of Obsevational visit to the Philippines for Quality of Basic Education Study		Ongoing.
MOEC Manpower Requirements and Forecasting Study.		Ongoing.
Establishment of a computer-based Operations Room for Minister of Education (assisted by EPP consultant)		Ongoing.
Two of three L/T advisers leave project after 14 months for one and 12 months for the other.	6/87	Replacements nominated but not yet named.

## EPP STRATEGY AND ASSUMPTIONS

The inputs to EPP in the form of technical assistance, training and commodities were assumed to contribute to the efficiency and effectiveness of long-term educational planning and policy making. The Project Paper specifically calls for the strengthening of Balitbang in three areas:

- (1) an improved information system with its center in Balitbang but linking all MOEC units;
- (2) the generation of new knowledge and insights through policy research and analysis; and
- (3) a supporting technology in the form of computers and appropriate software.

The basic strategy, then, is to provide inputs to Balitbang in order that this unit can give leadership and assistance to national and, at least experimentally, to provincial policy making and planning.

The various training programs and technical assistance are unquestionably raising the capabilities within Balitbang to analyze data, develop information and conduct educational research. With the return of those currently enrolled in overseas graduate programs an impressive core of young scholars will be available. There is, however, a caveat. While the technical computer and research skills of returned scholars might be assumed to be adequate, their skills in policy research and policy analyses may or may not be well developed. If, for example, a distinction is made between policy analysis and policy research — with the former emphasizing practical, quick advice and insights and the latter focusing on longer term knowledge development — little progress has yet been made in developing capability within Balitbang to engage in policy analysis. A graduate degree typically does not directly provide skills in policy analysis. Such skills are acquired through the application of social science knowledge and careful reasoning to real life policy issues. Supervised experience and well-planned internships become important components of acquiring competence in policy analysis. Moreover, to some degree a similar argument could be made with regard to the limitations of research-oriented graduate programs on their direct applicability to policy relevant research.

If it is to be accepted as a given that an increase in the capabilities of Balitbang will be forthcoming then three assumptions need to be examined:

1. Information and research developed by Balitbang will improve the effectiveness of policy making and long-range planning.

World-wide research suggests a very tenuous relationship between available research and policy decisions. Educational policy like other forms of policy tends to be influenced and often dominated by political processes and preferences. Decisions are often reached on the basis of ideology or convenient negotiation, not by research findings or data analysis. Such may be the case in implementation as well as formulation of educational policy. Implementation may well depend more on the exercise of political power than administrative knowledge and capacity.

EPP reflects an assumption that assistance to Balitbang will give that unit the capability to develop an information system and conduct research which will help rationalize educational planning and policy making in Indonesia. Are the processes of policy making and planning amenable to rationalization? Echelon 1 officials in MOEC tend to argue that although some important educational policies are indeed "political" the policy making process can often be influenced by available information and research. Since there has not yet been time for the outputs of Balitbang, which flow from EPP inputs, to impact on educational policy and long-term planning, evidence is not yet available to substantiate that view. Nevertheless, the team believes that attempts to better inform policy makers and planners and enlighten policy debate can easily be defended. Given better information and research the potential exists for more effective choices and decisions. The risk is well worth taking.

2. The MOEC and other national bodies will be supportive of experimental attempts to build information systems and conduct research to improve planning and policy making at the provincial level.

The rhetoric of support from MOEC offices for increased authority at the provincial level is generally strong. The Planning Bureau in particular has fostered provincial participation in planning decisions and may be expected to welcome provincial activities related to information development and

research. The team believes that there is potential for increased efforts, largely in the areas of planning and related research, in selected provinces where warranted by the quality of Kanwil staff and the interest of the governor.

As the involvement at the provincial level continues, Balitbang will need to monitor and evaluate the potential for expansion. Decentralization itself should become the subject for research and its limits understood in the context of Indonesia and the particular province in question. Questions to be addressed would include: What resources are the central government willing to transfer to organizations at the provincial level? To what degree are the dominant behavior, attitudes, and culture conducive to decentralized decision making? What tensions exist between the center and the provinces? Who benefits and who loses from decentralization?

3. Supply driven data and information can be "marketed" to influence decision making.

The project grant agreement calls for the identification of information needs for policy analysis and planning within MOEC and elsewhere in the planning system. The project paper identifies the need to develop "... timely, accurate and relevant information which is the basis for any research, analysis and planning." For Phase One, the project paper depicts parallel development of staff training, capabilities for policy research and analysis and the capacity of Information Center to develop an MIS plan. The evaluation scope of work, however, describes Phase One as "... largely a period of experimentation and exploration of alternatives to the development of an information system master plan for supporting policy formulation and long term planning."

Whatever the intent of the frames of reference of the project the Information Center during Phase One made significant progress in its capabilities in data collection, data analysis and information development. Although there has been some formal and considerable informal discussion with policy makers, the Information Center has not systematically identified information associated with key decision points in the policy and planning process. Nor has there been extensive communication and joint planning with the Policy Research Center. The development of information systems to a

considerable extent has been driven by assumptions on the part of the Information Center as to what constitutes policy relevant information and by knowledge of the capabilities of the technology at hand. The opinion has been expressed that the availability of "good" information will find appropriate users.

Without denying some validity in the supply driven argument the danger exists that data will be collected and information produced which are irrelevant to the wants and needs of policy makers. Moreover, generating information outside, or inadequately coordinated with, the ongoing systems of policy making and planning (which have their own traditions of collecting and processing data) may disrupt relationships between offices and agencies within these systems. Developing information in the hope that policy makers may learn about its existence, understand it and wish to use it may be an extravagant exercise in optimism.

The team believes that the Information Center should continually strive to be responsive to the information needs of MOEC. Indeed, the persistence of Balitbang as a significant agency may depend on it. In section 4 of this report certain specific recommendations are made in this regard.

## BALITBANG INSTITUTIONAL DEVELOPMENT AND RELATIONSHIPS

Internal Development and Relationships

Annex 1 of Project Grant Agreement sets out as one of the five elements of FPP strategy: "strengthening the internal management and organization of Balitbang Dikbud, effectively linking its proposed three main components of educational research, policy analysis and information system." An early step toward implementing this element of strategy in Phase One of the Project was to be a review of internal management and organization of Balitbang itself; technical assistance was to be provided during the initial year to assist the Head of Balitbang to review the management of Balitbang in light of its mandate for increased emphasis on policy analysis. The relationship of the various centers of Balitbang with the Information Center was to be examined, along with their respective functions and responsibilities. Recommendations were to be made on ways in which the transition to a new internal management system could best be achieved. To what extent has the project, in some eighteen months of operations, successfully employed this element of the project strategy?

So far, only in a limited way. The Head of Balitbang has made attempts to streamline the organization of the centers and to transfer marginally effective staff out of Balitbang. He has instituted the practice of designating principal investigators to follow research through from design to final report, replacing the disjointed team research approach, in which no one could be held responsible for quality of the final product. Assigning responsibility has made it possible to evaluate the capabilities of the research staff, and thus make research assignments more commensurate with staff skills. In addition, he has, through informal channels, sought to cull out and disseminate lessons learned from Balitbang research to policy makers within the MOEC.

For a variety of reasons the strengthening of internal organization and management is going slowly. Perhaps foremost is the rigidity of the bureaucratic system, which discourages structural change. Balitbang's proposal to restructure into four centers is, for example, mired in an

approval process that includes the Ministry of Manpower because it entails staff reductions. There is little Balitbang can do to change that system but it must be certain that it is doing all conceivable to push its needs through existing channels.

Furthermore, Balitbang leadership is having difficulty translating broad organizational goals into concrete strategies for achieving them — in other words, moving from ideas to action. There is a critical role to be played here by the Balitbang secretary, bolstered, perhaps, by outside consultants who can help formulate action plans and monitor their implementation.

One striking example of the need to translate abstraction into action is in defining relationships among the internal units of Balitbang. For purposes of EPP, this is particularly essential for the Information Center and Policy Research Center. The Information Center currently lays claim to data gathering for Balitbang and is vying with the DGs and the Planning Bureau of MOEC for establishment of the preeminent data bank for the Ministry. The Center is also attempting to define for itself the role of policy analysis, responding to a demand by MOEC policy makers that is not being met by other units of Balitbang. The Policy Research Center is reorienting its research agenda to reflect the needs and interests of the DGs for policy related research, again in response to external demand. However, there is little structured interaction between these two centers. A number of factors may account for this behavior not the least of which is the tradition of setting agendas based more on internal center concerns than on broader Balitbang objectives. While acknowledging the need for better cooperation between the centers, Balitbang leadership does not seem to be taking decisive measures to consolidate their functions.

#### Balitbang Organizational Study

In the opinion of the evaluation team, the project design unwittingly accentuated the division between information gathering and policy research. The exclusion of the head of the Policy Research Center from the Project Steering Committee and Technical Committee (the only center represented is the Information Center) sent a message that data collection could be pursued without reference to other complementary sources of information. Yet the

goals of the project, which aim to bring better information to bear on policy formulation and decision making, call for the coordination of information gathering, policy research, and policy analysis.

The Grant Agreement called for an organizational study of Balitbang early in Phase One of the project. No such study was conducted, though one focusing on the Information Center conducted by Vansant in December, 1984 made some recommendations that encompassed Balitbang in its entirety. The head of Balitbang stated to the evaluation team that he views the undertaking of a Balitbang-wide study of organization and management by an organization specialist as a high priority. Such a study would provide a valuable opportunity to clarify the roles of the centers, structure better internal linkages, and revive the momentum of reorganization. Its strategy and purpose must be carefully conceived, and the consultant well matched to the strategy and purpose. A modest effort might be made to glean organizational lessons from one or two of the better functioning Balitbangs from other ministries, such as Agriculture.

The redefined mission of Balitbang, shaped over the past three years, has been sharpened by recent ministerial decisions that direct Balitbang to design its information collection, analysis and research around the needs expressed by the Directorate Generals. By the same token, the DG's have been directed to limit their research activities in recognition of Balitbang's responsibility to provide this service to the DGs of the ministry. To fulfill its mission, however, Balitbang will have to move beyond the current plateau of structural reorganization toward more complete internal coordination. This appears unlikely to happen through the initiative of the center heads; it will require strong leadership from the Balitbang head to design the appropriate structures and incentives to promote cross-unit cooperation and coordination.

#### Recommendations:

1. The head of the Policy Research Center should be added to the Project Steering and Technical Committees. This appointment will explicitly recognize the inseparability of the Information Center and the Policy Research Center in striving to attain linkage of information, research and policy development.

2. The proposed study of Balitbang organization and management should be carried out with the assistance of an outside consultant. The study should clarify the roles of the centers, propose ways to better structure internal linkages, and seek comparative lessons in how two other strong balitbangs (e.g., Agriculture and Industry) are organized and managed to carry out their research and development missions.
3. As an interim measure, prior to undertaking the organization and management study, the Policy Analysis Group of the Information Center should be reconstituted to become a joint coordinating unit for the Information Center and the Policy Research Center, composed of two senior researchers from each. This unit should be placed under the direction of the secretary of Balitbang. Depending on the outcome of the study, Balitbang should begin the process of formally merging of the Information Center and the Policy Research Center.
4. Before fielding long term consultants, all major parties (Balitbang, Contractor, consultants, and USAID) should meet jointly to thoroughly discuss, clarify and agree upon the roles and relationships of the consultants in Balitbang. Consultants should be officially attached to the head of Balitbang, with working counterparts in one or both of the cooperating centers.

#### External Linkages and Organization

In the first half decade of its existence -- until 1975 -- Balitbang had what one official called a "foot" in the provinces through its planning unit, which at the time served the entire ministry. With the creation of an independent Planning Bureau under the Secretary General, Balitbang became dependent on the cooperation of the DGs of the MOEC to carry out its mission at the provincial, district and sub-district levels of administration. The concentration of professional talent in Balitbang and its dynamic leadership continued to afford it a high level of prestige and credibility with the primary units for a time. Through the late 70's and early 80's ministerial support for Balitbang declined, weakening its leadership and influence within the MOEC.

Balitbang continues to have difficulty competing with the universities to recruit highly qualified staff. The austerity budgets of the past two fiscal years have reduced the range of incentives that Balitbang can offer new recruits, though this loss has been somewhat offset by external sources of funding by which Balitbang has been able to recruit new junior staff and send them abroad for advanced training. Balitbang currently has four or five externally funded projects with training components, including EPP, one UNDP project, and one or two smaller projects funded by UNESCO.

At first blush, Balitbang's problems of coordination and the pattern of serving its own internal interests, reported by many observers over the past decade, seem to be intractable. The evaluation team detects, however, incremental movement in Balitbang toward more responsiveness to the informational needs of the DGs. This change is being reinforced by a series of ministerial decisions and statements in recent weeks and months designed to more clearly define the respective roles of Balitbang and the DGs in information management, policy analysis and policy research.

There are several prime examples. First, Balitbang's current research agenda has been shaped through close consultation with the DGs. The process, guided by the Policy Research Center, included: solicitation of topics from the DGs; review, reformulation, and addition of research topics in two joint meetings with the DGs, followed up by individual sessions with echelon II staff; prioritization of topics in a master list; reduction of the list to 49 topics which are placed in Balitbang's annual programming document (MPK); and, finally, designation of FY 1987-88 research projects from the MPK. Considering the thinness of staff, there appears to have been a reasonable level of productivity, with completion of 15 research tasks in 1986, as well as the Repelita evaluation, monitoring, and MOEC manpower studies. The process was not perfect. There has been little follow-up on the studies. DIP funds were slashed by 60%, so only 10 of the 49 topics included in Balitbang's annual programming document can be researched in FY 1987-88 with GOI funding. A better job of reporting progress to the Directors General is needed to overcome their long-standing skepticism about Balitbang's capability to be responsive; most do not seem fully aware — or fully convinced — of the degree to which their staff were involved in shaping the master research list. However, the development of the master list is the first time Balitbang has assembled a research agenda that is substantially demand driven. This development should be properly acknowledged as a stride in the right direction.

A second example is the somewhat less formal process followed by the Information Center to determine specific DG needs for information, which one Director General favorably described as "agile." Though its staff has been temporarily depleted by being sent for graduate degree training in the U.S., the dynamic leadership of the Center has managed to give Balitbang a much-needed heightened profile at upper levels of the ministry. Staff returning from overseas training over the next one to three years will provide the human resources the Center needs to complete its conversion from a supply driven to a demand driven body. Even now, the institutionalization of the Information Center would be strengthened by regularizing and strengthening its channels for consultation with the DGs and the Planning Bureau. One of the strongest complaints from the Kanwil offices of the three EPP pilot provinces was the lack of format uniformity in survey requests being made by Balitbang, the Planning Bureau, and the DGs. Even before full operationalization of the computerized MIS, the plan for which was approved in June, the Information Center can take further initiative to standardize formats and reduce duplication of effort in information collection. Nonetheless, the Center is making its mark. The Minister's request, at a meeting of his core staff on July 1, that information from all units for the Operations Room be coordinated by the Information Center head enhances the role of Balitbang in the presentation of information for policy analysis and formulation.

A third example is two attempts Balitbang has made to attach a senior researcher to the Directors General of Higher Education and of Non Formal Education, Youth and Sports. In the first case, the expectations of the DG were not sufficiently met, and another match is being sought. In the second, the fit has been a good one. These efforts provide the basis for broadened experimentation to bring researchers together with policy makers in the day-to-day arena of decision making.

A final example is a case of interagency cooperation, between Balitbang's Policy Research Center and Bappenas. Efforts on the part of the Center to identify research topics of concern to the Bappenas Education Bureau led to the current Balitbang comparative research on the National Student Final Examination (EBTANAS). While this may be an isolated case, it suggests that the Center is beginning to recognize the importance of reaching out to significant agencies outside the MOEC.

Recommendations:

1. The Project Steering Committee should schedule a minimum of two meetings per year to review progress toward meeting project objectives, discuss and resolve issues pertaining to the project workplan of the next six months, and provide direction to the Technical Committee. A standing item on the agenda should be progress on achieving improved coordination of efforts between Balitbang and the DGs.

Fairly or not, the Directors General, who are members of the Steering Committee, continue to view Balitbang as not responsive to their needs, and engaged in activities that will have little influence on policy formulation. Balitbang, while acknowledging shortcomings, views this perception of the DGs as a residue of the past; it believes that if the DGs are pinned down to specifics — especially regarding the MIS system and development of a master research agenda — they will admit that their needs are being served more effectively than in the past. Nevertheless, there is an almost unanimous opinion among the DGs that Balitbang is not tightly managed and that it is not forcefully communicating the progress it is making. Some DGs go so far as to suggest that Balitbang become a stronger promoter of itself as the logical coordinator of all MIS activity in the MOEC, and take the opportunity to do so in Project Steering Committee meetings when all DGs are assembled.

The key decision making body for EPP is the Steering Committee. The evaluation team believes that the infrequent meetings of the Project Steering Committee have limited Project effectiveness. Meetings should be held at a minimum of once every six months to review progress, problems and issues arising over the preceding interval and to provide a forum for briefing, discussion and agreement on plans for the next interval.

2. The Technical Committee should meet a minimum of four times per year. Two of these meetings should immediately follow those of the Steering Committee.

The Technical Committee of EPP met early in 1986 and then again in August 1986. It has not officially met since, although the team understands that members of the Committee have met informally. The committee's potential for effectiveness was shown by its earlier approvals of the Sector Assessment

dissemination plan, a first phase in-country training plan, and an organizational coordination plan for developing an overall Ministry MIS, subject to refinement of the MIS plan. The Committee also recommended that a monitoring task force be formed to coordinate the initial try out of some of the recommendations from the monitoring study and for further improvement of the monitoring system. Unfortunately, there does not appear to be adequate provision for follow up to the implementation of the approvals and recommendations of the Committee.

3. A structured program of mutual education should be initiated between senior staff of the Directorates General and Balitbang. Staff of the DGs need to become more knowledgeable of what research is feasible, and staff of Balitbang need to be able to better interpret the informational needs of the DGs. Specific actions would include:

a) an internship program which attaches returning Ph.D.s (or senior research staff) to one of the the MOEC DGs for several months to observe applications of information, research and policy analysis to day-to-day needs of decision makers.

b) Joint seminars and workshops for staff of Balitbang and the DGs using material drawn from actual situations in their respective units.

c) Attachment of DG staff members to research and analysis teams.

4. "Policy Research Briefs" should be issued as a bulletin to the DGs on the status of Balitbang research activities following the periodic quality reviews of research activities which are already part of the Policy Research Center's internal evaluation process (in design, implementation, and draft report phases). This can help to overcome an apparent lag in the DGs' recognition that Balitbang is responding to their expressed priorities for research, and alert them to work underway that may bear on pending policy decisions.

5. Information Center bulletins should be issued on the status of information available through the Information Center. The bulletins should provide examples of new available sources of information and describe how clients can obtain it.

## DECENTRALIZATION

The Project Grant Agreement commits the Project during its first phase to "assist in a review of the needs of the Kanwil in the present planning process to determine what kinds of decisions are or can be made at this level." The EPP Project Paper and the evaluation team's Scope of Work also identify decentralization of certain educational planning and budget decisions to the provincial level as a strategy to be explored. One Project objective is to "strengthen the capacity of the provincial office to undertake its own policy analysis and formulate program proposals based on those analyses."

Although Balitbang did not carry out a formal needs assessment of the information and research needs of Kanwil for decision making, through its Information and Research Centers it did establish a number of contacts and engage in a number of activities with the provinces. Two IBM PCs with supporting software were placed in each of three pilot sites. Training programs were initiated for Kanwil staff and continued technical assistance was provided by Balitbang. The long term goal is to make the Kanwil offices the hub of MIS operations in their respective provinces.

On the research side a network was developed toward the end of 1986 in seven provinces, including two of the three pilot provinces, composed of representatives from the Kanwil office, the Regional Office of Religious Affairs, KANDEP, BAPPEDA, local IKIPs, universities, IAINs, and Balitbang. The purpose of this network is to provide a forum for the exchange of ideas, address local research needs in the fields of education and culture and disseminate results. Some financial support has been forthcoming from the Governors' offices. Bappeda, the regional planning board, assumes responsibilities for coordinating the participating institutions in the provinces involved.

In its discussion with various MOEC officials the team found several optimists and a few skeptics about the potential for decentralization of significant educational decision making to the provincial level. However, provincial educational officials in the three pilot provinces were unanimous in their belief that all major educational policies and plans would continue to emanate from the central government. This belief appeared to be based on

assumptions about current power relationships between the center and the provinces and on the location of control of resources. Provincial officials also described the limitations in the capabilities of their own staffs as constraints on more active involvement in decision making.

Nevertheless, there is at the present time some involvement of provincial officials in both plan formulation and in the implementation of policies and plans. With regard to the former there is discussion among educational officials within and among provinces of educational issues, problems and priorities to be recommended to the Planning Bureau of MOEC. These recommendations may find their way into national annual plans and potentially can become part of the list of national policy guidelines and even may be included in national five year plans. This process could be made more effective through research based knowledge and through the availability, analysis and use of accurate information. Clearly a more developed MIS would facilitate the clarification of existing problems and identification of potential problems within the provinces.

In terms of the implementation and monitoring of policies and plans there already is significant activity at the provincial level and the potential exists for further involvement. Policies and plans from the center in many cases allow minor adaptation to meet provincial differences. MOEC officials argue that additional flexibilities are available in provincial decision making if provincial authorities are willing to take advantage of them.

The team concludes that rapid devolution of current national authority to provincial educational units is highly unlikely. "Bottom up" planning and policy making remains at best a long term achievement. However, some deconcentration of responsibilities of MOEC to the provincial level may slowly take place. The pace of such deconcentration will be governed by concrete steps taken at the center to devolve authority and budget to the provinces; public encouragement of provincial officials by the center to take initiatives reflecting their broadened authority; and improvement of the skills, information, and knowledge of provincial officials.

In summary, the team believes that at this time the focus of decentralization efforts at the provincial level should be on educational planning rather than educational policy. MIS operations and research

activities should be developed further to support educational planning decisions in the pilot provinces, with the possible inclusion of West Sumatra and North Sumatra. Additional provinces, particularly those where research networks have been established, may be included as soon as there are indications of readiness. These efforts should not be extended to all 27 provinces until the activities have been well integrated into educational decision making in the pilot provinces. Extension of EPP provincial involvements should be carried out in stages which would include as a preparatory activity: participation by provincial administrators and planners in training and awareness workshops on the use of information and research in educational decision making; and demonstrated interest in the acquisition of computers with appropriate software and associated training.

#### Recommendations

1. EPP, particularly through the operationalization of its MIS plan, should assist the three pilot provincial education offices in improving their capabilities to respond to the limited opportunities to engage in educational planning and the analysis of educational problems.

The objective of this thrust should be to improve the Kanwils' ability to participate in the formulation, implementation and monitoring of annual educational plans. The emphasis of such assistance should be on extending the successful beginning of the use of computers to store and process data toward the larger goal of developing a management information system designed to support the formal system of educational planning under the responsibility of the Planning Bureau, MOEC. Balitbang's involvement in this project should be through the planning unit of Kanwil, the unit functionally linked to the Planning Bureau. Since monitoring links information with the purpose of the user and forces consideration of information as a flow to the various stakeholders in planning, more active involvement in the monitoring process may be viewed as an early step toward larger planning objectives, (For specific suggestions on monitoring education see the EPP monitoring study.)

To increase the capacity in the three pilot provinces to manage information and engage in planning several inputs are required. First, the training envisaged in the comprehensive MIS plan should be carried out. In addition, general and issue-specific short term training should be conducted

in the management of information as part of the more general functions of administration and decision making. The main goal is to assist the provincial officials in decisions associated with implementation and monitoring of education. Second, development of better MIS capability and research skills requires training, hardware, software and maintenance costs. The main additional costs anticipated, for which planning is currently incomplete, are in the area of computer maintenance. Maintenance costs are a GOI responsibility; yet the education budget for the province is insufficient even for training Kanwil staff in that maintenance work frequently necessary to meet minor repair demands. Balitbang is attempting to respond to this problem. However, a plan is needed for long term maintenance needs which incorporates costs into the routine MOEC budget. Third, technical assistance should be provided on a continuing basis as a supplement to, and integrated with, the training programs. The pilot provinces, in addition to assistance on the frequent technical problems which may arise in data management, also need help in assessing their human and organizational resources to carry out their new functions.

With the addition of new functions in data storage and retrieval, information processing, and planning come new organizational needs. A plan needs to be developed in the pilot provinces to address such questions as: Where do the new or newly trained personnel fit organizationally? What should their salaries be? The responsibility for organizational adjustments rests with the MOEC, with ultimate approval coming from the Ministry for State Administrative Reform (MENPAN). Again, the necessary budget needs to be incorporated into the routine MOEC budget. More general financial support for these additional provincial involvements should be sought in the Governors' offices and at the community level.

2. The Kanwils of the pilot provinces should be encouraged to activate the provincial research networks and initiate research on educational issues of provincial and district concern. Budget should be provided on a matching basis from MOEC and the Governor's office.

The emphasis of such research should be on problems or questions identified by subdistrict, district and provincial educators rather than research ideas originating in Balitbang or elsewhere in MOEC. Research should

support planning decisions and inform discussions within the province and between the province and the center. Although provincial educational officials are by designation administrators rather than researchers they can and have become part of the research networks created under the leadership of Balitbang.

Discussions with staff members at the Karwil level identified a number of potential areas of research. These include issues regarding the management of schools, teacher-student relationships, design of school facilities, relations between nonformal and formal education, and community support. Such research would typically not include elaborate methods of design or complex analysis; but qualitative as well as quantitative techniques would need to be employed.

Clearly technical assistance and minimum financial support will be needed from MOEC. The willingness to allocate a modest amount of money would be a small test of the seriousness of MOEC about decentralization. Short term consultants from Balitbang may be crucial to research success.

3. At the national level, the coordination of these efforts should be carried out by a sub committee of the Technical Committee composed of the Heads of the Planning Bureau and the Information and Research Center.

Successful involvement in the formulation and implementation of annual plans requires the approval and cooperation of the Planning Bureau. The relationship between Balitbang and the Planning Bureau must be close enough to build common objectives and to engage as partners in the attempt to design and develop a planning process enriched by information and research. To reemphasize a point, annual planning may be viewed as a part of long-term planning. Its accomplishments and shortcomings become grist for new policies and directions identified in national discussions and documents and may get recognition in the Repelitas. Balitbang should be a partner in this process supplying information, analysis and research as needed.

## PARTNERSHIP WITH IEES

The evaluation team's scope of work notes that in order to "leverage project resources and for contractual convenience" EPP became a participant in the IEES project. The end of Phase One is the time to take stock of how the relationship of EPP and IEES squares with EPP objectives.

As a major expression of this partnership IEES funds were used to support a major review of the Education and Human Resources Sector. The EHR sector assessment appears to have been welcomed by Balitbang and by MOEC in general. Although it has not yet been fully translated into Bahasa Indonesia it has been used as a reference work. Moreover, the sector assessment has been the source of research needs which have found their way to Balitbang's research agenda.

There have, however, been administrative difficulties in the relationship of EPP and IEES. Even minor decisions with respect to personnel in the field require clearance by the USAID/Washington staff person in charge of the IEES project. Moreover, the multiple contractors in the IEES consortium, i.e. FSU, SUNY ALBANY, Howard University and IIR, interpret contracts with their field personnel differently causing some friction.

### Recommendations

1. All replacement technical advisers should be placed under one contractor and follow one set of regulations.
2. A reexamination should be made of which decisions need to be made by USAID/Washington and which may more efficiently be left to the field.
3. The replacement Chief of Party should also be designated as the Resident Technical Advisor for the IEES consortium. All communication from the Consortium to the field would go through the Resident Technical Advisor.

## EPP PROJECT AMENDMENT

The scope of work for the Mid Term Evaluation identifies as one outcome an assessment of the need for a project amendment to continue the institutional strengthening process Balitbang has begun in the provinces. The particular focus of the amendment would be to extend efforts to decentralize educational planning and decision making.

Recommendation

1. The team believes that it is premature to anticipate a date for extending Balitbang's experimentation and institution building efforts to all provinces. However, it is conceivable that special circumstances might warrant a decision in the near future to add one or two provinces to the full pilot effort, and possibly to involve all provinces to the extent of providing them with microcomputers and training in their use.

It should be pointed out that although the project technically started in February 1985 with the signing of the Grant Agreement in most aspects it has been underway less than 18 months. Sometime between six months and one year from now, after further experience of the pilot provinces in the utilization of information and research in the formulation and implementation of annual plans, the Mission should determine whether sufficient progress has been made to warrant a programmatic amendment to "decentralize" the project. On the other hand there may be need for an administrative amendment, apart from the issue of provincial involvement, in order to extend the project completion date to provide Ph.D. participants time to complete their programs and add funds to the project to finance further in-country training, additional short-term expertise and, most important, the cost of retaining the services of the three long-term advisers for sufficient time to insure adequate continuity to the project.

## LESSONS LEARNED

1. The role of the foreign technical adviser should not be taken for granted. Rather, the role needs to be examined at length, in reference to the context in question, and mutually agreed upon by all parties concerned.
2. The timing and sequencing of technical assistance may be significant to project success. There is, for example, a danger that technical advisers may serve as operational replacements for those persons in long term training. The adviser may be thus finishing his tour of duty by the time the trainees return, losing the opportunity for collaboration and mentoring.
3. The elaborate sequence of USAID preparatory steps culminating in the detailed project paper has given an illusion of certainty to the sequence and expectations of EPP. A specific example is the assumed linear relationship between certain increased institutional capabilities and the effectiveness of national planning and policy making. The relationship between the availability and use of knowledge is not highly predictable. However, the inability to avoid risk, as has been argued throughout the report, should not obscure the importance of carefully designed efforts to effect change.

## APPENDIX I

### Education Policy and Planning An Integrated Information Systems Approach Mid-Term Evaluation Scope of Work

#### A. Background

Education Policy and Planning (EPP) is a \$9.5 million project in cooperation with the Department of Education and Culture extending over a six year period (July, 1984 to September, 1990). Project funds consist of \$6.5 million from AID (\$5.5 million loan and \$1 million grant) and \$3 million from the Government of Indonesia.

The overall goal of the project is to improve the quality of education in Indonesia through the formulation of better policies and long-term plans based on more complete and accurate information and better analysis of that information. To achieve this, the project strategy has five main elements:

- to increase staff capacity for policy research and analysis;
- to improve the internal management of the Agency for Educational and Cultural Research and Development (Balitbang Dikbud);
- to complete studies of key policy issues;
- to assist the Center for Information Systems (Pusat Informatika) in establishing an information system relevant to policy and planning needs;
- to support experimentation with planning and information systems at the provincial level.

Technical assistance (approximately 9.5 person/years in the fields of education policy research and analysis, and information systems design and planning) and in-country and overseas training (including support for 10 MA's, 4 PhD's and six one-year diploma courses) is being provided. In-country training consists of short-courses, seminars and workshops in areas such as micro-computer applications to educational planning and policy analysis. Training and technical assistance are intended to result in increased capacity to collect, analyze and store information, and in better informed policy formulation and long-term planning.

In addition to training and technical assistance, the project provides funds for the acquisition of data management equipment both at the central and regional level to help establish a functioning and integrated information system.

Project implementation is divided into two phases. Phase One, of roughly 2 years duration, is largely a period of experimentation and exploration of alternatives to the development of an information system master plan for supporting policy formulation and long-term planning, while Phase Two is a period of implementation of the agreed upon plan.

Overall responsibility for project management and implementation is exercised by a Project Steering Committee established by ministerial decree and consisting of representatives of the major units within the Department. A project Working Team has more immediate responsibility for coordinating and managing day-to-day implementation of the project.

Although regular reporting is carried out (e.g., semi-annual and annual project reports), and workshops are periodically conducted to monitor progress against planned activities, an external evaluation of project implementation has been planned toward the end of Phase One and again at the end of the project.

B. Evaluation Overview

The external mid-term project evaluation is to serve first as a review of the project implementation strategy and the assumptions on which it is based. Secondly this evaluation is meant to assess the effectiveness of the project management system, in particular the Project Steering Committee, and the Technical Working Group in directing and administering project activities. The evaluation is expected to recommend revisions in the project strategy and its management system as appropriate.

Indicators of the effectiveness and feasibility of the project strategy and the major assumptions on which it is based are not easily identified. It was recognized during project design that a major problem of the policy and planning process was that the linkage between the research done and the policies chosen had been very weak, at least in part due to the lack of involvement of the Directorates-General and Provincial Education Offices in the formulation and conduct of Balitbang Dikbud's research agenda. An important assumption of the project is that by involving the Directorates-General and provincial education offices in the formulation and conducting of special studies, research findings will be more relevant to central problems facing the implementation agencies and thus more likely to be integrated into their program development activities. Examining the degree to which they have been involved in the identification, design and implementation of the special studies and policy research to date, provides an opportunity to assess at least at the initial stage of whether this assumption, and thereby the strategy for addressing the problem, is realistic.

A second major assumption of the project is that a data base can be established within the Balitbang Dikbud's Information Center that will provide a basis for long-term planning and policy analysis. The formulation, potential use, and, if possible, the cost of such a system as well as the practicability of installing and maintaining it should be examined in the mid-term review.

A final major assumption underpinning Phase One activities is that national offices will be supportive of experiments with, and innovations in, the information system and planning process at the provincial level. Initial activities focusing on the provinces should provide a general indication of the degree of commitment of national agencies for this activity.

### C. Specific Issues

While the following issues each deserve the specific attention of the evaluation team, they are intended in their totality to yield a retrospective and prospective assessment of the project. Each issue is related to several others in the list; knowledge about several of the issues may be a prerequisite to reaching a conclusion on another issue. Also, as the listed issues are pursued, new ones may emerge which will require consideration as well. Thus, the issues should be viewed as those minimally necessary to answer the overall concern of AID and the MOEC: Are project objectives valid, achievable and being adequately pursued under an appropriate strategy, and if not, what changes are required?

1. EPP Inputs: Recognizing that it is too early to judge output quality or impact, nevertheless a review of actual versus planned inputs will be useful. Are project inputs of the right quality and quantity, being provided at the right pace and to the right recipients? If there has been a deviation from the original plan for the provision of inputs, what is, or will be, the effect?
2. Achievements to Date: A review of achievements to date, actual versus planned, should focus on products of project efforts as well as the processes used to attain them. Also, any procedural or organizational changes which may have accompanied these activities should be assessed.
3. EPP Strategy and Assumptions: Given project inputs and achievements to date, and in consideration of other factors of importance incidental to EPP contributions, what are the indications that the project is pursuing an appropriate strategy for improving long-term planning and policy analysis capacities within Balitbang? Is there evidence to validate (or invalidate) the premise that an improved information system and better analysis of data will enable MOEC to formulate more informed and

appropriate policies. To what extent are data and policy research utilized, or likely to be utilized? What role has Balitbang and/or EPP played in relation to major policy changes which have recently been promulgated?

4. **Balitbang Institutional Development and Relationships:** A review should be made of the extent to which Balitbang has developed greater institutional capacities, since the advent of EPP; and, in particular, the extent to which it has successfully initiated the required management and organizational changes. Specific indicators that might be examined include staffing patterns, job responsibilities, utilization of relevant staff skills, planning systems, management styles and policies governing the allocation of Balitbang resources. Another important indicator worth assessing is the training, both in-country and overseas, which Balitbang has identified as necessary to achieve project related institutional development objectives.

Looking beyond the internal operations of Balitbang, a measure of institutional capacity is the extent to which Balitbang has been, or will be, able to identify and serve the needs of the other users, the various Directorate Generals in particular. This includes ensuring that they are included in planning the development of the information system so that it meets their needs, and formulating a research agenda which is responsible to their priorities. What institutional mechanisms and procedures (as opposed to personal relationships) have in the past, or can in the future, foster this? What constraints have been encountered, and how can they be overcome?

5. **Decentralization:** An important theme of the Project Paper is the decentralization of planning, program and budget development processes. While recognizing the need for national guidelines and standards, one project objective is to strengthen the capacity of the provincial education office to undertake its own policy analyses and formulate program proposals based on those analyses. There are two key assumptions here. First, the Project Paper assumes that there is scope for increased decentralization. Second, it assumes that if such decentralization were to take place, it would lead to the development of more effective and relevant education programs.

While it is probably too soon to assess the second, the first assumption can be examined. To what extent does EPP experience thus far suggest that there is scope for decentralization? In what areas? To what extent? What kind of support is likely from the national level? If some decentralization has taken place, what is the evidence that this has led or will lead to improved educational programs?

6. Partnership with IEES: Both to leverage project resources and for contractual convenience, EPP became a participant in the AID/W S&T/Education Office funded Improving the Efficiencies of Educational Systems (IEES) Project. Under this partnership, a major review of the EHR Sector was carried out, the long-term technical assistance team was hired (using EPP funds) and several short-term consultants were provided. Has this relationship served well the needs of Balitbang and the pursuit of EPP objectives? Are improvements needed in the way the various EPP and IEES supported activities are identified and implemented, or in the reporting/supervisory relationships of the TA team which puts them administratively responsible to S&T/Education, but programmatically, responsible to the USAID Mission?
  
7. EPP Project Amendment: The outcome of the mid-term evaluation will be used in two ways. First, it will validate the course EPP is following, or otherwise recommend where changes should be made to accomplish (or revise) its original objectives. Second, based on the assumption that EPP efforts will result in capacity improvements in Balitbang as well as the pilot provinces, there will be a need to continue this institutional strengthening process beyond what EPP can currently provide. For this reason, an amendment which adds additional resources to EPP and extends its implementation period is being considered by AID. The mid-term evaluation will be looked to for guidance in the amount, type and feasibility of obtaining the additional resources required, and where they will be best applied. Particular interest is in providing support to the GOI in its efforts to decentralize certain planning and programming aspects of its education system. Involvement of local level planners can lead to a more efficient use of scarce public resources, education programs more responsive to local conditions, and policy recommendations on new strategies for greater private sector/community contributions to education. An amendment to EPP would hope to support pursuit of these objectives, and guidance from the mid-term evaluation would be valuable in this regard.

#### D. Evaluation Approach and Methodology

It is planned that a team of three evaluators will spend 3 to 4 weeks in Indonesia reviewing all pertinent background materials, and progress reports, holding discussions with concerned parties on project strategy and performance, and observing the implementation of (or results of) project supported activities. The formative nature of this evaluation and its timing does not lend itself to the search for quantitative indicators of project achievements. Thus the need for structured interviews and data collection instruments are not anticipated. Rather a case-study approach focused on a few key project efforts, in depth

interviews with key informants (project actors and beneficiaries) coupled with insights gained from other discussions and document reviews should be sufficient to address the central issues of this review. Involvement of the various units of the MOEC, and possibly either GOI agencies such as Bappenas as well as provincial staff in the pilot regions will be necessary.

This work is not appropriate for division into a relatively large number of separate tasks. It needs a team which works together as a single unit, bringing different disciplines and perspectives to their work but able to maintain a common approach and common understanding amongst themselves, resulting in the kind of coherence of findings which is required.

The outcome of the effort will be a report which explicitly addresses each of the issues raised in section C above and other issues of importance that may emerge. In addition, the report should provide concrete recommendations on areas where changes to the current project design are judged necessary, and where the addition of more project resources could be optimally applied. The report should be specific on how such changes should be implemented and when.

Prior to the departure from Indonesia of the team, a final draft report should be provided in 10 copies each to the USAID Mission and Balitbang. This final draft should include revisions incorporated from prior reviews of an initial draft by USAID and Balitbang.

#### E. Composition of Evaluation Team

A team of three evaluators is needed to carry out the evaluation. Prior experience in Indonesia is preferable. Two of the team members should together possess educational planning and/or educational economics skills, management and institutional development skills, and if possible experience with management information systems. The third should be an AID Education and Human Resources Officer with experience in projects with objectives similar to EPP's, preferably from AID/W but outside of the IEES project responsibilities.

## APPENDIX II

### Persons Consulted

#### Washington D.C.

June 19: Dr. Michael Morfit, AID Washington, former USAID project officer for EPP  
Dr. Nat Colletta, former Chief of Party, EPP Project  
Dr. Joan Claffey, S & T Bureau, AID Washington

#### Jakarta

June 23: Dr. Cameron Bonner

Dr. Harsja W. Bachtjar, Head, Balitbang  
Dr. Moegiadi, Secretary, Balitbang; EPP Project Manager  
Dr. Boediono, Head, Information Center  
Dr. Simon Ju, Technical Development Advisor, MIS  
Dr. Sumardi, Head, Policy Research Center  
Dr. Ace Suryadi, Policy Research Group, Information Center  
Drs. Sunardi M.Sc., Information Center  
Dr. Aris Pongtuluran, Head, Planning Bureau, MOEC

June 24: Dr. Boediono, Dr. Ace Suryadi, Dr. Simon Ju

Drs. Waskito Tjptosasmito, Head, Personnel Bureau (former head of Educational Research Center, Balitbang)

Dr. Mawardi Yumus, National Coordinator, UNDP Project

June 25: Prof. H.A. Tilaar, Head, Education Bureau, Bappenas  
Prof. Sukaji Ranuwiharjo, Director General of Higher Education  
Mr. Sukotjo Tjokroatmojo, Inspector General, MOEC

June 26: Prof. Haryati Soebadio, Director General of Culture  
Mr. Sukayat, Head, Training Center, Central Bureau of Statistics  
Mr. Sjamsuar, Computer Programmer, CBS

#### Mataram

June 29: Drs. Soewono, Head, Kanwil MOEC, Nusa Tenggara Barat (NTB), and Section Heads

June 30: Drs. Lalu Wiramaja, Head, Kandep MOEC, Kabupaten Lombok Barat, and Unit Heads

Computer Center staff

Ujung Pandang (Bigalke, Bonner, Ju, and Oktorosadi)

July 1: Drs. H. Athallah, Head, Kanwil MOEC, Sulawesi Selatan,  
and Section Heads

Computer Center staff

Bandung (Adams, Freeman, Ace Suryadi)

July 1: Dr. Rachmat Wiradinata, Head, Kanwil MOEC, Jawa Barat,  
and Staff

Jakarta

July 3: Dr. Moegiadi, Secretary, Balitbang MOEC  
Dr. Sumardi, Head, Policy Research Center

July 6: Technical Committee, EPP Project

July 8: USAID Jakarta

## APPENDIX III

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|     | Jay Salkin  | May 1987 |

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