35p.

THE INDONESIA

AGRICULTURE DEVELOPMENT

PLANNING AND ADMINISTRATION

PROJECT

PROJECT REVIEW PAPER

MAY, 1977

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT REVIEW PAPER FACESHEET

1. TRANSACTION CODE: A (A = ADD, C = CHANGE, D = DELETE) — PRP — 2. DOCUMENT CODE: 2

3. COUNTRY/ENTITY: INDONESIA

4. DOCUMENT REVISION NUMBER:

5. PROJECT NUMBER (7 digits): 497 - 0265

6. BUREAU/OFFICE: A. SYMBOL: ASIA; B. CODE: 04

7. PROJECT TITLE (Maximum 40 characters): Agricultural Development Planning and Administration

8. PROPOSED NEXT DOCUMENT: A. 3 PP; B. DATE: MM 07 YY 77

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION: A. INITIAL FY 77; B. FINAL FY 81

10. ESTIMATED COSTS ($000 OR EQUIVALENT $1 = Rp. 414.5)

A. FUNDING SOURCE	FIRST FY B. FX	FIRST FY C. L/C	FIRST FY D. TOTAL	LIFE OF PROJECT E. FX	LIFE OF PROJECT F. L/C	LIFE OF PROJECT G. TOTAL
AID APPROPRIATED TOTAL	3,600	1,700	5,300	4,700	1,700	6,400
(GRANT)	(200)	(-)	(200)	(1,300)	(-)	(1,300)
(LOAN)	(3,400)	(1,700)	(5,100)	(3,400)	(1,700)	(5,100)
OTHER U.S. 1.						
OTHER U.S. 2.						
HOST COUNTRY	-	200	200	-	4,100	4,100
OTHER DONOR(S)						
TOTALS	3,600	1,900	5,500	4,700	5,800	10,500

11. PROPOSED BUDGET AID APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. FIRST FY 77 F. GRANT	E. FIRST FY 77 G. LOAN	LIFE OF PROJECT H. GRANT	LIFE OF PROJECT I. LOAN
(1) FN	B191	054	054	200	5,100	1,300	5,100
(2)							
(3)							
(4)							
			TOTAL	200	5,100	1,300	5,100

12. PROJECT PURPOSE (Maximum 480 characters) — "X" IF DIFFERENT FROM PID: [x]

To upgrade the planning and programming capability of the Department of Agriculture, including the collection, storage and use of basic statistical data. The task will be accomplished through the provision of staff training, technical advisory services and certain commodities and physical facilities.

13. DATA CHANGE INDICATOR. WERE CHANGES MADE IN PID FACESHEET DATA, BLOCKS 12, 13, 14, OR 15? IF YES, ATTACH CHANGED PID FACE SHEET.

[1] 1 = NO, 2 = YES

14. PLANNING RESOURCE REQUIREMENTS (Staff/Funds)

PDSF funds of $ 76,000 will be required for a Data Processing/Computer Specialist and two Information Management Specialists for Project Development (PP)

15. ORIGINATING OFFICE CLEARANCE

SIGNATURE: Thomas C. Niblock

TITLE: Director, USAID/INDONESIA

DATE SIGNED: MM 05 DD 06 YY 77

16. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

AID 1330-3 (3-78)

PROJECT REVIEW PAPER
AGRICULTURAL DEVELOPMENT PLANNING AND ADMINISTRATION

I. Priority and Relevance

Agriculture is the predominant sector in Indonesia's economy. It accounts for about 40 per cent of Indonesia's GDP, provides two-thirds of the employment and about two-thirds of the non-oil exports. Agricultural Development was the top priority sector during the GOI's First Five-Year National Development Plan (IFY 1969/70-73/74) and remains predominant in the Second Five-Year Plan (IFY 1974/75-78/79). The goal of the agricultural sector in the Third Plan, which is in preparation, is to increase production, rural incomes, and employment opportunities.

Indonesia is strongly committed to government planning for economic development. Planning for all sectors, including agriculture, is conducted within a tightly structured administrative system. Within such a system, there is a positive relationship between the quality of planning and the amount and type of economic development that occurs. Good planning will result in effective use of development resources and accelerate development; poor planning must result in ineffective use of development resources and lost opportunities for development. Since the Department of Agriculture's Third Plan development budget is expected to exceed one billion dollars the importance of good planning in agriculture is obvious.

As stated on page 71 of the FY 1975 DAP, Indonesia has substantial resources available to support development of the agricultural sector. However, experience during the First Plan and the first three years of the Second Plan shows that the pace of this much-needed development is slower than expected.

The present planning system does not provide the systematic methodology necessary for developing and instituting realistic agricultural production goals, priorities and targets. There is an obvious need for an agricultural planning and programming network that will better meet the needs of the country. This PRP outlines and describes a project that will address those needs within the criteria outlined in the DAP relative to areas of U.S. assistance.

II. Project Description

A. Background

Between April and June of 1975 two USAID-financed consultants, Drs. William Bolton and Fred T. Cooke, Jr., of the Economic Research Service of the U.S. Department of Agriculture, conducted a study of agricultural planning in Indonesia.* Their final report listed 17 conclusions and recommendations, some of which are excerpted as follows:

"Improved agricultural planning could stimulate development, resulting in greatly increased output, increased levels of income, and improvements in net trade balances. It would also improve the regional distribution of the benefits of development. ... the fact is that plans lack the specificity necessary to properly guide development: sectoral and regional planning cannot be effectively performed as separate or parallel activities; national or sectoral planning involves the same concepts and has the same data requirements as regional planning. The most effective agricultural development planning could be accomplished ... with the use of a single framework, or system; at the present time, project planning is largely substituting for overall agricultural development planning in Indonesia. Some projects are good. Many are bad ... development resources are being ineffectively used ... some development that should be occurring is not taking place ... the major contributing cause is inadequate overall planning. It is, therefore, recommended that the Bureau of Planning strengthen this function for the Department of Agriculture."

The report recommends that the Bureau of Planning (BOP), within the Department of Agriculture (DOA), assume responsibility for overall agricultural development planning throughout the country, with planning at the regional (provincial) level restricted to project planning. Other Bureau functions, such as project evaluation, should also be strengthened.

The current situation in one of DOA's Directorates General demonstrates the need for reform: Since 1972, some 80 individuals from this DG were provided training abroad, but not one received training focused specifically on the socio-economic aspects of their fields. Moreover, these short-comings vis-a-vis sound programming are generally recognized by the incumbents. Similar situations exist at the provincial level.

* Agricultural Planning in Indonesia by Bill Bolton and Fred T. Cooke Jr., Economic Research Service, U.S. Department of Agriculture, USAID/Indonesia Consultancy, April 20 - June 1, 1975.

Many of the Bolton/Cooke conclusions were direct reflections of the thinking of senior DOA officials. The present project proposal goes beyond the Bolton/Cooke recommendations to focus attention not only on the Bureau of Planning but on the whole planning/programming network for agriculture.

In June of 1976, the Mission submitted a PID to AID/W, which outlined a very broad, somewhat unstructured project of assistance to the DOA in the area of technical assistance, research, training and pilot projects. Subsequently, following a meeting with the Mission Director, the Minister of Agriculture decided that there was a need for a more limited and better structured project focused on planning and program formulation, based partly on the Bolton/Cooke report but also on the Department's own analysis of the problem and proposed solution.

The DOA sees as its major obstacles to improved planning: (a) lack of relevant, useful, current data arranged and stored in a manner permitting effective use, and (b) lack of both depth and breadth in the training, education and experience of the people working in planning at all levels.

The following described project proposal has thus evolved. It is not essentially a different project than proposed by the PID but rather one that focuses more directly on the problem considered of major importance by the GOI.

The proposal has been developed jointly by USAID and DOA in close collaboration with concerned officials and agencies at both the national and provincial levels.

B. The Planning/Programming Network

The Department of Agriculture's basic planning/programming network, which is schematically depicted in Attachment 1, includes:

1) Bureau of Planning, Office of the Secretariat General

2) Directorate of Programming, Directorate General for Food Crops

3) Directorate of Programming, Directorate General for Estate Crops

4) Directorate of Programming, Directorate General for Animal Husbandry

5) Directorate of Programming, Directorate General for Fisheries

6) Directorate of Programming, Directorate General for Forestry

7) Programming unit in the Secretariat, Agency for Agriculture Education, Training, and Extension

8) Programming unit in the Secretariat, Agency for Agriculture Research and Development

9) Planning/Programming units of the 27 provincial offices of the respective subject-matter Directorates General.

In addition to the organizational units in the basic network, other units play important supporting roles and their activities should be coordinated with the overall planning/programming operation.

The Agency for Agriculture Research and Development, for example, includes sub-units entitled:

1) Data Processing and Statistics

2) Library for Agriculture and Biology

3) Agricultural Economics

Among these three sub-units, the role of Data Processing and Statistics is of paramount importance, since this organization has primary responsibility for the assembly and supply of data required by the Department of Agriculture to plan and execute its various functions. In this light, the activities of Data Processing and Statistics must be considered an integral part of the basic organizational network.

A functional planning and programming network for agriculture must also encompass the views and recommendations of farmers and their organizations, and the private business community, without whose participation and action the best of planning and programming will come to naught. An awareness of their roles in development should be kept upper-most in mind and a conscious effort made to involve them at all stages in the process.

Further, the Staff Education and Training sub-unit of the Agency for Agriculture Education, Training, and Extension has responsibility for staff development and training within the Department of Agriculture and will play a major role in implementing the training component of the project.

The Minister of Agriculture's Decree Number 190/Kpts/Org/5/1975, dated May 2, 1975 concerning "Organization Structure and Job Description of the Department of Agriculture", places responsibility and provides the legal basis for the Bureau of Planning, the Program Directorates of the respective Directorates General and other related units to carry-out their currently assumed planning and programming functions. The Bureau of Planning has responsibility as well for maintaining surveillance over the Department's organization and administrative procedures and recommending improvements. Similarly, the Decree places central responsibility for staff training of Department personnel within the Agency for Education, Training and Extension.

C. Purpose

The purpose of the proposed project is to upgrade the planning and programming capability of the Department of Agriculture, including the collection, storage and use of basic statistical data. The project is intended to provide assistance to overcome relevant and specific institutional weaknesses described in the Bolton/Cooke Report. This task will be accomplished through the provision of staff training, technical advisory services, and certain commodities and physical facilities.

D. Outputs and End-of Project Conditions

The outputs of the project include (a) 16 people with doctorates (6 overseas and 10 in-country), 64 with masters degrees (24 overseas and 40 in-country) and at least 300 people with short term training in various subjects related to agriculture planning, (b) a new data information center, (c) an improved system of data collection, processing and usage and (d) a more efficient and effective overall approach to agriculture planning.

By the end of the project, the Department of Agriculture will have an in-depth organizational network capable of more effective planning and allocation of both human and material resources. Its central Bureau of Planning will be staffed with a core of well-trained key personnel, strategically placed within the organization, capable of effectively addressing any major question of an agricultural policy nature and to relate positively with their colleages at the National Bureau of Planning (BAPPENAS) who are concerned at a higher level with the economy as a whole. The group should have earned, by their performance and quality of work, a healthy degree of professional recognition by their peers.

The respective Directorates General and Agencies will have programming staffs knowledgeable not only in the technical but also in the socio-economic aspects of their respective fields. Consequently, the programs and projects they devise should be both technically and socio-economically more viable.

Improved policies and planning, increased competence to develop viable programs and projects and to maintain surveillance over their implementation necessary to assure successful results, will contribute to the attraction of both domestic and external resources to the agricultural sector. This, in turn, should hasten the achievement of national objectives and betterment of the livelihood of the traditionally low-income rural people.

E. Inputs

1. Training Component

The training component is the most important element of the project. Various types of training are envisaged: on-the-job, short-term, long-term, non-degree and academic degree, mostly in-country but also abroad. Observational and study tours abroad for key officials are included. Relatively short-term in-country training for those now on the job should receive priority attention to quickly improve current staff qualifications and performance. Placing emphasis initially on this type of urgently needed training will provide opportunities to select from among the trainees the more studious and otherwise more promising candidates for long-term degree training under the project.

The Bureau of Planning (BOP), which has plans to increase its staff by approximately fifty percent over the next few years, has a dearth of personnel presently qualified to carry out its assigned functions. Among the organizations included in the DOA's planning/programming network, BOP has the greatest need for more sophisticated, advanced academic training, especially for its key personnel. A detailed analysis of BOP's need made about two years ago was included as Appendix B to the Bolton/Cooke report referred to above. To date the situation remains essentially unchanged, due mainly to the lack of resources, which this project will provide, to effect improvement. A copy of Appendix B is attached (Attachment 2).

In addition to long term academic training (in-country and overseas) to increase the numbers of M.A.s and PhDs. working in planning/programming, short-term training of present staff in a wide range of subjects is needed. Training will be mainly in the field of economics but also in administration and management. An illustrative listing of subjects include: development economics, agricultural policy and planning, resource evaluation and allocation, production economics and marketing, regional planning, public finance and public administration, agricultural geography, statistics and data presentation, feasibility analyses, project formulation, project monitoring and evaluation, communications skills, and supervisory practices.

Special attention will be given to training a staff to focus attention on studies and surveys at the farm level as a primary source of basic information to guide the policy makers, planners and programmers at national and provinicial levels. Others will be designated and trained to relate directly with and support various subject matter specialists and extension workers in providing economic information of direct concern to farm people in their own day-to-day decision making.

In principle, individuals selected for training in economics, to enhance their planning and programming capabilities, should have some background in a subject-matter agricultural discipline either through previous training or other experience. Such subject-matter background is particularly important for incumbents of the Program Directorates in the respective Directorates General and for those engaged in programming at the provincial level. Special attencion will be focused on developing an in-country capability in micro-analysis techniques, with particular reference to the need for understanding at all times the "terms-of-trade" facing the producers of the major farm commodities.

If the DOA decides to have a computer-based information system, an issue to be resolved with the assistance of a consultant, personnel to operate and maintain it will have to be trained in such subjects as mathematical programming systems, computer programming, data formats, and key-punch operation. This training should be provided in large part by the supplier of the equipment and the cost for it included in the supply contract.

The DOA has 40,000 employees, of which some 1,000, or about 2.5 percent, are presently engaged full time in planning and programming. The numbers by parent organization are:

ORGANIZATION	NUMBER OF EMPLOYEES		
	PROFESSIONAL *	CLERICAL, ADMINISTRATIVE	TOTAL
National Level:			
Bureau of Planning	50	20	70
Program Directorates in 5 Directorates and 2 Agencies	250	50	300
Provincial Level:			
Program Units (27 provinces)	500	130	630
Total	800	200	1,000

* Holding degrees in their respective basic disciplines and classified accordingly by the GOI's personnel system.

2. Technical Advisory Services

Both long-term and short-term TA services are to be supplied through the project. The principal long-term assignment, and the only one presently envisaged, will be that of a training specialist to work full time assisting with the implementation of the training component. The training specialist will help to structure the overall training effort and will maintain continuous surveillance over its implementation, in close collaboration with the organizations to benefit from this project, the DOA unit responsible for staff training and development, and the institutions and others who will facilitate and conduct the training. This will entail decisions on the specific courses to be given, their nature, design and organization, where, when and by whom they will be conducted, screening and selecting the trainees, and other details to ensure successful results from the proposed substantial investment in human resource development.

The services of the full-time training specialist will be augmented by short-term consultancies as necessary to cope with specific needs that may arise, e.g., the organization and conduct of courses of training in-country where the required expertise is lacking.

In addition to the advisory services on manpower development, short-term consultancies directly related to planning, programming, and project formulation will be provided as needed on such matters as: feasibility assessments, socio-economic and resources surveys and analyses, specific project design and development, data information center design, and program and project evaluations. As with the training component, any need for advisory assistance to better understand the socio-economic situation at the farm level, through the conduct of relevant surveys and studies, should receive priority attention.

If a computer based information system is to be installed, technical assistance in its operation and maintenance will be needed. In principle, such need should be met by the supplier of the system and funded under the supplier contract. Advisory services in the use of the system for specific planning and programming purposes, after it is installed and operable, could be separately funded under the project. Such services would include data requirements, their organization and programming into the system to obtain the desired answers. Without such capability, the utility of having such system will not be realized.

Directly related to and supportive of the project is the urgent need for advisory assistance on two activities which should be undertaken immediately to assist in the project design and provide information for the PP and therefore, have been proposed for PDSF funding:

(1) a consultant for one and one-half months to evaluate the DOA's need for a computer-based information system and (2) two consultants for six months to serve with a 4-6 Indonesian staff of DOA on a special Task Force which will undertake to assemble, evaluate, organize and place in readily usable and retrievable form the wealth of existing information. Such information, although urgently needed for decision-making, planning and programming purposes, is presently resting in various files and other repositories throughout the DOA. The ultimate intent is to develop an accessible centrally operated and maintained system and to train personnel to run it efficiently.

There are tentative plans for an inter-disciplinary team, composed of about five senior-level short-term consultants under this project, to assist the Department in finalizing its policy, program and project strategies for the Third Development Plan which begins April 1, 1979. This consultancy would be for about two months during the period May-July, 1978.

3. Commodity Component

The principal item will be the equipment necessary to establish a computer-based information system. Other "tools-of-the trade" in planning and programming, i.e. desk and hand calculators, typewriters, reproduction and copying equipment, file cabinets, etc., seem generally in ample supply. However, closer scrutiny may reveal the need for more equipment, especially as the network becomes more functional and, over time, undertakes a heavier and probably a more complex workload.

4. Physical Facilities Component

The main item will be a facility to house a centralized, possibly computer-based, agricultural data and information storage and retrieval system. An integral part of such facility should be accomodations (meeting, reading and work areas) to encourage DOA staff, the academic community, students and others to utilize it. Normally, an attempt might be made to expand an existing library facility to include such center and possibly oversee its operation. However, this is impractical since the Department's Library for Agriculture and Biology is located in Bogor, some 70 kilometers from Jakarta and too inaccessible for day-to-day use by the intended principal users who are mostly located in Jakarta.

The alternative is to build a new center. The DOA has available land in Jakarta for this purpose. The proposed project includes cost for the building, utility systems, essential furnishings and ground improvement.

F. Assumptions

It is assumed that Indonesia will continue essentially, though with improvement, the system of national planning (Repelitas) which is presently practiced and that the agricultural sector will continue to receive prime attention, recognizing that successful national development hinges largely on this sector's achievements.

The major assumption concerning overseas training is that there will be sufficient numbers of English-speaking personnel in the planning network who can be released for long term training.

III. AID and Other Relevant Experience

The success of USAID's past participant training program in Indonesia is recognized and widely acclaimed. The capacity exists to organize and conduct training in-country as evidenced by the results of relevant past and current experiences. Basic facilities and competent teaching staff are available in Indonesia, although outside assistance may be required to augment the planning, design, organization and conduct of desired courses.

USAID has considerable successful experience in Indonesia with grant/loan projects. The procedures for their establishment and management are well known and, in general, the implementing GOI agencies have performed acceptably.

The GOI, particularly in the agricultural sector, has had wide experience in utilizing expatriate services and other outside assistance to improve its planning and programming. This experience, not always successful, has developed a perception of their current needs and the requirements to overcome them. These requirements are reflected in the project.

IV. Beneficiaries

The DOA's Second Plan budget is expected to total about $ 620 million, $ 112 million for operations and $ 508 million for development. The Third Plan budget will be substantially higher. The funds are used to assist the 110 million people who live in the rural areas of Indonesia. The average income of the rural family is about $ 500 per year, gained from an average farm plot of about 0.5 ha. The purpose of this project is to improve DOA's planning/programming capability so it can more effectively use its development resources to improve the quality of life for the low-income millions in the rural areas. Therefore, the ultimate target group of beneficiaries is, in effect, the entire rural population. The immediate direct beneficiaries will be the people in the DOA who receive the long and short term training.

V. Feasibility Issues

The only feasibility issue to be resolved is whether the Department of Agriculture should install a computer based information system. If so, what should be its nature and the means to provide such service? If not, what are the alternatives to improve its data management and analytical capacity?

Observing that several other GOI ministeries and organizations already have such systems, knowing that similar moves are already underway among neighboring ASEAN countries, and recognizing the need for improved data management and other potential uses of such system in DOA, there is little doubt that eventually DOA (or at least one or more of its subordinate units independently) will find the menas to proceed along this line. The main question is when and, most important, whether such development can take place in a rational, adequately planned and successful manner. Otherwise the initial and recurring costs can become prohibitive and the intended benefits not realized.

The proposed PDSF funding of a consultant to help resolve this issue is intended to allay these possible pitfalls by the DOA.

VI. Other Donor Coordination

West Germany, Japan, U.K., IBRD, and possibly others are assisting with various development activities which include project-specific planning and some limited regional or other planning broader than just agriculture. Their programs and projects also provide training opportunities and technical advisory services. USAID is the only donor presently proposing in-depth assistance in planning and programming to the DOA, on a department-wide basis. Coordination will be necessary to avoid duplication of effort in those organizations and geographical areas where other donor assistance is focused. The extent to which other donors are filling the need is welcomed and such further efforts on their part should be encouraged. USAID will exercise due caution to avoid any duplication of effort and encroachment on their areas of activity. The obvious need for coordination creates no major problem, and in total should prove complementary.

VII. Financial Plan

The total estimated cost of the project is $ 10.5 million, $ 4.7 million in foreign exchange and $ 5.8 million equivalent in local currency. The amount funded by AID is $ 6.4 million (60 per cent of the total) and by the GOI, $ 4.1 million equivalent in local currency (40 per cent of the total). The AID portion includes $ 4.7 million for total foreign exchange costs, plus $ 1.7 million for local currency costs. The AID portion includes $ 1.3 million (20 per cent) as grant and $ 5.1 million (80 per cent) as loan.

The $ 10.5 million project cost is equal to about 1.7 per cent of the DOA's budget for the Second Plan period. If equated to the expected Third Plan budget the percentage is less than one. Thus, a phenominal rate of return on this project's investment is possible if only a five per cent more productive use of DOA's allocated resources can result.

VIII. Implementation Plan

Borrower/Grantee/Administering Agency

The Borrower/Grantee will be the Government of Indonesia. The administering agency will be the Department of Agriculture. The project manager will be the director of the DOA's Bureau of Planning or his designee. The AID project officer will be the USAID Chief of Agriculture or his designee.

The Agency for Education, Training and Extension which is responsible for staff development and training of DOA personnel will arrange for the in-country training, in agreement with the beneficiary organizations regarding course content, timing and other substantive details.

For coordinating purposes and to provide a forum for expeditiously settling any problems which may arise, a steering committee will be established under chairmanship of BOP's designated project manager. Membership will include a representative from each of the five subject-matter Directorates General and the two DOA agencies. The USAID-designated project officer and the training specialist will serve as ex-officio members. The steering committee will have authority to designate special Work Groups as necessary to cope with particular project implementation problems.

Implementation

The project will be implemented over a five-year period, with most of the funding expended during the first four years. Training of those selected to pursue doctorate degrees will require four years and the designing, constructing, and outfitting of a data processing and information center is expected to require three years.

The selection of participants for the different levels and lengths of training, whether given in-country or abroad, will be made jointly by the Bureau of Planning and other benefitting DOA organizational units. The training specialist will assist in establishing participant selection criteria and also in the application of these criteria. It is expected that approximately one-half of those undertaking degree training will be selected from among the participants in short-term training and the other half from other sources.

It is anticipated that a host country contract will be signed with a U.S. university, a consortium of universities, or other appropriate organization to provide the long and short term advisory services and overseas academic training. Competitive procurement rules of Handbook II will be followed.

The composition and procurement of the commodity component hinges upon the pending assessment of the DOA's need for a computer-based information system or other alternative actions which may be pursued to meet its data requirements. If the decision is made to establish a computer-based system, it is expected that the supplier will be responsible, on a turn-key basis, for its installation and the training of DOA personnel in operation and maintenance.

Commodity procurement and building construction will be handled through the GOI's regularly prescribed bidding and contracting procedures, as agreed to by USAID.

IX. Project Development Schedule

In May 1977 USAID will submit a PIO/T to AID/W for three consultants under PDSF funding. One consultant will assess the need for, and make recommendations concerning, the computer-based information system issue. He should be a data processing expert with a thorough understanding of the practical present-day needs of a progressive department of agriculture. The other two consultants will work with a DOA task force to assemble, evaluate and organize the wealth of urgently needed information now resting in DOA files and other repositories essentially unused. The findings and recommendations of these three consultants will directly affect the ultimate detailed componentry of the project but not its general thrust and design. Contributions of the second two consultants will also help the DOA's current planning and programming efforts by increased near-term access to more reliable data. In addition, Mr. Ralph N. Gleason, current consultant for USAID, will assist a TDY, AID/W Project Development Officer in writing the Project Paper. It is anticipated that the Project Paper will be submitted to AID/W in August, 1977.

The Project Development Committee is comprised of the following persons:

USAID Indonesia

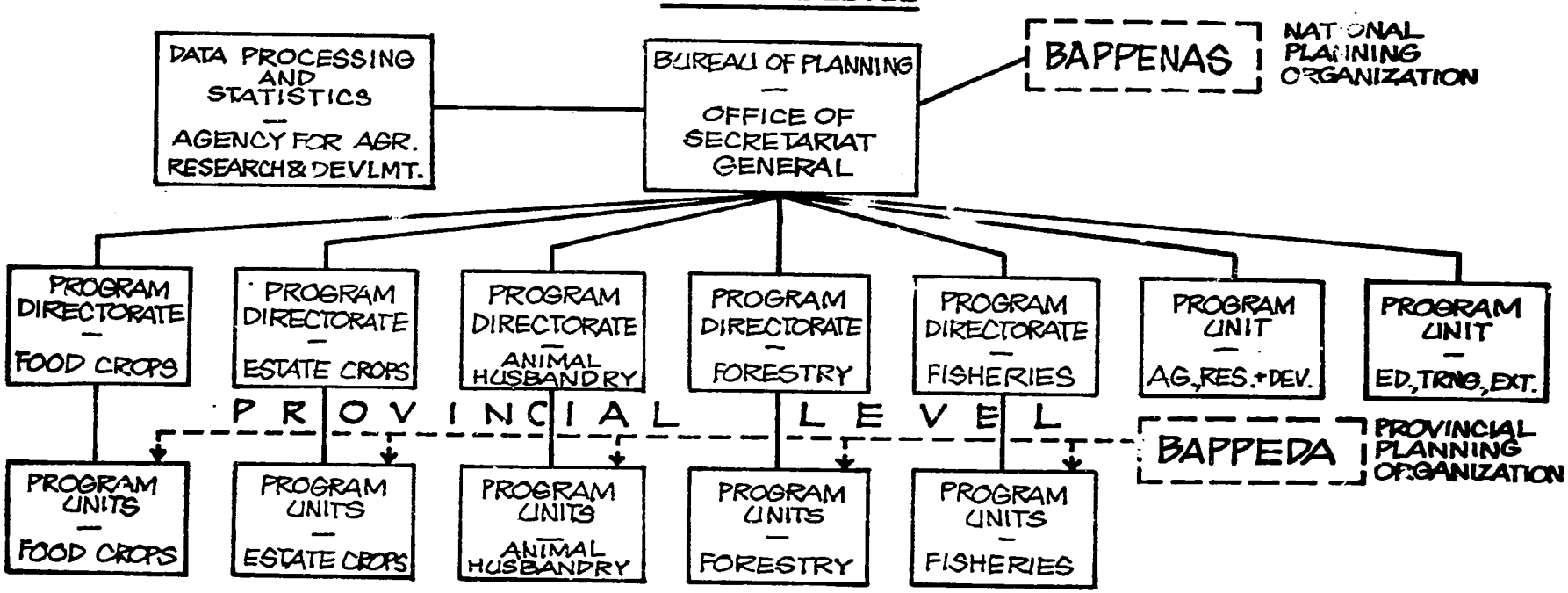
Agriculture (Project Officer)	- David R. Brooks
Rural Development	- W.C. Larson
Capital Development Officer	- Ralph M. Singleton
Engineer	- David C. Woody
Legal	- John R. Kahle
Controller	- Paul A. Bisek
Training	- D.S. Terrell
Consultant	- Ralph Gleason

Attachments

1. DOA Planning/Programming Network
2. Bolton/Cooke Report, Appendix B
3. Summary Cost Estimate and Financial Plan
4. Costing of Project Outputs/Inputs
5. Preliminary Logical Framework
6. Preliminary Planned Performance Network Chart
7. Environmental Statement

DEPARTMENT OF AGRICULTURE

PLANNING AND PROGRAMMING NETWORK
NATIONAL LEVEL



NOTES:

1. LEGAL BASIS--MINISTER OF AGRICULTURE'S DECREE NUMBER 190/Kpts/5/1975, dated May 2, 1975.
2. ESTIMATED NUMBER OF EMPLOYEES IN THE NETWORK – NATIONAL LEVEL: 370 (300 with technical backgrounds, 70 clerical/administrative); provincial level (27 provinces): 630 (500 technical backgrounds, 130 clerical/administrative)
3. THROUGH APRIL 1977, CENTRALIZED "REGIONAL" OFFICES HAD BEEN FORMALLY INAUGURATED IN FOUR PROVINCES TO COORDINATE PLANNING/PROGRAMMING FOR THE DEPARTMENT OF AGRICULTURE AT THAT LEVEL. IN ADDITION, THE MINISTER HAD APPOINTED PERSONAL REPRESENTATIVES TO PERFORM SIMILAR ROLES IN THE OTHER PROVINCES, WITH PLANS FOR FORMAL INAUGURATIONS IN DUE COURSE.
4. BAPPEDA, THROUGH THE RESPECTIVE PROVINCIAL GOVERNORS AND THE MINISTRY OF INTERIOR, RELATES TO BAPPENAS. CONCURRENTLY, THE PROVINCIAL AGRICULTURAL UNITS MAINTAIN A CONTINUOUS DIRECT RELATIONSHIP ON ALL PROGRAM-RELATED MATTERS WITH THEIR RESPECTIVE SUBJECT-MATTER DIRECTORATES GENERAL AT THE NATIONAL LEVEL, AND THRU THEM WITH BUREAU OF PLANNING AND BAPPENAS.

Attachment 1.

APPENDIX B

THE ORGANIZATIONAL UNITS OF THE BUREAU OF PLANNING: FUNCTIONS, STAFFING REQUIREMENTS, AND PERSONNEL QUALIFICATIONS

The following recommendations relative to responsibilities for the various organizational units within the Bureau of Planning, relative to staffing, and relative to personnel qualifications are made on the assumption that the accomplishment of a central planning activity for the Department of Agriculture will become the dominant activity of the Bureau.

Generally, requirements for personnel are stated only for professional staff. In a few instances, where they are considered critical to the central planning function, a requirement for subprofessionals is noted. But no secretarial, stenographic, clerical, or service personnel requirements are specifically stated. With these needs added to the professional staff requirements, it is clear that full staffing to the limits of the staffing formation policy of the Indonesian Government will be needed by the Bureau.*

Neither the existing numbers of professional staff nor their qualifications should be considered limitations to starting a central planning activity, assuming that qualified advisor assistance can be obtained and that two or three key positions in the Bureau can be staffed with persons with economic training. These recommendations pertain to the longer range functioning of the Bureau. Upgrading of numbers and qualifications should begin immediately, of course. The most critical training need for professional staff will be in the field of economics, with particular emphasis on microanalysis, resource allocation, and quantitative optimizing techniques. Any opportunities that arise for graduate training of personnel in economics or agricultural economics in the near

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* Although this Appendix refers to functions and staffing, it is clear that utilization of additional office space and equipment (such as typewriters and calculators) would be improved with increased staffing. Details on additional facility and equipment requirements cannot be specified at this time.

future should be taken. If three or four staff members could complete graduate training in these areas over the next two or three years, or if people with such background could be added to the staff, it would greatly strengthen the capability of the Bureau.

I. The Data Collection and Processing Division

This Division would have responsibility for developing, in the very precise required formats, the highly specific information needed for providing the overall economic development plans for agriculture. Division personnel would develop some primary data on their own, would arrange for other agencies to develop other data, and would adapt still other data from existing sources. In any case, the data development effort would be highly focused and disciplined, designed to produce only the information needed for the particular analyses to be accomplished. The Division Head, ultimately, should receive training at the graduate level in agricultural economics, with emphasis on quantitative resource allocation techniques.

A. The Data Collection Subdivision

Professional personnel should include specialists for data assembling and organization, as follows:

1. Field Crops - two
2. Vegetable Crops - one
3. Fruit Crops - one
4. Tree Crops - one
5. Livestock - two

These staff members would develop, organize into proper format, and keep current all necessary information on the commodities for which they are responsible. Information would be included on production, processing, marketing, transportation, consumption, trade, and other variables. Where necessary, primary data would be collected or arranged for. Obviously, much of the information would

be obtained through coordination with appropriate Directorates General and boards within Agriculture, and agencies outside of Agriculture.

These staff members should have had their initial training in fields related to their commodity responsibilities. For example, the persons responsible for developing information on livestock should have training in animal husbandry. As it becomes possible to accomplish, these persons should also receive training in economics of agricultural production and marketing.

Since the information will need to reflect regional differences, at least one member of the subdivision should also become well versed in agricultural geography. He would need to work with soils and climate people, as well as regional specialists, in delineating production-distribution areas based on soils, topography, climate, and other factors, for all the regions in Indonesia. It would be most desirable for the individual possessing this special competence to be the head of the subdivision since he would be in the best position to insure that regional relationships are properly reflected for all commodities. This individual also should receive training in agricultural resource allocation as soon as practicable.

B. The Data Processing Subdivision

Key personnel would include:

1. One person with a good applied knowledge of mathematical programming systems. Much of this knowledge could be obtained on the job, with a good advisor available. However, a short course with I. B. M. or some other agency would be useful.

2. A computer programmer.

3. Two persons knowledgeable in mathematical programming systems data formats.

4. Two key-punch operators.

This subdivision would obviously have responsibility for receiving information from the data collection subdivision and putting it into format for analysis. It would also receive information from the Planning Formulation and Program Implementation Division on analyses desired. Based on the information received, it would generate the required outputs.

C. Data Presentation and Storing Subdivision

This subdivision should include one statistician and statistical aides, with the number of aides depending on the future work load that develops in the subdivision.

The subdivision should become the depository for data generated for use by the central planning activity. Much of the data will be of interest and use outside of the planning system requirements. As time passes, requests are likely to increase for specific items of information contained in the system.

The Bureau also will develop requirements for data and information for other functions and activities, besides the central planning activity. The Data Presentation and Storing Subdivision should become the focal point for collection, distribution, and storage of such statistics. However, the objective should be to generate and maintain only those data and statistics that are required in support of Bureau activities.

II. The Planning Formulation and Program Implementation Division

This Division should have responsibility for conceptual guidance of the central planning activity, and for translating outputs from the system into recommended plans, programs, and policies. The proposed plans that go forward to BAPPENAS should be based largely on the work done in this Division. It should furnish guidance to the subsectors and to the regions on comparative advantages among various economic alternatives and on those activities that

would represent the largest economic pay-offs to specific regions and to the country. It should receive and review project proposals in terms of their contributions to the overall planning objectives. The Division Head, ultimately, should obtain a terminal graduate degree in Agricultural Economics, with a strong emphasis in Resource Allocation and Planning.

A. Long Term Planning Formulation Subdivision

Besides the Head, this Subdivision should include at least two professional staff members. They, as well as the Subdivision Head, should have a strong background in the agricultural sciences and, ultimately, should have graduate economics training. At least one should have additional training or experience in quantitative model building, with particular emphasis on optimizing and allocative models.

The staff of this Subdivision should formulate assumptions bearing on long range development. It should have the ability to translate these assumptions into analytical system modifications. It should generate long run outputs (at least to twenty-five years into the future) based on likely changes in infrastructure and resources starting from the present situation. It should then generate outputs based on reasonable changes to infrastructure or price relationships, or other variables. What if a specific road were built on Sulawesi or a specific port were constructed on Kalimantan? What would be the effect on shifts in kinds and levels of agricultural production, on incomes, or on trade balances? There, obviously, are almost endless questions that could be asked that would be invaluable to long range planning, not only in agriculture but in other agencies as well. The Subdivision should be expected to prepare several alternative sets of tentative long range plans for agriculture for guidance in using resources on commodities with long life cycles; tree crops, for example, and as a framework for testing shorter run plans.

B. The Short Term Planning Formulation Subdivision

Besides the Head, this Subdivision should have at least four professional staff members. Qualification and training needs would be the same as for the Long Term Subdivision. At least one staff member also should have special competence in agricultural policy.

The Short Term and Long Term Subdivisions would be expected to work together closely. They would be using the same planning system and the same basic data set. Only the assumptions and the emphasis would differ. The short term group would concern itself with developing recommended five-year plans and annual modifications for agriculture. Its assumptions would reflect conditions of infrastructure and other variables in the present, or as they might be subject to change over the planning period.

This Subdivision, specifically, should prepare the recommended plans for the agricultural sector that go to BAPPENAS. These should be the plans that the subsectors and regions work from in developing project proposals for implementation. The Subdivision also should have responsibility for preparing materials relating to policy matters in agriculture.

C. The Program Implementation Formulation Subdivision

This Subdivision should have at least one staff member with graduate training in Public Finance and/or Public Administration. Insofar as possible, it should have one staff member with educational background that is appropriate in subject matter, and level, to facilitate effective consultation and coordination with each Directorate General or comparable level agency. For example, there should be a person with training in forestry, preferably at the graduate level, to deal with forestry problems. Each of these staff members should have experience or training in project development and evaluation.

In addition, there should be at least one staff member, equally well trained, but with experience in the regions. This would enable the Bureau to make available a resource to advise and consult with BAPPEDA staffs and other regional personnel, on a request basis, concerning project formulation, development, and evaluation.

The Subdivision would have responsibilities for reviewing and giving Department of Agriculture approval for subsector projects. Its working relationships with the Programming Directorates in the Directorates General would be close. Its operations should be designed to shift maximum responsibility to Programming Directorates for upgrading project preparation. It would maintain effective liaison with BAPPENAS on all matters related to development projects in agriculture. It should render advice and assistance, including training, to subsectors and to regional planning units on project formulation, preparation, and evaluation for consistency with development plans.

The Subdivision should also be the organizational unit that receives budget guidance for development in agriculture, and, in turn, transmits the Department budget guidance to the subsectors. As the agency that translates plans into Department programs, this would be the appropriate unit to furnish corresponding budget guidance and, to the extent feasible and desirable, some element of control.

III. Monitoring and Reporting Division

This Division should be charged with responsibility for measuring performance against objectives. It would provide information to the Minister, to the subsectors, and to BAPPENAS on progress in accomplishment of plan, program, and project objectives. Information provided for its analyses and reports would provide guidance for adjustments in planning and execution.

While other Divisions would have reporting requirements relative

to their specific areas of responsibility, this Division would have major responsibility for most of the general reporting requirements of the Bureau.

A. The Analysis Subdivision

This Division should include one staff member trained in agricultural economics; and two, with training in technical agricultural fields.

The major task of the Subdivision would be to appraise performance in the agricultural sector in terms of goals, priorities, and targets established by plans and programs. It would also spot-check progress and performance of projects in the various subsectors. In consultation with personnel from the Planning Formulation and Program Implementation Subdivision, and from the subsectors, the Subdivision should determine whether deviations resulted from failures in planning or in execution. Based on these evaluations and consultations, corrective measures should be recommended.

B. The Reporting Subdivision

This Subdivision should prepare an annual report for the Department of Agriculture, reviewing plans and outlining accomplishments and progress as well as problems. It would draw on annual reports prepared by the subsectors as well as on reports and unpublished information in other subdivisions of the Bureau.

Besides the Head, a staff of two professionals should be adequate for performing the Subdivision mission. They should be well trained in the agricultural sciences, and should have better than average competence in written communication.

C. The Presentation Subdivision

This Subdivision should have two professional staff members besides the Head. They should have sound training

in some agricultural field and all should have exceptional communications skills.

This unit would prepare all reports emanating from the Bureau for which other Subdivisions were not specifically responsible. This would include general reports of an informational nature, ad hoc reports, speeches for government officials, and other written materials. The Subdivision should also render editorial support to other Subdivisions in the Bureau.

IV. The Organization and Management Division

This Division provides administrative support for the Bureau. Much more importantly, its primary function is to develop recommendations on organization and management for all agencies in the Department of Agriculture. While this activity is a peripheral one relative to the core function of the Bureau, it constitutes an important Bureau responsibility. Recommendations on future organization and management within the Department can have substantial impact on development in agriculture; in turn, these recommendations need to be influenced by development plans for agriculture.

The major function of the subdivisions of this Division are obvious from their titles. The Organization, Management, and Working Facilities' Standardization Subdivisions should each contain three professional staff members in addition to their Heads. Appropriate educational qualifications would be Master's Degrees in Public Administration from Indonesian universities. As resources permit, one staff member from each of the three subdivisions should be sent abroad for graduate training in Public Administration and/or Management. The Administration (Bureau level) Subdivision will need five staff members to perform its functions. These personnel should have Bachelor's Degrees in Management.

Both because of the responsibilities of the Division, and because of the levels of government at which contact and coordination will be required, it is recommended that the Division Head be sent abroad to study for the MBA degree.

V. The Foreign Cooperation Division

The importance of this Division to agricultural development, in view of the potential impact of foreign donors on development, is obvious.

For the near term, the activities of this Division also will be on the periphery of the central planning function of the Bureau. The function should continue along the lines of its present operations while improved plans are being developed. Once the planning system has resulted in improved development plans for agriculture, however, the Division effort should emphasize better coordination of internationally financed projects into the overall development plans.

The UN and Other International Agency Subdivision should contain two staff members besides the Head. One should be trained in International Economics or Development Economics; the other, in Marketing Economics.

The Regional Cooperation Subdivision should have two staff members besides the Head. They should have special competence in project development and evaluation.

The Bilateral Cooperation Subdivision should have three staff members besides the Head. Two should have special training or experience in project formulation and evaluation. One should have graduate training in one of the agricultural sciences and experience in agricultural education, training, or extension.

Bill Bolton/Fred Cooke
ERS/USDA
USAID/Indonesia
June 11, 1975

TABLE 1

Summary of Long Range Professional Staff and Training Needs of the Bureau of Planning 1/

Division and Subdivision 2/	Professionals 3/	Undergraduate Training		Graduate or Special Training		
		Agriculture	Administration, Finance, Management or other	Agricultural Economics or Economics	Technical Agriculture	Other
Data Collection & Processing Division	1	1		1		
Data Collection	8	8		8		
Data Processing	2	1	1	1		1
Data Presentation & Storage	2	1	1			1
Planning Formulation & Program Implementation Division	1	1		1		
Long Term Planning Formulation	3	3		3		
Short Term Planning Formulation	5	5		5		
Program Implementation Formulation	9	8	1	1	7	1
Monitoring & Reporting Division	1	1			1	
Analysis	4	4		1	1	
Reporting	3	3			1	1
Presentation	3	3			1	
Organization & Management Division	1		1			1
Organization	4					4
Management	4					4
Working Facilities Standardization	4					4
Administration (Bureau level)	6		6			1
Foreign Cooperation Division	1	1		1		
UN & Other International Agency	3	3		1	1	
Regional Cooperation	3	3		1		
Bilateral Cooperation	4	4			1	1

1/ For details on specialties see text
2/ Subdivision not underlined
3/ Including the Head

Summary Cost Estimate and Financial Plan
(thousands U.S. $)

	COST ESTIMATE BY CURRENCY			SOURCE OF FUNDS			
	Foreign Exchange	Local Currency	Total	USAID Loan	USAID Grant	GOI	Total
1. Training, In-Country	-	(1720)	(1720)	(1220)	-	(500)	(1720)
a. Masters Degree (40)	-	280	280	280	-	-	280
b. Doctorates (10)	-	220	220	220	-	-	220
c. Non-Degree 1200 MM	-	720	720	720	-	-	720
d. Salaries/Allowances (210 M yrs.)	-	500	500	-	-	500	500
2. Training-Abroad	(1410)	(510)	(1920)	(1410)	-	(510)	(1920)
a. Masters Degree (24)	580	200	780	580	-	200	780
b. Doctorates (6)	290	100	390	290	-	100	390
c. Non-Degree 120 MM	540	10	550	540	-	10	550
d. Salaries/Allowances (82 M. yrs.)	-	200	200	-	-	200	200
3. Technical Assistance	(910)	(210)	(1120)	-	(910)	(210)	(1120)
a. Training Consultant 60 MM	420	60	480	-	420	60	480
b. Short Term Consult. 70 MM	490	70	560	-	490	70	560
c. Counterparts Salaries (33 M. yrs.)	-	80	80	-	-	80	80
4. Commodities	(1040)	(190)	(1230)	(1040)	-	(190)	(1230)
a. Data Processing Equip.; Installation, supplies, training and 15% incountry costs.	1000	150	1150	1000	-	150	1150
b. Vehicles (2 sedan and 4 Jeeps) insurance, freight, and 15% incountry costs.	40	40	80	40	-	40	80

Attachment 3

Summary Cost Estimate and Financial Plan
(thousands U.S. $)

	COST ESTIMATE BY CURRENCY			SOURCE OF FUNDS			
	Foreign Exchange	Local Currency	Total	USAID Loan	USAID Grant	GOI	Total
5. Building Construction	-	(850)	(850)	-	-	(850)	(850)
a. Information Center (1000 M^2)							
i. Building, grounds improvement and utilities @ $ 300/M^2	-	300	300	-	-	300	300
ii. Furnishings	-	20	20	-	-	20	20
iii. Architecture fee and construction supervision	-	30	30	-	-	30	30
iv. Construction site	-	300	300	-	-	300	300
b. Consultant Housing (2 @ 150 M^2)							
i. Building, ground improvement and utilities @ $ 300/M^2	-	90	90	-	-	90	90
ii. Furnishings	-	10	10	-	-	10	10
iii. Architecture fee and construction supervision	-	10	10	-	-	10	10
iv. Construction site	-	90	90	-	-	90	90
6. Operation & Maintenance for 5 years	-	(650)	(650)	-	-	(650)	(650)
a. Buildings (3)	-	200	200	-	-	200	200
b. Equipment	-	120	120	-	-	120	120
c. Vehicles	-	30	30	-	-	30	30
d. Data processing staff (24) (120 M.yrs)	-	300	300	-	-	300	300
Totals	3360	4130	7490	3670	910	2910	7490
Contingency 10%	340	410	750	360	90	300	750
Inflation 30%	1000	1260	2260	1070	300	890	2260
	4700	5800	10500	5100	1300	4100	10500

Costing of Project Outputs/Inputs

(In $000 or equivalent)

Project # 0265 Title Agricultural Development Planning and Administration

Project Inputs	Project Outputs		Total
	#1 (Trained, functioning planning/programming cadre)	#2 Data information system)	
Participant tng, (US)	1,920	-	1,920
Participant tng, (RI)	1,720	-	1,720
Commodities		1,230	1,230
Data Information Center & Housing		850	850
Technical Assistance	800	320	1,120
O & M		650	650
TOTALS	4,440	3,050	7,490

Note: Contingency (10 per cent) and inflation (30 per cent) allowances are not included in above table.

Attachment 4

AID 1020-28 (1-73)

PROJECT DESIGN SUMMARY

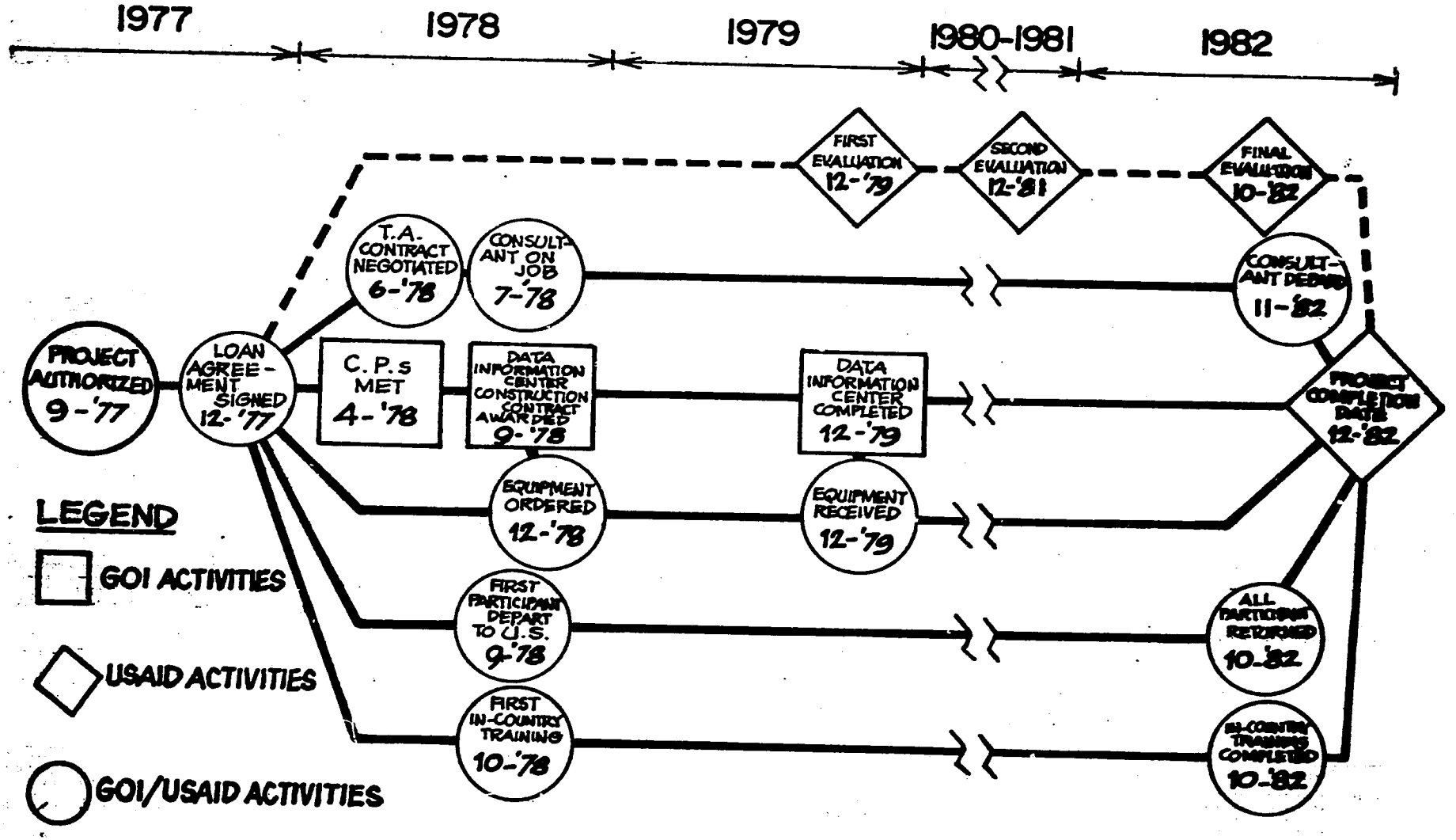
LOGICAL FRAMEWORK

Project Title & Number: AGRICULTURAL DEVELOPMENT PLANNING AND ADMINISTRATION . . . Grant/Loan 026

Life of Project:
From FY 77 to FY 81
Total US Funding $ 6,400,000
Date Prepared: April 1977

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATOR	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes: Increase agricultural production, rural income, and employment opportunities.	Measures of Goal Achievement: Repelita IV agricultural planning will be superior to prior Repelita planning; projects will be more efficiently planned and executed, with a higher degree of project success. A larger percentage of projects will be designed to directly benefit women and the rural poor without deleterious effects on the environment.	GOI/DOA reports and records Repelita III reports Repelita IV planning documents	Assumptions for achieving goal targets: The GOI's commitment to National Planning will continue. The GOI will continue to regard improvement of the agricultural sector as a priority developmental goal.
Project Purpose: Upgrade the planning and programming capability of the Dept. of Agriculture.	Conditions that will indicate purpose has been achieved: End of project status. 380 trained participants will be performing planning and data collecting, collating and evaluation functions in a structured planning and programing network within the Department of Agriculture. An agricultural data information center will be established and institutionalized.	Project records DOA records	Assumptions for achieving purpose: The Minister of Agriculture's Decree Number 190/Kpts/Org/5/1975 establishing Planning and other project related autnority will remain in force.
Outputs: a. Trained personnel b. Computer-based information center c. Improved system of data collection d. More efficient and effective approach to agriculture planning	Magnitude of Outputs: a. 16 Phds; 64 M.A.s, plus 300 received short term training b. Building completed, equipment installed and operating c. Magnitude not relevant d. Magnitude not relevant	Project records DOA records	Assumptions for achieving outputs: a. Participants will complete the courses of instruction and return to their parent organization. b. All DOA Directorates and Agencies will supply inputs to the data information center.
Inputs: AID-Loan $ 5.1 million Grant $ 1.3 million GOI - $ 4.1 million plus personnel Attachment 5.	Implementation Target (Type and Quantity) Inputs See details in Attachments 2 & 3 Summary Cost Estimates	USAID a. Project Evaluation b. Project Appraisal Reports GOI DOA records	Assumptions for providing inputs: GOI A sufficient number of fully qualified participant nominees will be provided. Data information center building completed prior to arrival of equipment.

AGRICULTURE DEVELOPMENT PLANNING and ADMINISTRATION PROJECT
GRANT/LOAN-0265



Attachment 6

INITIAL ENVIRONMENTAL EXAMINATION

Project Location : Indonesia

Project Title : Agricultural Development Planning and Administration

Funding : FY-77 $ 6,400,000

Life of Project : 5 years

IEE Prepared by : D.R. Brooks 14 April 1977

Environmental Action Recommended: Negative Determination

Mission Director's Concurrence:

Thomas C. Niblock, DIR

Date: May 6, 1977

Assistant Administrators Decision:

Approved: _____

Disapproved: _____

Date : _____

Attachment 7

I. Examination of Nature, Scope, and Magnitude of Environmental Impacts

a. Description of Project:

The proposed project will upgrade the planning and programming capability of the Department of Agriculture, including the collection, storage and use of basic statistical data. The project is intended to provide assistance to overcome relevant and specific institutional weaknesses. This task will be accomplished through the provision of staff training, technical advisory services, and certain commodities and physical facilities.

b. Identification and Evaluation of Environmental Impacts:

There are no areas of environmental alteration in this project, except for the construction of a building in Urban Jakarta to house the data information center. Construction of such a modest structure is not expected to have any deleterious effect on the environment.

II. Recommendation for Environmental Action

The proposed project is not a major action which will have a significant effect on the human environment. Therefore, this proposed project does not require an environmental assessment. It is therefore recommended that a negative determination be made.

OPTIONAL FORM NO. 10
JULY 1973 EDITION
GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

Memorandum

4970265 (4)
PD-AAD-910

TO : Distribution

DATE: December 12, 1978

FROM : ASIA/PD, G. R. Van Raalte

2p.

SUBJECT: INDONESIA - AID Grant 497-0265
AID (Loan 497-T-051)
Agricultural Development Planning and Administration
Project
Implementation Letter No. 1

Attached for your information and files is a copy of subject document.

Attachment: a/s

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ASIA/ISPA: HPetrequin
DS/DIV/DI: (2)

AGENCY FOR INTERNATIONAL DEVELOPMENT
AMERICAN EMBASSY
JAKARTA, INDONESIA

October 30, 1978

Departemen Luar Negeri
Jalan Pejambon No. 6
Jakarta Pusat

Attention: Directorate General of Foreign Economic Relations

Subject : AID Grant 497-0265
AID (Loan 497-T-051)
Agricultural Development Planning and Administration Project
Grant Project Implementation Letter No. 1

Gentlemen:

This is to acknowledge receipt of the Department of Agriculture's letter dated October 3, 1978, No. 163/PR/N, advising of the selection of Iowa State University for the technical services component of the Agricultural Development Planning and Administration Project.

Please be advised that AID approves the selection of the Department of Agriculture and looks forward to the implementation of a successful project.

Sincerely yours,

Thomas C. Niblock
Director

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OPTIONAL FORM NO. 10
MAY 1962 EDITION
GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

Memorandum

4970265 (5)
PD-AAD-910

TO : Distribution

DATE: May 11, 1979

FROM : ASIA/PD/EA, Paulyette F. Rogers

3p.

SUBJECT: INDONESIA - Project No. 497-0265
A.I.D. Project Agreement No. FY 77-15 Obl. 70352
Agricultural Development Planning & Administration

Attached for your information and files is copy of subject document.

Attachment: a/s

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USAID/ Indonesia

(Loan/Grant Agreement Distribution List)

PRO AG:

PROJECT AGREEMENT

BETWEEN THE DEPARTMENT OF STATE, AGENCY FOR INTERNATIONAL DEVELOPMENT (AID) AN AGENCY OF THE GOVERNMENT OF THE UNITED STATES OF AMERICA, AND

Department of Agriculture

AN AGENCY OF THE GOVERNMENT OF THE REPUBLIC OF INDONESIA Page 1.

Under the terms of the Economic Cooperation Agreement signed October 16, 1950, as amended, and the agreements and provisions noted below, it is agreed to carry out a project in accordance with the terms set forth herein.

☐ Agreement (Specify) .....

☒ Standard Provisions Annex. ☐ other (Specify) .....

1. Project No. 497-0265	2. Agreement No. FY 77-15 Obl. 70352	3. Original or Revision No. 3
4. Project/Activity Title Agricultural Development Planning and Administration		5. Project Descrip. (Annex A)
6. Appropriation 72-11X1023	7. Allotment 402-50-497-00-69-93	

8. AID DOLLAR FINANCING (Cost Component)	PREVIOUS TOTAL (A)	INCREASE (B)	DECREASE (C)	TOTAL TO DATE (D)
a. PERSONNEL COSTS				
(1) U.S.				
PASA				
Contract	1,293,000			1,293,000
(2) LOCAL AND TCN				
PASA				
Contract				
b. PARTICIPANTS				
AID DIRECT				
PASA/Contract				
c. COMMODITIES				
AID Direct				
PASA/Contract				
d. OTHER COSTS				
AID Direct	7,000			7,000
PASA/Contract				
e. TOTAL (ALL COSTS)	1,300,000			1,300,000
9. LOCAL CURRENCY FINANCING ($1.00 = Rupiah 620.00)				
a. U.S. OWNED RUPIAH				
b. GOI TRUST FUND (AID ADM.)				
c. GOI (SHOW SOURCE BELOW)	294,000			294,000

USAID CLEARANCE
PRO
CONTR
LA
AGR

10. REFERENCES AND REMARKS The reasons for this revision are fourfold: (1) The project final contribution date is extended. (2) The composition of the technical assistance (TA) to be made (continued p.2)

11. DATE OF ORIGINAL AGREEMENT	12. DATE OF THIS REVISION	13. ESTIMATED FINAL CONTRIBUTION DATE
Sept. 29, 1977	April 11, 1979	April 12, 1983

14. FOR THE COORDINATING GOVERNMENT OR AGENCY	15. FOR THE AGENCY FOR INTERNATIONAL DEVELOPMENT
SIGNATURE	SIGNATURE
TITLE SEC. GEN. for AGR DATE 4/11/79	TITLE Dir. USAID/Indonesia DATE 4/11/79

Block 10 (cont.)

available tc the Dept. of Agriculture under a host-country contract is modified to approximately ninety-six months of long-team TA, thirty months of short-team TA and forty-two months of home office support. (3) Housing for the long-team consultants will be funded from the Grant rather than the loan portion of Project 0265. (4) The Industrial Extension of Small Scale Agricultural Machinery Project, a cooperative effort between the GOI Department of Agriculture and the International Rice Research Institute, is hereby established as a sub-activity of Project 0265. This sub-activity is being transferred to Project 0265 from Project 0189, Assistance to Agriculture, since support under Project 0189 terminated on 13 March 1979.

The GOI will continue to support the Industrial Extension of Small Scale Agricultural Machinery Project as it has done to date. All USG financing and personnel contributed to the project will be provided under AID/W contract. USAID/Indonesia personnel and funds are not obligated under this ProAg revision; USAID/Indonesia will continue to monitor and assist the project as possible.

Title: SEC.GEN. for AGR

Title:Dir.USAID/Indonesia

4970265 (6)
PD-AAD-910

PRO AG

PROJECT AGREEMENT
BETWEEN THE DEPARTMENT OF STATE, AGENCY FOR INTERNATIONAL DEVELOPMENT (AID)
AN AGENCY OF THE GOVERNMENT OF THE UNITED STATES OF AMERICA, AND

Department of Agriculture

AN AGENCY OF THE GOVERNMENT OF THE REPUBLIC OF INDONESIA

14p-

Under the terms of the Economic Cooperation Agreement signed October 16, 1950, as amended, and the agreements and provisions noted below, it is agreed to carry out a project in accordance with the terms set forth herein.

☐ Agreement (Specify) .....

☒ Standard Provisions Annex. ☐ other (Specify) .....

1. Project No. 497-0265	2. Agreement No. FY 77-15 Obl. 70332	3. Original ☐ or Revision No. 4
4. Project/Activity Title Agricultural Development Planning and Administration	5. Project Descrip. (Annex A)	
6. Appropriation 72-11X1023	7. Allotment 402-50-497-00-69-93	

8. AID DOLLAR FINANCING (Cost Component)	PREVIOUS TOTAL (A)	INCREASE (B)	DECREASE (C)	TOTAL TO DATE (D)
a. PERSONNEL COSTS				
(1) U.S.				
PASA				
Contract	1,293,000			1,293,000
(2) LOCAL AND TCN				
PASA				
Contract				
b. PARTICIPANTS				
AID DIRECT				
PASA/Contract				
c. COMMODITIES				
AID Direct				
PASA/Contract				
d. OTHER COSTS				
AID Direct	7,000			7,000
PASA/Contract				
e. TOTAL (ALL COSTS)	1,300,000			1,300,000
9. LOCAL CURRENCY FINANCING ($1.00 = Rupiah _____)				
a. U.S. - OWNED RUPIAH				
b. GOI TRUST FUND (AID ADM.)				
c. GOI - (SHOW SOURCE BELOW)	294,000			294,000

USAID CLEARANCE
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10. REFERENCES AND REMARKS The reason for this revision is to incorporate as a discrete sub-activity of Project 0265 the Remote Sensing for Resources Assessment Project, 931-1224, to be

11. DATE OF ORIGINAL AGREEMENT	12. DATE OF THIS REVISION	13. ESTIMATED FINAL CONTRIBUTION DATE
Sept. 29, 1977	August 30, 1979	April 12, 1983

14. FOR THE COOPERATING GOVERNMENT OR AGENCY	15. FOR THE AGENCY FOR INTERNATIONAL DEVELOPMENT
Dept. of AGR — Date	Thomas C. Niblock
C B S — DATE 8-31-79	SIGNATURE — TITLE Director USAID/I — DATE 8-30-79

M. Abdulhadi Hd
Director of CBS.

PROJECT AGREEMENT
BETWEEN AID AND
The Dept. of Agriculture

AN AGENCY OF THE GOVERNMENT OF
The Republic of Indonesia

1. Project/Activity No. 497-0265
2. Agreement No. 77-15 Oblg. 70352
3. [ ] Original or Revision No. 4
4. Project/Activity Title: Agricultural Development Planning and Administration

implemented by the GOI Central Bureau of Statistics (CBS) and Department of Agriculture (DOA) with USAID and the U.S. Department of Agriculture (USDA). A description of this sub-activity is attached as a Memorandum of Understanding, which shall be considered as an integral part of this Pro. Ag. revision.

All USG financing and personnel contributed to this Remote Sensing Project will be provided by the USDA, operating under Participating Agency Service Agreement AG/TAB-1166-6-78 with the Agency for International Development. USAID/Indonesia personnel and funds are not obligated under this Pro. Ag. revision; however, USAID/Indonesia will monitor and assist this Project as possible. Likewise, DOA resources contributed toward implementation of the Agricultural Planning Development and Administration Project and the host-country contract between the DOA and Iowa State University are not to be altered by this Pro. Ag. revision. Since coordination between the ISU contract and the Remote Sensing Project can be mutually beneficial, such coordination will be encouraged. The CBS and DOA agree to contribute resources for the Remote Sensing Project as detailed in the attached Memorandum of Understanding.

The Parties agree to establish an evaluation program as part of the Project. Except as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at one or more points thereafter:

(a) evaluation of progress toward attainment of the objectives of the Project;

(b) identification and evaluationoof problem areas or constraints which may inhibit such attainment;

(c) assessment of how such information may be used to help overcome such problems; and

(d) evaluation, to the degree feasible, of the overall development impact of the Project.

Elements of the amplified description stated in MCU may be changed by a subsequent Pro. Ag. revision with USDA concurrence. This activity is expected to be initiated in U.S. FY 80 and be completed in about twenty-four months.

For the Cooperating Government or Agency	For the Agency for International Development
SIGNATURE:	SIGNATURE:
TITLE:	TITLE:
DATE:	DATE:

PROJECT TITLE: REMOTE SENSING FOR RESOURCE ASSESSMENT - AREA SAMPLING PROJECT

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) is made by and between the Government of Indonesia (GOI), represented by the Central Bureau of Statistics (CBS) and the United States Department of Agriculture (USDA), operating under a Participating Agency Service Agreement (PASA) AG/TAB-1166-6-78 with the Agency for International Development (AID).

1. Importance of Remote Sensing

Among many applications of satellite remote sensing technology, one of the most promising has been its potential use for monitoring and estimating crop production. Since the launch of the first Earth Resources Technology Satellite (ERTS), now called LANDSAT, much research on an international scale has been conducted to evaluate the use of the data and image products collected by this system. At the current state of development, however, satellite remote sensing provides useful data only when combined with other sources of information. The Economics, Statistics, and Cooperatives Service (ESCS) of the USDA has developed a system which integrates the satellite remote sensing data with "ground truth" data collected for an operational area sample survey. This system utilizes the synoptic coverage aspect of the satellite data in combination with the more precise and accurately recorded ground information collected for a very small sample (about 1/2 to 1 percent sampling rate). It provides significant improvements in the accuracy of area estimates for major crops. For more than a decade, ESCS, through AID sponsored projects, has provided technical assistance to several developing countries for starting an agricultural data system or improving the existing system. In most of these countries, the projects have involved the

construction of an Area Sampling Frame (ASF), followed by the completion of effective sample surveys using the ASF. These surveys have resulted in significant improvement in estimates of areas producing major crops in the countries involved.

It has been demonstrated that satellite remote sensing image products can be used to effectively delineate and separate different land uses. Frequently, maps and conventional photography are either out-of-date or non-existant. In these cases, satellite imagery is particularly valuable. Also, if satellite digital data is to be used to estimate land cover, it is essential to have an ASF to provide the statistical basis for correcting bias that exists in land classification data.

2. Proposal

(a) Background and Goals

Image products from earth orbiting satellites provide a new set of materials for either constructing or updating area sampling frames. To construct accurate ASF, these remotely sensed products must be used with existing materials such as maps, conventional aerial photographs, and other data such as ground surveys. Under this proposal, the USDA with AID funding will provide technical assistance to help the Government of Indonesia to construct an ASF utilizing remote sensing and other available data. This project is to serve as the first of a multi-phase project using satellite remote sensing for estimating agricultural production. Of major importance is the fact that a useful end product of this project (the ASF) will be developed and can be used for current on going or future agricultural surveys. This is true regardless of whether or not the additional phases are undertaken.

The four phases of a typical Remote Sensing Project for Agriculture are described in Annex B to this MOU; however, this MOU is limited to Phase 1 as

described in Annex B.

(b) Project Description

The specific purpose of this project is to provide improved agricultural information: first, in the form of estimates devoted to paddy and area composed of perennial trees such as rubber and coconut, each of these uses derived from area frame sampling; and second, through integration of satellite remote sensing data to provide current and more accurate crop estimates for the crops named above. This project should be completed within two years after this agreement is signed, and will include the following activities:

i. construction of an ASF for the sub-province of Pati in Central Java selected by GOI;

ii. conducting a pilot survey in the Pati sub-province using an area sample selection from the ASF for i above;

iii. a joint evaluation between the parties to this MOU of the pilot survey described in i and ii above. The plan for this evaluation to be developed within 2 months after the beginning of the project; and evaluation completed within one and one half years after the beginning of this project;

iv. providing agreement between the parties hereto that i, ii and iii indicate a practical and feasible means to develop ASF, construction of an ASF for the major agricultural areas of Indonesia to be completed by the end of two years after the beginning of this project.

3. Agency Responsibilities

The Indonesian CBS agency has the overall responsibility for completing the ASF as described in 2(b) above. USDA through ESCS, Statistics will provide

satellite image products and necessary technical assistance to use these products with existing materials for ASF completion. Monitoring of this project and disbursement of USDA funds for the project will be the responsibility of the designated USDA manager in ESCS, Statistics, Washington, D.C. in consultation with the Indonesian Project Director.

4. Resources/Services Required

The parties to this MOU will provide the following resources for the project:

(a) USDA, through AID/W funding, will provide the following at a total cost not to exceed the total USDA cost shown in Appendix A1 or A1 and A2 combined. Appendix A1 relates to the initial 3 activities described in paragraph 2(b) above. Appendix A2 will apply if the parties decide to proceed with the fourth activity described in paragraph 2(b) above. If A2 activity is completed, total USDA input would equal the total shown in Appendix A1 plus A2.

	Input A2	Input A1
i. Personnel		
Co-Director/Statistician	1 man month	1 man month
Area Frame construction person	2 man months	1 1/2 man months
Survey Statistician	2 man months	1 man month
ii. Equipment and Supplies		
LANDSAT Imagery and Computer Compatible tapes for computer Classification	165 scenes	2 scenes
Planimeters	2	
iii. Training		
CBS training in U.S.	2 man months	

iv. Travel (for both input requirements Appendix A1 or A2)

All international travel, including travel and per diem for Indonesian

personnel involved in training in U.S.A., including domestic travel costs in Indonesia for input A1 only.

(b) CBS will provide the following:

	Input A2		Input A1
i. Personnel as required			
Project Director	8 mm		1 mm
Fulltime employees for ASF construction	30 mm	1/	3 mm
Survey enumerators for field surveys	10 mm	2/	3 3/4 mm

1/ 4 persons for 6 months

2/ 8 persons for ½ months

Secretarial and statistical clerical support

ii. Maps

iii. Space

Office space

Storage space

5. Reporting and Publication

Quarterly progress reports prepared by the Project Director with the assistance of the USDA Co-Director/Statistician and will be submitted for review to the CBS, USDA, AID/W, and the Indonesian AID Mission. A report outlining results and evaluation of the pilot survey will be prepared and distributed to parties to this MOU within two months after the completion of the pilot survey specified in paragraph 2(b) ii above. In addition, frame preparation and conduct of activities will be documented to the extent that it represents a complete history of how the frame was constructed by the Project Leader and USDA Co-Director/ Statistician and a report will be prepared for the parties to this MOU. In

addition this documentation will describe procedures for area frame update and selection of sample areas for enumeration.

6. Amendment

This MOU may be amended by agreement of the parties in writing.

7. Effective Date

This MOU shall become effective upon the final signature hereto and shall remain in effect until September 30, 1981, unless terminated sooner by either party.

GOVERNMENT OF INDONESIA

By:_____ Date:_____

U.S. DEPARTMENT OF AGRICULTURE

By: [signature] Date: 6/22/79

U.S. AID/JAKARTA

By:_____ Date:_____

Pilot Project

Input Requirements (Estimated) 1/

Category	United States Department of Agriculture 2/		Government of Indonesia Central Bureau of Statistics 2/
I. Personnel	1 U.S. Co-Project Leader (1 mm)		1 Project Leader
	1 Area Frame Specialist (1½ mm)		3 Area Frame Technicians
	1 Survey Statistician (1 mm)		4 Field Enumerators
		$10,500	
II. Travel	3 trips USA/Indonesia/USA	6,300	None
	105 days per diem	6,900	None
	Domestic Travel Expenses	5,200 3/	
III. Equipment and Supplies			
	LANDSAT Products	400	None
	Supplies Required - Purchase of Maps, etc.	300	Maps (available)
	Light Table & Planimeters	400	None
	Aerial Photography	2,000	
	Acetate Roll, and misc.	200	
IV. Administrative Costs		8,050	
Total Expenditures		$40,250	

1/ The input requirements to complete only the pilot survey, as noted in 2(b) i, ii above.

2/ MM equals man month of work time.

3/ Vehicle rental and travel expenses in Indonesia for project personnel use for project related purposes.

Total Input Requirements (Estimated) 1/

Category	United States Department of Agriculture 2/		Government of Indonesia Central Bureau of Statistics ?
I. Personnel	1 U.S. Co-Project Leader (1 mm)		1 Project Leader
	1 Area Frame Specialist (2 mm)		5 Area Frome Technicians
			1 Person for Training in USDA Washington
	1 Survey Statistician (2 mm)		20 Field Enumerators
		$15,000	
II. Travel	6 trips USA/Indonesia/USA	12,800	None
	150 days per diem	9,000	None
		-	Domestic Travel Exp.
	Training two Indonesians USDA Washington, D.C. (includes travel and per diem)	7,200	None.
III. Equipment and Supplies			
	LANDSAT Products	30,000	None
	Supplies required - Purchase of Maps	4,000	Maps (available)
	Light Table, Planimeters, and other equipment	3,500	None
	Acetate Rolls, Color Diazo Printer Processor and Diazo materials and misc.	2,500	None
IV. Administrative Costs		21,000	
Total Expenditures		105,000	

1/ The total input requirements that would be required if the parties agree to complete the total project as described in 2(b) above.

2/ MM equals man month of work time.

Appendix B

A PRACTICAL APPLICATION OF REMOTE SENSING FOR CROP PRODUCTION ESTIMATION

For the past five years, AID's remote sensing program, conducted by the Office of Science and Technology in the Bureau for Development Support (DSB), has concentrated on demonstrating the applications of LANDSAT image interpretation and training host country resource planners how to analyze and thematically classify image data. The time is ripe that something concrete and meaningful be done with this technology base to assist planning for crop scheduling harvest, and marketing.

In this regard, DSB has a project starting this year called Remote Sensing for Tropical Agriculture; it focuses on: (1) crop prediction by monitoring pre-harvest conditions and acreages of sample fields, and (2) assessing the spatial extent of desertification and its impact on agriculture. DSB has had long discussions with the U.S. Department of Agriculture (USDA) who will be doing the technical work on (1) and with NASA who will actually be contributing both money and technical support on (2).

The crop prediction component is what DSB and USDA would like to assist with in Indonesia. It would consist of four phases in succession, each subsequent phase depending upon the former. These phases include: (1) area frame sampling, (2) national totals, (3) computerized classification, and (4) agromet modeling.

(1) Area frame sampling is a labor-intensive technique to statistically select the smallest sample of fields possible to obtain reliable crop information for national planning. The collection of data takes place on the ground at the sample fields. Before a statistically reliable sample of fields can be selected, an Area Sampling Frame (ASF) must be constructed. ASF's are generally constructed

by using various sampling materials such as maps and aerial photos; recently, it has become possible to use LANDSAT imagery also. To construct an ASF the first step is to divide the entire area of a country (Region, Province) into broad land use strata. Visual photo-interpretation techniques are employed in this process for both LANDSAT imagery and conventional aerial photography. The boundaries of these land use strata are adjusted to natural boundaries (roads, streams, etc.) visible on the ground, and are transferred to a base map. The second step in ASF construction involves the delineation of primary sampling units (PSU's) (sometimes referred to as "count units") using aerial photography and to a limited extent LANDSAT imagery. Again the boundaries of the PSU's should conform to natural boundaries. They are transferred from the aerial photography to the base map with unique identification numbers. This base map, along with the supporting documentation (strata definition, etc.) and the listing of the uniquely identified PSU's, is the ASF. As opposed to aircraft photography, which is expensive and in some developing countries impossible to obtain due to military restrictions, LANDSAT is available every 18 days (clouds permitting), hence the area frame can be updated when desired.

Usually sampling from the ASF is done in two stages:

Stage 1: A sample of PSU's is randomly selected.

Stage 2: Each selected PSU is divided into smaller sampling units (fields or clusters of fields) using aerial photography and LANDSAT imagery. These sampling units are uniquely numbered in order to permit random selection of the final sample units to be enumerated in the field. To assist with this field enumeration the sample unit is drawn on a map and if possible on an aerial photograph.

(2) National Totals: Once an ASF is completed for a country it is a straightforward process to randomly select sample units for enumeration. Data collected for these units are then multiplied by the reciprocal of the probability of selection (Expansion Factor) to produce reliable statistics for the entire country. Stratification using LANDSAT imagery and other materials greatly increases the efficiency of the sample. In other words, with stratification one can achieve a given degree of precision using a much smaller sample than would be required without stratification.

(3) Computerized classification would be the next logical step. From the area frame developed under (1) the Project would have, among other things: known crops growing in sample fields which, if some are large enough, can be identified on the LANDSAT imagery. With this data, the Project can now use the known crops to literally "train" a computer to automatically classify and measure all sufficiently large fields outside the sample area. The frame is time-consuming to construct, but the automatic classification of crop hectares theoretically permits one to update the predicted totals several times during the crop growing season to take account of climatic and catastrophic events.

It will be necessary to look at field size distribution in Indonesia to determine if this step makes sense. If only ten percent of the fields are larger than ten acres, but this ten percent is growing eighty percent of the crops in question, then computer techniques are obviously appropriate. If this ten percent is growing only ten percent of the crops, but the other ninety percent are all small one-quarter of an acre plots and yet consists of mile after mile of contiguous plots of the same crop (rice, for example), then again computer classification may be applicable.

(4) The agricultural-meteorological (agromet) models represent the final link in a viable crop prediction program. They are also the most sophisticated and expensive to use. They are computer-based, and essentially, simulate the growing of a crop by inputting crop moisture, sunlight radiation, and other parameters affecting the vigor of the crop. Data collected from the field as well as remote sensing data from LANDSAT, weather, and other satellites are required.