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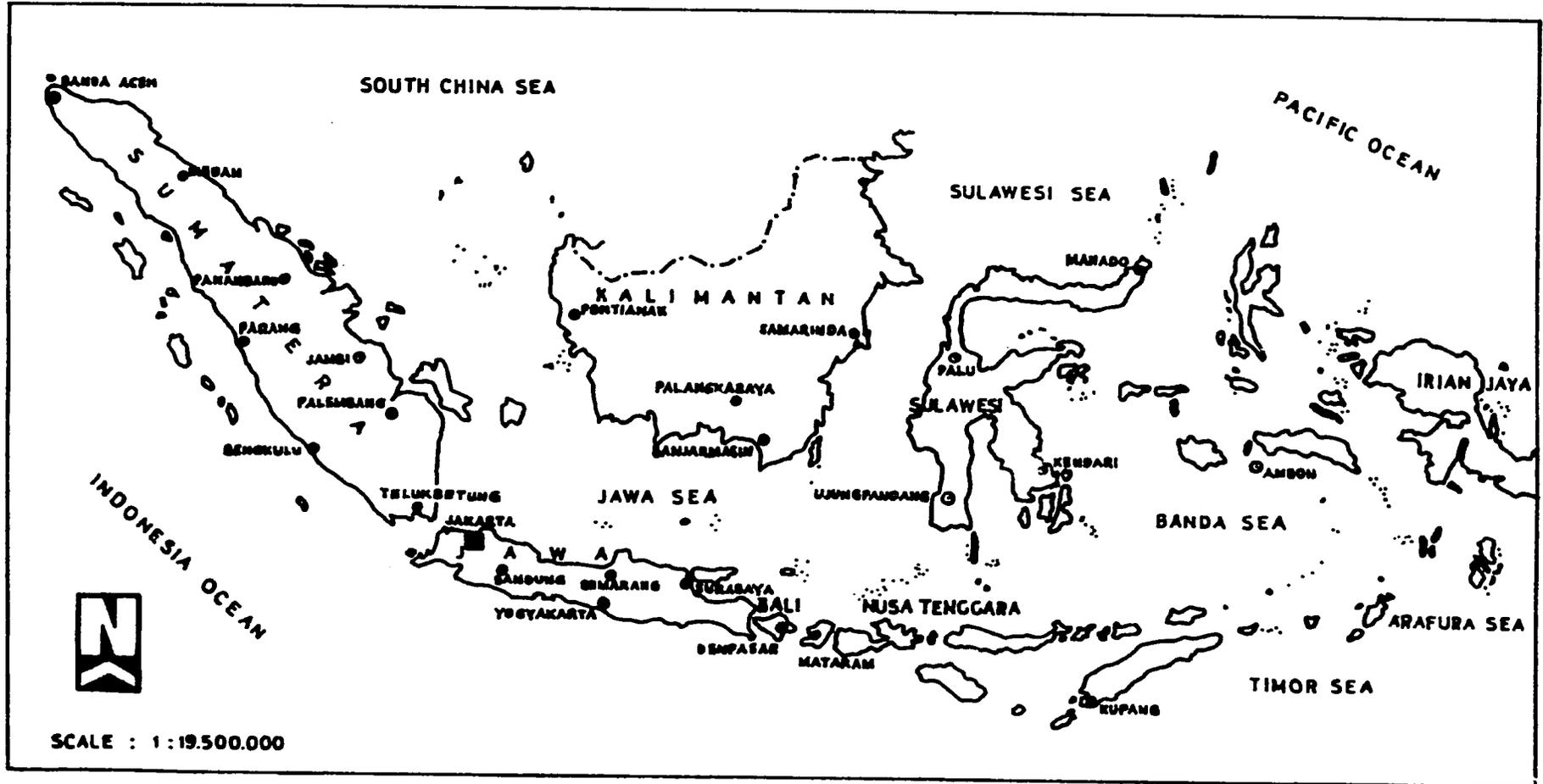
THE UNITED STATES OF AMERICA AGENCY FOR INTERNATIONAL DEVELOPMENT
and
THE DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
of the
MINISTRY OF PUBLIC WORKS
Representing
MINISTRY OF PUBLIC WORKS AND THE MINISTRY OF AGRICULTURE
GOVERNMENT OF INDONESIA

PROJECT NO. 497-0252
SEDERHANA IRRIGATION AND LAND DEVELOPMENT II

MONTHLY PROGRESS REPORT NO. 8
FOR PERIOD
FEBRUARY 1, 1981 - FEBRUARY 28, 1981

INTERNATIONAL ENGINEERING COMPANY, INC.
In Association with
SINOTECH ENGINEERING CONSULTANTS, INC.,
SANGKURIANG LTD., ARCHITECTS AND CONSULTING ENGINEERS
and
INDRA DEVELOPMENT CONSULTANTS
JAKARTA, INDONESIA

INDONESIA



I. INTRODUCTION

The Contract between the United States of America, Agency for International Development (USAID) and International Engineering Company, Inc. (IECO) includes technical advisory services for Project No. 497-0252 Sederhana Irrigation and Land Development II. The scope of services is outlined in detail in Appendix A of the Contract. Performance of the work, within the terms of the Contract, is subject to the technical direction of the Government of Indonesia (GOI) through the Ministry of Public Works and the Ministry of Agriculture. Portions of the work, as set forth in the Contract, are sub-contracted to Sinotech Engineering Consultants, Inc., Sangkuriang Ltd., Architects and Consulting Engineers, and Indra Development Consultants.

The Contract described above was signed on July 21, 1980 and the Effective Date of the Contract is July 10, 1980. Amendment No. 1 to the Contract, effective October 27, 1980, was signed on November 13, 1980.

This Eight Monthly Report is submitted in accordance with Appendix A, Article K, Subarticle a of the Contract. It covers major events from February 1 through February 28, 1981 and includes progress on various aspects of services. Information on personnel in Indonesia and man-months expended is presented in the appendixes at the back of this report.

II. SUMMARY OF CONSULTANT'S ACTIVITIES

The main activities during the reporting period were concerned with subproject inspections, subproject design reviews, certification of completed works and program monitoring.

Visits were made by the Resident Manager, Area Engineer, Agricultural Coordinator, Water User Association Advisor, and Land Development Engineer to Provincial and Regional Offices in Medan, Padang, Banjarmasin, Bandung, Ujung Pandang, Kendari, Manado and Palu.

The Provincial Irrigation Engineers performed subproject inspections in North Sumatra, West Sumatra, Riau, South Sumatra, Jambi, Lampung, Bengkulu, West Java,

South Kalimantan, North Sulawesi, Central Sulawesi, Southeast Sulawesi, West Nusa Tenggara and East Nusa Tenggara; design reviews in North Sumatra, Riau, Lampung, South Kalimantan, East Kalimantan, South Sulawesi, Southeast Sulawesi and West Nusa Tenggara; and certifications in North Sumatra, West Sumatra, Riau, Jambi, South Sumatra, Bengkulu, North Sulawesi, Central Sulawesi, Southeast Sulawesi, and West Nusa Tenggara.

Provincial Irrigation Engineers and Regional Agricultural teams were given further instructions regarding their respective programs, including area of responsibility, work schedules and priorities. Special emphasis was given to bringing the monitoring program up to date by the Provincial D.P.U. and by the DOI, Jakarta. Table III-1 presented at the end of this section shows the status of all submittals received from the Provincial Public Works during the reporting period.

Special attention was given to clarifying the status of active Sederhana I Subprojects in all provinces, so that efforts can be directed to those subprojects which can be completed and certified by the July 26, 1981 cut-off date for reimbursement from Sederhana I loan funds.

III. ADMINISTRATIVE AND SUPPORT ACTIVITIES

The activities of the Jakarta Office during the reporting period were concerned with providing technical and administrative support to the on-going program, program monitoring, preparing certifications for submittal to DGWRD, and meeting with DGWRD, DGFC and USAID officials concerning the program.

On February 28, 1981, 24 Certifications of Technical Soundness and Completion of Construction of subproject major works were submitted to the DGWRD.

3.1 SUPPORT ACTIVITIES

Mr. J.Y. Hsu, Water User Association Advisor, visited the provinces of East Java, West Nusa Tenggara and Bali from February 1 to 7, 1981, to give assistance to the Regional Agricultural Advisory Team, Surabaya, for upgrading the Water User Associations in conjunction with the Action Research Program.

Mr. C.E. Aksamit, Resident Manager, was in Bandung, West Java from February 5 to 7, 1981 to review the progress of the work of the Irrigation Design Engineer involved in the Transfer of Knowledge Program, and the work of the Provincial Irrigation Engineer.

On February 9, 1981, Mr. R.E. Dixon, Area Engineer, Ir. Wahyu A., Irrigation Engineer, and Mr. D.E. Warner, Sederhana Project Engineer, USAID, Jakarta, visited South Sulawesi where they met with the Provincial Public Works Chief of Water Resources and reviewed the Sederhana Program. From February 10 to 14, 1981, the team, accompanied by Mr. C.F. Sayer, Provincial Irrigation Engineer, visited Southeast Sulawesi where they held meetings with the Provincial Chief of Public Works and the Water Resources Section staff. Sederhana subprojects were inspected for construction completion certification by the consultants and reimbursement by USAID.

From February 10 to 13, 1981, S.M. Lee, Land Development Engineer, visited Bandung, West Java, for assisting the Regional Agricultural Advisory Team with their Land Development Program.

From February 16 to 20, 1981, Mr. S.M. Lee visited Palembang, South Sumatra to assist and advise the Regional Agricultural Advisory Team with their Land Development Program. Two Land Development Units (UPP) were visited on February 17 & 19, 1981, and detailed discussions were held with UPP Chiefs and their staffs.

From February 19 to 25, 1981, Mr. M.A.E. Adams, Area Engineer, visited the Provincial Offices in Padang and Medan. From February 19 to 22, Mr. Adams reviewed the program and provided assistance and guidance to Mr. R. Lizardo, Provincial Irrigation Engineer for West Sumatra and Riau. Emphasis was placed on monitoring and certification. A field visit was made to Subproject Punggung Kasiek (4243 ha) in West Sumatra Province which is fully functional with about 3000 hectares of irrigated sawah. From February 22 to 25, Mr. Adams reviewed the program and provided assistance and guidance to Mr. C. Lizardo, Provincial Irrigation Engineer for Aceh and North Sumatra. A field visit was made to Subproject Risma Duma (1522 ha) which is not functional due to weir failure and farmer problems.

During the period from February 23 to 24, 1981, Mr. R.E. Dixon, Area Engineer, Ir. Wahyu A., Irrigation Engineer, Ir. Gunawan W., Civil Engineer, USAID, Jakarta and Mr. Rustanto, Directorate of Irrigation, Jakarta, visited Central Sulawesi where they met with the Provincial Chief of Water Resources and Sederhana staff. Sederhana subprojects were inspected for reimbursement by USAID. Ir. Gunawan and Mr. Rustanto continued to inspect Sederhana subprojects in Central Sulawesi until March 5, 1981. In the meantime, Mr. R.E. Dixon and Ir. Wahyu A. visited North Sulawesi from February 25 to 27, 1981 and held meetings with the Provincial Public Works Chief of Water Resources and Sederhana Staff regarding subproject certification, reimbursement, evaluation, and monitoring. Discussions were held with Mr. K.F. Jeng, Provincial Agricultural Engineer, Ir. Siwi H.F., Agricultural Engineer and Mr. Monitja, Chief of Plant Protection, Manado.

From February 26 to 28, 1981 the Resident Manager visited South Kalimantan Province to review the progress of the Provincial Irrigation Engineer stationed in Banjarmasin.

Representatives of Sinotech, Sangkuriang and I.D. Consultants visited the office of the Consultants during the period.

The Assistant Resident Manager prepared a scope of work and work schedule for the Short-Term assignment, "Office Management and Documentation Specialist", requested by the Chief of the Sub-Directorate of Construction Management II, to develop and implement a system for cataloging, storing and retrieving Sederhana documents and correspondence.

The Assistant Resident Manager prepared a scope of work, work schedule, cost estimate and individual consulting services agreement for the short-term assignment, "Data Monitoring and Evaluation Specialist", at the request of USAID.

The Resident Manager and Assistant Resident Manager provided assistance to the DGWRD and DGFC in gathering materials and organizing the overseas training program for Sederhana Program staff.

3.2 PROGRAM MONITORING

Subproject monitoring continued during this period with updated progress and data sheets being transmitted to DGWRD, Jakarta. Monitoring is conducted only for active subprojects. The number of provinces having active subprojects and the number for which monitoring has been initiated are presented below:

<u>Program Year</u>	<u>Number of Provinces</u>		
	<u>With Active Subprojects</u>	<u>Monitoring Implemented</u>	<u>Monitoring Submitted this Month</u>
1976/77	3	3	2
1977/78	4	4	3
1978/79	15	14	8
1979/80	23	23	19
1980/81	23	23	19

Table III-1 presents the status of the December submittals from each Province for each program year.

3.3 MEETINGS

The Consultants held discussions or attended meetings during the period as follows:

- On February 2, 1981, Mr. C.E. Aksamit, Resident Manager, Mr. B.C. Ferguson, Assistant Resident Manager, and Mr. G.E. Kristeller, Data Monitoring and Evaluation Specialist, met with Drs. Pintor Tambunan, Sub-Directorate of P4 Planning and Programming, to discuss Mr. Kristeller's assignment to the Sederhana Program.
- On February 2, 1981, Mr. B.C. Ferguson, Assistant Resident Manager, met with Mr. D. Warner, Sederhana Project Engineer, regarding the status of Sederhana I Subprojects.

- On February 2, 1981, Mr. B.C. Ferguson, Assistant Resident Manager, met with Mr. W.J. Ackerman, Sederhana Project Officer, regarding the assignment of Mr. G.E. Kristeller, Data Monitoring and Evaluation Specialist, to the Sederhana Program.
- On February 3, 1981, Mr. Ferguson and Mr. Kristeller met again with Drs. Tambunan to discuss the scope of work and schedule for Mr. Kristeller's assignment.
- Mr. R.T. Edwards, Ir. Ibnu Mustari and Ir. Aris Wibawa joined the meeting of DGFC with USAID and Ford Foundation representatives on February 5, 1981 at the Pasar Minggu office. Beside discussing the organization and funding for the High Performance Irrigation System (HPIS) program, it was decided that non-Action Research subprojects should be considered for this program. Two provinces, Lampung and West Nusa Tenggara, were selected for a team to visit next month to determine criteria for the final selection of the subprojects for the HPIS program.
- Discussions were held on February 4, 9 and 20, 1981 between representatives of DGFC and the Resident Manager concerning the Consultants work programs and administrative matters.
- The Resident Manager met with the USAID Sederhana Project Officer on February 11, 1981 concerning proposed short-term assignments of Consultants and other matter concerning the project.
- The Resident Manager and Assistant Resident Manager met with Mr. Mamat Ismail, Chief of Sub-Directorate Construction Management II and members of his staff on February 12 and 14, 1981 on matters concerning the proposed short-term assignment of a Office Management and Documentation Specialist in the Jakarta Office.
- Messrs. Edwards, Mustari, Wibawa and Schoenleber attended a meeting of the Sub-Directorate, Water Management with USAID and Ford Foundation representatives on February 26, 1981, at the new office of the Directorate, Agricultural Area Development (DAAD), Pasar Minggu. The main topic discussed was a proposed national meeting the last of March in Jakarta of the DAAD staff and Provincial Action Research staffs. Budgeting matters concerning the HPIS program were also discussed.

TABLE III - 1
STATUS OF MONITORING PROGRAM
FEBRUARY 1981

PROVINCE	PROGRAM YEAR				
	1976/77	1977/78	1978/79	1979/80	1980/81
Aceh	-	-	Complete	Complete	Partial
North Sumatra *	-	Complete	Complete	Complete	Complete
West Sumatra *	-	-	Complete	Complete	Complete
Riau	-	Complete	Complete	Complete	Complete
Jambi	Complete	-	Complete	Complete	Complete
South Sumatra *	Complete	Complete	NS	Complete	Complete
Bengkulu	-	-	NS	Partial	Partial
Lampung *	-	-	Complete	Complete	Complete
West Java *	-	-	NS	Partial	Complete
Central Java	-	-	NS	NS	NS
D.I. Yogyakarta	-	-	-	Partial	Complete
East Java	-	-	-	NS	NS
West Kalimantan	-	-	NS	NS	NS
Central Kalimantan	NS	-	NS	NS	NS
South Kalimantan *	-	-	-	Complete	Complete
East Kalimantan	-	NS	Partial	Complete	Complete
North Sulawesi *	-	-	-	Complete	Complete
Central Sulawesi	-	-	-	Complete	Complete
South Sulawesi *	-	-	Complete	Complete	Complete
Southeast Sulawesi	-	-	-	Complete	Complete
Bali	-	-	-	-	-
West Nusa Tenggara *	-	-	-	Partial	Complete
East Nusa Tenggara	-	-	-	Complete	Partial
Maluku	-	-	NS	Complete	Partial

* designates home province
 - designates not required
 NS designates not submitted

IV. IRRIGATION ENGINEERING ACTIVITIES

Irrigation engineering activities include the activities of the Irrigation Design Engineers in Jakarta and Bandung and the Provincial Irrigation Engineers.

4.1 IRRIGATION ENGINEERING ACTIVITIES - JAKARTA OFFICE

The Assistant Resident Manager began the preparation of a Construction Supervision Guidelines, to be used by the Consultant's Provincial Irrigation Engineers and Provincial Public Works staff to upgrade construction supervision for Sederhana subprojects.

The Assistant Resident Manager began a review of the "Design Guidelines for Sederhana Irrigation Project" and other materials in preparation for the seminar for Sederhana Survey and Design Consultants and Provincial Sederhana staff to be held in Bandung from March 23 to 28, 1981. He also assisted the staff of the Sub-Directorate of Construction Management II in developing the schedule and list of participants for the seminar.

4.2 IRRIGATION DESIGN ACTIVITIES - BANDUNG OFFICE

A. Irrigation Design Activities - Irrigation Design Activities during the report period included the continuation of work on Technical Reports and meetings with four local survey and design consultants in Bandung. Mr. C.E. Aksamit, Resident Manager, visited the Bandung office from February 5 to 6, 1981, to review and give guidance to the Transfer of Knowledge Program.

The design computations were completed for Technical Paper No. 9, "Design of Chutes and Bench Flumes".

Translations were completed for the following technical papers:

- No. 5. Design of Gabion Weir Diversion Facilities.
- No. 6. Design of Masonry Weir Diversion Facilities.
- No. 7. Design of Canal Intake Structures.
- No. 8. Design of Drop Structures.

Meetings were held at the offices of four local survey and design consulting firms, attended by Mr. J.H. Cloward, Irrigation Design Engineer, Ir. A. Hananto, Irrigation Design Engineer, and the local consultant's staff. At these meetings, the "Design Guidelines for Sederhana Irrigation Project" were introduced to the local consultant's staff and discussed. Sederhana subprojects currently being designed by the local consultants were reviewed and assistance given regarding technical problems encountered. The four local consultants and the dates of the meetings were as follow:

- P.T. Tridjaja (February 9 to 12)
- P.T. Mezan (February 16 to 19)
- T.P. Tricon and P.T. Tritunggal (February 23 to 25)

B. Survey and Mapping Activities - Survey and Mapping Activities during the report period included assistance to the West Java and Lampung Provincial Public Works (DPU).

On February 3, 1981, Mr. J.D. Sabiniano, Irrigation Design Engineer, and Ir. D. Pratanata, Irrigation Design Engineer, visited the West Java DPU and provided assistance in checking survey work performed by local consultants. The West Java DPU has returned some unsatisfactory topographic maps to the local consultants for improvement, but due to lack of budget funds the DPU have not yet performed any field checks.

From February 9 to 18, 1981, Mr. J.D. Sabiniano and Ir. H. Gunawan, Irrigation Engineer, visited the Lampung Provincial Public Works (DPU) Office at Telukbetung and conducted survey upgrading sessions for DPU and contractors surveyors. The sessions were organized by Mr. D. Holloway, Provincial Irrigation Engineer, and Ir. Y. Robini, Chief of Irrigation for Lampung Province. During the meetings, every item in the Sederhana Survey and Mapping Specifications and the Survey Checking Guidelines was reviewed and discussed. Demonstrations of field checking of mapping and construction surveys consisted of actual field work on three Sederhana subprojects. The office sessions and field demonstrations were attended by 13 DPU staff and surveyors and two C.V. Isuda surveyors.

There is a need in Lampung Province for a full time Provincial Survey Team to do checking of topographic, construction and as-built surveys, especially

in the North and South Sections where there appear to be no experienced local surveyors.

4.3 IRRIGATION ENGINEERING ACTIVITIES - PROVINCIAL OFFICES

Nine Provincial Irrigation Engineers were at their stations during the reporting period. Their activities included design reviews; subproject inspections for construction, completion or special problems; certifications of completed works; and program monitoring. Tables IV-1, IV-2 and IV-3 present the subproject Inspections, Subproject Design Reviews and Subproject Certifications completed for all Provinces where these activities occurred. Table III-1 presents the status of the monitoring submittals for this month. Other activities of each Provincial Irrigation Engineer are discussed in the following subsections.

A. Medan Provincial Office (Aceh and North Sumatra)

The main concern in the Province of North Sumatra this month was subproject Risma Duma. On February 11, the upgrading of this subproject was discussed at the Provincial Public Works Offices in Medan at a meeting attended by:

Bupati, Kabupaten Dairi and staff;
Chief of Region I and staff;
Chief of Water Resources, DPU and staff;
Chief of Section, Dairi and staff;
Chief of Section IV. DOI/DPU Jakarta;
Provincial Irrigation Engineer, Medan;

From February 22 to 25, further discussions on this subproject were held between Mr. M.A.E. Adams, Area Engineer, Mr. C. Lizardo, Provincial Irrigation Engineer, and DPU staff, and a field visit was made to review the problem on site.

On February 21, a meeting was held between Mr. Lizardo and Mr. Hutasoit, Chief of Region II, at which the implementation of major and tertiary works in the Region were discussed.

B. Padang Provincial Office (West Sumatra and Riau)

During the month, special checks were carried out by the Survey Section of the West Sumatra Provincial Public Works on the proposed 1981/82 Subprojects Batang Coran (304 ha), Batang Sangki (531 ha) and Badnar Sangkir (1031 ha) in Kabupaten Limapuluh Kota, Tanah Datar and Agam.

On February 10, 1981, Mr. R.S.F. Lizardo, Provincial Irrigation Engineer, met with the Chief of Water Resources and his staff regarding the status of the Sederhana monitoring program; certification and reimbursement of Sederhana I Subprojects; and the implementation of the O & M program.

From February 11 to 13, 1981, Mr. Sutomo, BIE, Chief of Section IV, Sub-Directorate of Construction Management II, Directorate of Irrigation, Jakarta visited West Sumatra Province to evaluate the proposed 1981/82 program for construction and the status of the Sederhana Irrigation Projects including the monitoring program. Mr. Sutomo, accompanied by the Provincial Public Works Staff, visited Subprojects in Kabupaten Padang Pariaman and Solok.

From February 12 to 15, 1981, Mr. Lizardo visited the Riau Provincial Public Works Office in Pekanbaru and discussed the priority of the Sederhana monitoring program with the Chief of Water Resources and his staff and initiated an on-the-job training program for the completion of Sederhana Subproject monitoring.

From February 19 to 22, 1981, Mr. M.A.E. Adams, Area Engineer visited West Sumatra Province and discussed with Mr. Lizardo and his Counterparts the status of Subprojects not yet certified under Sederhana I; the special program; the status of tertiary works; and the present status of Sederhana Irrigation Systems in West Sumatra and Riau Provinces. Mr. Adams, accompanied by Mr. Lizardo and his Counterpart, visited Subproject Punggung Kasiek in Kabupaten Padang Pariaman.

From February 23, to 26, 1981, Mr. Lizardo visited the Riau Provincial Public Works office in Pekanbaru and discussed the status of subprojects with the Sederhana Engineer and staff. Mr. Lizardo and the Provincial Sederhana Staff visited subprojects in Kabupaten Kampar and Indragiri Hulu. On February 24, 1981, Mr. Lizardo, met with the Chief of Water Resources and his

staff and discussed the uncompleted Sederhana I subprojects and their associated problems and the implementation of tertiary works in the province of Riau.

C. Palembang Provincial Office (Jambi and South Sumatra)

From February 2 to 8, 1981, Mr. P.M. Clutario, Provincial Irrigation Engineer, made field visits to the Island Kabupatens Bangka and Belitung in South Sumatra. On February 2, Mr. Clutario met with the staff of the Provincial Public Works Bangka Section and discussed the status of and technical problems associated with 1979/80, 1980/81 Subproject Rias. On February 6, 1981, Mr. Clutario met with the staff of Provincial Public Works Belitung Section and discussed field observations of tertiary works implementation and the completed major works of 1978/79 Subproject Membalong. Subproject Perepat was given high priority in the subproject selection activity for Program Year 1982/83.

From February 15 to 22, 1981, Mr. Clutario visited the Provincial Public Works Office in Jambi and discussed the need for the tertiary works program implementation to be included in the monthly monitoring program. Field visits were made to subprojects located in Kabupatens Sarolangan-Bangko and Ma. Bungo.

From February 23 to 28, 1981, Mr. Satrio Judo of the USAID Jakarta Office visited South Sumatra Province and discussed with the Chief of Water Resources and Mr. Ngarim, BSE Sederhana Engineer the status of subprojects which will be inspected and the required data on the completed subprojects to be submitted to Jakarta Office for reimbursement and monitoring. Mr. Satrio, accompanied by Mr. Clutario and Mr. Ngarim, met with the Provincial MOA staff and visited subprojects in Kabupaten Lahat.

On February 28, 1981, Mr. Clutario met with Mr. Tarigan, Head of Tertiary Works for South Sumatra Province, and the monitoring staff, to discuss the Sederhana Tertiary Works Program implemented in South Sumatra and the need to include it in the monthly program.

D. Telukbetung Provincial Office (Bengkulu and Lampung)

From February 9 to 18, Mr. D.W. Holloway, Provincial Irrigation Engineer, assisted Mr. J.D. Sabiniano and Ir. Gunawan in the program to upgrade checking of surveying and mapping by the Lampung Provincial Public Works (DPU) staff. The office and field demonstrations were attended by 13 DPU staff members and two surveyors from local survey and design firms.

Mr. D.W. Holloway visited the Bengkulu DPU offices from February 22 to 27. Field trips for construction inspection and certification were made, and further advice was given to DPU staff on the importance of providing full coverage for the monthly monitoring program.

Other work during the month in Lampung province included design reviews and a site visit to Central Lampung to further the improvement of construction supervision.

E. Bandung Provincial Office (West Java, Central Java, D.I. Yogyakarta and East Java)

The principal activities of this office for the reporting period included making field inspection trips to completed and on-going subprojects; certification for completion and technical soundness; evaluation of construction problems; assisting Provincial Public Works Staff in various engineering activities and attending meetings.

From February 5 to 7, 1981, Mr. C.E. Aksamit, Resident Manager, visited the West Java Provincial Office to discuss various aspects of the project. On February 6, Mr. Aksamit and Mr. M.C. Christensen, Provincial Irrigation Engineer, visited the Sumedang Section, West Java Province, where they met with the DPU Section staff and discussed the special program to upgrade construction supervision in the Section.

On February 17, 1981, Mr. Aksamit and Mr. Christensen met with Mr. Adnan, West Java Provincial Public Works Sederhana Engineer, to discuss certification of subprojects for the 1976/77, 1977/78 Program Years, the program to upgrade construction supervision in the Sumedang Section, and other aspects of the Sederhana Project.

F. Banjarmasin Provincial Office (Central Kalimantan, South Kalimantan and East Kalimantan)

On February 10, 1981, Mr. O.L. Bulseco, Provincial Irrigation Engineer held discussions with the Chief of Water Resources and his staff pertaining to the acceleration and improvement of the Sederhana Project monitoring for the province.

On February 14, 1981, Mr. Bulseco met with Mr. Sukamto, Assistant Chief of O & M for South Kalimantan and his staff concerning matters relevant to O & M activity with special emphasis on the 'guidelines'.

On February 16, 1981, Mr. Bulseco attended the monthly meeting of Heads of Section which was presided over by Mr. Sugiharto, Chief of O & M, South Kalimantan.

On February 20, 1981, Mr. Bulseco held discussions with Mr. Sulbi, Head of Sederhana construction, with particular reference to the improvement of construction techniques. The need for guidelines for Construction Supervision was noted.

From February 26 to 28, 1981, Mr. C.E. Aksamit, Resident Manager was in Banjarmasin. He visited Mr. Tamdjid, Chief of Water Resources and discussed subproject selection and implementation, construction supervision, the monitoring program, reimbursements of subprojects under Sederhana I and as-built drawings. Mr. Aksamit, Mr. Bulseco and the Chief of Water Resources and his staff visited Subproject Sum-Sum in connection with the program to improve Operation and Maintenance on Sederhana Subprojects in South Kalimantan Province.

On February 28, 1981, Mr. Aksamit and Mr. Bulseco attended a meeting with Mr. Hally Dezar, Chief of Public Works at which matters concerning the implementation of Sederhana subprojects were discussed.

G. Manado Provincial Office (North Sulawesi, Central Sulawesi and Maluku)

On February 12, 1981, Mr. F.B. Regonas, Provincial Irrigation Engineer met with the Sederhana Engineer for Central Sulawesi and his staff and held detailed discussions regarding the Monitoring Program. Mr. Regonas provided assistance in the preparation of the monthly monitoring.

On February 18, 1981, Mr. Regonas met with the Chief of Public Works and Chief of Water Resources for Central Sulawesi. They discussed the program for checking survey and design contracts and results of the February 15 to 17 field inspection trip .

H. Ujung Pandang Provincial Office (South and Southeast Sulawesi)

Mr. C.F. Sayer, Provincial Irrigation Engineer met with the Provincial Public Works staff in South and Southeast Sulawesi. They discussed the Monitoring Program for 1981/82, updating of Subproject Data Sheets, and Certification of Program Year 1976/77, 1977/78 and 1978/79 subprojects.

Mr. D.E. Warner, Sederhana Project Engineer, USAID, visited the Ujung Pandang Provincial Office on February 9, 1981 where he met Ir. A. Yantahin, Chief of the Water Resources Division for South Sulawesi. He then visited Kendari and Kilaka Kabupatens in Southeast Sulawesi to inspect completed subprojects for reimbursement. He was accompanied by Mr. R.E. Dixon, Area Engineer, Ir. Wahyu A., Irrigation Engineer, and Mr. C.F. Sayer.

I. Mataram Provincial Office (Bali, East Nusa Tenggara and West Nusa Tenggara)

From February 10 to 12, 1981, Mr. L.P. Lim, Provincial Irrigation Engineer, visited East Nusa Tenggara Province for the purpose of Subproject construction inspections and certifications. Mr. Lim met with Ir. B.T.D. Panjaitan, Chief of Provincial Public Works, Ir. Hartono Tjokrosukarjo, Chief of Provincial Water Resources and the Provincial Public Works staff. They discussed the status of the uncertified 1976/77, 1977/78 and 1978/79 Program Year subprojects; tendering of the 1980/81 subprojects; construction problems in the 1979/80 program; monitoring; and requirements for subproject reimbursement.

TABLE IV - 1
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT INSPECTIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG	DATE	PURPOSE ^{1/}	
North Sumatra	Lau Simeme	4-I	79/80	170	170	1/29	Certification	Certifiable. Gabion weir improved with provision of concrete surfacing.
	Bandar Huta	11-I	79/80	200	200	1/30	Certification	Certifiable. Total area functional after completion of 1979/80 major works.
	Perbaungan	2-N	80/81	711	711	1/31	Construction	Satisfactory. Progress 40%. Realignment of secondary canal from BP6 to BP7 due to swampy area.
	Kp. Meranti/ Sei Balai	7-C	80/81	1185	350	2/1	Construction	Satisfactory. Progress 67%.
		NA	81/82	NA	NA	2/1	Subproject Selection	Improvement of gabion weir necessary. Proposed intake at left side of weir for Serba Jadi area.
	Padang Mahondang	1-N	80/81	1281	715	2/2	Construction	Satisfactory. Progress 57%. Free intake only. New area for irrigation with 70% rainfed.
	Perkotaan	1-C	80/81	844	172	2/17	Construction	Satisfactory. Progress 80%. Additional protective works required.
North Sumatra	Semangat Baris I	1-T	80/81	280	215	2/18	Construction	Gates to tertiary boxes over sophisticated and inadequate.

^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

TABLE IV - 1
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT INSPECTIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG	DATE	PURPOSE ^{1/}	
North Sumatra	Aek Mandosi I & II	2-C	79/80	893	0	2/19	Certification	Not certificable. Pending completion of 1980/81 works.
		3-C	80/81		325	2/19	Construction	River flood dike expensive
	Aek Mandosi III	NA	81/82	200	200	2/19	Subproject Selection	Construction of masonry weir 10 m. wide and improvement of irrigation canal constructed by farmers. Present water supply diverted by boulder weir.
	Sigohi Butuha	4-N	80/81	196	157	2/19	Construction & design review	Satisfactory. Progress 75%.
	Sihuar-suhar I	3-N	80/81	222	103	2/20	Certification	Not certifiable. Substantial design changes. Requires further study.
		NA	81/82		119	2/20	Design Review	Completion of Sisuhar-suhar I.
	Sisuha-suhar II	NA	81/82	NA	NA	2/20	Subproject Selection	No irrigation layout and construction drawings.
	Risma Duma	5-C	78/79	1522	72	2/24	Special Purpose	Evaluation.
		3-C	79/80		225	2/24	Special Purpose	Evaluation.
5-C		80/81		NA	2/24	Special Purpose and Design review	Evaluation of flume site upstream of damaged masonry weir.	

^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

TABLE IV - 1
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT INSPECTIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG	DATE	PURPOSE ^{1/}	
West Sumatra	Punggung Kasiek	2-C	79/80	4243	1130	2/21	Certification	Certifiable. Continuation of major works.
		1-C	80/81		0	2/21	Construction	Contract II completed. Contracts I and III still under construction.
Riau	Sasapan II	1-I	78/79	584	584	2/24	Special Purpose	Documentation.
		4-I	80/81		0	2/24	Certification	Certifiable. Improvement to major works.
		1-T	79/80		0	2/24	Construction	Tertiary works construction 66% complete.
	Tampan I-II	1-I	79/80	615	0	2/24	Special Purpose	Improvement works completed but canal system damaged and requires rehabilitation. Presently not functional.
	Rumbio Taluk	1-I	80/81	249	0	2/25	Certification	Certifiable. Improvement to major works.
	Taluk	11-I	78/79	75	75	2/25	Special Purpose	System functional.
		2-T	79/80		0	2/25	Construction	Tertiary works under construction..
	Kebon Durian	3	76/77	194	194	2/25	Special Purpose	Weir and canal system still functional.

^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

TABLE IV - 1
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT INSPECTIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS	
	NAME	NO.	YEAR	TOTAL	IRRIG	DATE	PURPOSE ^{1/}		
Riau	Penyesawan	NA	81/82	98	0	2/26	Design review	Proposed improvement to major works.	
	Tanjung Belit	4-N	76/77	112	112	2/26	Special Purpose	System functional.	
South Sumatra		3-T	79/80		0	2/26	Construction	Tertiary works under construction.	
	Membalong	15-I	78/79	333	232	2/4	Certification	Not certifiable. Land clearing required; Service area not yet occupied.	
	Perepat	NA	82/83	138	NA	2/4	Subproject Selection	Area potentially good for rice crop; embankment scheme to divert water for irrigation not required. Only division boxes needed.	
	Rias	2-N	79/80	747	369	2/7	Certification	Certifiable; Land clearing required; tertiary works in progress.	
			7-I	80/81		NA	2/7	Certification	Certifiable.
	Air Lematang II	6-I	78/79	164	125	2/25	Special Purpose	USAID visit. System functional.	
	Air Salak	7-I	78/79	130	130	2/25	Certification and special purpose	Certifiable. USAID visit. System functional.	

^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

TABLE IV - 1
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT INSPECTIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG	DATE	PURPOSE ^{1/}	
South Sumatra	Air Gohong	3-N	76/77	614	515	2/26	Special Purpose	USAID visit. Land development in progress; System functional.
		5-I	78/79		99	2/26	Special Purpose	
Jambi	Air Mana II	1-N	77/78	94	94	2/26	Special Purpose	USAID visit.
	Sei Rawang Ujo	26-I	78/79	144	86	2/18	Certification	Certifiable.
		17-I	80/81		0	2/18	Certification	Certifiable.
	Sei Lintang	1-N	79/80	150	150	2/19	Certification	Certifiable.
		12-I	80/81		0	2/19	Certification	Certifiable.
	Sei Nagan	18-I	78/79	337	337	2/19	Certification	Certifiable.
		16-I	80/81		0	2/19	Certification	Certifiable.
	Sei Ulak	15-I	80/81	489	265	2/19	Certification	Not certifiable work incomplete.
	Sei Teluk Panjang	5-I	78/79	44	NA	2/20	Special Purpose	Documentation.
		21-I	80/81			2/20	Construction	Progress 60%; improvement in canal layout needed.

^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

TABLE IV - 1
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT INSPECTIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG	DATE	PURPOSE ^{1/}	
Jambi	Sei Rantau Iki	20-I	80/81	70	NA	2/20	Construction	Progress 61%; area mostly in forest; land clearing required.
	Sei Sembilang	14-I	80/81	367	NA	2/21	Special Purpose	Unsatisfactory concreting works on weir.
	Sei Betuk	1-T	79/80	868	NA	2/21	Special Purpose	
		13-I	80/81		NA	2/21	Construction	Steel siphon nearly complete.
Lampung	Way Skipi Hilir	2	76/77	207	0	2/3	Design review	Weir site inspection.
	Way Getah Srimenanti	NA NA	74/75 75/76	73	73	2/4	Design review	Weir site inspection.
	Way Muara Mas	2-C	80/81	43	0	2/5	Construction	Borrow pits too close to canal.
	Way Ngison	4-N	79/80	950	0	2/13	Special Purpose	Weir without location stations of bench mark.
	Way Semah	NA	NA	NA	NA	2/14	Special Purpose	Survey check demonstration.
	Way Padang	NA	NA	NA	NA	2/16	Special Purpose	Survey check demonstration.

^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

TABLE IV - 1
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT INSPECTIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG	DATE	PURPOSE ^{1/}	
Bengkulu	Air Kemumu	10-I	80/81	339	339	2/25	Certification	Certifiable.
	Air Lais Lubuk Gedang	9-I	80/81	80	80	2/25	Certification	Certifiable.
	Air Petai	1-I	80/81	127	0	2/26	Construction	Section of marl and clay on main canal requires special treatment.
	Air Teras	2-I	80/81	345	0	2/26	Construction	Satisfactory.
West Java	Cisolok	NA	81/82	100	NA	2/3	Subproject Selection	Recommended for Survey & Design.
	Cikelat	NA	81/82	60	NA	2/3	Subproject Selection	Recommended for Survey & Design.
	Cihujung	NA	81/82	300	NA	2/3	Subproject Selection	Recommended for Survey & Design.
	Gunung Haur	9-N	80/81	217	NA	2/6	Construction	Near Completion.
	Curah Jero	NA	81/82	789	NA	2/16	Subproject Selection	Not recommended for Sederhana.
	Tojong	26-N	79/80	202	180	2/17	Certification	Not certifiable. Syphon damaged.

^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

TABLE IV - 1
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT INSPECTIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG	DATE	PURPOSE ^{1/}	
West Java	Cimanceng	27-N	79/80	323	0	2/17	Certification	Not certifiable. Project not completed.
	Cicamplang	25-N	79/80	145	145	2/18	Certification	Not certifiable. No weir embankment.
	Suraka Tiga	22-N	79/80	402	NA	2/26	Certification	Certifiable.
		4-I	79/80		NA	2/26	Certification	Certifiable.
		6-I	80/81		NA	2/26	Certification	Certifiable.
	Cileuleuy	5-N	78/79	158	NA	2/27	Certification	Certifiable.
South Kalimantan	Sum-Sum	1-I	80/81	272	272	2/18	O & M and Construction	Sederhana Special Program.
						2/27	Special Purpose	Water is abundant. Re-inspection with Resident Manager and Chief of Water Resources.
	Mandila	15-I	78/79	176	176	2/18	O & M	Abundant Water Supply but needs coordination by DPU, DIPERTA and Farmers.
	Pampain	14-I	78/79	818	818	2/19	O & M	Sederhana Special Program. Water is abundant System is ideal.
	Tatakan	3-I	78/79	101	101	2/19	O & M	Farm level development is accelerating. Water is abundant.

^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

TABLE IV - 1
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT INSPECTIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG	DATE	PURPOSE ^{1/}	
South Kalimantan	Mandiangan	1-N	79/80	100	100	2/21	0 & M	Water is abundant but only one farmer is in the area.
	Lurus	13-I	78/79	220	NA	2/21	0 & M	Scheduled improvement of the gabion weir due to excessive seepage.
	Jayau	12-I	78/79	161	NA	2/21	0 & M	Water is abundant but needs coordination of DIPERTA, PU and Farmers.
North Sulawesi	Alo	1	76/77	1642	915	2/9	Certification	Certifiable. Watersupply is inadequate during wet season; supplementary water supply weir under construction under Rehabilitation Program.
		3-I	78/79	-	0	2/9	Certification	Certifiable.
		1-I	79/80	-	0	2/9	Certification	Certifiable.
	Poso	8-I	80/81	268	0	2/10	Certification	Certifiable.
Central Sulawesi	Kasimbar	1-N	78/79	1081	31	2/15	Certification	Not certifiable.
		5-C	79/80	-	1050	2/15	Certification	Not certifiable.
		1-I	80/81	-	0	2/15	Construction	Weir improvement work 80% complete.
	Ongka	2-N	80/81	2157	0	2/16	Construction	In progress; 70% complete.

^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

TABLE IV - 1
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT INSPECTIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG	DATE	PURPOSE ^{1/}	
Central Sulawesi	Malino	8-I	80/81	1500	0	2/16	Construction	Sluiceway and intake gates yet to be installed.
	Mepanga	3-I	78/79	1293	0	2/16	Certification	Certifiable. Water supply inadequate during wet season; Link canal to supplement existing water supply is programmed under IFAD.
		7-I	80/81	-	0	2/16	Certification	Certifiable.
	Sidoan	NA	81/82	520	NA	2/17	Subproject Selection	Existing ricefield and available water supply.
Southeast Sulawesi	Tamboli	3-N	78/79	1398	419	2/11	Special Purpose	Previously certified. USAID inspection.
	Landon	1-N	78/79	842	842	2/12	Special Purpose	Previously certified. USAID inspection.
	Mowila II	6-N	79/80	415	415	2/12	Certification	Certifiable.
	Amoito	2-I	78/79	674	0	2/12	Certification	Certifiable.
West Nusa Tenggara	Mencongah	1-I	80/81	322	0	2/4	Certification	Certifiable.
	Buntopeng	3-I	78/79	225	0	2/5	Certification	Certifiable. Canal improvement work not yet completed.

^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

TABLE IV - 1
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT INSPECTIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG	DATE	PURPOSE ^{1/}	
East Nusa Tenggara	Wanga	4	79/80	586		2/13	Certification	Certifiable.
	Nain	2	76/77	366	13	2/17	Certification	Not certifiable. Minor weir repair work necessary.
	Nain	3-C	78/79	366	353	2/17	Certification	Not certifiable. Construction completed but no developed rice field.
	Tualeu	6	79/80	145	-	2/18	Certification	Not certifiable. Gabion weir destroyed by flood.
	Lurasik	5	77/78	399	-	2/18	Certification	Not certifiable. Gabion mattresses needed downstream of weir to dissipate energy.
	Lurasik	1-C	78/79	399	-	2/18	Certification	Not certifiable. Not functional because of canal damage.
	Lurasik	1-I	78/79	399	-	2/18	Construction	No activity.

^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

TABLE IV - 2
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT DESIGN REVIEWS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		REVIEW STATUS ^{1/}	COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG.		
North Sumatra	Kp. Meranti/Sei Balai	-	81/82	1185	NA	In progress	Gabion weir improvement work.
	Serba Jadi	6	80/81	600	NA	In progress	Survey and design of major works and tertiary works.
	Aek Sitandiang Sigoit	5	79/80	725	NA	Completed	Survey and design of major works.
	Perbaungan	2-N	80/81	711	711	Completed	Realignment of secondary canal.
	Sigohi Butuha	4-N	80/81	196	157	Completed	Proposed weir for 39 ha. Not necessary.
	Sisuhar-suhar	3-N	80/81	222	103	In progress	Revision of irrigation layout.
	Pentara	-	81/82	959	NA	In progress	
Riau	Penyesawan	NA	81/82	98	0	Completed	Improvement to major works satisfactory.
	Barabah	NA	81/82	300	0	Completed	Improvement to major works satisfactory.
Lampung	Way Skipi Hilir	2	76/77	207	0	Completed	
	Way Getah Srimenanti	NA	74/75 75/76	73	73	Completed	

^{1/} Report Received, In Progress or Completed.

TABLE IV - 2
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT DESIGN REVIEWS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		REVIEW STATUS ^{1/}	COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG.		
East Kalimantan	Selok Api	2-C	78/79	365	365	Completed	Recommend modification of weir design to improve stability.
South Kalimantan	Labuhan	NA	82/83	300	300	Completed	Recommend resiting of weir upstream to give improved foundation conditions.
	Suipin	NA	81/82	408	408	Completed	
South Sulawesi	Manalohe	1-I	78/79	481	NA	Completed	Satisfactory.
	Tondon Sumuluk	3-I	78/79	75	NA	Completed	Satisfactory.
	Wae Dulle	4-I	78/79	50	NA	Completed	Satisfactory.
	Calendu I	5-I	78/79	216	NA	Completed	Satisfactory.
	Calendu II	6-I	78/79	132	NA	Completed	Satisfactory.
	Bobo	8-I	78/79	50	NA	Completed	Satisfactory.
	Dunggarehang	9-I	78/79	65	NA	Completed	Satisfactory.
	Leworang Kanan	10-I	78/79	708	NA	Completed	Satisfactory.
	Takku	11-I	78/79	460	NA	Completed	Satisfactory.

^{1/} Report Received, In Progress or Completed.

TABLE .IV - 2
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT DESIGN REVIEWS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		REVIEW STATUS ^{1/}	COMMENTS	
	NAME	NO.	YEAR	TOTAL	IRRIG.			
Southeast Sulawesi	Roraya I	1-N	76/77	2382	NA	In progress		
		5-N	77/78		NA	In progress		
		1-C	78/79		NA	In progress		
West Nusa Tenggara	Amoito	2-I	78/79	674	NA	Completed		Satisfactory.
	Semalia	NA	NA	1686	NA	Completed		Top of chute sidewalls should be 30 cm above natural ground.
	Blanting	NA	NA	851	NA	Completed		
	Lolohan	NA	NA	717	NA	Completed		Weir should be stone masonry.

^{1/} Report Received, In Progress or Completed.

TABLE IV - 3
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT CERTIFICATIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		TYPE OF CERTIFICATION ^{1/}	COMMENTS
	NAME	NO.	YEAR	TOTAL	CERTIFIED		
North Sumatra	Lau Simeme	4-I	79/80	170	170	TSC and CCC	
	Bandar Huta	11-I	79/80	200	200	TSC and CCC	
West Sumatra	Punggung Kasiek	2-C	79/80	4243	1130	TSC and CCC	
Riau	Sasapan II	4-I	80/81	584	0	TSC and CCC	
	Rumbio Taluk	1-I	80/81	249	0	TSC and CCC	
Jambi	Sei Rawang Ujo	26-I	78/79	144	144	TSC and CCC	
	Sei Lintang	1-N	79/80	150	150	TSC and CCC	
	Sei Nagan	18-I	78/79	337	337	TSC and CCC	
South Sumatra	Air Salak	7-I	78/79	130	130	TSC and CCC	
	Membalong	15-I	78/79	333	89	TSC and CCC	
	Rias	2-N	79/80	747	369	TSC and CCC	

^{1/} Report TSC for Technical Soundness Certification and CCC for Completion of Construction Certification.

TABLE IV - 3
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT CERTIFICATIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		TYPE OF CERTIFICATION ^{1/}	COMMENTS
	NAME	NO.	YEAR	TOTAL	CERTIFIED		
Bengkulu	Air Kemumu	10-I	80/81	302	0	TSC and CCC	Needs O & M Program
	Air Lais Lubuk Gedang	9-I	80/81	80	0	TSC and CCC	
North Sulawesi	Ranotuana	5-N	79/80	188	188	TSC and CCC	Water supply is inadequate during wet season. Provision of supplementary water supply in hand under Rehabilitation program.
	Poso	8-I	80/81	268	0	TSC and CCC	
	Alo	1-N	76/77	1642	915	TSC and CCC	
		3-I	78/79	-	0	TSC and CCC	
Central Sulawesi	Nepanga	1-I	79/80	-	0	TSC and CCC	
		3-I	78/79	1293	0	TSC and CCC	
		7-I	80/81	-	0	TSC and CCC	
Southeast Sulawesi	Mowila II	6-N	79/80	415	415	TSC and CCC	System is functional.
	Amoito	2-I	78/79	674	-	TSC and CCC	

^{1/} Report TSC for Technical Soundness Certification and CCC for Completion of Construction Certification.

TABLE IV - 3
IRRIGATION ENGINEERING ACTIVITIES
SUB-PROJECT CERTIFICATIONS
FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		TYPE OF CERTIFICATION ^{1/}	COMMENTS
	NAME	NO.	YEAR	TOTAL	CERTIFIED		
West Nusa Tenggara	Mencongah	1-I	80/81	322	0	TSC and CCC	Water User's Association should be formed.
	Buntopeng	3-I	78/79	225	141	TSC and CCC	Improvement of canal will be undertaken by O & M.
	Wanga	4	79/80	586	356	TSC and CCC	No developed ricefield on the right side area of the system.

^{1/} Report TSC for Technical Soundness Certification and CCC for Completion of Construction Certification.

V. AGRICULTURAL ACTIVITIES

Agricultural activities include those of the Agricultural Coordinator and his staff in Pasar Minggu (Jakarta) and the activities of the seven Regional Agricultural Advisory Teams covering 23 provinces.

5.1 AGRICULTURAL ACTIVITIES - PASAR MINGGU

On February 5, 1981, Mr. J.Y. Hsu, Water User Association Advisor, met with the DIPERTA staff, Bali Province, for visiting Sederhana Subproject Peneng to observe and review the organization and activities of a Subak Irrigation System. On February 6, 1981, Mr. Hsu met with the Action Research staff of Udayana University, Denpasar, for discussing results and problems of their program in Bali.

Mr. S.M. Lee, Land Development Engineer, Mr. W.J. Shoenleber, Agricultural Engineer, and the Bandung Regional Team, met with four contracting firms in Bandung to give advice and assistance with survey and design of rice field forming. They met with staff from P.T. Iso Iki on February 11, 1981; with C.V. Hanako and C.V. Sangga Teknik on February 11, 1981; and with P.T. Hegar Daya on February 12, 1981. Currently, there are 12 contracting firms in Bandung doing land development survey and design. The firms contracted indicated they would like to have a seminar on land development in Bandung sometime in April, 1981.

During this report period, Mr. Lee prepared a guideline paper "Consultants Services for Concentration Project Implementation Units (UPP) and Focusing Points" for use by the Regional Advisory Teams in carrying out their land development program.

Also during this report period, Mr. Lee worked with the DGFC Land Development staff, Pasar Minggu, on standards and criteria of rice field forming. A method of staking out rice field plots by the use of the land level was demonstrated.

5.2 AGRICULTURAL ACTIVITIES - REGIONAL OFFICE

The MOA Training Courses, Subproject Inspections, Subproject Design Reviews and Subproject Certifications completed during the reporting period by Regional Agricultural Advisory Teams are presented in Table V-1 through V-4.

The main activities of the Regional Agricultural Advisory Teams during the period were to assist the Provincial Agricultural Services (DIPERTA) with the following programs:

- Completion of On-Farm Works of Subprojects from Previous Years.
- The Selection of the Model Farms under the Action Research Program.
- Implementation of the Monthly Monitoring Program.
- Formation of Water User Association.
- The Land Development Program.
- MOA Training Program.
- Field Inspection of On-Going Construction Work.
- Design Review of On-Farm Works.
- Certification of Survey and Design, Completion of Construction of On-Farm Works and Formation of Water User Associations.

a. Medan Regional Office (Aceh, North and West Sumatra and Riau)

From February 9 to 11, 1981, the Regional Team was split into two groups; one group went to Aceh Province and the other group went to West Sumatra to give special assistance to the DIPERTA staff with their monthly monitoring program for January.

From February 18 to 20, 1981, Ir. Kusnadi A., Chief, Sub-Directorate of Water Management, Mr. S. Yunan, Administrator for Foreign Aid, and Mr. Dachian W., Head of Land Development Section, all from DGFC, Pasar Minggu, visited Medan for completing the tendering of the on-farm construction contracts for five subprojects.

On February 20, 1981, Mr. C.W. Shih, Team Leader and his staff joined a discussion of the above DGFC staff with Ir. Kasim, Chief of Water Resources, and Ir. B. Sianipar, Engineer, both from Public Works. The meeting concerned subprojects with the survey and design of on-farm work done by Public

Works and the construction will possibly be done by DIPERTA.

From February 26 to 28, 1981, the Regional Team made a field trip to Aceh Province at the request of Ir. M. Nur Gaybita, Inspector, DIPERTA, Aceh, for checking the implementation of Land Development Program and give technical assistance with survey and design.

B. Palembang Regional Office (Jambi, South Sumatra and Bengkulu)

Mr. M.M. Hammond, Team Leader, and Ir. Moch. Noer, Agricultural Engineer, visited the districts of Bangka, Belitung and Baturaja from February 1 to 6, 1981, for inspection of subprojects and discussions with the District Agricultural Service staff. From February 1 to 3, 1981, the team joined Mr. P. Clutario, Provincial Irrigation Engineer, for visiting Bangka District. Only one Sederhana subproject is in this district, with an area of 747 ha, of which 369 ha has been developed and 100 ha is now in rice production. An additional 215 ha is to be developed in the future and the remaining 163 ha is swampland. From February 3 to 6, 1981, the team visited Belitung District for inspection of one Sederhana subproject which has several problems. Only 3 ha of this subproject is planted to rice. Also visited was the proposed subproject at Prapat which has existing paddy of about 100 ha, irrigated from 2 drainage canals. With construction of a complete irrigation system, the paddy area could be trebled.

Mr. A.H. Lo, Agricultural Engineer and Ir. Hilmar Hamzah, Agriculturist, visited Bengkulu Province from February 9 to 13, 1981, to review progress of on-farm works and to inspect on-farm construction in Rejang Lebong District.

From February 16 to 18, 1981, Mr. Lo and Ir. Hilmar, accompanied by Mr. S.M. Lee, Land Development Engineer, visited the UPP office in Lubuk Linggau, South Sumatra to give advice and assistance with their program. This UPP is fully staffed with an office fairly well equipped. Presently, there is not much progress on design and construction because of the rains. The UPP subproject Air Satan was inspected for conditions in the field. The proposed areas for Program Year 1979/80 are 300 ha for survey and design and 86 ha for construction. The major works is complete and the tertiary canal

is under construction by Public Works.

On February 19, 1981, the Regional Team and Mr. Lee attended the first Provincial Land Development meeting in Palembang. The Consultants presented their program of assistance with training, implementation, evaluation and monitoring the progress of the UPP program.

C. Telukbetung Regional Office (Lampung)

On February 2 and 3, 1981, Mr. R.B. Maza, Team Leader, prepared a technical paper on "Water User Associations" concerning organization, development and maintenance for use in the Regional training program.

Field trips were made to the following Land Development Units (UPP): UPP No. IV, Padang Ratu, Central Lampung on February 4, 1981; UPP No. I, Tanjung Iman, North Lampung, on February 5, 1981; and UPP No. III, Palas, South Lampung on February 7, 1981. Mr. R.B. Maza gave assistance with construction problems, preparation of situation maps and completion of the monthly Land Development Monitoring Report forms.

During the week of February 9, the Regional Team assisted the DIPERTA staff with the preparation of their monthly monitoring report; gave comments and recommendations on University of Lampung outline for the Action Research Program (ARP) final report to DIPERTA by the ARP Team; met with Messrs. D. Holloway and J. Sabiniano, IECO Consultants for Public Works concerning the checking of construction progress by use of surveying instruments; and discussed field trip report findings with Ir. Yusfian Yusuf, Chief, Plant Protection Section, DIPERTA.

On February 14, 1981, the Regional Team had a meeting with Ir. Semito Setjotenojo, Director, Agricultural Area Development (DAAD) and Ir. Otje S. R. Bratamidjaja, Chief, Sub-Directorate Land Development, concerning the Sederhana program and its progress in Lampung. From February 16 to 18, the Regional Team made an inspection trip to UPP No. IV for reviewing and assisting the UPP staff with their program. It was suggested that a sign-board be

installed for each land development block; that the completed area of land development which did not have credit pre-financing should be reported to DIPERTA; that the on-farm road should be repaired and maintained properly; and that the initial stages of WUA activities should be introduced to the farmers.

From February 24 to 27, 1981, the Regional Team made field trips to the districts of South, Central and North Lampung for discussions with the local agricultural staff and visit subprojects.

On February 28, 1981, Mr. R.B. Maza attended the monthly staff meeting of UPP No. IV, Padang Ratu, Central Lampung.

D. Bandung Regional Office (West and Central Java and D.I. Yogyakarta)

During the visit of S.M. Lee, Land Development Engineer, to Bandung from February 10 to 13, 1981, the Land Development Program was discussed. After meeting with four contracting firms in Bandung, it appears that a seminar or working session conducted by the consultants for all the contractors in Bandung doing land development work is desirable and would be quite productive.

On February 6, 7, 26 and 27, 1981, Mr. W.J. Schoenleber, Team Leader, worked with Mr. Lee on his guidelines on land development to be used by the Regional Agricultural Advisory Teams. Also, assistance was given in preparing a report on a critical review of the manual for land development which was requested by the DGFC staff.

The Regional Team visited four subprojects in the districts of Pandeglang and Lebak, West Java, from February 16 to 21, 1981. Assistance and advice were given on on-farm works construction and WUA organization. The good results of the extension work (intensification) on the Cidahu Girang subproject is very dramatic and in sharp contrast to the poor condition of the nearby Cukang Sadang subproject. The Cukang Sadang subproject requires some special assistance from the Regional Team to upgrade the WUA activities.

E. Manado Regional Office (North Sulawesi)

During the week of February 2, 1981, the Regional Team gave assistance to the DIPERTA staff, Manado, in setting up the master sheet of Monthly Monitoring forms especially for land development subprojects.

On February 10, 1981, the Regional Team joined a meeting for Extension Field Workers (PPL) held by Ir. Sihombing, Inspector, DIPERTA, and Mr. Monitja, Chief, Plant Protection Division. The following topics were discussed by the Team: (1) Certification activities; (2) How to upgrade the WUA; (3) Making cropping patterns; (4) How to accelerate the design work on land development subprojects.

From February 11 to 14, 1981, the Regional Team made a field trip to Gorontalo District for inspecting three subprojects. With staff from DIPERTA and Public Works, Subprojects Alo (457 ha) and Mololahu (44 ha) were inspected for certification of On-Farm Works. Alo was not certifiable because the system does not function properly even though the structures are completed. Also noted was that the irrigated area is being decreased because silting of the major works has reduced the water supply. The farmers in this area want to grow two or more crops of rice per year.

On February 18, 1981, the Regional Team met with Ir. Ike Hikmat, Design Engineer for P.T. Hegar Daya, contractor for land development in North Sulawesi. Mr. K.F. Jeng, Team Leader, reviewed the design maps for subproject Kasingolan and suggest the following should be included: (1) An index; (2) Follow the coordinate system; (3) A small scale map to show the complete system; (4) A report explaining survey procedures and design notes; and (5) The calculation data about land classification, earth works, cost analysis, etc.

On February 18 and 21, 1981, Mr. K.F. Jeng, assisted by Ir. Harry Siwi, Agricultural Engineer, gave a two hour lecture at PPL Training Course in the Districts of Bolaang Mongodow and Minahasa.

On February 25, 1981, the Regional Team with Mr. Monintja, DIPERTA, Ir. Suharto, Public Works, and the University Action Research Team made a field

inspection of two subprojects. The team from Sam Ratulangi University, Manado, included Drs. F. As. Bakar, Team Leader and Dean of the Economic Faculty, Drs. Soedarkam, Economist, and Ir. Wantasen, Agricultural Engineer. The organization of the WUA and the major works and the on-farm works problems were discussed.

F. Ujung Pandang Regional Office (Central, South and Southeast Sulawesi and Maluku)

During this report period, the Regional Team made field inspections of seven subprojects for WUA work and certification and two subprojects for land development in South Sulawesi. Assistance was given the UPP staff in methods of checking contractors survey techniques and data, interpretation of land development design work and checking the accuracy of the construction work.

From February 3 to 5, 1981, team members visited Central and Southeast Sulawesi to assist the DIPERTA staff with their monthly monitoring program. One subproject in Southeast Sulawesi was checked for certification of on-farm works during the visit.

On February 24, 1981, Mr. S.D. Scully, Team Leader, and Ir. Sidharto, Agricultural Engineer, met with Ir. Burhanuddin, Public Works Sederhana Project Implementation Section for clarification of details on the WUA certification.

G. Surabaya Regional Office (East Java, Bali, West and East Nusa Tenggara)

Concentrated attention was given by the Regional Team this month on the Land Development Program and for upgrading the WUA in the home province, West Nusa Tenggara. Mr. T. Soeginato, Agricultural Engineer, accompanied Mr. J.Y. Hsu, WUA Advisor on a visit to three subprojects near Mataram from February 3 to 5, 1981.

From February 9 to 14, 1981, Mr. J.Y. Hsu, Team Leader, made a field inspection trip to the islands of Lombok and Sumabawa of West Nusa Tenggara Province. Advice and assistance was given to four UPP staff regarding improvement of survey, design and cost estimates for carrying out their land development work.

During the week of February 9, 1981, Ir. T. Soegiarto and Ir. Son Suwasono, Counterpart gave advise and assistance to DIPERTA staffs of Bali and East Nusa Tenggara in establishing their Monthly Monitoring Program. Also, the land development Subproject Obor, in East Nusa Tenggara was visited.

TABLE V - 1
 AGRICULTURAL ACTIVITIES
 MINISTRY OF AGRICULTURE TRAINING COURSES
 FEBRUARY, 1981

COURSE TITLE	COURSE DATE	COURSE LOCATION (District and Province)	PARTICIPANTS		COMMENTS
			NO.	CLASSIFICATION	
Agricultural Extension Program	6-31 Jan. 1981	Manado, North Sulawesi	32	Extension Field workers	Mr. Jeng gave a 2 hour lecture on January 14.
Water User Association Program	20-24 Jan. 1981	Minahasa, North Sulawesi	25	Chiefs and staffs of WUA's	Mr. Jeng gave a 2 hour lecture on January 20.
Water User Association Program	17-19 Feb. 1981	Bolaang, North Sulawesi	25	Chiefs of staffs of WUA's	Mr. Jeng gave a 2 hour lecture on February 18.
Agricultural Extension Program	10 Feb.-5 Mar. 1981	Manado, North Sulawesi	30	Extension Field Workers	Mr. Jeng gave a 2 hour lecture on February 21.
Water Management & Paddy Field Forming	23-29 Feb. 1981	Pangkep, South Sulawesi	25	WUA Officials	
Water Management & Paddy Field Forming	14-20 Feb. 1981	Barru, South Sulawesi	25	WUA Officials	

TABLE V - 2
 AGRICULTURAL ACTIVITIES
 SUB-PROJECT INSPECTIONS
 FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS <u>2/</u>
	NAME	NO.	YEAR	TOTAL	IRRIG.	DATE	PURPOSE <u>1/</u>	
South Sumatra	Pilla Ranau	9	76/77	75	75	2/12	Special Purpose	Action Research Program & WUA. O & M required.
	Mebalong	8	77/78	333	3	2/4	Special Purpose	Land development inspection.
Bengkulu	Air Kelingi	21	76/77	119	50	2/11	Construction	More on-farm work required.
	Air Simpang	6	78/79	53	0	2/12	Construction	Main canal broken.
	Air Durian	9	78/79	41	0	2/11	Construction	More on-farm work required.
Lampung	Way Jagang	3	76/77	205	200	2/5	Certification	On-Farm Works. Not certifiable.
West Java	Cukang Sadang	4	76/77	237	237	2/17	Certification	On-Farm Works. Not certifiable. No tertiary canals constructed.
	Bojong Kakak	3	76/77	131	131	2/18	Certification	On-Farm Works. Certifiable. Construction completed.
	Cidahu Girang	1	76/77	138	138	2/19	Certification	On-Farm Works. Certifiable. Construction completed.
	Bungbas	2	76/77	200	121	2/20	Construction	On-Farm Works. Construction not started.

TABLE V - 2
 Sheet 1 of 4

1/ Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

2/ Report On-Farm Works, Water User Association, or Action Research Program.

TABLE V - 2
 AGRICULTURAL ACTIVITIES
 SUB-PROJECT INSPECTIONS
 FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS <u>2/</u>
	NAME	NO.	YEAR	TOTAL	IRRIG.	DATE	PURPOSE <u>1/</u>	
North Sulawesi	Alo	1	76/77	1642	750	2/11	Certification	On-Farm Works. Not certifiable.
	Posso	2	76/77	268	179	2/9	Certification	On-Farm Works. Certifiable.
	Mololahu	3	76/77	499	530	2/12	Certification	On-Farm Works. Not certifiable. 36 ha new rice field are completed.
	Moayat	4	76/77	1959	500	2/22	Certification	On-Farm Works. Not certifiable.
	Paniki Buha	5	77/78	381	15	2/23	Certification	On-Farm Works. Not certifiable.
	Karowa	7	77/78	216	216	2/20	Certification	On-Farm Works. Certifiable.
	Lindangan	8	77/78	158	158	2/24	Certification	On-Farm Works. Certifiable.
	Pentu	9	77/78	231	199	2/20	Certification	On-Farm Works. Not certifiable. 34 ha new rice field are completed.
	Kaluntai	10	77/78	303	107	2/21	Certification	On-Farm Works. Certifiable.
	South Sulawesi	Babana	14	76/77	413	413	2/5	Special Purpose

TABLE V - 2
 Sheet 2 of 4

1/ Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

2/ Report On-Farm Works, Water User Association, or Action Research Program.

TABLE V - 2
 AGRICULTURAL ACTIVITIES
 SUB-PROJECT INSPECTIONS
 FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS ^{2/}
	NAME	NO.	YEAR	TOTAL	IRRIG.	DATE	PURPOSE ^{1/}	
South Sulawesi	Aparang II	18	76/77	500	500	2/6	Special Purpose	Land Development and Water User Association.
	Nonongan	1	76/77	241	207	2/26	Certification	WUA Active & Certifiable. Weir is damaged again.
	Sibata Palangi	2	76/77	164	164	2/26	Certification	On-Farm Works. Not certifiable. Tertiary system cancelled by DIPERTA.
	Wae Dalle	4	78/79	50	50	2/27	Certification	WUA. Not certifiable. No WUA officials available for meeting.
	Tondon Sumuluk	3	78/79	75	75	2/27	Certification	WUA. Not certifiable. No WUA officials available for meeting.
	Baraka	8	76/77	195	125	2/25	Special Purpose	Weir not functional. Land development work transferred to other area.
	Panyili	19	76/77	298	50	2/11	Construction	On-Farm Works. Just started.
South East Sulawesi	Amoito	1	77/78	674	248	2/26	Certification	On-Farm Works. Certifiable. Area served is 248 ha.

^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.

^{2/} Report On-Farm Works, Water User Association, or Action Research Program.

TABLE V - 2
 AGRICULTURAL ACTIVITIES
 SUB-PROJECT INSPECTIONS
 FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		INSPECTION		COMMENTS ^{2/}
	NAME	NO.	YEAR	TOTAL	IRRIG.	DATE	PURPOSE ^{1/}	
West Nusa Tenggara	Sidemen	3	76/77	626	300	2/4	Special Purpose	WUA operating normally, needs further training and assistance.
	Ireng Daya	4	76/77	430	300	2/4	Special Purpose	Action Research Program; WUA operating poorly.
	Penimbang	6	77/78	656	235	2/4	Special Purpose	Action Research Program. WUA operating normally.
	Pongal	2	76/77	1000	397	2/10	Certification	On-Farm Works. Certifiable.
	Torusa I	5	77/78	395	335	2/12	Certification	On-Farm Works. Certifiable.
	Ncoha	3	77/78	522	447	2/13	Construction	On-Farm Works. Construction is still far from completion though 100% completion has been reported.
	Tarusan	4	79/80	193	185	2/12	Land Development	185 ha. completed.
	Pongal	5	79/80	200	200	2/10	Land Development	200 ha. completed.
East Nusa Tenggara	Obor	4-I	79/80	200	198	2/11	Land Development	3 ha. completed.

- ^{1/} Report Subproject Selection, Design Review, Construction, Certification, or Special Purpose.
^{2/} Report On-Farm Works, Water User Association, or Action Research Program.

TABLE V - 3
 AGRICULTURAL ACTIVITIES
 SUB-PROJECT DESIGN REVIEWS
 FEBRUARY, 1981

PROVINCE	SUBPROJECT			AREA (HA)		REVIEW STATUS ^{1/}	COMMENTS
	NAME	NO.	YEAR	TOTAL	IRRIG.		
Lampung	Way Lunik Panengahan	6	77/78	353	-	Received	
	Way Binjai	9	77/78	261	-	Received	

^{1/} Report Received, In Progress or Completed.

TABLE V - 4
 AGRICULTURAL ACTIVITIES
 SUB-PROJECT CERTIFICATIONS
 FEBRUARY, 1981

PROVINCE	SUB-PROJECT			AREA (HA)		TYPE OF ^{1/} CERTIFICATION	COMMENTS
	NAME	NO.	YEAR	TOTAL	CERTIFIED		
North Sulawesi	Posso	2	76/77	268	179	CCC	
	Karowa	7	77/78	216	216	CCC	
	Lindangan	8	77/78	158	158	CCC	
	Kaluntai	10	77/78	303	107	CCC	
South Sulawesi	Biang Loe IV	12	76/77	450	401	WUA	
	Kajengjeng	16	76/77	500	523	WUA	
	Cakura	17	76/77	731	731	WUA	
	Biang Keke I	1	77/78	115	115	WUA	D.P.U. tertiary work soon to be completed.
	Biang Loe II	2	77/78	148	148	WUA	
	Leang-leang	6	77/78	640	640	WUA	D.P.U. tertiary work soon to be completed.
West Nusa Tenggara	Pongal	2	76/77	1000	397	CCC	

^{1/} Report CSD for Completion of Survey and Design, WUA for Water User's Association or CCC for Completion of Construction Certification.

TABLE V - 4
 AGRICULTURAL ACTIVITIES
 SUB-PROJECT CERTIFICATIONS
 FEBRUARY, 1981

PROVINCE	SUB-PROJECT			AREA (HA)		TYPE OF ^{1/} CERTIFICATION	COMMENTS
	NAME	NO.	YEAR	TOTAL	CERTIFIED		
West Nusa Tenggara	Torusa I	5	77/78	395	335	CCC	
East Nusa Tenggara	Way Manapu	6	76/77	165	165	WUA	
	Hae Kesak	8	76/77	485	485	WUA	
	Panon Diwal	10	76/77	312	312	WUA	

^{1/} Report CSD for Completion of Survey and Design, WUA for Water User's Association or CCC for Completion of Construction Certification.

CONSULTANTS PERSONNEL IN INDONESIA

<u>Name</u>	<u>Classification</u>	<u>Location</u>	<u>Arrival Date</u>	<u>Departure Date</u>
<u>EXPATRIATE PERSONNEL - IECO</u>				
<u>Long-Term Personnel</u>				
C.E. Aksamit	Resident Manager	Jakarta	10 Jul 80	
M.A.E. Adams	Area Engineer	Jakarta	10 Jul 80	
R.E. Dixon	Area Engineer	Jakarta	10 Jul 80	
J.H. Cloward	Irrig. Design Engr.	Bandung	10 Jul 80	
D.W. Holloway	Prov. Irrig. Engr.	Telukbetung	10 Jul 80	
J.D. Sabiniano	Irrig. Design Engr.	Bandung	10 Jul 80	
R.T. Edwards	Agri. Coordinator	Jakarta	14 Jul 80	
B.C. Ferguson	Asst. Res. Mgr.	Jakarta	20 Jul 80	
M.C. Christensen	Prov. Irrig. Engr.	Bandung	21 Jul 80	
O.L. Bulseco	Prov. Irrig. Engr.	Banjarmasin	31 Jul 80	
P.M. Clutario	Prov. Irrig. Engr.	Palembang	31 Jul 80	
L.P. Lim	Prov. Irrig. Engr.	Mataram	31 Jul 80	
C.S.F. Lizardo	Prov. Irrig. Engr.	Medan	31 Jul 80	
R.S.F. Lizardo	Prov. Irrig. Engr.	Padang	31 Jul 80	
F.B. Regonas	Prov. Irrig. Engr.	Manado	31 Jul 80	
S.D. Scully	Agriculturist	U. Pandang	6 Aug 80	
W.J. Schoenleber	Agricultural Engr.	Bandung	8 Aug 80	
M.M. Hammond	Agriculturist	Palembang	27 Aug 80	
C.F. Sayer	Prov. Irrig. Engr.	U. Pandang	7 Sep 80	
R.B. Maza	Agricultural Engr.	Telukbetung	16 Sep 80	
<u>Short-Term Personnel</u>				
H.R. Causing	Project Director	Jakarta	20 Oct 80	26 Oct 80

<u>Name</u>	<u>Classification</u>	<u>Location</u>	<u>Arrival Date</u>	<u>Departure Date</u>
<u>INDONESIAN PERSONNEL - SANGKURIANG (cont'd)</u>				
<u>Logistic Support Personnel</u>				
Abubakar S.	Administ. Officer	Jakarta	10 Jul 80	24 Jan 81
R.M. Bachrawi	Head Accountant	Jakarta	10 Jul 80	
Glempo S.	Office Mngr./Expdt.	Jakarta	10 Jul 80	
Benjamin W.	Accountant	Jakarta	10 Jul 80	
Sinta R.A.	Secretary/Typist	Jakarta	10 Jul 80	
N. Hermawati	Secretary/Typist	Jakarta	10 Jul 80	
Tiene M.	Clerk/Typist	Jakarta	10 Jul 80	
Afriarningsih	Clerk/Typist	Jakarta	10 Jul 80	
Marguita S.	Clerk/Typist	Bandung	10 Jul 80	18 Oct 80
Hartati Oemar	Clerk/Typist	Jakarta	31 Jul 80	
Dewi M.	Clerk/Typist	Jakarta	8 Oct 80	
Yasmin M.	Clerk/Typist	Bandung	15 Oct 80	

INDONESIAN PERSONNEL - INDRA DEVELOPMENT

Ir. I. Mustari	Agricultural Engr.	Jakarta	27 Oct 80	
Ir. T Soegianto	Agricultural Engr.	Surabaya	1 Nov 80	
Ir. Siwi H.F.	Agricultural Engr.	Manado	21 Nov 80	
Ir. M. Noer	Agricultural Engr.	Palembang	5 Nov 80	
Ir. Sidharta	Agricultural Engr.	Uj. Pandang	1 Nov 80	

COUNTERPART PERSONNELDGWRD PERSONNEL

Ir. Mamad Ismail	- Chief of Sub Dir. of Construction Management II
Sutomo BIE	- Chief of Section IV (Sumatra)
Drs. M.N. Mansyur	- Chief of Section V (Java & Kalimantan)
Syaefullah D. BIE	- Chief of Section VI (Sulawesi & Eastern Islands)
Drs. Slameto H.	- Chief of Section VII - ABLN Unit for Sederhana Project

PROVINCIAL PUBLIC WORKS - SEDERHANA ENGINEERS

Supardi BIE	- Banda Aceh	Syahroni BIE	- Pontianak
P. Sirait BIE	- Medan	Ir. Berti	- Palangkaray
Asminan BIE	- Padang	Ir. Fansuri, S.	- Banjarmasin
Jumadi BIE	- Pekanbaru	Moelyono BIE	- Samarinda
B.L. Toruan	- Jambi	R. Suatmadja BIE	- Manado
Suratno H.P. BIE	- Palembang	B. Darwono BIE	- Palu
Sutrasno BIE	- Telukbetung	Ir. Yantahin	- U. Pandang
Ir. Sutardi	- Bengkulu	S. Nuryadi BIE	- Kendari
Ir. Adnan S.	- Bandung	Agus BIE	- Mataram
Ir. Subekti K	- Semarang	Drs. D. Hariandja	- Kupang
Sutandiyono BIE	- Yogyakarta	Ir. Mardiyanto	- Ternate
Ir. Mayangkoro	- Surabaya		

DGFC PERSONNEL

Ir. Otje S.R. Bratamidjaja	- Chief of Sub Dir. of Land Development
Ir. Kusnadi Affandi	- Chief of Sub Dir. of Water Management
Mr. Syahrums Yunan	- Administrator of Foreign Aid
Ir. Aris Wibawa	- Consultants' Counterpart
Ir. Hussein Akhmad	- Consultants' Counterpart

PROVINCIAL AGRICULTURAL SERVICES - REGIONAL COUNTERPARTS

Ir. S.T.M. Sihaloho	- Medan
Ir. Nazir Lubis	- Palembang
Ir. Jawadi Chon	- Telukbetung
Ir. Sulaeman N.	- Bandung
Ir. Son Suwasono	- Surabaya
Ir. Syamsuddin S.	- Manado
Ir. D. Parrusengi	- Ujung Pandang

MAN MONTHS EXPENDED (INDONESIA)

Month	I E C O ^{1/}				S I N O T E C H ^{1/}				S A N G K U R I A N G				I N D R A D E V E L O P M E N T	
	Long - Term		Short - Term ^{2/}		Long - Term		Short - Term		Technical		Logistic Support		Technical	
	Monthly Total	Total Date	Monthly Total	Total Date	Monthly Total	Total Date	Monthly Total	Total Date	Monthly Total	Total Date	Monthly Total	Total Date	Monthly Total	Total Date
<u>1980</u>														
JUL ^{3/}	5.39	5.39	-	-	1.61	1.61	-	-	4.26	4.26	6.42	6.42	-	-
AUG	15.12	20.51	-	-	5.68	7.29	-	-	7.06	11.32	10.00	16.42	-	-
SEP	18.40	38.91	-	-	6.00	13.29	-	-	9.00	20.32	10.00	26.42	-	-
OCT	18.84	57.75	0.23	0.23	6.00	19.29	-	-	9.06	29.38	10.90	37.32	0.16	0.16
NOV	20.00	77.75	-	0.23	6.57	25.86	-	-	10.00	39.38	11.00	48.32	4.20	4.36
DEC	19.42	97.17	-	0.23	7.00	32.86	-	-	10.00	49.38	11.00	59.32	5.00	9.36
<u>1981</u>														
JAN	18.84	116.01	-	0.23	7.00	39.86	-	-	9.87	59.25	10.77	70.09	5.00	14.36
FEB	20.00	136.01	-	0.23	7.00	46.86	-	-	10.00	69.25	10.00	80.09	5.00	19.36

^{1/} Does not include travel time to and from Indonesia

^{3/} July 10-31

^{2/} Includes Project Director

BILLING STATUS - USAID DOLLAR ACCOUNT

BILL NO.	MONTH	SUBMITTED		APPROVED		REMARKS
		Date	Amount	Date	Amount	
1.	Jul. 1980	17 Oct 80	\$ 79,257.07	16 Jan 81	\$ 79,257.07	
2.	Aug. 1980	29 Oct 80	\$ 324,725.38	16 Jan 81	\$ 324,725.38	
3.	Sep. 1980	7 Nov 80	\$ 428,595.89	16 Jan 81	\$ 426,053.47	
4.	Oct. 1980	12 Dec 80	\$ 299,627.77	16 Jan 81	\$ 299,627.77	
5.	Nov. 1980	17 Jan 81	\$ 275,227.52	29 Jan 81	\$ 275,227.52	
6.	Dec. 1980	27 Feb 81	\$ 242,419.80			

BILLING STATUS - GOI RUPIAH ACCOUNT

BILL NO.	MONTH	SUBMITTED		APPROVED		REMARKS
		Date	Amount	Date	Amount	
1.	Jul. 1980	17 Nov 80	Rp. 1,204,104	12 Jan 81	Rp. 1,204,104	
2.	Aug. 1980	17 Nov 80	Rp. 3,707,025	12 Jan 81	Rp. 3,707,025	
3.	Sep. 1980	17 Nov 80	Rp. 5,938,897	12 Jan 81	Rp. 5,938,897	
4.	Oct. 1980	23 Dec 80	Rp. 7,389,640	12 Jan 81	Rp. 7,389,640	
5.	Nov. 1980	30 Dec 80	Rp. 7,658,370	21 Feb 81	Rp. 7,658,370	
6.	Dec. 1980	31 Jan 81	Rp. 9,599,450	21 Feb 81	Rp. 9,599,450	
7.	Jan. 1981	28 Feb 81	Rp. 8,992,525			