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THE WORLD BANK  
Washington, D.C.

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The World Bank  
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Washington DC 20433  
Telephone: 202-473-1000  
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Chronological file 1987

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**30084781**

A2011-001 Other #:

353989B

Gloria Davis - Chronological file - 1987

The World Bank Group  
**Archives**



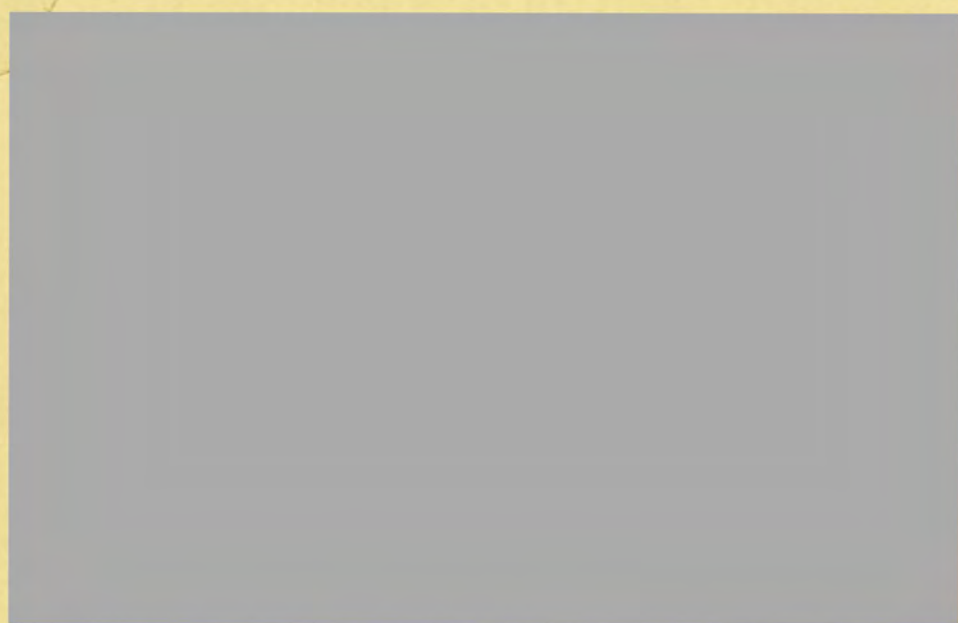
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A2011-001 Other #:

353989B

Gloria Davis - Chronological file - 1987

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WITH RESTRICTIONS**  
WBG Archives





ZCZC AINP2271 JWS0402  
AEPED AEAIN  
REF : TCP D.S.

*Discuss with Gordon*  
*GD*

JWS0402 JBY531 IN 12/10:34 OUT 12/10:42

59388 GEMCO NL

J  
59388 GEMCO NL

AR/DZ/0055

12.01.87

TO : WORLDBANK WASHINGTON  
FRM: GEMCO ENGINEERS B.V., THE NETHERLANDS  
RE : POLYTECHNIC MECHANIC SWISS WORLDBANK TENDER  
ATT: MR. GORDON HUNTING

FOLLOWING OUR TEL. CONVERSATION WE WOULD LIKE TO GIVE YOU THE FOLLOWING INFORMATION BY TLX :

AA) MARCH 1986 WE QUOTED FOR THIS PROJECT DIRECTLY WITH A TOTAL PROJECT PRICE OF DFL. 6.551.013,= AND A TOTAL OF DFL. 442.013,= OF RECOMMENDED OPTIONS.

BB) ON 13.05.86 WE RECEIVED A TLX FRM MR. KARTOLO SW REGARDING THIS EQUIPMENT TENDER ASKING FOR ADDITIONAL INFORMATION :  
1. LEAFLET OF THE OFFERED PRODUCT  
2. REFERENCIES OF INSTALLED PLANT  
3. NAME OF WELLKNOWN MAKER  
THIS INFORMATION WAS SENT BY US DIRECTLY TO THE T.C.  
WE ALSO INFORMED THEM BY TLX THAT WE MAILED THE REQUIRED INFO.

CC) ON 17.05.86 WE RECEIVED A TLX FRM MR. KARTOLO SW WITH A NUMBER OF TECHNICAL QUESTIONS WHICH WE ANSWERED BY RTN TLX. IN THIS TLX HE ALSO ASKED US WHETHER SPARE PARTS, MANUALS, SERVICE TOOLS AND COMMISSIONING WAS INCLUDED. THIS WE ALSO CONFIRMED BY TLX.

DD) DURING OUR VISIT TO INDONESIA IN AUGUST 1986 WE APPOINTED OUR AGENT FOR THIS PROJECT AND HAD A DISCUSSION WITH MR KARTOLO TO CLEAR THE MATTER REGARDING INSTALLATION AND COMMISSIONING.  
DURING THIS VISIT WE GOT THE INFORMATION THAT OUR QUOTATION WAS TECHNICALLY BETTER CONSIDERED BY THE TECHNICAL EVALUATION TEAM AND THAT OUR PRICE WAS CONSIDERABLY LOWER FOR THE COMPLETE PROJECT. BESIDES THIS WE ALSO INVESTIGATE THE POSSIBILITIES FOR LOCAL MANUFACTURING OF PARTS OF THE STEEL CONSTRUCTION WHICH WAS ALSO CONFIRMED TO THE T.C. THROUGH OUR AGENT.

EE) ON 21ST AND 25TH AUGUST 1986 WE RECONFIRMED OUR PRICE POSITION TO THE T.C. AS WE LEARNED FRM OUR AGENT THERE WAS STILL CONFUSION REGARDING THIS MATTER.  
BY THE T.C. RECEIPT OF THIS WAS CONFIRMED ON 26.08.86.

WE WOULD APPRECIATE IF YOU COULD GIVE US YOUR TELEFAX NUMBER SO

WE CAN SEND COPIES OF THE MOST ESSENTIAL CORRESPONDENCE.

LOOKING FORWARD TO HEAR FRM YOU SOON AS WE THINK THIS PROJECT  
IS ALREADY POSTPONED TOO LONG BY OUR COMPETITOR.

BEST REGARDS,  
IR. ALEX RIETJENS  
TELEFAX: .,+31.4990.76654

59388 GEMCO NL

=01121052

NNNN



ROUTING SLIP		DATE: 4/16/87
NAME		ROOM NO.
<del>Mrs. Gloria Davis</del>		I 6-153
Brad / return to GD		
A. B. /		
APPROPRIATE DISPOSITION	NOTE AND RETURN	
APPROVAL	NOTE AND SEND ON	
CLEARANCE	PER OUR CONVERSATION	
COMMENT	PER YOUR REQUEST	
FOR ACTION	PREPARE REPLY	
<input checked="" type="checkbox"/> INFORMATION	RECOMMENDATION	
INITIAL	SIGNATURE	
NOTE AND FILE	URGENT	
REMARKS:		
<p style="text-align: center;">Proposed</p> <p>A note on / B. Ed. Sector. This will be the subject of an I. M. later in the FY No action needed at this time</p>		
FROM: <i>Yvonne Jones</i>	ROOM NO.:	EXTENSION: 61915

## Basic Education Subsector Study FY 88-89

The study will examine three fundamental issues in primary education: management, financing, and quality of instruction. The management portion of the study will focus on the role of the headmaster, evaluating his leadership and management functions and their impact on school quality. The financing portion of the study will evaluate possibilities for mobilizing non-budgetary resources which could be used to improve school quality. The quality of instruction section will: (a) analyze regional and subject variations in quality; and (b) evaluate measures to upgrade student achievement;/(c) propose a long term strategy by the Government and the Bank for substantially improving student achievement, without substantially increasing demands on the Government's limited budgetary resources. The study will require 40 staffweeks; 25 in FY 88 and 15 in FY 89. This exercise will not duplicate studies currently under preparation by USAID or under the Secondary Education and Management Project (Ln. 2472-IND).



AEPED

MR. JAN H. MEYER

DYNAMAR BV, KANAALKADE 73, 1811 LT ALKMAAR, THE NETHERLANDS

RE MARITIME SECTOR TRAINING PROJECT

(AAA) IN ACCORDANCE WITH THE NETHERLANDS/IBRD AGREEMENT TO REVIEW PROPOSED ACTIVITIES ASSOCIATED WITH MSTP, WE HAVE RECEIVED AND REVIEWED THREE TRAINING AND CONSULTANCY PROPOSALS CONTAINED IN YOUR LETTER OF JANUARY 6, 1987: (A) NETWORK PLANNING/MANAGEMENT AND COMMUNICATION PLAN (B) INTEGRATION OF ARCHITECTURAL PLANNING INTO OVERALL PLANNING OF MSTP AND (C) MSTP PIU/MANAGEMENT INTEGRATION WORKSHOP. WE BELIEVE PROPOSED ACTIVITIES WOULD ENHANCE STARTUP AND IMPLEMENTATION OF MSTP. WE HAVE NO OBJECTION TO IMPLEMENTATION OF ACTIVITIES AS PRE-PROJECT COMPONENTS FINANCED ENTIRELY BY GOVERNMENT OF THE NETHERLANDS.

(BBB) REGARDING YOUR SUGGESTION RELATIVE TO GOVERNMENT OF THE NETHERLANDS PROVIDING LOCAL COST FINANCING AS A PART OF ITS CO-FINANCING COMMITMENT TO GOI, SUGGEST THAT WE HOLD OUR DISCUSSIONS REGARDING SAME UNTIL GOI AGREES TO NEGOTIATION SCHEDULE AND ISSUE OF LAND ACQUISITION. LOCAL COST FINANCING MAY BE BETTER CONSIDERED AFTER DISCUSSIONS WITH GOI RELATIVE TO THEIR NEEDS. WILL KEEP CO-FINANCIERS INFORMED. REGARDS, GILPIN FOR BURMESTER

CLASS OF SERVICE	TELEX	57200 JMCO NL	JAN. 20/87
PROJECT	INDONESIA-MARITIME SEC.TR.PROJ.	RMCG:TM: <i>RM</i>	61908
REFERENCES AND COPY DISTRIBUTION	CC: MESSRS/MS. FARNER, HUNTING, DEMETRIOU, SCHAEFER, DAVIS	AUTHORIZED <i>Clifford W. Gilpin</i>	CLIFFORD GILPIN, DEPUTY CHIEF
		DEPARTMENT	AEPED
		SECTION BELOW FOR USE OF CABLE SECTION	
		CHECKED FOR DISPATCH	

Mr Jordan

for clearance please  
JP

January 20, 1987

Mr. C.I. Santosa  
Secretary General  
Ministry of Transmigration  
Jl. H. Agus Salim, 58  
Jakarta  
Indonesia

Dear Mr. Santosa:

Re: December 1986 Transmigration Mission

I would like to convey my gratitude to yourself, the staff of the Bureau Planning and Bina Program Pankim for the excellent organization and reception granted our December 1986 transmigration mission. As you know, the task of this mission was to supervise the Transmigration III and V projects, follow up on the preparation of the Transmigration VI project and carry out a field visit to existing settlements and agricultural research stations in Sumatra.

I am pleased to inform you that the attached Draft Aide Memoire, discussed with your staff on December 17, 1986, has now been cleared by the



Bank's management. On that occasion I would like to draw your attention to some points which in our opinion would need to be pursued in the near future.

### Transmigration Sector Review

As a follow up of the Transmigration Sector review report, transmitted to H.E. Minister Martono on December 19, 1986, the Bank would like to reinforce its dialogue with you and other key staff of the Ministry on the issues affecting the transmigration program and see how they could be addressed within the framework of ongoing and future Bank assisted projects. On this subject the Bank would be willing to provide assistance, under the Transmigration V project, for the preparation of a draft Repelita V Transmigration plan. The Bank would also like to review the policy statement and the action plan requested in the transmittal letter of the sector report prior to the appraisal of the proposed Transmigration VI project which is to take place around October 1987.

### Transmigration III Project

This project is proceeding satisfactorily though with some delays. In accordance with the request of the Ministry of Finance dated December 26, 1986, the Bank would have no objection in principle to extend by one year the loan closing date from June 30, 1987, to June 30, 1988. We propose to amend the Loan Agreement accordingly as soon as we receive an action plan for the completion of the outstanding components, i.e., the settlement planning (assistance concept II), the two crumb rubber factories, the Baturaja road upgrading and the Technical Assistance to the Ministry of Population and Environment.



The Transmigration III project is expected to produce settlement plans for about 254,000 transmigrant families. It would therefore be advisable to prepare prior to the Repelita V plan a program for their utilization based on the present budgetary constraints. We would like to suggest that these plans be submitted not only to official users, such as the Directorate of Estates and the regional planning offices (Bappedas), but also to private investors wishing to develop their activities in conjunction with the transmigration program. It would also be useful to prepare a program for spontaneous transmigration based on these settlement plans.

#### Transmigration V Project

The Transmigration V project was designed to prepare settlement plans for 300,000 transmigrant families. However, the national budget cuts in fiscal year 1986/87 and the further cuts expected for fiscal year 1987/88 have made it necessary to reduce the scope of this project. On this basis the mission carried out together with senior staff of Bakosurtanal and of your ministry an extensive project recosting exercise which has reduced the project

scope. *The project as it now stands includes* a revised national mapping component with less airphotos and more remote sensing imagery, settlement plans for 125,000 families, feasibility studies for the 10 sites considered under the proposed Transmigration VI project and technical assistance to the Directorate General of Settlement Preparation and the Secretariat General. As a result *of these changes*, the total project cost has been decreased by about 50% from US\$275.5 million to about US\$140.8 million, as indicated in the project recosting table attached at the end of the draft Aide Memoire.



To follow up of the draft Aide Memoire, it would now be necessary for the Ministry of Transmigration to (a) inform the Bank through the Ministry of Finance that the revised project scope and cost estimate is agreeable to the Government of Indonesia, and (b) request the Bank to cancel an additional amount from the loan on the basis of a revised financing plan. In this context, we are pleased to inform you that the Bank is proceeding with the cancellation of an initial amount of US\$34.5 million from the loan as per the Ministry of Finance's request of December 2, 1986, with retroactive effect to that date.

#### Transmigration VI

As a follow up on the preparation of this project, the mission stressed the need to carefully review the land tenure situation within each site in liaison with the local authorities and people in order to facilitate the release of land required for the second agricultural plots (LU2). The mission also emphasized the need to complete the pre-feasibility studies by end February 1987.

In view of the interest in the above matters, I am also sending a copy of this letter to the Chairman Bakosurtanal, the Deputy Chairman for Manpower and Transmigration, BAPPENAS, the Director General for Settlement Preparation, and the Director General for International Monetary Affairs.

Please do not hesitate to contact us for any further information or clarifications.

Yours sincerely,

Antony P. Cole  
Chief, Agriculture 4 Division  
Projects Department  
East Asia and Pacific Regional Office

cc: Messrs. Jacub Rais, Chairman, Bakosurtanal

Hartono Padmoemirjono, Director General, Settlement Preparation

Soedjno Hardjosoetowo

Widerdo Dharmosusito, Director, Bina Program

R.S.G. Mailangkarj, Director, Settlement Preparation

Darmia Nasution, Director, Bureau Planning

Cleared with and cc: Messrs. Jordan (AEAIN), Mead (LEGEP)

cc: Messrs. Davar (AEPDR), Price (RSI), Purcell (RSI)

Ms. Hamilton (AEAIN)

JPBaudelaire:ks



## OFFICE MEMORANDUM

DATE: February 9, 1987

TO: Dr. Saleh Afiff, Vice Chairman, BAPPENAS

FROM: Gloria Davis (Senior Loan Officer, AEAIN)

SUBJECT: INDONESIA: The Tree Crops Human Resource Development Project

1. Thank you for your time on February 6th. It was good to see you again.

2. In our meeting you said that you would make a decision about negotiations after March 15 when DIPS will have been issued and resource availability is known. However, in light of the importance we attach to this project, and mindful of your desire to have project preparation as advanced as possible prior to negotiations, I would like to request Dr. Rachmat to take the following steps:

- a) begin the process of recruiting consultants for the Human Resources Development Unit and Management Information Study. This process will entail final SEKNEG approval of short lists and consultant mix (local/expatriate). No financial commitments would be made until the loan is negotiated and approved;
- b) make appropriate administrative and academic arrangements for the first year of training, including overseas training. No steps would be taken that would preclude changes at negotiations in the amount and type of training, should budget constraints in FY 87/88 require such modification; and
- c) assign a temporary manager to facilitate start-up. We would expect this person to become head of the HRDU once the project is approved.

If these steps are taken now, and if negotiations could be held in late March, we would expect that financial resources would be required at about the time the loan would become effective, e.g. June/July 1987.

3. Before writing to Dr. Rachmat I would be grateful if you would confirm that such steps are appropriate.

4. Once again, thanks again for your time and your help.

ROUTING SLIP		DATE:
NAME		ROOM NO.
G. DAVIS		
APPROPRIATE DISPOSITION		NOTE AND RETURN
APPROVAL		NOTE AND SEND ON
<input checked="" type="checkbox"/> CLEARANCE		PER OUR CONVERSATION
COMMENT		PER YOUR REQUEST
FOR ACTION		PREPARE REPLY
INFORMATION		RECOMMENDATION
INITIAL		SIGNATURE
NOTE AND FILE		URGENT
REMARKS:		
FROM:	ROOM NO.:	EXTENSION:
Mike Q		61147



Mrs. Buly O. Surjaatmadja  
Directory of External Fund  
Ministry of Finance  
Jakarta, Indonesia

Re: Loan 2472-IND Secondary Education and Management Training

Dear Mrs. Surjaatmadja:

Further to our Disbursement Letter of December 14, 1984, we are amending our disbursement procedures to include the use of Statement of Expenditures for Project Management Monitoring and Supervision (Category 5).

Attached is the Statement of Expenditure Summary Sheet (Form 10-PM) which should be attached to the Withdrawal Application (Form 1903) in lieu of the supporting documents. However, the supporting documents must be properly cross-referenced to the Withdrawal Application and be retained by the project implementing agency for inspection by Bank supervision missions.

In completing the attached Summary Sheet, the project implementing unit should be more explicit in describing under the "Nature of Expense" the type of expenditure instead of simply aggregating expenses as project monitoring and supervision.

We are also providing a copy of this letter to the implementing agencies.

**MR. AIME - COULD YOU FILL THIS PORTION?**

If you need any further clarification, please contact our Disbursement Unit in Jakarta.

Sincerely,

Miguel E. Santos  
Asia Disbursement Division  
Loan Department

To be cleared with and cc: Mr. A. Aime, (I-7-177)  
Miss G. Davis, (I-6-153)  
Mr. D. Mead, (E-640)

cc: Mr. M. Asikin, RSI

File: Loan 2472 Agreement  
Black Book



Mrs. Buly O. Surjaatmadja  
Directory of External Fund  
Ministry of Finance  
Jakarta, Indonesia

Re: Loan 2355-IND Second University Dev. Project

Mrs. Surjaatmadja:

Further to our Disbursement Letter of December 27, 1983, we are amending our disbursement procedures to include the use of Statement of Expenditures for Project Management Monitoring and Supervision (Category 6).

Attached is the Statement of Expenditure Summary Sheet (Form 1C-PM) which should be attached to the Withdrawal Application (Form 1903) in lieu of the supporting documents. However, the supporting documents must be properly cross-referenced to the Withdrawal Application and be retained by the project implementing agency for inspection by Bank supervision missions.

In completing the attached Summary Sheet, the project implementing unit should be more explicit in describing under the "Nature of Expense" the type of expenditure instead of simply aggregating all expenses as project monitoring and supervision.

We are also providing a copy of this letter to the implementing agency: Directorate General for Nonformal Education, Youth and Sports (DGPLSPD).

If you need any further clarification, please contact our Disbursement Unit in Jakarta.

Sincerely,

Miguel B. Quintos  
Asia Disbursement Division  
Loan Department

To be cleared with and cc: Ms. Y. Jones, (I-7-155)  
Miss G. Davis, (I-6-153)  
Mr. D. Mead, (E-640)

cc: Mr. M. Asikin, RSI

File: Loan 2355 Agreement  
Black Book

Mrs. Buly O. Surjaatmadja  
Directory of External Fund  
Ministry of Finance  
Jakarta, Indonesia

Re: Loan 2547-IND Second University Dev. Project

Mrs. Surjaatmadja:

Further to our Disbursement Letter of July 23, 1985, we are amending our disbursement procedures to include the use of Statement of Expenditures for Project Management Monitoring and Supervision (Category 5).

Attached is the Statement of Expenditure Summary Sheet (Form IC-PM) which should be attached to the Withdrawal Application (Form 1903) in lieu of the supporting documents. However, the supporting documents must be properly cross-referenced to the Withdrawal Application and be retained by the project implementing agency for inspection by Bank supervision missions.

In completing the attached Summary Sheet, the project implementing unit should be more explicit in describing under the "Nature of Expense" the type of expenditure instead of simply aggregating all expenses as project monitoring and supervision.

We are also providing a copy of this letter to the implementing agency: Directorate General of Higher Education (DGHE).

If you need any further clarification, please contact our Disbursement Unit in Jakarta.

Sincerely,

Miguel S. Quintos  
Asia Disbursement Division  
Loan Department

To be cleared with and cc: Mr. V. Demetriou, (I-7-139)  
Miss G. Davis, (I-6-153)  
Mr. D. Mead, (E-640)

cc: Mr. M. Asikin, RSI

File: Loan 2547 Agreement  
Black Book



Mrs. Buly O. Surjaatmadja  
Directory of External Fund  
Ministry of Finance  
Jakarta, Indonesia

Re: Loan 1904-IND Second Polytechnic Project

Dear Mrs. Surjaatmadja:

Further to our Disbursement Letter of ~~April 13, 1982~~ **DECEMBER 12, 1980**, we are amending our disbursement procedures to include the use of Statement of Expenditures for Project Management Monitoring and Supervision (Category 6).

Attached is the Statement of Expenditure Summary Sheet (Form IC-PM) which should be attached to the Withdrawal Application (Form 1903) in lieu of the supporting documents. However, the supporting documents must be properly cross-referenced to the Withdrawal Application and be retained by the project implementing agency for inspection by Bank supervision missions.

In completing the attached Summary Sheet, the project implementing unit should be more explicit in describing under the "Nature of Expense" the type of expenditure instead of simply aggregating all expenses as project monitoring and supervision.

We are also providing a copy of this letter to the implementing agency: Directorate General of Higher Education (DGHE).

If you need any further clarification, please contact our Disbursement Unit in Jakarta.

Sincerely,

Miguel B. Quintos  
Asia Disbursement Division  
Loan Department

To be cleared with and cc: Mr. V. Demetriou, (I-7-159)  
Miss G. Davis, (I-6-153)  
Mr. D. Mead, (E-640)

cc: Mr. M. Asikin, RSI

File: Loan 1904 Agreement  
Black Book

Mrs. Buly O. Surjaatmadja  
Directory of External Fund  
Ministry of Finance  
Jakarta, Indonesia

Re: Loan 2101-IND Second Polytechnic Project

Dear Mrs. Surjaatmadja:

Further to our Disbursement Letter of April 13, 1982, we are amending our disbursement procedures to include the use of Statement of Expenditures for Project Management Monitoring and Supervision (Category 4).

Attached is the Statement of Expenditure Summary Sheet (Form 1C-PM) which should be attached to the Withdrawal Application (Form 1903) in lieu of the supporting documents. However, the supporting documents must be properly cross-referenced to the Withdrawal Application and be retained by the project implementing agency for inspection by Bank supervision missions.

In completing the attached Summary Sheet, the project implementing unit should be more explicit in describing under the "Nature of Expense" the type of expenditure instead of simply aggregating all expenses as project monitoring and supervision.

We are also providing a copy of this letter to the implementing agency: Directorate General of Higher Education (DGHE).

If you need any further clarification, please contact our Disbursement Unit in Jakarta.

Sincerely,

Miguel B. Quintos  
Asia Disbursement Division  
Loan Department

To be cleared with and cc: Mr. A. Aime, (I-7-177)  
Miss G. Davis, (I-6-153)  
Mr. D. Mead, (E-640)

cc: Mr. M. Asikin, RSI

File: Loan 2101 Agreement  
Black Book



Mrs. Buly D. Surjaatmadja  
Directory of External Fund  
Ministry of Finance  
Jakarta, Indonesia

Re: Loan 2290-IND Second Polytechnic Project

Dear Mrs. Surjaatmadja:

Further to our Disbursement Letter of June 29, 1983, we are amending our disbursement procedures to include the use of Statement of Expenditures for Project Management Monitoring and Supervision (Category 4).

Attached is the Statement of Expenditure Summary Sheet (Form 1C-PM) which should be attached to the Withdrawal Application (Form 1903) in lieu of the supporting documents. However, the supporting documents must be properly cross-referenced to the Withdrawal Application and be retained by the project implementing agency for inspection by Bank supervision missions.

In completing the attached Summary Sheet, the project implementing unit should be more explicit in describing under the "Nature of Expense" the type of expenditure instead of simply aggregating all expenses as project monitoring and supervision.

We are also providing a copy of this letter to the implementing agency: Directorate General of Higher Education (DGHE).

If you need any further clarification, please contact our Disbursement Unit in Jakarta.

Sincerely,

Miguel B. Quintos  
Asia Disbursement Division  
Loan Department

To be cleared with and cc: Mr. G. Hunting, (I-7-153)  
Miss G. Davis, (I-6-153)  
Mr. D. Mead, (E-640)

cc: Mr. M. Asikin, RSI

File: Loan 2290 Agreement  
Black Book

Mrs. Buly D. Surjaatmadja  
Directory of External Fund  
Ministry of Finance  
Jakarta, Indonesia

Re: Loan 2258-IND Public Works Manpower Dev.

Dear Mrs. Surjaatmadja:

Further to our Disbursement Letter of May 5, 1983, we are amending our disbursement procedures to include the use of Statement of Expenditures for Project Management Monitoring and Supervision (Category 5).

Attached is the Statement of Expenditure Summary Sheet (Form 10-PM) which should be attached to the Withdrawal Application (Form 1903) in lieu of the supporting documents. However, the supporting documents must be properly cross-referenced to the Withdrawal Application and be retained by the project implementing agency for inspection by Bank supervision missions.

In completing the attached Summary Sheet, the project implementing unit should be more explicit in describing under the "Nature of Expense" the type of expenditure instead of simply aggregating all expenses as project monitoring and supervision.

We are also providing a copy of this letter to the implementing agency: Ministry of Public Works (MPW).

If you need any further clarification, please contact our Disbursement Unit in Jakarta.

Sincerely,

Miguel B. Quintos  
Asia Disbursement Division  
Loan Department

To be cleared with and cc: Mr. R. McGough, (I-7-167)  
Miss G. Davis, (I-6-153)  
Mr. D. Mead, (E-640)

cc: Mr. M. Asikin, RSI

File: Loan 2258 Agreement  
Black Book



Mrs. Buly O. Surjaatmadja  
Directory of External Fund  
Ministry of Finance  
Jakarta, Indonesia

✓  
Re: Loan 2102-IND Second Textbook Project

Dear Mrs. Surjaatmadja:

Further to our Disbursement Letter of April 13, 1983, we are amending our disbursement procedures to include the use of Statement of Expenditures for Project Management Monitoring and Supervision (Category 5).

Attached is the Statement of Expenditure Summary Sheet (Form 10-PM) which should be attached to the Withdrawal Application (Form 1903) in lieu of the supporting documents. However, the supporting documents must be properly cross-referenced to the Withdrawal Application and be retained by the project implementing agency for inspection by Bank supervision missions.

In completing the attached Summary Sheet, the project implementing unit should be more explicit in describing under the "Nature of Expense" the type of expenditure instead of simply aggregating all expenses as project monitoring and supervision.

We are also providing a copy of this letter to the implementing agency(ies) BARBARA.

PLS. FILL IN THIS PORTION.

If you need any further clarification, please contact our Disbursement Unit in Jakarta.

Sincerely,

Miguel B. Quintos  
Asia Disbursement Division  
Loan Department

To be cleared with and cc: Ms. B. Searle, (I-7-163)  
Miss G. Davis, (I-6-153)  
Mr. D. Mead, (E-640)

cc: Mr. M. Asikin, RSI

File: Loan 2102 Agreement  
Black Book

STATEMENT OF EXPENDITURES  
 REPORTING PERIOD

Category No. \_\_\_\_\_ FROM: \_\_\_\_\_ TO: \_\_\_\_\_

Category Description: Project Management Monitoring and Supervision

ITEM Col. 1	DOCUMENT REFERENCE Col. 2	DATE OF PAYMENT Col. 3	NATURE OF EXPENSE Col. 4	AMOUNT PAID (In Rupiah) Col. 5	REMARKS Col. 6
TOTAL AMOUNT REQUESTED:					XXXXXXXXXXXXXXXXXX

We hereby certify that the above amounts have been paid for proper execution of project activities within the terms and conditions of the Loan Agreement. All documentation authenticating these expenditures has been retained by the project implementing agency and will be made available for review by visiting missions on request.

\_\_\_\_\_  
 \_\_\_\_\_  
 Authorized Signature



THE WORLD BANK/INTERNATIONAL FINANCE CORPORATION  
**OFFICE MEMORANDUM**

DATE : February 26, 1987

TO : Mr. H. Barnum, Acting Chief, PHNPR

FROM : *D.C.* Chernichovsky, and D. de-Leeuw, CON

SUBJECT : Back to Office Report -- Jakarta, Indonesia, January 31 - Feb.17, 1987  
(de- Leeuw) and Feb. 2 - 19, 1987 (Chernichovsky)

1. In accordance with the Terms-of-Reference of January 20, 1987, we traveled to Jakarta, Indonesia, to work on the cost-effectiveness study financed by the Dutch Government.
2. The objectives of the mission were to: supervise and provide technical assistance to the final stages of the field work and initial stage of data entry and analysis; plan the last phase of the project; and report about its progress to the Dutch Government. In addition, an effort was to be made to review the preparation of a work program concerning the long-term strategy development for the family planning program and the analysis of its medium- and long-term resource requirements, to be developed and conducted under the covenants of the Fourth Population Project.
3. The current status of the project is summarized in the first section of the progress report submitted to Dutch Embassy in Jakarta on Feb. 18, 1987 (Annex 1).
4. The data collection under the project will be completed on schedule by the end of this month, and in spite of a slow start on the data entry, about 30% of the data to be collected under the project are ready for analysis. This highlights the substantial payoff to the database adapted for the project. It enables an analysis of some segments of the data while others are still in the field.
5. A descriptive analysis of the data covering the following topics for the areas under study, has already started in Indonesia:
  - (a) population and environment of family planning operations;
  - (b) personal profile of family planning workers: field workers, their supervisors, village and hamlet heads, volunteers, and medical personnel;
  - (c) family planning practices of family planning workers;
  - (d) time spent in family planning by family planning workers;



- (e) locations of family planning activity;
- (f) training of family planning workers;
- (g) activities of field workers and their supervisors;
- (h) wages and incomes of family planning workers.

6. This analysis will be complemented by analyses using multivariate techniques that will be conducted temporarily outside the country because of a lack of local expertise and the need for a mainframe computer for faster organization and analysis of data than can be done in Indonesia at this stage.

7. It has been agreed during the mission that reports will be produced by a team comprising Drs. H. Pardoko, (The National Family Planning Coordinating Board, BKKBN, the project's principal coordinator), R. Pudjo (BKKBN, Head of the Policy Analysis Unit) and B. Soeradji (the National Planning Agency, BAPPENAS) and D. Chernichovsky (IBRD). The Indonesian members of the team represent probably the best researchers in the Indonesian Government in the area of population and family planning services. This should assure the quality of analysis as well as its relevance to BKKBN's operations.

8. In part as a result of performance of the database and availability of data, we agreed to the request of BKKBN's management to hold a seminar for the Dr. Haryono and the bureau chiefs of The National Family Planning Coordinating Board (BKKBN). In the seminar, held on Feb. 16, 1987, the concepts underlying the project, its survey instruments, the database and some of the initial findings, were briefly presented. The major themes stressed in the discussion were: (a) the need to look closely, largely through activities of family planning workers, into the "black box" of program operations that relate budgets, on the one hand, and prevalence rates, on the other hand; (b) the need to establish the cost and relative efficiency of different delivery mechanisms, methods and operations, and (c) the need to have timely data on program operations and cost for policy making, planning and management.

9. Given the progress of the project thus far, there is a move on the part of BKKBN to try to extend the project and apply modified survey instruments and the database to one or two provinces in Java as part of BKKBN's routine evaluation of its operations. The Dutch Government is receptive to this idea; we were asked by the first secretary of the Dutch Embassy, Mr. G.J. van Rinsum, to submit any proposal we can base on this project. We pointed out that it may be premature yet to draw lessons even about the design of the project. At the same time, we could start developing a planning and budgeting model that would be based on data generated through the project. This idea is welcome by the Dutch Government and BKKBN.

10. The third and last phase of the project involves the following activities (and timing):

- (a) completion of data gathering and entry (March-May, 1987);



- (b) final design of database (March-May);
- (c) data analysis and report writing (June-August);
- (d) preparation and holding of a training workshop on principles of cost-effectiveness analyses in family planning, and related data gathering, processing and analysis (August);
- (e) preparation and holding of a dissemination seminar for BKKBN top management and other invited guests (August);
- (f) final reporting and recommendations (September, 1987).

More detail on these activities, which are expected to cost about \$US82,000., is given in the second section of the status report to the Dutch Government. A letter of understanding concerning this stage from Dr. P. Pandi, Deputy Chairman for Research and Development, is given in Annex B.

11. Several meetings were held (by Chernichovsky) with Dr. Kartomo (Ministry for Population and Environment) and Dr. Soeradji (BAPPENAS) about the long-term strategy development for the family planning program, and the analysis of its medium- and long-term resource requirements. As Mr. Soeteidjo (Deputy for Planning, BKKBN) in charge of pertinent activity in BKKBN was out of the country, no official view about the issues was available from this institution. Strategy development has been conducted in the last few months by BKKBN for the next Five-Year Development Plan (Repelita V). Relevant drafts of policy and program papers need to be submitted to BAPPENAS by next September. BKKBN has already produced a document (not available yet in English) which is scheduled to be the basis for discussions of the short- and medium-term population policy and family planning program. The Ministry for its part, has started hiring consultants that would help it formulate a long-term population policy. It appears that the momentum of the ongoing formulation of population and family planning policies for Repelita V can be used to prompt a more aggressive attitude towards the work under the Fourth Project; that is, while an effort is underway to develop short- and medium-term policy and programs, it would be institutionally easier to draw attention and mobilize the resources to the work required under the project. More details concerning these issues have been related directly to Mr. A. Williams (PHDD2).

cc: Mr. J. North, Mr. D. Hodgkinson, Dr. F. Sai, Mr. A. Berg,  
Dr. A. Measham (PHNDR);  
Ms. I. Husain, Mr. D. Mahar, Mr. B. Carlson, Mr. Z. Ecevit,  
Mr. A. Williams, Mr. N. Prescott (PHND2);  
Mr. M. Bale, Ms. G. Davis (AEAIN);  
Mr. E. Zenick (RSI)

ANNEX 1  
(Without survey instruments)



The World Bank /

RESIDENT STAFF IN INDONESIA : P.O. Box 324/JKT, Jakarta 12940 Indonesia  
Telephone - 517316 \* Cable Address - INTBAFRAD JAKARTA \* Telex - IBRD JKT 44456

Feb. 16, 1987

Mr. G.J. van Rinsum  
First Secretary  
The Embassy of the Kingdom of  
the Netherlands  
Jl. Rasuna Said  
Jakarta

Dear Mr. van Rinsum:

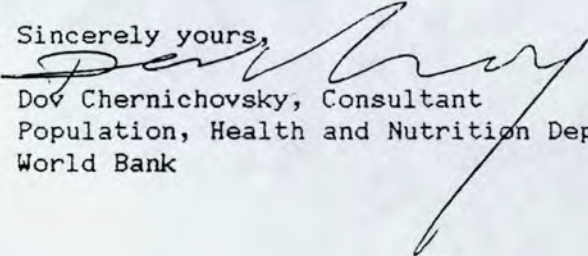
Enclosed you will find the second progress report on the Operational Research Project and Cost-effectiveness Study of the Indonesian family planning program that is funded by your government and managed through the World Bank. We apologize for the slight delay in the submission in this report but we wished to have a full assessment of the project's data processing procedures that resulted last week with the first tables from the project.

This report includes two sections. The first concerns the current status of the project, and the second deals with the activities planned for its third and final phase that is scheduled to commence on March 1, 1987 and close at the end of September 1987.

Kindly note that this report is based on the previous report that was submitted to you on behalf of the World Bank on October 31, 1987, and consequently does not repeat basic project information that was included in the first report.

We plan to submit to you the next report about May, 1987 when we expect to have some basic analyses of the data.

Sincerely yours,

  
Dov Chernichovsky, Consultant  
Population, Health and Nutrition Dept.  
World Bank

THE COST EFFECTIVENESS STUDY OF THE FAMILY PLANNING PROGRAM IN  
INDONESIA, FUNDED BY THE GOVERNMENT OF THE KINGDOM OF THE  
NETHERLANDS

Progress Report No. 2

February, 1987

I. STATUS OF THE PROJECT

This section covers the status of the project as of mid-February 1987. It concerns: survey instruments, the field work, the data and database, and the financial status of the project.

I.a Survey Instruments

Survey instruments for the project were prepared on the basis of a conceptual framework developed for this and similar projects, and extensive discussions with the project's steering committee.<sup>1</sup> These instruments (known as Forms according to the numbers below) pertain to the following information:

1. Personal data about field workers, their supervisors, village and hamlet heads, and clinical staff engaged in family planning;
2. General socioeconomic conditions, availability of facilities and schemes for family planning;
3. Land, buildings, and equipment used in family planning;
4. Activities of field workers and supervisors;
5. Activities of medical staff;

---

<sup>1</sup> A final draft of "Cost, Effectiveness, and Cost-effectiveness of Family Planning Programs: Methodology and Guidelines for Operational Research" is being prepared for the Technical Notes Series of the Population, Health and Nutrition Department of the World Bank. This document deals with the conceptual framework underlying the project. Although undertaken as an independent exercise, the preparation of the document has benefited from the preparation of the project and has become an integral part of it. A draft of the document should be available soon.



6. Wages and other payments to remunerated labor engaged in family planning;
7. Goods and services used in family planning;
8. Number of old and new acceptors by method.

The Indonesian version of these instruments or Forms and an English version are attached as annex 1 to this report.

#### I.b Field Work and Data

Data collection started in October 1986 and is about to be completed as planned by the end of February 1987. Forms 1-3 (above) were administered once during the months of October - November 1987, and Forms 4-8 were repeated three times during November, 1986, and January and February 1987. The survey forms have been shipped to Jakarta for processing. The final batch should arrive here by mid-March 1987. This stage of the project has been remarkably well-organized and executed by the staff of BKKBN.

Once checked for completeness by the management of the project, the data are entered into a database by a private company that has been hired for this purpose. This particular process deviates from our initial plan to have the data entered in the regional offices by BKKBN personnel. This change in plan followed the experience of the testing stage of the project that suggested that data entry under the auspices of BKKBN would overburden the institution at this stage.

To date, Forms 1-6 data from two out of three provinces have been entered. The experience with this process has been most satisfactory despite a slow start.

#### I.c Database

A special database was adapted for the project: The Scientific Information Retrieval System (SIR). The design of the database by Mr. D. de-Leeuw coincided with the design of the survey instruments and incorporates in its structure the analytic objectives of the project. A major objective in the choice of database and its design has been to provide BKKBN with a useful instrument for fast data entry and retrieval for management purposes.

This database is simple, flexible, and operates on a personal computer which was acquired for BKKBN under the project and turned out an extremely powerful tool for data entry and retrieval.

#### I.d Financial Status

The commitments made by the World Bank for this project as of Feb. 15,



1987 are about \$US 106,000. in full agreement with the budget figures in the first progress report. The project has about \$US 86,000 to spend.<sup>2</sup>

## II. SCHEDULED ACTIVITIES

The next and last phase of the project will commence on March 1, 1987 and will include:

- a. completion of data gathering and entry (March-May, 1987);
- b. final design of database (March-May);
- c. data analysis and report writing (June- August);
- d. preparation and holding of a training workshop on principles of cost-effectiveness analyses in family planning, and related data gathering, processing and analysis (August);
- e. preparation and holding of a dissemination seminar for BKKBN top management and other invited guests (August);
- f. final reporting and recommendations (September, 1987).

Details of these activities are outlined below.

### II.a Completion of Data Gathering and Entry.

The last data from the field are scheduled to arrive in Jakarta towards the latter part of March. Data entry for Forms 4-8, and their correction is planned to last until the end of May, 1987. Data will be discussed as they are entered. Descriptive reports should be produced on a regular basis as of April 1987.

### II.b Final Design of Database

As the data are entered they are checked for consistency and transformed per the analytic needs of the project. In addition, tables for final reporting and analysis are designed as part of the database. This

---

<sup>2</sup> As this report is written in February, in the midst of extensive data entry and provision of technical assistance to the project, a substantial amount of billing involving different exchange rates is taking place at the time this report. Consequently, a concise financial statement covering the first two stages of the project, will be available by mid-March 1987 and supplemented to this report.



design will stay with BKKBN for future data entry and analysis for this and similar projects.

#### II.c Data Analysis and Report Writing.

Once all the data are entered, a team of 3-4 researchers is scheduled to summarize the findings of the project. These findings will focus on the social environment of the program, the population's demographic and socioeconomic characteristics, the structure of the program (facilities and outreach mechanisms), operations (activities of field workers and their supervisors), costs of operations, correlates of effective and cost-effective operations. Thereby, the project should show the potential of this and similar projects for policy making and planning.

A major effort will go into eliciting the lessons learnt from the project particularly for the design of simpler instruments and data gathering procedures that can be made operational.

#### II.d Dissemination Seminar

The findings and conclusions of the project will be presented in a one day seminar scheduled for the top management of BKKBN and other guests. The seminar is intended to serve several objectives: to disseminate the findings of the project, to solicit reactions about the project from policy makers and managers, and to generate political support for expanding activities which focus on the economics of the Indonesian family planning program.

#### II.e Training Workshop.

The project's prime objective has been to develop operational tools for evaluation of the Indonesian family planning program to be used routinely by the BKKBN personnel. To meet this objective a special workshop is scheduled to be held in August 1987. Personnel from several BKKBN departments will be trained in this workshop in the principles and instruments of the project. It is hoped that BKKBN staff will expand the evaluation of their program with a cost-effectiveness orientation.

#### II.f Final Report and Recommendations.

The project will close with a final report that will comprise: (a) an economic evaluation and cost-effectiveness analysis of the Indonesian family planning program (in the areas studied), (b) recommendation on how to use the project's data for improved planning and policy making, and (c) recommendation on how to integrate the principles and instruments developed under the project into BKKBN's routine operations.

ANNEX 2





# NATIONAL FAMILY PLANNING COORDINATING BOARD

JALAN LET. JEN. M.T. HARYONO — JAKARTA

CABLE : NFPCB.  
P.O. BOX : 186 JKT.  
TELEX : 48181 BKKBN IA  
TELP. : 811308

Nomor : 0275/KU-106/M/87.

February 7, 1987

Dr. Dov Chernichovsky,  
World Bank,  
Jl. Rasuna Said,  
J A K A R T A

Dear Dov,

Dr. Henry Pardoko, the principal coordinator of the operational research project funded by the Dutch Government, informed me that the data gathering phase of the project is drawing to a close on schedule and that initial tabulations of the data are most encouraging. We look forward to a successful completion of this project by the end of Sept. 1987.

We understand that the next phase of the project will commence on March 1, 1987 and will include :

- a. completion of data gathering and entry (March-May, 1987);
- b. final design of data base for data entry and retrieval (March-May);
- c. data analysis and report writing (June-August);
- d. preparation and holding of a training workshop on principles of cost-effectiveness analyses in family planning, and related data gathering, processing and analysis (August);
- e. preparation and holding of a dissemination seminar for BKKBN top management and other invited guests (August);
- f. recommendation for future implementation of cost effectiveness analyses by BKKBN and final reporting to the Dutch Government (Sept.).

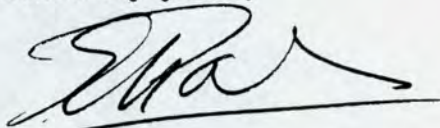
For its part, the BKKBN should be paid a total of US\$ 12,905 to cover the following expenses : the fees for the project's steering committee (US\$ 1530), the salary of the assistant to the principal investigator (US\$ 2275), local travel (US\$ 600) and the workshop and seminar arrangements (US\$ 8500).

We understand that other costs, including the fee of the principal coordinator, data processing and technical assistance, will be borne by the World Bank out of the funds allocated to the project.

We hope that the fruitful cooperation we have enjoyed with the World Bank in project implementation will continue, especially in activities concerning data analysis and training. This cooperation will enable us to complete the project successfully. We are hoping, thereby, to benefit from the principles and instruments that have been applied and developed through the project, and from the lessons that will eventually be learned from it. Our objective is to use the data from the project for policy making and planning, and its principles and instruments for further application on a wide scale.

As before, the BKKBN will continue giving its full commitment and support to the project through its staff and facilities.

Sincerely yours,

A handwritten signature in black ink, appearing to be 'S. Pandi', written over a horizontal line.

Dr. (Mrs). S. Pandi, MPH  
Deputy Chairman for  
Research and Development.



*Ms. Davis*

FACSIMILE TRANSMITTAL FORM

CABLE SERVICES USE ONLY	
MSG. NUMBER:	
DURATION OF CALL:	MINUTES

DATE: February 27, 1987

NUMBER OF PAGES: 4 (Including this page)

FROM: Antony P. Cole, Chief, AEPA4 Extension 61001 Dept/Div., No. 176/16

TO: COMPANY/ORGANIZATION: INTBAFRAD  
 CITY AND COUNTRY: Jakarta, Indonesia  
 FOR ATTENTION OF: Messrs. Price, Purcell, Zenick, Baudelaire  
 (c/o VMU)

FAX NUMBER/  
MACHINE TYPE:

SUBJECT: INDONESIA: Transmigration, Preparation of a Repelita V Plan

Please see attached.

cc:

Transmission Authorized by: Antony P. Cole, Chief, AEPA4 *A.P.C.*

Original to be returned to: Katie Scott Room No.: I8-029

If you experience any problems with this transmission, please call back as soon as possible.

Phone: (202) 477-2805/2021

Telecopier: RAPICOM 6300 (GR. II, III) (202) 477-8451

RAPIFAX 100 (with GR. III) (202) 477-8164

PANAFAX PX-100 (GR. I, II, III) (202) 477-6391

TELEX: RCA - 248423 WORLDBK; ITT - 440098 WORLDBANK;

FTCC - 82987 WORLDBK; TRT - 197688 WORLDBANK WUI - 64145 WORLDBANK

FAX

DATE: February 27, 1987

TO: Mr. O.T.W. Price, copy Messrs. Purcell, Zenick and Baudelaire (c/o VMU)

FROM: Antony P. Cole, Chief, AEAP4

RE: INDONESIA: Transmigration, Preparation of a Repelita V Plan

1. Gloria has informed us of her discussions with Simatupang and Hasibuan on preparation of the Repelita V plan for transmigration. She also prepared the attached note on elements to be included in such a plan.

2. We fully agree with the urgency and priority which should be given to the preparation and discussion of such a plan, and as J-P. indicated in his previous visit we are prepared to consider providing financial support for this activity from Transmigration V. In view of the importance of getting this work under way and in light of budget constraints, we are prepared to consider a proposal to finance all incremental costs from loan funds under the revised project and financing plan. This would obviously include the cost of consultant services but might also cover incremental operating expenditures such as the cost of travel to the provinces.

3. To facilitate this work it would be extremely helpful if the Planning Bureau could develop a proposal for assembling a task force to carry out Repelita V planning and prepare draft terms of reference for consultant services, prior to J-P.'s arrival on March 13. The institutional and financial implications of these proposals could then be discussed while J-P. is in Jakarta. If you agree, could you kindly forward the attached note to Simatupang (with a copy to Sayuti Hasibuan and others as appropriate), with an indication of our needs.

4. Thanks for your help.

cc: Messrs. Jordan (AEAIN), Nyanin (AEPA4), Sidhu (AEPA4)  
Ms. Davis (AEAIN)

GDavis:ks



Suggestions on matters to be considered in

Preparation of a Repelita V Plan

<u>Activity</u>	<u>Actions Needed</u>
<u>Existing Areas</u>	
Estimate of policies and funds required to:	
1. Support/maintain existing sites	1. Straightforward Planning Bureau activity.
2. Select and settle farmers on existing NES and PIR sites by year	2. Work with DGE to determine areas with mature trees, and policies needed to ensure adequate stands and permit conversion of credit.
3. Permit upgrading of existing sites before handover to the provinces (a) Under Trans VI (b) Under Government Projects	3. Complete preparation of Trans VI. Develop necessary mechanisms to assess simple upgrading needed on other sites, particularly in relation to: - road upgrading - resolution of land issues - provision of basic health and water supplies, etc.
4. Incorporate spontaneous migrants into existing settlements	4. Inventory areas available within and adjacent to settlements which could absorb those prepared to move on their own.
<u>New Areas</u>	
Identify areas to be used, policies needed, and funds required to:	
5. Place settlements in the context of regional development	5. Assess in early FY87/88 provincial priorities for Repelita V, establish mechanisms for provincial participation in planning.
6. Resettle spontaneous migrants already in the outer islands who are encroaching on forest and conservation areas	6. Assess the magnitude of problem (coordinate with Forestry). Develop mechanisms for recruitment in the outer islands - should include Buginese - should <u>not</u> include local people with traditional land claims.
7. Facilitate resettlement in cooperation with private enterprises	7. Assess constraints to private investment, and develop profiles of suitable sites.

Activity

Actions Needed

- |   |  |
|---|--|
| 8. Promote further resettlement in tree crop and other cash crop projects           | 8. Work with DGE to determine areas suitable for such development, scale of program, funds required                                      |
| 9. Overcome problems in existing swamp sites and develop plan for future settlement | 9. Evaluate ongoing studies. Identify from masterplans those areas with the greatest potential for contributing to regional development. |
| 10. Prepare plan for partially-assisted settlement                                  | 10. Identify appropriate areas and policies  |

Other

Development of parallel and supporting programs for:

- |   |  |
|---|--|
| 11. Environmental protection  | 11. When indicative Repelita V plan completed, identify areas with priority for protection.  |
| 12. Benefiting local populations                                    | 12. Review policies for land payment and compensation. Adjust programs to suit the needs of local people incorporated into transmigration sites. Develop parallel programs to benefit local people not included in settlement. |
| 13. Development of long range plans to support spontaneous movement | 13. Improve procedures for land registration by individual smallholders in the outer islands. Develop credit programs for land purchase. Provide incentives for local officials to identify and allocate underutilized land.   |
| 14. Institutional Development                                       | 14. Indicate steps to be taken and resources needed to improve planning, coordination, monitoring and training.  |



Draft Fax

*K.T.  
Pleas f...  
\**

February 26, 1987

To: Price, copy Purcell, Zenick

From: Tony Cole, AEPA4

Subject: INDONESIA: Transmigration, Preparation of a Repelita V Plan

Gloria has informed us of her discussions with Simatupang and Hasibuan on preparation of the Repelita V plan for transmigration. She also prepared the attached note on elements to be included in such a plan.

We fully agree with the urgency and priority which should be given to the preparation and discussion of such a plan, and as J-P. indicated in his previous visit we are prepared to provide <sup>concrete</sup> financial support for this activity from Transmigration V. In view of the importance of getting this work underway and in light of budget constraints, we are prepared to consider a proposal to finance all incremental costs from loan funds. This would obviously include the cost of consultant services but might also cover incremental operating expenditures such as the cost of travel to the provinces.

*under the revised program plan*

To facilitate this work it would be extremely helpful if the Planning Bureau could develop a proposal for assembling a task force to carry out Repelita V planning and prepare draft terms of reference for consultant services, prior to J-P.'s arrival on March 13. The institutional and financial implications of these proposals could then be discussed while J-P. is in Jakarta. If you agree, could you kindly forward the attached note to Simatupang (with a copy to Sayuti Hasibuan and others as appropriate), with an indication of our needs.

Thanks for your help.

Regards,

Tony Cole

*cc SP, VMA RSI*

GDavis:mld (168)

*Ms. Davis  
Mr. J...  
Mr. Nyam  
Mr. S...*



## OFFICE MEMORANDUM

Davis

Date: March 3, 1987

To: Mr. Anthony Cole, Chief, AEPA4

From: H. Benjamin Fisher, AEPTA *HBF*

Subject: Indonesia - Regional Planning and Investment Project  
Preparation in Eastern Indonesia, PPIP II (INS/83/013)  
Component of the Nusa Tenggara Agricultural Support Project  
(Ln. 2638-IND) Supervision Report

- I carried out a supervision mission for this project February 9-16, 1987, under terms of reference dated January 28, 1987. My report is attached.
- The following documents and reports in connection with the supervision mission will be entered in the Project Implementation Index File, forwarded to the East Asia Regional Information Center, and available on request:

<u>Title of Report</u>	<u>Date Issued</u>	<u>Project Implementation Index File Reference</u>
Project Progress Report	9/86	II
Project Revision "E"	1/87	II
Project Progress Report and Internal Evaluation	2/87	II
1987 Work Plan	1/87	II
Rupiah Budget Papers	12/86-2/87	II
Tripartite Review Participants	2/16/87	I
Jakarta Project Library Bibliography (500 titles)	8/87	II
Australia Study Tour Report	11/86	II
<u>NTB/NTT/Southeast Sulawesi</u>		
NTB Project Library Bibliography (500 titles),	undated	II
CVs for NTT LTA candidates (Siskel, Clarkson, Clarke),	2/87	II
Baseline Socio-Economic Survey for Lembor, NTT	11/86	II
The Role of PPIP II in Implementation of the Sultra Regional Development Study	1/87	II



<u>Title of Report</u>	<u>Date Issued</u>	<u>Project Implementation Index File Reference</u>
<u>Irian Jaya</u>		
Minister of Public Works		
Seminar Speech	2/13/87	II
Monthly Report, Lavalin International	12/86	II
Inception Report - Vol. 1	2/87	II
Inception Report - Vol. 2	1/87	II
Seminars Agenda and Participants	1/87	II
Cultural Considerations	1/87	II
Institutional Assessment	2/87	II
Economic Development	12/86	II
Revised Technical Proposal	5/86	II

Distribution I (full report)

Messrs./Mss. Davar, Zincir (AEPDR), Hamilton, Davis (AEAIN),  
Zenick, Price, Farruk (RSI), Baudelaire (AEPA4),  
Mead (LEG), Howlett (AEPTA), Goodland (PPDES)

Distribution II (Implementation Summary only)

Messrs./Ms. Schaeffer (AENVF), Linn (AEADR), Quintos (LOA)



THE WORLD BANK

IBRD AND IDA - IMPLEMENTATION SUMMARY

FORM NO. 590R  
(4-85)

This summary is  the initial summary  
 part of a mission report  
 an annual update

For detailed instructions on completion of this form, please see Attachment B to the Annex of OMS 3.50

Regional Office: East Asia & Pacific	Project Name: PPIPD II	Project Code: INS/83/013	Loan <input type="checkbox"/> Credit <input type="checkbox"/> No. UNDP Project	L/C Amt./\$xx.xm/SDP \$6.135
Country: Indonesia	Borrower/Beneficiary: Government	Board Date FY	Signing Date: 9/1/85	Effective Date: 9/1/85
Managing Dept./Div. Name: Technical Assist. Unit	Org. Code No.: 17607	Projects Officer: H.B. Fisher	Loan Officer: Gloria Davis	Mission End Date: 2/17/87

SECTION 1: PROJECT DATA AND PERFORMANCE RATINGS	Closing Date	Compl. Date	Proj. Costs	Disbursement ( / )		Ratings	This La
	(Mo/Yr)	(Mo/Yr)	(\$/Local) (xx.xm)	(\$xx.xm)	(% of L/C)		Sum. Su
SAR/PR (Initial)	8.88	8.88	6.135	SAR/PR: \$ 2.285	37 %	Avail. Funds	2
Revised	8.88	8.88	6.135	Actual: \$ 2.000	33 %	Project Mgmt.	1
Last IS	8.88	8.88	6.135	Profile: \$ -	( - %)	Dev. Impact	2
Expected	8.88	8.88	6.135	Comm.: \$ 2.000	33 %	Overall Stat.	2
Ratings - This Summary		Compl. Delays - %	Cost Overrun - % - %	Disb. Lag 12 %			
Ratings - Last Summary (2 / 18/86)		- %	- % / - %	31 %			

SECTION 2: SUMMARY PROJECT DESCRIPTION Type of lending instrument: Joint-Financed UNDP Project  
 This \$6 million UNDP/OPE-executed project, for which the Bank provides joint financing of \$2.7 million under the Nusa Tenggara Agricultural Support Project (NTASP) and is responsible as Associated Agency for substantive supervision, provides technical assistance: (a) to NTT and NTT for support of NTASP implementation, especially the provincially implemented components, (b) to Southeast Sulawesi to identify investment possibilities, and (c) to Irian Jaya to undertake a comprehensive regional development study and identify investment possibilities. The Project is known by its Indonesian acronym PPIPD II.

SECTION 3: PROJECT STATUS. Summarize current status of implementation. Identify major problems.  
 Project implementation is proceeding well despite some delays due to reductions and late release of GOI counterpart funds. All advisers are in place; the short-term consultancy programs for work in NTT, NTB and Irian Jaya are ahead of schedule and beginning in Sultra; the Irian Jaya Study Inception Report has been completed and reviewed on schedule. GOI counterpart funds have been reduced, but shortfalls so far can be covered by devaluation-based savings in the UNDP budget. There have been no reductions in GOI funding for the provincially-implemented NTASP components which are the focus of PPIPD II in NTB and NTT. Budget cuts will have serious impact upon the centrally-implemented components including those backstopped by ADAB TA, however, and government-wide delays in the release of FY86/87 funds require some adjustments. The new UNDP Resident Representative raised some questions about project focus and it was agreed that parts of the UNDP project document would be edited to answer these.

SECTION 4: ACTION TAKEN. Summarize actions taken or agreed to be taken with Borrower to address major problems.  
 Actions taken and/or agreed regarding the UNDP project did not concern major problems, since none were identified. Members of the NTASP Steering Committee were urged to meet soon to resolve problems related to GOI budget cuts, however, and it was agreed that the UNDP project document would be edited to sharpen its description of project objectives, activities and outputs. Operational issues and decisions addressed by the mission are summarized in the aide memoire. These involved staffing and planning of next steps in the Irian Jaya Study, the short-term consultancy program in all provinces, and project management.

SECTION 5: ACTION PROPOSED. Summarize further actions required. Include agenda for next mission. (Mo/Yr) (10/87)  
 (a) Upon clearance, a telex should be sent to GOI, UNDP and OPE finalizing the aide memoire (see attached); (b) the UNDP project document revision will be drafted as soon as possible, anticipating review by the Bank and finalization by UNDP/OPE by late April 1987 (it is hoped this will satisfy the Resident Representative, but if not other steps may be necessary); and (c) the next PPIPD supervision mission should coincide with scheduled review of the Irian Jaya Study Interim Report in October-November 1987. The next mission should consider extension of the project to support implementation of provincially-implemented NTASP components and start-up TA for a possible Irian Jaya Development Project.

Name of Preparing Officer: H. Benjamin Fisher	Date: 3/6/87	Reviewed by: (Divisional Manager) A. Cole, AEPA4	PIR Review: (Asst. Dir/Dir/RVP)
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REGIONAL PLANNING, INVESTMENT PREPARATION AND EXPERIMENTAL AREA  
DEVELOPMENT FOR THE NUSA TENGGARAS, SOUTH EAST SULAWESI  
AND IRIAN JAYA (INS/83/013)

PPIPD COMPONENT OF THE NUSA TENGGARA AGRICULTURAL SUPPORT PROJECT  
(NTASP)

Draft Supervision Aide Memoire  
February 17, 1987

1. With Messrs. Osman Farruk and Emmanuel Zenick (RSI), I have worked closely with project management, the UNDP/OPE project officer and staff of the UNDP Resident Representative February 9-16 to review progress in project implementation and plans for upcoming work. Mr. David Mead (LEG) joined the mission in Irian Jaya, February 11-15, and Ms. Gloria Davis (AEAIN) participated in Jakarta discussions, February 11. Highlights of the mission included a seminar convened in Jayapura by the Governor and Minister of Public Works to review the inception report of the project-sponsored Irian Jaya Regional Development Study and a Tripartite Project Review (TPR) convened in Bali by the Project Steering Committee (Directors General Soenarjono of Cipta Karya and Mulyadi of BANGDA and Deputy Chairman Hariri Hady of BAPPENAS). Numerous public officials and representatives of voluntary organizations as well as virtually all project staff attended these events, which in addition to providing appropriate forums for discussion and resolution of outstanding issues offered good opportunities for more informal discussions which should be useful in facilitating project implementation. My principal conclusion is that this technical assistance project is now well underway and that useful results are already in evidence, though care must be taken to maintain project momentum if the ambitious work program is to be completed on schedule. Some steps must be taken soon to accommodate reductions in Rupiah funding and delays in its release as well as to deal with certain new opportunities and problems.

2. This is a complex project for the very reason that regional development institutions in Indonesia are complex: they require multi-level and multi-sectoral collaboration; they involve a wide range of regions and areas within those regions; they invite attention from a full gamut of public, voluntary and private organizations; they bear upon all phases of planning and project development cycles; and they include participation of a number of donors. The regional development institutions have also grown very rapidly, starting from a very weak base in the 1970's and emerging in the mid-1980's with key responsibilities in overall national development. An appreciation of this history as well as the institutional complexities is essential for assessment of progress in the implementation of PPIPD II or other such projects. Review and discussion of these issues proved to be useful on several occasions during the mission.

3. The purpose of this draft aide memoire is to set down my general observations as well as my understanding of key agreements reached during the mission. All points have been discussed with the UNDP/OPE project officer, UNDP staff and project management. The aide memoire will be reviewed by Bank management upon my return to Washington and will be finalized by letter or telex to the Government, UNDP Resident Representative and the Executing Agency promptly thereafter.



PIIPD Phase I (INS/78/046)

4. All activities under the Phase I project have been completed, the Imprest Account has been closed with the small remaining balance of funds transferred to the Phase II project, and the final project budget revision has been issued. The final inventory of project equipment is now under preparation by the World Bank and will be submitted to the UNDP as soon as possible so that it may be disposed of appropriately or transferred to the Phase II project.

Irian Jaya

5. BAPPEDA Support. Good progress has been made by the Long Term Advisor (LTA) in providing a wide range of advisory support to the BAPPEDA as specified in his Terms of Reference. This has emphasized work toward identification of projects for consideration within the normal Government budget process, drawing upon well-chosen short term consultants, and the preparation of Blue Book proposals for FY86/7 and FY87/88. The LTA has also provided valuable assistance to the Lavalin consultant team in facilitating its mobilization and initiation of work that is very clearly appreciated by all parties. While the LTA will continue to liase closely with the Lavalin team, however, it is agreed that he will devote relatively less time in the future to direct support of its operations.

6. Regional Development Study. The Lavalin team has mobilized effectively and its Inception Report, completed on schedule and presented well in the February 13-14 Jayapura Seminar, is generally satisfactory. Some of the background papers are especially useful and the Seminar itself was fully successful, with good participation by a large and diverse group of GOI and NGO officials, among others, who are directly involved in development initiatives throughout the Province.

7. Good progress has been made toward formulation of a regional development strategy for Irian Jaya. Many key issues are dealt with well in the Inception Report and an appropriate work program has been agreed in principle so that progress may continue during the next year. It is agreed, however, that it would be premature at the present time to decide upon a particular strategy and/or commence with preparation of a major project of the sort that might be considered for appraisal by the World Bank. The Nabire/hinterland development project suggestion advocated most strongly by the Lavalin team and the intermediate service-centre development project suggestion advocated by a number of participants early in the discussions, for example, are considered premature even though they are useful to help focus thinking and may eventually prove to be worthy of preparation as investment projects. Anticipating eventual project preparation, which would probably begin by earnest in early 1988, it is agreed that the following issues are among those that must be considered with significantly more attention than has been provided so far:



- \* GOI budget resource availability;
- \* Provincial and local administrative and implementation capacity;
- \* Specific arrangements for direct involvement of NGO's and Cendrawasih University;
- \* Agreement upon clear project appraisal criteria;
- \* Attention to infrastructure operation, maintenance and repair;
- \* Practical and sensitive handling of traditional (adat) lands;
- \* More thorough consideration of education, training and human resource development issues;
- \* More specific confirmation that indigenous Irianese, including women, will be beneficiaries of development initiatives;
- \* Attention to ameliorating the social impact of development.

8. It is agreed that steps will be taken by project management, staff and consultants in consultation with the UNDP and appropriate central and provincial government authorities to expedite the official approval of travel required within Irian Jaya by project staff, consultants and counterparts.

9. While it is clearly premature to begin preparation of the anticipated Irian Jaya regional development project, it is agreed that Lavalin will recruit a project preparation specialist with broad experience in project operations of the World Bank in circumstances as close as possible to those to be faced in Irian Jaya. This specialist may be recruited either to fill the vacant Deputy Team Leader post or as a short term consultant who would visit at least three times for approximately (a) two months in the near future to work with Lavalin and GOI staff to define parameters for the kind of project that might eventually be prepared to appraisal standards, (b) one month for the Interim Report Seminar scheduled for October 1987, and (c) four months as the overall study nears its July 1988 conclusion to lead work in the completion of project preparation.

### Southeast Sulawesi

10. I was not able to visit Southeast Sulawesi during the mission, but did have an opportunity to meet with the LTA and BAPPEDA Chairman. Work seems to be well underway and consistent with expectations, and the LTA's first report lays out a reasonable basis for coordination of PPIPD and the CIDA-financed regional development activities. It is agreed that he will also explore linkages with ADB projects and the Bank-financed fisheries project.



## NTB and NTT

11 PPIPD activities in NTB and NTT are concerned primarily with implementation of the NTASP, and are therefore reviewed on a continuing basis by RSI staff. The present mission noted with satisfaction that TA components of the NTASP have been provided on schedule by UNDP/OPE and that the provincial governments have responded enthusiastically. Project Implementation Units are in place, a number of worthwhile consultancies have been completed, and arrangements for NGOs and UN Volunteers are well advanced. The mission also notes with satisfaction that the LTAs have made substantial contributions to the strengthening of provincial planning institutions and BAPPEDA manpower in particular through assistance in the preparation of FY87/88 national budget and blue book proposals. The mission also notes, however, that the need for short-term national and international consultants for work in NTB and NTT is somewhat greater than anticipated at the time of appraisal. It therefore supports the proposal of project management to provide an additional 41 m/m for short term consultancies in NTB and NTT within the approved project budget and lifetime.

12. The mission is also pleased that all FY86/87 Rupiah funds have been released for implementation of the NTASPs provincially-implemented components -- those components of most direct concern to PPIPD -- though delays already faced do raise the prospect that it will not be possible to complete implementation activities within the approved UNDP project lifetime. Delays to date imply the need for a project extension through approximately December 1988 in order that the provincially-implemented NTASP components might be provided with adequate technical assistance support. Therefore, the mission concurs with project management in recommending that decision regarding extension be made no later than December 1987.

13. The mission is seriously concerned by the substantial reduction in Rupiah funding for NTASP components to be implemented by the central government, however, and wishes to emphasize its view that a meeting of the NTASP Steering Committee must be convened in the very near future to decide upon an appropriate response.

## Project Management

14. Cipta Karya. The mission is well impressed with the continuing excellence of overall PPIPD project management provided through the Office of the National Project Coordinator and Chief Technical Adviser. The NPC and CTA deserve significant credit for smooth overall functioning of the project, drawing daily on their professional expertise with regard to the complex substantive dimensions of the project and making extraordinary personal efforts in dealing with the several national and international bureaucracies and personalities involved. The two Deputy NPCs and administrative staff also play unusually valuable roles. Cipta Karya continues to play well its historical role in regional planning through the stage of investment project identification in direct collaboration with BAPPENAS and BANGDA.



15. BANGDA. The BANGDA office, including the Deputy Project Coordinator and LTA with special responsibility of management of TA for the provincially-implemented components of the NTASP, is now operating smoothly. Outstanding achievements during the reporting period just completed include establishment of a financial reporting system for NTB and NTT, training of its users, and creation of the required Project Implementation Units. The BANGDA office has also played a key role in upgrading the technical quality of sub-projects to be financed through the NTASP and in managing related consultancies and training activities including exchanges already completed between the BAPPEDAs of NTB, NTT and Jogjakarta. The mission endorses plans for an upcoming exchange with the BAPPEDAs of Irian Jaya and Southeast Sulawesi. The mission also endorses provision of support for additional short-term consultancies for NTASP implementation and strengthening of the BAPPEDAs and it recommends further consideration the Steering Committee of possibilities to expand manpower assigned to the the BANGDA office, drawing if necessary on the UNDP project budget.

16. Training. The limited training budget appears to have been used effectively, and the mission concurs with the suggestion of UNDP that possibilities for additional training support should be identified subject to the availability of budget resources.

17. Budget. As noted above, the mission endorses project management's proposal to add approximately 41 m/m of short-term consultancy support for work in NTB and NTB within the approved project budget and lifetime upon appropriate revision of the project document as soon as possible. It also endorses project management's proposal to expand the project imprest account to accomodate lags of up to three months in the release of counterpart funds on a reimbursable basis and to provide funds directly from the UNDP budget to cover certain essential travel, maintenance and office supply costs for which Rupiah funds are no longer available. It is understood that further consideration of these matters will be required within UNDP and by UNDP in consultation with BAPPENAS.

18. Extensions. The mission endorses project management's proposal to extend all LTA's to the approved August 1988 completion date upon appropriate revision of the project document in the near future. The mission also recommends that project management, the Steering Committee and UNDP begin to plan for provision of an appropriate level of TA to bridge the anticipated gap between the presently-scheduled August 1988 closing of the project and (a) the earliest possible date of effectiveness for the proposed Irian Jaya Area Development project and (b) the earliest possible termination of TA needs for provincially implemented components of the NTASP.

19. Project Document Revision. It is agreed that project management will complete a substantive revision of the project document in order to sharpen the definition of project objectives, activities and outputs. The mission concurs with the Steering Committee in its view that this revision must be completed and agreed by all parties as soon as possible, hopefully by April 1987.

20. Tripartite Meetings. The mission recommends that the next Tripartite Review should be held in October or November 1987 to coincide with presentation of the Interim Report for the Irian Jaya Regional Development Study and to provide adequate time for subsequent steps necessary to prepare for a possible project extension beyond August 1988 as well as the satisfaction of UNDP project evaluation requirements.



TELEX TO GOVERNMENT, UNDP AND UNDP/OPE

March 5, 1987

FOR MR. SOENARJONO DANOEDJO (DIRECTOR GENERAL, CIPTA KARYA), MR. GALAL MADGI (UNDP RESREP) AND MR. BERNDT BERNANDER (DIRECTOR, UNDP/OPE) INFO ZENICK AND OSMAN FARRUK (RSI). REGIONAL PLANNING INVESTMENT PREPARATION AND EXPERIMENTAL AREA DEVELOPMENT IN EASTERN INDONESIA (INS/83/013). WE HAVE REVIEWED THE DRAFT SUPERVISION AIDE MEMOIRE PREPARED AT THE CONCLUSION OF MR. FISHER'S RECENT SUPERVISION MISSION AND AGREE THAT IT MAY NOW BE REGARDED AS FINAL. ANTHONY COLE, CHIEF, INDONESIA AGRICULTURE PROJECTS DIVISION. THE WORLD BANK.

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FOR MR. SOENARJONO DANOEDJO (DIRECTOR GENERAL, CIPTA KARYA), MR. GALAL MADGI (UNDP RESREP) AND MR. BERNDT BERNANDER (DIRECTOR, UNDP/OPE) INFO ZENICK AND OSMAN FARRUK (RSI). REGIONAL PLANNING INVESTMENT PREPARATION AND EXPERIMENTAL AREA DEVELOPMENT IN EASTERN INDONESIA (INS/83/013). WE HAVE REVIEWED THE DRAFT SUPERVISION AIDE MEMOIRE PREPARED AT THE CONCLUSION OF MR. FISHER'S RECENT SUPERVISION MISSION AND AGREE THAT IT MAY NOW BE REGARDED AS FINAL. ANTHONY COLE, CHIEF, INDONESIA AGRICULTURE PROJECTS DIVISION. THE WORLD BANK.

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- 1. MR. SOENARJONO DANOEDJO, DIRECTOR GENERAL  
CIPTA KARYA, JAKARTA, INDONESIA  
TELEX NO. 47330 DG CK IA
- 2. MR. GALAL MAGDI, RESIDENT REPRESENTATIVE  
UNITED NATIONS DEVELOPMENT PROGRAMME  
JAKARTA, INDONESIA  
TELEX NO. 44178 UNDEVPROIA
- 3. MR. BERNDT BERNANDER, DIRECTOR  
ONE UNITED NATIONS PLAZA  
NEW YORK, NEW YORK 10017  
TELEX NO. 645495 UNDOPE NYK
- 4. MESSRS. ZENICK AND PRICE, RESIDENT STAFF  
INTBAFRAD  
JAKARTA, INDONESIA  
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-MANILA HOTEL

-MANILA, PHILIPPINES

-ATTN: MR. GORDON HUNTING WORLD BANK OFFICIAL (ARR. 3/8/87)

BT

WASHINGTON, DC - 6-MAR-87

FOLLOWING IS A TELEX FROM MR. JAN VAN DER ZEE, COWICONSULT QUOTE RE: PRODUCTION TRAINING CENTERS, INDONESIA, I REFER TO OUR PLEASANT TELEPHONE CONVERSATION OF 11TH FEBRUARY AND TO OUR SUPPLEMENTARY INFORMATION TO TECHNICAL AND FINANCIAL PROPOSALS COPIED TO YOU BY LETTER OF 24TH FEBRUARY. WE UNDERSTAND THAT THE INDONESIAN GOVERNMENT IS SATISFIED WITH THE INFORMATION PROVIDED. HOWEVER, THE CONTRACT NEGOTIATIONS HAVE NOT STARTED, APPARENTLY BECAUSE THE INDONESIAN GOVERNMENT HAS NOT DECIDED WHETHER THE CONTRACT SHALL BE SUBCONTRACT (CMC/RCA IS MENTIONED) OR DIRECT CONTRACT. WE PREFER DIRECT CONTRACT. WE FEAR THAT WE ARE RAPIDLY APPROACHING THE DEADLINE FOR SECURING THE RUPIAH FINANCING FOR THIS FISCAL YEAR AS HINTED BY YOU. THE ABOVE IS FOR YOUR INFORMATION ONLY AND MAY ALSO BE OF ASSISTANCE TO YOU ON YOUR COMING TRIP TO INDONESIA. KIND REGARDS, JAN VAN DER ZEE, COWICONSULT UNQUOTE. REGARDS, GILPIN.

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~~Gloria~~ <sup>GLORIA</sup>  
DAVIS 7/7/67.

The attached is  
self explanatory. I was  
invited but could not  
find the time to go. Hopefully  
your report extract will  
stimulate some discussion.

Best regards.  
Dennis P.

## Spontaneous Migration

### The Indonesian Transmigration Sector Review

Prepared by the World Bank

On October 24, 1986<sup>4</sup> the World Bank presented the above review to the Government of Indonesia. One of the topics covered in this review was Spontaneous Migration.

Minister Martono has agreed that the relevant parts of the report be extracted for distribution to participants of the national seminar on "Investasi Swasta, Pembangunan Daerah dan Transmigrasi Swakarsa" to stimulate and contribute to discussion on this most important subject.

The paragraphs below are taken from the Sector Review. The first section deals with the subject in detail. The second section summarises the issues. The third section is a summary of the major recommendations of the whole report so that the comments on Spontaneous Migration can be seen in context.

## SECTION I

### Spontaneous Migration

7.19 Promoting spontaneous migration is a major objective of the Government, and has gained increasing attention as financial resources have become more limited. Recognizing the importance of large-scale unassisted migration, a Directorate for Self-initiated (Swakarsa) Movement was set up in the former Directorate General of Transmigration in 1979 and its tasks were set out in a Ministerial Decree issued in 1982. Several partially-assisted programs were envisioned, including the identification and settlement of spontaneous migrants already in transmigration sites. Although some spontaneous families were settled in existing areas, no program of partially-assisted movement or of support for spontaneous migration was developed in Repelita III. However, the Repelita III target of 500,000 families was eventually achieved by including 169,500 "spontaneous" families in the total moved. Of these, about 30,000 families were moved with partial assistance and the remaining 140,000 moved without assistance, but were identified in sending or receiving areas (Table 7.3). It is important to emphasize that these families were identified to round out official targets, and data collection, particularly from sending provinces, is not a good indicator of the number of people who actually move.

7.20 Of the target of 750,000 families for Repelita IV, the Government initially intended that 315,000 would be settled in upland and tidal programs, 105,000 in tree crop programs and the remainder, 330,000 families, would be settled on various partially-assisted or unassisted programs. To ensure that unassisted movers would be counted, Government also required that first-time migrants register before they move.



Table 7.3: BREAKDOWN OF SELF-INITIATED (SWAKARSA) FAMILIES COUNTED IN REPELITA III

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<u>With Assistance (DBB)</u>	
Moved with assistance from provincial governments	2,675
Other	27,875
<u>Subtotal</u>	<u>30,550</u>
<u>Without Assistance (TBB)</u>	
Relatives in projects	46,132
Those obtaining identification forms in sending areas	33,293
Settled in projects	4,877
PIR projects /a	4,264
Unexplained	50,381
<u>Subtotal</u>	<u>138,947</u>
<u>Total</u>	<u>169,497</u>

---

/a These families obtain considerable assistance and should be regarded as sponsored settlers.

Source: Joan Harjono from MOT statements on Swakarsa transmigration issued in 1984.

### The Process of Spontaneous Movement

7.21 In the past, the Government has been limited in its ability to identify and generate the policies needed to stimulate spontaneous migration. To understand what policies are needed, it is necessary to understand both the process of spontaneous movement and the constraints to settlement. Spontaneous migrants moving outside of government-assisted programs must ensure that they have adequate funds for transport and initial subsistence and that they have reasonable certainty of a cheap place to stay and employment in the destination area. Very poor people cannot afford to move on their own, even to areas with good employment prospects. Indeed, the very poorest people seldom, if ever, move without outside help, and virtually all spontaneous migration occurs through pre-existing chains of social support. When labor shortages arise in transmigration sites, earlier settlers alert friends and relatives, encourage their immigration and assist in their initial support. It follows that settlers in pioneer areas need the most assistance from Government (because they do not have family and friends to help them), and that if employment is generated in the receiving area, subsequent migrants will require less and less assistance.



7.22 This suggests that the benefit package should be diversified by region, remoteness, and stage in the settlement process. For example, the demand for land is so strong in Sumatra that virtually all land identified under the fill-in (sisipan) program could be settled if infrastructure and access were provided; but settlement in the more remote areas of Kalimantan and Irian Jaya implies substantial government investment and support. Conversely, given a much reduced sponsored program, relatively little spontaneous movement is expected to occur in Kalimantan and Irian Jaya.

#### Constraints to Spontaneous Movement

7.23 Once spontaneous migrants are in the receiving area, the major factor limiting settlement is the inability to find appropriate land and obtain legal rights to it. This problem, in turn, is due to (a) traditional systems of land tenure in the outer islands, (b) difficulties in land registration, (c) problems in providing compensation to land owners, and (d) Government policies which have encouraged complete occupation of available sites to meet settlement targets. These points are expanded briefly below.

- (a) Land Tenure. Land rights in rural areas of the outer islands are generally governed by customary law (adat). Under customary law, authority over land may reside in extended families or local territorial groups, and individual smallholders are seldom in a position to transfer the ownership of their land. If a spontaneous migrant wants land, he does what is called ganti-rugi -- compensates for loss, either to the individual or group. Compensation may be for the loss of the right to use the land or the loss of productive trees, but it is not generally for the land itself. Therefore, if the land improves in value, as it does with increased immigration or the planting of perennial crops, migrants may be requested to pay additional money or to return the land. They may even be subject to counter claims that the person who received the initial payments was not the person who had the right to do so. For this reason, many people are unwilling or unable to move without government assistance in finding land.
- (b) Land Registration. It is possible to legally transfer land title in the outer islands, but this entails official surveys and complex registration procedures which are costly and difficult to arrange. While the Directorate General of Agraria has staff in all outlying districts, they must give priority in land registration to development projects, to cadastral surveys in urban areas and towns and to registration for commercial enterprises, so the registration of smallholder land is difficult. Furthermore, the cost of cadastral surveys and land registration is currently about US\$70, well beyond the capacity of most transmigrants to pay.
- (c) The Cost of Land. Migrants are also limited in their ability to purchase land. There are many areas in the outer islands where land of moderate fertility is available at a "fair price", often about US\$40-60/ha. However, migrants seldom have this amount of money and Government does not pay cash compensation for land (See Chapter V).



Therefore, since land cannot be alienated without local consent, an impasse results in which the better land is seldom relinquished for transmigration, and spontaneous migrants settle on steep slopes or in protected forest areas, even though there are large areas of better, underutilized land available at a reasonable price.

- (d) Planning. Finally, spontaneous migrants are not taken into account in the planning process. Under the pressure of high targets, most areas which were identified in Repelita III were settled with fully sponsored migrants, and little thought was given to the amount of land needed to incorporate spontaneous migrants or to provide for family expansion. To overcome these problems it is crucial that Government develop new approaches to facilitate spontaneous movement in the long-term, and develop specific medium- and short-term programs to promote the settlement of past spontaneous migrants and incorporate future ones into the settlement plan.

Successful programs to facilitate spontaneous movement will require actions to address these constraints.

#### The Long-Term Program

7.24 Current evidence indicates that agricultural land suitable for large-scale sponsored settlement in the traditional receiving provinces of Sumatra, Sulawesi and Kalimantan, will be largely utilized in the next five to ten years. After that time, most resettlement occurring in these islands is likely to be by spontaneous migrants seeking underutilized land or off-farm employment. In many areas this situation already exists. The Government must therefore give increased attention to those policies which facilitate spontaneous movement, but reduce overcrowding on old sites, competition with local residents, and encroachment on forested areas. The three main components of such a program are (a) improvements in the mechanisms for land identification and land registration, (b) provision of capital for land purchase and land registration, and (c) the development of strong measures for environmental protection.

7.25 Land Registration. The best way to facilitate land transfer in the immediate future is to increase the incentives for district and sub-district officials to identify and register landholdings suitable for small numbers of migrants. To establish a program along these lines, the MOT might allocate a lump sum of perhaps US\$150-200 for settling a family on 2 ha of land. Up to half this amount would be allocated to the district level Agraria office for land surveys and registration. The remainder would be paid to the district (kabupaten) or subdistrict (kecamatan) treasury as an incentive to identify land and facilitate registration. Land registration criteria would eliminate steep slopes and protected areas and ensure reasonable access. Although it would undoubtedly be a slow process to develop the required procedures, such a program could reduce the cost of settlement per family to 3-4% of current costs.



7.26 Credit Mechanisms for Land Purchase. In the past, many communities willingly relinquished underutilized land to the Government for transmigration in order to obtain associated infrastructure, markets and services. In most areas of Sumatra, however, even marginal land now has a financial value and people with claims to such land are generally unwilling to part with it without remuneration. At the moment, however, Indonesia has no form of rural credit which will provide funds for the purchase of land to individuals or groups outside of government programs. Both the Government and banks have been wary of credit for land purchase, fearing that borrowers might be unwilling or unable to repay, or that the availability of credit would drive up land prices. However, the development of credit or the provision of funds for land purchase is a necessary aspect of rational land allocation, and such mechanisms must now be developed.

7.27 As a temporary measure, while more general credit mechanisms are being developed, the MOT should consider providing a line of funds for land purchase and land registration. Initially, these funds could be made available to NGOs or other migrant associations which could guarantee repayment. In the long run, however, rational, economic land use will depend on the development of credit mechanisms that enable individual migrants to buy land and improve its productivity. Complete cost recovery would reduce the cost of the program to the cost of administration alone. Even if such funds were not repaid, however, this program could potentially reduce the cost of settlement to US\$200-500/family, about 4% to 10% of the current cost.

7.28 Environmental Protection. Wherever spontaneous migrants go, they try to settle on land which does not have local land claims. These areas are often either poorly suited to agriculture (e.g. steep slopes) or in protected forest. Therefore, any program to encourage spontaneous migration must also be accompanied by strong measures for environmental protection. This means that areas of production and conservation forest must be clearly identified and demarcated so migrants are aware of the status of the land. Local officials should also be made aware of land status and there should be sanctions against officials who permit settlement in protected areas as well as against those who encroach on such land. Since spontaneous movement is already occurring at high rates in Sumatra, priority should be given to land demarcation on that island, and master plans for environmental protection should be developed by the Bappedas and ratified by MOT and MOF in the receiving provinces.

#### Medium-Term Program (Repelita V)

7.29 Due to financial constraints, the settlement program for the remainder of Repelita IV is likely to be slow. This means that the opportunity exists to plan a Repelita V transmigration program which takes into account the locations to be settled, the mix of settlement models (upland food crops, tree crops, and swamps), and levels of support -- ranging from fully sponsored, through partially-assisted and unassisted migrants. The main elements to be considered when deciding on the level of assistance to be provided to migrants in the Repelita V program are (a) location, (b) area of recruitment, (c) phasing of settlement.



*my emphasis  
DO.*

7.30 Fully-assisted. If sites are new and/or remote, or if those being settled are poor families recruited in Java or Bali (i.e. families without relatives or friends in the receiving areas), the full settlement package must be provided. There should be no exceptions to this rule. There is no "cushion" in the current transmigration package which can or should be left out if farmers have been recruited in Java and have no alternative means of support. Saving money by reducing the subsistence or agricultural packages, for example, could have serious negative consequences with no major saving in cost. Therefore, in planning the Repelita V program, it should be assumed that farmers sent from Java or Bali to new and remote locations should have full support.

7.31 Partially-assisted. Fill-in (sisipan) sites (small areas between large-scale sites) and the later phases of successful new sites can be settled using partial packages if migrants are recruited among spontaneous migrants and second generation families already in the receiving areas. Because such households already have family and friends in the area, because they know the area and the difficulties inherent in settlement, and because they are, in the case of spontaneous migrants, self-selected, they can make reasonable decisions about whether they have the resources and ability to cope with new settlement in the absence of full support.

7.32 Recruitment in the receiving areas implies a shift in emphasis from counting migrants "moved" to counting those families "settled". The Government is concerned that such a shift may lessen the demographic impact of transmigration in critical areas, but this need not be the case. Intensive recruitment in critical areas such as upper watersheds could continue under the fully-sponsored program, and spontaneous migrants from these areas would be expected to follow.

7.33 Several options are available for partially-assisted schemes:

- (a) Homesteading. The basic component of any partially-assisted package is land. For the last decade or so a number of writers have proposed an Indonesian homesteading policy such as that used to settle the outlying areas of the United States and the Philippines. Under homesteading, the Government would identify and obtain the land to be settled, divide it into plots and possibly provide minimum infrastructure. These plots would then be given to farmers registering on site. Such a program would work best in Sumatra where the infrastructure is already available and where many migrants would have relatives in the vicinity. It is unlikely to be successful in the more remote areas earmarked for transmigration. The cost of such a package would be on the order of \$500/family, e.g. the amount needed for site selection and evaluation.
- (b) Other Land Allocation Schemes. The second most important element is access. In successful settlement areas, where infrastructure exists or is being put into place, the provision of individual plots of land along village roads would be more than sufficient to induce settlement by spontaneous migrants already in the area. To encourage resettlement in slightly less developed areas, 0.25 ha house-



lots along the road could be cleared as roads were constructed. To promote agricultural production, foodcrop lots should be allocated directly behind the houses in order to facilitate clearing and development by family labor. Land titling should be done after the land is cleared by the farmer. Adequate reserve land should also be provided for second stage development. The cost of this package is estimated at about US\$1,000/family.

- (c) Land Allocation with Other Benefits. Most partially-assisted migrants would also profit from start-up funds for housing and agricultural supplies. Ideally this would be in the form of a cash grant of at least US\$500 which could be used by the migrants for needed goods and services. The Government is wary of cash grants since it is concerned that migrants may register for the cash alone or that funds may be diverted. Recognizing these problems, goods could be provided in-kind. In order of priority these are: (a) subsistence supplies, (b) agricultural inputs, and (c) building supplies. These elements are worth about \$1,000. Construction of a house, rather than the provision of building materials, would add about \$500 to this package. The cost of this partially-assisted package including building supplies would be roughly US\$2,000, and with a constructed house it would cost about US\$2,500, about half the current cost.
- (d) Unregistered Migration. Any mandatory registration, particularly if accompanied by checks in the area of origin or the receiving area, will potentially discourage circulatory migration and free movement. For this reason mandatory registration is to be discouraged. Instead MOT should introduce positive incentives for people to check in with transmigration offices and register in both Java and the outer islands. The incentive for check-in in Java might be to obtain discounts on transportation, maps and information. The incentives in the receiving area might be in the form of information on benefits which can be obtained in terms of land, extension, or other forms of support. The number of unassisted migrants should be counted in the receiving provinces.

7.34 Toward a Staged Program of Settlement. The Government has experimented in the past with programs where a portion of the site was allocated to sponsored migrants, a portion to local people, and a part was reserved for spontaneous migrants -- the so-called tri-partial approach. In the light of budget constraints, a new program of this type is required on a phased basis. In the first stage, pioneer settlers (who can be recruited in the sending or receiving provinces) should receive the full-benefit package. In the second stage, partially-assisted migrants could be recruited in receiving areas. Land would also be reserved for third-stage settlement by spontaneous migrants and the second-generation. Local people could be settled at any point in this process.



### Short-term Measures

7.35 As of FY86/87, the Government had cleared land for 60,000 families and constructed houses for 54,000 families, but due to budgetary constraints it had funds for settling only 26,000 families on the fully-sponsored upland program and for settling 10,000 fully-sponsored families on tree crop schemes. Under these circumstances, there has been growing interest in partially-assisted programs which could potentially accelerate settlement while reducing costs. It is important that the government recognize, however, that the urgency of budget constraints does not alter the guidelines listed above:

- (a) the first settlers in pioneer sites, settlers in remote sites where off farm work is not widely available, and settlers recruited in Java and moved to areas where they do not have family or friends should be fully supported;
- (b) if the package is to be reduced, settlers should be recruited in the receiving areas;
- (c) the better the area, and the more existing and spontaneous migrants in the vicinity, the more the package can be reduced.

Within these guidelines, partially-assisted programs are appropriate. The programs cited above would go a long way toward relieving the pressure for land by spontaneous migrants in existing sites and a special effort should be made to ensure that surplus land within existing settlements (that beyond 3.5 ha/family) is allocated to spontaneous migrants before the community is transferred to the province.

### Institutional Mechanisms for Program Development

7.36 There is a Directorate of Self-Initiated (Swakarsa) movement in the Directorate General of Mobilization and Development; however, this Directorate is relatively new and its staff are not sufficiently senior to recommend major policy changes. For this reason, program development has been slow and has focused on the components of the settlement package (i.e. eliminating the cost of transport, land clearing or houses), rather than on supporting the ongoing process of spontaneous settlement.

7.37 Recently, the office of the Secretary General in the MOT has tackled several important program and policy issues by forming special teams drawn from select senior officials and the staff of appropriate Directorates. This model could also be used to design key policies to support spontaneous migration and develop short-, medium- and long-term programs for partially-assisted settlement. These policies and programs could be developed in the office of the SEKGEN and then discussed by the Minister with the other Ministries involved. The Swakarsa Directorate would function as the Secretariat for this purpose.



### The Prospects for Spontaneous Movement

7.38 About 1.1 million people moved from the inner to the outer islands during 1975-80, of whom 878,000 moved to rural areas. At least 600,000 of these people, were not sponsored transmigrants. This is the equivalent of about 150,000 families <sup>2/</sup> of spontaneous movers or perhaps 30,000 families per year. With the level of investment and amount of development activity in the outer islands in Repelita III, it is reasonable to assume that this level increased significantly, at least doubling to 50-75,000 families/year. Government targets for FY85/86 call for over 100,000 families to move on partial or unassisted programs, and the question is whether this level of movement can be achieved or should be attempted.

7.39 The amount and direction of spontaneous movement in Repelita IV will depend on a number of factors. First, the state of the economy and the pattern of government investment. The relatively large amount of spontaneous movement from the inner to the outer islands in the last ten years has been in response to labor opportunities created there. Some of this employment has been generated in the process of creating transmigration sites, some as a result of the need for secondary services by migrants, some in different sectors such as mining and manufacturing. If public investment in the outer islands slackens and economic development slows, the number of spontaneous migrants will lessen.

7.40 Second, since spontaneous migrants often follow relatives or friends, it follows that spontaneous migrants will not be the first settlers in pioneer areas. In the absence of a strong sponsored program, only a few inner island residents would be expected to move spontaneously to Irian Jaya. More would move to Kalimantan, where there are already sponsored settlers and where employment opportunities in the timber industry are attractive, and the vast majority of spontaneous migrants will continue to go to Sumatra. Since much of the available land in Sumatra is already occupied, strong government encouragement to move there in the absence of improved land acquisition systems and strong environmental protection measures could have negative consequences. Chief among these would be a flood of unskilled labor onto provincial markets which would drive down wages and increase underemployment. These factors should be carefully monitored by the MOT.

7.41 In summary, it is not certain that the Government can achieve high levels of spontaneous movement to the outer islands if investment there slackens, and efforts to sustain high levels of movement in the absence of employment creation could have an adverse effect on the regional economies. For this reason it is important that the MOT use targets only as guidelines and concentrate on the key policies required to facilitate spontaneous movement. Among these, establishment of a responsive system of land registration, establishment of a short-term (MOT-supported) and longer-range (bank-supported) credit system for land purchase, and development of strong environmental protection measures are urgently required. Other programs such as

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2/ This is an estimate since spontaneous migrants often move individually.



homesteading and partially-assisted settlement packages will help circumvent immediate budgetary constraints, but they cannot circumvent long-term problems of land availability and economic land use in the outer islands.

SECTION II

Spontaneous Migration - Summary

9. To address constraints to movement and settlement, long-term and short-term measures are proposed. To promote orderly settlement in the long run, steps are needed to:

- (a) improve mechanisms for land identification and land registration by individual families (7.25);
- (b) provide credit for land purchase (7.26), this could initially be provided by the MOT (7.27);
- (c) demarcate and protect areas unsuited for agriculture or needed for production and conservation (7.28);
- (d) incorporate spontaneous migrants into planned sites (7.23) and
- (e) discourage mandatory registration for spontaneous migrants.

10. In the medium-term, partially-assisted schemes could consist of:

- (a) land identification by local officials (7.25);
- (b) homesteading (7.33);
- (c) other land allocation schemes (7.33); and
- (d) schemes which provide land and partial benefits (7.33).

Each of these is appropriate at a different stage in the settlement process (7.34). Migrants who are recruited in Java and sent to new, remote site should receive the full benefit package (7.30), but partial packages can be used for settlement if settlers are recruited among spontaneous migrants and second generation families in the area (7.31 and 7.35).

11. To develop policies for spontaneous migration an interagency team should be formed including officials with sufficient seniority to undertake policy formulation (7.36 and 7.37).

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P.P.*



SECTION III

SUMMARY OF MAJOR RECOMMENDATIONS IN THE MAIN REPORT

10.01 The following section summarizes the major recommendations emerging from the main report. Detailed recommendations cross-referenced to the text are found in Annex 10.

Maintenance and Second Stage Development

10.02 At a time of resource constraints, there is a strong argument for further investment in existing sites in order to sustain and improve migrant incomes and to capture the economic benefits of the manpower and infrastructure which are already in place. In addition, the Government should make an effort to sustain reasonable levels of investment in those provinces and districts which received large numbers of migrants in Repelita III, in order to prevent increasing competition for work, falling wages and possible second round flows of labor either back to Java or to outer island cities.

10.03 The most important form of second-stage development is likely to be in tree crop establishment in existing sites. To establish tree crops for transmigrants, the PMU programs must be strengthened and expanded, and the MOT should conduct an inventory of sites to determine which ones require tree crops and whether the sites have sufficient land for tree crop development. To support such development, steps are needed to mobilize private sector investment in tree crop establishment in transmigration sites, and to deregulate the processing of coconut oil.

10.04 Maintenance of settlement infrastructure must also be given high priority. In transmigration settlements, road maintenance is particularly critical to economic growth. In recent months the Government has taken steps to identify and register transmigration roads, and a program to assist those districts that have received large numbers of migrants to absorb and upgrade transmigration roads is now urgently required.

10.05 There are a number of other improvements that can be made in transmigration sites. For example, the introduction of livestock, fishponds and minor tree crops, the acceleration of land titling, and the improvement of research and extension should be encouraged. However, this report cautions that steps to ameliorate natural conditions, through liming and bench terracing for example, may be too costly to be replicable on a large-scale. The report also suggests that integrated, multi-component programs will be difficult to manage and it encourages an approach in which the MOT, in conjunction with the line agencies, identifies the needs of existing sites and contracts with the line agencies for these services. Funds would flow directly from the Ministry of Finance to the agencies for program expenditures.

New Settlement

10.06 Program Consolidation. In light of expected financial constraints, fill-in programs which make use of existing infrastructure should have priority over new settlement in pioneer areas. Such programs, which involve the settlement of migrants within or adjacent to existing sites, will have the



highest rate of return and can be carried out under partially-assisted programs if settlers are recruited among spontaneous migrants already in the area. Programs of consolidation will depend heavily on regional authorities for land identification and implementation, and are expected to contribute substantially to regional development.

10.07 Farm Model. Although there will be opportunities for many settlement models in the transmigration program, a shift in program emphasis is required if reasonable settlement and income levels are to be sustained.

- (a) Annual Crops. Settlements based mainly on annual crops may be possible in limited areas with good soils, in swamp reclamation areas (d, below) and in fill-in areas where ample opportunities for wage work already exist.
- (b) Tree Crops. In spite of marketing constraints, tree crop programs, such as NES/PIR projects, have good prospects. They provide higher incomes and rates of return than projects based on annual crops in marginal areas and have the potential for cost recovery. PMU programs can be tapped for new settlement, but priority for PMUs should be given to the development of tree crops on already existing schemes.
- (c) Other Cash Crops. Other cash crops such as sugar (Sumatra and Kalimantan) and cotton (SE Sulawesi) may have potential either in first or second stage development. However, most other cash crops (fruits, vegetables, soybeans) will be more attractive in densely settled areas with better market prospects.
- (d) Swamp Reclamation. Settlement in areas of swamp reclamation has a number of attractive features. However, to realize the potential of swamp sites, steps are needed to improve agro-hydrological surveys, drainage, and land development techniques; to improve coordination and agricultural supporting services; to develop an intensive pest management strategy; and to address problems of potable water and malaria control.

#### Partially-Assisted and Spontaneous Migration

10.08 In the near- and medium-term (Repelita IV and V) two principles must be borne in mind: first, pioneer settlement should be fully sponsored, as settlers in such areas will not have family, friends or well-developed institutions to support them. Second, partially-assisted migrants should be recruited among spontaneous migrants and second generation families already in the receiving areas. In the longer term, however, (Repelita VI) the success of transmigration program will depend on the ability of MOT to settle individual families moving on their own. To promote this:

- (a) incentives should be developed to encourage local-level officials to identify, register, and transfer underutilized land to transmigrants and to arrange for financial compensation as required;



- (b) credit mechanisms should be developed to permit poor smallholders to purchase and register land; and
- (c) emphasis should be given to parallel programs for environmental protection in areas where spontaneous migrants are expected to settle.

To avoid the adverse effects of spontaneous movement, it is important that the MOT use targets only as guidelines and concentrate on the key policies required to facilitate settlement.

### Environmental and Social Factors in Transmigration

10.09 Environmental Soundness. A major effort is needed to identify, demarcate and gazette areas needed for timber production and conservation purposes. Improved maps are being prepared by Bakosurtonal, and additional specialist assistance could facilitate the completion of the land resource suitability maps needed to reconcile development priorities, forest boundaries, and environmental master plans. Even when maps are available, however, considerable work will still be required to assess areas of biotic importance and to demarcate areas for conservation. To facilitate this task, a consortium should be considered, consisting of donor countries and environmental groups willing to provide financial and technical support. Government officials and consortium members could decide on the most efficient ways of studying and gazetting important lands and determining the priority to be given to specific areas for protection. Since wetlands appear to have good potential for settlement, these areas should also receive attention to ensure an adequate strategy for their development.

10.10 Social Soundness. Further steps need to be taken to provide benefits to local people in the vicinity of transmigration settlements and to link second-stage development to regional development. To improve the MOT's ability to understand and assist local people in the vicinity of transmigration settlements, and to aid MOT in developing appropriate procedures for the provision of compensation and parallel benefits, either the Directorate for Social and Cultural Development should be strengthened or a new Directorate within the MOT should be developed to deal with matters relating to local people. To improve social assessment, the demographic departments of local universities should be used to undertake assessment studies and impact monitoring; and provincial and district officials in receiving provinces should be sensitized to the special issues concerning isolated people.

### Institutional Development

10.11 Management. The MOT is aware of implementation problems, but has very few staff in positions to address management issues. To address this problem, senior MOT officials should meet on a regular basis to review the core management functions (planning, budgeting, monitoring and evaluation) and make recommendations for their improvement. To improve the role of the central Directorates should be strengthened and contractor supervision should be improved.



10.12 Interagency Coordination. To improve interagency coordination:

- (a) The office of the Secretary General in the MOT should convene an interagency forum on a regular basis to identify implementation problems and evaluate progress. A secretariat should be formed to support the work of these meetings and issue regular reports.
- (b) Consideration should be given to the formation of interagency policy development teams for agricultural development, forestry and the environment, social affairs, and spontaneous migration, and these teams should report regularly to the interagency forum or to the Minister.
- (c) Working secretariats should be formed within the provincial and district transmigration offices to convene interagency meetings and prepare materials. Increased budgets should be allocated for this purpose by Bappenas.
- (d) The MCT project head (pimpro) on each site should be given the authority to convene and coordinate other agency heads (pimpros), regardless of their location or status.

10.13 Planning and Budgeting. Under new budget procedures which allocate funds for only one year, much better planning must occur. Recently a special team has been formed to reconcile program and budget functions. High priority must be given to institutionalizing the functions of this team in the Office of the Secretary General, MOT.

10.14 Monitoring and Evaluation. There is an urgent need to strengthen monitoring and evaluation:

- (a) Office of the Secretary General (MOT). The monitoring system in the OSG should be greatly simplified. Only major indicators of physical and financial progress should be aggregated at this level to provide needed information for programming and budgeting.
- (b) Directorates General. Detailed monitoring of project implementation and impact should be carried out by the Directorates General and this material, where necessary, should be forwarded to the OSG.
- (c) Provinces. With the decentralization of procurement and implementation responsibility, there should be increased emphasis on developing appropriate monitoring and reporting capacity within the provinces, and clear decisions on that information to be channeled to the Directorates and the OSG.
- (d) Other Agencies. Improved monitoring and evaluation are also needed in the agricultural sector and could be carried out by a strengthened Agricultural Technical Team. The capacity to undertake environmental monitoring must be developed under MPE.



Technical support for monitoring and evaluation should be used to build an overall system operating at all these levels, and adequate budget should be provided for this purpose.

#### The Future Transmigration Program

10.15 Repelita IV. It now seems evident that Indonesian financial resources will be constrained for the foreseeable future. Under these circumstances, the Government intends to concentrate on maintenance of settlement infrastructure and second-stage development, and this policy is likely to continue through Repelita IV. During this period, emphasis should also be given to planning and preparation for Repelita V and to institutional development.

10.16 Forward planning for Repelita V should entail the preparation of base maps indicating those areas suitable for settlement and those with forest claims or other contingencies; the production of draft master plans indicating areas for upgrading and new settlement; the mix of farm models; areas where sponsored, partially-assisted and spontaneous migrants are to be settled; and critical areas for special environment protection. Agreement on these five-year master plans with the provinces would be followed by detailed planning and budgeting. During this period, a major effort should also be given to the development of parallel master plans for environmental protection and the development of action plans to address implementation constraints.

10.17 Repelita V. If planning were to begin now, it would be possible to plan and implement a program which could potentially resettle 200-300,000 families in Repelita V. Settlement at this level could be carried out without unduly taxing implementation capacity and could be designed to avoid adverse environmental and social consequences. Such a program would probably consist of some 100-150,000 families settled with tree crops or other cash crops, 50-75,000 families settled in swamp reclamation sites and 50-75,000 families settled in upland and in-fill areas. Most of this settlement would be in Sumatra on tree crop and swamp reclamation schemes (100-150,000 families), in Kalimantan (75-100,000 families) and in Irian Jaya (25,000-35,000 families). These figures are subject to justification and revision in the context of the Repelita V plan. The number might be lower in the face of continuing low oil revenues and constraints on tree crop development capacity, but it is unlikely that it could be significantly increased without straining institutional capacity and increasing financial, environmental and social costs. The number of spontaneous migrants who will seek land in this period is difficult to predict and will depend on economic factors, on the attractiveness of past settlements, and on the ability of the Government to establish policies which support land acquisition and land registration by individual families.

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<b>Withdrawn by</b> Tonya Ceesay	<b>Date</b> 17-Feb-16			




INTERNATIONAL SEMINAR ON SETTLEMENT CONCEPT AS  
INTEGRATED PART OF REGIONAL AND RURAL DEVELOPMENT  
( SUPPORTING PAPER FOR GROUP A )

ADVANTAGES AND DISADVANTAGES BETWEEN ALTERNATIVES :

- A. TRANS UMUM WITH FOOD CROPS AS THE MAIN FARMING.  
B. PIR TRANS (ACCORDING TO INPRES I/1986) WITH ESTATE/  
TREE CROPS AS THE MAIN FARMING.

No.	Subject	A	B
1.	Maintaining and improving soil fertility, prevent erosion, preserve environment.	Very difficult, costly investment for physical conservation structures with unsure results. Need liming, fertilizers, green manures, mulching. Difficult to prevent erosion, except at flatland.	Easier. Need less conservation structures using cover crops with effective results. Need no/less liming, less laborious efforts to prevent erosion but with good results.
2.	Acreage and layout of lands.	- 2 ha consists of : 0,25 ha home yard. 0,75 ha farmland I. 1 ha farmland II.  - distance too far.  - difficult to design satisfactory layout to ease farming.	2,5 ha consists of : 0,5 ha home yard + food crops land. 2 ha estate cropland  Easier to design satisfactory layout to ease farming.
3.	Farmers' labour requirement.	- 2 ha too large to be cultivated food crops by 1 family, seasonal food crops need high labour every time. Average managable farm only 0.75 ha/family.	- 2 ha of estate crops was prepared by the PTP before the settlers arrival. 0,5 home yard could be cared by wife and children.
4.	Main commodity to be cultivated.	Too many kinds of commodities (paddy, corn, pulses etc). Each with its own problems.	Only 1 kind of tree (rubber, palm oil or other) require less labour and headaches.
5.	Plant Protection.	Very difficult. Too many kind of crops, each with its own pests/diseases.	Easier, guided and supported by the PTP.
6.	Solving post harvest problems.	Trouble some. Should be solved by the farmers themselves.	Solved and guided by the PTP.
7.	Marketing of products.	Trouble some. Uncertain prices, usually not profitable prices.	Solved/done by the PTP. More certain price, profitable price.
8.	Income gained by the transmigrants.	Low, difficult to reach equivalent 500 kg rice/capital/year.	much higher, easier to reach equivalent 500 kg rice/capital/year.
9.	Hard work and discipline of farmers.	Need hard work but less result. May less discipline; depend on own initiative.	Hard work with more result. Should be more discipline, follow order of the PTP. More regimented work.
10.	Extension style	Extension with more suggestion, no pressure to farmers.	Extension with more command, orders, more pressure to farmers.
11.	Food security for the locality/region.	More, if the food crops in good development.	May be less. (depend on guidance of food crops development, and its result).
12.	Total cost of investment.	May be more.	May be less (more efficient).
13.	Credit liability.	No All depend on the Government budget.	Yes. Could be implemented by credit financing.
14.	Export earning	No or very low.	High.

Jakarta, August. 22, 1987.

  
Bambang Gunarto  
official Directorate General Food Crop  
Agriculture.  
in charge of Food Crops Development  
in Transmigration Areas.



Mr Chairman, Your Excellencies, Distinguished Guests, Ladies and Gentlemen: It is indeed a great pleasure for me to be given the opportunity to address you today - on behalf of Mr Soedjino - on the subject "The Transmigration Programme - Its image at home and abroad".

On accepting this duty I was immediately faced with two problems. The first was time - since to read Mr Soedjino's paper takes 35 minutes, and the video film - takes a further 8 minutes - and the time allocated being 20 minutes. The second problem was "What to edit out?" since, I would not presume to know which of the many important points Mr Soedjino makes are the most important.

With your permission, Mr Chairman, I propose to edit the first part since a transcript of the full speech is available and much of what is written is further dealt with in the excellent video film.

Let me therefore deal with the framework in which the transmigration programme is set. (Slide 2)

The Transmigration Sector is not solely responsible for the transmigration programme. Working closely with the transmigration sector are eight other closely related sectors, and others which are less closely related.

If we look at these closely related sectors we can see that they are:

Regional and demographic with the islands of Java, Lombok, Bali and Madura no longer capable of sustaining an agriculturally based economy; where the population has grown from between 3 and 5 million in 1800 to the present high density; this despite a successful family planning programme. Contrast this with the sparsely populated outer islands, rich in resources but scarce in the human resource.



Transmigration has helped develop these resources providing the framework for pioneering families to move to new areas and provide food and create jobs for themselves and others.

The Economic aspect - where families are helped out of the poverty trap of below subsistence farming, often with no land or at best .25 ha., to a new life with a new two roomed house and two hectares of land. From this land comes cash crops generating income and wealth in the family and giving them the ability to buy livestock, a means of transport, and modest consumer goods.

It also creates opportunities for entrepreneurs to provide goods and services. In fact it is the seed of a town of tomorrow.

99% of transmigrants remain in the new settlements and are happy with their house, two hectares of land complete with title, the schools for their children, mosques and churches, and a medical service.

The Socio-cultural aspect - where the family unit epitomises the "One Social Cultural Unity" of Indonesia. The values placed on cultures and customs and where the transmigration programme is bridging the gap between the indigenous tribal societies and modern societies. Many programmes are designed to provide education and medical services to the tribes people. It also assists in achieving a national goal - "One Land, One Language, One Nation".

The agricultural aspect with its extension services supporting the farmers and the part they are playing in enabling Indonesia become self sufficient in rice from a position of being one of the world's major importers. 5% of the rice produced in Indonesia is produced by transmigrants.

The Ideological Aspects in which transmigration is essential to

the achievement of the Archipelagic Outlook - Wawasan Nusantara

One Political Unity

One Social and Cultural Unity

One Economic Unity

One Unity in Defence and Security

The Defence and Security aspect itself is related to domestic purposes and not for the purposes of invasion of neighbours.

The Environmental Aspect. The aspect of preventing further environmental damage in Java and also the protection of the environment in the other parts of Indonesia. The GOI has set aside 25% of its land mass for conservation and protection while less than 1% has been used for the Transmigration Programme and that only after a rigorous selection process.



TRANSMIGRATION AS A PART OF REGIONAL DEVELOPMENT:  
ACHIEVEMENTS AND PROBLEMS IN INDONESIA

by  
Ismet Ahmad\*

INTRODUCTION

The Indonesian population is poorly distributed among regions. Approximately 60% of the Indonesian population live on the islands of Java and Madura, which together account for only 7% of the country's land area. To promote a nationally balanced population distribution and a balanced level of development, the government has been carrying out a transmigration program.

The GBHN (the Broad Outline of State Policies) of 1983 put an emphasis on continuing and speeding up the transmigration program. The transmigrants are expected to succeed in increasing the level of farm production outside the main island of Java. In addition, their presence in the new areas is aimed at raising their own and the neighboring local people's standard of living.

Government efforts in undertaking this program have been tremendous. However, it is acknowledged that the achievement of all objectives has not been entirely satisfying, particularly in terms of the number of successfully resettled transmigrants. There are a lot of problems encountered in carrying out the transmigration program because of the complex nature of the task.

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## ACHIEVEMENTS

The actual number of government sponsored transmigrated families has been considerably lower than the respective targeted numbers. During Pelita III (the third five year development plan, 1979/80 - 1983/84), for instance, out of a planned 500,000 families, only 365,937 families (73.19%) were actually resettled. The percentage of successive achievements in the first through fifth years of the Pelita were 44.95%, 98.82%, 88.07%, 96.28% and 41.10%, respectively (Table 1).

In accordance with what was expressed by the 1983 GBHN, Pelita IV (the fourth five year plan) set a target of transmigrating 750,000 families through the five year period. Yearly targeted numbers are gradually increased from 125,000 families in fiscal year 1984/85 to 175,000 families in 1988/89. Yet the first two years performance show that only 131,240 families (50.48% of the planned 260,000 families) were actually resettled. In the first year of the period, target achievement was only 41.25% and it rose only slightly to 59.02% in the second year (Table 2).

Furthermore, observations disclose the fact that many of the transmigrants left their resettlement areas permanently. Some of them returned to their home villages, some to nearby district or provincial cities and the rest moved to other settlement areas. Unfortunately, the number of unsuccessfully transmigrated people has never been well recorded.



Table 1. Targeted and actual numbers of government sponsored transmigrants during Pelita III, 1979/80 to 1983/84.

Y e a r	Number of families		Achievement (%)
	Targeted <sup>1)</sup>	Actual <sup>2)</sup>	
1979/80	50,000	22,474	44.95
1980/81	75,000	73,653	98.82
1981/82	100,000	88,066	88.07
1982/83	125,000	120,353	96.28
1983/84	150,000	61,643	41.10
Total	500,000	365,937	73.19

Source : 1) Repelita III (the Third Five Year Development Plan), Book II  
 2) Repelita IV (the Fourth Five Year Development Plan), Book II, and Pidato Kenegaraan Presiden (President's State of the Nation Address) August 15, 1986

Table 2. Targeted and actual numbers of government sponsored transmigrants during Pelita IV, 1984/85 to 1988/89.

Y e a r	Number of families		Achievement (%)
	Targeted <sup>1)</sup>	Actual <sup>2)</sup>	
1984/85	125,000	51,558	41.25
1985/86	135,000	79,682	59.02
1986/87	150,000	.	.
1987/88	165,000	.	.
1988/89	175,000	.	.
Total	750,000	.	.

Source : 1) Repelita IV, Book II  
 2) Pidato Kenegaraan Presiden, August 15, 1986

Spontaneous transmigration has been increasingly significant in contribution to total migration in recent years. In the fiscal year 1983/84, there were 14,867 recorded spontaneously resettled families. Spontaneous transmigration increased sharply to 50,330 families in 1984/85 and to 86,665 families in 1985/86 (Table 3). The contribution of spontaneous transmigrants to the total number of transmigrants jumped from 19.34% in 1983/84 to 49.40% in 1984/85 and then to 52.10% in 1985/86. This latest figure implies that spontaneous transmigration has now surpassed government sponsored transmigration. Increasing population pressure on the main islands and increased government and private investment in the outer islands seems to be playing a role in helping spur spontaneous transmigration to the outer islands.

Table 3. Actual number of government-sponsored and spontaneous transmigrants, 1983/84 - 1985/86

Type of migrants	Number of families		
	1983/84	1984/85	1985/86
Government sponsored	61,431	51,558	79,682
Spontaneous	14,867	50,330	86,665
Both	76,298	101,888	166,347

Source : Pidato Kenegaraan Presiden (President's State of the Nation Address), August 15, 1986.



Recognizing that there are also a lot of indigenous people in the regions of transmigrant destination, who own only a small proportion of the productive land, the Indonesian government has also been carrying out a local migration program. This kind of migration is facilitated by allocating 10% of reclaimed transmigration land or by exclusive resettlement. However, the large number of rural people continuing to live under the poverty line and cultivating a small proportion of the productive land indicate that the local migration program is still far from reaching its objective.

#### PROBLEMS ENCOUNTERED

It is well understood that transmigration is a complex task and has many problems. Problems often arise in mobilizing candidates in Java, Bali and Nusentenggara, in transporting them to resettlement areas and in helping them to establish themselves in the resettlement areas.

The gap between actual and targeted transmigrant numbers can be related to the lack of applicants. Although the program in the place of origin is strongly promoted, the attractiveness of the place of destination is apparently too limited. Without sufficiently strong attractiveness prospective migrants are reluctant to apply. Lack of realistic, complete and up-to-date information on the resettlement areas is another factor affecting the insufficient number of applicants.

Synchronization of what is supposed to be done in place of



origin and that which is supposed to be prepared in the place of destination is often poorly coordinated. In several cases, transmigrants found that their new houses were not yet ready, their farmland was not yet readily cultivable or that the soil fertility was unexpectedly poor for farming. Other cases show the contrary. A delay in the transmigrants arrival caused the already cleared land to become bushy again. Sometimes, those families planned to be settled in dryland ended up in a tidal-swamp area.

Successful transmigration may also depend on the background of the transmigrants. Transmigrants may not have the skills to fit the situation and requirements of their new region. In addition, most of the spontaneous transmigrants and local migrants also seem to be unskilled, and hence, have difficulties in finding jobs in their new region. Information pertaining to the places of destination, in general, is not sufficiently understood by migrant candidates. However, there is no denying the nature of work in place of destination requires a pioneering spirit and is often bearable only for those willing to work hard and be courageous.

Difficulty in obtaining a sufficiently large enough area of suitable quality land has begun to be felt. Conflict of interest with existing local needs occurs frequently and becomes an obstacle to the process of transmigration. There are many provinces outside Java which have not been able to develop an optimum and clear official land-use plan.



Some of the earlier transmigration areas were too far from market centers and lack reliable connecting roads to transport farm inputs and outputs. This problem created a strong price disparity against transmigrants' farm products. The very low prices received for outputs by the farmers can make them frustrated and quit farming.

In general, migrants are lacking in capital to operate their farms. Revenues from their farm business are not dependable for the purpose of capital formation. The low farm revenues may have resulted from marketing difficulties or harvest failures. This capital problem limits the transmigrants' ability to expand their farms and also reduces their bargaining position in output marketing.

#### RECOMMENDATIONS

Several activities could be programmed to speed up the process of obtaining better population distribution throughout the country. First of all, the promotional campaign in the places of origin needs to be better developed and intensified. The participation of successful transmigrant families in this promotional campaign would be a useful asset. The socio-cultural aspect needs to be taken into account in carrying out this task. Appropriate training is required to provide the migrant candidates with the necessary skills for both farming and non-farming jobs in the new settlement areas.

In the place of destination, preparation should be more



extensive. In this regard an intensive soil survey is needed, development of a sufficient transportation network is important and in low-land areas at least secondary irrigation canals are necessary. Also, research of appropriate farm technologies for each land type is required.

Regions of destination need to have an officially recognized optimum land-use plan. This would be useful in avoiding conflicting use of areas that may lead to a halt in the land preparation process.

To help develop the new settlement areas, several activities are needed. A credit system with a low interest rate and no collateral and procurement of appropriate farm supplies will help the settlers in running their farm business. Along this line, extension services, production and marketing organizations are necessary.

Encouragement of spontaneous transmigration should also be an important objective. For this purpose, investment-profile studies and investment-opportunity information are very helpful. Greater investment must be directed toward the regions of destination to make them better places for settlement.



REVIEW OF SOCIAL SCIENCE METHODS FOR SOCIAL FORESTRY

- Report submitted to Forest Department, FAO, Rome  
by Augusta Molnar, Consultant  
September 1987

REVIEW OF SOCIAL SCIENCE METHODS USEFUL FOR COMMUNITY FORESTRY  
- Augusta Molnar, Consultant

Summary

Social scientists have an important role to play in social forestry and broader land-use planning efforts in finding better approaches to increase people's participation and in tailoring traditional survey and interview methods to gather needed information at all stages of project and program development. This report provides an overview of some techniques that have been developed by social scientists for these purposes. It focuses strongly upon the informal survey and interview techniques used in rapid appraisal (quick turn around surveys) for project design and evaluation and in discussions with local communities for common resource management planning. It has been found that a systematic review of the actual experience in the use of these techniques would contribute substantially to social forestry implementation and land-use planning. The second section of this report is a detailed work plan for such a review. Appendix 1 includes a list of individuals with strong expertise in this field, who could be interviewed for this purpose. The third section is an annotated bibliography of useful sources regarding social science methods discussed in the paper.

I. STATE OF THE ART

Introduction

In the social forestry and other land-use planning projects that have been implemented, the central importance has been recognized of acting upon sound information about local conditions, about the perceptions of intended project beneficiaries, and about the relationship between project staff and institutions and local organizational structures for viable land-use planning. Social forestry relies heavily for its success upon local participation. The establishment and protection of trees, even on government lands, is impossible without strong local cooperation. And special interest groups, such as landless households or women, can only be reached through specific attention to their needs and roles throughout project design and implementation. Activities must also be planned to meet the priorities of the people; if species selected for community plantations are not of interest to local women, they will not be inclined to prevent their cattle from grazing in the area. If local women do not feel that fuel collection is an important constraint on their labor time, they will not be very interested in planting and tending fuelwood trees.<sup>1</sup> If communities do not traditionally manage trees as a common resource, alternative strategies to the establishment of community woodlots will have to be explored.

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<sup>1</sup>. This is not an idle scenario. Dolores Koenig (1986) found that Malian women villagers perceived fuelwood collection time as insignificant within the overall context of total cooking time. Although fuel collection time was substantial and increasing, they were much more interested in interventions that addressed food processing, drinking water collection, and cooking technology problems.



Because of this need to act upon a sound knowledge of the local situation, social scientists have played an increasingly important role in social forestry and other land-use planning programs, including pasture and livestock development, watershed management, and agro-forestry. They have been asked to provide information about local perceptions of land-use constraints to complement technical data on physical conditions. They have focused on: local knowledge about and use of forest products and perceived local needs for such projects; the nature of community structures and their viability for the organization of social forestry activities; and the potential role of private voluntary organizations. They have also helped establish guidelines for local negotiations to draw up community resource management strategies and implement self-help activities.

There has been a major shift in the methodology used by social scientists to gather information for project planning and implementation purposes. The more traditional tools include the use of formal, statistically-random surveys for base-line studies and monitoring and evaluation purposes, or the use of long-term ethnographic studies, which focus on a small population and rely strongly on participant-observation. Due to limitations of these methods, social scientists have been tailoring traditional methodology to find more cost-effective techniques which generate findings more quickly.

#### Limitations with Traditional Methods

Formal surveys often present problems of 1) the time-lag required to produce results, 2) high cost of administering the survey, 3) low levels of data reliability due to interviewer-based and questionnaire design-based errors,<sup>2</sup> and 4) the irrelevance of many of the questions for specific implementation problems. Long-term studies can provide important information for project planning, but, again, there is a time-lag in getting results. Information gathered by researchers for other purposes than the project itself for a smaller population must still be compared to additional information before that information can be judged to apply to the project area as a whole. Nor do either of these methods generate a dialogue with the local community that leads to their involvement in planning of activities.

A special set of problems has been common with the collection of monitoring and evaluation (M&E) data by formal methods. Project M&E units have usually been slow to start up relative to other units, projects have (for diverse administrative reasons) failed to recruit personnel with the

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<sup>2</sup>. See Campbell and Stone (1979). These authors investigated the validity of information collected in a number of development-oriented surveys for the country of Nepal. They re-interviewed households from these survey samples and found that economic data, particularly on land holdings was skewed by as much as 300%, that poor phrasing of questions led to mis-reporting of villager attitudes, and that categories used to group answers were often at odds with local custom, thereby greatly skewing survey conclusions.



needed qualifications to design and implement the surveys or case studies, and surveys have often been either too elaborate or have failed to collect types of information crucial for on-going project decision-making.

In an attempt to provide more timely and reliable information about the intended beneficiaries, local structures, and the project area, social scientists in the field of social forestry and other development fields have generated a set of alternative methods of data collection. This includes: 1) the use of simple, in-depth case studies to examine specific problems in detail as part of Monitoring and Evaluation, such as village woodlot implementation (Gregerson 1987; 291) 2) the design of simpler monitoring surveys that concentrate on collecting data for a small, but crucial set of indicators (see the manuals on M&E of Indian social forestry projects prepared by Slade and Campbell 1987 and Bhattarai and Campbell 1985), 3) the tailoring of participant observation techniques for use by host-country personnel in the relatively short-term evaluation of broad sector projects (see Salmen 1986),<sup>3</sup> and 4) the refinement of quick, informal survey and open-ended interview techniques, which are generically referred to as Rapid Appraisal or Rapid Reconnaissance techniques (see Chambers and Carruthers 1981).<sup>4</sup>

This report will focus on the last category of adapted social science alternatives, rapid appraisal and informal survey methodology. This is an area in which much experience in social forestry exists, but of which only a

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<sup>3</sup>. Lawrence Salmen (1986) has developed an evaluation technique that has relevance to broad-scale development projects in all sectors. Based on his experience with implementing urban projects in Latin America, Salmen has tailored the traditional techniques of participant-observation to the in-country evaluation by host-country personnel of large projects. His methodology is based on the assumption that currently used indicators to assess project impact are seldom measurable in any meaningful sense. What is really needed by project managers and planners is information to bring operating assumptions closer to the project reality than they would be otherwise. Using a combination of residence in several communities included in the project area to undertake participant-observation and follow-up cross-checking of information through structured interviews, Salmen finds it is possible to get much more reliable information about community participation than through traditional monitoring surveys.

<sup>4</sup>. Rapid appraisal has been analyzed by Robert Chambers in his updated World Bank report "Short-Cut Methods of Information Gathering" in Michael Cernea, ed., Putting People First, Washington, D.C: John Hopkins Press, 1985, and explored in depth in Robert Chambers, Rural Development: Putting the Last First, London: Longman Press, 1983.. Rapid Assessment techniques have been explored by a Development Alternatives, Incorporated staff consultant, George Honadle, in "Rapid Reconnaissance for Development Administration", World Development, vol. 10, no. 8 (1982), and in a UN ACC Task Force publication series, of which the first volume is entitled Guiding Principles in the Design and Use of Monitoring and Evaluation in Rural Development Projects, Rome: FAO.



small portion has been documented. Informal surveys are used for a wide variety of decision-making in social forestry, at all stages of any project, by both external advisers and project staff. Rapid appraisal through the use of informal surveys covers a wide range of techniques applied to a diverse set of circumstances and objectives. Informal surveys are used:

1) to provide complementary data to judge available statistical data and information on small populations from in-depth or ethnographic studies;

2) as a main source of information in the short field visits made by outside design and evaluation teams;

3) in the pre-design stages of farm-based research to diagnose the local situation and identify salient problems;

4) by project managers and other project staff to collect supervisory information during project implementation;

5) prior to the design of formal M&E surveys, base-line studies, etc. to define the parameters of the questionnaires;

6) in place of formal surveys during project implementation to collect quickly available information about special problem areas, such as local marketing potential of different tree species, the lack of involvement by village women, or the relationship between tree growing and livestock management.

In addition, the techniques of group interviewing are used in negotiations between forestry staff and local communities in the planning of common resources management and planning and implementation of local and self-help activities.

#### Characteristics of Rapid Appraisal

Rapid appraisal techniques are characterized by the following: 1) they are rapid, so that results can be quickly made available to decision-makers, 2) they are eclectic, tailoring diverse interview and survey techniques to meet the needs of the specific information gathering task, 3) they aim to capture a holistic picture of the local situation, drawing on a multi-disciplinary perspective, and cross-checking information by triangulation, and 5) they allow for valuable interaction between researcher and target population/local beneficiary during the course of the interviews themselves. They also cut the cost of formal surveys, since rapid appraisal can identify which particular topic really requires more formal or in-depth study, either for diagnostic, monitoring, or evaluative purposes.

These techniques are particularly geared for use by inter-disciplinary design, supervision, or evaluation teams. Their informal nature allows the social scientist to not only collect information as an individual about the social characteristics of the population, but to draw upon the technical expertise of other team members during interviews, and to generate discussion among the team with the farmers of salient factors and problems.



By combining methods from formal surveys and in-depth, participant-observer studies, rapid appraisal attempts to create a dialogue with the beneficiary, allowing the respondents to lead the questioning as well as the interviewer(s). This feature of the methodology is important to the data-collecting aims of the team social scientist, because it is conducive to collecting data concerning values, opinions, objectives, and farmer knowledge (Franzel and Crawford 1987:16).

It also furthers a major goal of the social scientist in land-use planning, which is to make non-social science oriented technical advisors and project staff aware of the important social issues. All team members receive immediate feedback from the farmer and other team members. A more formal survey lacks this face-to-face dialogue (Jamieson 1986).<sup>5</sup> In social forestry, as in other development fields, social scientists confront the danger that their recommendations will remain in their reports and not enter the decision-making process. A well-conducted rapid appraisal provides a good means to make others aware of the importance of the social reality.

The biggest constraint on gathering good information through rapid appraisal techniques is time. Because rapid appraisal surveys are carried out over a short period of time (one week to one month in the field), there is limited time for cross-checking information, interviewing a wide variety of beneficiaries or spending a long period of time in any one site.

These constraints have a very different impact on the results of such surveys depending on the purpose of the rapid appraisal. For a survey designed to identify major elements in a agro-forestry system, two weeks can be quite adequate to initially diagnose the main problems farmers face and suggest possible places for intervention in the land-use system. For a planning exercise with local communities, carried out subsequent to some, prior data-gathering, two weeks can allow for extensive and adequate dialogue and collection of reliable site-specific information. In a field visit to a large-scale social forestry project by an outside supervision team to review progress of a project to date, identify problem areas, and recommend approaches to finding a solution, two weeks can be a very short time for conducting reliable interviews on a diverse set of topics. Much of the difficulty in generating good rapid appraisal guidelines for social forestry lies in addressing the very different circumstances and constraints under which they are used.

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<sup>5</sup>. Niel Jamieson (n.d.) has pointed out the significance of rapid appraisal for all technical advisors in this regard. "'This kind of feedback is still grossly undervalued in the theory and practice of development itself . . . It is part of our professional responsibility to confront directly the epistemological challenges of intervention in a complex and dynamic world that is characterized by relativity and uncertainty. RRA constitutes an almost ideal vehicle for doing this. It pushes us into situations where our favorite intellectual tools are likely to be inappropriate and where our assumptions are likely to be called into question.'" (pg. 9)



This is one area in which a systematic review of actual techniques used by experienced practitioners in land-use planning would be extremely valuable. Only then can some judgement be made about the parameters of reliability for information collected through different kinds of recommended rapid appraisal techniques and their appropriateness for different circumstances.

#### Existing Guidelines: General Rapid Appraisal Literature

There are a number of general guidelines available on techniques of rapid appraisal that are applicable to the problems of social forestry and land-use planning. These guidelines suggest ways that design and evaluation team members can better prepare for field visits, important lines of questioning that reduce bias and maximize responses, available sources of supplementary information, use of socio-economic indicators and the use of indicators to measure hard-to-quantify information. Many of these are geared to the non-social scientist as well as the social scientist and include discussion of basic social science interview and survey techniques. All, however, include discussion of specially-adapted interview techniques as well as discussion of which topics must be covered to ensure a holistic picture.

They differ generally from traditional social science methods through their emphasis on the importance of lines of questioning regarding technical issues that are traditionally dealt with by other development professionals. Important sources are Chambers (1983), (1985) and (1986), Chambers and Carruthers (1981), Rhoades (1979) and (1986), Beebe (1985), UNACC Task Force (1984), Rossi and Berk (1980), Gow (1987), and Honadle (1982). Burch (1987) has summarized these for their applicability to social forestry, covering ICRAF's D&D approach, sources of bias, use of secondary data, and trade-offs in the choice of informant and interview technique.

This report makes no attempt to describe the general principles of rapid appraisal methodology, given the fact that most development-oriented social scientists are familiar with these. A summary of these principles is included in Appendix 2, from a chart compiled by Robert Chambers. One central aspect of rapid appraisal guidelines is the identification of potential sources of bias and suggesting strategies to counter these. Appendix 3 compiles a number of suggested techniques for conducting informal surveys and unstructured interviews from various rapid appraisal guidelines and sources on research methodology.

#### Farming Systems Research Methodology

A major source of rapid appraisal techniques for land-use planning is the farming systems research literature. FSR social scientists have generated a number of approaches, including (from Chambers 1985):

- 1) Peter Hildebrand's Sondeo (Hildebrand 1981), whereby teams of 5 agronomists or other technical agriculture specialists and 5 social scientists spend 5 days in the field, interviewing in rotating pairs of technician/social scientist, summing the results at the end;



2) Robert Rhoades' Farmer-back-to-Farmer (Rhoades 1982), whereby informal surveys are used to define the problem and identify solutions by an inter-disciplinary team, the intervention is tested, using farmer evaluation, and farmers deliver the 'last judgement';

3) CIMMYT's use of recommendation domains, whereby farmers are grouped by various criteria into 'domains' that can use similar recommendations on the basis of multi-stage informal surveys;

4) Chambers' Resource poor farmer (Chambers 1987), whereby the special circumstances and constraints surrounding "RPF"s are the focus of informal surveys and extension research; notably such farmers' lack of access to credit, constraints in availability of family labor, poorer quality farmlands, less access to irrigation, and poor market access for good prices.

5) ICRAF's Diagnostics and Design (Raintree 1986), whereby agro-forestry strategies are outlined through surveys which address trees as well as crops and broad production and conservation objectives usually omitted in FSR considering productivity, sustainability and adoptability; and

6) Program in International Agriculture (Cornell University)'s Regional Analysis of Farming Systems (Garrett, et.al 1987), which covers the usual range of topics with a well thought out section on informal survey questions regarding food habits and nutritional standing.

All of these approaches see Rapid Appraisal as part of a continuing and on-going learning process, whereby the results of each stage are used to re-evaluate the issues and projected solutions. Many of the interview and survey techniques developed through these approaches have great applicability to social forestry. In particular is the need to see the farming system as a whole and to view the problems from both the individual farmer as well as group community perspective, especially to understand how land-use issues impinge on individual farmer decision-making. The special constraints on the "resource poor farmer" are also quite important in designing tree-crop interventions, pasture improvement schemes, or common resource inputs that require community labor contributions.

Methodologically, FSR guidelines pay considerable attention to:

- 1) providing pointers for establishing a more reliable context in which to hold the interview,
- 2) collecting information using locally-customary categories, particularly for weights, measures, and time estimates,
- 3) creating a good rapport with the respondent before addressing sensitive issues,
- 4) encouraging the respondents to take the discussion into areas important to them,
- 5) discussing results throughout the interview process with the team as a whole,
- 5) recording and annotating information collected in the field, so that there is limited memory bias, and
- 6) cross-checking information through direct observation and use of mapping techniques.

There are several sets of guidelines which address detailed issues of



sampling and other informal survey methodology. The most complete reference is Shaner, Philip, and Schmehl (1982). This work includes appendices as well as discussion in the text of possible non-statistical random sampling, ways to reach commonly excluded groups, such as women, ways to determine farmer decision-making patterns, etc. This reference does not, however, evaluate the criteria for choosing between different techniques for use in different circumstances in a comprehensive fashion. It provides a useful reference guide to social scientists, but requires that they have sufficient experience with the material to make their own judgements regarding which techniques they wish to use.

#### Unresolved Issues and Gaps in FSR Methodology

For designing and carrying out activities in agro-forestry, the FSR approaches with the modifications introduced by the D&D specialists at ICRAF are extremely important for social forestry. Many of the techniques are also applicable to the use of informal surveys in visits to the field for project design, supervision, and evaluation. There are five main limitations to the applicability of the FSR approach to social forestry and land-use planning needs.

First, FSR does not tend to pay attention to the non-landed population in the rural area, which are a particular target of social forestry on public and community lands.

Second, FSR is not tailored to the broad range of circumstances in which rapid information gathering takes place for varied project design, monitoring and implementation.

Third, FSR has not generally provided guidelines for negotiating with local groups for activities such as common resource management, or for involving private voluntary institutions in village-level activities. One exception is Rocheleau 1985, but this is limited to experience in Africa.

Fourth, FSR does not generally gear questions to the longer time frame required by agro-forestry (Except for D&D methodology). Recommendations for tree planting must take into account the future farming system as well as the present one, so that the recommendation will remain valid throughout the tree's growing cycle.

Fifth, FSR has not generated a commonly agreed-upon list of socio-economic indicators or variables relevant to land-use surveys nor has it generated an agreed-upon list of proxy indicators that can be used to measure hard to gather information indirectly.

#### Unresolved Issues in Rapid Information Gathering

In the definition of Rapid Appraisal, Robert Chambers (1986) makes the important distinction between rapid appraisal and rural development tourism ("Rural development tourism . . . is hurried fact-finding visits to selected projects during working hours. For example, observations made during a drive from the irrigation headworks down the main canal, followed



by a brief meeting with better-off farmers, may be the only source of information for major development decisions.") Unfortunately, this distinction is seldom clear-cut when a team of outside experts is asked to visit the project site for a short time period for planning or evaluation purposes. While it is possible to avoid hurried information gathering when in-country experts or project staff properly prepare a field visit, it is not so simple when visits involve outside evaluators for which a high profile is expected, even high-level ministry officials from the country itself.

Nor is there a clear correlation between time spent in the field and whether it is tourism or appraisal. Is one day to visit a project site 'tourism' however low profile the visit? One week with a mixture of unavoidable high profile and as much as possible low profile interviewing also 'tourism'? Two weeks considered 'appraisal', even for a broad project area? Much depends on the task at hand, the experience of the team members, their prior preparation, formal demands on their time, and whether there are good cross-checks on the information collected from whatever source. This is one topic that warrants more systematic evaluation in terms of social forestry use of rapid appraisal for broad-sector projects.

Issues that require systematic review include: 1) to what extent the social scientist is most effective working as a team member and to what extent he or she can best collect information on certain subjects apart from the rest of the team, 2) how formalized team interaction should be (FSR specialists like Peter Hildebrand (Hildebrand 1981) argue for conducting interviews in rotating pairs of social scientists/technical specialists to maximize multi-disciplinary contributions while others argue that similar multi-disciplinary interactions can occur without rotation of experts), 3) how effective informal surveys are in sampling a true cross-section of the population, 4) what the minimum time or sampling requirement is for informal surveying, 5) what sorts of quick or proxy indicators provide valid criteria to assess socio-economic information (status, etc.) and 6) which interview techniques described in FSR and social science literature work best for which purposes.

Another important issue in terms of the state of the art in Rapid Appraisal is to what extent the geographic and culture-specific knowledge used by experienced practitioners to guide their choice and phrasing of questions can be generalized or summarized to guide other social scientists and other interviewers in diverse geographic settings. It is a luxury at present, and will probably remain so for the time being, to be able to contract a social scientist for short-term assignments who has the requisite in-depth background knowledge of the project area. While there is no substitute for an interviewer with that kind of background knowledge, it should be possible to greatly improve the reference information available to those contracted, based on the experience gained to date by geographic area specialists in land-use planning interviews.



### Two Areas in Need of Systematic Review for Different Geographic Regions

Two areas of information gathering that could be substantially improved by systematic review of the experience to date are 1) knowledge of local practices that prevent collection of reliable estimates for quantities, such as production or consumption figures for relevant products; and 2) use of appropriate socio-economic and proxy socio-economic indicators to evaluate the status of local beneficiaries. As an example of the first problematic area, Hill (1986) notes the difficulty of collecting accurate information in W. Africa about crop yields, even when interviewers are sensitive to the use of local categories of measures, because the farmers themselves do not aggregate information for produce that is self-consumed and produce which is sold. While in other regions of the world, it might be possible to get around the fact that farmers cannot give any reasonable estimate for their production as a whole by asking farmers how many grain storage containers they have filled with produce for home use and calculating a figure on that basis, in W. Africa this is impossible. There, farmers store grain on the stalk, only threshing it as needed and estimates are highly inaccurate.<sup>6</sup>

A similar social forestry-related problem mentioned by Hill (1986) is that of estimating the yield to farmers from tree crops, such as plantains or other fruits, which are harvested as needed, rather than as a lump sum. Farmers usually find it impossible to estimate either yields or what proportion that fruit provides in terms of overall household consumption.

Such culturally and geographically specific information is collected by social scientists working in an unfamiliar area by reviewing the available ethnographic literature and consulting with other social scientists and development specialists who have experience in that part of the world. To some extent, existing guidelines address this problem by suggesting that interviewer not go to the field with pre-established categories, but that these be created on the spot by asking farmers which categories they use and how they are defined. In terms of finding an easily computed land measure, this is quite adequate. In the case of the W. African farmer, however, the complexity of the problem may not emerge in the course of rapid surveys unless the researcher has some prior knowledge of harvesting and storage practices.

Garrett, et al (1987), for instance, have tried to resolve the problem

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Runzel (in ICRAF 1983) mentions another good example of this kind of problem when collecting information about livestock management. In one area of Tanzania, a problem arose in evaluating possible range improvement measures for an ethnic group, the Wapane. Wapane farmers regularly tended animals belonging to friends and relatives for extended periods of time. As a result, the farmers had very different perceptions about the benefits of improved range management systems than if the animals they tended had been their own. This fact did not emerge when using the usual lines of questioning for that region of the world.



of estimating crop and food production by asking nutritional questions that provide a cross-check on household consumption practices. These questions also ensured that information about the use of forest-derived foods are included in surveys. A review of what problem areas exist for different geographic areas and different ethnic groups would be valuable, together with a list of appropriate studies or documents that contain reliable indicators for different areas. This could include the farming and crop estimate problems mentioned above, or for social forestry more specifically, use of fuelwood versus agricultural wastes, patterns of fuel-gathering and fuel-storage, and irregular collection of forest by-products, such as medicines and food items. For the second area of information gathering, a systematic review can summarize the indicators presently used by experienced interviewers and evaluate their reliability for the different contexts in which they were actually used as a source of planning and evaluation data.

#### Use of Defined Intervals for Lumping Socio-Economic Information

A related source of biased information is the mis-use of categories to define the characteristics of interview respondents. Rapid appraisal methodologies usually rely upon estimated categories, rather than absolute figures, given the probable unreliability of the absolute figures. Farmers are lumped into small, medium, or large categories, for examples and livestock holdings into few, some, or many. These are very useful for the kinds of general recommendations made on the basis of such surveys, but can also be dangerously misleading, particularly when they cover-up a hidden theoretical assumption of the researcher that is patently wrong.

Dividing farmers for survey purposes into small, medium, and large can be misleading if the intervals are arbitrary or do not mirror a farmer's real decision-making constraints. There is a danger that poor farmers will be lumped with better-off small holders that face very different constraints in terms of risk, credit access, etc. The same is true for household size. If conclusions about the reasons for taking tree seedlings, for example, or the reasons for favoring establishment of a community plantation are made on the basis of false categories, the resulting project decisions may not have the desired effect.

Pre-determining categories because of what the researcher expects to find can be dangerous. Dewalt and Dewalt conducted an interesting study of farmer adoption rates for different farm practices and found that farmers follow very different models of decision-making, depending on the intervention. For grain seed package adoption, economic status determined adoption rates with upper-middle farmers consistently slower to adopt the new practices. For the planting of fodder grasses, small farmers were consistently the slowest. Had the researchers pre-selected the categories on the basis of expected adoption patterns of farmers in that region, the study would have failed to reflect the reality.

Researchers are advised by existing guidelines to determine the limits of each intervals on the basis of secondary data, the results of the first day's surveys, or on the basis of categories defined in an initial interview with village leaders. This helps mitigate, but does not resolve the danger



that mutually exclusive categories will mask important factors. It would be invaluable to social forestry practitioners to have some guidelines available based on the experience to date by which to judge the best use of intervals.

#### Socio-economic and other Indirect Indicators

Socio-economic and other kinds of indirect indicators are another tricky but important aspect of rapid information gathering. It is essential to collect enough socio-economic information about the informant(s) being interviewed to properly evaluate their responses. It is important to know if the informant's opinion represent a general belief or attitude, or are limited to individuals with particular farm sizes, individuals of particular ethnic origin, individuals with access to a large market, or with a particular level of access to capital. Rich and poor women will express a very different opinion about the importance of various species or the need for community woodlots, depending upon their reliance upon public resources and their consumption of forest-derived foods. Poor women who can sell wood to nearby urban markets will have different attitudes about forest restrictions than poor women in remote villages. Sharecroppers with limited animal holdings will feel differently about boundary planting or fodder cropping than other farmers.

#### Kinds of Quick Indicators

Many traditional indicators of socio-economic status are difficult to assess on the basis of short, informal surveys. Household income data, information about farm size, or data about outstanding loans are consistently misreported on both formal and informal surveys. Unless the researcher has time to discuss these topics in depth and carefully cross-check the data, such estimates are often useless. Yet some estimates of socio-economic status must be made to provide a reference point for informal interviews. Otherwise, it is impossible to judge whether the variable in question is explains a given attitude or practice, or whether some other factor is in play. A variety of indirect or proxy indicators are therefore used in rapid appraisal to collect reference information about project beneficiaries.

To determine the status of beneficiaries, interviewers may use quickly seen indicators, such as house type and construction materials, facilities, number of household utensils, possession of non-subsistence articles by respondents, such as radios and watches, and the quality and condition of their clothing. These are intended to substitute for impossible-to-collect information, such as figures on household income, crop yields, indebtedness, etc. Other, more reliable, but harder-to-estimate socio-economic indicators that some social scientists have proposed include indebtedness of farmer, whether women or men work as paid laborers, family consumption of low-status foods, renting out of land, status-related supplementary employment, and



livestock holdings.<sup>7</sup> So far there has been little consensus on the trade-offs between the use of these two kinds of indicators. One difficulty with including such information in guidelines on rapid information gathering is the culture and geographic-specific nature of these types of indicators. In cultures in which livestock are essential for various social ceremonies and all but the poorest keep such animals, their absence is an excellent indicator. In another culture or region, their absence might indicate reliance on outside trade and not level of poverty. A compendium of such indicators culled from existing documents and rapid appraisal experiences would, however, be extremely useful to social scientists working in social forestry. Work is being done on Africa in this area by OTA, in generating minimum data sets (Kathleen Parker, personal communication).

Which indicators work and how many indicators must be regularly included in informal interviews to be able to subsequently evaluate that information reliably? Which types of indicators are most cost-effective if the surveyor only wants to collect a minimal amount of background information about informants? Such indicators are not universal, but culture specific. In India, whether a Hindu woman works as a paid laborer outside the home is often a good indicator of a family's income level, since this practice carries a lower status (Chambers 1983). In Sri Lanka, a man who must borrow a bicycle to travel somewhere is a poor one (Soetero 1979). In highland Peru, only the poorest households have no access to plows, but many landowners have only plows and no oxen (Bourque and Warren 1979). In Central America, house type is a very accurate indicator of different socio-economic strata (Gerald Murray, personal communication).

A preliminary list culled from various rapid appraisal guidelines on socio-economic indicators is included in Appendix 3. Such a list would form a good basis for systematic interviewing of practitioners regarding the criteria presently in use.

#### Use of Socio-economic data

A related issue is whether socio-economic information collected in an interview to provide background information about the respondent is valid for making estimates about the characteristics of the local population in general. Such information is usually collected so that the interviewer can be sure the patterns that are emerging are due to the variables he or she is evaluating, rather than to particular socio-economic characteristics of the respondent. It is often used subsequently, however, to draw conclusions about the project population in general. What should be the basis for such extrapolations? Can figures collected in informal survey visits about a farmer's or village's livestock holding patterns be relied upon to give a

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<sup>7</sup>. David Gow (1987: 18) has a good discussion of the trade-offs between the use of different kinds of socio-economic indicators, based on work carried out in Indonesia. The lack of written discussion of this issue in project documents, agency reports, or academic sources is indicative of the need for more work in this area.



representative picture of the livestock holdings in the project area? To be used to subsequently help determine the viability of plantations on common lands that are also used by villagers for grazing purposes? How reliable is information gathered about land holdings? Production estimates? Fuelwood consumption? What kinds of information are impossible to collect through a rapid information gathering methodology? ICRAF 1983 uses a reliability rating for different types of information gathered, so that information can be properly weighed once the interviews are completed (reliable, fair estimate, guess). This helps counter such biases as weighing the last interview more strongly than those before or remembering the most vocal farmer's tree species preferences over others.

Franzel and Crawford (1987) compared the results of formal and informal surveys conducted as part of their FSR work and found that breakdowns of farmer holdings were fairly accurate in the informal surveys, while the real skewing of data occurred with estimates of crop yields and production figures. Both they and Garrett (1987) conclude, however, that formal surveys carried out subsequent to informal ones did not yield any contradictory information that substantially altered the informal survey's recommendations. Fuel consumption estimates have been found to be particularly problematic, because of the variety of cooking and heating fuels used, variations in household consumption depending upon size, income level, etc., and the difficulty of estimating use of agriculture residues. These are areas for which a systematic review of the experience gained by social scientists conducting such surveys would be valuable.

#### Proxy Indicators of other Information

Indirect or proxy indicators are also used in informal surveys to evaluate project issues that cannot be collected through in-depth methods due to the short-term nature of interviewing. Indirect indicators are collected for other kinds of hard-to-assess topics such as the effectiveness of local extension efforts and local extension staff and their ability to reach different segments of the population, such as women. These are particularly important when the survey team does not include any women to conduct interviews or when the context of the field interview is such that limited reliable information can be collected by interviewing women personally (men are also present at the interview, women are busy working outside the village, in-depth interviews with women were only conducted in one area of the whole survey region, etc.) Some indicators that are used to measure extension effectiveness, for example, are whether the local extension agent knows much about the characteristics of the local population, whether he knows much about usually excluded groups, such as women or landless laborers, whether villagers recognize him and understand his purpose in visiting them, and whether the agent knows local customary practices relevant to forestry or other land-use interventions. Again, there has been no systematic discussion of which of these are most valuable and how universal these are for assessment of a program in different countries.



### Hidden Sources of Bias regarding Rural Women

Another source of bias are theoretical assumptions made about the household as a unit for decision-making and the role of women. If the household is seen as a complete unit for decision-making and resource and labor allocation, the independence of various members is missed. The classic caveat for this assumption is West Africa, where women in polygynous households make decisions apart from the men and view their labor and resources as their own property. Social forestry projects that assume these women's labor is freely available to the men in the household will never work. There are a number of sources which address the problems of collecting adequate information about rural women. These include Hoskins (1979), Rocheleau (1985), Shaner, Philipp and Schmehl (1982; ), Naronha (1980).

There is no consistent set of suggestions for the best ways to interview women, within the time constraints of the normal informal survey field trip. Chambers (1983) suggests a useful approach for all normally excluded groups of beneficiaries of tallying the potential gains and losses to such groups from any given intervention. In terms of actual interviewing, which forums are most conducive for conducting interviews with rural women in which geographic areas? Can women be interviewed in the presence of men in some countries or regions? How different are the needs of rich and poor women? Of women in female-headed households? Is it better to rely upon proxy indicators of women's involvement if only a limited number of women can be interviewed in a sensitive manner? Again, the existing guidelines have no consistent answer to these questions.

### Sampling Inconsistencies

Nor is there a consensus on sampling for different purposes in rapid appraisal. Commonly, social scientists and land-use planners employ an eclectic mix of individual, household, and group interviews during the course of a field visit to gather information on the desired topics. How the results of these diverse sources are tabulated for the purposes of analysis is something never explicitly discussed in most final reports. Should for example, a small farmer interviewed in the course of a group interview about his tree planting practices be tabulated as part of the same representative sample as a small farmer selected as an individual by a quota or purposive sampling method during the same field trip? Or can the farmers interviewed in a group only be counted as a cross-check to those interviewed as individuals? If the team chooses to randomize the selection of respondents by interviewing every other farmer who comes to an agricultural cooperative meeting, should accompanying relatives be counted as separate individuals or not? Does this make an appreciable difference for the total reliability of the survey results?

### Group Interviewing

Group interviewing is a very important set of social science methods for social forestry because of its use both for collecting information in rapid appraisal settings and its use for conducting local negotiations with



forest user groups and communities. Written information about group interviewing techniques focuses much more often on the former use. There are some materials about conducting local negotiations, but this is clearly an area for which much more work and literature is needed.

### General Literature on Group Interviewing

There is a growing literature on the use of group interviewing techniques to gather information quickly about the local conditions and local beneficiaries and about problems and issues faced by beneficiaries and implementing staff. Some general guidelines on group interviewing are included in Shaner, Phillip and Schmehl (1982). Krishna Kumar (1987) has written a concise and easily referenced guide to community and focus group interviewing. Honadle (1982) and Hendricks (1986) include useful charts that outline the trade-offs between different types of group interview techniques.

In terms of social forestry and land-use planning, the value of different group interview techniques for gathering information is an important question, both for design and evaluation and for negotiating with communities and local groups for natural resource management. Gow (1987) makes the important observation that community interviews can often provide a team with a distorted picture of the local situation because local leaders dominate the discussion, because respondents discuss an 'ideal reality' rather than actual practices, because respondents may take control of topics out of the hands of the moderator, and because interviews with large teams often degenerate into a chance for respondents to air grievances and petitions. Kumar (1987) suggests some good strategies for circumventing these problems - carefully worded, leading questions to circumvent avoidance of real problems, interviewing leaders beforehand and introducing the meeting with their remarks, dividing the group into smaller ones, varying topics to encourage wider participation by those present, and the use of humor when pointing out limited participation by groups of participants.

### Local Negotiations

Various strategies have been used in Nepal for negotiating with local communities in social forestry activities, that rely upon sensitive group discussion to air information about local conditions and local needs and wishes. One strategy for is that detailed in Campbell and Arnold (1985) for generating village forest management plans for a community forestry project in Nepal. Another is a "village dialogue" method outlined by Messerschmidt (1987). A third is the seven-day village workshop approach for the Tinau watershed project (Suelzer and Sharma 1986). Outside Nepal, Williams (1986) describes discussions with villagers in a CARE project in Rwanda (1986). Hoskins outlines considerations for a dialogue that includes women forest users (1984) as well as more general considerations in Hoskins (1982). Social forestry projects in India are developing a micro-planning approach that involve village dialogues between extension staff and villagers for both group activities and individual planting on the basis of information from informal surveys conducted by extension staff (Hardcastle 1986). Conway (1985; described in Gow 1987:31) outlines the content of training



workshops for local staff in a variety of development sectors that provide a forum for identifying key questions, generating possible hypotheses and providing tentative answers, rather than imparting standardized information packages.

Attention is paid in all of these examples to setting up two-way information flows between local communities and the project planners or local-level staff. One useful method for recording data from surveys by extension staff and project managers or village dialogues that creates a two-way information flow is a "one-card" system (Odell 1987). Rapid appraisal surveys are conducted with local communities using a single card per interview, which is pre-punched for hand sorting with pins. Because the system is simple and requires no computer hardware, it is ideal for creating a data-base at the local extension level, so that project managers and communities have access to information needed for implementation of forestry activities.

### Focus Group Interviews

One methodology that developed in the primary health care and family planning sectors that has relevance to social forestry is the use of focus group interviews. This technique is relevant both for information gathering in informal interviewing and for conducting negotiations. Focus group interviews are adapted from social marketing methods in private industry and involve interviewing groups of target beneficiaries, such as women seeking medical care, etc., to gather in-depth information systematically on behavior and attitudes. Groups are small (6-12) and homogeneous (in sex, social status, occupation, etc.). Discussion is stimulated on selected topics by a moderator/interviewer. The advantage of this kind of interview is that information on sensitive topics can often be collected that respondents would not proffer in an individualized interview. Guidelines on this technique include Folch-Lyon and Trost (1981), Kumar (1986), Hendricks (1986), and Schearer (1981). In addition, a newsletter on Rapid Appraisal Procedures (RAP) in primary health care development is now available. Honadle's (1982) informal delphi technique serves very similar purposes.

### Issues for Effective Use of Group Interview Techniques

Important issues that deserve review in evaluating the literature on methodological criteria for the use of various techniques of group interviewing for village negotiation include: 1) different techniques to ensure that the opinions of all different village groups are represented, 2) types of cross-checks to ensure that problematic decisions, such as future distribution of produce, protection measures, involvement of women's needs, management of plantations, and livestock regulation have been made on the basis of complete information and that solutions are plausible, 3) decisions regarding the size of the groups suitable for different kinds of discussions (focus group versus committees versus the community as a whole), and 4) the appropriateness of special techniques for different cultural contexts, i.e. probing may be acceptable in some societies and unsuccessful in others.



## II. PROPOSED WORK PLAN

A Work Plan for Systematic Review of Sociology for Land-Use Planning

All of the rapid appraisal approaches described above are by nature eclectic and rely considerably upon the experience and sensitivity of the interviewer. For this reason it is highly unlikely that there will ever be any tight guidelines for the use of these techniques either in social forestry or in any other sector. Their use can and should, however, become much more systematic. As has been discussed in the report above, there are a variety of unresolved methodological issues in the existing guidelines. And equally importantly, the existing guidelines fail to systematically evaluate the use of methodologies in different project settings for different purposes. There is, however, a wealth of experience in social forestry and other development sectors regarding the most effective application of informal survey and interview techniques for specific planning and evaluation purposes, gained by social science and other practitioners through project planning and implementation.

On the basis of this experience, it should be possible to assess which techniques are more effective for conducting informal surveys and unstructured interviews in the varied circumstances of social forestry. And, equally importantly, it should be possible to assess what kinds of data do not lend themselves to rapid appraisal, but require more in-depth or formal investigation.

The following work plan details a methodology for systematically reviewing this experience. It is designed to produce an easily-referenced handbook on the state of the art in rapid appraisal techniques for land use planning. Rather than a rigid set of guidelines, such a handbook would serve as a "tool kit" of techniques, based on a wide range of accumulated experience. It would be very useful for social scientists involved in land-use planning and social forestry. This handbook could also provide a solid ground for preparation of training materials for use by social scientists, technical advisers, project managers, and local extension staff.

The issues to be reviewed include: sampling methods, interaction of the social scientist with the rest of the visiting team and other team interaction, choice of mixtures of interview types (group, community, focus group, individual, key informant, village leader), use of quantification and tabulation of results, criteria for reliability, methods of note-taking, use of group interview techniques for local negotiation, and use of socio-economic and other indirect and proxy indicators in different geographic regions and among different ethnic populations.

Methodology

To systematically review the experience gained to date in the application of informal interview and survey techniques to rapid information gathering, a representative sample of practitioners in land-use planning and other relevant fields would be interviewed in depth regarding their use of rapid appraisal techniques and methodology. To obtain both comprehensive



and cost-effective information, two separate samples of specialists should be interviewed. The first sample would be interviewed in person and in depth according to an interview schedule with both structured and open-ended questions covering the salient interview topics and methodological issues. On the basis of the findings from this first set of interviews, a draft set of findings would be prepared. This would then be tested for representative through a second set of telephone interviews with a sample of 30 - 40 individuals. Both samples would include both social forestry experts and development specialists from other relevant fields. Interviewees would be drawn from a preliminary list which includes the contacts listed in appendix 1.

The decision to use more costly ( in terms of time and travel expenses) personal rather than telephone interviews for the first sample is an important one. It would be impossible to get the same quality and depth of information about methodological issues and interview strategies through any other method. The majority of first stage interviews would therefore be conducted in person, except as logistically impossible.

To cover an internationally representative sample, interviews would be carried out in Washington, D.C. with both Washington-based professionals and professionals temporarily visiting the city, at FAO, in Rome, to interview FAO personnel and visiting professionals, at ICRAF, in Nairobi, at SIDA, in Stockholm, and in London, at various development institutions, such as IDS, at University of Sussex. Interviewees would be selected so that information can be collected about special considerations and problems relevant to different geographic regions and cultural contexts. Within the United States, two visits would be made to institutions with a strong experience in rapid appraisal and land-use planning, possibly Institute for Development Anthropology at Binghamton, New York, and College of Forestry and Natural Resources at the University of California, Berkeley.

A minimum of two senior social science consultants would be contracted at two different stages of the work to provide advice on the list of potential interviewees, review the interview schedule content, and advise regarding the completed handbook draft. The content of the handbook would be tested through one-day sample orientation courses conducted with social-science oriented professionals and project managers or extension staff. This would ensure the usefulness of the materials. Further tailoring and testing could be appropriately conducted upon completion of the work plan by agencies engaged in social forestry activities.

The work would be carried out mainly in Washington, D.C., where the widest variety of contacts and reference materials would be accessible. Information regarding different techniques would be put into a data-base, such as the partial data base included as Appendix 4. Interviews would be analysed using a computer-based qualitative analysis program for social science in combination with the data base.

### Schedule

A handbook could be produced over an eight-month period, a time period



which is necessary for interviewing of a wide variety of international donor and host-country professionals and consultants, for consultation of references on rapid appraisal techniques that are mentioned during interviews, for evaluation of literature on socio-economic and proxy indicators, and for preparation of an easily-readable, useful manual with concrete examples.

A work plan would be as follows:

- Month 1 - 2: Initial consultations with Consultant Senior Social Scientists on content and scope of personal interviews to be conducted, Outline of content of Interview Schedule finalized  
Selection of In-depth Interview Respondents (40)
- Month 3/5: Interviewing of Social-science oriented Experts in Washington, and Europe and Nairobi, on-going review of socio-economic and other proxy indicators through literature search and consultation with interviewees, visit to FAO and other relevant supervisory staff, Final outline of manual contents
- Month 6/8 - Preparation of draft report and follow-up telephone interviews with additional 30 experts to cross-check information through personal interviews, additional literature search  
Consultation with senior social scientists regarding draft report, Visit to FAO to consult with supervisory staff. Preparation of handbook and training materials for use by development professionals and extension workers. Pre-testing of materials through one-day sample orientation courses for intended audience. Review, and Submission of Final Report.

#### Specific Issues to Be Addressed in the Handbook

- a) What is the optimal mix of survey techniques in rapid field data collection and what circumstances affect choice of technique, e.g. when should group interviews be used and when should target beneficiaries be interviewed individually?
- b) How should commonly excluded groups, such as poor, landless farmers, and women included in surveys and group interviews?
- c) What constitutes systematic sampling of the population within the confines of short field visits? How many respondents of what kinds are needed to gather reliable information? Does only the team social scientist collect data as a sample, the team as a whole, or do team members collaborate at the end?
- d) What direct measures and proxy indicators are used to assess socio-economic status, background characteristics of the population, level of participation, and effectiveness of extension or service delivery in different geographic regions? What are the limits of reliability in these measures?
- e) Should the results of surveys and interviews be analyzed in tabulated form? What are the criteria used to evaluate the reliability of figures collected? Should quantities be expressed as numbers or as intervals (few, some, many) and how should intervals be defined?



- f) How can you know the farmer is telling the truth?
- g) What kinds of information are best collected as a team and what does a social scientist on the team try to collect apart from the rest of the team?
- h) What methods of cross-checking should be used, such as Chambers' 'triangulation of data' (1985:cf.footnote 2)?
- i) What kinds of information can be gleaned from interviews with project staff about what is going on in the field?
- j) How should questions be phrased and the overall interview structured to put informants at ease to make the best use of scarce time? What techniques work best with women and other disadvantaged groups?
- k) How can information gathering techniques be adjusted when something goes wrong, as inevitably occurs at least once during a rapid appraisal visit, to ensure reliable information? When a cancelled plane flight prevents visiting one project site or when local community leaders are away from home?
- l) How are rapid appraisal and group interview techniques applied to local negotiations with communities and forestry staff? To the involvement of local voluntary organizations?



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1979 Women for Local Community Development: A Programming Guide. AID-supported study. Washington, D.C.: US A.I.D.



Points out the need to question women and children separately from men about their knowledge, interests, and use of different forest and fodder products and species, to properly understand the local agro-forestry system and its problems.

ICRAF (International Council for Research in Agroforestry)

1983 Resources for Agroforestry Diagnosis and Design, Diagnostic and Design Methodology Manual Series No. 2, Working Paper No. 7, Nairobi, Kenya: International Council for Research in Agroforestry.

Series of collected articles on Diagnostics and Design (D&D) methodology developed at ICRAF for the study of agro-forestry systems. Places an emphasis on finding interventions that are sustainable, productive, and culturally appropriate. Includes a spacial mapping technique that identifies which landscape niches within the general environment and on farms are used by different users (men, women, herders, landless, etc.)

Jamieson, Niel

n.d. "The Paradigmatic Significance of Rapid Rural Appraisal", unpublished paper, Hawaii: East-West Center, 1986.

The author points out the importance of rapid appraisal as a new paradigm for incorporating the local beneficiary into the process of information gathering and decision-making. Because the fact-finding team engages in a dialogue with the project beneficiaries in rapid appraisal, there is much more feedback between project planners and implementers and beneficiaries, an issue of equal importance to questions of survey validity, etc.

Jones, Jeffrey and Ben Wallace, ed.,

1985 Social Sciences and Farming Systems Research: Methodological Perspectives on Agricultural Development, Boulder, Colorado: Westview Press.

A collection of articles which review the range of social science input into farming systems research and analyse the role of the anthropologist in developing a framework for informal survey research, working in a multi-disciplinary approach, and ensuring that the farmer's perception of problems emerges in both diagnostic and evaluative stages when introducing an intervention.

Koenig, Dolores

1986 "Alternative Views of the Energy Problem: Why Malian Villagers Have Other Priorities, Human Organization, 45(2):170-176.

Refers to footnote no. 1.

Kumar, Krishna

1987 Conducting Group Interviews in Developing Countries. A.I.D. program Design and Evaluation Methodology Report, No. 8. Washington, D.C.: Agency for International Development (Office of CDIE).

This is a concise and up-to-date guide on techniques of conducting community and focus group interviews designed for use by non-social scientists, particularly



project managers and design and evaluation team leaders. Included at the end is a short list of good, traditional references on social science methodology on conducting interviews.

Maxwell, Simon

1986 "Farming Systems Research: Hitting a Moving Target," World Development 14(1):65-77.

Maxwell argues that FSR has failed to include the fact that the rural situation changes over the time of the FSR recommendation to often make it inappropriate or obsolete. This is particularly relevant advice to social foresters who are making recommendations for planting trees that will not be harvestable for a long period of time, and must continue to prove adaptive to a farmer's overall strategy.

Messerschmidt, Donald

1987 "Conservation and Society in Nepal: Traditional Forest Management and Innovative Development" in Peter Little, ed., Lands at Risk in the Third World, Boulder, Colorado: Westview Press., pp. 373 - 398.

Describes the village dialogue approach used for watershed management in local communities.

Murray, Gerald

1986 "Seeing the Forest while Planting the Trees: An Anthropological Approach to Agro-forestry in Rural Haiti", Politics, Projects, and Peasants: Institutional Development in Haiti, New York: Praeger, pp. 193-266.

Deals with issues relevant to local negotiations with local communities and the types of local information needed for planning in social forestry.

Naronha, Raymond

1980 Sociological Aspects of Forestry Project Design. Washington, D.C.: World Bank. Agricultural Technical Note # 3.

Parts of this report are included in Naronha and Spears, "Sociological Variables in Forestry Project Design", in Michael Cernea, ed., Putting People First. Washington, D.C.: John Hopkins Press, 1985. This is a very useful report detailing the sociological factors of importance in social forestry project design and outlining the range of information that must be collected to evaluate the role of these factors in any particular region or culture area. Strong on factors related to land tenure and legal rights to land use.

Odell, Malcolm, ed. for Farming Systems Support Program, University of Gainesville, Florida

1986 Diagnosis in Farming Systems Research and Extension. Volumes I and II.

A training manual for which Volume I concentrates on diagnostic surveys and the various techniques and methodologies for carrying these out. Includes training units on sampling methodologies, informal survey and interviewing techniques, use of existing and secondary data as background information, and rapid appraisal



approaches. Much of this work is based on work done in social forestry as well as farming systems.

1987 Course Manual: Communications and Market Research for Agriculture. The Graduate School, USDA, Washington, D.C.

Includes excellent summary of one-card system for local information sorting from rapid appraisal surveys and summary of focus group interview techniques.

Patton, Michael Quinn  
1986 Utilization Focused Evaluation. Beverly Hills: Sage Publishers.

This is the most recent of Patton's books on practical evaluation. It contains a wealth of useful insights on why and how to collect information of importance to program implementation. An excellent background source for deciding what kinds of indicators are needed for various rapid appraisal purposes.

Patton, Michael Quinn  
1980 Qualitative Interview Methods. Beverly Hills: Sage Publishers.

This is another extremely useful general source on evaluative interviewing. The sections on techniques of conducting interviews and ways to plan questions are based on years of open-ended and structured interviewing in a variety of evaluation areas, especially educational programs. Much is directly relevant to interviewing farmers and other rural beneficiaries.

Potten, David,  
1986 "RRA of Small Irrigation Schemes in Zimbabwe", paper for Seminar at the International Irrigation Management Institute, March 1986.

Reviews Robert Chambers' list of RRA Techniques in relation to their use on an evaluation team's visit to Zimbabwe. One interesting conclusion was the team's consensus that rather than spending an additional day in each irrigation scheme (they spent one day in each), it would have been more cost-effective to make a follow-up trip for the same length of time in a different agricultural season.

Raintree, John, ed.  
1986 An Introduction to Agroforestry Diagnosis and Design. Nairobi, Kenya: International Center for Research in Agroforestry.

Overview of the Diagnostics and Design methodology, intended for use by expatriate experts, developing country planners, and field extension staff.

Raintree, John  
1987 "The state of the art of agroforestry diagnosis and design" in Agroforestry Systems, 1987 special issue on ICRAF's 10th Anniversary.

Summarizes the ICRAF D&D strategy in detail and reviews and references the wide range of working papers and studies carried out by the research team at ICRAF to date. Table 5 is a very relevant chart of the decision-making process and the corresponding field survey questions that must be asked to provide the needed



information to make those decisions.

Rhoades, Robert,  
1982 The Art of the Informal Agricultural Survey, Lima, Peru: International Potato Center.

Rhoades classic article on how to conduct an informal survey with farmers.

1982 "Farmer Back to Farmer: A Model for Generating Acceptable Agricultural Technology", Agricultural Administration 11(1982): 127-137.

Outlines the farmer-back-to-farmer strategy mentioned under FSR approaches in this report. Of importance to social forestry is the use of farmers as the 'evaluators' of the effectiveness of any intervention and the use of open-ended dialogues with farmers to identify problems and good points of intervention.

1985 "Informal Survey Methods for Farming Systems Research", Human Organization, 44(3):215-218.

A more accessible summary of the methodology detailed in the earlier pamphlet. One or the other are must reading for practitioners. Both include such topics as when and how to interview the respondent, how to establish a good rapport, when to introduce sensitive issues, how to record the answers, and how to analyse the findings.

1986 "Using Anthropology in Improving Food Production: Problems and Prospects", Agricultural Administration (22) 1986: 57-78.

In addition to outlining the special contribution of anthropology to multi-disciplinary efforts, Rhoades presents a case describing the quickness and innovativeness with which one anthropologist studied one valley (two months in Montaro valley) and produced a report based on informal surveys and use of secondary sources (aerial photographs, government documents) that has proved invaluable to FSR planning in that region at very low cost. Document produced by the anthropologist is unfortunately not readily available in the U.S.A. (Mayer, E., Land Use in the Andes: Ecology and agriculture in the Mantaro valley of Peru with special reference to potatoes. Lima, Peru: International Potato Center, 115 pp., 1979).

Rocheleau, Dianne  
1985 Land-Use Planning with Rural Farm Households and Communities: Participatory Agroforestry Research. Working Paper no. 36. Nairobi, Kenya: International Center for Research on Agro-forestry.

This study identifies the importance of collecting information on household composition and inter-household groupings for designing and carrying out group-based activities. Also reinforces Hoskins (1979) finding that women, men and children in the same household have different knowledge, interest, and responsibilities with respect to specific land units, plants and animals, and



particular activities (pg. 9 -10).

Scrimshaw, Susan and Elena Hurtado

1987 Rapid Assessment Procedures for Nutrition and Primary Health Care: Anthropological Approaches to Improving Programme Effectiveness. Los Angeles: University of California Press. In press.

Have not seen this work, but it is the first volume to exclusively deal with RAP and primary health care.

Shaner, W.W., P.F. Philipp, and W.R. Schmehl,

1982 Farming Systems Research and Development: Guidelines for Developing Countries, Boulder, Colorado: Westview Press.

This is a detailed and practical compendium of RRA techniques for informal surveys and interviews and other FSR techniques. It compiles techniques used by a wide variety of FSR practitioners, with ample discussion of the social scientist's input. Useful are discussions of sampling options, a case study of interviewing women in Bangladesh, and the section on ways to interview farmers on decision-making. The limitation on this work is that the relative value of different methods proposed are not systematically evaluated in this handbook.

Slade, Roger and Gabriel Campbell

1987 An Operational Guide to the Monitoring and Evaluation of Social Forestry in India. Forestry Paper no. 75. Rome: Food and Agriculture Organization of the United Nations (FAO).

Based on the experience with implementing social forestry projects in India and Nepal, this handbook outlines a simple, yet effective set of methods for conducting monitoring and evaluation for broad social forestry programs. Includes phasing of the collection of different types of information from the start-up of the M&E unit throughout the life of the project and discusses ways to effectively design and carry out special studies and case studies.

Suelzer, R. and K. Sharma

1986 Working with the People: Some Experiences with the People-Centered Approach (PDPP) in the Tinau Watershed Project 1983 - 1986. Tansen, Nepal: HMG/SATA Tinau Watershed Project paper. Mimeo.

Describes the seven-day workshop approach to community planning, with group interviews/discussions on local conditions and development parameters.

UN ACC Task Force on Rural Development,

1985 Guiding Principles for the Design and Use of Monitoring and Evaluation in Rural Development Projects, Rome:UN.

In a section on short-term information gathering, this pamphlet succinctly summarizes the interview and survey techniques that are needed for rapid reconnaissance. These are similar to those discussed by Robert Chambers, with specific attention to both village-based and external forces affecting farmers' decision-making.



Vergara, Napoleon, et al

1986 "Social Forestry Research Issues: Preliminary Problem Identification in Sisaket Province, Northeast Thailand". ODI Social Forestry Network Paper 2b, London: Overseas Development Institute.

Reports on the preliminary issues identified by research engaged in participatory action research being carried out in India and Thailand. The approach used is research through use of dialogue with farmers and action programmes while in residence in a village.

Warwick, Donald,

1976 The Sample Survey: Theory and Practice, New York: McGraw Hill Company.

There is a wealth of information in this handbook on ways to design questionnaires and important factors in question phrasing and sequencing of questions to reduce bias. Suggestions such as "don't wait till the very end of the survey to introduce controversial questions, or the informant will be too tired to respond, although you must wait until enough rapport has been established to ask such questions" are directly relevant to rapid information gathering interviews, even when interviews are unstructured.



## APPENDIX 1: Partial List of Expert Contacts

### Potential Consultant Advisors for In-Depth Interview Work Plan

Malcolm Odell, Synergy International - Expert in Rapid appraisal for forestry, agriculture, and other areas who is a specialist in training host-country professionals in the use of rapid appraisal for program implementation and planning and in the use of participatory group approaches for local negotiation.

Barbara Pillsbury, Private Consultant, U. of California - senior consultant on health and family planning methodologies with long-term A.I.D. experience

Roger Slade, monitoring and evaluation specialist at World Bank - Expert in sampling procedures for non-statistical, random and non-random selection from an unknown universe

Social Scientists who are adapting methods for rapid appraisal and local negotiations for social forestry (Starred names are individuals who could be contacted to write about especially promising methods)

David Brokensha, Director, IDA - social science methods for social forestry and livestock management/ pasture development projects

William Burch, Yale School of Forestry - Rapid appraisal techniques for learning about local communities

\*J. Gabriel Campbell, USAID, New Delhi - Expert in monitoring and evaluation systems for social forestry, particularly use of in-depth case studies. Expert in interview techniques for community dialogues on common resource management and forestry activity planning.

Jane Collins, SUNY, Binghamton, New York - Land-use planning and forestry in Latin and Central America

Robert Chambers, Institute for Development Studies, University of Sussex - Foremost expert in rapid appraisal methodology in a variety of rural development sectors. Has developed extensive training courses and materials for use of rapid appraisal by expatriate development experts and host-country professionals

Gordon Conway, Imperial College and IIED, London - Informal survey techniques in Rapid rural appraisal

Anis Dani, International Center for Investigation of Mountain Development, Nepal - Specialist in informal surveys to evaluate watershed management with a participatory group approach

\*Michael Dove, anthropologist, presently in Pakistan - Rapid appraisal for social forestry and techniques of local negotiations

Louise Fortmann, College of Forestry and Natural Sciences, Berkeley - Social science methods for community forestry implementation with special focus on Africa, Specialist in women and forestry issues



\*Patrick Hardcastle - Oxford Forestry Institute - local-level micro-planning of social forestry and natural resource management

Donald Messerschmidt, Forestry Support Program, USDA - village dialogue approach and natural resource management

\*Malcolm Odell - Training of rapid appraisal techniques for social forestry to local-level staff and host country professionals

\*Kathleen Parker, private consultant, Pennsylvania - Rapid appraisal and social forestry, techniques for local negotiations with emphasis on the sustainability of groups organized around social forestry activities

John Raintree, ICRAF - Survey techniques in D&D research for agro-forestry

Dianne Rocheleau, Ford Foundation, Nairobi, formerly of ICRAF - Geographer and specialist in social science methodology for D&D techniques, experience in local negotiations and group participation in local level forestry activities

#### Other Social Forestry and Land-Use Planning Experts

John Bruce, Land Tenure Center - social science methodology and natural resource management, common property issues

Christopher Gibbs - Rapid appraisal techniques for social forestry

Jerry Gillis - Rapid appraisal for livestock management

Hans Gregerson, forest economist, U. of Minnesota - Design and economic analysis of forestry projects and kinds of information needed for these tasks

Jeff Gritzner - social forestry, Africa

Peter Hazelwood, WRI - forester

George Honadle, Private Consultant, Maryland - trainer in choice of interview techniques and mapping

Michael Horowitz, Director, IDA - Specialist in rapid appraisal techniques and in livestock and pasture management

Peter Karinge, KENGO - Methodologies for local negotiations and self-help activities

John Michael Kramer, CARE - Social forestry and local negotiations with communities and self-help activities

Krishna Kumar, Price Williams Associate, consultant to CDIE, A.I.D. - Rapid appraisal techniques. Expert in developing training materials for host country professionals and outside design and evaluation team members for rural development in general



Michael Lipton, Institute of Development Studies - Assessment of common property resources and pasture development and planning

Gerald Murray, U. of Florida, Gainesville - Local negotiation in social forestry in Haiti and Central America

Bo Ohlsson, Consultant to SIDA - Rapid appraisal techniques for social forestry.

Pauline Peters, Harvard Institute for International Development - Methodology of rapid appraisal

Terry Rambo, East-West Center - Rapid appraisal for social forestry; especially for the Phillipines

Jeff Rohm, College of Forestry and Natural Resources, University of California - Local negotiations with communities and non-governmental organizations

Gill Shepherd, Overseas Development Institute - Editor of social forestry network

M. Skutsch, Resources for the Future - Rapid appraisal and social forestry, especially Tanzania

Steven Turner, consultant - Rapid appraisal methodology and Africa

Hakan Wahlquist, SIDA - Coordinator of Tamilnadu social forestry project. He and other SIDA coordinators have considerable experience in local negotiation and informal survey techniques to gather information about usually excluded beneficiaries

Paula Williams, IICA - Informal survey techniques in Africa for social forestry

Peter Wood, ICRAF/Oxford Forestry Institute - Training materials for social forestry, particularly local negotiation.

Sample List of General Experts in Rapid Appraisal Techniques in Land Use and Agriculture

Michael Cernea - World Bank sociology advisor

Michael Collinson - Agriculture Extension and rapid appraisal

Sam Fujisaka, Program on Environmental Science and Management, Los Banos, Phillipines

Patricia Garrett, University of North Carolina, Chapel Hill - FSR, Regional Analysis, Latin America

Max Goldensohn, DAI - local negotiation in agriculture and rural development

David Gow, DAI - integrated rural development and natural resource management

John Grayzel, A.I.D. - survey techniques, agriculture and rural development

Peter Hildebrand, CIMMYT - Inventor of the Sondeo approach to RRA

Janice Jiggins, Netherlands - Rapid appraisal and Resource poor farmers

Andy Manzardo - Rapid appraisal in agriculture and land use management

Laura McPherson, Louis Berger Associates - Rapid appraisal in design and evaluation

William Partridge, World Bank - rapid appraisal methodology and resettlement

Robert Rhoades, CIP - FSR methodology

David Wilcok, DAI - agricultural economist, natural resource management



Gerald Bailey, A.I.D. - Methodologies for non-random sampling techniques  
Michael Hendricks, M H Associates - Focus Group and other Qualitative interview techniques  
Edward Green, John Short and Associates - Health and Rapid Appraisal  
Pamela Hunte, University of Connecticut - editor of RAP newsletter  
Twig Johnson, Earthwatch, Exec. Dir. of Center for Social Research - Rapid Appraisal Procedures (RAP) in health care  
Kevin O'Reilly, CDC - methodology in short-term surveys in international health  
Sidney Shuler, A.I.D. - focus group sessions, rapid appraisal  
Marsha Townsend, A.I.D. - rapid appraisal and population  
Susan Scrimshaw, School of Public Health, UCLA - RAP for primary health care  
Ann Van Dusen, A.I.D. - expert on social indicators  
Perttie Pelto, University of Connecticut - Medical anthropologist and expert in RAP



## APPENDIX 2: OUTLINE OF RAPID APPRAISAL METHODOLOGY (adapted by Robert Chambers, IDS)

Basic Principles	Implications for Research Methodologies	Choice of Methodological Options
	PROVEN METHODS	
<p>I - Emphasis on Contexts (Relationships)</p> <p>- Use of Local Knowledge and Conceptual Systems</p> <p>- Analysis as Close to Source as Possible</p>	<ul style="list-style-type: none"> <li>- Semi structured interviewing</li> <li>- Working for more than "answers" to questions</li> <li>- Generate progressive improvement in tentative hypotheses</li> <li>- Data analysis by Field Researchers</li> </ul>	<ul style="list-style-type: none"> <li>- Key informants: Individual components</li> <li>- Group interviews</li> <li>- Local people as team participants</li> <li>- Folk Taxonomies, Local Proverbs, Oral Histories</li> <li>- Interview in proximity of topic</li> <li>- Walking</li> <li>- Sleeping overnight in village</li> <li>- Non-prime time visits</li> </ul>
<p>II - Triangulation (Multiple Checks)</p>	<ul style="list-style-type: none"> <li>- Use of other methodologies</li> <li>- Information collection in advance</li> <li>- Direct observation</li> </ul>	<ul style="list-style-type: none"> <li>- Maps and Aerial Photos and Local Interpretations</li> <li>- Bio-Physical, Rainfall, Soil conditions: secondary data combined with local observation</li> <li>- Time, space flow and logic schematics (spatial flow diagrams, seasonal calendars, decision trees etc.)</li> </ul>
<p>III- Interactive</p> <p>- Exploratory</p> <p>- Rapid</p>	<ul style="list-style-type: none"> <li>- Structure of time for team interaction</li> <li>- Sufficient time to return to topic for more information</li> <li>- Use of recurring rapid appraisals</li> <li>- Producing tentative hypotheses and working to refine them</li> <li>- Initially considering all aspects of the system through rough approximation and moving towards definition of model</li> <li>- Time period - a few days to a few weeks</li> <li>- Preparation of the report as part of the appraisal</li> </ul>	<ul style="list-style-type: none"> <li>- Scheduling Techniques for researcher-villager - researcher-researcher interaction</li> <li>- Specific rapid appraisals for special topics</li> <li>- Preliminary NRA presented to community for local comment and discussion</li> <li>- Strategies for recording - Team recorder, primary note taker etc.</li> </ul>
<p>IV - Flexible</p>	<ul style="list-style-type: none"> <li>- Selection from among wide range of methodological options tools, techniques; and ability to shift and revise as work progresses through conscious judgements and critical evaluations</li> </ul>	<ul style="list-style-type: none"> <li>- Team meeting in field to explicitly assess progress and change directions and methods</li> </ul>

SOURCE: Adapted from notes of working group at the International Conference on Rapid Rural Appraisal, Khon Kaen University, Khon Kaen, Thailand, 2-5 September 1985



### APPENDIX 3: SOCIO-ECONOMIC INFORMATION

#### Socio-economic information of importance for rapid appraisal

- 1) quality (color, texture, drainage, acidity, fertility, moisture, slope, shading) and type of soils
- 2) land resources and holdings
- 3) agricultural inputs and equipment/ technology
- 4) cropping/fallows strategies and perceived problems/risk management
- 5) local solutions to common disease, climate, insect, season problems
- 6) local marketing strategies
- 7) livestock holdings and livestock management (small and large)
- 8) pasture rights and grazing practices
- 9) division of labor in the household and community
- 10) cooperative structures and users groups
- 11) local credit sources/institutions and availability/accessibility
- 12) household structure/composition and division of authority/decision-making
- 13) allocation of commodities in the household
- 14) other common resource management structures
- 15) sources of information about new inputs/new technologies
- 16) social categories or classes (castes, classes, ethnic groupings)
- 17) local categories of land and crop measures/soil water types/fuelwood and fodder/ tree planting and local experimentation with trees
- 18) local use of forest products by different social groups and by gender
- 19) presence of other relevant groups in area, such as nomadic herders, etc.
- 20) inheritance systems
- 21) energy sources and trade of these items (ag. residue, dung, wood, coal)

#### Socio-economic indicators used as indirect or proxy indicators of status

- 1) food consumption habits - use of lower-status foods and no. of meals
- 2) cooking patterns - conservation of cooking fuel due to shortages
- 3) family members work as paid laborers outside the home or engage in other low-status economic activities
- 4) whether or not household owns livestock of what variety
- 5) land holdings and tenancy arrangements
- 6) house style and construction, condition
- 7) whether or not children attend school and which gender
- 8) whether or not family collects dung or fuel from common village resources
- 9) whether family sells wood to urban markets for cash
- 10) whether a family must rent out or sell their land
- 11) possession of manufactured goods, such as watches, radios, etc.
- 12) possession of essential household tools, utensils
- 13) quality of cooking fuels used
- 14) debt relationship with local farmer cooperatives
- 15) clothing used and condition
- 16) ownership of livestock in comparison to other farmers of the area



**Appendix 4: PARTIAL DATA BASE ON INTERVIEW AND SURVEY TECHNIQUES**

Category	No.	Technique	Sources	Special Cases
Survey Techniques	1	Pretesting by using first day's interviews as a trial run of different approaches and weighting the information on those questions accordingly	Warwick? or Self	
Interview techniques	1	Should you talk over the palm wine or not? In which countries is this a controversial issue?	Chambers 1985; Chamber 1983), (Potten says no in Zimbabwe what does McPherson say?)	
Sources of bias	2	Threats to validity: historical threat, maturation threat, testing threat, selection threat, interaction threat, experimental treatment threat	Shaner, P and S	based on those for agricultural situations (exp.treat.threat relates to areas where FSR research has been carried out
Sources of Bias	2	If first interview carried out with community leader or headman, it may become a standard answer set for other community followers	Warwick, Shaner, Philipp and Schmenl, Chambers and Cannuthers	
Sources of bias	2	For poor farmers, assume special cases for access to common property, access to fuel and fodder, and multi-purpose use of trees for various kinds of income	Agarwal (1986)	
Sources of Bias	2	Spatial - urban, on the paved road, on any road, near markets	Chambers (1985)	
Sources of bias	2	Temporal biases - daytime, leisuretime, and dry season interviews cover up information on total work day, work-related problems, and seasonally poor diets	Chambers (1985)	



Category	No.	Technique	Sources	Special Cases
Sources of bias	2	Person biases - talking only to rural elites, men, healthy, users of services and new technologies	Chambers (1985)	
Sources of bias	2	Professional biases and diplomatic biases - allowing interviewer's discipline to shape questions and discussion or being too polite to approach, meet, and learn from people	Chambers (1983)	
Phrasing of interview questions	3	Phrase questions in culturally understood categories [order of magnitude, land size, and time groupings	Shaner, Philipp and Schmehl	
Phrasing of interview questions	3	Phrase questions in culturally understood categories (order of magnitude/ land size)	Shaner/ P and S; Rossi and Berk; UN; Campbell and Stone	Accuracy of data recorded must recode later into commonly understood categories for use
Phrasing of interview questions Recording of Answers	3	Collect quantitative information in grouped categories rather than numerically, but be clear what numbers correspond to those categories (small, medium, large or few, some, many)	Shaner, P, S; D&D	
Phrasing of questions	3	Funnel Sequence of questions/Inverted Funnel 1. Begin with most general and move to more specific OR 2. Begin with most specific and move to general case	Warwick.138.	Inverted Funnel good if general response will color answers to others such as about minority groups against whom respondent is prejudiced
Phrasing of questions	3	Avoid double barreled questions even to save time and space	Warwick .140.	



Category	No.	Technique	Sources	Special Cases
Phrasing of questions	3	Avoid 'red flag' associations in leading questions, such as emotionally charged terms (political, class-based)	Warwick.143.	
Phrasing of questions	3	When third party skews information, )freeze out( outsider with glances, offer modest bribe to children, send other family members out on errands during interview	Warwick.212.	
Phrasing of Questions	3	When interviewing about women's activities, best to assume participation in outside tasks, etc. that farmers consider lower status for a woman to have to do (L.A. and S. Asia, particulatly) rather than phrasing question "Does your wife work outside"CASES	Chambers 1983	ask "where does your wife work outside the home" or "which field activities is your wife responsible for".
Phrasing of Questions	3	For Africa, household members have very independent control of resources, income, and labor allocation - never assume women are an unpaid working part of male enterprises	Hill 1986	Africa versus Asia
Design of Questions	3	Do not ask why - this leads to uncontrolled and unprioritized responses by informant. Determine what your "why" question means and ask "specific" questions instead	Patton (1980)	do you want to know if program had good extension, if other participants influenced informant, if it was economically compelling, why informant was motivated to participate? You decide first, then ask.(pg. 228-230)



Category	No.	Technique	Sources	Special Cases
Phrasing of Questions	3	Direct announcement format before each question to explain what next question is about - softens harsh questions	Patton (1980:236)	makes interview conversational, eases controversial questions into the interview, softens abruptness of questions, good for respondents unfamiliar with questionnaires, esp. women, landless
Phrasing of questions	3	Maintain control of interview so that respondent gives kind of information you want, whatever that may be - attitudes versus opinions, knowledge versus emotional feelings.	Patton (1980)	This means tailoring questions to fit the direction informant is moving to keep conversation informative to interviewer
Phrasing of questions	3	Keep questions truly open-ended by being sure informant talks more than interviewee - if questions are not limiting, informant will report more information and help shape future lines of questions	Patton (1980:216)	
Content of interview Context	4	Observe as much on site as possible (go to look at trees and crops and locations, map field plots on site, view insect damage)	Shaner, P, S; D&D; Chambers 1983	
Content of interview Context	4	Observe as much on site as possible .go to look at trees and crops and locations,	Shaner, P, S; D&D ; Chambers 1983	
Design of interview questions	4	Precoding categories versus establishing these after the interviews	Shaner, Philipp and Schmenl (1982)	



Category	No.	Technique	Sources	Special Cases
Content of Interviews	4	When to introduce sensitive questions: all at end of long interview (hit and run) leads to boredom by then or disorientation, but should have long warm-up based on personal experience with interviewing to get good answers.	Warwick .150.	
Content of Interviews	4	When interviewing regarding crop choice/seed selection, ask basis of seed selection/own experimentation and will get more information	Chambers 1983:91.	
Content of Interviews	4	Ask about possible problems faced by household:disasters, social ceremony expenditures,physical incapacity of workers, exploitation	Chambers 1983:120-128	Reasons for sale of land/mortgage of land
Content of Interviews	4	Ask about soil land type based on local categories of drainage, color, use, seasonal variation, rockiness, hardness, slope, texture	Chambers 1983; Shaner, Philipp and Schmehl	
Content of Interview	4	Ask information about farm in terms of discrete plots and discrete crops - do not expect farmers to think in aggregates	Hill 1986, Garrett 1987	Some output is sold and some is self-consumed and not always tallied together or at all, if not sold
Content of Interviews	4	In questions relating to farming systems, must include detailed information on whole system - crop,trees, pasture, and common lands/forested areas to be accurate from farmer's viewpoint	Raintree 1987	
Content of interviews	4	Make sure evaluation indicators are drawn up with interests of beneficiaries and stakeholders (key project staff who will act on evaluation results) rather than interviewer's decision about the "best" method	Patton (1986)	



Category	No.	Technique	Sources	Special Cases
Sampling techniques	5	Use of accidental sampling as a form of nonrandom .everyone you meet in a haphazard way (first 10 individuals on the path for ex.)	Shaner, P, S	
Sampling techniques	5	Use of quota sampling .draw up prior stratum and percentages from secondary sources and interview accidentally comprised individuals until you get enough from each stratus you have pre-selected	Shaner, P, and S	
Sampling technique	5	Use of Purposive Sampling to find farmers who meet criteria of "sample individuals" (less than 1 hectare of land, more than four children, sloping fields, etc.)	Shaner, Philip and Schmehl	
Sampling techniques	5	Key informant interviewing for in depth information	Shaner, Ph and S; O&O; Chambers	
Sampling methods	5	Avoid spacial and project bias look at whole canal, dam,plantation area, drains as well as canals, away from roadside, other than demonstration areas/pilot sites	Chambers and Carruthers 1978; Potten 1986; Chambers 1983	
Group discussion techniques	6	Generating controversy through the use of leading questions in group interview sessions	Myself; Kumar;	Uncovering range of opinions, especially from village outgroups in a short space of time
Group Interviewing - Question phrasing	6	When introducing leading questions provide all the options, so that the discussion will genuinely reflect all opinions	Warwick .143.	When group discussions threaten to leave out the minority or nonelite opinion, leading questions can lead to more representation of total participants' opinions



Category	No.	Technique	Sources	Special Cases
Group interviews	6	Group interviews are useful when interview guides are 'pretested' and don't need to be modified with each respondent so enough is known to establish a meaningful topic guide	Michael Hendricks (1987)	
Group Interviews	6	Interview leaders beforehand, so that they will not dominate discussion. You can summarize their opinions as a starting point to discussion	Kumar (1987;ix)	community interviews with mixed participants
Group Interviews	6	Use group interviews when group interaction will stimulate thinking on issues and attitudes and individuals can speak fairly quickly on a topic (under 10 minutes)	Michael Hendricks (1987)	
Group interviews	6	"Sophisticated naivete" or posture that moderator understands subject but does not know details as informants do elicits local customs and categories and feelings in more detail	Kumar 1986	
Group Interviews	6	Best to use structured guide to some extent, or else a general picture will emerge, but no comparable detail to put with other group discussions held in same survey session in the field	Kumar 1986:29	
Sampling techniques	6	Where a limited number of villages can be visited in the time frame, reliance on expert advice (chief of extension) can be the most valid sampling decision for choice of villages	Kumar 1986:32	
Group interviews	6	Informal Delphi technique - version of focus group	Honadle 1982	Use when group interviews will yield skewed data



Category	No.	Technique	Sources	Special Cases
Proxy indicators	8	Judging socio-economic status by attributes of farmer: livestock, sanitation, furniture, land holdings, clothing worn, unreliable source of food, cash, sick family members	Chambers 1983:108.	
Team behavior	9	Split team in three to deal with potential person bias one goes with leaders, one goes to visit scheme, and one goes far off to see other areas or special activities	Chambers 1983; Potten 1986	
Team interaction and behavior	9	Where several professions are involved, members should work in different pairs each day	Hildebrand 1981	
Team interaction or behavior	9	Members should discuss results and tentative conclusions frequently or daily	Potten 1986	
Questionnaire content	11	Use transitional questions and comments, although brief, to explain the sections of the interview to respondent	Warwick 1980.	Ex. To get an accurate financial picture of people all over the country, we need to know the income level of each respondent
Geographic specific problems	12	W. African farmers store grain in household graneries on the stalk, so it is impossible for them to estimate yields	Hill 1986	General problem of whether farmers can estimate yields by plot for accurate survey information



Category	No.	Technique	Sources	Special Cases
Group interviews	6	Use humor to resolve problem that too few people are participating	Kumar cites case (1987) from field	Can use to encourage women to talk as well by saying your boss said you needed this type of information, etc.
Group interviews	6	Rely on group interviews only when volume of stimulus material is limited and interview guide is established for use in all interviews	Hendricks 1987	group interviews are less useful for strings of related information than in depth study of one subject
Group interviews	6	Leading questions can sometimes cause a group to discuss something that has remained hidden in earlier interviews; provokes commentary on taboo subjects in some cases	Kumar 1987	Touchy issues like land tenure, community rights
Proxy indicators of service delivery	8	Counting no. of trees planted, children immunized, etc. as a proxy indicator of level of extension delivery or service delivery	Shaner, Philipp and Schmehl (1982); Chambers 1983; Gerald Bailey, Personal Communication	
Proxy indicators of service delivery	8	Checking rapport of extension workers with household members you go to interview, esp. women, landless, etc.	A. Molnar (1986)	
Proxy Indicators for socioeconomic status	8	Identifying socioeconomic status of farmer by quality of house, amount of land, cooking utensils, use of high quality burning materials for cooking, watch or other expensive items	Chambers; Self	



## TERMS OF REFERENCE

### REVIEW OF SOCIAL SCIENCE METHODS USEFUL FOR COMMUNITY FORESTRY

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The Community Forestry Unit has a mandate to integrate social science information into Community Forestry, project formulation, implementation and evaluation. It has found that traditional social science methods are frequently too time consuming and produce too much information which is irrelevant to forestry activities, especially those which are participative and therefore require a different type of information.

This contract is to review available information on social science methods ~~and~~ adaptations of social science methods focused specifically to improving information which could be useful in Community Forestry activities. Special attention will be given to rapid appraisals, the use of indicators and methods for local negotiations. Attention will also be given to ways of increasing two way information flow and support for local information systems leading to self help activities.

The contractor will produce a brief but succinct report, reviewing literature and other information on what new methods are being tried (both in forestry and in other fields) which could be used in Community Forestry, what information about them is already easily accessible and ~~where~~ further research or further method development is needed. The contractor should also propose what should be done to pull together needed information to give to practicing social scientists to make their work more responsive to actual field project needs. The report should have an annotated bibliography of selected relevant literature and include names of social scientists who could be contacted to describe special methods further and to write about adapting especially promising methods to Community Forestry.

This report is seen as an input in a larger work which will eventually result in a document for social scientists working in Community Forestry.





Dalhousie University

School for  
Resource and  
Environmental Studies

October 27, 1987

Richard Ackermann  
Policy Analyst  
Projects Policy Department  
The World Bank  
1818 H Street N.W.  
Washington, D.C.  
USA 20433

Dear Mr. Ackermann:

Enclosed as promised is the article by Geertz. Note particularly the references to the work by the Alexanders.

I don't know of any work which explicitly considers family patterns in relation to the environment, but my own research on Singapore suggests to me that the individualism within the Malay/Indonesian family would be one factor to consider. The division of assets between children (partible inheritance), the separation of property between husband and wife, while married and upon divorce (which is relatively frequent) and the tendency for children (especially boys), to pursue independent incomes even while unmarried and living at home, would all contribute to the pattern of small plots of land, frequently shifting tenure and wage labour arrangements, the relative absence of large landownership and other features of the Javanese rural economy which Geertz attributed to an ethic of shared poverty and communitarianism.

I would be very happy to review any work you care to send me and I would enjoy the opportunity to participate in future research in this area.

Yours sincerely,

Tania Li, Ph.D.  
EMDI Project Officer



The Restructuring of Village Government and  
Its Effect on Social and Economic Change:  
An Anthropologist's Experience in Central Sumatra

One of the more encouraging features of the reconsideration of strategies of rural development which is occurring in central Government planning boards is the new emphasis on bringing village communities into project planning at an early stage. Reacting as much to an analysis of past failures as to the criticism of academic researchers Governments have come to realise that the best way to enhance the success of a rural development project is not through employing strong-arm tactics or imposing demands on the peasantry, but by persuading them to take an active part in the planning, construction and maintenance of projects. This approach, inviting cooperation, does not guarantee success, but at least it increases the chances. Furthermore, in those countries where the tax-base is low and revenue difficult to collect, it clearly makes sense to try to encourage contributions in the form of services or local fees which can immediately be ploughed back into community development, thus easing the burden on the central exchequer, at the same time as making rural society more self-reliant and less dependent on central planning.

As far as Indonesia is concerned this move towards decentralisation had already been conceived by the Dutch in the early years of the century, and changes were made in institutions at a regional level giving greater autonomy in some spheres to local councils (Kansil 1984: 98ff; Benda 1966). The problem of how to encourage this sense of political and economic responsibility at the level where it most mattered, the village, was, however, resolved neither by the Dutch nor subsequently by the Japanese, since they were caught between the need to suppress anti-colonial actions and the desire to promote local responsibility and self-reliance.

Similar problems bedevilled the attempts by successive Indonesian Governments in the 50s and 60s who espoused the cause of village democracy and self-help in their rhetoric, but found that the risk to political stability which arose from regional separatists as well as from inter-party clashes was too great to allow room for experimentation, even if that had been a priority. In the late sixties with the consolidation of the New Order government under President Suharto there were created for the first time conditions which



made political and administrative reform at a local level a real possibility. There was a wide measure of support for the new Government, order was rigorously enforced by the armed forces and there was a general receptiveness to the notion of change. For its first two five-year development plans (Repelita I and II), however, the New Order had more urgent problems to deal with: coping with inflation, restoring the economic infrastructure, increasing rice production. Only in Repelita II was attention turned to problems of schooling, health and housing at a local level, and even then, what this meant was the execution of plans and proposals drawn up centrally: so many new primary schools, health clinics, power stations etc, according to the size of population. (For a good overview of development strategy of the period see Birowo and Hansen 1981.) In the meantime, however, much of the goodwill for the New Order had evaporated, and tensions often surfaced between Government officials and local populations who resented being dictated to at the same time as welcoming much of the visible development which was occurring round them.

It was important therefore for the New Order to re-establish itself by winning the confidence of the countryside, and there, unlike in the cities where there were other battles to be fought it was possible to do this less by coercion than by the offer of incentives for cooperation. It was an opportune time to remove the mothballs from plans for decentralisation. What was needed was legislation which would assist in facilitating the maintenance of political stability by establishing efficiently working democratic institutions which would be locked into an overall administrative scheme, and at the same time promote the raising of standards of welfare within rural communities, both by persuading those communities to take more responsibility than previously for their own environment, and by harnessing some of the resources of manpower and income to make development in some measure self-financing. At the same time the implementation of the new legislation would have to recognise three obstacles to its immediate acceptance.

- i) A high degree of resentment and scepticism in relation to Government initiatives as a consequence of the high incidence of corruption in official circles and the bullying tactics which had often been adopted in the past.
- ii) The existence of local cultural traditions, adat, which often provided the forums for communal decision-making which would now be threatened by new centrally-imposed institutions introducing uniformly throughout Indonesia.



- iii) The atrophy of initiative and enterprise at a local level as a consequence of increasing state interference in the mechanism of rural organisation since Dutch times, which had both removed much decision-making from rural communities and made the peasantry psychologically dependent on the provision of services offered by the central government.

With these considerations in mind, then, the Government introduced in 1979, Act 5 'Concerning Village Government' containing comprehensive legislation to be introduced throughout Indonesia with a different timetable for its implementation in the various provinces of the country. The proposed measures had wide-ranging implications not only for political restructuring but also for social and economic change in the countryside. It is too early to say what impact the legislation has had nationally. There have not yet been any attempts to assess its effectiveness, or even to monitor the degree to which the law has been implemented. It is, however, possible for the anthropologist at the local level to offer examples of what has occurred in one or two cases.

The following account describes the way in which this new legislation was introduced into a relatively prosperous rice-growing society in central Sumatra. It is offered by way of a case-study, but many of the features of this case can, *mutatis mutandis*, be applied to a consideration of the general problem of establishing neo-democratic institutions of cooperative endeavour at the village level throughout Indonesia and Southeast Asia. As others have pointed out (Antlor 1986), it is precisely this nexus linking the village to the State which anthropologists should be trying to elucidate.

#### The Situation in Kerinci in 1979

Kerinci is a kabupaten (sub-provincial administrative district) in the province of Jambi. It lies in a fertile valley located in a cleft in the Bukit Barisan range of mountains which stretches from north to south along the west coast of the island of Sumatra. Rice is grown on the floor of the valley, and in the surrounding hills coffee, cinnamon and other cash crops are cultivated. Relative to other areas in Sumatra, Kerinci is very densely populated. The total population is now c. 260,000, of which about 30,000 are to be found clustered in the township of Sungai Penuh, the administrative centre of the kabupaten. One reason for the high level of population density is the degree of migration into the area by people from outside the area attracted by the prosperity of the region and having comparatively easy access



to it since the construction of a road in 1922 linking Kerinci to the west coast road of Sumatra and thence to Padang. A measure of the pressure on land imposed by these new settlers, most of them petty traders, is the fact that the price of land per square metre in the market area in 1979 was Rp. 100,000 (in 1979 Rps. 1000 = £1).

I have written elsewhere of the way in which Kerinci has gradually been politically incorporated into the administration of central governments (Watson 1984). The salient points which need to be repeated here are that the Dutch colonial government, after taking over the region in 1903 attempted to introduce a number of innovations into the administration of the region. Not all of these were successful, and although there were no rebellions in Kerinci, sometimes other tactics of evading government demands were adopted. By the early 50s Kerinci had become economically and politically integrated into the Republic of Indonesia. Nevertheless there often arose problems in the administration of the region which took the form of local figures marshalling the forces of adat to oppose direction from above. With the collapse of the PRRI rebellion in central Sumatra, however, in which Kerinci had sided with the rebels, central government under martial law was less tolerant of opposition and for a number of years right through to the aftermath of the 1965 events little of a positive kind was done to engender social and economic change in the region. With the inception of Repelita I, however, attempts were introduced to promote agricultural production and strengthen local government both at the lowest level of salaried government official, the camat (of which there were seven in Kerinci immediately responsible to the Bupati), and at the level of the village head who was often de facto a government appointee rather than an elected representative.

In 1979 after ten years of central planning development in Kerinci had had mixed success. The economy was booming, largely for reasons independent of central planning, because the export commodity prices of coffee, cloves and cinnamon were high and marketing facilities were good. There had been some, not much, success in persuading farmers to grow new HYVs. There was grudging acknowledgement of the improvement in welfare services - schools, clinics - infrastructure - road constructions, but there were numerous undertones of complaint. Above all there was resentment at the way in which pressure had been exerted at elections to make people vote for the Government party, Golkar, and there was a general feeling that corruption was rife in the administration and that the people were not getting their money's worth of the money which the central Government was making available for development at the local level.



In relation to what was occurring in the villages the major innovation had been the introduction of television in 1978 and its wide dispersion throughout Kerinci, particularly in Sungai Penuh, in 1979. Although the quality of the picture was poor, there was widespread interest in television, and families and neighbours of all ages spent hours watching the box with the largest audiences for the news bulletins. In addition to being exposed to canned American cops and robbers series, the people of Kerinci were also learning more about national developments, the information supplementing what they read in the national newspapers which although a day late, arrived regularly. Thus the viewer could see references to Government campaigns to promote family planning, introduce new cropping methods and to live modestly (hidup sederhana). (The last campaign must have puzzled most viewers who in the first place were not in a position to live otherwise, and secondly were being exhorted by the advertisements on the television to live luxuriously.)

Of the issues which they read about and saw on television those which immediately touched chords concerned development projects and new regulations. At the village level the annual dropping of BANDES (Bantuan desa Village aid) money for the construction of small projects: drainage, additional primary school classrooms, improvement of roads, was an occasion for heated discussion between the village head and adat figures each party accusing the other of sharp-practice or short-sightedness. New regulations were particularly irksome when it came to the buying and selling of land, a market having been created which created an extraordinary windfall for many villagers who were fortunate enough to have even small square plots of land in strategic locations. The payment of fees, first to adat leaders and then to several classes of administrative <sup>officer</sup> right up the ladder of officialdom to the local camat caused considerable resentment.

Officials themselves were grumbling. Village heads were in a difficult position caught between the villagers among whom they and their families resided and to which they were related, and the instructions passed on to them by the camat for implementation in the village. They were not recognised government officials and received only nominal salaries, most of their income coming from percentages on the fees villagers paid for various services, the provision of marriage documents, identity cards, etc. In particular the heads of the larger villages round Sungai Penuh were angry at the difference between their own position and that of their counterparts in Java. Not only was that because the Javanese village head seemed to be in a more privileged position, but also because Kerinci villages as a whole were unfairly treated.



BANDES was allocated in Java to villages whose boundaries were defined according to a fixed number of households. Some of the Sungai Penuh villages were three or four times the size of Javanese villages and yet were given only one BANDES allocation.

Between the village head and the camat there was the post of mendapo, responsible for a federation of villages, also an unsalaried official. With the introduction of the new bureaucratic legislation he had seen his traditional authority whittled away and the functions he had previously executed now divided among village heads, camat and departmental officials such as those of Land Registry (Agraria) department. In this respect he found common cause with traditional adat lineage figures who found their authority and privileges eroded by the new centralisation.

The camat burdened with having to introduce unpopular measures, and compelled by circumstances to alternate between a strategy of cajoling and persuading villagers to accept new measures and imposing sanctions on those villages and village heads that were resistant, found himself forced to become an increasingly authoritarian figure. This stress on authority and imposition of orders and instructions from above was an alarmingly noticeable feature of what can be regarded as the Javanisation of bureaucracy in Sumatra at this time, a move which caused considerable uneasiness and ill-will, but was consciously adopted by Sumatran officials following the model of instruction advocated in their professional training, and observed by them to be practised by the Javanese.

Against the background of general uneasiness, in which only senior officials in local government appeared to feel comfortable, the central Government opportunely launched a nation-wide mass education programme known as P4 (Pedoman Pengamalan dan Penghayatan Pancasila - Guide to the Implementation and Interiorisation of Pancasila [the State Philosophy]). In the first wave of the programme in Kerinci the senior officials had to attend an intensive two-week course in which they were instructed on matters ranging from a study of Indonesian history, the Constitution and international relations to discussions of ethics, morality and an analysis of the New Order's development programme. The intention was to invigorate civil servants with a new sense of national purpose. This is not the place to discuss the effects of this indoctrination programme - which is still continuing incidentally in Indonesia today - but it is worth mentioning here that despite the cynicism with which many greeted the campaign, casual observation suggests that a large number of people have been positively influenced by the campaign. A further outcome has been that for all its



vagueness Pancasila is now seen as a code of general practice to which reference can be made by those who want to appeal against arbitrary impositions from above - although it is important not to over-emphasise its value in this respect.

Within this context of raising national consciousness among civil servants it was appropriate that they should be urged to set the example within rural areas and be the foremost to champion the various campaigns of the moment which the Government was promoting. In Kerinci at this time a special effort was made to reach the women, and thus the wives of local officials were required to approach women as wives and mothers in particular, to encourage family planning, and promote the notion of a healthy family (keluarga sehat) emphasising hygiene, a balanced diet, the importance of children's education and special care of infants. Although at times the wives of officials could adopt very patronising attitudes to villagers, on the whole these initiatives were welcomed, both because women of all strata found it easier to communicate than their men-folk, but also because these official wives posed no threat and were not perceived as having any ulterior motive in their actions.

By the end of 1979, then, officials within Kerinci, even though they might not appreciably have altered their life-styles, had been psychologically softened up to be more responsive to local needs. At the village level, although there was an openness to some Government programmes, there was still great hostility to the new rice intensification methods. Furthermore, although there was still suspicion of the village head and the camat and the petty taxes and fees which had to be paid, there was a feeling of inevitability in relation to the new regulations which villagers were slowly beginning to accept. The most obviously unhappy person in this situation, however, was the village head whose workload had been increased and who clearly felt that he had neither adequate recognition from his fellow-villagers nor from the local government administration. His situation was, however, to change dramatically with the introduction into Kerinci of Undang-Undang No. 5, 1979. Undang-Undang No. 5, 1979 Pemerintahan Desa (Village Administration)\*

The Act of 1979 governing village administration is to be viewed as one in a package of laws and regulations concerning local government (see MacAndrews et al, 1982 b). The first important step in this direction

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\*Much of the information here is taken from Kansil 1984



introduced by the New Order was Undang-undang No.5 1974 Pemerintahan Daerah (Regional Government) to which the 1979 Act should be seen as the sequel. In subsequent years further laws were introduced relating to some of the provisions of the earlier Acts, and dealing with, for example, the status of village heads.

Taking this legislation as a whole one quickly perceives that it has been the outcome of a considerable amount of careful thought and planning and that it has built not only on the legislative and administrative experience of earlier governments in this respect, but it has in addition tried to incorporate the wisdom of generations of academic scholars who have studied rural Indonesian societies. Furthermore, there is also evidence that the thinking which has gone into the formulation of objectives of development at the village level as well as the devising of the administrative means of achieving them has benefited from comparative international studies of rural development and from an acquaintance with contemporary conditions in the Indonesian countryside. In overall conception, then, the Act is an impressive document.

The initial premise of the legislation is the desire to establish democracy at the village level, a principle which is found enshrined in the 1945 Constitution of Indonesia. Recognising, however, that political and economic developments in recent years have brought about a set of complex circumstances in relation to administration and government even within the countryside, the legislation goes on to define the purpose of administrative reorganisation as the closer integration of village society into the body of the state by linking it systematically into a coordinated and elaborate scheme for national development. The latter or rather its aims it is careful to define in terms of providing in the first place for the basic needs of the whole population and in terms of raising the quality of life of the less well off members of the nation. In this respect acknowledgement is made that the first two five-year development plans (Pelita I and II) gave insufficient attention to problems faced by the poorer sections of society, but it is hoped that Pelita III, of which the new Act is an integral part will remedy the situation. Specific mention is made of the groups whom it is particularly designed to assist: 'fishermen, artisans, small farmers, share tenants, landless peasants, petty traders' (Kansil 1984 quoting a 1980 booklet of the Ministry of Information). All in all the total grand design to which the legislation is referred is general national policy statement (Garis Besar Haluan Negara), and beyond that to the fifth of the five principles of



Pancasila: a just and prosperous society.

The means of integrating the village into the State is seen as being the introduction of a uniform system of administration throughout all villages in the country where identical structures will obtain, but where it is hoped that sufficient allowance has been made to incorporate in the new system elements of the different adat traditions which distinguish one region from another. In its specific provisions then, the Act lays down in great detail the form that the new administrative system will take, specifying, for example, the procedure for the election of the village head, the size of his office staff, etc.

Of all these details the following need to be noted since they are of relevance to understanding developments in Kerinci:

- i) Village administration refers to the lowest level administrative unit accountable to the Camat. There are two such units, the desa(= village) and the lurah(= urban village). The latter are located in communities which are on the edge of towns and which have been heavily influenced by urban life-styles.
- ii) There are to be three categories of village. (These categories had earlier, it seems, been known in Java, but were not familiar to people of the outer islands.) These are desa swadaya, desa swakarya and desa swasembada. These categories are socio-economic and refer in ascending order to the capacity of the village to be economically self-supporting.
- iii) Very clear guidelines are indicated concerning the sources from which the desa will derive their income. In addition to money allocated by central government in the form of grants e.g. the annual BANDES, and by local government in the form of a redistribution of some tax revenue, villages are expected to generate their own sources of income through community projects, e.g. working a piece of land cooperatively, organising a regular weekly market, providing public recreational facilities for a small charge.
- iv) The overall administration of the village is to be the responsibility of an elected village head, kepala desa or kepala lurah, an elected representative of the village concerning whose election, conditions of service and term of office specific instructions are laid down.
- v) The village head is to be supported by a full complement of staff each member of which has specific duties.



- vi) The day-to-day administrative tasks of the village head consist inter alia of keeping records of village statistics, issuing official documents, dealing at an initial stage with land transactions, assisting in the collection of local taxes, assisting the initiatives of government departments at a local level, settling disputes, being responsible for village security. He must report regularly to the camat. In addition to these day-to-day tasks the village head is also responsible for seeing to the proper execution of projects for which the BANDES has been designated.
- vii) To help him in the execution of his tasks the legislation also provides for the setting up of two important institutions at the village level which are intended to be the cornerstone of village democracy. The first of these is the LKMD (Lembaga Ketahanan Masyarakat Desa - Community Institute for the Maintenance of the Village). This is to consist of members representing various sectional interests within the village: adat figures, youth, women etc. Their primary function is to discuss and plan village development and specify development projects. Their plans are to be passed on to the LMD (Lembaga Musyawarah Desa - Institution of the Village Council) which comprises the leading influential and educated figures in the village who then pass their comments on the proposals and modify them before sending them to the camat for ratification. The village head is chairman of both committees. Execution of the proposals is then again left to the village head and the LKMD.
- viii) Finally, to assist the LKMD and the LMD in formulating and executing proposals, two special teams of advisers are set up. The first is Pembina LKMD (LKMD Support Team), operating as far as the villages are concerned at the general level of the kecamatan, but of which there are representative teams at every level of the administrative hierarchy going right back to the National Central Planning Board and thus ensuring some measure of general coordination. The second is the Tim Penggerak PKK (Pembinaan Kesejahteraan Keluarga - Promoters of the Raising of Family Welfare) which operates at a village level to instruct families in the basic principles of meeting the demands of family life as efficiently as possible

This short synopsis of the provisions of the legislation gives some indication of its very great scope. In comparison to previous administrative



functions undertaken at the village level what immediately strikes the observer familiar with the previous system is both the very great extension of responsibility to the village level - at least in principle - which appears to reverse the earlier trend towards rigid centralisation and subordination of the village officials to a purely executive role, and secondly the new emphasis on the village as a cooperative economic unit expected to generate its own income. Village cooperatives had existed under previous governments, but they had not taken this particular form. Given this aim of making the village economy much more self-sufficient and less dependent on central government funds, it is not surprising that another separate piece of legislation introduced in 1980 dealt specifically with the reorganisation of cooperatives at the local level.

Admirable as this legislation on village administration appears to be in its promotion of limited economic and political autarky, it hardly needs pointing out that proposals of this kind which attempt to legislate in a uniform manner throughout a country as diverse as Indonesia are bound to be difficult to carry out in practice. The remaining section of this paper describes how the restructuring of the administration has been carried out in recent years in a village in Kerinci.

#### Bringing Undang-Undang No. 5, 1979 Into Force in Lubuk Dalam\*

The introduction of the new administrative structure to Lubuk Dalam in 1982 was greeted with much enthusiasm. There were several reasons for this warm reception, the first being that in place of the old village unit seven new administrative units were being created as demanded by the size of the population of the old village. Of these new units six would be desa and one would be a kelurahan, each would be entitled to a BANDES allocation, at that time fixed at Rp. 1¼ million. Thus at one stroke an administrative reorganisation had dramatically increased the amount of central government money available for small project development.

The old village head was also pleased, since he had been complaining for some time that his position under the old system was invidious, and he was not given proper recognition either in his status or in terms of his salary. Under the reorganisation he was appointed lurah with a fixed salary of Rp. 45,000 and given status as a civil servant.

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\*This is a pseudonym for a village with which I am very familiar and which I visited most recently in 1984



Within the desa the new institutions of the LMKD and LMD provided opportunities for new positions of status and prominent and ambitious village residents, many of whom were farmers but also civil servants and teachers, were more than happy to be elected to these bodies. There was eager discussion about how villages could initiate small money-making projects of the kind suggested by the government.

The new village heads were also pleased, both because of the status they acquired and because of the promise of a regular fixed income. The six desa had been divided into two groups of three, one group consisting of desa swasembada - self-supporting villages - and the other consisting of desa swakarya - subsidised villages, the categorisation being determined by their geographical location. The heads of the desa swasembada were particularly pleased since within their villages resided the more well-off members of the community, many of them immigrant traders, and the village boundaries encompassed areas of the township where property values were high. Under these circumstances it was to be expected that with the various transactions that residents would have to bring to the village head for approval the village income would be high. The heads of desa swakarya were less fortunate in this respect but they were at least subsidised by the Government with a salary of Rp. 11,000 a month. Furthermore they were rewarded by the degree of seriousness which the Government clearly gave to their position. All the village heads, for example, were invited to a two week training course in the provincial capital in Jambi during which they received instruction about their new jobs, and it was impressed upon them how much importance the Government attached to this reorganisation of village structure. They returned from Jambi enthusiastic and informed, although the degree of understanding of the significance of the changes differed widely among individuals.

By 1983 when the new system had been in operation several months it was possible to make some initial assessment of the effects of the reorganisation. The following are (adapted) excerpts from my field-notes of 1983 and 1984 of conversations with village heads.

1) Interview with Kepala Desa Mesjid Agung 13/4/83

This desa is in the swakarya category and lies within the heartland of the original village settlement. The population of the village is 1,268 and the kèpala (head) has four assistants to carry out the administration. For the most part his work consists of:

- a) Issuing letters of information, birth certificates etc. for which the fee is Rp. 500.
- b) Making out landed property certificates. (The fee is 0.25% of the value of the land.)



- c) Preparing the supporting documents for property sales (fee 0.5% of the selling price).
- d) Issuing IPEDA (land tax) forms and collecting IPEDA revenue.
- e) Arranging the ronda (night-patrols).
- f) Sending weekly and monthly statistical reports to the camat.
- g) Consulting the LMD and LKMD.
- h) Arbitrating in village disputes and settling matters internal to the village.

The kepala desa made observations on all these duties. Below are selected extracts.

### Property Certificates and Land Sales

#### Hak Milik Tanah and Jual-Beli Tanah

The kepala of PA was in a bad position in relation to these documents since there was no agricultural land to be bought or sold in his area. These certificates must be handled by the kepala desa in whose area the land concerned lies; the location of the residence of the sellers does not determine, then, the kepala desa who should arrange these matters. There had been a couple of incidents in the past where there had been trouble because of this arrangement. The kepala desa where the land was knew nothing of the seller and simply took his word that the land was his. This had caused trouble with others laying claim to the land. So it has now been decided that both the kepala desa of the land where the land is and that of the residence where the sellers live should have some say in the matter.

The reason why some desa are swasembada is because they are in areas where a lot of buying and selling take place. Consequently they manage to obtain a fair amount in fees. Pintu Air is a good example. There are a number of merchants there. If asked for the fee they often give more than is necessary, Rps. 3,000, say, instead of the Rps. 2,000 asked for.

#### IPEDA

This seemed to be running fairly smoothly at the moment. Last year the kepala desa had managed to collect 100% of the taxes and so the forms were being issued to him more quickly this year. On average people pay in the region of Rps. 2,000. sometimes they pay that all at once, sometimes they prefer to pay in installments. People seemed more prepared to pay these days, one of the reasons being that everything was tied up with having an IPEDA receipt. There had originally been some difficulty, again because of the split between areas of residence and areas of location of land but now this had been overcome.

#### Patrols

Members of the village who were eligible were obliged to take their turn at night patrols (roads). If anyone pleaded an excuse then it was customary to give the kepala desa Rps. 1,000 and for him to find a replacement or do the duty himself.

#### Regular Reporting

Weekly and monthly reports had to be sent to the comat. These dealt with births, marriages, deaths and recent events. There was a lot of



migration in and out of the village. In Pondok Agung a number of people from outside had settled in the village - as much as 20% perhaps - and original inhabitants were moving to the periphery of village lands, to Aur Berduri and Sungai Jernih.

### LKMD and LMD

These institutions were the kepala desa's biggest headache. At first c. March/April 1982 there had been a lot of enthusiasm and the various members had all attended. Now there was a decline of interest. Most of the members had been appointed by common consensus and the majority were local civil servants from the various departments. Their function was to decide on how improvements to the desa would best be carried out. As far as I understand it it was the LKMD which made the original recommendations which were then passed on to the LMD for execution. The kepala desa stressed how difficult it was to get people in these institutions to cooperate. The last meeting of the LKMD was cancelled, for example, because there was not a sufficient quorum,  $\frac{2}{3}$  of the members.

### Miscellaneous Observations

3. In the matter of the collection of fees there were numerous problems. Relatives often tried to ask for privileged treatment and many of them did not expect to pay when they asked for services. Some were quite reasonable and paid the requisite fee, others brought the money but tried to get away without paying.

### Extract from diary: 21/4/1983

... I then went off to visit D.A. who is head of Pintu Air (a swasembada - self-sufficient village on the edge of the town). He seemed very prosperous and confident. There were no problems in the Desa, he said. Ninety-five percent of the people were outsiders and they understood the new situation very well and were prepared to work in cooperation with him. There were no problems of income since there were various sumber penghasilan (sources of productive enterprise). He gave the example of the cinema. A Rp. 25 tariff was put on all cinema tickets. In relation to spending the money he had the full cooperation of the LMD and LKMD. They worked well with him.

I asked specifically Akta Jual-Beli Tanah (the Sale of Property Document) and he said that followed a regular procedure. The initial proceedings were handled at the ninik-mamak (traditional village seniors) level. Once this was done and ownership of the land was proved then the matter could be taken up with the Agraria people (whose fee was Rp. 30,000) who measured the land and then the Akta was drawn up. At the ninik-mamak level he said that the adat fee was beras 20 (20 containers of rice), kambing seekor (a goat). How this was translated depended on the individual circumstances. Were there no objections to this cumbersome process of going from one authority to another. "No", he said.

As far as disputes were concerned little came his way. Everything was settled at the family level. Occasionally in his capacity as an adat official (a position he held independently of his position as village head) he was called in, but in general, he said, the function of the ninik-mamak had declined: their role was now in accordance with adat-nenek yang dituakan mamak yang dimuliakan ("seniors are given the respect of age, representative elders are revered").

On one of the boards in his office there was an impressive list of contributions to the fund for the new elementary school which had been built. Apparently something in the region of Rps. 4 million had been collected, the biggest contribution coming from the contractors who were to build the school.



Some of this money had also been used to build the new office.

One of the most successful activities of the desa was the PKK. There had just been a three day course in March in relation to this. Participants had received instruction on matters ranging from sewing and cooking to religion and P4. The camat's wife played quite an active part in all this...

From Pintu Air I went on to Desa Usaha (a swakarya village on the outskirts and the least prosperous of all). It was clear that the kepala desa was the least knowledgeable about the new structure and how it should operate but he was trying to do his best... The kepala desa said that about half the people understood the significance of the new changes but half did not and there were problems, for example in relation to peternakan (animal husbandry) in the area. People sometimes just allowed their cows and ducks to roam freely spoiling the sawah. There were also problems with the re-forestation programme. The inhabitants wanted the land for grass for the cattle and so they weren't enthusiastic about reforestation.

While I was there two schoolgirls came in asking for travel documents since they were going up to Padang to try their luck in the IKIP tests (entrance tests for the Teacher Training College). They had to produce their identity cards, and everything was recorded in an exercise book. The fee was Rps. 500.

Village Administration. Conversation with D.M. (Kepala of desa Surian-Swakarya) 20/9/1984

#### Difficulties in Practice in Relation to Administration

1. The greatest difficulty was in dealing with the pemimpin, in other words the members of the LMD and LKMD, who were often lax in attendance at meetings and carrying out their functions. Dealing with masyarakat (the people) was relatively easy.
2. Trying to set up projects to supplant village income was more or less impossible. It was hoped that the village itself could produce 2 times the BANDES amount and D.M. had suggested working cooperatively on a ladang (upland garden) but the suggestion was not taken up.

#### Miscellaneous

2. Examples of projects completed in the village include: 1) 1982 - The office of the kepala desa which had needed Rp. 1 million for office equipment and 1 million for the building - Rp.  $\frac{1}{4}$  million had been contributed by village members; 2) 1983-84 one kilometre of road surfacing had been carried out, labour being contributed by the villagers.

#### The Role of Adat

Given that so much of the administration of the village was now being taken over by local government there didn't appear to be much left for the adat functionaries. I asked what were things still considered the province of adat. These were said to be the following:

- 1) Moral (susila) questions when people had acted improperly;
- 2) Questions of land tenure/disputes about boundaries.

#### Conversation with D.M. 16/9/1984

I asked if there were any problems in relation to managing the desa. He replied "No, but":

- 1) It was difficult to get people to cooperate. They simply didn't



want to know. Neither persuasion nor threats were of any avail. He gave the examples of gotong-gotong (mutual help) and planting padi adil (an HYV advocated by the Department of Agriculture at the time). He said that although he had issued instructions people still weren't planting padi adil.

- 2) People didn't keep their promises. They said at various meetings (LMD etc.) that they would perform certain tasks, but in the event they didn't.
- 5) The clearing of the irrigation channels (an annual event prior to the new planting season) was a good example of the difficulty of getting people to cooperate. There was no "jiwa sosial" (public spirit). People were supposed to turn up at 7.30, but in fact it wasn't until about 11.00 that things got moving.
- 7) It was no good the kepala desa trying to act tough since they had to live and work with people, and since they were elected by the people they risked their position if they came on too strong. It was very different for the comat who were government officials and were frequently moved about.

In interpreting the significance of the various comments made above by the village heads and the observable consequences of the new administration one can quickly make tentative conclusions in relation to some issues while reserving one's judgement on the overall impact which has been made. In the first place it is clear that after initial enthusiasm, disillusionment set in, followed by apathy. Further confirmation of this is to be found in the fact that between 1983-84 the old village head who had become lurah had resigned, since the job had not proved as satisfying as he had hoped. The head of Desa Pintu Air had also resigned. Money making projects had not been successful. There was simply no interest in cooperative ventures.

Trying to explain the decline in enthusiasm for the new system one might have been tempted to see the failure to make better use of lineage elders, the ninik-mamak, in the process of consultation, added to the fact that the mendapo was removed from his position as an administrative official, as a cause of lack of participation. However, it was clear that even before the new administration the authority of the ninik-mamak had been in decline, and they no longer commanded the respect which traditionally (at least according to the ideal) was owing to them.

Adopting this historical perspective one is able to note too how despite the more thorough-going nature of the new reforms, to the villagers themselves the changes have something of a *déjà vu* quality. After all, tax demands, the need to obtain documents and the exhortation to work cooperatively within the village unit had been familiar features of earlier administrations since Dutch times. There was little in terms of incentive or motivation to make the present scheme more attractive to villagers. On the contrary,



despite the rhetoric and the emphasis on planning from the bottom up, pressure was still being exerted from the top down on issues which were of major concern, for example in the campaign to make people plant padi adil. Resistance to this campaign sprang largely from the failure of the HYV which Lubuk Dalam farmers had been forced to plant in a campaign in 1974. As one official wryly remarked: peasants have long memories and the disasters of 1974 still colour their attitudes to official campaigns.

On the other hand it would be wrong not to acknowledge the progress that has been made with the introduction of the new administration. For one thing the payment of taxes and fees for services proceeds much more smoothly than it did five years ago. The day-to-day administration of the village head's office also seems to operate more efficiently: records are kept, returns are made, there is a sense of public accountability. Furthermore, even though there are problems in making the LMD and LKMD function as had been planned, the money released through BANDES and other sources is being visibly used to make improvements in the infrastructure of the village.

The noted tendency (see MacAndrews and Chia 1982) to expect rapid results in the development of rural resources as consequence of introducing new technology or administrative or political rearrangements is one which is shared not only by development planners and foreign consultants, but also by local government officials. In Kerinci it is common to hear the camat or the lurah bemoaning the failure of villages to become more self-supporting, and putting the blame for the failure on the village heads who are described as lacking in initiative or without proper understanding of what is required. It would appear, however, more sensible in this case to acknowledge that improvements are not going to occur over-night. Despite mass campaigns, in-service training and repeated instruction, changes within village mentalité shift more readily in response to empirical results rather than in reaction to exhortation. This is not to deny that education will have any impact. It does, but it is noticeable that it is, for example, the PKK campaigns in which much instruction takes place in the homes and where results are quickly realised that are most effective. The type of democratic participation and commitment upon which the new administrative structure is premised - the centrality of the LMD and LKMD - requires generations to become properly established. The assumption may have been that such institutions would build upon traditional democratic force familiar to the Indonesian village. This notion, as far as Lubuk Dalam at least is concerned, is illusory. There is no evidence that there was ever much cooperation at the level of the village (cf. Dove 1982). Furthermore, the kind of decision-making that is required



in contemporary times in relation to the allocation of resources requires a sophistication and analytical depth uncalled for in earlier generations. It is not incompetence or inability which seems to prevent the full development of democratic potential, simply a lack of practice. And since that is the case, it is important that the new structures continue to have the support of senior government officials who may be tempted in their frustration to revert to former methods of intimidation and pressure. It takes time as well as opportunity for democracy to become established.

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This illustration of the effect which the attempt to introduce a more systematic, and in accounting terms, a more satisfactory, administrative structure has had on village society in Sumatra may strike the observer as somewhat gloomy in its implications. The conclusion which might be drawn is that whatever the circumstances peasant society will not respond to direction from above, even when that direction is altruistic and benevolent in its intentions and seeks to encourage democratic participation, seeming confirmation of the arguments of some Marxists concerning the innate reactionary conservativeness of the peasantry.

On the other hand, there are grounds for optimism if one takes a longer view. If, for example, one sheds the illusion that changes can and should be made to occur to within one or two years, and if one ceases to attribute the failure of peasants to respond positively and immediately to initiatives from above to Government mauvaise foi, then one's vision is cleared for the acknowledgement that incremental change, occurring in a climate of experience and education, may not simply be the best we can hope for, but may also, in the long run for society, be the most valuable.



## CULTURE AND SOCIAL CHANGE: THE INDONESIAN CASE\*

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The debate over the patterns of social change in Indonesia, and especially in rural Java, has recently taken a strongly 'economistic' turn, either in the form of Neomarxist 'modes of production' theory or Neoclassical 'rationalisation of factor use' theory. This has led to the 'externalisation' of the cultural dimensions of change as 'mere ideology' or forceless social decor and to a heightened indeterminacy in our picture of what is now happening. Only the restoration of interest in the cultural dimensions of change can correct this development. The discussion is organised around a wide variety of responses to the author's 1963 study of social and agricultural transformation in Java, *Agricultural involution*.

### I

When I began, more than thirty years ago, to study Indonesia, indigenous cultural traditions were thought by all but a handful of economists, and probably by most anthropologists, to be a simple obstacle to social change, and especially to that particularly wished-for sort of social change called 'development'. The traditional family, traditional religion, traditional patterns of prestige and deference, traditional political arrangements were all regarded as standing in the way of the growth of properly rational attitudes towards work, efficient organisation, and the acceptance of technological change. Breaking the cake of custom was seen as the pre-requisite to the escape from poverty and to the so-called 'takeoff' into sustained growth of *per capita* income, as well as to the blessings of modern life in general. For the economists, the thing to do with the past was abandon it; for the anthropologists, to study it before it was abandoned, and then perhaps to mourn it.

In the Indonesian case, this general attitude did not long survive direct encounter with the place.<sup>1</sup> As Western economists began to flow into Jakarta, from the early 1950's, as advisors, researchers or teachers, the fact that traditional patterns were not only deeply rooted but extraordinarily various and would not yield easily to advanced notions was made brutally apparent to them. The advisers were ignored, the researchers could not find reliable numbers on anything, the teachers found their students seriously unprepared. And when, a bit later, Indonesians began to be trained abroad in modern economic theory,

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only to return to the proliferating tensions of the late Sukarno period, when virtually every cultural difference in the society was ideologically dramatised, the search for a view of the relation between established life ways and social transformation more adequate than 'the more you have of the one the less you have of the other' grew almost desperate.

The anthropologists (like the economists, predominantly American at that time), being the supposed 'experts' on traditional culture and about the only scholars, aside from a few Dutch philologists, operating outside Jakarta, were, naturally enough, looked to for help. But there were some serious problems.

In the first place, there were, in those early post-Independence days (the formal transfer of Sovereignty took place in the last week of 1949), very few of us—hardly more than a half dozen. Most of us, furthermore, were engaged in a single project centred on a town-village complex in eastern central Java. Worse, none of us was particularly concerned with 'development' as such. Dissertation-conscious graduate students that we all were, we were absorbed with the standard concerns of anthropology (or of anthropology professors): kinship, religion, village organisation, agricultural technique, language, exchange relations. Most of our methodological reflections, such as they were, were given over to the rather more immediate question, to us at least, of how to conduct ethnographic research in a complex civilisation with two millennia of recorded history, a highly differentiated social structure, an extraordinary level of artistic and intellectual accomplishment, and a vast population; a type of work then just getting under way in our still largely tribe and island oriented discipline. And finally, as none of us had much more than the normal college course in economics, we were rather unsure, to put it mildly, how to go about trying to be of use in making Indonesia 'modern', even if we so desired—which, distrusting the growth ethos as ethnocentric at best, imperialist at worst, we were very far from sure that we did.

The most immediate result of this non-meeting of minds between development-oriented economists and ethnographically oriented anthropologists was a sort of inverse version of the culture-as-obstacle view. As anthropological studies began to appear, in various types of barely legible pre-publication versions, they were eagerly combed—not only by economists but by political scientists, sociologists, and those anthropologists who had been brought to see the necessity of change by their encounter with mass poverty—for beliefs and practices that might aid, or be somehow brought to aid, 'modernisation'. Established religious beliefs, especially the Islamic dimensions of them; family structure, especially extended family structure; co-operative work practices in agriculture; traditional market institutions of various sorts—all were assessed in terms of their potentiality for stimulating social transformation in Indonesia. People began to talk about 'The modernity of tradition', 'The advantage of backwardness', and 'The Muslim ethic and the spirit of capitalism'.

I go into all this not as a first chapter in my memoirs, nor as a footnote to the sociology of knowledge but in order to convey a sense of the immediate setting in which the main lines of debate over the relationships between Indonesia's astonishingly variegated cultural inheritance and its even more astonishingly persistent directions of change, arose and crystallised. That debate cannot be



understood without some knowledge of how it took form, what it was in response to, who took part in it, what *idées reçues* it was seeking to overcome, and how shamelessly *ad hoc* it was.

It was developed, not in the halls of academe by systematic theorists, divided into sects and questioning one another's methodological premisses, ideological commitments or human sympathies (that came later), but in the field, by active researchers primarily concerned with instant matters and grateful for any leads from any quarter which might aid them in comprehending in any way a society whose complexity and depth they found overwhelming. It was made up by the first generation of post-Independence scholars—historians, political scientists, sociologists and linguists, as well as economists and anthropologists—more or less on the spot. Whatever the ultimate fate of its leading themes (which show little sign of fading), it provides an excellent example of the way in which the immediacies of research can themselves give rise to the terms of discourse in which the research is conducted.

It soon became apparent to those of us who did begin to feel the necessity of thinking seriously about the question, 'Whither Indonesia?' (even if still not persuaded that the answer was, or ought to be, 'To where we are now') that neither the culture-as-obstacle nor the culture-as-stimulus view was going to do. Both these views saw local beliefs and values as external to the processes of institutional change, impalpable forces, psychological perhaps, slowing it down here, speeding it up there, distorting it in this regard, rationalising it in that—the sort of approach that a few years later got Western policy makers (and some Eastern ones) enmeshed in the 'hearts and minds' theory of how to deal with Asian peasants. The separation of established views as to what was real, virtuous and desirable in life from the directions of movement in collective behaviour turned out to collapse under the weight of what one can only call massive social facts. Whatever the country was doing, it was changing; and apparently it had been, in about the same sort of way, for a very long time. Whatever it was changing to, it was but another version, perhaps one even less 'developmental', of what it was; and it looked to be doing so for a fairly long time to come.

As far as I was concerned, the massive social fact that seemed to render arguments about whether communal land tenure, the 'closed corporate village', ascetic mysticism, ascriptive hierarchy, higgling trade, or Quranic fatalism were or were not 'good for development' grandly beside the point was the enormous population density of the core areas of Indonesia and especially, of course, of the core of cores, central Java. Upwards of fifty million people (of a seventy-seven million or so country total) in the 1950's (it promised to be more than 100 million by the end of the century) on an island the size of England and mal-distributed within that, made everything else look rather secondary, even to someone whose main interest was in the role of ideas in the shaping of social action.<sup>2</sup> Any discussion of culture and change in Indonesia that did not have the past, present, and future of Javanese demography constantly before it would hardly be worth much. Someone who believed, as I did, that human life takes shape within a moving and diversified frame of socially constructed meanings worked out in time and reworked there as well, but who was so incautious as to become involved with Java just at the point at which it was at long last



re-assuming political responsibility for its own fate was obliged somehow to come to terms with these terrible numbers.

At the same time, I was hardly inclined to take a Malthusian view, within which the whole matter reduced to a question of Christian arithmetic: the abstinent prosper, the indulgent starve. What I felt was needed was the placing of Indonesian, especially rural Javanese, demographic history, in the context of the cultural forms which had surrounded it at the various stages of its course. Some of these forms, however altered, surrounded it still, and some, doubtless even further altered, seemed likely to go on surrounding it, at least for that developmentalist dream-time, the foreseeable future. Accordingly, I wrote, in the late fifties and early sixties, a short, rather schematic, rather argumentative book, *Agricultural Involution: the processes of ecological change in Indonesia*, which, whatever its worth, certainly launched the sort of discussion I wished to see launched.<sup>3</sup> Praised and derided, used and misused, passionately dissected and aimlessly invoked, 'the involution thesis' has probably been the most extensively, if not always the most perceptively, debated theoretical idea in Indonesian studies since the second world war.<sup>4</sup> I had danced for rain; I got a flood.

## 2

The argument of *Agricultural involution* is structurally quite simple. But as this has not prevented a fair amount of the secondary presentation of it from getting important aspects of it seriously wrong, whether for tendentious reasons (White 1983) or out of mere incomprehension (Collier 1981; Knight 1982), let me restate its essentials in a breathless and unshaded, synoptic paragraph—a schema schematised.

Indonesia is not merely very heavily populated, but the internal distribution of the population is radically skewed, Java having about nine per cent of the land area and (1961) nearly two-thirds of the people; and this situation is of long duration and extended prospect. The capacity of terraced wet rice agriculture, concentrated mainly on Java, to absorb increasing labour inputs per hectare while keeping per capita output at constant or very slowly declining rates, a capacity lacking in the shifting cultivation, 'swidden' regimes of much of Sumatra, Borneo, The Celebes, and the eastern islands, has made this pattern possible. These rising levels of labour intensification were themselves enabled by the ecological characteristics of rice terraces, by a wide range of terrarial, technological, and work organisational developments, and by extensive reworkings of traditional peasant culture and social structure. The earliest stages of this process are impossible to trace circumstantially, but the systematic imposition by the Dutch of forced export crop cultivation (indigo, coffee, tobacco, and, most critically, sugar) from about 1830 powerfully accelerated it, as well as creating a (relatively) capital intensive enclave economy within the peasant economy, the connections between the two being generally symbiotic though hardly symmetrically beneficial. The ultimate result (ca. 1950) was, on the peasant side, 'involution'. This term was borrowed from the American anthropologist, Alexander Goldenweiser, who devised it to describe culture patterns which, like Gothic architecture or Maori carving, having reached a definitive form, continued nonetheless to develop by becoming internally more complicated. Javanese agriculture particularly, but Javanese social life more generally, maintained itself in the face of a steadily rising population and increasing colonial pressure by such an internal complexification, to the point that by the middle of this century a terrible impasse had come into being: an extremely large and still



growing labour force, a weakening capacity to absorb it into traditional agriculture through involutinal processes (even Maori carving runs out of space between the lines), and a small encapsulated, and job-poor industrial sector. On the one side, rural class polarisation of the sort found in many third world countries—even neighbouring ones such as the Philippines—was inhibited; but on the other, so was the steady reduction of the proportion of the labour force employed in agriculture that has been characteristic of development in Europe and North America. The book closed with some comparative remarks about Japan's rather different agrarian history (different, that is, from both European and Indonesian) that I still think enlightening but which hardly anyone else seems to have grasped the point of, some whistlings in the dark about the future, and a plea for carrying forward the diagnosis of the Indonesian malaise 'beyond the analysis of ecological and economic processes to an investigation into the nation's political, social and cultural dynamics'. (1963: 154)

There were, of course, a number of other matters touched on in the book: the incipient, but ill-fated moves toward smallholder export agriculture in some parts of the so-called 'Outer Islands' during the 1920's; an analysis of swidden and wet rice terracing in ecosystem terms; a critique of both environmental determinism and the evasive response to it called 'possibilism'; a discussion of the changing strategies of colonial exploitation—trade monopoly, forced cultivation, corporate farming—on Java. But these have not much entered into the debate, perhaps because it has been, left, right, and centre, so intensely economic in its tenor; a point I will make a great deal of in what follows. Also, some of the questions on which the book has stimulated controversy—when involution really set in; the causes, indeed the reality, of the nineteenth century 'population explosion'; the precise nature of the interaction between Dutch and Javanese agricultural technologies—seem to me empirical issues of some moment, however one might want to phrase them, but not ones whose resolutions are likely to contribute all that much towards either weakening or strengthening its central thesis. In any case, they are matters for specialists, quarrels about quarrels, and cannot be entered into here.<sup>5</sup> What I do want to enter into is the degree to which the call to situate the general inquiry in its cultural context has been heeded, and with what effect.

The short and brutal answers to these questions are: 'not much' and 'very little'. My own main disappointment with most of the reactions to the book—with those that are 'for' as well as those that are 'against'—is that they interpret it independently of the rest of my Indonesian work on religion, stratification, politics, bazaar trading, village organisation, family structure, etc., rather than as a prolegomena to that work, which it was intended to be. Occasionally, one or two of the early and rather casually phrased sketches of the involution idea are referred to in passing, perhaps because they are rather easier to caricature than the filled-in argument. Very much less often some offhand mention is made (usually just an opaque citation) of my *The social history of an Indonesian town* (1965), where the argument is developed in a more particularised setting and at least some of its ambiguities directly addressed. But almost never, in this context, are my views about aspects of Indonesian culture other than rice-production (and absolutely never, my more general notions about culture as such) brought into the picture. The book has come to be regarded as rather a sport; an unaccountable lapse from my general, supposedly dreamy, approach to things.



Much of this (though not the fantasy that I am an idealist) is doubtless my own fault. My original intention was to carry the involution book itself forward into a more comprehensive consideration of the Javanese, and beyond it the Indonesian form of life. But I felt I would never finish it if I tried to do that, and clearly it would have been extremely premature for me to have attempted it. In case this seems like a petulant complaint that my other work has been neglected (it has not been neglected in general; just ignored so far as the involution debate is concerned), I must make it clear that I bring this point up only to stress that the bulk of the involution debate has taken precisely the sort of turn the book was written expressly to forestall: that is, toward 'economism'.

'Economism' is a useful, if unlovely, term of art whose diffusion to English-speaking anthropology from French we owe perhaps as much to Marshall Sahlins (1976) as to anyone. It is the view that the moving forces in individual behaviour (and thus in society, which is taken to be an aggregate of individual behaviours or some stratificational arrangement of them) are those of a need-driven utility seeker manoeuvring for advantage within the context of material possibilities and normative constraints: 'the home-bred economizing of the market place... transposed to the explication of human society' (1976: 86). Man (and, in her own place, Woman) the strategist, manipulating 'means-ends relations [within] an eternal teleology of human satisfactions' (1976: 85), takes the centre and most of the rest of the social stage. Custom, convention, belief, and institution are but *mise-en-scène*, the particular setting within which the universal drama of boundless desires and scarce fulfilments or, in the Marxist version, productive forces and class interests, is played out.

So far as the involution debate is concerned, 'economism' has led to what one might call the re-externalisation of cultural (or socio-cultural) matters reminiscent of the culture-as-barrier v. culture-as-stimulus framework from which the discussion sought to escape in the first place. Now, however, the alternatives tend to be culture-as-mystifying-ideology (Alexander & Alexander 1982; Gerdin 1982; Lyon 1970) or culture-as-forceless-trapping (Collier 1981; Miles 1979; Robison 1981): collective illusion concealing (one is never quite sure from whom, although one can be sure it is not the analyst) the mechanics of power and exploitation, or collective poetry which makes nothing happen. Down deep, culture is shallow; society runs on the energies of want.<sup>6</sup>

More concretely, there have been (simplifying madly a cluttered landscape of creed and theory) two main expressions of this general approach to the issues posed by Java's (and thus Indonesia's) resilient predicament: one centred around mode-of-production conceptions of one sort or another, stemming of course from Marxist perspectives transmogrified by structuralism; the other centred around rational action models, stemming from Neoclassical perspectives softened with populist sentiments.

The mode of production approach has concerned itself with the incorporation of Java into the world economy and, particularly, with the impact of the so-called



'Capitalist' on the so-called 'Asiatic' Mode of Production. (Or 'Tributary', or 'Mercantile', or 'Feudal': as is usual in Marxist polemic, whose form is a good deal more stable than that of either Marxist theory or Marxist praxis, types tend to multiply and distinctions to proliferate to the point where each participant ends up a party of one, at least as anxious to dispatch rival comrades as bourgeois enemies.) Matters are cast on a resolutely grand and abstract scale, a dialectic of mega-concepts heavily annotated with opportune mini-facts, assembled from here, there and elsewhere, rather in the manner of a lawyer's brief—a tendency reinforced by the appearance of World Systems Theory with its cores, semi-peripheries, dependencies, dominations, global divisions of labour, and other triumphant categories. The oft-noted (e.g. Dunn 1982; 1983; cf. Thompson 1978) habit of social theorists to get the relation between social theory and social research rather backward, so that the function of research is the aggrandisement of theory rather than the function of theory the enablement of research, is particularly marked here.

The main problematic (as its adherents would be likely to call it) animating this way of addressing the issues raised by the involution thesis, is this. Has or has not Indonesian history, and again especially Javanese history, consisted, from quite early on—say, 1511, or 1602, or 1755, or 1830 (all resonant dates in Indonesian history)—of a progressive, step by irresistible step, encroachment of the logic of capitalism upon that of indigenous society such that that society has been fairly thoroughly transformed into a commoditised, class-polarised, 'dependent' system, a peripheral outlier of a formerly colonial, now neo-colonial hierarchical world economy whose apex is, in Geoffrey Hainsworth's (1982: 9) mocking phrase, 'most likely located in the New York Board Room of the Chase Manhattan Bank'? Most (Knight 1982; Elson 1978*a*, 1978*b*; White 1983; Aass 1980; Alexander & Alexander 1978; van Niel 1983), though with differing degrees of assurance and for somewhat differing reasons, rather think that it has. Some, also with varying confidence and for varying reasons (Tichelman 1980; Mortimer 1973; Fasseur 1975; Onghokham 1975; Slamet 1982; Robison 1982; Kahn n.d.), rather think that it has not. The difference of opinion is not, of course, whether such an impact has occurred and been extremely significant; no one, from any perspective, has ever denied that. It is whether the force of that impact has been such as to overwhelm Javanese rural society and 'reconstitute' its peasantry in Capitalist, Man and Master terms, or whether it has been insufficiently massive or too specifically focused to overcome the 'Asiatic' constraints proper to that society, the immanent logic of the 'Tributary' or the 'Mercantile' or the 'Feudal' Mode of Production.

According to this way of thinking, the characteristic mark of capitalism is a fundamental opposition between the owners of the means of production and wage labourers, alienated from such ownership, while the characteristic mark of the Asiatic Mode of Production is one between patrimonial or feudal tribute-takers and the kin- and community-bound primary producers from whom the tribute is taken. Historical and sociological arguments therefore focus on the degree to which, at any point and generally, the first of these exploitative conditions displaces the second.

In particular, one scans the history of rural Java for signs of the implantation of



a monetised market economy conjoining privately managed property to formally free labour because, from the relative presence or absence of this everything else in some sense follows. If you know how production—the social deployment of labour 'to wrest energy from nature by means of tools, skills, organization, and knowledge' (Wolf 1982: 75)—is accomplished, you know how political order, social form, and ideological confabulation are, at least in general, going to fall out.<sup>8</sup> The vulgarities of material determinism may be softened, the distinction between technical processes and the institutional framework through which they are realised may, at last, be kept reasonably clear, and the sense of historical particularity may be less brutally suppressed. But the economism, the hegemony of 'larger forces', lingers on.

Those who believe that at least the nineteenth- and twentieth-century history of Java (and some, as I have noted [e.g. van Niel 1983], would trace the process a good deal further back than that) consists of the progressive class polarisation of the peasantry in rural capitalist/rural proletarian terms argue as follows. The incursion of Western forms of enterprise, especially plantation enterprise, and Western goods, especially consumption goods, individualised, or perhaps 'familised', the supposedly communal village economy to such an extent that those marginally better placed in that economy markedly increased their material position at the expense of those marginally less well placed, until a proper gulf appeared between them. A little more land, a little greater integration into regional trade networks, a little better placement in the village political hierarchy, and the passage to country-style *embourgeoisement* was launched, never after to be more than temporarily arrested. Or, to change the idiom, that necessary figure in the Marxist agrarian romance, The Kulak, was born.

Or invented. Some of the elements of this picture are reasonably easy to establish; but not, in my opinion and that of some others (Kahn n.d.; Mackie n.d.), the picture as a whole. As Elson's (1978b) and, to a lesser extent, the Alexanders' (1979) work on mid-nineteenth century sugar areas in East Java has shown, the injection of money into the peasant economy was quite significant. Elson indeed calls it a flood, more than doubling, in the Residency he studied (Pasuruan), in sixteen years.<sup>9</sup> The progressive displacement, after about 1825, of at least some rural handicraft industries, especially cotton textiles, by imported goods is also undeniable (Aass 1980), though this can easily be overemphasised, especially when one moves beyond textiles.<sup>10</sup> The uneven impact within the micro-differentiated village social structure of both the material rewards (plantation rents, plantation wages, and more than occasionally plantation bribes) and the material burdens (land appropriation, labour impressment, crop deliveries) of European-directed export cultivation (Knight 1982; Alexander & Alexander 1979; Elson 1978a; 1978b), as well as the regional variability in their impact overall (van Doorn 1980), is also clear—so clear that I don't think anyone has ever denied it.<sup>11</sup>

The question that arises for this view is, of course, where, if this process of kulakisation has been gathering force for a century or more, all the kulaks are. If the members of the Javanese rural elite have been so exquisitely capitalistic, why aren't they rich? As we shall see, there are those who argue that such primitive accumulators, ruthlessly rationalising production, commoditising labour, and



appropriating wealth, are at last, in the past decade or so, coming into being, providing, to quote Robison (1982, 57), 'a powerful landlord/kulak class which constitutes a significant strategic basis of political support for the [Suharto regime]'. But even if that is the case (and, as we shall see, it is possible to have reservations here also), it is extremely difficult to trace a continuous history of such a forming class over the colonial and early post-Independence periods.<sup>12</sup> Indeed, in so far as such a history can be traced at all, it seems quite discontinuous, a series of weak, incipient movements, local spasms soon swallowed up in the general immiseration, gradual, diffluent and unrelenting, of Javanese village society.

What evidence there is seems to indicate that the overall pattern of small, very gradually declining average farm size, with a comparatively narrow, markedly downwardly skewed distribution, maintained itself from at least the beginning of the last century to at least the middle of this. The Alexanders' (1982) summary of the situation, if not the interpretation ('structural realities' *v.* 'ideological dreams') they place upon it, seems to me as close to infeasible as one can get in the shadow-facts and floating-numbers world of Javanese rural history:

By 1903, less than 4 per cent of landholdings were above 2.8 hectares (Pelzer 1948: 166). In 1925 Scheltema (1931: 275) estimated that only two thousand Javanese outside the [thinly settled West Javanese] Preanger region owned more than eighteen hectares, and in 1961, 90 per cent of holdings were less than a hectare (Mears 1961: 31). On the basis of the 1973 agricultural census, Booth and Sundrum (1976: 95) calculated that the degree of inequality in landholding was lower than in any Asian society for which comparative data was available, except Taiwan and Japan.

Although the average farm size at the time of Independence was [thus] very small, it does not appear to represent a significant decline from some higher level. Raffles (1817) in 1815 and Boeke (1953) in 1925 both reported an average farm size of almost 2 hectares and the fragmentary evidence suggests the average size did not diminish greatly between 1830 and 1930. Pelzer (1948: 166) summarises late nineteenth-century surveys which indicate that more than 70 per cent of [wet rice farms] were already less than 0.7 hectare by 1900. Burger's (1929: 8) study of the village of Pekalongan reveals that the average proprietor had 0.7 hectares of [wet rice land] in 1868 and this had declined to 0.5 hectares in 1928. These figures can be compared with the 1973 agricultural census which placed the average farm size at 0.64 hectares, of which 0.42 hectares were [wet rice land], although very small holdings were excluded from the sample (Booth & Sundrum 1976) [603; footnotes omitted].

Against this general background—the gradual miniaturisation of a farming system lilliputian to start with—farmers of a dimension and disposition sufficient to qualify as proper kulaks, to the degree that they appear at all, seem but bubbles in the stream, local, fragile and evanescent, soon engulfed by the central current. If one looks hard enough, especially along hospitable coasts (Knight 1982), around enterprising sugar mills (Elson 1978*b*), in late developed interior regions (van Doorn & Hendrix 1983) or migrant settled frontier ones (Geertz 1965), and during particular times (export booms, crop revolutions, administrative florescences), one finds a few proprietary heads beginning to appear above the subsistence mass, but when one looks back again, after the boom has receded, the crop pattern restabilised, or the regime re-routinised, they are gone.<sup>13</sup> Poverty lasts, and indeed proliferates; landlords don't.

The reasons for this 'non-reproduction of a landlord class' (Alexander & Alexander 1982: 603)—to stay in the idiom—given by capitalist-transformation theorists, when they recognise the fact at all, are largely *ad hoc*, strained, and



thoroughly undeveloped, which is about the best one can do when cultural phenomena are neglected, or pushed off into a mystifying ideology in favour of economic analyses. The Alexanders (1982: 603-4) for example, invoke 'legal restraints' on the alienation of land, imperialist inhibition of a free market in rice and peasant produced commercial crops, bilateral inheritance, and 'a higher population growth rate among richer peasants which would have accelerated the dispersal of capital accumulated by this group'—matters which seem not to have prevented landlordism elsewhere.

The problem is again that the placing of cultural matters outside social process as but deceptive metaphors for changing economic relationships leaves one helpless to understand even those relationships, never mind the metaphors, to which no real attention is given anyway. The externalisation of Javanese (or Indonesian) moral, political, practical, religious and aesthetic ideas, the conceptual frame within which Javanese (or Indonesians) perceive what happens to them and respond to it, ends not with the discovery of the 'real', material determinants of change, nor with the restoration of the 'hegemony' of economics over society (Alexander & Alexander 1982: 615), but with a disjunction between them that neither the most desperate of speculations nor the most determined of dogmas can paper over. Whatever happened in pre-Independence Java—involution, class formation, or anything else—it did not consist in the progressive working out of 'the logic of capitalism', and it did not take place in a cultural vacuum.

## 4

This comes to a head and finds its practical point, of course, in assessments of the present situation. Whatever may or may not have happened around Pasuruan in the 1850's, Tulungagung in the 1920's, or Kediri in the 1950's, there has emerged a strong current of opinion that holds that something else is happening now—that the long awaited rural capitalist has, like some inverse Messiah, at last arrived, this time to stay, and involution, if it ever did exist, is over, as is perhaps the past in general. Here, it has been mostly agricultural economists (and their anthropological fellow travellers) with an essentially Neoclassical rather than a Marxist conception of how the rich get richer and the poor poorer who have been in the vanguard, though the contrast is far from absolute. (For some mixed cases, Marxist commitments and Neoclassical analyses, see Gerdin 1982; White 1976a; 1976b). This is particularly so since the rise of Suharto's 'New Order' has induced a pervasive sense of moral dissatisfaction, mounting at times to outrage, among the overwhelming majority (myself included) of independent observers of Indonesia, whatever their political persuasions (for a useful sampling, see Anderson & Kahin 1982). Present injustices, unlike past ones, tend to drive people who would otherwise not much agree with one another into each other's arms.

The difference in the general atmosphere within which students of Indonesia, foreign or domestic, now prosecute their studies and the one within which those of us who worked in the fifties prosecuted ours is so great as to be difficult to



overestimate. I do not say this to disable contemporary work with some sort of home-cooked *Ideologiekritik*, any more than I say it to disable my own by rendering it out of date, or to set up a 'circumstances-alter-cases' sort of evasion. I say it to draw attention again to the fact that the substance of, in this case, the involution debate—what is genuinely at issue after the appeals to methodological gods are stripped away—cannot be effectively grasped without some understanding of the contexts within which positions are formed, research conducted and polemics launched.

To write, even about rice growing, population pressure, or land tenure, just after a successful political revolution seems to have opened up a vast range of new possibilities is one thing; to write about them just after the ignominious collapse of a hyper-populist regime, a great popular massacre and the installation of an anti-populist Government seem to have closed them up again, is quite another. The question is whether the transformation in what I can again only call 'the general atmosphere' has led to a tendency to misinterpret what is now happening in rural Java: to see a continental shift where there is but a collection of marginal adjustments to a persisting, if accelerating, erosive process. The difference between my critics and myself (or at least *one* of the differences) is that I rather think that it has.

Those who see such a continental shift find its moving causes not in mode-of-production abstractions such as 'capitalism', but in particular technical innovations, and in novel employment practices directly induced by such technical innovations, which have, in good factors-of-production style, 'resulted in shifts in the relative "economic bargaining position" of landowners near-landless, and landless groups' in favour of landowners (Sinaga & Collier 1975: 21). Everything, from the introduction of small Japanese-made rice hullers, increasing substitution of the sickle for the famous 'finger-knife' in reaping, and the spread of lease-out commercial harvesting, to the fertilisers, insecticides, and 'miracle seeds' of the Green Revolution, is working to strengthen the strong and weaken the weak in the intensified price bargaining over the distribution of Java's (and Indonesia's) agricultural product. The cold winds of the free market in commoditised land, labour, and capital are now blowing through the land-short, labour-bloated, capital-thin village economy, little hindered by established practice or moral constraint, certainly not by fellow-feeling. Growth (about 4 per cent. a year since the mid-sixties [Booth & McCawley 1981; cf. Pauw 1983]) is being purchased at the expense of equity.<sup>14</sup>

The two most persistent themes in this sort of analysis are large scale labour displacements and the radical rationalisation (or, perhaps better, deculturalisation) of economic relationships. The introduction of labour saving innovations, even if limited, into a rural economy in which landlessness or near-landlessness runs on the average around twenty percent (Montgomery & Sugito 1980) and in the worst cases to 75 per cent. or more (Stoler 1977a; cf. White 1976b: 127; Penny & Singarimbun 1973), drastically reduces employment opportunities and enables those who do have workable farms, even if miniscule, to deal with agricultural workers in strenuously iron law terms.<sup>15</sup> The Ricardian paradise, swelling rents and subsistence wages, finds an Asian home.

The construction of this picture rests mainly on extensive, highly focused,



spot-survey type observations, almost all of them quantitative, plus a great deal of notional arithmetic, rather than on long-term, intensive and systematic, 'multiplex', community studies directed toward uncovering how village life is holistically put together. That is, it rests on what I have elsewhere called 'divergent' as opposed to 'convergent' data:

By convergent data I mean descriptions, measures, observations, what you will, which are at once diverse, even rather miscellaneous, both as to type and degree of precision and generality, unstandardized facts, opportunistically collected and variously portrayed, which yet turn out to shed light on one another for the simple reason that the individuals they are descriptions, measures, or observations of are directly involved in one another's lives; people, who in a marvellous phrase of Alfred Schütz's, 'grow old together'. As such they differ from the sort of [divergent] data one gets from polls, or surveys, or censuses, which yield facts about classes of individuals not otherwise related: all women who took degrees in economics in the 1960s; the number of papers published on Henry James by two-year periods since World War II. (Geertz 1983: 150).

There is, of course, no general argument favouring one of these sorts of data over the other. Both have their uses; for some purposes they complement one another, and it is possible to get things precisely or vaguely wrong, employing either of them. But the sharp turn towards the divergent data approach does raise serious questions about the adequacy of interpretations of the contemporary scene in rural Java which flow from such a 'what you count is what you get' sort of analysis. When you are dealing with, to quote myself again (1983: 157) 'communities of multiply connected individuals in which something you find out about A tells you something about B as well, because having known each other too long and too well, they are characters in one another's biographies', number crunching—tables, graphs, ICORs, and Gini Coefficients—may not be enough.

In any case, the estimating, categorising, counting, summing, 'percentifying', and row-and-column showing forth of things, the wild intensity of which cannot really be appreciated without looking at the studies themselves, has not resulted in much of a consensus about what is or isn't going on in rural Java so far as social change is concerned.<sup>17</sup>

Differences in estimates of the amount of labour displaced by mechanical hullers rise as high as an order of magnitude (Timmer 1973; Collier, Colter, *et al.* 1974; Timmer 1974), a small figure in astronomy, perhaps, but rather a large one in the social sciences. The percentage of the 'destitute' in rural Java (i.e. those consuming less than 180 kg of rice-equivalent a year) is claimed on the one hand to have markedly risen in recent years (Sajogyo; cited in Bose 1982) and on the other to have, about as markedly, fallen (Meesook; cited in Bose 1982). One calculator can argue that the technological innovations of the Green Revolution have radically 'widened the [income] gap between small peasants and . . . big farmers' (Hüsken 1982b: 8); a second that 'the majority of the Indonesian people have benefited, in terms of material living standards, from the economic growth of [recent] years, though no doubt in an unequal degree' (Arndt 1975: 83); a third that 'there is no persuasive evidence that Indonesia's relatively egalitarian income distribution has significantly changed since 1965' (Papanek 1980: 65); a fourth that, urban Java aside, between 1970 and 1976, 'a decline in absolute



poverty occurred' and 'the poor were able to increase their real expenditure more rapidly than the rich' (Pauuw 1983: 249). And William Collier, the presiding figure in this social arithmetic approach to things, can write (Collier, Soentoro, *et al.* 1974: 181-2) that the introduction of leased-out harvesting has brought about '[a] major change [in the labour] absorptive capacity of Javanese [wet rice farming]' such as 'not only to prevent further involution but to also reduce the already existing involuted nature' of such farming, at the same time that a Japanese and an Indonesian social surveyor, using similar methods (Hayami & Hafid; 1979; cf. Hayami & Kikuchi 1981: 155-69), are able to conclude that though there may possibly be some reduction, it is hardly major, and not even certainly real. The pulverisation of village social structure into ~~numbers and the setting aside of cultural factors altogether as substitutable for~~ ~~anthropology, mythography, and shadow-play ethnology to deal with~~ ~~to lead not to increased precision but to ascending indeterminacy.~~

## 5

Only the recontextualisation of Javanese and Indonesian economic processes within Javanese and Indonesian life as concretely enacted, the de-externalisation of culture, can reduce this indeterminacy, however slightly, and deliver answers we can have some faith in, however modest. It is not economic analysis itself that is the problem, any more than it is quantification. It is economism: the notion (to which, in fact, anthropologists, at least in Indonesia, seem rather more susceptible these days than do economists) that a determinate picture of social change can be obtained in the absence of an understanding of the passions and imaginings that provoke and inform it. Such understanding is inevitably limited. (Who knows what the Javanese are *really* like?) And the determinateness it brings is inevitably partial. (Who can assess what a permutational sense of time means for capital formation?) But without it there is nothing but polemic, schematicism and endless measurements of amorphous magnitudes: history without temper, sociology without tone.

If the debates that have arisen around 'the involution thesis' are ever to be properly adjudicated and, at least, some reasonable determination made as to whether the present crisis in the Indonesian rural economy is one of incremental immiseration (as the returns from agriculture are distributed ever more thinly across the swelling rural population) or whether it is one of a classic, have and have-not confrontation (monopolisation of the means of production, dispossession of the working class), we shall have to know a great deal more about the concrete particulars of social life than we are likely to get from global categories, divergent data and, if I may say so, the processed sentiments of evangelical social theories. Nor is it only the particulars of peasant life, in the narrow sense, that need to be uncovered, but those of commerce and artisanry, of state-society relationships, of religious differentiation and aesthetic transformation, and much else as well.

This is not a counsel of perfection. It is not necessary to know everything to know anything. Nor is it a counsel of despair. There are other forms of



dynamism than those Marxists and Liberals have already thought of, as well as other forms of disaster. It is merely a plea for us to begin again to look for answers to our questions where the answers might conceivably be. The shamelessly *ad hoc* grappling with the whole grand conglomeration of social practices, the willingness to take factual or analytical instruction from whatever direction it might come, and above all the determination to situate processes of change within local ways of going at life that marked the first phases of 'developmental theorizing' in Indonesia may have lacked a certain rigour and certainly lacked a sufficient precision. But, at least, they did not confine us to searching for lost coins only where the light was, and they did not imagine that it was advantage that made the world go round.

The case is particular, but the point is general. Whatever one may think of omega point models of social change, in which everyone ends up a class warrior or a utility maximiser (and I, obviously, think very little of them), there is no chance of analysing change effectively if one pushes aside as so much incidental music what it is that in fact is changing: the moral substance of a sort of existence. The Renaissance, the Reformation, the Enlightenment and the Romantic Reaction made the modern world as much as trade, science, bureaucracy and the Industrial Revolution; and, indeed, vast changes of social mind, they made it together. Whatever happens in Asia, Africa, and Latin America—Rough Beasts or New Forms of Architecture—it will, you can count on it, involve comparable passages, comparably vast.<sup>18</sup>

## NOTES

<sup>1</sup> It does, however, linger on here and there. For an example from economics, see Sievers (1974); for one from anthropology, see Mulder (1978). A particularly egregious popular expression of the view, by an Australian journalist unhindered by scholarly constraints, can be found in May (1978).

<sup>2</sup> The 1990's figures, which are estimates (the first post-war census was not taken until 1961), are from Widjojo (1970: 124); the 2001 estimates (which take account of Indonesia's family planning efforts) from Keyfitz (1973), who gives high and low limits as 100 and 120 million for Java, 200 and 240 million for Indonesia (cf. Chandrasekaran & Suharto 1978, who say that Indonesian population may come in a bit under the 300 million mark in the year 2000 if family planning programmes work well, but even then it is doubtful that the population will stabilise before the middle of the next century at about 330 million). Indonesia is, of course, the fifth most populous nation on earth, after China, India, the Soviet Union, and the United States, and is moving on toward being the fourth. Density figures are perhaps even more striking, pointing up the regional imbalances: 1961, Java 1,234 per sq. mile, all-Indonesia 132; 1971, Java, 1,234 per sq. mile, all-Indonesia 163—and these are absolute not nutritional densities (Sievers 1974: 332). Population is unevenly distributed within Java as well, the West, East and Central regional densities standing (1961) in about a 1:1.2:1.4 (Jogjakarta, 1.6) ratio. The Indonesian growth rate is somewhere around 2.3 per cent. per year (Java, 2.0) (Keyfitz 1973; Chandrasekaran & Suharto 1978; Hull 1981). Java has, of course, had a long history of a heavy and steadily growing population, but early figures are highly uncertain: for reviews, Widjojo (1970): 1-47; White (1976b).

<sup>3</sup> Geertz (1963).

<sup>4</sup> Among the discussions (book reviews aside), pro, con, or uncertain, of the involution thesis, see: Wertheim (1964); Penny (1966); Yengoyan (1966); Lyon (1970); Larkin (1971); Penny & Singarimbun (1972); Sajogyo (1972-73); Utrecht (1973); White (1973); Sievers (1974); Hinkson (1975); van den Muijzenberg (1975); Polak (1976); Sajogyo (1976); Temple (1976); White (1976a, 1976b); Collier *et al.* (1977); Stoler (1977 *a*, 1977b); Alexander & Alexander (1978); Elson (1978a, 1978b); May (1978); Mulyarto (1978); Stoler (1978); Alexander & Alexander (1979); Hüsken (1979); Miles (1979); van Doorn (1980); Hüsken & van Schaik (1980); Kano (1980); Sherman (1980);



Tichelman (1980); Zimmerman (1980); Collier (1981); Alexander & Alexander (1982); Gerdin (1982); Hüsken (1982a); Knight (1982); Mubyarto (1982); Alexander (1983); White (1982); van Niel (1983); Kahn (n.d.); Mackie (n.d.); Strout (n.d.) These references include only those I have encountered which discuss the involution thesis as such. A very much larger number of books and articles, some of which will be cited below, have considered one or another issue that arises from it or have framed their arguments in terms that silently reflect it. The debate has also spilled beyond the border of Indonesia to southeast Asia more generally: see Scott (1976); Popkin (1979); cf. Brow (1976). Geertz 1956a, 1956b, and 1956c are early efforts of my own to formulate the argument. Ellen (1982) places my work within the general context of ecological analysis in anthropology. And, although my own views differ radically in certain ways from his, it is necessary to mention J. H. Boeke's colonial period work (see for example, Boeke 1953) as a critical predecessor to it.

<sup>5</sup> In order to avoid the charge of evasion concerning these questions, and because White (1983), has seen fit to assemble polemicised versions of them in order to dismiss me as (exchangeable terms for him, apparently) a 'Parsonian', an 'infuriating' *littérateur*, and a peddler of 'imperialist software' — 'Geertz-bashing' as he winningly calls it — let me merely indicate, without argument, my present views on them. (And so as not to be misunderstood, I should remark that White's intellectual vulgarity is not generally characteristic of the involution debate, which has for the most part been conducted, from infra-red to ultra-violet, on a high and serious level; some of my most persistent critics (the Alexanders 1978, 1979, 1982, for example) have been consistently fair, temperate and scholarly.)

1) As to whether the involution process got firmly under way during the pre-colonial period (Mubyarto 1982; May 1978), the *cultuurstelsel* ('Culture' or 'Cultivation System') period (Geertz 1963) or the 'Corporate Plantation/Ethical System' period (Tichelman 1980) I confess myself still partial to my original position. The pre-colonial, 'fellahin of a thousand years' view could be true, but so little of circumstantial detail concerning population, rice intensification, work organisation or production methods is available from that period (for what is, see van Setten van der Meer 1979; van Naerssen & de Jongh 1977), that I don't see how the case can be made, save rhetorically, and in some hands (May 1978; Boeke 1948) it tends to make the supposed Javanese 'lack of dynamism' somehow ingredient in their very being. The 'ethical period' argument, on the other hand, seems to derive from a wildly over-schematised 'Capitalist Mode of Production' / 'Asiatic Mode of Production' opposition (of which more below) that leaves the nineteenth century a mere *entre-acte* between the dominance of the first and that of the second. Arguments against the mid-nineteenth century crystallisation view which invoke the restricted extent of the *cultuurstelsel* as such (van der Kroef 1963), seem to me rather literal minded, though doubtless more attention should be given to the regionally uneven impact of it (Hüsken & van Schaik 1980; van Doorn 1980; Fasseur 1975) than I was able to give in my synoptic characterisation.

2) As for the causes of the population 'explosion', I find the arguments of White (1973) and Alexander (1983) for a 'labour demand theory of population', which sees the 'explosion' to be a result of Dutch pressures on the peasant labour force, in turn causal of altered reproductive practices, intriguing, speculative and unconvincing (cf. Geertz 1973). On the other hand, I would now be more inclined to doubt (with Widjojo 1970 and van der Walle 1973; cf. White 1976b: 60-1) a proper 'explosion' at all in contrast to a general, more or less steady rise, than I was in 1963. The history of Indonesian population dynamics, and most especially of their micro-dynamics, before 1930 remain obscure and will probably stay that way no matter how many just-so stories about lactation and post-partum sex taboos the 'labour demand' theorists can contrive to tell.

3) On the interaction of Dutch and Javanese production modes, especially in sugar, I find a number of the points made by recent historical research (Elson 1978b; Alexander & Alexander 1978; van Niel 1983) enlightening and usefully corrective; others (particularly ones which attribute to me positions I never held, such as that 'the ecological requirements of sugar cane are identical to those of wet rice' or that 'sugar cane technology was deliberately developed . . . by the capitalists to conform to the ecological requirements of irrigated paddy' (Sajogyo 1976)) much less so. The general 'adverse symbiotic' characterisation seems, in any case, to stand largely undamaged. Indeed, in some ways it seems to have been strengthened by exacter specification than I was able to give it.

Finally, 4) one other supposed correction to the involution thesis — the importance of house-gardening in local agricultural production (Stoler 1978), was in fact mentioned in the original formulation (Geertz 1963: 96, n. 41), and indeed, as pointed out there, had been stressed and quite



thoroughly investigated by the Dutch agricultural economists, well before the second world war (for a summary, see Terra 1946). Similar remarks can be made concerning my supposed neglect of dry field cultivation (Stoler 1973; cf. Geertz 1963: 91-4, 101, 106, 143).

<sup>6</sup> For a discussion of the concept of 'economism'—the notion that 'the economy' considered as a universal order of society, determines 'in the last instance' the relationships between the various 'structures' of social life—as it has functioned in the polemics of Marxist anthropology in France, see Kohn and Lubeck (1981). For a critique, by an economist, of the Neoclassical version of economism, where it is economic motivations (*wants, needs, desires, etc.*) rather than 'structures' that are in the foreground, see McFritson, M. (1983). For the arguments that the two perspectives, though superficially opposed 'have something massively in common', namely, 'seeing a constitutive aspect of human existence resolutely from outside and implicitly dehumanizing it by doing so', see Duman (1973) quotations at p. 118.

<sup>7</sup> For a critical discussion and an historically global application of 'mode of production' theory, see Wolf (1982), esp. pp. 73-100, 400-4.

<sup>8</sup> As Wolf's recent reassessment of this general point of view is, to my mind, by far the most scholarly, sociologically sophisticated, and ideologically unambiguous formulation of it, it is worth noting how strong material determinism, and how externalized 'cultural', (and how mis-caller the theoretic) remains, whatever the conclusions to the 'efficacy of superstructure':

I have placed special analytic weight on a concept intended to reveal the key relationship through which social labor is brought to bear upon nature—the mode of production. In this usage 'production' is not synonymous with work; a mode of production is not the same thing as a system of technology. Nor is a mode of production identical with 'society'. The idea of society centers upon the social alignment of groups; the idea of mode of production aims at identifying the forces that guide those alignments. To speak of a mode of production, therefore, draws attention to the ways in which human beings confront their world in order to modify it in their favor, and focuses on the dynamic consequences of that confrontation. I do not use the term *relationship* to indicate co-occurrence or co-variation of perceived characteristics of phenomena, an occurrence itself empty of consequences. *I think of relationships as perceiving, felt, relationships subject human populations to their imperatives, giving people help and hindrance, and imparting a directionality to the alignments produced.* [Italics mine.] The key relationships of a mode of production empower human action, inform it, and are carried forward by it. As Marx said, man makes their own history but not under conditions of their own choosing. They do so under the constraint of relationships and forces that shape their will and their desires. . . . [H] we think of [social] interaction not as expansion in its own terms but as responsive to larger economic and political forces, the expansion of cultural forms must take account of that larger context, that wider field of force. 'A culture' is thus better seen as a series of processes that construct, reconstruct, and dynamically cultural material, in response to identifiable determinants [italics mine]. (Wolf 1982: 386-7.)

<sup>9</sup> These estimates, made by Dutch apologetics for the forced cultivation of sugar under the famous (or infamous) *cultuurstelsel*, are much reduced, as Elison indeed notes, and perhaps as much as four-fifths of such income was returned to the Netherlands East Indies Government in the form of taxes. Knapik (1982), the most headlong of the *Kapitalismus* theorists, found a similar pattern, equally difficult to estimate with any precision, along Java's north coast in this period; and Passar (1975), a good deal more cautious, traces the development for the *cultuurstelsel* period generally. Van Nind (1983) gives perhaps the most balanced picture. All these studies assume, separately from first principles, the socially transformative effect of the increase of money supply in Javanese villages, so that to establish the fact is to establish the interpretation. None much reflects on what 'monetization' looks like from the Javanese side of the fence, leaving them rather open, in my opinion to Postan's critique (1973: 28; cited—but deflected—in Asis 1980), that 'the rise of "money economy" is one of the residuary hypotheses of economic history: a *deus ex machina*, to be called upon when no other explanation is available.'

<sup>10</sup> For (Sussartan and Malayani) evidence that the handicraft industry has not been in simple retreat since European incursions, see Kohn (1980, 1983); cf., for contemporary Java and Bali, Geertz (1963a). In part, the illusion of a radical de-industrialization of rural Java is the result of inadequate attention to female employment among the peasantry and a neglect of the craft-manufacturing dimensions of the traditional bazaar network, as well perhaps as an over estimation of the 'natural'



autochthony of the traditional rural economy, which had in fact been 'generated' by international trade for a very long time.

<sup>11</sup> Certainly not me, though I have been repeatedly accused of having a view of the Javanese peasantry as an undifferentiated lump (see, *inter alia*, Elson 1974a; Soekir 1977a; Geertz 1983; Hiteken 1982a; White 1983; van Doorn 1980, Alexander & Alexander 1983), see Geertz 1965: 102 for ranking; 42 sq. for regionalisation; (Geertz 1965: 1936a: *passim*). The reasons for this vast misrepresentation of my views—in which a literalist, and often enough tendentious, interpretation of what is meant by 'shared poverty' (the Churchillian provenance of this phrase, which I thought too obvious to point out, has never been noticed) has played an important theoretical role—seem to be mainly a notion that there is only one sort of stratification, 'class formation', worthy of the name and that 'revolution' was proposed as some sort of general, sovereign force, like 'class formation', rather than as a sensitizing, heuristic concept designed to elucidate situations to which it could be applied to the degree that it could and, contrarily, those to which it could not, to the degree that it could not. For a study (of contemporary Java) which grasps this latter point, see STONE (n.d.); for one which grasps the former, Jay (1969). Deep differences in methodology between 'positivist' and 'interpretive' (see, as Kahn (n.d.), would have it, 'historical') approaches in the social sciences are involved in these confusions, but the matter cannot be pursued here. See Geertz (1973: 1983). For a frankly 'rigid and uncompromising' statement of the 'positivist' view, see White (1966b: 94–107), and for an excellent overall discussion, Bernstein 1983.

<sup>12</sup> Quantitative arguments here are extremely tricky to make—trickier than most of the class-polarisation theorists, who rely very heavily upon them, often seem to realize, though the usual caveats are entered and ignored. Not only are the numbers unreliable as such, many of them having been made up in some administrative office or other for purposes more rhetorical than analytic, but the great complexity of proprietary institutions within the historic Javanece (or Balinese, Bugis, Batak or Minangkabau) local community (for an overall summary, see van Vollenhoven 1925) makes the application of familiar measures of rural inequality based on a fee-simple view of ownership often quite misleading. The tendency to rely on numerical measures, however uncertain, rather than institutional descriptions, is again part of the general turn to an economic approach to the analysis of rural society and the externalisation of culture that strands it, a point I will also return to below.

<sup>13</sup> As a number of people have pointed out in self-induced punishment (Alexander & Alexander 1984; MacLé n.d.; van Niel 1983; White 1983), I myself (Geertz 1965: 49–51, 49–51) discussed the appearance of a nascent, though soon undetermined 'rural middle class of slightly larger landholders' (p. 42) during the sugar boom of the 1920s in the eastern Central Javanece Subdistrict (Pare) where I did most of the field research that gave rise to the 'revolution' idea. As in this case, it was the collapse of the sugar boom in the thirties depression that most instantly undercut this 'capitalist' development in village society, the tendency has been to regard its reification as an ungeneralisable historical accident. But the point is (and the ungrasped point of my discussion was) that it is an ungeneralisable historical accident that keeps happening over and over again in diverse places: in a remote, plantation-free area of south central Java in 1921–2 (van der Kolff 1956); in an immensely expansive sugar area in (them) relatively thinly populated 'East Hood' in the 1860's and '90's (Elson 1978a, 1978b; van Niel 1972); in a (them) heavily commercialised 'justit' (coastal) area (Pekalongan) in the 1860's and 70's (Knight 1982); in a late-settled region of north Java (Pati) around the turn of the last century (Hiteken 1983), and doubtless in many other localities, at many other points in time, which will be discovered as the determined search for the emergence of 'two opposing classes' ['*bulak*' and 'proletarian' ] amid 'a large mass of small or marginal peasants' (White 1983: 22) during the colonial period proceeds. A series of scattered sociological hiccups—small notes, soon dispersed—do not, however, an 'agrarian transition' (*ibid.*) make, much less, 'a pervasive growth of capitalist relations and purposes' (Knight 1983: 147). What they make, given a Java in the 1970's in which probably less than one per cent of the landholdings are more than five hectares (Booth & Sanarum 1981: 84), and virtually none are more than nine (Kahn, n.d.: 25), is a howling counterfactual question.

<sup>14</sup> For other expressions of this view, which as Hayami and Hird (1979) ('who are sceptical of it) remark, 'has virtually come to be accepted as an established paradigm', see Collier (1981), Collier, Colfer *et al.* (1974); Collier, Hardikoesworo *et al.* (1977); Collier, Wiradi *et al.* (1973); Collier, Scentoro *et al.* (1974); Sylogyo and Collier (1973); Birrowo, Collier *et al.* (1974); White (1976a, 1976b,



1983); Saiogyo (1972-73; 1976); Hlaken (1979; 1982b); Uami & Ihaluw (1973); Gerdin 1983); Palmer (1976); Stoler (1977a).

<sup>15</sup> The estimates of landlessness or near-landlessness (which are inevitably given in 'households', a complication in itself) in Indonesia are shaky at best, especially aggregate ones. For some general discussions of what can and can't be said, see Arndt (1975); Booth & Sundrum (1981); Montgomery & Sugio (1980). Aggregate estimates for Javanese landlessness and near-landlessness range from 16 per cent. (Montgomery & Sugio 1980) to more than 60 per cent. (Lyon 1970, citing a 1960 ministry report, p. 24, and various studies undertaken by the Indonesian Communist Party during their land-reform drive of the early sixties, pp. 23-5). The 1971 Agro-Economic Survey of Java (cited, Strout, n.d.) gives particular village figures (N=20) ranging from 99 per cent., Penalang, Central Java) to 2 per cent. (Kendal, Central Java), with about a 40 per cent. overall average. Much clearly depends on definitions. Had Stoler (1977a) used a half-hectare of swath as her cutoff point rather than the 0.2 ha. she did use, her landless or near-landless figure would have been about 90 per cent.; had she used 0.1 ha. it would have been about 90 per cent. Discussions of the effect of (and rationales for) alternative cut-off points—and indeed of the robustness of measures in general—are largely absent from this literature (for a partial exception, see Montgomery & Sugio 1980). For some other local estimates, see Booth (1974) (South Central Java); Hlaken (1983) (North central Java); Gerdin (1983) (Lombok: extra-Java estimates are very difficult to find).

<sup>16</sup> Even in those few cases in which polarisation arguments are based on extended-residence village studies (White 1966c; Gerdin 1983), the studies involved consist less in an attempt to determine the overall order of social relationships and the cultural forms that sustain it, than the mobilisation of quantifiable fact into objectified categories—wealth, income, employment, work hours, labour efficiency, household expenditures, caloric consumption. They are rather more in the nature of mini-surveys than they are community ethnographies: it is magnitudes that are wanted, not pictures; findings not portrayals. For an exception, yet somewhat in tension with my own views, see Hefner (1983).

<sup>17</sup> For examples of runa waya quasophrenia, calculating everything from 'fodder eaten per household' in six southern hamlets to 'net mending costs per year' for small *v.* medium sized perahu operators in a north coast fishing village, see White (1976b); (Bikrowo, Collier et al. 1974). Aside from doubts as to the possibility of obtaining reliable estimates of matters such as these by means of point-blank questions to pencil-sampled peasants by intrusive investigators, my objection to much—not all—of this sort of work is the seeming lack of recognition of the fact that, as probabilities do not add but multiply, the chance that an extended string of calculations connected together by estimated conversion ratios, *certis paribus* assumptions, and various other postulated magnitudes will culminate in an accurate conclusion is vanishingly small. It is not quantification that is the problem (for some careful, less thesis-driven, and technically more sophisticated studies that have at least heard of instrument effects and error estimates, see Montgomery & Sugio 1980; Strout n.d.), but the making of very soft data look very hard by casting it into numerical rhetoric.

<sup>18</sup> Two stimulating articles, one (Gray 1983) a general survey of 'historical change' in rice-growing societies by a Sinologist supporting the 'general immiseration' rather than the 'class polarisation' conception of the 'crisis' characteristic of such societies, the other (Malyart et al. 1983) by three Indonesianists arguing for a more qualitative, that is cultural, approach to the analysis of development there than the highly quantitative approach now in vogue, only appeared as this article was completed. Though none of these authors would necessarily support my views in detail, they do indicate that contrary to some accounts (White 1983), the 'revolution debate' is not exactly over.

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1818 H St NW  
Washington, DC 20433

Dear Gloria:

Here is a rough calculation of the economic returns to a land registration program for spontaneous migrants, using the same methodology developed in the Transmigration Sector Review, in particular regarding agriculture benefits, off farm income, and the opportunity cost of labor, but with modifications to the development costs.

Development Costs. Table 3.1 in the Transmigration Sector Review shows MOT development costs for food models. Following our discussion, we assume that the development costs for a spontaneous transmigrant household under a land registration and transfer program would include only land registration and land cost (US \$95/ha), site preparation (the migrant's labor for land clearing, 70 mandays/ha), relocation (US \$300/household), and the agricultural development package (Rp 306,000 as in Table 3.1). Under this modified analysis, the food crop models assume 2 ha are transferred, the PMU models assume 3 ha are transferred. Of the above costs, the transmigrant would bear the site preparation, relocation and agricultural development package.

Economic Costs. To include these development costs as economic costs, all of the above costs except labor are shadow priced at .8 of the financial costs. The additional labor for clearing 1 ha is included in the the labor allocation section of the economic models. The opportunity cost of family labor is the subsistence income in Java. The additional labor for land clearing only becomes an incremental economic cost if it exceeds the family labor available for agriculture and the hypothesized fixed amount of off farm work available.

The Results. I reran the models that used the August 86 commodity prices. Column A refers to the farm models using the development costs from the Transmigration Sector Review. Column B refers to the farm models under the land registration and land transfer program.



	TRANS SECTOR REPORT		LAND REGISTRATION/ TRANSFER ANALYSIS	
	Agric. (a)	Agric. and Off Farm work (a)	Agric. (b)	Agric. and Off Farm work (b)
<u>Upland</u>				
<u>Food Crop Models</u>				
Low Input	neg.	1%	neg.	15%
Low Input w/ Cow	neg.	4%	4%	16%
Diversified	2%	4%	14%	17%
Sustained Input	2%	7%	16%	27%
<u>PMU Planted Rubber</u>	8%	9%	13%	15%

What I told you on the phone for PMU, full development was mixed up and what is in the above chart is correct.

As I mentioned on the phone, I expect that this quick and dirty land registration/transfer analysis overstates the benefits, because by reducing MOT investments such as road construction, long run benefits that stem from improved transport must be reduced.

See you in December!

*Helen*



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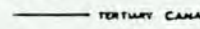

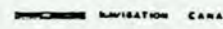
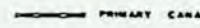
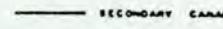



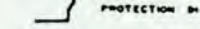
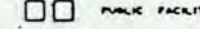
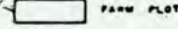
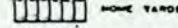
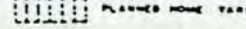
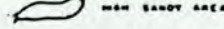
Monitoring and Evaluation Karang Agung - 9,000 Ha

1. Support of construction
  - map out of unsuitable areas
  - study of general construction failures as slides, siltation and spoil area cutter dredger.
2. Soil and hydrology
  - monitoring of soil and hydrological changes
  - monitoring of drainage system
  - field trials on soil and water management
  - water quality for domestic use
3. Agricultural performance
4. Preparation of future M&E program and data collection system.
5. Supporting activities.





LEGEND

-  TERTIARY CANAL
-  PLANNED TERTIARY CANAL
-  NAVIGATION CANAL
-  PRIMARY CANAL
-  SECONDARY CANAL
-  JETTY
-  CREEK
-  DIIKE
-  PROTECTION DIIKE
-  PUBLIC FACILITIES
-  FARM PLOT
-  HOME YARDS
-  PLANNED HOME YARDS
-  HIGH SANDY AREA

GOVERNMENT OF THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS U.S. WATER RESOURCES DEVELOPMENT PROJECT TIGAL PUMP RECLAMATION PROJECT	
Monitoring and Evaluation Project For Working Agency I (1969-1971)	
<b>LAYOUT PROJECT AREA</b>	
SURVEILLANT: [ ] CONSULTANTS: [ ]	
DRAWN: [ ]	DATE: OCTOBER 1969
SCALE: 1:20,000	CODE:

SCALE 1:20,000

0 500 1000 1500 2000 2500 3000 M



## Problem soils

1. Soils with potential acid sulphate clay at shallow depth may hamper crop growth. Due to the shallowness acidity and high concentrations of noxious elements may develop following drainage of the soils. Generally a depth of 50 cm or less is considered as a soil constraint. However the actual development of a soil constraint is also determined by other conditions as hydrology, soil fertility and management of the soils.

The soil conditions in the homeyards of the not yet settled areas were investigated. These investigation showed shallow potential acid sulphate soils on the following locations :

- primary unit IV between secondary canals 4 and 8, average depth 42 cm
- primary unit V between secondary canals 6 and 10 right and secondary canals 6 and 9 left, average depth 50 cm.
- the remainder of primary unit V has an average depth of the potential acid sulphate clay of 76 cm. But the top soil is peat with an average peat depth of 40 cm. When cultivation starts the peat will decompose very fast. For the future it may be expected that also the remainder of the homeyards in primary unit V will have a shallow potential acid sulphate soil.

To prevent crop failure these soils require an adapted management. Excavation of soil for construction of a sorjan system is not recommended. Common practice in Karang Agung 9,000 ha is the excavation of 20 cm or more. However this would bring the potential acid sulphate clay more near to the surface. Not implementing a sorjan system means a decrease of the water retention. To improve the water retention it is recommended to construct stoplog structures in the secondary canals. Moreover stoplog structures will prevent a dramatic fall of the groundwater table which might cause severe acidity. A fall of the water table below 50 cm depth may especially be expected when the tertiary canals are constructed. Stoplogs should be constructed before the tertiary canal excavation or tertiary canals should be dammed when stoplogs are not provided yet.

It is also recommended to test a leaching system in the area with shallow potential acid sulphate clay. Presently such a leaching system is tested in primary unit I. The results are satisfactory, the leaching system quickly decreases high soluble iron contents. In case of potential acid clays occasionally high concentration of soluble iron and other noxious elements may be expected.

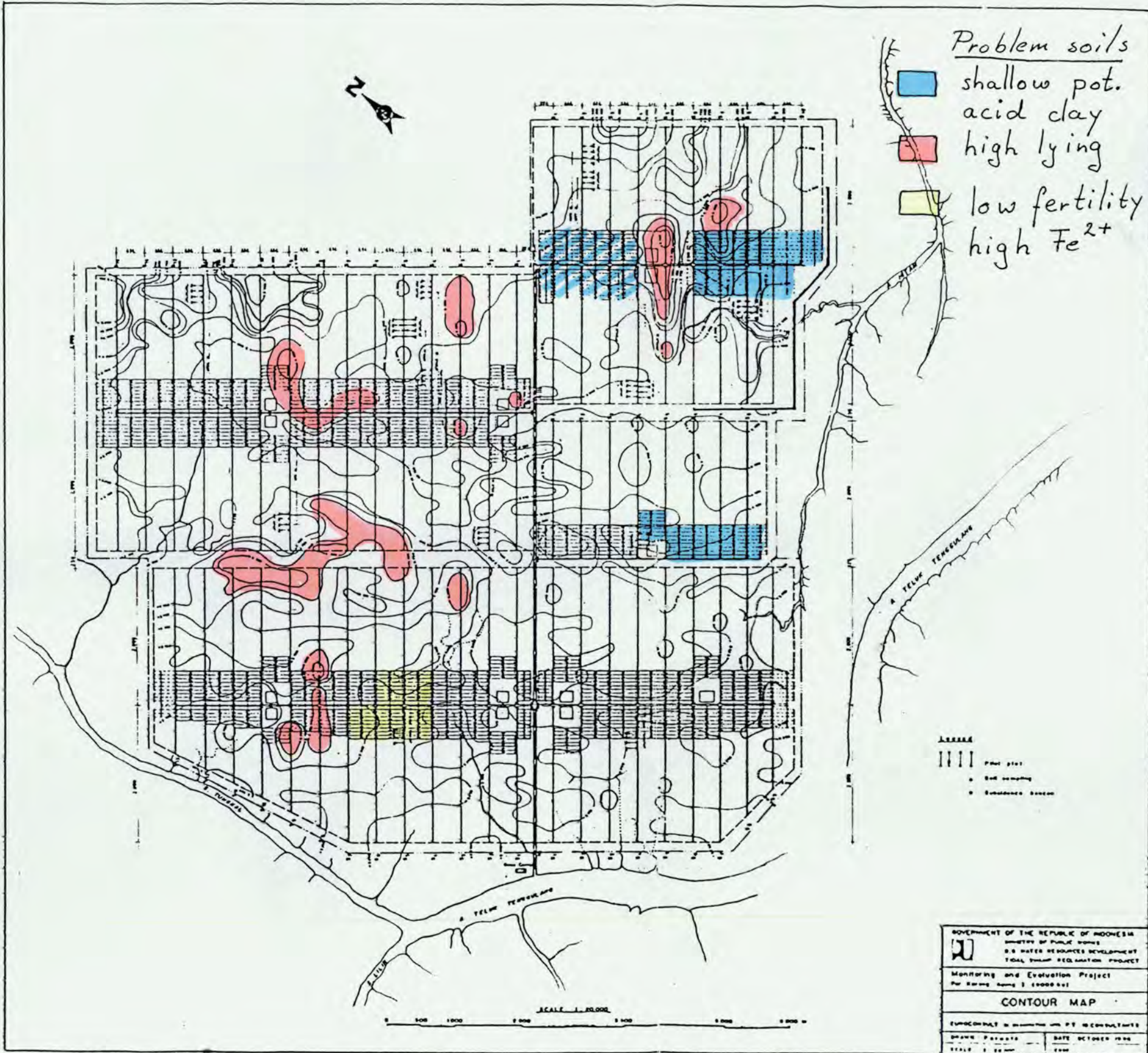


2. Primary unit I has soils with a low productivity. Observation showed locally high soluble iron contents. Soil analyse showed an extreme low fertility. The combination of low fertility with high concentrations of noxious elements is believed to be the cause for crop failure in this area. The recently installed one-way-flow leaching system reduces the iron content of the soils quickly. Presently a crop production trial should start to asses till what extent the reduction of the iron content increases the yields. It is likely that also the low fertility has to be compensated. So the trial should include various fertilizer applications. AARD has the expertise and facilities for these kind of trials so it seems recommendable to have AARD conduct these trials.
  
3. The Karang Agung project has some high lying area, generally with an elevation over + 4.0 m. These areas have a sandy to loamy texture, deeper they have a clay texture. Soils have a typical light grey colour. Fertility of these soils is low, the water retention is poor and due to the elevation tidal irrigation is impossible. Prospects for the crops commonly grown in Karang Agung are poor. However the Agiculture Inventory indicates that growth of vegetables is more promising. It is recommended that supporting services guide growth of vegetable more intensively.



Problem soils

- shallow pot.  
acid clay
- high lying
- low fertility  
high  $Fe^{2+}$



- ▬▬▬▬ Photo plot
- Soil sampling
- Evidence boxes

GOVERNMENT OF THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS SO WATER RESOURCES DEVELOPMENT TIGAL DAM REGULATION PROJECT	
Monitoring and Evaluation Project For Rawa Rawa I (10000 ha)	
<b>CONTOUR MAP</b>	
ENGINEERED BY <i>[Signature]</i> AND P.T. CONSULTANTS	
DRAWN BY <i>[Signature]</i>	DATE OCTOBER 1966
SCALE 1:5000	SHEET



## Siltation

Siltation in the Karang Agung 9,000 ha project is high. Siltation was measured in the navigation canal and the primary canals I and IV.

### Siltation navigation canal measured September - October 1986

Location	Siltation		Bottom rise
	: m <sup>3</sup> /m	: m <sup>3</sup> /m/year	: m/year
NI - PI/PII	: 3.9	: 2.1	: 0.1
PI/PII - PIV	: 10.3	: 5.6	: 0.4
PIV - PIII	: 14.3	: 11.1	: 0.7
PIII - PV	: 23.5	: 24.6	: 1.5

### Siltation in primary canal I (compared to as-built) and primary canal IV (compared to design) measured November 1978

Location	m <sup>3</sup> /m	m <sup>3</sup> /m/year
primary canal I	9.8	5.9
primary canal IV	12.0	0.2

Assuming the siltation rate of primary canal I for the other primary canals yields a total siltation rate for the whole canal system of 230,000 m<sup>3</sup> per year.

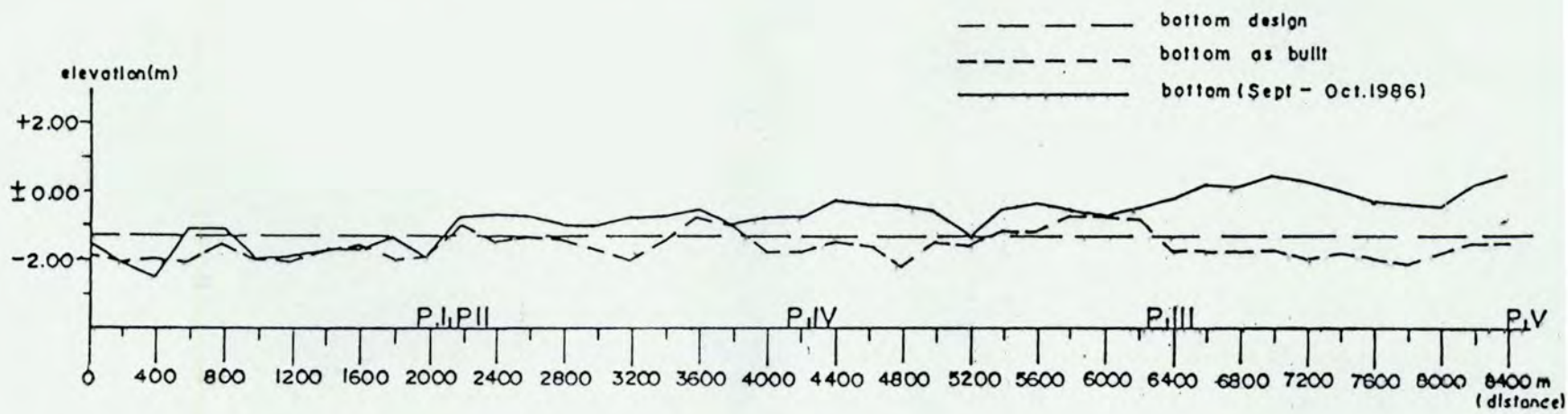
High siltation in primary canal IV shows that the construction method where the canal is dammed during excavation may have disadvantages. Presently this method is also applied in Karang Agung 30,000 ha. Measurements should be made in due course in this project to investigate the siltation and consequently if the method is still recommendable.

It can be questioned if the design of the canal system is a main cause for the high siltation. Karang Agung 9,000 has a canal system that is only connected at one side to a river. Measurements showed that due to dampening of the tide the flow



velocities decrease towards the end of the canal system. Other projects have canals that connect two rivers, dampening of the tide may be less. It is proposed to investigate this in Karang Agung 30,000 ha that has both types of canals.

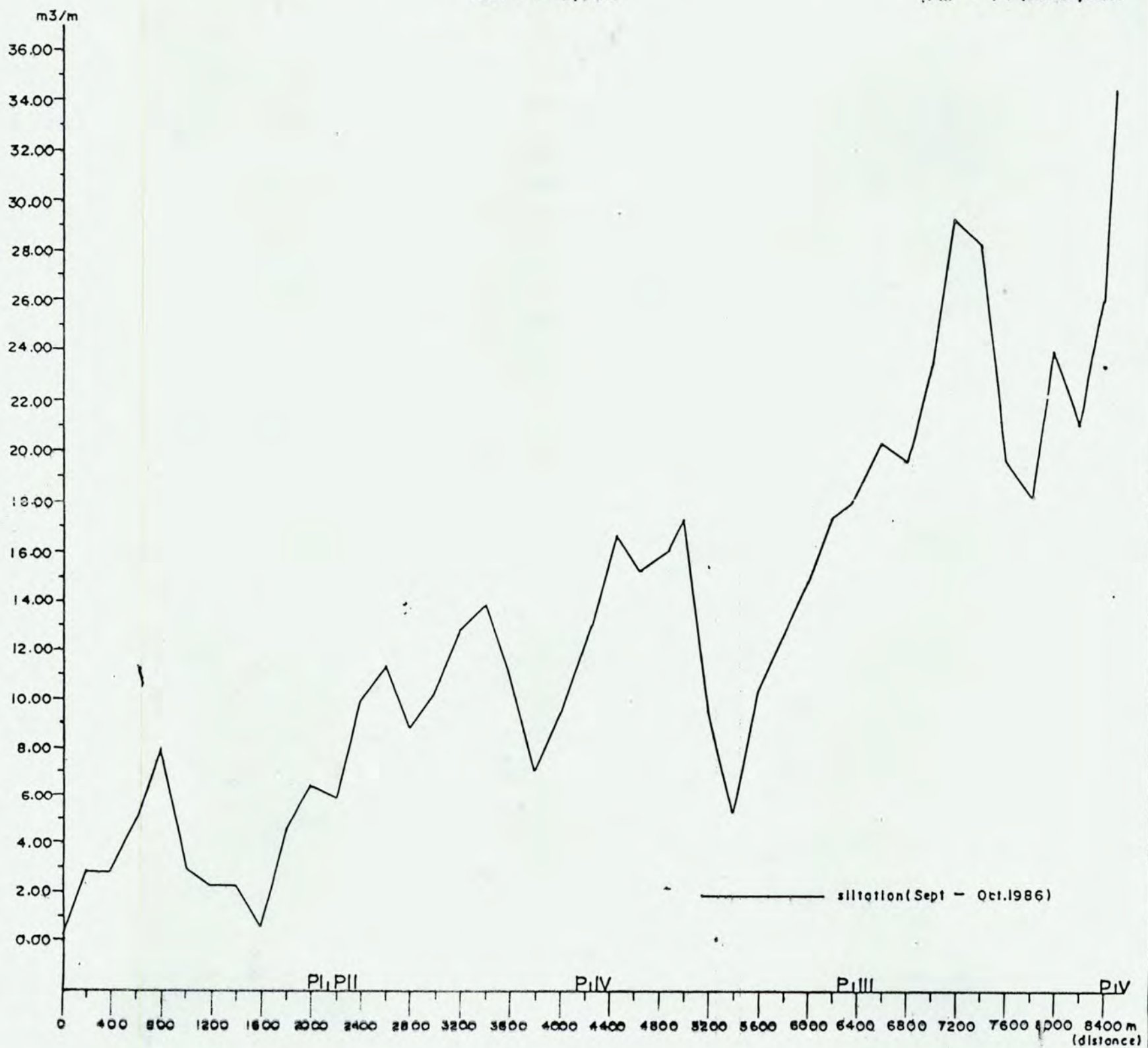




bottom elevation Navigation Canal  
 scale: ver. 1 : 200  
 hor. 1 : 40,000

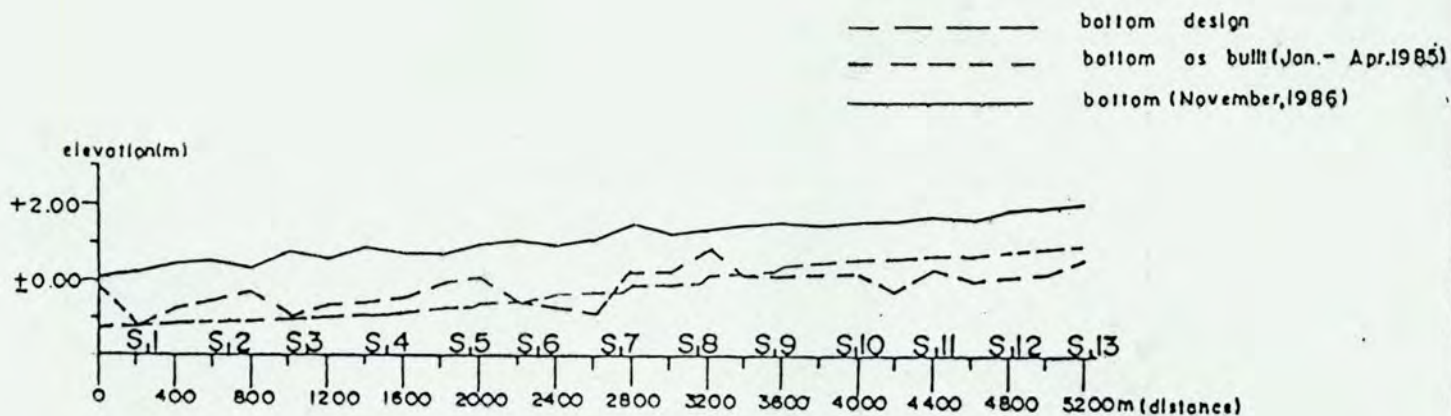
Remarks:

- bottom as built NI - P<sub>I</sub>/P<sub>II</sub> (Dec'84 - Jan'85)
- P<sub>I</sub>/P<sub>II</sub> - P<sub>V</sub> (Jan - Apr'85)
- P<sub>IV</sub> - P<sub>III</sub> (Apr - Oct'85)
- P<sub>III</sub> - P<sub>V</sub> (October, 1985)



Siltation Navigation Canal (compared to as-built)

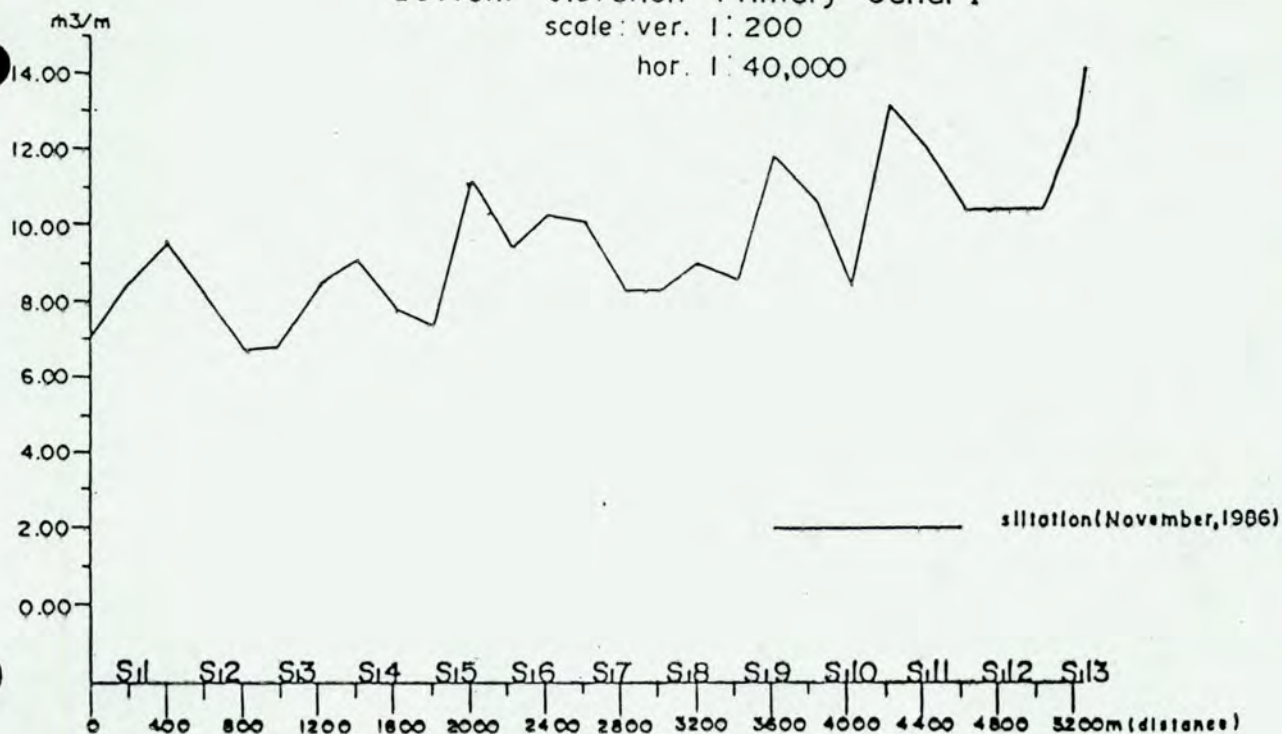




bottom elevation Primary Canal I

scale: ver. 1: 200

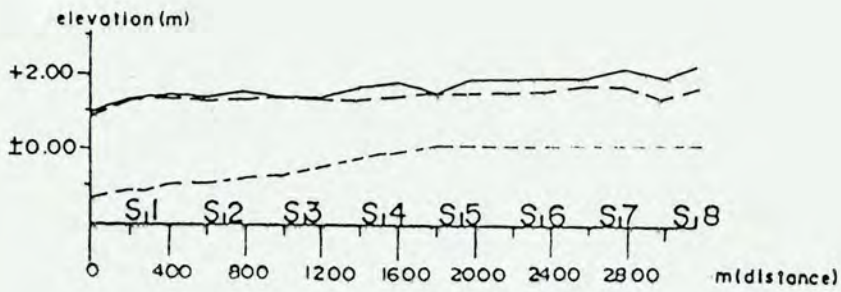
hor. 1: 40,000



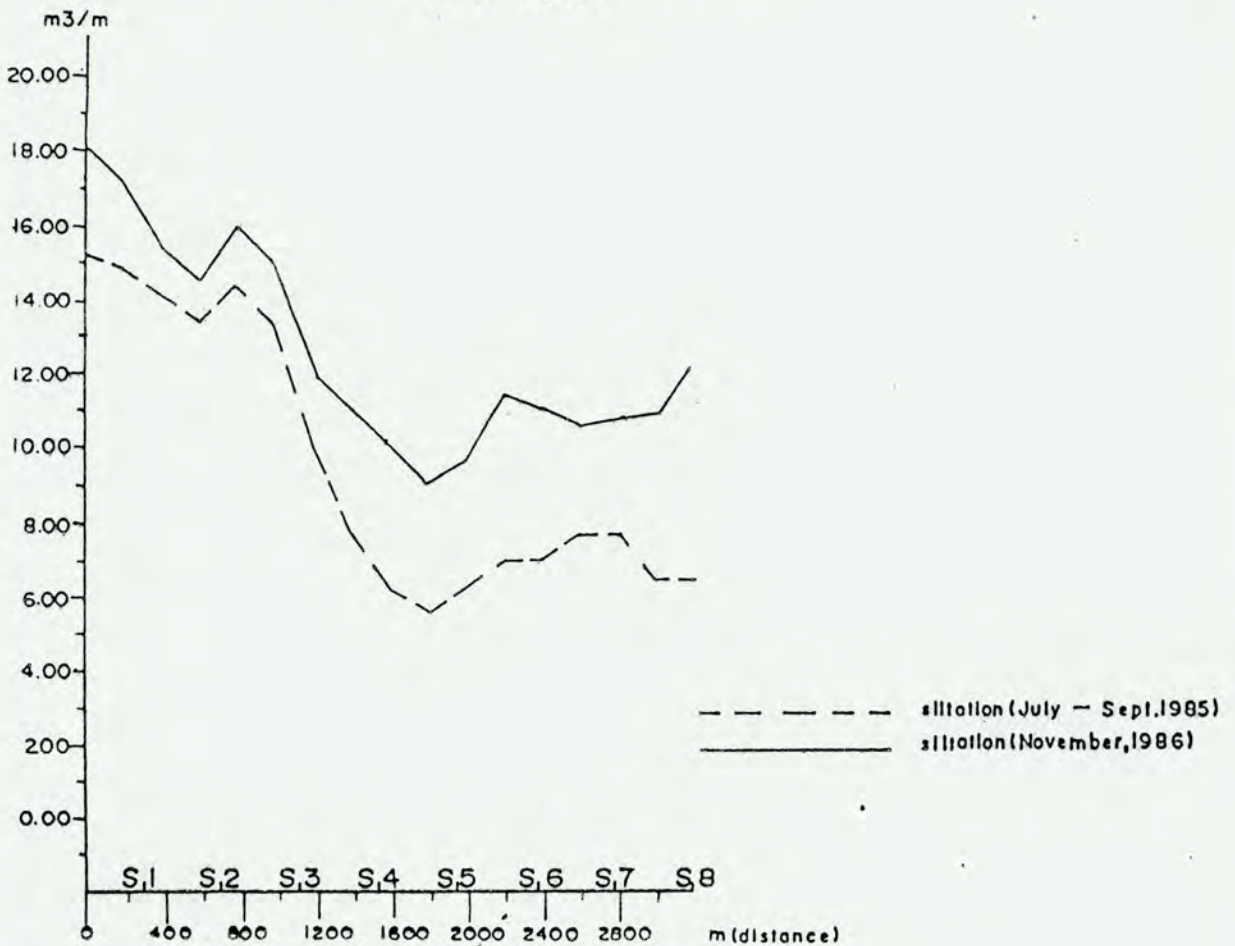
siltation Primary Canal I (compared to as-built)



- - - - - bottom design  
 - - - - - bottom as built (July - Sept. 1985)  
 \_\_\_\_\_ bottom (November, 1986)



bottom elevation Primary Canal IV  
 scale: ver. 1:200  
 hor. 1:40,000



siltation Primary Canal IV (compared to design)



## Pilot plots

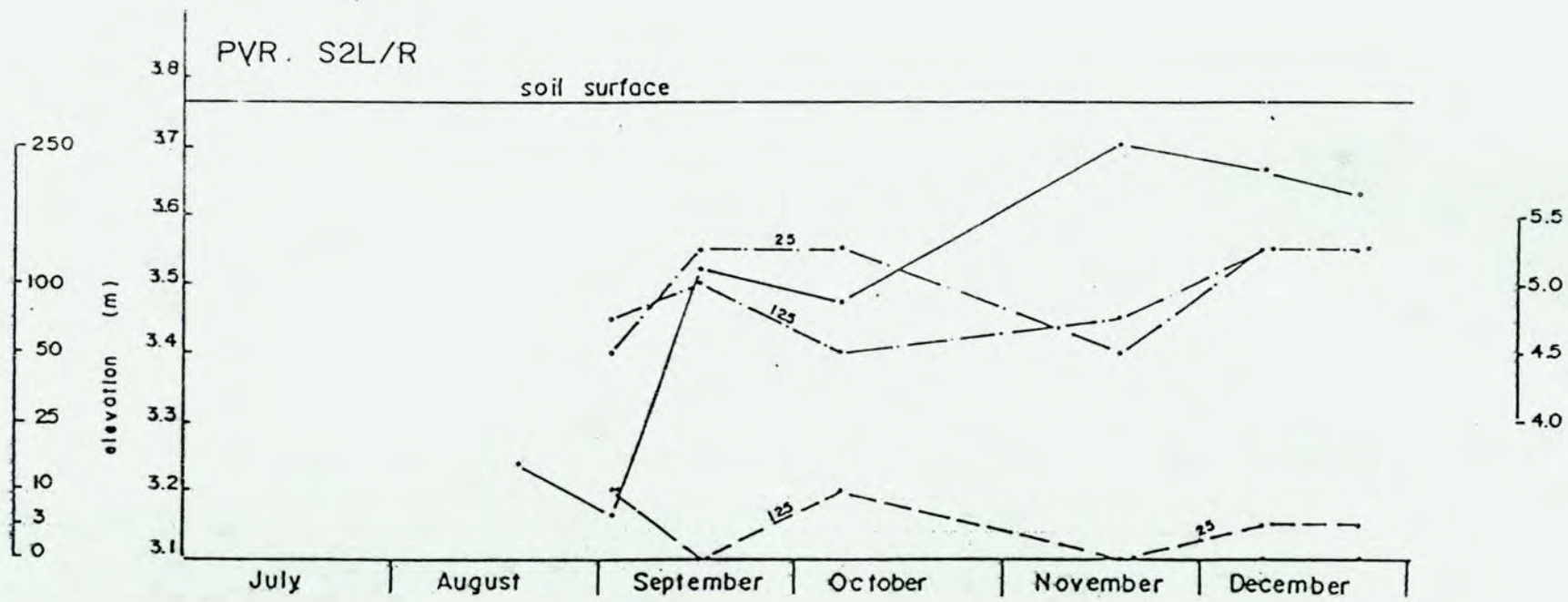
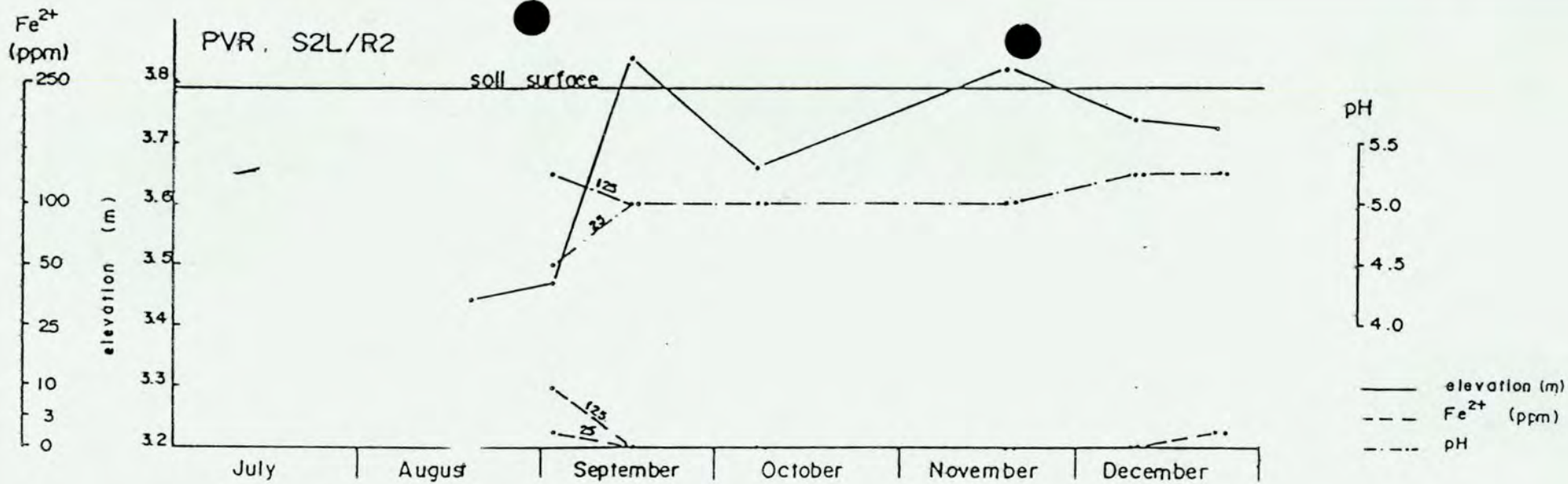
Observation on the pilot plots were repeated as in 1984. As the pilot plots were all located on farm plots that were not yet cultivated additionally 4 pilot plots were erected in homeyard areas. Due to earlier start of the cultivation changes in the soil conditions are expected to be more rapid and pronounced.

Present observation did not show any changes compared to 1984. There was no subsidence since 1984. Bulk densities, permeabilities, soil profiles, depth of the potential acid sulphate clay were unchanged. Like in 1984 the soils did not show any acidity the pH of the soils ranged between 4.5 and 5.5. Main cause of the unchanged conditions are the remaining high groundwater tables. The drainage by secondary canals did not lower the groundwater table noticeably.

Started was a regular monitoring of the groundwater conditions on the pilot plots. Measured were the depth of the groundwater and the pH and soluble iron ( $\text{Fe}^{2+}$ ) content. Observations showed since August a gradually rise of the groundwater table, as at the same time the soluble iron content decreases. August (end of the dry season) showed relatively high iron contents which decreased quickly when the rainy season started. Increased drainage flow washed out a major part of the soluble iron. On one pilot plot the iron content remained relatively high. On this plot the drainage conditions were poor due to shallow impermeable Palembang clay.

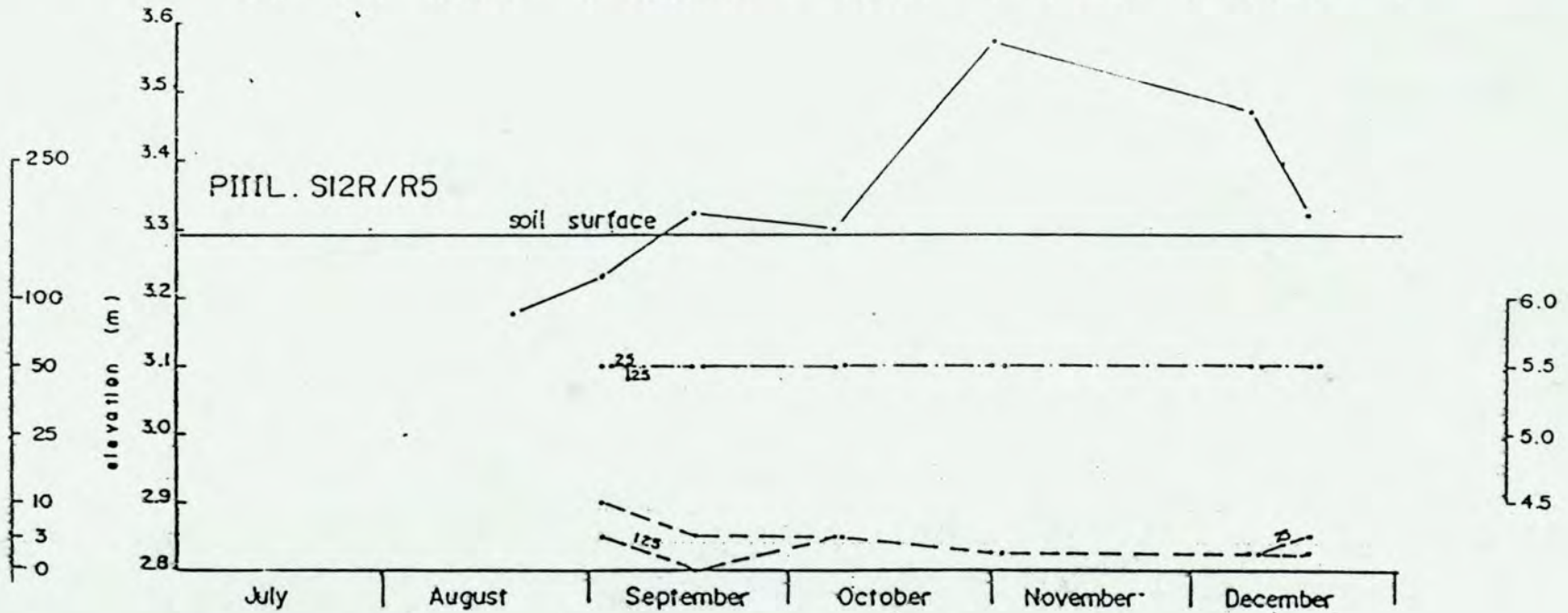
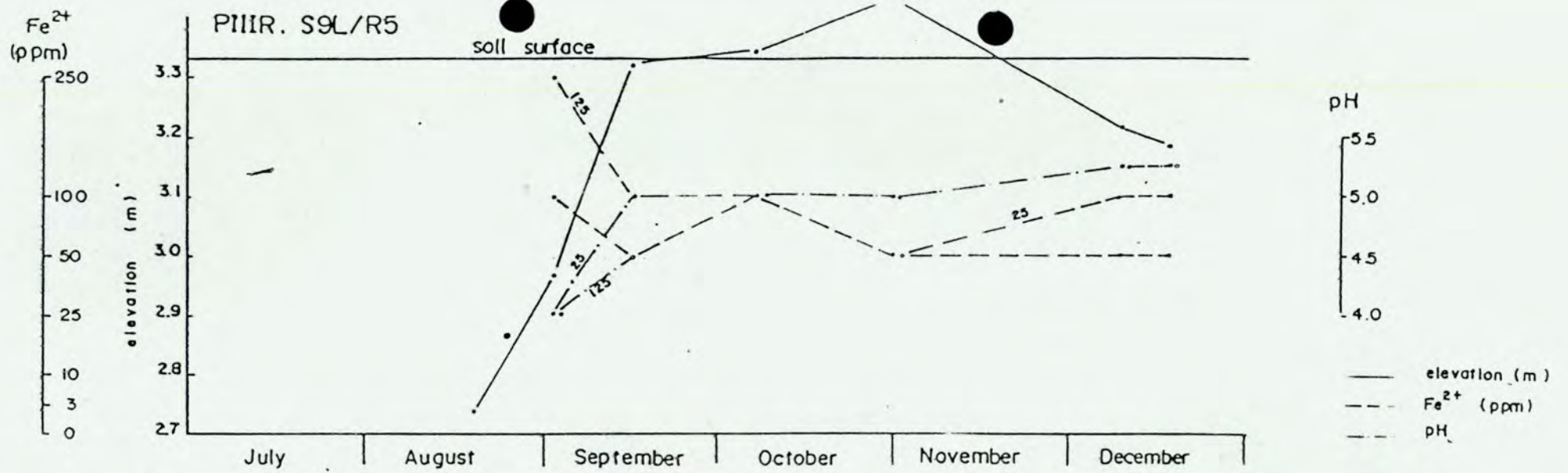
A more noticeable change in the soil conditions can be expected when tertiary canal construction is completed. It is recommended to repeat the soil observations on the pilot plots 6 month to 1 year after construction of the tertiary canals.





Pilot plot observation on groundwater level and pH and soluble iron (Fe<sup>2+</sup>) content of the groundwater





Pilot plot observation on groundwater level and pH and soluble iron (Fe<sup>2+</sup>) content of the groundwater







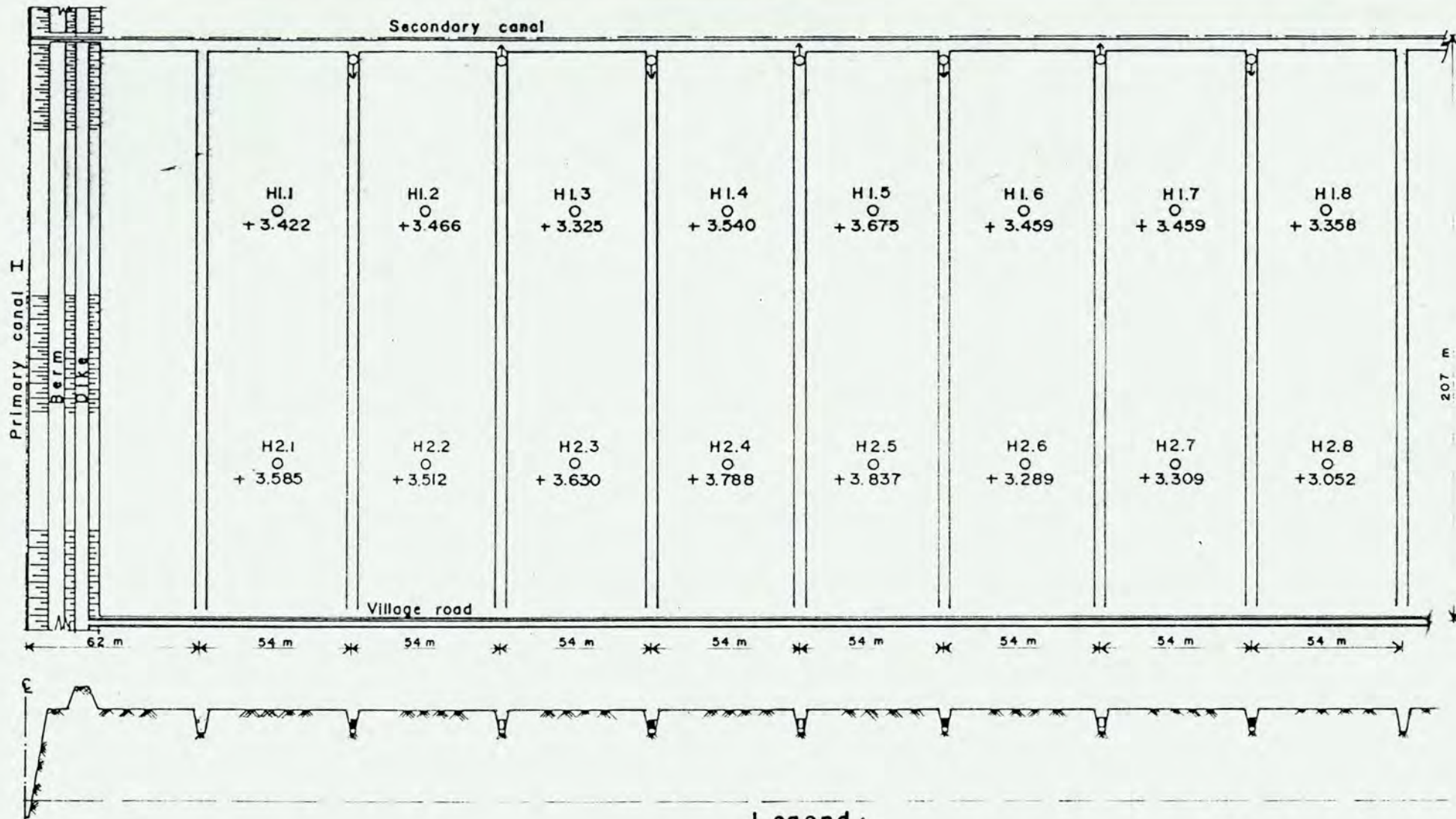
## Leaching trial

A leaching trial was erected in primary unit I on the area that was abandoned by farmers because of its extremely low agricultural production. One of the likely causes was the high soluble iron ( $\text{Fe}^{2+}$ ) content, and possibly high concentrations of other noxious elements as aluminium and hydrogen sulphide. Leaching may reduce these high concentration to less harmful levels. Applied was a one-way-flow leaching system with tidal river water. Flapgates were used to maintain alternately high and low watertables in bordering tertiary canals. By this leaching water from the high waterlevel canal is forced toward the low level canal.

The system proved to decrease the iron content of the soils very quickly. It is recommended to start some production trials on these plots to asses the actual improvement for agriculture. AARD presently conducting trials in the same area has the knowledge and facilities for this. The trials should be combined with fertilizer applications as low fertility is also a problem in the area.

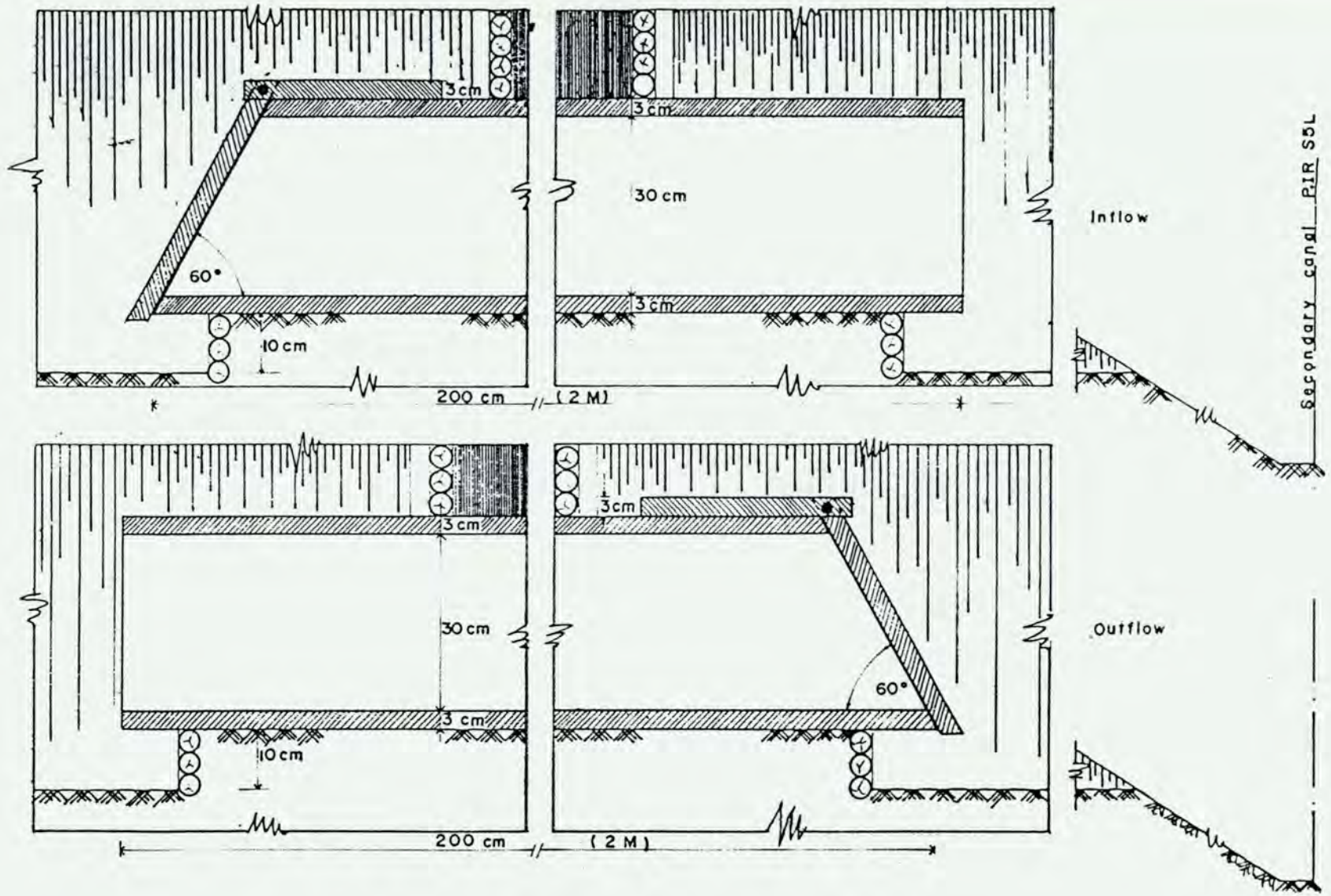
The leaching system proved to be succesful. Possibly it can also be applied in other areas. In areas with shallow potential acid clay soils it might prevent an increase of noxious elements and acidity due to oxidation of pyrite. Moreover it might gradually decrease the pyrite content of the soils. It is therefore recommended to start a simular leaching trial is one of the areas with shallow potential acid sulphate clays.





Lay out leaching trial PIRS5L

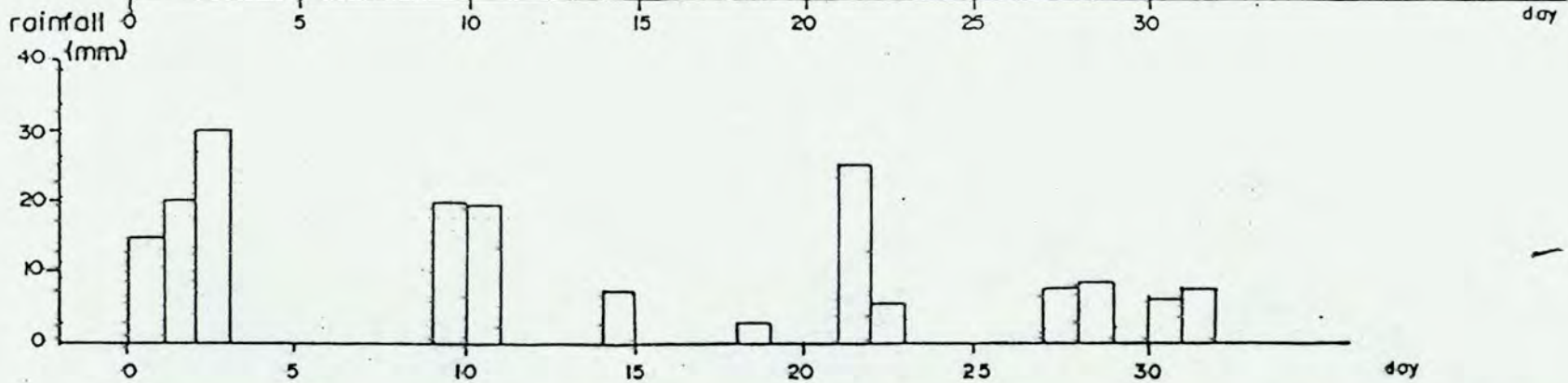
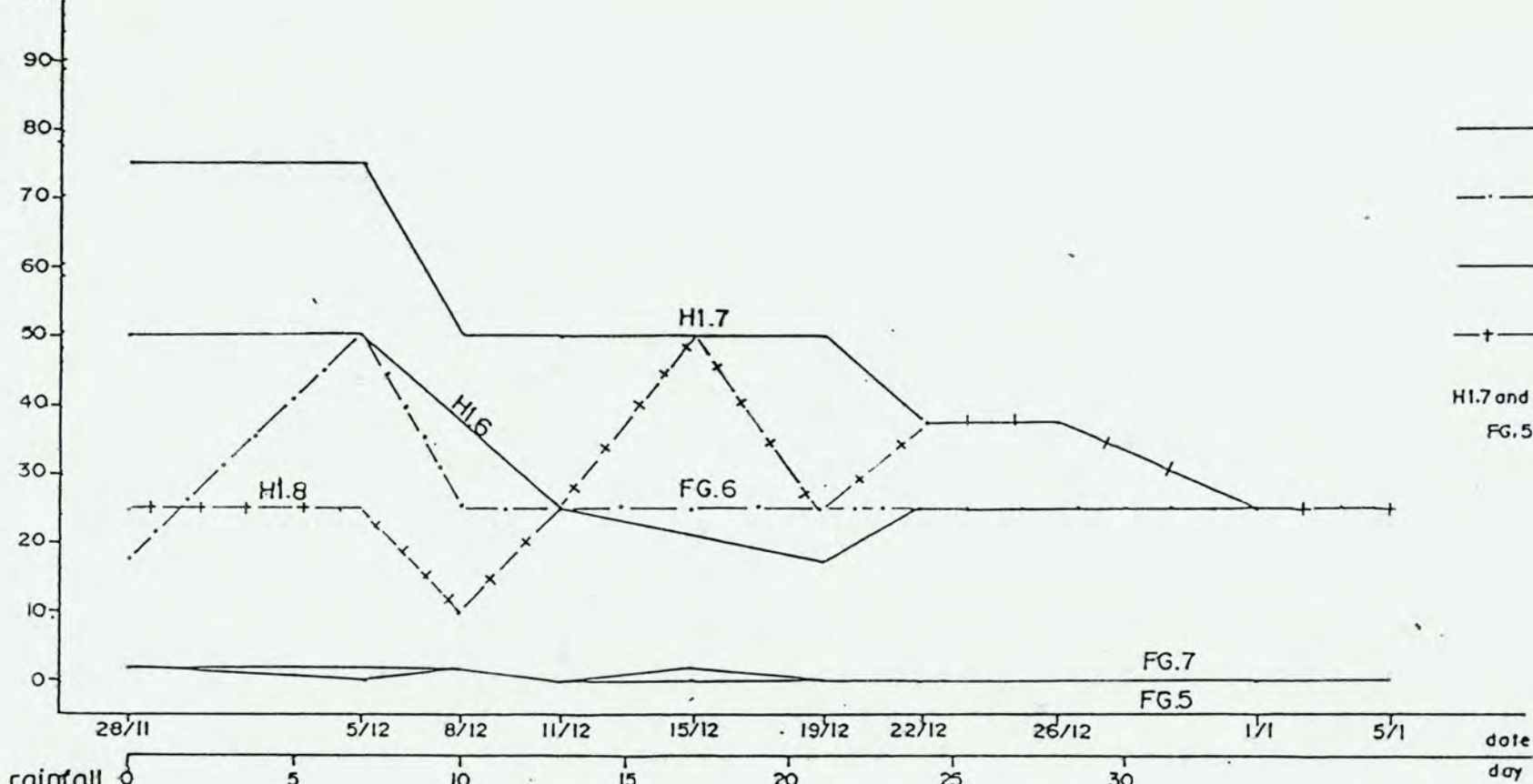




Design of flapgates for leaching trial



Fe<sup>2+</sup> (ppm)



Fe<sup>2+</sup> content in plot H1.7 and H1.6 of leaching trial in PIR. S5L



## Agricultural

Various sources report a poor agricultural production for the Karang Agung 9,000 ha project. However data on production, and production constraints were never published. Within the framework of monitoring and evaluation a brief inventory of the agriculture in Karang Agung 9,000 ha was made. For this 90 farmers were interviewed this is approximately 5% of the farmers in the area.

Yield averages of main crops grown in the three settlements of Karang Agung I - project area during 1985/1986 as derived from interviews and yield averages from DGFCFA. Pangkalan Balai. (Qt/Ha)

Crop	interviews				DGFCFA	
	PI	PII	PIII	Total KAI	KA I	
Paddy	7.8	12.2	5.4	8.5	14.2	
Maize	4.9	9.0	5.4	6.5	11.5	
Soy-bean	5.0	4.1	3.3	4.2	7.1	
Groundnuts	4.3	7.7	4.3	5.4	6.8	
Gr.-grams	0.2	-	1.1	0.8	3.9	
Cassava	50.6	208.2	19.2	92.6	143.9	
Str.-beans	13.1	28.4	12.9	18.1	18.2	
Chilies	8.3	2.4	3.6	4.8	13.3	
Egg-plants	25.6	-	37.4	31.5	16.8	

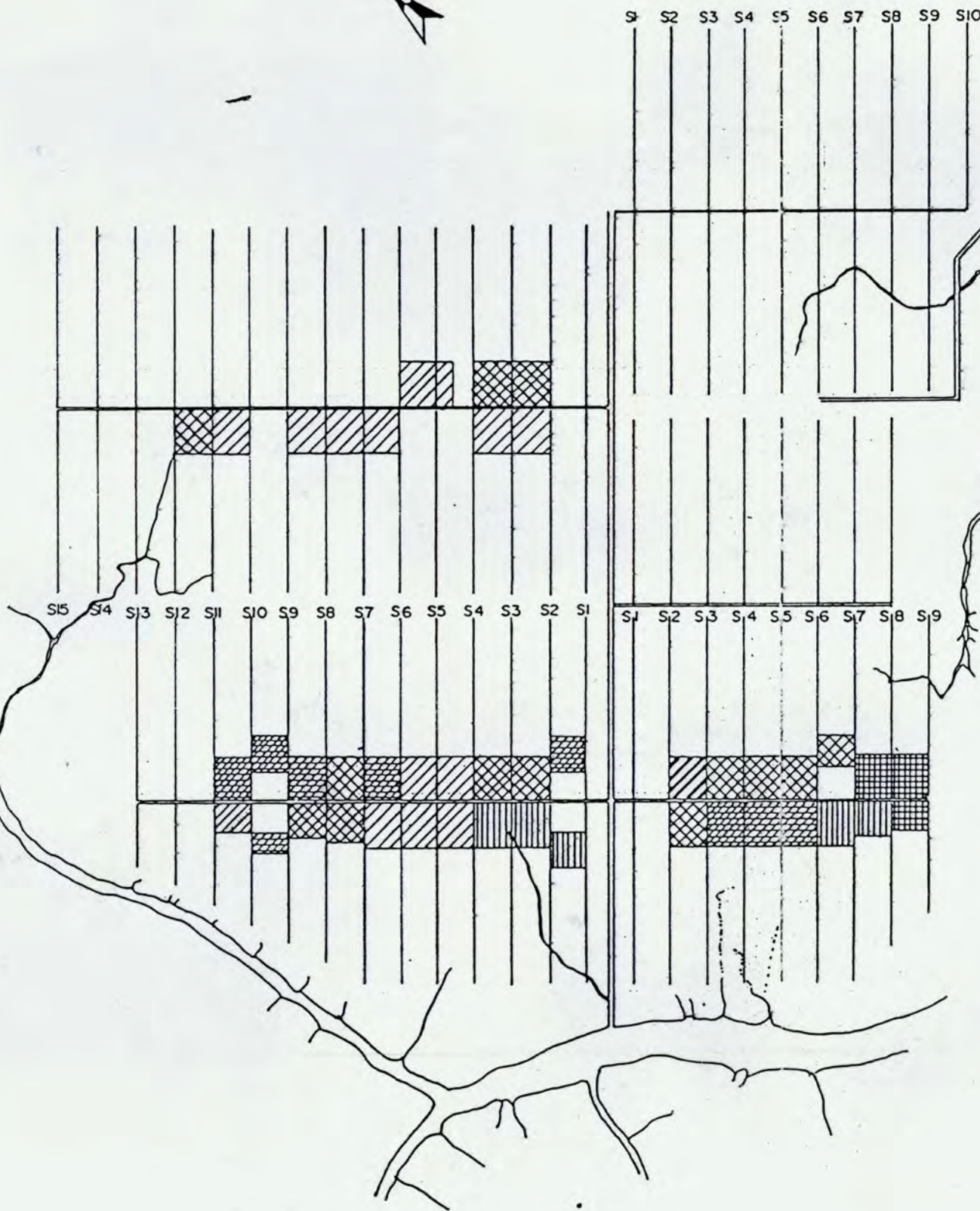
Yearly averages of crop yields in Karang Agung 9,000ha compared with P. Rimau I & II settlements nearby (approx. 30 km East) as collected by DGFCFA.

Type of crop	Karang Agung I (Qt/Ha)	P. Rimau I (Qt/Ha)	P. Rimau II (Qt/Ha)
Paddy	14.2	16.9	19.1
Maize	11.5	23.7	14.6
Gr. nuts	6.8	7.7	5.0
Gr. grams	3.9	3.4	4.6
Soy-bean	7.1	4.7	7.5
Cassava	142.9	125.5	129.6
Str. beans	18.2	11.5	13.6
Chillies	13.3	13.3	11.4
Egg plant	16.8	14.0	9.4

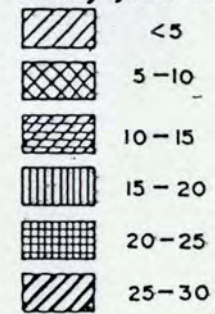


The first transmigrants in Pulau Rimau arrived in 1981. Between 1981 and 1984 totally 7,500 transmigrant families were settled. First settlement in Karang Agung 9,000 ha started in 1983. Due to the earlier start transmigrants in Pulau Rimau are more adapted to the conditions in swamp reclamation projects and development will therefore be in advance with Karang Agung 9,000 ha.





Legend  
Paddy yield 1986 (Qt/ha)



Average	wet	dry season
P I	8.4	6.7
P II	15.0	8.7
P II	2.8	2.1





S.1 S.2 S.3 S.4 S.5 S.6 S.7 S.8 S.9 S.10

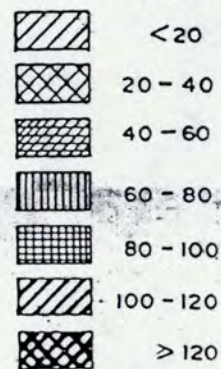


S.13 S.12 S.11 S.10 S.9 S.8 S.7 S.6 S.5 S.4 S.3 S.2 S.1

S.1 S.2 S.3 S.4 S.5 S.6 S.7 S.8 S.9

Legend

Casava yield 1986(Qt/ha)

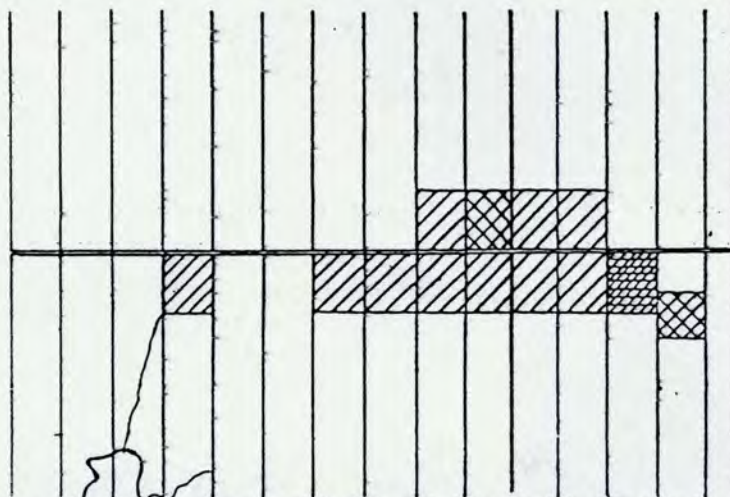


Average	wet	dry season
P I	72.2	43.7
P II	58.0	40.0
P III	46.7	30.0

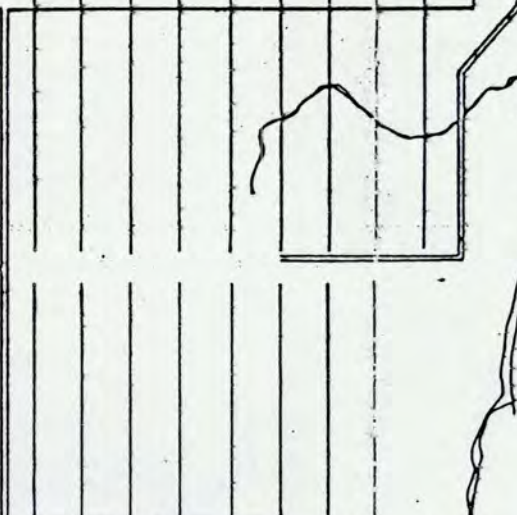




S.1 S.2 S.3 S.4 S.5 S.6 S.7 S.8 S.9 S.10



S.13 S.12 S.11 S.10 S.9 S.8 S.7 S.6 S.5 S.4 S.3 S.2 S.1



S.1 S.2 S.3 S.4 S.5 S.6 S.7 S.8 S.9

**Legend**

Maize yield 1986(Qt/ha)

- < 4
- 4-8
- 8-12
- 12-16
- 16-20

Average	wet	dry season
PI	12.0	2.1
PII	3.8	-
PIII	3.7	2.5



