

MIRI-BINTULU REGIONAL PLANNING STUDY

FOR

THE GOVERNMENT OF MALAYSIA

AND

THE STATE OF SARAWAK

PROGRESS REPORT

No. 8

AUGUST 1973

MIRI-DINTULU REGIONAL PLANNING STUDY
FOR THE
GOVERNMENT OF MALAYSIA & THE STATE OF SARAWAK

PROGRESS REPORT NO. 8

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Progress Chart

at cover

INTRODUCTION

This report covers the period from 1st of June to the end of July, 1973. The period has been dominated by meetings with various Government officers on specific subjects based on Working Papers and Memoranda submitted by the Consultants.

The Transport Planner and the Senior Port Engineer completed, early in July, a Memorandum on Port Development. It outlines some important conditions relating to port development in the Study Area and recommends that early decisions are taken to carry out further vital studies. The recommendations are now being considered by the pertinent bodies.

The Physical Planning Team is now fully staffed and is going into details with respect to the structures of various types of urban settlements, the location of new towns and expansion of existing towns.

The Land Classification Team completed the semi-detailed soil survey field work of 50 000 acres for detailed planning. A land capability map based on the broad transect soil survey has been completed for the area between Sungai Suai and Batu Niah.

In the report period the Action Group of the Steering Committee has assembled once in Economic Planning Unit (EPU) in Kuala Lumpur for discussion of several important matters among which were the problems concerning the implementation organisation, especially of agricultural development, and of principles for development of settlements, particularly the relationships between smaller villages and somewhat larger service towns. The discussions contributed to a clarification of the problems, although a final common attitude comprising all parties involved has not yet been achieved.

PROJECT MANAGEMENT

1. Staffing - additional to Report No. 7

<u>Position and Name</u>	<u>Chargeable dates</u>
7. R.A.J. Harrison, Fisheries Specialist	from 11.6.73
13. M. Breyen, Physical Planner	from 14.7.73
17. A.K. Macdonald, Drainage Engineer	from 16.7.73
19. T.V. Andersen, Agricultural Extension/Credit	from 30.6.73
D6. T. Sorensen, Senior Port Engineer	21.6.73 to 8.7.73

The following Counterpart staff were attached to the Project from the dates shown:-

Alexander Ng, Planning Officer	from 9.7.73
Richard Jong, Assistant Planning Officer	from 16.7.73

2. Administration and Finance

- (a) Supplies and Services - satisfactory
- (b) The thirteenth and fourteenth Statements of Account were submitted on the due dates.
- (c) Deposit of local funds Nos. 10 and part 11 have been received.
- (d) Comprehensive Statements of Foreign and Local Costs as at 30th April, 1973 were submitted to Government.

3. Schedule of Work

The programme of work for the next reporting period is as set out in the progress chart at cover.

4. Survey Maps and Reports

Fair drawing work on the sample area maps has now been completed and work is in hand on preparation of the colour mask for the Sungai Karabungan Sample Area soils map. Compilation work on the series of maps

for the broad transect surveys is also well in hand and fair drawing has been started on the terrain, soils and soil rentis maps for sheet one.

The 1:50 000 scale negatives of the existing series T735 sheets have been assembled to produce a base map on a single sheet for the areas to be planned in detail. The negative of this map has been processed to positive by the Land and Survey Department in Kuching.

The continuing assistance being provided by the photographic sections of the Land and Survey Department in Miri, and more especially of the Headquarters in Kuching in processing the scribed sheets is much appreciated.

It is anticipated that the full set of Sample Area survey maps will be ready for final negative production in August. Preparation of colour screens and proofs will then take place at the Directorate of National Mapping in Kuala Lumpur.

A first draft has been prepared on the structure of the Final Report and guidance from EPU has been received on the final printing requirements and the expected layout. A report production programme can now be set up during the course of the next reporting period.

PROGRESS

SECTION A

NATURAL RESOURCES STUDIES

1. SOILS

Based on the revised Soil Classification a Land Capability Classification has been developed and discussed with members of the Sarawak Soil Survey Division.

Mr. Lim Chin.Pang was officially transferred back to Kuching as from 1st July but returned to the Project on 17th July to assist in Soils, Terrain and Land Capability mapping.

1.1 Study of Soil Erosion

Routine maintenance and checking of the erosion trials at Bukit Peninjau and near Niah has continued.

1.2 Sample Areas

All field and mapping work on this part of the study has been completed but existing draft reports of these areas will have to be rewritten on the basis of the revised Soil Classification.

1.3 Broad Transect Survey Area

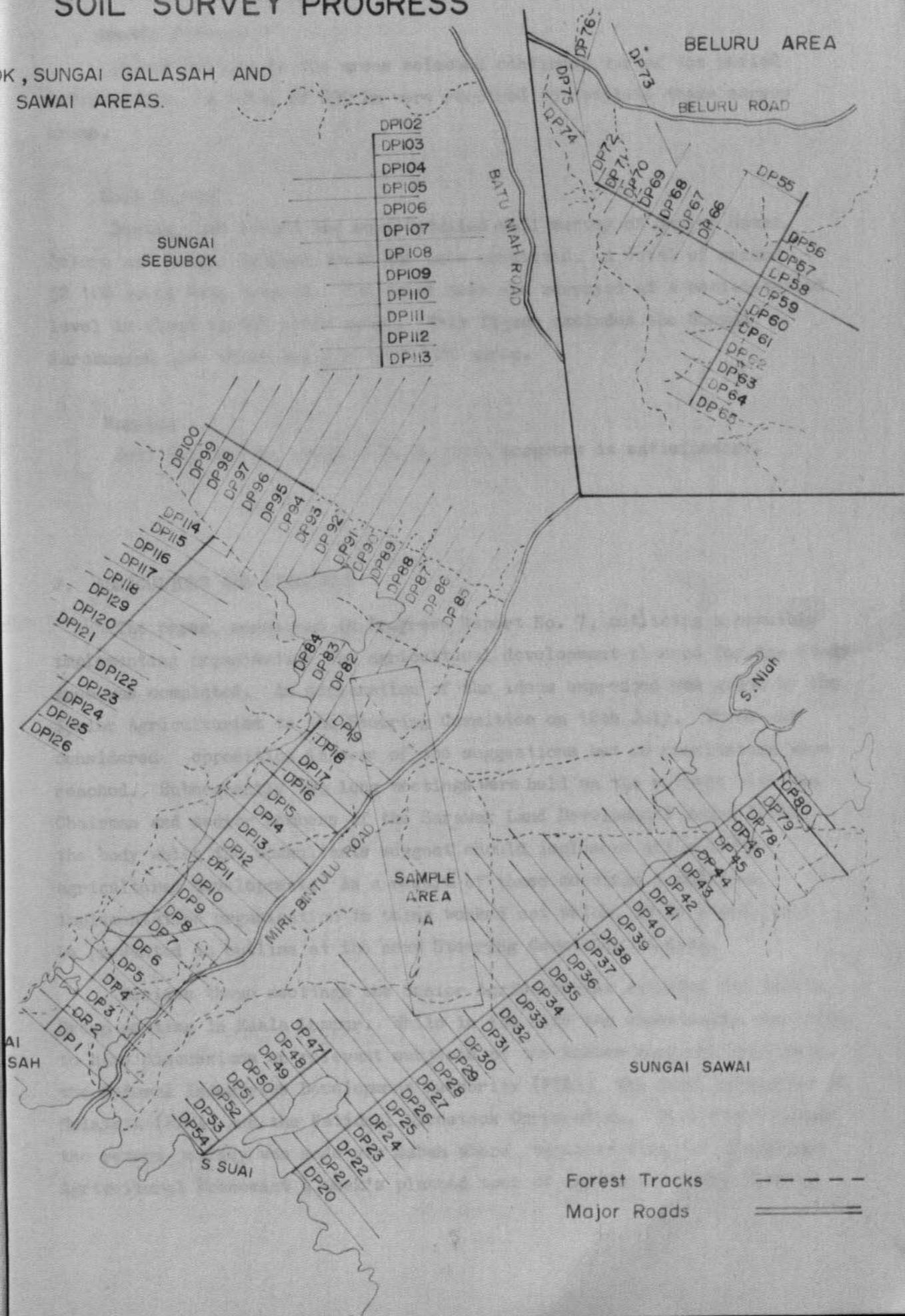
Mapping

Soil mapping at 1:50 000 scale has been completed and the maps handed to the Drawing Office for reduction to 1:100 000 and final drawing.

The Land Capability Map at 1:100 000 for the area between Sungai Suai and Batu Niah has been completed and handed to the Drawing Office for final drawing.

SOIL SURVEY PROGRESS

OK, SUNGAI GALASAH AND SAWAI AREAS.



BELURU AREA

BELURU ROAD

BATU MAH ROAD

SUNGAI SEBUBOK

- DP102
- DP103
- DP104
- DP105
- DP106
- DP107
- DP108
- DP109
- DP110
- DP111
- DP112
- DP113

S. Niah

SAMPLE AREA A

MIRI-BINTULU ROAD

SUNGAI SAWAI

AI SAH

S SUAI

Forest Tracks - - - - -

Major Roads = = = = =

1.4 Semi-Detailed Survey Area

Rentis Cutting

Rentis cutting in the areas selected continued during the period under review. A total of 299 km were required to complete these survey areas.

Soil Survey

During this period the semi-detailed soil survey of Sungai Sawai, Beluru and Sungai Sebungok areas has been completed. A total of around 52 100 acres were covered. The total area now surveyed at a semi-detailed level is about 63 000 acres gross. This figure excludes the Sungai Karabungan area which amounts to 17 325 acres.

Mapping

Soil and Terrain mapping is in hand; progress is satisfactory.

2. AGRICULTURE AND LIVESTOCK

The paper, mentioned in Progress Report No. 7, outlining a possible implementing organisation for agricultural development planned for the Study Area was completed. An explanation of the ideas expressed was given by the Senior Agriculturist to the Steering Committee on 12th July. There was considered opposition to some of the suggestions but no conclusions were reached. Subsequently two long meetings were held on the subject with the Chairman and senior members of the Sarawak Land Development Board (SLDB) the body which the Consultants suggest should implement all planned agricultural development. As a result of these meetings a modified implementation organisation is being worked out which, it is hoped, will be presented in outline at the next Steering Committee meeting.

Besides these meetings the Senior Agriculturist attended the Action Group meeting in Kuala Lumpur. While in the city the opportunity was taken to have discussions on relevant subjects at the Rubber Research Institute, the Federal Industries Development Authority (FIDA), the Food Industries of Malaysia (FIMA) and the National Livestock Corporation. From Kuala Lumpur the return journey was made via Sabah where, together with the Consultant Agricultural Economist a week's planned tour of agricultural development

schemes in the State was undertaken. The tour proved a very interesting and profitable one. Given below is a list showing some of the prominent people with whom discussions were held as well as several schemes, research stations and estates which were visited.

The Rubber Fund Board (Mr. S.P. Durai).

The Decan Crumb Rubber Factory.

The Sabah Padi Board (The General Manager, Mr. Osmen bin Mohd. Sham, and the Board's Development Officer, Mr. Lim who conducted a tour of some of the double-cropping rice areas).

Sabah Land Development Board Headquarters (Mr. L. Butterworth and Mr. K. Lane).

The Keningau area (terraced, irrigated rice).

Sebrang Livestock Breeding Station.

Tenom Cocoa Research Station.

Ulu Dusun Oil Palm Research Station.

Ulu Dusun Settlement Scheme.

Sungai Manila Settlement Scheme, Sandakan (Regional Manager, Sabah Land Development Board).

Quoin Hill Cocoa Research Station, Tawau (Officer-in-charge, Mr. Chee You Fah).

The Commonwealth Development Corporation estate, Borneo Abaca Ltd. (The General Manager, Mr. D. Byers).

Apas Balung Settlement Scheme, Tawau (The Regional Manager, Sabah Land Development Board).

Kundassan Farmers Organisation.

Mr. T.V. Andersen, the Consultants' agricultural and credit specialist rejoined the team on 1st July, 1973, for the second part of his assignment. He is now continuing the planning work on agricultural institutions and organisations taking into account the progress of the study since December. On 9th and 10th of July he joined the Counterpart Sociologist on a study tour to Limbang to look into the oil palm plantings in that area and to learn the local farmers' attitudes and results.

3. AGRICULTURAL ECONOMICS

Work has continued on activity analyses for the major of agricultural

enterprises; pond fish, shrimp and turtle culture have been tackled this period. A preliminary evaluation has been carried out on ideas aimed at increasing the tapping of existing small-holder rubber plantations. The work has covered the possible production by small-holders of lump coagulum, poly-bag coagulum and unsmoked sheet rubber for processing into crumb rubber in a central factory; the purchase of the small-holders' product by Government through a system of agents; the possibility of pooling transport costs so as to achieve a uniform price (based on dry rubber content) throughout the Study Area; the problems of adjusting the uniform price paid to farmers and of arranging a minimum price to the farmer in times of low world prices. More work has to be done on these aspects before a proposal can be made.

Field work and data tabulation of the farm survey has been completed. Writing-up of the findings and conclusions is now in hand as is the updating of production economics data collected since the beginning of 1973.

The Agricultural Economist accompanied the Senior Agriculturist on the tour in Sabah.

4. FISHERIES

The Inland Fishery Specialist returned for two months to complete his assignment on the Study. Due to the relatively short duration of his stay he has concentrated his effort in investigating the potential of fish culture which he considers has the greatest development potential in the Study Area. He has spent considerable time in discussions with the officers of the Inland Fishery Division of the Department of Agriculture.

Whilst the natural fisheries of the rivers and streams in the area are productive they cannot be expected to make any increased contribution to the food supplies of the area. In fact, a temporary decline is likely because any land development will probably be matched by a decline in the quality of the aquatic environment due mainly to an increasing silt load from run off. This in time will return to stable conditions and with restocking the rivers can be expected to return to their former productivity.

Fish culture has a good potential in the area as the requirements are simple and the technique easily learnt. However, great economic benefits to

the area as a whole from fish culture are unlikely. Rather the benefits will be indirect through the improvement in the diet of the rural people which will in turn enable them to lead more productive lives.

The culture of Chinese carp is highly profitable but the widespread adoption of their culture is limited by the relatively large areas of water required. Ponds less than half an acre in area should not be stocked with Chinese carp. Also a high standard of management is required, but the greatest constraint is the reliance for stocking on imported fingerlings which currently came from China. Fingerlings have been produced in Malaysia but so far none have been supplied to Sarawak. The most promising new development in culture methods is the raising of the giant freshwater prawn (Macrobrackium) in ponds. These prawns if stocked in well fertilised ponds can attain a weight of three ounces each in six months. Local and world prices for prawns are rising fast and the freshwater prawns are in great demand from restaurants. Currently Sarawak is one of the few countries in the world artificially raising juvenile prawns in quantity for pond stocking. However the number produced will have to be greatly stepped up if a new industry is to be developed. In fact there is a potential new industry in merely raising prawn juveniles for export all over the world.

5. FORESTRY

Analyses of data collected by the Forestry Department Diagnostic Sampling teams continued satisfactorily.

6. WATER RESOURCES

Recording of hydrological and climatological data continues. Analysis and interpretation has been carried out by the Consultant Hydrologist and Senior Engineer in the United Kingdom. It is anticipated that Project hydrological field studies will be completed at the end of October.

SECTION B
POPULATION AND PRODUCTION

1. MANPOWER TRAINING

During a visit to Kuala Lumpur the Project Manager and the Regional Planner called on the Department of Manpower in the Ministry of Labour and Manpower to discuss several approaches to informal vocational training. Such training programmes are currently under study by a UNDP group connected to the Department. The Department supplied the Consultants with instructive material, which is now being studied.

2. GENERAL AND INDUSTRIAL ECONOMICS

Industrial economics and development is being given considerable attention in this phase of the Study. The General Economist, having concluded a data collecting visit to Peninsular Malaysia and Singapore, is now working on identification and evaluation of specific projects. This work will continue until that phase of the Study when the total economic regional model can be revised on the basis of new and more detailed information and knowledge. The utilisation of the Bintulu glass sand has been subject to scrutinisation, and besides the preparation of a pre-feasibility report on the subject, extensive discussions have been carried out to coordinate the development of this industry with the general urban and regional planning of the Bintulu area.

Efforts have also been made to analyse and identify the possibilities for establishing small scale industries. The Counterpart Economist has, in this connection, been concentrating on the structure of present and future industrial estates as a natural focus point of a small scale industrial development. In addition initial discussions have been carried out with the recently arrived Town Planner whose experience in the housing sector is expected to influence the actual designs of house types for a pre-fabrication housing industry.

The General Economist is co-operating also with the Financial Analyst in his general approaches to project evaluation.

3. FINANCING

The Financial Analyst has worked out guidelines for definition and description of projects, as they are identified and for the procedure of preparing the Action Programme and the Financial Programme. This completes the preliminary programme given in Progress Report No. 7.

A start has been made on a Working Paper describing certain ideas concerning new types of savings institutions which can increase the population's propensity to save.

In co-operation with the Agricultural Extension and Credit specialist a study of methods of financing agricultural development has been started. Other activities in hand are preliminary calculations of the amount of money likely to be available for development purposes during the period 1975-1980.

These calculations include:-

- a) Direct Regional Public revenues. These are defined as the total amount of public revenues collected within the Study Area less the amounts which are absorbed by the State and Federal Governments for the payment of administration, superior State and Federal purposes and possible transferences to other regions of the country;
- b) Transfer of money from Federal Government to the Region;
- c) Regional savings;
- d) Transfer of savings from other regions of Malaysia;
- e) Foreign investments and loans;
- f) Investments and loans by Statutory Bodies. These amounts are included only to the extent that they originate from a financial surplus over and above the running costs of the Statutory Bodies.

SECTION C
TRANSPORT AND COMMUNICATIONS

The months of June and July have been used mainly for an appraisal of the prospects of port development in the Study Area. The Consultants' Senior Port Engineer, Mr. Torben Sorensen, was attached to the Study for a two-week period, from the 23rd June to 7th July.

The appraisal was based on data and information gathered from different sources;

- a) that already assembled by the Transport Planner;
- b) a helicopter reconnaissance trip from Kuching to Kuala Baram made in conjunction with representatives from the Government Port Authority and Public Works Department;
- c) discussions with officials of all relevant Government departments and with Sarawak Shell Berhad and Brunei Shell Petroleum Company.

The results of the appraisal have been presented in a Memorandum on Port Development. The main conclusions of the appraisal are:-

- Tanjong Kidurong appears to be the best possible site for a deep sea port for Sarawak;
- the basic principles of harbour layout expressed in the sketch prepared by FWD appear to be sound for the site and type of port in question;
- the port feasibility study should pay special attention to the siltation problem of the port access channel and the harbour basin;
- that a study of the feasibility of undertaking modest improvements to the entrance channel and port facilities at Miri ought to be included as an appendix to the Deep Sea Port Study.

The Transport Planner has, in addition to the preparation of and participation in the port development appraisal, continued the work on preparation of action programmes within the Transport Sector.

SECTION D
SETTLEMENTS AND INSTITUTIONS

1. GENERAL

The arrival of the following people has completed the formation of the physical planning group; the Physical Planner, Professor Mogens Breyen; the water resources Engineer, Mr. Alistair K. Macdonald; the Counterpart Physical Planner, Mr. Alexander Ng; the Town Planning Assistant, Mr. Richard Jong.

2. REGIONAL PLANNING

Working Paper No. 48, a study on settlements in the Lambir-Subis Development Area was discussed at the Action Group meeting in Kuala Lumpur on 12th July. It was agreed at this meeting that the settlement principles laid down in the working paper should act as a guideline for future settlement proposals. In general these principles point towards a concentration of agricultural estate workers in towns of 5-10 000 people instead of in villages of 1-2 000 persons. Whether this principle also will be adopted for the settlements of the oil palm schemes in the southern part of the Lambir-Subis Area is still undecided because the Sarawak Land Development Board does not consider this approach suitable for the type of development they are presently undertaking. If the Consultants are to assist in the planning of a new 'Subis' town an early decision on this point was required.

Ideas on different types of small-holder settlements were also put forward by the Consultants at the Action Group meeting. Based on the different views expressed during the ensuing discussion several types of small-holder settlement patterns are under consideration. A paper on the subject will be preparation for later discussion with the Government. This work on settlements, both small-holder and estate based, is closely connected to the proposals for the organisation of implementing rural development.

The work on the Planning Manual for housing and services is in

progress and the chapters on facilities for education and health are nearing completion in draft form, when finished they will be passed to the respective Government Departments for comment and discussion.

3. PHYSICAL PLANNING

The physical planning group has made a familiarisation trip to Marudi and the surrounding areas. The group is now working on the relationship between the total regional development of the Study Area and the various functions of its centres. In addition to this general aspect preparations are being made to present, at the next Steering Committee meeting, alternative structure plans for Bintulu New Town. In this connection the group has made a town planning tour to Bintulu.

4. PUBLIC UTILITIES

The water resources Engineer who is working in close connection with the town planners visited Marudi and Bintulu in company with other members of the Regional and Town Planning Section for familiarisation purposes. On the journey he inspected hydrological features with the Counterpart Hydrologist. With assistance from the Hydrologist a review is being made of water supply sources for the towns listed in the Perspective Plan.

5. SOCIOLOGICAL ASPECTS

The Counterpart Sociologist has been occupied during the absence of the Consultant Sociologist with writing a draft report on the sociological study of the labour force at Bukit Peninjau Scheme. Also a preliminary report has been written on the Danau Small-Holders' oil palm scheme following a trip made to Limbang to look at the structural set-up of the scheme. These reports have been sent to Dr. Sather for his comment. A review of the Youth Settlement Scheme at Pujut-Lopeng is being written. A final trip to Sibuti for a follow-up study of the Kedayan land tenure

system will complete the sociological field work.

The Consultant Sociologists, Dr. Sather and Dr. Morris will rejoin the Study Team in mid-August to write the final sociological report for incorporation in the Final Report.

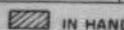
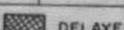
APPENDIX I
WORKING PAPER INDEX

<u>No.</u>	<u>Date</u>	<u>Author</u>	<u>Title</u>	<u>File reference</u>
48	Jun 22	S. Jorgensen/ T.E. Wetteland	An Evaluation of Settlement Patterns - An Exercise for the Lambir-Subis Development Area	MB/3/PLAN/47
49	Jul 6	M. Cooper	Organisation Machinery for Planning and Implementing Rural Development	MB/3/AGRIC/ ORGANISATION/30

/al/30.7.73

PLAN OF OPERATIONS & MONTHLY PROGRESS CHART
MIRI - BINTULU REGIONAL PLANNING STUDY

STUDY HEAD	1973												1974			
	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL		
SOILS	MAPPING MASTER PLAN	SEMI-DETAILED PLAN AREAS	DETAILED SURVEY PROJECT AREAS			REPORT			FINAL REPORT							
	RENTS CUTTING	D.P.A.		MAPPING D.P.A.		REPORT	FIELD CHECKS									
AGRICULTURE	UPDATE LIVESTOCK ENTERPRISE BEGINNING	AGRONOMIC/ECONOMIC MARKETING DATA	UNIT COSTS	ACTIVITY	PHASING OF PROPOSALS AND BUDGETS ANALYSES					REPORT PREPARATION	S.D.M.P.A. AND D.P.A.					
						INSTITUTIONS AND CREDIT STUDIES			PLANNING EVALUATION OF D.P.A.							
FISHERIES					DETAILED DEVELOPMENT	FISHERY PROPOSALS										
FORESTRY								EVALUATION OF PLANTATION AND REGENERATION POTENTIAL	LIASON FAO	REPORT						
HYDROLOGY	COLLECTION PROJECT	AND DATA	HYDROLOGICAL RECUCTION STATIONS			ANALYSES OF GAUGING DATA		REPORT								
POPULATION & LABOUR		MANPOWER		TRAINING					FINAL REPORT							
SOCIOLOGY	ANALYSIS AND EVALUATION OF SURVEY DATA							FINAL REPORT								
PROJECT ECONOMICS AND INDUSTRY		DETAILED STUDIES OF SELECTED INDUSTRIES						GENERAL PROJECTIONS OF INDUSTRY, COMMERCE AND SERVICES		PROJECT SYNTHESIS AND EVALUATION	REPORT					
TRANSPORT AND COMMUNICATIONS		ACTION PROGRAMMES ON TRANSPORT		MASTER PLAN OF TRANSPORT		REPORT DEVELOPMENT										
FINANCE AND ADMINISTRATION		INVESTIGATIONS ON ADMINISTRATIVE AND FINANCIAL ORGANISATIONS				FINANCIAL ANALYSES		REPORT			REPORT					
SETTLEMENTS AND INFRASTRUCTURE		PROJECTIONS AND EVALUATION OF SETTLEMENT PATTERNS PRIVATE AND PUBLIC SERVICES AND COSTS				PLANNED SETTLEMENT LAYOUT		REPORT	REPORT		FINAL REPORT					
MAPS	PAIR	DRAW	RESOURCES	MAPS				REPORT		DRAFT PROJECT PLAN	CHECKING	DRAWINGS	PRINTING	PRINTING		
MAIN REPORTS						FIRST DRAFT PREPARATION AND CIRCULATION			REPRODUCTION		FINAL DRAFT PREPARATION	PRINTING / PROOFING	SUPPORTING VOLUMES			
PROGRESS REPORTS & CONSULTATIONS	PR6	SC5	PR7	SC6	PR8	SC7	PR9	SC8	PR10	SC9	PR11	SC10				

 IN HAND
  DELAYED
 PR - PROGRESS REPORT
 SC - STEERING COMMITTEE
 D.P.A. - DETAILED PROJECT PLAN AREA
 S.D.M.P.A. - SEMI DETAILED MASTER PLAN AREA