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MIRI-BINTULU REGIONAL PLANNING STUDY

FOR

THE GOVERNMENT OF MALAYSIA

AND

THE STATE OF SARAWAK

PROGRESS REPORT

No. 10

DECEMBER 1973

HUNTING TECHNICAL SERVICES LTD.,
LONDON
• LAND USE CONSULTANTS •

HOFF & OVERGAARD,
COPENHAGEN
• PLANNING CONSULTANTS •

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

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INTRODUCTION

This report covers the period from 1st of October to the end of November 1973. The detailed studies mentioned in the previous Progress Report have been continued; final recommendations are now emerging for Settlement patterns, Road network, Forestry and Agricultural development. The latter includes recommended land use, cropping patterns and structure of agriculture, i.e. type of development in various parts of the Study Area. Recommendations for phasing of development are nearly finished. By phasing is meant a stipulation of the time when development of separate areas within the 250 000 acres Master Plan Area should be commenced. This phasing has been based on the existing development, existing programmes, the presence of already logged forest areas and on schedules for future logging.

A draft of the Planning Manual has been completed, circulated to, and discussed with, pertinent institutions and persons in Sarawak and Kuala Lumpur.

The Physical Planner has completed his term on the Study and has left a draft report with detailed layouts of drawings and illustrations which are now under processing.

Supporting Reports on Sociology, Physical Planning, Transport, Inland Fisheries and Livestock all of which will supplement our main Report are now under final editing.

The preliminary Working Papers on financing, mentioned in the last Progress Report have been discussed with pertinent institutions and persons and final versions are under preparation.

Work has started on the presentation of the overall development plan in the form of summaries of individual Projects. However, the details of all identified Projects, are not yet completed so that The Draft Development Plan which we had hoped to present at the coming Steering Committee meeting cannot be finalised.

The Financial Analyst and the General Economist have commenced a 'review of the general economic and financial framework' for development of the Study Area as described in the Perspective Plan. Likewise a revision of the Population figures is under preparation.

The General Economist has continued investigations of 'special industries' and of 'small-scale industries.'

During the period under review, several briefings were given to various groups of people and individuals on Project activities and the Study Area. Important among those briefed were members of the Dewan Negara of Negri Sembelan who were visiting Miri. Another group was composed of the Chief Minister, Datuk Haji Abdul Rahman Ya'kub, and senior executive members of the Malaysian Council for Higher Education who were briefed as part of an orientation visit to Bintulu in connexion with the possible establishment of a University in the Bintulu area.

Drafting of the main Report has been commenced by the Project Manager and the Deputy Project Manager.

PROJECT MANAGEMENT

1. STAFFING - additional to Report No. 9

	<u>Name and Position</u>	<u>Chargeable Dates</u>
13.	M. Breyen, Physical Planner	to 15.11.73 (final)
16.	J. Stowell, Hydrologist	to 28.10.73 (final)
D.4	D. McVean, Ecologist	from 16.11.73

Counterpart Staff

Mr. Hatta Solhee, Rural Sociologist, returned to his parent department on 13.11.73; Mr. Then Thiat Khiong, Hydrologist, returned to Kuching on 20.10.73. The Consultants wish to record their appreciation of the important contribution made to the Study by both Officers, and their thanks to the respective departments for making their services so freely available.

During the period under review, two Assistant Town Planning Officers were seconded to the Study Team for a period of 5 weeks.

2. ADMINISTRATION AND FINANCE

- (a) Supplies and Services. Under the direction of the State Financial Secretary items of equipment no longer required by the Study Team, are in process of being handed over to nominated departments and organisations.
- (b) The 17th and 18th Statements of Account were submitted on the due dates.
- (c) Deposits of local funds 13 to part 15 have been received.

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

Preparation of all the colour separation sheet for the Resources maps at 1:100 000 and 1:50 000 scale was completed during November and final negatives of all the linework progressively produced throughout the month. All of this material has now been passed to the Directorate of National Mapping in Kuala Lumpur for preparation of the colour screens and proofing.

Work is well in hand on preparing the legend details for the 1:250 000 and 1:50 000 scale development plans, and fair drawing should commence in December, for completion by the end of January.

Drawing work has commenced on the report drawings for the final report and the text for a number of the Supporting Volumes is in draft form prior to final editing and preparation of material for printing. The printing layout of the Final Report has been briefly discussed with SFS and EPU and a general agreement reached on the format proposed.

SECTION A
NATURAL RESOURCES STUDIES

1. SOILS - General

The period under review has been spent on writing the report on Geomorphology, Soils and Land Evaluation.

The draft has been discussed with the Soil Survey Division of the Department of Agriculture, and will subsequently be discussed with the Consultant Advisor on Soils, prior to final production.

1.1 Study of Soil Erosion

The Soil Conservationist's report has been received and will be incorporated in the Soils Report together with the results of the physical trials undertaken.

1.2 Semi-Detailed Survey Area

Following reference to the Niah Forest Reserve in Progress Report No. 9, the boundaries now indicate the area surveyed at 22 105 acres. In addition a further 4 535 acres were surveyed in the Sawai Protected Forest. Both areas were surveyed at Semi-Detailed level and the measurements based on 1:50 000 scale Topographic sheets Series T735.

2. AGRICULTURE AND LIVESTOCK

Drafting of sections of the Final Agricultural Report by the Senior Agriculturist has commenced. In addition the Livestock Specialist's report has been received and is being processed for distribution to appropriate people and Departments before it is

finalised for inclusion in the Final Report.

The drafting of a paper describing an implementation organisation for overall agricultural development in the Study Area has been completed. Editing and reproduction of the paper for distribution is in hand.

Considerable progress has been made concerning the phasing and form of development throughout the Study Area: Development Units have been delineated, their sequence of development worked out and the type of agriculture in each determined. An outline of these ideas will be given at the next Steering Committee Meeting.

Close liaison with the SLDB management and planning staff has continued and detailed priority plans are being drawn up for continuation of SLDB's development work within the overall Regional Plan.

In addition to the briefings given by the Study Team and referred to in the Introduction, discussions were held in the Consultants' offices with the following people and organisations:-

- (a) Mr. J. E. Armaingaud of Technisucre, a firm of French sugar consultants, on the possibility of large-scale sugar production in the Study Area. The sharply undulating nature of the majority of the terrain and the absence of a definite dry season were confirmed as serious constraints against this undertaking.
- (b) A group of specialists from the Mitsubishi Corporation on the selection of land for the siting of a large-scale grass planting and animal feed manufacturing project. Unfortunately this, like large scale sugar production, also relies on highly mechanised field operations and because of the lack of large areas of suitable land the Consultants were unable to suggest possible locations for this enterprise.
- (c) Mr. K. M. Tuohy of Tarmac Roadstone Holdings Ltd., of Great Britain, on the possible development of

stone quarries in the region. The need for gravel surfacing of practically all roads, existing and proposed ones, was pointed out. This requirement indicates a huge future demand for road gravel. Mr. Tuohy was shown the localities of existing quarries and outcrops of limestone. Also he was put in touch with the operator of the largest private local quarry.

- (d) Mr. W. E. Webb of Forestal, a Canadian firm of forestry and engineering consultants who was enquiring about the planned coordination between forest exploitation and agricultural development in the Study Area. He was given an indication of the dates when agricultural development is expected to start in the different FAO delineated forest exploitation units.

3. AGRICULTURAL ECONOMICS

The detailed appraisals of oil palm, rubber and rice were completed and those for pepper, essential oils, inland fisheries and beef cattle commenced. An internal memorandum was prepared on the preliminary findings of these evaluations.

Work on the farm survey report continued and a first draft was completed.

As the land capability mapping and area measurements have been completed, the Agricultural Economist has participated in the formulation of plans for the future agricultural development of the area. A preliminary plan indicating cropping patterns and development phasing was prepared for the Action Program area for discussion with members of the Study Team.

During November the Agricultural Economist visited Kuching, Kuala Lumpur and Singapore where a number of Government Departments, Statutory Authorities and commercial concerns were contacted, including the following:-

F.A.M.A. Office (Kuching);
Agricultural Research Centre Semongok;
Sarawak Land Development Board;
Federal Industries Development Authority (FIDA);
Rubber Research Institute of Malaysia;
National Livestock Industry Board;
Federal Land Development Authority (FELDA);
Rubber Industry Smallholders Development Authority
(RISDA);
Chemara Agricultural Services;
Commonwealth Development Corporation Regional Office;
I.C.I. (Malaysia) Sdn. Berhad.

In addition discussions were held with several concerns involved in the supply and manufacture of agricultural plant and equipment for the oil palm and rubber industries, and buyers or dealers handling pepper, cocoa and palm kernels.

Visits were also paid to commercially operated estates and processing units concerned with oil palm, rubber, lowland tea and grass meal. The information obtained in course of these discussions with senior executives of the organisations mentioned, and the data collected during the visits, will be used appropriately for project evaluation and in formulation of development plans for the Study Area.

In addition to meetings in Kuala Lumpur the Agricultural Economist attended the Incorporated Society of Planters' Symposium on Management Development. The proceedings of this meeting highlighted the problems connected with the development of management skills required for large scale agricultural expansion and the need for effective management organisations to administer development programmes.

The Agricultural Economics Section was also involved in discussions on the need for integrating socio-economic studies with soil surveys in Sarawak, as well as in the discussions concerning sugar production in Sarawak, and the potential for grass protein production in the region.

4. FORESTRY

Maps showing preliminary suggestions for areas to become permanent Forest Reserves were made-up from the semi-detailed and broad transect soil survey maps. Then in collaboration with the Forest Department and other members of the team, the combined forestry/agricultural allocation proposals were completed. There is one exception, however, the Niah Forest Reserve boundaries. This concerns the preservation of the Forest Department experimental plots in that Reserve. During the Steering Committee meeting of 4th October a situation was accepted whereby both experimental plots remained in the Forest Reserve. Later the Consultants found that such an arrangement would seriously affect the rate of growth of a Regional Service Centre which, in tentative Regional Development proposals (Model 3 as presented to the Steering Committee), had been sited close to the smaller of the two experimental plots.

The Consultants submitted a paper pointing out this conflict and suggested alternative boundaries between agriculture and future Forest Reserve. This situation included into agriculture the smaller and more recently started of the two experimental plots leaving the larger, older plot within Forest Reserve.

Such an arrangement, it is believed, would enable Model 3, with its rapidly created Regional Service Centre, to be realised while retaining the majority of the valuable forestry research.

The Consultants would appreciate early guidance on this proposal.

Maps showing possible adjustments of the FAO exploitation phasing to fit in with the proposed agricultural phasing were also prepared, and flow charts drafted.

A visit was made to Kuala Lumpur to continue liaison with the FAO Forestry Team and in particular to find what was the basis of the FAO felling cycle calculations. The Silvicultural investigation plots in N₁ah F.R. were also visited. The Diagnostic Sampling final report was completed by the Silviculturist

of the Forest Department, Mr. Lee Hua Seng, and is being studied and prepared for inclusion in the Final Report. The latter is now a major preoccupation and several sections of the Forestry Report have been drafted.

5. ECOLOGY AND CONSERVATION

The Consultant Ecologist joined the Study Team on 17th November.

Preliminary assessment of the Zonation Plan Perspective Plan and other relevant reports and papers indicates that both the Action Programme and longer term Regional Plans are essentially sound from the ecological standpoint. Some suggestions on points of detail are being prepared.

Visits have been made to Loagan Bunut and Lambir Hills Proposed National Parks in the course of reviewing the entire National Parks Programme within the Study Area.

6. WATER RESOURCES

Data collection from the Project network continued for a short time into November in order to assist the transfer of the instruments to operation by Government Departments. The Department of Agriculture agreed on 26th October to take over, in the field, all equipment at the Project's Climate Station at Kabuloh. The Drainage and Irrigation Department agreed on 16th November to a procedure whereby the majority of the field equipment was returned to their stores in Miri. This has now been done; two rain gauges and one river level gauge remain installed in the field.

The Project Hydrologist visited Sarawak in October in order to inspect the field network and commence the final processing and analysis of field data. This work will be completed in London.

The Counterpart Hydrologist returned to Kuching on 20th October, but he has been working part-time in Kuching on analysis of the data collected during the Study.

Visits of inspection were made along the Suai and Niah rivers and to Kabuloh by the Hydrologist, Counterpart Hydrologist and Public Utilities Engineer.

The existing ship-building industry is being studied in order to find out if there is a demand for its expansion within the Study area. Different aspects of shipbuilding and ship repair have been discussed with representatives of local ship yards, with a Transport Division and marine related parts outside Malacca. The basis for an improved shipbuilding industry with various feeder industries (e.g. iron foundry) seems to exist but changes, both in internal organisation and location, might be necessary to improve the profitability of present yards. The investigation of these matters is continuing but is slightly impeded by the confidential character of the information required.

An analysis of housing costs has been initiated as a result of the debate at the last Steering Committee Meeting on the "Housing Problems". With the kind participation of SIDA the Study has been involved in the layout, costing and construction of selected Standard Builders' Houses in the SIDA scheme at Lebu. Already interesting information on price formation of construction work has been obtained and useful experience is accumulated from the site/work analysis which will be carried out during the actual construction phase at the end of this year.

The general economic model presented during the Preparative Field phase of the Study is currently under revision and a modification of the conceptual and the financial analysis is under preparation.

The analysis of the economic consequences of the forestry development is also being prepared jointly by the Consultant Forester and the General Economist. This work will include the preparation of the findings of the SIDA Forestry Team with the

SECTION B
POPULATION AND PRODUCTION

1. GENERAL AND INDUSTRIAL ECONOMICS

Work on identification and description of possible industries has continued during the Report Period. Discussions have been held with various parties on the proposed glass/bottling industry in Bintulu. The existing ship-building industry is being studied in order to find out if there is a basis for its expansion within the Study Area. Different aspects of shipbuilding activities have been discussed with representatives of local ship yards, MARA's Transport Division and medium sized yards outside Malaysia. The basis for an improved shipbuilding industry with attached feeder industries (e.g. iron foundry) seems to exist but changes, both in internal organisation and taxation, might be necessary to improve the profitability of present yards. The investigation of these matters is continuing but is slightly impeded by the confidential character of the information required.

An analysis of housing costs has been initiated as a result of the debate at the last Steering Committee Meeting on the "Memo on Housing Problems". With the kind permission of SLDB the Study has been involved in the layout, costing and construction of selected Standard Settlers' Houses in the SLDB scheme at Lambir. Already interesting information on price formation of construction works has been acquired and useful experience is anticipated from the time/work analysis which will be carried out during the actual construction phase at the end of this year.

The general economic model presented during the Perspective Plan phase of the Study is currently under revision and a coordination of the macro-model and the financial analysis is under preparation.

The analysis of the economic consequences of the forestry development is now being prepared jointly by the Consultant Forester and the General Economist. This work will include the correlation of the findings of the FAO/Forestry Team with the

information obtained by the Consultants and the results and conclusions arising therefrom.

2. FINANCING

Studies and considerations of financing of rural development and preparation of the Action Programme for the period 1975-80 have been the two main tasks of the Financial Economist. A Working Paper on Land Rent, has been finished and presented to various persons for comment. Preliminary discussions of the paper have been held in representatives from The State Planning Unit, State Financial Secretary's Office and The Land and Survey Department. At the same time the papers - 'Sarawak People's Saving and Loan Society' and 'Premium Bonds' were discussed with the Director of The State Planning Unit.

Work on the financial and organisational aspects of small scale industries has continued in collaboration with the Counterpart Economist.

Continuation of the Action Programme work and the structuring and summarising of the financial aspects of the proposed development will be the main tasks in the next work period.

SECTION C
SETTLEMENTS AND INSTITUTIONS

1. REGIONAL AND PHYSICAL PLANNING

Work during the period under review included:-

the Planning Manual for Services and Infrastructure;
the Physical Planning Report; and
Regional Aspects of the Action Programme.

A first draft of the Planning Manual has been completed and circulated to various Departments for comment and correction. The Regional Planner has been to Kuching and Kuala Lumpur to gather these comments and to discuss further development of the Planning Manual. Valuable contributions from the State and Federal Departments are now being included in the final version of the Planning Manual. The Consultants' reasons for producing the Manual and its intended use will be explained at the Steering Committee Meeting in December.

The Physical Planner, before leaving the Study on completion of his assignment prepared a Draft Physical Planning Report. This has been presented to the Department of Lands & Surveys in Kuching and to the Physical Planning Adviser in the Economic Planning Unit, Kuala Lumpur. A final version of the report is now being edited.

A first draft of the regional aspects of the Action Programme, i.e. the population growth of the various settlements, the location of services and infrastructure in the period 1975-80, and the identification of public service and infrastructure projects necessary for the development of settlements, has been completed. This draft has been discussed with the various Government Departments involved and is now under further elaboration.

2. PUBLIC UTILITIES

Work has concentrated on the preparation of Chapters of the Planning Manual for Water Supply, Sewage and Effluent Disposal, Electricity Supply and Telecommunications. At the end of November the Public Utilities Engineer visited Kuching to discuss these drafts with the relevant Government Departments and SESCO.

The preparation of initial projects for the draft development plan is in hand. The Public Utilities Engineer visited Long Lama to inspect the areas of proposed development works.

3. SOCIOLOGICAL ASPECTS

The Sociological report has been circulated and discussed internally, and is now in process of final editing.

WORKING PAPER INDEX

<u>No.</u>	<u>Date</u>	<u>Author</u>	<u>Title</u>	<u>File reference</u>
57	25.10.73	C. J. Mathiesen & F. H. Andersen	Land Rent	MB/3/FINC/GEN

