

Recommendations

Introduction

The population of the Sabah State is small for its area, and the percentage of forests in the total area is large. Northern Sabah has no secondary industry developed and depends on primary industries, especially forestry for economic activity. The current state of forests is characterized by the recent depletion of natural forest resources and the decreasing timber production from natural forests. On the other hand, a large area of grassland and forest land has not been fully used and therefore needs well-planned land use and development. The use of such an area is limited to forestry due to its low soil fertility and steep topography making it unsuitable for agriculture.

Based on the results of the one and a half years study, the study team would like to present the following recommendations in order to implement the proposed forestation project.

1. Forest Management

Forest management systems to be adopted for this project are divided into four, treatment categories, namely (1) afforestation, (2) reforestation, (3) enrichment planting and (4) natural regeneration treatment. These systems will be appropriately applied to forest lands within the coverage of this study as follows:

- (1) Afforestation of grasslands or sites with few standing trees;
- (2) Reforestation of shrubs;
- (3) Enrichment planting at accessible sites with a few succeeding trees of useful species among other low forests; and
- (4) Natural regeneration treatment at sites not subject to enrichment planting among other high, medium and low forests.

Sites for afforestation and reforestation combined will fall under the clear cutting and planting system. In this case, to avoid the uniform planting of a single species in a large area, natural forests will be remained on ridges, along valleys and on steep slopes.

2. Plantation Species

The following species are recommended as major plantation species in view of soil, weather, growth, usage and economics.

Acacia mangium as a fast-growing species is recommended for the clear cutting and planting system mainly for producing pulpwood and MDF chips. If soil conditions are good, *Paraserianthes falcataria* and *Gmelina arborea* should be planted to produce saw timber. If the conditions are too bad to plant *A. mangium*, *A. auriculiformis* should be planted. If the conditions are particularly good, *Tectona grandis* and *Swietenia macrophylla* would be introduced.

For enrichment planting, among other indigenous dipterocarp species, *Dryobalanops lanseolata* (Kapur paji), *Shorea leprosula* (Seraya tembaga) and *S. parvifolia* (Seray punai) are recommended because of their easy seedling supply as well as their fast growth and timber value.

3. Plantation Area

Areas to be planted under this project by species are:

<i>A. mangium</i>	52,000 ha
<i>P. falcataria</i>	7,500 ha
Others	6,500 ha
Subtotal	66,000 ha
Dipterocarp spp.	11,500 ha
Total	77,500 ha

4. Plantation Entity

In this project, plantation entities are:

- (1) SAFODA alone or its joint venture with a private company (or companies) for large-scale forestation
- (2) SAFODA for medium-scale forestation
- (3) Farmers for small-scale forestation.

5. Protection of Plantations

The large plantation where a single species is uniformly planted is susceptible to diseases and insects attack. To prevent such damage as much as possible, one felling area should be limited to such a level as to secure 10,000 m³ of logs, and adjoining areas should not be felled in the same year.

The present countermeasures against forest fires are not sufficient, and more efforts should be made to construct lookout towers, provide fire-fighting equipment, and enlighten people on fire prevention. The prevention of forest fires requires the local people to understand the forestation project by means of participating the project. To promote their understanding, a system of information on the direct and indirect benefits of forestation should be established.

6. Harvesting Method

The size of one felling area is as described in Section 5. In view of forest protection, timber collection by tractor should be avoided, and the high-lead cable logging system should be adopted as much as possible.

7. Use of Timber from Man-made Forests

The major species for this project is *A. mangium* mainly for producing pulpwood and MDF chips. However, logs of high quality among all the logs produced should be used for molding and producing finger joint boards, etc. as far as possible in order to improve their value added. *P. falcataria* and *G. arborea* should be first processed in Northern Sabah as much as possible so that wood processing industries will develop. An industrial park for timber industries could provide force of traction for such development. The Sabah State Government should give incentives for developing such a park in the region for the purpose of the high-tech processing of small-diameter logs from man-made forests rather than the conventional sawing of large-diameter logs from natural forests.

8. Provision of Infrastructure

The implementation of this project requires the provision of infrastructure, including forest roads, bridges and nurseries. Such infrastructure will facilitate the distribution of forest products and other goods and consequently make a great contribution to the regional economic development. Bridging the Bengkoka River is particularly needed. In addition, chip mills and log yards are also needed, and much attention should be paid to these facilities.

9. Environmental Conservation

An additional field survey should be carried out prior to the implementation of this project, and improvement measures should be taken, whenever required. Detail is described in Part III, Chapter VII, Section 3.

10. SAFODA's Role

SAFODA is expected to play an important role in implementing this project. It will be the entity to operate plantations by itself or as one partner of a joint venture and also promote activities, including the extension of tree farm, technical development, and enlightenment on fire prevention. SAFODA will need administrative and financial assistance and support from the Sabah State Government especially when performing necessary activities for unfolding the public functions of forests. As far as enrichment planting is concerned, SAFODA has no sufficient experience and should focus its effort on staffing, training, testing and research.

11. Appropriation

Large and medium-scale forestation will need a huge fund. The Sabah State Government should take a special measure for fiscal investment in or low-interest loans to large-scale forestation and fiscal investment in medium-scale forestation. The government should also appropriate budget for SAFODA's extension activities, technical development and enlightenment on fire prevention in the case of small-scale forestation.

12. Measures for Local People

The implementation of this project is expected to exert various effects on the local people, especially those dependent on shifting cultivation, tree farms, and forestry workers. Possible measures to be considered for them are as follows:

- (1) Settlement expansion and land reform for nontraditional shifting cultivators, and improvement in agricultural system by promoting agriculture and agroforestry for traditional shifting cultivators. In addition, promoting tree farms and expanding job opportunities in the forestry sector.
- (2) In most cases, small-scale forestation may be undertaken by farmers, including shifting cultivators. SAFODA's extension activities are expected for the spread of tree farms. It is assumed that a cooperative association like a forest owners association will be organized to cut and sell planted trees for the benefit of the farmers.
- (3) For forestry labour, as many inhabitants as possible should be employed. However, having fixed labour may create miscellaneous problems for plantation entities in the future. It would be preferable to perform forest operations by contract. Nevertheless, remarkable fluctuations in labour demand are not good for workers, and labour demand should be planned to keep the number of employees at a certain level.

Conclusion

The results of financial analysis of this project indicate that this project is fairly feasible and that the implementation of this project will contribute to not only the development of forestry in Northern Sabah but also the development of processing industries of forest products in the downstream sector. Moreover, it will contribute in environmental improvement in Sabah as a part of tropical rain forest region. Therefore, it is earnestly recommended that this project should be implemented.

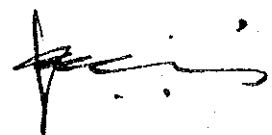
**MINUTES OF THE MEETING
ON
THE INCEPTION REPORT
OF
THE MASTER PLAN STUDY ON FOREST PLANTATION DEVELOPMENT
IN NORTHERN SABAH IN MALAYSIA**

In pursuance to the objective of the Scope of Work for the Master Plan Study on Forest Plantation Development in Northern Sabah in Malaysia (hereinafter referred to as "the Study") signed on October 15, 1992, Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Study Team headed by Mr. Hiroji OKABE and the Advisory Team headed by Mr. Kazuhiko SHIGETA from March 2 to March 26, 1993 and from March 2 to March 12, 1993, respectively.

The Study Team submitted 20 copies of the Inception Report to the Malaysian side on March 3, 1993 and held a series of discussion with the Malaysian authorities and counterparts at Kota Kinabalu, Sabah on March 8 and 9, 1993 and final meeting at Kuala Lumpur on March 11, 1993, headed by Mr. KASSIM BIN SARBANI, Director, Agriculture Section, Economic Planning Unit, Prime Minister's Department. The list of attendance in the final meeting is attached.

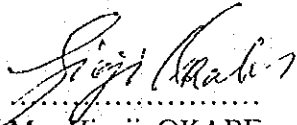
The salient results of the discussion are as follows:

1. The Malaysian side and the Advisory Team and Study Team of JICA discussed the Inception Report and all sides agreed with the contents of the Report thereof with some modification as in Appendix 1 and the records of discussion is attached.
2. The meeting agreed that the study should also look into the aspect of mode of implementation of the master plan.

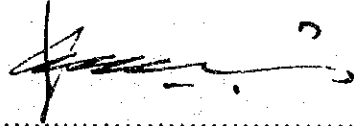


3. Both sides will cooperate with each other for the efficient implementation of the study so that the objective of the study would be attained as described in the Inception Report.

Kuala Lumpur, March 11, 1993

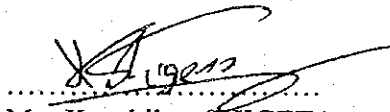


.....
Mr. Hiroji OKABE
Team Leader,
Study Team, JICA



.....
Mr. KASSIM BIN SARBANI
Director, Agriculture Section,
for and on behalf of Director General,
Economic Planning Unit,
Prime Minister's Department,
Malaysia.

Witnessed by



.....
Mr. Kazuhiko SHIGETA
Leader,
Advisory Team, JICA

**MEETING ON THE INCEPTION REPORT OF THE MASTER
PLAN STUDY ON FOREST PLANTATION DEVELOPMENT
IN NORTHERN SABAH IN MALAYSIA
(March 11, 1993)**

Attendance:

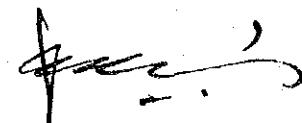
The Malaysian Side

- | | | | |
|----|------------------------|---|---|
| 1. | Mr. Kassim bin Sarbani | - | Director, Agriculture Section,
Economic Planning Unit.
(Chairman) |
| 2. | Mr. Blaise Yapp | - | SAFODA |
| 3. | Mr. Jihek Hj. Basanu | - | Federal Development Department,
Sabah |
| 4. | Miss Aimi Lee Abdullah | - | Ministry of Primary Industries |
| 5. | Mr. Maisuri bin Besri | - | State Development Department, Sabah |
| 6. | Mr. Mohd. Fadzil Akram | - | Economic Planning Unit |
| 7. | Mr. Alias bin Simin | - | Economic Planning Unit
(Secretary) |

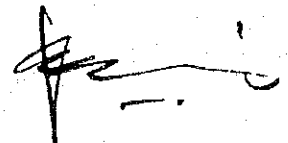
The Japanese Side

- | | | | |
|----|----------------------|---|---------------------------------|
| 1. | Mr. Kazuhiko SHIGETA | - | Leader,
JICA Advisory Team |
| 2. | Mr. Katsusuke OKADA | - | JICA Advisory Team |
| 3. | Mr. Akio KAGAWA | - | JICA Advisory Team |
| 4. | Mr. Hiroji OKABE | - | Leader,

JICA Study Team. |

5. Mr. Kiyoshi FUJII - JICA Study Team.
6. Mr. Makio SHICHIJO - Embassy of Japan
7. Mr. Hidenao SAWAYAMA - Embassy of Japan
8. Mr. Toshiyuki ARITA - JICA Office, Kuala Lumpur.



Modifications to the Inception Report

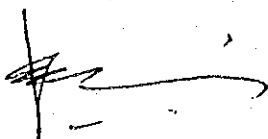
Reference to the Inception Report	Modifications made (as underlined)
1. Page 1, para 1	The State of Sabah, having a population of about <u>1.73</u> million
2. Page 1, para 3	Natural forest resources in Sabah has been decreased due to a drastic increase of logging. The Kudat district located in Northern Sabah, a jurisdiction of <u>Regional Forestry Office</u> has a forest percentage of 30% and 70% of which is subjected to <u>shifting cultivation</u> ,
3. Page 1, para 4 (last sentence)	SAFODA selected Acacia Mangium as a fast growing species for reforestation which has so far been carried out in an area of about <u>4,000 ha under the World Bank loan and 10,000 ha under the State Grant.</u>
4. Page 2, item 2(i)	Forestry activities on sustainable <u>basis</u> with consideration in environment.
5. Page 3, item 4(ii)	Collection of existing materials and <u>information on</u> policies concerning forests, environments and regional development, conditions of nature and socio-economy, the existing state of land use, vegetation and soil, etc.

MINUTES OF MEETING
OF
THE STEERING COMMITTEE
ON
THE MASTER PLAN STUDY FOR THE FOREST PLANTATION DEVELOPMENT
IN NORTHERN SABAH, MALAYSIA

DATE : JUNE 6, 1994
VENUE : ECONOMIC PLANNING UNIT,
PRIME MINISTER'S DEPARTMENT,
DAMANSARA TOWN CENTRE,
KUALA LUMPUR.
TIME : 9.40 A.M.

In pursuance to the objective of the Scope of Work for the Master Plan Study on Forest Plantation Development in Northern Sabah, Malaysia (hereinafter referred to as "the Study") signed on October 15, 1992, Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Study Team headed by Mr. Hiroji OKABE and the Advisory Team headed by Mr. Katsusuke OKADA from May 30 to June 18, 1994 and from May 30 to June 7, 1994, respectively.

The Study Team submitted 20 copies of the Interim Report to the Malaysian side on May 31, 1994 and held a Technical Committee meeting with the Malaysian authorities and counterparts at Kota Kinabalu, Sabah on June 2, 1994 and a Steering Committee meeting at Kuala Lumpur on June 6, 1994, headed by Mr. Kassim Bin Sarbani, Director, Agriculture Section, Economic Planning Unit, Prime Minister's Department. The list of attendance in the Steering Committee meeting is as attached in Annex I.



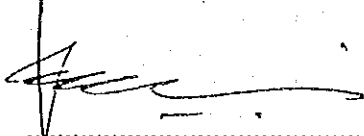
The salient results of the discussion are as follows:

1. The Malaysian side and the Study and Advisory Team of JICA discussed the Interim Report and also the Notes of Discussion of the Technical Committee meeting. All sides agreed with the contents of the Report and also accepted the Notes of Discussion of the Technical Committee Meeting with some modifications as in Appendix 1.
2. Both sides will cooperate with each other for the efficient implementation of the Study so that the objectives of the Study would be attained.

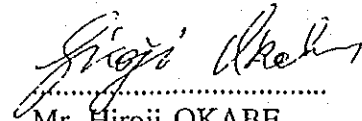
June 6, 1994

Kuala Lumpur, Malaysia.

Signed by,

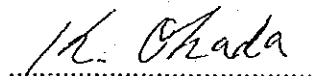


.....
Mr. Kassim Bin Sarbani
Director, Agriculture Section,
for Director General,
Economic Planning Unit,
Prime Minister's Department,
Malaysia.



.....
Mr. Hiroji OKABE
Team Leader,
Study Team, JICA.

Witnessed by,



.....
Mr. Katsusuke OKADA
Leader,
Advisory team, JICA.

sgrent(M)

List of Attendance:

- | | | |
|-----|---------------------------|--|
| 1. | Mr. Kassim bin Sarbani | Economic Planning Unit,
(Chairman). |
| 2. | Ms. Molly Koe | Ministry of Primary Industries. |
| 3. | Mr. Maisuri bin Besri | State Department of Development,
Sabah. |
| 4. | Mr. Francis George Otigil | SAFODA. |
| 5. | Mr. Gimson Stanley | SAFODA. |
| 6. | Mr. Hidenao SAWAYAMA | Embassy of Japan, Malaysia. |
| 7. | Mr. Katsusuke OKADA | JICA Advisory Team. |
| 8. | Mr. Akio KAGAWA | JICA Advisory Team. |
| 9. | Mr. Hiroji OKABE | JICA Study Team. |
| 10. | Mr. Susumu MIYATAKE | JICA Study Team. |
| 11. | Mr. Toshiyuki ARITA | JICA, Malaysia Office. |
| 12. | Mr. Ramli bin Haji Hasan | Economic Planning Unit. |

x1dccc(M).




NOTES OF MEETING OF THE STEERING COMMITTEE ON
THE INTERIM REPORT OF THE MASTER PLAN STUDY
FOR THE FOREST PLANTATION DEVELOPMENT IN
NORTHERN SABAH, MALAYSIA, HELD ON JUNE 6, 1994
AT 9.40 A.M. AT THE ECONOMIC PLANNING UNIT,
PRIME MINISTER'S DEPARTMENT,
DAMANSARA TOWN CENTRE, KUALA LUMPUR

A. INTRODUCTION

The chairman welcomed members of the JICA Study team and JICA Advisory team and also the representatives from the Malaysian side. The main purpose of the meeting was to discuss the Interim Report of the Study as well as other additional views raised in the Steering Committee meeting.

B. COMMENTS

The Steering Committee meeting accepted the Notes of Discussion of the Technical Committee meeting with some modifications and additional comments as follows:-

1. On the cover of the Interim Report, instead of Department of Prime Minister, the appropriate name should be the "Government of Malaysia".
2. On page 45, item 3-5, it was agreed that the name of the Prime Minister should be appropriately changed to "The Government of Malaysia".
3. On page 72, para 9.2(1) of the Interim Report, the Steering Committee meeting felt that it was not appropriate to identify the tribe involved based on religion. Instead it was suggested that the identification of the people affected should be based on 'community' only .

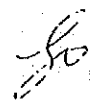
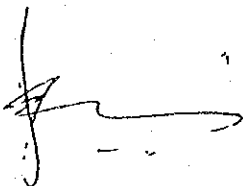
Besides the above modifications to the Notes of Discussion of the Technical Committee meeting, other additional comments raised by the Steering Committee meeting on the Interim Report were:-

1. The Interim Report should take into account on the number of families affected in the proposed project. However the Study team is not in a position to determine the number of families affected in the proposed project.
2. The Cost-Benefit Analysis and assumptions should be stated in detail and the Net Present Value (NPV) of the project should also be stated.
3. Participation of the private sector in the implementation of the proposed project need to be explored in detail. The Study team take note of the request.
4. The harvesting techniques should take into account of the latest technology currently practised in the world. The study team agreed to the proposal.

C. CONCLUSION

The chairman thanked the members of the meeting for their active participation in the discussions.

The meeting was adjourned at 12.10 p.m.

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**MINUTES OF MEETING
OF
THE STEERING COMMITTEE
ON
THE MASTER PLAN STUDY FOR THE FOREST PLANTATION DEVELOPMENT
IN NORTHERN SABAH, MALAYSIA**

DATE : SEPTEMBER 26, 1994

VENUE : ECONOMIC PLANNING UNIT,
PRIME MINISTER'S DEPARTMENT,
JALAN DATO' ONN,
50502 KUALA LUMPUR.

TIME : 10.00 A.M.

In pursuance to the objective of the Scope of Work for the Master Plan Study on Forest Plantation Development in Northern Sabah, Malaysia (hereinafter referred to as "the Study") signed on October 15, 1992, Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Study Team headed by Mr. Hiroji OKABE and the Advisory Team headed by Mr. Kazuhiko SHIGETA from September 19 to September 28, 1994.

The Study Team submitted 20 copies of the Draft Final Report to the Malaysian side on September 20, 1994 and held a Technical Committee meeting with the Malaysian authorities and counterparts at Kota Kinabalu, Sabah on September 22, 1994 and a Steering Committee meeting at Kuala Lumpur on September 26, 1994, headed by Mr. Md. Rosnan Bin Sulaiman, Director, Agriculture Section, Economic Planning Unit, Prime Minister's Department. The list of attendance in the Steering Committee meeting is as attached in Annex I.

The salient results of the discussion are as follows:

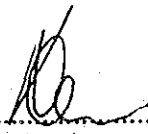
1. The Malaysian side and the Study and Advisory Team of JICA discussed the Draft Final Report and also the Notes of Meeting of the Technical Committee (as attached). All sides agreed and accepted the contents of the Draft Final Report and the Notes of Meeting of the Technical Committee with some modifications as in Appendix I.
2. As a follow up to the Master Plan Study, the Government of Malaysia (GOM) requested JICA to undertake a feasibility study for a pilot project in the area. The Study and Advisory Team of JICA took note the request from the GOM.

The Government of Malaysia extended its great appreciation to the Japanese Government and JICA for undertaking the Master Plan Study.

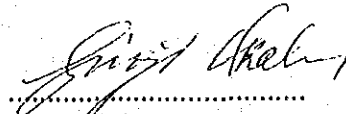
September 26, 1994

Kuala Lumpur, Malaysia.

Signed by,

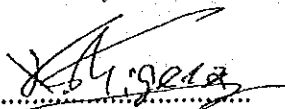


.....
 Mr. Md. Rosnan Bin Sulaiman
 Director, Agriculture Section,
 for Director General,
 Economic Planning Unit,
 Prime Minister's Department,
 Malaysia.



.....
 Mr. Hiroji OKABE
 Team Leader,
 Study Team, JICA.

Witnessed by,



.....
 Mr. Kazuhiko SHIGETA
 Leader,
 Advisory Team, JICA.

AMENDMENTS

1. The title of the Minutes of Meeting to be changed to the "Notes of Meeting of the Fifth Technical Committee on" .
2. Under the list of attendance, Mr. Naoya Ikeda to be listed as no. 9 and Mr. Hiroyuki Abe to be listed as no. 10.
3. For Mr. Hiroji Okabe is the JICA Study Team and not the JICA Malaysia Office.
4. Item 7, 1st sentence (last page), the word 'forsee' be spelt as 'foresee', and the second sentence, after the word 'increase', be followed by 'and therefore push'.
5. Item 9 second sentence, the word 'mentioned' be replaced by 'mention' and the word 'Suppose.....' be replaced by 'In the event'.
6. On the last page, instead of 23rd September, 1994 be changed to 22nd September, 1994.

ANNEX I

AttendanceThe Malaysian Side

- | | | |
|-----|---------------------------------------|---|
| 1. | Mr. Md. Rosnan b. Sulaiman | Director Agriculture Section,
Economic Planning Unit
(Chairman) |
| 2. | Mr. Blaise Yapp | SAFODA
(General Manager) |
| 3. | Tuan Hj. Md. Yasin bin
Hj. Ibrahim | Federal Development
Department, SABAH. |
| 4. | Mr. Jusoh bin Salleh | Ministry of Primary Industry |
| 5. | Mdm. Monica Chic | State Development Department, Sabah |
| 6. | Mr. Francis Otigil | SAFODA |
| 7. | Mr. Gimson Stanley | SAFODA |
| 8. | Mr. Mohd. Sani b. Mistam | Economic Planning Unit
(Extended Assistant Sector) |
| 9. | Mr. Mohd. Fadzil b. Akram | Economic Planning Unit
(Agriculture Section) |
| 10. | Mr. Ramli b. Hj. Hasan | Economic Planning Unit
(Agriculture Section). |

The Japanese Side

- | | | |
|----|----------------------|------------------------------|
| 1. | Mr. Kazuhiko SHIGETA | Leader
JICA Advisory Team |
| 2. | Mr. Naoya IKEDA | JICA Advisory Team |
| 3. | Mr. Hiroyuki ABE | JICA Advisory Team |
| 4. | Mr. Hiroji OKABE | Leader
JICA Study Team |

5. Mr. Susumu MIYATAKE JICA Study Team
6. Mr. Kenzo TAJIMA JICA Study Team
7. Mr. Kiyoshi FUJII JICA Study Team
8. Mr. Takaki TOYODA JICA Study Team
9. Mr. Hidenao SAWAYAMA Embassy of Japan
10. Mr. Toshiyuki ARITA JICA, Malaysia Office, Kuala Lumpur.

22/06/2014

**RECORD OF DISCUSSION OF THE FIFTH
TECHNICAL COMMITTEE MEETING ON
THE DRAFT FINAL REPORT OF THE
MASTER PLAN STUDY FOR THE FOREST
PLANTATION DEVELOPMENT IN
NORTHERN SABAH MALAYSIA HELD ON
THE 22ND SEPTEMBER, 1994 AT 9.00 A.M.
SAFODA'S HQ. CONFERENCE ROOM, K.K.**

IN ATTENDANCE

1. Mr. Blaise Yapp
(Chairman) - SAFODA
2. Datuk William Shim - Office of Natural Resources
3. Mr. Eric Juin - Forestry Department
4. Mr. Dahlan Hj. Tengah - Lands & Surveys Department
5. Mr. Juif Adzim - Ministry of Agriculture &
Fisheries
6. Mr. Francis G. Otigil - SAFODA
7. Mr Gimson Stanley
(Secretary) - SAFODA

JAPANESE MISSION

8. Mr. Kazuhiko Shigeta
(Advisory Team Leader) - JICA Advisory Team
9. Mr. Hiroyuki Abe - JICA Advisory Team
10. Mr. Naoya Ikeda - JICA Advisory Team
11. Mr. Toshiyuki Arita - JICA Malaysia Office
12. Mr. Hiroji Okabe
(Study Team Leader) - JICA Malaysia Office

13. Mr. Susumu Miyatake - JICA Study Team
14. Mr. Kenzo Tajima - JICA Study Team
15. Mr. Kiyoshi Fujii - JICA Study Team
16. Mr. Takaki Toyoda - JICA Study Team

A. INTRODUCTION

The Chairman welcomed members of the Technical Committee of the Master Plan Study, the Advisory Team and the Study Team. Due to an unforeseen circumstances, representatives from the Jabatan Pembangunan Negeri, Jabatan Pembangunan Persekutuan and the Consul of Japan were not able to attend the meeting. The main purpose of the meeting was to discuss the draft final report of the Master Plan Study. The Leader of the Advisory Team expressed a sincere thanks to the Malaysian side for the cooperation on the completion of the Master Plan study.

The Leader of the Study Team said that without the close cooperation between the study Team and the Malaysian side the draft final report would not be completed in time. The final report would be ready by November 1994. A handout on the correction of the draft final report was circulated. With that he briefed on the contents of the draft final report.

B. Comments

The Technical Committee comments were as follows :

1. It was opined that the conclusion on page 248 should be the recommendation. The report did not state any recommendations. For example to develop a large scale plantation, the study should recommend whether the development would be in a form of Joint-Venture or SAFODA to develop it alone. The same goes to the medium and smaller scale plantations.

The Study Team responded saying that it was beyond the Scope of Work. The committee argued that this was not outside the Scope of Work. It should be mentioned in passing as it was still part of the Scope of Work.

2. On page 3, para 1, line 3, the statement "SAFODA's existing project sites " should be change to "Bengkoka Project.

On the same page, para 4, line 3, the term "granadiomite" should be "granodiorite". The term "adamellite" need to be checked. On para 5, line 6, the work "lichets" should be "lichens".

3. On page 5, para 1, last sentence which reads as "National estates of this crop are concentrated in Kota Marudu, Kota Belud and Pitas" should be rewritten as "Plantations of this crop are concentrated in Kota Marudu and Pitas."
4. It was found out that the report contained a repetitions of statement. For example the total areas of the Study covers an area of about 323,000 ha out of the total area of about 540,000 ha. This statement has been found to be repeated in the report., The same goes to the statement on the population of the area.
5. The committee seek clarification on the data pertaining to the rainfall in the study area as stated in page 32. The source of the data was taken from "The Land Capability Classification of the West Coast Residency, Sabah Malaysia". This was compiled back in 1971. Changes in the sorrounding environment of the area for the past few years due to logging activities might have altered the rainfall pattern. The Study Team agreed with the views and certainly they needed the latest information from the Malaysian parts.
6. On page 158, the committee seek clarification, on the harvesting method by using Highlead skidding. The use of the system may not be environmentally friendly. It was suggested that the skyline method might be more practical and environmentally sound system.

The Study Team responded by saying that skyline system was not practical in that study area. This was because the land is undulating and not very steep which warrants the use of the Highlead skidding. This system is much more better than using bulldozers.

7. On page 227, the committee seek clarification on the marketability and demand for the plantation logs.

The Study Team expressed their views that the wood processing industry development is very important to ensure the utilization of the plantation logs. The decline in the log supply from the natural forest would force the industry to utilize the plantation logs with changes in the wood processing technology.

With the advent of new technology they foresee that the utilization of plantation logs would increase, pushing the price up in the future. Another factor was that plantation logs were of single species and there would be a uniformity in quality.

8. On page 248, para 2, the committee asked what would be the implication if the State Government should levy royalty to the plantation logs in whatever form.

The Study Team viewed that the State Government should not levy royalty on the plantation logs. Their argument was that money was invested in the plantation development. Unlike the natural forest where the tree grow by itself, there was no investment. So it is only logic that natural forest logs should be levied with royalty. And also to levy royalty on plantation logs would discourage investors to invest in forest plantations.

9. The committee also seek clarification on the land cost involved in the project. There was no mentioned of land cost in the report. Suppose there's a proposal to develop the area commercially by means of Joint-Venture it would be difficult to assess what would be the land cost.

The Study Team responded saying that in their financial analysis assumed that no land cost is involved since the land belongs to the Government.

C. OTHER MATTERS

There being no other business, the meeting adjourned at 10.45 a.m.

23rd September, 1994.

Attachment 2

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