

添付資料 1

SUMMARY OF DISCUSSION
ON
SCOPE OF WORK FOR MASTER PLAN
OF
THE CENTRAL SOUTH SULAWESI WATER
RESOURCES DEVELOPMENT PROJECT

The Japanese Team (JICA) and the Directorate of Planning and Programming, the Directorate General of Water Resources Development, Ministry of Public Works and Electric Power, the Government of the Republic of Indonesia, exchanged their views concerning the draft of the Scope of Work for Master Plan of the Central South Sulawesi Water Resources Development Project (hereinafter called "the Master Plan") prepared by the Japanese Team (refer to the attachment I and II).

Both sides agreed with some minor changes in the draft of the Scope of Work (refer to the Attachment III) and with the followings understanding.

On-the-job training of Indonesian Counterparts.

Every individual expert shall prepare technical note on the subject matter he will perform. This technical note will be used as teaching materials for everybody.

Transfer of knowledge and technical know-how to the Indonesian counterparts in the course of the main works in Japan.

The detail training programme will be arranged during the main field survey of the Master Plan.

The Government of the Republic of Indonesia requested the main works (the review, compilation and analysis of survey data) would be carried out in Indonesia according to the current policy.

R e p o r t.

In one month advance of the commencement of the main field survey work of the Master Plan, the JICA will submit the "Experts Assignment Schedule" to the Government of Indonesia.

Progress Report.

Progress report will include the formulation of recommended Terms of Reference for selected individual project and the formulation of recommended activities for further study.

Main field Survey.

The main field survey will be finished by the end of February, 1979 except the inland fisheries survey.

If the survey of inland fisheries will be completed before the end of May 1979, the review, compilation and analysis of surveys in Japan will be commenced earlier than scheduled.

Monthly Report.

During the field survey of the Master Plan, the survey team has to submit the monthly report to the Directorate of Planning and Programming, the Directorate General of Water Resources Development, Ministry of Public Works and Electric Power.

Terrestrial and geological survey, material and soil test.

Detail lists of above mentioned survey and test will be indicated in Inception Report.

The boring machine for geological survey will be provided by the JICA if necessary.

Jakarta, December 9, 1977.

(SIGNATURE)

MR. Y. KUNIHIRO
Team Leader of the
Japanese Team.

(SIGNATURE)

IR. BOESONO BOEDIDARMO
Director of the Directorate
of Planning and Programming.

ATTACHMENT I.

D A T E : Wednesday, December 7, 1977.

Thursday, December 8, 1977.

T I M E : Wednesday : 9.30 - 13.30 WIST.

Thursday : 9.15 - 10.30 WIST.

ATTENDANTS :

Indonesia

Ir. Boesono Boedidarmo

Ir. Mardjono

Drs. Attamini

Ir. S.P. Kuntjoro Jakti

Ir. Hutomi

Ir. Djoko Sarjono

Ir. Sudiyanto

Drs. Azis Bocking

Ir. Rusbini

Ir. Syamsul Arida

Ir. Hilman Kosasih

Ir. Widadi Wahyu

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M. Watanabe

N. Nakahiro

A. Noda

J a p a n

Yasuhiko Kunihiro

Yoshiaki Tsukamoto

Mizuho Imamura

Tetsuro Miyazato

Yuji Okazaki

Embassy of Japan

Shigeru Tamesue

ATTACHMENT II.

SCOPE OF WORK
ON
MASTER PLAN STUDY
FOR
THE CENTRAL SOUTH SULAWESI WATER RESOURCES DEVELOPMENT PROJECT
IN THE REPUBLIC OF INDONESIA

I. INTRODUCTION

In response to the request made by the Government of Indonesia for technical cooperation in conducting a master plan study for Central South Sulawesi Water Resources Development Project, the Government of Japan agreed to offer the service of the Japanese Experts Team for the master plan study to be carried out in the project site and the training of local staff of the Indonesian Government in the course of the works and the Japan International Cooperation Agency (JICA) will conduct the study. The present document sets forth the Scope of Work in regard to the above mentioned works to be conducted in close cooperation with the Government of Indonesia.

II. OUTLINE OF THE STUDY

II-1. Objective of the Study

The objective of the study are;
to conduct survey and study for preparing a master plan for Central South Sulawesi Water Resources Development.

II-2. The Survey Area

The survey area is an area of about 8,000 km² along the Walanae, the Bila and the Cenranae River which flow into or out of Lake Tempe.

II-3. Scope of Works

The activities undertaken in the survey and study are divided into two main programs namely;

Main works program

Transfer of knowledge program

1. Main works program is specified as follows;

1-1. Mapping and Surveyings

Necessary surveyings will be conducted by use of the 1:25,000 topographic map prepared by JICA.

1-2. Data collection

- a) Additional data of hydrology and hydraulics
- b) Meteorology
- c) Geology
- d) Agriculture
- e) Agro-economy
- f) Regional economy
- g) Inland fishery
- h) Forestry
- i) Others

1-3. Hydrological and hydraulic survey

- a) River water discharge
- b) Rainfall and evaporation
- c) Water balance - demand and supply of water
- d) Analysis of runoff mechanism and high water discharge
- e) Sediment and siltation
- f) Salinity intrusion on the coast line

1-4. Soil survey

- a) Soil map
- b) Land classification map
- c) Land use map

- 1-5. Geological survey
 - a) Geological survey for necessary sites
- 1-6. Construction material study
 - a) Study on construction materials for necessary sites
- 1-7. Regional economic survey
- 1-8. Agriculture
 - a) Land use
 - b) Land ownership
 - c) Cropping pattern
 - d) Productivities
 - e) Labor forces
 - f) Input materials
 - g) Farming method
 - h) Others
- 1-9. Agro - economic survey
 - a) Processing
 - b) Agricultural price and products
 - c) Distribution system
 - d) Farmer's way of life and farming
 - e) Agricultural economic index
 - f) Marketing
 - g) Extension services
 - h) Crediting
- 1-10. Irrigation and drainage study
 - a) Existing irrigation and drainage system
 - b) Existing irrigation and drainage facilities
 - c) Quantities of intake water
 - d) Water management
 - e) Estimation of irrigation water requirement
 - f) Formulation of extension plan of paddy field

- 1-11. Flood control study
 - a) Survey and study of inundated area and flood damage
 - b) Carrying capacity of river channel
 - c) Design high water level
 - d) Formulation of the basic layout of flood control structures
- 1-12. Land conservation study
 - a) Erosion and sand control
 - b) Reforestation
- 1-13. Inland fishery survey and study
- 1-14. Optimum utilization studies of available water resources
- 1-15. Economic analysis and evaluation
 - a) Estimation of construction costs and benefits of each project
 - b) Economic evaluation of the project
- 1-16. Formulation of Master Plan
 - a) Study on technical and economic priority order of individual project
2. Transfer of knowledge program is as follows
 - 2-1. On-the-job training of Indonesian counterparts.
 - 2-2. Transfer of knowledge and technical know-how to the Indonesian counterpart in the course of the main works in Japan.

III. REPORT

1. Inception Report

The JICA will prepare and submit to the Government of Indonesia 20 copies of Inception Report (in English) at the beginning of the main field survey.

2. Progress Report

The JICA will prepare and submit to the Government of Indonesia 20 copies of Progress Report (in English) at the end of the main field survey.

3. Interim Report

The JICA will prepare and submit to the Government of Indonesia 20 copies of Interim Report (in English) within 17 months after the commencement of the main field survey. The Government of Indonesia will provide the JICA with its comments within 30 days after the receipt of the Interim Report.

4. Draft Final Report

The JICA will prepare and submit to the Government of Indonesia 20 copies of Draft Final Report (in English) within 4 months after the receipt of the comments of the Interim Report. The Government of Indonesia will provide the JICA with its comments within 30 days after the receipt of the Draft Final Report.

5. Final Report

The JICA will prepare and submit to the Government of Indonesia 30 copies of Final Report within 60 days after the receipt of the comments on the Draft Final Report.

IV. UNDERTAKINGS OF THE GOVERNMENT OF THE REPUBLIC OF INDONESIA

For the purpose of the study, the Government of Indonesia will cooperate to the extent possible by:

1. Providing the team with the data and information concerned for its use in connection with the study.
2. Carrying out such works as terrestrial survey, geological survey, material and soil test, hydrological observation.
3. Assuring the security of the team to the extent possible.

4. Exempting from taxes and duties for machinery equipment and materials necessary for the study.
5. Assigning counterpart personnel (officials/engineers) to the team during the survey period.
6. Providing the team with suitable office space and office equipment necessary for the study.
7. Making arrangements for accommodations and field office required for the study work, when necessary.
8. Providing vehicles with drivers (four wheel drives Jeep).
9. Allowing to take all data and materials concerned including photo films out of the Republic of Indonesia to Japan by the Japanese study team according to the security regulation.
10. Providing any other available facilities that may be required for the execution of the study.

V. UNDERTAKINGS OF THE GOVERNMENT OF JAPAN

For the purpose of the study, the Government of Japan will assist to the extent possible:

1. Sending the Japanese expert team to conduct the survey.
2. Transferring the knowledge to the Indonesian counterparts during the period of the study.
3. Arranging the equipment necessary for the efficient conduct of the study.

VI. STUDY SCHEDULE

Refer to the attached Sheet 1.

JCA