7. Scope of Work

SCOPE OF WORK

FOR

THE STUDY ON WATER SUPPLY AND SANITATION

IN

LINDI AND MTWARA REGIONS

AGREED UPON BETWEEN

MINISTRY OF WATER

AND

JAPAN INTERNATIONAL COOPERATION AGENCY

Dar es Salaam, August 27, 1999

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#### I. INTRODUCTION

In response to the request of the Government of the United Republic of Tanzania (hereinafter referred to as "the Government of Tanzania"), the Government of Japan has decided to conduct the Study on Water Supply and Sanitation in Lindi and Mtwara Regions (hereinafter referred to as "the Study") in accordance with the relevant laws and regulations in force in Japan.

Accordingly the Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation programs of the Government of Japan, will undertake the Study in close cooperation with the authorities concerned of the Government of Tanzania.

The present document sets forth the scope of work with regard to the Study.

## II. OBJECTIVES OF THE STUDY

. The objectives of the Study are:

- 1. to review the existing water master plan,
- to carry out feasibility study for the priority projects identified in the Master Paan Review, and
- 3. to carry out technology transfer to the Tanzanian counterpart personnel in the course of the Study.

## III. STUDY AREA

The Study will cover Mtwara and southern part of Lindi Regions.

## IV. SCOPE OF THE STUDY

In order to achieve the objectives mentioned above, the Study will count that all main and the study will

Review of 1986 Naster Plan
 (1) Collection, review and analysis of related data and information

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- a) socio-economic conditions
- b) natural conditions (topographic maps, hydrogeologic maps, meteorological data, hydorogeological data, geologic data, aerial photos) '
- c) other projects relevant to the Study
- d) existing well data and existing water supply systems
- e) sanitary condition
- f) present condition and policy related to Women In Development (WID)
- g) laws, regulations and policies on water resource development and water supply and sanitation
- h) other relevant data and information
- (2) Diagnostic survey of existing water supply facilities
- (3) Assessment of water potential
  - a) investigation of existing well
  - b) review of hydrogelogical condition
  - c) review of water potential
- (4) Water demand projection
- (5) Confirmation of Master Plan framework
- (6) Revision of water supply facility plan
- (7) Revision of operation and maintenance plan and institutional development plan
- (8) Public and individual hygiene awareness improvement plan
- (9) Cost estimation and evaluation
- (10) Initial Environmental Evaluation (IEE)
- (11) Selection of priority project(s)
- 2. Feasibility Study on the Priority Project
  - (1) Sociological survey on present condition of the priority area
    - a) social and economic aspects
    - b) condition of water use and sanitation
    - c) culture and habits on water supply and sanitation
    - d) people's awareness on health and hygiene
    - e) people's affordability to pay for better water supply services
    - f) women's situation in society
  - (2) Groundwater resources potential survey
    - a) field investigation

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- b) geophysical exploration
- c) test well drilling, well logging, pumping test
- d) water quality analysis
- e) evaluation of groundwater potential
- (3) Confirmation of planning framework
- (4) Formulation of water supply facility plan
- (5) Preliminary design of the facilities
- (6) Formulation of operation and maintenance plan and institutional development plan
- (7) Cost estimation and financial plan
  - (8) Evaluation
    - a) financial and economic evaluation
    - b) institutional and technical evaluation
    - c) social evaluation
    - d) environmental impact assessment
  - (9) Selection of pilot study project(s)

## 3. Pilot Study

- (1) Installation of model facilities
- (2) Pilot study on people's participation in planning and construction
- (3) Training for operation and maintenance of water supply facilities and sanitary education
- (4) Monitoring of the pilot project
  - a) observation of changes in customs and behavior of water use and hygiene practice
  - b) monitoring the operation and maintenance activities
  - c) evaluation of the pilot projects and feeding back of the lessons learned to developme plan

#### V. SCHEDULE OF THE STUDY

The Study will be carried out in accordance with the attached tentative schedules.

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#### VI. REPORTS

JICA will prepare and submit the following reports in English to the Government of Tanzania.

- Inception Report
   Twenty (20) copies at the beginning of the first work period in Tanzania
- Progress Report (1)
   Twenty (20) copies at the end of the first work period in Tanzania
- 3. Interim Report Twenty (20) copies at the beginning of the second work period in Tanzania
- 4. Progress Report (2)
  Twenty (20) copies at the end of the second work period in Tanzania
- 5. Draft Final Report
  Twenty (20) copies at the third work period in Japan.
  The Government of Tanzania will present its comments to JICA within one (1) month after the receipt of the Draft Final Report.
- 6. Final Report Fifty (50) copies within two (2) months after JICA's receipt of comments on the Draft Final Report

## VII. UNDERTAKINGS OF THE GOVERNMENT OF TANZANIA

- To facilitate the smooth conduct of the Study, the Government of Tanzania shall take necessary measures:
  - (1) to secure the safety of the Japanese study team;
  - (2) to permit the members of the Japanese study team to enter, leave and sojourn in Tanzania for the duration of their assignment therein, and exempt them from foreign registration

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requirements and consular fees;

- (3) to exempt the members of the Japanese study team from taxes, duties, and other charges on equipment, machinery and other materials brought into Tanzania for the conduct of the Study;
- (4) to exempt the members of the Japanese study team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Japanese study team for their services in connection with the implementation of the Study;
- (5) to provide necessary facilities to the Japanese study team for remittance as well as utilization of the funds introduced into Tanzania from Japan in connection with the implementation of the Study;
- (6) to secure permission for entry into all areas concerned for the implementation of the Study within the laws and regulations in force in Tanzania;
- (7) to secure permission for the Japanese study team to take all data and documents to Japan, as necessary for analysis during the implementation of the Study within the laws and regulations in force in Tanzania, and
- (8) to provide medical services as needed. Its expenses will be chargeable to members of the Japanese study team.
- The Government of Tanzania shall bear claims, if any arise against members of the Japanese study team resulting from, occurring in the course of, or otherwise connected with the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the members of the Japanese study team.
- 3. Ministry of Water (hereinafter referred to as "MOW") shall act as a counterpart agency to the Japanese study team and also as a coordinating body in relations with other governmental and non-governmental organizations concerned for the smooth implementation of the Study.
- 4. MOW shall, at its own expense, provide the Japanese study team with the following, in cooperation with other organizations

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## concerned:

- (1) available data and information related to the Study,
- (2) counterpart personnel,
- (3) suitable office space with necessary equipment in Dar es Salaam and cities to be studied, and
- (4) credentials or identification cards.

## VIII. UNDERTAKINGS OF JICA

For the implementation of the Study, JICA shall take the following measures:

- (1) to dispatch, at its own expense and on a grant basis, study teams to Tanzania, and
- (2) to pursue technology transfer to the Tanzanian counterpart personnel in the course of the Study.

## IX. OTHERS

JICA and MOW shall consult with each other in respect of any matter that may arise from or in connection with the Study.

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# TENTATIVE SCHEDULE

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