
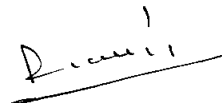


RECORD OF DISCUSSIONS
ON
THE PROJECT FOR THE STRATEGIC MASTER PLAN UNDER
SEWERAGE SECTOR
IN
DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
AGREED UPON BETWEEN
NATIONAL WATER SUPPLY AND DRAINAGE BOARD
AND
JAPAN INTERNATIONAL COOPERATION AGENCY

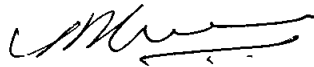
Colombo, 31, August, 2015



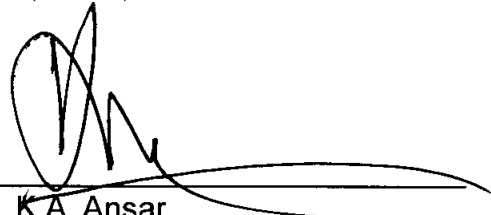
Mr. Kiyoshi Amada
Chief Representative
JICA Sri Lanka Office



Mr. R. M. P. Rathnayake
Director General
Department of External Resources,
Ministry of Policy Planning, Economic
Affairs, Child, Youth & Cultural Affairs



Eng. Karunasena Hettiarachchi
Secretary
Ministry of Urban Development, Water
Supply and Drainage



Eng. K.A. Ansar
Chairman
National Water Supply and Drainage
Board

In response to the official request of the Government of Democratic Socialist Republic of Sri Lanka (hereinafter referred to as "GOSL") to the Government of Japan, the Japan International Cooperation Agency (hereinafter referred to as "JICA") held a series of discussions with National Water Supply and Drainage Board of Sri Lanka (hereinafter referred to as "NWSDB") and relevant organizations to develop a detailed plan of the Project for the Strategic Master Plan under Sewerage Sector (hereinafter referred to as "the Project").

Both parties agreed the details of the Project and the main points discussed as described in the Appendix 1 and the Appendix 2, respectively. With regard to "Environmental and Social Consideration Study" which will be implemented in the Project, both parties agreed the Terms of Reference (TOR) as shown in the Appendix 3.

Both parties also agreed that NWSDB, the counterpart to JICA, would be responsible for the implementation of the Project in cooperation with JICA, coordinate with other relevant organizations and ensure that the self-reliant operation of the Project is sustained during and after the implementation period in order to contribute toward social and economic development of Democratic Socialist Republic of Sri Lanka.

The Project will be implemented within the framework of the Agreement on Technical Cooperation signed on 12 October 2005 (hereinafter referred to as "the Agreement") and the Note Verbales exchanged 9 July 2014 between the Government of Japan (hereinafter referred to as "GOJ") and GOSL.

Appendix 1: Project Description

Appendix 2: Main Points Discussed

Appendix 3: TOR for Environmental and Social Consideration Study

Appendix 4: Minutes of Meetings on the Detailed Planning Survey

The image shows four handwritten signatures or initials. The top-left one is a simple 'A' shape. The top-right one is a more complex, stylized signature. The bottom-left one is a simple 'u' shape. The bottom-right one is a simple 'r' shape.

PROJECT DESCRIPTION

Both parties confirmed that there is no change in the Project Description in the minutes of meetings for Detailed Planning Survey on the Project signed on 24, April, 2015(Appendix 3).

I. BACKGROUND

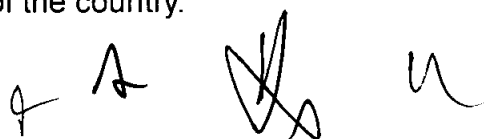
The Democratic Socialist Republic of Sri Lanka (hereafter referred to as "Sri Lanka") has achieved the economic growth rate of 7.3% in 2013. The government of Sri Lanka aims at continuing the high economic growth rate and realizing per-capita gross national income of 4,000 US dollars in 2016 and becomes one of the middle-income countries.

The government is implementing various environment protection measures, including prevention of water pollution, for improving living standard and achieving sustainable development. However, coverage of sewerage system in the country is only 2.5% in 2014. Meanwhile, volume of untreated water discharged into rivers and ocean is increasing due to urbanization and increase of demand of water supply. As a result, sanitary condition of the country was worsened and water-sources became contaminated. Therefore, provision of proper sewage treatment is an urgent task of the country.

The Government of Sri Lanka considers provision of sewerage systems and safe drinking water is an important factor in terms of achieving sustainable development of the country; and aims at increasing sewerage service population rate to 7.0% by 2020 and sanitation coverage rate consisting of on-site and off-site treatment to 100% by year 2025.

NWSDB has installed sewerage facilities in Dehiwala - Mount Lavinia, Kolonnawa Urban Council area, Ratmalana / Morauwa area and Jaela / Ekala areas currently. These are the cities where population is increasing and had potential risk factor for deteriorating living conditions of the residents. JICA is providing financial assistance for NWSDB for constructing the sewerage system in Kandy Municipal Council area. In addition to establishment of the sewerage systems in these cities, NWSDB is preparing for several sewerage projects, including expansion and rehabilitation of existing systems, with financial assistances of various donor agencies. Although NWSDB is preparing for several sewerage projects; NWSDB does not have clear policy to prioritize these projects.

In these circumstance, the project aims at assisting Government of Sri Lanka for achieving the above-mentioned sewerage target in the country, by means of formulating a (Strategic) Master Plan under Sewerage Sector; thereby contributing to improvement of living environment of the country.



II. OUTLINE OF THE PROJECT

1. Title of the Project

Project for the Strategic Master Plan under Sewerage Sector

2. Expected Goal which will be attained after implementing the Proposed Plan
Appropriate measures are taken for treatment of sewage by 2025 and pollution of surrounding environment is mitigated in Sri Lanka.

3. Outputs

- 1) National Sewerage Master Plan of Sri Lanka under Sewerage Sector are formulated.
- 2) City Sewerage Master Plans of the prioritized cities are formulated.
- 3) Feasibility Studies for the selected cities are conducted.
- 4) Capacity of the cities that conduct FS is enhanced.

4. Activities

1) Formulation of National Sewerage Master Plan of Sri Lanka Including Both On-site and Off-site Sanitation

a) The following basic information is collected while reviewing available data and reports including the results of the data collection surveys conducted by JICA and NWSDB. The NWSDB will provide the relevant available data pertaining to NWSDB:

- i) Relevant laws and regulations, organizations and financial situation of water environment, water resources, sewage and urban drainage
- ii) Current water quality of public water body in Sri Lanka, such as in rivers, ground, lakes and ocean (refer to data owned by Central Environmental Agency and related organizations and/or collection of current data in some of the cities by NWSDB with the assistance of JICA Experts if needed)
- iii) Status of operation and maintenance of the existing sewerage facilities, including those constructed by National Housing Development Authority and Board of Investment
- iv) Status of organizational capacity of the sewerage sector of NWSDB
- v) Projects of other donor agencies in sewerage sector
- vi) Current situation and issues of the existing sanitation facilities, including regulations and actual implementation, desludging, collection and disposal of sludge from septic tank. The field investigation and surveys are to be performed by NWSDB with the assistance of JICA Experts in order to have updated information on both on- and off-site facilities in some of the cities if needed.
- vii) NWSDB will carry out necessary field surveys to collect the data where the adequate existing data are not available as much as their time and budget allows.
- viii) Data to analyze affordability or demand for the sewer connections are to be collected by available data or conducting a household survey in the form of questionnaire or other alternative methodologies in some of the cities if needed.

b) Literature reviews such as statistics data on the 64 Urban Council and

Municipal Council in Sri Lanka as follows in order to set criteria from the view point of securing transparency/accountability and eliminating arbitrariness/human nature:

- Population, population density
 - Water supply coverage ratio
 - Water resource for water supply
 - Piped water consumption amount,
 - Number of waterborne disease case
 - Distance to industrial estate, export processing zone, and other government national projects such as airport, harbour, etc.
 - Number of poverty
 - The river downstream of discharge point of sewage is used for drinking water, irrigation, recreation and so on
 - Sewage is discharged into upstream of intake point of water purification plant and closed water areas such as lake, bay
 - Water quality at water intake point
 - Number of bed of accommodations
 - Distance to national preserved area such as sanctuary, strict natural reserve, national park, etc
 - Collection ratio of water tariff
 - Topography map with contour
- c) To establish criteria for selection of priority cities
- d) To select cities (around five) with priority according to the above-mentioned criteria
- e) To evaluate the quantitative improvement of water quality in public water body and public health improvement by the development sanitation and sewerage facilities
- f) To formulate a strategy to achieve national target in sewerage sector of the country including provision of recommendations in terms of technical, institutional and financial direction for future development
- g) To formulate a plan for institutional capacity development in sewerage sector of NWSDB, such as plans for improving organizational structure, human resource development and others
- h) To formulate a plan for improving in sewerage sector of NWSDB in terms of financial aspects. This includes studies on possibility of introduction of private finance, modification of sewerage tariff and asset management.
- 2) Formulation of City Sewerage Master Plans
- a) To establish objectives, target area and year in the master plans
- b) To establish basic policy to develop sewerage systems, including on-site facilities
- c) To collect basic information necessary for construction of sewerage facilities in each city
- d) To review basic policy on planning and designing of the facilities
- e) To delineate sewerage service area
- f) To plan basic sewerage facilities, including treatment method, sewage treatment plant, disposal method/location and main sewer routes stage wise.
- g) To formulate financial plan for construction and O&M of the sewerage

facilities

- h) To conduct study for environmental and social considerations, including a study of possible alternative options of the Master Plans based on the policy of strategic EIA
- i) To select projects with top priorities (around two cities) for Feasibility Studies

3) Feasibility Studies (FS)

- a) To conduct FS for formulating plans for construction of sewerage systems, including on-site facilities, for the above-mentioned projects with top priorities
- b) To conduct study for environmental and social considerations, including a study of possible alternative options of the selected project.
- c) To conduct stakeholders' meetings/ consultation.

4) Capacity Development of the Sewerage Sector

- a) Identify suitable institutional arrangement for sewerage operation and management
- b) Periodical information sharing
- c) Training programmes in Japan
- d) Workshops

5. Input

(1) Input by JICA

(a) Dispatch of Experts

- Team Leader
- Sewerage Planning and Sewage Collection System
- Sewage Treatment Planning and Designing
- Natural Condition Survey
- Mechanical/Electrical Engineering
- Implementation Plan / Cost Estimate
- Organization and Institutions
- Economic and Financial Analysis
- Environmental and Social Considerations

(b) Local Consultant

Input other than indicated above will be determined through mutual consultations between JICA and NWSDB during the implementation of the Project, as necessary.

(2) Input by NWSDB

NWSDB will take necessary measures to provide at its own expense:

- (a) Services of NWSDB's counterpart personnel and administrative personnel as referred to in Annex III
- (b) Suitable office space with necessary equipment;
- (c) Information as well as support in obtaining medical service;
- (d) Available data (including maps and photographs) and information related to the Project; and
- (e) Running expenses necessary for the implementation of the Project.

6. Implementation Structure

The project organization chart is given in the Annex I. The roles and assignments of relevant organizations are as follows:

(1) Project Administrator

Additional General Manager (Sewerage) of National Water Supply and Drainage Board will be responsible for overall administration and implementation of the Project.

(2) JICA Experts

The JICA experts will give necessary technical guidance, advice and recommendations to NWSDB on any matters pertaining to the implementation of the Project.

(3) Joint Coordinating Committee

Joint Coordinating Committee (hereinafter referred to as "JCC") will be established in order to facilitate inter-organizational coordination. JCC will be held whenever deems it necessary. A list of proposed members of JCC is shown in the Annex II.

(4) Technical Committee

A technical committee will be established for providing necessary technical advice for the Project. A list of members and functions of the technical committee are shown in the Annex II.

7. Project Site(s) and Beneficiaries

The Project will cover the whole administrative area of Sri Lanka. The direct beneficiaries of the Project will be around 20 million people living in the Sri Lanka.

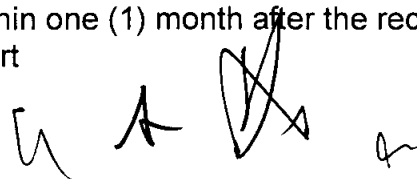
8. Duration

Twenty (20) months from the arrival of the first expert. The Project will be carried out in accordance with the tentative schedule as Annex IV. The schedule is tentative and subject to change when both parties agree upon any necessity that will arise during the course of the Project.

9. Reports

JICA will prepare and submit the following reports to the NWSDB in English.

- (1) Fifteen (15) copies of Inception Report at the commencement of the first work period in Democratic Socialist Republic of Sri Lanka
- (2) Fifteen (15) copies of Progress Report at the time about five (5) months after the commencement of the first work period in Democratic Socialist Republic of Sri Lanka
- (3) Fifteen (15) copies of Interim Report at the time of nine (9) months after the commencement of the first work period in Democratic Socialist Republic of Sri Lanka
- (4) Fifteen (15) copies of Draft Final Report at the end of the last work period in Democratic Socialist Republic of Sri Lanka
- (5) Twenty (20) copies of Final Report within one (1) month after the receipt of the comments on the Draft Final Report



10. Environmental and Social Considerations

NWSDB will abide by 'JICA Guidelines for Environmental and Social Considerations' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project.

III. UNDERTAKINGS OF NWSDB

1. NWSDB will take necessary measures to:

- (1) ensure that the technologies and knowledge acquired by the Democratic Socialist Republic of Sri Lanka nationals as a result of Japanese technical cooperation contributes to the economic and social development of Democratic Socialist Republic of Sri Lanka, and that the knowledge and experience acquired by the personnel of Democratic Socialist Republic of Sri Lanka from technical training as well as the equipment provided by JICA will be utilized effectively in the implementation of the Project; and
- (2) grant privileges, exemptions and benefits to members of the JICA Experts referred to in II-5 (1) above and their families, which are no less favourable than those granted to experts and members of the Experts and their families of third countries or international organizations performing similar Experts in Democratic Socialist Republic of Sri Lanka

IV. MONITORING AND EVALUATION

JICA will conduct the following evaluations and surveys to verify how the proposed plan is utilized and draw lessons. The NWSDB is required to provide necessary support for them.

1. Ex-post evaluation: three (3) years after the project completion, in principle
2. Follow-up surveys on necessity basis

V. PROMOTION OF PUBLIC SUPPORT

For the purpose of promoting support for the Project, NWSDB will take appropriate measures to make the Project widely known to the people of Democratic Socialist Republic of Sri Lanka.

VI. MISCONDUCT

If JICA receives information related to suspected corrupt or fraudulent practices in the implementation of the Project, NWSDB and relevant organizations will provide JICA with such information as JICA may reasonably request, including information related to any concerned official of the government and/or public organizations of the Democratic Socialist Republic of Sri Lanka.

NWSDB and relevant organizations will not, unfairly or unfavourably treat the person and/or company which provided the information related to suspected corrupt or fraudulent practices in the implementation of the Project.

VII. MUTUAL CONSULTATION

JICA and NWSDB will consult each other whenever any major issues arise in the course of Project implementation.

VIII. AMENDMENTS

The record of discussions may be amended by the minutes of meetings between JICA and NWSDB. However, PO may be amended in the Monitoring Sheets.

The minutes of meetings will be signed by authorized persons of each side who may be different from the signers of the record of discussions.

Annex I Project Organization Chart

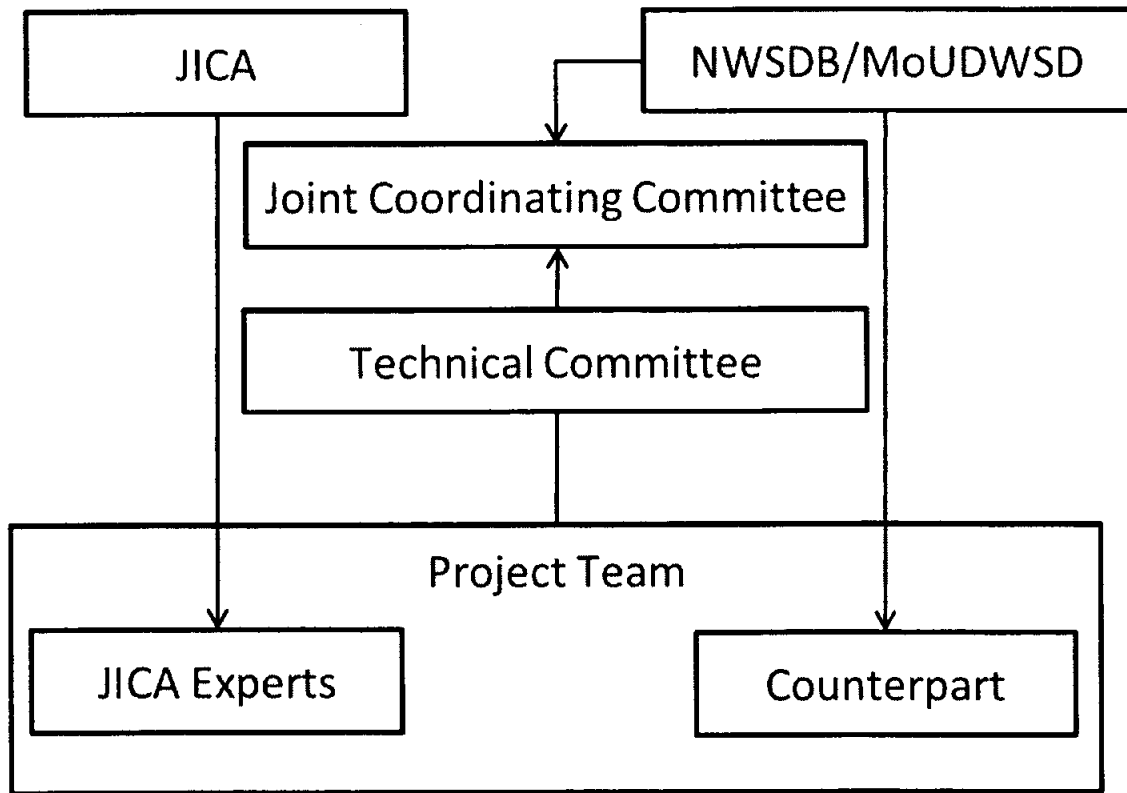
Annex II A List of Proposed Members of Joint Coordinating Committee/
Technical Committee

Annex III Draft List of Counterparts

Annex IV Plan of Operation



Annex I: Project Organization Chart



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Annex II: A List of Proposed Members of Joint Coordinating Committee/
Technical Committee

-Members and Functions of the Joint Coordinating Committee

1. Functions of the Joint Coordinating Committee

The Joint Coordinating Committee shall be as follows;

- (1) To formulate and authorize the annual plan, and its modification when necessary, of the Project activity,
- (2) To monitor and review the overall program and achievements of the Project,
- (3) To authorize a National Sewerage Master Plan of Sri Lanka, City Master Plans, and Feasibility Studies which are the results of the project activity; and
- (4) To discuss and advise major issues arising during the implementation period of the project.

2. Members of the Joint Coordinating Committee

The Joint Coordinating Committee shall be composed of:

(Sri Lanka Side)

- (1) Chairperson of JCC
Secretary, Ministry of Urban Development, Water Supply & Drainage
 - (2) Member of JCC
 - a) Representative, Department of External Resources, Ministry of Policy Planning, Economic Affairs, Child, Youth & Cultural Affairs
 - b) Representative, Department of National Planning, Ministry of Policy Planning, Economic Affairs, Child, Youth & Cultural Affairs
 - c) Chairman, NWSDB
 - d) Additional General Manager (Sewerage), NWSDB
 - e) Deputy General Manager (Sewerage), NWSDB
 - f) Assistant General Manager (Sewerage, P&D), NWSDB
 - g) Sewerage Specialist, (P&D), NWSDB
 - h) Assistant General Manager (Japanese Projects Unit), NWSDB
 - i) Representative, Department of External Resources, Ministry of Policy Planning, Economic Affairs, Child, Youth & Cultural Affairs (1)
 - j) Representative, Department of National Planning, Ministry of Policy Planning, Economic Affairs, Child, Youth & Cultural Affairs (1)
 - k) Representatives of 5 Local Municipalities
- (Japanese Side)
- a) Experts of the Project
 - b) Representatives of JICA Sri Lanka Office

- Members and Functions of the Technical Committee

1. Functions of the Technical Committee

The Technical Committee shall be as follows;

- (1) To advise and discuss the annual plan, and its modification when necessary, of the Project activity,
- (2) To monitor the overall program and achievements of the Project , and advise the modification of them,
- (3) To discuss a National Sewerage Master Plan of Sri Lanka, City Master Plans, and Feasibility Studies during the formulation of those plans, and advise the formulation of them

A h  ✓

(4) To discuss major issues arising during the implementation period of the project.

2. Members of the Technical Committee

The Technical Committee shall be composed of the following members;

(Sri Lanka Side)

(1) Chairperson of Technical Committee

Additional General Manager (Sewerage), NWSDB

(2) Member of Technical Committee

a) Deputy General Manager (Sewerage), NWSDB (1)

b) Assistant General Manager,(Sewerage, P&D), NWSDB (1)

c) Sewerage Specialist, (P&D), NWSDB (1)

d) Chief Engineer (Sewerage, P&D), NWSDB (2)

(Japanese Side)

Experts of the Project

A



Annex III: Draft List of Counterparts

Name	Position	Section
(Sri Lanka Side)	Additional General Manager	(Sewerage), NWSDB
	Assistant General Manager	Sewerage, P&D NWSDB
	Sewerage Specialist	P&D
	Chief Engineer	Sewerage, P&D
(Japanese Side)	Experts of the Project	

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Appendix 2

MAIN POINTS DISCUSSED

JICA and the Sri Lankan side discussed the contents and process of the Project and agreed on the following points.

1. Scope of the Master Plans to be formulated in this Project

This Project aims at a) formulating National Sewerage Master Plan of Sri Lanka to facilitate coverage of sanitary facility to 100% by 2025 and coverage of sewerage systems to 7% in 2020; b) formulating City Sewerage Master Plans for selected cities with priorities scrutinized by the National Sewerage Master Plan of Sri Lanka; and c) implementing Feasibility Studies (FS) on construction of sewerage facilities for the top priority cities. NWSDB is going to execute necessary measures for establishing suitable institutional structure and for implementing sewerage projects based on the National Sewerage Master Plan of Sri Lanka.

< National Sewerage Master Plan of Sri Lanka >

The JICA Experts with the assistance of Sri Lankan counterparts will review status of 64 Urban Council and Municipal Council in Sri Lanka, including those under discussion for funding. They will also propose criteria for selection of five priority cities for formulation of City Sewerage Master Plans. The members of the JCC will discuss and agree on the proposals for the criteria and the priority cities. National Sewerage Master Plan also includes a strategy to achieve national target in sewerage sector of the country including provision of recommendations in terms of technical, institutional and financial direction for future development.

<City Sewerage Master Plans>

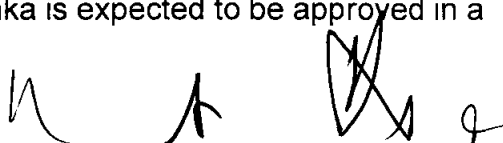
Thereafter, City Sewerage Master Plans will be formulated for around five priority cities selected in the Project in accordance with the above-mentioned criteria, so that tentative project cost for construction of sewerage facilities in each city, which will be required in the course of project approval in Sri Lanka, will be figured out. The City Master Plans will include; (1) Establishment of basic policy of sewerage development, (2) Collection of basic information necessary for sewerage development in the cities, (3) Delineation of sewerage service areas, (4) Formulation of financial plan for sewerage development, (4) Plan of basic sewerage facilities, including main trunk sewer routes and sewage treatment plant (STP), The City Master Plans include a study of main trunk sewer route, effluent water quality, and candidate site of STP effluent disposal locations to suit the CEA disposal standards with design of each facilities. As for pumping station, capacity and layout of the station are also conducted after studying its necessity,

<Feasibility Studies>

Based on the result of the City Master Plans, two cities will be selected for Feasibility Studies for developing sewerage plans in each city.

2. Status of the National Sewerage Master Plan of Sri Lanka

The National Sewerage Master Plan of Sri Lanka is expected to be approved in a



formal manner and utilized in Sri Lankan side in future. In particular, it is expected that the GOSL will implement the future sewerage projects in accordance with the formulation of National Sewerage Master Plan of Sri Lanka, which will be approved by the two Ministries of Planning, and Urban Development and Water Supply and Drainage in the JCC meetings of this Project.

3. Criteria for selecting priority city in prioritization of the National Sewerage Master Plan of Sri Lanka

The basic concept for formulating the criteria for selecting priority project in National Sewerage Master Plan of Sri Lanka is as shown below.

- (1) JICA Experts with the assistance of NWSDB will review the following seven (7) kinds of priority criteria proposed by NWSDB and discuss how to revise or clarify the criteria.
 - 1) Population, population priority density:
 - 2) Health effect to public
 - 3) Industry/Commercial development:
 - 4) Social priority
 - 5) Consumer affordability
 - 6) Demand of connection
 - 7) Environmental factor
- (2) JICA Experts will process the secondary data in public and propose the result of processing to NWSDB.
- (3) The JICA Experts and NWSDB will discuss the result of processing and revise the priority criteria or clarify it with supporting data.

4. Participation of the Local Governments of the Priority Cities to be selected in the Project to the JCC Meetings

This Project will formulate City Sewerage Master Plans for around five priority cities selected in due course. Representatives of the local government authorities of the selected priority cities will participate in the JCC meetings as JCC members, so that the City Sewerage Master Plans will be formulated in accordance with the city planning and opinions of the relevant local government authorities in order to be utilized by them after the formation.

5. Condition for Selection of Priority Cities

City Sewerage Master Plans will be formulated in this Project with an expectation that GOSL will implement the Plans with higher priority. It will be one of the critical conditions for selection of the priority cities that the local government authorities propose suitable land for sewage treatment plants.

6. Implementation of the Feasibility Studies for the Cities with Priorities

The Feasibility Studies will be conducted only if both the Ministry of Urban Development and Water Supply and Drainage and JICA will select and agree on the suitable two priority cities for the F/S. An official approval by the government of Japan is also required before commencement of the F/S. The official request by GoSL for financial assistance under the Japanese ODA loan will be required in order to facilitate the approval process.

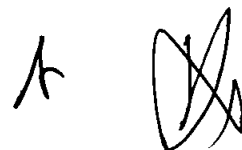
7. Data Collection for Formulation of the National Sewerage Master Plan and the Selection Criteria for Prioritized Cities

NWSDB requested that the field survey for data collection is conducted to approximately 20 cities and review of data need to be addressed during this Project. NWSDB agreed to furnish data such as water coverage plan, key plan of water coverage area, details of land availability, details of previous studies. The strength of Regional Support Center will also extend for data collection.

For this request, JICA advocated that it was appropriate for formulating the National Sewerage Master Plan and the selection criteria for prioritized cities by reviewing existing data. JICA also insisted on conducting detailed field survey only after the prioritized cities are decided. In addition, JICA commented that the cost of the field survey on many cities for the National Sewerage Master Plan would not be covered by JICA. Based on these discussions, both sides basically agreed that; 1) at first, JICA Expert Team and NWSDB review the existing data and discuss whether there is good enough technical data to formulate the master plan and select prioritized cities, 2) based on the result of the discussion, the need of additional field survey would be decided by the JCC meeting which is planned to be held in three months from the beginning of the Project, and 3) in case field surveys on several cities are needed, NWSDB would take the initiative in conducting the survey with technical assistance of JICA Expert Team after Sri Lanka prepare the necessary budget for the survey. In case the budget allocated to the survey from Sri Lanka is insufficient, JICA would consider covering it partly based on the quest from Sri Lanka.

8. Overlapping between the project of AFD and JICA

AFD has been planning to implement a project on NWSDB's organizational capacity development, and in case it is revealed in advance that the project activities of AFD overlap with the Activity 1) g) and h) in Appendix 1, II OUTLINE OF THE PROJECT, these activities of the Project are deleted. However in case the activities of AFD are not clear when the Project activities above are got started, JICA and NWSDB will coordinate with AFD on activities concerned and share the information from time to time.

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**Terms of Reference for Environmental and Social Considerations in
The Project for the Strategic Master Plan under Sewerage Sector
(Technical Cooperation for Development Planning)**

1. Background

The Democratic Socialist Republic of Sri Lanka (hereafter referred to as “Sri Lanka”) has achieved a high economic growth rate.¹ The government of Sri Lanka aims to continue the high rate of economic growth, and to realize a per capita gross national income of US\$4,000 in 2016 - becoming a middle-income country.

Meanwhile, the volume of untreated wastewater discharged into the rivers and ocean is increasing due to urbanization and the increased demand for water. As a result sanitary conditions in the country have worsened, and water sources have become contaminated. Therefore provision of proper treatment of sewage is an urgent task for the country, to improve both the living and hygienic environment. However, piped sewage treatment systems have only been introduced in areas around Colombo city; on-site sanitation facilities in other areas are sometimes found to be malfunctioning.

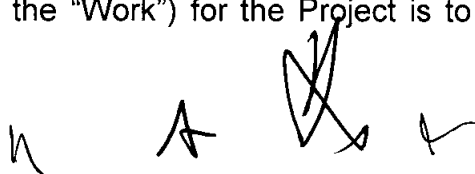
The Government of Sri Lanka considers provision of sewerage systems an important task in the development of the water sector in the country. Its national target is to increase piped sewerage system service coverage rate to 7 per cent by 2020, and for the sanitation coverage rate, consisting of both on-site and off-site treatment, to increase to 100 per cent by 2025. For appropriate implementation of the sewerage projects, it is necessary to identify the cities with higher priority for introducing a sewage treatment facility. However, the country has not conducted a nationwide study of the sewerage sector, and has not formulated a plan with a comprehensive approach.

Based on this background, the Government of Sri Lanka requested the Japanese Government to assist implementation of “The Project for the Strategic Master Plan under Sewerage Sector” (the Project). This aims to formulate a national master plan for the sewerage sector in the country and to develop plans for prioritized cities. The Japanese Government subsequently accepted the request.

2. Purpose of environmental and social considerations for this Project

Formation of (1) National Sewerage Master Plan, (2) City Sewerage Master Plan (pre-feasibility studies: pre-F/S) and (3) Feasibility Studies (F/S) will be conducted in this Project. The purpose of the environmental and social consideration work (hereinafter referred to as the “Work”) for the Project is to

¹ Econ omic Growth Rate in 2013 was 7.2 per cent.



assist and coordinate the project proponent/counterpart organization, so that the formation of the master plan and development of the pre-F/S and F/S are implemented in accordance with the laws and regulations of Sri Lanka and JICA's Guidelines for Environmental and Social Considerations (2010) (hereinafter referred to as "JICA's Environmental Guidelines").

3. Points of attention in implementing environmental and social considerations

(1) Strategic Environmental Assessment

A Strategic Environmental Assessment (SEA), which is explained in JICA's Environmental Guidelines, will be applied to the Project, so that the plans that are formulated and the studies that are conducted in the Project include well-balanced economic, social and environmental considerations. These will ensure consistency with higher levels of policy and strategy of the country, studying possible alternatives, and conducting stakeholder meetings and public consultations. The SEA will be applied at the time of formulation of the country's National Sewerage Master Plan, selection of the cities where the Pre-F/S will be implemented and implementation of the Pre-F/S, and selection of the cities where the F/S will be implemented and implementation of the F/S.

(2) Upholding of Sri Lankan environmental laws and regulations and JICA's Environmental Guidelines

A fundamental policy of this Project is to avoid or reduce the negative impact of the Project by studying, projecting and evaluating possible impacts of the Project towards the environment and local communities, and by examining alternatives and consider appropriate mitigation measures, in accordance with the laws and regulations of environmental protection and environmental impact assessment (EIA) of Sri Lanka, as well as JICA's Environmental Guidelines.

In accordance with the laws of Sri Lanka, an Initial Environmental Impact Assessment (IEE) will be conducted by assisting the project proponent/counterpart organization at the time of implementation of the Pre-F/S, in accordance with the National Environmental Act, No. 56 (established in 1980 and amended in 1988). An Environmental Impact Assessment (EIA) will be conducted by assisting the project proponent/counterpart organization at the time of implementation of the F/S in accordance with the above-mentioned Act.

This Project was categorized as "Category B" according to JICA's Environmental Guidelines; therefore, studies on environmental and social considerations will be conducted during project implementation according to the Guidelines.

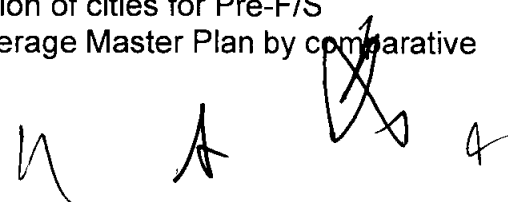
4. Terms of Reference (TOR) of the Work

The Expert in charge of Environmental and Social Considerations of this Project is going to conduct the following activities:

(1) Environmental and social considerations to be conducted at the time of formation of the National Sewerage Master Plan and the selection of cities for Pre-F/S

Overall TOR: Conduct the activities as follows at the time of formation of the National Sewerage Master Plan and selection of cities for Pre-F/S

- a) Examine direction of the National Sewerage Master Plan by comparative



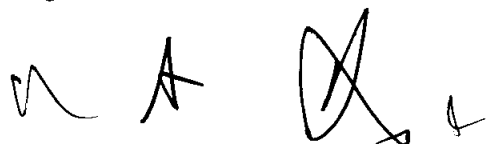
review of alternative options based on the concept of Strategic Environmental Assessment (SEA) and by reflecting opinions of stakeholders (government, universities, NGOs and communities); propose several possible activities plans and programmes at the time of formulating the Master Plan.

- b) Examine and finalize contents of the scoping (items for environmental and social evaluations and method of evaluation), which is necessary in the course of deciding prioritized cities for Pre-F/S and F/S.
- c) Study status of environmental and social conditions necessary for conducting the scoping.
- d) Conduct comparative study on alternatives, including zero-option, and by evaluating their environmental impact.
- e) Examine process of selection of the priority cities from the perspective of environmental and social considerations.

(2) Environmental and social considerations to be conducted at the time of conducting Pre-F/S

Overall TOR: Conduct environmental and social impact evaluations and develop an Environmental Management Plan (mitigation measures) by utilizing existing data and information; and compile an IEE report by assisting the project proponent/counterpart organization.

- a) Identify the cities where the Pre-F/S are going to be conducted and examine the background and reasons for the selection.
- b) Study the envisaged contents of the programme/projects, such as location, size and activities.
- c) Identify the cities where the Pre-F/S are going to be implemented; study environment and social situation (land use, natural environment, settlement of under-served communities and other environmental and social conditions).
- d) Study laws and regulations of environmental and social considerations of the country and identify roles of each stakeholder.
- e) Study and finalize items for environmental and social considerations as for a scoping for conducting an environmental impact assessment.*
- f) Predict and evaluate environmental and social impacts to be created by the Project.
- g) Compare the possible alternatives, including zero option (option for "without the project"), with the result of the impact evaluation, and finalize the plan of the Project.
- h) Study mitigation measures to avoid, minimize or compensate the anticipated negative impact to be caused by the Project.
- i) Study and finalize the Environmental Management Plan (draft), Environmental Monitoring Plan (draft), including implementation structure, methodology, cost and monitoring forms.
- j) Assist stakeholder meetings, including provision of advice for setting up objectives, selection of participants and proposing contents of discussions.
- k) Assist and develop IEE report by assisting National Water Supply and Drainage Board (NWSDDB) while implementing the Pre-F/S.



(3) Environmental and social considerations to be conducted at the time of conducting F/S

Overall TOR: Conduct environmental and social impact evaluation and develop an Environment Management Plan (mitigation measures); compile an EIA report by assisting the project proponent/counterpart organization.

- a) Identify the cities where the F/S are going to be conducted and examine the background and reasons for the selection.
- b) Study the envisaged contents of the programme/projects, such as location, size and activities.
- c) Identify the cities where the F/S are going to be implemented; study the environment and social situation (land use, natural environment, settlement of under-served communities, and other environmental and social conditions).
- d) Study laws and regulations of environmental and social considerations of the country and identify roles of each stakeholder.
- e) Study and finalize items for environmental and social considerations as for a scoping for conducting an environmental impact assessment.*
- f) Predict and evaluate environmental and social impacts to be created by the Project.
- g) Compare the possible alternatives, including zero option, with the result of the impact evaluation and finalize the plan of the Project.
- h) Study mitigation measures to avoid, minimize or compensate the anticipated negative impact to be caused by the Project.
- i) Study and finalize Environment Management Plan (draft), Environment Monitoring Plan (draft), including implementation structure, methodology, cost and monitoring forms.
- j) Assist stakeholder meetings, including provision of advice for setting up objectives, selection of participants, proposing contents of discussions.
- k) Assist and develop EIA report by assisting NWSDB while implementing the F/S.
- l) Develop resettlement action plan in case the Project would be a large-scale involuntary resettlement case. In case the Project would not be a large-scale but an involuntary resettlement case or requiring site acquisition, assist and develop a simple resettlement action plan.

*Note: See the sector-wise environmental checklist of JICA in <http://www.jica.go.jp/environment/guideline/ref/index.html> and laws of Sri Lanka (National Environmental Act, No. 56 (established in 1980 and amended in 1988 and 2000) at the time of scoping.

Handwritten initials and signatures in black ink, including a large stylized signature and several smaller initials.