Appendix

Appendix-1 Member List of the Study Team

(1) 1st Field Study

| Assignment | Name | Position | | | |
|--|-------------------|---|--|--|--|
| Team Leader | Yoshiki OMURA | JICA Senior Advisor (Water Supply Development) | | | |
| Planning Management | Miki INAOKA | Water Resources Management Division I, Global Environment Department, JICA | | | |
| Chief Consultant/Water Supply Planning | Tadao FUNAMOTO | | | | |
| Water Supply System Planning/Water | | | | | |
| Purification/Water Quality | Toru YAGI | NJS Consultants Co., Ltd. | | | |
| Operation and Maintenance Planning | Shinichi OSAKA | | | | |
| Construction and procurement | Takashi | | | | |
| Planning/Cost Estimation | WATANABE | | | | |

(2) 2nd Field Study

| Assignment | Name | Position |
|--|------------------|--|
| Team Leader | Yoshiki OMURA | JICA Senior Advisor (Water Supply Development) |
| Planning Management | Ryosuke ISOBE | Assistant Director, Water Resources Management Division I, Global Environment Department, JICA |
| Chief Consultant/Water Supply Planning | Tadao FUNAMOTO | |
| Water Supply System Planning/Water Purification/Water Quality | Toru YAGI | |
| Operation and Maintenance Planning | Shinichi OSAKA | |
| Construction and procurement Planning/Cost Estimation | Takashi WATANABE | |
| Mechanical/ Electrical | Akira MIURA | NJS Consultants Co., Ltd. |
| Facility Plan/Civil Structure | Yoshiya MAEDA | |
| Network Analysis | Daisuke YASHIRO | |
| Environmental/Social Considerations | Kenji TAKAYANAGI | |
| Water Supply System Planning/Water Purification/Water Quality (2) | Koichi YONEDA |] |
| Mechanical/ Electrical (2) | Akira HASEBE | |

(3) Explanation of DBD Report

| Assignment | Name | Position | | | |
|--|----------------|---|--|--|--|
| Team Leader | Yoshiki OMURA | JICA Senior Advisor (Water Supply Development) | | | |
| Planning Management | Yushin NAKAO | Training and Partnership Program Division, JICA | | | |
| Chief Consultant/Water Supply Planning | Tadao FUNAMOTO | NIC Consultante Co. I td | | | |
| Water Supply System Planning/Water Purification/Water Quality | Toru YAGI | NJS Consultants Co., Ltd. | | | |

Appendix-2 Study Schedule

(1) 1st Field Study

| | ЛСА | | Consultants | | | | | |
|----------|--------------|--------|----------------------|-----------------------|-----------------------------|--------------------------|-----------------------|-----------------------------------|
| | Date | | Mr. Omura Ms. Inaoka | | Mr. Funamoto | Mr. Yagi | Mr. Osaka | Mr. Watanabe |
| 1 | 2/24 | Т | СМВ | NTR-SIN-CMB | | | Preparation | |
| 2 | 2/25 | F | Explanation and D | iscussion on ICR with | n NWSDB | | | / |
| 3 | 2/26 | S | Internal meeting | | | | | / |
| 4 | 2/27 | S | Move for Anuradh | apura | | | | . / |
| | | | Move for Vavuniy | | | | | |
| | | | | WSDB Northern Offi | ce | | | |
| 5 | 2/28 | М | Move for Killinoch | | cretariat, Site Visiting | | | |
| | | | Discussion with K | minochem District Se | cretariat, Site visiting | Move for | Move for | / |
| | | | Move for Anuradh | apura | | Vavuniya | Anuradhapura | |
| 6 | 3/1 | Т | Move for Colombo | , Internal Meeting | | | Move for Colombo | |
| | | | | | | | Discussion on | |
| 7 | 3/2 | W | Discussion on ICR | with NWSDB | | Field Survey | ICR with | |
| | | | | | | (Existing Facilities) | NWSDB | |
| 8 | 3/3 | Т | Discussion on MM | I with NWSDB, ERD | , Ministry of Finance | racinues) | Discussion on | |
| | | | and Planning | | | | O&M with | |
| 9 | 3/4 | F | Sign on MM | ſ | | | NWSDB | . / |
| 10 | 2/5 | C | Move for | CMD GINI NTD | Review of | M | Review of | |
| 10 | 3/5 | S | another study | CMB-SIN-NTR | collected information | Move for Colombo | collected information | |
| 11 | 3/6 | S | | <u> </u> | Review of collected | information | Information | |
| 12 | 3/7 | M | | / | | t situation and issues | with NWSDB | |
| 13 | 3/8 | Т | | | Existing Facilities | | | |
| | | | | / | Future provision | | | |
| 14 | 3/9 | W | | | Prior water supply | plans | | |
| 15 | 3/10 | Т | | | • Base Map Prepara | | | |
| 16 | 3/11 | F | | | | rmation on existing pla | ans and initial cost | |
| 17 | 3/12 | S | | / | and O&M cost | view of collected infor | mation | . / |
| 17 | 3/12 | S | | | Preparation | Move for Vavuniya | mation | |
| 19 | 3/13 | M | | | Discussion on | Field survey in Killin | ochchi | / |
| 20 | 3/15 | Т | | | current situation | | Discussion on | |
| 20 | 3/13 | 1 | | | and issues with | Field survey in | O&M with | / |
| 21 | 3/16 | W | | | NWSDB | Killinochchi | NWSDB | |
| 22 | 3/17 | Т | | / | Preparation | Move for Colombo | | NTR-SIN-CMB |
| 23 | 3/18 | F | | / | TV Conference (JIC | AHQ—JICA Sri Lanka | 1) | |
| 24 | 3/19 | S |] , | / | Internal meeting, Re- | view of collected infor | mation | |
| 25 | 3/20 | S |] / | | Review of collected | information, Report pro | eparation | |
| 26 | 3/21 | М | . / | | Discussion with NW | SDB | | Information |
| 27 | 3/22 | Т | | | Report preparation | | | collection on loca contractors |
| 28 | 3/23 | W | | | Plenary meeting w | | | |
| 29 | 3/24 | Т | . / | | | view of collected infor | | 1 |
| 30 | 3/25 | F | / | | Preparation | CMB - SIN - NTR | Preparation | Cost information |
| 31 | 3/26 | S | / | | Preparation | | / | Cost information |
| 0.5 | | S | / | | Preparation | | | Cost information |
| 32 | 3/27 | 5 | | | Discussion with | | | Discussion with |
| 32 33 | 3/27 3/28 | M | | | | | | |
| 33 | 3/28 | | | | NWSDB | | | NWSDB |
| 33 34 | 3/28 3/29 | М | | | NWSDB Report preparation | | | NWSDB Report preparation |
| 33 | 3/28 | M T | | | NWSDB | | | NWSDB |

(2) 2nd Field Study

| | | | JICA Consultants | | | | | | | | | | |
|------|-----|-----|------------------------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|-----------------------|-------------------|--------------------|
| Dat | e | Day | Mr Omura Mr. Isobe | Mr. Funamoto | Mr. Yagi | Mr. Osaka | Mr. Watanabe | Mr. Miura | Mr. Maeda | Mr. Yashiro | Mr. Takayanagi | Mr. Yoneda | Mr. Hasebe |
| | 5/8 | 日 | NTR-SIN-CMB | | / | | | | | / | / | / | 1 |
| 2 | 5/9 | 月 | Discussion with JICA Office, ERD a | nd NWSDB | / | | / | / | | | | | / |
| 3 5 | /10 | 火 | Discussion with NWSDB | 3 | / | | | | | | | | / |
| 4 5 | /11 | 水 | Discussion with NWSDB | 3 | / | | / | | NTR-SIN-CMB | | | | / |
| 5 5 | /12 | 木 | Discussion on MM with ERD and | NWSDB | / | Move for Vavuniya | / | | Move for Vavuniya | | | | / / |
| 6 5 | /13 | 金 | Sign on MM | | / | Field Survey | / | | Field Survey | | | | / |
| 7 5 | /14 | ± | CMB-SIN-NTR | Review of Data | | Field Survey | / | | Field Survey |] / | | | / |
| 8 5 | /15 | 日 | | Review of Data | | Field Survey | / | | Field Survey | 1 / | | | / |
| 9 5 | /16 | 月 | / | Discuss with NWSDB | / | Field Survey | / | | Field Survey | 1/ | | | |
| 10 5 | /17 | 火 | / | Review of Data | | Field Survey | 1 / | | Field Survey | V | \sim | | / |
| 11 5 | /18 | 水 | / | Review of Data | | Move for Colombo | 1 / | | Move for Colombo | NT R-SI | N-CMB | / | / |
| 12 5 | /19 | 木 | / | Discuss with NWSDB | / | / | / | | Discuss with NWSDB | Discuss with NWSDB | Discuss with NWSDB | V | |
| 13 5 | /20 | 金 | / | Discuss with NWSDB | / | / | / | / | Discuss with NWSDB | Discuss with NWSDB | Prepare Social Survey | | 1 / I |
| 14 5 | /21 | 土 | / | Review of Data | / | / | / | | Review of Data | Review of Data | Prepare Social Survey | | 1 / I |
| 15 5 | /22 | 日 | / | Review of Data | NTR-SIN-CMB | / | / | | Review of Data | Review of Data | Prepare Social Survey | NTR-SIN-CMB | 1 / 1 |
| 16 5 | /23 | 月 | / | Discuss with NWSDB | Discuss with NWSDB | | / | / | Review of Data | Review of Data | Prepare Social Survey | Review of Data | 1 / 1 |
| 17 5 | /24 | 火 | / | Discuss with NWSDB | Move for Vavuniya | / | | | Review of Data | Review of Data | Environmental Data | Review of Data | / / |
| 18 5 | /25 | 水 | / | Discuss with NWSDB | Field Survey | / | / | | Review of Data | Review of Data | Field Survey | Review of Data | |
| 19 5 | /26 | 木 | / | Discuss with NWSDB | Field Survey | | | | Review of Data | Review of Data | Field Survey | Review of Data | |
| 20 5 | /25 | 金 | / | Discuss with NWSDB | Field Survey | / | / | | Move for Vavuniya | Move for Vavuniya | Environmental Data | Move for Vavuniya | |
| 21 5 | /28 | | / | Review of Data | Field Survey | / | / | | Field Survey | Field Survey | Environmental Data | Field Survey | |
| 22 5 | /29 | 日 | / | Move for Vavuniya | Move for Vavuniya | | / | | Field Survey | Field Survey | Move for Vavuniya | Field Survey | |
| 23 5 | /30 | 月 | / | Discuss with NWSDB | Discuss with NWSDB | / | / | | Field Survey | Field Survey | Discuss with Others | Field Survey | |
| 24 5 | /31 | 火 | / | Discuss with NWSDB | Discuss with NWSDB | | NTR-SIN-CMB | 1 / | Field Survey | Field Survey | Discuss with NWSDB | Field Survey | |
| 25 | 5/1 | 水 | / | Move for Colombo | Move for Colombo | / | Review of Data | 1 / | Field Survey | Field Survey | Move for Colombo | Field Survey | |
| 26 | 5/2 | 木 | / | Review of Data | Review of Data | / | Review of Data | 1 / | Field Survey | Field Survey | Review of Data | Field Survey | / |
| 27 0 | 5/3 | 金 | / | Internal Meeting | Review of Data | / | Internal Meeting | 1 / | Move for Colombo | Move for Colombo | Internal Meeting | Move for Colombo | |
| 28 | 5/4 | | / | Review of Data | Review of Data | / | Review of Data | | Review of Data | Review of Data | Review of Data | Review of Data | |
| 29 | 5/5 | 8 | / | Review of Data | Review of Data | Review of Data | Review of Data | / | Review of Data | Review of Data | Review of Data | Review of Data | |
| 30 | 5/6 | 月 | / | Discuss with NWSDB | Discuss with NWSDB | Discuss with NWSDB | Review of Data | 1 / | Review of Data | Review of Data | Review of Data | Review of Data | 1/ |
| 31 (| 5/7 | 火 | / | Discuss with NWSDB | Discuss with NWSDB | Discuss with NWSDB | Review of Data | 1/ | Review of Data | Review of Data | Review of Data | Review of Data | 1/ |
| 32 0 | 5/8 | 水 | / | Discuss with NWSDB | Discuss with NWSDB | Discuss with NWSDB | Review of Data | 1/ | Review of Data | Review of Data | Move for Vavuniya | Review of Data | 1/ |
| 33 (| 5/9 | 木 | / | Discuss with NWSDB | Discuss with NWSDB | Discuss with NWSDB | Review of Data | 1/ | Review of Data | Review of Data | Discuss with Others | Review of Data | 1/ 1 |
| 34 6 | /10 | 金 | / | Review of Data | Review of Data | Review of Data | Review of Data | Ý | Review of Data | Review of Data | Discuss with Others | Review of Data | 1 I |
| 35 6 | /11 | ± | / | Review of Data | Review of Data | Review of Data | Review of Data | NTR-SIN-CMB | Review of Data | Review of Data | Discuss with Others | CMB - SIN - NTR | NTR-SIN-CMB |
| 36 6 | /12 | 日 | / | Move for Vavuniya | Move for Vavuniya | Move for Vavuniya | Internal Meeting | Move for Vavuniya | Internal Meeting | Move for Vavuniya | Discuss with Others | / | Move for Vavuniya |
| 37 6 | /13 | 月 | / | Discuss with NWSDB | Discuss with NWSDB | Discuss with NWSDB | Review of Data | Discuss with NWSDB | Discuss with NWSDB | Discuss with NWSDB | Discuss with NWSDB | / | Discuss with NWSDB |
| 38 6 | /14 | 火 | / | Field Survey | Field Survey | Field Survey | Review of Data | Field Survey | Field Survey | Field Survey | Move for Colombo | / | Field Survey |
| 39 6 | /15 | 水 | / | Move for Colombo | Move for Colombo | Field Survey | Review of Data | Field Survey | Field Survey | Field Survey | Review of Data | / | Field Survey |
| 40 6 | /16 | 木 | / | Meeting with JICA | Meeting with JICA | Move for Colombo | Review of Data | Move for Colombo | Move for Colombo | Move for Colombo | Review of Data | / | Move for Colombo |
| 41 6 | /17 | 金 | / | CMB - SIN - NTR | Discuss with NWSDB | Review of Data | Review of Data | Review of Data | Review of Data | Review of Data | Review of Data | | Review of Data |
| 42 6 | /18 | 土 | / | / | Review of Data | Review of Data | Review of Data | Review of Data | NTR-SIN-CMB | Discuss with NWSDB | Review of Data | / | Review of Data |
| | /19 | 日 | / | | Review of Data | Review of Data | Review of Data | Review of Data | / | Discuss with NWSDB | Move for Jaffna | | Review of Data |
| 44 6 | /20 | 月 | / | | Discuss with NWSDB | Review of Data | Review of Data | Review of Data | 1 / | Discuss with NWSDB | Discuss with Others | | Review of Data |
| 45 6 | /21 | 火 | / | | Discuss with NWSDB | Review of Data | Review of Data | Review of Data | 1 / | Discuss with NWSDB | Discuss with Others | 1 / | Review of Data |
| 46 6 | /22 | 水 | / | | Review of Data | Review of Data | Review of Data | Review of Data |] / | Review of Data | Discuss with Others | | Review of Data |
| 47 6 | /23 | 木 | / | | Review of Data | Review of Data | Review of Data | Review of Data | | Review of Data | Move for Colombo | | Review of Data |
| | /24 | 金 | / | / | Meeting with JICA | Meeting with JICA | Meeting with JICA | Meeting with JICA | | Meeting with JICA | Meeting with JICA | / | Meeting with JICA |
| 49 6 | /25 | 土 | / | / | CMB - SIN - NTR | Review of Data | NTR-SIN-CMB | NTR-SIN-CMB | V | NTR-SIN-CMB | NTR-SIN-CMB | / | NTR-SIN-CMB |

(3) Explanation of DBD Report

| | Date | | J | IICA | Const | ultants | | |
|----|-------|---|--|----------------------|----------------------|-------------|--|--|
| | Date | | Mr. Omura | Mr. Nakao | Mr. Funamoto | Mr. Yagi | | |
| 1 | 10/6 | Т | | | NTR-SIN-CMB | NTR-SIN-CMB | | |
| 2 | 10/7 | F | | | Discussion with JICA | Office | | |
| 3 | 10/8 | S | | | Document Preparatio | n | | |
| 4 | 10/9 | S | NTR-SIN-CMB | NTR-SIN-CMB | Document Preparatio | n | | |
| 5 | 10/10 | М | Discussion with JICA Discussion with NWS Discussion with ERD Discussion with MWS | D | | | | |
| 6 | 10/11 | Т | Discussion with NWS | Discussion with NWSD | | | | |
| 7 | 10/12 | W | Discussion with NWSD Discussion with ERD | | | | | |
| 8 | 10/13 | Т | Discussion with NWSD Sign on MM | | | | | |
| 9 | 10/14 | F | Discussion with ERD Sign on MM Report to Japanese Embassy Discussion with JICA Office | | | | | |
| 10 | 10/15 | S | СМВ | CMB-SIN-NTR | CMB-SIN-NTR | CMB-SIN-NTR | | |

Appendix-3 List of Parties Concerned in Sri Lanka

| | 0 |
|-----------------------|---|
| Mr. Mapa Pathiarana | Director General, External Resources Department |
| Dr. B.M.S. Batagoda | Director General, Department of National Planning |
| Mr. S.S. Mudalige | Director, Department of National Planning |
| Ms. Rumeshi Hewawasam | Assistant Director, Department of National Planning |

(1) Ministry of Finance and Planning

(2) Ministry of Water Supply and Drainage

| / | J I I I J | |
|---|----------------------|-----------|
| | Mr. A Abeygunasekara | Secretary |
| | | |

(3) National Water Supply and Drainage Board (NWSDB)

| Mr. Karunasena Hettiarachchi | Chairman |
|------------------------------|---|
| Mr. K.L.L. Premanath | General Manager |
| Mr. D N J Fernando | Additional General Manager |
| Ms. P.N.S. Yapa | Additional General Manager (Northern & Central) |
| Mr. Duleep Goonewardene | Deputy General Manager (North) |
| Mr. D.S.D. Jayasiriwardene | Deputy General Manager (Planning & Designs) |
| Mr. M.M. Umarlebbe | Assistant General Manager (Japanese Project Unit) |
| Mr. R. B. Thavendrakumar | Regional Manager (NR-Jaffna) |
| Mr. T. Barathithasa | General Manager of ADB Project |
| Mr. U. Ratnapala | Assistant General Manager (Planning & Designs) |
| Mr. Thirunavukkarasu | Assistant General Manager (North) |
| Mr. R.R.P.N. Rathnayake | Specialist (Water Treatment) |
| Mr. S. Saravanakugan | Engineer (Planning & Designs) |
| Mr. Imran M Saheer | Engineer (Japanese Project Unit) |
| Mr. Suveenthan | Engineer (NR-Jaffna) |

(4) Killinochchi District Secretariat

| Ms. R. Ketheeswaran | District Secretary |
|---------------------|-------------------------------|
| Mr. S. Srinivasa | Additional District Secretary |

(5) Road Development Authority (RDA)

| Mr. T. K. Ilangeern | Chief Engineer |
|---------------------|-------------------------------|
| Mr. Sivagauesan | Project Officer (A9 Project) |
| Mr. Thayaparan | Project Engineer (A9 Project) |

(6) Central Engineering Consultancy Bureau (CECB)

| Mr. Dinusha Gunawardana | Site Engineer (A9 Road) |
|-------------------------|-----------------------------|
| Mr. M.D. Vaseehara | Site Engineer (A9 Road) |
| P. Chanddrsiri | Resident Engineer (A9 Road) |

(7) Central Environmental Authority (CEA)

| Ms. Vijitha Sathiyakuumar Assistant Director (Northern Provincial Office) | |
|---|--|
|---|--|

(8) Ceylon Electric Board (CEB)

| Mr. T Gugaraj CEB Killinochchi Office |
|---------------------------------------|
|---------------------------------------|

(9) Land Mine Removal Office

| Mr. R. Rajkumar I | Land Mine Removal Information Technology Officer |
|-------------------|--|
|-------------------|--|

(10) ADB

| Mr. Mookiah Thiruchelvam | Project Implementation Officer |
|--------------------------|--------------------------------|
|--------------------------|--------------------------------|

Appendix-4Minuets of Meetings / Minutes of Discussions4-1Minutes of Meetings on 3 March 2011

THE MINUTES OF MEETINGS ON THE MISSION FOR THE PREPARATORY SURVEY ON REHABILITATION OF KILLINOCHCHI WATER SUPPLY SCHEME IN DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

In response to a request from the Government of the Democratic Socialist Republic of Sri Lanka (hereinafter referred to as "GoSL"), the Government of Japan decided to conduct a Preparatory Survey on Rehabilitation of Killinochchi Water Supply Scheme (hereinafter referred to as "the Project").

JICA sent to Sri Lanka the Preparatory Survey Team (hereinafter referred to as "the JICA Mission") which is headed by Mr Yoshiki Omura, Senior Advisor, JICA, and is scheduled to stay in the country from 25 February 2011 to 31 March 2011.

The JICA Mission held discussions with the officials concerned of GoSL and conducted a field survey at the survey area.

In the course of discussions and field survey, both parties confirmed the main items described in the attached sheets. The JICA Mission will proceed to further works and prepare the preparatory survey report.

Colombo, 3 March 2011

Mr. M P D U K Mapa Pathirana Director General Department of External Resources Ministry of Finance and Planning

Mr. Karunasena Hettiarachchi Chairman National Water Supply and Drainage Board

Mr. Yoshiki Omura Leader The Preparatory Survey Team Japan International Cooperation Agency (JICA)

I. OBJECTIVES OF THE PROJECT

The Objective of the Project is the rehabilitation of the existing water supply scheme to bring it back to operational level.

II. PROJECT SITES

The site of the Project is located in Killinochchi as shown in Annex-1.

III. RESPONSIBLE AND IMPLEMENTING AGENCY

The Responsible Organization is Ministry of Water Supply and Drainage. The Implementing Agency is the National Water Supply and Drainage Board (NWSDB). The organization chart is shown in Annex-2.

II. MAJOR ISSUES DISCUSSED

The Major issues discussed are described in Annex-3. Both sides confirmed that appropriateness of the request shall be examined in accordance with further studies and analysis in Japan and the final components of the Project would be decided by the Japanese side after consultation with the GoSL.

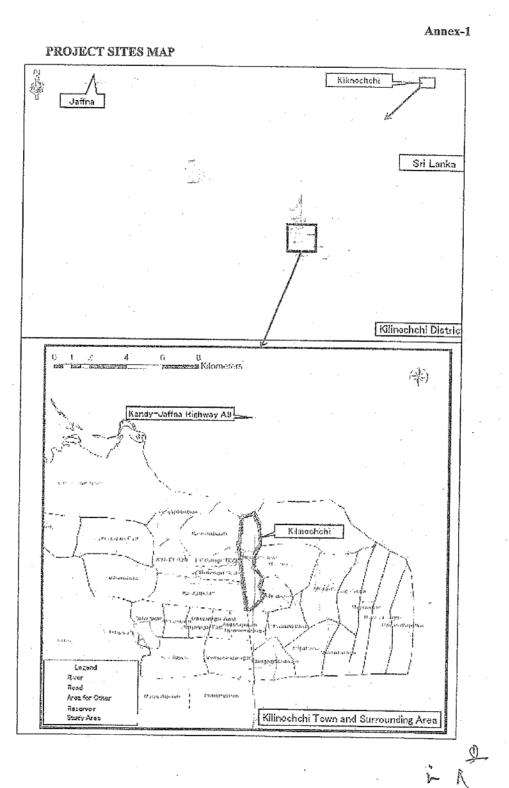
III. JAPAN'S GRANT AID SCHEME

GoSL understands the Japan's Grant Aid Scheme explained by the JICA Mission as described in Annex-4.

GoSL will take the necessary measures, as described in Annex-5, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

Annex-1 Project Sites Map Annex-2 Organization Chart Annex-3 Major Issues Discussed Annex-4 Japan's Grant Aid Scheme Annex-5 Major Undertakings to be taken by each Government Annex-6 Proposed Project Management Unit Staff Annex-7 Proposed Operation and Maintenance Staff

END



ORGANIZATION CHART

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Organization Structure of the National Water Supply & Drainage Board

| | | DGM (IA) | |
|--|-------------------------|--------------------------|---|
| Chairman & Board of Directors | | Secretary | |
| Board of Directors | | | AGM (TAC) |
| | | | AGM (Co-ordination) |
| | | DGM (P&A) | AGM (Personnel) |
| | ·. | Dona (Post) | AGM (Administration) |
| | | DGM (Commercial) | |
| | | o din (o dinina chinj | |
| | | | AGM (Financial Accounts) |
| | | DGM (Financo) | AGM (Budgetary Control) |
| | | | AGM (Logistics & Projects) AGM (Revenue & Payments). |
| • | | | |
| | | DGM | AGM (Woatern) |
| Obneral | AddL GM | DGM (Western - South) | AGM Dev. (Western - South) AGM (NRW) |
| . Manager | (Wastern) | (Wastern - Central) | AGM (OSM) Western - Centrel |
| | | DGM | AGM Dev. (Western - Central) |
| | | (Western - North) | AGM Dev. (Western - North) |
| | | | AGM (Production) |
| | - | | AGM (Southern/ Eastern) |
| | Addi, GM | COM | AGM Dov. (Sabaragamuwa) |
| | (Southern/ | (Subaragamuwa & Uva) | AGM (Uva) |
| | · . | DGM (East) | AGM Dev. (Ensl) |
| | | CCM (Southern) | AGM Dev. (Southern) |
| | Addt, GM (Northern/ | DGM (Central) | AGM Dov, (Central) |
| | Central) | DGM | AGM Dev. (North - Western) |
| | | (North - Western) | From Der, promi - Desterni |
| | | (North - Control) | AGM Dev. (North - Central) |
| | | DGM (Nonh) | AGM Dov. (North) |
| | | DOM | AGM (Northern/ Central) |
| | Addi. GM | (M&E Sarvices) | AGM (M&E Services) |
| | (Corporate Corvices) | DGM (IT) | AGH (IT - Information & Services) |
| | Getvices | | AGM (IT · Application Development) |
| | | | AGM (Supplies) AGM (MDT) |
| | | PDs | |
| | Addl. GM | | AGM (Sewerage Operations) AGM (Sewerage Projects) |
| | | | AGM (PED Severage) |
| | | PDs | |
| | Addl. GM (Water | DGM | AGM (Japanese Projects) |
| · | Supply Projects) | (Project Co-ordination) | AGM (PAD N/C) |
| | | DGM (P6D) | AGM (PED Western) |
| | | | AGM (PAD MAE) |
| | | | AGM (PSD Documentation) |
| | | | AGM (P&D S/E) |
| | | , | AGM (Censtruction) |
| | Addi, Gia | DGM (Dov.) | AGM (Surface Water Resources) |
| | (Policy & Planning) | | AGM (GW Resources & Invest.) |
| | Planning) | DGM (CP) | AGM (MIS) |
| · · | | | AGIA (Policy & Strategy) |
| an 2018-05 15 | | | AGIA (Research & Development) |
| B Corporate Pitzening DN-5 on, All regres redutined. | | | AGM (Rural Water Supply) |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Annex-3

MAJOR ISSUES DISCUSSED

The following issues were discussed among the Sri Lankan Side and the JICA Mission.

1 The Request of Small Scale Treatment Plant and Drilling Equipment

GoSL submitted a separate request of a package water treatment plant (1,000m3/d) to EoJ to utilize the Counterpart Fund of 2KR. The proposed plant was for urgent supply of safe drinking water to the Killinochchi General Hospital, other institutions and domestic users. Upon completion of the rehabilitation of the existing 3,000m3/d treatment plant, the proposed package plant will be disassembled and relocated.

GoSL has submitted another request to purchase well drilling equipment and spare parts for rural water supply.

Both sides confirmed that there is no duplication among the three projects.

2 Confirmation of Water Right

NWSDB explained that the agreement between the Provincial Irrigation Department (NEPC) and NWSDB dated 13 July 2007 was confirmed as remaining valid; the confirmation was made during the stakeholder meeting held by the Government Agent – Killinochchi and participated by the Farmers Organization, Divisional Secretary-Kandavalai, the Irrigation Department, and NWSDB held on 12 October 2010.

NWSDB also explained that water abstraction up to 12,000m3/d for Killinochchi District are confirmed.

3 Alternative Locations of Towers

The Location of Elevated Tower of 1,000m3 is to be changed since there is a plan to reserve the previous tower as a memorial. The Paranthan Balancing Tower of 450 m3 also might need to be relocated due to space limitations. The Sri Lankan side will decide alternative locations for the Towers by 11 March 2011. The JICA Mission stated that the conditions of the substitute land are: (1) mine cleared (2) topographically appropriate (3) smooth land acquisition.

4 Expansion Plan of A9 Road and Rehabilitation of Pipelines

NWSDB explained that there is a plan to widen the A9 road. Even if the existing pipelines were still in good condition, after expansion the pipelines would be under the carriage way of the road and maintenance work will be hampered. Therefore NWSDB requested the JICA Mission to consider re-laying the transmission mains and distribution lines.

In case the A9 widening works commences prior to the Project, NWSDB will implement the road crossing works.

The JICA Mission will convey the request to GoJ after further collection of information by the JICA Mission.

5 Future Plan of Killinochchi Development

Both sides agreed that the Project should be in line with the Future Development Plan of the District. The Sri Lanka side will provide relevant information. The JICA Mission emphasized that a Grant Aid Project is aimed at meeting immediate needs and a District Development Plan should be interpreted reflecting present conditions of the district.

6 Service Level

NWSDB explained that the Board approval has been obtained to implement 1,000 individual connections on subsidized rate in the Killinochchi Town. NWSDB requested the materials of individual connection be included in the Project.

7 Treatment of Wastewater of Hospitals

The JICA Mission expressed their concern about the possibility of discharging wastewater of District General Hospital and District Ayuruvedic Hospital into Dry Aru. NWSDB understood the necessity to handle the waste water properly and requested this to be included in the Project, if any adverse effect on to Dry Aru were found.

8 Jaffna- Killinochchi Water Supply and Sanitation Project

NWSDB explained that the Jaffna- Killinochchi Water Supply and Sanitation Project funded by the ADB only includes Poomeri and Palai Divisions of Killinochichi District, and is out of the service area of the Project.

9 Staff Allocation

NWSDB agreed to make arrangements to allocate sufficient numbers of trained staffs for Construction Supervision, Operation and Maintenance. Numbers, Job Descriptions and backgrounds of necessary staffs will be discussed and identified in the course of the Preparatory Survey.

10 Budget Allocation

The GoSL shall make necessary arrangements to allocate budget for the responsibility of the recipient country

Annex-4

JAPAN'S GRANT AID SCHEME

The Government of Japan (hereinafter referred to as "the GOJ") is implementing the organizational reforms to improve the quality of ODA operations, and as a part of this realignment, a new JICA law was entered into effect on October 1, 2008. Based on the law and the decision of the Government of Japan (hereinafter referred to as "the GOJ"), JICA has become the executing agency of the Grant Aid for General Projects, for Fisheries and for Cultural Cooperation, etc.

The Grant Aid is non-reimbursable fund to a recipient country to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

The Japanese Grant Aid is conducted as follows-

- Preparatory Survey (hereinafter referred to as "the Survey")
 The Survey conducted by JICA
- Appraisal & Approval
- Appraisal by the GOJ and IICA, and Approval by the Japanese Cabinet • Determination of Implementation
- The Notes exchanged between the GOJ and a recipient country Grant Agreement (hereinafter referred to as "the G/A")
 - Agreement concluded between JICA and a recipient country
- Implementation Implementation of the Project on the basis of the G/A

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide a basic document necessary for the appraisal of the Project by JICA and the GOJ. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also
 institutional capacity of agencies concerned of the recipient country necessary for
 the implementation of the Project.
- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, financial, social and economic point of view.
- Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- Preparation of a basic design of the Project.
- Estimation of costs of the Project.

The contents of the original request by the recipient country are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of the Japan's Grant Aid scheme. JICA requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA uses (a) registered consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

The Report on the Survey is reviewed by JICA, and after the appropriateness of the Project is confirmed, JICA recommends the GOJ to appraise the implementation of the Project.

3. Japan's Grant Aid Scheme

(1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes(hereinafter referred to as "the E/N") will be signed between the GOJ and the Government of the recipient country to make a plead for assistance, which is followed by the conclusion of the G/A between JICA and the Government of the recipient country to define the necessary articles to implement the Project, such as payment conditions, responsibilities of the Government of the recipient country, and procurement conditions.

(2) Selection of Consultants

The consultant firm(s) used for the Survey will be recommended by JICA to the recipient country to also work on the Project's implementation after the E/N and the G/A, in order to maintain technical consistency.

(3) Eligible source country

Under the Japanese Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When JICA and the Government of the recipient country or its designated authority deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm are limited to "Japanese nationals".

(4) Necessity of "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by JICA. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

(5) Major undertakings to be taken by the Government of the Recipient Country

In the implementation of the Grant Aid Project, the recipient country is required to undertake such necessary measures as Annex.

(6) "Proper Use"

The Government of the recipient country is required to maintain and use the facilities constructed and the equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

(7) "Export and Re-export"

The products purchased under the Grant Aid should not be exported or re-exported from the recipient country.

- (8) Banking Arrangements (B/A)
 - a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). JICA will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.
 - b) The payments will be made when payment requests are presented by the Bank to JICA under an Authorization to Pay (A/P) issued by the Government of the recipient country or its designated authority.
- (9) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.

(10) Social and Environmental Considerations

A recipient country must ensure the social and environmental considerations for the Project and must follow the environmental regulation of the recipient country and JICA socio-environmental guidelines.

(End)

Annex-5

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Major Undertakings to be taken by Each Government (Architecture)

* To be adjusted as appropriate for each project

| NO | Items | To be covered by the Grant | To be covered by Recipient side |
|-----|---|-------------------------------|------------------------------------|
| 1 | To secure land | | (3) |
| 2 | To clear, level and reclaim the site when needed | | 6 |
| 3 | To construct gates and fences in and around the site | | 9 |
| 4 | To construct the parking lot | | |
| 5 | To construct roads | | |
| | 1) Within the site | 9 | |
| | 2) Outside the site | | ٠ |
| 6 | To construct the building | | |
| 7 | To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities | | |
| | 1) Electricity | | |
| | a. The distributing line to the site | | |
| [| b. The drop wiring and internal wiring within the site | ۲ | |
| | c. The main circuit breaker and transformer | ٩ | |
| | 2) Water Supply | 1 | |
| | a. The city water distribution main to the site | | 0 |
| . [| b. The supply system within the site (receiving and/or elevated tanks) | 9 | |
| Ļ | 3) Drainage | | |
| | a. The city drainage main (for storm, sewer and others) to the site | | 6) |
| | b. The drainage system (for toilet sewer, ordinary waste, storm drainage and others) within the site | ٩ | |
| | 4) Telephone System | | |
| | a. The telephone trunk line to the main distribution frame / panel (MDF) of the building | | ۲ |
| | b. The MDF and the extension after the frame / panel | • | |
| · | 5) Furniture and Equipment | | |
| | a. General furniture | 1 | . @ |
| | b. Project equipment | 8 | |
| 8 | To bear the following commissions to a bank of Japan for the banking services based upon the B/A | | |
| | 1) Advising commission of A/P | 1 | Ø |
| | 2) Payment commission | | (2) |

g N

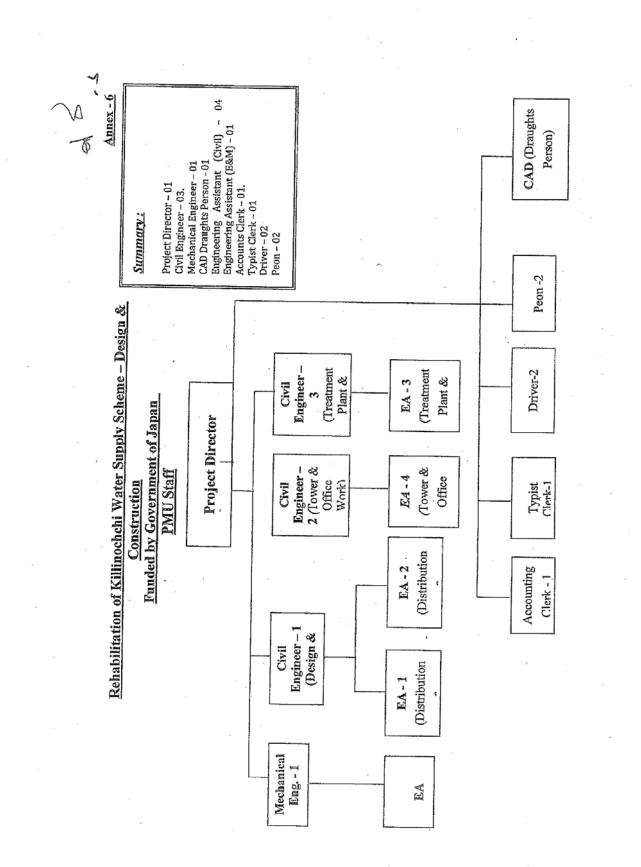
| NO | Items | To be covered by the Grant | To be covered by Recipient side |
|----|---|-------------------------------|------------------------------------|
| 9 | To ensure prompt unloading and customs clearance at the port of disembarkation in recipient country | | |
| | 1) Marine(Air) transportation of the products from Japan to the recipient country | 0 | |
| | 2) Tax exemption and customs clearance of the products at the port of disembarkation | | G |
| | 3) Internal transportation from the port of disembarkation to the project site | G | |
| 10 | To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work | | ٢ |
| 11 | To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contract | | 9 |
| 12 | To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid | | ٩ |
| 13 | To bear all the expenses, other than those to be borne by the Grant Aid, necessary for construction of the facilities as well as for the transportation and installation of the equipment | | 0 |

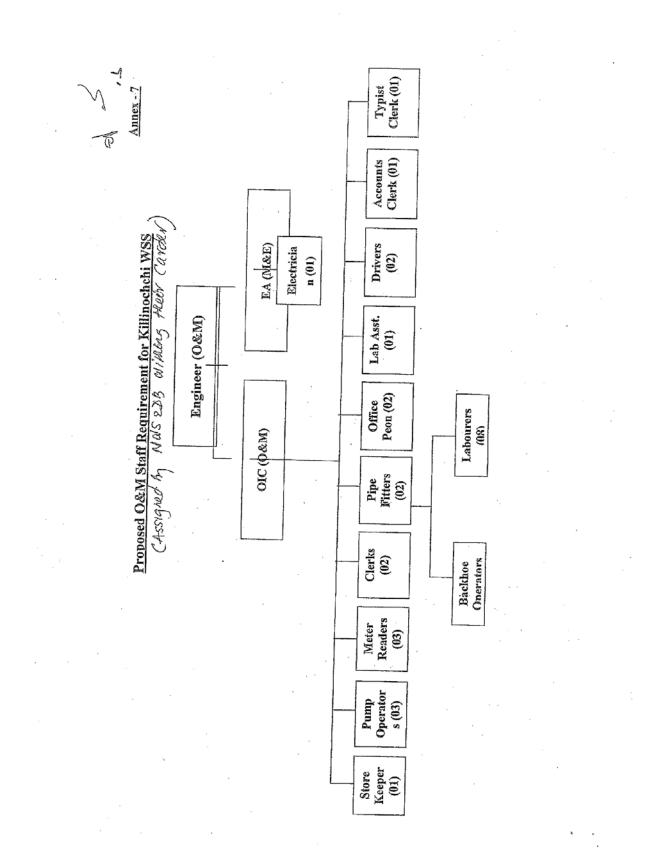
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(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)

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4-2 Minutes of Discussions on 28 March 2011

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MINUTES OF THE MEETING ON MARCH 28TH 2011 ON PREPARATORY STUDY ON REHABILITATION OF KILLINOCHCHI WATER SUPPLY SCHEME IN

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

Agreed on March 28th 2011

0 walst

Mr. D.S.D Jayasiriwardene Deputy General Manager Planning & Design Section, National Water Supply & Drainage Board

Mr. Tadao Funamoto Chief Consultants JICA Study Team

MINUTES OF THE MEETING

| I. | Date and Time | : | 28 March 2011, 14:00-16:40 |
|------|---------------|---|--|
| П. | Place | : | Meeting Room of Planning & Design Division NWSDB |
| III. | Present | : | As shown in the attached attendants list |

IV. Discussions

The meeting was chaired by Mr. D.S.D Jayasiriwardene; Deputy General Manager, NWSDB Planning & Design Section. In the meeting two subjects were discussed, i.e. 1) water treatment technologies to be introduced into the WTP, and 2) the water supply system options and the project components to be undertaken by the Japan's Grant Aid Scheme or by Sri Lankan side. Those two subjects had been discussed generally on March 23rd 2011 and on March 14th respectively. Both issues were discussed in detail and both sides agreed to select the Case -2 as the optimum option.

Water Treatment Technology

- NWSDB explained the necessity of detailed discussion about the technology which will be introduced into the WTP in addition to the existing Slow Sand Filters technology. In the previous meeting "Pre-chlorination + Aeration" was supposed to be introduced; however, NWSDB suggested that another technology such as Roughing Filters might be suitable to deduce Turbidity, Colour, Iron and Manganese properly. However, NWSDB explained that Mn measurements are not available for the source and agreed to provide them within next week. The NWSDB indicated that all the above technologies are only options to be considered by the consultant prior to finalization their final recommendation of the appropriate treatment method.
- 2) NWSDB also explained the necessity of a trial analysis to be conducted to determine the effectiveness of proposed technology and the JICA Study Team agreed to carry out the trial in the early period in April 2011. The JICA Study Team will make a testing method proposal before 01 Aril 2011 and discuss with NWSDB about detailed procedures. Since algae is present in water a suitable option will be introduced to reduce them to an acceptable level at the intake.

Water Supply System Option

3) The JICA Study Team explained that there are following three options as concepts of Planning the Project, as follows:

3 Options of Scope of Works for Japan's Grant Aid components

- · Case-1: Rehabilitation of the former existed main water supply system
- Case-2: Rehabilitation of the former existed water supply system with some extension up to Iranamadu Junction
- · Case-3: Rehabilitation of the former existed water supply System with future provision

4) NWSDB and the JICA Study Team agreed to select the Case -2 as the optimum option.

Alif

5) Case-3 shall be justified as a future plan which will cover the entire area of Killinochchi Division in the aspects of the consistency of the total water supply system in future.

The second second

- 6) NWSDB agreed that Case-3, the expansion of the water supply system to the southern area (Ponnagar and Bharathipuram) shall be taken care of in a future plan.
- 7) The area for the elevated tower which will be newly constructed in Kilinochchi Town is proposed to be included with in the current WTP land. It shall be justified with treatment technology selection. NWSDB also agreed to search for a suitable land to construct the tower within a radius of I km from the existing TP land within 2 weeks and report.
- 8) Regarding the demarcation of the proposed project components between Japan's Grant Aid components and Sri Lankan sides' components, NWSDB and the JICA Study Team agreed tentatively as follows. This will be finalized and agreed among NWSDB and the next JICA mission expected in May 2011, after further analysis, discussion and approval in Japan.

| No | Items | Grant Aid Project Component | Sri Lankan sides |
|----|---|---|---|
| 1 | Demolition and Disposal of damaged structures | Deleted | |
| 2 | Intake / Catchment Protection | Included | |
| 3 | Supply & Installation of LL and HL Pumps and Generators | Included | |
| 4 | Rehabilitation, Repairs, Modification and Improvement of existing 3,000 m3 capacity water treatment plant and intake with clear water tank | Included | |
| 5 | Construction of 1,000 m ³ tower at Kilinochchi Town | Included | |
| 6 | Construction of 450 m ³ tower at Paranthan | Included | |
| 7 | Rehabilitation of Raw Water Main | Included DCIP L=200m | |
| 8 | Rehabilitation of Treated Water Transmission Main to Paranthan | Included DCIP L=-6 km | |
| 9 | Rehabilitation and repair of uPVC - distribution system including reinforcement | Included uPVC L=approx. 34 km | |
| 10 | Supply & Installation of Gas Chlorinator | Included | |
| 11 | Construction of Quarters | Excluded | Will manage |
| 12 | Construction Office Building and Stores | Only O&M rooms at WTP site | Main Office and Sores will be taken |
| 13 | Power Supply | Excluded | Will manage |
| 14 | Vehicles for operation and maintenance works (Pickups - 2, Lorry Mounted Crane - 1, JCB - 1, Crew Cab - 2) | Included | |
| 15 | O&M Equipment and Laboratory Equipment | Minimum equipment required for WTP operation | Laboratory in Jaffna Office will overview |
| 16 | Capacity Building Training Programme | Included (O&M Training shall be included) | General Training for newly hired staffs will be done by NWSDB |
| 17 | House Connections (added) | Included (1,500 connections) | |

Note 1: As to the pipe material, utilization of PE is to be examined.

Note 2: The number of connections shall be examined and justified later.

- A population density map to be developed by the JICA Study Team to clarify area-wise priorities of the project.
- IV. Conclusion

NWSDB and the JICA Study Team agreed to examine the project components in further detail through internal and mutual discussions prior to the second JICA's Mission.

The JICA Sri Lanka Office Representative explained the tentative schedule of the Preparatory Survey on Rehabilitation of Killinochchi WSS (Phase 2) from May 9th 2011 to June 29th 2011.

V. Others

Regarding environmental and social considerations, JICA Study Team explained that they need to confirm in writing from CEA that neither IEE nor EIA is necessary for the Project. NWSDB will contact CEA and discuss whether there are any issues to be clarified regarding fauna and flora ordinance clarification, etc.

| Mr. D.S.D Jayasiriwardene | NWSDB Planning & Design Section | Deputy General Manager |
|---------------------------|---------------------------------|----------------------------------|
| Mr. M.M. Umarlebbe | NWSDB Japanese Projects Unit | Assistant General Manager |
| Mr. R.B. Thavendrakumar | NWSDB NR-Jaffna | Regional Manager |
| Mr. R. R. P.N. Rathnayake | NWSDB Planning & Design Section | Specialist (Water Treatment) |
| Mr. S. Saravanakugan | NWSDB Planning & Design Section | Engineer |
| Mr. Imran M Saheer | NWSDB Japanese Projects Unit | Engineer |
| Mr. Tsuyoshi Hara | JICA Sri Lanka Office | Representative |
| Mr. Tadao Funamoto | JICA Study Team | Chief Consultant |
| Mr. Shinichi Osaka | JICA Study Team | O&M Specialist |
| Mr. Takashi Watanabe | JICA Study Team | Construction Planning Specialist |

Attachment: List of Participants

THE MINUTES OF MEETINGS ON THE MISSION FOR THE PREPARATORY SURVEY (PHASE 2) ON REHABILITATION OF KILLINOCHCHI WATER SUPPLY SCHEME IN DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

In response to a request from the Government of the Democratic Socialist Republic of Sri Lanka (hereinafter referred to as "GoSL"), the Government of Japan decided to conduct a preparatory Survey (Phase 2) on Rehabilitation of Killinochchi Water Supply Scheme (hereinafter referred to as "the Project").

JICA sent to Sri Lanka the Preparatory Survey Team (hereinafter referred to as "the JICA Mission") which is headed by Mr. Yoshiki Omura, Senior Advisor, JICA, and is scheduled to stay in the country from 8 May 2011 to 25 June 2011.

The JICA Mission held discussions with the officials concerned of GoSL and conducted a field survey at the survey area.

In the course of discussions and field survey, both parties confirmed the main items described in the attached sheets. The JICA Mission will proceed to further works and prepare the preparatory survey report.

Colombo, 13 May 2011

Mr. Yoshiki Omura Leader The Preparatory Study Team Japan International Cooperation Agency (JICA)

Mr. M & D U K Mapa Pathirana Director General Department of External Resources Ministry of Finance and Planning

Mr. A. Abeygunasekara Secretary Ministry of Water Supply and Drainage

Mr. Karunasena Hettiarachchi Chairman National Water Supply and Drainage Board

ATTACHMENT

1. Objective of the Project

The Objective of the Project is the rehabilitation of the existing water supply scheme to bring it back to operational level.

2. Project Site

The site of the Project is located in Killinochchi as shown in Annex-1.

3. Responsible and Implementing Agency

- 3-1 The Responsible Organization is the Ministry of Water Supply and Drainage.
- 3-2 The Implementing Agency is the National Water Supply and Drainage Board (NWSDB).
 - The organization chart is shown in Annex-2.

4. Items requested by the Government of Sri Lanka

After discussions between the Sri Lanka side and the JICA Mission (hereinafter referred to as "the both sides"), the items described in Annex-3 were finally requested by the Sri Lanka side.

The both sides confirmed that the appropriateness of the request would be examined in accordance with the further studies and analysis, and the final components of the Project would be decided by the Japanese side.

5. Japan's Grant Aid Scheme

- 5-1 GoSL understands the Japan's Grant Aid Scheme explained by the JICA Mission as described in Annex 4.
- 5-2 GoSL will take the necessary measures, as described in Annex-5, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

6. Schedule of the Survey

- 6-1 The consultant members of the JICA Mission will proceed to further studies in Sri Lanka until June 25, 2011.
- 6-2 JICA will prepare the survey report in English and dispatch a mission in order to explain its contents to GoSL around October 2011.
- 6-3 In case that the contents of the report are accepted in principal by GoSL, JICA will finalize the report and send it to the GoSL around December 2011.
- 6-4 GoSL understands that execution of the Preparatory Survey (hereinafter referred to as "the Survey") does not necessarily imply that the grant aid will be implemented.

7. Other Relevant Issues

In addition to the issues recorded in the previous minutes of meeting signed on 3 March 2011, the following were discussed and agreed:

7-1 Expansion Plan of A9 Road and Rehabilitation of Pipelines

Regarding the proposed transmission pipe and distribution pipe routes along the A9 road, the A9 road expansion project will be started before the commencement of the Project. Both sides recognized that the existing pipes will be located in the middle of expanded carriage way, which makes operation and maintenance of the pipes difficult, and there is a need of

relocation of pipeline to the road sides of the expanded A9 road. Also both sides recognized that the other existing transmission and distribution mains have the possibility of damages by bombardment during the conflict. Therefore both sides considered that it was preferable to install new pipeline for the transmission and distribution mains of the Project and leave the existing mains as they are. NWSDB agreed to install road crossing pipeline across the expanded A9 road at approximately 500m intervals.

7-2 Treatment of Wastewater of Hospitals

NWSDB explained that untreated wastewater is discharged by the Killinochchi District General Hospital directly to Dry Aru Tank, which was proposed as a water source for Killinochchi water supply scheme. NWSDB also explained that a nearby army camp is also discharging wastewater.

In view of water resource conservation, NWSDB proposed a plan to construct a wastewater treatment facility (stabilization pond system) for treating both wastewater from the hospital and the army camp.

The JICA Mission requested that the treatment facilities be made operable by the end of 2013 or the Project completion. NWSDB agreed to include this cost for the government budget of 2012 to meet the schedule.

NWSDB also explained that no wastewater from the Ayurvedic Hospital is drained to Dry Aru tank.

7-3 UXO disposal

NWSDB submitted "Current Status of Mine Action Map for Kandavalai DS Division as of April 27, 2011", which indicated that the project area was of low risk with respect to landmines. In this regard, the JICA Mission requested and NWSDB agreed to arrange the Technical Survey (TS) at least within the premises of Killinochchi Water Treatment Plant by October 2011.

Also during the previous survey, the JICA Mission recognized risks of unexploded ordnance (UXO) in addition to landmines. The JICA Mission requested and NWSDB agreed to conduct the following activities during the project period:

- i) With assistance of UN Mine Action Office, NWSDB shall organize a seminar on landmines and UXOs about current situations and how to deal with them when UXOs are discovered prior to the commencement of the construction works.
- ii) NWSDB shall facilitate Technical Survey (TS) of all the routes of transmission and distribution mains for UXO by November 2011. If any landmines/UXOs were found, NWSDB immediately reports to the UN Mine Action Office for disposal.
- iii) NWSDB shall report to the UN Mine Action Office and clear the landmines/UXOs, if found during the construction works.

7-4 Treatment of color and turbidity

In the previous field survey, NWSDB showed its concern of color, turbidity, Manganese and algae and requested the countermeasures. The Mission proposed introduction of up-flow roughing filtration as pre-treatment. NWSDB agreed the proposal.

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7-5 Pipe material

In the previous field survey, NWSDB requested to utilize High-density Polyethylene (PE) pipes instead of PVC pipes for distribution network. After the previous field survey a comparative study was conducted about pipe material and, both sides agreed to utilize PVC pipes for the distribution network for the Project.

Both sides also agreed that for transmission mains, PE pipe will be used except for exposed sections, where Ductile Iron pipes are applied, and for house connections, PE pipes of 15mm and/or 20mm diameters will be used.

7-6 Installation of individual house connections

In the previous survey, NWSDB requested new 1500 individual connections under the Project. The JICA mission proposed that the Japanese side will provide pipe material and water meters for 1500 connections for NWSDB's installation work if NWSDB submitted justification of such quantity acceptable to JICA. NWSDB agreed to install 2000 connections including said 1500 connections for immediate maximization of benefit within one year after completion of the Project.

7-7 Proposed intake pit

NWSDB requested to locate the proposed intake pit off the existing intake pit and the JICA Mission agreed. Both sides agreed to study providing devices for minimizing inflow of algae into the proposed intake pit.

7-8 Soft component

NWDSB requested to include soft component comprising O&M training and preparing O/M manuals as follows:

i) O&M of treatment plant

ii) O&M of distribution system

iii) Training of Electrical & Mechanical works

iv) PE service connection work

v) Water quality analysis

NWSDB emphasized that Killinochchi Water Supply Scheme requires manpower of 20 employees, who are mostly new recruits within the NWSDB approved cadre. The JICA Mission recognized the need of such training.

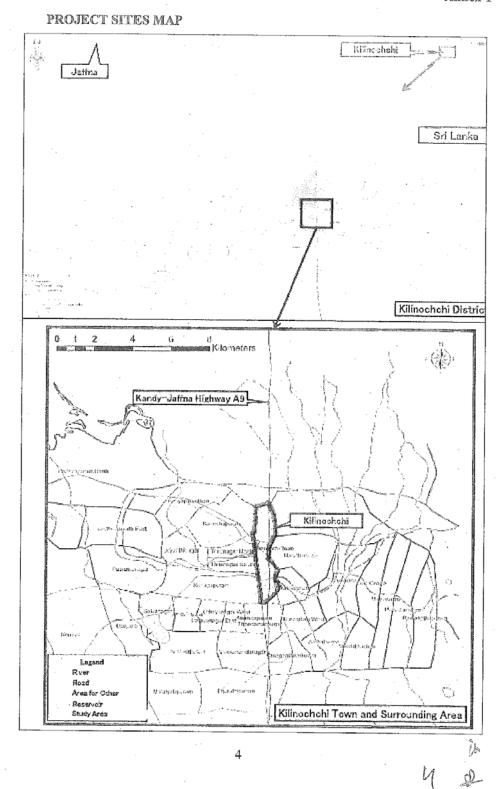
7-9 Elevated tower

NWSDB requested that the distribution system should have a single water tower comprising the existing capacity of 1,450m3 depending on the distribution model and soil condition.

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A-27

END



Annex-1

ORGANIZATION CHART

Annex-2

Organization Structure of the National Water Supply & Drainage Board

DGM (IA) Chairman & Board of Directors Secrotory AGM (T&C) AGM (Co-ordination) AGM (Personnel) DGM (P&A) AGM (Administration) DGM (Commercial) AGM (Financial Accounts) AGM (Budgetary Control) DGM (Finance) AGM (Logistics & Projects) AGM (Revenue & Payments) AGM (Western) DGM (Western - South) AGM Dev. (Western - South) Addi, GM (Western) General Menage AGM (NRW) DGM (Western - Central) AGM (OAM) Western - Central AGM Dev. (Western - Central) DGM (Western - North) AGM Dev. (Western - North) AGM (Production) AGM (Southern/ Eastern) đ Addl. GM (Southern Eastern) AGM Dev. (Sabaragamuwa) DGM (Sabaragamuwa & Uya) AGM (Uvo) DGM (East) AGM Dev. (East) DGM (Southern) AGM Dev. (Southern) Idi. GM DGM (Central) AGM Dev. (Central) (Norther Central) OGM (North - Western) AGM Dev. (North - Western) DGM (North - Central) AGM Dev. (North - Central) OGM (North) AGM Dev. (North) AGM (Northern/ Central) DGM (M&E Services) AGM (M&E Services) Addi, GM (Corporate Services) AQM (IT - Information & Services) DGM (IT) AGM (IT - Application Development) AGM (Supplies) AGM (MDT) PDs AGM (Sowerage Operations) Addl. GM AGM (Sawaraga Projects) AGM (P&D Sowerage) PDs DGM (Project Co-ordination) Addi. GM (Water Supply Projects) AGM (Japanese Projects) AGM (P&D N/C) DGM (P&D) AGM (P&D Western) AGM (P&D M&E) AGM (P&D Documentation) AGM (P&D S/E) AGM (Construction) AGM (Surface Water Resources) DGM (Dev.) AGM (GW Resources & Invest.) Addi. GM (Policy & DGM (CP) AGM (MIS) AGM (Policy & Stralegy) AGM (Research & Developm Version 2010,08,10 © 2010 Corporate Planning Division. All rights res AGM (Rural Water Supply) ŝ Ø n

Annex-3

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Items requested by the Sri Lankan side

| No. | Description | | | |
|------------|---|--|--|--|
| 1 | Intake and catchment protection | | | |
| 2 | Supply and installation of LL & HL pumps & generators | | | |
| 3 | Rehabilitation of existing 3000cu.m per day capacity water treatment | | | |
| | plant, clear water sump, HL pump house and installation of transmission | | | |
| | main | | | |
| 4 | Construction of 1000 cu.m water tower in Killinochchi Town | | | |
| 5 | Construction of 450 cu.m water tower at Paranthan | | | |
| 6 | Rehabilitation of 300mm dia Raw water main | | | |
| \bigcirc | Supply and laying of 300 mm dia treated water transmission mains | | | |
| 8 | Supply and laying of 225-90 mm dia 40km uPVC distribution system | | | |
| 9 | Supply & installation of gas chlorinators | | | |
| 10 | Construction of quarters, office building & stores | | | |
| 1 | Vehicles for Operation and Maintenance works (Crew Cab 1 unit, Pick up truck 1 unit) | | | |
| (12) | | | | |
| C C | O&M Equipment (under-pressure tapping machine 2 units, personal | | | |
| | computer 2 units, printer 2 units, LCD projector 1 unit) and laboratory | | | |
| | equipment (colorimeter (temperature, turbidity and color) 1 unit, | | | |
| | microscope 1 unit, Electrical Conductivity meters 2 units, pH meters 2 | | | |
| | units and Residual chlorine meter 2 units) | | | |
| 13 | Soft (Non-Physical) Components: Capacity building training program | | | |

Annex-4

JAPAN'S GRANT AID SCHEME

The Government of Japan (hereinafter referred to as "the GOJ") is implementing the organizational reforms to improve the quality of ODA operations, and as a part of this realignment, a new JICA law was entered into effect on October 1, 2008. Based on the law and the decision of the Government of Japan (hereinafter referred to as "the GOJ"), JICA has become the executing agency of the Grant Aid for General Projects, for Fisheries and for Cultural Cooperation, etc.

The Grant Aid is non-reimbursable fund to a recipient country to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

The Japanese Grant Aid is conducted as follows-

- Preparatory Survey (hereinafter referred to as "the Survey")
 The Survey conducted by JICA
- Appraisal & Approval
 - Appraisal by the GOJ and JICA, and Approval by the Japanese Cabinet
- Determination of Implementation
- The Notes exchanged between the GOJ and a recipient country
- Grant Agreement (hereinafter referred to as "the G/A")
 - Agreement concluded between JICA and a recipient country
- Implementation Implementation of the Project on the basis of the G/A

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide a basic document necessary for the appraisal of the Project by JICA and the GOJ. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the implementation of the Project.
- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, financial, social and economic point of view.
- Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- Preparation of a basic design of the Project.
- Estimation of costs of the Project.

The contents of the original request by the recipient country are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the

Project is confirmed considering the guidelines of the Japan's Grant Aid scheme.

JICA requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA uses (a) registered consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

The Report on the Survey is reviewed by JICA, and after the appropriateness of the Project is confirmed, JICA recommends the GOJ to appraise the implementation of the Project.

- 3. Japan's Grant Aid Scheme
- (1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes(hereinafter referred to as "the E/N") will be signed between the GOJ and the Government of the recipient country to make a plead for assistance, which is followed by the conclusion of the G/A between JICA and the Government of the recipient country to define the necessary articles to implement the Project, such as payment conditions, responsibilities of the Government of the recipient country, and procurement conditions.

(2) Selection of Consultants

The consultant firm(s) used for the Survey will be recommended by JICA to the recipient country to also work on the Project's implementation after the E/N and the G/A, in order to maintain technical consistency.

(3) Eligible source country

Under the Japanese Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When JICA and the Government of the recipient country or its designated authority deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm are limited to "Japanese nationals".

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(4) Necessity of "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by JICA. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

(5) Major undertakings to be taken by the Government of the Recipient Country

In the implementation of the Grant Aid Project, the recipient country is required to undertake such necessary measures as Annex.

(6) "Proper Use"

The Government of the recipient country is required to maintain and use the facilities constructed and the equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

(7) "Export and Re-export"

The products purchased under the Grant Aid should not be exported or re-exported from the recipient country.

- (8) Banking Arrangements (B/A)
 - a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). JICA will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.
 - b) The payments will be made when payment requests are presented by the Bank to JICA under an Authorization to Pay (A/P) issued by the Government of the recipient country or its designated authority.
- (9) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.

(10) Social and Environmental Considerations

A recipient country must ensure the social and environmental considerations for the Project and must follow the environmental regulation of the recipient country and JICA socio-environmental guidelines.

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Major Undertakings to be taken by Each Government (Architecture)

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| * To be adjusted | an annuanista fan anal | |
| · To be adjusted | as appropriate for each | project |
| | | Project |

| NO | Items | To be covered by the Grant | To be covered by |
|-----|---|-------------------------------|------------------|
| 1 | To secure land | by the Grant | Recipient side |
| 2 | To clear, level and reclaim the site when needed | | 0 |
| 3 | To construct gates and fences in and around the site | | |
| 4 | To construct the parking lot | | |
| 5 | To construct roads | | |
| - | 1) Within the site | () | |
| | 2) Outside the site | | |
| 6 | To construct the building | @ | |
| · 7 | To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities | | |
| | 1) Electricity | | |
| ĺ | a. The distributing line to the site | | ۵. |
| | b. The drop wiring and internal wiring within the site | | |
| | c. The main circuit breaker and transformer | ۲ | |
| | 2) Water Supply | | - |
| | a. The city water distribution main to the site | | 6 |
| | b. The supply system within the site (receiving and/or elevated tanks) | 9 | |
| | 3) Drainage | | |
| | a. The city drainage main (for storm, sewer and others) to the site | | ۲ |
| | b. The drainage system (for toilet sewer, ordinary waste, storm drainage and others) within the site | ۲ | |
| | 4) Gas Supply | | |
| | a. The city gas main to the site | | 9 |
| [| b. The gas supply system within the site | 9 | |
| | 5) Telephone System | | |
| | a. The telephone trunk line to the main distribution frame / panel (MDF) of the building | | ٢ |
| | b. The MDF and the extension after the frame / panel | | |
| | 6) Furniture and Equipment | | · · · · · |
| · [| a. General furniture | | ۲ |
| | b. Project equipment | . 🕲 | |
| 8, | To bear the following commissions to a bank of Japan for the banking services based upon the B/A | | |
| . [| 1) Advising commission of A/P | | ۲ |
| F | 2) Payment commission | | • • • |

| NO | Items | To be covered by the Grant | To be covered by Recipient side |
|----|---|----------------------------|------------------------------------|
| 9 | To ensure prompt unloading and customs clearance at the port of disembarkation in recipient country | - | |
| | 1) Marine(Air) transportation of the products from Japan to the recipient country | ٢ | |
| | 2) Tax exemption and customs clearance of the products at the port of disembarkation | | 0 |
| | 3) Internal transportation from the port of disembarkation to the project site | · (@) | (@) |
| 10 | To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work | | 0 |
| 11 | To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contract | • | © , |
| 12 | To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid | | ٢ |
| 13 | To bear all the expenses, other than those to be borne by the Grant Aid, necessary for construction of the facilities as well as for the transportation and installation of the equipment | | ٩ |