



No. **03**
January
2016

Newsletter ^{Quarterly}

The Federal Capital Territory Reduction of Non-Revenue Water Project

Project Name

The Federal Capital Territory
Reduction of Non-Revenue Water
Project (The Project)

Project Period

Phase-1: Oct. 2014 to Dec. 2016
Phase-2: Jan. 2017 to Mar. 2018

Project Area

Federal Capital Territory (FCT)
Pilot Areas: Gudu, Jabi and Garki I

Implementation by

FCT Administration (FCTA)
FCT Water Board (FCTWB)

Support by

Japan International Cooperation
Agency (JICA)

JCC, Workshop and Meetings

The Project has so far held three Joint Coordinating Committee (JCC) meetings on 2nd Dec. 2014, 23rd Jun. and 12th Nov. 2015. The JCC is a decision-making process and chaired by the Project Director, who is also the Director of Economic Planning, Research and Statistics Dep't, FCTA. A workshop was also held on 4th December 2014. Quarterly and monthly meetings have been held regularly.



JICA organized a Stakeholder Meeting on 10th Nov. 2015, with Federal Min. of Water Resources, Kaduna State Water Board and FCTWB for mutually-beneficial information sharing.



Official Handover Ceremony
(FCTWB Director & JICA Chief Representative)

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Welcome, the new FCT Minister and PS.

After the assumption of duty on 11th Nov. 2015, the Project welcomes warmly **Mallam Muhammad Musa Bello, Hon. Minister, FCT** (left) and **Dr. Babatope Ajakaiye, Permanent Secretary, FCT** (right).



HIGHLIGHTS

Pilot Projects commence, and JICA seals Additional Assistance.

Handover of Equipment: Equipment from Japan such as leakage detector and vehicles were procured and then handed over officially from JICA to FCTWB. (See details in page 2.)

GIS Training: Training on GIS for eight FCTWB staff was conducted in Abuja in late November 2015. (See details in page 2.)

Pilot Projects: The selected three pilot project areas, called Pilot Metering Areas (PMAs), have been created through installation of flow meters and valves. Particularly in Gudu Area, baseline survey prior to Non-Revenue Water (NRW) reduction operations is ongoing. (See details in page 2.)

Additional Assistance: FCTA/FCTWB and JICA came to agreement on additional assistance in water distribution management and installation of zonal meters for effective NRW reduction and maintenance in the future (See details in Page 2.)

Training in Japan: In late August 2015, four project members participated in training course for two weeks in Yokohama City of Japan. (See details in page 3.)

Joint Monitoring: From late October to early November 2015, monitoring evaluation of the Project was conducted jointly by FCTA/FCTWB and JICA in the presence of mission members from JICA Headquarters.

FCTWB is being equipped to implement Pilot Project.

Equipment for implementation of pilot projects were procured and then handed over officially from JICA to FCTWB in the ceremony at FCTWB Headquarters on 3rd Nov. 2015, such as ultrasonic flow meters, data loggers, leakage detectors, correlators, pipe locators, etc. from Japan as well as two 4WD vehicles.

Network drawings as base map for pilot projects in the selected three PMAs have been prepared, and training on GIS for eight FCTWB staff was conducted by a locally-contracted company in Abuja from 23rd Nov. to 1st Dec. 2015.



Ultrasonic Flow Meter



Microphone Leak Detector



Mr. Shehu Suleiman, Head of GIS Unit, Distribution Department, who attended GIS Training together with seven other trainees.

"The training has impacted much by educating staff on the advantage and benefit of using GIS technology with a view to facilitating effective O&M. However, FCTWB should drive skill transfer from trainees to other staff by utilizing GIS software procured by JICA and also sustainability of GIS operations.

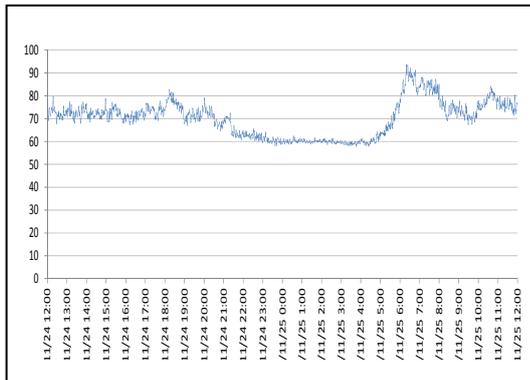
It is hoped that JICA will continue to provide comprehensive support including more training in order to ensure not only the perfection of the system but also its sustainability for FCTWB."

Findings in Baseline Survey in Pilot Project

Pilot project in a PMA of Gudu Area Office has been implemented, and so far baseline survey is ongoing prior to NRW reduction operations including repair of leakage, replacement of faulty meters and disconnection of illegal connections.

Baseline survey is composed of 24hrs & minimum night flow measurement, step test to prioritized leakage detection, meter inaccuracy/error test, identification of illegal connection, etc.

In the field, project members have faced difficulty in conducting baseline survey, due to inaccessibility to meters located inside property and private storage tanks hindering assumption of leakage by minimum night flow measurement as well as identification of illegal connections



24hrs & Minimum Night Flow Measurement

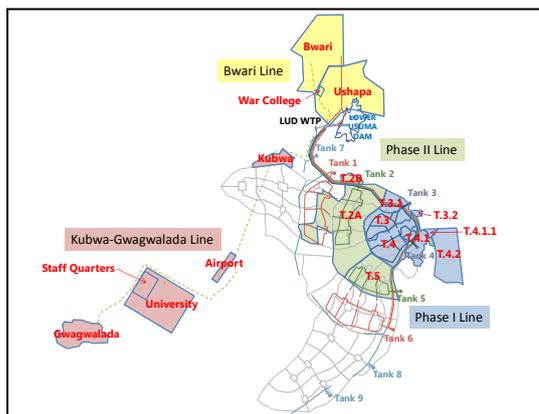


Meter Inaccuracy/Error Test



Illegal (Underground Bypassed) Connection

JICA's Additional Assistance under the Project.



Proposed Zoning for Water Distribution Management

Manageable zoning of distribution network enables FCTWB to monitor water distribution and NRW, and carry on maintenance effectively in a large scale of water supply system.

The necessity of additional activities and inputs to the Project, such as installation of zonal meters for water flow monitoring and establishment of framework of water distribution management, was recognized and then accepted as further assistance of JICA.



Mr. Habib Ahmed Kiru, Area Manager of Gudu Area Office.

"The Project has enhanced staff's capacity on skills and knowledge of more scientific methodology with procured equipment against NRW, such as 24hrs flow measurement, midnight step test and detection of underground leakages and illegal connections.

Conclusively, the Project has enlightened us more on the negative effect of NRW and its consequences on the economy.

Finally, the Project has to be sustained and extended to cut across all entire system in future for us to meet up with the acceptable level of NRW."



Procurement and installation of photovoltaic system (975kWp) into Lower Usuma Water Treatment Plant has been implemented since November 2015 under JICA's project "the Project for Introduction of Clean Energy by Solar Electricity Generation System (Responsible Ministry and implementing agency: the Federal Ministry of Power)" funded by Japan.

This Project will contribute to not only the realization of Nigeria's development plans and energy policy but also alternative power supply to FCTWB as an O&M agency, eventually water supply to more than 40,000 customers.



FCTWB invited JICA Expert Team to weekend lunch one fine day in Nov. 2015 in the waterfront of Lower Usuma Dam, which helps both to promote strong ties of friendship.

JICA Expert Team says "We'd like to use this medium to appreciate FCTWB's hospitality."

Congratulations



Mr. Ezeh Hilary, a project member, Surveyor of GIS Unit got married on 28th Nov. 2015. The Project offers hearty congratulations to him and his wife.

LEARNT FROM JAPAN AND ACTIONS

In late August 2015, four project members namely Engr. A. A. Nahuche, Mr. Adis S. Muhammad, Engr. Aliyu Usuman and Mr. Musa Dikko participated in training course "Water Supply Services Management and NRW Reduction" for two weeks in Yokohama City, Japan (Service Population: 3.7 million, Connection: 1.6 million, Daily Supply: 1.1 million m³, NRW Ratio: 8%).



Award of Certificate by JICA

As a conclusion of the training, they emphasized "Capacity strengthening of FCTWB and service improvement will be achieved by imbibing the practice of being self-sustaining organization as well as applying scientific approaches. Based on knowledge gained from the training, we propose actions to be taken or considered by FCTWB"

Organization

- Enabling Law for FCTWB
- Restructuring the organization for more effective & efficient service delivery
- Preparation of short, medium and long-term planning for training

Planning

- Forming a committee to review ongoing business plan and discuss future plan covering the NRW reduction
- Introduction of quality management of works
- Introduction of information management

Operation and Maintenance

- Creation of the mapping/GIS unit and procedures
- Establishment of leak detection unit
- Strengthening of metering units and establish meter workshop
- Installation of bulk/zonal meters to manage and monitor distribution system
- Introduction of strategic plan for maintenance

Billing

- Review of mode of payment to be more flexible for customers
- Review of water tariff based on volume of water consumption (progressive water tariff)
- Review of billing papers, elimination of return bills

Customer Service

- Enhancement of Customer Service Center and creation of desk officer of each area office
- Creation of more awareness through PR



Well-organized works



Leakage Detection Training Yard



Meter Workshop



Meter Reading and Billing

PROJECT MEMBERS

Project Director

Mr. Abubakar Sani Pai, Director of Economic Planning, Research and Statistics Dep't, FCTA

Project Manager

Mr. Hudu Bello, Director of FCTWB

Deputy Project Manager

Mr. S.T. Bello, Head of Administration and Supply Department, FCTWB

Technical Manager (Team Leader of NRW Management Team)

Engr. A. A. Nahuche, Head of Distribution Department, FCTWB

Mr. Adis S. Muhammad, Head of Commerce Department, FCTWB

Head of other relevant Departments and Unit (FCTWB)

Mrs. Hafsat Ahmed Lawi, Head of Finance and Accounts Department

Engr. Aliyu Usman, Head of Reservoir and Production Department

Ms. Bunmi Olowookere, Head of Planning, Research and Statistics Unit

Mr. Abbas A. Ahmed, Head of Public Relations Unit

Mr. Vincent Obeh, Head of Management Information System Unit

NRW Management Team (FCTWB)

Engr. Abolade. R. Lawal, Head of Special Projects Unit, Coordinator

Engr. Moh. Kabir Rabi, Head of Logistics Unit

Mr. Musa Dikko, Head of Pipeline Unit

Mr. Shehu Suleiman, Head of GIS Unit

Engr. Douglas E. Oloton, Head of Metering General

Engr. A.O. Akande, Head of Metering Unit (AMR Meter)

Engr. Yetunde Olaniyan, Head of Water Monitoring Unit

Engr. Abdullahi Masaud, Head of Metering Unit (Pre-paid Meter)

Mr. Abubakar Ubale Abubakar, Civil Engr. II, Logistics Unit

Mr. Mohammed Dauda, Technical Officer, Pipeline Unit

Mr. Ezech Hilary, Surveyor, GIS Unit

Mr. Isaac O. Owolabi, Head of Customer Care Unit

Mr. Danjuma Isah, Head of Monitoring and Detection Unit

Mr. Taiwo Adeyemi, Monitoring Staff, Monitoring and Detection Unit

Mr. Aliyu Maradun, Head of Major Consumers Unit

Mrs. Rose Akpan, Head of Billing Unit

Mr. Suleman Agbawn, Billing Officer, Billing Unit

Mrs. Francisca Samuel, Head of Training/ Welfare Unit

Mr. Akudike Ike D., Head, Facility Management Unit

NRW Action Team (Three Area Offices of FCTWB)

Jabi Area Office

Mr. Muhammed A. S. Ramat, Area Manager (Distribution), Team Leader

Mr. Sadiq Salihu, Assistant Area Manager (Distribution)

Mrs. Abawonse J. K., Assistant Area Manager (Commerce)

Mrs. Jummai Ugbodaga, Senior Commercial Officer (Commerce)

Mr. Mohammed Moh'd, Planning Officer (Commerce)

Mr. Aliyu Ibrahim, Senior Works Superintendent (Distribution)

Mr. Abubakar Danladi, Foreman (Distribution)

Ms. Raliat Zubairu, Higher Trade Officer (Commerce)

Mr. Mahmud Muhammed, Forman (Distribution)

Mr. Hassan Yelwa, STA (Commerce)

Gudu Area Office

Mr. Habib Ahmed Kiru, Area Manager (Distribution), Team Leader

Mr. Ogbu O. Williams, Assistant Area Manager (Commerce)

Mr. Abdul Ozumi, Assistant Area Manager (Distribution)

Mr. Adamu Ismaila, Unit Head (Commerce)

Mr. Umar I. Adamu, Assistant Tech. Officer (Commerce)

Mr. Kontagora Mohammed, Assistant Unit Head (Distribution)

Mr. Salisu Mohammed, Plumber (Distribution)

Garki I Area Office

Mr. Adesoji Adenuga, Area Manager (Commerce), Team Leader

Mr. Choji Pam, Assistant Area Manager (Commerce)

Mr. Mohammed Gana, Assistant Area Manager (Distribution)

Mrs. Olusegun Rose, Senior Trade Office (Commerce)

Mr. Abdulahi Ibrahim, Assistant Tech. Officer (Commerce)

Mr. Iliya Galadima, Higher Works Super intendant (Distribution)

Mr. Raymond Olowookere, Forman (Distribution)

Mr. Ibrahim Yelwa, Forman (Distribution)

Mr. Hassan Abubakar, Commerce Officer (Commerce)

Mr. Shehu Isa, Craftsman (Distribution)

JICA Expert Team

Mr. Akinori Miyoshi

Chief Advisor /

NRW Reduction Planning /

Water Distribution Management

Mr. Taketoshi Fujiyama

Deputy Chief Advisor /

NRW Reduction Planning /

Facility Design / Supervision

Mr. Toru Toyoda

NRW Reduction Operations

Management

Mr. Kiyoshi Kiyama

Leakage Detection Technology /

Equipment Design / Installation

Mr. Hiroyuki Morita

Commercial Loss

Mr. Shinta Segawa

Hydraulic Analysis / GIS /

Water Distribution Management

Mr. Seigo Goto

Remote Monitoring

Mr. Hiroki Niimura and

Mr. Takashi Mori

Procurement Management /

Coordinator

Appreciation

The Project expresses utmost thanks to Ms. Chie Shimodaira, JICA Nigeria Office, leaving Nigeria in the middle of Feb. 2016, for her substantial support to the Project from its commencement.

Chie's Message

"My dear FCTWB Team

It's been really a pleasure to engage the NRW project from its formulation. All the best for your persistent endeavor to enhance the skill, knowledge and commitment to NRW reduction. I will be looking forward to hear about your success story back in Japan.

Chie Shimodira"

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