

添付資料


會議議事録 (M/M)


MINUTES OF MEETING
ON
THE INCEPTION REPORT
FOR
THE STUDY ON
GROUNDWATER RESOURCES ASSESSMENT
IN THE RIFT VALLEY LAKES BASIN
IN
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

Addis Ababa,
February 4, 2010


Mr. Toshiyuki Matsumoto
Team Leader
Study Team
Japan International Cooperation Agency (JICA)




Ato. Abera Mekonnen
Chief Engineer
Ministry of Water Resources
Federal Democratic Republic of Ethiopia




Witnessed by
Dr. Yuji Maruo
Senior Advisor
Japan International Cooperation Agency (JICA)



In response to the official request of the Government of the Federal Democratic Republic of Ethiopia (hereinafter referred to as "the Government of Ethiopia"), the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Preparatory Study Team. The Japanese side and the Ethiopian side came to an agreement on the Scope of Work (hereinafter referred to as "S/W") which was signed on July 23rd, 2009.

JICA sent to Ethiopia the JICA Study Team (hereinafter referred to as "the Team") for THE STUDY ON GROUNDWATER RESOURCES ASSESSMENT IN THE RIFT VALLEY LAKES BASIN (hereinafter referred to as "the Study"). The Team held a meeting with the officials of the Ministry of Water Resources (hereinafter referred to as "MoWR") and other authorities concerned with the Study. The list of those who attended this meeting is shown in Appendix-1.

In the course of discussions, both sides confirmed the main items described on the Inception Report (hereinafter referred to as "IC/R"). The Team will submit the Final Report on December 2011, when the Study comes to an end.

1. Explanation of Inception Report (IC/R)

The Team submitted twenty (20) copies of the IC/R to the MoWR on 25th January, 2010.

The inception report was presented by the Team to the MoWR and concerned authorities, and discussed in Addis Ababa on 25th, 26th January, 2010. In this presentation, Ato Abera Mekonnen (Chief Engineer of the MoWR) chaired the meeting.

The Team presented the basic objectives, outline and scope of the study proposed in the IC/R, including the technical transfer proposed in the Study. Technical discussions were conducted between the Team and the MoWR, Geological Survey of Ethiopia (hereinafter referred to as "GSE") and concerned authorities on each of the study items, surveys and data required for the Study.

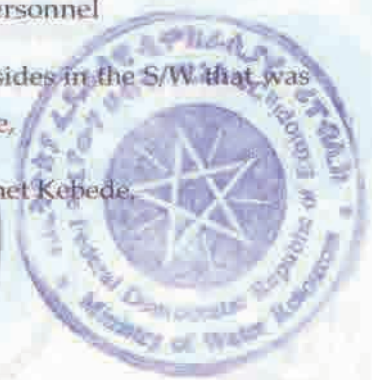
The Ethiopian side agreed on the contents of the IC/R in principle, understood the study objectives, schedule, activities and methodology, and promised close cooperation with the Team during the Study.

Major issues and the contents regarding the IC/R are as follows.

1) Designation of Counterpart (hereinafter referred to as "C/P") personnel

The C/P personnel were confirmed by the Ethiopian and JICA sides in the S/W that was signed on July 23rd, 2009. The candidates of the C/P personnel will be,

1. EWTEC: Ato Tamiru Fekadu, Ato Mulgeta Kenfir and Ato Shumet Kebede.



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2. GSE: To be filled in the name of C/P personnel after confirmation,
3. Addis Ababa University (hereinafter referred to as "AAU") To be filled in the name of C/P personnel after confirmation,
4. Oromia Water Bureau: To be filled in the name of C/P personnel after confirmation,
5. Southern Nations, Nationalities and People (hereinafter referred to as "SNNP") Water Bureau: To be filled in the name of C/P personnel after confirmation, and
6. MoWR: To be filled in the name of C/P personnel after confirmation

All C/P personnel shall closely cooperate with the Team for the smooth implementation of the Study. The Team strongly requested that the MoWR and Ethiopia Groundwater Resources Assessment Program (hereinafter referred to as "EGRAP"), which is the Implementing Agency of the Study, should select the above permanent C/P personnel and keep the assignment and budget for their activities. The Ethiopian side agreed to select the above personnel.

2) Participation of the members of Oromia and SNNP Regions for the C/P of the Study

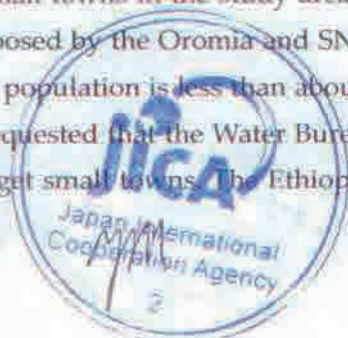
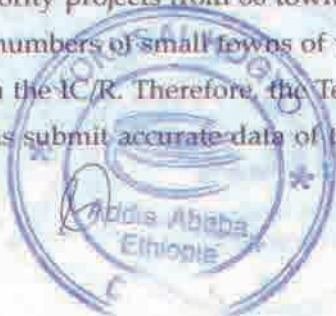
The Team emphasized that it was very important to involve the members of Water Bureau of Oromia and SNNP regions. Because, water supply plans for both of these regions were included as one of the aims of this Study. The Team requested that the Water Bureau members of the above two regions provide with pertinent data of the study area and they join the Team during the course of the survey. The Team explained that the technology transfer for the water supply plan was carried out targeting the C/P of the two regions. The Ethiopian side agreed that the Water Bureau members of Oromia and SNNP regions participated as the C/P of the Study.

3) Collection of existing data

The Team requested that the MoWR should cooperate on the collection of existing data for the Study with Team through the participation of the C/P personnel, including the Water Bureau members of Oromia and SNNP regions. The Ethiopian side agreed to facilitate data collection.

4) Selection of small towns for the water supply

The Team explained that the number of small towns in the study area will be narrowed down for priority projects from 80 towns proposed by the Oromia and SNNP regions to the appropriate numbers of small towns of which population is less than about 10,000, based on the criteria in the IC/R. Therefore, the Team requested that the Water Bureau of Oromia and SNNP regions submit accurate data of the target small towns. The Ethiopian side promised



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to submit reliable data of target small towns of Oromia and SNNP regions to the Team.

5) Utilization of equipment and drilling machinery of EWTEC

The Team request to borrow and use geophysical equipment and drilling machine with operator from EWTEC during the study in consideration of the term of training in EWTEC. The Ethiopian side agreed to render EWTEC's equipment and machinery.

2. Undertakings by the Government of Ethiopia

The Government of Ethiopia shall accord privileges, exemptions and other benefits to the Team in accordance with the Agreement on Technical Cooperation between the Government of Japan and the Government of Ethiopia, signed on July 23, 2009.

3. Other relevant issues

1) Joint Steering Committee (JSC)

• Members of JSC are as follows:

- (1) The Chairperson: Chief Engineer of the MoWR.
- (2) Permanent members
 - EGRAP+, MoWR
 - EWTEC, MoWR
 - Water Resources Development Fund (WRDF), MoWR
 - GSE
 - AAU
 - WRDB of Oromia Region
 - WRDB of SNNP Region
 - JICA Ethiopia Office
 - The Team
 - Others as necessary (EWTEC Japanese experts)

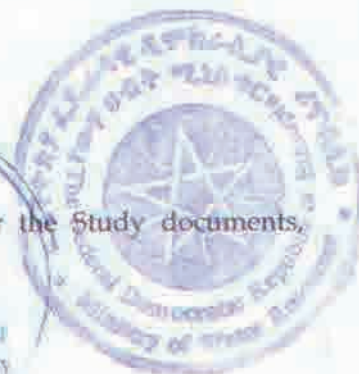
JSC meeting is to be held as follows:

• Schedule of meeting

The JSC will convene around the time of each report submission

2) Official language for the Study

Both sides agreed that English is the principal language for the Study documents, including the M/M.



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3) Outline of study schedule:

The outline of study schedule is as follows:

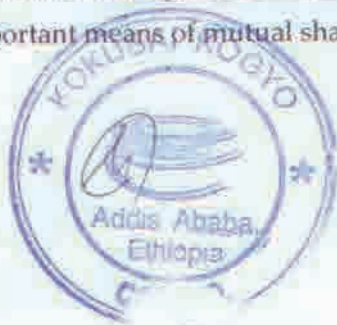
Fiscal Year	2009			2010												2011									
Cal. Month	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Report		▲ IC/R							▲ P/R(1)						▲ P/R(2)				▲ IT/R				▲ DF/R	▲ F/R	
JSC		1							2						3				4				5		

Note: IC/R: Inception report; DF/R: Draft Final Report; IT/R: Interim Report; F/R: Final report; P/R: Progress report.

4) Dissemination of information and know-how transfer

Both sides agreed that the major aim of the Study also includes sharing of results and techniques or various surveys where technical transfer to the related Ethiopian authorities constitutes important means of mutual sharing.

END



ATTENDANCE LIST

ETHIOPIAN SIDE

Ministry of Water Resources (MoWR)

Ato Abera Mekonnen

Ato Tsegaye Telila

Ato Zebene Lakew

Ethiopia Groundwater Resources Assessment Program (EGRAP+)

Ato Tesfaye Tadese

Ato Zenaw Tessema

EWTEC

Mr. Masahiko Ikemoto

Mr. Hiroshi Takashima

GSE

Dr. Tesfaye Demissie

Ato Demis Alamirew

JAPANESE SIDE

JICA Study Team

Mr. Toshiyuki Matsumoto

Mr. Hisayuki Ukishima

Mr. Kensuke Ichikawa

Mr. Ryohei Matsumoto

Team Leader of Study Team

Hydrogeologist 1

Hydrogeologist 2

Coordinator

JICA Official Mission

Dr. Yuji Maruo

Leader of Official Mission



List of Counterparts (draft)

Study Team		C/P	
Expertise	Name	Name	Position
Team Leader/Groundwater development plan	Toshiyuki MATSUMOTO	1. Ato Tesfay Tadesse 2. Ato Zenaw Tessema	EGRAP+ EGRAP+
	Hydrogeology 1	Hisayuki UKISHIMA	1. Ato Shumet Kebede
Hydrogeology 2/Water quality	Kensuke ICHIKAWA	2. Ato Tamiru Fekadu	EWTEC
		3. 2 persons 4. 1 person	GSE AAU
Volcanic geology	Toshiaki HOSODA	1. 1 person	GSE
		2. 1 person	AAU
GIS database	Yoshimizu GONAI	1. Ato Shumet kebede	EWTEC
		2. Ato Tamiru Fekadu	EWTEC
Geophysical survey	Nobuo KIMURA	1. Ato Shumet kebede	EWTEC
		2. Ato Tamiru Fekadu	EWTEC
Well Drilling/Hydrology	Naoki YASUDA	1. Ato Mulgeta Kenfu	EWTEC
Water supply	Hiroshi TAKASHIMA	1. 1 person	WRDB of Oromia
		2. 1 person	WRDB of SNNP
		3. 1 person	EWTEC
Socio-economic survey	Masaru OBARA	1. 1 person	WRDB of Oromia
		2. 1 person	WRDB of SNNP

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MINUTES OF MEETING
ON
THE 1ST STEERING COMMITTEE
FOR
THE STUDY ON
GROUNDWATER RESOURCES ASSESSMENT
IN THE RIFT VALLEY LAKES BASIN
IN
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

松本 俊

Mr. Toshiyuki Matsumoto
Team Leader
Study Team
Japan International Cooperation Agency (JICA)



Yefky

Ato. Abera Mekonnen
Chief Engineer
Ministry of Water Resources
Federal Democratic Republic of Ethiopia

Addis Ababa,
August 27, 2011



Tesfaye Tadese

Witnessed by
Ato. Tesfaye Tadese
Groundwater Study Development & Management Directorate Director
Ministry of Water Resources & National Coordinator/EGRAP
Federal Democratic Republic of Ethiopia

In response to the official request of the Government of the Federal Democratic Republic of Ethiopia, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Study Team ("the Team") for THE STUDY ON GROUNDWATER RESOURCES ASSESSMENT IN THE RIFT VALLEY LAKES BASIN based on the agreement on the Scope of Work ("S/W") which was signed on July 23rd, 2009.

The Ministry of Water Resources ("MoWR") held the first Steering Committee ("SC") meeting with the Team and Counterpart Personnel ("C/P") for the discussion of contents of Progress Report (1) submitted from the Team. The list of the participants is shown in the Annex.

1. Explanation of Progress Report (1) (P/R(1))

The Team explained the contents of P/R (1) using the documents summarized the important points of P/R (1) in the steering committee meeting chaired by Ato Abera Mekonnen on 3rd August, 2010. And also the Team submitted the P/R (1) printed to the SC members on 9th August, 2010.

The Team presented the basic objectives, outline and scope of the Study, and the results of survey, in particular geology, hydrogeology, geophysical survey, observation well drilling and survey of small town water usage explained in the P/R (1), including the role of SC proposed in the presentation. Technical discussions were conducted on each of the study items, and the results of survey.

The Ethiopian side agreed on the contents of the P/R (1) in principle, in particular, methodology of the Study, the Study results and activities.

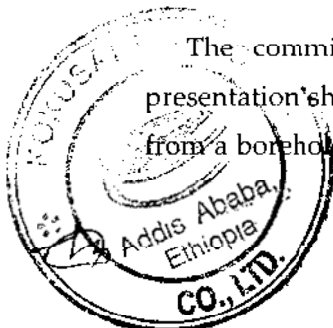
Major issues and the contents regarding the P/R (1) in SC meeting are as follows.

1) Size of the study area

The participants mentioned that the Study area is too wide to draw over all hydrogeological pictures within the limited time frame. It is recommended compromise in the scope shall be considered. The Team said that it was mentioned in the project scope in IC/R explanation. To achieve the project goal, it is necessary to narrow down the target strategically such as focusing particular items of the Study.

2) Groundwater contour

The committee pointed out that the groundwater contour map explained in the presentation shall not be presenting the true distribution and level as the water level varies from a borehole to the other. Therefore, if aquifer status (such as confined or unconfined, or



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the aquifer formation) is not fully understood, it may give misinformation. The Team replies that the contour map was presented just for the general information, and the said point is fair. The Team mentioned the groundwater level distribution and/or partial groundwater level map will be figured out instead of the water level contour of whole Study area.

3) Precondition of drilling site selection

There are thousands of boreholes drilled in the area, and the intention of JICA boreholes in terms of its main purpose and particular difference with other borehole was questioned by C/P. The Team replied that the drilling location is considered to understand stratigraphical distribution of geology and cross sectional settings of the basins. Not only of the geological consideration, but also detailed aquifer interpretation and chemical, isotopic analysis will be made. It is obvious that the geophysical logging, water level measurement and other detail chemical approaches are noted to differ from the wells drilled in the conventional wells.

4) Water quality testing

The advantage and outcome of the water quality testing in order to achieve the results to characterize the Study area was also questioned. The Team answered that 93 sampling will be made, each sampling points are defined independently by basins, type of aquifer and source type. The water quality test and isotopic analysis will be made to grasp some tendency between those aquifers (formations) and water chemical composition, and its origin.

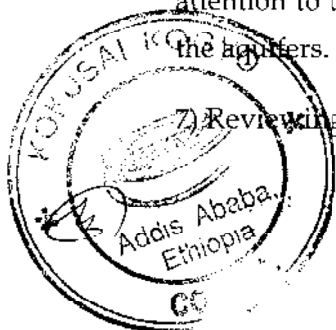
5) Continuation of detailed geological survey

The participants mentioned that they are concerned for continuing geological survey at southern area of RVLB in same scale because the study period is only around 3 month in the Study of second year. The Team answered that they may not spend much time in southern region; detailed geological maps made by EGS are available in that area and the survey will be conducted for confirmation and correlation of those maps with stratigraphy established in northern area by the Study.

6) Reviewing of existing geological map and data

The participants commented that it is better to compile and review existing data before the conducting of geological investigation. The Team answered that all the existing map of RVLB was well reviewed by Halcrow (2008) report. However after the Team reviewed this report, the Team believes that detailed stratigraphical investigation is necessary with special attention to the lithology and distribution of welded tuffs which are deeply related to the aquifers.

7) Reviewing of geothermal exploitation data



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The participant advised that there are some detailed studies for geothermal exploitation, and it is better to take into consideration for geological investigation. (Remark: The Team collected the geothermal exploitation report of Mt. Aluto, Corbetti and Dugna and the Team reflected those reports to the Study).

8) Interpretation of satellite imagery

The participant mentioned that the interpretation of faults and structures from satellite imagery give helps to the investigation. The Team answered that satellite imagery interpretation well be conducted in the Study of second year.

9) Dating of stratigraphic units

The participant advised that it is better to conduct dating of classified stratigraphic units to verify the position, correlation and relationship. The Team answered that it will be considered.

10) Volcano-geological point of view

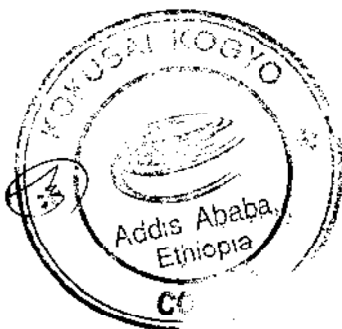
The participant commented that the volcano-geological point of view is indispensable; volcanic center and distribution must be discussed for each pyroclastic unit. The Team agreed this opinion and will be discussed in the Study of second year.

11) Geological sections

The participant commented that the geological section is necessary to understand stratigraphy. The Team answered that the geological sections will be made in the Study of second year Study with consideration of drilling data.

After distribution of copies of P/R (1), the Team received the SC member's comments regarding the P/R (1), such as the general comments for the selection of small town, technical comments for the geology, hydrogeology, geophysical survey and the results of observation well drilling. Those items which were able to modify would be amended in the P/R (1) by the Team and the other items will be reflected in the Study of second year by the Team.

Finally, the Team submitted eighteen (18) copies of the P/R (1) to the MoWR on 27th August, 2010.



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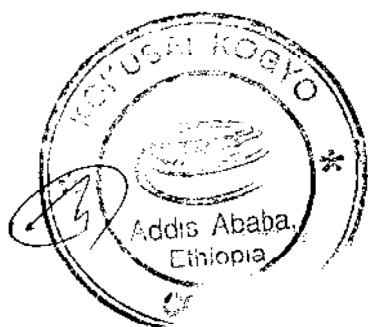


2. Other relevant issues

1) Steering Committee and responsibility and involvement of C/P

Although the Team explained the role of SC in the IC/R meeting, one of SC members who was absent from IC/R meeting questioned as SC and C/P side clarified the TOR of the committee. The participants suggested that the Team should be clarified in terms of person's commitment and duties. And the participants side also required explaining more about the involvement and duties as counterpart. Although it was already stated in the scope of the Project, the Team and MoWR (or EGRAP) agreed to submit certain activity and their involvement which shall be made by C/P.

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Annex

ATTENDANCE LIST

ETHIOPIAN SIDE

Ministry of Water Resources (MoWR)

Ato Abera Mekonnen (Chairman)

Ato Zebene Lakew

Ethiopia Groundwater Resources Assessment Program (EGRAP+)

Ato Tesfaye Tadese

EWTEC

Ato Tamiru Fekadu

Ato Mulugeta Kiufu (Absence of meeting, but sending the comments about P/R (1))

GSE

Ato Muhuddin Abdela

Ato Sileshi Mamo

AAU

Prof. Dr. Gezahegn Yirgu

Prof. Dr. Tenalem Ayenew

WRDF

Ms. Ghrmawit Haile

SNNPRS

Ato Taddele Mugero (Absence of meeting, but sending the comments about P/R (1))

Oromia Rigion

Ato Debebe Muleta (in stead of Ato Samuel Tolessa)

JAPANESE SIDE

JICA Study Team

Mr. Toshiyuki Matsumoto

Mr. Kensuke Ichikawa

Mr. Toshiaki Hosoda

Mr. Hiroshi Takashima

Ato Getachew Geletu

Team Leader of Study Team

Hydrogeologist 2

Volcanic geology

Water supply plan

Adviser of project

