

(3)Explanation of the Draft Final Report

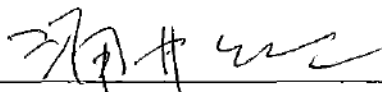
MINUTES OF DISCUSSIONS
ON
THE PREPARATORY SURVEY
OF
THE PROJECT FOR RURAL WATER SUPPLY PHASE III
IN
THE REPUBLIC OF THE GAMBIA
(EXPLANATION ON DRAFT REPORT)

In March and May 2009, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Preparatory Survey Teams on the Project for Rural Water Supply Phase III (hereinafter referred to as "the Project") to the Government of the Republic of The Gambia (hereinafter referred to as "The Gambia") and through discussion, field survey and technical evaluation of the results in Japan, JICA prepared a draft report of the study.

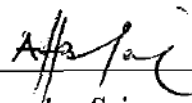
In order to explain and consult with the Government of The Gambia on the components of the draft report, JICA sent to The Gambia the Draft Report Explanation Team (hereinafter referred to as "the Team"), which was headed by Mr. Junji WAKUI, Director, Water Resources Management Division II, Water Resources and Disaster Management Group, Global Environment Department, JICA, from 20th to 24th December 2009.

As a result of discussions, both parties confirmed the main items described in the attached sheets.

Banjul, 23rd December 2009

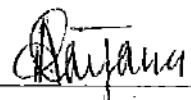


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Mr. Amadou Saine
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Republic of The Gambia

(Witness)



Mrs. Amie JARRA
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ATTACHMENT

1 Components of the Draft Report

The Gambian side agreed and accepted in principle the components of the Draft Outline Design Report explained by the Team. The project sites and components of the project are shown in Annex-1, 2 and 3.

2 Japan's Grant Aid Scheme

The Gambian side understood the Japan's Grant Aid Scheme and the necessary measures to be taken by The Gambian side as explained by the Team and described in Annex-4, 5 and 6.

3 Responsible and Implementing Organization

3.1 The Responsible Organization is the Ministry of Fisheries, Water Resources and National Assembly Matters.

3.2 The implementing Organization is the Department of Water Resources (hereinafter referred to as "DWR") of the Ministry written in above 3.1.

4 Schedule of the Survey

JICA will complete the final report in accordance with the confirmed items and send it to the Government of The Gambia by March 2010.

5 Other Relevant Issues

5.1 Water Sources of New Water Supply Facilities

The Team explained that 3 in 14 test boreholes which were drilled during the preparatory survey were classified as unsuccessful boreholes for the reason of high iron ion concentration in the groundwater. Both sides agreed that 11 successful boreholes will be used as production wells in each site and The Gambian side will protect those boreholes until construction of the water supply facilities.

Both sides agreed that maximum 4 production wells will be drilled during implementation stage. Both sides also agreed that new alternative sites will not be accepted.

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5.2 Water Sources of Rehabilitation Sites

Both sides agreed that existing production wells in 3 rehabilitation sites (R-01, R-02 and R-03) will be used as water sources of new pumping systems in principle. However, as far as R-02 site is concerned, both sides also agreed that a new production well needs to be drilled if the existing well in R-02 site is not suitable.

5.3 Design Scale of Water Supply Facilities

Both sides agreed that the new water supply facilities were designed on the basis of the expected population on the target year 2020. Regarding 3 rehabilitation sites, both sides also agreed that the water supply facilities, such as the reservoirs, distribution pipelines and so on, will not be expanded.

5.4 Solar Pumping Systems

The Team explained that the appropriateness of installation of solar pumping system to the piped water supply facilities was based on the result of the preparatory survey. Both sides agreed that solar pumping systems will be installed at 15 new sites. In addition, both sides also agreed that the existing diesel pumping systems will be replaced with solar pumping systems at R-02 site and R-03 site. Regarding R-01 site, both sides agreed that the existing diesel pumping system will be replaced with the pumping system powered by national electricity grid.

5.5 Procurement of Equipment

The Team explained that the appropriateness of procurement only for geophysical resistivity survey equipment with the function of borehole logging was confirmed among the all requested equipment as a result of the preparatory survey, and The Gambian side accepted the explanation.

5.6 Unsuccessful Boreholes

The Gambian side requested the Team to hand over 3 unsuccessful boreholes which were drilled in the preparatory survey. The Team replied that the water of those boreholes that are containing high iron ion contents above the recommended WHO drinking water guideline values are not therefore appropriate for drinking water sources. Both sides agreed that the Japanese side will hand over these unsuccessful boreholes to The Gambian side for the water use except for drinking. The Japanese side will not take any responsibility which may arise from the use of those boreholes.

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5.7 Undertakings of The Gambian side

Both sides agreed that The Gambian side will abide by the following undertakings listed below, and in addition to the major understandings described in Annex-6.

- 1) to secure land acquisition/clearance necessary for the construction of boreholes and water supply facilities including distribution pipelines
- 2) to clear and maintain access road to the sites
- 3) to secure land acquisition/clearance necessary for the construction of 2 field offices (40m x 50m) one on the north bank and one on the south bank of the river.
- 4) to secure stock yards and store to maintain construction materials
- 5) to provide necessary information and documents for the Project
- 6) to assign necessary number of counterpart personnel (hereinafter referred to as "C/Ps") who will work together with Japanese consultant for operation and maintenance (hereinafter referred to as "O/M") and hygiene education during the software-component programme of the Project
- 7) to bear the allowances and other expenses related to the activities for C/Ps
- 8) 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 O/M as well as to bear all the expenses other than those covered by the Grant Aid
- 9) to protect test boreholes which are to be used as production boreholes until the start of the construction of the facilities

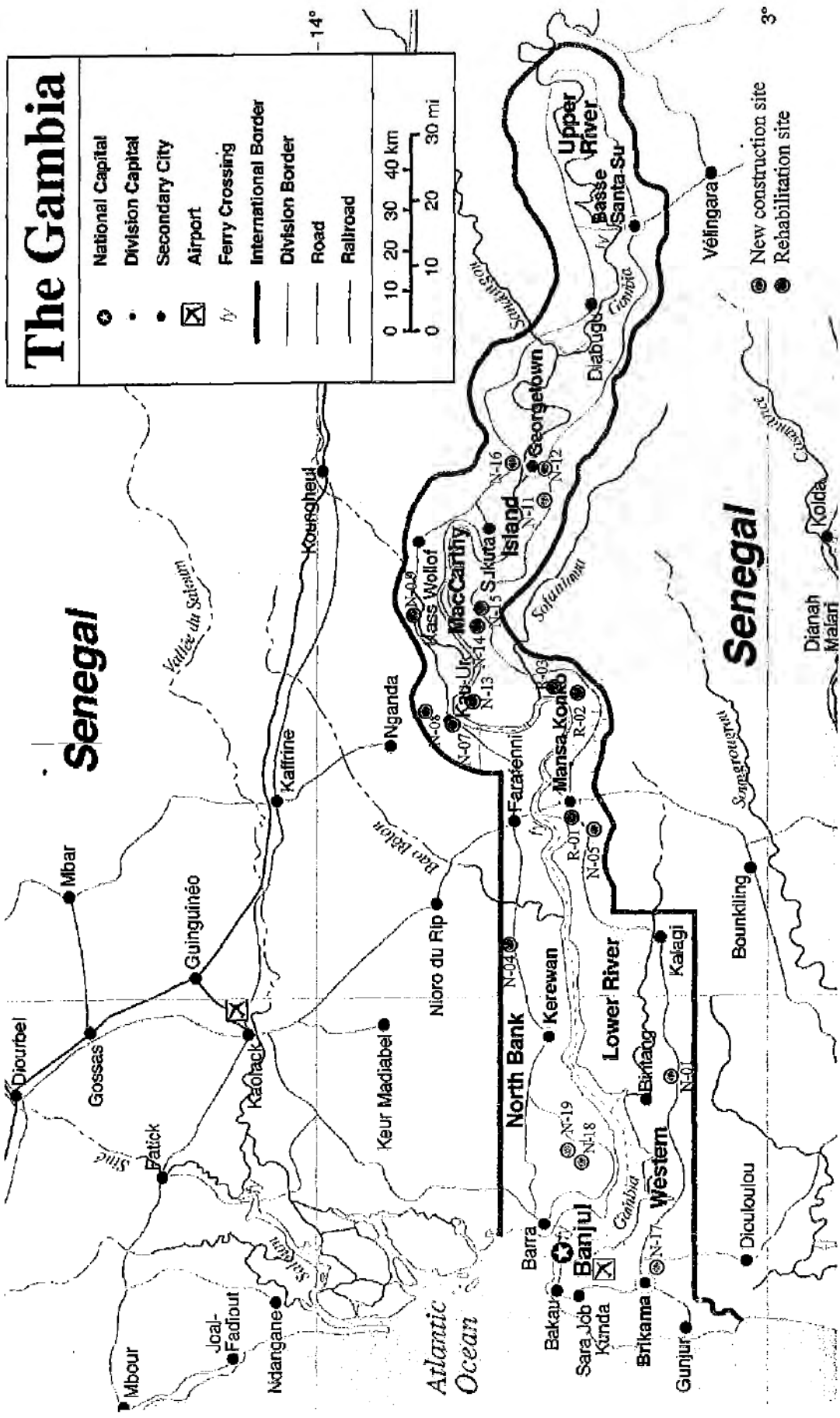
5.8 Project Cost Estimate

The Team explained to The Gambian side the Project cost estimate as described in Annex-7. The Team explained and the Gambian side understood that the cost estimate was provisional and would be examined further by the Government of Japan for its approval as a Grant.

Furthermore, The Team explained to the Gambian side to understand that the cost estimate should not be duplicated in any form nor released to any other party(s) until the relevant contracts are awarded by executing agency. This embargo is for securing fairness of tender procedures.

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Project Sites

4 *Annex-1*

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List of Project Sites

New Construction Sites						
Site No.	Village Name	Region	District	Population in 2009	Population to be expected in 2020	Remark
N-01	Kabocorr & Tampopo & Killy*	WR	Foni Bintang	1,389	2,426	
N-04	Kerr Katim*	NBR	Central Baddibu	1,200	1,339	
N-05	Madina Kaiaf (Sancha)*	LRR	Kiang East	1,661	1,853	
N-07	Ballangharr Complex*	CRR North	Lower Saloum	3,139	3,698	
N-08	Jimbala Complex	CRR North	Lower Saloum	1,319	1,554	Drilled on implementation stage
N-09	Fass	CRR North	Upper Saloum	1,296	1,527	
N-11	Kerewan Samba Sira	CRR South	Fulladu West	4,341	5,397	
N-12	Fula Bantang & Sinchu Bora*	CRR South	Fulladu West	1,280	1,592	
N-13	Jissadi Complex*	CRR South	Niamina DKK	1,731	2,152	
N-14	Sotokoi	CRR South	Niamina East	1,079	1,342	
N-15	Macca & Njie Kunda*	CRR South	Niamina East	3,807	4,734	
N-16	Lamin Koto & Badala & Sotokoi	CRR North	Sami	1,449	1,707	
N-17	Gridda	WR	Kombo East	1,356	2,368	Drilled on implementation stage
N-18	Kerr Mamma*	NBR	Upper Nuimi	1,245	1,389	Drilled on implementation stage
N-19	Ker Cherno (Madina Bafuloto)*	NBR	Upper Nuimi	1,819	2,029	Drilled on implementation stage

* Errors in writing of the village name were corrected.

Rehabilitation Sites (Conversion Site from Diesel Generator to Solar)						
Site No.	Village Name	Region	District	Population in 2009	Population to be expected in 2020	Remark
R-01	Toniataba	LRR	Jarra West	1,996		National Electricity grit
R-02	Bureng	LRR	Jarra East	2,331		
R-03	Barrow Kunda	LRR	Jarra East	3,762		

Contents of the Project

(1) Construction of Water Supply Systems

- 1) Construction of 15 boreholes and water supply facilities with solar pumping systems
- 2) Rehabilitation of 2 diesel pumping systems by changing to solar pumping systems in 2 sites of JICA Project Phase I (R-02 and R-03)
- 3) Rehabilitation of 1 diesel pumping system by changing to national electricity grid system in 1 site of JICA Project Phase I (R-01)

(2) Procurement of Equipment

Geophysical resistivity survey equipment with the function of borehole logging: 1 set

(3) Technical assistance for the sustainability of the solar pumping system (Soft wear component)

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JAPAN'S GRANT AID

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 this law and the decision of 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 provided to a recipient country to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for its economic and social development 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 supplied through following procedures:

- Preparatory Survey
 - The Survey conducted by JICA
- Appraisal & Approval
 - Appraisal by the GOJ and JICA, and Approval by the Japanese Cabinet
- Authority for Determining 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 preparatory Survey is to provide a basic document necessary for the appraisal of the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of relevant agencies 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.

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- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline 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 Outline Design of the Project is confirmed based on the guidelines of the Japan's Grant Aid scheme.

JICA requests the Government of the recipient country to take whatever measures necessary to achieve 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 of the recipient country which actually implements the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country based on the Minutes of Discussions.

(2) Selection of Consultants

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

(3) Result of the Survey

JICA reviews the Report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the appropriateness 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 pledge 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

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the recipient country to continue to work on the Project's

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implementation after the E/N and G/A.

(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 fulfill 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 properly and effectively the facilities constructed and the equipment purchased under the Grant Aid, to assign staff necessary for this operation and maintenance and 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 under 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

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designated authority.

(9) Authorization to Pay (A/P)

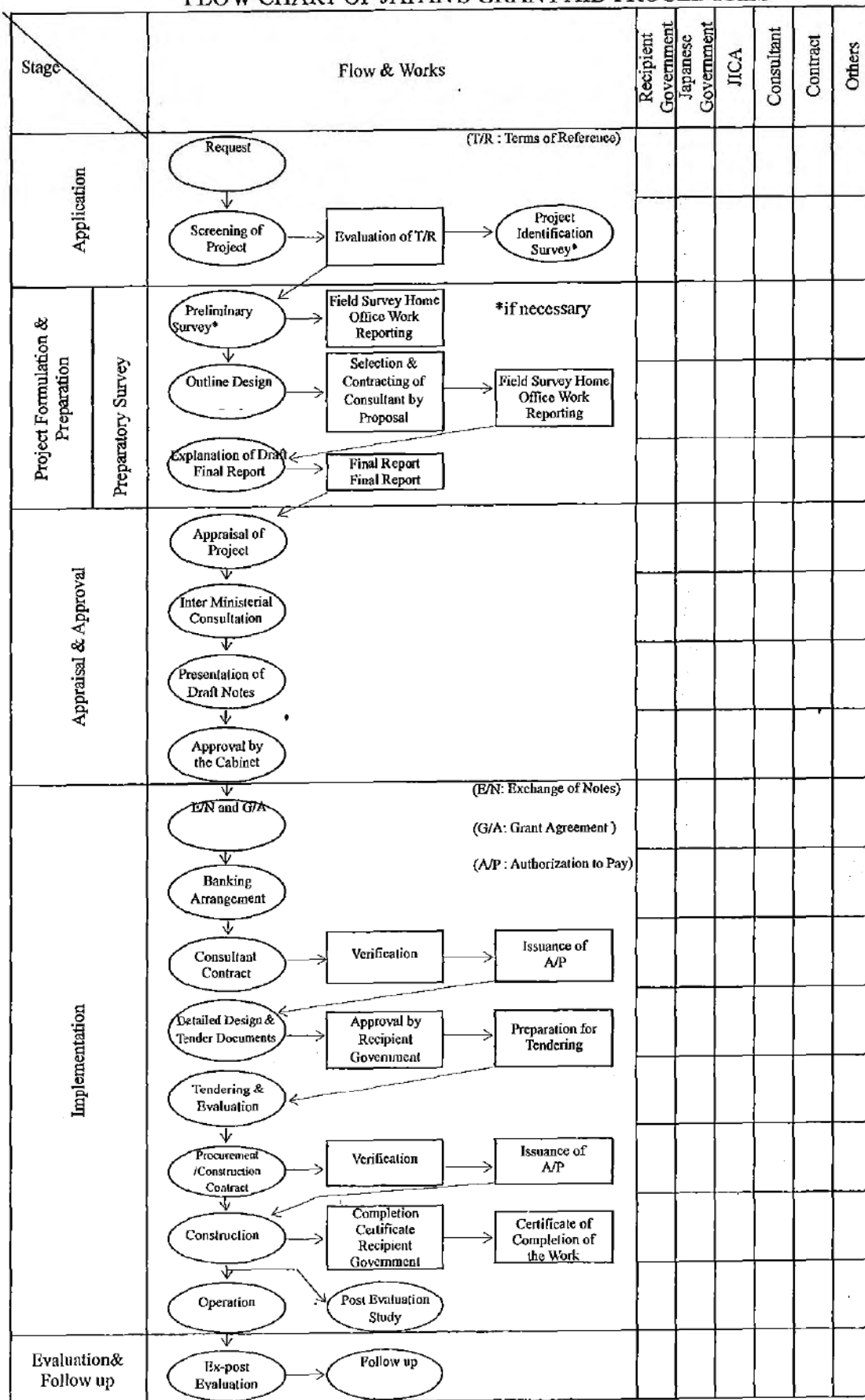
The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions paid to the Bank.

(10) Social and Environmental Considerations

A recipient country must carefully consider social and environmental impacts by the Project and must comply with the environmental regulations of the recipient country and JICA socio-environmental guidelines.

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FLOW CHART OF JAPAN'S GRANT AID PROCEDURES



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Major Undertakings to be taken by Each Government (Construction)

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	to secure [a lot] /[lots] of land necessary for the implementation of the Project and to clear the [site]/[sites];		•
2	To ensure prompt unloading and customs clearance of the products at ports of disembarkation in the recipient country and to assist internal transportation of the products		
	1) Marine (Air) transportation of the Products from Japan to the recipient country	•	
	2) Tax exemption and custom clearance of the Products at the port of disembarkation		•
	3) Internal transportation from the port of disembarkation to the project site	(•)	(•)
3	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the purchase of the products and the services be exempted		•
4	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		•
5	To ensure that [the Facilities and the products]/[the Facilities]/ [the products] be maintained and used properly and effectively for the implementation of the Project		•
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project		•
7	To bear the following commissions paid to the Japanese bank for banking services based upon the B/A		
	1) Advising commission of A/P	•	•
	2) Payment commission		•
8	To give due environmental and social consideration in the implementation of the Project.		•

(B/A: Banking Arrangement, A/P: Authorization to pay)

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Major Undertakings to be taken by Each Government (Equipment)

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To ensure prompt unloading and customs clearance of the products at ports of disembarkation in the recipient country and to assist internal transportation of the products		
	Marine (Air) transportation of the Products from Japan to the		
	1) recipient country	•	
	2) Tax exemption and custom clearance of the Products at the port of disembarkation		•
	3) Internal transportation from the port of disembarkation to the project site	(•)	(•)
2	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the purchase of the products and the services be exempted		•
3	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		•
4	To ensure that [the Facilities and the products]/[the Facilities]/ [the products] be maintained and used properly and effectively for the implementation of the Project		•
5	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project		•
6	To bear the following commissions paid to the Japanese bank for banking services based upon the B/A		
	1) Advising commission of A/P		•
	2) Payment commission		•
7	To give due environmental and social consideration in the implementation of the Project.		•

(B/A: Banking Arrangement, A/P: Authorization to pay)

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2. Cost borne by The Gambian side

Cost Item	Cost Estimate	Description
1) Land Acquisition/Clearance	3.09 Million GMD (Approx. 11.12 Million JPY)	<ul style="list-style-type: none"> Land for new construction sites: 200m²/sites x 15 sites Access road and site clearance: 18 sites x 10 workers/day
2) Personnel Expense of the Counterpart and Field Allowance	0.18 Million GMD (Approx. 0.65 Million JPY)	<ul style="list-style-type: none"> Field survey (Personnel expense and field allowance: 10 days/site) Site inspections (Site transfer, Mid-term inspection and Handing-over: 1.5 days/site)
3) Fuel and Maintenance Cost for Vehicles	0.21 Million GMD (Approx. 0.76 Million JPY)	<ul style="list-style-type: none"> Vehicles for DWR counterpart
4) Advance Deposit by VWC	0.36 Million GMD (Approx. 1.30 Million JPY)	<ul style="list-style-type: none"> Contribution from Beneficiaries at each 18 site
5) Expense for Motivators	0.32 Million GMD (Approx. 1.15 Million JPY)	<ul style="list-style-type: none"> Motivator/s from 5 regions at 36 days/site x 18 sites
6) Water Quality Monitoring	0.43 Million GMD (Approx. 1.55 Million JPY)	<ul style="list-style-type: none"> Water source for water supply facilities at 18 sites/year
7) Service Charge for Authorizati on to Pay (A/P)	0.01 Million GMD (Approx. 0.04 Million JPY)	<ul style="list-style-type: none"> 5,000 GMD x 2 times
8) Payment Commission to Bank	0.11 Million GMD (Approx. 0.40 Million JPY)	0.05% of project cost
Total	4.71 Million GMD (Approx. 16.97 Million JPY)	Project period of 24 months from April 2010 to March 2012

- 1) Estimation Base September 2009
- 2) Exchange Rate 1 EUR = 133.81 JPY
 1 US\$ = 97.55 JPY
 1 GMD = 3.6345 JPY
 1 CFA = 0.02040 JPY

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THE REPUBLIC

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MINISTRY OF FISHERIES, WATER RESOURCES AND NATIONAL ASSEMBLY MATTERS

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RURAL WATER SUPPLY PROJECT PHASE III

**DISCUSSIONS ON THE DRAFT OUT LINE FOR THE JICA FUNDED
WATER SUPPLY PROJECT PHASE III 21ST DECEMBER 2009.**

ATTENDANCE REGISTER

ITEM	NAME	DESIGNATION	SIGNATURE
1	Mr Amadou Saine	Ag. Permanent Secretary	A/Saine
2	Amme Jara	Deputy Director	Ammeh
3	MR. KAGAWA Shigeyoshi	JICA Survey Team Consultant	KAGAWA
4	Mr. MIYAUCHI, Kōsō	Civil Engineer, Consultant, JAPAN TECHNICAL CO.	Miyachi
5	Mr. Momodou S. Jallow	Principal Hydrologist	M Jallow
6	Mr. Alhagi Jabbar	Coordinator JICA	A Jabbar
7			



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RURAL WATER SUPPLY PROJECT PHASE III

DISCUSSIONS ON THE DRAFT OUT LINE FOR THE JICA FUNDED
WATER SUPPLY PROJECT PHASE III 22ND DECEMBER 2009.

ATTENDANCE REGISTER

ITEM	NAME	DESIGNATION	SIGNATURE
1	Amie Jara	Deputy Director	
2	Mr Amadou Saine	Acting Permanent Secretary	
3	Mr. Wakui Junji	Director, Water Resources Div.	JICA
4	Mr. Hiroshi Ikema	Program officer, WRD, JICA	
5	MR KAGAWA Shigeyoshi	Consultant Leader, Tapanetebo	
6	Mr. MIYAUCHI, Koji	Civil Engineer, Consultant, JAPAN TECHNO	
7	Mr. Momodou S. Jallow	Principal Hydrologist	
8	Alhagi Jabbi	Lowman JICA.	
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RURAL WATER SUPPLY PROJEC PHASE III

**SIGNING OF THE MINUTES OF DISCUSSION ON THE DRAFT
OUT LINE FOR THE JICA FUNDED WATER SUPPLY PROJECT
PHASE III 23RD DECEMBER 2009.**

ATTENDANCE REGISTER

ITEM	NAME	DESIGNATION	SIGNATURE
1	AUKAMAN SANO	MINISTER	Amm Sano
2	Amadou SAINE	Permanent Secretary	A/Saine
3	Anne Jara	Deputy Director	Anne Jara
4	Wakai Tsuji	Leader of the Team	Wakai Tsuji
5	Ikema Hiroshi	Member of the Team	Ikema Hiroshi
6	KAGAWA shigeyoshi	JICA Survey Team	KAGAWA shigeyoshi
7	MIYAUCHI KOJI	JICA Study Team	MIYAUCHI KOJI
8	Momodou S. Jallow	Principal Hydrologist	M Jallow
9	Alhaji Jabbi	Coordination JICA	Alhaji Jabbi

APPENDIX 5

5-1 RESULTS OF SOCIO-ECONOMIC SURVEY

5-2 QUESTIONNAIRE FOR SAMPLE

HOUSEHOLD SURVEY

APPENDIX 5-1 RESULTS OF SOCIO-ECONOMIC SURVEY

1. Survey Objectives

Aimed the followings, the socio- economic survey was conducted in target sites during the 1st survey.

- (1) To assemble basic information on socio-economic conditions
- (2) To grasp their willingness and capacity to improve living conditions as well as their problems and needs related to water and sanitation for the community members.
- (3) To extract social conditions to be paid an attention for the planning the projects
- (4) To collect baseline data of indicators to be used for impact evaluation of the project

2. Contents and Methodologies of the Survey

Three methods were applied for the socio-economic. The outline of each method, content and target person of the survey is as follow.

Type of Survey	1. Key Informant Interview	2. Sample Household Survey	3. Participatory Assessment
Main Topics of Survey	<ul style="list-style-type: none"> - General socio-economic conditions of the village - Types of existing water facilities and OM conditions - Needs to improve water supply facilities and willingness for OM 	<ul style="list-style-type: none"> - Problems and behaviour of residents on water and sanitation - Conditions of livelihood - Perceptions of OM of water supply facilities, willingness to pay for OM costs, and affordable amount for the households 	<ul style="list-style-type: none"> - Basic information of the villages - Relationship of villages consisting of the sites - Types and location of existing water facilities and OM conditions
Responsible Person	Japanese consultant	Enumerators of the local consultant	
Survey Site	20 sites for construction of new water supply facilities, 3 sites for conversion of pumping system to solar-powered one		
Method	Semi-Structured Interview	Structured Interviews using Questionnaires	Focus Group Discussion
Target Person of the Survey	Village heads, members of existing VWCs and other community members	20 households sampled in each target site, 460 in total	Members of VDCs, VWCs and woman groups

3. Results of Household Survey

The household survey was conducted by AfriConsult, a local consultant specialized in social development and selected from 3 organisations, at 20 sites for construction of new water supply

facilities and 3 sites for conversion of pumping system to solar-powered one as a scope of sub-contract on socio-economic survey. Enumerators of the local consultant visited sample households and interviewed to residents with questionnaires. The questionnaires were prepared by the Japanese Consultants and finalized after a review with the local consultant. A form of the questionnaires is attached hereafter in Appendix 7-2.

The people in The Gambia communicate in local languages instead of using English which is the official language of the country. Since each ethnic group use their own language, enumerators who were well acquainted with those local languages were appointed for the survey. They translated questions in the questionnaire orally and recorded responses in English. These enumerators and facilitators of FGD were trained prior to commencement of the field survey in order to make consensus on survey methods, translation of the questions, and other important points on conducting the survey.

(1) Sampling Method

Number of samples per site was 20 households and 460 samples in total were collected from the targeted 23 sites. The survey primarily aimed with assessing present situation of use of water sources and problems and needs of the community members on water and sanitation environment. In the light of these points, sample households were selected in order to be contained various households in terms of types of existing water sources they used and conditions of accessibility.

(2) Characteristics of Respondents

Ratio of sex of the respondents is 62.4% for male and 37.6% for female as shown in Fig.1. 53% of the respondents are household head followed by wife (32%), brother or sister (5%) and father or mother (5%) of the household head. (Fig.2)

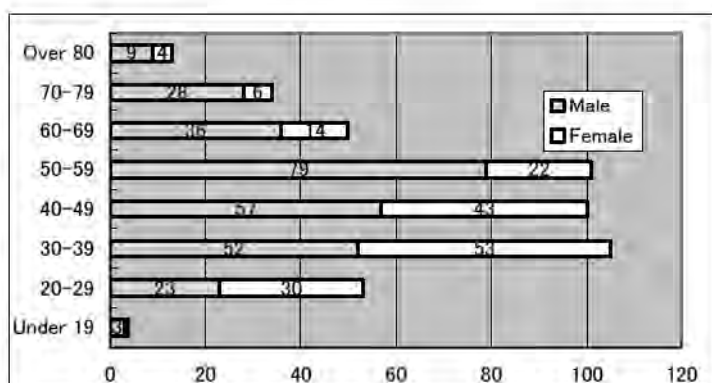


Fig. 1 Distribution of Respondents per Sex and Age

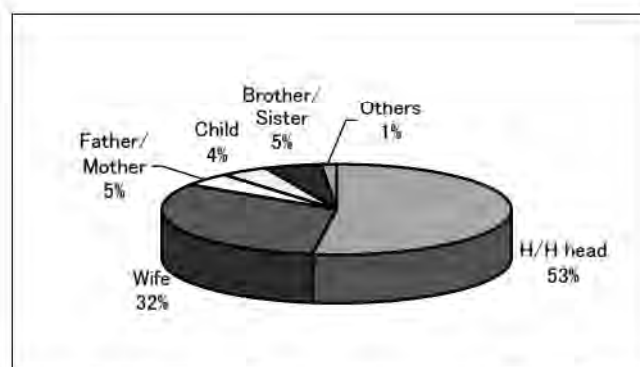


Fig. 2 Relation between Respondents and H/H head(%)

(3) Characteristics of Sample Households

Ratio of sex of household is 95.4% for male and 4.6% for female. Average age is 54 with 18 at lowest and 100 at highest. (Fig. 3) 94% of household head were married as of the survey period and 66% of them have polygamous households. Size of sample households are generally from 7 to 21 members and representative number is 17 members per household (medium).

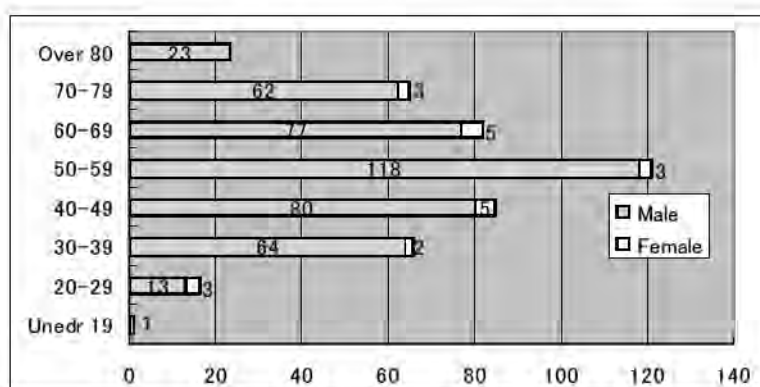


Fig.3 Distribution of H/H heads by Sex and age

(4) School Attendance of Children and Adult Literacy

Sample households have 2-3 children at school age on average and 80 % of these children were attending school as of the survey period. Ratio of girl child (82%) is slightly higher than the one for boy child (77%). The reasons of not attending school, even though children reach school age, are such as “no affordability to pay the school fee” “children go to Islamic school instead of going to public school”. Among household members at 18 years and above, those who can read letters and news papers without a difficulty is 29% in total. Literacy rate of men (35%) is well over than the one for women (23%).

(5) Livelihood

The most important income source for the residents in the survey sites is farming from which about 404 sample households (90%) of all earn their livelihood. It is followed by remittance from family members who are working outside their villages (41.7%), trading (32%), salary from employment (18%) and others such as gardening and construction work. (Table 1, Fig.4) On the other hand, percentage of households which are involved in trading and have various income source are higher in WR compared with other Regions since sample households in WR are located in the area where access to the central area is relatively easy. (Table 2, Fig 5)

Table 1 Distribution of Main Income Source per Region (Multiple Answer)

Income Source	NBR		WR		LRR		CRR		All	
	Count	Ratio	Count	Ratio	Count	Ratio	Count	Ratio	Count	Ratio
Farming	111	37%	28	45%	72	44%	193	43%	404	41%
Trading	39	13%	17	27%	25	15%	66	15%	147	15%
Salary	25	8%	5	8%	19	12%	34	8%	83	8%
Pension	0	0%	1	2%	2	1%	6	1%	9	1%
Remittance	73	24%	5	8%	30	18%	84	19%	192	20%
Others	54	18%	6	10%	16	10%	68	15%	144	15%
Total	302	100%	62	100%	164	100%	451	100%	979	100%

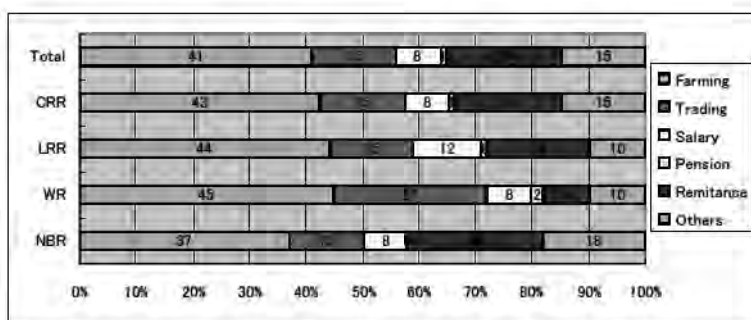


Fig. 4 Distribution of Main Income Sources per Region (Multiple Answer)

Table 2 Number of Income Source (Only for farming households)

No. of Income Source	NBR		WR		LRR		CRR		All	
	Count	Ratio	Count	Ratio	Count	Ratio	Count	Ratio	Count	Ratio
Only farming	19	16%	5	13%	16	36%	26	13%	66	16%
1 apart from farming	55	46%	14	35%	17	39%	110	55%	196	49%
2 apart from farming	37	31%	19	48%	8	18%	56	28%	120	30%
3 apart from farming	8	7%	2	5%	3	7%	7	4%	20	5%
4 apart from farming	1	1%	0	0%	0	0%	1	1%	2	0%
Total	120	100%	40	100%	44	100%	200	100%	404	100%

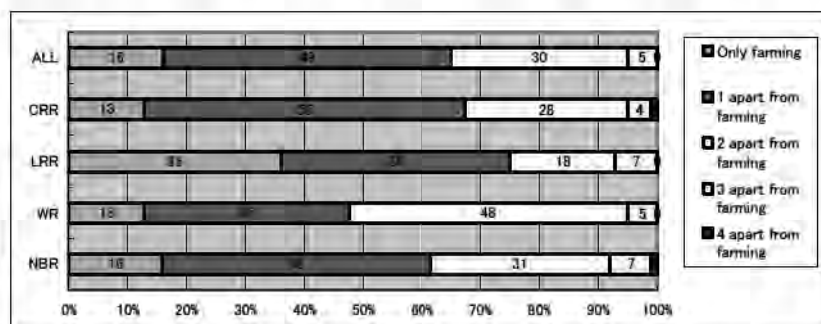


Fig. 5 Number of Income Source (Only for farming households) (404 Valid)

Regarding the household expenditures, almost all sample households answered that the costs for feeding is the biggest item followed by education, cloths and health.

About half of the sample households are saving some funds for household emergency measures which are to be utilized when the household requires a certain amount of expenditure apart from the daily items mentioned above (Fig. 6). 71% of households which practice savings are keep it at the credit union while 26% save it at the bank and 3% keep it in the house. (Fig. 7)

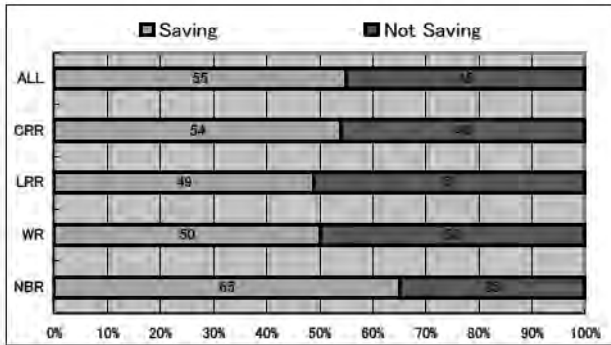


Fig. 6 Practice of Savings by Region (460 Valid)

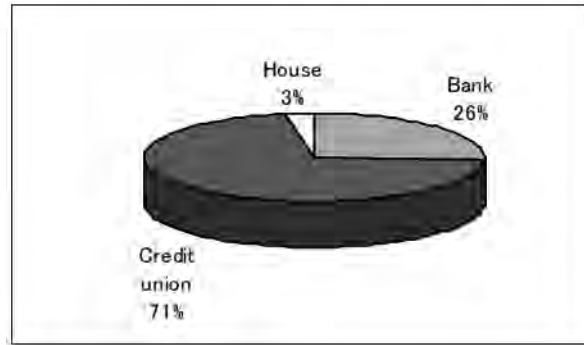


Fig. 7 Place for Savings (460 Valid)

(6) Present Situation of Water Supply

① Types and Usage of Existing Water Supply Facilities

According to the result of household survey, 50% of the sample households are using shallow wells with hand pumps as the source of drinking water followed by 31% are in use of unprotected wells and 7% are in use of hand dug well with lining, windlass, bucket and cover (Fig. 8). 38% of the sample households use separate water source(s) from drinking for other purposes while 61.7% use a single water source for all purposes (Fig. 9). Most of the households using several water sources utilise traditional hand dug wells such as concrete lined shallow wells and unprotected wells without any protection measures such as a lid for washing and gardening.

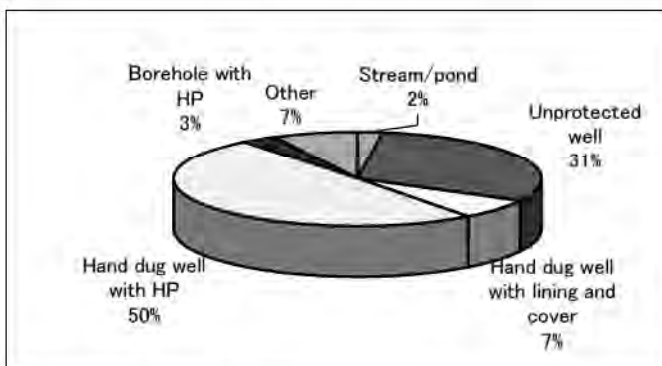


Fig.8 Main Water Source for Drinking Water

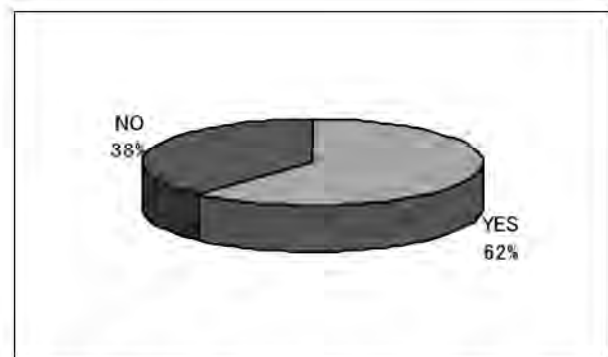


Fig.9 Use of Different Water Source per Usage

Since there is no alternative water source which enable household to use separate water source for their livestock from the one for drinking and people take care their livestock, they let livestock use same water source as the one for people drinking. (Fig. 10, 11, 12)

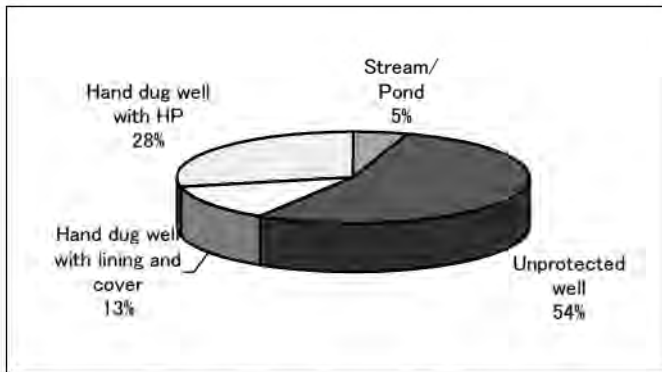


Fig.10 Water Source for Washing
(only for user hand pump wells user households) (78 valid)

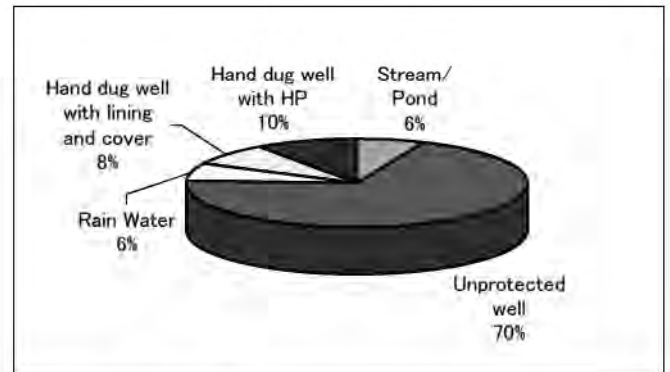


Fig. 11 Water Source for Gardening
(only for user hand pump wells user households) (78 valid)

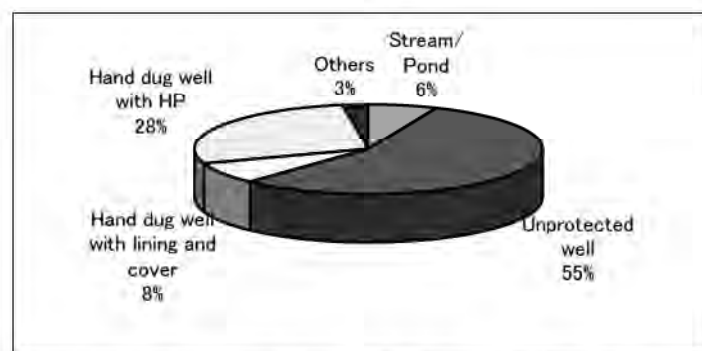


Fig. 12 Water Source for Livestock Watering
(only for user hand pump wells user households) (78 valid)

②Perceptions of Residents on Present Situation of Water Supply

Regarding reliability of existing sources for drinking water, a survey on perceptions of the sample households on safety of water quality and stability of water supply revealed that a feeling of satisfaction of households mainly using shallow wells with hand pumps was higher than the one for users of other water sources. 71% of the user households of shallow wells with hand pumps answered that the water quality of the existing source was good while only 47% of the households mainly using concrete lined open wells responded it. However, contamination of water with coliform was confirmed at the existing wells with hand pumps which the communities were using as a water source through the water quality analysis in the field survey. From this point of view, a gap exists between perceptions of the residents on safety of the water source they daily use and actual conditions. (Fig. 13)

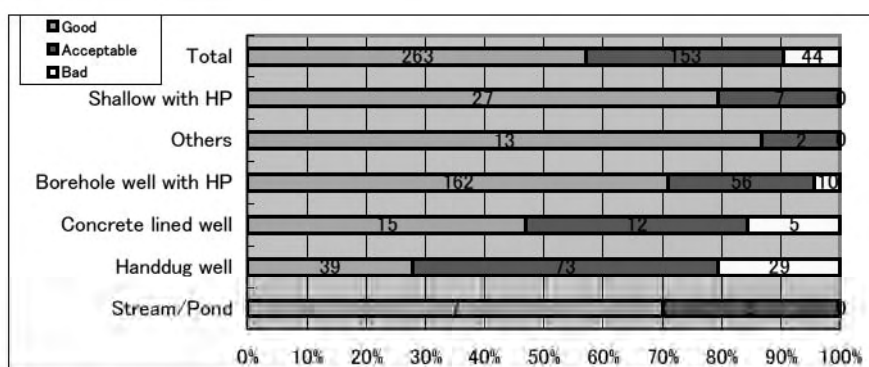


Fig. 13 Perceptions of Water Quality of Water Sources (All Sample Households)

On the other hand, 63% of households using concrete lined wells and 67% of user households of hand pump wells perceive that water supply from the existing sources is sufficient throughout the year. 41% of the sample households stated that water supply from the sources was seasonal or insufficient all year around. In case that they cannot secure enough water from the main water sources, they cope with such difficulties by allowing well water to settle and increase in volume, travelling to distant places to fetch water, or re-digging the well by themselves or with paying to contractors.(Fig.14)

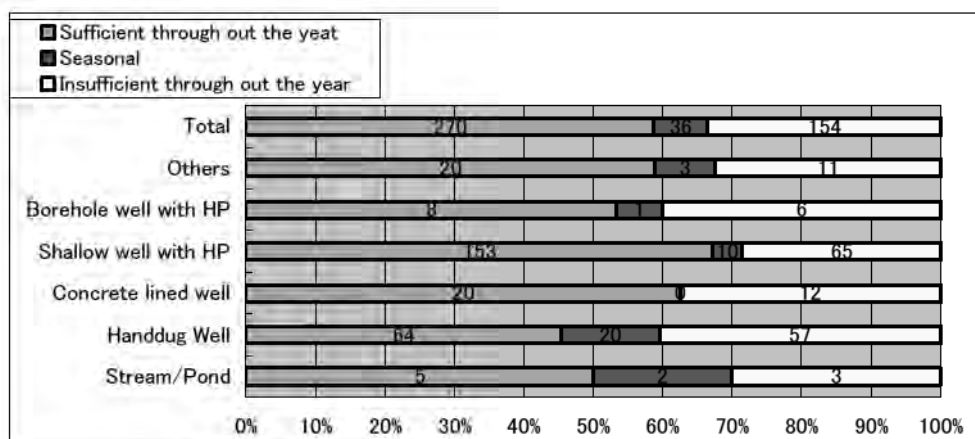


Fig.14 Perception of Water Stability of Water Sources

③Quantity of Water Use

Quantity of water used for domestic purpose such as drinking, cooking, washing and bathing is estimated as 25.3lit/person/day (medium) at present from the quality of water fetching per day per household. 52.4% of the sample households perceive this amount is enough while other 47.4% think insufficient. If they can use more water compared with the present status by improving the water supply facilities, their needs on increase of water use for drinking is the highest, followed by washing and bathing.

④ Burden of Water Fetching

Water fetching for domestic use is a daily chore done by adult women and children. Girl child is involved in the water fetching more than boy. (Fig. 15)

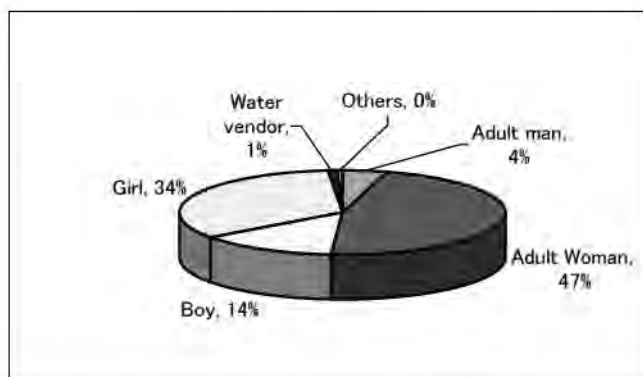


Fig.15 Responsible Person for Water Fetching

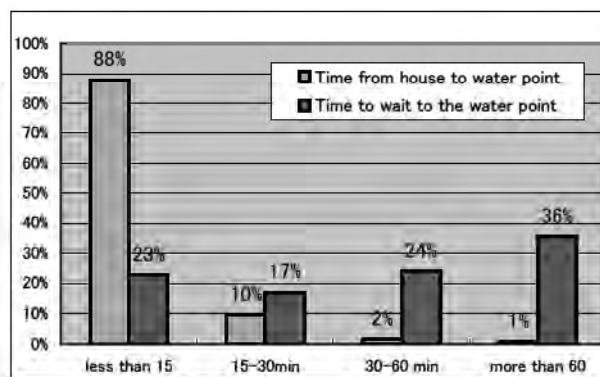


Fig.16 Time for Water Fetching

Time of water fetching is 2-3times in a day for domestic use. Especially from 6:00 to 9:00 and 15:00 to 18:00 are the peaks in terms of number of users at water sources. 87.8% of the sample households can access to their main water sources within 15minutes. However, more than 60% of the sample households answered that they have to wait in a queue for fetching water at the source for more than 30 minutes. (Fig. 16)

(7) Status of Existing Sanitation Facilities and Hygiene Behaviour

① Types and Use of Sanitation Facilities in Households

Traditional pit latrines are the most commonly used facility among the various types of sanitation facilities. 90% of all sample households have their own pit latrines, however, about 10% of the households have no latrine in their households. Members of such households use their neighbours' latrines (62%) or nearby bush (38%). (Fig.17)

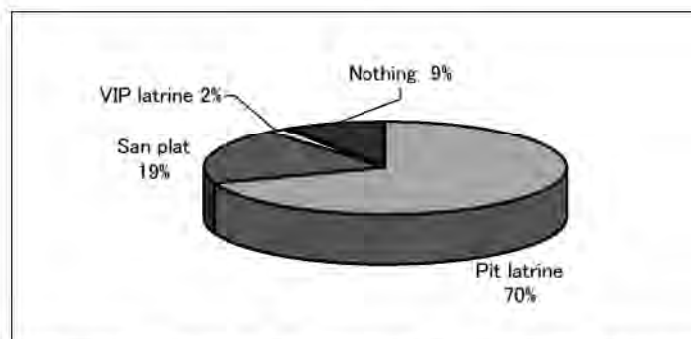


Fig.17 Type of Sanitation Facilities owned by Households (460 valid)

② Knowledge, Attitudes and Practices on Hygiene

Regarding the hygiene practice at fetching water and its transportation from water sources to houses, 57.2% of the respondents use container or bucket with a lid. Further, almost all households (446 sample households) storage drinking water in a jar inside the house with a cover. (Fig. 18)

85.4% of all sample households said that they treat water. The majority (95.6%) of them said they treat water by filtering and 1.3% is simply allowing the water to settle before use. However practices of boiling water or treating with chorine are not seen in the responses.

In terms of hand washing practices, it is common in the sample households to wash their hands before eating while practices of hand washing before cooking, after working outside varies. The most common method of hand washing is to wash their hands inside a basin. (Fig. 19, 20)

Regarding practices on household hygiene, 39% of the sample households dispose of their household rubbish at a collection point in the village or compound, whilst 24% dispose rubbish by burying in the yard, and 22% throw it in the back yard. (Fig. 21)

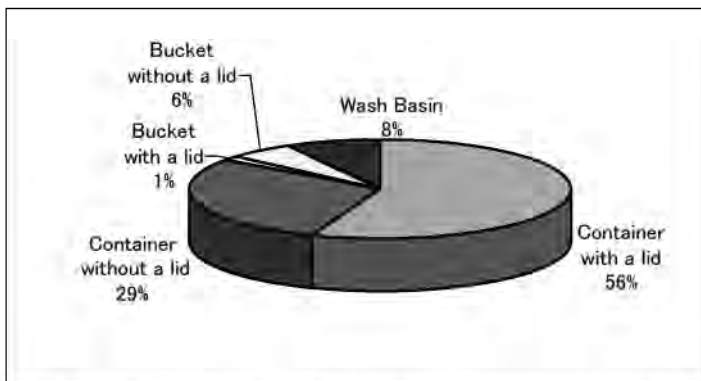


Fig.18 Type of Utensils for Fetching and Transportation of Water

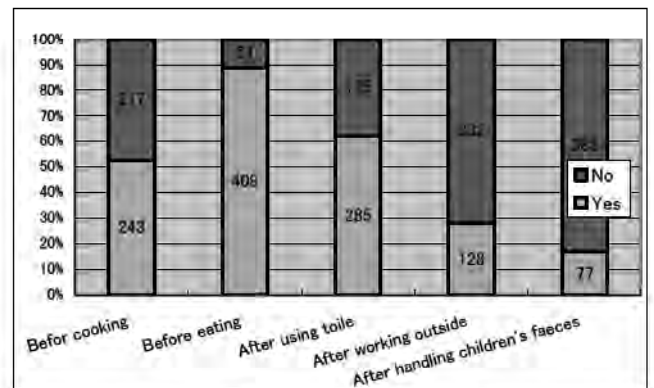


Fig.19 Practices of Hand Washing

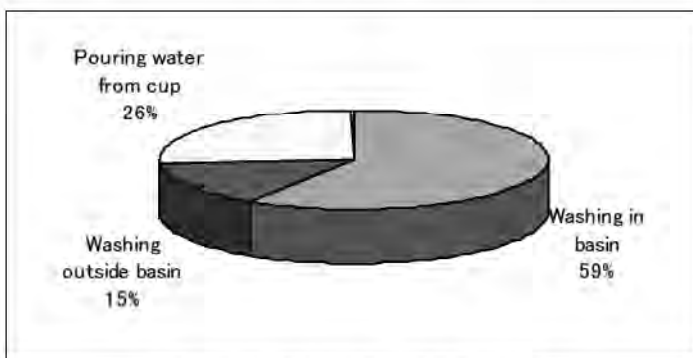


Fig.20 Method of Hand Washing

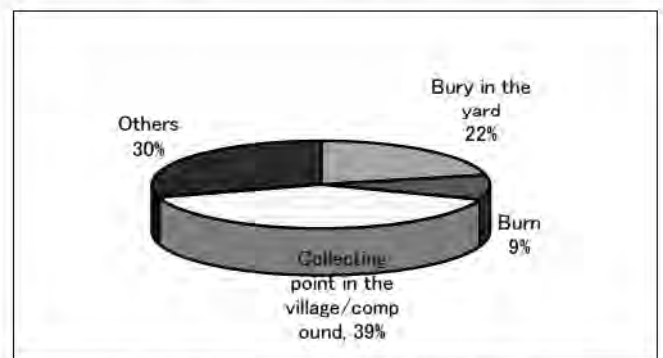


Fig.21 Dispose of Household Rubbish

(8) Health Status of the Household Members

① Infection Disease and Protection of Water Borne/ Related Disease

Top 3 major diseases for the members of the sample households are 1) malaria, 2) diarrhoea, and 3) respiratory diseases. (Fig. 22) Regarding prevalence of diarrhoea, about 41% of the sample households indicated that diarrhoea occurred in their households within the last two weeks. It happened more in infants below 3 years (55.7%) followed by children at age between 3 and 17. (Fig. 23)

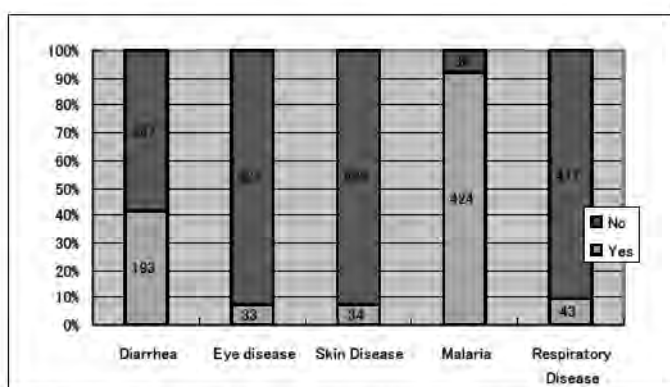


Fig.22 Major Disease for Household Members

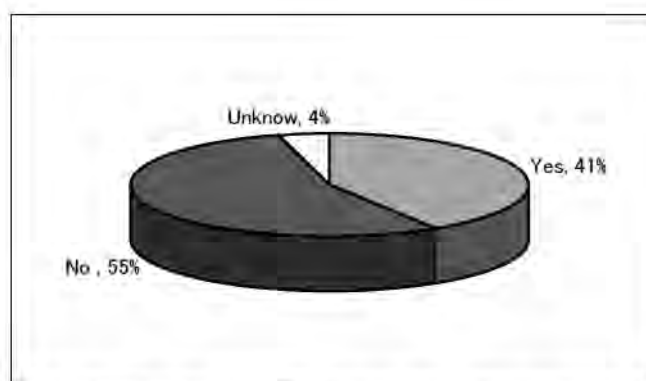


Fig.23 Family Members Suffering from Diarrhoea within Last 2 Weeks

For treatment of diarrhoea, the vast majority uses the existing health facilities such as PHCs, rural health centres, and hospitals, followed by measures to give medicines or Oral Dehydration Salt (ORS). Meanwhile, the sizeable minority that still gives traditional herbs or takes the patient to the traditional healer is also observed. (Fig. 24)



Fig.24 Method of Hand Washing

② Experiences of Health and Hygiene Education Programs

Any household members of 88% of the sample households have experiences in receiving some form of health and hygiene education. The radio, health facilities and the health workers were the main sources of the hygiene education for them.

The Project for Rural Water Supply (Phase III) in the Republic of The Gambia

Questionnaire for Sample Household Survey

Serial No. _____

Date of Interview ____/____/2009

(Day) (Month)

Name of Interviewer _____

SITE No. _____

Site Name _____

Name of Village _____ (Specify in case that the site consists of several villages.)

Name of District _____ Name of Region _____

Section A. Personal Information of the Respondent

A-1. Name of Respondent	[_____]
A-2. Sex of Respondent	[1] Male [2] Female [_____]
A-3. Age of Respondent	[_____]years
A-4. Relationship of Respondent to the Household Head	[1] Household Head [2] Spouse [3] Father or Mother [4] Child [5] Brother or Sister [6] Others If the answer is "[5] Others", please specify. [_____]

Section B. Information of the Household

B-1. Sex of Household Head	[1] Male [2] Female [_____]
B-2. Age of Household Head	[_____]years
B-3. Marital Status of Household Head	[1] Married (monogamous) [2] Married (polygamous) [3] Single/ never married [4] Widow/Widower [5] Divorced [6] Separated [_____]
B-4. How many people usually live in your household?	[1] Adult men (age 18 and above) [_____]persons [2] Adult women (age 18 and above) [_____]persons [3] Boy children (age 3-17) [_____]persons [4] Girl children (age 3-17) [_____]persons [5] Babies (boy) (under 3) [_____]persons [6] Babies (girl) (under 3) [_____]persons
B-5. How many people can read letter or newspaper without difficulty among the persons age 18 and over in your household?	[1] Men [_____]persons [2] Women [_____]persons
B-6. Are there other persons not living in your household for working away from home?	[1] Yes → B-7 [2] No → B-8 [_____]
B-7. How many persons are working away from home?	[_____]persons Please indicate "-1" if not applicable.
B-8. How many children are at school-age in your household?	[1] Boy [_____]persons [2] Girl [_____]persons
B-9. How many children are attending school among the ones stated in B-8?	[1] Boy [_____]persons [2] Girl [_____]persons If some children are out of school, → B-10 Please indicate "-1" if not applicable.

The Project for Rural Water Supply (Phase III) in the Republic of The Gambia

B-10. What is the reason for children not attending school, if any?	<hr/> <hr/>
---------------------------------------------------------------------	-------------

Section C. Existing Water Source for the Household

C-1. Does your household have access to safe water source for drinking?	[1] Yes [2] No []																								
C-2. What is the main water source for drinking and cooking for members of your household?	[1] Stream/River/Pond [] [2] Unprotected well without concrete lining nor cover [3] Rainwater collection If the answer is "[10] Others", please specify. [4] Hand dug well with concrete lining, windlass, bucket, and cover [] [5] Hand dug well with hand pump [6] Borehole with hand pump [7] Public taps [8] Piped into yard [9] Piped into house [10] Others																								
C-3. Whose property is the main water source which your household usually uses?	[1] Own property [] [2] Community [3] Neighbour [4] Others If the answer is "[4] Others", please specify. []																								
C-4. What is your perception on the quality of water from the source selected in C-2?	[1] Good → C-6 [] [2] Acceptable → C-6 [3] Bad → C-5																								
C-5. If the answer to C-4 is "[3] Bad", why do you think so?	[1] Water is salty [] [2] Water is muddy [3] Water is rusty [4] Others [-1] Not applicable If the answer is "[4] Others", please specify.																								
C-6. What is your perception on quantity of water from the source selected in C-2?	[1] Sufficient throughout a year → C-9 [] [2] Seasonal → C-7 [3] Not sufficient throughout a year → C-9																								
C-7. If the answer to C-6 is [2] Seasonal, which month is the water available? <i>(Multiple answer: Please tick the box.)</i>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td> </tr> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td> </tr> </table> <p style="text-align: right;">Please indicate "-1" if not applicable.</p>	J	F	M	A	M	J	J	A	S	O	N	D												
J	F	M	A	M	J	J	A	S	O	N	D														
C-8. If the answer to C-6 is [2] Seasonal, how does your household get drinking water during the period apart from the month(s) indicated in C-7?	<hr/> <hr/>																								
C-9. What time does your household fetch water normally from the main water source? <i>(multiple answer)</i>	[1] Before 6:00 [] [2] 6:00 – 9:00 [3] 9:00 – 12:00 [4] 12:00-15:00 [5] 15:00 – 18:00 [6] After 18:00																								

The Project for Rural Water Supply (Phase III) in the Republic of The Gambia

C-10. How long does it take to reach the main water source from your house?	[1] Less than 15 minutes [] [2] More than 15 min. and less than 30 min. [3] More than 30 min. and less than 60 min. [4] More than 60 minutes
C-11. How long do you have to queue up before you get your turn to fetch water?	[1] Less than 15 minutes [] [2] More than 15 min. and less than 30 min. [3] More than 30 min. and less than 60 min. [4] More than 60 minutes
C-12. Why do you prefer this main water source of drinking water?	[1] Distance [] [2] Time [3] Water quality [4] No better alternative [5] Financial [] [6] Others If the answer is "[6] Others", please specify.
C-13. Do you fetch water for washing, gardening, or for livestock from the same source with drinking water stated in C-2?	[1] Yes → C-17 [] [2] No → C-14
C-14. If answer to C-13 is [2] No, what is the main source for <u>washing</u> ?	[1] Stream/River/Pond [] [2] Unprotected well without concrete lining nor cover [3] Rainwater collection [4] Hand dug well with concrete lining, windlass, bucket, and cover [] [5] Hand dug well with hand pump [6] Borehole with hand pump [7] Public taps [8] Piped into yard [9] Piped into house [10] Others [-1] Not applicable If the answer is "[10] Others", please specify.
C-15. If answer to C-13 is [2] No, what is the main source for <u>gardening</u> ?	[1] Stream/River/Pond [] [2] Unprotected well without concrete lining nor cover [3] Rainwater collection [4] Hand dug well with concrete lining, windlass, bucket, and cover [] [5] Hand dug well with hand pump [6] Borehole with hand pump [7] Public taps [8] Piped into yard [9] Piped into house [10] Others [-1] Not applicable If the answer is "[10] Others", please specify.

The Project for Rural Water Supply (Phase III) in the Republic of The Gambia

C-16. If answer to C-13 is [2] No, what is the main source of <u>drinking water for livestock</u> ?	[1] Stream/River/Pond [2] Unprotected well without concrete lining nor cover [3] Rainwater collection [4] Hand dug well with concrete lining, windlass, bucket, and cover [5] Hand dug well with hand pump [6] Borehole with hand pump [7] Public taps [8] Piped into yard [9] Piped into house [10] Others [-1] Not applicable	[] If answer is "[10] Others", please specify. []
C-17. Does the water source for livestock have perennial water supply?	[1] Yes [2] No	[]
C-18. What kind of vessel does your household use to fetch and carry water?	[1] Container with a lid [2] Container without a lid [3] Bucket with a lid [4] Bucket without a lid [5] Wash basin [6] Others	[] If the answer is "[6] Others", Please specify. []
C-19. How much capacity in litre is the vessel to fetch and carry water?	_____ litre	To the enumerator: ask the respondent to show you the vessel to check its capacity.
C-20. How much water does your household consume per day on average?	[1] Drinking/ cooking -----[] containers/ buckets [2] Washing-----[] containers/ buckets [3] Gardening -----[] containers/ buckets [4] Bathing -----[] containers/ buckets	
C-21. Is the quantity of water enough for drinking and cooking purposes?	[1] Yes [2] No	[]
C-22. If you can get more water, would your household increase your water use?	[1] Yes → C-23 [2] No → C-24	[]
C-23. If yes to C-22, for which purposes would your household increase water use? <i>(multiple answer)</i>	[1] Drinking/ cooking [2] Washing [3] Gardening [4] Bathing [5] Cattle watering [6] Others [-1] Not applicable	[] If the answer is "[6] Others", please specify. []
C-24. Who usually collect water in your household? <i>(multiple answer)</i>	[1] Adult men [2] Adult women [3] Boy child [4] Girl child [5] Water vendors [6] Others	[] If the answer is "[6] Others", please specify. []
C-25. Could you briefly describe problems you and your household members are encountered related to present water supply condition?	_____ _____ _____	

The Project for Rural Water Supply (Phase III) in the Republic of The Gambia

Section D. Existing Sanitation Facilities and Hygiene Practices of the Household

D-1. Which type of sanitation facility does your household have?	[1] Pit latrine → D-3 [2] Pit latrine with concrete slab (San Plat: Sanitary Platform) → D-3 [3] VIP latrine → D-3 [4] Pour flush latrine → D-3 [5] Flush to septic tank → D-3 [6] Nothing → D-2 [7] Others → D-3	[] If the answer is “[7] Others”, please specify. []
D-2. If the answer to D-1 is [6] Nothing, where do you and your household members go to toilet?	[1] In yard [2] Bush [3] Neighbour’s latrine [4] Others [-1] Not applicable	[] If the answer is “[4] Others”, please specify. []
D-3. Where does your household dispose the rubbish?	[1] Buried in the yard [2] Burned [3] Collection point in the village/ Compound [4] River [5] Others	[] If the answer is “[5] Others”, please specify. []
D-4. When do you and your household members normally practice hand washing? <i>(multiple answer)</i>	[1] Before start cooking [2] Before start eating [3] After going to the latrine [4] After working outside [5] After handling children’s faeces [6] Others	[] If the answer is “[5] Others”, please specify. []
D-5. How is it done?	[1] In the basin [2] Outside the basin [3] Pour water from a cup [4] Others	[] If the answer is “[4] Others”, please specify. []
D-6. How does your household keep drinking water in your house?	[1] In a jar inside the house with a cover [2] In a jar inside the house without a cover [3] Others	[] If the answer is “[3] Others”, please specify. []
D-7. Is water treated before drinking in your household?	[1] Yes → D-8 [2] No → Section E	[]
D-8. If Yes to D-7, how is it treated?	[1] Filtering [2] Allowing it to settle [3] Putting chlorine [4] Boiling [5] Others [-1] Not applicable	[] If the answer the is “[5] Others”, please specify. []

Section E. Health Status of Members of Household

E-1. What are the major diseases affecting members of your household? <i>(multiple answer)</i>	[1] Diarrhoea [2] Eye diseases [3] Skin diseases [4] Malaria [5] Respiratory Diseases [6] Others	[] If the answer is “[6] Others”, please specify. []
E-2. During the past two weeks, did any member of your household have diarrhoea?	[1] Yes → E-3 [2] No → E-5 [3] Unknown → E-5	[]

The Project for Rural Water Supply (Phase III) in the Republic of The Gambia

E-3.	If Yes to E-2, who had diarrhoea? (multiple answer)	[1] Adult men [] [2] Adult women [3] Children (age 3-17) [4] Baby (under 3) [-1] Not applicable	
E-4.	If Yes to E-2, how was it treated? (multiple answer)	[1] Give medicine [] [2] Give ORS [3] Give traditional herb [4] Take to PHC/clinic/ hospital [5] Take to traditional healer [6] Others [-1] Not applicable	If the answer is "[6] Others", please specify. []
E-5.	Do you know any diseases which cause by drinking and using contaminated (unsafe) water source? (multiple answer)	[1] Diarrhoea [2] Dysentery [3] Typhoid [4] Cholera [5] Bilharzias [6] Scabies [7] Others [8] Unknown	[] If the answer is "[7] Others", please specify. _____
E-6.	How would you protect yourself and your household members from getting these diseases?	_____ _____ _____	
E-7.	Have you and/or your household members ever received a programme for hygiene promotion by any organisation?	[1] Yes → E-8 [] [2] No → E-10	
E-8.	If yes to E-7, where did you receive the programme? (multiple answer)	[1] At clinic/ hospital [] [2] From health worker [3] From radio [4] From TV [5] At school [6] From family member [7] At mosque/ church [8] Others [-1] Not applicable	If the answer is "[8] Others", please specify. []
E-9.	If yes to E-7, what was the useful information for you and your household?	_____	
E-10.	Could you briefly describe problems you and your household members are encountered in relation with health and hygiene?	_____ _____ _____	

Section F. Maintenance of Water and Sanitation Facilities

F-1.	Is your household supposed to pay for operation and maintenance cost of the water facility which your household uses for drinking water?	[1] Yes → F-2 [] [2] No → F-4 [3] Unknown → F-5
F-2.	If yes to F-1, how much is your household supposed to pay? (please choose a mode of payment which is applicable.)	[1] D _____ per container [2] D _____ per household per month [3] D _____ per household per year [4] D _____ per other mode of payment (specify _____) [-1] Not applicable [-2] Don't know

The Project for Rural Water Supply (Phase III) in the Republic of The Gambia

F-3.	If yes to F-1, does your household actually pay for the cost?	[1] Yes [2] No [3] Unknown [-1] Not applicable	[] If the answer is "[2] No", → F-4
F-4.	If no to F-3, what is the reason for your household not to pay for the cost?		
F-5.	Is your household supposed to pay for drinking water for livestock (cattle) as well?	[1] Yes → F-6 [2] No → F-7 [3] Unknown → F-7	[]
F-6.	If yes to F-5, how much is your household supposed to pay?	[1] D _____ per head of livestock [2] D _____ per household per month [3] D _____ per household per year [4] D _____ per other mode of payment (specify _____) [-1] Not applicable [-2] Don't know	
F-7.	Who is usually maintaining water facility which your household uses for drinking water?	[1] Village Water Committee [2] Nobody [3] Others [4] Unknown	[] If the answer is "[3] Others", please specify []
F-8.	Who is responsible for repairs of the water facility when it breaks down?	[1] Village Water Committee [2] Area Council [3] Department of Water Resources [4] Nobody [5] Others [6] Unknown	[] If the answer is "[5] Others", please specify []
F-9.	Do you see a need for the present water supply conditions to get improved for domestic use?	[1] Yes → F-10 [2] No → Section G	[]
F-10.	Which option is desirable for you if the present water supply conditions are improved to obtain domestic water?	[1] Rehabilitating existing borehole/ shallow well with handpump [2] Rehabilitating existing piped scheme with communal taps [3] Constructing communal borehole with handpump [4] Constructing communal borehole with motor pump (supply at the water source) [5] Constructing piped scheme with communal taps [6] Others [-1] Not applicable	[] If the answer is "[4] Others", please specify []
F-11.	If yes to F-9, who do you think should be primarily responsible for operation and maintenance of the water facility you selected?	[1] Village Water Committee [2] Area Council [3] Department of Water Resources [4] Private company contracted by the community [5] Others [-1] Not applicable	[] If the answer is "[5] Others", please specify []
F-12.	If yes to F-9, would your household be willing to pay for user fee for the improved water facility?	[1] Yes → F-13 [2] No → Section G [-1] Not applicable	[]
F-13.	If Yes to F-12, how much could your household pay for user fee for a borehole with handpump ?	[1] D _____ per container [2] D _____ per household per month [3] D _____ per household per year	

The Project for Rural Water Supply (Phase III) in the Republic of The Gambia

	[4] D _____ per other mode of payment (specify _____) [-1] Not applicable [-2] Don't know <i>(Please choose a mode of payment which the household prefer to.)</i>
F-14. If Yes to F-12, how much could your household pay for user fee for a water scheme with motor pump which supplies water at the borehole (no extension of distribution pipes in the village)?	[1] D _____ per container [2] D _____ per household per month [3] D _____ per household per year [4] D _____ per other mode of payment (specify _____) [-1] Not applicable [-2] Don't know <i>(Please choose a mode of payment which the household prefer to.)</i>
F-15. If Yes to F-12, how much could your household pay for user fee for a piped water scheme with motor pump which supplies water from public taps locate in the village?	[1] D _____ per container [2] D _____ per household per month [3] D _____ per household per year [4] D _____ per other mode of payment (specify _____) [-1] Not applicable [-2] Don't know <i>(Please choose a mode of payment which the household prefer to.)</i>

Section G. Economic Status of the Household

G-1. What are the main income sources of your household which bring cash income? Please indicate average amount of income per month. <i>(multiple answer)</i>	[1] Farming D _____ [2] Trading D _____ [3] Salary from employer D _____ [4] Pension D _____ [5] Remittance from family working elsewhere D _____ [6] Others 1 (Specify _____) D _____ [7] Others 2 (Specify _____) D _____																								
G-2. When can you get cash income in a year? <i>(Multiple answer. Please tick in the box)</i>	<table border="1"> <tr> <td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>	J	F	M	A	M	J	J	A	S	O	N	D												
J	F	M	A	M	J	J	A	S	O	N	D														
G-3. How do you earn a living during the period apart from the month(s) indicated in G-2?	_____																								
G-4. What is the most costly thing in your household expenses in a month? Please indicate five items from the most costly one.	1. _____ D _____ 2. _____ D _____ 3. _____ D _____ 4. _____ D _____ 5. _____ D _____																								
G-5. Does your household keep any savings or cash ?	[1] Yes → G-6 [] [2] No → G-7																								
G-6. Where does your household keep savings or cash?	[1] Bank [] [2] Co-op [3] Household [4] Others [-1] Not applicable If the answer is [5] Others, please specify []																								
G-7. How many livestock does your household own?	[1] Cattle for farming [] [2] Cattle for breeding [] [3] Donkey [] [4] Horse [] [5] Goat [] [6] Sheep [] [7] Others []																								
G-8. How many members in your household earn a living?	[1] Adult men [] [2] Adult women [] [3] Boy child [] [4] Girl child []																								