

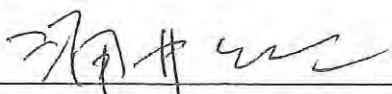
MINUTES OF DISCUSSIONS
ON
THE PREPARATORY SURVEY
OF
THE PROJECT FOR RURAL WATER SUPPLY PHASE III
IN
THE REPUBLIC OF THE GAMBIA
(EXPLANATION ON DRAFT REPORT)

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



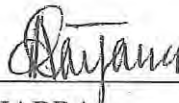
Mr. Junji WAKUI
Leader
Draft Report Explanation Team
Japan International Cooperation Agency
Japan



Mr. Amadou Saine
Permanent Secretary
Ministry of Fisheries, Water Resources and
National Assembly Matters
Republic of The Gambia

Ministry of Fisheries, Water Resource
& National Assembly Matters

(Witness)



Mrs. Amie JARRA
Deputy Director
Department of Water Resources
Republic of The Gambia

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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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	Gidda	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 Chernon (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)

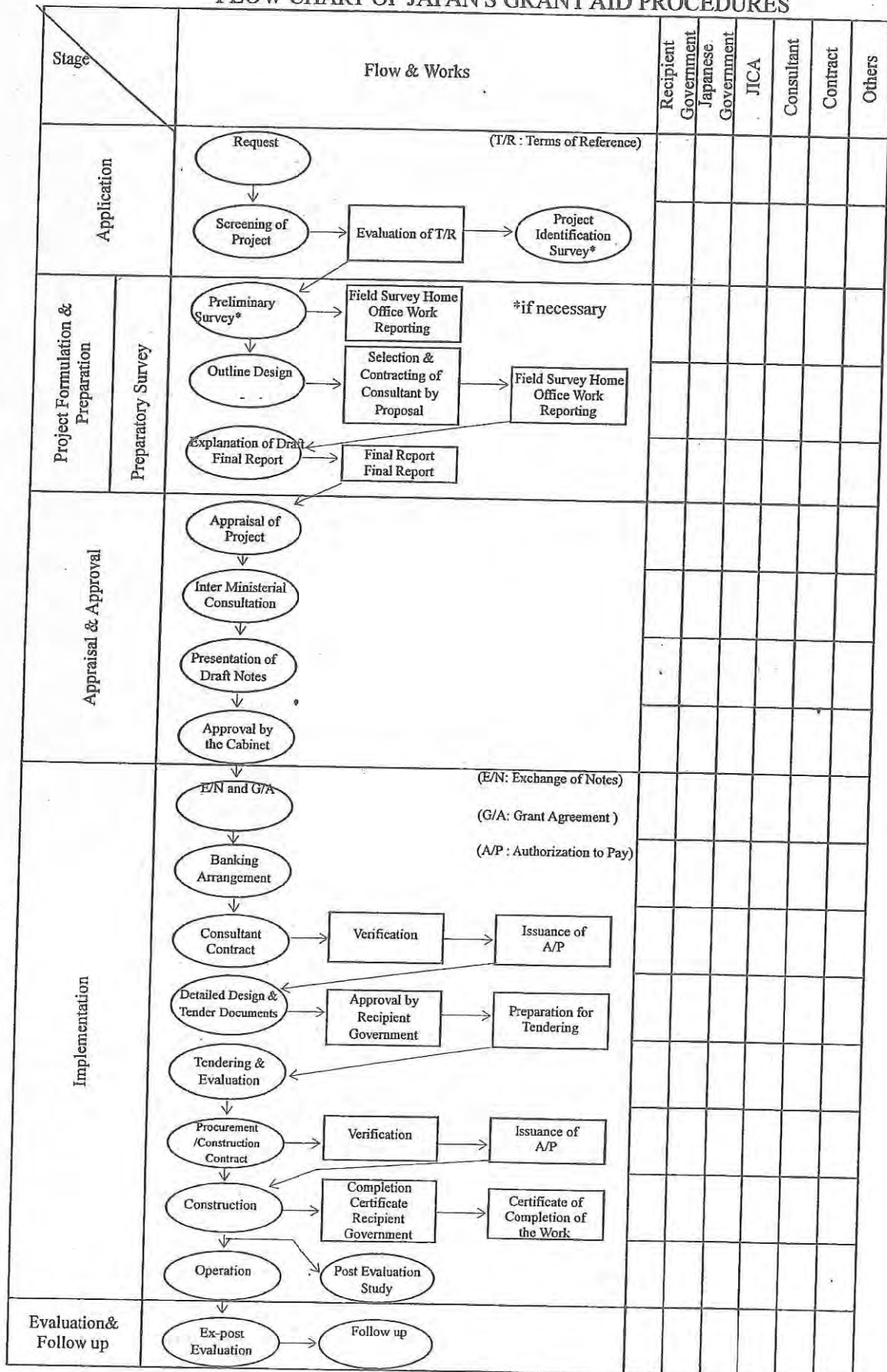
The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions paid to the Bank.

(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)

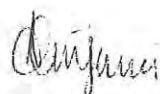
No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To ensure prompt unloading and customs clearance of the products at ports of disembarkation in the recipient country and to assist internal transportation of the products		
	Marine (Air) transportation of the Products from Japan to 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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Project Cost Estimate

1. Cost borne by the Japan's Grant Aid

Total Project Cost

Approx. 910.million JPY

Item		Cost Estimate (JPY)
Construction	Construction of Borehole and Elevated Water Tank, Plumbing, Installation of Solar Pumping System and Pubic Faucets	<u>674.2 million</u>
Detail Design, Construction Supervision,		<u>112.4 million</u>
Software-Component Programme		<u>24.6 million</u>
Procurement of Equipment		<u>6.6 million</u>
Contingency		<u>92.2 million</u>

Detail of Regions

(1) NORTH BANK

1) Construction of Piped Water Supply Facilities with Solar Pumping Systems: 3 sites

Item		Cost Estimate (JPY)
Construction	Construction of Borehole and Elevated Water Tank, Plumbing, Installation of Solar Pumping System and Pubic Faucets	<u>98.6 million</u>
Detail Design, Construction Supervision,		<u>16.4 million</u>
Software-Component Programme		<u>4.1 million</u>
Contingency		<u>14.6 million</u>

Cost Estimate (Sub-Total) Approx. 133.7 million JPY

(2) WESTERN

1) Construction of Piped Water Supply Facilities with Solar Pumping System: 2 sites

Item		Cost Estimate (JPY)
Construction	Construction of Borehole and Elevated Water Tank, Plumbing, Installation of Solar Pumping System and Pubic Faucets	<u>131.4 million</u>
Detail Design, Construction Supervision,		<u>21.9 million</u>
Software-Component Programme		<u>2.7 million</u>
Contingency		<u>17.5 million</u>

Cost Estimate (Sub-Total) Approx. 173.5 million JPY

(3) LOWER RIVER

- 1) Construction of Piped Water Supply Facilities with Solar Pumping System: 1 site
2) Conversion of Diesel Generator to Solar Pumping System for Existing Piped Water Supply Facilities: 3 sites

Item		Cost Estimate (JPY)
Construction	Construction of Borehole and Elevated Water Tank, Plumbing, Installation of Solar Pumping System and Public Faucets	<u>70.9 million</u>
Detail Design, Construction Supervision,		<u>11.8 million</u>
Software-Component Programme		<u>5.4 million</u>
Contingency		<u>9.9 million</u>

Cost Estimate (Sub-Total) Approx. 98.0 million JPY

(4) CENTRAL RIVER

- 1) Construction of Piped Water Supply Facilities with Solar Pumping System: 9 sites

Item		Cost Estimate (JPY)
Construction	Construction of Borehole and Elevated Water Tank, Plumbing, Installation of Solar Pumping System and Public Faucets	<u>373.3 million</u>
Detail Design, Construction Supervision,		<u>62.3 million</u>
Software-Component Programme		<u>12.4 million</u>
Contingency		<u>50.2 million</u>

Cost Estimate (Sub-Total) Approx. 498.2 million JPY

(5) Procurement of Equipment

Item		Cost Estimate (JPY)
Geophysical Survey Equipment	1 set	<u>6.6million</u>

Cost Estimate (Sub-Total) Approx. 6.6 million JPY

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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 Authorization 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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OF THE GAMBIA

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 Amadu Saime	Ag. Permanent Secretary	A/Saime
2	Amme Jara	Deputy Director	Amme Jara
3	MR. KAGAWA Shigeyoshi	JICA Survey Team Consultant	KAGAWA Shigeyoshi
4	MR. MIYAUCHI, KOSI	Civil Engineer, Consultant, JAPAN TECHNICAL CO.	Miyauchi Kosi
5	Mr. Momohou S. JALLOW	Principal Hydrologist	Mr Jallow
6	Mr Alhagi Jabbar	Coordinator JICA	Alhagi 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 Jauji	Director, Water Resources Div.	JICA
4	Mr. Hiroshi Ikemai	Program Officer, WRD, JICA	
5	MR KAGAWA Shigeyoshi	Consultant Leader, Tapateku	
6	Mr. MIYAUCHI, Koji	Civil Engineer, Consultant, JAPAN TECHNICAL	
7	Mr. Momodu S. Jallow	Principal Hydrologist	
8	Alhagi Jatta	Coordinator 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	AUSMAN SAHO	MINISTER	Ausman Saho
2	Amadou SAINE	Permanent Secretary	Amadou Saine
3	Anne Jara	Deputy Director	Anne Jara
4	wakai Junji	Leader of the Team	Wakai Junji
5	Ikeura Hiroshi	Member of the Team	Ikeura Hiroshi
6	KAGAWA shigeyoshi	JICA Survey Team	KAGAWA shigeyoshi
7	MIYAUCHI KOJI	JICA Study Team	MIYAUCHI KOJI
8	Momodou S. Jallow	Principal Hydrologist	Momodou S. Jallow
9	Alhaji Jabbi	Coordinator JICA	Alhaji Jabbi

資料 5 事業事前計画表(概略設計時)

資料 5 事業事前計画表（概略設計時）

1. 案件名
ガンビア国第三次地方飲料水供給計画
2. 要請の背景（協力の必要性・位置付け）
<p>「ガ」国は「貧困削減戦略文書 2007-2011（PRSP-II，2006）」を策定し、地方における良質な飲料水確保を最重要課題の1つとして掲げて、国民の生活水準の向上に取り組んでいる。</p> <p>さらに 2006 年には、安全な水資源の供給に向けての具体的な計画及び運営体制をまとめた、国家水政策(National Water Policy, 2006)を策定し、国際機関や二国間協力により、地方村落部における給水施設を整備してきたが、「ガ」国政府の試算による全国給水率(2007)は約 66%、村落部では約 64%を下回るといわれ、国民の3分の1近くが不衛生な飲料水の使用を余儀なくされている。本プロジェクトはこれら地方住民への安全で安定した飲料水供給を目的としている。</p> <p>日本政府は、「ガ」国の要請を受け、過去二回の給水施設の建設及び資機材調達に係る無償資金協力、第一次(1991～1993)と第二次(2005～2007)を実施し、合計 30 村落において、管路系深井戸給水施設を建設している。このうち、第二次では、20 村落において、ソーラー式管路系深井戸給水施設（以下“ソーラー式給水施設”とする）を建設したほか、第一次で建設したディーゼル式給水施設のうち 4 箇所をソーラー式給水施設に改修している。しかしながら依然として給水率が低いことから、同国政府は、2007 年 8 月に、西部州、北岸州、下流州、中流州の 4 州におけるソーラー式給水施設 30 箇所の建設及び資機材の調達を要請した。</p>
3. プロジェクト全体計画概要
<p>(1) プロジェクト全体計画の目標（裨益対象の範囲及び規模）</p> <p>本プロジェクトは、西部州、北岸州、下流州、中流州においてソーラー式給水施設の新設(15 箇所)と過去に無償資金協力で実施された既存施設の改修(3 箇所)を実施し、裨益人口約 43,200 人に安全な水を供給するものである。</p> <p>(2) プロジェクト全体計画の成果</p> <p>① <u>対象村落にソーラー式給水施設が整備される。</u></p> <p>② <u>建設された給水施設の運営・維持管理体制が整備される。</u></p> <p>(3) プロジェクト全体計画の主要活動</p> <p>① <u>対象 15 村落においてソーラー式給水施設を建設する。</u></p> <p>② <u>対象 3 村落において給水施設の改修を実施する。</u></p> <p>③ <u>参加型運営・維持管理体制の構築、関係者の能力向上プログラムを実施する。</u></p>

(4) 投入（インプット）

① 日本側（本案件）

無償資金協力 9.10 億円

② ガンビア国側

- ア) 漁業水資源省水資源局要員の配置及び予算の確保
- イ) プロジェクト管理のための車両・機材
- ウ) 施設・機材の運営・維持管理に係る経費の確保

(5) 実施体制

主管官庁： 漁業水資源省

実施機関： 水資源局

4. 無償資金協力案件の内容

(1) サイト

- ① ソーラー式給水施設建設：西部州、北岸州、下流州、中流州の 4 州 15 村落
- ② 給水施設改修：下流州 3 村落

(2) 概要

- ① 対象 15 村落におけるソーラー式給水施設の建設
- ② 対象 3 村落における給水施設の改修
- ③ 給水施設建設対象サイトの裨益住民を対象に給水施設の運営・維持管理体制の整備に係る技術支援
- ④ 村落における井戸掘削地点の選定に必要な物理探査機器の調達

(3) 相手国側負担事項

施設建設用地の確保、アクセス等の整備、要員の配置とその予算の確保

(4) 概算事業費

概算事業費 9.16 億円 積算時事業費

（無償資金協力 9.10 億円、「ガ」国側負担 0.06 億円）

(5) 工期

詳細設計・ソフトコンポーネント・入札を含め約 24.0 ヶ月（予定）

(6) 貧困、ジェンダー、環境及び社会面の配慮

村落給水委員会の形成において、積極的に女性参画を促進する。

5. 外部要因リスク（プロジェクト全体計画の目標達成に関するもの）

- ・気候変動の影響ほか、地下水の水量・水質に影響を及ぼす現象が生じない。
- ・対象地域住民を取り巻く社会・経済条件が急激に悪化しない。

6. 過去の類似案件からの教訓の活用

ディーゼル燃料は入手が困難であることに加え、価格が高騰したことにより、ディーゼル発電式給水施設の運営・維持管理は困難であった。このため、運営・維持管理費を抑えるために、「ガ」国で1990年代初期から運用実績があり、運営・維持管理体制も構築されているソーラー式給水施設を採用する。

7. プロジェクト全体計画の事後評価に係る提案

(1) プロジェクト全体計画の目標達成を示す成果指標

「ガ」国4州(西部州、北岸州、下流州、中流州)における安全な水の供給能力が、施設完成時(2012年)に、35,100人増加する。

指標	実施前（2009年）	事業終了時（2012年）
対象4州18村落の安全な水の供給能力	8,100人	43,200人

(2) その他の成果指標

なし

(3) 評価のタイミング

2012年(全施設完成時点)