

資 料

資料-1 調査団員氏名・所属

(1) 基本設計調査時

名 前	担当業務	所 属
(1) 丸尾 祐治	総括	国際協力事業団 国際協力総合研修所国際協力専門員
(2) 野田 久尚	計画管理	国際協力事業団 無償資金協力部業務第一課
(3) 諸町 伸一	業務主任 / 維持管理計画	日本テクノ株式会社
(4) 横木 昭一	水理地質	日本テクノ株式会社
(5) 山田 毅	水理地質	三井金属資源開発株式会社
(6) 田中 眞知	社会経済条件調査	日本テクノ株式会社
(7) 田中 栄治	物理探査	三井金属資源開発株式会社
(8) 石川 秀浩	物理探査	三井金属資源開発株式会社
(9) 高松 章二	積算 / 調達計画	日本テクノ株式会社

(2) 基本設計概要説明時

名 前	担当業務	所 属
(1) 丸尾 祐治	総括	国際協力事業団 国際協力総合研修所国際協力専門員
(2) 吉村 悦治	計画管理	国際協力事業団 ザンビア事務所
(3) 諸町 伸一	業務主任 / 維持管理計画	日本テクノ株式会社
(4) 横木 昭一	水理地質	日本テクノ株式会社

資料-2 調査日程

(1) 基本設計調査時

日順	日付	調査内容	
1	6/13(火)	東京発	
2	6/14(水)	ルサカ着 JICA 事務所打合せ	
3	6/15(木)	日本国大使館表敬 エネルギー・水資源省水利局表敬、協議	
4	6/16(金)	財務・経済開発省表敬 掘さく現場視察 サイト調査準備	
5	6/17(土)	官チーム：過去の無償案件サイト視察 コンサルタント：サイト調査準備	
		サブセンター・チーム	ハンドポンプ・チーム
6	6/18(日)	Livingstone へ移動	サイト調査：Mumbwa 郡
7	6/19(月)	Sesheke 郡サブセンター視察	サイト調査：Mumbwa 郡
8	6/20(火)	Sesheke 郡サブセンター視察 Kazungula 郡庁表敬	サイト調査：Mumbwa 郡
9	6/21(水)	南部州給水計画サイト視察 Lusaka へ移動	サイト調査：Mumbwa 郡
10	6/22(木)	DWA と合意議事録協議	サイト調査：Mumbwa 郡
11	6/23(金)	合意議事録署名 日本国大使館、JICA へ帰国報告	サイト調査：Mumbwa 郡
12	6/24(土)	資料整理	サイト調査：Mumbwa 郡
13	6/25(日)	サイト調査：Mumbwa 郡 官チーム：ルサカ発	サイト調査：Mumbwa 郡
14	6/26(月)	WASHE ワーク・ショップ出席	サイト調査：Mumbwa 郡
15	6/27(火)	Namwala へ移動 サブセンター調査	サイト調査：Mumbwa 郡
16	6/28(水)	サイト調査：Itezhi-tezhi、Namwala 郡 官チーム：東京着	サイト調査：Mumbwa 郡
17	6/29(木)	サイト調査：Itezhi-tezhi、Namwala 郡	サイト調査：Mumbwa 郡
18	6/30(金)	打合せ：Namwala D-WASHE Livingstone へ移動	サイト調査：Mumbwa 郡
19	7/1(土)	サイト調査：Kazungula 郡	サイト調査：Mumbwa 郡
20	7/2(日)	サイト調査：Kazungula 郡	Kaoma 郡へ移動
21	7/3(月)	サイト調査：Sesheke 郡 Lusaka へ移動	サイト調査：Kaoma 郡
22	7/4(火)	データ解析	サイト調査：Kaoma 郡
23	7/5(水)	KazungulaD-WASHE と打合せ	サイト調査：Kaoma 郡
24	7/6(木)	社会経済条件調査再委託先との打合せ	サイト調査：Kaoma 郡
25	7/7(金)	社会経済条件調査再委託先との打合せ	サイト調査：Kaoma 郡
26	7/8(土)	資料整理	資料整理
27	7/9(日)	Livingstonr へ移動	サイト調査：Kaoma 郡
28	7/10(月)	打合せ：Sesheke 郡庁	サイト調査：Kaoma 郡

29	7/11(火)	サイト調査： Sesheke 郡	D-WASHE と打合せ サイト調査：Kaoma 郡
30	7/12(水)	打合せ： CARE International/ Livingston、Kazungula 郡庁	サイト調査：Kaoma 郡 Lusaka へ移動
31	7/13(木)	Itezhi-tezhi へ移動 サイト調査： Namwala 郡	資料整理
32	7/14(金)	サイト調査： Namwala 郡 Lusaka へ移動	Itezhi-tezhi へ移動
33	7/15(土)	データ解析	サイト調査： Itezhi-tezhi 郡
34	7/16(日)	資料整理	サイト調査： Itezhi-tezhi 郡
35	7/17(月)	Mumbwa へ移動 打合せ：郡庁、保健局、教育省	Namwala へ移動 サイト調査： Namwala 郡
36	7/18(火)	Kaoma へ移動 打合せ：郡庁、保健局、教育省	サイト調査： Namwala 郡
37	7/19(水)	打合せ：DWA 西部州統括事務所	サイト調査： Namwala 郡 Livingstone へ移動
38	7/20(木)	Lusaka へ移動	打合せ：Kazungula 郡庁
39	7/21(金)	サイト調査：Kaoma、Mumbwa Lusaka へ移動	サイト調査： Kazungula 郡
40	7/22(土)	チーム内打合せ	サイト調査： Kazungula 郡
41	7/23(日)	資料整理	サイト調査： Kazungula 郡
42	7/24(月)	データ解析	サイト調査： Kazungula 郡
43	7/25(火)	民間資機材業者訪問	サイト調査： Kazungula 郡
44	7/26(水)	打合せ：N-WASHE、教育省	サイト調査： Kazungula 郡
45	7/27(木)	打合せ：NWASCO、社会経済条件調査再 委託先	サイト調査： Kazungula 郡
46	7/28(金)	中間報告：JICA 打合せ：MLGH、CCF	打合せ：Kazungula 郡庁 物理探査：Lusaka へ移動
47	7/29(土)	物理探査、社会経済条件調査担当、離ザ ンビア	サイト調査： Kazungula 郡 物理探査：Lusaka 発
48	7/30(日)	資料整理	サイト調査： Kazungula 郡
49	7/31(月)	DWA 既存資機材調査	Sesheke 郡へ移動 打合せ： Sesheke 郡庁 サイト調査： Sesheke 郡
50	8/1(火)	打合せ： DWA	サイト調査： Sesheke 郡
51	8/2(水)	打合せ： MLGH、UNICEF	サイト調査： Sesheke 郡
52	8/3(木)	打合せ： N-WASHE	サイト調査： Sesheke 郡
53	8/4(金)	打合せ： 社会経済条件調査再委託先	サイト調査： Sesheke 郡
54	8/5(土)	データ解析	サイト調査： Sesheke 郡 Livingstone へ移動
55	8/6(日)	資料整理	資料整理
56	8/7(月)	ハンド・ポンプ代理店訪問	サイト調査： Kazungula 郡
57	8/8(火)	ハンド・ポンプ代理店訪問	サイト調査： Kazungula 郡
58	8/9(水)	現地資機材マーケット調査	サイト調査： Kazungula 郡
59	8/10(木)	打合せ： DWA	サイト調査： Kazungula 郡
60	8/11(金)	打合せ： DWA	Lusaka へ移動
61	8/12(土)	団内打合せ	団内打合せ
62	8/13(日)	資料整理	資料整理
63	8/14(月)	JICA へ中間報告	JICA へ中間報告
64	8/15(火)	サイト調査： Mumbwa 郡 Kaoma 郡へ移動	サイト調査： Mumbwa 郡 Kaoma 郡へ移動

65	8/16(水)	サイト調査： Kaoma 郡 Itezhi-tezhi へ移動	サイト調査： Kaoma 郡 Itezhi-tezhi へ移動
66	8/17(木)	サイト調査： Itazhi-tezhi 郡	サイト調査： Itazhi-tezhi 郡
67	8/18(金)	サイト調査： Itezhi-tezhi 郡	サイト調査： Itezhi-tezhi 郡
68	8/19(土)	サイト調査： Itezhi-tezhi 郡 Lusaka へ移動	サイト調査： Itezhi-tezhi 郡 Lusaka へ移動
69	8/20(日)	資料整理	資料整理
70	8/21(月)	DWA と打合せ DWA 既存掘さく機材調査	DWA と打合せ
71	8/22(火)	DWA 既存掘さく機材調査	サイト調査： Mumbwa 郡
72	8/23(水)	DWA と打合せ 民間掘さく業者訪問	サイト調査： Mumbwa 郡
73	8/24(木)	DWA と打合せ 民間掘さく業者訪問	データ解析
74	8/25(金)	DWA と打合せ	データ解析
75	8/26(土)	団内打合せ	
76	8/27(日)	資料整理	
77	8/28(月)	日本国大使館へ帰国報告 DWA へ帰国報告	
78	8/29(火)	JICA へ帰国報告 Lusaka 発	
79	8/30(水)	機内	
80	8/31(木)	東京着	

(2) 基本設計概要説明時

日順	日付	調査内容	
		官側	コンサルタント
1	10/23(月)	東京発	
2	10/24(火)	ルサカ着	
3	10/25(水)	JICA、日本国大使館、財務・経済開発省、エネルギー・水資源省、 同水利局表敬	
4	10/26(木)	DWA 基本設計概要説明	
5	10/27(金)	DWA 基本設計概要説明、ミニッツ協議 エネルギー・水資源省大臣表敬	
6	10/28(土)	団内協議	
7	10/29(日)	団内協議	
8	10/30(月)	ミニッツ協議	
9	10/31(火)	ミニッツ協議、JICA、日本国大使館報告	
10	11/1(水)	ミニッツ署名	
		官側ルサカ発	資料整理
11	11/2(木)	南アフリカ事務所打合せ	ルサカ発
12	11/3(金)	南アフリカ発	トランジット
13	11/4(土)	東京着	東京着

資料-3 相手国関係者リスト

1. 在ザンビア日本国大使館
五月女 光弘 特命全権大使（ドラフト説明時）
遠藤 賢司 一等書記官
木村 孝司 二等書記官

2. 国際協力事業団ザンビア事務所
石川 満男 所長
大田 孝治 次長
吉村 悦治 所員

3. 財務・経済開発省 (Ministry of Finance and Economic Development)
Agnes M. Musunga 主席エコノミスト
W.S. Akapelwa エコノミスト
浜田 哲郎 JICA 専門家

4. エネルギー・水資源省 (Ministry of Energy and Water Development-MEWD)
Eusebius Chola Katai 次官補

5. エネルギー・水資源省水利局 (Department of Water Affairs- DWA)
Adam Hussen 局長代行
Peter Chola 局次長
Onson L. Sangulube 主席水利技師
S. Banda 掘さく課長
M.S. Muyendekwa 西部州統括水利技師
Alex Lusaka 水利技師
Fred Mulenga 南部州水利技師
Andrew Mtonga ルサカ州水利技師
Jack Nkhoma ルサカ州水利技師
Kabombo Felix ムンプワ郡水利技師
Emelda Mataa カオマ郡啓蒙活動担当

6. 地方自治・住宅省 (Ministry of Local Government and Housing-MLGH)
O.M. Banda 次官

7. 地方自治・住宅省インフラ・社会サービス局
(Department of Infrastructure and Support Services-DISS)
- | | |
|--------------------|----------|
| Peter Lubambo | 局長 |
| Pola P.L.M. Kimena | 局長補佐 |
| M. D. Patel | 主席技師 |
| Mbaala Matengu | 主席エコノミスト |
8. 地方自治・住宅省人事・総務局
(Department of Human Resources and Administration-DHRA)
- | | |
|-----------------------|----|
| Elizabeth Pezo Kanoka | 局長 |
|-----------------------|----|
9. 国家給水・衛生評議会 (National Water Supply and Sanitation Council-NWASCO)
- | | |
|------------------|-------|
| Oswald M. Chanda | 専務理事 |
| Paul M. Banda | 主任検査官 |
10. National WASHE Co-ordinating and Training Team (N-WASHE)
- | | |
|--------------|----------|
| Isaac Mbewe | コーディネーター |
| Sam Ngoma | 広報・法務担当 |
| K. Nyundu | 水利技師 |
| Davy Nglowa | データ管理 |
| Paul Mboshya | ファシリテーター |
11. Water Sector Reform Support Unit (RSU)
- | | |
|---------------|---------|
| P. Mwasanbili | チームリーダー |
|---------------|---------|
12. ムンブワ郡
- | | |
|---------------|-------------|
| Alex B. Meema | 郡行政官 |
| Victor Mwelba | D-WASHE 委員長 |
| Ester Katenda | 中央・北部保健委員長 |
13. イテシテシ郡
- | | |
|-----------------|--------------------|
| V. Hamayuwa | 公共事業部長/D-WASHE 委員長 |
| Samuel Nabuzoha | コーディネーター |

- | | | |
|-----|-----------------------|---------------|
| 14. | ナムワラ郡 | |
| | David Lamanyexido | 郡行政官 |
| | Phillymon Michelo | 郡庁職員 |
| | I.Z. Haambozi | 保健部長 |
| | Brown Ngenda | D-WASHE メンバー |
| | Justine Malupande | WASHE アドバイザー |
| 15. | カズングラ郡 | |
| | M.M. Mainza | 郡長 |
| | N. Kalufyanya | 郡長補 |
| | F. Ngelezi | 公共事業部長 |
| | Cruesher Muleya | 村落開発員 |
| 16. | カオマ郡 | |
| | S. Kambenja | 公共事業部長 |
| | M. Mkozomba | 計画部長 |
| | R.N. Mwanamambo | 保健部長 |
| | S. Mkhata | 保健衛生普及員 |
| 17. | セシェケ郡 | |
| | M. Mutale | 郡長 |
| | Patrick Mutaneko | 公共事業部長 |
| | Kawana Wamuwi | 村落開発員補佐 |
| 18. | 国際連合児童基金 (UNICEF) | |
| | S. P. Mathur | プロジェクト・マネージャー |
| 19. | World Vision Zambia | |
| | Martin Silutongwe | フィールド・プログラム部長 |
| | Chikondi Phiri | プログラム・マネージャ |
| | Rev. Sam Simon Sakala | 連携・協調担当 |
| 20. | Water Aid | |
| | John Kelleher | 所長 |

21. Christian Children's Fund

Joseph S. Conteh

所長

Victor Koyi

計画部長

19. Care International/ Livingstone Food Security Programme

Felix Lombe

プログラム・オフィサー

Jasper Hatwiinda

プログラム・オフィサー

資料-4(1) 討議議事録（基本設計調査時）

MINUTES OF DISCUSSIONS
ON BASIC DESIGN STUDY
ON THE GROUNDWATER DEVELOPMENT AND SANITATION PROJECT
IN DROUGHT PRONE RURAL AREAS
IN THE REPUBLIC OF ZAMBIA

In response to a request from the Government of the Republic of Zambia (hereinafter referred to as "Zambia"), the Government of Japan decided to conduct a Basic Design Study on the Groundwater Development and Sanitation Project in Drought Prone Rural Areas (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Zambia the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Dr. Yuji Maruo, Senior Advisor, JICA, and is scheduled to stay in the country from June 14 to August 29, 2000.

The Team held discussions with the officials concerned of the Government of Zambia (hereinafter referred to as "Zambian side") and conducted field survey in the study area.

In the course of the discussions and field survey, both sides have confirmed the main items described on the attached sheets. The Team will proceed with further works and the Basic Design Study report.

Lusaka, June 23, 2000

丸尾祐治

Yuji Maruo
Leader
Basic Design Study Team
JICA

Adam Hussen

Adam Hussen
Acting Director
Department of Water Affairs
Ministry of Energy and Water Development

(Witness)

PP

A.M. Musunga
Acting Chief Economist
Bilateral Cooperation
Ministry of Finance and Economic
Development

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ATTACHMENT

1. Objective

The Objective of the Project is to improve the living standard of rural population by means of development of groundwater supply and sanitation facilities.

2. Study Area

The Zambian side and the Team agreed that the following six districts would be the study area for the Project.

- (1) Central Province: Mumbwa District
- (2) Western Province: Kaoma District
Sesheke District (East Bank of Zambezi River)
- (3) Southern Province: Namwala District
Itezhi-Tezhi District
Kazungula District

3. Responsible and Executing Organization

- (1) Responsible organization of the Project is the Ministry of Energy and Water Development
 - (2) Executing organization of the Project is the Department of Water Affairs (DWA).
- Organization chart of the above organizations is described in Annex-I.

4. Items requested by the Zambian side

After discussions with the Team, the following items were finally requested by the Zambian side. However, the project sites and final components of the Project will be decided by the Government of Japan after further studies.

(1) Construction of boreholes fitted with hand pump

The Zambian side requested the construction of total number of three hundred (300) boreholes fitted with hand pump. The number of boreholes requested in each district is described in Annex-II.

The Team will select 300 sites for study from a list of candidate sites prepared by the Zambian side through discussion with officials in each district, clarification of priority, analysis of geophysical condition, and other relevant information in accordance with Water, Sanitation and Health Education (WASHE) selection criteria.

The actual sites for borehole construction will finally be decided according to the study.

(2) Construction of water supply and public sanitation facilities at the sub-centres

The Zambian side requested construction of water supply and public sanitation facilities at twenty (20) sub-centres. The locations of sub-centres are selected from the list of candidate sub-centres in Annex-III for further discussion.

The Team will consider the most appropriate system in each sub-centre.

(3) Procurement of equipment

Requested items are listed in Annex-IV

5. Japan's Grant Aid System

(1) The Zambian side has understood the system of Japan's Grant Aid on Annex-V as explained by the Team.

(2) The Zambian side will take the necessary measures described in Annex-VI for the smooth implementation of the Project, on condition that the Grant Aid Assistance by the Government of Japan is extended to the Project.

6. Schedule of the Study

(1) The consultant members of the Team will proceed with further studies in Zambia until August 29, 2000.

(2) Based on the Minutes of Discussions and technical examination of the study results, JICA will prepare the draft report and dispatch a mission in order to explain its contents in October, 2000.

(3) In case the contents of the draft report are acceptable in principle by the Zambian side, JICA will complete the final report and send it to the Zambian side around January, 2001.

7. Other relevant issues

(1) Both sides confirmed that the Zambian side would be responsible for operation and maintenance of facilities constructed under the Project. For the proper operation and maintenance of the facility, the Team explained each community at the Project site should raise enough funds so that it could fully cover procurement costs of expendables and replacement costs of facility in future.

The Zambian side understood this explanation by the Team, and in response they said that they would take measures to encourage the activity of community-based operation and

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maintenance body, such as the village water, sanitation and health education committee (V-WASHE), for proper management of facilities.

(2) The Team proposed that it would exclude the West Bank of Zambezi River in Sesheke District from the Study Area due to the uncertain security conditions in the border area.

The Zambian side agreed to this proposal in principle. However, the Zambian side explained that there are villages in the West Bank which are severely affected by drought, and therefore requested the Team to include provision of materials for construction of water supply facilities which would be implemented by the Government of Zambia.

In response the Team said it would consider any possible measures in the course of study.

(3) The Zambian side requested the Team to include counterpart training in Japan for DWA staff in order to enhance their capacity in project management.

NUMBER OF REQUESTED BOREHOLES WITH HANDPUMP IN EACH DISTRICT

1. Central Province		
Mumbwa District		69 boreholes
2. Western Province		
Kaoma District		67 boreholes
Sesheke District		28 boreholes
3. Southern Province		
Namwala/ Itezhi-Tezhi District		35 boreholes
Kazungula District		101 boreholes
Total		300 boreholes

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LIST OF CANDIDATE SUB-CENTRES IN EACH DISTRICT

- | | |
|--------------------------|---|
| 1. Namwala District | Moobola, Muchila, Kantengwa and Banbwe |
| 2. Itezhi-tezhi District | Nansenga, Banamwaze, Shimbizi and Kanzwa |
| 3. Kazungula District | Nyawa, Sinde, Momba, Ngwezi, Makunka,
Sekute and Mambova |
| 4. Sesheke District | Machile, Mulobezi, Bwina, Mulauli, Lipumpu,
Masese, Katima and Sichili |

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LIST OF REQUESTED EQUIPMENT

1 Cargo Truck 4x4 (6x6) with crane for transport of construction materials	6 units
2 Light vehicles 4x4 for community mobilization, pre- and post-construction activities with the communities	8 units
3 Motor-bikes for WASHE activities	18 units
4 Personal computer for survey and project management	7 units
5 Materials for education meetings, materials for training	1 lot
6 Tools and equipment for maintenance of water supply facilities at sub-centres	1 lot
7 Drilling rigs, tools and accessories	2 units
8 Spare parts for existing drilling rigs	1 lot
9 Truck mounted compressor	4 units

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JAPAN'S GRANT AID SCHEME

1. Grant Aid Procedures

- 1) Japan's Grant Aid Program is executed through the following procedures.

Application	(Request made by a recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the recipient country)

- 2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the Project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the Project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

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2. Basic Design Study

1) Contents of the Study

The aim of the Basic Design Study (hereafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Japanese Government. The contents of the Study are as follows:

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

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

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

2) Selection of Consultants

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

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selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consultant firm(s) used for the Study is(are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchanges of Notes, in order to maintain technical consistency.

3. Japan's Grant Aid Scheme

1) Grant Aid

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

2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc. are confirmed.

- 3) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and a final payment to them must be completed.

However in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year by mutual agreement between the two Governments.

- 4) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.
When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

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However the prime contractors, namely, consulting, contracting and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

5) Necessity of the "Verification"

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

6) Undertakings required of 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 the following:

- (1) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction.
- (2) To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.
- (3) To secure buildings prior to the procurement in case the installation of the equipment.
- (4) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid.
- (5) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts.
- (6) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as

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may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(7) Proper Use

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

(8) Re-export

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

(9) Banking Arrangement (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan 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 the Government of Japan under an authorization to pay issued by the Government of the recipient country or its designated authority.

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Necessary measures to be taken by the Government of Zambia

- 1 To secure the sites for the Project
- 2 To clear, level and reclaim the sites prior to commencement of the Project
- 3 To provide the land for access road, a temporary site office, warehouse and stockyard during implementation of the Project
- 4 To provide data and information for the Project
- 5 To provide necessary facilities for the Project such as warehouse for spare parts, drilling accessories and other incidental facilities
- 6 To undertake incidental outdoor works such as gardening, fencing, gates and exterior lighting in and around the site
- 7 To construct the access road to the site prior to commencement of the construction
- 8 To bear commissions to a Bank of Japan for the banking services based upon the banking arrangement
- 9 To exempt taxes and levies and to take necessary measures for customs clearance of the materials and equipment brought for the Project at the port of disembarkation
- 10 To ensure prompt unloading and customs clearance at a port of disembarkation in Zambia and facilitate internal transportation therein of the products purchased under the Project
- 11 To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in Zambia with respect to the supply of the products and services under the contracts verified by the Government of Japan
- 12 To accord Japanese nationals whose services may be required in connection with supply of the products and services under the contract verified by the Government of Japan, such facilities as may be necessary for their entry into Zambia and stay therein for the performance of their work
- 13 To assign the necessary staff and secure the necessary budget for operation and maintenance of the equipment purchased under the Grant Aid
- 14 To maintain and use properly and effectively the equipment procured under the Grant Aid
- 15 To bear the expenses other than those to be borne by the Grant Aid necessary for construction of the facilities as well as for the transportation and installation of the equipment
- 16 To maintain the control of tools and spare parts purchased under the Grant Aid

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資料-4(2) 討議議事録 (基本設計概要説明時)

MINUTES OF DISCUSSIONS
ON BASIC DESIGN STUDY ON THE GROUNDWATER
DEVELOPMENT AND
SANITATION PROJECT IN DROUGHT PRONE RURAL AREAS
IN THE REPUBLIC OF ZAMBIA
(EXPLANATION ON DRAFT REPORT)

In June 2000, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Basic Design Study Team on the Groundwater Development and Sanitation Project in Drought Prone Rural Areas (hereinafter referred to as "the Project") in the Republic of Zambia (hereinafter referred to as "Zambia"), and through a series of discussions, field surveys, and technical examination of the results in Japan, JICA prepared a draft report of the study.

In order to explain and to consult the Department of Water Affairs on the component of the draft report, JICA sent to Zambia the Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Dr. Yuji MARUO, Senior Advisor, JICA from 24 October to 1 November 2000.

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

Lusaka, November 1, 2000.

丸尾祐治

Dr. Yuji Maruo
Leader
Draft Report Explanation Team
Japan International Cooperation Agency
Japan

Joseph C. Kasongo

Mr. Joseph C. Kasongo
Permanent Secretary
Ministry of Energy and
Water Development
Republic of Zambia

(Witnesses)

A. Musunga.

Ms. A.M. Musunga
Acting Chief Economist
Bilateral Cooperation
Ministry of Finance and
Economic Development
Republic of Zambia

Adam Hussen

Mr. Adam Hussen
Acting Director
Department of Water Affairs
Ministry of Energy and
Water Development
Republic of Zambia

ATTACHMENT

1. Components of the Draft Report

The Government of Zambia agreed and accepted in principle the components of the draft report explained by the Team.

2. Japan's Grant Aid scheme

The Zambian side understands the Japan's Grant Aid scheme and the necessary measures to be taken by the Government of Zambia as explained by the Team and described in Annex-V and Annex-VI of the Minutes of Discussions signed by both parties on 23 June 2000.

3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed items and send it to the Government of Zambia by January 2001.

4. Other relevant issues

1) Responsible and Executing Organization

- i. Responsible organization of the Project is the Ministry of Energy and Water Development.
- ii. Executing organization of the Project is the Department of Water Affairs(DWA).

2) Budgetary Arrangement

The Ministry of Finance and Economic Development has allocated a budget of Kwacha 450 million for DWA to execute the Project during the fiscal year 2001.

The Zambian side confirmed to take necessary measures for acquiring necessary amount of budget to execute the Project in the following fiscal years as well.

3) Contents of the Items of the Project

Both sides have basically confirmed the number of boreholes at the site listed in Annex-I and items which would be procured under the Japanese Grant Aid listed in Annex-II.

4) Vehicles for Construction Team

The Zambian side requested three (3) pick-up trucks for following use:

- i. One (1) pick-up for overall management and inspection of the construction
- ii. Two (2) pick-up for liaison and transportation of four(4) drilling crews

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5) Suitable Type of Handpump

Due to corrosive nature of groundwater quality in the Project area, the Japanese side proposed a type of handpump in which riser pipe is made of PVC. On the other hand, the Zambian side requested that steel riser pipe of the present standard handpump would be replaced with stainless steel riser pipe. Both sides came to a conclusion that the final decision would be made after the detailed analysis and evaluation of advantage and disadvantage of two types of the handpump which will be described in the final Report.

6) Implementation Schedule

Regarding the implementation schedule, the Zambian side requested to start the drilling work during the phase-1. The Japanese side responded that, in order to implement this Project efficiently, the existing drilling rigs and supporting vehicles must be properly rehabilitated with newly procured spare parts and accessories before they are deployed to the actual drilling works. At least eight (8) months would be required for the procurement and rehabilitation of the above mentioned existing drilling rigs and supporting vehicles. Therefore, it is not possible to start the drilling works before beginning of the rainy season during the phase-1.

While the Zambian side understood the above mentioned explanation, they strongly requested again to find a way to start the drilling works in phase-1 in order to maintain the community confidence. The Japanese side responded that this request would be conveyed to JICA headquarter for further consideration.

7) Operation and Maintenance

The Zambian side is responsible for operation and maintenance of facilities constructed under the Project. D-WASHE members will play major role in the community mobilization activities after receiving the training. However, the Zambian side requested that some activities of the community mobilization during the Project be conducted by the Japanese side.

8) Specifications of the Equipment

The Zambian side basically agreed with the specification of the equipment to be procured under the Project.

9) Supervision of Community Mobilization Activities

The Zambian side requested to assign a member of consultant on the supervision of the community mobilization activities, particularly in the area where NGOs are taking part in the community mobilization activities.

10) Provision of Land for Base Camp and Stockyard

The Zambian side confirmed that necessary land for the base camp and stockyard would be provided as follow:

- i. Main stockyard and base camp in Livingstone and Mumbwa
- ii. Branch stockyard in Kaoma, Itezhi-tezhi, Namwala and Sesheke

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ANNEX-2

LIST OF EQUIPMENT AND MATERIALS TO BE PROCURED UNDER THE PROJECT

Item.	Q'ty.
1. Equipment for drilling works	
a. Truck mounted drilling rigs	2 units
b. Tools for mud drilling	2 sets
c. Tools for DTH drilling	2 sets
d. Compressor for DTH drilling	
i. Truck mounted	2 units
ii. Skid mounted	2 units
e. Fishing tools	2 sets
f. Miscellaneous	2 sets
2. Equipment for pumping test	3 sets
3. Cargo truck with crane for pumping test equipment(4x4)	1 unit
4. Cargo truck for drilling works	
a. For tools and construction material transportation (6x6, with 4 tone crane)	2 units
b. For water and fuel tank transportation (4x4, with 3 tone crane)	2 units
5. Materials and equipment for community education and mobilization	
a. Motor-bikes	12 units
b. Computer (for Sesheke and Itezhi-tezhi)	2 sets
6. Spare parts and accessories for the existing drilling rigs and cargo truck	1 set

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