

Appendices

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1. Member List of the Survey Team

(1) Basic Design Survey

No.	Name	Assignment	Position
1)	Mr. Akihiko Hoshio	Survey Team Leader	Deputy Resident Representative, JICA Malawi Office
2)	Mr. Masayuki Shiraishi	Technical Adviser	JICA Technical Adviser (Water Resource)
3)	Mr. Takeharu Kojima	Project Coordinator	Water Resources Management Division2, Grobal Envirment Department, JICA
4)	Mr. Masahiro Yamaguchi	Chief Engineer/Groundwater Development	CTI Engineering International Co., Ltd.
5)	Mr. Atsusa Kikawada	Hydrogeology	CTI Engineering International Co., Ltd.
6)	Mr. Mitsuyoshi Saito	Geophysical exploration Specialist	CTI Engineering International Co., Ltd.
7)	Mr. Manabu Atsuchi	Drilling/Equipment Planner(1)	CTI Engineering International Co., Ltd.
8)	Mr. Shoji Masumura	Social Condition Survey /Operation and Maintenance Planner	CTI Engineering International Co., Ltd.
9)	Mr. Shinichi Matsunaga	Equipment Planner(2)/Construction Planner/Cost Estimator	CTI Engineering International Co., Ltd.
10)	Mr. Daniel Neagari	Coodinator	CTI Engineering International Co., Ltd.

(2) Explanation of Draft Report

No.	Name	Assignment	Position
1)	Mr. Shinji Obuchi	Survey Team Leader	Resident Reprsentative, JICA Malawi Office
2)	Mr. Takeharu Kojima	Project Coordinator	Water Resources Management Division2, Grobal Envirment Department, JICA
3)	Mr. Masahiro Yamaguchi	Chief Engineer/Groundwater Development	CTI Engineering International Co., Ltd.
4)	Mr. Shoji Masumura	Social Condition Survey /Operation and Maintenance Planner	CTI Engineering International Co., Ltd.

2. Survey Schedule

(1) Basic Desgin Survey

No.	Date	Day	Mr. Akihiko Hoshio: Survey Team Leader	Mr. Masayuki Shiraiishi: Technical Adviser	Takeharu KOJIMA: Project Management	Masahiro YAMAGUCHI: Chief Engr./Groundwater Development	Atsuee KIKAWADA: Hydro geologist	Shouji MASYMURA: Social Condition Survey / Operation and Maintenance Planner	Shinichi MATSUMAGA: Equipment Planner (2) / Construction Planner / Cost Estimator	Daniel NEAGARI: Coordinator	Manabu ATSUCHI: Drilling & Equipment Planner (1)	Mitsuyoshi SAITO: geophysical exploration Specialist
						①	②	③	④	⑤	⑥	⑦
1	4-Apr	S				Narita->Hongkong						
2	5-Apr	M				->Lilongwe Arrival						
3	6-Apr	T				Visit EOJ, JICA, MoWD						
4	7-Apr	W				Explanation of ICR, MM						
5	8-Apr	T				Move to Mwanza, Meeting with Districts Offices(ICR, MM), Site Inspection						
6	9-Apr	F				Return to Lilongwa						
7	10-Apr	S				Meeting on Draft MM, Meeting on MM, and Sign of MM, Report to EOJ						
8	11-Apr	S				Collection of Data/Information, Preparation of Contract with Local Firms on Site Survey						
9	12-Apr	M				move to Blantyre						
10	13-Apr	T				Lilongwe->Johannesburg->->Hongkong->Narita						
11	14-Apr	W				move to Lilongwe						
12	15-Apr	T				Preparation of Site Survey						
13	16-Apr	F				Narita->Hongkong Arrival						
14	17-Apr	S				1 group						
15	18-Apr	S				2 group						
16	19-Apr	M				3 group						
17	20-Apr	T				Preparation of Site Survey, and Start						
18	21-Apr	W				4 group						
19	22-Apr	T				Lilongwe->Johannesburg->->Hongkong Arrival						
20	23-Apr	F				Site Survey on, .watersupplu operation and maintenance, social condition, water .quality, etc						
21	24-Apr	S				Site Survey on, .watersupplu operation and maintenance, social condition, water .quality, etc						
22	25-Apr	S				Water Supply System, operation and maintenance, Existing Condition and Needs						
23	26-Apr	M				Survey for Socail condition, Other Donor, Planning of operation and maintenance						
24	27-Apr	T				Survey for drilling equipment, operation&maintenanc e of equipment & materilas, workshop, private drilling companies, etc.						
25	28-Apr	W				Hydrogeological condition in the site, groundwater level, water quality, etc						
26	29-Apr	T				Survey for Equipment and material, Planning of procurement, Planning of Construction, Cost Estimation, etc.						
27	30-Apr	F				Lilongwe->Johannesburg->Kenya						
28	1-May	S				Around 1 week, Data collection and site survey of similar project in/near Lilongwe						
29	2-May	S				Around 1 week, Data collection and site survey of similar project in/near Lilongwe						
30	3-May	M				Lilongwe->Johannesburg->->Hongkong->Narita						
31	4-May	T				move to Lilongwe (with reserve date)						
32	5-May	W				Meeting with MoWD						
33	6-May	T				Data Arrangement						
34	7-May	F				Report to JICA, EOJ						
35	8-May	S				Lilongwe->Johannesburg->->Hongkong->Narita						
36	9-May	S				Lilongwe->Johannesburg->->Hongkong->Narita						
37	10-May	M				Lilongwe->Johannesburg->->Hongkong->Narita						
38	11-May	T				Lilongwe->Johannesburg->->Hongkong->Narita						
39	12-May	W				Lilongwe->Johannesburg->->Hongkong->Narita						
40	13-May	T				Lilongwe->Johannesburg->->Hongkong->Narita						
41	14-May	F				Lilongwe->Johannesburg->->Hongkong->Narita						
42	15-May	S				Lilongwe->Johannesburg->->Hongkong->Narita						
43	16-May	S				Lilongwe->Johannesburg->->Hongkong->Narita						
44	17-May	M				Lilongwe->Johannesburg->->Hongkong->Narita						
45	18-May	T				Lilongwe->Johannesburg->->Hongkong->Narita						
46	19-May	W				Lilongwe->Johannesburg->->Hongkong->Narita						
47	20-May	T				Lilongwe->Johannesburg->->Hongkong->Narita						
48	21-May	F				Lilongwe->Johannesburg->->Hongkong->Narita						
49	22-May	S				Lilongwe->Johannesburg->->Hongkong->Narita						
50	23-May	S				Lilongwe->Johannesburg->->Hongkong->Narita						
51	24-May	M				Lilongwe->Johannesburg->->Hongkong->Narita						
52	25-May	T				Lilongwe->Johannesburg->->Hongkong->Narita						
53	26-May	W				Lilongwe->Johannesburg->->Hongkong->Narita						
54	27-May	T				Lilongwe->Johannesburg->->Hongkong->Narita						
55	28-May	F				Lilongwe->Johannesburg->->Hongkong->Narita						
56	29-May	S				Lilongwe->Johannesburg->->Hongkong->Narita						
57	30-May	S				Lilongwe->Johannesburg->->Hongkong->Narita						
58	31-May	M				Lilongwe->Johannesburg->->Hongkong->Narita						
59	1-Jun	T				Lilongwe->Johannesburg->->Hongkong->Narita						
60	2-Jun	W				Lilongwe->Johannesburg->->Hongkong->Narita						

Survey will be conducted by 4 groups:
Site survey will be done by 3 groups, ⑤ & ⑥ will joint Group1 or Group2 for the site survey.

(2) Draft Report Explanation

No.	Date	Day	Mr. Akihiko Hoshio: Survey Team Leader	Mr. Masayuki Shiraishi: Technical Adviser	Takeharu KOJIMA: Project Management	Masahiro YAMAGUCHI: Chief Engr. /Groundwater Development	Shouji MASYMURA: Social Condition Survey / Operation and Maintenance Planner	
1	25-Sep	S			Lilongwe→Johannesburg→			
2	26-Sep	S			→Hongkong→Narita			
3	27-Sep	M	Visit EOJ, JICA, MoIWD					
4	28-Sep	T		Move to Mwanza, Meeting with Districts Offices				
5	29-Sep	W		Return to Lilongwe, Meeting with MoIWD				
6	30-Sep	T	Meeting with MoIWD, Sign of MM					
7	1-Oct	F			Lilongwe→ Johannesburg	Supporting Survey	Lilongwe→ Johannesburg	
8	2-Oct	S			Johannesburg→ Hongkong→	Supporting Survey	Johannesburg→ Hongkong→	
9	3-Oct	S			Hongkong→Narita	Lilongwe→ Johannesburg	Hongkong→Narita	
10	4-Oct	M				Johannesburg→ Hongkong→		
11	5-Oct	T				Hongkong→Narita		

3. List of Parties concerned in the Recipient Country

Name	Position	Observations
Ministry of irrigation and Water Development		
Sandram C.Y. Mawaru	Secretary for irrigation and Water Development	
Modesta B. Kanjaye	Director of Department of Ground water (DGW)	
Thanasias Sitolo	CBM Coordinator, Department of Water Supply Service	
Mr. G.D.C. Matiki,	Principal Hydrogeologist	
Dwight Kambuku	Hydro geological Research Officer	
P. Chintengo,	Principal Hydrogeologist	
Humphrey Sagnlayi	Meteorological Engineer	
Maruto Chintoga	Senior Groundwater Development Officer	
Peaches Phiri	CWC, Water Quality Division	
Ronald Chiwaula	Senior Drilling Officer	
M. Chintengo	Senior Groundwater Development Officer	
Andrew Joloza	HgRO (Groundwater - Central Region)	
G. E. Hora	P.A.	
Southern Regional Water Development Office		
S. Matamula,	Regional Water Development Officer	
Chrispine Songola	CBM Coordinator	
Mwanza district		
S.L. Gwedemila	District Commissioners	
Mazeti Mbulenje	Director for Planning and Development	
B.S.P. Banda	District Community Development Officer	
F.M. Chaima	Assistant Community Development Officer, Mwanza	
P.A. Sipuni	Community Development Officer	
A.J. Phir	i, District Environmental Health Officer	
Joseph Kumalawi	Education Officer	
Joshua Saini	DFDO (Social Welfare)	
Edgar T. Phri	Water Development Officer, DWO	

Willard Botha	Water Monitoring Assistant,DWO	
Neno district		
A.B. Mnanzi,	Director for Planning and Developme t	
W.M. Kuseli	District Water Development Officer	
James Mando	Water Monitoring Assistant,DWO	
Luckson Sipolo	Water Monitoring Assistant,DWO	
D.S. Phanyanphanga	District Agricultural Development Officer	
Embassy of Japan		
Shinichi Ogawa	First Secretary	
JICA Malawi Office		
Minako Shiotsuka	Asistant Resident Representative	
Nathan Mwafulirwa	Senior Programme Officer	
Others		
Chimwenwe Nyimba	UNICEF	

4 . Minutes of discussions
(1) MD (Basic Design Survey)

**MINUTES OF DISCUSSIONS
ON THE PREPARATORY SURVEY
ON
THE PROJECT FOR GROUNDWATER DEVELOPMENT IN MWANZA AND NENO
IN
THE REPUBLIC OF MALAWI**

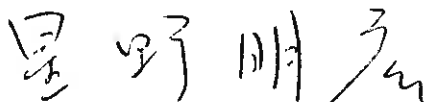
In response to a request from the Government of the Republic of Malawi (hereinafter referred to as "Malawi"), the Government of Japan (hereinafter referred to as "GOJ") decided to conduct a Preparatory Survey of the Project for Groundwater Development in Mwanza and Neno (hereinafter referred to as "the Project") and entrusted the Survey to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Malawi the Preparatory Survey Team (hereinafter referred to as "the Team"), which is headed by Mr. Akihiko HOSHINO, Senior Representative, JICA Malawi, and is scheduled to stay in the country from 5th April 2010 to 14th April 2010.

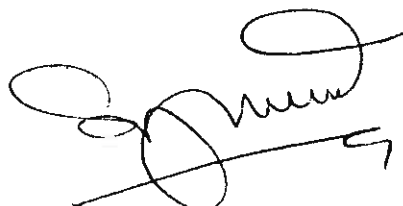
The Team held a series of discussions with the officials concerned of the Government of Malawi and conducted a field survey in the Project area.

In the course of discussions and field survey, both parties have confirmed the main items described in the attached sheets. The Team will proceed to work and prepare the Preparatory Survey Report.

Malawi, 13th April 2010



Mr. Akihiko HOSHINO
Leader
Preparatory Survey Team
Japan International Cooperation Agency



Mr. Sandram C.Y. Maweru
Secretary for Irrigation and Water Development
Ministry of Irrigation and Water Development
The Republic of Malawi



Mr. P.K. Simbani
Director for Debt and Aid,
Ministry of Finance,
The Republic of Malawi

ATTACHMENT

1. Objective of the Project

The objective of the Project is to improve water supply conditions in Mwanza and Neno districts through the construction of water supply facilities.

2. Project site (s)

The candidate sites of the Project will be in villages of Mwanza and Neno districts as shown in Annex-1. Exact sites will be determined in the course of the survey.

3. Responsible and Implementing Organization

3-1. The responsible organization is Ministry of Irrigation and Water Development (hereinafter referred to as "MoIWD").

3-2. The implementing organization is Department of Water Resources, MoIWD.

3-3. The organization chart of MoIWD is shown in Annex-2.

4. Items requested by the Government of Malawi

4-1. After discussions with the Team, the items described in Annex-3 and 4 were finally requested by the Government of Malawi. The Team promised to convey the request to GOJ.

4-3. JICA will assess the appropriateness of the request and will recommend to the GOJ for approval.

5. Japan's Grant Aid Scheme

5-1. The Malawi side understood the Japan's Grant Aid Scheme explained by the Team as described in Annex-5.

5-2. The Malawi side will take necessary measures as described in Annex-6 for smooth implementation of the Project, as a condition for the Japan's Grant Aid to be implemented.

5-3. JICA will report to the Malawi side if there are any other undertakings based on the result of this survey.

5-4. The Team explained that implementation of the preparatory survey is not a commitment of the approval of the Project.


6. Schedule of the Survey

6-1. Consultant members in the Team will proceed to undertake further studies in Malawi until end of May 2010.

6-2. JICA will prepare the draft report of the Survey in English and dispatch a mission to Malawi in order to explain its contents around the middle of September 2010.

6-3. In case the contents of the draft report are accepted in principle by the Government of Malawi, JICA will complete the final report and send it to the Government of Malawi around February 2011.



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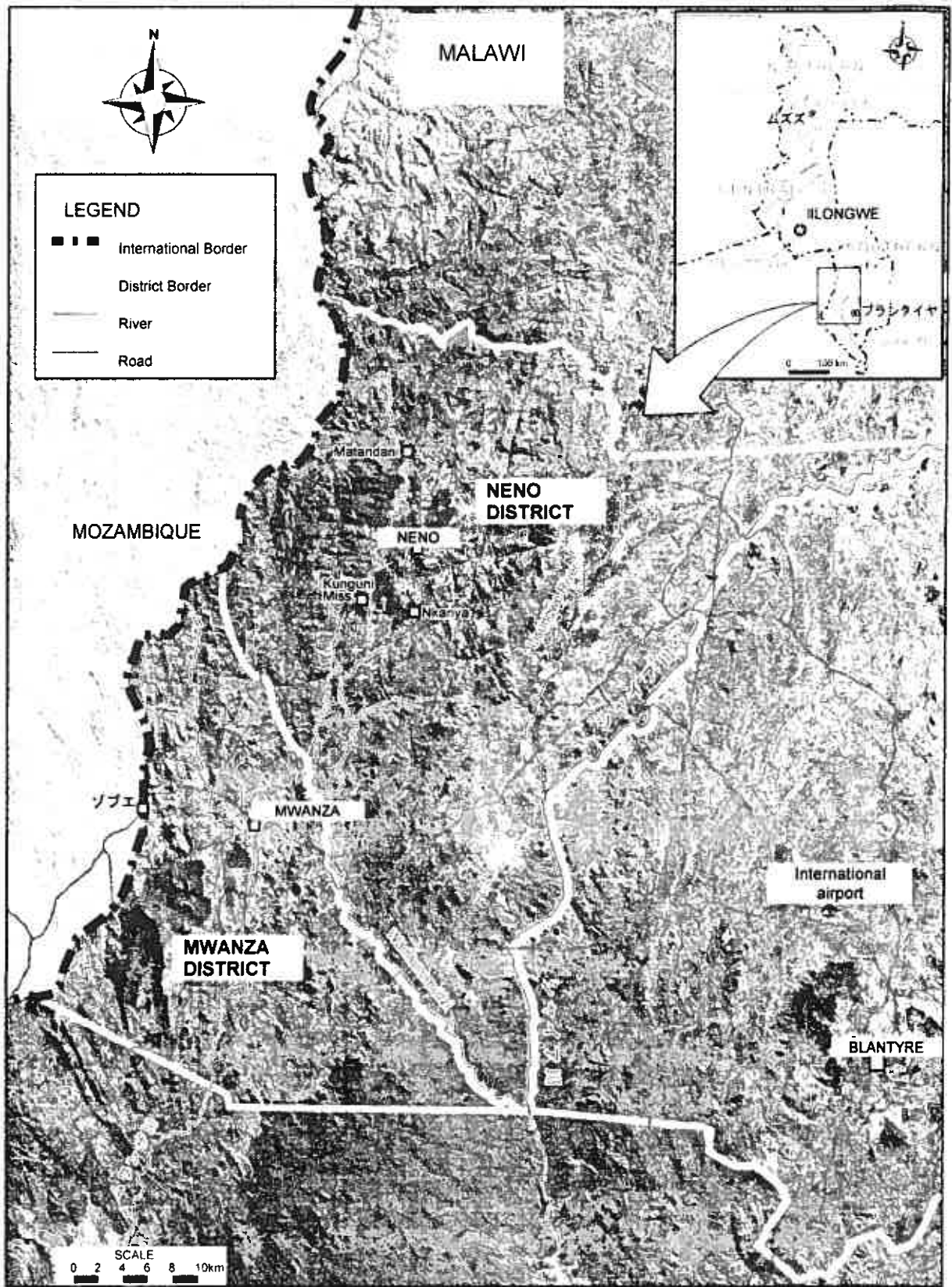
7. Other relevant issues

- 7-1. Both sides confirmed that target year for the projection of target population would be set around five years after the completion of the Project.
- 7-2. Both sides confirmed that the Project will basically focus on constructing boreholes and handpump facilities.
- 7-3. Maximum of four test-drillings will be conducted during the Survey. The Team will consult the Malawi side on the location and details of the test drilling sites.
- 7-4. The final number and location of the Project Sites will be determined after further examination in Japan and consultation with Malawi side.
- 7-5. Malawi side will arrange for working space for the consultant team in Lilongwe and Mwanza.
- 7-6. Malawi side has 5 sets of existing and workable drilling rigs and related equipment under its possession. The Malawi side envisaged to provide maximum of two drilling rigs and related equipment to the Project, if the grant aid is to be implemented. The Study Team will examine the condition of the drilling rigs and related equipment.
- 7-7. Malawi side confirmed that after the mission in September, there will be no duplication among development partners in conducting rural water supply projects in the sites in Mwanza and Neno districts. Malawi side will play a main role in coordinating among development partners. Any relevant information concerning activities of MoIWD and development partners will be provided to JICA.

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Annexes

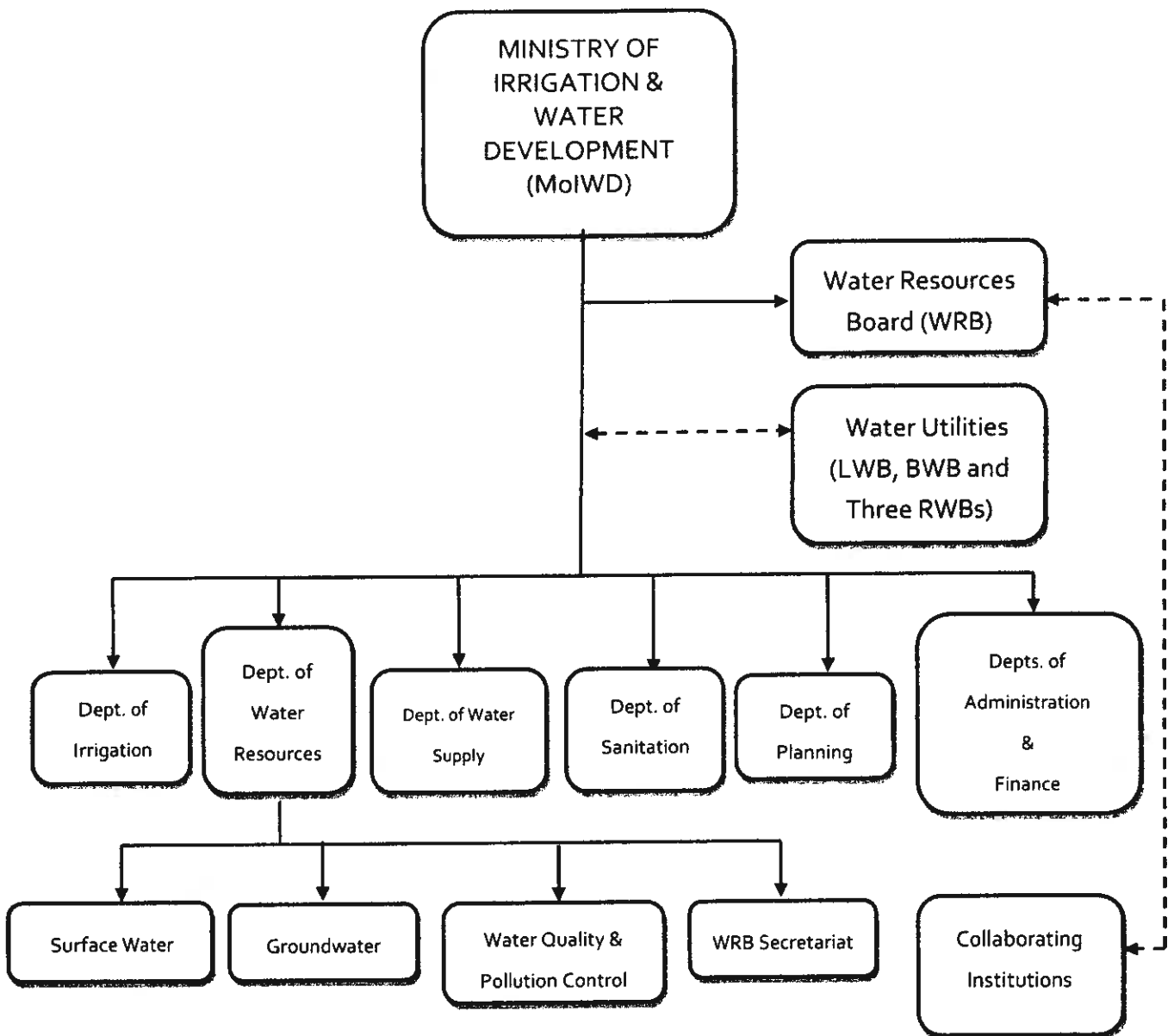
1. Project Area Map
2. Organization Chart
3. Items requested by the Government of Malawi
4. Requested Sites for Construction of Groundwater Supply Facilities
5. Japan's Grant Aid
6. Major Undertakings to be taken by Each Government



Annex-1 Project Area

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Annex-2 Organization Chart of MoIWD

Annex-3 Items requested by the Government of Malawi
Requested Components

No.	Component	Specification
1	Construction of new boreholes, construction of apron, drain and washing slab.	
(1)	Boreholes and apron, drain and washing slab	
(2)	water supply facility	
2	Procurement of equipment and materials	
(1)	A set of drilling rig mounted on 4x4 truck	1 unit
(2)	A set of development and pumping test unit 4x4	1 unit
(3)	Pick-up type Light Vehicles single cab 4x4)	2 unit
(4)	Pick-up type Light Vehicles double cab 4x4)	2 unit
(5)	Global Positioning System	3 unit
(6)	A set of Geophysical Survey Machine	1 unit
(7)	Well casing and Screen Pipe	1 lot
(8)	Spare parts for the above equipment	1 lot
(9)	Spare parts for the drilling rigs	1 lot
3	Soft Component	
	➤ CBM training of water supply committees	
	➤ Training of extension workers	

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Annex-4 Requested Sites for Construction of Groundwater Supply Facilities

MWANZA District

No.	AREA/SITE NAME	H/HOLDS	POPULATION	VILLAGE	TRADITIONAL AUTHORITY
M-1	Tambo				STA Govati
M-2	Emvulo				
M-3	Dzeiakwina				
M-4	Machilika				
M-5	Kalima				
M-6	Chigungulu				
M-7	Enoko				
M-8	Jerejere				
M-9	Chemaere				
M-10	Kalanga				
M-11	Chammanja				
M-12	Sikweya				
M-13	Lusineya				
M-14	Chikapa				
M-15	Mpeni				
M-16	Tidziweztti				
M-17	IMkhoma 2				
M-18	Nguteya				
M-19	Khutu				
M-20	Kawiriza				
M-21	Fulutuma				
M-22	Chamwalira				
M-23	Jamu				
M-24	Minjale				
M-25	Kankoma				
M-26	Tipatuleni				
M-27	Kavalansiye				
M-28	Mgwedula				
M-29	Mwenyekonde				
M-30	Tchale				
M-31	Chatambalala				
M-32	Kamphirimo				
M-33	Govati 1				
M-34	Govati 2				
M-35	Msembezera				
M-36	Mtitima				
M-37	Imbani				
M-38	Kayera				
M-39	Tsegulani 1				
M-40	Tsegulani 2				
M-41	Chikoleka				
M-42	Kanyani 2				
M-43	Phalira				
M-44	Sitampa				
M-45	Ndilire				
M-46	Chikoleka 2			T/A Nthache	
M-47	Pfupa 2				
M-48	Chiwambo				
M-49	Ng'onzo 1				
M-50	Ngonzo 2				
M-51	Mangulenje				
M-52	Sathamapira				
M-53	Galatiya				

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M-54	Chimbwihda				
M-55	Kagulo 1				
M-56	Kaguo 2				
M-57	Njanjama				
M-58	Kamwendo				
M-59	Chenedi				
M-60	Kapherana				
M-61	Ilemba				
M-62	Gunde				
M-63	Nkulira				
M-64	Biriwiri				
M-65	Kabango				
M-66	Zapanga				
M-67	Kachipanda .				
M-68	Chemire				
M-69	Dzilima				
M-70	Kagonamwake				
M-71	Chiwembu				
M-72	Silota				
M-73	Nthache				
M-74	MkwGte				
M-75	Pfupal				
M-76	Kanyanil				
M-77	Makanani				
M-78	Masakosa				
M-79	Ntandamula				
M-80	Mpandasoni				
M-81	Kasapha				
M-82	Golowa				
M-83	Nkuliral				
M-84	Chimulango				
M-85	Nkhawazatha (Biriwiri)				
M-86	Faiti				
M-87	Gwrenchira				
M-88	Kasuza				
M-89	Kapise				
M-90	Ntasa				
M-91	Kaluluma				
M-92	Epesi				
M-93	Mulongoiola				
M-94	Raundi				
M-95	Chirimpira				
M-96	Chigona				
M-97	Tcheleni				
M-98	Moffati				
M-99	MadzJaphitsa				
M-100	Kanyalua				
M-101	Eliya				
M-102	Benjamiu				
M-103	Nsakambewa				
M-104	Mchotseni				
M-105	Tulonkhondo				
M-106	Tofire				
M-107	Dziwiro				
M-108	Kasnka				
M-109	Chimweta				
M-110	Jimu				
M-111	Mandolo				
M-112	Mdzinja				

T/A Kanduku

M-113	Mwalea			
M-114	Ngadziwe			
M-115	Chiphaso			
M-116	Njolomola			
M-117	Lopati			
M-118	Mpata			
M-119	Yohane			
M-120	Nyangazangoma			
M-121	Mgango			
M-122	Chtunguza			
M-123	Genesesi			
M-124	Gulumba			
M-125	makuza			
M-126	Kumanje			
M-127	Boko			
M-128	Lupiya			
M-129	Chatha			
M-130	Namcholi			
M-131	Chilala			
M-132	Siledi			
M-133	Kanthiti			
M-134	Thambala			
M-135	Kampandeni			
M-136	Kaunie			
M-137	Jolosi			
M-138	Katondo			
M-139	Nikisi			
M-140	Mulingalira			
M-141	Bongisi			
M-142	Hau			
M-143	Sudala			
M-144	Kanduk 2			
M-145	Njadzo			
M-146	Rabisoni			
M-147	Chithumbwi			
M-148	Humba			
M-149	Donkeni			
M-150	Manchichi			
M-151	Moileni			
M-152	Chiduleni			
M-153	Katunga			
M-154	Chikudzu			
M-155	Ziyaya			
M-156	Pitala			
M-157	Joni			
M-158	Lipenga			
M-159	Mkwichi			
M-160	Mpima			
M-161	Dicksoni			
M-162	Chipondeni			
M-163	Zikaloga			
M-164	Samu			
M-165	Amosi			
M-166	Kunenekude			
M-167	wingolo			
M-168	Mchotseni			
M-169	Kalimanjira			
M-170	Timvere			
M-171	Thambala (Miswati)			

M-172	Kankoma (Dzengwe)				T/A Govati
M-173	Kawiliza (Sitonkeni)				



NENO DISTRICT

No.	AREA/SITE NAME	H/HOLDS	POPULATION	VILLAGE	TRADITIONAL AUTHORITY	
N-1	Mposadala	129	645	MPOSADALA	T/A DAMBE	
N-2	Kweneza	112	560			
N-3	Kalimedzako	103	515			
N-4	Chimbalanga 1A	121	605			
N-5	Chimbalanga I B	200	1,000			
N-6	Chimbalanga 11	134	670			
N-7	Kudembo	211	1,055			
N-8	Kaguza	73	375			
N-9	Hauya	62	310			
N-10	Masamba II	69	345			
N-11	Masamba I	53	265			
N-12	Thava School	-	-			
N-13	Mchenga School	-	-			
N-14	Kanjalanjira	47	235			CHAKULEMBERA
N-15	Chakulembera A	209	1,045			
N-16	Chakulembera B	167	835			
N-17	Kumbwani	92	460			
N-18	Chawe School	-	-			
N-19	Chawe	51	255			
N-20	Moffati	107	535			
N-21	Chembekeza	188	940			
N-22	Mtemankhawa I	121	605			
N-23	Mtemankhawa II	94	470			
N-24	Nzama	76	380			
N-25	Kagona	69	345			
N-26	Kamoto 1	123	615	KAMOTO		
N-27	Kamoto II	67	335			
N-28	William	53	265			
N-29	Mgwengwere	42	210			
N-30	Chatata	33	165			
N-31	Bello I	59	295			
N-32	Bello II	46	230			
N-33	Benito	38	190			
N-34	Kazizi	51	255			
N-35	Chakhumbira A	171	855	CHAKHUMBIRA		
N-36	Chakhumbira B	49	245			
N-37	Chilimbondo School	-	-			
N-38	Ndoma	78	390			
N-39	Haindi	45	225			
N-40	Khomera	40	200			
N-41	Soka I	182	910	SOKA		
N-42	Soka II	113	565			
N-43	Soka III	60	300			
N-44	Mangadzi	-	-			
N-45	Benalita	71	355			
N-46	Ntaia I	86	430			
N-47	Ntaja II	55	275			
N-48	Binie CBO	-	-			
N-49	Chitimbe School	-	-			
N-50	Leketa I	39	195	LEKETA		
N-51	Leketa II	38	190			
N-52	Kumfule I	37	385			
N-53	Kabudula I	39	395			
N-54	Kuziona I	32	160			
N-55	Kuziona II	37	185			
N-56	Kabudula 11	36	180			

N-57	Kumfukule II	31	155		
N-58	Kumphika	40	200		
N-59	Chinkhali	37	185		
N-60	Chatuiukira	50	250		
N-61	Chikalema I	57	285	CHIKALEMA	
N-62	Chikalema II	51	255		
N-63	Tsenjerani	43	215		
N-64	Chiomba	60	300		
N-65	Kadzidzi	37	185		
N-66	Mangweru	40	200		
N-67	Kanangwanii	52	260		
N-68	Sabola II	40	200		
N-69	Sabola I	44	220		
N-70	Namapanga School				
N-71	Kammangeni	27	135		
N-72	Chikapa	39	195		
N-73	Maithi	48	240		
N-74	Mkanya	53	265	NYAKOKO	
N-75	Chammudzi	47	235		
N-76	Chipande	44	220		
N-77	Langjsi	57	285		
N-78	Luwana	50	250		
N-79	Veskanl	26	130		
N-80	M'mora	73	365		
N-81	Asumi	29	15		
N-82	Chinyani	46	230		
N-83	Ekalasi	51	255		
N-84	Chifenthe I	77	385	CHIFENTHE	
N-85	Chifenthe II	42	210		
N-86	Chifenthe III	89	445		
N-87	Ndau	48	240		
N-88	Ndege	-	/-		
N-89	Subili	80	400		
N-90	Muonekera	41	205		
N-91	Donda I	169	845	DONDA	T/A CHEKUCHEKU
N-92	Donda IV	96	480		
N-93	Hora	43	215		
N-94	Dube	39	195		
N-95	Thambani	55	275		
N-96	Donda III	-	-		
N-97	Chagalu	66	330		
N-98	Khonjeni	57	285		
N-99	Litchowa	86	430		
N-100	Mpakati III	78	390	MPAKATI GEORGE	
N-101	Muonekera School				
N-102	Sekani	61	305		
N-103	Mpakati 'III	46	230		
N-104	Magalasi	37	185		
N-105	Nandzanga Schopi	-	-		
N-106	Nandzanga Hill	48	240		
N-107	George II	53	265		
N-108	Hiwa II Rehabilitation	29	145	CHIDAKWANI	
N-109	Hiwa (Chimphonda)	34	170		
N-110	Chidakwani	53	265		
N-111	Nkhombe	29	145		
N-112	Lumbe II	37	185		
N-113	Mtoniobvu	70	350		
N-114	Mtsukansengyva	47	235		
N-115	Mussa	59	295	CHIROMBO	

N-116	Msambakala	50	250	KALUPSYA	
N-117	Kathamalo	29	145		
N-118	Galeta	57	285		
N-119	Wilson	31	155		
N-120	Chekucheku	26	130		
N-121	Chimphonda	62	310		
N-122	Mlemeka	70	350		
N-123	Kalupsya	60	300		
N-124	William II	33	165		
N-125	Katoleza	56	280		
N-126	Mfgnda School	-			
N-127	Tiyese	29	145		
N-128	Mwetang'ombe	60	300		
N-129	Samson	66	330		
N-130	Thindi	52	260		
N-131	Matandani	44	220		
N-132	Golden I	42	210	GOLDEN	T/A MLAULI
N-133	Golden II	57	285		
N-134	Ndakana	81	405		
N-135	Nseniere	70	350		
N-136	Phulusa	44	220		
N-137	Leven	62	310		
N-138	Mtoso	56	280		
N-139	Chiseke ECD	-	-	DZOMODYA CONT'D	
N-140	Mkanya	57	285		
N-141	Mankhwala	46	230		
N-142	Butao	51	255		
N-143	Zande	66	330		
N-144	Kantuwale	40	200		
N-145	Chimpanzi	44	220	CHIMPANZI	
N-146	Falawe	31	155		
N-147	Gonhi	59	295		
N-148	Chikungulu	66	330		
N-149	Zidala It	29	145		
N-150	Chimembe	61	305		
N-151	Nsalawatha I	173	865	NSALAWATHA	
N-152	Nsalawatha II	89	445		
N-153	Kazunga II	57	285		
N-154	Kazunga (Chifunga)	36	180		
N-155	Neno T/Off (DECAM)				
N-156	Kaniedza	29	145		
N-157	Chiqona	54	270		
N-158	Chapita	73	365		
N-159	Mwandaza	67	335		
N-160	Mlindi School			MAGALETA	
N-161	Jereman	35	125		
N-162	Paleven	37	185		
N-163	DaudifAgric. Rehab.)	44	220		
N-164	Kanjedza	48	240		
N-165	Chiqona	69	345		
N-166	Jana	40	200		
N-167	Nkhwali	36	180		
N-168	Namwiri	27	135		
N-169	Feremu	77	385		
N-170	Kambalame	43	215		
N-171	Mpatamanga R/Block				
N-172	Chasesa	59	295		
N-173	Yera II	60	300	KASAMBA	T/A SYMON
N-174	Yera III	27	135		

N-175	Kaphilipili School	-			
N-176	Masita		79	395	
N-177	Mapundi		63	315	
N-178	Kasamba li {Rehab}				
N-179	Makoza		39	195	SYMON
N-180	Mtembwe		53	265	
N-181	Nkundika 1		41	205	
N-182	Ndlema It		29	145	
N-183	Ngwenyama I		73	365	
N-184	Nelson {Rehab}	-			
N-185	Mkavu Sch. {Rehab}				
N-186	Mbira		27	135	
N-187	George II		56	280	
N-188	George III		49	245	
N-189	Mgugudu		83	165	
N-190	Chikapa Kanono T/Off		50	250	
N-191	Kandoje		34	170	NGWENYAMA
N-192	Phokoso		59	295	
N-193	Joseph		40	200	
N-194	Mashelo		51	255	
N-195	Kapanikiza School	-	-		
N-196	Chikampana		30	150	
N-197	Mbemba		32	160	
N-198	Pajo		55	275	
N-199	Ngwenyama II				ZALEWA
N-200	Mfingala {Quary}		61	305	
N-201	Salafose		34	170	
N-202	Chinyezi		49	245	
N-203	Chitete		30	150	
N-204	Chimphonda		66	330	
N-205	Lisungwi T/Off		52	260	
N-206	No. 1 School Area		71	355	NTENGULA
N-207	Joliji		51	255	
N-208	Maunsamatha		63	315	
N-209	Chiphaka		52	260	
N-210	Chimalizeni		40	200	
N-211	Mkwaila		43	215	
N-212	Kaligwenjere		53	255	
N-213	Mte.nguia		56	280	
N-214	Tsanjalamwimba Sch.	-	-		
N-215	Chipanqa		40	200	
N-216	NJalammano		77	385	
	TOTAL		11,651	58,651	

No.	AREA/SITE NAME	H/HOLDS	POPULATION	VILLAGE	TRADITIONAL AUTHORITY
N-217	Kamoto School— Rehab.				
N-218	Masawant— Rehab				
N-219	Luwani , Rehab.				
N-220	Chifunga — Rehab.				
N-221	Chingwalu— Rehab,				
N-222	Chulu School-Rehab.				
N-223	Mvala— Rehab.				
N-224	Mtengula— Rehab.				

N-225	Chimkwita – Rehab.				
N-226	Chikwekwe II – Rehab.				
N-227	Muonekera – Rehab				
N-228	Ngaiyaye – Rehab.				
N-229	Kammwamba – Rehab.				
N-230	Manyenie – Rehab.				
N-231	Balaka Turn Off- Rehab.				
N-232	Gobede – Rehab.				
N-233	Nlayanyemva School				
N-234	Chipindu School – Rehab.				
N-235	Kalinde – Rehab.				
N-236	Kammwamba				
N-237	Chikapa				
N-238	Kaingilira				
N-239	Matemba				
N-240	Chimenya				
N-241	Manyenje				

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.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of a 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 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.

(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 designated authority.

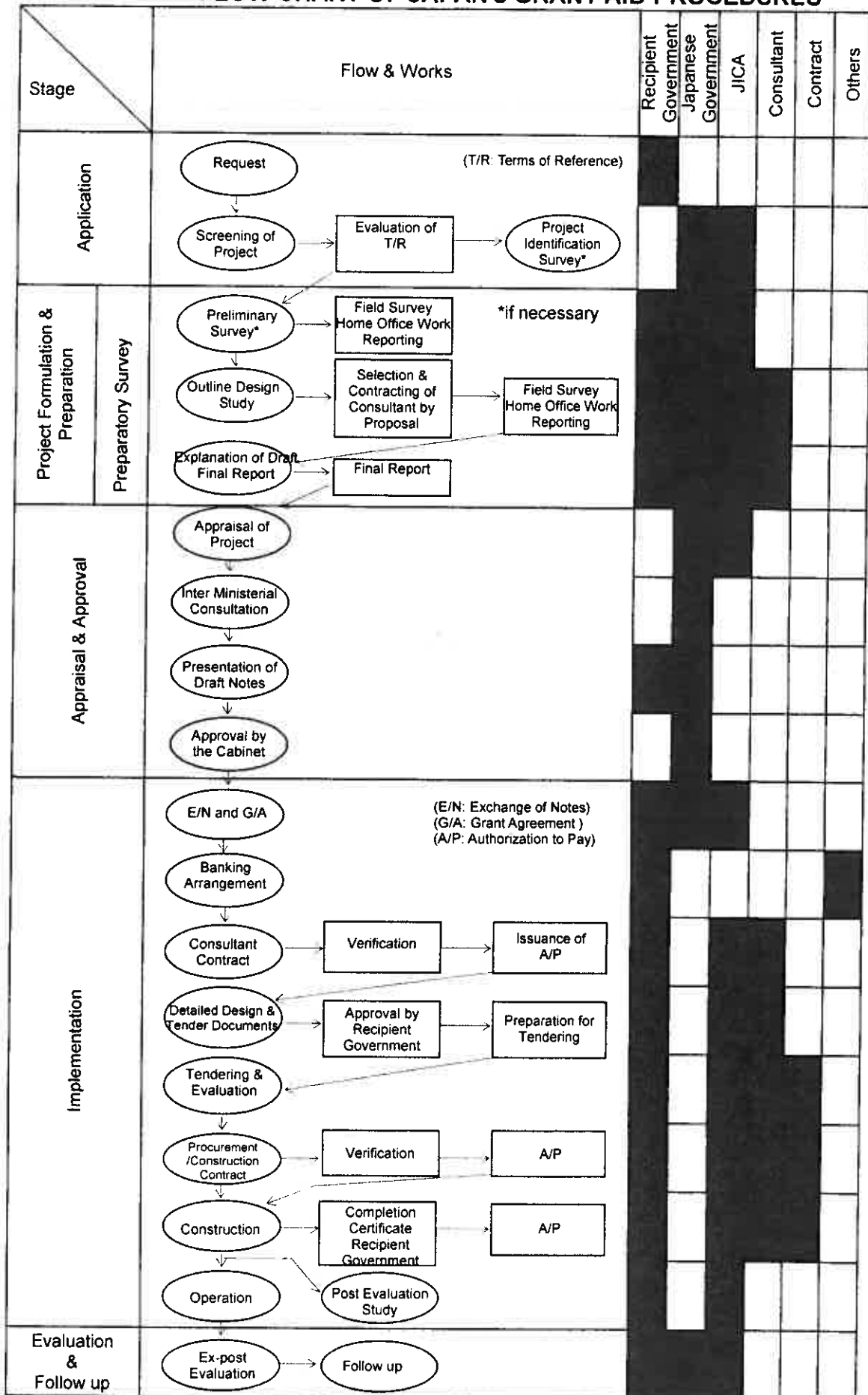
(9) Authorization to Pay (A/P)

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.

FLOW CHART OF JAPAN'S GRANT AID PROCEDURES



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Major Undertakings to be taken by Each Government

No	Items	To be covered by Grant Aid	To be covered by Recipient side
1	To secure land [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 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] / [be borne by the Authority without using the Grant]		•
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		•

(B/A : Banking Agreement, A/P : Authorization to Pay)

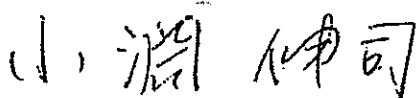
**MINUTES OF DISCUSSIONS
ON
THE PREPARATORY SURVEY
ON
THE PROJECT FOR GROUNDWATER DEVELOPMENT
IN
MWANZA AND NENO
IN
THE REPUBLIC OF MALAWI
(Explanation of Draft Outline Design)**

In April 2010, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Preparatory Survey Team on the Project for Groundwater Development in Mwanza and Neno (hereinafter referred to as "the Project") to the Republic of Malawi (hereinafter referred to as "Malawi"), and through discussion, field survey, and technical examination of the results of the survey in Japan, JICA prepared a Draft Outline Design of the Survey.

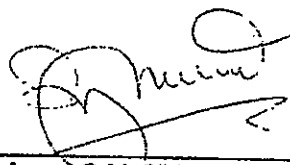
In order to explain and to consult with the Government of Malawi on the components of the Draft Outline Design, JICA sent to Malawi the Draft Outline Design Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Shinji OBUCHI, Resident Representative, JICA Malawi, from September 26 to October 1, 2010.

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

Malawi, September 30, 2010



Mr. Shinji OBUCHI
Leader
Preparatory Survey Team
Japan International Cooperation
Agency



Mr. Sandram C.Y. MAWERU
Secretary for Irrigation and Water
Development
Ministry of Irrigation and Water
Development
The Republic of Malawi



Mr. P.K. SIMBANI
Director for Debt and Aid,
Ministry of Finance,
The Republic of Malawi

ATTACHMENT

1. Components of the Draft Final Report

The Malawi side agreed and accepted in principle the components of the Draft Outline Design explained by the Team.

2. Japan's Grant Aid scheme

The Malawi side understood the Japan's Grant Aid Scheme and would take the necessary measures and allocate necessary budget properly for smooth implementation of the Project, as a condition for the Japan's Grant Aid to be implemented. The Grant Aid Scheme and necessary measures were described in the Annex 5 and Annex 6 of the Minutes of Discussions signed by both sides on 13th April, 2010.

3. Responsible and Implementing Agency

3-1. The Responsible Agency is Ministry of Irrigation and Water Development (hereinafter referred to as "MoIWD").

3-2. The implementing organization is Department of Water Resources, MoIWD.

4. Schedule of the Study

JICA will complete the final report in accordance with the confirmed items and send it to the Government of Malawi by the end of January 2011.

5. Other Relevant Issues

5-1. Project Cost Estimate

The Team explained to the Malawi side the project cost estimate as attached in Annex 1. Both sides confirmed that this cost estimate was provisional and would be examined further by the Government of Japan for its approval as the Grant. Furthermore, both sides confirmed that this project cost estimate should never be duplicated in any form nor released to any other party(s) until the relevant contracts are awarded by MoIWD. This embargo is for securing fairness of tender procedure.

5-2. Budget arrangement for operation and maintenance of the water supply facilities

The Team explained the estimated cost for management, operation and maintenance of water supply facilities as described in Annex-2 and requested the Malawi side to allocate necessary budget.

5-3. Undertakings of the Malawi side

In addition to the above undertakings, the Team requested the Malawi side to carry out followings. The Malawi side agreed to take necessary measures.

- a) Abide by major undertakings of the Government of Malawi regarding Japan's general grant aid scheme.
- b) Arrange for counterpart personnel
- c) Construct fences or other kinds of protection for the water supply facilities
- d) Improve / maintain access roads to construction sites
- e) Obtain related licenses and permits
- f) Facilitate customs clearance for imported equipment and materials
- g) Secure lands for site office, base camp and stockyard for Japanese contractor and consultant

5-4. Capacity Development

Both sides concurred on the necessity of a technical assistance program so-called "Soft Component Program" in the Project and confirmed the contents of Soft Component Program as follows:

- Capacity enhancement of operation and maintenance skills

The Malawi side committed to deploy counterpart personnel to implement the Soft Component Program and bear their local cost.

5-5. Target Year for the Project

The Team explained that the target year of the Project will be changed to 3 years after the completion of the Project instead of 5 years because of the impact of the Project.

End

Annex-1 : Project Cost Estimates

Annex-2 : Annual Construction and O&M Costs

Annex-1: Project Cost Estimates

Confidential

Table-A. Cost borne by the Government of Japan

Unit: Million yen

Items	Cost
Facilities	373.8
Machinery and materials	8.9
Soft Component	11.1
Construction supervision	75.0
Total	468.8

Table-B. Costs borne by the Government of Malawi

Unit: Million yen

Items	Cost(Million yen)	Cost(thousand MK)
Construction Cost	25.2	41,965
O&M Cost	1.5	2,514
Total	26.7	44,479

Note: The above costs to be borne by the Government of Malawi are based on 2010 prices and 10% of annual price escalation.

Annex-2: Annual Construction and O&M Costs

Table-C. Annual Construction Costs to be borne by Government of Malawi

Items	Unit	volume	Cost (Million yen)	Cost (x 1000 MK)
Land preparation for a base camp	m ²	2,500x2	0.5	750
Land preparation of the borehole site	m ²	30x30x152	13.4	22,300
Access to the borehole site	m ²	5x50x152	3.7	6,200
Fencing work for the intake facility	m	119	5.4	8,900
Total			22.9	38,150

Table-D. O&M Costs

Salary and Operation & Maintenance Cost (WDO Mwanza & Neno)

No.	Items	Unit	Unit Price	Volume	Cost	Remarks
1	District water development office extension workers salary	monthly	20,000	12	240,000	1 persons Mwanza office
2	Daily Allowance	daily	1,500	40	60,000	40 days per year
3	Vehicle fuel	Km	30	2,000	60,000	50km x 40 days
4	Vehicle Maintenance	set	1	-	450,000	US\$30,000x 5% x MK150/US\$ x2
	total				810,000	

Note: 40 days are estimated to visit 119 communities.

Cost for CBM Program

No.	Items	No. of persons	No. of sites	Unit Price	Days	Cost	Remarks
1.	Regional CBM Coordinator	1	5	5,000	1	25,000	
	District WDO Extension Worker	2	119	1,500	1	357,000	
2.	District WDO Extension Worker	2	40	1,500	2	240,000	119 sites/3=40 groups
	District WDO Extension Worker	2	40	1,500	2	240,000	119 sites/3=40 groups
3.	District WDO Extension Worker	2	40	1,500	1	120,000	119 sites/3=40 groups
	Vehicle Maintenance					494,500	
	total					1,476,500	

5. Soft Component (Technical Assistance) Plan

Project for Groundwater Development in Mwanza and Neno Districts in Southern Malawi

Soft Component Plan

1. Background for the Soft Component Planning

1-1 Promotion of CBM Program by the Executing Agency

Since the introduction of the Decentralization Policy in 1998, all the social capital development projects, including construction of boreholes with hand pump facility, have been planned, constructed and maintained by local government. Based on the policy, MoIWD is extending its technical support for the management of rural water supply facility to each district through CBM coordinators in the ministry (Department of Supply) as well as regional offices. Such technical assistance is conducted on the basis of the Community Based Management (CBM) program that has been prepared for the sensitization of water users of the constructed water facility to operate and maintain such facility by themselves and for the improvements in hygiene and sanitation at community level. Soft Component Plan of the proposed Project is planned and implemented based on the CBM program that have been applied in many similar rural water supply projects in Malawi, including previous Japanese water supply projects.

1-2 Operation and Maintenance System

Under the guidance of District Water Development Office (DWDO), most of the villages in the project area have already established Village Health and Water Development Committees (VHWCs) to operate and maintain the water supply facility in the village. In addition, in the villages where there are more than two water points, a water point committee (WPC) has been established at each water point to operate and maintain the facilities.

The VHWC usually consist of 10 committee members, i.e. 5 male and 5 female members. Out of these members, executive members such as a chairman, vice-chairman, treasurer, secretary and handpump (HP) caretakers are selected. The WPC committee members also have the same composition and the main roles of the WPC are collection of water service fee and maintenance of the facilities.

In order to meet the demand of repair of the HP facility that are beyond the capacity of the HP caretakers, DWDOs in Mwanza and Neno districts have trained HP Area mechanics (AMs). There

are 11 AMs in Mwanza and 12 in Neno districts. DWDOs are planning to train some more AMs. These AMs are extending maintenance services to the community organizations based on the agreement made between the AM and the community. In Mwanza district, about 62 % of the community organizations have concluded service contract with AMs.

Current Operation and Maintenance System is depicted in Figure 1.

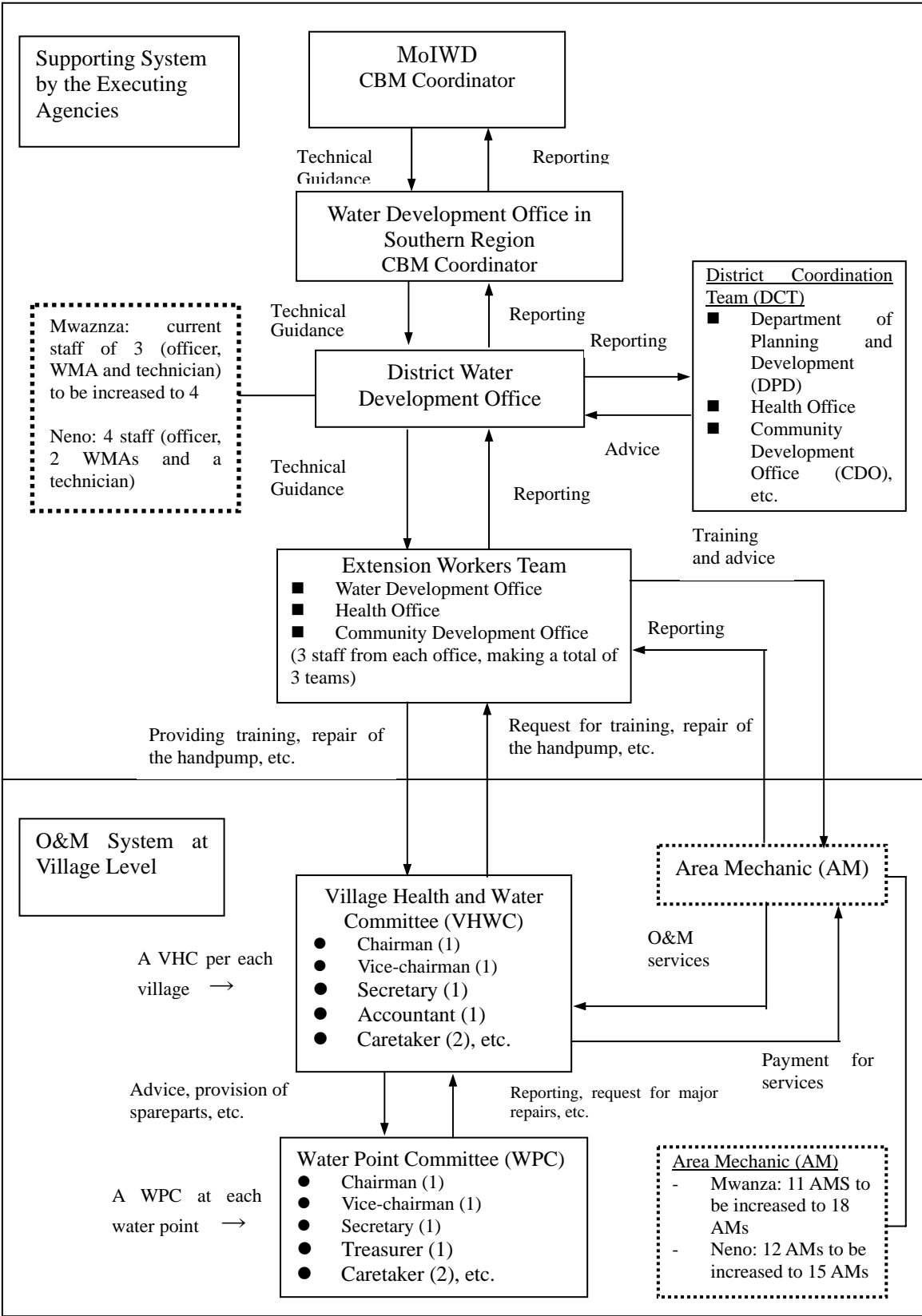


Figure 1 Operation and Maintenance System

The CBM Program has been designed to establish an improved operation and maintenance system through the participation of water users for their effective and sustainable use of the facilities. The CBM activities includes: (i) the meeting with the stakeholders at the district and TA levels; (ii) training of the extension workers in the district; (iii) training of the committee members of VHWCs and WPCs; and (iv) training of the village people on the health and sanitary aspects in relation with the HP operation.

Soft Component Plan of the proposed Project has been prepared on the basis of the CBM program that have been applied in many rural water supply projects in Malawi, including WASH project conducted in Mwanza under UNICEF assistance. The experiences learnt through these projects will be carefully reviewed and utilized as lessons of similar projects.

1-3 Issues in Current Operation and Maintenance System

During the course of the Preparatory Survey, several issues in water use and operation and maintenance activities in the target villages have been identified.

(1) Insufficient Number and Capacity of District Extension Workers

District Water Development Office (DWDO) is in charge of water and sanitation sector in the district and plays a leading role as a coordinating agency for the management of rural water supply projects. However, due to lack of extension workers of the DWDO, technical guidance and assistance for the community organizations (VHWCs and WPCs) have not been conducted sufficiently. In addition, the training capacity of the extension workers to provide technical guidance should also be improved. Technical supports from the ministry (Department of Water Supply) and Regional Water Development Office in Blantyre are necessary.

(2) Training Need of District Extension Workers

In order to improve the situation as mentioned above, DWDOs in Mwanza and Neno districts have conducted a training program to train hand pump Area Mechanics (AMs). There are 11 AMs in Mwanza and 12 in Neno. These AMs are extending maintenance services to the community organizations based on the agreement made between the AM and the community. However, in consideration of the number of water supply facilities to be constructed under the proposed project, the number of AMs will not be sufficient to cover the whole project area. Another training program for the candidate AMs will be necessary in both Mwanza and Neno districts. For that purpose, the

training of District Extension Workers, i.e. trainers' training, is indispensable.

(3) Establishment of VHWCs in the Target Villages and WPCs at the Water Points

In the villages where there are existing boreholes with hand pumps (HPs), the Village and Water Development Committees (VHWCs) have been established, where the committee members have been selected for the committee activities. In the villages where there are more than 2 water points, a Water Point Committee (WPC) has been established to conduct the operation and maintenance (O&M) activities for each water facility. However, out of the total target villages, about 10% of the villages have not established VHWCs yet. Therefore, establishment of VHWCs will be necessary in these villages. In addition, the establishment of a WPC is necessary at each new water point to be constructed under the project.

In order to promote the establishment of VHWCs and WPCs, technical guidance by the extension workers will be necessary before the commencement of the operation of the water supply facility.

(4) Training Need of Committee Members of VHWCs and WPCs

Observation in the existing VHWCs and WPCs in Mwanza and Neno districts indicated that some of the WPCs were not conducting minor repair works (e.g. exchange of rubber seal). It was also observed that some of the committees did not collect enough funds for the repair works. Taking into consideration such a situation, strengthening of the committee activities through training of committee members should be conducted. Training items will include: (i) technical training on O&M particularly for HP caretakers, and (ii) organizational and financial management for executive committee members such as chairman and treasurer.

(5) Need for Health and Sanitary Education for the Community

Out of the total villages surveyed, more than 70% of the villages have existing HP facility. Due to long distance to the HP facility, however, more than 50% of the village people are utilizing traditional water sources (e.g. dug wells) for their domestic water use because of shorter distance.

It will be necessary, therefore, to provide Health and Sanitary Training for the village people who used to take unsafe traditional water sources so that they will have enough knowledge on the importance of using safe water. In this regard, health and sanitary education for the village people is one of the important training items for the effective use of the water facility.

The proposed Soft Component Plan has been designed to solve the issues as mentioned above and the detailed plan is mentioned in the following sections.

2. Objective of the Soft Component Plan

The objective of the Soft Component Plan is set “to establish an autonomous and sustainable operation and maintenance system for the water supply facilities constructed by the Project”.

3. Outcomes of the Soft Component

Expected outcomes of the Soft Component Plan will be as follows.

- Outcome 1: Operation and maintenance system is established by the water users at each water point, where the water supply facility is operated and maintained by them on a sustainable base, countermeasure being for the issues (1), (3) and (4).
- Outcome 2: Technical assistance services on O&M activities made by the executing agency will be improved, countermeasure being for the issue (2).
- Outcome 3: Consciousness on the public health and sanitation of the village people will be improved, countermeasure being for the issue (5).

4. Measures to confirm the Achievement of the Outcomes

Measures to confirm the achievement of the Outcomes will be as follows.

- (1) Outcome 1: Operation and maintenance system will be established by the water users at each water point, where the water supply facility is operated and maintained by them on a sustainable base.

Indicator 1-1: Establishment of VHWCs and WPCs and their activities

Data for indicator 1-1 will be obtained from:

- List of the VHWCs and WPCs with their location (village) and names of the committee members
- Activities of the VHWCs and WPCs recorded in the minutes of the meetings and results of interview survey to committee members (e.g. HP caretakers)

Note:

Activities of the committees will be reviewed from the results of sample interview survey made by extension workers to committee members using check sheets when the extension workers visit the community for monitoring of the water supply facility.

Items of the interview survey will include the following.

- List of committee members
- Frequency of the meetings (date, participants and main topics)
- Collection of water service fee and its management (collected amount, way of keeping money, amount of expenses, etc.)
- Problems during the committee’s activities and its reason

(2) Outcome 2: Technical assistance services on O&M activities made by the executing agency will be improved.

Indicator 2-1: Training for District Extension Workers

Data for indicator 2-1 will be obtained from:

- Records of the training (date, training items and participants)
- Testing on the degree of understanding of the trained items

Items for the training and testing will include the following.

Table -1 Training and Testing Items

Training Items (Draft)	Testing Items (Draft)
1. Organizational management	Interview to the participants on the trained items. ● Degree of understanding on each training item: (1) full understanding; (2) good understanding; (3) poor understanding ● The reasons for (3) poor understanding will be clarified.
1-1 Procedure for community organization	
1-2 Leadership	
1-3 Conflict management	
2. O&M and Repair Technology	
2-1 Background of the Village Level Operation and Maintenance System	
2-2 Structure and Function of Afridev Pump	
2-3 Daily Operation and Maintenance and Repair of Afridev Pump	
3. Health Education	
3-1 Introduction to Health Issues	
3-2 Causes and Prevention of Water-borne and Water-related Diseases	
3-3 Sanitary Protection for the Water Supply Facility	

Indicator 2-2: Training for the Committee Members

Data for indicator 2-2 will be obtained from:

- Records of the training (date, training items and participants)
- Testing on the degree of understanding of the trained items

Items for the training and testing will include the following.

Table -2 Training and Testing Items

Training Items (Draft)	Testing Items (Draft)
1. Organizational Management	Interview to the participants on the trained items. <ul style="list-style-type: none"> ● Degree of understanding on each training item: (1) full understanding; (2) good understanding; (3) poor understanding ● The reasons for (3) poor understanding will be clarified.
1-1 Procedure for organizing VHWCs and WPCs	
1-2 Leadership	
1-3 Conflict Management	
2. O&M and Repair Technology	
2-1 Background of the Village Level Operation and Maintenance System	
2-2 Structure and Function of Afridev Pump	
2-3 Daily Operation, Maintenance and Repair of Afridev Pump	
3. Health Education	
3-1 Introduction to Health Issues	
3-2 Causes and Prevention of Water-borne and Water-related Diseases	
3-3 Sanitary Protection for the Water Supply Facility	

- (3) Outcome 3: Consciousness on the public health and sanitation of the village people will be improved.

Indicator 3-1: Consciousness on the public health and sanitation of the village people will be improved as a result of the health education.

Data for indicator 3-1 will be obtained from:

- Records of the training (date, training items and participants)
- Testing on the degree of understanding of the trained items (sample interview survey)

Items for the training and testing will include the following.

Table -3 Training and Testing Items

Training Items (Draft)	Testing Items (Draft)
1. Introduction to Health Issues	Interview to the participants on the trained items. <ul style="list-style-type: none"> ● Degree of understanding on each training item: (1) full understanding; (2) good understanding; (3) poor understanding ● The reasons for (3) poor understanding will be clarified.
2. Causes and Prevention of Water-borne and Water-related Diseases	
3. Sanitary Protection for the Water Supply Facility	

5. Activities (Input Plan)

The Soft Component activities will be conducted at: (i) detailed design (D/D) stage; (ii) the construction stage; and (iii) post-construction stage.

As shown in Table 4, after the completion of the training for the District Extension Workers, extension services for the establishment of VHWCs (4 villages) and WPCs (10 water points) will be made. These activities will be conducted by the Japanese and local consultants in collaboration with the District Extension Workers in the form of “on the job” training. Additional activities to establish another VHWCs (6 villages) and WPCs (110 water points) will be conducted by the District Extension Workers continuously.

Under the Soft Component activities, training for the committee members of VHWCs and WPCs will be conducted at 6 locations with participants from 18 villages (3 villages per location). Training on the health and sanitation will be conducted at 10 villages. These activities will also be conducted by the Japanese and local consultants in collaboration with the District Extension Workers in the form of “on the job” training. Additional activities in the remaining villages will be conducted by the District Extension Workers later on.

Monitoring survey under the Soft Component will be conducted at 20 water points to be selected from the facilities that will have been constructed and operated at the first half stage of the project implementation. Monitoring items will include the results of training made by the District Extension Workers, activities of VHWCs and WPCs, and so on. The results of the monitoring will be utilized for the base of the evaluation of the project, and recommendations for the future activities will also be made.

The activities and the implementation period as mentioned above are summarized in the following table.

Table 4 Activities (Input Plan, including activities of the Executing Agency)

Items	Main Actors/Target	Days	Activities	Period	Output
1-1 Meeting with CBM Coordinators and Preparation of Training Manuals	Japanese and local consultants	5	- Explanation of the Soft Component Plan - Preparation of training manuals	D/D Stage	-Soft Component Plan (Draft) - Manuals (Draft) - Form of monitoring (Draft)
	CBM coordinators in the ministry and regional office				
1-2 Explanation to Local Government (Mwanza and Neno Districts)	- Japanese and local consultants - CBM coordinators from the ministry and regional office	2	- Explanation of the Project - Confirmation on the collaboration with the project - Confirmation on the establishment of VHVs and WPCs	D/D Stage After the activities 1-1	Presentation Report
	DCT members from Mwanza and Neno				
1-3 Explanation to TA Leaders	- Japanese and local consultants - CBM coordinator from regional office	7 (7 TAs x 1 day)	- Explanation of the Project - Confirmation on the collaboration with the project (e.g. construction of access roads) - Confirmation on the establishment of VHWCs and WPCs	During D/D Stage After the activities 1-2	Report and Presentation documents
	- TA - Group Village Heads - Village Heads - Representative of the target villages				
1-4-1 Establishment of VHWCs	- Japanese and local consultants - CBM coordinators	8 (4 villages x 2 days)	- Explanation of the Project - Confirmation on the collaboration with the project construction works - Explanation on establishment of a VHWC - Selection of committee members	D/D Stage After the activities 1-3	List of VHWCs Records of establishment of VHWCs
	- Village Heads - Representative of the target villages				
1-4-2 Establishment of WPCs	- Japanese and local consultants - CBM coordinators	10 (10 villages x 1 day)	- Explanation of the Project - Confirmation on the collaboration with the project	construction stage	List of WPCs Records of establishment of WPCs

	- Village Heads - Representative of the target villages		construction works - Explanation on establishment of a WC - Selection of committee members		
1-5 Monitoring and Evaluation	- Japanese and local consultants - CBM coordinators	20 (2 districts x 10 villages x 1 day)	-Monitoring - Evaluation	Post-construction stage (3 months before operation)	Results of monitoring and evaluation
	- Village Heads - Representative of the target villages				
2-1 Training of District Extension Workers (1)	- Japanese and local consultants - CBM coordinators	2	- Organizational management	D/D Stage After the activities 1-1	Records of training Manuals Tools
	District extension workers				
2-2 Training of District Extension Workers (2)	- Japanese and local consultants - CBM coordinators	4	- Organizational management - Health Education - O&M and repair technology	construction stage	Records of training Manuals Tools
	District extension workers				
2-3 Training of Committee Members of VHWCs and WPCs	- Japanese and local consultants - District extension workers	12 (6 locations x 2 days) *3 villages per location	- Organizational management - Financial management - O&M and repair technology - Health education	Post-construction stage, before operation of the facility	Records of training Manuals Tools
	Committee members of VHWCs and WPCs				
3-1 Health and Sanitary Training for Village People	- Japanese and local consultants - District extension workers	10 (2 districts x 5 villages x 1 day)	-Introduction to health and sanitation - Causes and prevention of water related diseases - Sanitary consideration for the facility	construction stage, after activities 1-3	-Manuals for water and sanitation - Education tools
	Village people				

6. Necessary Resources for the Implementation of the Soft Component Activities

The Soft Component activities will be conducted by the Japanese and local consultants in collaboration with CBM coordinators from the ministry and District Extension Workers.

A local consultant will be selected by the Japanese consultant from several candidate experts in consideration of his/her past experiences in similar projects. In addition, District Extension Workers from DWDO (e.g. WMAs) and several candidate staff from District Health Office and Community Development Office will participate in the Soft Component activities. Most of them have experiences in conducting the CBM program in similar projects. These extension workers will be organized into three teams, i.e. one team consisting of 3 extension workers from DWDO, Health Office and Community Development Office.

Main roles of the consultants and counterpart personnel for the implementation of the Soft Component activities are presented in the following table.

Table -5 Main Roles of Consultants and Counterpart Personnel

Consultants and Counterparts		Expertise	Number	Main Roles (Activities)
Soft Component Experts	Japanese consultant	Operation and Maintenance Planning	1 (4 M/M)	<ul style="list-style-type: none"> - Preparation of the Soft Component Plan - Overall management of the activities - Technical guidance to the counterpart personnel and local consultant - Meetings and reporting with relevant agencies (MoIWD and JICA) - Coordination with contractors
	Local consultant	Coordination (Operation and Maintenance Activities)	1 (4 M/M)	<ul style="list-style-type: none"> - Overall coordination concerning the Soft Component activities - Monitoring of the activities - Preparation works for each sub-components - Meetings and reporting with relevant agencies (e.g. DWDO) and Japanese consultant
Counterpart Personnel	Executing Agency (CBM Coordinators)	CBM Promotion	2 (2 M/M)	<ul style="list-style-type: none"> - Advice on the Soft Component plan and activities - Technical guidance and training to the District extension workers (- Reporting to MoIWD - Coordination with other relevant agencies and donors
	District Water Development Officer	Coordination of Overall O&M Activities	2 (2 M/M)	<ul style="list-style-type: none"> - Coordination of the Soft Component activities in the district - Management of overall activities of extension workers - Coordination with other relevant agencies and donors
	District Extension Workers for O&M (WMAs, etc.)	Technical Assistance on O&M Activities	6 (about 25 M/M)	<ul style="list-style-type: none"> - Promotion of community development activities (e.g. establishment of VHWCs and WPCs) - Technical training to HP caretakers - Monitoring of activities of VHWCs and WPCs
	District Extension Workers for Community Development and Health	Community Development and Health Education	12 (about 18 M/M)	<ul style="list-style-type: none"> - Promotion of community development activities (e.g. establishment of VHWCs and WPCs and health education) - Monitoring of activities of VHWCs and WPCs (water use and health conditions)

7. Implementation Schedule

Implementation schedule of the Soft Component activities is presented in Figure -2.

Activities	D/D Stage							Construction Stage			Post-Construction Stage	
	1							2	3	4		
1 Meeting with CBM Coordinators and Preparation of Training Manuals												
2 Explanation to Local Government and TA												
4 Training of District Extension Workers (1)												
5 Establishment of VHWCs												
6 Preparatory works in Japan												
7 Establishment of VHWCs and WPCs												
8 Strengthening of Community Organizations												
9 Health and Sanitary Training												
10 Review of the activities												
11 Monitoring and Evaluation												
12 Reporting												
1. Operation and Maintenance Specialist												
2. Local Consultant												

Timing		Detailed Design	Before & under Construction		After Construction		
			2	3			
Items		1			4		
Soft Component	Activities	1 Meeting with CBM Coordinator, Preparation of Training Manual(draft)	■				
		2 Meeting with District&TA for the Project	■				
		3 Training of Extension Worker(Establishment of Organization)		■			
		4 Support of Establishment of VHWC			■		
		5 Preparation in Japan			□		□
		6 Capacity Development of Extension Workers of the water development office in Mwanza & Neno			■		
		7 Establishment of WPC,Participation of Communities			■		
		8 Capacity Building of Committee Members				■	
		9 Health Education				■	
		10 Verification of Work Results					■
		11 Monitoring, Evaluation					■
		12 Reporting, Recommendation					■
Personnel	1. O&M Specialist	■	■	■	■		
	2. Local Consultant	■	■	■	■		

Figure -2 Implementation Schedule of the Soft Component Activities

8. Output

Main output of the Soft Component activities is as follows.

- (1) Completion Report
- (2) Training manuals for the District Extension Workers (organizational management, operation and maintenance technology, and health education)
- (3) Training manuals for the committee members of VHWCs and WPCs(organizational management, operation and maintenance technology, and health education)
- (4) List of the VHWCs and WPCs

9. Estimated Cost

The cost for the Soft Component activities to be borne by Japanese side is estimated at 13,852 thousand Japanese yen.

10. Obligations of the Executing Agency

The overall cost for the Soft Component activities to be borne by both Japanese and Malawi side is presented in the following table.

Activities	Japanese Side	Malawi Side
1-1 Meeting with CBM Coordinators and Preparation of Training Manuals	-Remuneration of Japanese and local consultant - Preparation of manuals	- Allowance for CBM coordinators
1-2 Explanation to Local Government (Mwanza and Neno Districts)	-Remuneration of Japanese and local consultant - Vehicle expenses	- Allowance for district officers and extension workers
1-3 Explanation to TA Leaders	-Remuneration of Japanese and local consultant - Vehicle expenses	- Allowance for CBM coordinators and district extension workers - Vehicle expenses
1-4-1 Establishment of VHWCs and WPCs	-Remuneration of Japanese and local consultant - Vehicle expenses	- Allowance for district extension workers - Vehicle expenses
1-5 Monitoring and Evaluation	-Remuneration of Japanese and local consultant - Vehicle expenses	- Allowance for district extension workers - Vehicle expenses
2-1 Training of District Extension Workers (1)	-Remuneration of Japanese and local consultant - Vehicle expenses - Copying expenses - Stationery	- Allowance for CBM coordinators and district extension workers - Vehicle expenses
2-2 Training of District Extension Workers (2)	-Remuneration of Japanese and local consultant - Vehicle expenses - Copying expenses - Stationery	- Allowance for CBM coordinators and district extension workers - Vehicle expenses
2-3 Training of Committee Members of VHWCs and WPCs	-Remuneration of Japanese and local consultant - Vehicle expenses	- Allowance for district extension workers - Vehicle expenses
3-1 Health and Sanitary Training for Village People	-Remuneration of Japanese and local consultant - Vehicle expenses - Copying expenses	- Allowance for district extension workers - Vehicle expenses