

## **5. Laws and Regulations Related to Water and Sanitation**

## 5. Laws and Regulations Related to Water and Sanitation

### Laws and Regulations of Lao PDR related to Water Supply and Sanitation

Year	Name of Law, Regulation, etc.	Agency
1994	Industrial Waste Discharge Regulation	Ministry of Industry-Handicrafts
1996	Water and Water Resources Law	Ministry of Health
1998	Water and Water Resources Law (Updated)	Ministry of Health
1998	Water and Water Resources Public Health Regulation	Ministry of Health
1999	Prime Ministerial Decision on Management and Development of the Water Supply Sector	Prime Minister's Office

1

2

## **6. Economic Cooperation by International Organizations**

## 6. Economic Cooperation by International Organizations

### Recent External Support for Rural Water Supply and Sanitation Sector

Implementing Year	Organization	Name of Project/Study	Target Area	Description
1998-2002	SIDA	Five-Year Plan	-	Institutional strengthening and capacity building of Nam Saat
1998-2004	UNDP-WB	Rural Water Supply and Sanitation, HASWAS	Oudomsay, Phonsali Provinces: 6 Districts	Model case for Sector Strategy; Capacity building of Province and District; Improvement of water supply and sanitation
1994-On-going	WB WSP-EAP	Rural Water Supply and Sanitation Improvement Project	Luang Namtha Provinces: Nale, Luang Namtha, Long Districts	Improvement of water supply and sanitation in line with Sector Strategy
1993	JICA	Project for Groundwater Development in Vientiane Province	Vientiane Province: Phong Hong, Tholakhom, Keo Oudom Districts	Construction of Level I facilities with handpumps, Level II networks with tapstands and maintenance center
1997-1999	JICA	Project for Development of Groundwater in Champasack and Saravanh Provinces	Champasak, Saravanh Provinces	Well drilling and construction of handpump facilities
1999-2001	JICA	Study on Rural Water Supply and Sanitation Improvement in North-West Region in Lao PDR	Luang Namtha Province: Long, Viengphoukha Districts Bokeo Province: Houayxai, Pha Oudom Districts	Development study which includes training, sanitation promotion and participatory implementation of GFS, boreholes, dug wells and latrines through pilot studies in line with Sector Strategy.
	GTZ	Integrated Rural Development Project	Bokeo Province: Houayxai, Tonpheung, Pha Oudom Districts	Includes construction of water supply facilities
	GTZ	Integrated Rural Development Project	Luang Namtha Province: Sing, Nale, Long Districts	Includes construction of GFS and dugwells
2001-2003	Belgium	Rural Water Supply Component of Belgian Cooperation for MCTPC	Savannaket, Saravanh Provinces	Cooperation includes urban and rural water supply. Nam Papa is in charge of the urban component, and Nam Saat is in charge of rural water supply component, which includes borehole drillings.
2001-2003	World Bank	Rural Water Supply and Sanitation Component of Agricultural Project under Ministry of Agriculture	Attapeu, Champasak, Saravanh, Khammouan, Savannaket Provinces	Agricultural Development Project for which Nam Saat is responsible for the rural water and sanitation, which includes borehole drillings and hygiene promotion in line with the Sector Strategy.

1

2

## 7. Concerned Persons

## 7. CONCERNED PERSONS

---

### **Ministry of Health**

Dr. Ponmek DALALAY	Minister
Dr. Bounkouang PHICHIT	Deputy Minister
Dr. Chanthanome MANOTHAM	Director of Cabinet
Dr. Nao BOUTTA	Deputy Director of Cabinet
Mr. Phoukhong CHOMMALA	Director, Foreign Relations Division
Dr. Khemphet VONTHANOUVONG	Coordinator of JICA Projects
Dr. Xiengchoy PHANYAWONG	Deputy Director, Inspection Department
Dr. Khamvieng VILAPHEN	Deputy Chief of PHC and RD Division
	Rural Development Section of Cabinet
Dr. Songpeth	Training and Budgeting Section, Planning and Budgeting Department

### **Department of Hygiene and Prevention**

Dr. Bounlay	Deputy Chief
Dr. Boua KHAM	Technical Adviser
Dr. Phitthanousone CHOUMMANIVONG	Deputy Chief of Environmental Health Div.
Dr. Vielaiwon	

### **National Center for Environmental Health and Water Supply (Nam Saat)**

Dr. Nouanta MANIPHOUSAY	Director
Dr. Soutsakhone CHANTHAPHONE	Deputy Director
Dr. Thongma ONGKEOBOUNMY	Deputy Director
Dr. Vannareth THAMNAVONGSA	Former Deputy Director
Mr. Kanna BARAN	Chief Technical Advisor

#### **Water Supply Division**

Mr. Kongkham MIBOUM	Chief
Dr. Keo Oudom NAMSENA	Deputy Chief
Mr. Viengxay VIRAVONG	Engineer, Surface Water Section
Mr. Sengphet	Engineer, Surface Water Section
Mr. Pouvang	Engineer, Surface Water Section
Mr. Bounmy PHANCHANTHALA	Engineer, Groundwater Section
Mr. Khonekeo PHONGVICHIT	Engineer, Groundwater Section
Mr. Phouthasene	Engineer, Groundwater Section
Mr. Somphit	Engineer, Groundwater Section

#### **Environmental Health Division**

Dr. Bouakeo SUVANTHONG	Chief
Dr. Boun KEOMANIVONG	Deputy Chief
Dr. Khonsavanh MALIBYPHIT	Head, Hygiene Promotion Section
Mr. Bounnong	Engineer, Hygiene Inspection and Environmental Health Section
Mr. Chantha VONGTHAVADY	Engineer, Hygiene Inspection and Environmental Health Section
Ms. Thatsany MANUEVONG	Water Quality Analyst, Hygiene Inspection and Environmental Health Section
Mr. Ving	Hygiene Promotion Section
Ms. Kheuwan SUPHINDALA	Hygiene Promotion Section
Ms. Ounheuane	Hygiene Promotion Section
Ms. Guilliane McLawckle	Former Water Quality Analyst, UNICEF Volunteer



Administration Division

Dr. Soulinthone INTHAVONG  
Dr. Tayphasavanh FENGTHONG  
Dr. Khonethip PHOUANGPHET  
Dr. Bounphone  
Ms. Keodokmai PHOUIPASEUTH  
Mr. Khonechai

Chief  
Former Deputy Chief  
Head, Planning and Statistics Section  
Planning and Statistics Section  
Planning and Statistics Section  
Finance and Procurement Section

Luang Namtha Province

Mr. Singkham PHANTHAVONG  
Ms. Khamnyeng SIVANXAY

Vice Governor  
Chief of Cabinet of Provincial Office

Provincial Health Department

Dr. Phouthone VANGKONEVILAY  
Dr. Manivan SAVADIE  
Mr. Inkeo PHOUTHVONG  
Dr. Sengthip  
Mr. Somsanith  
Mr. Khammouan

Director  
Deputy Director  
Deputy Director  
Chief of Technical Division

Sanitation Technician

Provincial Nam Saat

Mr. Somlith SENVANPAN  
Mr. Bountham  
Mr. Khamdy  
Mr. Khamphan

Chief  
Gravity Feed System Unit  
Administration

Provincial Planning and Statistics

Mr. Souphamith

Provincial Planning and Statistics Unit

Long District

Mr. Namkham KEOBOUNPHAB  
Mr. Wan Thong  
Dr. Somsack THIPMOUN  
Dr. Houmphanh  
Mr. Somchit  
Mr. Khamfeuang  
Mr. Thongsy  
Ms. Yodsi MANIVANH  
Ms. Choy  
Ms. Feng  
Mr. Phommasouk VILAYKOUN  
Mr. Khonkham SISENBGPHEP  
Mr. Bounthieng

Vice Governor  
Chief of Cabinet  
Chief, District Health Department  
District Nam Saat  
District Nam Saat  
District Nam Saat  
District Nam Saat  
Deputy Chief, District Lao Women's Union  
District Lao Women's Union  
District Lao Women's Union  
Chief, District Lao Youth Union  
District Rural Development  
District Education

Viengphoukha District

Mr. Khamsai  
Mr. Bounlerd SENGMANY  
Mr. Bounthong  
Dr. Tiengsamone  
Dr. Keo INTHAVONG  
  
Mr. Bounsy CHANKHAMFONG  
Mr. Somsagat  
Ms. Lae SAYAKHAM  
Ms. Manchan

Governor  
Vice Governor  
Chief of Cabinet  
Chief, District Health Department  
Deputy Chief, District Health Depart. and  
Director, Viengphoukha District Hospital  
Chief, District Nam Saat  
District Nam Saat  
District Nam Saat  
District Lao Women's Union

Ms. Bounmy  
Mr. Tomchang AMPHASOUK  
Ms. Manchanh

District Lao Women's Union  
Chief, District Lao Youth Union  
District Lao Women's Union

**Bokeo Province**

Mr. Boualan SILIPANYA Governor  
Mr. Phahon PHOMPANYA Vice Governor  
Mr. Soubanh Chief of Cabinet  
Mr. Visaikone VANNACHOMCHANH Committee of Provincial Governor

**Provincial Health Department**

Dr. Pheng Sy VIENSAVAN Director  
Dr. Keokham SELITHAM Deputy Director  
Dr. Nounchanh Deputy Director  
Dr. Sounphone PHANGMANISAY Former Deputy Director  
Dr. Bounyok SOMPHANITH Chief of Cabinet  
Dr. Thongtheng BOUNSI Director of Management, Technical Office  
Mr. Phouthone  
Ms. Soung  
Dr. Phisith PHOUTSAVATH Director, Bokeo Provincial Hospital  
Dr. Khampanya Deputy Director, Bokeo Provincial Hospital

**Provincial Nam Saat**

Mr. Bounchanh VANNACHOMCHANH Chief  
Mr. Xaiyaphone BOUNSAVANH Deputy Chief  
Mr. Kham Lang TAYANIN Deputy Chief of Technical Section  
Dr. Kamsa Hygiene Division  
Mr. Intha KITTISACK Sanitation Unit  
Mr. Somsouk SYTHONG Dug Well Technician  
Ms. Soung  
Mr. Phonekeo KHAMMANIPANH Borehole Technician  
Mr. Bounpheng  
Mr. Sykham

**Planning and Cooperation Office**

Mr. Hongkeo VINAIVONG Planning and Cooperation

**Planning and Socio-economic Organization**

Mr. Thavone SELITHAM Social Coordinator

**Provincial Lao Women's Union**

Ms. Khankeo MANIXAI Community Development  
Ms. Phetmani PHADOUANGDET Community Development

**Provincial Rural Development**

Mr. Sichanh PHOMSAVANH Chief

Ms. Khonexay

**Bokeo Red Cross**

Dr. Boun THEUNG Chief of Cabinet

**Houayxai District**

Mr. Lee Tou LENG Governor  
Dr. Khampheng XAIYACHIACK Chief of Cabinet  
Dr. Souphen PHANYADA Chief, District Health Department  
Mr. Khamxim District Health Department  
Mr. Serth District Health Department  
Mr. Phomsavath Chief, District Nam Saat

Mr. Khamsin	District Nam Saat
Mr. Sipraseuth	District Nam Saat
Ms. Kesone	District Lao Women's Union
Ms. Manivone	District Lao Women's Union
Mr. Khamdeng PENGXAI	Chief, District Lao Youth Union
Mr. Khamson	District Education
<u>Pha Oudom District</u>	
Mr. Chanh Pheng	Governor
Mr. Somchit NASANKHON	Deputy Governor
Dr. Bountiem KHOUNSAWAN	Chief, District Health Department
Dr. Khanchan XAIYAVONG	Deputy Chief, District Health Department
Mr. Sonekham	District Health Department
Mr. Feng	District Health Department
Mr. Phonesavanh	Chief, District Nam Saat
Mr. Xaiphone	District Nam Saat
Mr. Thongkhan	District Nam Saat
Ms. Dala SEUPXAIYA	Chief, District Lao Women's Union
Ms. Manivan SENGSAAYAVONG	Deputy Chief, District Lao Women's Union
Mr. Khamheng	Deputy Chief, District Lao Youth Union
Mr. Phonsavath	District Lao Youth Union
Mr. Soukvong	District Rural Development
Mr. Phonsavat	District Education
<u>Ton Pheung District Health Department</u>	
Dr. Somphone	Deputy Director and Director, Ton Pheung District Hospital
Dr. Kamsin	Deputy Director, Ton Pheung District Hospital
<b>Vientiane Province</b>	
<u>Provincial Nam Saat</u>	
Dr. Khamphiane VANMANY	Chief
Mr. Somsack	Chief of Borehole Drilling Team
Mr. Sonsawat	Sanitation Section
<u>Provincial Health Department</u>	
Dr. Thongkhanh	Chief of Malaria Station
<b>Ministry of Communication, Transport, Post and Construction</b>	
<u>Department of Housing and Urban Planning</u>	
Mr. Bounleuam SISOULATH	Director
Mr. Aphisayadeth INSISIENGMAY	Head of Water Supply Division
<u>Lao Water Supply Authority (Nam Papa Lao)</u>	
Mr. Somlith SILAPHET	Deputy General Manager
<b>World Bank</b>	
Mr. Finn NIELSEN	Senior Operations Officer
<b>UNDP-World Bank Water and Sanitation Program</b>	
Mr. Michael SEAGER	Former Country Program Manager
Mr. Santanu LAHIRI	Lead Resource-Lao PDR
	Water and Sanitation Specialist
Ms. Malin C. KROOK	Country Officer
Mr. Johan ARVLING	Former Country Officer
Mr. Chander BADLOE	

**UNICEF**

Mr. Rafael DIAZ DIAZ

Project Officer, Water and Environmental Sanitation

Mr. Nadarajah S. MOORTHY

Project Officer, Water Systems

Ms. Maliporn VIRACHITH

Assistant Project Officer, Water and Environment Sanitation

Ms. Boel Cecilia NYBERG

Assistant Project Officer, Water and Environmental Sanitation

Mr. Francois DELPORTE

Assistant Project Officer, Water and Environment Sanitation

**UNHCR**

Ms. Elizabeth KIRTON

Repatriation Officer

**GTZ**

Dr. Somvang

Assistant Project Coordinator, Bokeo

**Action Contre la Faim (ACF)**

Ms. Danielle de KNOCKE

Chief de Mission

Mr. Tim SUTTON

Chief Technical Adviser (Hydraulician)

Ms. Chanhimmaly SUTTON

Social Surveyor

**Adventist Development Relief Agency (ADRA)**

Mr. Khamsay

Projects Officer

Mr. Marcel FREDERIK

Project Manager, Luang Namtha

Mr. Pamouane

Project Coordinator, Luang Namtha

Mr. Jonathan Berkel

**Education et Developpement (EED)**

Mr. Pascal

Assistant Administrator

Ms. Lith THANOME

**Medecins sans Frontieres (MSF)**

Ms. Maite PAHUD

Office Head, Bokeo

Mr. Hugues ROBERT

Administrator/Manager, Project in Bokeo

Mr. Sounphone

Local Logistician, Bokeo

**Norwegian Church Aide (NCA)**

Mr. Willian B. TUFFIN

Chief Technical Advisor, Drug Supply and Demand Reduction Project, Luang Namtha

Mr. Voudthisavath

SA, Bokeo

**Embassy of Japan**

Mr. Hiroomi SAKAI

Former Ambassador

Mr. Seiji NAGANO

First Secretary

Mr. Kazunori KAWADA

First Secretary

Mr. Shigeki KOBAYASHI

Former First Secretary

**JICA Laos Office**

Mr. Makoto AOKI

Resident Representative

Mr. Tsuneo TAKAHATA

Former Resident Representative

Mr. Nobuaki MIYATA	Deputy Resident Representative
Mr. Hiroshi HIDAKA	Assistant Resident Representative
Mr. Norihiro IKEDA	Assistant Resident Representative
Mr. Nobuhiro KUMAGAI	Former Assistant Resident Representative
Ms. Chie SATO	Former Project Formulation Advisor
Mr. Mikio MASAKI	Project Formulation Advisor
Mr. Takashi YOSHIMURA	Coordinator of JOCV
Mr. Nobuhiro TSUTSUI	Staff
Mr. Sophonh KOUSONSAVATH	Program Officer
Mr. Hathsadong CHANTHANVONGSA	Program Officer
Ms. Alounxay ORABOUNE	Program Officer

**JICA Expert**

Dr. Hiroyuki AMANO	Health and Medical Cooperation Planning Adviser, Ministry of Public Health
Mr. Akio MURAYAMA	Former Water Supply Adviser, National Center for Environmental Health and Water Supply (Nam Saat)
Mr. Yasuhiro KAWASHIMA	Former Water Supply Adviser, Lao Water Supply Authority (Nam Papa Lao)

**JOCV (Japan Overseas Cooperation Volunteers)**

Ms. Harumi MARUYAMA	Former Water Quality Analyst, Lao Water Supply Authority (Nam Papa Lao), Chinaimo Water Treatment Plant
---------------------	---

**JICA Senior Volunteer**

Mr. Makoto SAITO	Senior Volunteer, Vientiane Provincial Nam Saat
------------------	--

## 8. Participants

## 8. PARTICIPANTS

### 8.1 Training Session

No.	Name	Province/District	Affiliation and Function
<b>Trainees</b>			
1	Mr. Bounchanh Vannachomchanh	Bokeo Province	Provincial Nam Saat/Chief
2	Mr. Xaiyaphone Bounsavanh	Bokeo Province	Provincial Nam Saat/Deputy Chief
3	Mr. Phonkeo Khammanipanh	Bokeo Province	Nam Saat/Borehole Technician
4	Ms. Kankeo Manixai	Bokeo Province	LWU/Community Development
5	Ms. Phetmani Phadouangdet	Bokeo Province	LWU/Community Development
6	Ms. Khonexay	Bokeo Province	Provincial Rural Development
7	Mr. Sipraseuth	Houayxai District	District Nam Saat
8	Mr. Khamxim	Houayxai District	District Health Office
9	Ms. Kesone	Houayxai District	District LWU
10	Mr. Phonesavanh	Pha Oudom District	District Nam Saat/Chief
11	Mr. Thongkhan	Pha Oudom District	District Nam Saat
12	Ms. Dala Seupxaiya	Pha Oudom District	District LWU/Chief
13	Mr. Soukvong	Pha Oudom District	District Rural Development
14	Mr. Somlith	Luang Namtha Prov.	Provincial Nam Saat/Chief
15	Mr. Souphamith	Luang Namtha Prov.	Planning and Statistics Unit
16	Mr. Khamdy	Luang Namtha Prov.	Provincial Nam Saat/ Dug Well Technician
17	Mr. Khampheuang	Long District	District Nam Saat
18	Mr. Somchit	Long District	District Nam Saat
19	Ms. Choy	Long District	District LWU
20	Ms. Yodsi Manivanh	Long District	District LWU/Deputy Chief
21	Mr. Khonkham Sisengphet	Long District	District Rural Development/ Planning and Statistics Unit
22	Mr. Phommasouk	Long District	District LYO/Deputy Chief
23	Mr. Bounsy	Viengphoukha Dist.	District Nam Saat
24	Mr. Tomchang	Viengphoukha Dist.	District LYO/Chief
25	Ms. Manchanh	Viengphoukha Dist.	District LWU

LWU: Lao Women's Union

LYO: Lao Youth Organization

## 8.2 Training of Trainers (TOT)

### 8.2.1 Pilot Study

No.	Name	Province/District	Affiliation and Function
<i>Trainers</i>			
1	Dr. Keo Oudom	Vientiane	Nam Saat Central/Chief, Water Supply Division
2	Dr. Bouakeo	Vientiane	Nam Saat Central/Chief, Environ. Health Div.
3	Dr. Tayphasavang	Vientiane	Nam Saat Central/Former Dep. Chief, Admin. Div.
4	Dr. Khonethip	Vientiane	Nam Saat Central/Section Head, Administ. Div.
5	Dr. Bounphone	Vientiane	Nam Saat Central/Administration Div.
6	Mr. Khonekeo	Vientiane	Nam Saat Central/Water Supply Div.
7	Ms. Keodok Mai	Vientiane	Nam Saat Central/Administration Div.
<i>Trainees</i>			
1	Mr. Somlith	Luang Namtha Prov.	Provincial Nam Saat/Chief
2	Mr. Khamdy	Luang Namtha Prov.	Provincial Nam Saat/Administration
3	Mr. Khammouan	Luang Namtha Prov.	Provincial Health/Sanitation Technician
4	Mr. Khampheuang	Long District	District Nam Saat
5	Mr. Somchit	Long District	District Nam Saat
6	Mr. Bounthieng	Long District	District Education
7	Ms. Feng	Long District	District Lao Women's Union
8	Mr. Phommasouk	Long District	District Lao Youth/Chief
9	Mr. Bounsy	Viengphoukha Dist.	District Nam Saat/Chief
10	Mr. Somsagat	Viengphoukha Dist.	District Nam Saat
11	Ms. Lae	Viengphoukha Dist.	District Nam Saat
12	Mr. Tomchang	Viengphoukha Dist.	District Lao Youth/Chief
13	Ms. Bounmy	Viengphoukha Dist.	District Lao Women's Union
14	Mr. Bounchanh	Bokeo Province	Provincial Nam Saat/Chief
15	Mr. Xaiyaphone	Bokeo Province	Provincial Nam Saat/Deputy Chief
16	Mr. Phonekeo	Bokeo Province	Provincial Nam Saat/Borehole Technician
17	Mr. Somsouk	Bokeo Province	Provincial Nam Saat/Dug Well Technician
18	Ms. Khankeo	Bokeo Province	Provincial Lao Women's Union/Women Develop.
19	Mr. Phomsavat	Houayxai District	District Nam Saat/Chief
20	Mr. Khamsin	Houayxai District	District Nam Saat
21	Mr. Khamson	Houayxai District	District Education/Formal Education
22	Mr. Khamdeng	Houayxai District	District Lao Youth/Chief
23	Ms. Manivone	Houayxai District	District Lao Women's Union
24	Mr. Xaiphone	Pha Oudom District	District Nam Saat
25	Mr. Thongkhan	Pha Oudom District	District Nam Saat
26	Mr. Phonsavat	Pha Oudom District	District Education
27	Mr. Khamseng	Pha Oudom District	District Lao Youth/Deputy Chief
28	Ms. Manivan	Pha Oudom District	District Lao Women's Union/Development
29	Mr. Sonekham	Pha Oudom District	District Health/Sanitation
30	Mr. Somphone	Bokeo Branch	MSF/Local Logistician
<i>Observers</i>			
1	Dr. Pheng Sy	Bokeo Province	Provincial Health Depart./Chief
2	Dr. Nounchanh	Bokeo Province	Provincial Health Depart./Deputy Chief
3	Dr. Manivan	Luang Namtha Prov.	Provincial Health Depart./Deputy Chief
4	Mr. Fujii		JICA Study Team Leader
5	Mr. Kagawa		JICA Study Team Member
6	Mr. Sybounheung		JICA Study Team Member



## 8.2.2 Pilot Study Extension

No.	Name	Province/District	Affiliation and Function
<i>Trainers</i>			
1	Dr. Keo Oudom	Vientiane	Nam Saat Central/Deputy Chief, Water Supply Division
2	Dr. Khonethip	Vientiane	Nam Saat Central/Section Head, Administration Division
3	Mr. Chantha	Vientiane	Nam Saat Central/Environmental Health Division
<i>Trainees</i>			
1	Mr. Somlith	Luang Namtha Province	Provincial Nam Saat/Chief
2	Mr. Bountham	Luang Namtha Province	Provincial Nam Saat
3	Mr. Khamphan	Luang Namtha Province	Provincial Nam Saat
4	Mr. Somsanith	Luang Namtha Province	Provincial Health
5	Dr. Houmphanh	Long District	District Nam Saat
6	Mr. Thongsy	Long District	District Nam Saat
7	Mr. Somchit	Long District	District Nam Saat
8	Ms. Feng	Long District	District Lao Women's Union
9	Mr. Phommasouk	Long District	District Lao Youth/Chief
10	Mr. Lao Neng	Long District	Daen Kang Village Caretaker
11	Mr. Somsagat	Viengphoukha District	District Nam Saat
12	Ms. Lae	Viengphoukha District	District Nam Saat
13	Mr. Tomchang	Viengphoukha District	District Lao Youth/Chief
14	Ms. Manchan	Viengphoukha District	District Lao Women's Union
15	Mr. Kerd Yi	Viengphoukha District	Nam Seua Village Chief
16	Dr. Keokham	Bokeo Province	Provincial Health Depart./Deputy Chief
17	Dr. Nounchang	Bokeo Province	Provincial Health Depart./Deputy Chief
18	Mr. Phouthone	Bokeo Province	Provincial Health Department
19	Ms. Soung	Bokeo Province	Provincial Health Department
20	Mr. Bounchanh	Bokeo Province	Provincial Nam Saat/Chief
21	Mr. Xaiyaphone	Bokeo Province	Provincial Nam Saat/Deputy Chief
22	Mr. Phonekeo	Bokeo Province	Provincial Nam Saat/Borehole Technician
23	Mr. Somsouk	Bokeo Province	Provincial Nam Saat/ Dug Well Technician
24	Mr. Intha	Bokeo Province	Provincial Nam Saat
25	Mr. Bounpheng	Bokeo Province	Provincial Nam Saat
26	Mr. Sykham	Bokeo Province	Provincial Nam Saat
27	Ms. Khankeo	Bokeo Province	Provincial Lao Women's Union
28	Mr. Serth	Houayxai District	District Health Department
29	Mr. Khamxin	Houayxai District	District Nam Saat
30	Mr. Khamson	Houayxai District	District Education/Formal Education
31	Mr. Khamdeng	Houayxai District	District Lao Youth/Chief
32	Ms. Manivone	Houayxai District	District Lao Women's Union
<i>Observers</i>			
1	Dr. Phouthone	Luang Namtha Province	Provincial Health Department/Chief
2	Dr. Phengsy	Bokeo Province	Provincial Health Department/Chief
3	Mr. Fujii		JICA Study Team Leader
4	Mr. Miyoshi		JICA Study Team Member
5	Mr. Manochit		JICA Team Contracted Facilitator

## 8.3 Workshops

### 8.3.1 Workshop on Phase I Results

#### Nam Saat Central

Dr. Vannareth Thamnavongsa	Deputy Director
Mr. Kanna Baran	Chief Technical Advisor
Dr. Keo Oudom Namsena	Deputy Chief of Water Supply Division
Dr. Bouakeo Suvanthong	Chief of Environmental Health Division
Dr. Tayphasavanh Fengthong	Former Deputy Chief of Administration Division
Dr. Khonethip Pengpouang	Head of Planning and Statistics Section, Administration Division
Mr. Phouvang	Engineer, Water Supply Division

#### Luang Namtha Province

Dr. Phouthone Vangkonevilay	Director of Provincial Health Department
Mr. Somlith Senvanpan	Chief of Provincial Nam Saat

#### Viengphoukha District

Dr. Tiengsamone	Chief of District Health Department
-----------------	-------------------------------------

#### Long District

Dr. Somsack Thipmoun	Chief of District Health Department
----------------------	-------------------------------------

#### Bokeo Province

Dr. Nounchanh	Deputy Director of Provincial Health Department
Mr. Bounchan Vanachomchan	Chief of Provincial Nam Saat

#### Houayxai District

Dr. Khankham	District Nam Saat
--------------	-------------------

#### Pha Oudom District

Dr. Boutiem	District Health Department
-------------	----------------------------

#### NGO

Mr. Marcel Frederik	Project Officer, ADRA
Mr. Pamouane	Project Coordinator, ADRA

#### JICA Study Team

Mr. Shoji Fujii	Team Leader
Ms. Noriyo Aoki	Member
Mr. Sybounheung Phandanouvong	Member
Ms. Kiyoko Takamizawa	Member

## 8.3.2 Workshop on Pilot Study Implementation

### Nam Saat Central

Dr. Tayphasavanh Fengthong

Former Deputy Chief of Administration  
Division

Dr. Khonethip Pengpouang

Head of Planning and Statistics Section,  
Administrative Division

Dr. Bounphone

Monitoring and Evaluation, Planning and  
Statistics Section, Administrative Division

### Bokeo Province

Dr. Peng Sy Viensavan

Chief of Provincial Health Department

Mr. Bounchan Vanachomchan

Chief of Provincial Nam Saat

Ms. Bouaxing Simpanya

President of Provincial LWU

Mr. Somlith

Chief of Provincial Youth

Mr. Sychan Phomsavan

Chief of Provincial Rural Development

Mr. Inkham

Deputy Chief of Provincial Education

Mr. Xaiyaphone

Deputy Chief of Provincial Nam Saat

Mr. Phonkeo Kammaniphan

Technician, Provincial Nam Saat

Mr. Somsouk Sythong

Technician, Provincial Nam Saat

Ms. Khankeo

Women Development, Provincial LWU

### Houayxai District

Mr. Phomsavath

Chief of District Nam Saat

Mr. Khamxim

Technician, District Nam Saati

Mr. Khamdeng Pengxai

Chief of District Youth

Mr. Khamstone

District Education Office

Ms. Manivone

District LWU

### Pha Oudom District

Mr. Thongkhan

District Nam Saat

Mr. Khamheng

Deputy Chief of District Youth

Mr. Feng

District Health

Mr. Souekham

District Sanitation Sector

Ms. Manivan Sengsayavong

Deputy Chief of District LWU

Mr. Phonesavath

Chief of Kindergarten Sector, District Youth

### Luang Namtha Province

Mr. Maikhamdee

Administration, Provincial Nam Saat

Mr. Khammone

Sanitation Technician, Provincial Nam Saat

### Viengphoukha District

Mr. Bounsy Chankhamfong

Chief of District Nam Saat

Ms. Lea Sayakham

District Nam Saat,

Mr. Somsagat

District Nam Saat

Mr. Tomchang Amphasouk

Chief of District Youth

### Long District

Mr. Phomasouk Vilaykoun

Chief of District Youth

Mr. Bounthieng

Personal Sector, District Education Office

### NGO

Ms. Maite Pahud

Bokeo Office Chief

Mr. Somphone

Logistician, MSF Bokeo

Mr. Pascal

EED

### JICA Study Team

Mr. Shoji Fujii

Team Leader

Mr. Shigeyoshi Kagawa

Member

Mr. Sybounheung Phandanouvong

Member

Ministry of Health

Dr. Phithanousone Chaumnanyvong

Chief of Environmental Division, Hygiene  
Department  
Health Center

Mr. Visit Khamleusa

Nam Saat Central

Dr. Nouanta Maniphousay

Dr. Keo Oudom Namsena

Dr. Bouakeo Souvanthong

Dr. Bounphone

Director  
Deputy Chief of Water Supply Division  
Chief of Environmental Health Division  
Planning and Statistics Section

Bokeo Province

Mr. Phahon Phompanya

Mr. Visaikone Vannachomchanh

Dr. Pheng Sy Viensavan

Dr. Nounchanh

Dr. Bounyok Somphanith

Dr. Thongtheng Bounsi

Mr. Bounchan Vannachomchanh

Mr. Somsouk

Ms. Soung

Mr. Hongkeo Vinaivong

Mr Thavone Selitham

Vice Governor  
Committee of Provincial Governor  
Chief of Provincial Health Department  
Deputy Chief of Prov. Health Department  
Chief of Cabinet, Prov. Health Department  
Management Director of Prov. Health Dep.  
Chief of Provincial Nam Saat  
Provincial Nam Saat  
Provincial Nam Saat  
Planning and Cooperation Office  
Social Coordinator of Planning and  
Socio-economic Organization  
Chief of Provincial Rural Development

Mr. Sichanh Phomsavanh

Houayxai District

Mr. Lee Tou Leng

Ms. Souphen Panyada

Governor  
Chief of Cabinet, District Health Depart.

Pha Oudom District

Mr. Chanh Pheng

Mr. Bouthiem

Governor  
Chief of Cabinet, District Health Depart.

Luang Namtha Province

Dr. Phouthone Vangkonevilay

Mr. Somlith Senvanpan

Director of Provincial Health Department  
Chief of Provincial Nam Saat

Viengphoukha District

Mr. Bounlerd Sengmany

Dr. Tiengsamone

Vice Governor  
Chief of District Health Department

Long District

Mr. Namkham Keobounphab

Dr. Somsack Thipmoun

Vice Governor  
Chief of District Health Department

Other Organizations

Dr. Boun Theung

Dr. Somvang

Mr. Voudthisavath

Mr. Sounphone

Ms. Lith Thanome

Chief of Cabinet, Bokeo Red Cross  
Assistant Project Coordinator, Bokeo GTZ  
SA, Bokeo NCA  
Logistician, MSF  
Assistant Administrator, EED

JICA Study Team

Mr. Shoji Fujii

Ms. Noriyo Aoki

Mr. Sybounheung Phandanouvong

Mr. Manochit Panichith

Team Leader  
Member  
Member  
Team contracted Facilitator

### 8.3.4 Workshop on Study Results

#### Ministry of Health

Dr. Chanthanome Manotham  
Dr. Xiengchoy PHANYAWONG  
Dr. Khamvieng VILAPHEN

Dr. Songpeth

Dr. Bounlay

Dr. Vielaiwon

#### Nam Saat Central

Dr. Nouanta Manouphousay  
Dr. Soutsakhone Chanthaphone  
Mr. Kanna Baran  
Dr. Keo Oudom Namsena  
Dr. Bouakeo Suvanthonng  
Dr. Bounphone  
Ms. Kheuwan Suphindala  
Mr. Chantha Vonthavady  
Mr. Bounmy Phanchanthala  
Mr. Khonkeo Phongvichit

#### Luang Namtha Province

Dr. Phouthone Vangkonevilay  
Mr. Somlith Senvanpan

#### Viengphoukha District

Mr. Bounthong  
Dr. Thiengsamone

#### Long District

Mr. Wan Thong  
Dr. Somsack Thipmoun

#### Bokeo Province

Dr. Keokham Selitham  
Mr. Bounchanh Vannachomchan

#### Houayxai District

Mr. Khampheng Xaiyachiack  
Dr. Souphen Phanyada

#### Pha Oudom District

Mr. Somchit Nasankhon  
Mr. Bounthien Khounsawan

#### Bolikamsay Province

Mr. Satanam

#### WB WSP-EAP

Mr. Santanu Lahiri

#### UNICEF

Ms. Maliporn Virachith

Director of Cabinet

Deputy Director, Inspection Department  
Deputy Chief of PHC and RD Division  
Rural Development Section of Cabinet  
Training and Budgeting Section, Planning  
and Budgeting Department  
Deputy Chief, Department of Hygiene and  
Prevention  
Department of Hygiene and Prevention

Director

Deputy Director  
Chief Technical Adviser  
Deputy Chief of Water Supply Division  
Chief of Environmental Health Division  
Administration Division  
Environmental Health Division  
Environmental Health Division  
Water Supply Division  
Water Supply Division

Director of Provincial Health Department  
Chief of Provincial Nam Saat

Chief of Cabinet

Chief of District Health Department

Chief of Cabinet

Chief of District Health Department

Deputy Director of Prov. Health Depart.  
Chief of Provincial Nam Saat

Chief of Cabinet

Chief of District Health Department

Deputy Governor

Chief of District Health Department

UNV Technical Adviser

Lead Resource-Lao PDR, Water and  
Sanitation Specialist

Assistant Project Officer Water and  
Environmental Sanitation

NGO

Mr. Jonathan Berkel

JICA Laos Office

Mr. Makoto Aoki

Mr. Norihiro Ikeda

Ms. Chie Sato

JICA Study Team

Mr. Shoji Fujii

Ms. Noriyo Aoki

Mr. Sybounheung Phandanouvong

Mr. Izumi Atsuta

Mr. Akihiko Uchiyama

Ms. Kiyoko Takamizawa

Mr. Akinori Miyoshi

Private Organizations

Mr. Suwangno

Mr. Phonekeo

Mr. Khamsay

Ms. Phoukham

Mr. Chanhassem

Mr. Daoheuang

ADRA

Resident Representative

Assistant Resident Representative

Formulation Project Adviser

Team Leader

Member

Member

Member

Member

Member

Member

Champa Lao Consulting

Vientiane Times

Passason Newspaper

Vientiane Mai Newspaper

Lao TV

Lao TV3

## **9. List of Equipment to be Supplied**

## 9. LIST OF EQUIPMENT TO BE SUPPLIED

The equipment listed below were supplied by the JICA Study Team for use during the village survey and study activities. The items listed below are donated to the Lao side at the end of the Study.

Item	Quantity
<i>Village Survey Equipment</i>	
1. Water Quality Analyzer	5 sets
2. Hand Level	5 each
3. Aluminum Staff (Pole)	5 each
4. Tape Measure, 50 m	5 each
5. Altimeter	5 each
6. Compass	5 each
7. Global Positioning System (GPS)	2 each
8. Bucket	3 each
9. Tent (for 3 to 4 persons)	10 each
10. Table with 6 Chairs	5 sets
11. White Board, 60 x 80 cm with Accessories	5 sets
12. Rechargeable Lighting Apparatus	5 sets
13. Cooking Set	5 sets
14. Sleeping Bag	30 each
15. Rain Coat	30 each
16. Trekking Shoes	30 pairs
17. Generating Set	2 sets
<i>Office Supplies</i>	
1. Photocopy Machine	2 sets
2. Desk Top Computer with Accessories	2 sets
3. Printer for above Computer	2 sets
<i>Hygiene Promotion Equipment</i>	
1. Digital Camera	2 sets
2. Lap-Top Personal Computer with Accessories	2 sets
3. LCD Projector	2 sets
4. PA System with Microphone	2 sets
5. Generator with Stabilizer	2 sets



1


2

## **10. Minutes of Meetings**

MINUTES OF MEETINGS  
ON  
SCOPE OF WORK  
FOR  
THE STUDY  
ON  
RURAL WATER SUPPLY AND SANITATION IMPROVEMENT  
IN  
NORTH-WEST REGION  
IN  
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

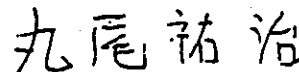
AGREED UPON BETWEEN  
THE MINISTRY OF HEALTH  
AND  
THE JAPAN INTERNATIONAL COOPERATION AGENCY

Luang Prabang, October 21, 1998



---

Mrs. Chanthanome MANOTHAM  
Director of Cabinet,  
Ministry of Health



---

Dr. Yuji MARUO  
Leader of the Preparatory Study Team,  
Japan International Cooperation  
Agency (JICA)

## 1. Introduction

In response to the request of the Government of the Lao People's Democratic Republic (hereinafter referred to as "the Government of Lao"), the Preparatory Study Team (hereinafter referred to as "the Team") of the Japan International Cooperation Agency (hereinafter referred to as "JICA") visited Lao from October 5 to 30, 1998 to discuss the Scope of Work (hereinafter referred to as "S/W") for the Study on Rural Water Supply and Sanitation Improvement in North-West Region in the Lao People's Democratic Republic (hereinafter referred to as "the Study").

The Team carried out field surveys of the study area and held a series of discussions with the authorities concerned of the Ministry of Health (hereinafter referred to as "the MOH"), and other organizations.

The list of attendants is shown in Appendix.

The Minutes of Meetings has been prepared for the better understanding of the S/W agreed upon between the MOH and the Team on October 21, 1998, summarizing main points of the discussions made in the course of the preparation of the S/W.

## 2. Study Title

Both sides agreed that the title of the Study would be "the Study on Rural Water Supply and Sanitation Improvement in North-West Region in the Lao People's Democratic Republic" as described in the S/W.

## 3. Study Area

The Team explained that the five provinces with four hundred forty eight (448) target villages in them which were originally requested by the Government of Lao would be too many to study in detail at a time, and that one or two provinces would be selected for the study. The Team also explained that total number of target villages should be not more than eighty (80) when those are taken into consideration that usual rainy season starts from late May and the field study of the phase I should be completed by that time.

In accordance with the national policy of the sector strategy and recommendation of the MOH, the Team selected Luang Namtha and Bokeo which are located more remote than other three (3) provinces. The Team will choose forty two (42) villages from Luang Namtha and thirty eight (38) villages from Bokeo provinces as the target villages for the study. Those target villages must be located not far from any mortarable roads.

The MOH agreed with the selection.

## 4. Demand Projection

It is a general practice of this area that demand projection of fifteen (15) years is applied to the designing of rural water supply facilities using the fixed rate of population growth. The Study will follow the way of the general practice, although the Study will introduce most realistic rate of population growth.

## 5. Counterpart Personnel

It was confirmed that the MOH would assign some counterpart personnel to the specialists of the Study with Director of Nam Saat (Water Supply and Environmental Health Programme) as a chief counterpart. It was also confirmed that at least one (1) staff from

the provincial or the district Nam Saat Office would accompany with a field research group when the groups visit the target villages.

#### 6. Office Space and Vehicles

The Team requested that the MOH would provide the suitable office space with necessary equipment in Luang Namtha and Bokeo provinces, sufficient numbers of vehicles with drivers for the Study. The MOH, however, expressed concern that, due to the budgetary constraints and remoteness of the locations, such a request could not be fulfilled. The Team recognized the situation and promised to convey the message to JICA H.Q. for consideration.

#### 7. Counterpart Training in Japan

The MOH requested that JICA conduct counterpart training for one (1) month in Japan for the purpose of the smooth transfer of technology during the Study. The Team agreed to convey this request to JICA H.Q. for consideration.

#### 8. Reports

In order to clarify the status and nature of the respective reports, title of some reports in the original Scope of Work were changed as follows, Progress Report (2) to Phase I Report, Interim Report to Progress Report (2), Progress Report (3) to Phase II Report, Monitoring Progress Report to Progress Report (3).

The MOH requested that main report and summary of Draft Final and Final Reports would be translated into Lao Language for wider dissemination of the outcome to the provincial and district levels. The Team will convey this request to JICA H.Q. for consideration.

The MOH agreed to make all the reports open to public in order to achieve maximum use of the Study results.

#### 9. Work Shops

Both the MOH and the Team recognized the necessity to hold work shops at least three (3) times when the study team submits the Phase I Report, Phase II Report and Draft Final Report for sharing the learnings and for exchanging views with related officials and other donors and NGOs which have been operating similar projects.

The Team will convey the information to JICA H.Q. for positive consideration.

#### 10. Type of Water Supply

According to the information from provincial Nam Saat and after their own field visit, both the MOH and the Team recognized that the most popular type of rural water supply in the north-west region is the gravity piped scheme, and that although there are quite a few tube wells in the region, water quality of those wells are usually not favorable for drinking. Taking these information into consideration, the Team suggested that geophysical exploration and test well drilling works may not be necessary to be included in the phase II study. If in case it is recommended by the study team to conduct the geophysical exploration and test well drilling as a result of phase I study, JICA will consider again to carry out these works.

The MOH understood the situation.

## APPENDIX

## LIST OF ATTENDANTS

(Lao Side)

## Ministry of Health

Dr. Bounkouang PHICHIT  
 Mrs. Chanthanome MANOTHAM  
 Mr. Phoukhong CHOMMALA  
 Dr. Nouanta MANIPHOUSAY

Vice-Minister of Health  
 Director of Cabinet  
 Director, Foreign Relations Division  
 Program Manager of Water Supply and  
 Environmental Health Programme  
 (Nam Saat)  
 Deputy Manager of Water Supply and  
 Environmental Health Programme  
 (Nam Saat)

Dr. Soutsakhone CHANTHAPHONE

## Prime Minister's Office Committee for Investment and Cooperation

Mr. Soulasith OUPRAVANH

Deputy General Director, Bilateral  
 Cooperation, Dept. of International  
 Economic Cooperation

## Luang Prabang Province

Mr. Chansy PHOSIKHAM  
 Ms. Amone SIRIVONG  
 Mr. Khampheua PHALYVANH

Governor  
 Deputy Director, Department of Health  
 Deputy Director, Water supply and  
 Environment Health Section (Nam Saat),  
 Dept. of Health

## Bokeo Province

Mr. Mai Bunchan WANNACHOOMCHAN

Director, Water Supply and Environment  
 Health Section (Nam Saat), Dept. of  
 Health

## UNDP-World Bank Water and Sanitation Program

Mr. Michael SEAGER

Country Program Manager, Lao P.D.R.  
 and Cambodia

Mr. Johan ARVLING

Country officer, Lao P.D.R.

## UNICEF

Mr. Rafael Diaz Diaz

Project Officer, Water and Environmental  
 Sanitation

Dr. K. S. MUNG  
 Mr. Maliporn VIRACHITH

Project Officer, Health and Nutrition  
 Assistant Project Officer, Water and  
 Environmental Sanitation

Mr. Nadarajah S. MOORTHY

Assistant Project Officer, Water and  
 Environmental Sanitation

## Food For The Hungry International (NGO)

Mr. John R. Gowdy

Country Director, Lao P.D.R.

Southeast Asia Regional Representative

Action Contre la Faim (NGO)  
Mr. Onekham Keokanong

Hydrological Technical Assistant

(Japanese Side)

Embassy of Japan  
Mr. Shigeki KOBAYASHI  
Mr. Seiji NAGANO

First Secretary  
Second Secretary

JICA Lao Office  
Mr. Tsuneo TAKAHATA  
Mr. Nobuhiro KUMAGAI  
Mr. Yusuke TADA  
Mr. Mikio MASAKI  
Dr. Hiroyuki AMANO

President Representative  
Assistant President Representative  
Project Formulation Advisor  
Project Formulation Advisor  
Expert, Health and Medical Cooperation  
Planning Adviser  
Programme Officer

Dr. Sophonh KOUSONSAVATH

The Preparatory Study Team

Dr. Yuji MARUO  
Mr. Yasumichi ARAKI  
Mr. Shogo SHIBATA  
Mr. Makoto YASUDA  
Ms. Kimiko ABE  
Mr. Akio MURAYAMA

Leader  
Member  
Member  
Member  
Member  
Interpreter

*mm*

*mm*

SCOPE OF WORK  
FOR  
THE STUDY  
ON  
RURAL WATER SUPPLY AND SANITATION IMPROVEMENT  
IN  
NORTH-WEST REGION  
IN  
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

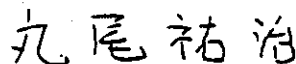
AGREED UPON BETWEEN  
THE MINISTRY OF HEALTH  
AND  
THE JAPAN INTERNATIONAL COOPERATION AGENCY

Luang Prabang, October 21, 1998



---

Mrs. Chanthanome MANOTHAM  
Director of Cabinet,  
Ministry of Health



---

Dr. Yuji MARUO  
Leader of the Preparatory Study Team,  
Japan International Cooperation  
Agency (JICA)



## I. INTRODUCTION

In response to the official request of the Lao People's Democratic Republic (hereinafter referred to as "the Government of Lao"), the Government of Japan decided to conduct a Study on Rural Water Supply and Sanitation Improvement in North-West Region in the Lao People's Democratic Republic (hereinafter referred to as "the Study") in accordance with the relevant laws and regulations in force in Japan.

The Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation programs of the Government of Japan, will undertake the Study in close cooperation with the authorities concerned of the Government of Lao.

The present document sets forth the Scope of Work for the Study.

## II. OBJECTIVES OF THE STUDY

The objectives of the Study are:

- (1) to identify the existing issues on rural water supply and sanitation through the investigation of the present rural water supply and sanitation situation,
- (2) to formulate rural water supply and sanitation improvement plan for the selected target villages, and
- (3) to transfer skills and technology of water resources development and management for potable water to counterpart personnel in the course of the Study.

## III. STUDY AREA

The Study will cover about eighty (80) villages in Luang Namtha and Bokeo provinces in North-West Region.

## IV. SCOPE OF THE STUDY

### Phase I Baseline Study and Analysis

1. Collection, review and analysis of related data and information
  - a. social and economic conditions
  - b. topographical and hydrogeological maps
  - c. meteorological, hydrological, geological data
  - d. existing well data and existing water supply facilities
  - e. data on rural living conditions
  - f. on-going and planned projects relevant to the Study
  - g. laws, regulations and policies on water resource development and water supply services
  - h. other relevant data and information
2. Field reconnaissance
  - a. hydrological and hydrogeological investigation
  - b. topographical and geological investigation
3. Inventory and assessment on possible water sources and existing water supply facilities

4. Study on actual condition and people's aspiration of target villages
  - a. economic conditions
  - b. sociological configuration
  - c. sanitation and hygiene
  - d. gender issues
  - e. villager's will on water supply development
5. Initial Environmental Evaluation (IEE)

#### Phase II: Water Resources Potential Study for Potable Water and Pilot Study

1. Field study
  - a. topographical and geological investigation
  - b. rivers and springs
  - c. hydrogeological investigation
2. Preparation and selection of villages for pilot study
3. Geophysical exploration
4. Test well construction, well logging, pumping test and water quality analysis
3. Observation of groundwater level, spring water, river flow and their water quality analysis
4. Evaluation of water resources potential for potable water
5. Model water supply facility construction for pilot study (gravity system, spring protection, rain water harvesting, tube well, etc.)
6. Implementation of pilot study for people's participation in planning, construction, operation and maintenance of water supply facilities and sanitary education

#### Phase III: Formulation of Development Plan on Rural Water Supply and Sanitation Improvement

1. Formulation of basic strategy
2. Formulation of water supply plan and preliminary design of appropriate facilities for various water sources
3. Formulation of operation and maintenance plan
4. Formulation of institution and organization plan
5. Formulation of sanitary education plan
6. Cost estimation
7. Monitoring of the Pilot Study

*MPM*

*Amal*

- a. observation of changes in custom and behavior related to water use and sanitation
  - b. monitoring of operation and maintenance condition
  - c. observation of groundwater level, spring water flow and water quality analysis
  - d. evaluation of the pilot study and feedback for the development plan
8. Evaluation of the development plan
    - a. financial plan and evaluation
    - b. institutional and technical evaluation
    - c. socio-economic evaluation
    - d. environmental impact assessment
    - e. WID evaluation
  9. Formulation of implementation program and prioritization

## V. SCHEDULE OF THE STUDY

The Study will be carried out in accordance with the tentative schedule as attached in the appendix. The schedule is tentative and subject to be modified when both parties agree upon any necessity that will arise during the course of the Study.

## VI. REPORTS

JICA shall prepare and submit the following reports in English to the Government of Lao.

### 1. Inception Report:

Thirty (30) copies at the commencement of the first work in Lao.

### 2. Progress Report (1):

Thirty (30) copies at the end of the first work in Lao.

### 3. Phase I Report:

Thirty (30) copies at the commencement of the second work in Lao. This report will contain the results of the Phase I and the schedule and methodology of the Phase II and Phase III study program.

### 4. Progress Report (2):

Thirty (30) copies at the end of the second work in Lao.

### 5. Phase II Report :

Thirty (30) copies at the commencement of the third work in Lao.

### 6. Progress Report (3):

Thirty (30) copies at the end of the third work in Lao.

7. Draft Final Report:

Thirty (30) copies at the end of the forth work in Lao. The Government of Lao shall submit its comments within one (1) month after the receipt of the Draft Final Report.

8. Final Report:

Final Report will consist of Main Report, Supporting Report, Data Book and Summary. Fifty (50) copies will be submitted within one (1) month after the receipt of the comments on the Draft Final Report.

**VII. UNDERTAKINGS OF THE GOVERNMENT OF LAO**

1. To facilitate the smooth conduct of the Study, the Government of Lao will take the following necessary measures:
  - (1) To secure the safety of the Japanese study team (hereinafter referred to as "the Team")
  - (2) To permit the members of the Team to enter, leave and sojourn in Lao for the duration of their assignment therein, and exempt them from foreign registration requirements and consular fees
  - (3) To exempt the members of the Team from taxes, duties, fees and any other charges on equipment, machinery and other materials brought into Lao for the conduct of the Study
  - (4) To exempt the members of the Team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Team for their services in connection with the implementation of the Study
  - (5) To provide necessary facilities to the Team for remittance as well as utilization of the funds introduced into Lao from Japan in connection with the implementation of the Study
  - (6) To secure permission for the Team to enter into private properties or restricted areas for the implementation of the Study
  - (7) To secure permission for the Team to take all data and documents ( including photographs and maps ) related to the Study out of Lao to Japan
  - (8) To provide medical services as needed, expenses for which will be chargeable to the members of the Team.
2. The Government of Lao shall bear claims, if any arises, against the members of the Team resulting from, occurring in the course of, or otherwise connected with, the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the member of the Team.

*Handwritten mark*

*Handwritten mark*

3. The Ministry of Health shall act as a counterpart agency to the Japanese Study Team and also as a coordinating body in relation with other governmental and non-governmental organizations for the smooth implementation of the Study. The Ministry of Health shall, at its own expense, provide the Team with the followings, in cooperation with other organizations concerned:

- (1) available data and information related to the Study
- (2) counterpart personnel
- (3) suitable office space with necessary equipment
- (4) credentials or identification cards
- (5) an appropriate number of vehicles with drivers.

#### VIII. UNDERTAKINGS OF JICA

For the implementation of the Study, JICA shall take the following measures:

1. to dispatch, at its own expense, study teams to Lao
2. to pursue technology transfer to counterpart personnel in the course of the Study.

#### IX. CONSULTATION

JICA and the Ministry of Health shall consult with each other in respect of any matter that may arise from or in connection with the Study.

1/2/2

APPENDIX

TENTATIVE SCHEDULE

MONTH DESCRIPTION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
WORK IN LAO																								
WORK IN JAPAN																								
PHASE OF THE STUDY				PHASE I							PHASE II								PHASE II					
REPORT PRESENTATION	▲ IC/R							▲ P/R(1)		▲ P I/R						▲ P/R(2)		▲ P II/R		▲ P/R(3)		▲ DF/R		▲ F/R

IC/R : Inception Report

P/R : Progress Report

P I/R : Phase I Report

P II/R : Phase II Report

DF/R : Draft Final Report

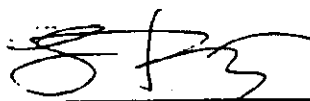
F/R : Final Report

MINUTES OF MEETINGS  
ON  
INCEPTION REPORT  
FOR  
THE STUDY  
ON  
RURAL WATER SUPPLY AND SANITATION IMPROVEMENT  
IN  
NORTH-WEST REGION  
IN  
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC  
AGREED UPON BETWEEN  
THE MINISTRY OF HEALTH  
AND  
THE JAPAN INTERNATIONAL COOPERATION AGENCY

Vientiane, February 24, 1999




Dr. Nouanta MANIPHOUSAY  
Director  
National Center for Environmental  
Health and Water Supply (Nam Saat)  
Ministry of Health



Mr. Shoji FUJII  
Team Leader  
JICA Study Team

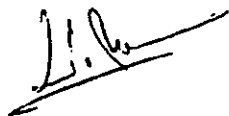
Witness:



Dr. Yuji MARUO  
Technical Advisor  
Development Specialist, JICA

Discussions were made on the Inception Report for the Study on Rural Water Supply and Sanitation Improvement in North-West Region in the Lao People's Democratic Republic, and the contents of the Inception Report were agreed upon, in principle. Additionally, the following points were mutually agreed upon.

1. After discussions with the Provincial officers of Nam Saat Luang Namtha and related agencies, it was realized that more remote areas are in need of assistance and also, some duplications of villages with other donors were found. Then, the Japanese side expressed their idea to consider these views and as a result, to concentrate the target area to two Districts of Long and Viengphoukha. Therefore if necessary, the distribution of villages will be adjusted with Bokeo Province.
2. The Lao side agreed to make the final decision on counterpart candidates who will conduct the field surveys with the Study Team before the beginning of March 1999 in consideration of:
  - (1) full time assignment to the JICA Study,
  - (2) appropriate District allocation of responsibilities and
  - (3) equal representation of gender.Furthermore, the Lao side assured the confirmation of counterpart personnel to be trainers for the above field surveys before the end of February 1999.
3. Both sides agreed that any submitted reports in the Lao language are to be used as reference and those reports in the English language will prevail.





## LIST OF ATTENDANTS

### Ministry of Health

Dr. Ponmek DALALOY	Minister
Dr. Bounkouang PHICHIT	Vice-Minister
Mr. Phoukhong CHOMMALA	Director, Foreign Relations Division
<u>National Center for Environmental Health and Water Supply (Nam Saat)</u>	
Dr. Nouanta MANIPHOUSAY	Director
Dr. Vannareth THAMAVONGSA	Deputy Director
Dr. Tayphasavanh FENGTHONG	Deputy Director
Dr. Soutsakhone CHANTHAPHONE	Deputy Director

### Luang Namtha Province

Mr. Singkham PHANTHAVONG	Vice Governor
Ms. Khamngeng SIVANXAY	Chief Cabinet of Provincial Office

#### Provincial Department of Health

Dr. Phouthone VANGKONEVILAY	Director of Public Health Department
Mr. Inkeo PHOUTHVONG	Deputy Director of Public Health Department
Mr. Somsack THIPMOUN	Chief of Long District Public Health Department

#### Water Supply and Hygiene Section (Provincial Nam Saat)

Mr. Somlith SENVANPAN	Chief of Section
Dr. SENGTHIP	Chief of Technical Division

### Bokeo Province

#### Public Health Department

Dr. Pheng Sy VIENSAVAN	Chief of Public Health Department
Dr. NOUCHANH	Deputy Chief of Public Health Department

#### Water Supply and Hygiene Section (Provincial Nam Saat)

Mr. Bounchanh WANNACHOMCHAN	Chief of Section
Dr. KAMSA	Hygiene Division

### Embassy of Japan

Mr. Seiji NAGANO	Second Secretary
------------------	------------------

### JICA Laos Office

Mr. Nobuhiro KUMAGAI	Assistant Resident Representative
Mr. Mikio MASAKI	Project Formulation Advisor
Mr. Sophonh KOUSONSAVATH	Programme Officer

**JICA Expert**

Dr. Hiroyuki AMANO

Health and Medical Cooperation Planning Adviser

**JICA Headquarters**

Dr. Yuji MARUO

Technical Advisor

Mr. Yasumichi ARAKI

Staff

**JICA Study Team**

Mr. Shoji FUJII

Team Leader

Ms. Noriyo AOKI

Member

Ms. Khamtanh CHANTY

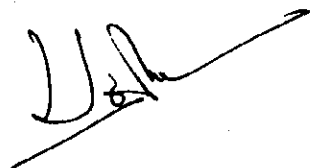
Member

*SA*      *mm*

*LLA*

**MINUTES OF MEETINGS**  
ON  
PROGRESS REPORT (1)  
FOR  
THE STUDY  
ON  
RURAL WATER SUPPLY AND SANITATION IMPROVEMENT  
IN  
NORTH-WEST REGION  
IN  
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC  
AGREED UPON BETWEEN  
THE MINISTRY OF PUBLIC HEALTH  
AND  
THE JAPAN INTERNATIONAL COOPERATION AGENCY

Vientiane, June 25 1999



---

Dr. Nouanta MANIPHOUSAY  
Director  
National Center for Environmental  
Health and Water Supply (Nam Saat)  
Ministry of Public Health



---

Mr. Shoji FUJII  
Team Leader  
JICA Study Team

Discussions were made on the Progress Report (1) for the Study on Rural Water Supply and Sanitation Improvement in North-West Region in the Lao People's Democratic Republic, and the contents of the Progress Report (1) were agreed upon, in principle. Additionally, the following points were mutually agreed upon.

1. During the "Approval Meeting" held in Luang Namtha on June 7 1999, all the attendants at the meeting (the List of Attendants is attached) mutually agreed upon the preliminary selection of candidate villages for the pilot study. Based on this tentative list, the pilot study village list will be finalized after analyzing the technical survey data, in consideration of the budget and implementation period.
2. The Lao side agreed to organize counterpart personnel and prepare a program of animation and education to be implemented during the pilot study in Phase II through the initiative of the Lao side. The program outline, required manning schedule and list of necessary materials for this program will be sent to the JICA Study Team by the beginning of August 1999.
3. One counterpart from Nam Saat Central is assigned to coordinate the JICA Study. He is responsible mainly for the technical aspects of the Study. In addition, the Lao side agreed to nominate at least the following counterparts for full assignment to the Study:
  - a. A non-technical (social survey) counterpart
  - b. A sanitation counterpart



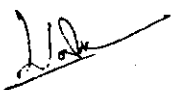
## LIST OF ATTENDANTS AT APPROVAL MEETING

Date: 7 June 1999

Place: Luang Namtha

Attendants:

Mr. Sing Kham Panthavong	Vice Governor of Luang Namtha Province
Dr. Boua Kham	Technical Adviser, Department of Hygiene, Ministry of Public Health
Dr. Nouanta Maniphousay	Director, Nam Saat Central
Mr. Kanna Baran	Chief Technical Adviser, Nam Saat Central
Dr. Keo Oudom Namsena	Deputy, Water Supply Division, Nam Saat Central Coordinator for JICA Study
Mr. Viengxay Viravong	GFS Engineer, Water Supply Division, Nam Saat Central
Dr. Phouthone Vangkonevilay	Director of Luang Namtha Provincial Public Health
Mr. Somlith Senvanpan	Director of Luang Namtha Provincial Nam Saat
Dr. Thieng Samon	Director of Viengphouka District Public Health
Mr. Somsack Thibmuon	Director of Long District Public Health
Dr. Thongthang Bounsi	Director of Management, Technical Office, Bokeo Provincial Public Health
Mr. Bouchan Vannachonchan	Director of Bokeo Provincial Nam Saat
Dr. Suphen Phanyada	Director of Cabinet, Houayxai District Public Health
Dr. Khanchan Sayyavong	Deputy Director of Cabinet, Pha Oudom District Public Health
Mr. Shoji Fujii	JICA Study Team Leader
Mr. Nobuyuki Ishii	JICA Study Team Member
Mr. Phoutsavong Thonaouchour	JICA Study Team contracted interpreter



MINUTES OF MEETINGS  
ON  
PHASE I REPORT  
FOR  
THE STUDY  
ON  
RURAL WATER SUPPLY AND SANITATION IMPROVEMENT  
IN  
NORTH-WEST REGION  
IN  
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC  
AGREED UPON BETWEEN  
THE MINISTRY OF HEALTH  
AND  
THE JAPAN INTERNATIONAL COOPERATION AGENCY

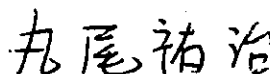
Vientiane, October 21, 1999



Dr. Nouanta MANIPHOUSAY  
Director  
National Center for Environmental Health and  
Water Supply (Nam Saat)  
Ministry of Health



Mr. Shoji FUJII  
Team Leader  
JICA Study Team



Dr. Yuji MARUO  
Leader  
JICA Advisory Team

Discussions were made on the Phase I Report for the Study on Rural Water Supply and Sanitation Improvement in North-West Region in the Lao People's Democratic Republic, and the contents of the report which includes the Pilot study implementation strategy and schedule for Phase II, were agreed upon, in principle. Additionally, the following points were mutually agreed upon.

1. Workshop Schedule

The Lao side requested that the second workshop would be postponed until the middle of November in order to elaborate on the possibility for wider range of participants. The JICA Study Team agreed to this request.

2. Design Report Submission

The Lao side agreed to complete and submit the design reports for all of the pilot study schemes by the beginning of November 1999.

3. Assignment Confirmation

Both sides confirmed that the pilot study manning program prepared by Nam Saat is appropriate for the pilot study activity requirements of this study. The Lao side agreed to abide by the schedule for manning assignment described in this program. Furthermore, both sides consented that the pilot study activities will be initiated by the Lao side through supervision by the assigned personnel with emphasis on village participation in line with the Sector Strategy.

4. Confirmation of Village Contribution

Both sides agreed that the level of contribution from the village needs to be confirmed upon community dialogue using demand responsive approach in consideration of their willingness-to-pay in relation to their ability-to-pay.

sf

LSA

12/12

## LIST OF ATTENDANTS

---

### Ministry of Health

#### Department of Hygiene and Prevention

Dr. Phitthanosone CHOUMMANIVONG

Deputy Chief of Environment Health  
Division

#### National Center for Environmental Health and Water Supply (Nam Saat)

Dr. Nouanta MANIPHOUSAY

Director

Dr. Vannareth THAMAVONGSA

Deputy Director

Mr. Kanna BARAN

Chief Technical Advisor

Mr. Kong Kham MIBOUM

Chief of Water Supply Division

Dr. Keo Oudom NAMSENA

Deputy Chief of Water Supply Division

Dr. Bouakeo SUVANTHONG

Deputy Chief of Environmental Health  
Division

#### Vientiane Provincial Nam Saat

Dr. Khamphiane VANMANY

Chief

### UNDP-World Bank Water and Sanitation Program

Mr. Johan ARVLING

Country Officer

### UNICEF

Ms. Boel Cecilia NYBERG

Assistant Project Officer, Water and  
Environmental Sanitation

### JICA Headquarters

Dr. Yuji MARUO

Leader of JICA Advisory Team

Mr. Yasumichi ARAKI

Staff

### JICA Study Team

Mr. Shoji FUJII

Team Leader

Ms. Noriyo AOKI

Member

Ms. Kiyoko TAKAMIZAWA

Member

### JICA Senior Volunteer

Mr. Makoto SATO

Senior Volunteer





**MINUTES OF MEETINGS**  
ON  
PROGRESS REPORT (2)  
FOR  
THE STUDY  
ON  
RURAL WATER SUPPLY AND SANITATION IMPROVEMENT  
IN  
NORTH-WEST REGION  
IN  
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC  
AGREED UPON BETWEEN  
THE MINISTRY OF HEALTH  
AND  
THE JAPAN INTERNATIONAL COOPERATION AGENCY

Vientiane, March 14, 2000



Dr. Nouanta MANIPHOUSAY  
Director  
National Center for Environmental Health  
and Water Supply (Nam Saat)  
Ministry of Health



Mr. Shoji FUJII  
Team Leader  
JICA Study Team

Discussions were made on the Progress Report (2) for the Study on Rural Water Supply and Sanitation Improvement in North-West Region in the Lao People's Democratic Republic, and the contents of the report which includes the study activities of Phase II, were agreed upon, in principle. Additionally, the following points were mutually agreed upon.

1. Preparations for Second Monitoring

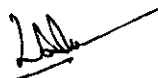
Both sides confirmed that a second monitoring survey would be conducted in Phase III. The Lao side consented to take initiative to make preparations for the survey with proper manning assignment and appropriate scheduling so that the second monitoring can be held in June 2000. Therefore, the Lao side will submit the plan before the beginning of May 2000 to the JICA Study Team.

2. Continuation of Monitoring

The JICA Study Team strongly recommended continuing the monitoring activities even after completion of this Study on a periodic basis to comprehend the middle to long-term effects of water supply and sanitation. The Lao side will request the Lao government to prepare annual budgets for this purpose.

3. Design Report Submission

The Lao side agreed to complete and submit the design reports for the remaining non-pilot villages by the end of July 2000 in order to incorporate these villages into the development plan of the target area. Both sides agreed that if these design reports are not submitted, these villages will not be included in the development plan.

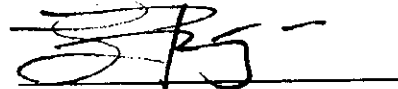


MINUTES OF MEETINGS  
ON  
PHASE II REPORT  
FOR  
THE STUDY  
ON  
RURAL WATER SUPPLY AND SANITATION IMPROVEMENT  
IN  
NORTH-WEST REGION  
IN  
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC  
AGREED UPON BETWEEN  
THE MINISTRY OF PUBLIC HEALTH  
AND  
THE JAPAN INTERNATIONAL COOPERATION AGENCY

Vientiane, 2 June 2000



Dr. Nouanta MANIPHOUSAY  
Director  
National Center for Environmental  
Health and Water Supply (Nam Saat)  
Ministry of Public Health



Mr. Shoji FUJII  
Team Leader  
JICA Study Team

Discussions were made on the Phase II Report for the Study on Rural Water Supply and Sanitation Improvement in North-West Region in the Lao People's Democratic Republic, and the contents of the report were agreed upon, in principle. Additionally, the following points were mutually agreed upon.

1. Second Monitoring Survey


The Lao side will make every effort to complete the second monitoring survey for the pilot study villages by the middle of July 2000. Furthermore, since monitoring should be done periodically on a long-term basis, the JICA Study Team strongly recommends persuading the central government to allocate the necessary budget for this purpose.

2. Sanitation and Hygiene Promotion

The Lao side will make every effort to complete the sanitation and hygiene promotion activities for Phase III by the end of July 2000. These promotion activities can be included in the monitoring activities mentioned above.

3. Implementation of Villages not selected for Pilot Study

Nam Saat will consider the implementation possibilities for the villages which were not selected for the Pilot Study. The procedures for implementation of the remaining villages will be made as soon as the implementing method is decided.




**MINUTES OF MEETINGS**  
**FOR**  
**THE STUDY**  
**ON**  
**RURAL WATER SUPPLY AND SANITATION IMPROVEMENT**  
**IN**  
**NORTH-WEST REGION**  
**IN**  
**THE LAO PEOPLE'S DEMOCRATIC REPUBLIC**  
**AGREED UPON BETWEEN**  
**THE MINISTRY OF PUBLIC HEALTH**  
**AND**  
**THE JAPAN INTERNATIONAL COOPERATION AGENCY**

Vientiane, 7 August, 2000



---

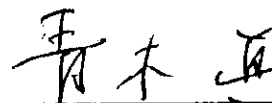
**Dr. Nouanta MANIPHOUSAY**  
**Director**  
**National Center for Environmental**  
**Health and Water Supply (Nam Saat)**  
**Ministry of Public Health**



---

**Mr. Shoji FUJII**  
**Team Leader**  
**JICA Study Team**

Witnessed by



---

**Mr. Makoto AOKI**  
**Resident Representative**  
**JICA Laos Office**

Discussions were made for the Study on Rural Water Supply and Sanitation Improvement in North-West Region in the Lao People's Democratic Republic (Refer to Annex 2 for the details of attendants). The main issues discussed are the following:

- 1 The Laotian side requested the Japanese side to provide the assistance in the implementation of the "Pilot Study Extension," or "PSE," which would install clean water supply systems and sanitation facilities for some of the villages that were not covered by the original pilot study. The Team promised to convey the request to the JICA Headquarter that would finalize the decision of the PSE's implementation.
- 2 Both Laotian and Japanese sides agreed that the justifications of the PSE are as follows. First, PSE's implementation is expected to promote the technology transfer in the wider area. Second, efforts should be made to reduce the discrepancies in the coverage of the clean water supply and sanitation facilities among the targeted villages.
- 3 Both sides agreed that, upon the realization of the PSE, the targeted villages would be the ones shown in ANNEX 1.
- 4 Both sides agreed that, upon the realization of the PSE, the C/P agencies would assign the staff as the facilitators and trainers to initiate the implementation and promote the villagers' participation.
- 5 Both sides agreed that the submission of the progress report (3) would be shifted from August to October, depending on the PSE's implementation which would start in late October, and consequently that the Study would come to an end in March 2001 after the submissions of the draft final report and final report.



**The Study on Rural Water Supply and Sanitation Improvement in  
North-West Region in Lao PDR**

**List of Candidate Villages for Pilot Study Extension**

No.	Village Name	Water Scheme	No. Latrine
<i>Houayxai District, Bokeo Province</i>			
H-2	Phokham	GFS	40
H-4	Hoai Makeo	Dug Well	0
H-5	Done Phao	GFS	0
H-8	Namphou	GFS	40
H-26	Phibounthong	GFS 1 Scheme, 5 Villages	4
H-27	Houakhoua		26
H-28	Pakhaotay		0
H-29	Thongbia		0
H-30	Viengmay		20
<i>Viengphoukha District, Luang Namtha Province</i>			
V-1	Nam Mai	GFS	28
<i>Long District, Luang Namtha Province</i>			
L-6	Nong Kham	GFS	35
L-7	Nam Bak	GFS 1 Scheme, 4 Villages	48
L-8	Luang Phokham		0
L-9	Phaya Luang		35
L-14	Khok Hin		21
L-11	Nam Ma	Dug Well	0
L-23	Kang	GFS	13
	17 Villages	10 Schemes -8 GFS -2 Dug Well	11 Latrine- Villages

*W. J. M.*

*SA*

*6*

Annex 2

List of Attendants for Discussion on Pilot Study Extension

National Center for Environmental Health and Water Supply (Nam Saat)

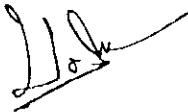
Dr. Nouanta MANIPHOUSAY	Director
Dr. Soutsakhone CHANTHAPHONE	Deputy Director
Mr. Kanna BARAN	Chief Technical Advisor
Dr. Keo Oudom NAMSENA	Deputy Chief, Water Supply Division
Dr. Khonsavanh MALIBYPHIT	Hygiene Promotion Section, Environmental Health Division

JICA

Mr. Makoto AOKI	Resident Representative of JICA Laos Office
Mr. Kenji INOUE	Study Planning

JICA Study Team

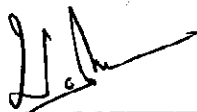
Mr. Shoji FUJII	Team Leader
Mr. Akihiko UCHIYAMA	Team Member





**MINUTES OF MEETINGS**  
ON  
PROGRESS REPORT (3)  
FOR  
THE STUDY  
ON  
RURAL WATER SUPPLY AND SANITATION IMPROVEMENT  
IN  
NORTH-WEST REGION  
IN  
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC  
AGREED UPON BETWEEN  
THE MINISTRY OF PUBLIC HEALTH  
AND  
THE JAPAN INTERNATIONAL COOPERATION AGENCY

Vientiane, 18 October 2000



---

**Dr. Nouanta MANIPHOUSAY**  
Director  
National Center for Environmental  
Health and Water Supply (Nam Saat)  
Ministry of Public Health



---

**Mr. Shoji FUJII**  
Team Leader  
JICA Study Team

Discussions were made on the Progress Report (3) for the Study on Rural Water Supply and Sanitation Improvement in North-West Region in the Lao People's Democratic Republic, and the contents of the report were agreed upon, in principle. Additionally, the following points were mutually agreed upon.

1. Implementation of Pilot Study Extension

The Lao side agreed to take initiatives to implement the pilot study extension, and will make every effort to complete the construction works by the end of January 2001. A hand-over ceremony will be scheduled tentatively on 9<sup>th</sup> or 10<sup>th</sup> February 2001.

2. Follow-up Activities of Province and District

The operation and maintenance of the completed facilities in the Pilot Study villages will be the responsibility of the beneficiary villages. However, each Province and District Nam Saat will be responsible for the following activities.

- (1) Repairs beyond the capability of the villagers
- (2) Allocation of basic tools to the villages for minor repairs
- (3) Periodic patrol of the villages to inspect, monitor and advice on proper operation and maintenance and required modifications
- (4) Further education on committee functioning, fee collection, bookkeeping and repairs
- (5) Continuous promotion on sanitation and hygiene
- (6) Other interventions necessary for proper functioning of the facilities

Therefore, the Lao side will prepare the necessary budget for the above activities.

3. Workshop (3)

Both sides agreed to hold the Workshop (3) tentatively on 6<sup>th</sup> or 7<sup>th</sup> February 2001 at Vientiane through the full initiative of Nam Saat. This workshop will explain the results of the present study to exchange views with the participants.

4. Request for Implementation of Remaining Villages

The Lao side requests implementation of the study target villages remaining after completion of the previous pilot studies. The request will be made by the end of October 2000.

5. Consideration of Other Provinces

The original request for this present study included five Provinces. Since only two Provinces were studied this time, the Lao side now requests consideration of the other three Provinces.



MINUTES OF MEETINGS  
ON  
DRAFT FINAL REPORT  
FOR  
THE STUDY  
ON  
RURAL WATER SUPPLY AND SANITATION IMPROVEMENT  
IN  
NORTH-WEST REGION  
IN  
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC  
AGREED UPON BETWEEN  
THE MINISTRY OF PUBLIC HEALTH  
AND  
THE JAPAN INTERNATIONAL COOPERATION AGENCY

Vientiane, 2 February 2001



Dr. Nouanta MANIPHOUSAY  
Director  
National Center for Environmental  
Health and Water Supply (Nam Saa)  
Ministry of Public Health

Mr. Shoji FUJII  
Team Leader  
JICA Study Team

Witness



Mrs. Chanthanome MANOTHAM  
Chief of Cabinet  
Ministry of Health

JICA submitted the Draft Final Report (hereinafter referred to as DF/R) for the Study on Rural Water Supply and Sanitation Improvement in North-West Region in the Lao People's Democratic Republic that has been conducted in accordance with the Scope of Work agreed and signed on 21 October 1998. The Lao side has accepted the DF/R in principle.

The main points of discussion made on this report are as follows:

1. Comments on the Draft Final Report

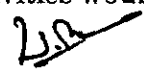
Both sides agreed that the Lao side would send the comments on the contents of the DF/R to JICA, if any, before the middle of February 2001, and that any comments received after the deadline would not be reflected in the Final Report.

2. Follow-up Activities for the Pilot Study Extension

Both Japanese and Lao sides have confirmed that the relevant technology transfer has been successfully carried out. The Lao side thus promised the Japanese side that it would alone conduct the monitoring and sanitation promotion of the Pilot Study Extension villages even after the end of the Study. These follow-up activities would include supervision of operation and maintenance, periodic monitoring on behavioral changes of the villagers, and continuous hygiene promotion at the villages. The Lao side stated that it would make every effort to allocate the necessary budget for this purpose.

3. Appropriate Handling of Study Equipment

Both Japanese and Lao sides confirmed that the Lao side would make every effort to properly manage and maintain the Study equipment that would be donated from the JICA Headquarters when all of the Study activities would come to an end.



**LIST OF ATTENDANTS**  
**for Discussion on Draft Final Report**

Ministry of Health

Mrs. Chanthanome Manotham                      Chief of Cabinet

Nam Saat Central

Dr. Nouanta Maniphousay	Director
Dr. Thongma Ongkeobounmy	Deputy Director
Dr. Soutsakhone Chanthaphone	Deputy Director
Mr. Kanna Baran	Chief Technical Adviser
Dr. Soulinthone Inthavong	Chief Administration Division
Dr. Keo Oudom Namsena	Deputy Chief of Water Supply Division
Dr. Bouakeo Suvanthonng	Chief of Environmental Health Division
Ms. Thatsany Manuevong	Hygiene Promotion Section, Environmental Health Division

JICA Study Team

Mr. Shoji Fujii	Team Leader
Mr. Akihiko Uchiyama	Team Member
Mr. Izumi Atsuta	Team Member
Mr. Sybounheung Phandanouvong	Team Member

*af*

*L.A.*

# ບົດບັນທຶກກອງປະຊຸມ

ໃນຫົວຂໍ້

ຮ່າງບົດລາຍງານສຸດທ້າຍ

ຂອງ

ໂຄງການຄົ້ນຄວ້າ

ກ່ຽວກັບ

ການຈັດຫນ້າສະອາດ ແລະ ອານາໄມສິ່ງແວດລ້ອມ

ໃນເຂດ

ພາກຕາເວັນຕົກຊ່ຽງເໜືອ

ຂອງ

ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊາຊົນ ລາວ

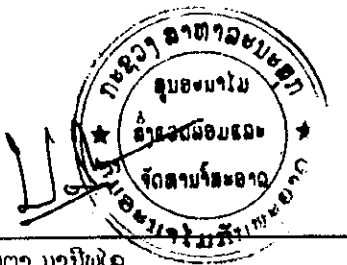
ໂດຍການ ຕົກລົງເຫັນດີກັນ ລະຫວ່າງ

ກະຊວງ ສາທາລະນະສຸກ

ແລະ

ອົງການຮ່ວມມືສາກົນຂອງອີ່ປຸ່ນ (JICA)

ທີ່ ວຽງຈັນ, ວັນທີ 2 ກຸມພາ 2001



ດຣ. ນວນຕາ ນານີພິໄຊ  
ຜູ້ອໍານວຍການ  
ສູນກາງນໍ້າສະອາດ ແລະ  
ອານາໄມ ສິ່ງແວດລ້ອມ ແຫ່ງຊາດ  
ກະຊວງ ສາທາລະນະສຸກ

ທ່ານ ໂສຈິ ຜູ້ຈິ  
ຫົວໜ້າຄະນະ  
ຄະນະຄົ້ນຄວ້າ ອົງການຮ່ວມມືຂອງອີ່ປຸ່ນ  
(JICA)



ທ່ານ ນາງ ຈິນທະໝອມ ນາໂນທໍາ  
ຫົວໜ້າຫ້ອງການ  
ກະຊວງ ສາທາລະນະສຸກ

ອົງການຮ່ວມມືສາກົນຂອງຍີ່ປຸ່ນ (JICA) ໄດ້ສົ່ງຮ່າງບົດລາຍງານສຸດທ້າຍ (ຊຶ່ງຕໍ່ໄປເອີ້ນວ່າ DF/R) ສໍາລັບ ໂຄງການຄົ້ນຄວ້າ ຈັດຫນ້າສະອາດ ແລະ ອານາໄມ ສົ່ງແວດລ້ອມ ໃນເຂດ ພາກຕາເວັນຕົກ ຊຸ່ງຽງເໜືອ ຂອງ ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊາຊົນ ລາວ ຊຶ່ງໄດ້ດໍາເນີນການ ພາຍໃຕ້ ຂອບເຂດຂອງວຽກງານ ທີ່ໄດ້ຕົກລົງ ແລະ ເຊັນກັນ ໃນວັນທີ 21 ຕຸລາ 1998. ທາງດ້ານ ຫຼັກການແລ້ວ ພ່າຍລາວ ສາມາດ ຮັບເອົາ ຮ່າງບົດລາຍງານສຸດທ້າຍໄດ້ (DF/R).

ຈຸດຕົ້ນຕໍ ຂອງການປຶກສາຫາລື ທີ່ຢູ່ໃນບົດລາຍງານນັ້ນ ມີດັ່ງຕໍ່ໄປນີ້:

1) ຄໍາເຫັນກ່ຽວກັບ ຮ່າງບົດລາຍງານສຸດທ້າຍ

ທັງສອງພ່າຍໄດ້ຕົກລົງກັນວ່າ ຫາກມີ ຄໍາເຫັນແນວໃດ, ພ່າຍລາວຈະສົ່ງຄໍາເຫັນຂອງຕົນ ກ່ຽວກັບ ຮ່າງບົດ ລາຍງານສຸດທ້າຍ ຕໍ່ ອົງການຮ່ວມມືສາກົນຂອງຍີ່ປຸ່ນ (JICA) ກ່ອນກາງເດືອນ ກຸມພາ 2001, ແຕ່ຖ້າຫາກມີຄໍາເຫັນ ໃດໆ ທີ່ຈະໄດ້ຮັບຫຼັງກໍາໜົດດັ່ງກ່າວ ແມ່ນຈະບໍ່ໄດ້ ເອົາເຂົ້າໃນ ບົດລາຍງານສຸດທ້າຍ.

2) ການຕິດຕາມ ການເຄື່ອນໄຫວ ຕໍ່ມາ ສໍາລັບການສືບຕໍ່ໂຄງການຄົ້ນຄວ້າທົດລອງ

ທັງສອງພ່າຍລາວກັບຍີ່ປຸ່ນໄດ້ອົບອັນວ່າ ການຖ່າຍທອດ ເຕັກໂນໂລຢີ ທີ່ກ່ຽວຂ້ອງ ກັບຂະແໜງການ ແມ່ນໄດ້ ຮັບການປະຕິບັດ ອ່າງສໍາເລັດພົບ. ພ່າຍລາວໄດ້ ຮັບປາກວ່າ ພ່າຍລາວ ຈະດໍາເນີນ ດ້ວຍຕົນເອງ ແຜ່ນການ ສົ່ງເສີມ ການລົງຕິດຕາມ ແລະ ວຽກງານ ສຸກຂາພິບານ ຂອງບັນດາບ້ານ ທີ່ຈະສືບຕໍ່ໂຄງການຄົ້ນຄວ້າທົດລອງ ເຖິງແມ່ນວ່າ ໂຄງການ ຈະສິ້ນສຸດແລ້ວກໍຕາມ. ການຕິດຕາມການເຄື່ອນໄຫວນີ້ ຈະລວມມີ ການກວດກາ ການນໍາໃຊ້ ແລະ ການປົກ ປັກຮັກສາ, ການຕິດຕາມອ່າງເປັນໄລຍະ ກ່ຽວກັບການ ປ່ຽນແປງ ພຶດຕິກຳ ຂອງຊາວບ້ານ ແລະ ສືບຕໍ່ ແຜ່ນການ ສົ່ງ ເສີມ ການຮັກສາອານາໄມ ຢູ່ໃນບ້ານເຫຼົ່ານັ້ນ. ພ່າຍລາວໄດ້ແຈ້ງວ່າ ຈະສຸມຄວາມພະຍາຍາມ ຂອງຕົນ ເພື່ອນໍາໃຊ້ ງົບປະມານ ທີ່ຈໍາເປັນ ເຂົ້າໃນການເຄື່ອນໄຫວດັ່ງກ່າວ.

3) ການນໍາໃຊ້ ອຸປະກອນ ຄົ້ນຄວ້າ ທີ່ຖືກຕ້ອງ

ທັງພ່າຍລາວ ແລະ ຍີ່ປຸ່ນໄດ້ ອົບອັນວ່າ ທາງພ່າຍລາວ ຈະໃຊ້ຄວາມ ພະຍາຍາມ ເພື່ອຄຸ້ມຄອງ ອຸປະກອນ ຄົ້ນ ຄວ້າອ່າງ ຖືກວິທີ ເຊິ່ງອຸປະກອນ ເຫຼົ່ານັ້ນ ແມ່ນຫ້ອງການໃຫຍ່ ຂອງອົງການຮ່ວມມືສາກົນຂອງຍີ່ປຸ່ນ (JICA) ເປັນຜູ້ ນອບໃຫ້ ພາຍຫຼັງທີ່ການຄົ້ນຄວ້າ ດັ່ງກ່າວສໍາເລັດລົງ.

# ລາຍຊື່ຜູ້ເຂົ້າຮ່ວມປະຊຸມ

ເພື່ອສົນທະນາ ຮ່າງບົດລາຍງານສຸດທ້າຍ

## ກະຊວງ ສາທາລະນະສຸກ

ທ່ານ ນາງ ຈັນທະໝອມ ມາໂນທຳ

ຫົວໜ້າຫ້ອງການ

## ອົງການນໍາສະອາດແຫ່ງຊາດ

ດຣ. ນວນຕາ ມານີພູໄຊ

ຜູ້ອໍານວຍການ

ດຣ. ທອງມາ ອົງແກ້ວບຸນມີ

ຜູ້ຊ່ວຍອໍານວຍການ

ດຣ. ສຸກສາຄອນ ຈັນທະພອນ

ຜູ້ຊ່ວຍອໍານວຍການ

ທ່ານ ກັນນາ ບາຣັນ

ຫົວໜ້າ ທີ່ປຶກສາເຕັກນິກ

ດຣ. ສຸລິນທອນ ອິນທະວົງ

ຫົວໜ້າ ພະແນກບໍລິຫານ

ດຣ. ແກ້ວອຸດົມ ນໍາເສນາ

ຮອງຫົວໜ້າ ພະແນກ ນໍາສະອາດ

ດຣ. ປົວແກ້ວ ສຸວັນທອງ

ຫົວໜ້າ ພະແນກ ສາທາ ສິ່ງແວດລ້ອມ

ນ. ທັດສະນີ ມາຫຍຸຍວົງ

ກົມສົ່ງເສີມສຸຂາພິບານ

ພະແນກ ສາທາ ສິ່ງແວດລ້ອມ

## ຄະນະຄົ້ນຄວ້າຂອງອົງການ (JICA)

ທ່ານ ໄສຈິ ພູຈິ

ຫົວໜ້າ ຄະນະ

ທ່ານ ອາກິຣິໂກະ ອູຈິຢາມາ

ສະມາຊິກ

ທ່ານ ອິດສຸມິ ອັດຊິຕະ

ສະມາຊິກ

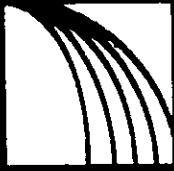
ທ່ານ ສິບຸນເຮືອງ ພັນດານຸວົງ

ສະມາຊິກ



## 11. Related Literature





**Water and  
Sanitation  
Program**

An international  
partnership to help  
the poor gain  
sustained access to  
improved water  
supply and  
sanitation services

# SANITATION & HYGIENE PROMOTION IN LAO PDR

Learning from the National Water Supply &  
Environmental Health Programme

**East Asia and  
Pacific Region**



## **Field Note**

Prepared by:

**Dr. Khonethip Phouangphet  
Dr. Soutsakhone Chanthaphone  
Santanu Lahiri  
Chander Badloe**

**March 2000**

## INTRODUCTION

In Lao PDR, as in many other countries, the provision of safe and reliable water supply and appropriate sanitation services, based on community-focused and sustainable approaches, remains a challenge.

One of the main focus areas in Lao PDR's National Water Supply and Environmental Health Programme<sup>1</sup> (NWSEHP) is sanitation and hygiene promotion. To this end, participatory hygiene analysis has been the entry point for initiating a key strategic principle - the community dialogue process.

Following a brief description of the programme background, this Learning Note describes the step-wise approach to community dialogue, with an emphasis on hygiene promotion initiatives. It defines the lessons learned thus far, based on field experience from operationalising the Lao PDR Rural Water Supply and Sanitation (RWSS) Sector Strategy in 7 selected 'spearhead' provinces, and on the nationally implemented School Sanitation and Hygiene program.

Lao PDR at a Glance	
Total population	4.6 million
Land area	236,800 km <sup>2</sup>
Rural/urban population %	85 / 15
Number of Provinces, excluding Vientiane municipality and Saysomboune Special Zone	16
Municipalities/Special Zone	2
Total number of Muangs (districts)	138
Number of ethnic groups:	> 60
Lao Loum/lowland - 60%, Lao Theung/mid-level - 30% and Lao Soung/highland - 10%	
Access to water supply-rural and urban	< 51 %
Access to sanitation - rural and urban	< 32 %
Adult literacy rate (male/female) %	58 (64/42)
Infant mortality rate (IMR), per 1,000 live births	113
Life expectancy at birth	51.3
Main causes of morbidity/mortality	Malaria, diarrhoea, respiratory infections

Source: The Laos Experience: Indigenous, Sustainable, Replicable: WSP-EAP, March 1998

## PAST APPROACHES, NEW BEGINNINGS

In the past<sup>2</sup>, rural water supply and sanitation interventions mainly focused on locations with relatively easy access. The technology and level of services offered were limited, with little scope for community dialogue.

<sup>1</sup> As set out in the National Rural Water Supply and Sanitation Sector Strategy

<sup>2</sup> In 1996, service coverage for rural water supply and sanitation reached 51% and 20% respectively during Phase I of NWSEHP.

Poor communities were used to decisions being handed down to them by projects. Their input was limited to the provision of labor and local materials. **The traditional top-down approach, with minimum community participation in decision-making, has proven to be the source of un-sustainable investments, in Lao PDR and elsewhere.**

This motivated the lead sector agency Nam Saat<sup>3</sup>, to successfully launch the Sector Strategy and Guideline National Framework in November 1997. The government prepared the strategy with technical support from the World Bank's Water and Sanitation Program for East Asia and Pacific (WSP-EAP), UNICEF and other sector partners. The strategy was the result of a 30-month policy reform and institutional strengthening process supported by Swedish International Development Cooperation Agency (Sida)<sup>4</sup>.

With the Strategy and the National Guidelines in place, the NWSEHP was launched to ensure a smooth transition from the target or coverage-oriented approach to a community-oriented process. Sida, the World Bank, UNICEF and WSP-EAP have subsequently supported a number of projects in line with the new sector strategy.

What is especially encouraging, is that newer donors in the sector such as JICA and AusAID, as well as some international NGOs, are increasingly following the Lao PDR RWSS sector strategy.

## TURNING STRATEGIC PRINCIPLES INTO PRACTICE ON THE GROUND

The demand responsive approach forms the basis of the new community focused rural water supply, sanitation and hygiene awareness activities. Communities are involved from the very early stages of the project through participatory hygiene analysis in:

- establishing their needs ( and building demand);
- selecting the right technology option for water supply and sanitation improvements (informed choice), based on their ability & willingness to pay for these services;
- the physical implementation of the interventions;
- addressing the operation and maintenance needs for water supply and/or sanitation facilities.

To promote the demand responsive approach, Nam Saat developed the "12 Steps Participatory Approach for Applying the Lao PDR RWSS Sector Strategic Principles". This has proven to be a valuable tool for

<sup>3</sup> Literally meaning 'clean water'

<sup>4</sup> For further information read "Indigenous, Sustainable, Replicable - Lessons Learned", RWSE-EAP March 1998, website: <http://www.wsp.org>

Nam Saat at central, provincial and district levels in promoting a systematic approach in each target village in the spearhead provinces where the RWSS program is implemented. Increasingly other supporting donors and NGOs in other provinces are applying the "12 Steps Participatory Approach" too.

Sanitation and Hygiene promotion starts in the Village Level Demand Assessment phase when communities, with facilitation from trained members of the Hygiene Promotion Team, identify hygiene behavior patterns and changes by themselves. Sanitation and hygiene awareness activities are then integrated in a package of improved services at the household, community and/or school level.

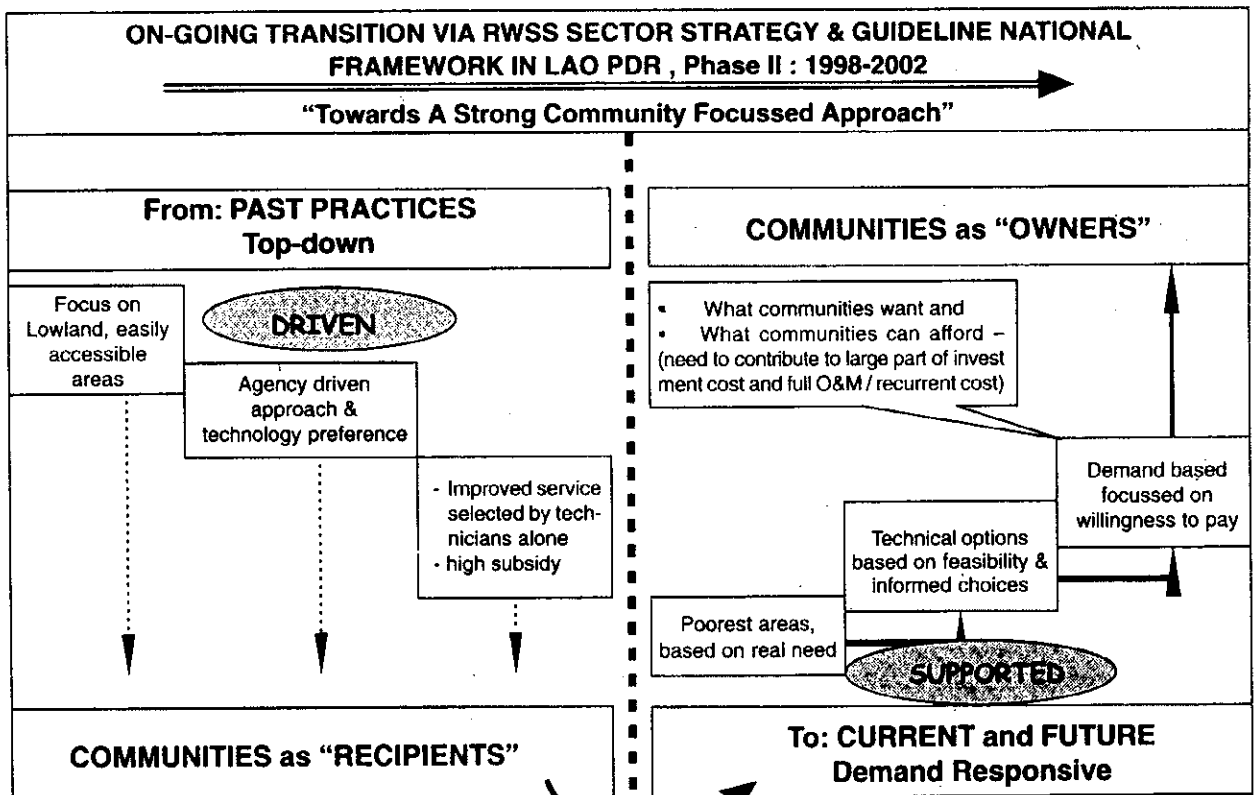
Some of the key principles relating to sanitation and hygiene promotion in the Lao PDR RWSS sector strategy are:

**Emphasis on behavioral change leading to improved hygiene** as the major intervention supported by technically sound, feasible and affordable water and sanitation options.

**New impetus to a program of school sanitation, water and hygiene**, benefiting both pupils as future citizens and partners, and the surrounding communities.

These principles have not only been integrated in the "12 Steps Participatory Approach to apply the Lao PDR Sector Strategy", but they also form an important part of the community dialogue process.

<b>The 12-Steps Participatory Approach</b>	
<b>Provincial/District Level Activities:</b>	
1.	Desk research
2.	Verification of data and partnership linking
3.	Consultation Workshop
4.	Establishing the Provincial and District Coordination Units (PCU/DCU) <sup>5</sup>
5.	Training of Field teams
6.	Project Implementation Planning
<b>Local Level Activities:</b>	
7.	Implementation of Capacity Building Plan
8.	Conduct Village Level Demand Assessment
9.	Development of Village Action Plan
10.	Approval/agreements
<b>Village Level Implementation:</b>	
11.	Implementation of Village Action Plan
12.	Monitoring, Evaluation and Learning/Feedback
<b>Notes:</b>	
•	Hygiene Awareness Promotion activities continue in steps 7-12
•	Monitoring, Evaluation and Learning/Feedback actually starts from the very first step



<sup>5</sup> PCU/DCU means multi agency Provincial and District Coordination Units respectively.

## SANITATION & HYGIENE PROMOTION— A VITAL STEP IN THE LAO PDR RWSS PROGRAM

A set of thirteen participatory learning activities<sup>6</sup> form the basis of the Community Dialogue<sup>7</sup> process for participatory hygiene assessments, and the assessment of demand for water supply and sanitation services.

### Community Dialogue Activities

- a) Community history profiling
- b) Village mapping
- c) Wealth classification: criteria for identifying the poorest communities
- d) Gender analysis of tasks/roles: household and community level
- e) Gender analysis of control of resources: household and community level
- f) Community participation profile in past development projects
- g) Prioritising of problems
- h) Health awareness assessment
- i) Hygiene awareness: rationale of existing hygiene behaviours
- j) People's perceptions of routes of faecal-oral contamination in the community
- k) People's perceptions of ways to block contamination routes
- l) Water supply ladder— existing water supply systems & presentation of options with increasing levels of service and cost
- m) Sanitation ladder— existing defecation practices and presentation of options with increasing levels of service and cost

The basic fundamentals applied in the development of effective sanitation and hygiene promotion tools as presented in the Lao PDR Sector Strategy are:

### Assessing demand

Participatory hygiene analysis is an *entry-point* for community dialogue to assess demand (or willingness to share resources) for Hygiene Awareness and Sanitation and Water Supply (HASWAS) interventions.

Sanitation and hygiene promotion takes an important place in the community dialogue process. Members of the Hygiene Promotion Team facilitate the community dialogue process, using mainly pictorial materials. Separate dialogues with men and women encourage women's participation to ensure that their voice is heard too. Villagers themselves map out the local hygiene practices and the dialogue continues with a discussion on preventive measures, using the water supply and

<sup>6</sup> Drawn from Participatory Rural Appraisal (PRA) and Participatory Hygiene And Sanitation Transformation (PHAST)

<sup>7</sup> For further information read "Demand, Informed Choice, Behavior Change – Lessons Learned", RWSG-EAP, March 1998; website: <http://www.wsp.org>

sanitation ladder as tools. Since the start of this process about 2 years ago, this process of community dialogue has been completed in 167 villages in 8 different provinces. These provinces represent various geographical locations in Lao PDR (from Phongsali - the most northern province to Sekong, - one of the most southern and poorest provinces).

Supporting Donor	Province	Number of / Villages Districts Villages	
Sida	Houaphan	2	20
Sida	Sekong	2	5
Sida	Bolikhamxai	2	10
WB IDA	Oudomxai	2	10
WB IDA	Phongsali	2	10
JICA	Bokeo	2	48
WB IDA	Luang	3	11
JICA	Namtha	2	33
AusAID	Sayabouri	3	20
<b>TOTAL</b>	<b>8</b>	<b>20</b>	<b>167</b>

Note: Sida funding through Nam Saat, UNICEF and WSP-EAP

### Responding to demand

Where there is demand for improved services, promotion of hygiene awareness starts at the individual as well as household level. The promotion of latrines starts at household level with the introduction and discussion of various technically suitable sanitation options. Trained village volunteers, the village water and sanitation committee and teachers present these options in the form of a sanitation ladder. Primary schools and clinics are also targeted for sanitation and hygiene activities.

### Generating demand

If there is no immediate demand for improvement of water supply and sanitation services in a particular village, the process is continued with only hygiene promotion activities by the village hygiene team, with monitoring and periodic support from the district hygiene promotion team. This raises the community awareness of health and hygiene issues. Hygiene promotion is continued till such time as the community expresses demand for improved services.

## TOOLS AND METHODOLOGIES FOR SANITATION AND HYGIENE PROMOTION

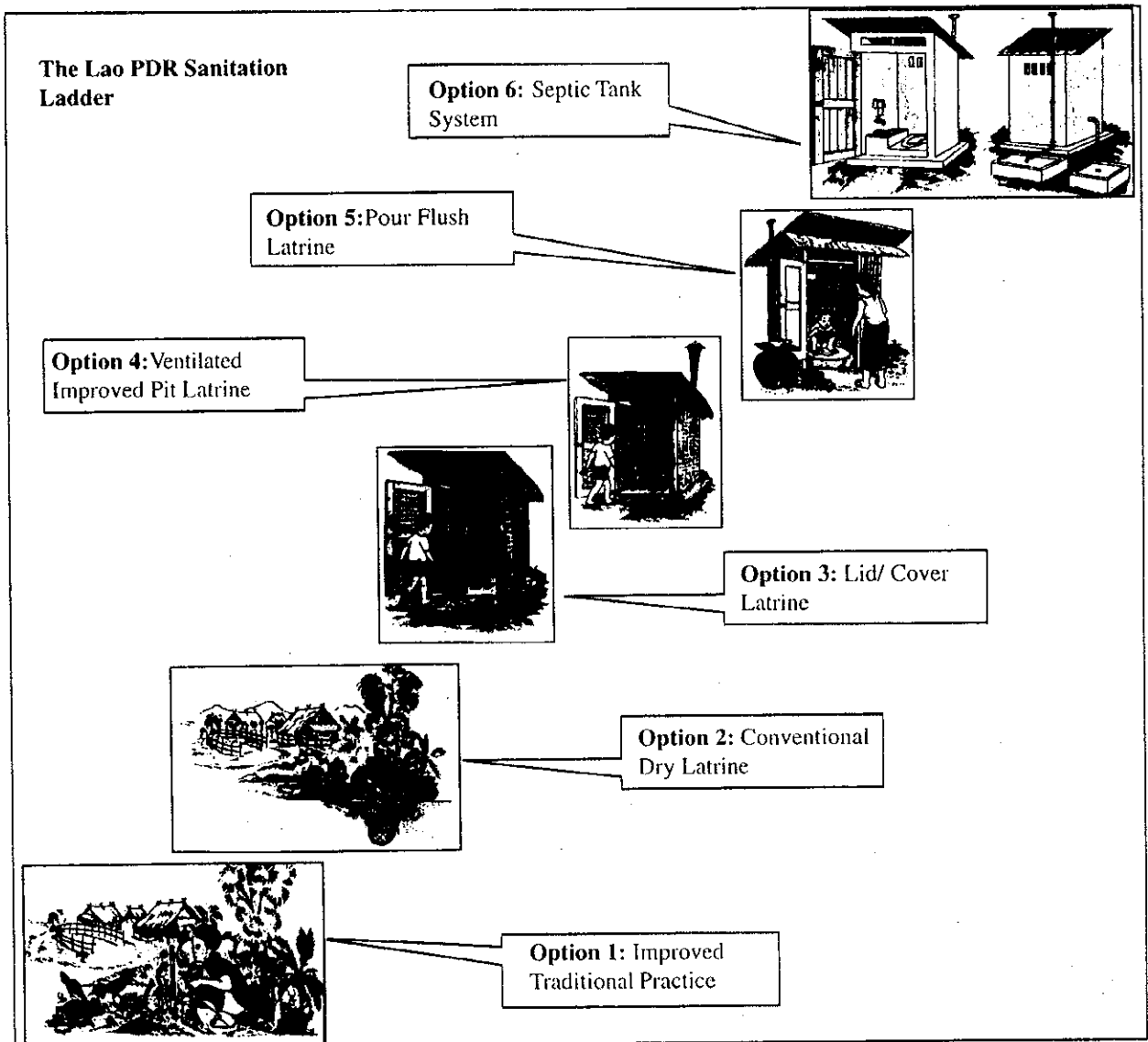
Some of the successful tools and methodologies that have been developed include the Sanitation Ladder, innovation in Sanitation and Hygiene Promotion, and School Sanitation and Hygiene Promotion.

## The Lao PDR Sanitation Ladder

The Sanitation Ladder defines a number of technology options for sanitation improvements in rural communities. Using the sanitation ladder as a basis, Nam Saat has further developed the Information Kit for Community Dialogue on Rural Sanitation for use at community level. This summarizes various technically feasible options. Each option includes:

- (i) a brief explanation of the main characteristics, using pictures and graphs;
- (ii) the advantages and disadvantages;
- (iii) the materials required for the construction - external and locally available materials; and
- (iv) an estimation of the initial investment cost, and operation and maintenance cost and requirements.

These options are presented to individuals and households through the community dialogue process. This facilitates discussion, and enables communities to make an informed and well-considered selection of the best technical solution to meet their own requirements, resources and local conditions. Apart from the Information Kit for Community Dialogue on Rural Sanitation, there is also an Informed Choice Catalogue for Rural Sanitation, which is a more comprehensive manual for use by field level facilitators. More detailed construction manuals prepared for each of the technically feasible options, for use by district/provincial level technicians, complete the series.



## An Example of Innovation in Sanitation and Hygiene Promotion

A provincial team, supported by JICA advisors, started the pilot water supply and sanitation scheme in Bokeo and Luang Namtha provinces in the north-west of Lao PDR. They used the community dialogue approach to develop a 'show- case village'. As part of the community dialogue process and to add innovation to the sanitation and hygiene promotion process, this team used multimedia equipment to facilitate the community discussion and raise hygiene awareness. They used digital cameras to capture 'a day in the life' images of village activities in some of the target villages. By afternoon, the images were prepared and ready for use in discussion with the community. The team then used these images to highlight the existing positive and negative behavior patterns. They then discussed possible interventions for changing these behavior, such as improvement of the water supply and/or sanitation situation.

### Phase II of JICA's north-west Rural Water Supply and Sanitation Study

...the study on Improvement of RWSS in northwest region of Lao PDR is now in Phase II of operation...the study is based on the Agreement for a pilot study signed between Nam Saat and JICA in October 1999.

In the pilot study phase, 16 water schemes and latrines at 12 villages will be constructed through contributions of the villagers in labor, materials and cash.

The villagers living in remote areas of Luang Namtha and Bokeo provinces who are mostly ethnic minorities are becoming aware of the need for sanitation and proper management through the community dialogues and guidance associated with the pilot study.

JICA said that it will closely monitor behavioral changes and social development of these villagers. .... The close collaboration between Nam Saat and the villagers was also becoming more apparent through these activities.

Sections from an article in the local newspaper "The Vientiane Times" of February 22-24, 2000.

## School Sanitation and Hygiene Promotion

The Primary Schools sub-project also applies the Lao PDR RWSS Sector Strategy Principles. Supported by UNICEF, and led by Nam Saat, the Ministry of Education

and several pilot communities, have successfully developed Information-Education-Communication Tools suitable for primary school students in Lao PDR. This Field Kit for Hygiene Promotion at Schools consists of a series of pictorial information sheets, and three stories. The approach followed is similar to Participatory Hygiene And Sanitation Transformation (PHAST) and Participatory Rural Appraisal (PRA) techniques.

A core group of four Central Nam Saat staff trained 19 other Nam Saat staff from 11 Provinces in the first national Training of Trainers (TOT) workshop on Hygiene Promotion towards the end of 1999. The new 'trainers' will go on to train 25 teachers of primary schools, where water supply and sanitation facilities have been provided.



## THE CAPACITY BUILDING CHALLENGE

The shift to a Demand Responsive Approach poses a challenge within Nam Saat, in terms of staff capacity at the central, provincial, district and community level. This requires preparation and adaptation of various training and promotional materials, as part of the on-going learning-by-doing approach. Nam Saat has therefore initiated the preparation of a series of Training Manuals/ Users Guides on Hygiene Awareness, Community Based Dialogue Planning, Sanitation Improvements, Community Based Financing and Management and Water Supply Improvements. Each manual consists of a series of publications for use at the community level, for Field level Facilitators and for District/Provincial Level Support and Management staff.

Training in community dialogue processes and management training has been provided to members of the Provincial Coordination Units and District Coordination Units (PCU/DCU)<sup>6</sup> in the spearhead provinces. Community Dialogue training is planned in the remaining 11 provinces. These efforts will have to be continued to further strengthen Nam Saat's capacity at all levels to effectively facilitate the demand responsive approach and the community dialogue process.

<sup>6</sup> PCU and DCU consists of representatives from Nam Saat, Lao Women's Union, Youth Union, Rural Development Committee, Department of Public Health, Department of Education and other line agencies.



## THE RESULTS SO FAR

In line with the sector strategy, Nam Saat continues to actively promote 'learning-by-doing and feed back' as one of its key principles, with a strong emphasis on a nationally driven 'step-by-step' approach. Although the transition from target driven top down approach to a stronger community focused demand responsive approach is still in its early stages, and field level implementation is ongoing in the spearhead provinces, the results so far are encouraging.

The spin-off effect to other provinces is already noticeable. The participatory hygiene analysis as an entry point in the community dialogue process progressively finds wider application from initially 7 selected 'spearhead' provinces, into the remaining 11 provinces in Lao PDR. On request from these provinces, Nam Saat has prepared community dialogue training to actively involve these provinces in the strategy implementation process, earlier than anticipated.

The results are encouraging not just to Nam Saat, but also to the supporting partners and external support agencies, from the initial supporting partners (Sida, WSP-EAP, UNICEF and the World Bank) to newer RWSS donors such as JICA and AusAID.



## LESSONS LEARNED

Although the implementation of the national sector strategy is still in its early stages, a number of key lessons have emerged from the selected Spearhead Provinces, and from the national Primary School Sanitation and Hygiene Program:

- Participatory Hygiene Analysis with a strong community focus is recognised as a successful approach for achieving sustainable changes in sanitation and hygiene-related behaviors. With the sector strategy in hand, other partners and donors are now using the community dialogue approach in their program support work.
- The community dialogue process provides a framework for district/provincial and village level facilitators to sequence the critical steps necessary to raise a community's awareness and to assess its real needs and willingness to contribute.
- The failure of past 'hygiene educational' approaches shows that communication for hygiene promotion needs more than just better knowledge on the part of the communicator. It requires improvement of the communication skills through on-going capacity development activities, supported by an appropriate set of training manuals and guided practice.
- Behavioral change does *not* happen by just 'providing information that is missing and describing exactly what people must do'.
- The greatest challenge always remains in identifying the 2 or 3 key behavioural changes to most effectively promote in each community, based on locally prevalent routes of disease transmission, identified and recognised by the community themselves.

### Acknowledgements:

Kanna Baran, Caroline van den Berg, Michael Seager, Nilanjana Mukherjee, Finn Nielsen, Malin Krook and Rafael Diaz Diaz for their contributions and review of this Field Note.

Photographs by Chander Badloe (WSP-EAP) and Dr. Izumi Atsuta (front and back cover page pictures)



For more information please contact:

**National Water Supply and Environmental Health Program (NWSEHP or Nam Saat)**

Ministry of Health,  
Junction of That Luang / Nongbon Roads,  
Vientiane, Lao PDR  
Telephone : (+ 856 - 21) 415 726 / 450 130 / 450 128  
Fax: (+ 856 - 21) 413310  
E-mail: souch@pan-laos.net.la

- **Dr. Nouanta MANIPHOUSAY**, Director, NWSEHP
- **Dr. Soutsakhone CHANTHAPHONE**, Deputy Director, NWSEHP



**NWSEHP**

**Water and Sanitation Program - East Asia and Pacific (WSP-EAP)**

The World Bank  
P.O. Box 345  
Pathou Xai  
Vientiane, Lao PDR  
Tel: (+ 856 - 021) 413 710 / 450 014 / 415 729  
Fax: (+ 856 - 021) 450 015  
Website: <http://www.wsp.org>



**Water and  
Sanitation  
Program**

**UNICEF - Water and Environmental Sanitation Section, Vientiane, Lao PDR**

P.O. Box 1080  
Vientiane, Lao PDR  
Tel: (+ 856 - 021) 315200-4  
Fax: (+ 856 - 021) 314852



**UNICEF**



**Nam Saat**

**LAO PEOPLE'S DEMOCRATIC REPUBLIC**  
**Peace, Independence, Democracy, Unity, Prosperity**

**National Water Supply and Environmental Health Programme**  
**Ministry of Health**

**STEPS TOWARDS BETTER GENDER  
BALANCE IN RURAL WATER SUPPLY AND  
SANITATION SECTOR IN LAO PDR**  
**FROM STRATEGY INTO PRACTICE**



**World Bank Water and  
Sanitation Program –  
East Asia and the Pacific**



**A SITUATION REPORT**



**Vientiane, Lao PDR**  
**Final Version, January 2001**

## Preface

---

This Situation Report on Gender in Rural Water Supply and Sanitation Sector in Lao PDR is prepared by the National Centre for Environmental Health and Water Supply (Nam Saat) as part of its activities to implement the Annual Workplan for the year 1999-2000. This report tries to summarize some key achievements and developments in Lao PDR to promote more gender balanced approaches in the Rural Water Supply and Sanitation Programme.

### ACKNOWLEDGEMENTS

Nam Saat received support and overall guidance for compiling this Gender Situation Report on Gender in Rural Water and Sanitation Sector in Lao PDR from the Water and Sanitation Program - East Asia and Pacific (WSP-EAP) of the World Bank. Valuable inputs also came from UNICEF, Japan International Cooperation Agency (JICA), and the Gender Resource Information in Development (GRID) of the Lao Women's Union.

This report reflects the findings, comments and contributions made by various water, sanitation and gender professionals. In particular, for their contributions and review, Nam Saat expresses its appreciation to:

Boel Nyberg, Anna Collins-Falk, Dr. Outhaki Khampoui, Dr. Khonethip Phuangphet, Dr. Tayphasanh Fengthong, Kheodokmay Phonepaseuth, Sengsavanh Vongsiprasom, Thomas Meadley, Eleni Karkas, Sybounheuang Phandanouvong, Dr. Thongma Ongkeobounmy, Dr. Soutsakhone Chanthaphone, Dr. Khonsavanh Malibaiphit, Thatsany Manivong, Bounthanom Phimmason, Chantha Vongthavady, Ny Luangkhot, Noriyo Aoki, Phouipaseuth, Sisavanh Phanouvong, Malin Krook, Patricia DeBoer, Kanna Barran, Caroline van den Berg, Nilanjana Mukherjee, Santanu Lahiri, Rafael Diaz Diaz, and Chander Badloe.

The preparation of this situation report was made possible through funds from the Swedish International Development Cooperation Agency (Sida) which has given strong support to the Nam Saat's work and to integrating gender issues into the rural water and sanitation sector in Lao PDR.

Photographs by Chander Badloe, Chong Kham and Dr. Izumi Atsuda.

Initial draft report prepared by Ms. Jacquelyn Chagnon, an independent consultant to WSP-EAP.

Report finalization, edit and lay-out by Chander Badloe, WSP-EAP.

## Contents

---

Introduction .....	4
Gender Development in a Global Context .....	5
Gender Development in Lao PDR in a Historic Perspective .....	5
Gender and Water Supply & Sanitation in Lao PDR .....	6
Participatory Approach in Communities Promotes Gender Equity .....	7
Gender Development in Lao PDR at a Glance .....	8
Positive Gender Steps at the Central Nam Saat .....	10
Achieving Gender Balance in Staffing is Challenging .....	11
District and Provincial Women Staff Essential for Local Effectiveness .....	12
Several Small Steps Make a Big One .....	14
Nam Saat Policy on Promoting Gender .....	15

## Introduction

---

During the 1990's the Lao People's Democratic Republic has made progress towards improving *gender equity*<sup>1</sup>. Some of the key legal and practical steps that the Government has taken to provide a national framework for promotion of gender include:

- The new Lao Constitution from 1991 which guarantees equal rights for women and men.
- The Government's endorsement of "The Twelve Areas of Critical Concern" from the 1995 Beijing Declaration and the Platform for Action for the Advancement of Women of the International Conference on Women in Beijing<sup>2</sup>. Some of the relevant areas of concerns are *Women and Health, Women in Power and Decision-Making, Institutional Mechanisms for the Advancement of Women, Women and the Environment*.
- The Government's and external support agencies (ESAs) emphasis on women's participation in national and local development efforts.
- Gradually, the appointment of more women into leadership positions in the Government and the National Revolutionary Party.

In line with these national progressive actions and the international experience related to gender promotion in water supply and sanitation projects, in 1997 the National Center for Environmental Health and Water Supply (commonly known as Nam Saat) incorporated the principles of gender equity and empowerment into its National Rural Water Supply and Sanitation Sector Strategy and Guideline National Framework (hereafter called the RWSS Strategy).

Nam Saat is the national government agency in the Ministry of Public Health responsible for hygiene promotion, water supply and sanitation in Lao PDR. Its primary local partners are the Ministry of Education, the Lao Women's Union (LWU), the Lao Youth Union (LYU), the Lao National Front for Reconstruction (NLSS), the Department of Rural Development (DRD) and other local partners.

This Gender Situation Report assesses Nam Saat's step-by-step actions to move gender equality and strategic principle into practice. Sections include brief overviews of gender development taken globally, in Lao PDR and within the Nam Saat programme. It then highlights Nam Saat's stance on gender improvements in community level activities and notes the ongoing challenges of changing daily personnel attitudes and actions within Nam Saat and its partner agencies. This report aims to identify some of the lingering gaps in *gender balance* and *gender sensitivity*. Finally, this report shows how Nam Saat can incorporate gender-sensitive actions into its main activities, with allowed staff time and effort.

---

<sup>1</sup> Gender Equity = giving equal opportunity to women and men in education, work and social enhancement.

<sup>2</sup> For more information, reference is made to "The 12 Areas of Critical Concern - The Beijing Platform for Action for the Advancement of Women", GRID Centre, LWU.

## Gender Development in a Global Context

Worldwide research shows that a country's economic development and well-being improves as gender equity rises. In other words, when women and men share equally the benefits and responsibilities as well as burdens of family life, development has a greater chance of being efficient, effective, sustainable and just.

In the past decades, research has shown that gender issues need to be addressed as they influence sustainability and effective use of water supply and sanitation services. These findings have gained global acceptance during international meetings, such as the International Drinking Water Supply and Sanitation Decade (1981-1990) and the Fourth World Conference on Women in Beijing in September 1995. Now that the critical, important and central role of women in the water supply and sanitation sector is widely recognized, these research findings have to be implemented in the field. About the same time, international consensus began to emerge that strategies for designing and implementing policies, programs and projects in water and sanitation were more successful when they used demand-driven, participatory approaches rather than traditional supply driven approaches. Some lessons from the experience gained over the last decade in terms of gender, water and sanitation are summarized in Box 1<sup>3</sup>. A recent global study by the Water and Sanitation Program and the IRC International Water and Sanitation Centre produced empirical evidence that demand-responsive approaches that are gender-sensitive and poverty-targeted are significantly associated with services that are better sustained and more effectively used by user communities<sup>4</sup>.

### BOX 1: LESSONS FROM PROJECT EXPERIENCE ON GENDER, WATER AND SANITATION:

1. Gender and the role of women is a central concern in water and sanitation
2. Specific, simple mechanisms must be created to ensure women's involvement
3. Gender analysis is integral to project identification and data collection
4. Attention to gender needs to start as early as possible
5. Ensuring both women's and men's participation improves project performance
6. A learning-by-doing approach is more gender-responsive than a blueprint approach which assumes that everything is known can be planned in advance
7. Projects are more effective when both women's and men's preferences about "hardware / choice of technology" are addressed
8. Women and men promote project goals through both their traditional and non-traditional roles
9. Non-governmental organizations and especially women's groups can facilitate a gender balanced approach
10. Gender-related indicators should be included when assessing project performance
11. Gender issues are important because they influence sustainability and effective use of facilities

## Gender Development in Lao PDR in a Historic Perspective

In the mid-1990's, with persistent pressures from the National Revolutionary Party, the LWU and the Human Resource Development Committee and support from UNICEF, various ESAs and NGOs, public awareness and attitudes about *gender equity* in the Lao PDR began to change. As a result, many development programs are now actively striving for:

- *Gender awareness* to help people broaden their attitudes about what women and men are capable of learning and doing at work and at home.
- *Gender sensitivity* to understand and take action on the barriers which limit the roles and duties of women and sometimes men;

<sup>3</sup> "Toolkit on Gender in Water and Sanitation", Gender Toolkit Series No. 2, The World Bank, 1996.

<sup>4</sup> "Linking Sustainability with Demand, Gender and Poverty: A study in community-managed water supply projects in 15 countries", by Bruce Gross, Christine van Wijk and Nilanjana Mukherjee, WSP, 2000.

- *Gender balance* to give equal opportunity to women and men in learning, decision-making, and demonstrating their work abilities;
- *Gender mainstreaming* to incorporate gender sensitive thinking and actions into the core of work and social setting without having to take special actions.

## Gender and Water Supply & Sanitation in Lao PDR

In line with the Government's national progressive agenda, and the international experience with gender promotion in water supply and sanitation projects in various parts of the world, Nam Saat's National Strategy recognized the advantages of *gender equity* by specifying several gender strategies.

1. Encourage women's involvement in community decision-making, implementation and management of water supply, sanitation and hygiene activities.
2. Increase the number of Nam Saat women personnel at every level and in all major components, including the use of *Gender Balance Targets (GBT)*<sup>5</sup>.
3. Set up a special training apprenticeship for Nam Saat's work for rural and ethnic minority women who lack the education level for regular government service.
4. Conduct gender awareness training for all staff.
5. Ensure that gender dis-aggregated data is collected and analyzed.

Since the approval of the National RWSS Strategy in 1997, Nam Saat has made notable progress in its community level work as the analysis below shows. These statements show that incorporating gender balance and sensitivity into its institutional make-up remains a challenge for the future. However, herein lie some lessons from which Nam Saat is basing its future steps towards a more gender balanced approach and gender equity.

IMPROVING GENDER SENSITIVITY IN NAM SAAT	
<p><i>What was usually said in the PAST:</i></p> <p><i>"Field work is too dangerous and strenuous for women staff therefore they should be assigned office duties".</i></p> <p><i>"Women do not have the strength and ability to do technical work, and therefore should be assigned to office tasks".</i></p> <p><i>"Village women do not have the education to be on management committees".</i></p> <p><i>"Women should not be promoted as leaders and decision-makers as they always leave work to have babies".</i></p>	<p><i>What is NOW increasingly heard :</i></p> <p><i>"Women make effective field staff, especially in promoting community dialogues, community organizing and hygiene awareness, and encouraging village women's participation".</i></p> <p><i>"To develop Nam Saat's full human resource potential, both men and women staff should be given opportunities for training and assignments, according to their abilities and interests".</i></p> <p><i>"Village water management groups become effective and efficient when men and women share decision-making and responsibilities".</i></p> <p><i>"Good leadership is based upon ability and experience, regardless of a person's biological sex and marital status".</i></p>

<sup>5</sup> Gender Balance Targets = Percentages set for women and men's participation for each activity of the Plans of Actions. The targets are achievable and reasonable, and intended to progressively move towards a 50 : 50 ratio.



## Participatory Approach in Communities Promotes Gender Equity

Nam Saat and its partners support the principle of empowering community women in all aspects of its work. In the past, community decisions were made by a small group of village leaders, which almost always consisted of only men except for the local LWU representative. Applying the Participatory Approach in a systematic manner opens opportunities for both women and men to be involved together in every aspect of the project. For many women, especially those from ethnic minority groups, Nam Saat's new Participatory Approach offers women their first occasion to discuss, plan, decide, implement and manage village action equally with men. Through this approach, Nam Saat has put gender equity into the core of its community work. Some elements of such a systematic Participatory Approach in the provision of water supply and sanitation services currently applied or planned for application are:

**By its nature, the Participatory Approach promotes gender equity into the mainstream of the Nam Saat's work and improves women's opportunities to participate.**

- \* *The Community Dialogue Process*<sup>6</sup> encourages women and men to voice their opinions separately and then come to a consensus.
- \* *Informed Choice*: Women and men choose the most cost-effective, appropriate technology for the village (Informed Choice).
- \* *Community User Groups*: User Groups are gender balanced in both duties and numbers.
- \* *Consensus on Village Agreements*: Village Agreements are discussed in the village in order to build ownership before signing.
- \* *Contribution during Construction*: Women and men participate with skilled and unskilled labor during the construction.
- \* *Hygiene Promotion*: Women and men learn and practice improved hygiene to improve health and well being.
- \* *Hygiene Promotion in Schools*: Girls and boys in school are taught good hygiene practices.

To ensure that women are not disenfranchised once Nam Saat's project work is completed, it is essential that:

- Nam Saat continues to adhere to the key principles of the participatory approach which is now being implemented by Nam Saat in the provinces, districts and villages.
- Nam Saat monitors the effects of this participatory approach and its effect on gender equity over the long-term.



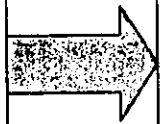
*Community Dialogue in Ban Yang Va Village, Oudomxay Province*

<sup>6</sup> For further information, see "Manual on the 12 Steps Approach in Participatory Planning & Implementation, Part A", Nam Saat/WSP-EAP/UNICEF, June 2000 and "Manual on Community Dialogue", Nam Saat/WSP-EAP/UNICEF, July 2000.

## GENDER DEVELOPMENT IN LAO PDR AT A GLANCE

### 1985: Gender Concerns Invisible

- Nam Saat consults and trains mainly men community leaders on water supply and management issues.
- LWU trains mainly women on hygiene.
- Nam Saat field staff are almost all men.
- Nam Saat leadership at all levels is mostly men.



### 1997: Gender Concerns Raised in National Strategy on Rural Water Supply and Environmental Health which includes:

- A new effort to increase the women staff within Nam Saat at every level and in all major components, including the use of *Gender Balance Targets*.
- A special training internship mechanism for the recruitment of rural women and ethnic minority volunteers who do not have the education levels for regular government service.
- Regular staff training in *gender awareness and sensitivity*.
- *Gender dis-aggregated data* in surveys and analysis for improving annual plans of actions.
- Encouragement of women's involvement in community decision-making, implementation and management of water supply, sanitation and hygiene activities.



### 1986-90: LWU Begins WID Efforts

- LWU begins to pilot Women in Development (WID) projects which focus on water supply and sanitation.
- Lao Women's Congress of 1989 endorses women's participation in community development, noting LWU's effective results in water supply, hygiene and sanitation with Nam Saat.



### 1991: Constitution Calls for Equality

Lao Constitution declares equality of women and men. UNICEF, ESAs and many NGOs call for increased women's participation in Nam Saat work.



### 1995: International Gender Platforms

Following active participation, Lao Government endorses twelve Gender Platforms adopted in the International Conference on Women in Beijing.



## GENDER DEVELOPMENT IN LAO PDR AT A GLANCE

### 1998 – 2000 : Gender Learning Begins

#### At Central Nam Saat Level

- Annual Workplan for 1999-2000 sets *Gender Balance Targets* for each proposed training activity (except TOT on Management).
- Two women hygienists that left the unit in 1997 were replaced by two women.
- Gender Awareness Workshop for central leaderships takes place.
- Two planning staff and adviser attend two week gender and water supply training in the Netherlands.
- Dis-aggregated data collected on staffing in JICA funded projects in Bokeo and Luang Namtha provinces.
- No Gender Balance Targets set for other activities (e.g. recruitment of staff, participants in planning and review meetings).
- Women have not yet been appointed in senior decision making positions.
- Draft Gender Plan of Action for 1999-2000 is only partially implemented.
- Recruitment of regional /national advisers strives for gender balance. Staffing remains largely male, providing few women role models.
- Members of the Gender Working Group find meeting together difficult due to workloads and conflicting schedules.

#### At Provincial and District Nam Saat Level

- Nam Saat field offices add a few women, but staffing largely remains gender imbalanced.
- Two Sekong women trained as drillers and one Bolikhamxai woman trained as store manager, presenting possible role models for the future.
- Spearhead provinces improve gender balance in teamwork in communities with partners.
- Gender Development Plan prepared by Oudomxay Province

#### At the Community Level

- Community Dialogue Promotes opportunities for both men and women to express their viewpoints and make decisions together.
- Within certain ethnic groups, women's participation remains weak, perhaps because of poor cultural sensitivity.
- Users groups need to be gender balanced.
- Men and women participate in unskilled labor tasks, but not in skilled labor tasks.
- Boys and girls learn about hygiene in schools.

### 2001 and onwards: Future Targets for Gender Equity, constituting move from Women in Development to Gender and Development approach

#### At Central Nam Saat Level

- Set Nam Saat Policy on *Gender Equity* and incorporate into annual personnel recruitment and training plans.
- Insert a minimum of three gender strengthening actions into each annual Plan of Action.
- Set and monitor annually *Gender Balance Targets* for personnel recruitment, technical and non-technical job positions, and training activities.
- Train Nam Saat planning staff on analysis of dis-aggregated gender data.
- Provide Nam Saat senior leadership with advanced personnel management course with strong emphasis on gender sensitivity.
- Recruitment for further advisory support will aim for gender balance.
- Set the framework for a pilot project for Nam Saat Apprenticeships for Women and Minorities in districts and provinces.

#### At Provincial and District Nam Saat Level

- Incorporate gender awareness training into all workshops and meetings. Include discussions about differences on gender roles and customs observed among various ethnic groups.
- Set up pilot project on Nam Saat Apprenticeships for Women and Minorities.
- Examine personnel needs and gender balances annually and set Gender Balance Targets.
- Implementation of Gender Development Plan in Oudomxay Province

#### At the Community Level

- Begin gender sensitive monitoring, noting impact on quality of work and effectiveness of members of User Group Committees on sustained operations and maintenance.
- Include women in skilled labor training and in technical decisions.
- Intensify hygiene promotion among both men and women.

### **Gender-Sensitive Participation in Ethnic Minority Villages**

In early 2000, a JICA-funded assessment of community participation provided useful gender dis-aggregated observations about community participation in decision-making and physical labor in 34 ethnic minority villages in Bokeo and Luang Nam Tha. The sample showed a range of ethnicity (Leu, Doi, Lamae, Yuan, Thai Dam, Khmu, Akha and Hmong), economic well-being (ownership of lowland, upland and mixed fields) and locations (close to district towns to remote).

Women and men's participation in decision-making was rated high in 28 out of 34 villages (82%). People's participation in physical construction was similar, with higher women's participation than men's, except in those villages close to the district center. In only one village a poor gender scenario was seen: women's participation in decision-making was negligible, but they did almost all the physical construction. Survey data also showed differences in participation among the ethnic groups. Most of the Leu and Yuan villages had a high or very high level of women's participation in village decision-making and in construction activities, regardless of the gender factor. Hmong, Khmu, Lamae, Doi villages did not show the same level of women's participation in similar activities as the Leu and Yuan villages.

This gender-sensitive assessment technique which mainly uses observations and key informant discussions is relatively easy to implement and can produce a tracking of gender participation in decision-making, construction and operations and maintenance. After defining the steps and criteria for the observations, provincial-monitoring staff could be trained to perform these assessments regularly. With such data, Nam Saat Central could be trained to make analytical gender assessments.

## **Positive Gender Steps at the Central Nam Saat**

Since 1997, Nam Saat Central has undertaken several small noteworthy steps towards gender development in rural water supply and sanitation in Lao PDR. Central leadership, advisors and Supporting Agencies attended a one-day Gender Awareness Workshop in early 2000. This will need to be repeated at least annually to refresh the learning and assess the gender progress. Similar training also need to be encouraged at the provincial and district levels.

Also, a system for collecting gender dis-aggregated data on personnel records has been introduced, making future gender analysis possible on Nam Saat's staffing patterns. However, besides staffing pattern, other ways of becoming more gender-sensitive also needs to be built into the project performance monitoring systems which is essential for monitoring the progress toward gender balance in terms of numbers, positions and types of responsibilities. This initiatives are in line with the Prime Minister Decree on Gender Statistics<sup>7</sup>.

Nam Saat Central is witnessing a severe work overload as a result of increasing program activities, while staff numbers do not increase simultaneously. The work overload hindered the full implementation of the forward-looking Gender Plan of Action for 1999-2000 for Water Supply and Sanitation. This plan called for 1) conducting a baseline gender survey, 2) setting a national gender policy for Nam Saat and 3) developing detailed staff gender training courses and programmes.

Nam Saat recognizes that it is best to plan achievable gender steps which do not consume much staff time or energy for only gender activities and which fit into ongoing main activities.

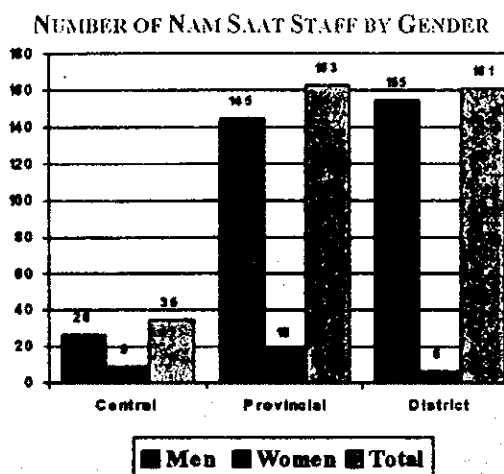
This Plan, developed by two Nam Saat planning staff and an advisor during a two-week specialized gender and water supply training course in the Netherlands, proved too ambitious given the severe staff and time constraints faced by Nam Saat. Even the designated staff of the Gender Working Group rarely found time to meet. This calls for a strategic plan to mainstream gender through existing activities and not through special additional activities. Otherwise, it tends to become an additional burden for a small group of people on top of their other work and hence not so effective.

<sup>7</sup> Decree No. 0009, May 2000 : All official data collection processes should integrate gender statistics and promote dis-aggregated data collection

## Achieving Gender Balance in Staffing is Challenging

One persisting gender weakness lies in personnel recruitment and position assignments at all levels. To achieve a gender balance within Nam Saat, women and men should be given the chance to be leaders, managers, social motivators, and technicians based upon their abilities and interests.

Generally, women are under-represented in the overall Nam Saat organization. Only 33 staff, equal to roughly 8 percent of the total staff, are women. Overall, at the central level, women make up 26%, compared to 11 % in the provinces and only 4 percent in the districts. This contrasts strongly with other departments in the Ministry of Public Health, where women make up 55 percent of the total overall staff and where the number of female professionals is exceptionally high.



At all Nam Saat levels, there are no senior women managers. This rate compares poorly to the national civil service average of 6 percent. Despite the significant number of qualified professional women in the Ministry of Public Health, Nam Saat has no policy for giving professionally qualified women preference when filling vacant senior and mid-level management positions.

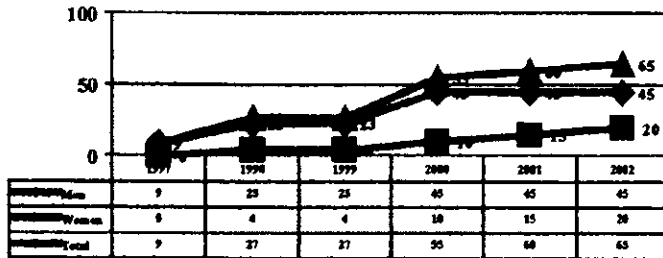
At the central office, strengthening of the hygiene promotion activities saw an increase in the percentage of women technical staff. Presently, at the provincial and district levels, women technicians comprise 7 percent of the total number of staff, indicating a slight growth compared to 1997 Nam Saat personnel data. In part, these rates mirror the 66% illiteracy rate among women in Lao PDR. They also reflect national gender biases in employment: women rarely are assigned to technical designing and surveying, and construction positions, and men are less likely to be given secretarial work.

Nam Saat is in the process to finalize its Human Resource Development Plan and to widely implement its Gender Policy, both of which will provide useful insights for further improving the gender balance. With the number of women staff expected to increase, that the number of women role models is also expected to rise which can further build confidence among Nam Saat staff and attract other women into Nam Saat's program.

It is noted in this regard, that the 1999-2000 Work Plan did set Gender Balance Targets (GBTs) for proposed training activities. An analysis on the outcome of reaching those targets will be most instructive for setting GBTs in other critical activities of the Nam Saat programme, such as staff recruitment, staff involvement in planning and review meetings. Similar target setting is considered very useful and needs to be continued.

### Setting Gender Balance Targets – an example from Oudomxay

Gender Situation and Development Plan, Oudomxay Province, Start-up Workshop, April 2000



It was agreed in the start-up workshop in February 2000 to increase the capacity of the provincial and district units such as the managing secretariat, the provincial/district coordination units, the hygiene promotion and technical teams by gradually recruiting more women than men. As is shown, from 2000 onwards, the number of men staff is planned to remain constant while the number of women staff will increase to 20 % or 31% by the year 2002.

In all Provincial Implementation Planning workshops, Nam Saat requested the provinces to have a gender balanced participation. Good intentions, however, do not always produce results. In the July 2000 Workshop for several southern provinces, for example, no provincial women attended, despite instructions from central Nam Saat and designated funds.

Such imbalanced gender participation indicates that leaders selecting participants in various activities are not yet recognizing the need for women's participation. As a result, they designate only heads of provincial departments, mostly men, and the LWU representatives, who are often busy and overburdened with

“representing women.” Meanwhile, the potential of plentiful professional women in the health and education sectors are not fully being recognized.

To attain gender balance in staffing requires gender-sensitive policies, strategies, and targeted planning & monitoring and committed leadership in Nam Saat.

Although recognized that gender balance in staffing is an important, but not the only institutional factor that needs to be addressed. The need for clear strategy on gender equity is called for, which also needs to focus on other essential factors such as a) making gender

equity explicit in policies and project/program objectives, b) introducing gender sensitive project performance and staff performance monitoring indicators, c) using gender-segregated planning and monitoring systems, d) applying training and incentives for gender sensitive performance, e) having skills mix and gender balance in staffing. All these factors need to be present in a strategy to make such a institutional strategy a more powerful tool for change.

### District and Provincial Women Staff Essential for Local Effectiveness



Women's active participation in construction.

As suggested in the national Sector Strategy, Nam Saat has established valuable alliances with the LWU, LYU, Hygiene Units and Education Departments. Inter-sectoral teamwork is crucial for performing participatory planning, community dialogues and hygiene promotion activities at provincial and district levels. These partnerships actually help to boost the gender balance in field teams, as Nam Saat technicians are predominantly men.

However, there is a negative side to this. By relying heavily on partners for creating

gender balance in staffing, Nam Saat's severe gender imbalance in the provinces and districts is masked and the pattern of staff selection and work assignments remains largely as in the past - men are assigned field work and management positions and women continue to be assigned basic office tasks<sup>8</sup>. Furthermore, the gender discrepancy hampers Nam Saat's overall effectiveness, especially in communicating with village women, the main collectors of water supply and promoters of hygiene change.

In remote under-served areas where few local women have attained minimal education for government service, Nam Saat recruitment will need innovative actions, such as developing an apprenticeship program for women.

One of the added barriers that Nam Saat faces, particularly in under-served districts, is that extremely few women, especially among the ethnic minorities, attain a high school diploma, the latter being a requirement for becoming a civil servant. In addition to this, national budget constraints restrict the hiring of additional personnel. Yet, it is believed that without women district staff, the persistent gender and linguistic barriers found in most ethnic minority settings will not be eased and as such hinder the provision of sustainable water supply and sanitation services. One innovative solution is to form a special work apprenticeship program to train and recruit women who have had little opportunity for education and work.

**Special Work Apprenticeship Program:  
Filling the Gender Personnel Gaps in Poor Areas**

To service difficult-to-reach areas, where basic education and work opportunities are limited, an innovative apprenticeship program for women and ethnic minorities is emerging. One model set up by the Sekong Indigenous People's Development Programme (SIP-Dev) mentors nine district development trainees (5 women, 4 men, and all ethnic minorities). The target is to provide them with continuous on-the-job training in community development (8 months / year) and adult education classes (4 months / year) for up to 5 years. In return, SIP-Dev builds a critical core of women and ethnic minority developers without whom the institution's work could not be implemented over the long-term. The apprentices receive a modest trainee stipend (equivalent to a low level government salary). The annual cost for the training, and stipends of 9 apprenticeships is less than \$10,000. Funded through donor support, the apprentices are not government-salaried staff, but vocational trainees.

**Personal Profile of Ms. Souvannali, so far the only female technician with Nam Saat in Sayaboury province<sup>9</sup>**

Ms. Souvannali (Nali) started working at the provincial Nam Saat office about three years ago after graduating in nursing with a focus on hygiene education. Her original job was accountant but she also did secretarial work.

Her supervisor, Dr. Sythat, encouraged Nali to go with him and the all-male technical team when they went into villages because he believed that a woman would make village women feel more comfortable. He was right; many women were much more interested and willing to talk with Nali than they would have been with an all-male technical team. At first, Dr. Sythat had to support Nali's work by helping her get familiarized with participatory extension methods but she learned quickly and assumed more responsibility with every visit.

Through the years, Nali's experience and knowledge continued to increase as she moved from needs assessment in villages to more technical work as well. Now Nali has finished studying *Auto-cad*, a computer design program used by water technicians for building Gravity-fed Water Systems. She has been on site for the construction of several such systems and knows a lot about designing and building water and sanitation infrastructure. Her three years experience working with the Nam Saat team in Sayaboury has been a time of learning and exchanging. Having Nali on the technical team when going into villages sends a positive message to villagers regarding the role of women in clean water work - that water supply work is not just men's work. This contributes to the acceptance of women as full members of water user groups. Because Nali enjoys work with villagers, many people benefit from her knowledge and experience. She loves the challenges of her work.

*"I have many years of experience... I can help with construction, I can do needs assessment with villagers and I know about what it takes to build latrines or Gravity-fed Water Systems in rural villages"* - Souvannali, September 2000

<sup>8</sup> With a few exceptions: 2 drillers in Sekong province, 1 store manager in Houphan and 1 technician in Sayaboury.

<sup>9</sup> information Provided by Save the Children Australia, Lao PDR

## Several Small Steps Make a Big One

---

Nam Saat has begun to recognize the practical advantages of promoting Gender Equity and empowering women. Furthermore, it is finding practical creative solutions to overcome its gender barriers, to improve gender balances, and to undertake gender sensitive action. From Nam Saat's gender-focused efforts in the late 1990's, three main lessons have emerged.

1. If implemented within an overall framework, consistently taking **small gender-sensitive steps** can lead to a big step forward on gender equity and the advancement of women.
2. Within ongoing, main activities, there are **numerous opportunities to include gender-sensitive actions** with minimal staff time and inputs.
3. **Gender-sensitized leaders** with strong commitment for achieving gender equity are crucial for guiding gender policies and actions at all levels.

With these lessons in mind, Nam Saat Central endeavors to undertake three small gender steps with minimal amounts of time and staffing which should spark broader gender actions.

1. Draft a short **Nam Saat Policy on the Promotion Gender Equity** for consideration in Nam Saat's Annual Review Meeting.
2. Finalize the **Human Resource Development Plan with its Annual Plan of Action**, ensuring that recommendations are gender-sensitive and that gender balanced approaches are applied in the human resource development of Nam Saat at all levels.
3. Draft a brief **Concept Paper for a Nam Saat Pilot Apprenticeship Programme** for recruiting women in under-served areas.

Furthermore, Nam Saat intends to propose a series of small gender-sensitive steps for consideration, review and reporting at each annual work plan such:

- Examine the progress towards gender equity at the Annual Review Meeting.
- Target at least three new achievable gender-sensitive actions for the year.
- Set Gender Balance Targets for all activities involving meetings, training, study tours, and recruitment, and assess the progress in the year.
- Require that all reporting contain gender dis-aggregated data and a section on the gender situation and problems encountered.
- Include in job descriptions the phrase "*women are urged to apply*" and "*qualifications being equal, women will be given preference*" as a initial step toward improving the noted weakness in personnel recruitment and positions assignment at all levels.

Collectively, these progressive gender actions should not only improve Nam Saat's gender equity, but also provide useful lessons for other government departments in the Lao PDR and elsewhere.



## Nam Saat Policy on Promoting Gender

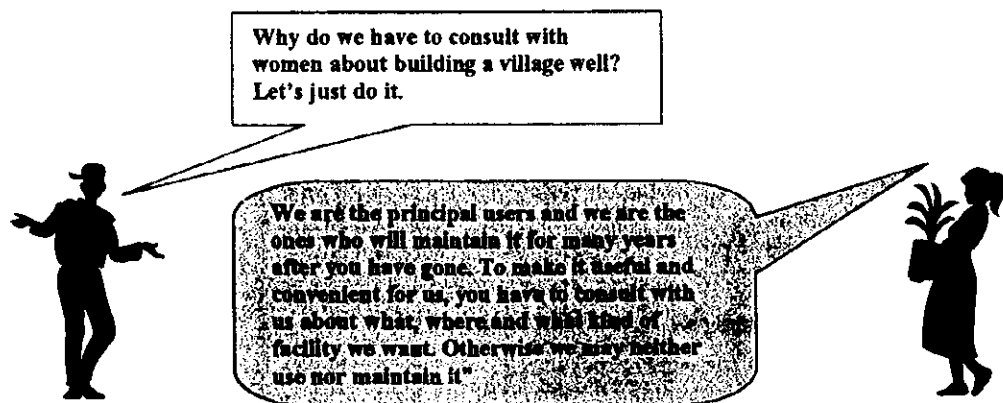
---

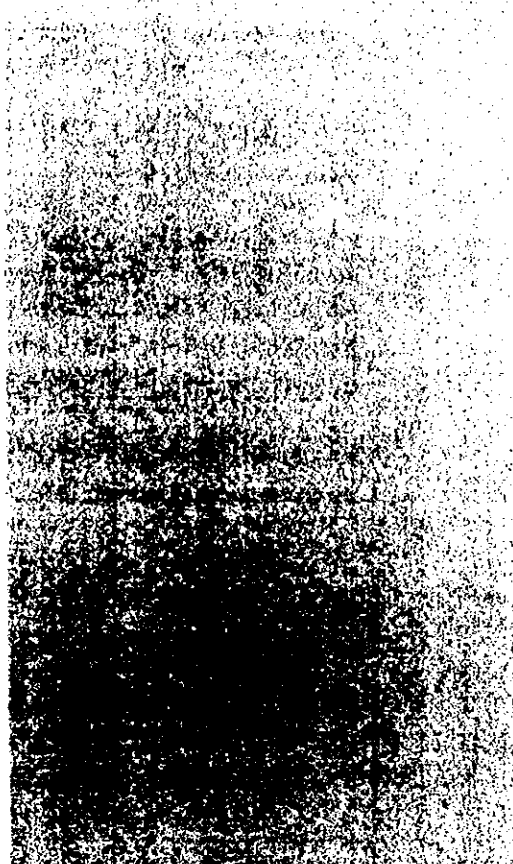
The National Center for Environmental Health and Water Supply (commonly known as Nam Saat) affirms the Constitutional right that all women and men have equal rights. As stated in its Rural Water Supply and Environmental Health Sector Strategy, Nam Saat endorses the policy of promoting equal gender rights and opportunities within all aspects of its program.

In accord with that policy, Nam Saat staff, partners agencies and external support agencies are strongly urged to:

1. Ensure equal opportunity for women staff of Nam Saat and its partner agencies to participate in and to lead activities in planning, implementation, evaluation and learning;
2. Foster a professional atmosphere of gender sensitivity and gender awareness;
3. Improve the gender balance in its overall personnel staffing, particularly position related to hygiene awareness, design and survey and senior management;
4. Enable women as well as men to voice their concerns and ideas, make decisions, and have access to the learning, power, and benefits.

Presented to all participants at the Annual Review and Planning Meeting,  
7-11 August 2000, Thalat, Vientiane Province





***For further information please contact:***

**National Centre for Environmental Health and Water Supply (Nam Saat)**  
Ministry of Public Health  
Junction of That Luang and Nongbon Roads,  
Vientiane, Lao PDR  
Telephone: (856-21) 415 – 726, 450 – 130, 450 – 126  
Fax: (856-21) 413 – 310  
Email: [soutch@laotel.com](mailto:soutch@laotel.com)

Dr. Nouanta Maniphousay, Director Nam Saat  
Dr. Southsakhone Chanthaphone, Deputy Director Nam Saat  
Dr. Khonethip Phuangphet, Environmental Health Section, Nam Saat

**Water and Sanitation Program – East Asia and Pacific (WSP-EAP)**  
The World Bank  
P.O. Box 345  
Pathou Xai, Vientiane, Lao PDR  
Telephone: (856-21) 413 – 710, 450 – 014, 415 – 729  
Fax: (856-21) 450 – 015  
Website: <http://www.wsp.org>

**UNICEF – Water and Environmental Sanitation Section, Lao PDR**  
P.O. Box 1080  
Vientiane, Lao PDR  
Telephone: (856-21) 315 – 200-4  
Fax: (856-21) 314 – 852



## 12. Press Coverage



# DEVELOPMENT



JICA study team leader Shoji Fuji exchanges signed documents with the Director of the National Centre of Environment and Water Supply, Dr Nouanta Maniphouxay

-Photo by Anoulack

## Two northwestern provinces to have clean water

EIGHTY villages in two northwestern provinces can expect to have access to clean water, after the government of Japan agreed to conduct a clean water project in this part of the country.

The Japan International Cooperation Agency (JICA) this week signed an agreement with the National Centre of Environment and Water Supply to carry out a water sanitation project using spring water from the mountains.

This project expects to supply water to people in 80 villages in Houei say district of Bokeo province and the districts of Long, Viengphoukha, and Namtha of Luang Namtha province.

The project actually started earlier this month when JICA sent a study team to Laos to

formulate a development plan for the project with emphasis on technology transfer in pursuit of capacity building of provincial and district personnel in these provinces. The project is scheduled to be complete in December of the year 2000.

According to an official from the National Centre of Environment and Water Supply, this is the third time the Japanese government has granted assistance for water sanitation projects in rural Laos.

Previously, JICA completed construction of artesian wells in Vientiane province and now it is conducting a similar project in Champassak and Saravan provinces.

Attending the signing ceremony were Mr Hiroomi Sakai, Ambassador of Japan to Laos and other officials from concerned organisations.

# DEVELOPMENT

## JICA's Pilot Study in Luang Namtha and Bokeo

THE Japanese assisted Study on Rural Water Supply and Sanitation Improvement in north-west region has completed its first phase and is now starting the Phase II.

The JICA Study targets 81 villages in 2 districts (Long and Viengphoukho) of Luang Namtha province and 2 districts (Houayxai and Pha Oudom) in Bokeo Province.

In Phase I, village surveys were made at the target villages by provincial and district level personnel from local government, who received training on participatory socio-economic surveys and technical water resource surveys through the training program carried out in the Study. The survey results become the baseline data for formulating a development plan for this area.

In Phase II, a pilot study will be conducted at 27 villages out of the 81 target villages selected through an elaborate screening process. The pilot study is scheduled to be implement 13 gravity fed systems (GFS), 2 borehole villages and one dug well village for a total of 16 water supply schemes. Moreover, 12 villages will have flush type latrines.

Workshops will be held during Phase II to share the results of Phase I and explain the strategy of the pilot study to other donors, mass organizations as well as provincial and district authorities. The first workshop is scheduled to be held on October 25, 1999 at Luang Namtha. The second workshop is scheduled for the middle of November.

Also in Phase II, the participants who made the villages surveys in Phase I, will receive a Training of Trainers (TOT) to further strengthen their capacity for sustained



Signing agreement for improvement of water supply and hygiene in the north-west provinces of Laos.

-Photo by Viengsone

improvements. Using the knowledge obtained through the TOT, a leaning-by-doing process will be applied to conduct community dialogues at the pilot villages using demand driven approaches to confirm the villagers' willingness to (1) organize village water supply

and sanitation committees; (2) be involved in participatory planning, (3) contribute labour, local materials and cash to the construction of the facilities, and (4) create a sustainable maintenance plan for the facilities.

Then as part of Phase III, after completion

of the construction works, the pilot study villages will be monitored and evaluated. The results from this monitoring as well as the results from Phase I surveys on non-pilot villages will be used to formulate a plan for sustainability in Luang Namtha and Bokeo provinces.

D12-2

# DEVELOPMENT

## Phase II of JICA's northwest water supply and sanitation study

JICA said last week the Study on Improvement of Rural Water Supply and Sanitation in North-West Region of Lao PDR, is now in Phase-II of operation.

According to a press release, The Study supported by the Japan International Cooperation Agency is based on the Agreement of pilot study signed in October, 1999 between the National Center of Environmental Health and Water Supply (Nam Saat), the Ministry of Health, and JICA.

In this pilot study phase, 16 water schemes and latrines at 12 villages will be constructed through the contributions of the villagers in

labour, materials and cash.

The villagers living in the remote areas of Luang Namtha and Bokeo Provinces, who are mostly ethnic minorities, are becoming aware of the need for sanitation and proper management through the community dialogues and guidance associated with the pilot study, the release said.

JICA said it will closely monitor behavioral changes and social developments of these villagers.

The report said the close collaboration between Nam Saat and the villagers was becoming more apparent through these activities.



Digging and installing a gravity-fed system.

---

---

# NEWS

---



The hand-over ceremony of water supply facilities and latrines to Bokeo and Luang Namtha authorities.

## Japan supports rural water supply

WATER supply facilities and latrines were constructed through the participation and contributions of selected villages for the JICA (Japan International Cooperation Agency) supported Study on Rural Water Supply and Sanitation Improvement in Bokeo and Luang Namtha Provinces. The completed facilities, which were constructed as pilot study, were handed over to the villages for operation and maintenance. The villages contributed labor, local materials and cash in kind towards the construction works so the villagers have a sense of ownership of these facilities. After completion of these facilities, a monitoring survey will

be conducted to confirm the social developments, behavioral changes and sanitation awareness of the users in relation to their new water schemes and latrines. Handing over ceremonies were held at Ban Poug in Houayxai District on 15 February 2000 presided by Mr. Bouatan Silapanya, the Honorable Governor of Bokeo Province and Dr Pheng Sy Viensavan, the Director of Bokeo Provincial Public Health Department; and at Xiengkok Mai and Xiengkok Kao of Long District on 19 February with the presence of Dr Phouthone Vangkonevilay, the Director of Luang Namtha Provincial Public Health Department.



---

# NEWS

---

## JICA aid for Luang Namtha water supply

KPL — CONSTRUCTION of five clean water supply facilities worth over 289 million kip in Long district, Luang Namtha province, is nearly completed.

“The improvement of environmental health and water supply programme” is funded by JICA, the Japan International Cooperation Agency.

Constructions comprise: over 100 million kip worth of clean water supply facilities at Siengkok Kao and Siengkok May villages, to include over four thousand metres of pipe with 14 taps, which began December 10; clean water facilities at Luang

village worth over 50 million kip, which began in January - 195 metres of pipe with six taps; clean water facilities at Chamkhamping village, worth over 12 million kip, which began in January - 220 metres of pipe and two taps; clean water facilities at Deankang village worth over 68 million kip, commencing in October last year - 370 metres long pipe laying with eight taps; a clean water site at Tinthat village worth 59 million kip, which began in January - 1,930 metres of pipe with seven taps.

JICA has also provided funds for 118 lavatories at Siengkok Kao and Siengkok May villages, costing 21 million kip.

---

## WHAT THE LAO LANGUAGE PAPERS SAY

---

### *Pasason*

## Five clean water projects in Long district nearly completed

FIVE water supply and environmental improvement projects in Long district, Luang Namtha province, are nearly completed, reported *Pasason* on March 6.

The JICA-funded projects, worth more than 289 million kip, include:

Xiengkok Kao and Xiengkok Mai project, over 100 million kip, with 4,000m of pipe and 14 taps, 95% complete;

Ban Luang project, over 50 million kip, 195m of pipe and 6 taps, 95% complete;

Chakhamping project, over 12 million kip, 220m of pipe with 2 taps, 45% complete;

Ban Dandkang project, over 68 million, 370m of pipe with 8 taps, 90% complete;

Ban Teentath project, over 59 million kip, 1,930m of pipe with 7 taps, 97% complete.

JICA has also given 21 million kip to Xiengkok Kao and Xiengkok Mai villages for sanitation.

---

# NEWS

---

## JICA funds Bokeo water supply

KPL — JAPAN International Co-operation Agency (JICA) has paid 200 million kip for the recently-completed gravity-fed water supply and latrines at Poug village, Houaisai district, Bokeo province.

Construction began last December. An extra 76 million kip was raised from local people.

The 7,250 metre long facilities consist of two reservoirs with a capacity of 240 cubic metres, with 14 water taps and meters.

JICA also paid 2 million kip to build 11 latrines.

---

# NEWS

---

## JICA agree to extend the study on rural water supply in Bokeo

A SIGNING ceremony was held on 7 August at Thalat, Vientiane province to agree on extending the on-going JICA (Japan International Cooperation Agency) study. Dr. Nouanta Maniphosay, director of Nam Saat, Ministry of Health ; Mr. Shoji Fujii JICA study team leader; and Mr. Makoto Aoki, resident representative of JICA Laos office were in attendance for the signing. JICA is now supporting the study on rural water supply and sanitation improvement in North West region of Lao PDR, and phase 3 of this study is expected to end in December 2000. However, Nam Saat has requested an extension of this study to include another pilot study to implement water supply facilities and latrines at village which were not covered by the previous pilot study. This extension aims to further build the capacity, strengthen the institution, and extend coverage of water supply and sanitation. About 17 villages in Houayxai district of Bokeo province as well as long and Viengphoukha districts of Luang Namtha province are candidates for the pilot extension. Nam Saat will initiate the pilot study extension through the participation and contribution of the selected village. As a result of this extension, the completions of the study itself will be extended to March 2001.

## Basic Human Needs (BHN)

In the Lao P.D.R, rapid economic reform is expected to polarize the gaps between various social groups in BHN areas such as basic education and health care. The improvement of BHN, particularly in local communities is essential to improve quality of life and to attain social equality.

JICA carries out 4 main programs:

**1) Propagation of public health:**

Health and Medicine are areas facing tough challenges in the Lao PDR. Infant and maternity mortality is higher compared with neighboring countries, especially in rural and remote areas. An efficient management system of medicine and health care is needed to cater to demand.

**2) Improvement of medical technology:**

For the improvement of medical services, JICA assists improving core hospitals, as well as educating medical personnel.

**3) Propagation of primary and secondary education:**

JICA assists upgrading the quality of education by dispatching experts for developing curriculum for primary and secondary education. Gender, ethnic and regional gaps are given careful consideration, as is an emphasis on rural and remote areas.

**4) Improvement of Living Environment and Establishment of Environmental Administration:**

Environmental management, natural resources (such as forest and water resources), cities and industries (such as solid waste) are problems of significance. JICA assists each organization and human resource development for better management of the environment.



A pilot project on clean water supply in a village in Bokeo province. Rural Water Supply and Sanitation Improvement in North West region, Development Study.

# NEWS

## JICA studies water quality in Luang Namtha and Bokeo

DRAFT results of a two-year study to investigate water quality and sanitation issues in the north-west of Laos have been submitted to the Government.

The JICA sponsored study, which began in February 1999 and is due for final completion in March targets 81 mainly ethnic minority villages in Luang Namtha and Bokeo provinces. Facilities to improve water supply and sanitation, such as wells, latrines and pumps were installed in the villages with their participation. The study concludes that the lives of villages have improved significantly since construction of the water supply facilities and latrines was completed. Villagers have significantly changed their social and economic behavior.



Ethnic girl enjoys new clean water.

The project was implemented alongside Nam Sa-at and the Government.

A workshop to share views and experiences on the results of the study is scheduled for February 6 in Vientiane. The final report will be submitted in March this year.

