

資料 5：ラオス人材育成調査の団員及び日程表

(1) 調査期間

平成 22 年 12 月 6 日(月)～12 月 11 日(土)

(2) 調査団員

川島 康弘 (さいたま市水道局給水部水道計画課 副参事)
 金子 磨古刀 (株式会社東京設計事務所 水道事業部 特任理事)
 石原 剛敏 (株式会社東京設計事務所 海外事業部 主査)
 青竹 寛子* (厚生労働省大臣官房国際課国際協力室 国際協力専門官)
 菅原 繁** (社団法人国際厚生事業団 水道主幹)
 *12 月 8 日午後～9 日同行
 **12 月 8 日より合流

(3) 調査日程 平成 22 年 12 月

6 日	(月)	移動：成田発 11:30→(バンコク経由)→ビエンチャン着 21:05
7 日	(火)	(終日) 首都ビエンチャン水道局水道技術研修センター訪問：首都ビエンチャン水道局等ラオス側 CP との協議
8 日	(水)	(午前) JICA ラオス事務所訪問(9:00～) 公共事業・交通省 住宅都市計画局訪問(10:00～)
		(午後) 世界保健機関ラオス事務所訪問(14:00～) 首都ビエンチャン水道局訪問・協議・ヒアリング(15:30～)
9 日	(木)	(午前) 首都ビエンチャン水道局水道技術研修センター訪問：資料収集・CP との協議など
		(午後) 公共事業・交通省 村岡専門家訪問(13:30～) 公共事業・交通省 住宅都市計画局訪問(14:00～)
10 日	(金)	(午前) AFD ラオス事務所訪問(10:00～) 移動：ビエンチャン発 21:50→(バンコク経由)→
11 日	(土)	移動：→成田着 07:30

The questionnaire concerning training for capacity building projects in the water supply sector

1. Purpose

The Ministry of Health, Labour and Welfare has been making considerations concerning training for capacity building in the water supply sector.

In Laos, JICA carried out the Technical Cooperation Project from 2003 until 2006, and during this period, from 2005, there were cases where capacity building in the water supply sector was tackled through JICA's cooperation on the Laos Water Supply and Drainage Center project by Agence Française de Développement (AFD/French Development Agency).

In light of Laos's case as stated above, it was decided that the Survey would be undertaken in Laos to collect training information on technical cooperation projects overseas and collect information on training by other donors for the purpose of upgrading training-related information.

The Survey will be used for future reference to effectively carry out cooperation in capacity building in the water supply sector of Laos while Japan promotes role-sharing with other donors.

2. Questionnaire Item

Regarding capacity building projects in water supply sector at the locale (and the own country), kindly request reply to questionnaire items below;

- (1) The basic policy and master plan of the organization regarding capacity building in water supply sector
 - Department of Housing and Urban Planning (DHUP), Ministry of Public Works and Transports (MPWT)
 - Vientiane Capital City Water Supply Enterprise and Waterworks Technology Training Center
- (2) Capacity building projects in water supply sector which were done in the past
 - Kindly request to make a compilation list of capacity building projects in water supply sector that carried out for the past decade in reference to the samples.
- (3) The training information which was executed through capacity building projects
 - In regard to capacity building project and training information, the format for entry below was prepared. According to entry method and sample which it mentions later, kindly request entry to the respective format concerning the training which with a number of common capacity building project was done.
 - (i) The summary of typical capacity building project (Format-1)
 - (ii) The general contents regarding the training (Format-2)
 - (iii) Concerning the lecture of the training (Format-3)

3. Entry Method of each format

- (1) The summary of typical capacity building project (Format-1)

Please appoint several typical projects that are chosen among capacity building project which is listed up, and kindly describe the statement regarding the item below in additional Excel sheet.

- 1) Name of project:
- 2) Feature of project: type, scheme

- 3) Object country / area:
- 4) Cooperation Period: from yyyy/mm to yyyy/mm
- 5) Implementing organizations / institutions concerned: relevant ministry/ agency
- 6) Person in charge of Lao side:
- 7) Overall goal:
- 8) Project goal:
- 9) Outputs: Output-1, Output-2, Output-3, ...
- 10) Training courses: 1-1, 1-2, 2-1, 2-2, 3-1, 3-2, ...

(2) The training in the locale and the own country in above-mentioned typical project
Regarding capacity building projects in water supply sector at the locale (and the own country), kindly describe the statement regarding the item below in additional Excel sheet;

- 1) The general contents regarding the training (Format-2)
 - Name of project, donor agency/organization
 - Name of training, training period, place of training, training purpose, outputs, targeted participant/number of trainee, host organization/institution of training, curriculum list/overview (details fill out in Format-3)
- 2) Concerning the lecture of the training (Format-3)
 - Field of lecture title and subject*, lecture type (distinction of lecture, inspection or exercise), content of lecture, names of lecturer and belonging organization, lecturer inspection field, training material and its language, lecture execution time

* Please describe the field that corresponds to the following classification items about the field in the lecture course;

Classification item: Legislation and administration, water service management, plan and facilities outline, water source/water intake/raw water transmission, water treatment, water supply, equipment for water service, and water quality and others

(3) The submittal for the lecture material of the training described in Format-3
Regarding to training lecture material which is filled in Format-3, kindly provide operating procedure of training, general information of training and lecture materials which were actually drawn up with training at the locale (and the own country) as much as possible.

資料 5-2 : 面会者リスト

所 属	職 位	氏 名
Department of Housing and Urban Planning (DHUP), Ministry of Public Works and Transports (MPWT)	Director General	Mr. Khamthavy THAIPHACHANH
	Deputy Director General	Mr. Noupheuak VIRABOUTH
	Deputy Director of Water Supply Division	Mr. Phouvong CHANTHAVONG
Cabinet Office in Infrastructure Department	Planning Advisor (JICA Long-term Expert)	Mr. Kazumitsu MURAOKA
NAMPAPA NAKHONE LUANG	General Manager	Mr. Daopet BOUAPHA
	Deputy General Manager	Mr. Khampheuy VONGSAKHAMPHOUI
	Director National Project	Mr. Sisamone KONGMANY
	Director, Waterworks Technical Training Center	Mr. Kamphamay SENNOUVONG
	Depty Director, Waterworks Technical Training Center	Mr. Khamtanh SIMMALAVONG
AFD ラオス事務所	ラオス事務所代表	Mr. Guy FRANÇOIS
WHO ラオス事務所	ラオス事務所・環境コンサルタント	Ms. Kate MEDLICOTT
JICA ラオス事務所	インフラセクター担当	服部 容子

資料 5-3 : AFD 情報

AFD の人材育成プロジェクト情報

1) Name of project	Establishment Project EFME Water Profession Training Center
2) Feature of project: type, scheme	AFD Project Assistance
3) Object county / area	Lao PDR, Entire the country
4) Cooperation period: from yyyy/mm to yyyy/mm	2004-2010
5) Implementing organizations / institutions concerned: relevant ministry / agency	Nampapa Nakoneloung, Vietiane Capital
6) Persons in charge of Lao side:	Mr.Khampheuy Vongsakhampouy
7) Overall Goal:	1)Build up and equip a training Center for Water professionals in Vietiane . 2)Train and provide enough personnel to ensure the development of the activities of the center (trainers,managers and staff , PNPs Training correspondents) 3)reinforce the Local Capacities of supervision, management and piloting of the traning Center activities.
8) Project Goal:	Create a professional training center in response to the needs of the various Nam Papas and the other actors of the sector.
9) Outputs: Output-1, Output-2, Output-3,	1) Establishment of national training facilities for the water sector.2)Skills improvement for water companies staff (in accordance with Nam papa Training Plans. 3) progressive autonomy and financil self -sufficiency of the center through the establishment of sustainable financial resources.
10) Training courses: 1-1, 1-2, 2-1, 2-1, 3-1, 3-2, ...	1)Training of "Correspondents trainers " 2)Finalisation of NPLV/ Provinec Nampapa lao traning plans .3) Definition of CFMEs offer (programmes) 4)Organisation of the center and definition of management rules and procedures (administrative, financial and educational)5)Traing of the centers personnel .6)Drafting the technical explannatory leaflets for equipment (DTE) to prepare the bidding documents for equipment supply.7)Study the funding opportunities for vocational trining in the water sector.

AFD の人材育成プロジェクト関連研修情報

Name of project	Trainig of Trainers
Donor agency / organization	AFD
Name of training	Training of "Correspondents Trainers"
Training period	2007-2010
Training purpose	Performeng the water technical knowledge for the trainers
Outputs	All Trainers will have enough allity to train the concernd trainers
Targeted participant/number of trainee	All Trainers of wwtc/ 174 persons
Host organization/institution of training	AFD
Curriculum list	

資料 5-4 : ADB 情報

ADB の人材育成プロジェクト情報

1) Name of project	Partnership for Good Governance and Knowledge on Urban Water Management between ADB and K-Water
2) Feature of project: type, scheme	
3) Object county / area	Luangprabang province (Nam Papa State owned Enterprise)
4) Cooperation period: from yyyy/mm to yyyy/mm	year 2011
5) Implementing organizations / institutions concerned: relevant ministry / agency	Department of Housing and Urban Planning, Ministry of Public Works and Transport
6) Persons in charge of Lao side:	Mr. Khamthavy Thaiphachanh, Director General
7) Overall Goal:	
8) Project Goal:	The objective of the training is to improve the quality of life for Laotians and to construct infrastructures for development through the capability enhancement of Luang Prabang Water Supply State Owner Enterprise.
9) Outputs: Output-1, Output-2, Output-3,	1. Training needs surveyed, 2. Specialized training program developed 3. Training program implemented 4. Improvement action by Nam Papa Luangprabang 5. Evaluation made.
10) Training courses: 1-1, 1-2, 2-1, 2-1, 3-1, 3-2, ...	1. Administration 1. 1 Business Management 1.2 Organization 2. Technology 2.1 Supply & Network 2.2 Treatment 2.3 Facilities

ADB の人材育成プロジェクト関連研修情報

Name of project	A Partnership for Good Governance and Knowledge on Urban Water Management between ADB and Kwater
Donor agency / organization	ADB
Name of training	ADB & K water Training in Daejeon, Korea
Training period	25 April to 8 May 2010
Training purpose	to improve the quality of life for Laotians and to construct infrastructures for development through the capability enhancement of Luang Prabang Water Supply State Owner Enterprise.
Outputs	
Targeted participant/number of trainee	21
Host organization/institution of training	K-water Academy in Daejeon, Korea
Curriculum list	<ol style="list-style-type: none"> 1. Business plan, Budget, Finance, PPP, Law and Institution, Customer services. 2. Governance structure, HRD Management, HRD Development, MIS, Business Innovation. 3. Supply Scheme, Project Management, NRW, Leakage Management, Reservoir. 4. Treatment Plant Management, Operation Management, Quality Management. 5. Mechanical, Electrical, Electronical issues.

ADB の人材育成プロジェクト関連研修の講義等情報（その１）

Name of Training	ADB & K water Training in Daejeon, Korea				
No.	Lecture title	Classification item	Lecture type (distinction of lecture, inspection or exercise)	Content of lecture	Lecturer organization
	Business Management			P-D-C-A Cycle, Long Term Strategic Plan, Interim Budget(Project) Review, Tariff Structure, PPP / Corporatization, Anti-corruption, Customer Satisfaction	
	Finance Management			General, Financing, Managing Cash, Project Financing, Capital Increase, some rates relating to capital cost, return on capital, payment methods.	
	Accounting Management			Types of cost, CVP Analysis, Financial Ratio, EVA, IFRS, Tax, Value-added Tax.	
	Business Management				Dept. of Business Administration, Chungnam Nation University, Daejeon
	Finance Management			Overall Concept of Financial Management, Investment Decision (Time Value of Money, Investment Decision (Capital Budgeting), Financing Decision (Cost of Capital), Financial Decision (Optimal Capital Structure), Working Capital Management, Dividend Decision, Public-Private Partnership (PPP), Project Finance, and Syndication	Mokwon University
	Water Tariff in K-Water			1. Domestic Water Supply in Korea; 1.1 Multi Regional/Local Water Supply; 1.2 Water Business Entrust (Consignment); 1.3 Development Plan; 2. Water Tariff; 2.1 Principals of Public Service Charges; 2.2 Production cost/rate; 2.3 Tariff in a city (Seosan); and 2.4 Metering, collection	
	Customer services	Water service management		1. Why customer service?; 2. K-Water's Customer service; 3. Real experience; Water Supply Service Regulation.	
	Organization & HRM, HRD			1. Introduction of K-Water, 2. Manpower Planning, 3. Performance Appraisal, 4. Training, placement, promotion, 5. Grievance Handling, 6. Disciplinary Action.	K Water Academy
	Law on Waterworks and Water Services			1. Law on Waterworks and water services, 2. the policy on the water service industry.	
	International Cooperation and Water Projects in K-Water			1. Overview of Kwater: Water Resources Management, Drinking Water Supply, Wastewater Management, etc.; 2. K-Water's Key project; 3. International activities	Director of International Business Department, K-Water
	Business Innovation and Knowledge Management in K-Water			1. What is KM? 2. KM Framework, 3. Major KM Activities.	K Water Academy
	K-Water PR World			1. What is PR? 2. PR Department of K-Water, 3. PR Activities.	
	Management Information System			1. What is MIS? 2. The component of a computer based Information System, 3. MIS Classification by support functions; 4. Transaction processing system; 5. Executive Information system; 6. Decision support system; 7. Office automation system; 8. Knowledge management system; 8. Enterprise resource planning; 9. IT architecture classified by hardware; 10. The web-based IT architecture; 11. K-Water MIS.	Information Resources Services Department,
	Performance Management			1. MBO (Management by Objectives); 2. BSC (Balanced Scorecard); 3. K-Water Performance Appraisal System.	
	Compensation			1. Basic Concept; 2. Compensation; 3. Compensation system; 4. Effectiveness of compensation; 5. Strategic Roles; 6. Relationship to other HR functions; 7. Performance Management System; 8. Theory; 9. Designing the compensation system; 10. Compensation system in K-Water.	
	HRD & OD Planning			1. Definition of HRD, 2. Evolution of HRD; 3. Human Resources Movement, 4. Establishment of the training Profession, 5. Relationship between HRM and HRD; 6. HRD functions; 7. HRM Functions; 8. Training and Development; 9. Organizational Development; 10. Career Development; 11. Strategic Management and HRD.	

ADB の人材育成プロジェクト関連研修の講義等情報（その２）

Name of Training ADB & K water Training in Daejeon, Korea					
No.	Lecture title	Classification item	Lecture type (distinction of lecture, inspection or exercise)	Content of lecture	Lecturer organization
	Current Status of Korean Water Industry			1. Water Resources in Korea; 2. Water Management System; 3. Water Supply System; 4. Current Status of Water Supply Services; 5. Research on Benchmarking; 6. Internal & External Challenges of Korean Water Industry; 7. Structural Reorganization and Liberalization of Korean Water Industry.	
	Water Cycle Management System				
	Water Supply	Water supply		1. Overview; 2. Water Supply by K-Water; 3. Basic Theory for Hydraulics; 4. Water Supply System Operation.	
	Water Treatment	Water treatment		1. Introduction; 2. Coagulation; 3. Sedimentation; 4. Filtration; 5. disinfection; 6. Distribution system.	
	Facility Management in K-Water			1. status of K-Water Water Facility; 2. K-Water Facility Management; 3. Suggestions for facility Management.	
	Water meter	Distribution facilities		1. Types and measuring principles of water meters; 2. Installation of water meters; 3. Meter seal; 4. Selecting water meters; 5. Calibration system.	
	Pump and Energy Saving	Plan and facilities outline		1. Definition of Pump; 2. Pump total Head; 3. Specific speed; 4. Pump Operation; 5. Cavitation and Water Hammer; 6. Vibration.	
	Flow Meters	Plan and facilities outline		1. Outline of flowmeter; 2. Turbine flowmeter; 3. Electromagnetic flowmeter; 4. Ultrasonic flowmeter; 5. Installation of flowmeter; 6. Selection of flowmeters; and 7. Calibration system.	
	Electrical Facilities	Plan and facilities outline		1. General Theory of Electricity; 2. Power Facilities; 3. Electric facilities at Nam Khan WTP; 4. Action Plan Review.	
	WTP facilities	Plan and facilities outline		1. Coagulation; 2. Clarification; 3. Filtration; 4. Disinfection.	
	Telemonitoring and Control	Plan and facilities outline		1. SCADA; 2. Level sensors; 3. Signal processing; 4. Action plan review.	
	NRW Strategies and Technique	Distribution facilities		1. Background and Terminologies; 2. Unavoidable Real Losses and Infrastructure Leakage Index (ILI); 3. Leakage Management and Control; 4. Causes of Leaks and breaks; 5. Pressure Management; 6. Intermittent Supply vs. Constant Water Supply; 7. Understanding district Metered Area; 8. Corrosion.	
	Hydraulics and Network Analysis	Distribution facilities		1. Network analysis boundary; 2. Non revenue water assessment; 3. Step test; 4. Pressure Management; 5.	
	Utilization of CAD, GIS & DB	Distribution facilities		1. Introduction; 2. Establishment of DB Structure; 3. Investigating system; 4. Map digitizing; 5. map Management.	
	Water Pipe Network Planning & Design	Distribution facilities		1. Overview; 2. Planning and Design Process; 3. Estimation of Demand; 4. Hydraulic modeling; 5. Diagnosis of WDS; 6. Summary	Water and Wastewater Research
	Estimation of Domestic Water Use for Demand Management	Water supply		1. Introduction and Background; 2. Water Supply Statistics in Korea; 3. Problems Definition; 4. Data Collection System; 5. Analysis Results; 6. Conclusions.	Water and Wastewater Research

資料 5-5 : WHO 情報

WHO の人材育成プロジェクト情報

1) Name of project	Water Safety Planning Phase 1 (2006-2008 TBC) Water Safety Planning Phase 2 (Feb 2010 - June 2011) Water safety Planning Phase 3 (anticipated 2011 - 2015)
2) Feature of project: type, scheme	Phase 1 and 2 - WSP training and WSP development for 8 provincial urban water utilities
3) Object county / area	Lao PDR (Luang Prabang, Luang Namtha, Xayabouli, Oudomxai, Khammuane, Savannakhet, Champasak, Bolikhamsay provincial capitals)
4) Cooperation period: from yyyy/mm to yyyy/mm	Phase 1 (2006-2008 TBC) Phase 2 (Feb 2010 - June 2011) Phase 3 (anticipated 2011 - 2015)
5) Implementing organizations / institutions concerned: relevant ministry / agency	Ministry of Public Works and Transport
6) Persons in charge of Lao side:	Nuopheuk Virabouth
7) Overall Goal:	A significant proportion of SEA and Western Pacific Countries with access to improved drinking water sources are served with the safest possible drinking water, assured through credible WSPs.
8) Project Goal:	as above
9) Outputs: Output-1, Output-2, Output-3,	Output 1: Initiation of project including contracting and appointments Output 2: Institutional Development to support WSP implementation Output 3: Continues support to WSP implementation to the Nam Papas with phase 1 training Output 4: WSP implementation in 3 new Nam Papas
10) Training courses: 1-1, 1-2, 2-1, 2-1, 3-1, 3-2, ...	WSP ToT - 4 participants in Singapore WSP training for Utilities based on ToT and WHO WSP manual

WHO の人材育成プロジェクト関連研修情報

Name of project	Water Safety Planning Phase 1 (2006-2008 TBC) Water Safety Planning Phase 2 (Feb 2010 - June 2011) Water safety Planning Phase 3 (anticipated 2011 - 2015)
Donor agency / organization	WHO / AUSAID
Name of training	Water Safety Planning
Training period	5 days
Training purpose	Refer WSP training manual - whqlibdoc.who.int/publications/2009/9789241562638_eng.pdf
Outputs	Refer WSP training manual - whqlibdoc.who.int/publications/2009/9789241562638_eng.pdf
Targeted participant/number of trainee	ToT in Singapore - 4 participants from MPWT and provincial utilities Utility Training in Laos - WSP teams from 8 provincial utilities (2 in Phase 1, 6 in Phase 2)
Host organization/institution of training	ToT in Singapore - PUB Singapore Utility Training in Laos - Host MPWT
Curriculum list	Refer WSP training manual - whqlibdoc.who.int/publications/2009/9789241562638_eng.pdf Translated in draft version to Lao Language

WHO の人材育成プロジェクト関連研修の講義等情報

Name of Training									
No.	Lecture title	Classification item	Lecture type (distinction of lecture, inspection or exercise)	Content of lecture	Names of lecturer and belonging organization	Lecturer inspection field (Government/ Local Public Authority/ Private Company/ University/ Other organizations)	Training material	Language	Lecture execution time
1	WSP ToT	Water quality and others		Refer WSP training manual - whqlibdoc.who.int/publications/2009/9789241562638_eng.pdf			Refer WSP training manual - whqlibdoc.who.int/publications/2009/9789241562638_eng.pdf	English	5 days
2	WSP Utility training in Laos	Water quality and others		Refer WSP training manual - whqlibdoc.who.int/publications/2009/9789241562638_eng.pdf			Refer WSP training manual - whqlibdoc.who.int/publications/2009/9789241562638_eng.pdf	English	5 days

資料 5-6 : 収集資料リスト

No.	資料名称	ドナー／資料元	発行年	言語	形態	入手先
1	Donar information on Capacity Deveropment Training Program in Laos 2000-2010	AFD		英語	Word	NPNL
2	Donar information on Capacity Deveropment Training Program in Laos 2000-2010	ADB		英語	Word	DHUP
3	Donar information on Capacity Deveropment Training Program in Laos 2000-2010	JICA		英語	Word	DHUP
4	Donar information on Capacity Deveropment Training Program in Laos 2000-2010	WHO		英語	Word	DHUP
5	Format 1(Project) ; Format 2(Training Course)	AFD Project		英語	Excel	NPNL
6	Format 1(Project) ; Format 2(Training Course) Format 3 (Lecture of Training)	Urban Water Management between ADB and K-Water		英語	Excel	DHUP
7	Training Course Program of 2009-2010	WTTC		英語	PDF	NPNL
8	CFME AFD WATER PROFESSIONS TRAINING CENTER ESTABLISHMENT PROJECT	WTTC		英語	PDF	NPNL
9	The current situation in Vientiane water supply and Sanitation in Urban zone	NPNL		英語	Word	NPNL
10	Le Bulletin de Madevie - NPNL No.4	NPNL/GRET	2010	仏語	Copy	NPNL
11	Partnership for Good Governance and Knowledge on Urban Water Management between ADB and K-Water(Format1-Format3)	ADB/DHUP		英語	PDF	DHUP
12	Information on the Training Program for MIREP Private Sector	DHUP	2009	英語	Word	DHUP
13	Small Towns Water Supply and Sanitation Sector Project	ADB/DHUP	2008	英語	PDF	DHUP
14	Vientiane Capital Uruban Development Master Plan -Proposal-	JICA/DHUP	2010	英語	PDF	DHUP
15	MIREP Programme in lao PDR	GRET/DHUP	2010	英語	Word	DHUP
16	A Road Map to Support Country-Level Implementation of Water Safety Plans	WHO/IWA	2010	英語	Booklet	WHO, Laos
17	Water Supply and Sanitation Project Capacity Building for the Water Supply Sector, Final Report	COWI AS (Norway)	2005	英語	Copy	NPNL
18	Institutional Strengthening of Water Supply Authority (WASA) and Water Sipply Division (WSD) of DHUP	COWI AS (Norway)	2008	英語	Copy	NPNL
19	Drinking Water Supply and Distribution Master Plan for Vientiane, Laos, Abstract	NPNL/AFD (BCEOM)	2004	英語	Copy	NPNL
20	Brief Report on Selection of Training Participants	WTTC&UN-Habitat	2010	英語	Copy	NPNL
21	Agreement of Cooperation between The United Naqtions Human Settlements Programme and the Waterworks Technical Training Centre of the Nampapa State-Owned Enterprise Lao	UN Habitat	2009	英語	Copy	NPNL
22	Proposed Asian Development Fund Grant and Administration of Grants Lao People's Democratic Republic: Small Towns Water Supply and Sanitation Sector Project	ADB	2008	英語	PDF	DHUP
23	Proposal for Training Support for Small Scale- Piped Water Supply Providers in Lao PDR	DHUP MIREP programme (Mini Réseau d' Eau Potable)	2009	英語	Word	DHUP