Appendix 6

Capacity Development

APPENDIX 6: CAPACITY DEVELOPMENT

6.1 Technical Transfer Workshop

6.1.1 Concept

The three main concepts for Technical Transfer Workshop has been set as stated as below due consideration of "Urban Planning Manual".

- (i) Analysis over present situation and socio-economic framework
- (ii) Formulation methodology of development vision per sectors
- (iii) Implementation methodology of urban development and management



About 12 to 20 officials from PTI, DHUP, DPWT and VUDAA attended in each workshop. The members were selected by the supervisor of each sector division of organizations.

6.1.3 Contents

The six workshops for technical transfer have been held for four general sectors in July and August and two in October and November. Each study member of main sectors made a presentation about methodology how they usually develop their own plan and management plan, not what they have made for this Master Pan.







Table 6.1.1: Contents of Technical Transfer Workshop

	Table 0.1.1 . Contents of Technical Transfer Workshop							
No. of Workshop	Contents	Lecturer (Study Team Member)	Date					
1.	Socioeconomic Analysis:	Mr.Y. Sakakibara	July 23 rd , 2010					
	Logic and Methodology to set the framework of Socio-economy							
2.	Urban Infrastructure and Environmental and Social Consideration:	Mr. M. Ishiya /	July 27th, 2010					
	- Infrastructure Planning and Management (Transportation Planning,	Ms. C. Klinpun /						
	Water Supply, Sewage and Drainage, and Solid Waste)	Mr. T. Omura						
	Fundamental planning methodology and logic							
	- Environmental and Social Consideration							
	Logic and Methodology							
3.	Urban Planning:	Mr. K. Yamada	August 12th, 2010					
	- Movement of urban planning 1900's to recent.	(TL)						
	- Example of foreign countries.							
4.	Land Use Planning and Management:	Mr. A. Saito /	August 13th, 2010					
	Specific methodology of land use planning and GIS, and examples.	Ms. M. Ogasawara						
5.	Urban Park and Greenery Planning and Management:	Mr. K. Hirano	October 22nd, 2010					
	Specific methodology of land use planning and examples.							
6.	Urban Design:	Mr. K. Ito /	November 12th, 2010					
	- Concept of landscape planning in Japan	Mr. A. Odake						
	- Movement of Landscape Code and examples.							

6.1.4 Comment of Attendants

Table 6.1.2: Comment for Technical Transfer Workshop

Main Topic	Main Comments
General	- The urban master plan practice by implementation sectors should be done followed Vientiane Master Plan.
Training Workshop	 More training is necessary for us to have widely and more qualified idea on planning for future. More training of GIS is necessary. This training presentation on special planning is very clear in detail and it is good knowledge for me to use with my current duty. Not only technical training but also foreign language training, especially English, should be included. More specific technical training of each sector is necessary. More frequent technical transfer workshop in detail is requested including modernized technology to enable officials to implement by himself efficiently. Session of Urban Laws and Regulations should have been conducted During workshop more time for discussion and comment should have been set.
What officials need to be able to do for planning and management	 More staff should have the chance to work together with international technical professionals. More chance to study infrastructure projects in foreign countries is necessary to improve them of Laos. Urban Planning Management Division needs more power to implement Urban Plan. More cooperation between organizations is necessary for urban planning. Technical and Management level of Urban Planning officials should be upgraded to realize efficient planning work in the future.

6.2 Training in Japan

6.2.1 Title: "Urban and Regional Development"

6.2.2 Purpose

- To study present system of urban and regional development by local government in Japan and inspection of actual projects,
- To study the diversity of team work of actual planning projects, and
- To study urban design by local government.



6.2.3 Trainees

11 personnel from PTI, DPWT, DHUP, and VUDAA.

Table 6.2.1: Trainees in Training in Japan

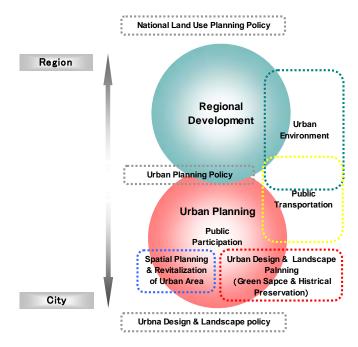
Name	Organization and Position
	Acting Director,
Mr.Thenekham	Public Works and Transport Institute (PTI),
THONGBONH	Ministry of Public Works and Transport Institute (MPWT)
	Acting Director General,
Mr.Khamthavy	Dept. of Housing and Urban Planning (DHUP),
YHAIPHACHANH	Ministry of Public Works and Transport Institute (MPWT)
	Director,
	Urban Engineering Division,
Mr. Boulanh	Dept. of Public Works and Transport Institute (DPWT)
KANEKHAMVONGSA	Vientiane Capital
	Director,
	Housing and Urban Planning Division,
Mr. Chanthala	Public Works and Transport Institute (PTI),
PHIMMACHACK	Ministry of Public Works and Transport Institute (MPWT)
	Head,
	Town Planning Section,
	Housing and Urban Planning Division,
Mr. Chanthasack	Public Works and Transport Institute (PTI),
BOTTAPHANITH	Ministry of Public Works and Transport Institute (MPWT)
	Deputy Director,
Mr. Oudone	Dept. of Public Works and Transport Institute (DPWT)
NHENGVANNAVONG	Vientiane Capital.
	Deputy Head,
	Housing, Urban Planning and Environment Office,
Mr. Khammone	Dept. Of Public Works and Transport (DPWT),
CHOMMANIVONG	Vientiane Capital
	Deputy Director,
	Dept. of Infrastructure Facilities Development,
Mr. Khampian	Vientiane Urban Development Administration Authority (VUDAA)
INTHALÛXA	Vientiane Capital.
	Technical Officer,
	Housing and Urban Planning Division,
Mr. Loumkham	Vientiane Urban Development Administration Authority (VUDAA)
CHANTHAPANYA	Vientiane Capital.

	Chief,
	Infrastructure Section
	Housing and Town Planning Division,
Mr. Vongsack	Public Works and Transport Institute (PTI),
MALIVANH	Ministry of Public Works and Transport Institute (MPWT)
	Technical Stuff,
	Housing and Urban Planning Division,
Mr. Bannaseng	Public Works and Transport Institute (PTI),
SYPHOXAY	Ministry of Public Works and Transport Institute (MPWT)

6.2.4 Contents

(1) General Concept of Training in Japan

The main topic of Training in Japan in this Study is "Urban and Regional Development" in Japan. Therefore two (2) main concepts had been set, which are "Regional Development" and "Urban Planning". Based on the core are of these two concept, region and city, detail concepts had been set as Figure below.

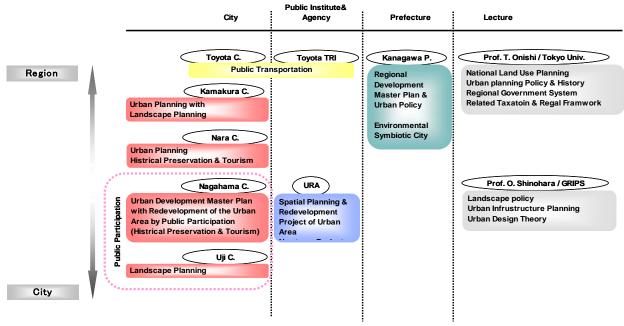


Source: JST

Figure 6.2.1: General Concept of Training in Japan

(2) General Concept of Training Course

Training course and place to visit had been planned based on the concept of Training in Japan. Each organization and institute shows outstanding activities of each sector related to urban planning and design, urban infrastructure, regional development, and public transportation. Two (2) professors are accustomed to give lectures to class of foreign students and hold reputation of high teaching skills, not only prominent in their own field.



Source: JST

Figure 6.2.2: General Concept of Training Course



6.2.5 Term and Schedule

The Training in Japan has been conducted as the term and schedule as the Table below.

Table 6.2.2: Schedule of Training in Japan

<Training in Japan>

The Project for Urban Development Master Plan Study in Vientiane Capital>

Trainees : 12 Officials (PTI, MPWT-DHUP, Vientiane Capital-DPWT& VUDAA)

Cource : Urban Planning and regional Development Schedule : Augst 22nd-September 9th, 2010 (18days)

31	M/D	Date	AM/PM	Contents	Schedule	Place to Visit or Trainers	Place to Stay
	8/22	Sun			Departure (Laos->Bkk)	Hamers	Stay
1	8/23	Mon			Arrival (Narita -> Tokyo)		JICA Tokyo
2	8/24	Tue	9:00-12:00	■Briefing ■Orientation		JICA Tokyo	JICA Tokyo
	I		LUTTI		16:00-17:30 Lecture	Urban Renaissance Agency (@JICA Tokyo)	JICA Tokyo
9	8/25	Wed		<ur> <urban design="" planning="" urban=""></urban> ■Lecture & Inspection Urban Planning, Landscape Planning & Management, Histrical Preservation, </ur>	10:00-12:00 : Lecture 13:30-16:30 : Inspection Histrical Preservation Area 「Kamakura Station」 - 「Wakakusa Oji」「Tsurugaoka Shrine」	Kamakura City	JICA Tokyo
4	8/26	Thir		<spatial planning=""> ■Inspection: MM21, Kohoku NT</spatial>	10:00-12:00: Inspection @ MM21 13:30-14:30 : Lecture @ UR Training Cnter 14:30-16:30: Inspection @ Kohoku NT	Urban Renaissance Agency	JICA Tokyo
9	8/27	Fri			9:30 : Registration @ Univ. of Tokyo 10:00-12:00 : Lecture 12:00-13:20 : Lunoh 13:30-16:00 : Lecture	Prof. Takashi Onishi Dept. of Urban Engineering, University of Tokyo	JICA Tokyo
6	8/28	Sat					JICA Tokyo
7	8/29	Sun			(PM : Tokyo->Toyota)		Nagoya City
8	8/30	Mon		< Urban Transportation / Public Transportation > ■ Lecture & Inspection	9:00~16:00 : Lecture & Inspection	Toyota Transportation Research institute Toyota City	JICA Tokyo
9	8/31	Tue			9:30 : Regiostration @ GRIPS 10:00-12:00 : Lecture 12:00-13:20 : Lunch 13:30-16:00 : Lecture	Prof.Osamu Shinohara GRIPS, National Graduate Institute for Policy Studies	JICA Tokyo
10	9/1	Wed	АМ	≪Regional Development Planning> ■Lecture & Inspection Regional Development & Spatial Planning Regional Development Master Plan Environmental Symbiosis City Strategy Legal Aspects & Descision Making	10:00-14:00 : Lecture 14:00-17:00 • Inspection	Kanagawa Prefecture	JICA Tokyo
		11	PM		To Nara		•••••••
11	9/2	Thir			10:00 ~ 12:00 : Lecture 13:30 ~ 17:00 : Inspection	Nara City	Nara
			AM		To Osaka		
12	9/3	Fri	PM	■Interim Review and Discussion			JICAOsaka
13	9/4	Sat					JICAOsaka
	11-7-1				Maria da Maria da		Nagahama
14	9/5	Sun			(Nara->Nagahama))	1	City
15	9/6	Mon		 <urban design="" planning="" urban=""></urban> ■Lecture & Inspection -Urban Planning (Master Plan), -Landscape Planning & Management, -Histrical Preservation (Kurokabe), 	10:00-12:00 : Lecture Urban Planning (Master Plan), Landscape Plannign & Management 13:00-17:00 : Inspection	Nagahama City	Nagahama City
16	9/7	Tue		<ur> <urban design="" planning="" urban=""></urban> ■Lecture & Inspection -Urban Planning, -Landscape Planning & Management, -Histrical Preservation (World Treasure, others) </ur>	10:00-12:00 : Lecture Urban Planning (Master Plan), Landscape Plannign & Management 13:00-17:00 : Inspection (PM : Uji->Tokyo)	uji City	JICA Tokyo
17	9/8	Wed	10:00-16:00	Reporting & Evaluation	2	JICA Tokyo	JICA Tokyo
18	9/9	Thir			Departure (Narita->Laos)		

6.3 Issue Analysis Workshop (PCM)

The workshop content put more emphasis on problems identification and analysis to give participants a realization of the problems and issues related to urban master plan development and implementation in Vientiane Capital, Lao PDR.

6.3.1 Purpose

The main purpose of the two-day PCM Workshop is aiming to help the concerned project counterpart to be able:

- i) to implement and manage the Urban Development and Planning effectively by using PCM tools, namely problem, objective analysis and project design matrix (PDM) tools.
- ii) to understand better the current situation related to (1) Capacity of human resources, (2) Institutional cooperation and (3) Legal condition

6.3.2 Participants

Twenty (20) officials from related organizations joined this workshop.

Table 6.3.1: Participant of PCM Workshop

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Organization	No. of				
_	Participant				
Department of Housing and Urban Planning (DHUP)	2				
Public Works and Transport Institute (PTI)	5				
Department of Public Works and Transport of Vientiane Capital (DPWT)	2				
Public Works and Transport Office of 9 districts (OPWT)	9				
Vientiane Urban Development Administration Authority (VUDAA)	2				

Source: JST

6.3.3 Outline of Workshop

The two-day workshop puts more emphasis on (i) problem identification and analysis, (ii) objective analysis and prepares the project design matrix (PDM).

The PCM/PDM workshop outline is summarized below.

Workshop outline (First day)

- Opening remark
- Introduction to the project cycle management--PCM (presentation by the moderator)
 - Stakeholder analysis;
 - o Problem identification (core-problem);
 - o Problem analysis tree
 - Objective analysis tree
 - Alternative analysis--shortly,
 - o Introduction to Project Design Matrix (PDM)--shortly;
- Group work using PCM tools and instruments;

- o Problems identification and analysis using problem tree
- o Presentation the result of problem tree analysis chart
- o Objective analysis using objective tree
- o Presentation the result of objective tree analysis chart

Workshop outline (Second day)

- o Alternative Analysis (the best solution selection)
- Introduction to Project Design Matrix (PDM)
 - Narrative Summary (Lecture + Examples)
 - Assumption, Pre-condition (Lecture + Examples)
 - o Indicator, Means of Verification, Input (Lecture +Example)
 - o Indicator, Means of Verification, Input
- Group work to complete the PDM;
 - o 3 sub-groups complete their PDM
 - Presentation the result of their PDM to the whole group and
 - Question and Answer (Q&A) session.
- Summary of two-day workshop,
- Workshop evaluation
- Closing remark
- Certification

Table 6.3.2: Agenda of PCM Workshop

Day	Time	Contents	Method and In- charge person
1	8:45- to 9:00	Registration	
	9:00 to 9:30	Opening remark	Head of Public Work and Transportation Institute
	9:30 to 9:45	Rule of workshop and objective	Moderator
	9:45 to 10:00	Coffee and tea break	
	10:15 to11:00	Introduction to PCM	Lecture by moderator
	11:00 to12:00	Group work: Brainstorming, identify core problem and problem tree analysis	3 sub group work: 1. Capacity building, 2. cooperation and 3. legal
	12:00 to13:30	LUNCH	2. Coperation and 5. legal
	13:30 to 14:30	Group presentation on problem tree result	3 sub groups
	14:30 to 14:45	Coffee and tea break	
	14:45 to 15:30	Group work: Objective tree analysis	3 sub groups
	15:30 to 16:00	Presentation of group work result	3 sub groups and moderator
	T = 1 = 2 = 2		T
2	8:45 to 9:00	Summary of first day workshop	Moderator
	9:00 to 9:30	Group work: Alternative analysis	3 sub groups
	9:30 to10:00	Presentation of group work result	3 sub groups
	10:00 to10:15	Coffee and tea break	
	10:15-10:30	Introduction to PDM: Narrative summary, (Goal,	Moderator
		Objective, Outputs, and Major activities)	
	10:30-11:00	Group work: Narrative summary	3 sub groups
	11:00- 11:15	Lecture on Indicator, mean of verification and Input	Moderator

11:00-12:00	Group work: PDM Indicator, mean of verification	3 sub groups
	and Input	
12:00- to 13:15	Lunch	
13:15 to 13:45	Lecture: Important Assumption and project activities	Moderator
13:45 to14:45	Group work: Important Assumption and project activities	3 sub groups
14:45 to 15:00	Coffee and tea break	
15:00 to 15:45	Presentation of whole PDM	3 sub groups
15:45 to 16:00	Summary and workshop evaluation	Moderator
16:00-16:30	Closing remark	Head of Public Work and Transportation Institute

Source: JST

6.3.4 Problem Analysis

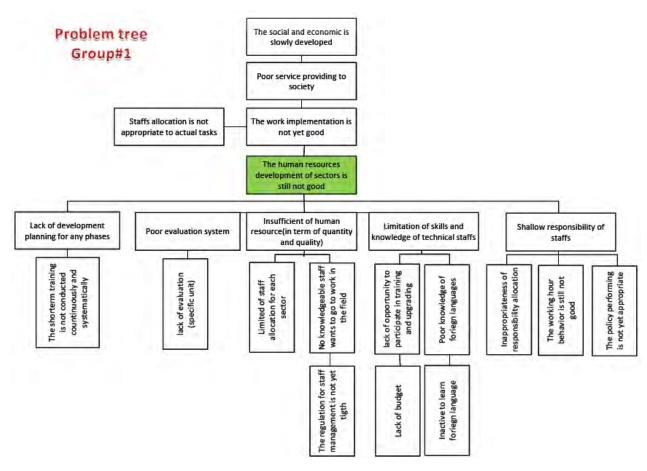
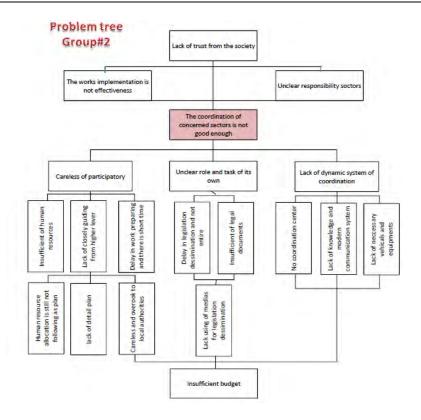


Figure 6.3.1: Problem Tree (Group 1)



Source: JST

Figure 6.3.2: Problem Tree (Group 2)

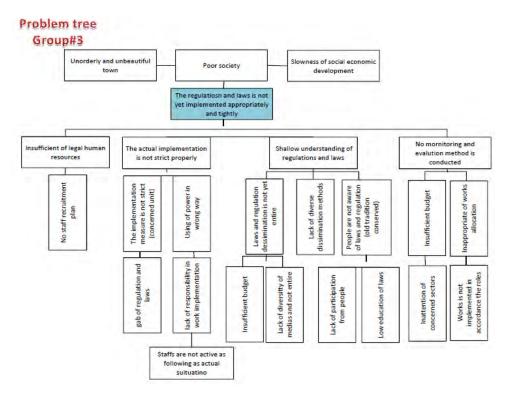


Figure 6.3.3: Problem Tree (Group 3)

6.3.5 Objective Analysis

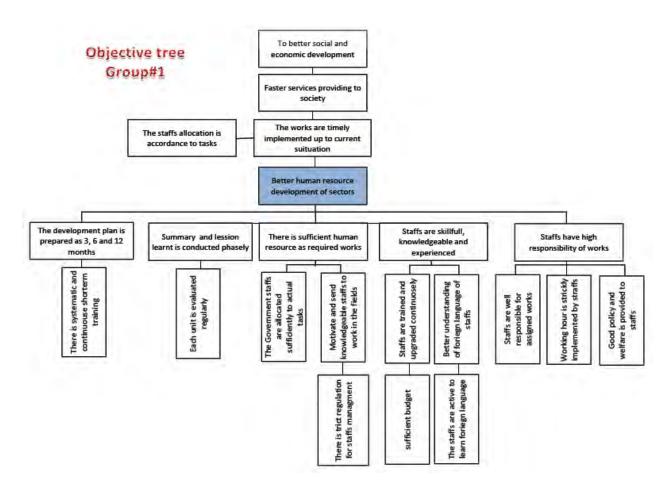
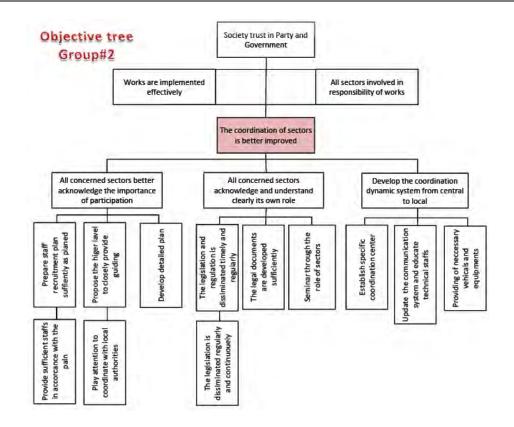


Figure 6.3.4: Objective Tree (Group 1)



Source: JST

Figure 6.3.5: Objective Tree (Group 2)

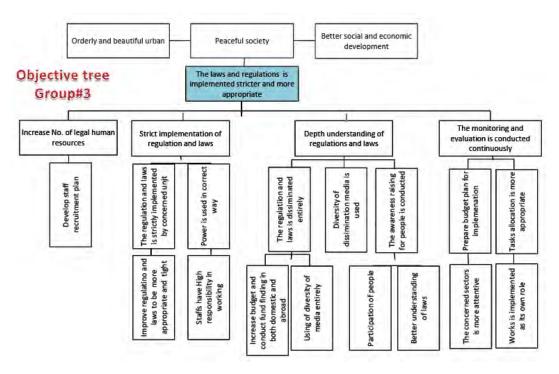


Figure 6.3.6: Objective Tree (Group 3)

6.3.6 PDM

Table 6.3.3: PDM (Group 1)

Project name: Human Resource Development of District Public Works and Transportation (PWT)

Target group: Government officers; Target area: District Public Works and Transport Office Duration: 17 Dec 2010 - 17 Dec 2011

Narrative Summary	Indicators	Means of verification	Important Assumption		
Overall Goal: Provide all services to society faster	80% of people in society does not complain or claim about the service by PWT.	Conducting of evaluation survey and collecting of feedback from Village cluster and villagers			
Objective: The Human Resource Development in the Public Work and Transportation sectors is improved.	90% of Public Work and Transportation staffs is honored by higher authorities (appreciation certification)	Summary report of Administrative sector	PWT officers is well performing according to the Lao laws		
Output: 1. Human Resource Development Plan is implemented 2. The skillful and knowledgeable staffs are sufficient. 3. The staff's performance monitoring and management system established.	2 persons for Master degree 3 persons for Bachelor degree 3 persons for Road management 3 persons for Transport Management 3 persons for Housing Management Annual, Monthly and Weekly meeting	Annual personnel evaluation report	An appropriate reward schemes and policy provided to all good performance staffs		
1.1. Select and send staff for upgrading their technical knowledge 2.1. Allocate the staff to specific task base on their qualification 3.1. Delegate a certain task to individual staff 3.2. Summarize and report work progress by staffs regularly 3.3. Monitor and appraise the work achievement regularly	Input: Budget Training in Japan Vehicle and equipments		Pre-condition: The Human Resource Development programme relevant to Government's human resources development programme		

Source: JST

Table 6.3.4: PDM (Group 2)

Project name: Establish the coordination dynamic system from central to local level

Narrative Summary	Indicators	Means of verification	Important Assumption
Overall Goal: Improve public work and transportation services	The PWTs Problems solving is increased from 40% to 80% compare to before project started	Annual summary report	
Objective: The coordination mechanism from central to local level established	The centered- problem resolution system officially established. The mandatory task of the centered problem solution committee officially approved by the Minister of Public Works and Transportation	Report of public survey	All concerned sector agree to cooperate
Output: 1. The coordination unit is set up 2. The experiences staff are formed to lead this mechanism 3. The coordination methods is better improved	1 Coordination office at Division of Public Works and Transport Representative from 5 sectors participated with involving 10 persons which certified by Division Weekly consultation meeting on work solution	Annual evaluation report Summary report on staffs performance	Good policy and welfare is provided to staffs
1.1. Prepare legislation on setting up of this unit 1.2. Establish working place at central level 2.1. Organize training for staffs 2.2. Provide necessary vehicles and equipments 3.1. Prepare Action Plan	Input: Equipment and budget using for staffs to Experienced trainers	training	Pre-condition: • All concerned sector agree and appoint representative

Table 6.3.5: PDM (Group 3)

Project name: Improvement of Monitoring and Evaluation of Regulation and Laws Implementation

Target group: Vientiane Urban Development and Administration Authority Target area: 100 villages; Duration: 2 years Dated: 17 Dec 2010

Narrative Summary	Indicators	Means of verification	Important Assumption	
Overall Goal: The urban of Vientiane Capital is orderly constructed and beautiful.	80% of targeted 100 villages are orderly constructed in the year 2012 No. of visitors, tourist are increased to 75 % in the year 2012	Report of VUDAA on beautiful and orderly Report of National Tourism Agency		
Objective: The monitoring and evaluation of regulation and laws implementation is improved	75 % of structures is built following to Urban Planning regulation compare to prior to the project begins	Report of VUDAA on House building authorization	Good implementation of Urban Planning Regulation and Laws	
Output: 1. The Monitoring and Evaluation Unit is established and functioned. 2. Awareness rising on Urban Planning Regulation and Laws is conducted.	The mandatory task of M&E unit official approved by higher authority. 75 % of target group participated	Got approval from Vientiane capital mayor Unit report	There is cooperation from target stakeholders. The target group is better understood of Urban regulation and laws.	
1.1. All sectors prepare action plan 1.2. Allocate staffs for unit 1.3. Provide capacity building for staffs on roles, regulations and laws) 2.1. Propagate and promote of law and regulation through local medias (TV, Radio, Brochure, Newspaper and etc.) 2.2. Conduct evaluation on awareness raising	Input: Budget Experts Equipments and Vehicles Study tour		Pre-condition: • All concerned stakeholder agreed with designed project.	

Source: JST

6.3.7 Workshop Evaluation

The two-day PCM/PDM workshop has final evaluation, which explored further feed back from the participants in terms of their satisfaction of the workshop, understanding in the contents of the workshop in term of problems and objectives analysis, group discussion, the number of member in each group, atmosphere among group discussion, and the participant's general comments about the training workshop, etc.

Once the PDM completed, the final evaluation form was distributed to individual participants to indicate the usefulness of the training/workshop, and degree of understanding and general comments about the training workshop. The respective responses related to the final evaluation are as follow, there were altogether 20 evaluation forms collected.

Table 6.3.6: Overall Evaluation of the two days PCM Workshop

Evaluation Question	Score									
Evaluation Question		%	4	%	3	%	2	%	1	%
(1) Do you satisfy with this PCM training method?	8	40	12	60		0		0		0
(2) Your overall evaluation for the PCM workshop	5	25	13	65	2	10		0		0
(3) Please rate your level of satisfaction for group work	11	55	9	45		0		0		0
(3.1) Is the number of group member appropriate?	10	50	7	35	2	10	1	5		0
(3.2) Is the mix of group member encouraging the exchange of ideas?	10	50	9	45	1	5		0		0
(3.3) How was the atmosphere during the group discussion?	15	75	5	25		0		0		0
(3.4) Were you given enough chance to contribute or express your ideas?	13	65	7	35		0		0		0
(3.5) Do you have any comment about the content?	9	45	9	45	2	10		0		0
(3.6) How about the trainer's quality?	15	75	5	25		0		0		0
(3.7) do you satisfy with coffee break and food services?	14	70	6	30		0		0		0
Average	11	55	8	41	2	4	1	1	0	0

*Note: 5 points—Most Positive 4 points—Very Positive 3 points—Positive 2 points—Negative 1 points—Very Negative

- (1) Satisfaction or feeling toward the PDM workshop: When asked about participant's satisfaction toward the PCM/PDM training/workshop, 8 participants or 40% stated they are "most satisfied"; while 12 participants or 60% were "very satisfied" with the workshop (see table 3 above).
- (2) Overall evaluation for the PCM training/workshop: 5 participants 25% greatly like this PDM training workshop especially they satisfied with the workshop's contents and started as "most positive", 13 participants or 65% said they were "very positive", other 2 people stated they were "positive" understood about the contents of the workshop.
- (3) Group Discussion methodology: 11 of them or 55% mentioned they were "most satisfied"; while 9 participants or 45% stated that they were "very satisfied" of group discussion methodology.
 - (3.1) Number of the participants: 10 participants or 50% stated they were "most positive"; 7 participants or about 35% mentioned they were "very satisfied"; 2 person or 10% said he/she was "satisfied" and the rest 1 participant or about 5% mentioned he/she "not satisfied" to the number of the participants' group.
 - (3.2) Encouraging of participants to share their ideas: 10 of them or 50% said they were "most positive" and other 9 people or 45% stated they were very positive" and the rest 1 person or about 5% said he/she "positive" to encourage to share the their idea.
 - (3.3) Atmosphere of the workshop during the group discussion: 15 participants or 75% said they were "most satisfied" and the rest 5 participants or 25% said they were "very satisfied" to the atmosphere of the workshop during the group discussion.

- (3.4) Chance to share idea: 13 of them or 65% unveiled they were "most positive"; the rest 7 people or 35% stated they were "very positive" of having a chance to share their owned idea.
- (3.5)Participant assessment about the workshop **content**: 9 participants or about 45% reported they were "most satisfied", another 9 participants or about 45% said they were "very satisfied" and the rest 2 participants or about 10% mentioned they were "satisfied" with the workshop content.
- (3.6) While asked participants about <u>trainer's quality</u>: 15 participants or about 75% mentioned "most positive", another 5 participants or about 25% said "very positive" about the trainers/facilitator's quality of delivery of this training/workshop on project cycle management and prepare project design matrix.
- (3.7) Assessment the participants satisfaction toward <u>coffee break and food services</u>: 14 participants or about 70% mentioned they were "most satisfied" and the rest 6 participants or about 30% said they were "very satisfied" with the coffee break and food services provided by the project.

Appendix 7

A Brochure of the Urban Development Master Plan
-Proposal- as of November 2010







Vientiane Capital Urban Development Master Plan

- Proposal -



The Project for Urban Development Master Plan Study in Vientiane Capital A Brochure of the Interim Report

November 2010

Public Works and Transport Institute (PTI) Japan International Cooperation Agency (JICA) JICA Study Team

(Nippon Koei Co., Ltd International Development Center of Japan PACET Corp. Oriental Consultants Co., Ltd.)



What is Urban Develoment Master Plan?

The best way to develop Vientiane Capital toward the year 2030

Background

Vientiane Capital has high economic and demographic growth potential. It is quite likely that the urban area would rapidly expand toward the suburbs along arterial roads without having enough infrastructure, thus creating the problem of urban sprawl with bad living conditions and inappropriate social services. Then the charms of the city might be lost for ever. To counter this problem, appropriate measures must be taken promptly based on a comprehensive urban development plan. In the light of this situation, it is recommended that the local government of Vientiane Capital as well as all its citizens carefully examine the problems which they are confronted with and consider the best way to develop Vientiane Capital toward the year 2030, so that it should be a more attractive and beloved capital for Lao people and foreign visitors as well. This year is a good occasion for the master plan, as Vientiane Capital marks the 450th anniversary of the transfer of the capital to the city.

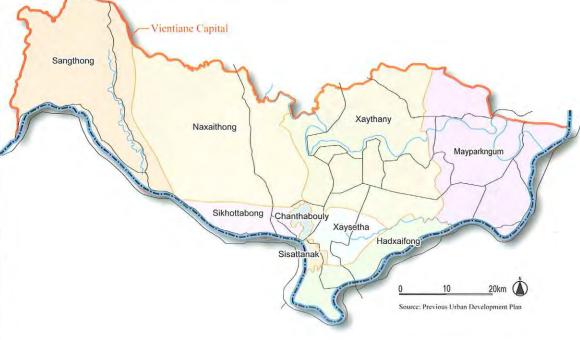
In response to the request of the Government of Lao PDR, the Government of Japan decided to conduct "The Project for Urban Development Master Plan Study in Vientiane Capital". Accordingly, JICA undertakes the Study in close cooperation with the authorities concerned of the Government of Lao PDR.

Objectives

- ➤ To formulate an urban development master plan in Vientiane Capital, targeting the year 2030.
- To examine a methodology to improve the effectiveness of the urban development master plan.
- > To implement a technical transfer for urban development and planning.

Target Area

The whole area of Vientiane Capital, 3,920 km²



Target Area

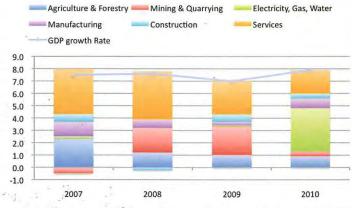
Current Conditions of Vientiane Capital

The origin of township of Vientiane is on a river bank of the Mekong which still performs as the downtown and city center.

Socioeconomic

The population of Vientiane Capital was 795,000 in 2009. The annual population growth rate of Vientiane Capital was 3.1% between 1985 and 2005.

For the economic output, manufacturing, mining quarrying and service sector are major contributors to GDP growth. The GDP growth rate was 6.4% in 2009.

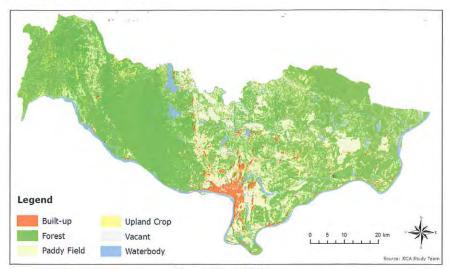


GDP Growth Rate and Contribution of Industries

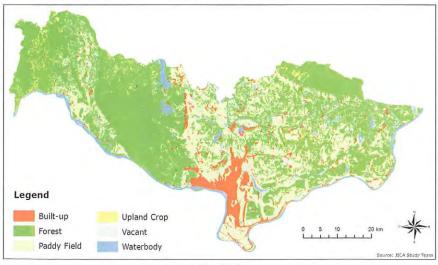
Source: Lao PDR Economic Monitor Mid-Year Update May 2010, World Bank Lao Office

Land Use

Looking at land use of Vientiane Capital in 2005, a dominant land use type is forest area, which occupied about 68% of total area, followed by 17% of paddy area. Rapid economic development and population growth may have largely affected the land use pattern. The built-up area doubled from approximately 3% of total area in 1995 to 6% in 2005.



Land Use 1995



Land Use 2005

Land Use Change (1995-2005)

(1993-2003)			7		1.11	
	1995		2005		Difference	
	Area (Km2)	(%)	Area (km2)	(%)	(2005-1995)	
Built-up Area	132.84	3.4%	220.66	5.6%	87.82	
Paddy Area	655.11	16.7%	659.93	16.8%	4.81	
Upland Crop Area	52.86	1.3%	65.17	1.7%	12.31	
Forest Area	2,710.88	69.2%	2,645.56	67.5%	-65.32	
Vacant Land Area	221.08	5.6%	113,01	2.9%	-108.06	
Water Body Area	147.23	3,8%	215.67	5.5%	68.44	
Total	3,920.00		3,920.00		0.00	



Development Visions for 2030

Ideal future images of our city, Vientiane Capital, for 2030

Development Visions

Development visions are ideal future images of a city to be materialized based on the citizens' needs and foresight of the stakeholders and experts.

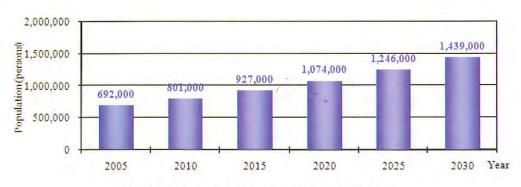
Vision 1: Regional Hub in GMS Receiver of Industrial Relocation under Horizontal Division of Labor in Regional Branch of Global Business Regional Commercial Center Development Visions of Vientiane Capital for 2080 Vision 2: Center of Nation Vision 3: Comfortably Livable - Center of Administration and Politics and Beloved Hometown - Center of Economy Sustainability - Center of Absorbing Population and - Lower Intensity and Environmental Non-Agricultural Employment International Gateway for Goods and Friendliness Rich Green and Water to be surrounded People Convenience and Comfortable Life - Cultural Identity with Historic Architecture and Urban Landscape **Ecology Economy Efficiency**

"Three E" Viewpoints

Development Visions for Vientiane Capital

Socioeconomic Framework

A scenario of demographic development is proposed in comparison with alternatives. In the proposed scenario, population in 2030 will double from the current population, and increase of labor population is 400,000 persons in 20 years. Annual average growth rate of Gross Regional Domestic Products (GRDP) is 8.0% in the same period. GRDP will increase by 4.8 times in 20 years from 2010 to 2030. This will be a high level but at the same time a possible target in terms of urban growth, economic development and infrastructure development. Growth of the economic sectors will be 2.4 times for the primary sector, 6.4 times for the secondary sector, and 4.3 times for the tertiary sector.



Population Projection of Vientiane Capital

A Stucture Plan for Vientiane Capital

Vientiane Capital is required to strengthen its urban economy and improving livability under rapid population growth.

Concept of Urban Structure

Vientiane Capital needs to strengthen its urban economic functions, particularly, in commercial and business, industry and logistics, and improve livability at the same time. A concept of "Multi-core structure" is proposed in consideration of location and size of necessary functions to accommodate them. In this sense, three determinants are taken into account:

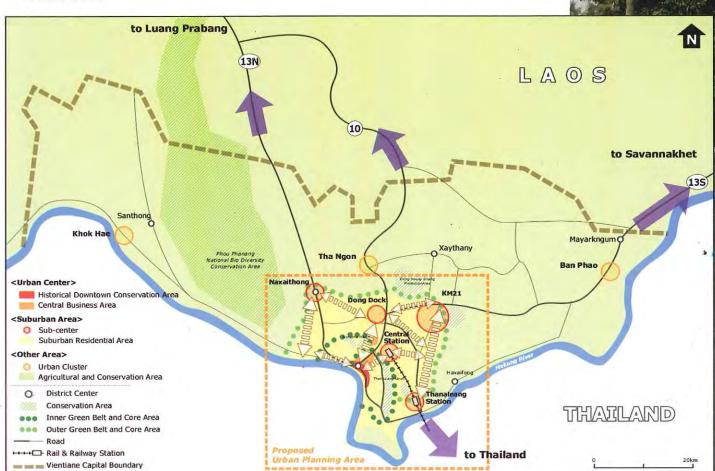
- > Centralized pattern or decentralized pattern
- > Location of required urban function
- > Conservation of natural environment and higher productive agricultural land

Multi-core Structure

Multi-core structure aims at controlling expansion of existing urban center with creating a few of sub-centers and urban clusters to avoid over-concentration and disordered expansion of the existing urban center.

- > Sub-centers: KM21, Thanaleang, Dongdock, Naxaithong and Railway town
- > Urban clusters : Khok Hae, Tha Ngon and Ban Pao

Urban development shall be limited in the designated area and other area will be agricultural or conservation area to be maintained basically with existing land use or conserved.



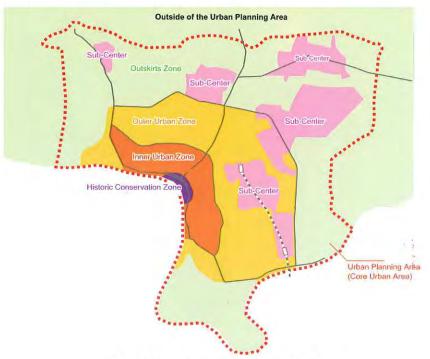


Land Use Policy

Vientiane Capital area is categorized into six (6) zones.

Land Categorization

The whole Vientiane Capital area shall be categorized into six zones based on the roles under the multi-core structure with careful considerations of the location and the current situations.



Land Categorization in the Core Urban Area

Historic Conservation Zone

This zone is the place of historic and cultural heritage. This townscape consisting mainly of low shop-house buildings is a major tourist attraction.

Inner Urban Zone

This zone strengthens the urban function of Vientiane Capital as a center of regional economic hub in GMS in addition to the national center of Lao PDR.

Outer Zone

This zone is the surrounding area of the inner urban and is capable of providing sufficient residential areas with good living environment.

Sub-center Zone < KM21, Thanaleang, Dongdock, Naxaithong & Railway Town>

This zone is developed as a new urban accumulation to relocate certain urban functions from the urban center and to receive new urban activities.

Outskirts Zone

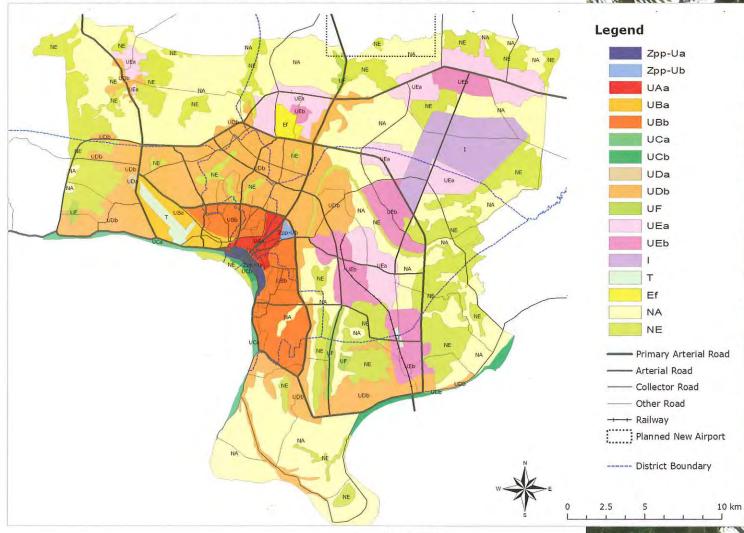
This zone is important from environmental and disaster prevention viewpoints. The zone should be maintained/conserved as current land use.

Urban Cluster Zone <Tha Ngon, Khok Hae & Ban Pao>

This zone is developed to local economic and service center serving surrounding villages as well as to distribute population from the urban center.

Land Use Plan 2030

The future land use plan of the core urban area in 2030 is proposed here.



Land Use Plan 2030

Detailed Zones of Land Use Plan 2030

Zones	Description of Zone	Coverage ratio (%)	Height of Building (m)	Plot Ratio
ZPP-Ua	- Historical town conservation zone	75%	12	2.0
ZPP-Ub	- Ancient site conservation zone	50%	7	0.7
UAa	- Administration and trade central zone	60%	26	4.0
UAb	- New central zone	60%	26	4.0
UBa	- Urban inner zone within aircraft flying zone	60%	*2	1.5
UBb	- Urban inner zone	60%	20	3.0
UCa	Ca - Mekong River bank zone with aircraft flying zone		10	1.0
UCb	- Mekong River bank zone		10	1.0
UDa	- Urban Surrounding Zone with aircraft flying zone	40%	7	0.7
UDb	· Urban Surrounding Zone relevant to agricultural activities	50%	15	2.0
UDc	- Urban Surrounding Zone and suburb	50%	15	2.0
UF	- Village surrounded by rice field	40%	10	1.0
UEa	- Urban expansion zone	50%	23	3.0
UEb - Urban	- Urban expansion zone (Sub-center)	50%	23	3.0
	(When each of specific conditions*1 is met)	50%	50	6.0
I	- Industrial zone	40%	15	1.5
T	- Transport zone	-	-	-
Ef	- Education zone	-	-	-
Em	- Military zone	-	-	-
Eh	- Public health zone	-	-	4
NA	- Agricultural zone	-		•
A Rice field has been surrounded by build up area		-	-	4
NE	- Public preservation zone	-	-	-

^{*1:} Specific conditions are 1) public open space, 2) public greenery space, 3) indoor facility for public benefit and 4) fireproof building



^{*2:} Referring to relevant organization.



Infrastructure Development

A basic strategy for infrastructure development and urban landscape improvement are proposed. Some results of the examinations are shown as bellows;

Road and Transport

Two important ring roads should be completed until 2020. Next, a new ring road between the inner and outer ring road and two important radial roads should be newly constructed until 2030.

Water Supply

Water service ratio of urban area in Vientiane Capital is basically set at the target 97% in 2015 and 100% in 2020.

Sewarage/ Wastewater

Within the urbanized areas centralized wastewater treatment system should be provided in long-term to prevent deterioration to the quality of water environment.

Drainage

Retarding ponds or marshes with water gates and drainage pump stations should be provided for more efficient discharge of rain water.

Solid Waste

Estimation of annual domestic solid waste generation will be 944,415 ton/year. Waste collection rates were assumed to increase up to 100% in 2030.

Parks and Greenery

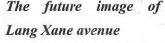
The area of public parks in new urbanizing area will increase by 375ha in total for 2030. This number is 10 times of the current level.

Urban Landscape



The future image of Guest house area

- Building design (height, roofs, window roofs, exterior materials, color, and fences)
- Setback area design (pavement, plants and street furniture) etc.



- Building design (height, color and shape)
- BRT (Bus rapid transit)
- Roadside design (large tree, flower, pavement and street furniture) etc.



This study will be finalized in March/2011. Please contact below if you need further information; JICA Study Team office 021-285262 in PTI