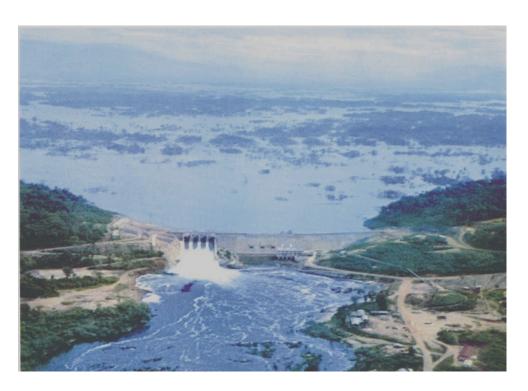
# The Livelihood Reconstruction of Resettlers from the Nam Ngum 1 Hydropower Project in Laos

Bounsouk Souksavath &
Miko Maekawa

**Hydropower Plants in Lower Mekong Region** 

nyuropower Plants in Lower Mekong Region								
Country	Installed Capacity (MW)							
	Existing	Construction	Proposed	Total				
Cambodia	1	- 5,589		5,590				
Laos	1,545	1,758	17,604	20,907				
Thailand	754	_		745				
Vietnam	1,204	1,016	299	2,519				
Yunan Guangxi Myanmar Thalland Cant odia Vietnam								

#### Nam Ngum 1 Hydropower (NN1)



Source: Hajime KOIZUMI, Nam Ngum Dam After 30 Years of Operation. 2006

Constructed in 1971
Reservoir area 370 km<sup>2</sup>
Capacity 155 MW

Resettlement:
23 villages
579 Households
3,242 people

## **Objectives**

- 1.To compare and clarify the present livelihood conditions of resettlement villages with their livelihood conditions prior to resettlement.
- 2. Aims to inform processes for improving future resettlement planning.

# Methodology

Reviewed literature for analysis (e.g., law and regulation, project reports, take books).

Focus group discussion: Interview and discussion with authorities and key persons of projects.

Household interviews by using questionnaire forms.

### **Questionnaire Design**

Part 1: Occupation/Income,

Part 2: Land Ownership/Farming Activities,

Part 3: Property,

Part 4: Convenience in Daily Life,

Part 5: Children's Educational Opportunities,

Part 6: Community,

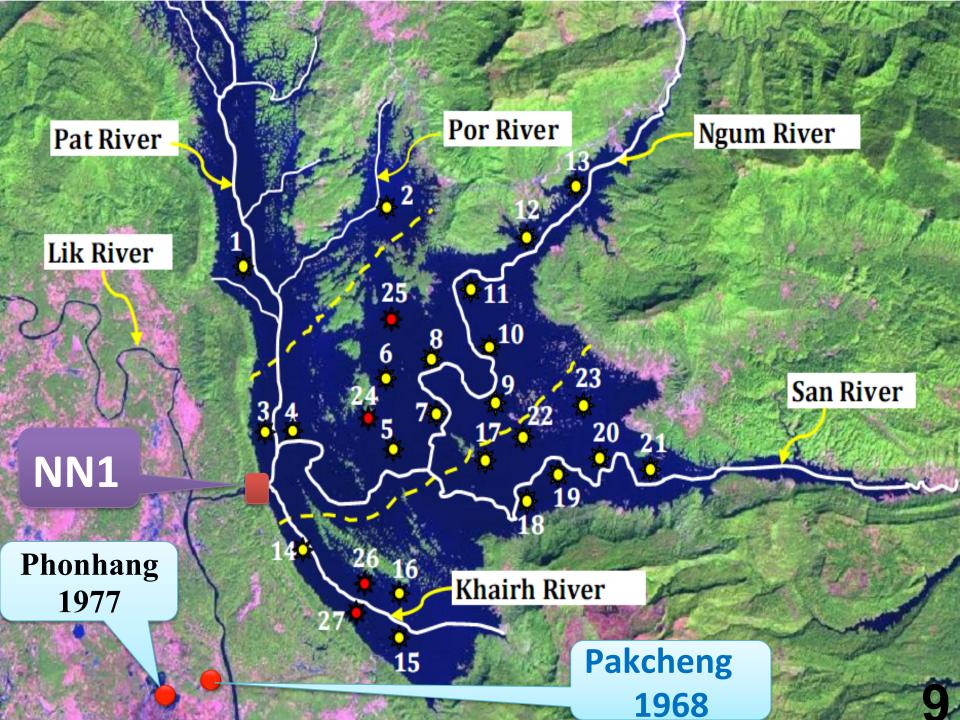
Part 7: General Satisfaction,

Part 8: Compensation.

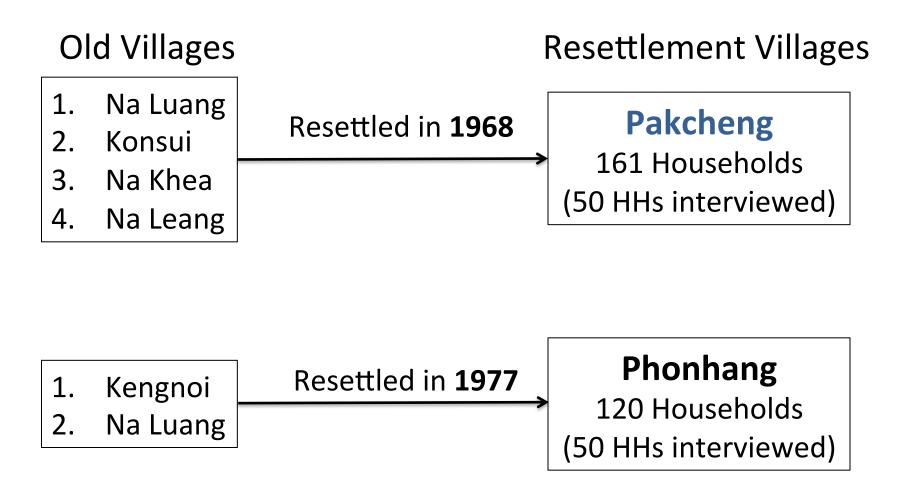
# Part of Questionnaire

[OCCUI	PATION /	INCOME]							
1.1	What is	s your occupation?							
	Before:	<ol> <li>Self-employed farmer</li> </ol>	2. Share cropper	3. Public sector employee					
		4. Private sector employee	5. Laborer (daily/weekly/	monthly)					
		6. Unemployed	7. Other	800 					
	Present:	1. Self-employed farmer	2. Share cropper	3. Public sector employee					
		4. Private sector employee	5. Laborer (daily/weekly/monthly)						
		6. Unemployed	7. Other						
1.2		body in your family work out 1. Yes 2. No who?	side the village? – Going t	to town center or city daily?					
1.3	How mu	ch was/is your family income?							
	Before:								
	Present:_								
1.4	What we	ere/are your income sources?							
	Before:	First source:%		The state of the s					
	Present:	First source:%	Second:%	Third:%					

# Survey about Nam Ngum 1 Hydropower



#### **Process of Resettlement**



#### Households Survey in Pakcheng Village



11

#### **Households Survey in Phonhung Village**





### **Occupation**

Occupation	Pakcheng (n=50)			Phonhang (n=50)				
	Before		Present		Before		Present	
	НН	%	НН	%	НН	%	НН	%
Self-employment farmer	47	94	29	56	45	89	38	76
Share cropper	0	0	0	0	0	0	4	8
Public sector employee	0	0	8	16	0	0	5	10
Private sector employee	0	0	3	6	0	0	0	0
Laborer	0	0	5	10	0	0	2	4
Unemployed	0	0	1	2	0	0	0	0
Other	3	6	5	10	5	11	1	2

In before "self-employment farmer" was majority occupation, while in the present the occupation is changing, people can work outside with the public and private sectors.

# Family Income in Present (per year)

Present Family Income	Pakcheng	(n=50)	Phonhang (n=50)		
(Kip)	НН	%	НН	%	
3,000,000-5,000,000	5	10	11	22	
6,000,000–10,000,000	12	24	19	38	
11,000,000-15,000,000	15	30	16	32	
16,000,000–20,000,000	9	18	2	4	
21,000,000–25,000,000	5	10	1	2	
26,000,000–30,000,000	1	2	0	0	
31,000,000–35,000,000	2	4	0	0	
41,000,000–45,000,000	0	0	1	2	
120,000,000	1	2	0	0	
Average Exchange 8,000kip/\$ (2010)	23,112,000Kip (2,889\$)		10,380,000Kip (1,298\$)		

Family income of **Pakcheng** village is significantly (almost twice) larger than **Phonhang** Village. Why?

#### Land Ownership/Farming Activities

#### **Before:**

Paddy field **1.5**ha/HH (base on 5 family member)



#### **Present:**

Paddy field 1 ha/HH for Pakcheng & 1.3ha/HH for Phonhang (base on 5 family member)

(Photo 2010)

#### **Pakcheng has better Irrigation**

(Photo 2010)

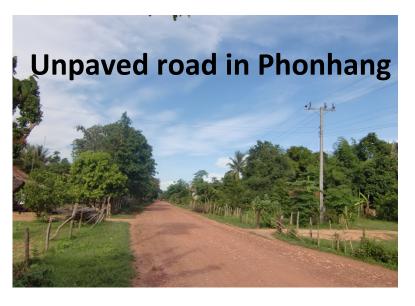


Phonhang village can only enjoy one crop per year, while the **Pakcheng** village can crop twice a year due to more plenty irrigation water.

#### Pakcheng has better road and school

(Photo 2010)



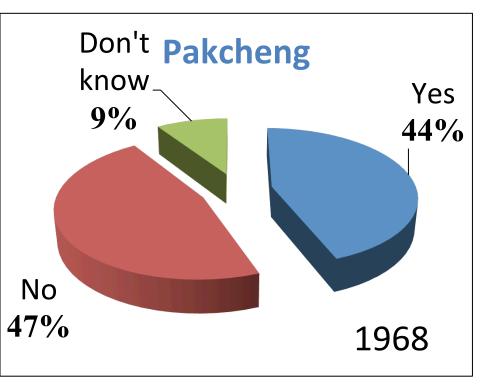


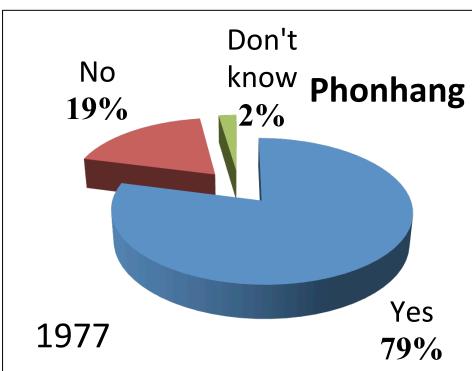




#### **Public Involvement in Before**

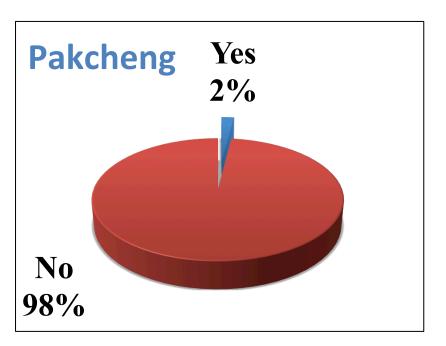
Did anybody explain to you about the resettlement?

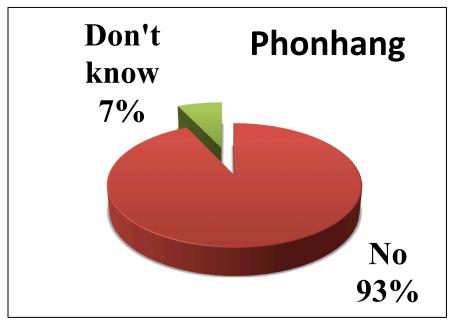




More people in **Phonhang** Village had explanation about resettlement than those in **Pakcheng** Village, presumably because the former were resettled under peace, not under civil war.

#### Did you have choices for the resettlement?

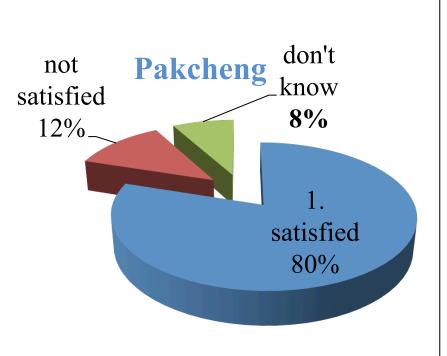


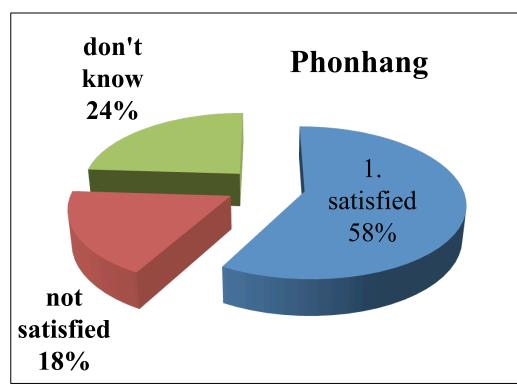


Very few people feel that they had choices, while those in **Phonhang** village were resettled under peace, not under the civil war (as was the case with those in **Pakcheng** village.)

#### **General Satisfaction about Resettlement**

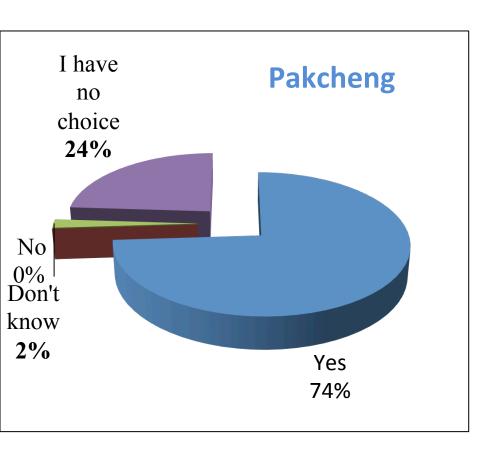
You satisfied with the place you live?

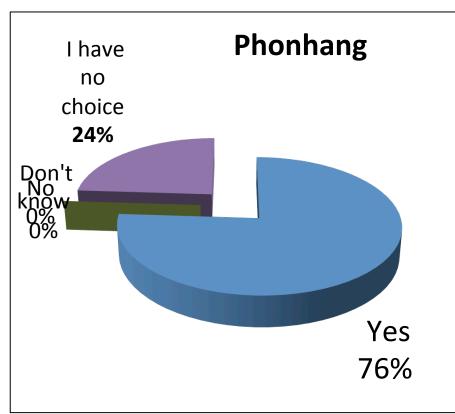




Not surprisingly, those in **Pakcheng** village are more satisfied.

#### Do you want to live here for a long time?





Majority of people in two villages do not wish to move to other areas.

# Considerations of Resettlement Development

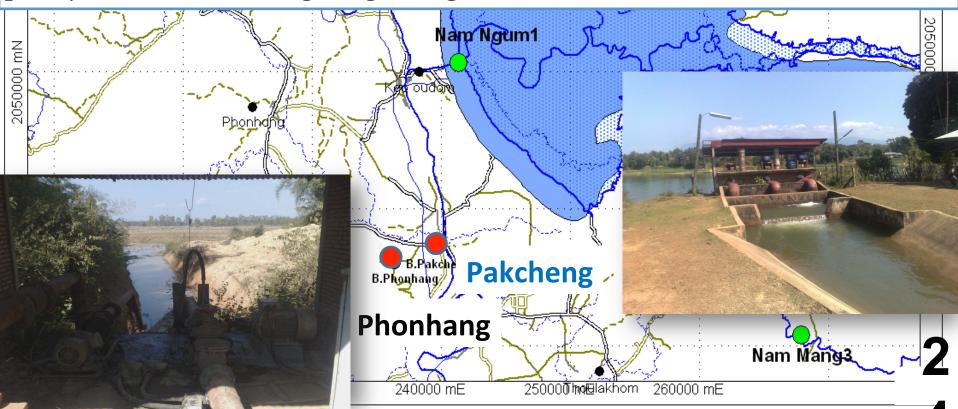
Different gap of family **income** (2,889\$ & 1,298\$) because of different gap of assess **road** and **Irrigation** therefore the improvement of road and irrigation should be taken in consideration.

# **Consideration of Main Road Construction for Phonhang Village** Main Road to Pakcheng National Road No. **Phonhang** Pakcheng Village Village Vientiane Considered Poad **Existing Road** Phonthan Village

#### **Consideration of Improved Irrigation System for Phonhang Village**

The existing irrigation of Phonhang can only supply water to paddy field of about 10ha (12%), while the whole paddy rice field of Phonhang village is about 85 ha.

It is considerable to **connect** irrigation system from **Pakcheng**, who have plenty water into Phonghang village.



#### **Conclusions**

It is clarified that most re-settlers are **satisfied** with the place of they live in the present resettlement villages, and they will **continue** to live there. By the better of public infrastructures, most of them believe that the places they live are **good** for their children.

It is considered that the **improvement** of irrigation systems and main road through Phonhang village were **important** to make livelihood conditions of Phonhang village improved.

## Acknowledgements

The authors are profoundly grateful to Professor Masahiko Kunishima, Professor Mikiyasu Nakayama, Professor Ryo Fujikura, and Dr. Hajime Koizumi for their guidance and intellectual support.

The authors would like to acknowledge with sincere appreciation that this research was partially funded by the fund of the Mitsui & Co., Ltd, Environmental Fund. This study was also partly supported by KAKENHI (24310189).

#### References

- MRC (Mekong River Commission). (2002). *Environmental Training Program (ETP)*. Revised 2002. Vientiane: Mekong River Commission Secretariat.
- MRC (Mekong River Commission). (2009). *Initiative on sustainable hydropower: Work plan*. Vientiane: Mekong River Commission Secretariat.
- NAFRI (National Agriculture and Forestry Research Institute). (2005). *Using of method from agriculture development in Laos*. Vientiane: Author [in Lao].
- Nippon Koei Co., Ltd. (1972). Final report on Nam Ngum Hydro-Electric Project, First Stage. Laotian National Mekong Committee, Mekong Project. Tokyo: Author.
- Schaap, B. (1974). Report on a household study of Nam Ngum Reservoir evacuees with recommendations for a programme of action. Bangkok: Mekong Committee.
- UNDP (United Nations Development Programme). (2006). *Country report: The Lao PDR*. Vientiane: United Nations Country Office, Lao PDR.

# Thank You