

**APPENDIX-I**  
**RURAL SOCIETY AND PARTICIPATORY**  
**APPROACH**

## APPENDIX - I

### RURAL SOCIETY AND PARTICIPATORY APPROACH

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## APPENDIX-I

### RURAL SOCIETY AND PARTICIPATORY APPROACH

#### CHAPTER I-1 ADMINISTRATION AND DEMOGRAPHY

##### I-1.1 Administration

Local administration in Cambodia is structured by Province (Khet), District (Srok), Commune (Khum), Village (Phum) and Group (Khrom). Commune is the lowest unit of public administration. Each unit of local government has an appointed chief of public administration.

The Study Area is located in Basedth district of Kampong Spueu Province and Doun Kaev, Samraong, Tram Kak and Treang districts of Takeo Province. Total number of villages in the Study Area is 276 in total, 23 in Kampong Spueu Province and 253 in Takeo Province. The whole Tram Kak district (consisting of 15 communes) and Phong commune of Basedth district are situated in the Study Area, and several villages in other communes are also partially included in the Study Area as shown in Fig. I-1. Summary of administration in the Study Area is tabulated below, and the detail is shown in Table I-1 and Table I-2.

Communes and Villages in the Study Area (Summary)

Province	District	Nos. of Commune	Nos. of Villages	
			Total	in the Study Area
Kampong Spueu Takeo	Basedth	4	55	23
	Doun Kaev	1	12	1
	Samraong	1	10	4
	Tram Kak	15	242	242
	Treang	3	30	6
Total				
2 Provinces	5 Districts	24 Communes		276 Villages

Source: 1998 Population Census of Cambodia

Total population and households consist of total population of these villages and “special settlement”. The special settlement is temporary group of people who do not belong to any part of villages. The special settlements are located in Basedth commune (24 persons/ 4 household), Roka Knong commune (312 persons/ 24 households) and Trapeang Kranhung commune (173 persons/ 30 households).

##### I-1.2 Demography

Total population and households in the Study Area is about 165,600 persons and 33,000 households, respectively, according to “population census in 1998”. Sex ratio

(% of male/ female) is 89.1 %. Average family size is 5.0 persons/household. The population and households are summarized below, and the detail is shown in Table I-2.

Population and Households in the Study Area (Summary)

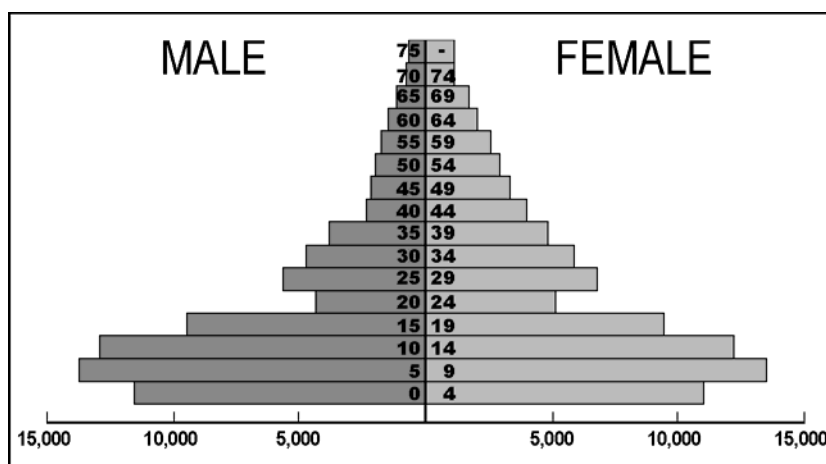
Province	District	Nos. of Households	Population	Sex Ratio M/F (%)	Average Family Size
Kampong Spueu Takeo	Basedth	2,674	13,836	86.8	5.2
	Doun Kaev	83	399	90.9	4.8
	Samraong	464	2,466	88.4	5.3
	Tram Kak	28,826	144,032	90.5	5.0
	Treang	978	4,847	88.4	5.0
Total		33,025	165,580	89.1	5.0

Source: 1998 Population Census of Cambodia

As the Study Area is 65,000 km<sup>2</sup> in total, population density of the Study Area is 2.55 persons/km<sup>2</sup>.

Age distribution is shown below. As fertility rate had seriously decreased under “Khmer Rouge Regime”(1975-79), population of 20-24 year-old-generation is less than two thirds of that of the estimated natural growth rate during 1975 - 1979. The population of present 0-4 year-old-generation has been affected by the unhappy period, since most of them are supposed to be children of the 20-24 year-old-generation.

Age Distribution in the Study Area



Source: 1998 Population Census of Cambodia

## CHAPTER I-2 SOCIAL ENVIRONMENTAL BASELINE SURVEY

In order to grasp beneficiaries' needs, expectation and worries about the project, and social and rural condition, such as family condition, living condition, farm economy, farming practices, interview surveys were conducted with questionnaire in February and September 2001. Before the questionnaire survey, the Study Team interviewed commune leaders as Commune Profile Survey. Information from the commune profile survey, district leaders, other informant and available data such as population census was used to modify the questionnaire on which local condition could be reflected. Selection of interviewee (201 + 60 households<sup>\*1</sup>) was made according to the following conditions:

- 1) One village should be selected from every major commune<sup>\*2</sup>,
- 2) The number of the interviewees in the selected villages should be determined in proportion to commune population, and
- 3) The interviewees should be selected at random from the villager registration.

Distribution map of selected villages having 261 interviewees was shown in Fig. I-1. The survey with the modified questionnaire was conducted at village leader's house by enumerators and their assistants who were trained by the Study Team. The modified questionnaire used for the social environmental baseline survey is shown in Table I-3.

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<sup>\*1</sup> The questionnaire survey was conducted for 201 households on February 2001, and additional survey was for 60 households on September 2001. The additional survey was 20 households each for Trapeang Chhuk village and Kim Sei village (SRP), and Trapeang Snao village (PDP).

<sup>\*2</sup> The major communes means that more than 50 % of villages in the commune are located in the Study Area.

## CHAPTER I-3 RRA WORKSHOP

The “Rapid Rural Appraisal (RRA) Workshops” were held at three villages by the Study Team. Categories of “Individual Informants” are shown below:

Categories of Informants for RRA Workshop

Commune	Village	Key Informant	Individual Informant
Samraong	Prey Ta Dok	Village Chief	0.3 ha Paddy Farmer 2 ha Paddy Farmer
O Saray	Stueng	Village Chief	Vegetable Farmer Paddy in Reservoir
Ta Phem	Ta Phem	Village Chief	Widow Livestock Farmer

The target villages and informants (interviewees) were selected based on the Population Census<sup>\*</sup>, statistics, and results of the Commune Profile Survey and the Social Environmental Baseline Survey. They are typical farmers of the Study Area. The results of the workshops (for individual informants) are summarized in Table I-4. The results of RRA workshops were properly reflected on planning.

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\* 1998 Population Census of Cambodia

## CHAPTER I-4 PRA WORKSHOP

### I-4.1 General

The “Participatory Rural Appraisal Workshops (PRA Workshops)” were carried out at stage in the Study Area on sub-contract basis. The first was held at the Master Planning Stage, and the second was at the Feasibility Study Stage.

#### (1) PRA Workshops at the Master Planning Stage

Objectives of the workshops were (1) explanation of the draft Master Plan to anticipated beneficiaries, (2) hearing of their opinions, and (3) confirmation of acceptability of the Plan for them. The PRA procedure was adopted for these purposes.

Twenty sessions of workshops were conducted for four (4) days from June 13 to June 16, 2001; twelve sessions with farmers or beneficiaries, six sessions with local administration staff (commune (vice-) chief and village (vice-) chief), one sessions with related NGOs working in the Study Area and one session with related local governmental organizations. The workshops were operated by facilitators. The facilitators were well trained by the Study Team prior to the workshops. The Study Team members participated in all the workshops as observers.

The participants of farmers or beneficiaries and village (vice-) chiefs were selected from villages, which are covered by proposed three (3) plans (USP, SRP and PDP) of the draft Master Plan. The participants of commune (vice-) chiefs were selected from communes and villages of the target areas. Relation between the selected target villages and the plans are shown in Table I-5.

#### (2) PRA Workshops at the Feasibility Study Stage

Objectives of the workshops were (1) explanation of the draft Feasibility Study Plan to beneficiaries, local government officers and NGOs, (2) listening to their opinions, and (3) confirmation of acceptability of the Plan with them.

Ten workshops were conducted for two (2) days from December 5 and 6, 2001; nine sessions with farmers or beneficiaries, and local administration staff (commune (vice-) chief and village (vice-) chief), one session with related local governmental organizations.

The participants of farmers or beneficiaries and village (vice-) chiefs were selected from villages, which are covered by priority projects of the proposed three (3) plans (USP, SRP and PDP). The participants of commune (vice-) chiefs were selected from communes consisting of these villages.

#### I-4.2 Participants for PRA Workshops (1)

The total participants for the workshops were more than 280 people. Details are shown in Table I-4. Number of participants for each workshop was around fifteen. Most of the workshops were conducted getting female participants with an average percentage of about 40 %. Categories of participants are shown below.

Categories of Participants for the PRA Workshops (1)

Categories of Participants	Nos. of Participants	Remarks
Farmers	219	Ave. of paddy field is 1.26 ha.
Big-scale paddy farmers	32	Ave. of paddy field is 1.9 ha.
Small-scale paddy farmers	17	Ave. of paddy field is 0.27 ha.
Vegetable farmers	16	Ave. of vegetable field is 0.44 ha.
Livestock-breeding farmers	13	Ave. of cow holding is 4.1 heads.
Paddy farmers inside reservoir <sup>#1</sup>	34	
Widow paddy farmers	16	Ave. of paddy field is 0.28 ha.
Other category farmer	91	
Local Administration <sup>#2</sup>	49	
NGO	7	7 organizations
Related Governmental Officers(RGO)	6	6 organizations
Total	281	

Note #1: Kpob Trobek Reservoir in O Saray commune and Kim Sei Reservoir in Nhaeng Nhang commune

#2: Commune (vice-) chief and village (vice-) chief

Profiles of Participants for the PRA Workshops

Profiles		Remarks
Number of commune	5 <sup>*1</sup>	Workshops for NGOs and RGOs are not included.
Number of village	21	Workshops for NGOs and RGOs are not included.
Percentage of female	39.9 %	

Note \*1: O Saray, Samraong, T.T.K. Cheung, T.T.K. Tboung and Nhaeng Nhang commune

Participants for the PRA workshop were selected from beneficiaries, local governmental offices, international organizations and related NGOs working in the Study Area. The selected local governmental offices, IOs and NGOs are Department of Environment, DWRAM, WFP (World Food Program supported by UNICEF), Department of Agricultural Extension, AQIP and WID (Women In Development supported by MRD). The activities of selected NGOs are shown in the following:



Categories of NGOs Participated in the PRA Workshops

Name of NGOs		Main activities
EMT	Credit for Rural Area	Micro credit
MCC	Mennonite Central Committee	Micro credit, Food security, Health education, Forestation
CRS	Christian Relief Service	Micro credit
CRWRC	Christian Reformed World Relief Committee	Micro credit
VRC	Veterinaires Ruraux du Cambodge	Vaccination training for livestock
CWPD	Cambodian Women for Peace and Development	Micro credit, Education for firewood and charcoal

### I-4.3 Beneficiaries' Opinions on the Draft Master Plan

The draft Master Plan was accepted as a whole by participants of the workshops. Some requests and opinions were given at the workshops. Outstanding opinions which do not always mean the majority, are summarized in this section.

#### (1) Farmers' Groups (FGs)

- Some participants wished to re-establish present VDC because some members of VDC are not active.
- Some participants wished to recommend village chief as representative or advisor for VDC.
- A certain village chief refused to be a representative of VDC because he is busy as the chief of village.
- Participants approved on establishment of FWUC and FGs, and payment of allowance to representative of each FWUC and FG.
- Some participants agreed to pay only for running cost (not including allowance) for FGs activities.
- Amount of the allowance should be decided by members' meeting.
- A certain participant (village chief) of Nhaeng Nhang commune expressed negative opinion against establishment of VDC because PRDC and MRD did not succeed in the past.

#### (2) Micro credit service

- The interest rate should be 4 %/month. The interest should be used for allowance for the representatives of FG and VDC (1 %) and for investment of infrastructures in the village (3 %).
- The minimum amount of loaned money should be Riel 100,000.
- Participants wished to use the credit service at monthly interest rate of 4 %. (The interest rate of 4 %/month is the same as that of NGO's).
- Some participants requested that interest rate should be less than 4 %/month because poor farmers cannot repay even at the present NGO's interest rate of 4 %/month.

- Participants want to repay their credit after harvesting.
- Participants think that everybody will be able to repay if higher yield is ensured.
- FG members for the credit service will persuade debtor farmers to repay by themselves.
- If a debtor farmer does not repay, FG members for the credit service would repay instead of him (her), and the debtor farmer has to pledge his (her) land to FG for the credit service. In this case, the debtor farmer will not be allowed to use the credit service any more.

### (3) ISF

- Some participants wished to pay ISF with rice, while some in cash because they can manage easily.
- Amount of ISF should be decided according to size of land.
- If a member does not pay, FWUC member would repay instead of him, and the farmer who doesn't pay ISF has to withdraw FWUC. In this case, the withdrawer will not be able to use irrigation water.
- Participants appreciate MOWRAM policy (20 % of increased yield for ISF).
- If irrigation water benefits for increase of yield and the collected ISF is used for irrigation facilities, participants are willing to pay ISF.
- If scheduled irrigation water volume does not come, the ISF should be decreased depending on actual volume of the irrigation water.

### (4) Water distribution

- If the irrigation water is not used properly upstream area, representatives of FWUC should mediate the water-related disputes.
- Farmers who have their land far from canals required pumps

### (5) Contribution

- Participants agreed to participate in construction works for short term without getting any allowance. If the works continue for long time, they would request food for work.

### (6) Evacuation or Removal from lands for the Reservoirs and the Canals

- Participants are ready to share land loss for canal construction with villagers by paying money or donating their land.
- Some participants requested for compensation from the project and beneficiaries if he loses his land.
- Some participants requested construction of pond for compensation of relocation from the reservoir area.
- Participants recognize that land inside the reservoirs and canals belong to property of the country.
- Participants are willing to move from the reservoirs and the canals if construction

or rehabilitation works start.

- Some participants of Nhaeng Nhang commune opposed to abandon present land in the small reservoir because their total lands including the land in the small reservoir are too small although they recognize that the lands belong to the country.

#### (7) Cropping Pattern

- Some participants were anxious about marketability of vegetables.
- Some participants wanted to plant medium paddy because taste of medium paddy is better than that of early paddy,
- Some participants wanted to undertake a double or triple cropping a year if irrigation water is available.
- Some participants told that variety of vegetables should be determined by market demand.

#### (8) PDP

- Participants are ready to share land loss for pond with villagers by paying money or donating their land.
- Participants proposed contribution in cash for pond construction if they cannot participate in the construction works.
- Some participants requested to re-excavate their existing pond.

#### (9) Village Road

- Participants are willing to participate with construction works for the village road without any allowance.
- Participants are ready to share land loss for the village road with villagers by paying money or donating their land.

#### (10) Forestation Plan

- Participants need some supports so that they could buy nursery at low price.
- Since deforestation was caused by cutting of trees for selling, they will stop the cutting after getting enough income from on-farm activities.
- The variety of nursery should be decided by farmers.

#### (11) Others

- Having little drought damage before, they requested to the project to supply fertilizers rather than water distribution. (Nhaeng Nhang Commune)
- Technical guidance on rice cultivation has been conducted for limited villagers. They need technical guidance for other villagers.

#### (12) Collaboration with the JICA project

- CRWRC, which has own budget for training on rice cultivation and vegetable cultivation, would collaborate with JICA project.
- WID recommend not to start credit service at the same villages NGO, because villagers would try to borrow money from JICA to pay back to NGO. The

villagers' debts might increase would try to.

- Most of the NGOs providing credit service will collaborate with the JICA project.
- Certain NGOs want to collaborate with the JICA project on the forestation. They wished to expand their activities of distribution of nursery if JICA provides some fund.
- Department of Environment has a proper understanding about usage of agricultural chemicals that appropriate usage of agricultural chemicals will result in high yield, but negative impact for environment is anticipated.

#### (13) O&M

- Participants agreed to participate in O&M works. The working volume should be decided by members' meeting.
- Some participants prefer additional payment for actual O&M works.

#### (14) Donation of Land for Irrigation Facilities

- Beneficiaries are ready to pay money or donate a part of their land to land-losers concerned with the project.
- A village chief of T.T.K. Tboung commune strongly opposed to donate his land.

#### (15) Tertiary Development

- Participants agreed to undertake tertiary development by themselves.
- They will share land loss for the tertiary canal with FWUC members by paying money or donating their land.

And also, participants analyzed cause of low yield:

- Water shortage (Shortage of rain and dry season is long),
- Shortage of fertilizers application,
- Damage by insects and pest,
- Low quality of rice seed,
- Losses during harvesting, transporting and threshing loss,
- Shallow plowing by cattle (less power than water buffalo),
- Fertilization without weeding,
- Low farming technology, and
- Damage by flood.

### **I-4.4 Participants for PRA Workshops (2)**

The total participants for the workshops were more than 140 persons in total. The number of participants for each workshop was around 14. Categories of participants are shown below.

Categories of Participants for the PRA Workshops

Categories of Participants	Nos. of Participants	Remarks
Beneficiaries	111	
Village chief*	48	Chief and vice-chief
VDC president*	31	President and vice-president
Farmer	53	
Commune chief	23	Chief, vice/third chief, and secretary
Local Government officer	7	DWRAM, DAFF, PRDC and DOE
NGO	2	OXFAM
Total	140	

Note \*: Some village chiefs play roles of VDC presidents concurrently

Profiles of Participants for the PRA Workshops

Profiles		Remarks
Number of commune	6	All related commune are included.
Number of village	34	All related villages are included.

Note \*1: All the village chiefs in the priority areas participated in the workshops

Participants for the PRA workshop were selected from beneficiaries, local governmental offices, and related NGOs. The selected local governmental offices are PRDC, DAFF, and DOE (Department of Environment, Takeo). OXFAM Australia participated as NGO.

#### **I-4.5 Beneficiaries' Opinions on the Draft Feasibility Study Plan**

##### **(1) Beneficiaries' Contribution to Construction Works**

- Short-time (2 to 10 days/month) engagement without payment will be acceptable.
- Long-term engagement for construction works without payment will be impossible because most farmers need to work for their family even in dry season.
- Wage proposed by farmers is about Riel 2,500 ~ 5,000 /m<sup>3</sup> according to earthwork volume.
- Some farmers wanted to work with payment. The project office should decide wage. Someone requested Riel 3,000 ~ 5,000 /day.
- We will not request to pay by daily or weekly installments if project owner guarantee payment.
- All the participants agreed to participate in the construction works for the tertiary canal and watercourse without payment for short-term.
- Even for the short-term work without payment, they wanted to have some intensive for working, such as 2 kg of paddy /m<sup>3</sup> according to earthwork volume.
- Payment to farmers is necessary if they work for long-term work.

##### **(2) Provision of Land for Canals and Roads**

- It will be possible to compensate for the land loss with other land or money. All the beneficiaries in the community will share such loss.

- Commune chiefs and village chiefs would have responsibility to solve problems for the compensation for the land loss.
- Provision of land for construction period without any compensation will be possible if percentage of the land loss is small.
- Compensation should be made by land because present landholding size is small in general.

### (3) Inspection Road and Temporary Road for Construction

- They will compensate the land loss either with land or money within the community.
- They agreed to allow MOWRAM / DOWRAM and/or contractor(s) to use their land as temporary road or construction and access road without any compensation for dry season.
- Some commune chiefs and village chiefs requested to use inspection road as community road after rehabilitation and/or construction of canals. Laterite facing proposed in the draft Plan was appreciated.

### (4) Formation of FWUC/FWUG

- All the participants of USP agreed to form an FWUC for USP, become members of FWUC, and obey decision of Apex Committee of FWUC.
- All the participants of SRP agreed to form an FWUG under the present VDC, become members of FWUG and obey decision of FWUG.
- All the participants of PDP agreed to form a FWUG under the present VDC, become members of FWUG and obey decision of FWUG. They need to get the agricultural extension service.

### (5) ISF

- All the participants understood necessity of ISF for rice and diversified crops.
- They agreed to pay ISF as proposed by the draft Plan.
- Most of them recognized that the proposed ISF rate is reasonable, namely 140 kg/ha of paddy for rain season, if anticipated yield is attained.
- Some of them firstly disagreed to pay ISF for dry season irrigation, because they use water in canal at present. But, they finally decide to obey FWUC's decision.
- Some participants gave comment that ISF for the diversified crops is too high.
- Some of them requested that ISF for dry season irrigation should be the same price or less than that for rain season, because volume of irrigation water for vegetable cultivation in dry season is less than that for paddy cultivation in rain season.

### (6) Agricultural Support Service

- All the participants were satisfied with the interest rate (2 %/month) of the proposed credit service handled by FWUC, which is equal to that of the VDC

credit.

- Assembling and shipping of the diversified crops by FWUC are indispensable because marketing of such crops by farmers is difficult.
- They need agricultural extension service, such as breed improvement, water management and fertilizer application for irrigated paddy and diversified crops cultivation.

(7) Cultivation inside the Reservoirs of USP

- All of participants that use land inside the reservoirs of USP agreed to give up the present cultivation inside the reservoirs.
- An owner of a grave inside the reservoir agreed to relocate it if it is submerged.
- An owner of house located inside the reservoir insisted that is not necessary to move because the house is located on higher elevation than that of proposed water surface of the reservoir.
- All of them that use land inside the reservoirs for USP were greatly relieved to know that some area inside the reservoir will available for cultivation even after the construction by delaying planting period.

(8) SRP

- Some of participants disagreed about the Project because they thought JICA would sell irrigation water and prohibit villagers from cultivating and fishing in the small reservoir.
- Some of them worried about their neighbors, whose land located inside the small reservoir might be lost, because relationship among villagers in their community would get worse. But, they finally agreed on the rehabilitation work knowing that some area inside the reservoir might be cultivated by delaying the planting period.
- All of them agreed to pay the proposed ISF because the proposed amount of ISF was reasonable if anticipated yield is attained.
- Some of them requested that the small reservoir be bigger than the proposed one by increasing height of dike by 1 to 2 m because they wanted to expand irrigation area.

(9) PDP

- Some of participants worry about that canal pond is easy to collapse by heavy water stream in rain season.
- Some of them, who have small land, need group pond, and they want to compensate the land for pond by cash to landowner(s).
- They cannot compensate the land for pond by land because they have small patches of lands scatteringly
- Some of them requested that the proposed capacity of group pond should be bigger.

- They requested subsidy for PDP. Actual repayment by beneficiaries should be less than around 20 % of the construction costs.
- Some of them requested wage (Riel 3,000 ~ 3,500 /m<sup>3</sup>) if they have to work for pond construction because most of them are very poor and have to work for their families even during the dry season.
- Most of them request rehabilitation of present canals if PDP is not realised.

#### (10) Opinion and Recommendation of Local Government Officers

- Nobody will reject provision of small land for rehabilitation of road because they know well about importance of road.
- Considering that other international organizations and NGOs provide food for work, JICA follow such practices because most of villagers are very poor.
- Pumps and other building materials for PDP should be prepared by the Project because farmers don't have enough money.
- Some farmers may suffer from poverty during construction period and at the first year of FWUC / FWUG operation, if all the rehabilitation works and O & M of irrigation facilities need beneficiaries' labor work without payment.
- No serious environmental negative impact is anticipated, but it is necessary as proposed in the draft Plan to conduct environmental monitoring and evaluation work during and after the construction works of the priority projects.
- Number of FWUC staff should be reduced to lower ISF rate.
- Some beneficiaries may not agree to pay ISF for supplemental irrigation in rainy season.
- An officer requested JICA to donate fund for PDP.
- Beneficiaries may prefer repayment of construction cost of PDP by labor to that by cash.

#### (11) Deposit of wages for the construction works to FWUC and/or FWUG

- All the participants agreed to deposit a part (5 to 30 %) of wages for the construction works to FWUC and/or FWUG as initial working funds of the first year management of FWUC and/or FWUG.

#### (12) Watercourse

- As the participants agreed to make watercourse by themselves, and requested technical advice, and equipment as required.

#### (13) RIP

- Participants requested urgent rehabilitation of roads. They promised to solve problems for land loss inside community by themselves, and also they will participate in the rehabilitation works.
- They requested high quality roads which are passable even during the rainy season.



## CHAPTER I-5 RURAL SOCIETY

### (1) Present Condition and Problems of Local Society

Exchange labor, which is conducted even today in harvesting and transplanting works, is an effective resource management system in the Study Area. The system essentially depends on mutual understanding between neighborhoods and often takes advantage to ordinary interaction in the local society. Major difference between the exchange labor and commercial trade is “term of the interaction”. The commercial trade concludes at the market itself, while the exchange labor is balanced not instantly but for long term.

Community that does not bring specific benefit but coordinate social environment for maintaining the society is defined as “fundamental community”. Blood-related community and/or local community, such as village is the typical fundamental community.

Community that is established for specific purposes is defined as “functional community”, which aims at attaining the essential target of the fundamental community, namely, “continuation of living”. Farmers groups which are organized under VDCs are categorized in the “functional community”. Procedures and know-how of formation of the community function are accumulated in VDCs.

It is considered that sustainability of the functional community or participation of the members are promised only if incentives that would be acquired by the community are recognized by the members and the operational cost of the community is small enough. On the other hand, it is supposed that contribution of the participation of the community members would not be reflected on such incentives immediately.

### (2) Necessary Approach

It is required for all the community members to follow the consensus of the community. It is necessary to create sense of solidarity and atmosphere to control anti-organizational activities so that the whole activities of the community are properly be coordinated.

As mentioned above, incentives and low operational cost are the basic requirements for formation and maintaining the functional communities. Thus, the following approach should be taken in the course of development activities.

- 1) Clarifying of details of the incentives (quantity, form, timing, etc.)
- 2) Concrete balance sheet of the operation (income and expenditure)
- 3) Establishment and strengthening of the fundamental community such as

village, commune, etc.

- 4) Creation of sense of solidarity through training and participation to community development programs.
- 5) Upgrading from individual collaboration such as exchange labor to community-wise collaboration such as Farmers Group, Farmer Water User Community, etc.

For making such approach, existing society such as village would be strengthened, empowered and utilized as the fundamental community and various functional communities would be organized and operated given certain incentives and initial arrangement such as subsidies, incentives (wages) for participation to the construction works, training to the communities, etc.

### (3) Representatives of Local Administration

#### 1) Commune Chief

Election of commune chiefs will be conducted in 2002. At present, the commune chiefs are appointed by province or district, and term of service is not stipulated. A commune office generally consists of a chief, three vice-chiefs, a secretary, who are paid for their service on the monthly basis\*. Marriage, birth and death are reported to the commune office through village chiefs for registration. The commune chiefs collaborate with the village chiefs on resolution of disputes in the commune. Being not elected directly by the residents who have less sense of belonging to the commune than to the village, the commune chiefs do not seem to be trusted as much as the village chiefs. However, the commune chief plays a role of local leader.

#### 2) Village Chief

Commune is the lowest unit of public administration. The commune chief arranges village chiefs to collect and distribute information. The village chiefs are selected by two ways. One is appointment by the commune chief. The other is made by voting to one or several candidates that were nominated by the commune chief. Both procedures brings the village chiefs who are nominated or appointed by the commune chief. Therefore, the villager do not always fully trust or accept the village chief. The term of the service is not stipulated, which

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\* According to the Commune Profile Survey, the amount of allowance for the commune chief is Riel 30,000/month, that for Vice-chief is Riel 27,000/month, and that for secretary is Riel 23,000/month, respectively, in most communes.

hampers democratization in the local society.

Results of the interview survey to the village chiefs consisting of the election procedures and the term of service of the village chiefs in the Priority Project Areas are shown in Table I-5. The average term of service of the present villages chiefs is 15.7 years.

### 3) President of VDC

The presidents of VDCs, which were originally organized by UNICEF, RD&RP and SEILA Program, were elected by all the villagers at the age of 18 years or older. They have been elected recently, and seem to enjoy villagers' trust and support. Some villagers hope that the president of VDC should be new village chief because they were selected by direct voting by the villagers.

### 4) Representative of Farmers' Group

Various farmers groups (FG) such as FG of credit for purchasing of agricultural input and/or Farmer Water User Group were organized under VDCs. Management of these FGs has been generally conducted by certain VDC members but not by the leaders of the FGs. VDC members seem to play a role of the representatives of FGs.

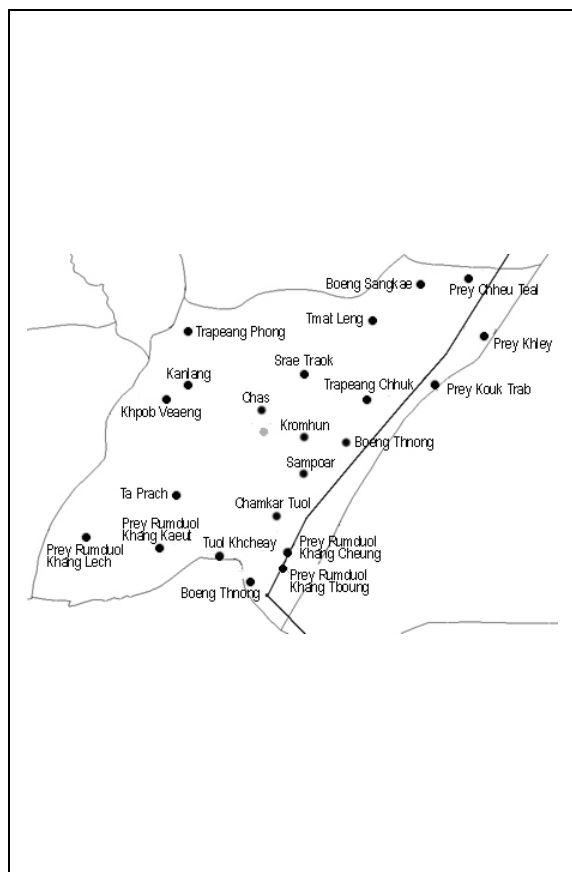
## *Tables*

Table I-1 Communes and Villages in the Study Area

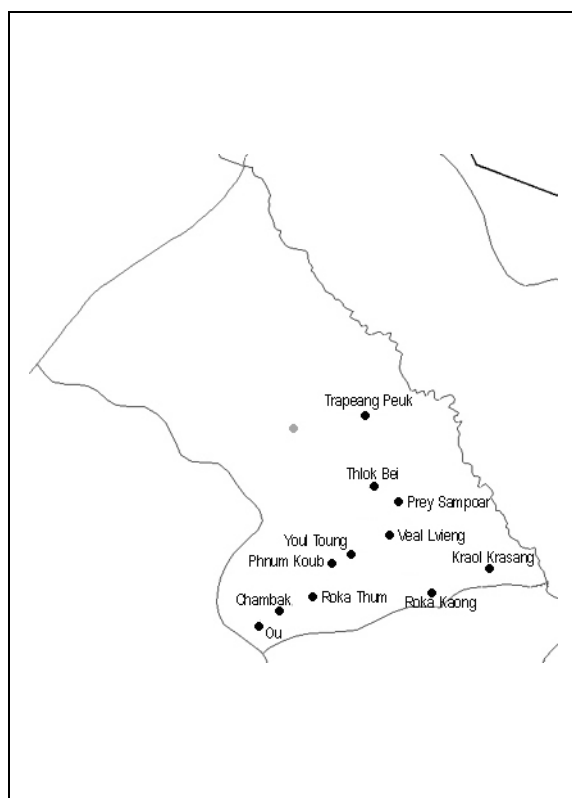
No.	Province	District	Commune	Total	Nos of Villages in the Study Area	in the Priority Area
1	Kampong Spueu	Basedth	Basedth	22	5	
2			Kat Phluk	11	4	
3			Pheakdei	9	1	
4			Phong	13	13	
5	Takeo	Doun Kaev	Roka Knong	12	1	
6		Samraong	Lumchang	10	4	
7		Tram Kak	Angk Ta Saom	22	22	
8			<b>Cheang Tong*</b>	16	16	13
9			Kus	30	30	
10			Leay Bour	25	25	
11			<b>Nhaeng Nhang*</b>	11	11	2
12			<b>O Saray*</b>	12	12	4
13			<b>Trapeang Kranhung*</b>	7	7	1
14			Otdam Souriya	14	14	
15			Popel	12	12	
16			Samraong	16	16	
17			Srae Ronoung	17	17	
18			<b>Ta Phem*</b>	23	23	5
19			Tram Kak	13	13	
20			<b>Trapeang Thum Khang Cheung*</b>	11	11	9
21		<b>Trapeang Thum Khang Tboung*</b>	13	13	1	
22		Treang	Khvav	11	3	
23			Angk Kaev	8	1	
24			Roneam	11	2	
Total						
2 Provinces		5 Districts	24 Communes		277 Villages	35 Villages

Note: \* are related communes for the Priority Area.

Table I-2 Commune and Village Profile (1/13)



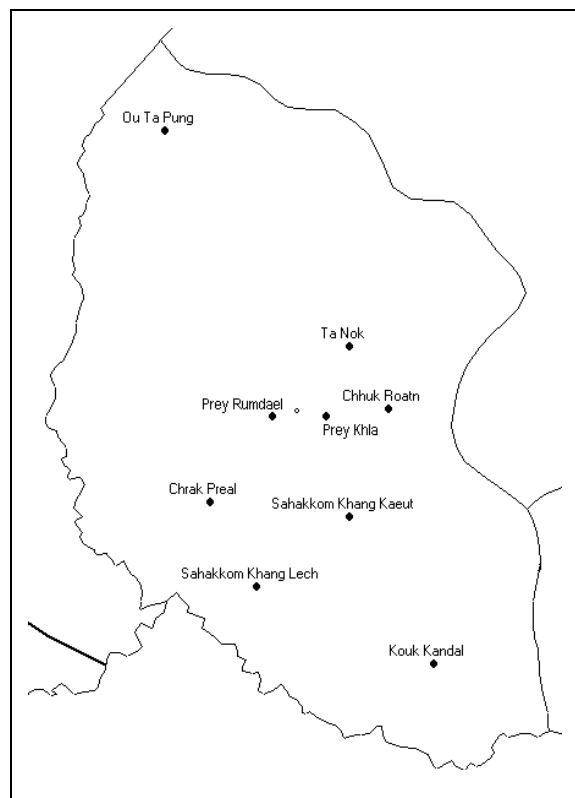
Province: <b>Kampong Spueu</b>		District: <b>Basedth</b> Commune: <b>Basedth</b>			
No	Village	----- Population -----		----- Household -----	
		Total	Male	Female	
1	Prey Chheu Teal*	308	129	179	71
2	Prey Kouk Trab*	514	263	251	103
3	Prey Khley*	437	211	226	87
4	Trapeang Chhuk*	416	187	229	96
5	Boeng Sangkae*	284	120	164	55
6	Boeng Thnong*	610	287	323	124
7	Srae Traok*	336	164	172	71
8	Tmat Leng*	396	174	222	92
9	Sampoar*	534	241	293	109
10	Chamkar Tuol*	320	143	177	65
11	Prey Rumduol Khang Kaeut	464	225	239	88
12	Prey Rumduol Khang Tboung*	615	291	324	138
13	Boeng Thnong*	429	205	224	90
14	Prey Rumduol Khang Lech	565	273	292	114
15	Prey Rumduol Khang Cheung*	661	316	345	146
16	Tuol Khcheay	448	196	252	88
17	Khpob Veang	412	185	227	87
18	Kanlang*	409	182	227	84
19	Chas*	535	254	281	106
20	Trapeang Phong*	268	123	145	49
21	Kromhun*	513	250	263	110
22	Ta Prach	412	195	217	92
	Special Settlements	24	24	0	4
<b>Total</b>		<b>9,910</b>	<b>4,638</b>	<b>5,272</b>	<b>2,069</b>
Average household size:		4.8			
Average sex ratio:		88 %			



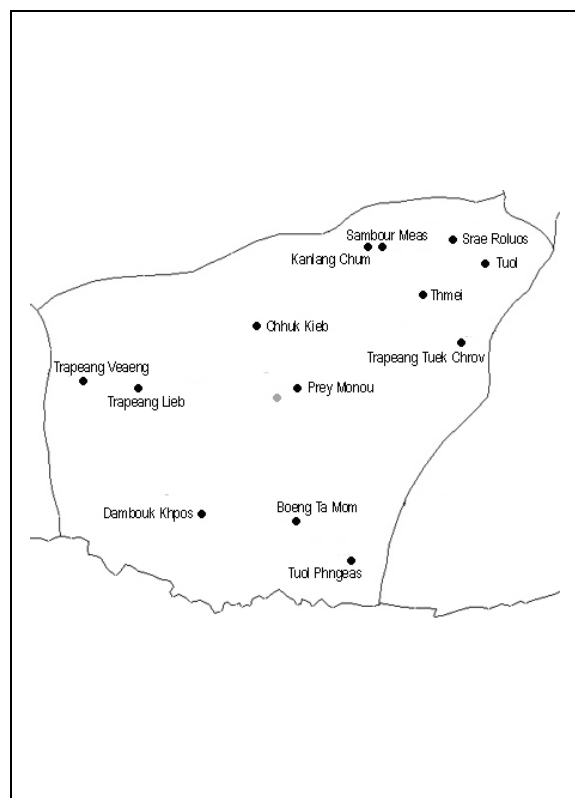
Province: <b>Kampong Spueu</b>		District: <b>Basedth</b> Commune: <b>Kat Phluk</b>			
No	Village	----- Population -----		----- Household -----	
		Total	Male	Female	
1	Kraol Krasang*	608	306	302	110
2	Roka Kaong	915	417	498	168
3	Prey Sampoar*	758	375	383	135
4	Thlok Bei*	615	286	329	115
5	Veal Lvieng*	755	357	398	148
6	Youl Toung*	181	89	92	38
7	Roka Thum*	303	145	158	52
8	Phnum Koub	654	309	345	126
9	Chambak	590	278	312	112
10	Ou	548	253	295	98
11	Trapeang Peuk*	749	352	397	150
<b>Total</b>		<b>6,676</b>	<b>3,169</b>	<b>3,509</b>	<b>1,252</b>
Average household size:		5.3			
Average sex ratio:		90 %			

Notes: \* is out of the Study Area  
 Source: 1998 Population Census of Cambodia

Table I-2 Commune and Village Profile (2/13)



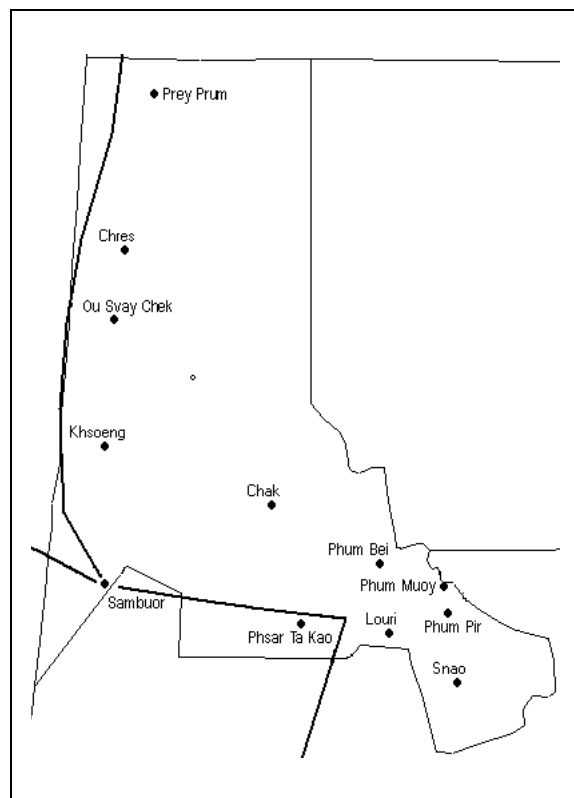
Province: <b>Kampong Spueu</b>		District: <b>Basedth</b> Commune: <b>Pheakdei</b>			
No	Village	Population		Household	
		Total	Male	Female	
1	Chrak Preal*	692	336	356	137
2	Prey Rumdael*	685	326	359	135
3	Prey Khla*	433	213	220	99
4	Chhuk Roatn*	358	168	190	75
5	Kouk Kandal	731	340	391	139
6	Sahakkom Khang Kaeut*	424	199	225	90
7	Sahakkom Khang Lech*	576	273	303	103
8	Ou Ta Pung*	421	194	227	81
9	Ta Nok*	456	205	251	91
<b>Total</b>		<b>4,776</b>	<b>2,254</b>	<b>2,522</b>	<b>950</b>
Average household size:		5.0			
Average sex ratio:		89 %			



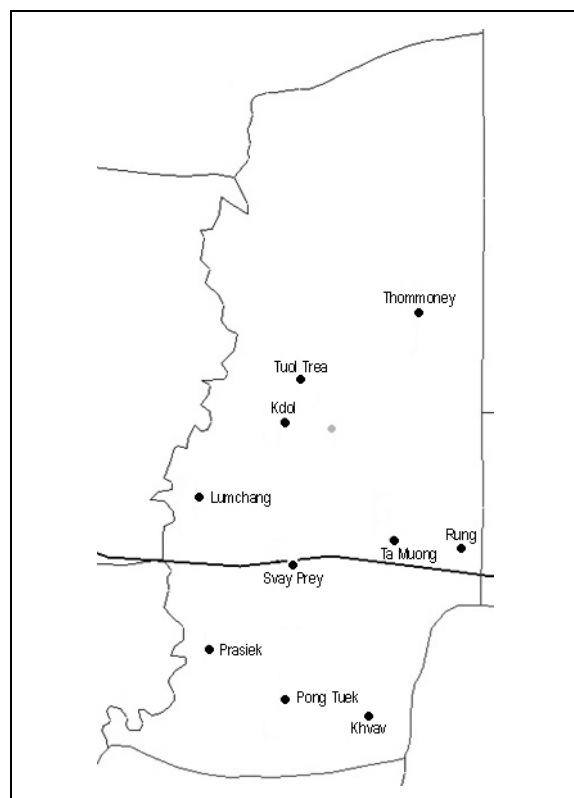
Province: <b>Kampong Spueu</b>		District: <b>Basedth</b> Commune: <b>Phong</b>			
No	Village	Population		Household	
		Total	Male	Female	
1	Boeng Ta Mom	573	265	308	110
2	Tuol	501	228	273	102
3	Thmei	191	87	104	35
4	Sambour Meas	427	197	230	83
5	Kanlang Chum	608	282	326	120
6	Prey Monou	647	293	354	134
7	Trapeang Tuek Chrov	419	180	239	74
8	Trapeang Veaeng	964	449	515	198
9	Chhuk Kieb	632	303	329	118
10	Trapeang Lieb	596	264	332	117
11	Dambouk Khpos	1,169	566	603	216
12	Tuol Phngeas	752	352	400	135
13	Srae Roluos	162	88	74	29
<b>Total</b>		<b>7,641</b>	<b>3,554</b>	<b>4,087</b>	<b>1,471</b>
Average household size:		5.2			
Average sex ratio:		87 %			

Notes: \* is out of the Study Area  
Source: 1998 Population Census of Cambodia

Table I-2 Commune and Village Profile (3/13)



Province: <b>Takeo</b>		Commune: <b>Roka Knong</b>			
District: <b>Doun Kaev</b>					
No	Village	Population		Household	
		Total	Male	Female	
1	Chak*	1,722	809	913	327
2	Phsar Ta Kao*	1,372	634	738	276
3	Sambuor	399	190	209	83
4	Khsoeng*	686	339	347	137
5	Ou Sway Chek*	433	213	220	85
6	Chres*	888	430	458	167
7	Prey Prum*	722	345	377	128
8	Louri*	2,457	1,189	1,268	436
9	Phum Muoy*	907	462	445	186
10	Phum Pir*	688	387	301	125
11	Phum Bei*	1,168	621	547	267
12	Snao*	1,905	938	967	367
	Special Settlements	312	292	20	24
<b>Total</b>		<b>13,656</b>	<b>6,849</b>	<b>6,810</b>	<b>2,608</b>
Average household size:		5.2			
Average sex ratio:		101 %			

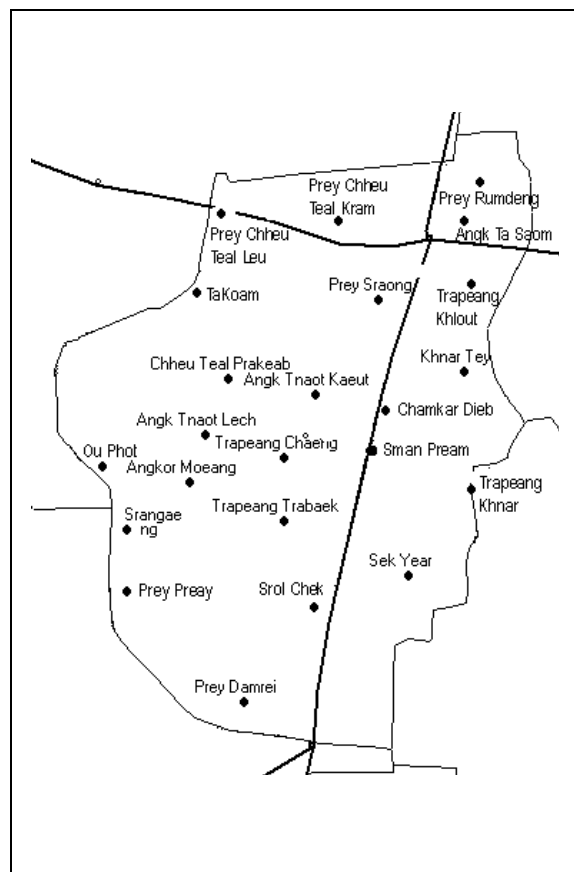


Province: <b>Takeo</b>		Commune: <b>Lumchang</b>			
District: <b>Samraong</b>					
No	Village	Population		Household	
		Total	Male	Female	
1	Lumchang*	466	222	244	99
2	Sway Prey	724	347	377	144
3	Pong Tuek	255	106	149	47
4	Kdol*	676	325	351	134
5	Thommoney*	268	124	144	51
6	Tuol Trea*	665	323	342	120
7	Ta Muong*	629	294	335	122
8	Rung*	507	247	260	100
9	Khvav	738	336	402	131
10	Prasiek	749	368	381	142
<b>Total</b>		<b>5,677</b>	<b>2,692</b>	<b>2,985</b>	<b>1,090</b>
Average household size:		5.2			
Average sex ratio:		90 %			

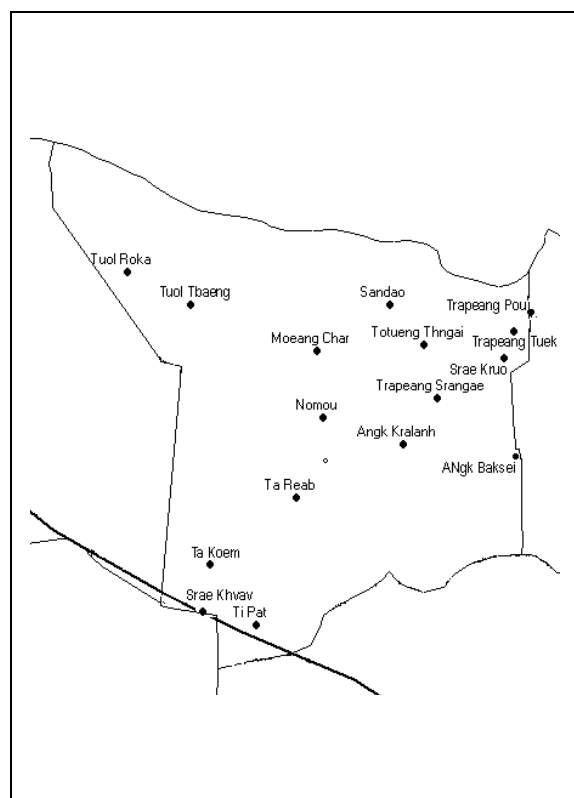
Notes: \* is out of the Study Area  
Source: 1998 Population Census of Cambodia



Table I-2 Commune and Village Profile (4/13)



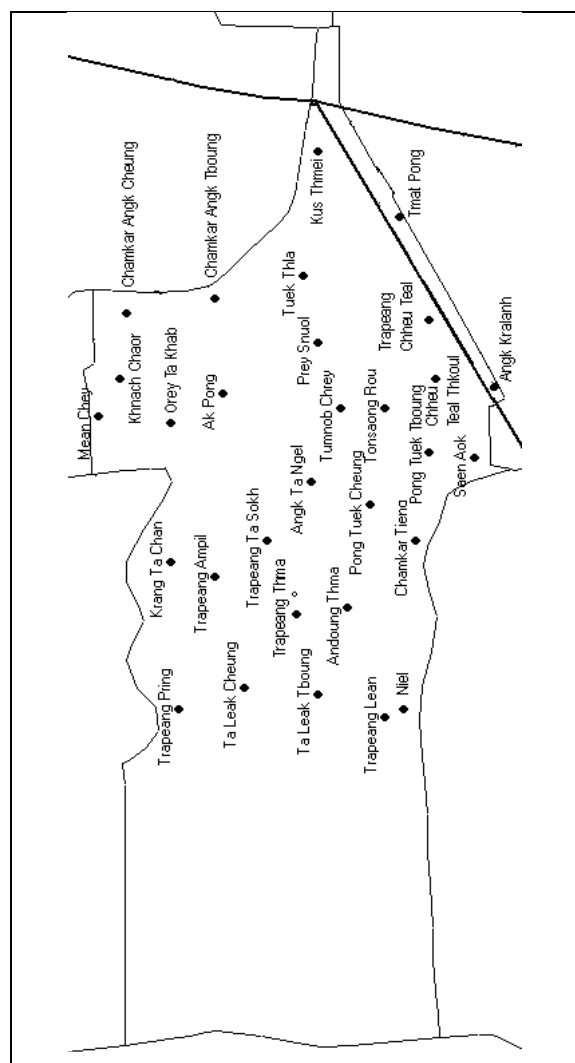
Province: <b>Takeo</b>					
District: <b>Tram Kak</b>		Commune: <b>Angk Ta Saom</b>			
No	Village	----- Population -----		Household	
		Total	Male		Female
1	Srok Chek	597	285	312	126
2	Prey Damrei	506	259	247	104
3	Prey Sraong	1,161	543	618	216
4	Prey Chheu Teal Leu	290	148	142	62
5	Chheu Teal Prakeab	317	149	168	67
6	Prey Chheu Teal Kraom	575	273	302	111
7	Angk Ta Saom	2,568	1,199	1,369	467
8	Trapeang Khnar	841	382	459	183
9	Sek Year	604	279	325	125
10	Ou Phot	372	184	188	77
11	Khnar Tey	686	322	364	139
12	Prey Rumdeng	1,062	508	554	198
13	Trapeang Chaeng	169	84	85	34
14	Angk Tnaot Lech	408	196	212	86
15	Trapeang Sraengae	493	228	265	98
16	Angk Tnaot Kaeut	721	364	357	142
17	Chamkar Dieb	398	179	219	89
18	Sman Pream	413	195	218	80
19	Trapeang Trabaek	722	328	394	149
20	Prey Preay	480	222	258	93
21	Trapeang Khnout	464	228	236	85
22	Angkor Moeang	242	118	124	50
<b>Total</b>		<b>14,089</b>	<b>6,673</b>	<b>7,416</b>	<b>2,781</b>
Average household size:		5.1			
Average sex ratio:		90 %			



Province: <b>Takeo</b>					
District: <b>Tram Kak</b>		Commune: <b>Cheang Tong</b>			
No	Village	----- Population -----		Household	
		Total	Male		Female
1	Srae Khvav	921	427	494	189
2	Ta Reab	550	244	306	113
3	Angk Kralanh	569	259	310	113
4	Angk Baksei	593	280	313	122
5	Tuol Roka	820	373	447	177
6	Trapeang Sraengae	244	114	130	55
7	Totueng Thngai	437	214	223	94
8	Trapeang Tuek	383	184	199	71
9	Ta Koem	414	190	224	90
10	Moeang Char	1,292	600	692	290
11	Trapeang Pou	401	185	216	77
12	Sandao	534	249	285	104
13	Ti Pat	432	202	230	98
14	Srae Kruo	472	237	235	101
15	Tuol Tbaeng	752	330	422	142
16	Nomou	692	327	365	145
<b>Total</b>		<b>9,506</b>	<b>4,415</b>	<b>5,091</b>	<b>1,981</b>
Average household size:		4.8			
Average sex ratio:		87 %			

Notes: \* is out of the Study Area  
 Source: 1998 Population Census of Cambodia

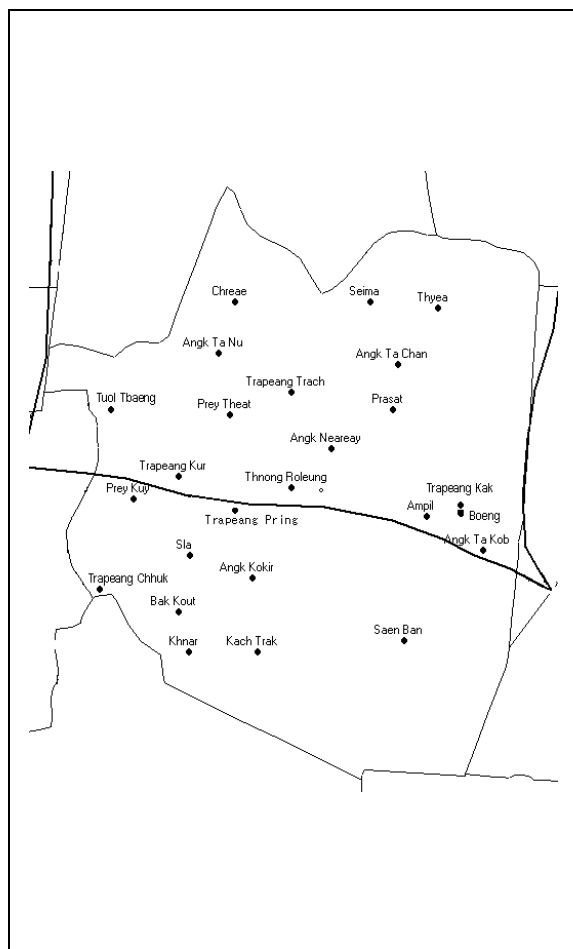
Table I-2 Commune and Village Profile (5/13)



Province: <b>Takeo</b>					
District: <b>Tram Kak</b>		Commune: <b>Kus</b>			
No	Village	----- Population -----		Household	
		Total	Male	Female	
1	Kus Thmei	623	296	327	133
2	Tuet Thla	510	228	282	108
3	Tumnob Chrey	364	163	201	77
4	Khnach Chaor	466	245	221	88
5	Ak Pong	409	196	213	73
6	Mean Chey	166	77	89	35
7	Angk Kralanh	288	133	155	55
8	Angk Ta Ngel	475	216	259	98
9	Chheu Teal Thkoul	244	115	129	53
10	Pong Tuet Cheung	272	125	147	58
11	Krang Ta Chan	611	285	326	126
12	Niel	321	139	182	64
13	Trapeang Lean	534	260	274	100
14	Tmat Pong	266	121	145	51
15	Trapeang Pring	830	391	439	180
16	Trapeang Thma	835	407	428	154
17	Ta Leak Cheung	749	341	408	154
18	Ta Leak Tbound	667	325	342	136
19	Trapeang Ta Sokh	377	147	230	87
20	Trapeang Ampil	254	126	128	52
21	Chamkar Tieng	308	140	168	63
22	Saen Aok	293	143	150	54
23	Tonsaong Rou	206	94	112	46
24	Trapeang Chheu Teal	305	155	150	60
25	Prey Snuol	268	120	148	57
26	Chamkar Angk Cheung	437	209	228	90
27	Chamkar Angk Tbound	476	233	243	90
28	Pong Tuet Tbound	408	198	210	82
29	Andoung Thma	595	279	316	112
30	Prey Ta Khab	544	269	275	117
Total		13,101	6,176	6,925	2,653
Average household size:		4.9			
Average sex ratio:		89 %			

Notes: \* is out of the Study Area  
Source: 1998 Population Census of Cambodia

Table I-2 Commune and Village Profile (6/13)

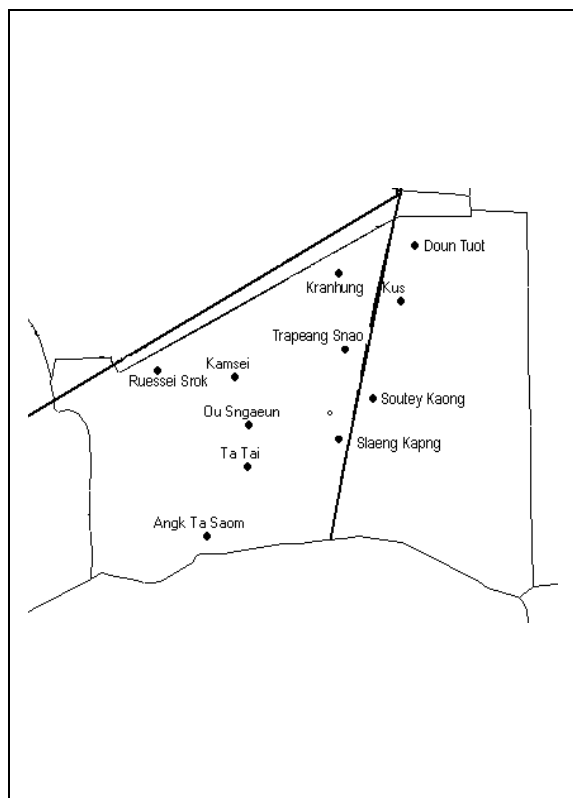


Province: <b>Takeo</b>		Commune: <b>Leay Bour</b>			
District: <b>Tram Kak</b>					
No	Village	Population		Household	
		Total	Male	Female	
1	Chreae	853	417	436	150
2	Khnar	925	421	504	172
3	Prey Theat	930	428	502	191
4	Trapeang Kur	493	244	249	96
5	Tuol Tbaeng	977	468	509	186
6	Angk Kokir	418	192	226	86
7	Trapeang Chhuk	812	378	434	146
8	Prey Kuy	714	329	385	140
9	Ampil	776	369	407	151
10	Angk Ta Kob	831	378	453	152
11	Boeng	545	262	283	100
12	Kach Trak	752	359	393	146
13	Trapeang Trach	693	325	368	134
14	Thyea	675	328	347	132
15	Thnong Roleung	672	316	356	136
16	Trapeang Pring	989	484	505	173
17	Angk Ta Chan	596	285	311	112
18	Prasat	467	221	246	93
19	Angk Ta Nu	902	440	462	161
20	Bak Kout	943	448	495	176
21	Trapeang Kak	194	95	99	37
22	Angk Neareay	639	329	310	122
23	Sla	641	305	336	120
24	Seima	623	277	346	121
25	Saen Ban	1,380	655	725	268
<b>Total</b>		<b>18,440</b>	<b>8,753</b>	<b>9,687</b>	<b>35,01</b>
Average household size:		5.3			
Average sex ratio:		90 %			

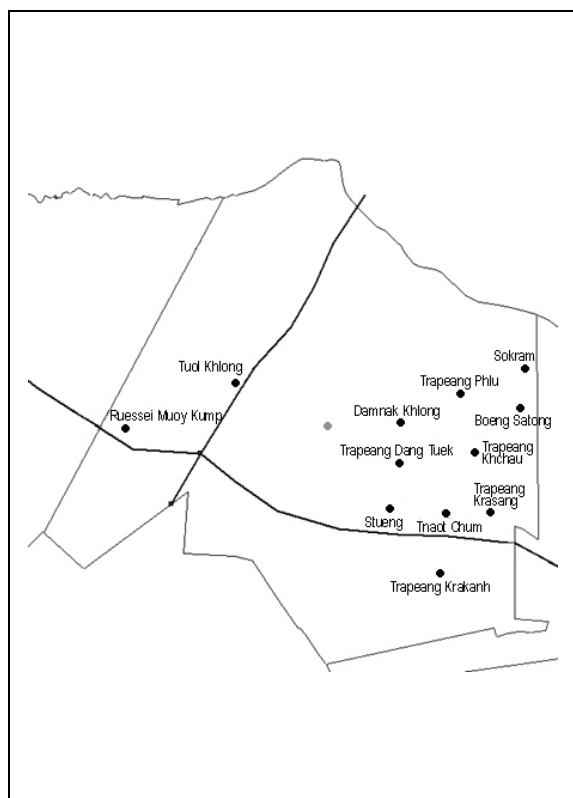
Notes: \* is out of the Study Area

Source: 1998 Population Census of Cambodia

Table I-2 Commune and Village Profile (7/13)



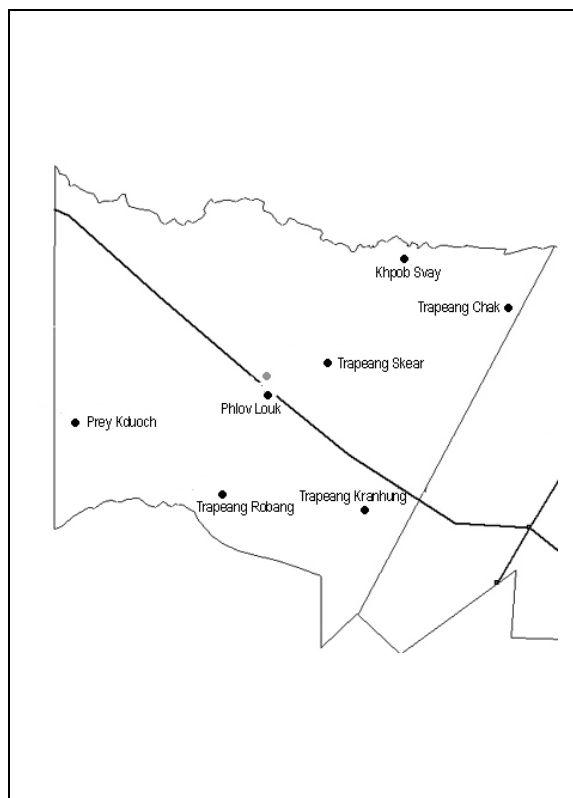
Province: <b>Takeo</b>		District: <b>Tram Kak</b> Commune: <b>Nhaeng Nhang</b>			
No	Village	Population		Household	
		Total	Male	Female	
1	Doun Tuot	263	126	137	56
2	Soutey	412	200	212	88
3	Kranlung	304	144	160	70
4	Trapeang Snao	583	259	324	119
5	Kus	324	144	180	76
6	Slaeng Kaong	662	304	358	124
7	Ta Tai	867	420	447	176
8	Ruessei Srok	639	316	323	135
9	Angk Ta Saom	737	338	399	152
10	Ou Sngaeun	450	221	229	93
11	Kamsei	344	162	182	68
<b>Total</b>		<b>5,585</b>	<b>2,634</b>	<b>2,951</b>	<b>1,157</b>
Average household size:		4.8			
Average sex ratio:		89 %			



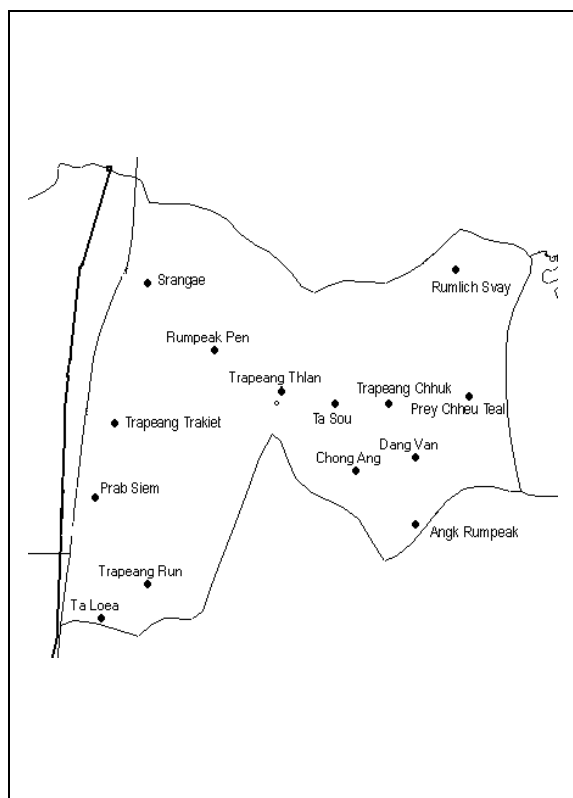
Province: <b>Takeo</b>		District: <b>Tram Kak</b> Commune: <b>O Saray</b>			
No	Village	Population		Household	
		Total	Male	Female	
1	Trapeang Dang Tuek	615	289	326	124
2	Tuol Khlong	1,087	498	589	228
3	Sokram	950	435	515	181
4	Trapeang Krasang	828	365	463	183
5	Trapeang Kralanh	1,087	523	564	224
6	Boeng Satong	420	200	220	85
7	Trapeang Phlu	729	328	401	152
8	Trapeang Khchau	498	227	271	101
9	Damnak Khlong	592	283	309	110
10	Stueng	1,529	706	823	322
11	Ruessei Muoy Kump	1,072	512	560	228
12	Tnaot Chum	867	423	444	174
<b>Total</b>		<b>10,274</b>	<b>4,789</b>	<b>5,485</b>	<b>2,112</b>
Average household size:		4.9			
Average sex ratio:		87 %			

Notes: \* is out of the Study Area  
 Source: 1998 Population Census of Cambodia

Table I-2 Commune and Village Profile (8/13)



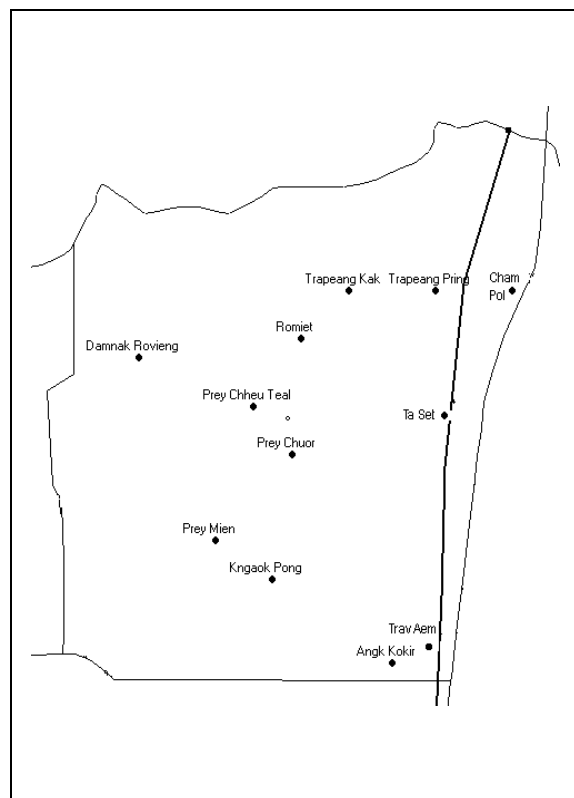
Province: <b>Takeo</b>		District: <b>Tram Kak</b>			
Commune: <b>Trapeang Kranhung</b>					
No	Village	Population		Household	
		Total	Male	Female	
1	Khpob Svay	405	192	213	82
2	Trapeang Chak	388	176	212	74
3	Trapeang Skear	560	266	294	110
4	Trapeang Robang	543	266	277	105
5	Trapeang Kranhung	926	448	478	173
6	Prey Kduoch	1,668	833	835	297
7	Phlov Louk	632	294	338	125
	Special Settlements	173	140	33	30
<b>Total</b>		<b>5,295</b>	<b>2,615</b>	<b>2,680</b>	<b>996</b>
Average household size:		5.3			
Average sex ratio:		98 %			



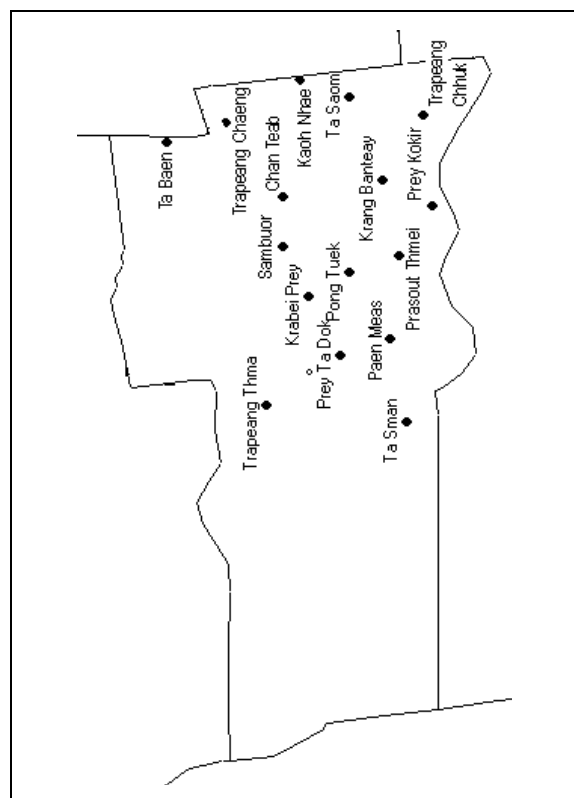
Province: <b>Takeo</b>		District: <b>Tram Kak</b>			Commune: <b>Otdam Souriya</b>
No	Village	Population		Household	
		Total	Male	Female	
1	Trapeang Run	642	310	332	125
2	Chong Ang	356	158	198	71
3	Trapeang Trakiet	621	280	341	115
4	Angk Rumpeak	338	156	182	68
5	Dang Van	851	404	447	159
6	Ta Sou	770	372	398	138
7	Ta Loea	995	462	533	157
8	Rumpeak Pen	813	376	437	146
9	Trapeang Thlan	322	156	166	64
10	Prab Siem	740	342	398	154
11	Rumlich Svay	629	304	325	116
12	Srangae	1,115	535	580	219
13	Prey Chheu Teal	623	313	310	113
14	Trapeang Chhuk	350	167	183	67
<b>Total</b>		<b>9,165</b>	<b>4,335</b>	<b>4,830</b>	<b>1,712</b>
Average household size:		5.4			
Average sex ratio:		90 %			

Notes: \* is out of the Study Area  
 Source: 1998 Population Census of Cambodia

Table I-2 Commune and Village Profile (9/13)



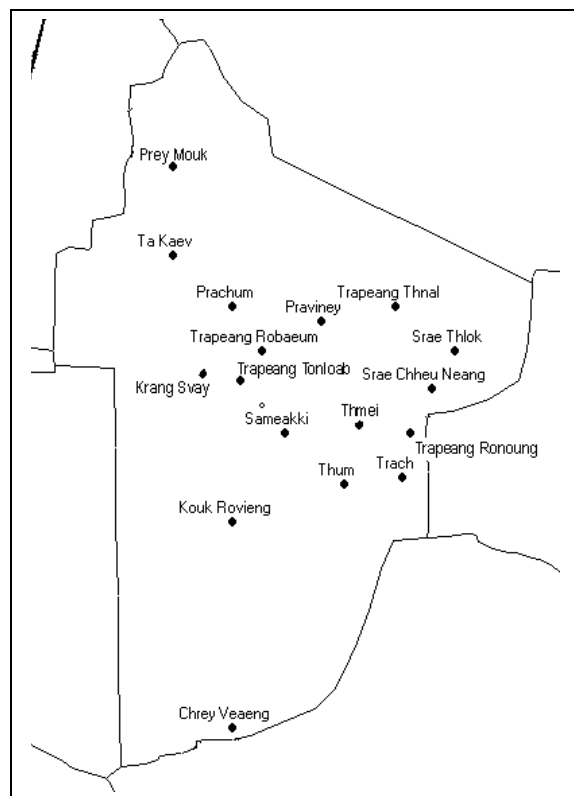
Province: <b>Takeo</b>		Commune: <b>Popel</b>			
District: <b>Tram Kak</b>		Commune: <b>Popel</b>			
No	Village	Population		Household	
		Total	Male		Female
1	Angk Kokir	275	121	154	58
2	Trav Aem	886	414	472	185
3	Ta Set	304	141	163	60
4	Prey Chuor	1,072	496	576	213
5	Trapeang Kak	500	229	271	96
6	Kngaok Pong	625	278	347	129
7	Damnak Rovieng	728	355	373	137
8	Cham Pol	785	374	411	163
9	Trapeang Pring	695	319	376	131
10	Romiet	443	186	257	88
11	Prey Mien	398	174	224	83
12	Prey Chheu Teal	497	238	259	103
<b>Total</b>		<b>7,208</b>	<b>3,325</b>	<b>3,883</b>	<b>1,446</b>
Average household size:		5.0			
Average sex ratio:		86 %			



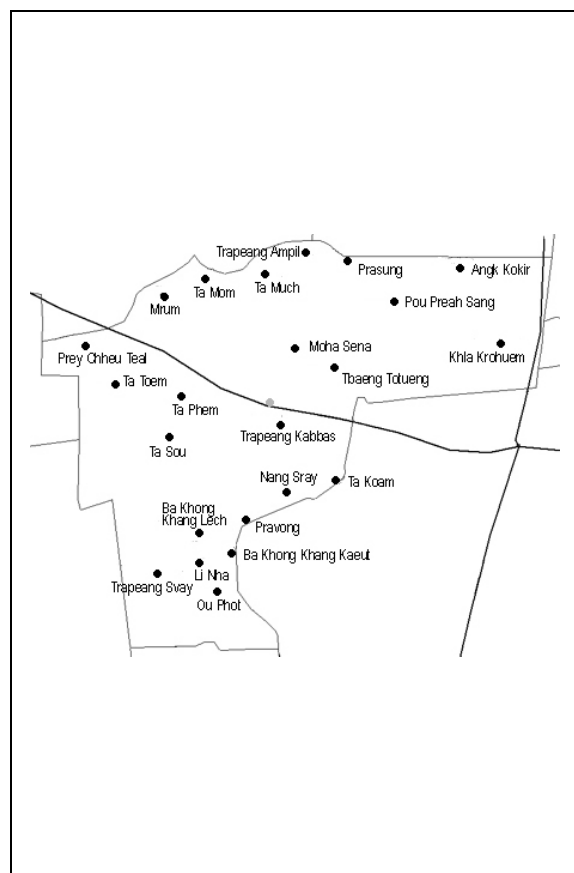
Province: <b>Takeo</b>		Commune: <b>Samraong</b>			
District: <b>Tram Kak</b>		Commune: <b>Samraong</b>			
No	Village	Population		Household	
		Total	Male		Female
1	Trapeang Chaeng	266	131	135	53
2	Kaoh Nhae	220	95	125	52
3	Krabei Prey	310	143	167	69
4	Chan Teab	633	323	310	129
5	Trapeang Chhuk	181	86	95	41
6	Krang Banteay	437	224	213	96
7	Pong Tuek	323	150	173	75
8	Paen Meas	537	261	276	111
9	Ta Sman	509	240	269	104
10	Prey Ta Dok	316	142	174	68
11	Prasout Thmei	287	142	145	55
12	Trapeang Thma	253	111	142	55
13	Ta Saom	406	202	204	85
14	Prey Kokir	227	100	127	50
15	Ta Baen	344	153	191	81
16	Sambuor	409	189	220	92
<b>Total</b>		<b>5,658</b>	<b>2,692</b>	<b>2,966</b>	<b>1,216</b>
Average household size:		4.7			
Average sex ratio:		90.8			

Notes: \* is out of the Study Area  
 Source: 1998 Population Census of Cambodia

Table I-2 Commune and Village Profile (10/13)



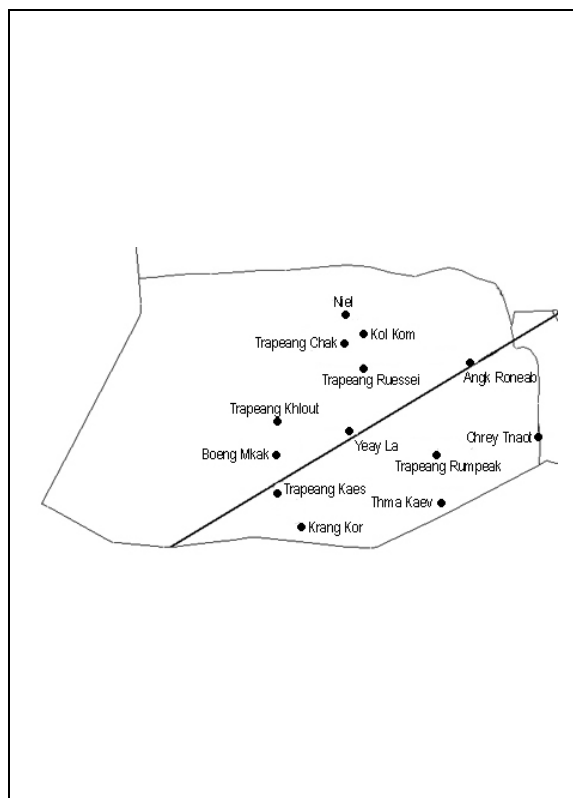
Province: <b>Takeo</b>					
District: <b>Tram Kak</b> Commune: <b>Srae Ronoung</b>					
No	Village	----- Population -----		Household	
		Total	Male		Female
1	Praviney	389	186	203	68
2	Trapeang Thnal	470	227	243	86
3	Chrey Veang	503	250	253	91
4	Sameakki	705	357	348	141
5	Trapeang Ronoung	342	146	196	73
6	Trach	417	194	223	79
7	Kouk Rovieng	291	142	149	56
8	Thum	304	144	160	69
9	Ta Kaev	441	207	234	74
10	Krang Svay	454	203	251	88
11	Trapeang Robaeum	215	100	115	45
12	Thmei	373	146	227	75
13	Prachum	590	274	316	114
14	Srae Chheu Neang	769	356	413	148
15	Prey Mouk	700	333	367	146
16	Srae Thlok	171	93	78	38
17	Trapeang Tonloab	220	100	120	42
<b>Total</b>		<b>7,354</b>	<b>3,458</b>	<b>3,896</b>	<b>1,433</b>
Average household size:		5.1			
Average sex ratio:		89 %			



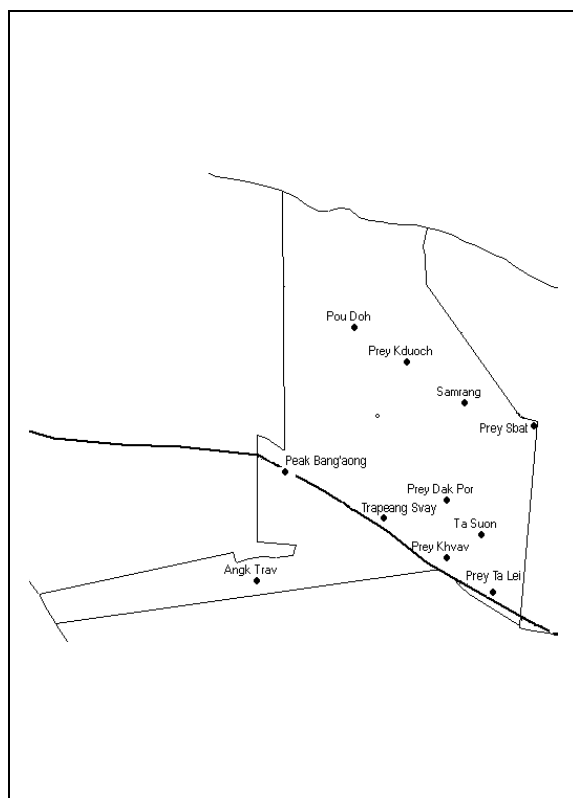
Province: <b>Takeo</b>					
District: <b>Tram Kak</b> Commune: <b>Ta Phem</b>					
No	Village	----- Population -----		Household	
		Total	Male		Female
1	Mrum	644	309	335	140
2	Trapeang Ampil	701	348	353	138
3	Ta Much	443	207	236	87
4	Angk Kokir	502	225	277	100
5	Ta Phem	767	359	408	154
6	Ta Sou	420	211	209	88
7	Khla Krohuem	533	262	271	105
8	Li Nha	311	151	160	57
9	Prasung	446	210	236	88
10	Tbaeng Totueng	880	418	462	153
11	Ou Phot	219	99	120	43
12	Moha Sena	1,057	485	572	214
13	Nang Sray	378	169	209	82
14	Ta Koam	695	321	374	126
15	Pou Preah Sang	620	275	345	123
16	Trapeang Kabbas	490	234	256	89
17	Trapeang Svay	590	279	311	132
18	Ba Khong Khang Kaeut	434	201	233	87
19	Ba Khong Khang Lech	457	221	236	81
20	Ta Mom	602	295	307	115
21	Pravong	297	133	164	55
22	Prey Chheu Teal	700	342	358	153
23	Ta Toem	584	271	313	129
<b>Total</b>		<b>12,770</b>	<b>6,025</b>	<b>6,745</b>	<b>2,539</b>
Average household size:		5.0			
Average sex ratio:		89 %			

Notes: \* is out of the Study Area  
 Source: 1998 Population Census of Cambodia

Table I-2 Commune and Village Profile (11/13)



Province: <b>Takeo</b>		District: <b>Tram Kak</b>			
Commune: <b>Tram Kak</b>		----- Population -----		Household	
No	Village	Total	Male	Female	
1	Yey La	1,009	473	536	213
2	Chrey Tnaot	974	469	505	215
3	Trapeang Rumpeak	1,499	741	758	309
4	Niel	932	472	460	175
5	Trapeang Kaes	1,189	596	593	251
6	Trapeang Chak	601	270	331	129
7	Kol Kom	680	303	377	144
8	Angk Roneab	1,287	597	690	248
9	Trapeang Ruessei	447	207	240	95
10	Trapeang Khlout	590	288	302	116
11	Boeng Mkak	408	195	213	87
12	Krang Kor	666	318	348	146
13	Thma Kaev	558	251	307	108
<b>Total</b>		<b>10,840</b>	<b>5,180</b>	<b>5,660</b>	<b>2,236</b>
Average household size:		4.9			
Average sex ratio:		92 %			

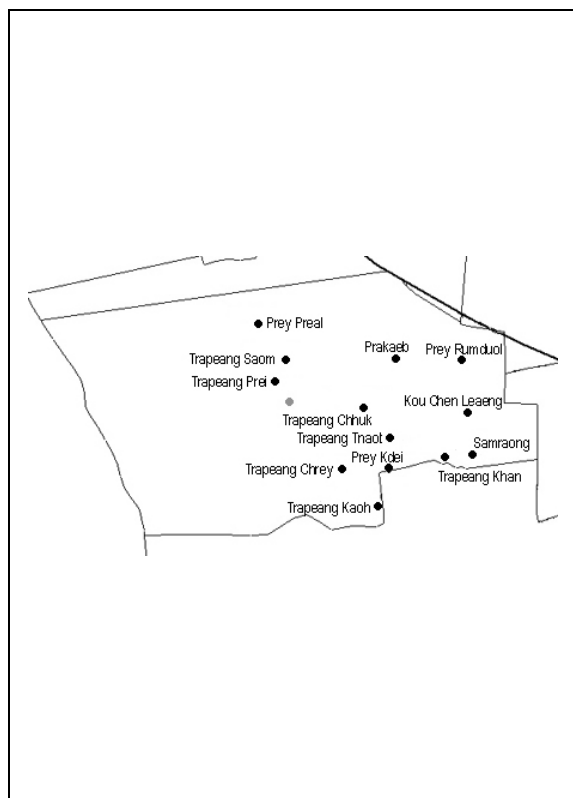


Province: <b>Takeo</b>		District: <b>Tram Kak</b>			
Commune: <b>Trapeang Thum Khang Cheung</b>		----- Population -----		Household	
No	Village	Total	Male	Female	
1	Peak Bang'aong	1,190	563	627	247
2	Prey Khvav	414	198	216	95
3	Trapeang Svay	440	211	229	87
4	Ta Suon	804	372	432	163
5	Prey Kduoch	274	126	148	57
6	Prey Ta Lei	372	175	197	73
7	Samrang	455	212	243	97
8	Angk Trav	1,052	500	552	233
9	Pou Doh	1,208	583	625	235
10	Prey Sbat	834	390	444	173
11	Prey Dak Por	345	151	194	61
<b>Total</b>		<b>7,388</b>	<b>3,481</b>	<b>3,907</b>	<b>1,521</b>
Average household size:		4.9			
Average sex ratio:		89 %			

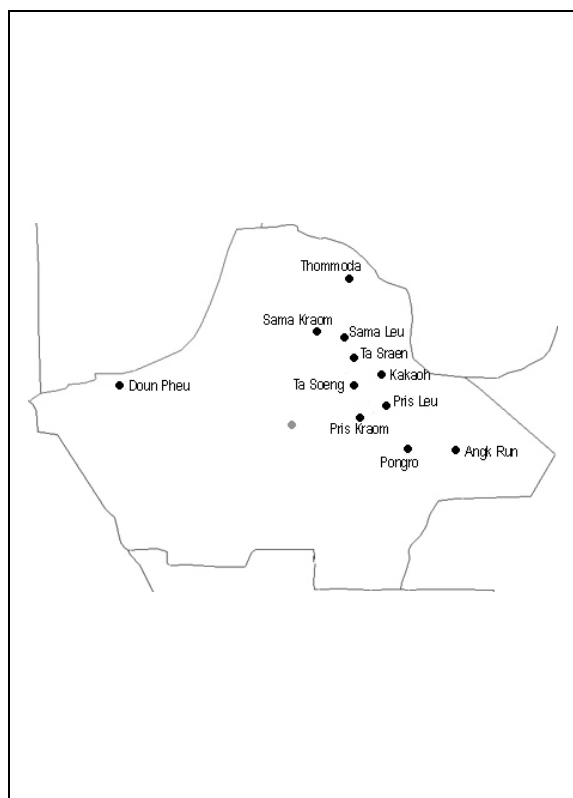
Notes: \* is out of the Study Area  
 Source: 1998 Population Census of Cambodia



Table I-2 Commune and Village Profile (12/13)



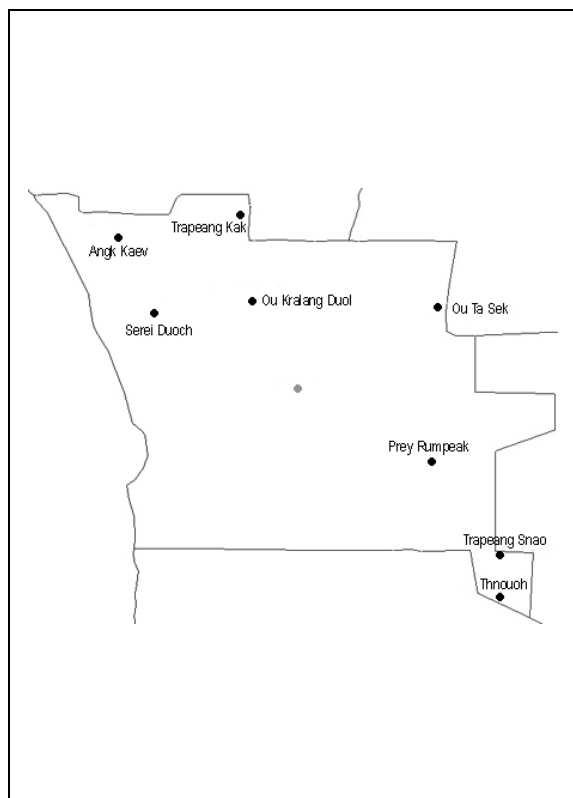
Province: <b>Takeo</b>		District: <b>Tram Kak</b>			
Commune: <b>Trapeang Thum Khang Tboung</b>					
No	Village	----- Population -----		Household	
		Total	Male	Female	
1	Trapeang Kaoh	469	229	240	109
2	Prey Kdei	268	111	157	69
3	Prey Rumduol	560	265	295	107
4	Prakeab	771	355	416	150
5	Trapeang Chrey	437	203	234	100
6	Samraong	546	263	283	114
7	Kou Chen Leaeng	552	270	282	114
8	Trapeang Saom	1,018	473	545	206
9	Trapeang Chhuk	827	383	444	185
10	Trapeang Tnaot	475	216	259	108
11	Trapeang Prei	214	91	123	47
12	Trapeang Khan	283	131	152	59
13	Prey Preal	939	418	521	174
<b>Total</b>		<b>7,359</b>	<b>3,408</b>	<b>3,951</b>	<b>1,542</b>
Average household size:		4.8			
Average sex ratio:		86 %			



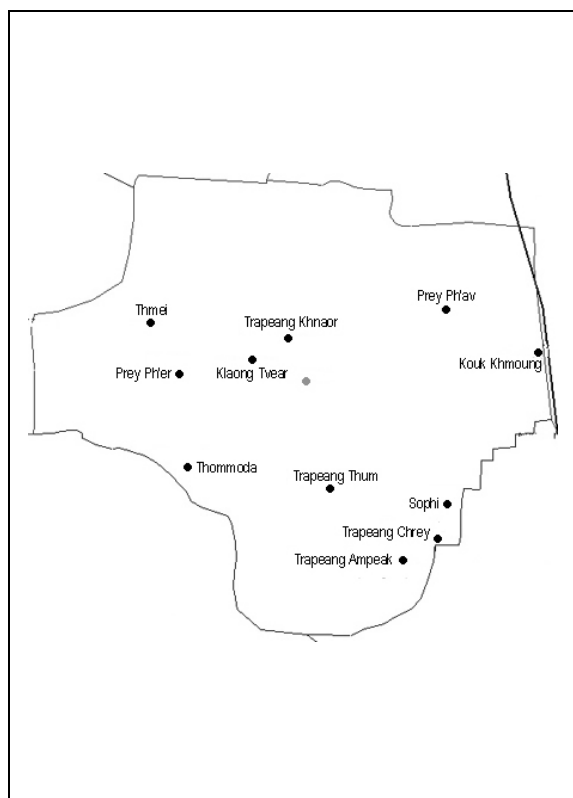
Province: <b>Takeo</b>		District: <b>Treang</b>			
Commune: <b>Khvav</b>					
No	Village	----- Population -----		Household	
		Total	Male	Female	
1	Pongro*	1,156	566	590	226
2	Ta Soeng*	729	330	399	134
3	Angk Run*	1,082	534	548	210
4	Kakaoh*	954	451	503	174
5	Sama Leu*	471	211	260	88
6	Thommoda	1,134	520	614	225
7	Sama Kraom	950	456	494	199
8	Ta Sraen*	845	418	427	152
9	Doun Pheu	1,034	487	547	202
10	Pris Leu*	534	249	285	103
11	Pris Kraom*	416	203	213	79
<b>Total</b>		<b>9,305</b>	<b>4,425</b>	<b>4,880</b>	<b>1,792</b>
Average household size:		5.2			
Average sex ratio:		91 %			

Notes: \* is out of the Study Area  
 Source: 1998 Population Census of Cambodia

Table I-2 Commune and Village Profile (13/13)



Province: <b>Takeo</b>		Commune: <b>Angk Kaev</b>			
District: <b>Treang</b>		----- Population -----		----- Household -----	
No	Village	Total	Male	Female	
1	Ou Kralang Duol*	237	120	117	41
2	Trapeang Kak*	255	128	127	47
3	Angk Kaev	369	183	186	72
4	Prey Rumpeak*	645	310	335	116
5	Thnuoh*	736	332	404	143
6	Trapeang Snao*	385	195	190	79
7	Serei Duoch*	470	223	247	95
8	Ou Ta Sek*	232	115	117	41
<b>Total</b>		<b>3,329</b>	<b>1,606</b>	<b>1,723</b>	<b>634</b>
Average household size:		5.3			
Average sex ratio:		93 %			



Province: <b>Takeo</b>		Commune: <b>Roneam</b>			
District: <b>Treang</b>		----- Population -----		----- Household -----	
No	Village	Total	Male	Female	
1	Trapeang Chrey*	620	271	349	114
2	Trapeang Ampeak*	526	253	273	96
3	Trapeang Thum*	1,425	673	752	277
4	Thommoda*	354	182	172	72
5	Thmei	607	280	327	127
6	Prey Ph'av	1,102	498	604	228
7	Klaong Tvear*	711	321	390	149
8	Trapeang Khnaor*	393	193	200	76
9	Prey Ph'er*	753	348	405	153
10	Kouk Khmourng*	290	144	146	50
11	Sophi*	877	409	468	178
<b>Total</b>		<b>7,658</b>	<b>3,572</b>	<b>4,086</b>	<b>1,520</b>
Average household size:		5.0			
Average sex ratio:		87 %			

Notes: \* is out of the Study Area  
 Source: 1998 Population Census of Cambodia

Table I-3 Questionnaire for Social Environmental Baseline Survey

Sample No.  Q-1

**Questionnaire for Social Environmental Baseline Survey (for all interviewees)**

Date (M/D/Y):  /  /

Enumerator:  Team Leader:

Province:  Takeo / Kampong Spueu Q-2 District:  Q-3

Commune:  Q-4 Village:  Q-5

**SECTION I GENERAL INFORMATION**

I-1 Name of interviewee

I-2 Total number of household members  Q-6

I-3 Main activity of this household  Q-7

**I-4 Household member in the same house**

	Sex	Age	Education	Farming	Main occupation	Present/Absent	Literacy
1	M/W Q-8	<input type="text"/> Q-9	<input type="text"/> Q-10	Y/N Q-11	<input type="text"/> Q-12	P/A Q-13	Y/N Q-14
2	M/W Q-15	<input type="text"/> Q-16	<input type="text"/> Q-17	Y/N Q-18	<input type="text"/> Q-19	P/A Q-20	Y/N Q-21
3	M/W Q-22	<input type="text"/> Q-23	<input type="text"/> Q-24	Y/N Q-25	<input type="text"/> Q-26	P/A Q-27	Y/N Q-28
4	M/W Q-29	<input type="text"/> Q-30	<input type="text"/> Q-31	Y/N Q-32	<input type="text"/> Q-33	P/A Q-34	Y/N Q-35
5	M/W Q-36	<input type="text"/> Q-37	<input type="text"/> Q-38	Y/N Q-39	<input type="text"/> Q-40	P/A Q-41	Y/N Q-42
6	M/W Q-43	<input type="text"/> Q-44	<input type="text"/> Q-45	Y/N Q-46	<input type="text"/> Q-47	P/A Q-48	Y/N Q-49
7	M/W Q-50	<input type="text"/> Q-51	<input type="text"/> Q-52	Y/N Q-53	<input type="text"/> Q-54	P/A Q-55	Y/N Q-56
8	M/W Q-57	<input type="text"/> Q-58	<input type="text"/> Q-59	Y/N Q-60	<input type="text"/> Q-61	P/A Q-62	Y/N Q-63
9	M/W Q-64	<input type="text"/> Q-65	<input type="text"/> Q-66	Y/N Q-67	<input type="text"/> Q-68	P/A Q-69	Y/N Q-70
10	M/W Q-71	<input type="text"/> Q-72	<input type="text"/> Q-73	Y/N Q-74	<input type="text"/> Q-75	P/A Q-76	Y/N Q-77

**I-5 Member of village organization (Head of the family)**

1  Q-78    2  Q-79    3  Q-80    4  Q-81    5  Q-82

**I-6 Member of village organization (Housewife)**

1  Q-83    2  Q-84    3  Q-85    4  Q-86    5  Q-87

**SECTION II LIVING CONDITION**

**II-1 Drinking water**

	Main source	Distance	Sufficiency
Dry season	<input type="text"/> Q-88	<input type="text"/> m Q-89	<input type="text"/> Q-90
Wet season	<input type="text"/> Q-91	<input type="text"/> m Q-92	<input type="text"/> Q-93

**II-2 Fuel source for cooking**

	Importance	Availability
1 Most important	<input type="text"/> Q-94	<input type="text"/> Q-95
2 Secondary importance	<input type="text"/> Q-96	<input type="text"/> Q-97

Table I-3 Questionnaire for Social Environmental Baseline Survey

**II-3 Facilities in your house**

		Nos.			Nos.		
1	Radio	<input type="text" value="set"/>	<b>Q-98</b>	5	Car	<input type="text" value="set"/>	<b>Q-102</b>
2	TV	<input type="text" value="set"/>	<b>Q-99</b>	6	Audio	<input type="text" value="set"/>	<b>Q-103</b>
3	Bicycle	<input type="text" value="set"/>	<b>Q-100</b>	7	Toilet	<input type="text" value="set"/>	<b>Q-104</b>
4	Motorcycle	<input type="text" value="set"/>	<b>Q-101</b>				<b>Q-105</b>

**SECTION III INCOME AND EXPENDITURE**

**III-1 Cash income sources in last year**

1	Selling paddy/rice	<input type="text" value="riel/Yr"/>	<b>Q-106</b>	9	Wage from temporary job out of farm	<input type="text" value="riel/Yr"/>	<b>Q-114</b>
2	Selling vegetables (including beans)	<input type="text" value="riel/Yr"/>	<b>Q-107</b>	10	Private business (transportation, trading, shop, etc.)	<input type="text" value="riel/Yr"/>	<b>Q-115</b>
3	Selling fruits	<input type="text" value="riel/Yr"/>	<b>Q-108</b>	11	Remittance from family members	<input type="text" value="riel/Yr"/>	<b>Q-116</b>
4	Selling other agricultural products	<input type="text" value="riel/Yr"/>	<b>Q-109</b>	12	Selling firewood	<input type="text" value="riel/Yr"/>	<b>Q-117</b>
5	Selling livestock/ poultry products	<input type="text" value="riel/Yr"/>	<b>Q-110</b>	13	Selling handicraft/ cottage industry products	<input type="text" value="riel/Yr"/>	<b>Q-118</b>
6	Selling fishes	<input type="text" value="riel/Yr"/>	<b>Q-111</b>	14	Selling forest vegetable/ crop	<input type="text" value="riel/Yr"/>	<b>Q-119</b>
7	Salary from permanent job	<input type="text" value="riel/Yr"/>	<b>Q-112</b>	15	Others (Specify: <b>Q-120</b> )	<input type="text" value="riel/Yr"/>	<b>Q-121</b>
8	Wage from temporary job on farm	<input type="text" value="riel/Yr"/>	<b>Q-113</b>	16	Total	<input type="text" value="riel/Yr"/>	<b>Q-122</b>

**III-2 Expenditure for consumption**

1	Rice	<input type="text" value="riel/month"/>	<b>Q-123</b>	<input type="text" value="riel/Yr"/>	<b>Q-124</b>
2	Other foods	<input type="text" value="riel/month"/>	<b>Q-125</b>	<input type="text" value="riel/Yr"/>	<b>Q-126</b>
3	Health/ medicine	<input type="text" value="riel/month"/>	<b>Q-127</b>	<input type="text" value="riel/Yr"/>	<b>Q-128</b>
4	Education	<input type="text" value="riel/month"/>	<b>Q-129</b>	<input type="text" value="riel/Yr"/>	<b>Q-130</b>
5	Clothes	<input type="text" value="riel/month"/>	<b>Q-131</b>	<input type="text" value="riel/Yr"/>	<b>Q-132</b>
6	Firewood/Kerosene/Electricity	<input type="text" value="riel/month"/>	<b>Q-133</b>	<input type="text" value="riel/Yr"/>	<b>Q-134</b>
7	Transportation	<input type="text" value="riel/month"/>	<b>Q-135</b>	<input type="text" value="riel/Yr"/>	<b>Q-136</b>
8	Tax	<input type="text" value="riel/month"/>	<b>Q-137</b>	<input type="text" value="riel/Yr"/>	<b>Q-138</b>
9	Others	<input type="text" value="riel/month"/>	<b>Q-139</b>	<input type="text" value="riel/Yr"/>	<b>Q-140</b>
10	Total	<input type="text" value="riel/month"/>	<b>Q-141</b>	<input type="text" value="riel/Yr"/>	<b>Q-142</b>

**III-3 Investment of productive and fixed assets in the last two year**

1	Livestock	<input type="text" value="riel"/>	<b>Q-143</b>	<input type="text" value=""/>	<b>Q-144</b>
2	Housing (building & maintenance)	<input type="text" value="riel"/>	<b>Q-145</b>	<input type="text" value=""/>	<b>Q-146</b>
3	Private business	<input type="text" value="riel"/>	<b>Q-147</b>	<input type="text" value=""/>	<b>Q-148</b>
4	Land	<input type="text" value="riel"/>	<b>Q-149</b>	<input type="text" value=""/>	<b>Q-150</b>
5	Transportation means	<input type="text" value="riel"/>	<b>Q-151</b>	<input type="text" value=""/>	<b>Q-152</b>
6	Others	<input type="text" value="riel"/>	<b>Q-153</b>	<input type="text" value=""/>	<b>Q-154</b>

Table I-3 Questionnaire for Social Environmental Baseline Survey

**SECTION IV CONDITION OF FARM LABOR WORKS**

**IV-1 Wages from farm labor work**  Y / N  **Q-15**  
5

**IV-2 Amount of wages**

1	In cash	Work in irrigated paddy field	<input type="text"/> riel/day	<b>Q-156</b>	<input type="text"/> days	<b>Q-157</b>
		Work in rain-fed paddy field	<input type="text"/> riel/day	<b>Q-158</b>	<input type="text"/> days	<b>Q-159</b>
		Work in upland	<input type="text"/> riel/day	<b>Q-160</b>	<input type="text"/> days	<b>Q-161</b>
		Work in others	<input type="text"/> riel/day	<b>Q-162</b>	<input type="text"/> days	<b>Q-163</b>
2	In kind	Work in irrigated paddy field	<input type="text"/> riel/day	<b>Q-164</b>	<input type="text"/> days	<b>Q-165</b>
		Work in rain-fed paddy field	<input type="text"/> riel/day	<b>Q-166</b>	<input type="text"/> days	<b>Q-167</b>
		Work in upland	<input type="text"/> riel/day	<b>Q-168</b>	<input type="text"/> days	<b>Q-169</b>
		Work in others	<input type="text"/> riel/day	<b>Q-170</b>	<input type="text"/> days	<b>Q-171</b>
3	Others	Specify: ( <input type="text"/> )	<input type="text"/> riel/day	<b>Q-173</b>	<input type="text"/> days	<b>Q-174</b>

**SECTION V SAVINGS AND LOAN**

**V-1 Savings of any type at present**

	Source	Amount	Interest rate	Purpose
<input type="checkbox"/> Y / N <b>Q-175</b>	<input type="text"/> <b>Q-176</b>	<input type="text"/> riel <b>Q-177</b>	<input type="text"/> % <b>Q-178</b>	<input type="text"/> <b>Q-179</b>
	<input type="text"/> <b>Q-180</b>	<input type="text"/> riel <b>Q-181</b>	<input type="text"/> % <b>Q-182</b>	<input type="text"/> <b>Q-183</b>

**V-2 Loans and debts at present**

	Source	Amount	Interest rate	Purpose	Collateral	Amount repaid
<input type="checkbox"/> Y / N <b>Q-184</b>	<input type="text"/> <b>Q-185</b>	<input type="text"/> riel <b>Q-186</b>	<input type="text"/> % <b>Q-187</b>	<input type="text"/> <b>Q-188</b>	<input type="text"/> <b>Q-189</b>	<input type="text"/> riel <b>Q-190</b>
	<input type="text"/> <b>Q-191</b>	<input type="text"/> riel <b>Q-192</b>	<input type="text"/> % <b>Q-193</b>	<input type="text"/> <b>Q-194</b>	<input type="text"/> <b>Q-195</b>	<input type="text"/> riel <b>Q-196</b>
	<input type="text"/> <b>Q-197</b>	<input type="text"/> riel <b>Q-198</b>	<input type="text"/> % <b>Q-199</b>	<input type="text"/> <b>Q-200</b>	<input type="text"/> <b>Q-201</b>	<input type="text"/> riel <b>Q-202</b>
	<input type="text"/> <b>Q-203</b>	<input type="text"/> riel <b>Q-204</b>	<input type="text"/> % <b>Q-205</b>	<input type="text"/> <b>Q-206</b>	<input type="text"/> <b>Q-207</b>	<input type="text"/> riel <b>Q-208</b>

**SECTION VI LIVESTOCK**

	Number	Food sufficiency				Market
		Wet season		Dry season		
1	Cattle/ Oxen	<input type="text"/> <b>Q-209</b>	<input type="text"/> <b>Q-210</b>	<input type="text"/> <b>Q-211</b>	<input type="text"/> <b>Q-212</b>	
2	Water buffalo	<input type="text"/> <b>Q-213</b>	<input type="text"/> <b>Q-214</b>	<input type="text"/> <b>Q-215</b>	<input type="text"/> <b>Q-216</b>	
3	Goat/ Sheep	<input type="text"/> <b>Q-217</b>	<input type="text"/> <b>Q-218</b>	<input type="text"/> <b>Q-219</b>	<input type="text"/> <b>Q-220</b>	
4	Swine/ Pig	<input type="text"/> <b>Q-221</b>			<input type="text"/> <b>Q-222</b>	
5	Chicken	<input type="text"/> <b>Q-223</b>			<input type="text"/> <b>Q-224</b>	
6	Duck	<input type="text"/> <b>Q-225</b>			<input type="text"/> <b>Q-226</b>	

Table I-3 Questionnaire for Social Environmental Baseline Survey

**SECTION VII FRUIT TREES**

		No. of trees		No. of trees			
1	Orange trees	<input type="text"/>	Q-227	9	Guava	<input type="text"/>	Q-235
2	Lime trees	<input type="text"/>	Q-228	10	Avocado	<input type="text"/>	Q-236
3	Lemon trees	<input type="text"/>	Q-229	11	Sugar palm	<input type="text"/>	Q-237
4	Mango trees	<input type="text"/>	Q-230	12	Tamarind	<input type="text"/>	Q-238
5	Papaya trees	<input type="text"/>	Q-231	13	Others	<input type="text"/>	Q-239
6	Coconut trees	<input type="text"/>	Q-232				
7	Banana trees	<input type="text"/>	Q-233				
8	Jackfruits	<input type="text"/>	Q-234				

Table I-3 Questionnaire for Social Environmental Baseline Survey

Sample No.  Q-1**Questionnaire for Social Environmental Baseline Survey (for Farmer with Land)****SECTION VIII LAND USE****VIII-1 Land holding (only for farm land)**

	Land owned	Land rented from others	Land leased to others	Land operated
1 Irrigated paddy field	<input type="text"/> ha Q-240	<input type="text"/> ha Q-241	<input type="text"/> ha Q-242	<input type="text"/> ha Q-243
2 Rain-fed paddy field	<input type="text"/> ha Q-244	<input type="text"/> ha Q-245	<input type="text"/> ha Q-246	<input type="text"/> ha Q-247
3 Upland for field crop	<input type="text"/> ha Q-248	<input type="text"/> ha Q-249	<input type="text"/> ha Q-250	<input type="text"/> ha Q-251
4 Upland for tree crop	<input type="text"/> ha Q-252	<input type="text"/> ha Q-253	<input type="text"/> ha Q-254	<input type="text"/> ha Q-255
5 Total	<input type="text"/> ha Q-256	<input type="text"/> ha Q-257	<input type="text"/> ha Q-258	<input type="text"/> ha Q-259

**VIII-2 Evaluation of land holding status**  Q-260**VIII-3 Land use**

	Wet season	Dry season I	Dry season II	Land on reservoir and/or canal
1 Irrigated paddy field	<input type="text"/> ha Q-261	<input type="text"/> ha Q-262	<input type="text"/> ha Q-263	<input type="text"/> ha Q-264
2 Rain-fed paddy field	<input type="text"/> ha Q-265	<input type="text"/> ha Q-266	<input type="text"/> ha Q-267	<input type="text"/> ha Q-268
3 Upland for field crop	<input type="text"/> ha Q-269	<input type="text"/> ha Q-270	<input type="text"/> ha Q-271	<input type="text"/> ha Q-272

**VIII-4 Condition for land tenure**

## 1. Land rental charge

	Rental charge	Production cost
1 In cash	Irrigated paddy field <input type="text"/> riel/ha/year Q-273	<input type="text"/> Q-274
	Rain-fed paddy field <input type="text"/> riel/ha/year Q-275	<input type="text"/> Q-276
	Upland <input type="text"/> riel/ha/year Q-277	<input type="text"/> Q-278
2 In kind	Irrigated paddy field <input type="text"/> % of harvest Q-279	<input type="text"/> Q-280
	Rain-fed paddy field <input type="text"/> % of harvest Q-281	<input type="text"/> Q-282
	Upland <input type="text"/> % of harvest Q-283	<input type="text"/> Q-284
3 Free of charge	<input type="text"/> Q-285	
4 Others	<input type="text"/> Specify: <input type="text"/> Q-286	

## 2. Decision maker for crop selection in rented land

1 Irrigated paddy field	<input type="text"/> Q-287	3 Upland	<input type="text"/> Q-289
2 Rainfed paddy field	<input type="text"/> Q-288		

Table I-3 Questionnaire for Social Environmental Baseline Survey

**VIII-5 Cropping pattern**

- 1 Irrigated paddy field  Q-290      3 Upland  Q-292  
 2 Rain-fed paddy field  Q-291

**VIII-6 Reason for fallow**

- 1 Wet season  Q-293      2 Dry season  Q-294

**SECTION IX PRODUCTION**

**IX-1 Food condition/ availability**

	Production		Sold product		Price		Income		Marketing channel/route
1 Early paddy in wet season	<input type="text"/> kg Q-295		<input type="text"/> kg Q-296		<input type="text"/> Riel/kg Q-297		<input type="text"/> Riel Q-298		<input type="text"/> Q-299
2 Medium paddy in wet season	<input type="text"/> kg Q-300		<input type="text"/> kg Q-301		<input type="text"/> Riel/kg Q-302		<input type="text"/> Riel Q-303		<input type="text"/> Q-304
3 Late paddy in wet season	<input type="text"/> kg Q-305		<input type="text"/> kg Q-306		<input type="text"/> Riel/kg Q-307		<input type="text"/> Riel Q-308		<input type="text"/> Q-309
4 Dry season paddy	<input type="text"/> kg Q-310		<input type="text"/> kg Q-311		<input type="text"/> Riel/kg Q-312		<input type="text"/> Riel Q-313		<input type="text"/> Q-314
5 Maize	<input type="text"/> kg Q-315		<input type="text"/> kg Q-316		<input type="text"/> Riel/kg Q-317		<input type="text"/> Riel Q-318		<input type="text"/> Q-319
6 Cassava	<input type="text"/> kg Q-320		<input type="text"/> kg Q-321		<input type="text"/> Riel/kg Q-322		<input type="text"/> Riel Q-323		<input type="text"/> Q-324
7 Sweet potato	<input type="text"/> kg Q-325		<input type="text"/> kg Q-326		<input type="text"/> Riel/kg Q-327		<input type="text"/> Riel Q-328		<input type="text"/> Q-329
8 Green gram	<input type="text"/> kg Q-330		<input type="text"/> kg Q-331		<input type="text"/> Riel/kg Q-332		<input type="text"/> Riel Q-333		<input type="text"/> Q-334
9 Groundnut	<input type="text"/> kg Q-335		<input type="text"/> kg Q-336		<input type="text"/> Riel/kg Q-337		<input type="text"/> Riel Q-338		<input type="text"/> Q-339
10 Soybean	<input type="text"/> kg Q-340		<input type="text"/> kg Q-341		<input type="text"/> Riel/kg Q-342		<input type="text"/> Riel Q-343		<input type="text"/> Q-344
11 Sesame	<input type="text"/> kg Q-345		<input type="text"/> kg Q-346		<input type="text"/> Riel/kg Q-347		<input type="text"/> Riel Q-348		<input type="text"/> Q-349
12 Sugarcane	<input type="text"/> kg Q-350		<input type="text"/> kg Q-351		<input type="text"/> Riel/kg Q-352		<input type="text"/> Riel Q-353		<input type="text"/> Q-354
13 Tobacco	<input type="text"/> kg Q-355		<input type="text"/> kg Q-356		<input type="text"/> Riel/kg Q-357		<input type="text"/> Riel Q-358		<input type="text"/> Q-359
14 Hemp	<input type="text"/> kg Q-360		<input type="text"/> kg Q-361		<input type="text"/> Riel/kg Q-362		<input type="text"/> Riel Q-363		<input type="text"/> Q-364
15 Vegetables	<input type="text"/> kg Q-365		<input type="text"/> kg Q-366		<input type="text"/> Riel/kg Q-367		<input type="text"/> Riel Q-368		<input type="text"/> Q-369
16 Others	<input type="text"/> kg Q-370		<input type="text"/> kg Q-371		<input type="text"/> Riel/kg Q-372		<input type="text"/> Riel Q-373		<input type="text"/> Q-374
17 Banana	<input type="text"/> kg Q-375		<input type="text"/> kg Q-376		<input type="text"/> Riel/kg Q-377		<input type="text"/> Riel Q-378		<input type="text"/> Q-379
18 Pineapple	<input type="text"/> kg Q-380		<input type="text"/> kg Q-381		<input type="text"/> Riel/kg Q-382		<input type="text"/> Riel Q-383		<input type="text"/> Q-384
19 Coconut	<input type="text"/> kg Q-385		<input type="text"/> kg Q-386		<input type="text"/> Riel/kg Q-387		<input type="text"/> Riel Q-388		<input type="text"/> Q-389
20 Cow/ Ox	<input type="text"/> kg Q-390		<input type="text"/> kg Q-391		<input type="text"/> Riel/kg Q-392		<input type="text"/> Riel Q-393		<input type="text"/> Q-394
21 Chicken	<input type="text"/> kg Q-395		<input type="text"/> kg Q-396		<input type="text"/> Riel/kg Q-397		<input type="text"/> Riel Q-398		<input type="text"/> Q-399
22 Swine/ Pig	<input type="text"/> kg Q-400		<input type="text"/> kg Q-401		<input type="text"/> Riel/kg Q-402		<input type="text"/> Riel Q-403		<input type="text"/> Q-404
23 Fish	<input type="text"/> kg Q-405		<input type="text"/> kg Q-406		<input type="text"/> Riel/kg Q-407		<input type="text"/> Riel Q-408		<input type="text"/> Q-409
24 Others	<input type="text"/> kg Q-410		<input type="text"/> kg Q-411		<input type="text"/> Riel/kg Q-412		<input type="text"/> Riel Q-413		<input type="text"/> Q-414

**IX-2 Food condition/ availability**

	Condition		Condition
1 Rice	<input type="text"/> Q-415	4 Vegetables (including beans)	<input type="text"/> Q-418
2 Other cereals	<input type="text"/> Q-416	5 Meat	<input type="text"/> Q-419
3 Roots and tuber crops	<input type="text"/> Q-417	6 Fish	<input type="text"/> Q-420



Table I-3 Questionnaire for Social Environmental Baseline Survey

**SECTION X EXPENDITURE**

**X-1 Production cost**

	Wet season		Dry season I		Dry season II		Total	
1 Paddy in wet season	<input type="text"/> Riel/Yr	Q-421	<input type="text"/> Riel/Yr	Q-422	<input type="text"/> Riel/Yr	Q-423	<input type="text"/> Riel/Yr	Q-424
2 Paddy in dry season	<input type="text"/> Riel/Yr	Q-425	<input type="text"/> Riel/Yr	Q-426	<input type="text"/> Riel/Yr	Q-427	<input type="text"/> Riel/Yr	Q-428
3 Other crops	<input type="text"/> Riel/Yr	Q-429	<input type="text"/> Riel/Yr	Q-430	<input type="text"/> Riel/Yr	Q-431	<input type="text"/> Riel/Yr	Q-432
4 Livestock	<input type="text"/> Riel/Yr	Q-433	<input type="text"/> Riel/Yr	Q-434	<input type="text"/> Riel/Yr	Q-435	<input type="text"/> Riel/Yr	Q-436
5 Total	<input type="text"/> Riel/Yr	Q-437	<input type="text"/> Riel/Yr	Q-438	<input type="text"/> Riel/Yr	Q-439	<input type="text"/> Riel/Yr	Q-440
6	<input type="text"/> Riel/Yr	Q-441	<input type="text"/> Riel/Yr	Q-442	<input type="text"/> Riel/Yr	Q-443	<input type="text"/> Riel/Yr	Q-444

**SECTION XI EXPECTATIONS FOR THIS PROJECT**

XI-1 Problems and constraints in farming	<input type="text"/>	Q-445	<input type="text"/>	Q-446	<input type="text"/>	Q-447
If there is other problem and constraints, write it.	<input type="text"/>					Q-448
XI-2 Expectations and needs to the project or government support	<input type="text"/>	Q-449	<input type="text"/>	Q-450	<input type="text"/>	Q-451
If there is other expectation and need, write it.	<input type="text"/>					Q-452

**SECTION XII PARTICIPATORY AWARENESS LEVEL FOR THIS PROJECT**

1 To participate to construction of on-farm irrigation facilities						
Construction works (Earthworks, concreting-works: small bridge, lining of canal, etc.)	<input type="text"/>	Y / N	<input type="text"/>	Q-453		
If "No", what is the reason?	<input type="text"/>					Q-454
Carrying works of construction materials	<input type="text"/>	Y / N	<input type="text"/>	Q-455		
If "No", what is the reason?	<input type="text"/>					Q-456
Assistance works (measurement, etc.)	<input type="text"/>	Y / N	<input type="text"/>	Q-457		
If "No", what is the reason?	<input type="text"/>					Q-458
Sharing the construction cost (payment by installments in long term)	<input type="text"/>	Y / N	<input type="text"/>	Q-459		
If "No", what is the reason?	<input type="text"/>					Q-460
Donation of local materials for construction (gravel, ballast, sand, etc.)	<input type="text"/>	Y / N	<input type="text"/>	Q-461		
If "No", what is the reason?	<input type="text"/>					Q-462
Donation of equipment for construction works (spade, shovel, etc.)	<input type="text"/>	Y / N	<input type="text"/>	Q-463		
If "No", what is the reason?	<input type="text"/>					Q-464
Donation of draft animals (cow, horse, etc.)	<input type="text"/>	Y / N	<input type="text"/>	Q-465		
If "No", what is the reason?	<input type="text"/>					Q-466
2 To be a member of WUA	<input type="text"/>	Y / N	<input type="text"/>	Q-467		
If "No", what is the reason?	<input type="text"/>					Q-468
3 To participate in WUA meeting	<input type="text"/>	Y / N	<input type="text"/>	Q-469		
If "No", what is the reason?	<input type="text"/>					Q-470
4 To pay water charge by cash	<input type="text"/>		<input type="text"/>	Q-471		
If "Yes", how much can you pay per year?	<input type="text"/>	ri el/year	<input type="text"/>	Q-472		
If "No", could you pay it by crops (rice, vegetable, fruit, etc)	<input type="text"/>	Y / N	<input type="text"/>	Q-473		
If "No", what is the reason?	<input type="text"/>					Q-474
5 To pay member fee of WUA	<input type="text"/>	Y / N	<input type="text"/>	Q-475		
If Yes, how much can you pay per year?	<input type="text"/>	ri el/year	<input type="text"/>	Q-476		

Table I-3 Questionnaire for Social Environmental Baseline Survey

If “No”, could you pay it by crops (rice, vegetable, fruit, etc)	<input type="text" value="Y / N"/>	Q-477
If “No”, what is the reason?	<input type="text"/>	Q-478
6 To participate to maintenance of irrigation facilities		
De-silting	<input type="text" value="Y / N"/>	Q-479
If “No”, what is the reason?	<input type="text"/>	Q-480
Weeding	<input type="text" value="Y / N"/>	Q-481
If “No”, what is the reason?	<input type="text"/>	Q-482
Repairing	<input type="text" value="Y / N"/>	Q-483
If “No”, what is the reason?	<input type="text"/>	Q-484
7 To participate to operation of irrigation facilities		
Gate operation	<input type="text" value="Y / N"/>	Q-485
If “No”, what is the reason?	<input type="text"/>	Q-486
Water distribution	<input type="text" value="Y / N"/>	Q-487
If “No”, what is the reason?	<input type="text"/>	Q-488

**SECTION XIII NEGATIVE EFFECT**

1 To a deeper inundation depth (If this farmer plant on reservoir area)	1 Not accept      2 Need compensation      3 No choice      4 No problem	Q-489
If he/she chooses “1 Not accept”, write reason of it.	<input type="text"/>	Q-490
If he/she chooses “2 Need compensation”, what does he/she want to compensation?	1 Money      2 Other land      3 Both      4 Others	Q-491
2 To loss of present cultivation on reservoir area and/or canal	1 Not accept      2 Need compensation      3 No choice      4 No problem	Q-492
If he/she chooses “1 Not accept”, write reason of it.	<input type="text"/>	Q-493
If he/she chooses “2 Need compensation”, what does he/she want to compensation?	1 Money      2 Other land      3 Both      4 Others	Q-494
3 To loss of your land for irrigation facilities	1 Not accept      2 Need compensation      3 No choice      4 No problem	Q-495
If he/she chooses “1 Not accept”, write reason of it.	<input type="text"/>	Q-496
If he/she chooses “2 Need compensation”, what does he/she want to compensation?	1 Money      2 Other land      3 Both      4 Others	Q-497
Do you think illegal to cultivate on reservoir and/or canal?	1 Yes      2 No	Q-498
4 To a lower drinking water quality by application of fertilizer and chemicals	1 Not accept      2 Need other drinking water source 3 No choice      4 No problem	Q-499
If he/she chooses “1 Not accept”, write reason of it.	<input type="text"/>	Q-500

Table I-3 Questionnaire for Social Environmental Baseline Survey

**SECTION XIV DEMANDS AND NOTICE FOR ESTABLISHMENT AND ACTIVATING OF WUA**

Q-501

**SECTION XV P/H PROCESSING FOR RICE**

**XV-1 Agricultural machine**

	Machine	Ownership	Charge	Unit
Threshing	<input type="text"/> Q-502	O/ B/ C Q-503	<input type="text"/> Q-504	<input type="text"/> Q-505
Place of threshing	<input type="text"/> Q-506			
Drying	<input type="text"/> Q-507	O/ B/ C Q-508	<input type="text"/> Q-509	<input type="text"/> Q-510
Heat source (Fuel)	<input type="text"/> Q-511			
Cleaning	<input type="text"/> Q-512	O/ B/ C Q-513	<input type="text"/> Q-514	<input type="text"/> Q-515
Milling for self-consumption	<input type="text"/> Q-516	O/ B/ C Q-517	<input type="text"/> Q-518	<input type="text"/> Q-519
Wage			<input type="text"/> Q-520	<input type="text"/> Q-521

**XV-2 Storage and P/H losses**

**Means of storage**

	volume	unit	period
Max. storage volume	<input type="text"/> Q-522	<input type="text"/> Q-523	<input type="text"/> months Q-524
Kind of container	<input type="text"/> Q-525		
Usage of fumigant	<input type="text"/> Q-526		

**Processing losses**

Dominant loss	<input type="text"/> Q-527	<input type="text"/> Q-528
% of losses	<input type="text"/> % Q-529	<input type="text"/> % Q-530
Constraints for processing of rice	<input type="text"/> Q-531	<input type="text"/> Q-532
Expectation to improve	<input type="text"/> Q-533	<input type="text"/> Q-534
Processing of white rice to sell	<input type="text"/> Q-535	

Table I-4 Results of RRA Workshops (Individual Informants)

<b>1 Small-scale rice cultivation farmer</b>	
1-1	Basic Information
-	Interviewee: Mr. Men Thu (Head of household: Husband)
-	Date: 6 March 2001
-	Characteristic: Small-scale rice cultivation farmer.
-	Location for interview: in his house
-	Location of interviewee's house: Prey Ta Dok village/ Samroang Commune His house is along the ADB road.
-	Number of family: 8
-	Family structure: Husband (34), Wife (39) Daughter (17), son (15) and daughter (12) are born with previous husband. Son (7), daughter (5), daughter (1) Total children: 6 (Boy 2 and Girl 4)
-	Marriage: in 1989 (12 years ago)
-	Parents of this couple: Parents of husband live in Povsat District. Parents of wife already died (Father: 34 years ago, Mother: 5 years ago)
-	Education: Elder daughter and son gave up primary school. Other children and this couple have no education: Primary school is far (3 km) from here.
-	Health condition: Good
-	Main activity: Rice cultivation
-	Migrant work: Husband goes to border area of Vietnam to help transplanting every year.
-	Other work: Gathering firewood: Elder daughter and son
1-2	Agriculture
-	Land holding: Only paddy field.
-	Chemicals: No application: no damage by insects. Some damage by mouse.
-	Fertilizers: 1 bag of DAP
-	Seed: 60 kg
-	Production: Only for 4 months' self-consumption.
-	Work inputs: Only this couple.
1-3	Livestock
-	Cow: 1 He will rent one more cow for plowing.
-	Pig: Parent: 1 Young: 6 Owner of all pigs is other person. He will share selling price.
-	Chicken: Parent: 1 Young: 2 He had 4 parents chicken, but already died of illness. Chickens are only for self-consumption.
-	Feed: Rice for chicken and rice straw for pig.
1-4	Debt
-	Amount: Debt 1: 60,000 riel

Table I-4 Results of RRA Workshops (Individual Informants)

- Interest: Debt 2: Rice for 8 months  
Debt 1: 10 % per month, but he pay back as farm labor work.  
Debt 2: No
  - Repayment: Debt 1:  
Debt 2: Cash after harvesting or collected firewood.
- 1-5 Other Information
- House and land inherited from wife's parent.
  - All of all children were born in this house. Midwife come from in this village with 1,000 to 2,000 riel or 2 kg of rice.
  - A radio-cassette recorder with battery is the only luxuries. He bought it at market with 15,000 riel (secondhand).
  - He worked at wages of 4,000 riel a day for ADB road (in front of his house) construction.
  - He never goes to Phnom Penh because he is stranger in there.
- 1-6 Impressions and Findings
- He has land along the secondary canal. Other farmer cultivates vegetables on next land. The farmer draws water from the canal to their vegetable land. This farmer is negative to vegetable cultivation because of no money for seed and no experience of vegetable farming.
- 1-7 Cash Flow

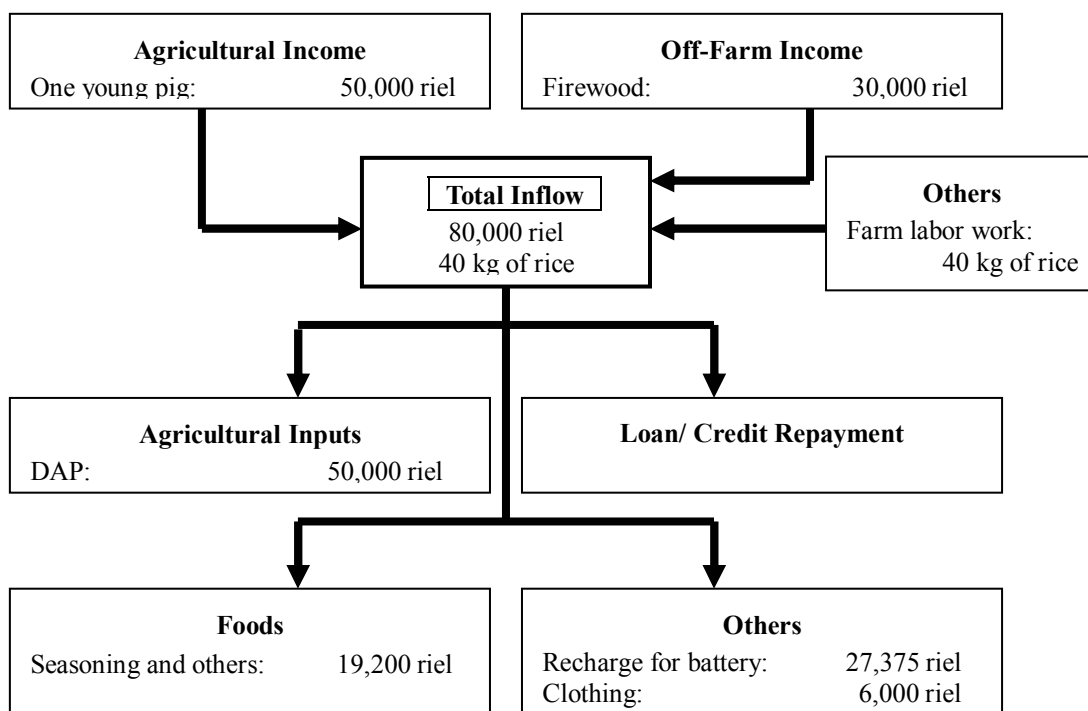


Table I-4 Results of RRA Workshops (Individual Informants)

1-8 Cropping Calendar

Crops	Variety	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	
Paddy	Non-glutinous rice																		
	Glutinous rice																		

2 Big paddy farmer

2-1 Basic Information

- Interviewee: Mr. Meak Soeung (Husband)
- Date: 6 March 2001
- Characteristic: Big Paddy Farmer
- Location for interview: in his house
- Location of interviewee's house: Prey Ta Dok Village/ Samroang Commune/ Tram Kak District/ Takeo Province
- Number of family: 7  
Present family is 4. 2 sons and 1 daughter have married and went out. the 1st son lives near Thailand border, the 2nd son lives in Krabei Prey Village of same Commune and the daughter lives in the same village.
- Family structure: Husband (62), Wife (34)  
Son, Son, Daughter, Son (19) and Daughter (14)  
The wife is second wife.
- Marriage:
- Parents of this couple:
- Education: The 3rd son graduate for secondary school.  
The 2nd daughter graduate for primary school.
- Health condition: Good for all.
- Main activity: Agriculture (Paddy and vegetable)
- Migrant work:
- Other work:

2-2 Agriculture

- Land holding: 2 ha in total.  
1.6 ha is paddy land (0.075 ha is used for watermelon too) and 0.4 ha is for Mango tree.  
1 ha is own land. Other 1 ha rend from villagers with free of charge.
- Chemicals:
- Fertilizers: 3 bags for paddy (1.6 ha)  
Urea: 1 bag, 18-46-0: 1 bag and 16-20-0: 1 bag.
- Seed:
- Production: Paddy, watermelon and mango.
- Yield: 2.4 ton/1.6 ha (1.5 ton/ha)  
This is for self-consumption and animal feed.

Table I-4 Results of RRA Workshops (Individual Informants)

- Work inputs: Family labor: 3 people.  
Hired labor for transplanting: 30 M/D.  
2,500 riel/M/D for hired labor.
- Water: The two paddy lands are rain-fed. The other paddy field is irrigated by pump from pond.
- Marketing:
- 2-3 Livestock
  - Cattle: 2
  - Pig: 1
  - Chicken: 10
  - Duck: 4
  - Feed:
  - Marketing:
- 2-4 Debt
  - Amount: No debt
  - Interest:
  - Repayment:
- 2-5 Other Information
  - They have a TV (290,000 riel), a motorcycle, a bicycle and a battery (70 A, 90,000 riel)
  - They charge the battery every week. They watch the TV about 8 to 10 hours a day.
  - No saving and no debt.
  - They bought land by saving money (Gold).
  - There are no troubles and problems.

2-6 Impressions and Findings

2-7 Cash Flow

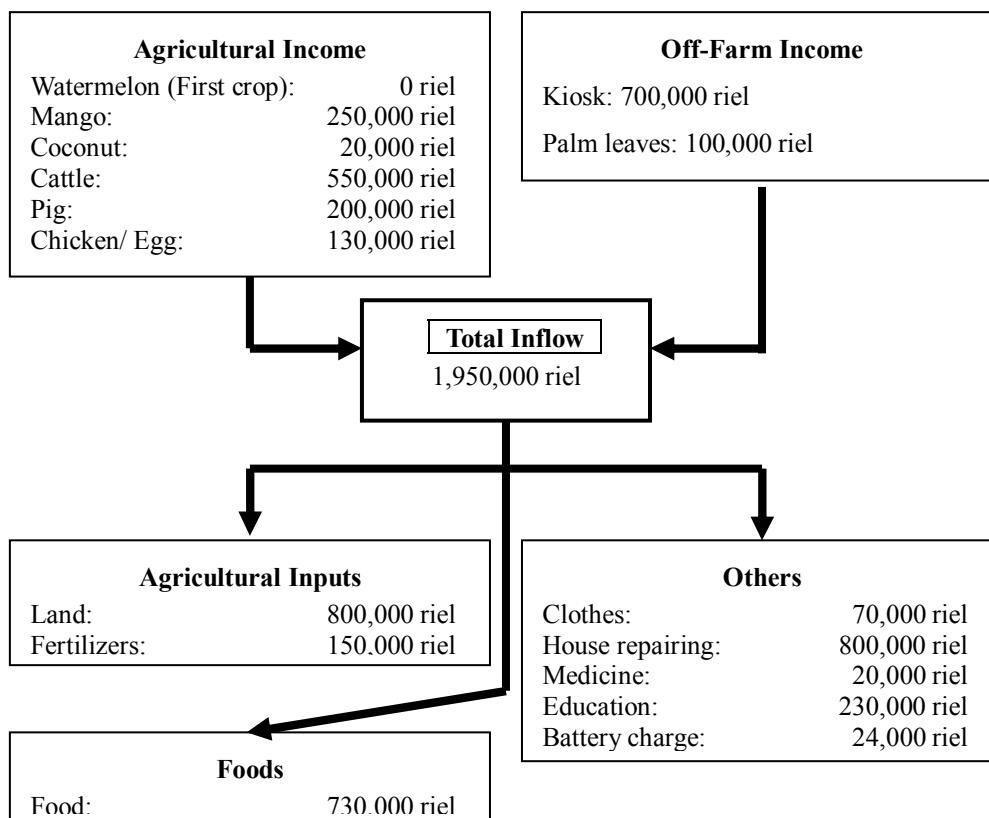


Table I-4 Results of RRA Workshops (Individual Informants)

2-8 Cropping Calendar

Crops	Variety	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	
Paddy							■	Sowing in nursery											
								■ Land preparation											
									■ Transplanting										
														■ Harvesting					

3 Paddy field in reservoir

3-1 Basic Information

- Interviewee: Mr. Ut Sen (Husband)
- Date: 7 February 2001
- Characteristic: Paddy Field in Reservoir
- Location for interview: in his rice storehouse
- Location of interviewee's house: Stueng Village/ Ou Saray Commune/ Tram Kak District/ Takeo Province.
- Number of family: 6
- Family structure: Husband (30), Wife (30)  
Son (10), Son (7), Daughter (4) and Son (2)  
Total children: 4 (Boy 3 and Girl 1)
- Marriage: They are from this village.  
The husband moved here before marriage (more than 10 years ago). The husband inherited the land from his mother.
- Parents of this couple: already passed away  
Both parents lived in other place of this village.
- Education: The 1st son goes to primary school at Trapeang Dang Tuek Village (about 3.5 km in a road). (Grade 2)  
The 2nd son has not entered the primary school.
- Health condition: Good for all.
- Main activity: Paddy
- Migrant work:
- Other work:

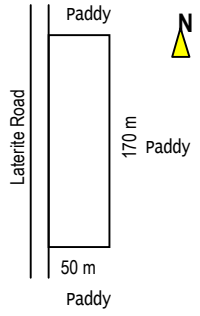
3-2 Agriculture

- Land holding: Paddy fields are 4.32 ha in total as shown as below:

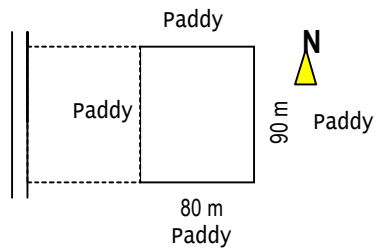


Table I-4

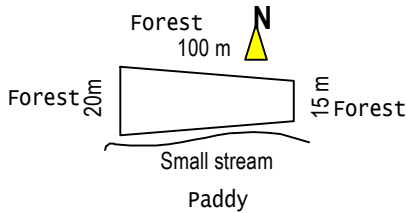
Results of RRA Workshops (Individual Informants)



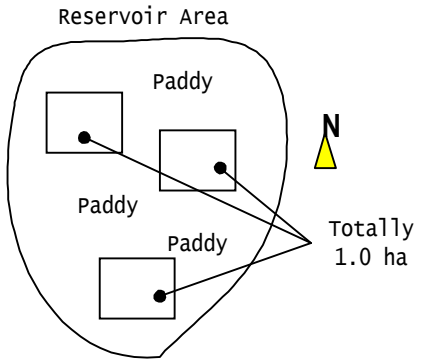
- Locate 2 km to the west of the house.
- All season road (laterite) is available.
- Area is 0.85 ha.
- Half of the land is used by his aunt, because she has little land available with her.
- No water source.
- Rain-fed condition.
- Local rice (red rice) is planted.
- Production is 840 kg.
- DAP and Urea are used 12.5 kg respectively.
- Land preparation and nursery start in mid-May.
- Transplant in early August.
- Harvest in mid December.



- Located 1 km to the east of the house.
- Canal runs near the land but not being used.
- Area is 0.72 ha (?).
- No water source.
- Rain-fed condition.
- Local rice (sao) is planted.
- Yield is more than that of No.1.
- DAP and Urea are used 12.5 kg respectively.
- Land preparation and nursery start in mid-May.
- Transplant in early August.
- Harvest in late December



- Located 1 km to the south of the house.
- Small stream runs near the land (wet season).
- Area is 0.18 ha (?).
- Local rice (phkatean) is planted.
- Yield is more than that of No.1.
- DAP and Urea are used 5 kg respectively.
- Land preparation and nursery start in mid-May.
- Transplant in early August.
- Harvest in early January

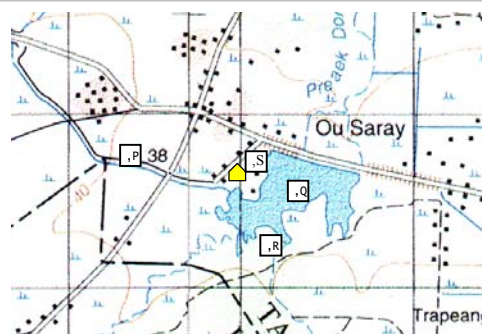


- Located 200 m to the northeast of the house.
- Located in the Kpob Trobek Reservoir.
- MOWRAM has the land (illegal cultivation).
- Area is 1 ha for three (3) locations (?).
- Yield is more than that of No.1.
- Local rice (teshplok) and sticky rice is planted.
- DAP and Urea are used 10 kg respectively.
- Land preparation and nursery start in mid-May.
- Transplant mid-July.
- Harvest in late November

	1	2	3	4
Area (ha)	0.85	0.72	0.18	1.00
Distance (km)	2	1	1	0.2
Registration	Yes	Yes	Yes	No
Ranking	3 <sup>rd</sup>	4 <sup>th</sup>	2 <sup>nd</sup>	1 <sup>st</sup>
Remarks				In reservoir

Table I-4

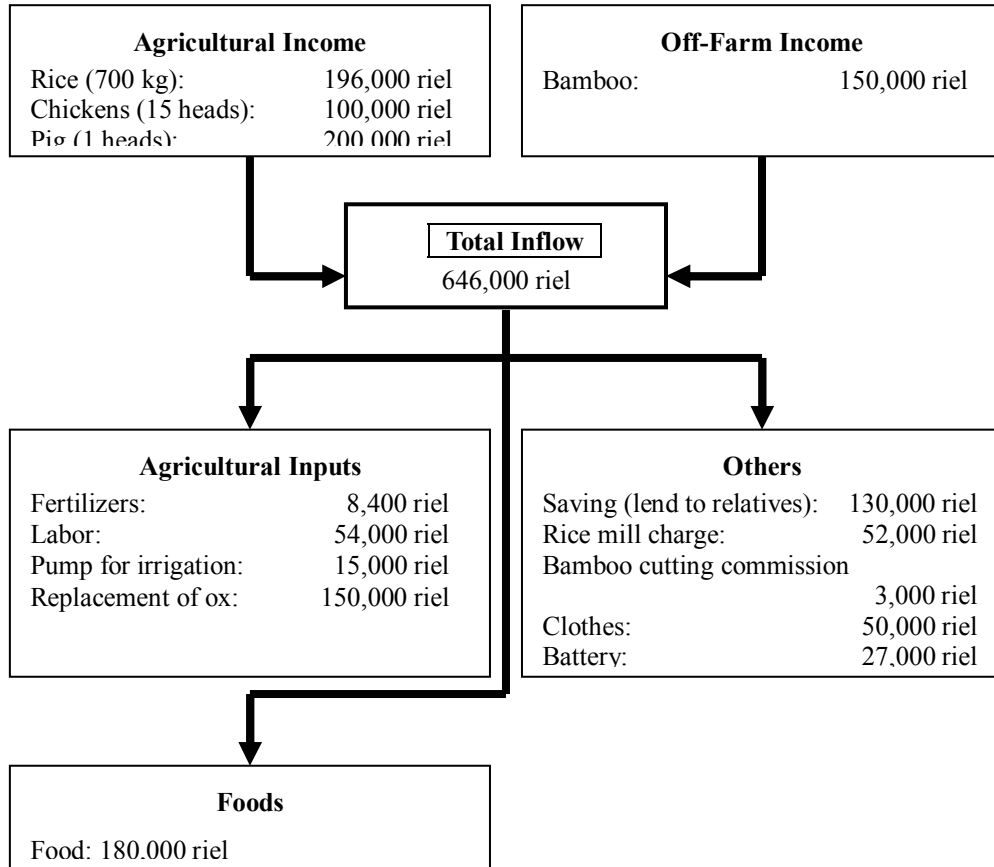
## Results of RRA Workshops (Individual Informants)

**Location of Lands**

-	Chemicals:	
-	Fertilizers:	DAP and Urea are used 40 kg respectively in total. Application fertilizers are only once before transplanting.
-	Seed:	
-	Production:	No.1 is 840 kg (1.0 ton/ha), No.2 is more than No.1, No.3 is more than No.1, and No.4 is more than No.1.
-	Work inputs:	Transplanting is carried out by using “exchange labor”. Harvesting is conducted by using hired labor. Total M/D for the four lands is 18 M/D. Cost for one M/D is about 3,000 riel and two meals.
-	Water:	Rain-fed condition
3-3	Livestock	
-	Cow:	1
-	Buffalo:	3
-	Pig:	1
-	Chicken:	4
-	Duck:	5
-	Feed:	Enough
3-4	Debt	
-	Amount:	No debt
-	Interest:	
-	Repayment:	
3-5	Other Information	
-	The family is trying to build a house.	
-	The family is trying to build a house. The husband procures materials from the mountain.	
-	They take open water (pond or open well) for drinking	
-	They do not have TV or cassette.	
-	They have rice stock.	
-	Rice production is sufficient for self-consumption	
-	They have no debt	
3-6	Impressions and Findings	

Table I-4 Results of RRA Workshops (Individual Informants)

3-7 Cash Flow



3-8 Cropping Calendar

Crops	Variety	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	
Paddy	No.1					■		Plowing/Nursery											
									■	Transplanting									
														■	Harvesting				
	No.2						■		Plowing/Nursery										
										■	Transplanting								
														■	Harvesting				
	No.3						■		Plowing/Nursery										
										■	Transplanting								
														■	Harvesting				
	No.4						■		Plowing/Nursery										
										■	Transplanting								
														■	Harvesting				

Table I-4 Results of RRA Workshops (Individual Informants)

<b>4</b>	<b>Swine breeding farmer</b>	
4-1	Basic Information	
-	Interviewee:	Mr. Kin Tha (Husband)
-	Date:	8 March 2001
-	Characteristic	Swine Breeding Farmer
-	Location for interview:	Ta Phem Village/ Ta Phem Commune/ Tram Kak District/ Takeo Province
-	Location of interviewee's house:	in his house.
-	Number of family:	11
-	Family structure:	1st daughter (21) has married and lives another house. Husband (43), Wife (43) Daughter (18) and her Husband and 3 children, Son (15), Daughter (12), Daughter (10) and Son (7)
-	Marriage:	
-	Parents of this couple:	
-	Education:	The 1st son (15): Secondary school (Grade 7). The 3rd daughter (12): Primary school (Grade 5). The 4th daughter (10): Primary school (Grade 3). The 2nd son (7): Primary school (Grade 1).
-	Health condition:	
-	Main activity:	Paddy (1.5 ha), Brewing (white liquor made from rice), Pig and cattle breeder, Vegetable, and Photographer
-	Migrant work:	
-	Other work:	
4-2	Agriculture	
-	Land holding:	1.5 ha for paddy and some for vegetables. Early paddy: 0.15 ha and Late paddy: 1.5 ha
-	Chemicals:	
-	Fertilizers:	DAP (0.5 sacks) and some manure for early paddy. DAP (2 sacks), Urea (1 sack) and some manure for late paddy.
-	Seed:	
-	Production:	1.9 ton in wet season and 250 kg of rice in dry season. Eggplant: and leek: 2-month short for self-consumption.
-	Work inputs:	
-	Water:	Irrigate by hand pump for paddy.
4-3	Livestock	
-	Cow:	5
-	Pig:	6
-	Chicken:	10 (Parents: 3, Children: 7)
-	Duck:	7
-	Feed:	
4-4	Debt	
	Amount:	No debt
	Interest:	
	Repayment:	

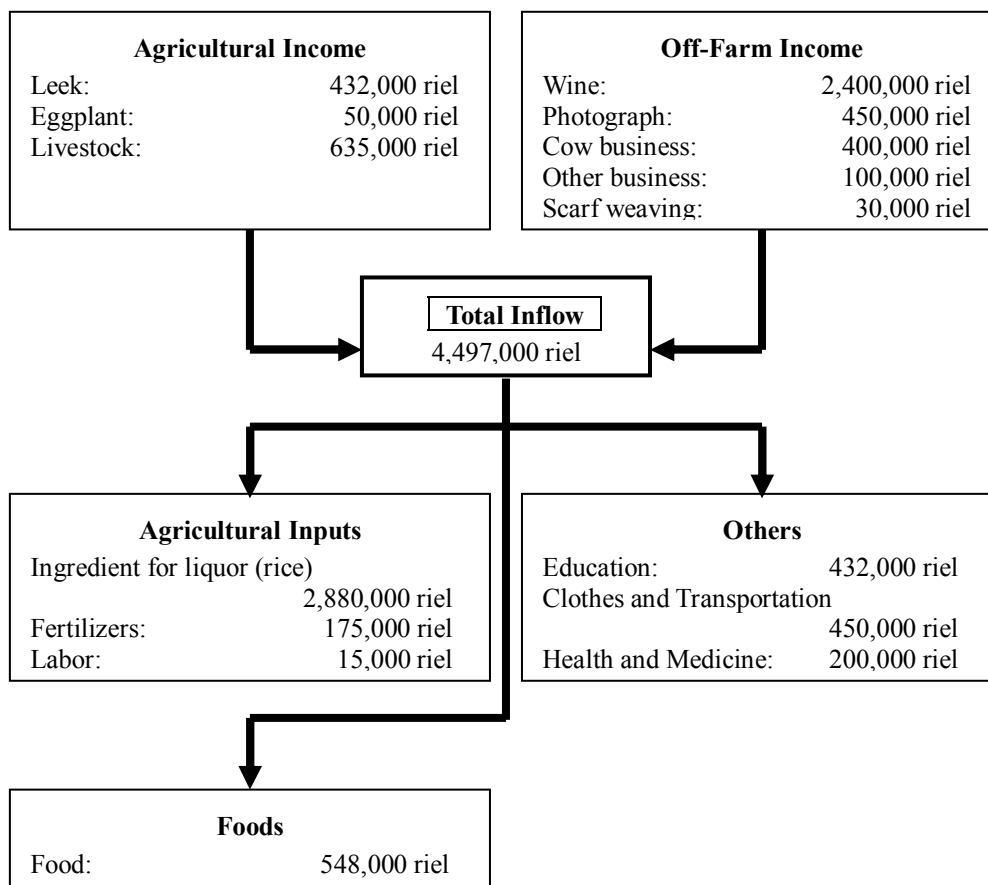
Table I-4 Results of RRA Workshops (Individual Informants)

4-5 Other Information

- They have a motorbike.

4-6 Impressions and Findings

4-7 Cash Flow



4-8 Cropping Calendar

Crops	Variety	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
Paddy	Early Paddy (IR 66)						Plowing/Nursery											
										Harvesting								
	Late Paddy						Plowing/Nursery											
															Harvesting			

5 Widow

5-1 Basic Information

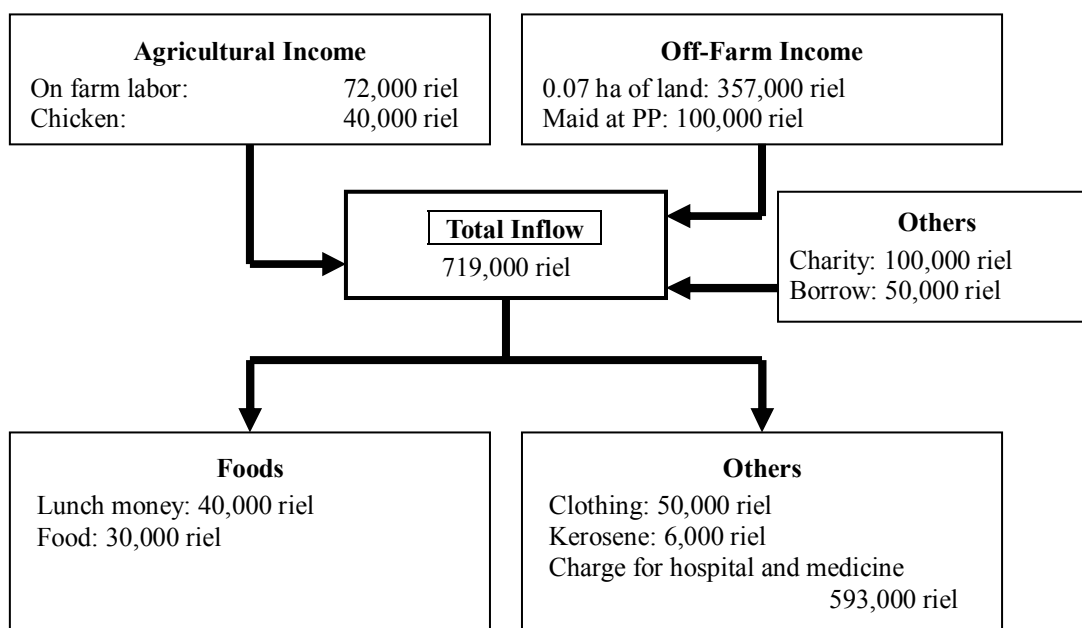
- Interviewee: Miss Khim Nget (Head of household: Widowed mother)
- Date: 8 March 2001
- Characteristic: Widow
- Location for interview: in her house
- Location of interviewee's house: Ta Phem village/ Ta Phem Commune  
His house is along the National Road No. 33.
- Number of family: 9

Table I-4 Results of RRA Workshops (Individual Informants)

-	Family structure:	Mother (54) Daughter (25), daughter (22), daughter (20), daughter (18), daughter (14) and daughter (13) are her own children. Husband of 18 years old daughter and their child (1) are live together. Farther was died in 1998 caused by malaria when he went to mountain to collect firewood. He was Pol Pot soldier. Total children: 8 (Boy 2 and Girl 6)
-	Marriage:	in 1967 (34 years ago)
-	Parents of this couple:	Parents of husband lived in Tand Mon village in this Commune and husband was born at there. Parents of wife lived in this village and wife was born at there.
-	Education:	Only 5th daughter (14) graduate from primary school. Other daughters gave up primary school.
-	Health condition:	Mother: T.B. (tuberculosis), outpatient. 3rd daughter: T.B from 2 years ago, inpatient of heath center from 2 months ago. 4th daughter and his husband, and 6th daughter: are in poor health.
-	Main activity:	Rice cultivation
-	Migrant work:	Some daughter got to PP as maid.
-	Other work:	Gathering firewood: only around her house because of her health condition and no transportation. Only leaves and small trees around the house. She and 3 daughters work as farm labor about one month. She gets 3,000 riel a day for one person.
5-2	Agriculture	
-	Land holding:	Paddy field is 0.6 ha in total and her house land. She has 2 paddy field: 0.3 ha and 0.3 ha. She sold other 0.07 ha paddy field for hospital charge of 3rd daughter.
-	Crop	Medium paddy in rainy season.
-	Chemicals:	Nothing
-	Fertilizers:	Nothing
-	Seed:	
-	Production:	Not enough for self-consumption (about 420 kg).
-	Work inputs:	She and 3 daughters.
-	Water availability for agriculture	She gets irrigation water from canal near her house. There is small dam to get irrigation water from the canal. There is a pond at next her house, but it is for other person.
-	Other information:	She transplants by 2 months old nursery.
-	She had no information about credit for fertilizer.	
5-3	Livestock	
-	Cattle:	Nothing She borrows 2 cattle for land preparation. She work 2 days if she borrow cattle for one day (Exchange labor system).
-	Pig:	She raises 3 of parent pig 18 of child pig.

Table I-4 Results of RRA Workshops (Individual Informants)

- These pigs belong to other person. She will share half of selling price.
- Chicken: 21  
She sold 10 chickens to market.
  - Feed:
  - Other information:
- 5-4 Debt
- Amount: 50,000 riel
  - Interest: Nothing.
  - Repayment: Nothing, no time limit to repay.
  - Source: Rich farmer.
  - Purpose: Charge for hospital and medicine.
- 5-5 Other Information
- They get water from canal in dry season. Because there is no water in canal in dry season, she digs a hole to get water from bed of canal. She has no big pot to store rainwater.
  - She use kerosene lamp.
  - If she has additional money, she wants to buy cattle and pig.
  - Villagers gave to charity 100,000 riel.
  - She has relatives, but they are poor too. She can't borrow money from them.
- 5-6 Impressions and Findings
- Disease calls them even worth poverty.
- 5-7 Cash Flow



5-8 Cropping Calendar

Crops	Variety	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	
Paddy	Non-glutinous Rice (Local Variety)								Plowing/Nursery										
										Transplanting									
																	Harvesting		

Table I-4 Results of RRA Workshops (Individual Informants)

6 Vegetable farmer	
6-1	Basic Information
-	Interviewee: Miss Prom (Wife)
-	Date: 7 March 2001
-	Characteristic: Vegetable Farmer
-	Location for interview: in her house
-	Location of interviewee's house: Stueng village/ Ou Saray Commune Her house is along the National Road No.22 and near reservoir.
-	Number of family: 7
-	Family structure: Husband (65), Wife (60) Daughter (?), son (23), daughter (20) daughter (18) and daughter (12) Total children: 8 (Boy 2 and Girl 6) Two daughters and one son already married and live near here.
-	Marriage: in 1979 (22 years ago)
-	Parents of this couple: Died.
-	Education: The youngest child (12) drops out primary school. Other children never go to school.
-	Health condition:
-	Main activity: Fishing/ Paddy and vegetable cultivation
-	Migrant work:
-	Other work: She goes to mountain to gathering firewood 6 times a year (only in dry season). Some of them sell at market.
6-2	Agriculture
-	Land holding: Paddy field is 1.5 ha. Vegetable land is 0.5 ha. Vegetable land is around her house, but paddy field is near the mountain (4 km/ 1 hour from here).
-	Chemicals:
-	Fertilizers: Only manure from own cattle for paddy. Urea 10 kg, DAP 5 kg and manure for vegetable.
-	Seed: 60 kg (40 kg/ha) for paddy. 3 kg (6 kg/ha) for maize. 40 kg/ha for paddy is enough empirically.
-	Production: Paddy (1.5 ha) in rain season and vegetable (0.5 ha) in all year. Vegetables: Watermelon, cabbage, maize and sweet potato. Rice is not enough for self-consumption.
-	Yield: Paddy: 1.5 ton (1.0 ton/ha)
-	Work inputs: Only wife. Husband rarely works because he is a hard drinker. No farm labor.
-	Water: Water for paddy is only rainwater. Water shortage is rare. She brings water for vegetable in dry season from reservoir.
-	Marketing: 100 watermelon and maize. Other production is not so much. Market is 1 km from here.



Table I-4 Results of RRA Workshops (Individual Informants)

- 6-3 Livestock
- Cattle: 2
  - Pig: 0  
She sold a pig last year.
  - Chicken: 2 parent chicken and 15 young chickens.
  - Feed:
  - Marketing: They never sell egg of chickens.
- 6-4 Debt
- Amount: No debt
  - Interest:
  - Repayment:
- 6-5 Other Information
- Husband is a hard drinker (2 little of wine every day). He never works.
  - She goes to fishing in rain season (about 90 days). She has trap to catch fish. She get 5 kg of fish with 1 hr.
  - She lives in hut near her paddy land and come back to her main house to care children.
  - They eat fish (3 times a week) and pork (2 times a week) and never eat chicken.
  - If she has additional money, she wants to buy pump for vegetable.
  - Decision maker is only she.
  - They have lived here from 1979.
  - They get 2.0 ha land (0.8 ha for a adult, 0.8 ha x 2.5 person).
- 6-6 Impressions and Findings
- If husband work as normal, this household will be rich.
- 6-7 Cash Flow

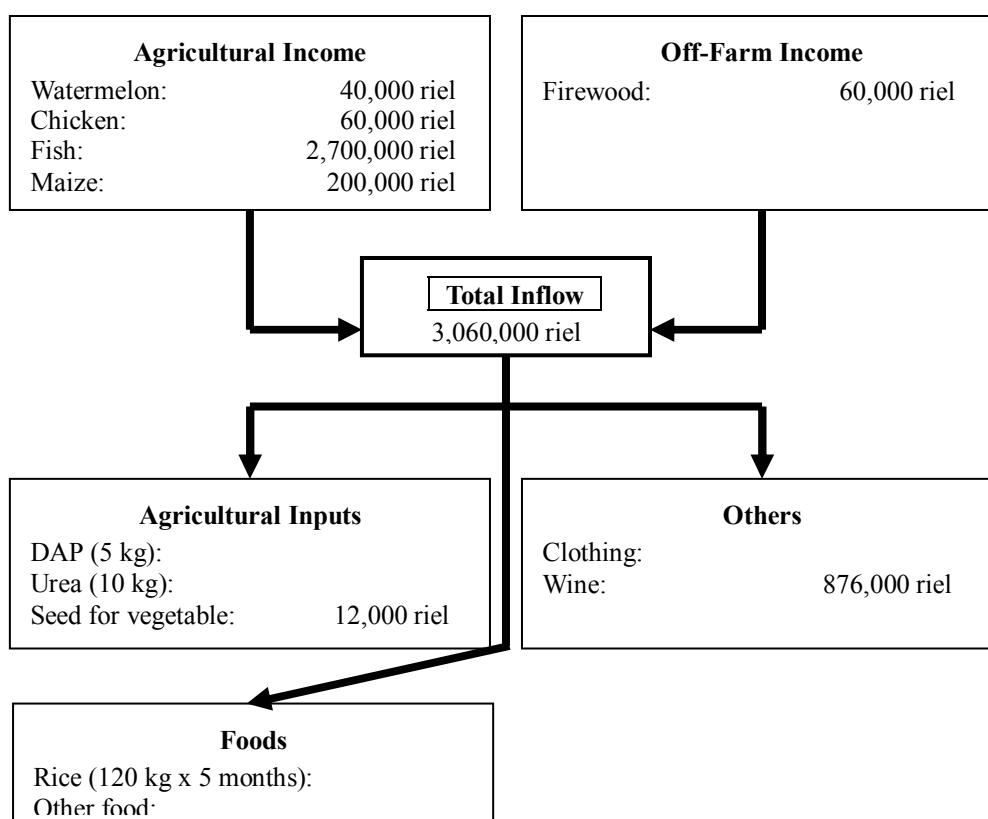


Table I-4 Results of RRA Workshops (Individual Informants)

6-8 Cropping Calendar

Crops	Variety	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	
Paddy	Non-glutinous Rice (Local Variety)						Plowing/Nursery												
									Transplanting										
															Harvesting				
Maize																			
Water Melon																			

Table I-5 Relation between the Selected Target Villages and the Plans

Plans	Characters of Participants	O Saray	Samraong	T.T.K. Cheung	T.T.K. Tboung	Nhaeng Nhang	Common	Nos. of workshops
USP	Big paddy farmer							2
	Small paddy farmer							1
	Widow farmer/ Small paddy farmer							1
	Livestock farmer							1
	Vegetable farmer							1
	Paddy field in reservoir							1
	VDC/ FG member							1
SRP	Small reservoir							2
PDP	Small pond					(21)		1
	Small pond/ Rural road							1
	Rural road							1
UPS SRP PDP	Village (vice-) chief							4
	Commune (vice-) chief							1
	NGOs							1
	Related Governmental Offices (RGOs)							1
Nos. of workshops		4	3	4	4	2	3	20

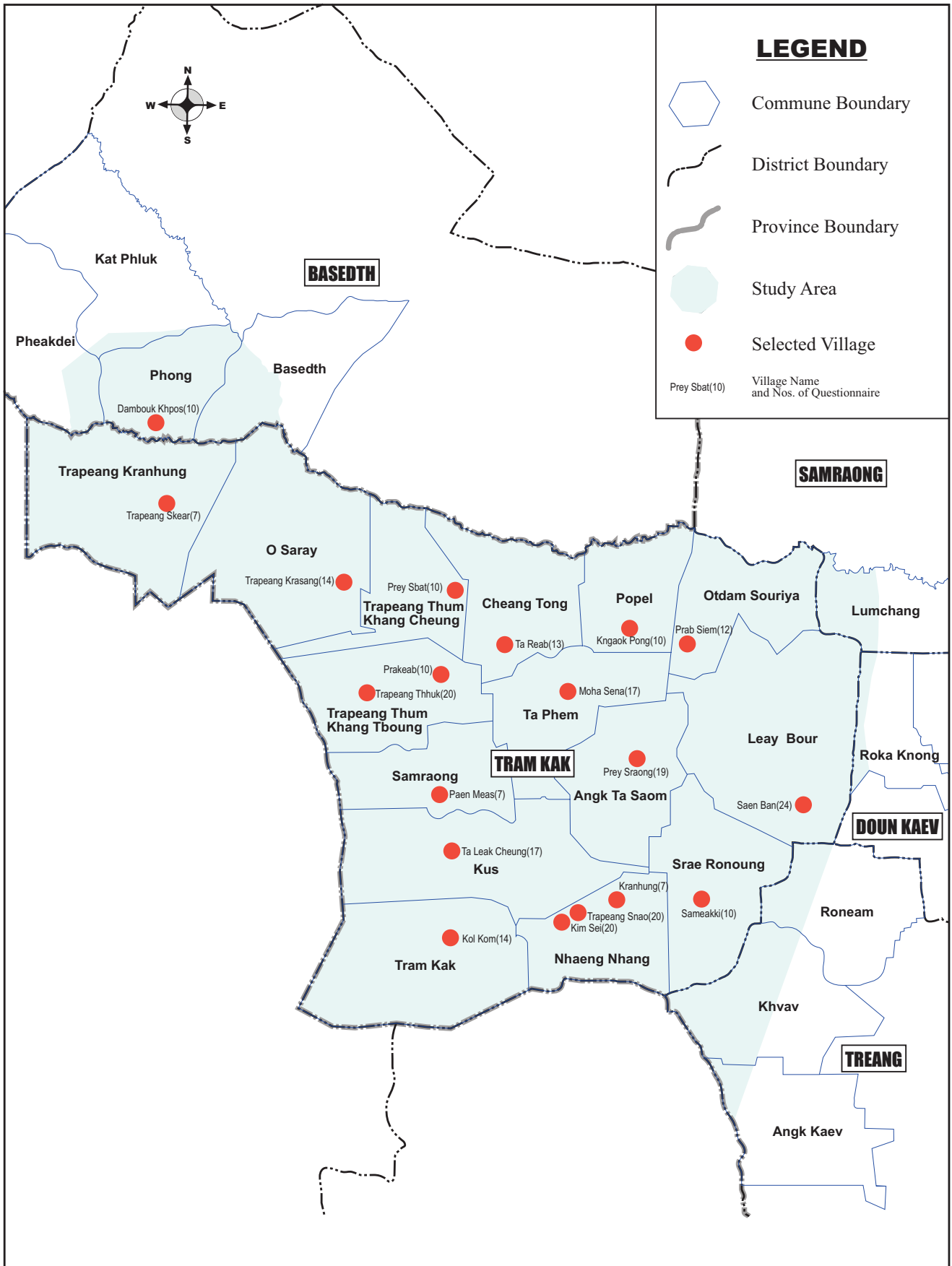
Notes: Trapeang Dang Tuek, Stueng Tnaot Chum, Trapeang Kralanh and Tuol Khlong; O Saray commune Krabei Prey, Pret Ta Dok, Trapeang Thma and Sambuor; Samraong commune Peak Bang'aong, Trapeang Svay, Prey Kduoch, Pou Doh and Prey Sbat; T.T.K. Cheung commune Kou Chen Leaeng, Trapeang Chhuk, Trapeang Tnaot and Trapeang Prei; T.T.K. Tboung commune Kamsei, Trapeang Snao and (21)Ruessei Srok; Nhaeng Nhang commune is selected from related communes consisting of related villages ( ~ (21)). is related organizations.

Table I-6 Selection Type of Village Chief

Plans	Communes and Villages	Election	Recommendation	Starting Year
USP	Trapeang Kranhung Commune 1 Khpob Svay	√		1985
	O Saray Commune 1 Trapeang Dang Tuek	√		1998
	2 Trapeang Krasang	√		1982
	3 Boeng Satong	√		1998
	4 Trapeang Khchau	√		1984
	T.T.K. Cheung Commune 1 Peak Bang'aong		√	1986
	2 Prey Khvav		√	1986
	3 Trapeang Svay		√	1986
	4 Ta Suon	√		1979
	5 Prey Ta Lei		√	1987
	6 Pou Doh		√	1983
	7 Prey Sbat		√	1986
	8 Prey Dak Por		√	1983
9 Prey Kduoch	√		1987	
USP	Cheang Tong Commune 1 Srae Khvav	√		1982
	2 Ta Reab	√		1983
	3 Angk Kralanh	√		1981
	4 Angk Baksei	√		1980
	5 Trapeang Srangae	√		1980
	6 Totueng Thngai	√		1983
	7 Trapeang Tuek	√		1983
	8 Ta Toeum	√		1985
	9 Moeang Char	√		1984
	10 Ti Pat	√		1987
	11 Srae Kruo	√		1988
	12 Tuol Tbaeng	√		1991
	13 Nomou	√		1984
USP	Ta Phem Commune 1 Mrum	√		1983
	2 Trapeang Ampil	√		1984
	3 Ta Much	√		1983
	4 Moha Sena	√		1983
	5 Ta Mom	√		1983
SRP	T.T.K. Tboung Commune 1 Trapeang Chuuk		√	1993
	Nhaeng Nhang Commune 2 Kim Sei	√		1985
PDP	Nhaeng Nhang Commune 1 Trapeang Snao		√	1991
	Total	26	9	15.69*

Note: Average tenure (years) as village chief as of Oct. 2001.

## *Figures*



The Study on the Rehabilitation and Reconstruction of Agricultural Production System in The Slakou River Basin, The Kingdom of Cambodia

Japan International Cooperation Agency

Figure I-1  
Location of Target Villages for Questionnaire Survey