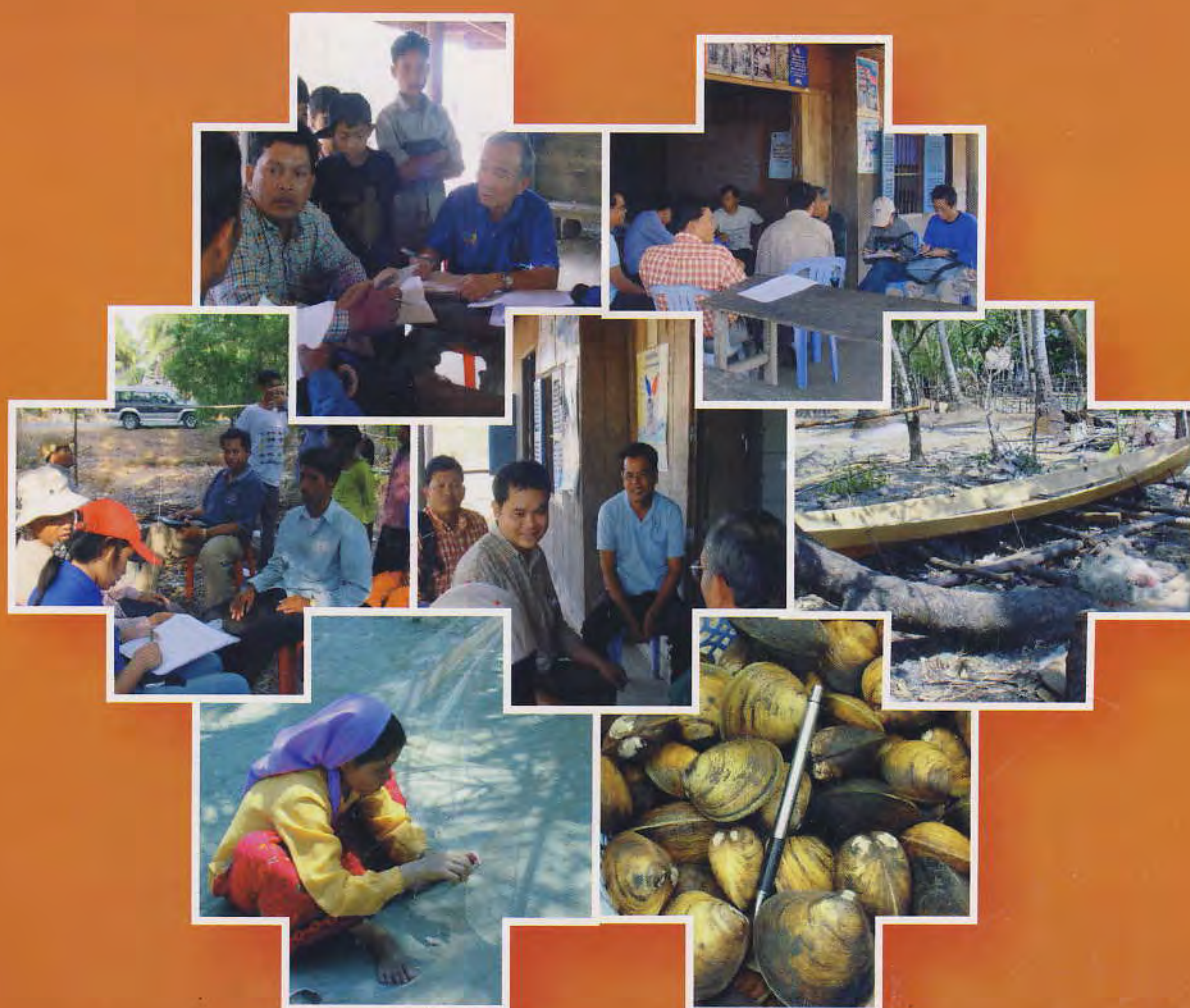




Preliminary Socio-Economic Survey
In
Comune Teuk Thla, Sihanoukville,
CAMBODIA



TD/RES/96

ICRM-SV No.2

Integrated Coastal Resources Management in Sihanoukville
(ICRM-SV)

Report
of the
**Preliminary Socio-Economic Survey
in
Commune Teuk Thla, Sihanoukville**

Integrated Coastal Resources Management in Sihanoukville
(ICRM-SV)

A collaborative project between SEAFDEC/TD
and
Department of Fisheries, Cambodia

Prepared by SEAFDEC/TD



Training Department
Southeast Asian Fisheries Development Center



Department of Fisheries
Cambodia

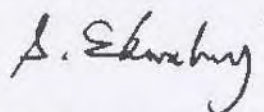
**TD/RES/96
ICRM-SV No.2**

September 2005

FOREWORD

Under ASEAN-SEAFDEC Fisheries Consultative Group (FCG) Scheme, Thailand takes duty as the lead country among ASEAN member countries and the Training Department (TD) takes as a lead department of SEAFDEC to implement the coastal resources management program. This program is mainly supported by Japanese Trust Funds.

Under the coastal resources management program, TD and Department of Fisheries (DOF), Cambodia collaborated in formulating and planning the collaborative coastal fisheries management project. An aim of the collaborative project is to promote and achieve sustainable use of fisheries resources. TD and the DOF, Cambodia agreed to transfer essence of technologies, accumulated knowledge and lesson learned, which gain through the implementation of coastal fisheries management project to other SEAFDEC member countries through the SEAFDEC's information mechanism. This information may help ASEAN-SEAFDEC member countries consider their own policies and formulate a new direction for cost-effectiveness of coastal fisheries resources management plan and implementation.



Siri Ekmaharaj, Ph.D.
Secretary-General

PREFACE

Prior to formulation of the project document for “Integrated Coastal Resources Management Project in Sihanoukville (ICRM-SV)”, the preliminary socio-economic survey was conducted on 14 – 17 March 2005 in Commune Teuk Thla, Sihanoukville, Cambodia, with the joint team of DOF Cambodia, Fisheries Office Sihanoukville and SEAFDEC/TD.

Preliminary Socio-economic Survey or Rapid Rural Appraisal is a repertoire of rapid approaches to collecting information and data and identifying problems. It is a vital step to take upon formulating a rural development project for any implementing agency, especially relevant for coastal fisheries development encompassing the total community development aspect that looks at problems outside of the fisheries sector, in such areas as cottage or small scale industry development and house holding. It is not only conducive to provide basic data and information which will constitute the backbone of the project streamline but also as a milestone for the operational status in the project area and, thereby, the project can use it as a means of measuring the degree of achievement with the period of project operation. Additionally, a fishing and fish handling technologies survey was simultaneously carried out as a complementary survey, the content of which will be reported separately.

Sei Etoh and co-authors

22 September 2005

CONTENTS

	Page
Acknowledgement	vi
1. Background	1
2. Objectives of the survey	1
3. Expected outputs of the survey	2
4. Survey design	2
5. Scale of the survey and target groups of sampling	2
6. Interviewing	3
7. Results	3
8. Findings and analytical observations	11
9. Conclusion and recommendations	15
<u>Annex</u>	
Annex 1: Notes on the discussion	19
Annex 2: The design of the questionnaire	21
Annex 3: The questionnaire sheet	23
Annex 4: List of analytical data and information sheets	29
Annex 5 - 1: Analytical result – Part I	31
Annex 5 - 2: Analytical result – Part II	45
Annex 5 - 3: Analytical result – Part III	61
Annex 5 - 4: Analytical result – Part IV	71
Annex 5 - 5: Analytical result – Part V	77

ACKNOWLEDGEMENTS

The Authors would like to express sincere appreciation to all colleagues named below who contributed in conducting this Preliminary Socio-economic Survey in Sihanoukville, Cambodia.

Special thanks go to Mr. Ing Try, Deputy Director, Fisheries Department, Phnom Penh, Cambodia, for his efforts in making pre-arrangements to carry out this survey.

Thanks are also due to Mr. Duong Samath, Chief, Fisheries Office, Sihanoukville, Cambodia, for his coordination in the Sihanoukville Municipal Office and to Mr. Roem Mousoeu, Chief, Community Fisheries Prey Nup II, in making local arrangements for this survey at the project site.

Department of Fisheries, Phnom Penh

- | | |
|----------------------|-------------------|
| 1. Mr. Pich Sereyath | Fisheries Officer |
| 2. Mr. Lim Nguonkruy | Fisheries Officer |
| 3. Mr. Seng Leang | Fisheries Officer |

Fisheries Office, Sihanoukville

- | | |
|----------------------|-------------------|
| 1. Mr. Yi Boros | Fisheries Officer |
| 2. Mr. Nen Chamreaun | Fisheries Officer |
| 3. Mr. Kang Maxey | Fisheries Officer |

SEAFDEC/TD

- | | |
|-------------------------------|-------------------------|
| 1. Dr. Tawekiet Amornpiyakrit | Fishing gear Technology |
| 3. Ms. Sumitra Ruangsivakul | Socio-economic |

The Authors: SEAFDEC/TD Research Division Group

Sei Etoh	Project Leader,
Siriporn Pradit	Unit Head, SITU
Siriporn Pangsorn	Researcher, SITU

1. BACKGROUND

A new program on "Capacity Building of Human Resources and Participation in Integrated Coastal Resources Management" was approved at the 27th PCM meeting held from 6th – 9th December 2004. Component 2 of this program lies in "Extension of the project concept to other member countries" which means that knowledge and experience gained through the CBRM project operation and management in Chumphon Province, Thailand, and in Langkawi Island, Malaysia, will be disseminated to other SEAFDEC member countries. Some other member countries have expressed their requests to initiate a CBRM project including Brunei Darussalam, Indonesia, Cambodia and Myanmar, it was decided to commence the 3rd project in Cambodia taking various advantages into account compared with the others appellants.

Subsequent to the decision, a preliminary mission was mounted in early January 2005 to inspect the proposed project site and to formalize the project operation and management modes (refer to the Travel Report to Sihanoukville, Cambodia - 2, Etoh.S. January 2005). During the visit by the mission a new project site was proposed by the DOF Cambodia and judging from the various factors and aspects it was agreed to commence the project at this site from January 2005. The proposed site is called Prey Nop 2, which has two communes; i.e. Teuk Tla and Teuk Laak. The former has already institutionalized a fishermen's cooperative type organization called "Community Fisheries" and initiated group activities, while the latter is not yet organized. Given the fact that there would be a limitation in operational capacity of the project, it was further decided to concentrate the project activity in Teuk Tla Commune in the 1st stage and to expand the scope of the activity into Teuk Laak later.

Hence, a preliminary socio-economic survey was conducted on 14th – 17th March 2005 in Commune Teuk Tla consistent with the tentative project work-plan to understand the socio-economic conditions in the project operational area. The rapid survey that was employed this time is essential and conducive for outsiders to learn, in a short period, about a community, an area or an activity or possibly specific problems they knew little about and, therefore, it constitutes an essential step for the commencement of any project involving community development. It is also conducive as a milestone for the pre-operational status in the project area and, thereby, the project can use it as a means of measuring the degree of achievement with the period of project operation. Additionally, a fishing gear and operation survey was carried out in parallel, the content of which will be reported separately.

2. OBJECTIVES OF THE SURVEY

The objectives of the survey are;

- a. To generally identify the socio-economic status of the fishing communities,
- b. To identify the current status of local practices in coastal resources management
- c. To identify gender roles in community economic development,
- d. To identify the role of the Community Fisheries (CF) members and their function to develop community economics and manage coastal resources
- e. To identify problems, basic needs and local people's interests to provide appropriate extension services and capacity building of the local people development program to encourage them to participate in community development,
- f. To identify and classify the prevailing fishing methods and fishing force



3. EXPECTED OUTPUTS OF THE SURVEY

The expected output of the survey was to reveal information about:

- a. The socio-economic status of the fishing community; which gives a general picture of local people's employment. This can categorize and prioritize sources of income of local people. This information is useful to arrange and design activities for community development.
- b. The current status of coastal resources management; which gives a picture of the degree of participation to CBRM and its awareness by local fishers. This will be an indicative milestone for project achievement.
- c. Gender roles in community economic development and resources management are measured. This will give the project implementers and extension officers a clear orientation for their approach.
- d. The role of the Community Fisheries (CF) members and their function; which is useful information to provide further and advanced activities to encourage the CF and members to attain a strengthening of the CF to develop the community and manage coastal resources.
- e. The priority of basic needs and local people's interests in community are properly identified, and that are conducive in deploying the extension services and community development programming.
- f. The currently prevailing fishing and fish handling methods are identified and classified which are further elaborated through a separate survey on fishing and fish handling technology.

4. SURVEY DESIGN

The survey used the rapid rural appraisal method, a repertoire of approaches in collecting information and identifying problems in local communities. The main component of the survey consisted of interviewing stakeholders using local language along with a questionnaire sheet, which was prepared in English. The responses were translated into English and recorded on the questionnaire sheets by the interviewers. The framework of the questionnaire design is explained in Annex 2 and the questionnaire sheet is shown in Annex 3.

A preliminary discussion on the content of the questionnaire was held on 14th March 2005 in Sihanoukville among the representatives of DOF Cambodia, the interviewers and the SEAFDEC/TD project staff. In this meeting, the purpose of the survey, the methodology, the tactful way of interviewing and subsequent compilation was explained. A note on the discussion is attached as Annex 1.

5. SCALE OF THE SURVEY AND TARGET GROUPS OF SAMPLING

The survey sample groups were fisherfolk in four villages within Commune (Sangkat) Teuk Thla – Pre Pros, Prek Sangke, Prek Tal and Kampong Chin - from which 112 interviews were held based on the number of households in the villages as shown in the following table 1. The representation by the survey target groups vary from 12.2% to 14.4% with an average of 13.3%, which is within an acceptable range.

Table 1: Interviews conducted in 4 villages

<u>Village</u>	<u>Population</u>	<u>Household</u>	<u>Interviewed</u>	<u>Representation</u>
Prek Pros	1,833	317	41	12.9%
Prek Sanke	924	201	29	14.4%
Prek Tal	779	156	19	12.2%
Kampong Chin	1,432	165	23	13.9%
Total :	4,968	839	112	13.3%

6. INTERVIEWING

As aforementioned, prior to initiating the survey, a workshop was organized to give an orientation for the surveying methodology on 14th March 2005 in Shihanoukville for all survey interviewers.

The interview was conducted with 4 to 5 pairs of interviewers consisting of one SEAFDEC/TD researcher and one DOF officer in principle. Two DOF officers, however, could manage to conduct interviewing alone from the second day, which facilitated the survey to a great extent. The interviewers who participated in the survey are shown in the following list.

DOF Cambodia

- | | |
|----------------------|----------------------------------|
| 1. Mr. Pich Sereyath | Fisheries Officer, Phnom Penh |
| 2. Mr. Lim Nguonkruy | Fisheries Officer, Phnom Penh |
| 3. Mr. Seng Leang | Fisheries Officer, Phnom Penh |
| 4. Mr. Ti Boros | Fisheries Officer, Sihanoukville |
| 5. Mr. Nen Chamreaun | Fisheries Officer, Sihanoukville |
| 6. Mr. Kang Maxey | Fisheries Officer, Sihanoukville |

SEAFDEC/TD

- | | |
|--------------------------------|---|
| 1. Mr. Sei Etoh | Project Leader |
| 2. Dr. Taweekeit Amornpiyakrit | Fishing gear Technology / Training Div. |
| 3. Ms. Sumitra Ruangsivakul | Socio-economic / Research Div. |
| 4. Ms. Siriporn Pradit | Socio-economic / Research Div. |
| 5. Ms. Siriporn Pangsorn | Socio-economic / Research Div. |

The interviews took place over three days from 15th – 17th March 2005 with the following schedule.

- 15th March : Prek Pros (30 interviews)
- 16th March : Prek Pros (11 interviews) and Prek Sangke (29 interviews)
- 17th March : Prek Tal (19 interviews) and Kampong Chin (23 interviews)

7. RESULT

The raw data was compiled and processed by each topic in line with the categorized analytical data and information sheets as shown in Annex 4. The result of analysis is shown in detail in Annex 5. Based upon these figures, the narrative analysis is made as follows.

Part –I: General information

Part I-1: Fishermen's age variation



1. By village, the fishermen age in Prek Pros has percentages in the range of 25-35 years (19.5%), 36-45 years (43.9%) followed by 46-55 years (24.4%), 56-65 years (9.8%), and 66-75 years (2.4%) respectively. Prek Sangke village the age range is highest in the range of 36-45 (37.9%), 25-35 years (31.0%), 16-24 years (13.8%), 56-65 years (10.3%), and 46-55 years (6.9 %) respectively. In the Prek Tal village the highest age range is between 16-24 years (42.1%); followed by 36-45 years (21.1%), 46-55 years (10.5%), 56-65 years (10.5%), 25-35 years (10.5%) and 66-75 years (5.3%). Kampong Chin village the highest age range is between 36-45 years (56.5%), 25-35 years (21.7%), 16-24 years (13.0 %), and 46-55 years (8.7%) respectively.
2. As a whole, the age of fishermen which has the highest percentage in range is 36-45 years (41.1%), followed by 25-35 years (21.4%), 46-55 years (14.3%), 16-24 years (13.4%), 56-65 years (8.0%) and 66-75 years (1.8%) respectively

Part I-2: Marital status

1. In total, the fishers' marital status is married (90.2%) followed by single (5.4%), widow (3.6%) and widower (0.9%) respectively.
2. In total, the fishers' marital status by sex is married (93.4%), single (5.3%) and widower (1.3%) for male, while married (83.3%), single (5.6%) and widow (11.1%) for female.

Part I-3: Occupations of fishermen

1. By village, in every village the highest percent of occupations is fisheries combined with agriculture which is highest in Prek Pros (17.5%), Prek Sangke (9.8%), Prek Tal (8.4 %) and Kampong Chin (5.6 %).
2. In total, the occupation of fishers which has the highest percentage is fisheries combined with agriculture (41.3%), fisheries only (21.7%), fisheries combined with livestock (12.6%), fisheries combined with general labour (10.5%), others (7.0%), fisheries combined with trading (4.9%) and fisheries and processing (2.1%) respectively.
3. By age group, the fishers in the age range of 36-45 years has a highest number of people who involve in several occupations, follow with the age range of 25-35 years, 46-55 years, 16-24 years, 56-65 years and 66-75 years, respectively.
4. No fisher is engaged in aquaculture business even in the combined form.
5. Out of fishers who are engaged in fisheries business, 76.7% of them are making their livings with other occupations like agriculture (mostly rice cultivation) and livestock farming and only 23.3% of them are full-time fishers.
6. Some fishers have multi-combined occupations with fisheries. This resulted in the total fishers' number of 143 against 112 interviewers.
7. Ratios in full-time fishers and part-time fishers by the age group are 31.6% against 68.4% in 16-24 years, 28.6% against 71.4% in 25-35 years, 23.6% against 76.4% in 36-45 years, 15.8% against 84.2% in 46-55, 11.1% against 88.9% in 56-65 years and 0% against 100% in 66-75 years.
8. By village, the ratios of full-time fishers in interviewees are 10.0%, 41.4%, 31.6% and 39.1% in Prek Pros, Prek Sangke, Prek Tal and Kampong Chin respectively.

Part I-4: Number of family/child(ren) per household

1. Prek Pros village has the highest percent of family with child(ren) (85.4%), followed by Kampong Chin (82.6%), Prek Sanke (79.3%) and Prek Tal (73.3%).
2. In total, the families with child(ren) occupy 81.2 % and without child is 18.8%.
3. The average number of children in a household varies from 3.2 (Prek Pros) to 2.4 (Prek Tals) with the mean figure of 2.9.
4. The average number of family members is 6.4 varying from 7.4 to 5.1

Part I-5: Education level of fishermen

1. By village, the fishers who have no institutional education background are dominant in Prek Tal (52.6%) followed by Kampong Chin (27.3%), Prek Sangke (21.4%) and Prek Pros (14.6%). The fishers who obtained the education up to primary school are of highest in Kampong Chin (59.1%) followed by Prek Pros (58.5%), Prek Sangke (57.1%) and Prek Tal (31.6%). The fishers who are educated up to lower secondary school are of highest in Prek Pros (24.4%) followed by Prek Sangke (17.9%), Prek Tal (15.8%) and Kampong Chin (13.6%). The fishermen who are educated to Upper secondary school are only two persons each from Prek Pros and Prek Sangke.
2. As a whole, the majority of fishers are educated in primary schools (53.6%) followed by lower secondary schools (19.1%) and upper secondary school (1.8%). The non-educated fishers reach to 25.2%.
3. By age group, the age range of 66-75 years bears 100 percent with a non-educational background followed by 56-65 years (33.3%) and 16-24 years (33.3%), 46-55 years (26.7%), 36-45 years (22.2%) and 25-35 years (16.7%).
4. On the other hand, the majority of the age range 46-55 years received primary school education by 73.3% followed by 25-35 years (58.3%), 36-45 years (57.8%), 16-24 years (40.0%) and 56-65 years (22.2%).
5. For lower secondary education, 33.3% of fishers with a 56-65 years age range enjoy followed by 16-24 years (26.7%), 25-35 years (20.8%) and 36-45 years (20.0%).

Part I-6: Average monthly income of fishers

1. For the average monthly income by age group, the fishers with the age range of 16-24 years enjoy the highest income (USD 53.0) prominently followed by the age range of 46-55 years (USD 32.7), 66-75 years (USD 28.7), 25-35 years (USD 24.50) and 56-65 years (USD 18.37) respectively.
2. The fishers working in the combined business of trading fetch the highest income by USD 70.0 followed by full-time fishers (USD 41.4), part-time fishers combined with agriculture (USD 35.2), with general labour (USD 16.3), with processing (USD 13.8) and with livestock farming (USD 4.7).
3. Prek Pros is enjoying the highest average income (USD 31.1) followed by Kampong Chin (USD 29.6), Prek Tal (USD 27.4) and Prek Pros (USD 24.2).
4. The mean monthly income for a household is

Part I-7: Relationship between education level and monthly incomes

1. The average monthly income for a non-educated, primary school graduate, lower school graduate and upper school graduate are USD 61, 74, 83 and 71 respectively.

Part I-8: Asset ownership by fishermen

1. Prek Sange village comprises a highest number of boat owners (86.2%) followed by Prek Tal (73.7%), Kampong Chin (65.2%) and Prek Pros (56.1%).
2. Apart from boats, the other assets that most fishers occupy are houses (97.0%), land (91.8%), farmland (61.3%), cattle (32.0%), buffalos (22.9%), chickens (15.0%), motorbikes (13.7%), bicycles (9.5%), ducks (1.3%) and others (6.0%).
3. No fisher owns a vehicle.
4. The ownership of house and land varies from 93.3%, 95.8%, 97.8%, 100%, and 100% to 100% for the age group of 16-24, 25-35, 36-45, 46-55, 56-65 and 66-75 respectively.
5. There is no conspicuous trend for ownerships of other properties by age groups except in the age group of 66-75 years who do not own any property other than houses, land and farms.



Part I-9 : Region

1. Of 112 interviewees, 69 fishers (61.6%) are Buddhist, 42 (37.5%) are Muslim and only 1 (0.9%) is Christian.
2. Almost 100% population are Buddhist both in Prek Pros and kampong Chin, while in Prek Sanke and Prek Tal Muslim is overwhelmingly predominant (82.8 and 94.7% respectively).

Part II : Engagement in the Fisheries Sector

Part II – 1 : Fishing boat

1. Out of the total number of interviewees (112 persons), 109 persons were fishers. Among these fishers, 32 persons (29.4%) do fishing without boats. The remaining 77 fishers (70.6%) do fishing with boats.
2. The total number of fishing boats is 79 (2 fishers own 2 boats each). Out of these 79 boats, 58 boats (73.4%) are not motorized and the remaining 21 boats (26.6%) are motorized with either outboard motors (OBM) or inboard motors (IBM) with the numbers of 17 and 4 respectively. The ratios of OBM and IBM in all fishing boats are 21.5% and 5.1% respectively.
3. Of these motorized boats (non-motorized boats are not liable for obtaining licenses from DOF Cambodia), only 2 boats(9.5%) are licensed while the remaining 19 boats (90.5%) are unlicensed.

Part II – 2: Fishing gear used

1. 12 different types of fishing gear prevail in the project operational area. These are: Crab Trap (39.1%), hand push net (31.2%), hand shellfish collection (9.4%), fish gill net (7.2%), crab gillnet (2.9%), mullet gillnet (2.9%), mackerel gillnet (2.2%), hand crab fishing (1.4%), hooks and lines fishing (1.4%), shrimp gillnet (0.7%), set bag-net / stow net (0.7) and cast net(0.7%).
2. The most popular fishing; i.e. crab trap, is operated by non-motorized boats (68.5%), motorized boats (29.6%) and foot fishers (1.9%).
3. Push net are operated by foot fishers (55.8%), non-motorized boats (39.5%) and OBM boats (4.7%).
4. Gill net fishing is operated by non-motorized boats (70%) and OBM boats (30%).

Part II – 3 : Fishing gear used/type of fishing boat and number of crew

1. The highest number of crew onboard is 3 persons with shrimp gillnet gear and mackerel gillnet which are operated by OBM boat. The crew members belong to the same family of the owner and are not employed crew.
2. 2 crew are engaged in hand fishing shellfish, which are operated with non-motorized boats and in crab trap fishing and fish gillnetting, which are operated by OBM boats.
3. Other than the above, fishing operations are carried out with a single crew.

Part II – 4 : Fishing season/fishing days/fishing hours by fishing method

1. Most interviewees answer that fishing seasons are through the year round except shrimp gillnet fishing (5 months per year).
2. The highest fishing days per year is 283 days in crab tarp fishing, followed by 276 days in mullet gillnet, 255 days in fish gillnet, 240 days in mackerel gillnet and set bag-net, 235 days in hand push net and 227 days in crab gillnet. The fishing days in shrimp gillnet and crab hand fishing are as short as 35 and 72 days respectively.
3. Average fishing hours per days of every gear is varies from 5-10.5 hours.

Part II – 5 : Average fish catch per type of boat/day

1. The average fish catch per trip (day) varies from 1.7-20 kg. The detail is as follows; crab gillnet average catch: 5 kg/trip, shrimp gillnet: 10 kg/trip, crab trap: from 1- 5.1 kg/trip depending on the types of fishing boat, fish gillnet: 4.1 - 4.7 kg/trip, mackerel gillnet: 20 kg/trip, mullet gillnet: 6 kg/trip, hand push net: 3.4 - 4.2 kg/trip, hand crab fishing: 1.7 kg/trip, hand shell-fishing: 2-6 kg/trip and set bagnet: 8 kg/trip.

Part II-6 : Disposal of fishing catches

1. Fish catches are disposed in three ways: family consumption - 6.4 %, for sale - 85.5 % and processing - 8.1 %

Part II – 7 : Marketing outlets of fish catches

1. In total, 95% of fish are marketed through middlemen and the remaining 5% are sold through local markets.

Part II – 8 : Average fish sales

1. Average fish sales per boat/day by a different type of fishing method varied from 1 to 20Kg, The detail is as follows; crab gillnet: 4.6 kg, shrimp gillnet: 8.0 kg, crab trap: from 1.0 – 5.1 kg depending on the types of fishing boat, fish gillnet: 4.0 kg, mackerel gillnet: 20 kg, mullet gillnet: 5.0 kg, hand push net: 2.8 – 3.3 kg, hand crab fishing: 1.5 kg and hand shell-fishing: 1.6 – 6.0 kg.

Part II–9 : Economics of fishing operation

1. The economic status in fishing operation is tabulated as follows.

Table 2 : Monthly Profit and loss calculation

No.	Fishing method	Sales (USD) *	Expenditure (USD)			Net income (USD)	Remarks
			Fishing * operation	Main-tenance	Sub-total		
1	Crab gillnet	132.0	16.0	5.9	21.9	110.1	NM boat
2	Shrimp gillnet	600.0	270.0	11.5	281.5	318.5	OBM boat
3	Crab trap	62.0	20.0	6.3	26.3	35.7	NM boat
4	Fish gillnet	42.0	8.0	5.3	13.3	28.7	NM boat
5	Mackerel gillnet	120.0	26.0	2.8	28.8	91.2	OBM boat
6	Mullet gillnet	68.0	4.0	5.8	9.8	58.2	NM boat
7	Hand push net	64.0	2.0	1.1	3.1	60.9	Foot fisher
8	Hand crab fishing	50.0	2.0	0.0	2.0	48.0	Foot fisher
9	Hand shell fishing	32.0	4.0	0.0	4.0	28.0	Foot fisher
10	Set bag net	26.0	10.0	6.4	16.4	9.6	NM boat

* Calculated based on 20 fishing days per month

Part II – 10 : Source of credit and amount

1. 48.0% of fishers enjoy loans in one way or another, while the rest 51.4% are not.
2. There are three sources of credit; i.e. Commercial Bank (40%), middlemen (40%) and other sources like relatives (20%) and no government loan agency functions in the area.
3. The amount of loan to be used for the fisheries purpose varies from USD 61.8-1,050.0 and for the non-fisheries purpose varies from USD 152.5 – 250.0.
4. By village, the Prek Pros village is enjoying the highest amount of loan (USD 1,965) followed by Kampong Chin (USD 1,146), Prek Sangke (USD 791) and Prek Tal (USD 2).
5. Out the total loan credited by 4 villages, 84.0% is used for the fisheries purpose while the balance 16.0% is for non-fisheries purpose.

Part III : Gender role through time-consumed in working

Part III – 1 : Involvement of women in fisheries

1. About 30 – 40 % women in the three villages; i.e. Prek Pros, Prek Sangke and Prek Tal, are involved in fishing gear repair and preparation. In Kampong Chin, no contribution to fishing gear repair and preparation by woman is made.
2. About 10 – 20 % women in all villages are involved in fishing activities.
3. About 10-24% women in all villages are involved in fish trading.
4. About 10 – 17% women in the three villages; Prek Pros, Prek Tal and Kampong Chin are involved in general labouring work. No woman in Prek Sangke is involved in this work.
5. Less than 10% women in the three villages; i.e. Prek Pros, Prek Sangke and Kampong Chin, are involved in fish processing work. But, no woman contributes to it in the village of Prek Tal.
6. No contribution is made to fish culturing as no household participated in this survey is engaged in aquaculture.
7. To fishing gear repair and preparation work, the women contribute about 12 days per month and about 3 hours a day on average.
8. To fishing activity, the women contribute about 16 days a month and about 12 hours per day on average.
9. To fish trading, the women contribute about 18 days a month and about one-hour per day.
10. To fish processing, the women contribute about 18 days a month and about 4 hours a day.
11. By total, the involvement of women in fisheries can be divided into fishing gear repair and preparation 42%, fish trading 27 %, fishing 23% and fish processing 8%.

Part III – 2 : Involvement of woman in household work and other businesses

1. In almost all household, the housewives are involved in household work every day without a break for over 8 hours a day on average.
2. About 10% housewives are engaged in labouring work other than fisheries.

Part III : 3 Involvement of men in fisheries

1. 63.4% men are involved in fishing gear repair and preparation for 3.7 hours a day with 20.4 days a month on average followed by 48.2 % for fishing activity for 8.2 hours a day with 22.5 days a month, 9.8% for fish trading for 1.1 hours a day with 21.4 days a month and 3.3% for fish processing for 5.7 hours a day with 17.0 days a month.

Part III – 4 : Involvement of men in household work and other businesses

1. 15% men are involved in labouring work or other work than fisheries as side business for 6.3 hours a day with 14.3 days a month on average..
2. 79.0% men contribute house hold work to their families for 3.4 hours with 20.2 days a month..

Part IV : Role of fishermen participation in Community Fisheries (CF) activities or other fishery or community related activities

Part IV – 1: Membership of Community Fisheries (CF) and other groups

1. By village, the membership of Community Fisheries (CF) is high in Prek Sangke (79%), followed by Prek Pros(71%), Prek Tal(41%) and Kampong Chin(17%).
2. In total, the member of CF is 58% and non-CF members was 42%.
3. Only one person in Prek Pros village belongs to other group (political party member) in addition to the CF member. Other than him, no fisher surveyed belongs to any group but CF.

Part IV – 2 : Involvement in organizational activities (day/hour per month/year)

1. In total, the CF's member is involved in the patrolling activity (71%) and involved in the CF meeting (29%).
2. The CF meeting is normally summoned as much as 30 times a year and a meeting lasts for 4 hours per time (or day). For patrolling activity, it is normally conducted 20 days per month and for 3 hours a day on average.

Part IV – 3 : Participation in community development works classified by age group

1. In total, participation in the patrolling activity by CF members varies depending on age groups; i.e. the age group 36-45 years (14.3%) is highest followed by 25-35 years (5.4%), 46-55 years (3.6%), 56-65 years (3.6%), 16-24 years (1.8%) and 66-75 years (0%).
2. In total, the participation to the CF meeting by the members varies as follows; the age group 36-45 years (28.6%) followed by 25-35 years (17.9%), 56-65 years (12.5%), 46-55 years (10.7%), 16-24 years (1.8 %) and 66-75 years (0%).

Part IV – 4 : Incentive for member's participation

1. Among the members of CF, the highest percentage of people that participate in CF activities was Kampong Chin village (100%); followed by Prek Sangke (74%), Prek Pros (72%) and Prek Tal (67%).
2. There is no incentive provided to all CF members when they participate in the CF activities.
3. For participation in the other group activities, some incentive is provided in term of kind like lunch etc.

Part V: Problems, interests, needs and future expectations

Problems

Issues in fishery

1. The most serious problem that fishers in Teuk Thla Sangkat are currently facing is “intrusion by illegal or industrial fishing boats” of which almost 80% of interviewees complain and also some fishers (3.6 percent) complain of no intervention by the authorities.
2. Over 20% of interviewees are concerned about the decline in fisheries resources and climate changes.
3. About 7% of the interviewees complain of the price hike of bait fish especially for crab fishers.
4. About 5% of them complain of obsolete or small fishing boats and environmental degradation.

Issues in Socio-economic / infrastructure

5. About 17% of them complain of a lack of a water supply system followed by medical care facilities (13%), electricity supply system (8%), road connections (4%), educational facilities (2%) etc. Some (1%) complain of the non-existence of toilet facilities in the houses.
6. About 13% of them complain of shortage of income to support the families followed by no other alternative jobs exist than fisheries (5%), no job opportunities for the family (1%) and no language education (1%).

Issues in agriculture and livestock

7. The most serious problem lies in seawater flow into the paddy field crossing over the dike of which 4% of them complain, followed by the shortage of funds to procure animals (3%) and lack of knowledge on animal raising (1%).

Interest

Issues in fisheries

1. Most of them are interested in having training in various subjects like new or improved fishing methods (37%), fish processing (14%), marine engine repair and maintenance (13%), aquaculture (5%), fishery resources management (5%), boat building (3%), extension services (1%), fish trading (1%) and fisheries regulation (1%).

Issues in socio-economics / infrastructure

2. Similarly most of them are interested in having training in various subjects like a guide to start a business (8%), tailoring (6%), barbering (2%), cooking (1%) etc.
3. Some are interested in learning English (4%), continuation of school (1%), participation in women's activities (1%) etc.

Immediate needs

Issues in fisheries

1. Many interviewees express their need in the procurement of motorized / larger fishing boats (11%) followed by more fishing gear (8%).
2. About 6% of them express their need for the authorities to intervene in the prevention of illegal fishing.
3. About 3% of them express their need to procure an engine for the patrolling boat and also a CF premises (2%)
4. Some (2%) demand well organized marketing channels.
5. Some (2%) request to set up a public or CF's credit scheme with low interest rates.

Issues in socio-economics / infrastructure

6. About 63% of them express their acute need to install a water supply system followed by an electric supply system (34%) and construct clinics / hospitals (35%) and schools (5%).
7. Some (21%) express their need to construct toilet facilities in their own houses.
8. Also road construction (10%) and a public transportation network (2%) are demanded.

Issues in agriculture and livestock

9. About 5% of them request construction of dikes to protect seawater flow into paddy fields.
10. About 3% of them demand more spacious land to cultivate (3%), procurement of more fertilizer (3%), development of an irrigation system (3%) etc.

Future expectations

Topics in fisheries

1. About 51% of the fishers interviewed have desires to change their occupations to animal husbandry (15%) followed by factory labourers (14%), agriculture (5%), aquaculture (5%), mechanics / drivers (3%), trading (2%) and any other jobs than fisheries (7%).
2. But, still 11% of them express their desire to continue fishing and some (5%) are willing to continue subject to improvement of fishing methods.
3. Some (16%) of them express ambitious views in the possibility to operate larger and motorized fishing boats (12%) and to establish fish processing factories (4%).
4. Some (8%) of them express their wish that a well controlled coastal resources management system be introduced.

Topics in Socio-economics / infrastructure

5. Most interviewees are concerned for their families like providing job opportunities (15%), good education (15%), construction of spacious houses (4%), more civilized lives (2%) and ensuring sufficient incomes to sustain even modest lives (1%) etc.

Topics in agriculture / livestock

6. About 5% of them have an expectation to obtain more animals and more spacious land (2%)
7. Only minor though, 1% of them expect to control strict cutting of trees.

8. FINDINGS AND ANALYTICAL OBSERVATIONS

Based upon the above analytical results, the following findings and observations were derived.

Part I: General information

Age groups of fishermen

1. 41 percent of fishermen surveyed are aged between 36 – 45 years which is almost 10 years younger compared with those in Malaysia and Thailand. The fishermen under 45 years old occupy 75.9% while over 45 are only 24.1%. (Comparison with the national average age should be made.)
2. It is noteworthy that the age group of 16-24 years is predominant in Prek Tal and followed by the age group of 46- 55 unlike the other three villages. There must be some underlying reasons for this phenomenon which should be clarified.
3. The average age of fishers surveyed is 38.8 years old.

Marital status

4. Most (94 percent) male heads of households surveyed are married, one is single and two widowers.
5. About 11% of female households are widows, which is much higher compared with the case of widowers.

Occupation

6. Only 23 percent of the fishers surveyed are exclusively engaged in fisheries activities. Others are engaged as part-time fishers with other occupations like agriculture (44 percent), livestock farming (14 percent), general labour (11 percent), trading (5 percent) and processing (2 percent). Some of them (31 fishers at maximum) are engaged in multi-combined occupations with fisheries.
7. There is a clear tendency in the correlation between full-time fishers against part-time fishers by the age group; aged fishers tended to opt for combined occupations. (This is contrary to the trend of most other countries.)
8. Prek Sangke village is more dependent on fisheries followed by Kampong Chin. Combined occupations are more prevalent in Prek Pros followed by Prek Tal.

Family structure

9. About 20 percent of fishing households surveyed have no children.
10. About 80 percent of households surveyed have child(ren).



11. The average number of children in the households surveyed is 2.9 persons varying from 3.2 to 2.4.
12. The average of family members is 6.4 persons per household.

Education

13. 54 percent of fishermen surveyed had completed primary school, 19 percent had completed lower secondary and 2 percent upper secondary school.
14. Higher education levels were more evident in younger age groups in general except the youngest age group 16-24 years. Almost one third of them are not educated at all.

Monthly income

15. The average monthly income for the target group in the project operational area is USD 28.6 per household.
16. Fishers engaged in trading as part-time occupation earn the most, followed by full-time fishers. It is noticeable that the income level of full-time fishers is higher than the part-time fishers except for those working with a trading business.
17. There are wide variations in income level among different occupations ranging from USD 70.0 (part-time fishers working with trade) to USD 4.7 (part-time fishers working with livestock farming).
18. There is some difference in income level among four villages varying from USD 31.1 to USD 24.2.
19. There is a general trend that more educated fishers earn more, except in the age group of 66-75 which is commonly treated as the workforce of easy or retired job and naturally the average income is comparatively lower than the younger groups. This trend is more conspicuous in the younger age groups under 35 years.

Ownership of fishing boats and other assets

20. According to the survey, 68.8 percent of fishermen are boat owners but no significant variation of ownership by the age groups was noticed.
21. Most fishermen (97.0%) surveyed lived in their own homes with land.
22. More than a half of the fishermen (61.3%) surveyed own the farm land they are living on.
23. The major transportation means in the villages are bicycles and motorbikes but the possession of those is limited to only 13.7% and 9.5% for motorbikes and bicycles respectively.
24. About one third of fishers own cattle.
25. There is no noticeable difference of the ownerships of properties by age group.
26. There is no noticeable difference in distribution of properties among 4 villages.

Religion

27. In the area, 61% fishers are Buddhist, 37% are Muslim and Christian is negligible to 0.9%.
28. Among those, Buddhist population are extremely (almost 100%) predominant both in Prek Pros and Kampong Chin, while the majority of Muslim population are living in both Prek Sangke and Prek Tal.

Part II: Engagement in the fisheries sector

Fishing boats

1. Almost 70 percent of fishers (as a unit of household) are boat owners and no employed crew exist. (N.B. There is some discrepancy in the figures with the compiled data in Part I – Ownership of fishing boats and other assets).
2. Almost 30% fisheries are engaged in capture fishing without using boats.
3. Of these motorized boats, over 80% are motorized with out-board motors (OBM) and 20% with inboard motors..
4. Almost 90 percent of the fishing vessels were unlicensed.
5. IBM boats are utilized only for crab trap fishing and OBM boats are mainly used for crab trap fishing and gillnet fishing.

Fishing method

6. There are 12 fishing methods being employed in the project operational area. These are; crab trap, hand push net, hand shellfish collection, fish gill-net, crab gillnet, mullet gillnet, mackerel gillnet, hand crab fishing, hook & line fishing, shrimp gillnet, set bag-net and cast net in order of common use.
7. Hand push nets are mainly operated by either foot fishers or non-motorized fishing boats. Also, some OBM boats are also in operation.
8. Most fishing operations using fishing boats are carried out with a single crew except shrimp gillnet, crab trap, fish gillnet and mackerel gillnet fishing which are operated by 2-3 crew who are normally from the same family of the owner (captain).

Fishing efforts

9. Most fishing is carried out throughout the year round except shrimp gillnet fishing which is limited to 5 months (due to the regulation ??).
10. The fishing days per year vary from 283 days to 227 days depending on the fishing methods with the average of 252.7 days.
11. Fishing hours per a fishing trip varied depending on fishing methods from 5 hours to 10.5 hours within a day.

Fish catch

12. The mean fish catch per boat / day daily fish sales are listed as follows;

Table 3. : Fish catch and sales

<u>Fishing methods</u>	<u>Daily catch (Kg)</u>	<u>Daily sales (Kg)</u>
- Crab gillnet	5.0	4.6
- Shrimp gillnet	10.0	8.0
- Crab trap	1.0 – 5.1	1.0 – 5.1
- Fish gillnet	4.1 – 4.7	4.0
- Mackerel gillnet	20.0	20.0
- Mullet gillnet	6.0	5.0
- Hand push net	3.4 – 4.2	2.8 – 3.3
- Hand Crab fishing	1.7	1.5
- Hand shell fishing	2.0 – 6.0	1.6 – 6.0
- Set bagnet (small shrimp)	8.0	0 (All are processed)

Fish distribution and marketing

13. The majority of fish catch are disposed for sale, leaving only 6.4% and 8.1% for family consumption and further processing.
14. Fish catches are marketed through middlemen at the rate of 95% while the remainder is sold at local markets.

Credit scheme

15. Almost half of fishers enjoy loan in one way or another, while the rest are not.
16. There are three sources that provide fishers with loans; e.g. Commercial Bank, middlemen and other sources like relatives, but no appropriate government agency is functioning.
17. About 84% of a loan is used for fisheries purpose.

Income

18. The monthly net incomes per boat or a fisher in case of foot fisher are calculated in the Table 4 below.
19. Among all types of fishing method, the crab gillnet and shrimp gillnet fishing attract a better income.

Table 4 : Net income by fishing operation

<u>Fishing methods</u>	<u>Net income(USD)</u>	<u>Fishing boat</u>	<u>No. of crew</u>	<u>Remarks</u>
- Crab gillnet	110.1	NM boat	1	
- Shrimp gillnet	318.5	OBM boat	3	
- Crab trap	35.7	NM boat	1	
- Fish gillnet	28.7	NM boat	1	
- Mackerel gillnet	91.2	OBM boat	3	
- Mullet gillnet	58.2	NM boat	1	
- Hand push net	60.9	Foot fisher	1	
- Hand Crab fishing	48.0	Foot fisher	1	
- Hand shell fishing	28.0	Foot fisher	1	
- Set bagnet	9.6	NM boat	1	Small shrimp for drying

Part III: Gender roles

1. About 10 percent of women interviewed have work outside the home.
2. Most fishermen are involved in various work like fishing gear repairing and preparation, fish trading, fish processing etc in addition to their fishing activities.
3. About 80% of the fishermen interviewed, except widowers, spent between 3 and 4 hours a day for over 20 days a month on household work.

Part IV: Fishermen's participation in social organizations

Membership of Community Fisheries

1. 58% of fishers surveyed are members of CF.
2. Those fishers are exclusively members of CF. It seems that no other group exists in the communities.
3. Among the 65 members of CF out of the 112 interviewees, two are committee members and the rest are ordinary members.
4. The proportion of member for CF is higher in Prek Sangke (79.3%), followed by Prek Pros but lower in Prek Tal and Kampong Chin (only 17.4%).

Activity of Community Fisheries

5. About 3 fourths of CF members dedicate to patrolling for around 3 hours a day with 20 days' participation per month.
6. The CF meeting are fairly frequently held; about 30 times a year, and about 30% fishermen participated in the FC meeting.
7. The most dedicated age group for participation in the community activities like patrolling and the CF meeting is the one 36-45 years followed by 25-35 years and 56-65 years. The younger age group like the 16-24 years is not eager.
8. The most dedicated village for participation in the community activities is Kampong Chin followed by the other three villages which show more or less the same degree of attendance.

Part V : Problems, interests, needs and future expectations

Problems

1. The most serious problem for the fishers in the area is encroachment by illegal or industrial fishing boats.
2. The fishers feel that the authority has put little effort into preventing this illegal fishing.
3. The fishermen feel concerned about dwindling fisheries resources and environmental degradation.

9. Almost 70 percent fishers are boat owners. This is primarily due to the fact that the fishing boats in the area are generally small and operated by 1- 2 fishers. There is no employed crew as such, because most fishing is carried out within family members. About 30 percent of the fishers are engaged in capture fishing without a boat. This peculiarity should be taken into account in fisheries development in the area.
10. Almost one fourth of fishing boats are non-motorized. The remaining ones are motorized by either in-board engines (5.1%) or out-board engines (21.5%). However, 90% of them are not licensed. This should be clarified when the project begins.
11. There are 12 fishing methods prevailing in the area. Among these, the most popular one is crab trap fishing.
12. The fishers are generally engaged in fishing throughout the year round without distinct off-seasons. The average fishing days varied from 227 to 283 days depending fishing methods, which are relatively high. The average fishing hours varied from 5 – 11 hours per day.
13. The average fish catch per boat per day varies from 1.7 to 20.0Kg depending on the fishing methods.
14. The majority of fish catch are marketed through the middlemen and a few are brought to the markets in a fresh form. Only 6% are turned to further processing. This proved the traditionally strong ties with the middlemen. The project should put this factor into consideration when envisaging improvement of fish handling technique on-board.
15. The highest net income per head is derived from crab gillnet fishing followed by shrimp gillnet fishing and the lowest one is in set-bagnet fishing. The detailed figures in Table 4: Net income by fishing operation should be retained as the baseline data constituting a mile stone.
16. Only 10 percent of housewives are working outside other than housekeeping works. Women's working forces are idling.
17. Fishermen are generally involved in housekeeping work in addition to their professional work.
18. About a half of fishers are the members of Community Fisheries. The proportion of membership varies depending on villages.
19. The majority of the CF members voluntarily participate in the patrolling.
20. The most serious problem for the fishers is encroachment by illegal or industrial fishing boats. The fishers feel that the authorities have put little efforts on it. The project ought to put more efforts to alleviate the situation.
21. The fishers feel that more serious problems lie in the improvement of basic infrastructure necessary to enjoy civilized lives like water and electricity supply and sewage systems, public transportation system, schools and hospitals, which are beyond the project mandate.
22. The fishers are already concerned about dwindling fishery resources and environmental degradation.
23. The major problem for those who engaged in both agriculture and fisheries lies in seawater flow-in of the cultivated land. This is also beyond the capacity of the project.
24. Most fisheries feel that reinforcement of patrolling is necessary. The project should exert every effort on it.
25. Creation of a public credit line with marginal interests is necessary.
26. It is so pessimistic to see that more than half of the fishers are willing to change the profession to other occupations like agriculture, animal husbandry etc., remaining only 10% fishers want to stick to fisheries. Efforts should be so made as to encourage the fishers to continue the professional line. This can be one of indicators to measure the attainment of the project goals.
27. Some data obtained through respective socio-economic survey conducted in the three sister projects are listed in the following table 5 for comparison.

Table 5: Comparison with other sister project sites

Item (In average)	Project site		
	Sihanoukvill (Cambodia) (2005)	Chumphon (Thailand) (2001)	Lnagkawi (Malaysia) (2003)
1. Monthly income per house hold (USD)	28.6	41.8	128.8
2. Age of fisherman (year)	38.8	43	48.3
3. Family member of household (person)	6.4	5	6.0
4. Number of children per household (person)	2.9	2	2.5
5. Ratio of boat-owner (%) /1	70.6	90	66.0
6. Fishing day per month (day)	18.9 – 23.6	20-25	11.0 – 26.0
7. Fishing hour per day (hour)	5.0 – 11.0	10-15	-
8. Housekeeping work by married fisherman	3.5	-	3.0
- Hours per day (hour)			
- Days per month (day)	20.0	-	3.5

/1 : In case of Shihanoukville, Almost 30% fishers are engaged in foot fishing without using boats.

Annex 1

Note on the Discussion on Base Line Survey in Sihanoukville, Cambodia On 14 March 2005

Sumitra Ruangsivakul
20th March 2005

1. List of Participants:

DOF Cambodia

- | | |
|----------------------|--|
| 1. Mr. Duong Samath | Chief, Fisheries Office, Sihanoukville |
| 2. Mr. Pich Sereyath | Fisheries Officer, Phnom Penh |
| 3. Mr. Lim Nguonkruy | Fisheries Officer, Phnom Penh |
| 4. Mr. Seng Leang | Fisheries Officer, Phnom Penh |
| 5. Mr. Ti Boros | Fisheries Officer, Sihanoukville |
| 6. Mr. Nen Chamreaun | Fisheries Officer, Sihanoukville |
| 7. Mr. Kang Maxey | Fisheries Officer, Sihanoukville |

SEAFDEC/TD

- | | |
|--------------------------------|-------------------------|
| 1. Mr. Sei Etoh | Project Leader |
| 2. Dr. Taweekiet Amornpiyakrit | Fishing gear Technology |
| 3. Ms. Sumitra Ruangsivakul | Socio-economic |
| 4. Ms. Siriporn Pradit | Socio-economic |
| 5. Ms. Siriporn Pangsorn | Socio-economic |

2. Meeting content

The meeting discussing the program management of base line survey to be conducted on 15-17 March 2005 was held at the DOF's Sihanoukville Office at 16.30 PM on 14 March. The minutes of meeting is as follows.

1. All participants introduced themselves, from Cambodia and SEAFDEC/TD
2. Mr. Etoh informed on the reason of this survey as saying that this survey will find the problem, the level of fishermen and what kind of future expectation they deem. The result of base line survey will be incorporated in the project document.
3. Mr. Etoh explained the questionnaire detail in line by line. The survey is conducted in the two parts; i.e. Socio-economic and fishing gear surveys.
4. The part of fishing gear, the results will be shown on what the current fishing technology and identification of the improvement need.
5. The method of collection of information along with the questionnaire was explained. It would be carried out by interviewing the randomly selected potential stakeholders by DOF Cambodian staff in local language and recorded by SEAFDEC/TD staff in English. It will take 30 minutes per interview. One team composed of the combination of two persons (one SEAFDEC/TD and DOF' Cambodia).
6. To cover 4 villages, 5 teams of socio economic survey and one team of fishing gear survey will be assigned.

Questionnaire Design Format

Components of questionnaires		Parameters	Rationale	Output of the Component
Part I: General information		1. Age 2. Marital status 3. Number of children 4. Educational level 5. Occupation 6. Source of daily income 7. Asset ownership	Correspondent to Objective (a)	Generally views information of fishers in the project area to arrange activities appropriately based on occupation and educational level
		1. Fishing boat: length and license 2. Type of fishing gear, seasons and numbers 3. Fishing ground 4. Catch distribution: by source, species and purpose of distribution 5. Total expenditures of fishing operation: by type of fishing gear 6. Gross income from sale of fish products: by species	Correspondent to Objective (b)	Views capacity of fishers in capture fisheries, characteristics in fishing operation by different types of fishing gear and any measures taken for coastal resources management
Part III: Gender role through time-consuming in employment		1. In fishing operation, harvesting and house-keeping 2. Duty in household 3. Participation in social and religious ceremonies	Correspondent to Objective (c)	Views role of fisher, fishers' wives and women in community economic development and resource management, including strengthening of family relationship. This is useful to provide extension program or training courses for the specific target groups and appropriate time-consuming arrangement
Part IV: Role of Community Fisheries' members and its functions in community development and resource management		1. Member status: member of committee, regular member 2. Members participating in Community Fisheries (CF), its activities and other group activities 3. Categories of CF's activities and status	Correspondent to Objective (d)	Views functional performance of Community Fisheries and its activities, how active and effective it is to contribute community economic development and resource management. Fishers' participation and level are informative to arrange activities with their contribution.
Part V: Any problem encountered, any interests envisaged, any needs desired and any expectation in the future dream		1. Clarification of problems, needs, interests and expectation in the near future	Correspondent to Objective (e)	Views fishers' perspectives, problems currently facing, future plans and dreams, that can measure the degree of negative or positive life styles.

Annex 3

Questionnaire for Preliminary Socio-economic Community Survey
in Teuk Tla Commune

Name of interviewer:

Name of Respondent:

Village:

Date of interview:

Part I: General Information

Age year.
Marital Status	1. Single 2. Married 3. Widow 4. Widower
Composition of family Number of Children	1. Adult (Male....., Female....., Total.....) 2. Child under 15 (Male....., Female....., Total.....)
Educational Level (The master of the family only)	<input type="radio"/> Primary school <input type="radio"/> lower secondary school <input type="radio"/> Upper secondary school <input type="radio"/> None , other.....
Occupations (The source of income for the household)	<input type="radio"/> Fishing only <input type="radio"/> Aquaculture only <input type="radio"/> Fisheries and agriculture <input type="radio"/> Fisheries and trading <input type="radio"/> Fisheries and laboring <input type="radio"/> Fisheries and processing <input type="radio"/> Fishing and aquaculture <input type="radio"/> Fishing and livestock <input type="radio"/> Others.....
Source of total monthly income	<input type="radio"/> Fisheries (.....RYO) <input type="radio"/> Agriculture (.....RYO) <input type="radio"/> Trading (.....RYO) <input type="radio"/> Laboring (.....RYO) <input type="radio"/> Processing (.....RYO) <input type="radio"/> Aquaculture (.....RYO) <input type="radio"/> Live stock (.....RYO) <input type="radio"/> Tourism (.....RYO) <input type="radio"/> Others (.....RYO)
Monthly expenditure	1. Water (.....RYO), 2. Electricity (.....RYO) 3. Foods / drinks (.....RYO), 4. Clothing (.....RYO), 5. Education (.....RYO), 6. Social affair (.....RYO) 7. Entertainment (.....RYO), 8. Transportation (.....RYO), 9. Others, pls. specify (.....RYO)
Asset ownership (current prices)	<input type="checkbox"/> Fishing boat (.....RYO/unit), (.....RYO/unit), <input type="checkbox"/> House (.....RYO/unit), (.....RYO/unit) <input type="checkbox"/> Land (.....ha) <input type="checkbox"/> Farmland / paddy field (.....ha) <input type="checkbox"/> Live stocks (cow, buffalo.....) <input type="checkbox"/> Car (.....RYO/unit), (.....RYO/unit)

Part II: Engagement in Fisheries Sectors

1. Type of engagement

- a) Capture fisheries (Boat owner....., Crew.....) b) Aquaculture (Owner....., Employee.....)
 c) Fish processing (Owner....., Employee) d) Fish trading (Owner....., Employee.....)
 e) Others (Please specify, if more than one).....

2. Fishing boat (only for boat owners)

(1). Fishing boat	(2). In or out-board motor and HP of engines if with engine	(3). Made (Wooden or FRP)	(4). Overall Length (m)	(5). Price of boat when purchased (Ryo)	(6). Age of boat after construction	(7). Licensing register (licensed or unlicensed)	(8). Main fishing gear used	(9). Number of crew	(10). From where was it purchased or built?
A.									
B.									
C.									

3. Fishing season and fishing ground by type of fishing gear

(1). Type of Gear and no. of gear	(2). Fishing ground (please indicate on map)	(3). Fishing season (month)	(3). No. of fishing days per year	(4). No. of hauls per fishing trip	(5). No. of fishing hours a day (from departure to return)	(6). Quantity of Catch (Kg) (Average catch per trip)	Remarks (consecutive fishing day etc.)
A.							
B.							
C.							
D.							
E.							

4. Catch utilization per trip

4a. Purpose of Consumption

(1). Type of major species of fish	Utilization (%)			
	(2). For family consumption	(3). Sale	(4). Processing – what Form?	(5). For feed for aquaculture
A.				
B.				
C.				
D.				
E.				
F.				

4b For sale of daily catch (average quantity and market price)

To whom	Fish		Crab		Shrimp		Shellfish		Squid		Others	
	kg	RYO Per kg	Kg	RYO Per kg	Kg	RYO	Kg	RYO Per kg	kg	RYO Per kg	kg	RYO Per kg

5a Operational cost and returns per trip

(1).Type of fishing gear	Operational costs (RYO)						(7).Total gross income (RYO)
	(2).Fuel	(3).L.oil	(3).Food	(4).Salary	(5).Bait	(6).Others	
A.							
B.							
C.							
D.							

5b Maintenance costs

a) Fishing gear.....RYO/month b) Boat.....RYO/year

5c Do you have any loan taken and from whom and how much for what and monthly repayment?

(1).Have any loan taken (yes or no)	(2).From whom	(3).For what	(4). How much (RYO)	(5).Monthly repayment (RYO)
A.				
B.				
C.				
D.				

6. Aquaculture

6.a. Fish ponds or cages for aquaculture (Pond, Cage,)

(1) Species (Aquaculture)	(2) Number of cages or ponds	(3) Average size of cage or pond	(4) Stock density (Pcs. per cage or pond)	(5) Number of workers	(6) Price of a pond or a cage

6.b. Seed supply and marketing for aquaculture

(1) Species (Aquaculture)	(2) Fingering supply (from who?)	(3) Average price of fingering (RYO/Pc.)	(4) Duration of culturing (month)	(5) Average total production per year (Kg)	(6) Average market price (RYO/Kg)
A.					
B.					
C.					

6.c. Monthly operational cost for aquaculture

(1) Species (Aquaculture)	Operational cost (RYO)				Total (6)
	(2) Feeds	(3) Medicines	(4) Labour	(5) Other materials	
A.					
B.					
C.					

Part III: Gender role through time-consuming in working for a month

(1) Activity	Male		Female	
	(2) Working day	(3) No. of hours	(4) Working day	(5) No. of hours
Fishing gear repair & preparation				
Fishing				
Fish trading				
Fish processing				
Fish culturing				
Laboring other than fisheries				
Household works				

Part IV: Role of fishermen participation in Community Fisheries (CF) activities or other fishery or community related activities

1. Participation in CF and group activities

Group	Position held	Participation		
		Main Activity No. of days per month	Hours per day	Any Incentive provided? If yes, how much per month or in kind?
(1) CF				
(2) Others:				
(3) Others				

1. Participation of CF members in community development and resource management (CF Member only)

Position held	CF Activities			
	Patrolling	Other :	Other:	Other:

Part V: Problems, interests, needs and expectations in the future after incomes have increased.

Problems: (not only in fisheries sectors)

- 1.....
- 2.....
- 3.....

Interests: (for example: training in improved fishing technique, fish processing etc.)

- 1.....
- 2.....
- 3.....

Immediate Needs: (for example infrastructure construction, access to credit scheme etc.)

- 1.....
- 2.....
- 3.....

Future Expectation (any vision)

- 1.....
- 2.....
- 3.....

Thanks for cooperation !

Annex 4

List of analytical data and information sheets

<u>No</u>	<u>Data number</u>	<u>Particulars</u>	<u>Remarks</u>
01.	Part I – 1	Fishermen's age variation	by village/total
02.	Part I – 2	Marital status	by total
03.	Part I – 3	Occupation of fishermen	by village/total
04.	Part I – 4	Number of family / child(ren) per household	by village/total
05.	Part I – 5	Education level of fishermen	by village/total
06.	Part I – 6	Average income of fishermen(by occupation)	by village/total
07.	Part I – 7	Relation between education level and income	by total
08.	Part I – 8	Asset ownership by fishermen	by village/total
09.	Part II – 1	Number of fishing boats by OBM/IBM and by licensed/unlicensed	by village/total
10.	Part II - 2	Fishing gear used	by village/total
11.	Part II – 3	Fishing gear used/ type of fishing boat and number of crew	by total
12.	Part II – 4	Fishing season/fishing days/fishing hours by fishing method	by total
13.	Part II – 5	Average fish catch per boat/day/year	by total
14.	Part II – 6	Disposal of fish catches	by total
15.	Part II – 7	Marketing outlets of fish catches	by total
16.	Part II – 8	Average fish sales	by total
17.	Part II – 9	Economics of fishing operation	by total
18.	Part II – 10	Source of credit and amount	by village/total
19.	Part III – 1	Involvement of women in fisheries	by village/total
20.	Part III – 2	Involvement of women in household works and other businesses	by village/total
21.	Part III - 3	Involvement of men in household work and other businesses	by village/total
22.	Part IV – 1	Membership of CF and other groups	by village/total
23.	Part IV – 2	Involvement in organizational activities (days/hours per month/year)	by total
24.	Part IV – 3	Participation in community development works or group activities (days/hours per month/year)	by village/total
25.	Part IV – 4	Incentive of member's participation	by village/total
26.	Part V – 1	Insight to problems	by village/total
27.	Part V – 2	Insight to interests	by village/total
28.	Part V – 3	Insight to immediate needs	by village/total
29.	Part V – 4	Insight to future expectation	by village/total

Annex 5 - 1

Analytical Result - Part I**Part I: General Information****Part I-1 Fishermen's age variation**

a) Fishermen's age variation by village

No.	Age group	Fishing village				Total
		Prek Pros	Prek Sangke	Prek Tal	Kampong Chin	
1	16-24	0	4	8	3	15
2	25-35	8	9	2	5	24
3	36-45	18	11	4	13	46
4	46-55	10	2	2	2	16
5	56-65	4	3	2	0	9
6	66-75	1	0	1	0	2
Total		41	29	19	23	112
Average Age		43	37	36	36	39

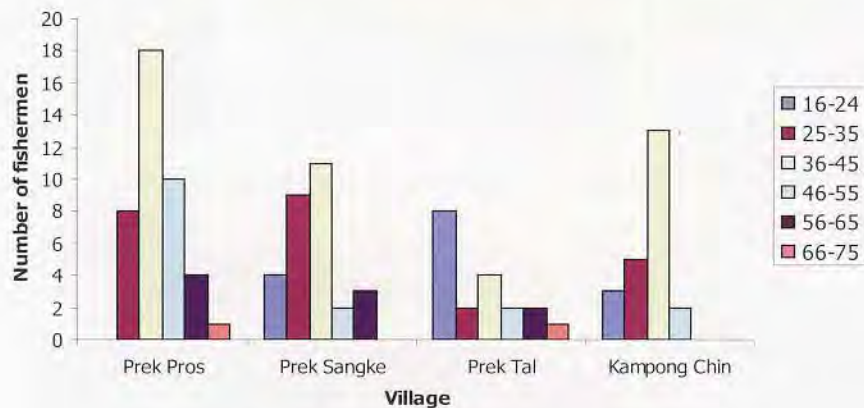


Figure 1. Fishermen's age variation by village

b) Fishermen's age variation by total (in percentage)

No.	Age group	Fishing village				Total %
		Prek Pros	Prek Sangke	Prek Tal	Kampong Chin	
1	16-24	0.0	13.8	42.1	13.0	13.4
2	25-35	19.5	31.0	10.5	21.7	21.4
3	36-45	43.9	37.9	21.1	56.5	41.1
4	46-55	24.4	6.9	10.5	8.7	14.3
5	56-65	9.8	10.3	10.5	0.0	8.0
6	66-75	2.4	0.0	5.3	0.0	1.8
Total %		100	100	100	100	100

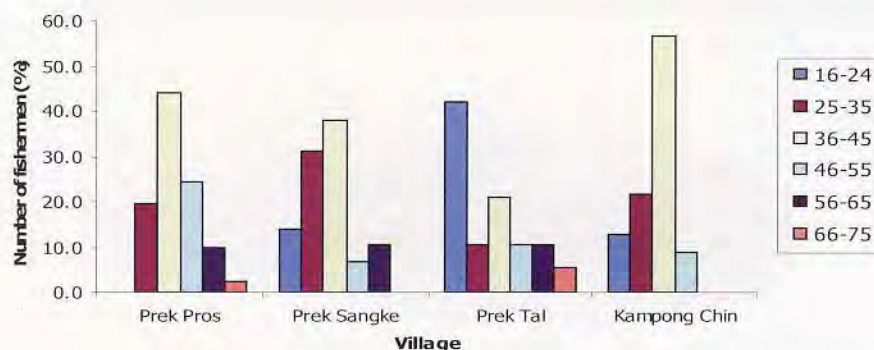


Figure 2. Fishermen's age variation by village (in percentage)

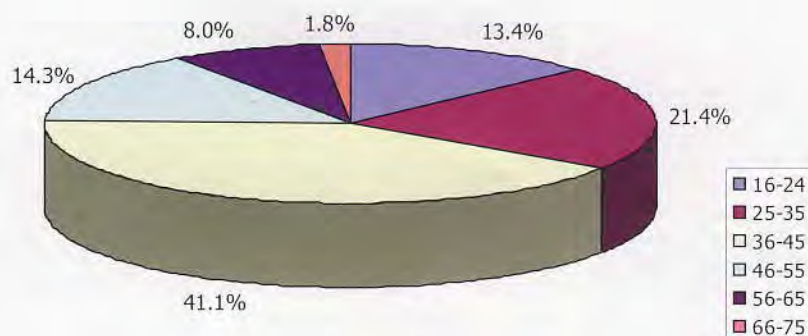


Figure 3. Fishermen's age variation by total (in percentage)

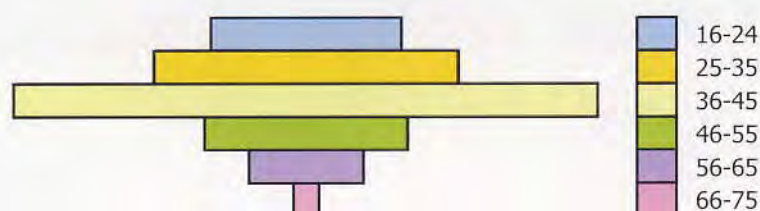


Figure 4. Fishermen's age structure

Part I-2 Marital status

a) Marital status by village

Village	Marital Status						Total
	Male			Female			
	Single	Married	Widower	Single	Married	Widow	
Prek Pros	0	24	0	0	15	2	41
Prek Sangke	2	16	0	1	9	1	29
Prek Tal	1	14	0	0	3	1	19
Kampong Chin	1	17	1	1	3	0	23
Total	4	71	1	2	30	4	112

b) Marital status by total (in percentage)

Village	Marital Status						Total (%)
	Male			Female			
	Single	Married	Widower	Single	Married	Widow	
Prek Pros	0.0	21.4	0.0	0.0	13.4	1.8	36.6
Prek Sangke	1.8	14.3	0.0	0.9	8.0	0.9	25.9
Prek Tal	0.9	12.5	0.0	0.0	2.7	0.9	17.0
Kampong Chin	0.9	15.2	0.9	0.9	2.7	0.0	20.5
Total (%)	3.6	63.4	0.9	1.8	26.8	3.6	100.0

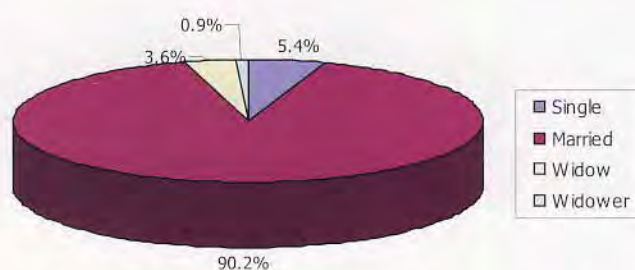


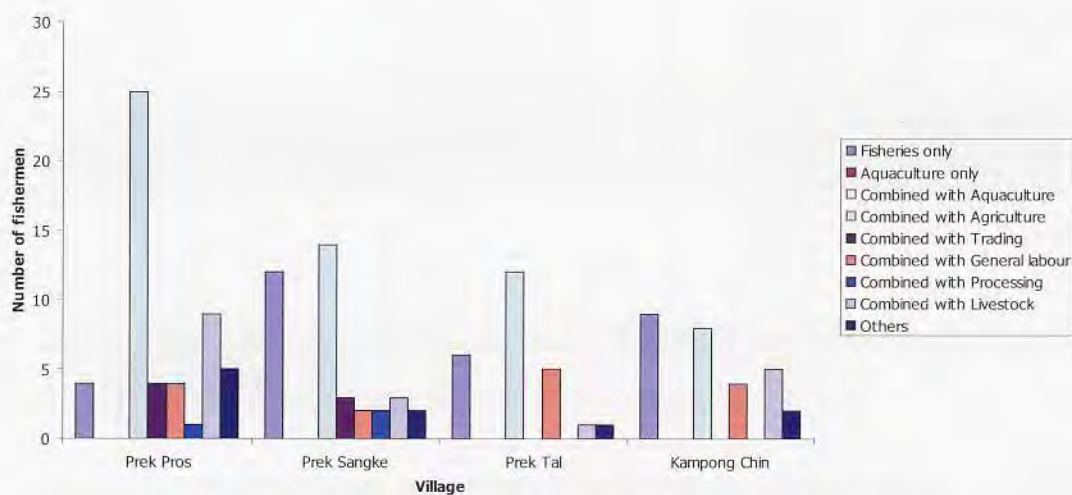
Figure 5. Marital status by total (in percentage)

Part I-3 Occupation of fishermen

a) Occupations of fishermen by age group (by village)

Age group	Occupation									Total
	Fisheries only	Aqua. only	Combination with other profession						Others	
			Aqua.	Agri.	Trading	Gen.labour	Processing	Livestock		
16-24										
Prek Pros	0	0	0	0	0	0	0	0	0	0
Prek Sangke	3	0	0	1	1	0	0	0	0	5
Prek Tal	2	0	0	5	0	2	0	0	0	9
Kampong Chin	1	0	0	2	0	1	0	1	1	6
Sub-total:	6	0	0	8	1	3	0	1	1	20
25-35										
Prek Pros	3	0	0	3	0	2	0	0	1	9
Prek Sangke	3	0	0	4	1	1	2	1	0	12
Prek Tal	1	0	0	1	0	0	0	0	0	2
Kampong Chin	1	0	0	2	0	1	0	2	0	6
Sub-total:	8	0	0	10	1	4	2	3	1	29
36-45										
Prek Pros	1	0	0	10	4	1	1	6	3	26
Prek Sangke	6	0	0	4	1	1	0	1	2	15
Prek Tal	1	0	0	2	0	2	0	1	0	6
Kampong Chin	5	0	0	4	0	2	0	2	1	14
Sub-total:	13	0	0	20	5	6	1	10	6	61
46-55										
Prek Pros	0	0	0	8	0	1	0	3	0	12
Prek Sangke	0	0	0	2	0	0	0	0	0	2
Prek Tal	1	0	0	2	0	0	0	0	1	4
Kampong Chin	2	0	0	0	0	0	0	0	0	2
Sub-total:	3	0	0	12	0	1	0	3	1	20
56-65										
Prek Pros	0	0	0	3	0	0	0	0	1	4
Prek Sangke	0	0	0	3	0	0	0	1	0	4
Prek Tal	1	0	0	1	0	0	0	0	0	2
Kampong Chin	0	0	0	0	0	0	0	0	0	0
Sub-total:	1	0	0	7	0	0	0	1	1	10
66-75										
Prek Pros	0	0	0	1	0	0	0	0	0	1
Prek Sangke	0	0	0	0	0	0	0	0	0	0
Prek Tal	0	0	0	1	0	1	0	0	0	2
Kampong Chin	0	0	0	0	0	0	0	0	0	0
Sub-total:	0	0	0	2	0	1	0	0	0	3
Summary										
Prek Pros	4	0	0	25	4	4	1	9	5	52
Prek Sangke	12	0	0	14	3	2	2	3	2	38
Prek Tal	6	0	0	12	0	5	0	1	1	25
Kampong Chin	9	0	0	8	0	4	0	5	2	28
Total	31	0	0	59	7	15	3	18	10	143
Summary (%)										
Prek Pros	2.8	0.0	0.0	17.5	2.8	2.8	0.7	6.3	3.5	36.4
Prek Sangke	8.4	0.0	0.0	9.8	2.1	1.4	1.4	2.1	1.4	26.6
Prek Tal	4.2	0.0	0.0	8.4	0.0	3.5	0.0	0.7	0.7	17.5
Kampong Chin	6.3	0.0	0.0	5.6	0.0	2.8	0.0	3.5	1.4	19.6
Total (%)	21.7	0.0	0.0	41.3	4.9	10.5	2.1	12.6	7.0	100.0

Remark: Aqua. = Aquaculture, Agri. = Agriculture, Gen. = General



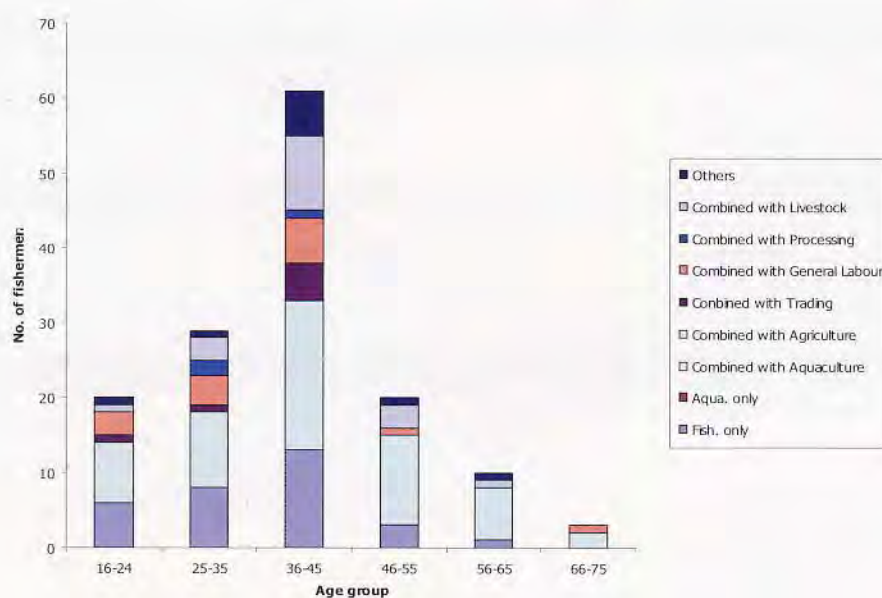
Remark: in the legend details box every items is including fisheries

Figure 6. Occupations of fishermen by village

b) Occupations of fishermen by age group (by total)

Age group	Occupation									Total
	Fish. only	Aqua. only	Combination with other profession						Others	
			Aqua.	Agri.	Trading	Gen. Labour	Processing	Livestock		
16-24	6	0	0	8	1	3	0	1	1	20
25-35	8	0	0	10	1	4	2	3	1	29
36-45	13	0	0	20	5	6	1	10	6	61
46-55	3	0	0	12	0	1	0	3	1	20
56-65	1	0	0	7	0	0	0	1	1	10
66-75	0	0	0	2	0	1	0	0	0	3
Total	31	0	0	59	7	15	3	18	10	143

Remark: Aqua. = Aquaculture, Agri. = Agriculture, Gen. = General



Remark: in the legend details box every items is including fisheries

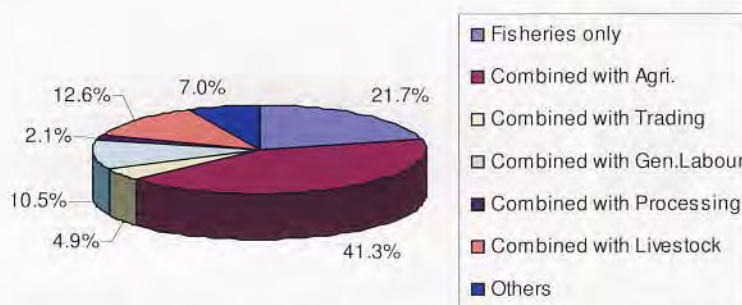
Figure 7. Occupations by age group

c) Principal occupations in the fishing community

Occupation	Fisheries only	Combined with Agri.	Combined with Trading	Combined with Gen.Labour	Combined with Processing	Combined with Livestock	Others	Total
No. of Fishermen	31	59	7	15	3	18	10	143
In percentage (%)	21.7	41.3	4.9	10.5	2.1	12.6	7.0	100.0

Remark: Interviewees in Prek Pros, Prek Sangke, Prek Tal and Kampong Chin are 41, 29, 19 and 23 respectively

: Agri. = Agriculture, Gen. = General



Remark: in the legend details box every items is including fisheries

Figure 8. Occupations of fishermen by total (in percentage)

Part I-4 Number of family/child(ren) per household

Structure of family

Village	Number of interviewees	Average No. of family member	Household (Composition of family)				
			Without child		With Child(ren)		
			Number	%	Number	%	Average No. of Children
Prek Pros	41	7.4	6	14.6	35	85.4	3.2
Prek Sangke	29	6.1	6	20.7	23	79.3	2.7
Prek Tal	19	5.1	5	26.3	14	73.7	2.4
Kampong Chin	23	6.1	4	17.4	19	82.6	2.7
Total	112	6.4	21	18.8	91	81.3	2.9

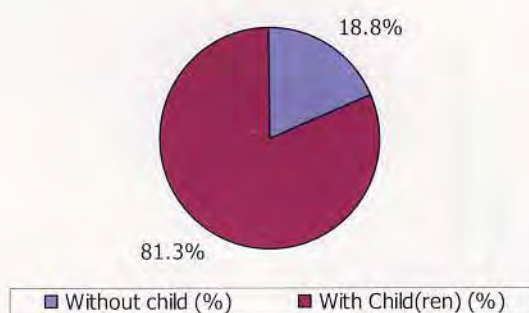


Figure 9. Family structure with child (ren) and without child by total (in percentage)

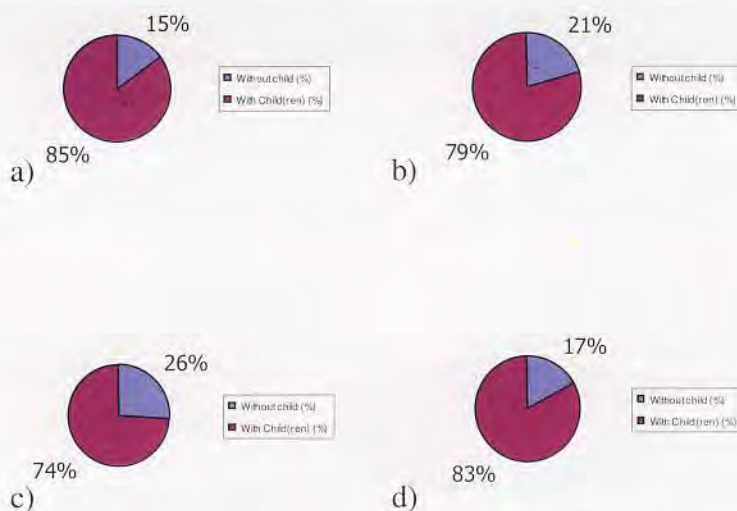


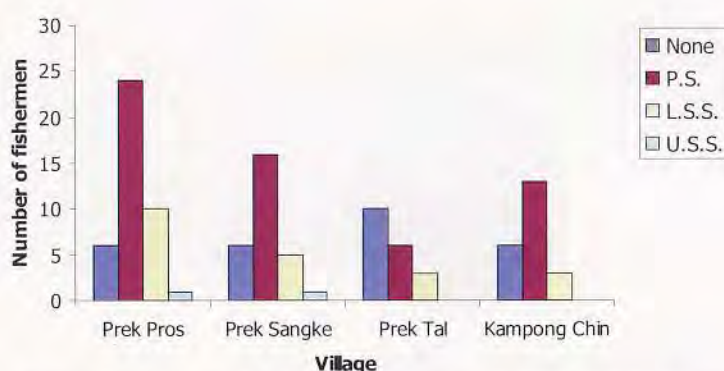
Figure 10. Family structure with child (ren) and without child by village in percentage
a) Prek Pros b) Prek Sangke c) Prek Tal d) Kampong Chin

Part I-5 Education level of fishermen

a) Education level of fishermen by age (by village)

Age group	Village																Total			
	Prek Pros				Prek Sangke				Prek Tal				Kampong Chin							
	None	P.S.	L.S.S.	U.S.S.	None	P.S.	L.S.S.	U.S.S.	None	P.S.	L.S.S.	U.S.S.	None	P.S.	L.S.S.	U.S.S.	None	P.S.	L.S.S.	U.S.S.
16-24	0	0	0	0	1	2	1	0	4	2	2	0	0	2	1	0	5	6	4	0
25-35	0	4	3	1	2	6	1	0	0	1	1	0	2	3	0	0	4	14	5	1
36-45	2	11	5	0	3	6	2	0	1	3	0	0	4	6	2	0	10	26	9	0
46-55	2	8	0	0	0	1	0	0	2	0	0	0	0	2	0	0	4	11	0	0
56-65	1	1	2	0	0	1	1	1	2	0	0	0	0	0	0	0	3	2	3	1
66-75	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0
Total	6	24	10	1	6	16	5	1	10	6	3	0	6	13	3	0	28	59	21	2

Remark P.S. = Primary School, L.S.S = Lower Secondary School, U.S.S= Upper Secondary School



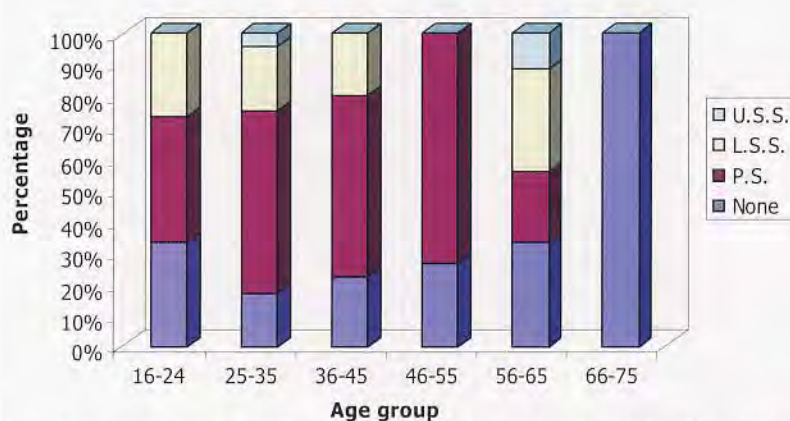
Remark P.S. = Primary School, L.S.S = Lower Secondary School, U.S.S= Upper Secondary School

Figure 11. Education level of fishermen by village

b) Education level of fishermen by age (by total)

Age group	Number of interviewees	Education level (number)				Education level (%)			
		None	P.S.	L.S.S.	U.S.S.	None	P.S.	L.S.S.	U.S.S.
16-24	15	5	6	4	0	33.3	40.0	26.7	0.0
25-35	24	4	14	5	1	16.7	58.3	20.8	4.2
36-45	45	10	26	9	0	22.2	57.8	20.0	0.0
46-55	15	4	11	0	0	26.7	73.3	0.0	0.0
56-65	9	3	2	3	1	33.3	22.2	33.3	11.1
66-75	2	2	0	0	0	100.0	0.0	0.0	0.0
Total	110	28	59	21	2				

Remark P.S. = Primary School, L.S.S = Lower Secondary School, U.S.S= Upper Secondary School



Remark P.S. = Primary School, L.S.S = Lower Secondary School, U.S.S= Upper Secondary School

Figure 12. Education level of fishermen by age group

c) Education level of fishermen

Village	Number of interviewees	Education level							
		Number				Percentage (%)			
		None	P.S.	L.S.S.	U.S.S.	None	P.S.	L.S.S.	U.S.S.
Prek Pros	41	6	24	10	1	14.6	58.5	24.4	2.4
Prek Sangke	28	6	16	5	1	21.4	57.1	17.9	3.6
Prek Tal	19	10	6	3	0	52.6	31.6	15.8	0.0
Kampong Chin	22	6	13	3	0	27.3	59.1	13.6	0.0
Total	110	28	59	21	2				
Total (%)		25.5	53.6	19.1	1.8				

Remark: 1 person in Kampong Chin Village was not specify educational level and 1 person in Prek Sangke was specific only study Arab but he does not mention the education level. So two of them were excluded from this table

: P.S. = Primary School, L.S.S = Lower Secondary School, U.S.S= Upper Secondary School



Remark P.S. = Primary School, L.S.S = Lower Secondary School, U.S.S= Upper Secondary School

Figure 13. Education level of fishermen by Total

Part I-6 Mean monthly income of fishermen

a) Monthly income (in USD) of fishermen by age/village

Age group	Occupation							
	Fisheries only	Combination with other profession						Others
		Fisheries	Agri.	Trading	Gen.labour	Processing	Livestock	
16-24								
Prek Pros	-	-	-	-	-	-	-	-
Prek Sangke	116.88	22.50	4.17	200.00	-	-	-	-
Prek Tal	26.50	10.31	27.09	-	35.63	-	-	0.10
Kampong Chin	28.13	40.00	46.25	-	10.00	-	4.17	3.00
25-35								
Prek Pros	102.50	42.50	6.11	75.00	21.36	-	-	25.00
Prek Sangke	71.75	55.83	55.94	22.50	3.00	12.50	2.08	-
Prek Tal	25.00	37.50	3.65	-	-	-	-	-
Kampong Chin	56.25	33.44	20.59	-	2.08	-	8.86	-
36-45								
Prek Pros	15.00	54.26	26.73	19.75	16.00	15.00	6.02	8.94
Prek Sangke	46.92	37.00	49.93	40.00	-	-	4.17	22.50
Prek Tal	37.50	28.75	97.25	-	25.00	-	2.29	-
Kampong Chin	28.27	34.82	13.48	75.00	15.00	-	8.09	30.00
46-55								
Prek Pros	-	51.55	22.09	-	7.50	-	10.42	-
Prek Sangke	-	18.75	65.63	-	-	-	-	-
Prek Tal	32.50	60.00	112.50	-	-	-	-	37.50
Kampong Chin	48.75	-	-	-	-	-	-	-
56-65								
Prek Pros	-	40.00	30.99	-	-	-	3.50	-
Prek Sangke	-	40.83	23.61	-	-	-	2.08	-
Prek Tal	19.50	1.00	6.25	-	-	-	-	-
Kampong Chin	-	-	-	-	-	-	-	-
66-75								
Prek Pros	-	37.50	3.54	-	-	-	-	-
Prek Sangke	-	-	-	-	-	-	-	-
Prek Tal	-	10.00	96.20	-	12.50	-	-	-
Kampong Chin	-	-	-	-	-	-	-	-

Remark: Agri. = Agriculture, Gen. = General

b) Mean monthly income (in USD) of fishermen by occupation

Age group	Fisheries only	Occupation Combination with other profession						Others	Total
		Fisheries	Agri.	Trading	Gen. labour	Processing	Livestock		
16-24									
Prek Pros	-	-	-	-	-	-	-	-	-
Prek Sangke	350.63	22.50	4.17	200.00	-	-	-	-	577.30
Prek Tal	53.00	61.88	135.47	-	71.25	-	-	0.10	321.70
Kampong Chin	28.13	80.00	92.50	-	10.00	-	4.17	3.00	217.80
Sub-total:	431.75	164.38	232.14	200.00	81.25	-	4.17	3.10	1116.79
25-35									
Prek Pros	307.50	170.00	18.34	75.00	42.71	-	-	25.00	638.55
Prek Sangke	215.25	335.00	223.75	22.50	3.00	25.00	2.08	-	826.58
Prek Tal	25.00	37.50	3.65	-	-	-	-	-	66.15
Kampong Chin	56.25	133.75	41.17	-	2.08	-	17.71	-	250.96
Sub-total:	604.00	676.25	286.91	97.50	47.79	25.00	19.79	25.00	1782.24
36-45									
Prek Pros	15.00	922.50	267.27	79.00	16.00	15.00	42.17	26.83	1383.77
Prek Sangke	281.50	185.00	199.72	40.00	-	-	4.17	67.50	777.89
Prek Tal	37.50	86.25	194.50	-	50.00	-	2.29	-	370.54
Kampong Chin	141.33	243.75	67.40	75.00	30.00	-	16.17	30.00	603.65
Sub-total:	475.33	1437.50	728.89	194.00	96.00	15.00	64.80	124.33	3135.84
46-55									
Prek Pros	-	515.50	154.66	-	7.50	-	31.25	-	708.91
Prek Sangke	-	37.50	131.25	-	-	-	-	-	168.75
Prek Tal	32.50	60.00	112.50	-	-	-	-	37.50	242.50
Kampong Chin	97.50	-	-	-	-	-	-	-	97.50
Sub-total:	130.00	613.00	398.41	-	7.50	-	31.25	37.50	1217.66
56-65									
Prek Pros	-	120.00	123.96	-	-	-	3.50	-	247.46
Prek Sangke	-	122.50	70.83	-	-	-	2.08	-	195.41
Prek Tal	19.50	1.00	6.25	-	-	-	-	-	26.75
Kampong Chin	-	-	-	-	-	-	-	-	-
Sub-total:	19.50	243.50	201.04	-	-	-	5.58	-	469.62
66-75									
Prek Pros	-	37.50	3.54	-	-	-	-	-	41.04
Prek Sangke	-	-	-	-	-	-	-	-	-
Prek Tal	-	10.00	96.20	-	12.50	-	-	-	118.70
Kampong Chin	-	-	-	-	-	-	-	-	-
Sub-total:	-	47.50	99.74	-	12.50	-	-	-	159.74
Summary									
Prek Pros	322.50	1765.50	567.76	154.00	66.21	15.00	76.92	51.83	3019.72
Prek Sangke	847.38	702.50	629.72	262.50	3.00	25.00	8.33	67.50	2545.93
Prek Tal	167.50	256.63	548.57	-	133.75	-	2.29	37.60	1146.34
Kampong Chin	323.20	457.50	201.07	75.00	42.08	-	38.05	33.00	1169.90
Total	1660.58	3182.13	1947.12	491.50	245.04	40.00	125.59	189.93	7881.88
No. of interviewees	31	78	59	9	13	3	20	11	112
Mean income	53.57	40.80	33.00	54.61	18.85	13.33	6.28	17.27	70.37
Calculated income			33.00		18.85				

Remark: Agri.= Agriculture, Gen. = General

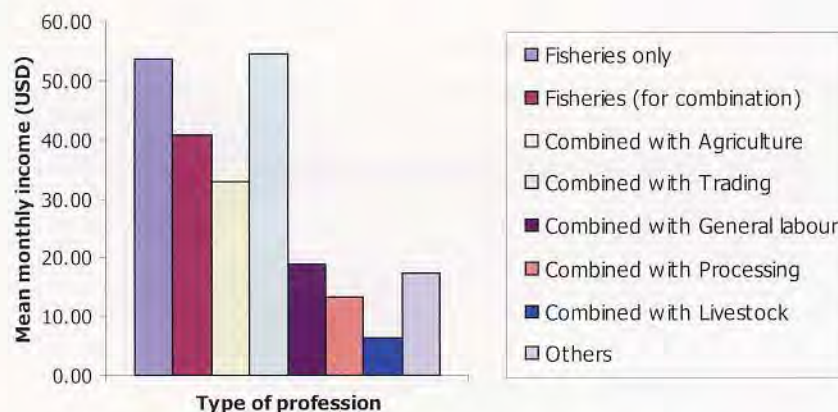


Figure 14. Mean monthly income by profession

Part I-7 Relation between education level and income

a) Relation between education level and income (in USD), classify by age group

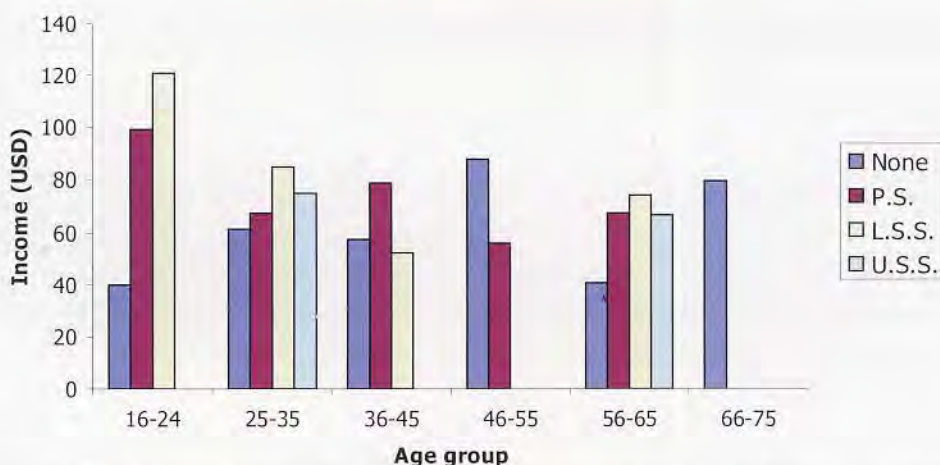
Age group	Village																Average			
	Prek Pros				Prek Sangke				Prek Tal				Kampong Chin							
	None	P.S.	L.S.S.	U.S.S.	None	P.S.	L.S.S.	U.S.S.	None	P.S.	L.S.S.	U.S.S.	None	P.S.	L.S.S.	U.S.S.	None	P.S.	L.S.S.	U.S.S.
16-24	-	-	-	-	60	145	227	-	20	105	17	-	-	48	120	-	40	99	121	-
25-35	-	90	68	75	77	85	163	-	-	41	25	-	45	54	-	-	61	67	85	75
36-45	75	53	112	-	59	90	31	-	36	112	-	-	60	60	13	-	57	79	52	-
46-55	54	75	-	-	-	44	-	-	121	-	-	-	-	49	-	-	88	56	-	-
56-65	68	68	86	-	-	66	63	67	13	-	-	-	-	-	-	-	40	67	74	67
66-75	41	-	-	-	-	-	-	-	119	-	-	-	-	-	-	-	80	-	-	-
Av3.(USD)	59	72	89	75	65	86	121	67	62	86	21	-	53	53	67	-	61	74	83	71

Remark P.S. = Primary School, L.S.S. = Lower Secondary School, U.S.S. = Upper Secondary School

b) Relation between education level and income

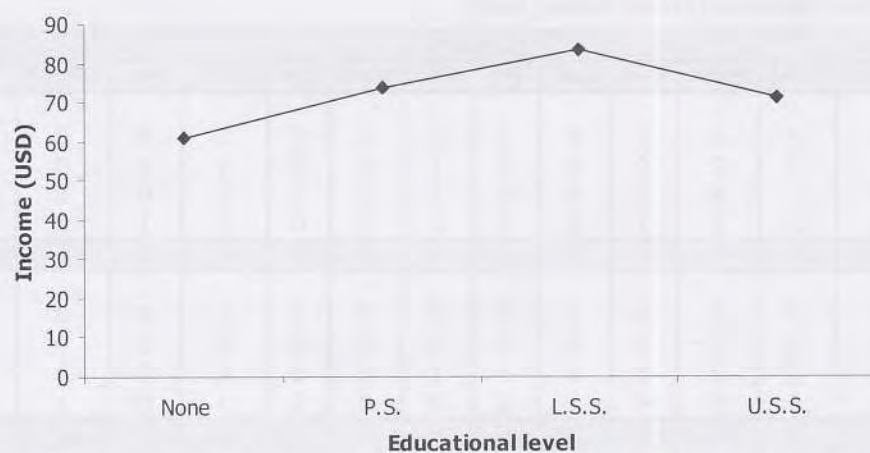
Age group	Number of interviewees					Average incomes (USD)			
	None	P.S.	L.S.S.	U.S.S.	Total	None	P.S.	L.S.S.	U.S.S.
16-24	5	6	4	0	15	40	99	121	-
25-35	4	14	5	1	24	61	67	85	75
36-45	10	26	9	0	45	57	79	52	-
46-55	4	11	0	0	15	88	56	-	-
56-65	3	2	3	1	9	40	67	74	67
66-75	2	0	0	0	2	80	-	-	-
	28	59	21	2	110	61	74	83	71

Remark P.S. = Primary School, L.S.S. = Lower Secondary School, U.S.S. = Upper Secondary School



Remark P.S. = Primary School, L.S.S. = Lower Secondary School, U.S.S. = Upper Secondary School

Figure 15. Education level and average monthly incomes (in USD)



Remark P.S. = Primary School, L.S.S. = Lower Secondary School, U.S.S. = Upper Secondary School

Figure 16. Total average monthly incomes by educational level

Part I-8 Asset ownership by fishermen

a) Owner of fishing boats

No.	Age group	Village				Total	Number of interviewees	Ratio of boat owner (%)
		Prek Pros	Prek Sangke	Prek Tal	Kampong Chin			
1	16-24	0	4	7	0	11	15	73.3
2	25-35	4	7	2	4	17	24	70.8
3	36-45	11	9	2	9	31	46	67.4
4	46-55	5	2	2	2	11	16	68.8
5	56-65	2	3	0	0	5	9	55.6
6	66-75	1	0	1	0	2	2	100.0
Total		23	25	14	15	77	112	68.75

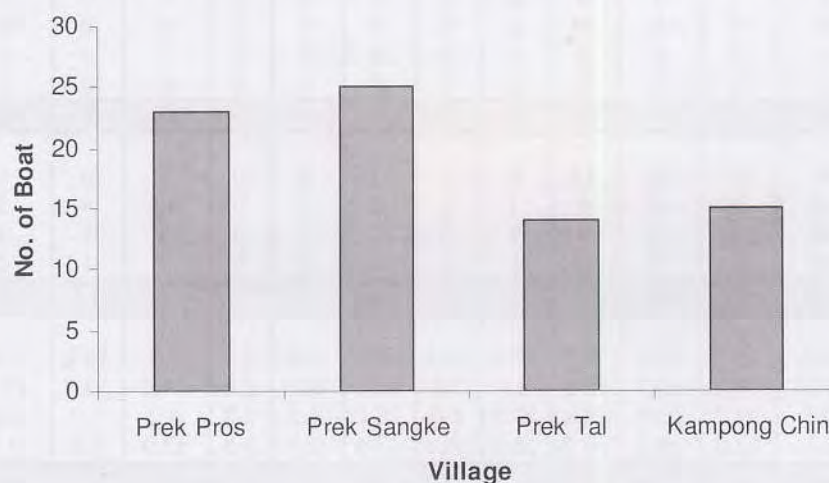
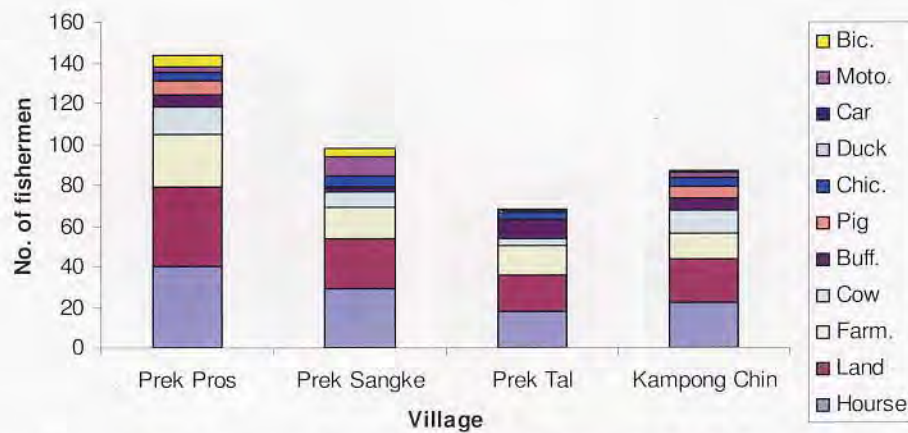


Figure 17. Owner of fishing boats by village

b) Asset ownership of fishermen (except fishing boat)

Age group	Property												Total
	Hourse	Land	Farm.	Cow	Buff.	Pig	Chic.	Duck	Car	Moto.	Bic.	Others	
16-24													
Prek Pros	0	0	0	0	0	0	0	0	0	0	0	0	0
Prek Sangke	4	3	2	0	0	0	1	0	0	1	1	0	12
Prek Tal	7	7	6	2	3	0	1	0	0	0	0	0	26
Kampong Chin	3	3	1	2	0	1	0	0	0	0	1	0	11
Sub-total:	14	13	9	4	3	1	2	0	0	1	2	0	49
25-35													
Prek Pros	7	7	3	4	1	0	0	0	0	1	0	0	23
Prek Sangke	9	8	4	2	0	0	3	0	0	3	2	0	31
Prek Tal	2	2	2	0	1	0	1	0	0	0	0	0	8
Kampong Chin	5	5	4	4	1	3	2	0	0	1	0	1	26
Sub-total:	23	22	13	10	3	3	6	0	0	5	2	1	88
36-45													
Prek Pros	18	17	8	4	2	5	3	0	0	0	4	0	61
Prek Sangke	11	9	5	2	0	0	0	0	0	4	0	2	33
Prek Tal	4	4	2	1	2	0	1	1	0	0	1	0	16
Kampong Chin	12	11	6	4	4	2	2	0	0	1	0	1	43
Sub-total:	45	41	21	11	8	7	6	1	0	5	5	3	153
46-55													
Prek Pros	10	10	10	3	2	2	1	0	0	1	2	1	42
Prek Sangke	2	2	1	1	0	0	0	0	0	1	0	0	7
Prek Tal	2	2	2	1	1	0	0	0	0	0	0	0	8
Kampong Chin	2	2	2	1	1	0	0	0	0	1	0	0	9
Sub-total:	16	16	15	6	4	2	1	0	0	3	2	1	66
56-65													
Prek Pros	4	4	4	2	1	0	0	0	0	1	0	1	17
Prek Sangke	3	3	3	3	1	1	1	0	0	1	1	1	18
Prek Tal	2	2	2	0	2	0	0	0	0	0	0	0	8
Kampong Chin	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total:	9	9	9	5	4	1	1	0	0	2	1	2	43
66-75													
Prek Pros	1	1	1	0	0	0	0	0	0	0	0	0	3
Prek Sangke	0	0	0	0	0	0	0	0	0	0	0	0	0
Prek Tal	1	1	0	0	0	0	0	0	0	0	0	0	2
Kampong Chin	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total:	2	2	1	0	0	0	0	0	0	0	0	0	5
Summary													-
Prek Pros	40	39	26	13	6	7	4	0	0	3	6	2	-
Prek Sangke	29	25	15	8	1	1	5	0	0	10	4	3	-
Prek Tal	18	18	14	4	9	0	3	1	0	0	1	0	-
Kampong Chin	22	21	13	11	6	6	4	0	0	3	1	2	-
Total:	109	103	68	36	22	14	16	1	0	16	12	7	-
Summary (%)													-
Prek Pros	97.6	95.1	63.4	31.7	14.6	17.1	9.8	0.0	0.0	7.3	14.6	4.9	-
Prek Sangke	100.0	86.2	51.7	27.6	3.4	3.4	17.2	0.0	0.0	34.5	13.8	10.3	-
Prek Tal	94.7	94.7	73.7	21.1	47.4	0.0	15.8	5.3	0.0	0.0	5.3	0.0	-
Kampong Chin	95.7	91.3	56.5	47.8	26.1	26.1	17.4	0.0	0.0	13.0	4.3	8.7	-
Average (%)	97.0	91.8	61.3	32.0	22.9	11.7	15.0	1.3	0.0	13.7	9.5	6.0	-

Remark: Bic. = Bicycle, Moto. = Motorbike, Chic. = Chicken, Buff. = Buffalo, Farm. = Farm land



Remark: Bic. = Bicycle, Moto. = Motorbike, Chic. = Chicken, Buff. = Buffalo, Farm. = Farm land

Figure 18. Asset ownership by fishermen (except fishing boat)

c) Asset ownership of fishermen by age group

Age group	Property											
	House	Land	Farm.	Cow	Buff.	Pig	Chic.	Duck	Car	Moto.	Bic.	Others
16-24	14	13	9	4	3	1	2	0	0	1	2	0
25-35	23	22	13	10	3	3	6	0	0	5	2	1
36-45	45	41	21	11	8	7	6	1	0	5	5	3
46-55	16	16	15	6	4	2	1	0	0	3	2	1
56-65	9	9	9	5	4	1	1	0	0	2	1	2
66-75	2	2	1	0	0	0	0	0	0	0	0	0
Summary (total)	109	103	68	36	22	14	16	1	0	16	12	7
Summary (Ave.%)	97.0	91.8	61.3	32.0	22.9	11.7	15.0	1.3	0.0	13.7	9.5	6.0

Remark: Bic. = Bicycle, Moto. = Motorbike, Chic. = Chicken, Buff. = Buffalo, Farm. = Farm land

d) Asset ownership of fishermen by age group (in percentage)

Age group	Property											
	House	Land	Farm.	Cow	Buff.	Pig	Chic.	Duck	Car	Moto.	Bic.	Others
16-24	93.3	86.7	60.0	26.7	20.0	6.7	13.3	0.0	0.0	6.7	13.3	0.0
25-35	95.8	91.7	54.2	41.7	12.5	12.5	25.0	0.0	0.0	20.8	8.3	4.2
36-45	97.8	89.1	45.7	23.9	17.4	15.2	13.0	2.2	0.0	10.9	10.9	6.5
46-55	100.0	100.0	93.8	37.5	25.0	12.5	6.3	0.0	0.0	18.8	12.5	6.3
56-65	100.0	100.0	100.0	55.6	44.4	11.1	11.1	0.0	0.0	22.2	11.1	22.2
66-75	100.0	100.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total (average)	97.8	94.6	67.3	30.9	19.9	9.7	11.5	0.4	0.0	13.2	9.4	6.5

Remark: Bic. = Bicycle, Moto. = Motorbike, Chic. = Chicken, Buff. = Buffalo, Farm. = Farm land

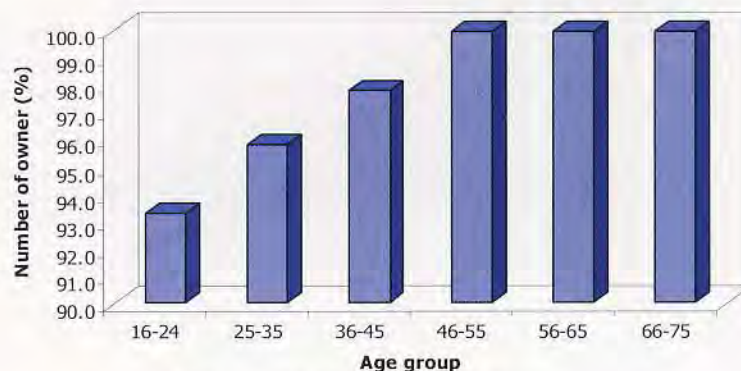


Figure 19. Houses owner status

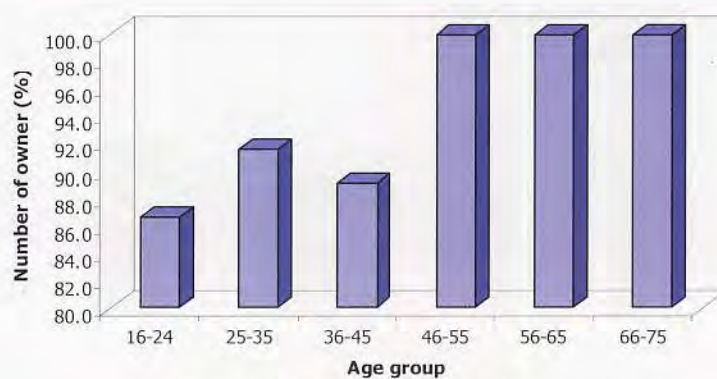


Figure 20. Land owner status

Part I-9 Religion

Village	Number of interviewees	Religion (Number)			Religion (Percentage%)		
		Buddhist	Muslim	Christian	Buddhist	Muslim	Christian
Prek Pros	41	41	0	0	100	0	0
Prek Sangke	29	5	24	0	17.2	82.8	0
Prek Tal	19	1	18	0	5.3	94.7	0
Kampong Chin	23	22	0	1	95.7	0	4.3
Total	112	69	42	1	61.6	37.5	0.9

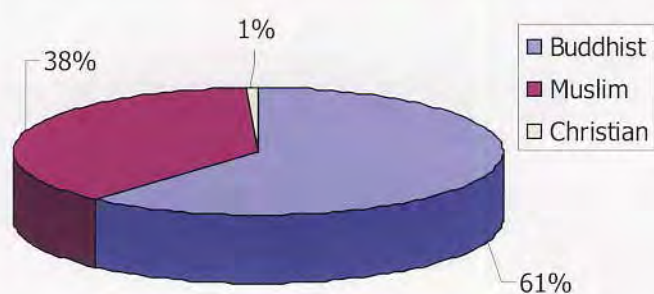


Figure 21. Religion of fishermen by total (in percentage)

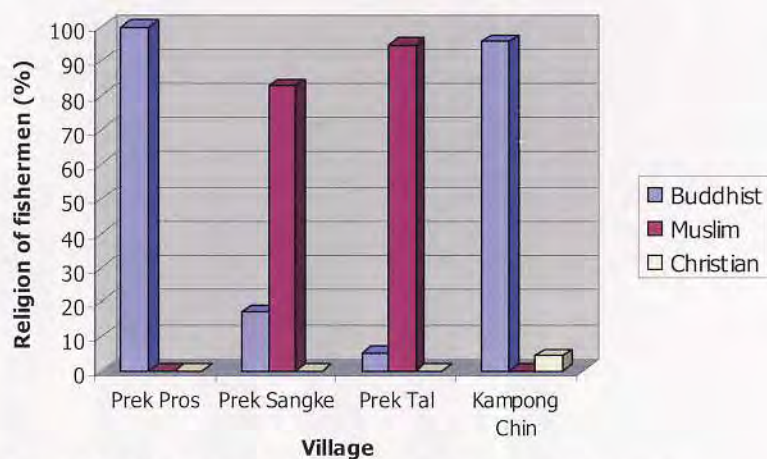


Figure 22. Religion of fishermen by village (in percentage)

Annex 5 - 2

Analytical Result - Part II**Part II - 1 Number of fishing boats by Out-Board Motor (OBM)/In-Board Motor (IBM) and by licensed/unlicensed**

a) Number of fishing boats (by Out-Board Motor/In-Board Motor) and fishing without boats

Village	Number of fishers interviewees	Without boat	No engine	With Engine		Ownership	
				Outboard	Inboard	Owner	Crew
Prek Pros	39	16	10	9	4	23	0
Prek Sangke	29	4	21	6	0	25	0
Prek Tal	19	5	13	1	0	14	0
Kampong Chin	22	7	14	1	0	15	0
Total	109	32	58	17	4	77	0

Remark: Without boat= fishing without using boat; In Prek Sangke Village 2 fishers have 2 boats each.

b) Number of fishing boats by Out-Board Motor (OBM)/In-Board Motor (IBM) and by licensed/unlicensed

	Outboard				Inboard				Total
	Prek Pros	Prek Sangke	Prek Tal	Kampong Chin	Prek Pros	Prek Sangke	Prek Tal	Kampong Chin	
Unlicensed	8	6	1	1	3	0	0	0	19
Licensed	1	0	0	0	1	0	0	0	2
Total boats with engine									21

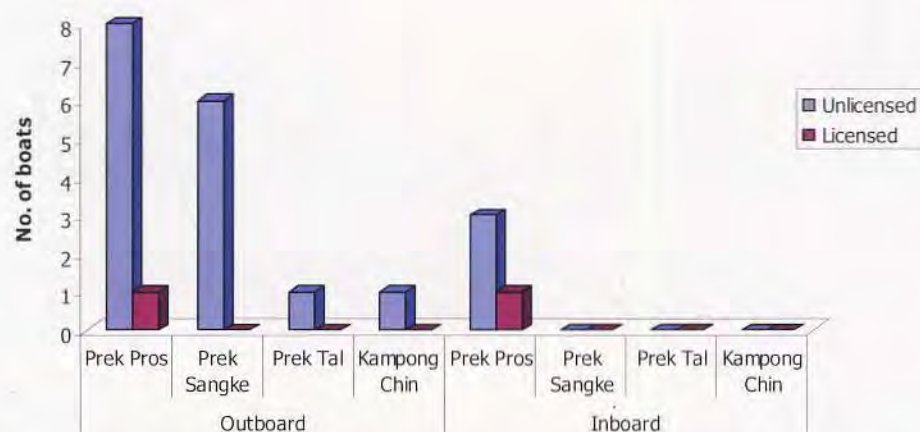


Figure 1. Number of fishing boats by Out-Board Motor/In-Board Motor and by licensed/unlicensed

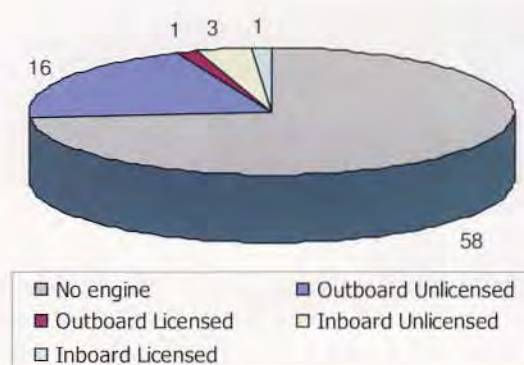


Figure 2. Number of fishing boat by total

Part II - 2 Fishing gear used

Fishing gear used by total

Boat type	No. of boats	Fishing gears type											
		CGN	SGN	CT	FGN	MGN	MUGN	HPN	HFC	HFS	HK	SBN	CN
Without boat	32	0	0	1	0	0	0	24	2	6	1	0	0
No engine	58	4	0	37	7	1	4	17	0	5	0	1	1
Outboard	17	0	1	12	3	2	0	2	0	2	1	0	0
Inboard	4	0	0	4	0	0	0	0	0	0	0	0	0
Total No of boats	111												
Total No. of gears	138	4	1	54	10	3	4	43	2	13	2	1	1
Percentage of gears(%)	100	2.9	0.7	39.1	7.2	2.2	2.9	31.2	1.4	9.4	1.4	0.7	0.7

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

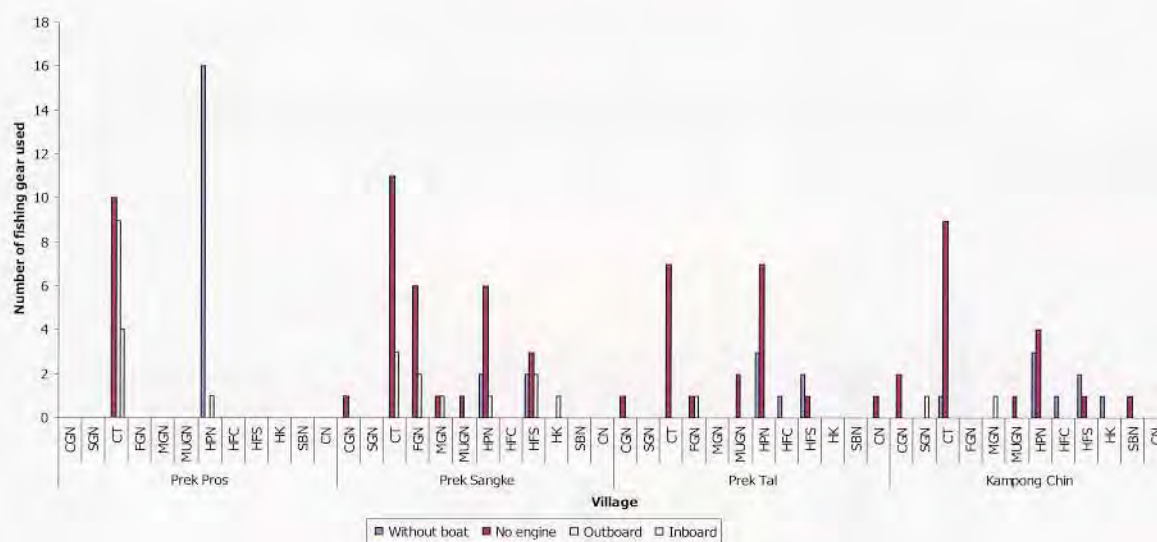
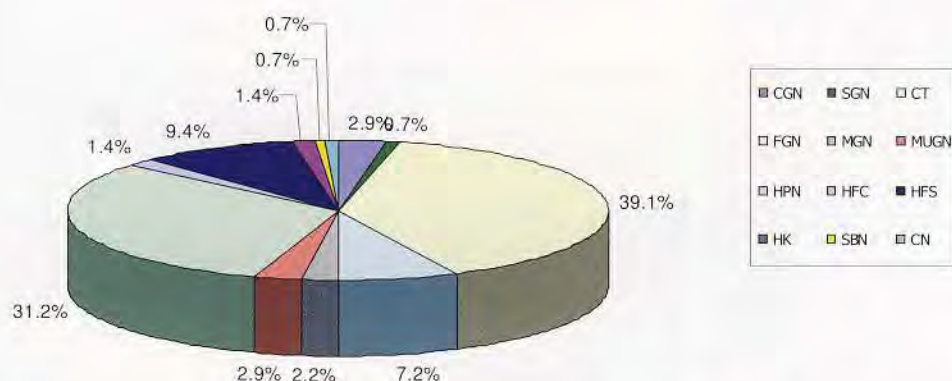


Figure 3. Fishing gear used by village



Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

Figure 4. Fishing gear used by total

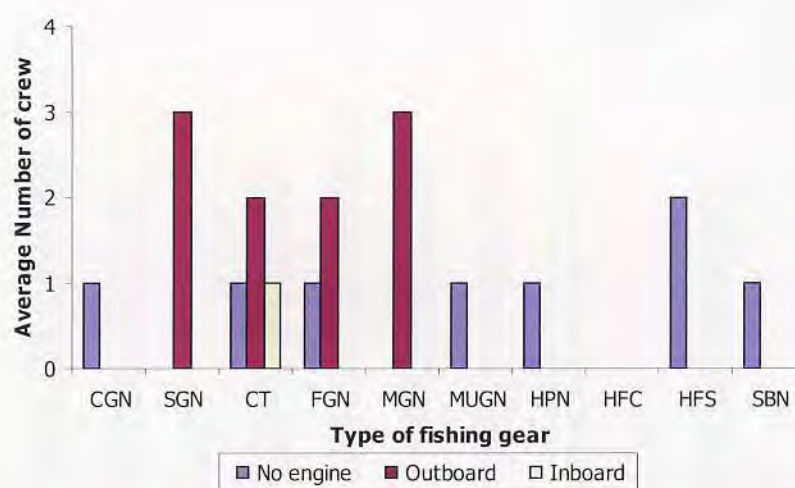
Part II - 3: Fishing gear used/type of fishing boat and number of crew

Fishing gear used/type of fishing boat and number of crew

Type of Fishing gear	Non-* boat owner	Boat owner	Type of fishing boat and crew								
			No engine	Percentage %	Average no. of crew	Outboard	Percentage %	Average no. of crew	Inboard	Percentage %	Average no. of crew
CGN	0	3	3	4	1	-	-	-	-	-	-
SGN	0	1	-	-	-	1	1	3	-	-	-
CT	1	50	34	43	1	12	15	2	4	5	1
FGN	0	10	7	9	1	3	4	2	-	-	-
MGN	0	1	-	-	-	1	1	3	-	-	-
MUGN	0	2	2	3	1	-	-	-	-	-	-
HPN	24	10	10	13	1	-	-	-	-	-	-
HFC	2	0	-	-	-	-	-	-	-	-	-
HFS	5	1	1	1	2	-	-	-	-	-	-
SBN	0	1	1	1	1	-	-	-	-	-	-
Total	32	79	58	73	8	17	22	10	4	5	1

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

:Non-boat*=fishing without boats



Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

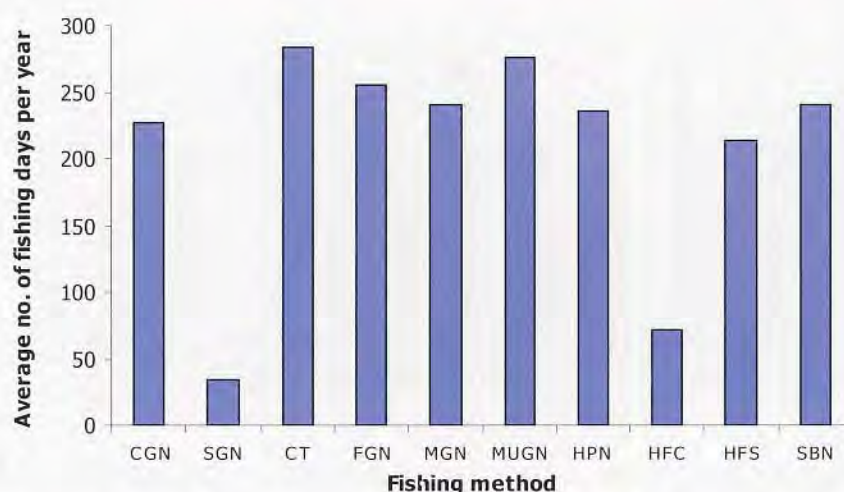
Figure 5. Average number of crew by type of fishing boat and fishing gear used

Part II - 4 Fishing season/fishing days/fishing hours by fishing method

a) Fishing days and fishing hours by fishing method

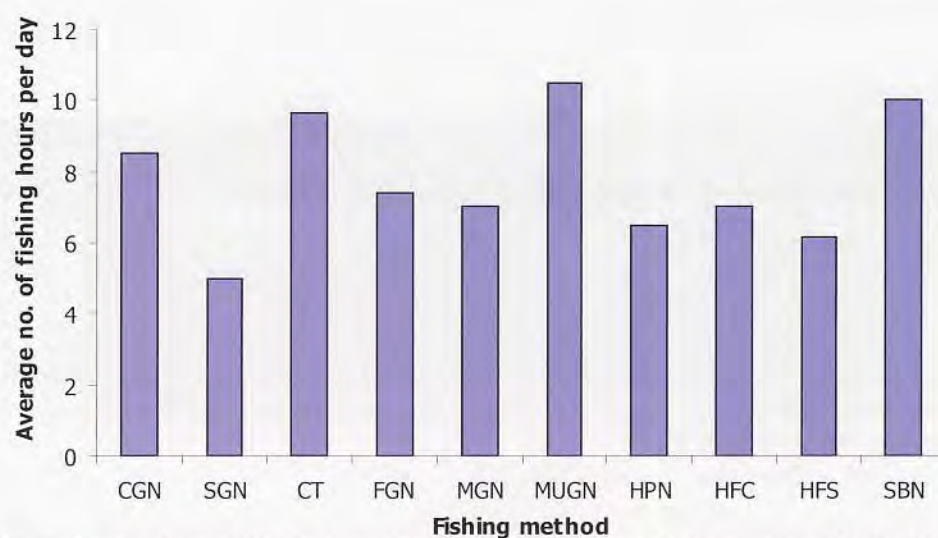
Fishing gear used	No. of Boats	Average number of fishing days per year	No. of Boats	Average number of fishing hours per day
CGN	3	227	3	9
SGN	1	35	1	5
CT	51	283	51	10
FGN	10	255	10	7
MGN	1	240	1	7
MUGN	2	276	2	11
HPN	34	235	34	6
HFC	2	72	2	7
HFS	6	214	6	6
SBN	1	240	1	10
Total	111		111	

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net



Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

Figure 6. Average fishing days per year by fishing method



Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

Figure 7. Average fishing hours per year by fishing method

b) Fishing seasons by fishing methods

Fishing gear used	No. of HH	Average number of fishing season (months)
CGN	3	12
SGN	1	5
CT	51	12
FGN	10	12
MGN	1	12
MUGN	2	12
HPN	34	12
HFC	2	12
HFS	6	12
SBN	1	12
Total	111	

Part II - 5 Average fish catch per boat/day/year

Average fish catch per boat/trip (day)

Type of fishing boats	CGN		SGN		CT		FGN		MGN		MUGN		HPN		HFC		HFS		SBN	
	No.	Ave. (kg)	No.	Ave. (kg)	No.	Ave. (kg)	No.	Ave. (kg)	No.	Ave. (kg)	No.	Ave. (kg)	No.	Ave. (kg)	No.	Ave. (kg)	No.	Ave. (kg)	No.	Ave. (kg)
Without boat	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	24	3.4	2	1.7	5	6.0	0	0.0
No engine	3	4.8	0	0.0	34	3.1	7	4.1	0	0.0	2	6.0	10	4.2	0	0.0	1	2.0	1	8.0
Outboard	0	0.0	1	10.0	12	5.1	3	4.7	1	20.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Inboard	0	0.0	0	0.0	4	4.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	3	14.5	1	10.0	51	183.9	10	43.0	1	20.0	2	12.0	34	123.8	2	3.3	6	32.0	1	8.0
Mean catch	4.8		10.0		3.6		4.3		20.0		6.0		3.6		1.7		5.3		8.0	

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

: No.=Number of boats, Ave. =Average quantity

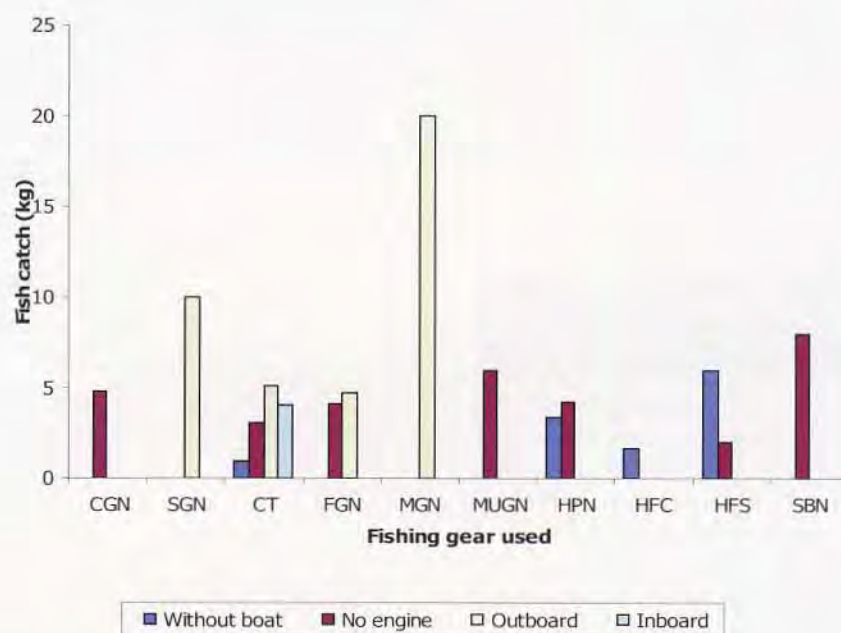


Figure 8. Average fish catch per boat/trip (day)

Part II - 6 Disposal of fishing catches

Disposal of fishing catches by total

	CGN				SGN			
	Without boat	No engine	Outboard	Inboard	Without boat	No engine	Outboard	Inboard
Family consumption (%)	0.0	4.2	0.0	0.0	0.0	0.0	20.0	0.0
For sale (%)	0.0	95.8	0.0	0.0	0.0	0.0	80.0	0.0
Processing (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CT				FGN			
	Without boat	No engine	Outboard	Inboard	Without boat	No engine	Outboard	Inboard
Family consumption (%)	0.0	2.3	0.4	0.0	0.0	2.4	15.0	0.0
For sale (%)	100.0	97.7	99.6	100.0	0.0	97.6	85.0	0.0
Processing (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MGN				MUGN			
	Without boat	No engine	Outboard	Inboard	Without boat	No engine	Outboard	Inboard
Family consumption (%)	0.0	0.0	0.0	0.0	0.0	17.2	0.0	0.0
For sale (%)	0.0	0.0	100.0	0.0	0.0	82.9	0.0	0.0
Processing (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	HPN				HFC			
	Without boat	No engine	Outboard	Inboard	Without boat	No engine	Outboard	Inboard
Family consumption (%)	5.2	6.3	0.0	0.0	10.0	0.0	0.0	0.0
For sale (%)	81.4	77.9	0.0	0.0	90.0	0.0	0.0	0.0
Processing (%)	13.5	15.8	0.0	0.0	0.0	0.0	0.0	0.0
	HFS				SBN			
	Without boat	No engine	Outboard	Inboard	Without boat	No engine	Outboard	Inboard
Family consumption (%)	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
For sale (%)	100.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0
Processing (%)	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Total								
Family consumption (%)	6.4							
For sale (%)	85.5							
Processing (%)	8.1							

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

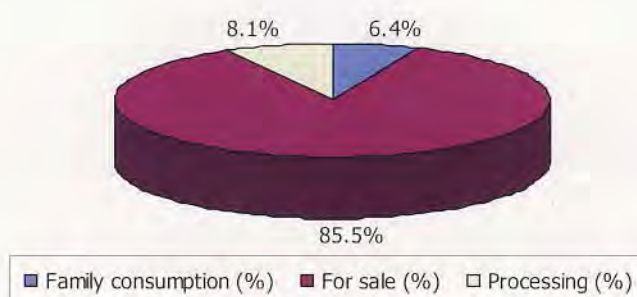


Figure 9. Disposal of fishing catches by total

Part II - 7 Marketing outlets of fish catches

Marketing outlets of fish catches

Gears	Middleman(%)	Local market(%)
CGN	1.8	0.9
SGN	0.9	0.0
CT	45.9	0.0
FGN	5.4	3.6
MGN	0.9	0.0
MUGN	0.9	0.9
HPN	30.6	0.0
HFC	1.8	0.0
HFS	5.4	0.0
SBN	0.9	0.0
Total(%)	94.6	5.4

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

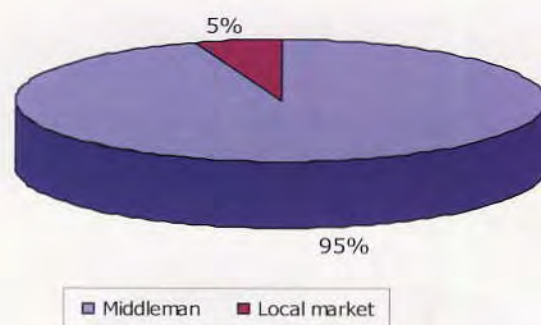


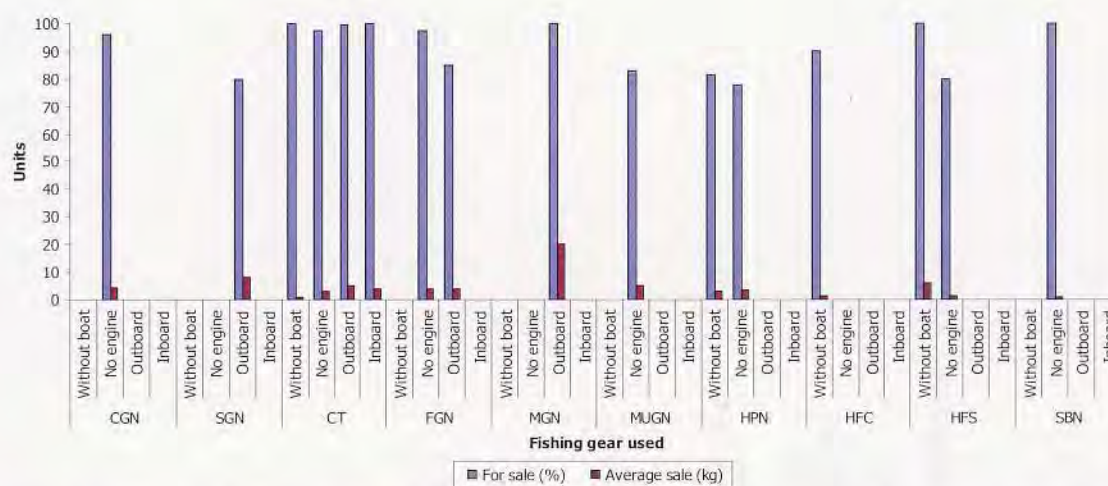
Figure 10. Percentage of marketing outlets of fish catches by total

Part II - 8 Average fish sales

Average fish sales

	CGN				SGN				CT			
	Without boat	No engine	Outboard	Inboard	Without boat	No engine	Outboard	Inboard	Without boat	No engine	Outboard	Inboard
For sale (%)	0.0	95.8	0.0	0.0	0.0	0.0	80.0	0.0	100.0	97.7	99.6	100.0
Average sale (kg)	0.0	4.6	0.0	0.0	0.0	0.0	8.0	0.0	1.0	3.0	5.1	4.0
	FGN				MGN				MUGN			
	Without boat	No engine	Outboard	Inboard	Without boat	No engine	Outboard	Inboard	Without boat	No engine	Outboard	Inboard
For sale (%)	0.0	97.6	85.0	0.0	0.0	0.0	100.0	0.0	0.0	82.9	0.0	0.0
Average sale (kg)	0.0	4.0	4.0	0.0	0.0	0.0	20.0	0.0	0.0	5.0	0.0	0.0
	HPN				HFC				HFS			
	Without boat	No engine	Outboard	Inboard	Without boat	No engine	Outboard	Inboard	Without boat	No engine	Outboard	Inboard
For sale (%)	81.4	77.9	0.0	0.0	90.0	0.0	0.0	0.0	100.0	80.0	0.0	0.0
Average sale (kg)	2.8	3.3	0.0	0.0	1.5	0.0	0.0	0.0	6.0	1.6	0.0	0.0
	SBN											
	Without boat	No engine	Outboard	Inboard								
For sale (%)	0.0	100.0	0.0	0.0								
Average sale (kg)	0.0	1.0	0.0	0.0								

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net



Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

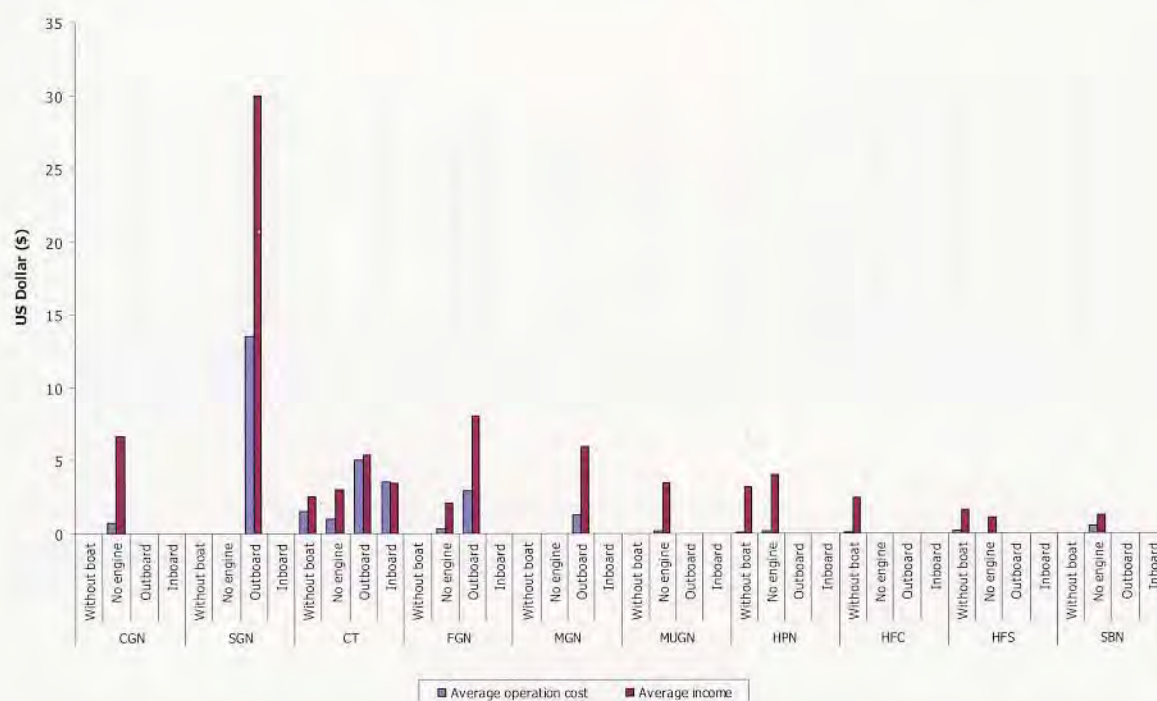
Figure 11. Average fish sales

Part II - 9 Economics of fishing operation

a) Economics of fishing operation in average value per trip (USD)

Fishing gear used	Without boat			No engine			Outboard			Inboard			Total number of HH
	No. of HH	Average operation cost (USD)	Average income (USD)	No. of HH	Average operation cost (USD)	Average income (USD)	No. of HH	Average operation cost (USD)	Average income (USD)	No. of HH	Average operation cost (USD)	Average income (USD)	
CGN	0	0.0	0.0	3	0.8	6.6	0	0.0	0.0	0	0.0	0.0	3
SGN	0	0.0	0.0	0	0.0	0.0	1	13.5	30.0	0	0.0	0.0	1
CT	1	1.5	2.5	34	1.0	3.1	12	5.0	5.4	4	3.5	3.4	51
FGN	0	0.0	0.0	7	0.4	2.1	3	3.0	8.1	0	0.0	0.0	10
MGN	0	0.0	0.0	0	0.0	0.0	1	1.3	6.0	0	0.0	0.0	1
MUGN	0	0.0	0.0	2	0.2	3.4	0	0.0	0.0	0	0.0	0.0	2
HPN	24	0.1	3.2	10	0.2	4.0	0	0.0	0.0	0	0.0	0.0	34
HFC	2	0.1	2.5	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	2
HFS	5	0.2	1.6	1	0.0	1.1	0	0.0	0.0	0	0.0	0.0	6
SBN	0	0.0	0.0	1	0.5	1.3	0	0.0	0.0	0	0.0	0.0	1
Total HH	32			58			17			4			111

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net
 : HH=Household



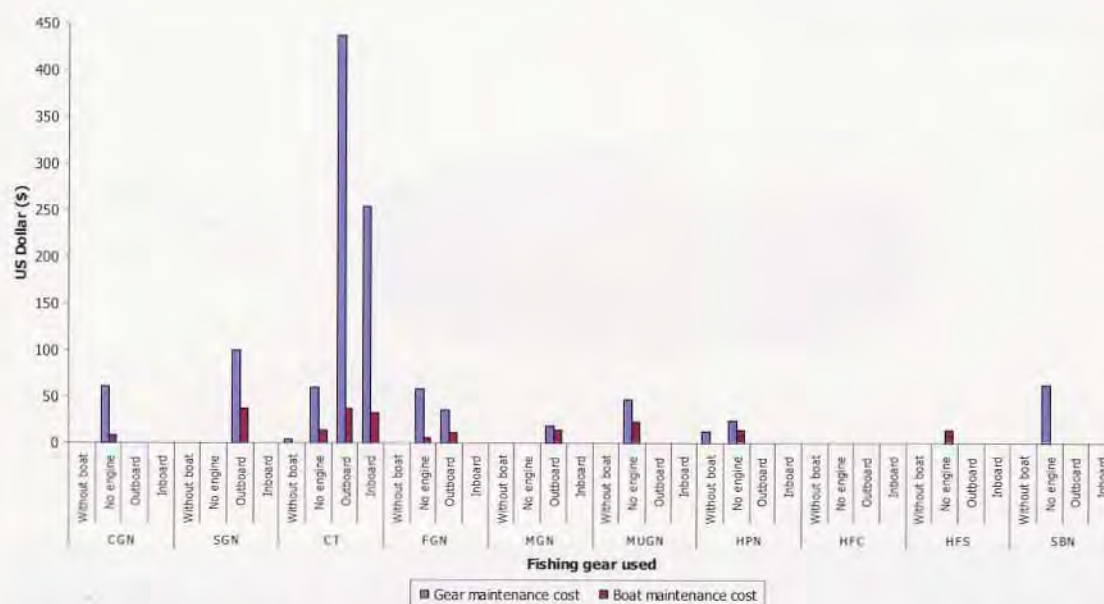
Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

Figure 12. Economics of fishing operation

b) Economics of fishing operation in average maintenance cost per year (USD)

Fishing gear used	Without boat		No engine			Outboard			Inboard			Total number of HH
	No. of HH	Gear maintenance cost (USD)	No. of HH	Gear maintenance cost (USD)	Boat maintenance cost (USD)	No. of HH	Gear maintenance cost (USD)	Boat maintenance cost (USD)	No. of HH	Gear maintenance cost (USD)	Boat maintenance cost (USD)	
CGN	0	0.0	3	61.8	8.7	0	0.0	0.0	0	0.0	0.0	3
SGN	0	0.0	0	0.0	0.0	1	100.0	37.5	0	0.0	0.0	1
CT	1	4.4	34	60.3	14.9	12	436.6	37.2	4	255.0	32.8	51
FGN	0	0.0	7	58.1	5.4	3	36.0	11.7	0	0.0	0.0	10
MGN	0	0.0	0	0.0	0.0	1	18.0	15.0	0	0.0	0.0	1
MUGN	0	0.0	2	46.8	22.5	0	0.0	0.0	0	0.0	0.0	2
HPN	24	12.9	10	23.9	14.7	0	0.0	0.0	0	0.0	0.0	34
HFC	2	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	2
HFS	5	0.0	1	0.0	15.0	0	0.0	0.0	0	0.0	0.0	6
SBN	0	0.0	1	62.8	(No reply)	0	0.0	0.0	0	0.0	0.0	1
Total HH	32		58			17			4			111

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net
: HH=Household



Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

Figure 13. Economics of fishing operation in average maintenance cost per year (USD)

Part II - 10 Source of credit and amount

a) Source of credit

Fishing gear used	Taken loan		Source of credit							
	Yes	No	Commercial bank		Government agencies		Middlemen		Others	
			Fisheries	Non-fisheries	Fisheries	Non-fisheries	Fisheries	Non-fisheries	Fisheries	Non-fisheries
CGN	1	2	1	0	0	0	0	0	0	0
SGN	1	0	0	0	0	0	1	0	0	0
CT	34	17	13	2	0	0	16	0	4	0
FGN	2	8	0	0	0	0	2	0	0	0
MGN	0	1	0	0	0	0	0	0	0	0
MUGN	0	2	0	0	0	0	0	0	0	0
HPN	14	20	4	1	0	0	3	0	4	2
HFC	0	2	0	0	0	0	0	0	0	0
HFS	1	5	0	0	0	0	0	0	0	1
SBN	1	0	1	0	0	0	0	0	0	0
Subtotal	54	57	19	3	0	0	22	0	8	3
Total		111	22		0		22		11	55
Total (%)			40				40		20	

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

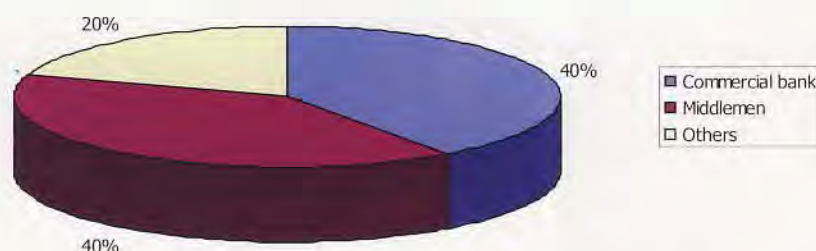
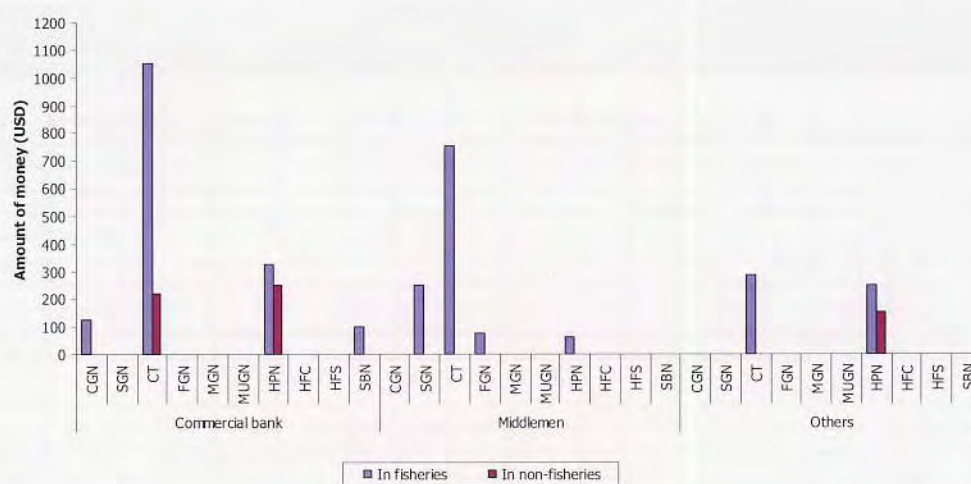


Figure 14. Source of credit by total

b) Total amount of loan (in USD)

Fishing gear used	Amount (USD)							
	Commercial bank		Government agencies		Middlemen		Others	
	Fisheries	Non-fisheries	Fisheries	Non-fisheries	Fisheries	Non-fisheries	Fisheries	Non-fisheries
CGN	125.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SGN	0.00	0.00	0.00	0.00	250.00	0.00	0.00	0.00
CT	1050.00	220.00	0.00	0.00	752.50	0.00	290.00	0.00
FGN	0.00	0.00	0.00	0.00	75.00	0.00	0.00	0.00
MGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MUGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HPN	325.00	250.00	0.00	0.00	61.75	0.00	250.00	152.50
HFC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HFS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
SBN	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal	1600.00	470.00	0.00	0.00	1139.25	0.00	540.00	154.50
Total								3903.75

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net



Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

Figure 15. Source of credit and amount

b) Source of credit by village

Fishing gear used	Taken loan		Source of credit							
	Yes	No	Commercial bank		Government agencies		Middlemen		Others	
			Fisheries	Non	Fisheries	Non	Fisheries	Non	Fisheries	Non
Prek Pros										
CGN	0	0	0	0	0	0	0	0	0	0
SGN	0	0	0	0	0	0	0	0	0	0
CT	18	5	7	2	0	0	7	0	3	0
FGN	0	0	0	0	0	0	0	0	0	0
MGN	0	0	0	0	0	0	0	0	0	0
MUGN	0	0	0	0	0	0	0	0	0	0
HPN	8	8	3	0	0	0	1	0	3	1
HFC	0	0	0	0	0	0	0	0	0	0
HFS	0	0	0	0	0	0	0	0	0	0
SBN	0	0	0	0	0	0	0	0	0	0
Subtotal	26	13	10	2	0	0	8	0	6	1
Prek Sangke										
CGN	0	1	0	0	0	0	0	0	0	0
SGN	0	0	0	0	0	0	0	0	0	0
CT	11	3	3	0	0	0	7	0	1	0
FGN	2	6	0	0	0	0	2	0	0	0
MGN	0	1	0	0	0	0	0	0	0	0
MUGN	0	1	0	0	0	0	0	0	0	0
HPN	2	2	0	0	0	0	1	0	1	0
HFC	0	0	0	0	0	0	0	0	0	0
HFS	0	2	0	0	0	0	0	0	0	0
SBN	0	0	0	0	0	0	0	0	0	0
Subtotal	15	16	3	0	0	0	10	0	2	0
Prek Tal										
CGN	0	1	0	0	0	0	0	0	0	0
SGN	0	0	0	0	0	0	0	0	0	0
CT	0	5	0	0	0	0	0	0	0	0
FGN	0	2	0	0	0	0	0	0	0	0
MGN	0	0	0	0	0	0	0	0	0	0
MUGN	0	1	0	0	0	0	0	0	0	0
HPN	0	7	0	0	0	0	0	0	0	0
HFC	0	1	0	0	0	0	0	0	0	0
HFS	1	1	0	0	0	0	0	0	0	1
SBN	0	0	0	0	0	0	0	0	0	0
Subtotal	1	18	0	0	0	0	0	0	0	1
Kampong Chin										
CGN	1	0	1	0	0	0	0	0	0	0
SGN	1	0	0	0	0	0	1	0	0	0
CT	5	4	3	0	0	0	2	0	0	0
FGN	0	0	0	0	0	0	0	0	0	0
MGN	0	0	0	0	0	0	0	0	0	0
MUGN	0	0	0	0	0	0	0	0	0	0
HPN	4	3	1	1	0	0	1	0	0	1
HFC	0	1	0	0	0	0	0	0	0	0
HFS	0	2	0	0	0	0	0	0	0	0
SBN	1	0	1	0	0	0	0	0	0	0
Subtotal	12	10	6	1	0	0	4	0	0	1
Summary	54	57	19	3	0	0	22	0	8	3
Total		111	22		0		22		11	55

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

c) Total amount of loan (in USD) by village

Fishing gear used	Amount (USD)							
	Commercial bank		Government agencies		Middlemen		Others	
	Fisheries	Non	Fisheries	Non	Fisheries	Non	Fisheries	Non
Prek Pros								
CGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CT	625.00	220.00	0.00	0.00	285.00	0.00	240.00	0.00
FGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MUGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HPN	300.00	0.00	0.00	0.00	25.00	0.00	150.00	120.00
HFC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HFS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SBN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal	925.00	220.00	0.00	0.00	310.00	0.00	390.00	120.00
Prek Sangke								
CGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CT	225.00	0.00	0.00	0.00	317.50	0.00	50.00	0.00
FGN	0.00	0.00	0.00	0.00	75.00	0.00	0.00	0.00
MGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MUGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HPN	0.00	0.00	0.00	0.00	23.75	0.00	100.00	0.00
HFC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HFS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SBN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal	225.00	0.00	0.00	0.00	416.25	0.00	150.00	0.00
Prek Tal								
CGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MUGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HFC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HFS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
SBN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Kampong Chin								
CGN	125.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SGN	0.00	0.00	0.00	0.00	250.00	0.00	0.00	0.00
CT	200.00	0.00	0.00	0.00	150.00	0.00	0.00	0.00
FGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MUGN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HPN	25.00	250.00	0.00	0.00	13.00	0.00	0.00	32.50
HFC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HFS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SBN	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal	450.00	250.00	0.00	0.00	413.00	0.00	0.00	32.50
Summary	1600.00	470.00	0.00	0.00	1139.25	0.00	540.00	154.50
Total								3903.75

Remarks: CGN=Crab gillnet, SGN=Shrimp gillnet, CT=Crab trap, FGN=Fish gillnet, MGN=Mackerel gillnet, MUGN=Mullet gillnet, HPN=Hand push net, HFC=Hand fishing crab, HFS=Hand fishing shellfish, HK=Hook, SBN=Set bagnet/stow net, CN=Cast net

d) Mean amount of loan (in USD) taken by each fishers

Village	Mean amount (USD)						Mean amount
	Commercial bank		Middlemen		Others		
	Fisheries	Non-fisheries	Fisheries	Non-fisheries	Fisheries	Non-fisheries	
Prek Pros	92.50	110.00	38.75	0.00	65.00	120.00	72.78
Prek Sangke	75.00	0.00	41.63	0.00	75.00	0.00	52.75
Prek Tal	0.00	0.00	0.00	0.00	0.00	2.00	2.00
Kampong Chin	75.00	250.00	103.25	0.00	0.00	32.50	95.46
Mean amount	84.21	156.67	51.78	0.00	67.50	51.50	70.98

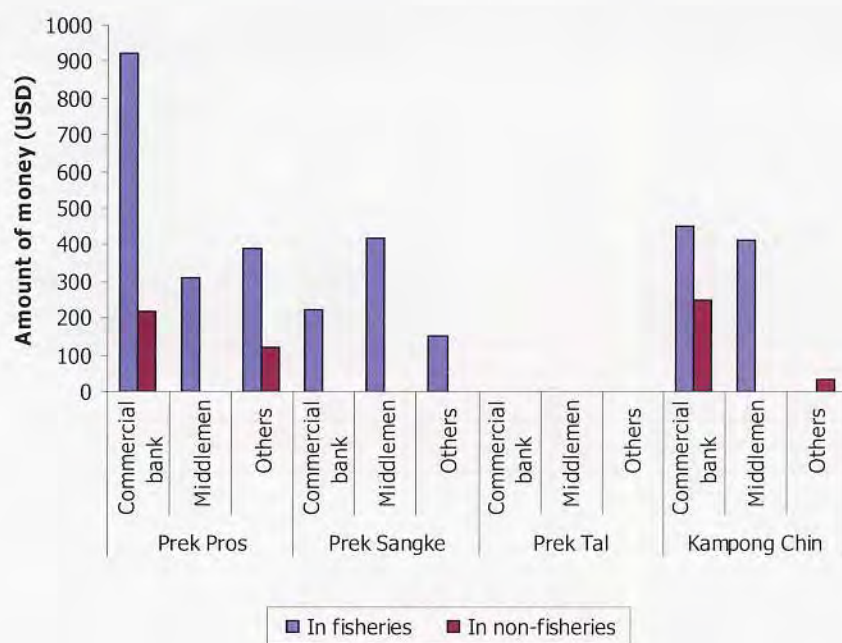


Figure 16. Source of credit and total amount by village

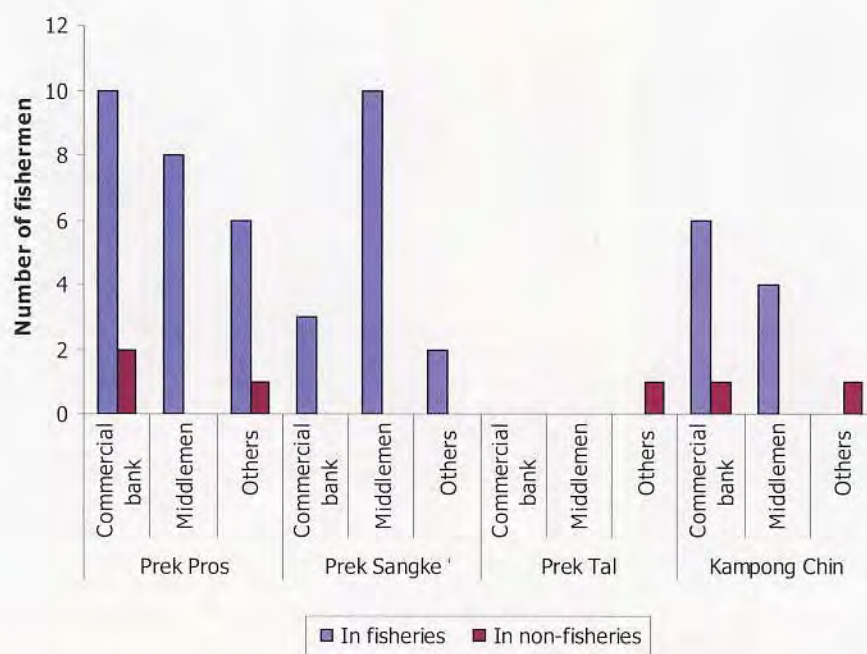


Figure 17. Source of credit and number of fishermen whom taking loan by village

Annex 5 - 3

Analytical Result - Part III

Part III: Gender role through time-consuming in working for a month

Part III - 1 Involvement of women in fisheries

a) Involvement of women in fisheries by village

Village	Fishing gear repair & preparation	Fishing	Fish trading	Fish processing	Fish culturing	Others	No. of participation
Prek Pros	12	4	6	3	0	21	41
Prek Sangke	11	6	7	1	0	13	29
Prek Tal	8	3	2	0	0	8	19
Kampong Chin	0	4	5	2	0	16	23
Total HH	31	17	20	6	0	58	112
Percentage (%)	27.7	15.2	17.9	5.4	0.0	51.8	

Remark: HH=Household

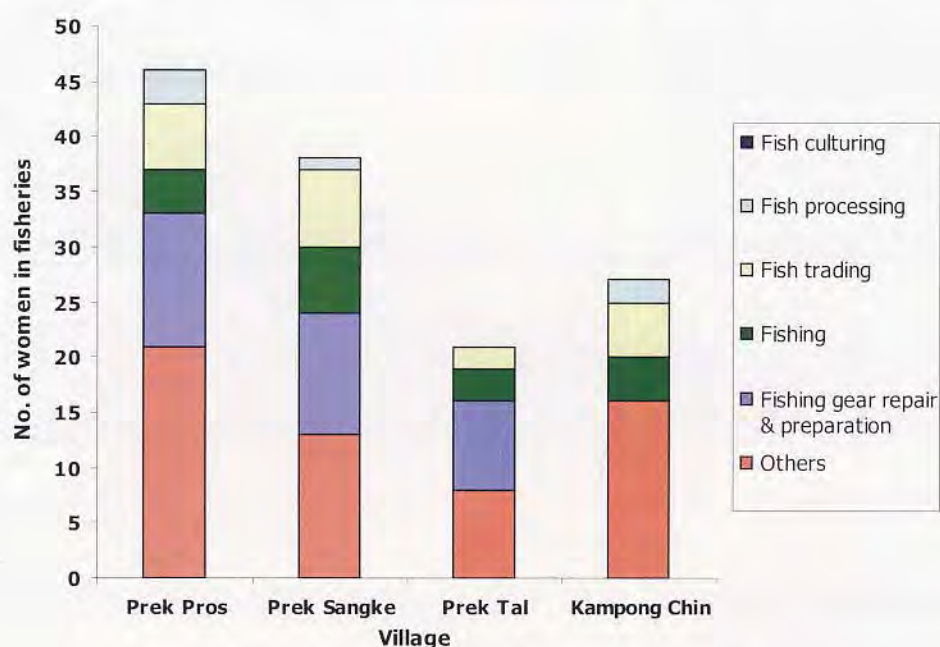


Figure 1. Involvement of women in fisheries by village

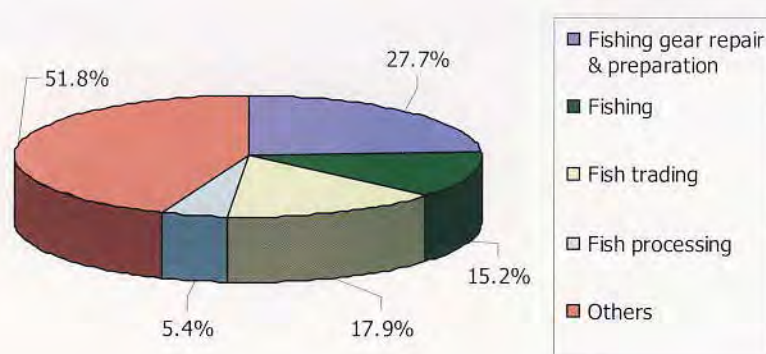


Figure 2. Involvement of women in fisheries by total

b) Involvement of women in fisheries by village and age group

Age group	Fishing gear repair & preparation			Fishing			Fish trading			Fish processing			Fish culturing		
	No. of HH	Days	Hours	No. of HH	Days	Hours	No. of HH	Days	Hours	No. of HH	Days	Hours	No. of HH	Days	Hours
16-24															
Prek Pros	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Prek Sangke	1	20	0.5	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Prek Tal	4	14	1.5	0	0	0.0	1	5	1.0	0	0	0.0	0	0	0.0
Kampong Chin	0	0	0.0	1	3	24.0	0	0	0.0	0	0	0.0	0	0	0.0
Sub-total	5	17	1.0	1	3	24.0	1	5	1.0	0	0	0.0	0	0	0.0
25-35															
Prek Pros	3	9	7.0	2	15	11.0	1	20	0.5	0	0	0.0	0	0	0.0
Prek Sangke	4	18	3.0	3	19	8.0	5	22	1.0	1	20	3.0	0	0	0.0
Prek Tal	1	5	1.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Kampong Chin	0	0	0.0	0	0	0.0	2	16	0.3	1	15	12.0	0	0	0.0
Sub-total	8	10.7	3.7	5	17	9.5	8	19	0.6	2	17.5	7.5	0	0	0.0
36-45															
Prek Pros	4	7	3.5	1	25	9.0	3	25	6.0	2	25	0.6	0	0	0.0
Prek Sangke	4	14	4.0	3	18	4.0	1	20	6.0	0	0	0.0	0	0	0.0
Prek Tal	1	2	3.0	1	10	10.0	1	30	0.5	0	0	0.0	0	0	0.0
Kampong Chin	0	0	0.0	3	13	9.0	3	23	0.5	1	7	6.0	0	0	0.0
Sub-total	9	8	3.5	8	16.5	8.0	8	24.5	3.3	3	16	3.3	0	0	0.0
46-55															
Prek Pros	3	16	5.0	1	20	6.0	2	20	1.0	1	20	2.0	0	0	0.0
Prek Sangke	1	4	2.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Prek Tal	2	16	4.0	1	4	7.0	0	0	0.0	0	0	0.0	0	0	0.0
Kampong Chin	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Sub-total	6	11.8	3.7	2	12	6.5	2	20	1.0	1	20	2.0	0	0	0.0
56-65															
Prek Pros	2	16	3.5	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Prek Sangke	1	5	2.0	0	0	0.0	1	22	0.1	0	0	0.0	0	0	0.0
Prek Tal	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Kampong Chin	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Sub-total	3	10.5	2.8	0	0	0.0	1	22	0.1	0	0	0.0	0	0	0.0
66-75															
Prek Pros	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Prek Sangke	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Prek Tal	0	0	0.0	1	30	10.0	0	0	0.0	0	0	0.0	0	0	0.0
Kampong Chin	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Sub-total	0	0	0.0	1	30	10.0	0	0	0.0	0	0	0.0	0	0	0.0
Summary															
Prek Pros	12	11	4.7	4	19	9.3	6	23	4.5	3	23	1.1	0	0	0.0
Prek Sangke	11	14	2.9	6	19	6.2	7	21	1.5	1	20	3.0	0	0	0.0
Prek Tal	8	12	2.2	3	15	9.0	2	18	0.8	0	0	0.0	0	0	0.0
Kampong Chin	0	0	0.0	4	11	13.0	5	20	0.4	2	11	9.0	0	0	0.0
Total	31	12	3.4	17	16	9.0	20	22	2.6	6	19	4.0	0	0	0.0

Remark: HH=Household ; Days=Days/month; Hours=Hours/day

c) Involvement of women in fisheries by age group

Age group	Fishing gear repair & preparation			Fishing			Fish trading			Fish processing			Fish culturing		
	No. of HH	Days	Hours	No. of HH	Days	Hours	No. of HH	Days	Hours	No. of HH	Days	Hours	No. of HH	Days	Hours
16-24	5	17	1.0	1	3	24.0	1	5	1.0	0	0	0.0	0	0	0.0
25-35	8	11	3.7	5	17	9.5	8	19	0.6	2	18	7.5	0	0	0.0
36-45	9	8	3.5	8	17	8.0	8	25	3.3	3	16	3.3	0	0	0.0
46-55	6	12	3.7	2	12	6.5	2	20	1.0	1	20	2.0	0	0	0.0
56-65	3	11	2.8	0	0	0.0	1	22	0.1	0	0	0.0	0	0	0.0
66-75	0	0	0.0	1	30	10.0	0	0	0.0	0	0	0.0	0	0	0.0
Total	31	12	3.4	17	16	9.0	20	22	2.6	6	19	4.0	0	0	0.0

Part III - 2 Involvement of woman in household works and other businesses

Village	Laboring and other than fisheries	Household works	No. of participation
Prek Pros	4	41	41
Prek Sangke	0	28	29
Prek Tal	5	19	19
Kampong Chin	3	17	23
Total	12	105	112
Percentage(%)	10.7	93.8	

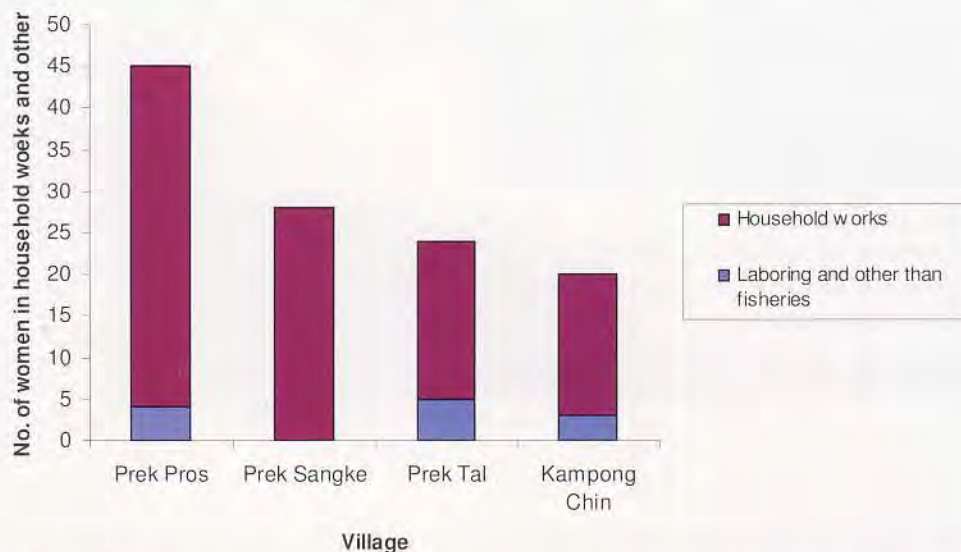


Figure 3. Involvement of women in household works and other businesses by village

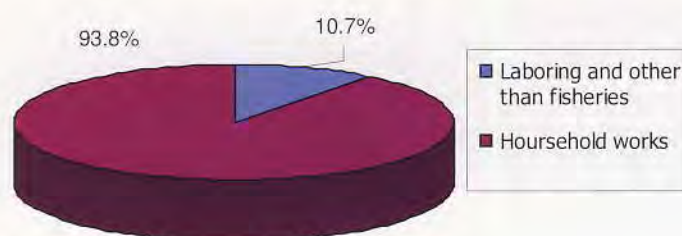


Figure 4. Involvement of women in household works and other businesses by total

b) Involvement of women in household works and other businesses by age group

Age group	Laboring other than fisheries			Household works		
	No. of HH	Days	Hours	No. of HH	Days	Hours
16-24						
Prek Pros	0	0	0.0	0	0	0.0
Prek Sangke	0	0	0.0	3	30	7.0
Prek Tal	3	7	6.0	8	30	9.0
Kampong Chin	0	0	0.0	1	30	12.0
Sub-total	3	7	6.0	12	30	9.3
25-35						
Prek Pros	0	0	0.0	8	29	8.0
Prek Sangke	0	0	0.0	9	30	9.0
Prek Tal	1	20	8.0	2	30	8.0
Kampong Chin	2	25	7.0	5	30	7.0
Sub-total	3	23	7.5	24	30	8.0
36-45						
Prek Pros	2	20	4.0	18	30	7.0
Prek Sangke	0	0	0.0	11	30	7.0
Prek Tal	1	20	8.0	4	30	7.0
Kampong Chin	1	30	6.0	9	30	6.0
Sub-total	4	23	6.0	42	30	6.8
46-55						
Prek Pros	2	15	7.5	10	30	8.0
Prek Sangke	0	0	0.0	2	30	9.5
Prek Tal	0	0	0.0	2	30	9.0
Kampong Chin	0	0	0.0	2	30	12.0
Sub-total	2	15	7.5	16	30	9.6
56-65						
Prek Pros	0	0	0.0	4	30	5.0
Prek Sangke	0	0	0.0	3	30	9.0
Prek Tal	0	0	0.0	2	30	9.0
Kampong Chin	0	0	0.0	0	0	0.0
Sub-total	0	0	0.0	9	30	7.7
66-75						
Prek Pros	0	0	0.0	1	30	11.0
Prek Sangke	0	0	0.0	0	0	0.0
Prek Tal	0	0	0.0	1	30	4.0
Kampong Chin	0	0	0.0	0	0	0.0
Sub-total	0	0	0.0	2	30	7.5
Summary						
Prek Pros	4	18	5.8	41	30	7.0
Prek Sangke	0	0	0.0	28	30	8.0
Prek Tal	5	12	6.8	19	30	8.1
Kampong Chin	3	27	6.7	17	30	7.6
Total	12	18	6.4	105	30	7.6

Remark: HH=Household ; Days=Days/month; Hours=Hours/day

c) Summary of Involvement of women in household work and other businesses by age group

Age group	Laboring other than fisheries			Household works		
	No. of HH	Days	Hours	No. of HH	Days	Hours
16-24	3	7	6.0	12	30	9.3
25-35	3	23	7.5	24	30	8.0
36-45	4	23	6.0	42	30	6.8
46-55	2	15	7.5	16	30	9.6
56-65	0	0	0.0	9	30	7.7
66-75	0	0	0.0	2	30	7.5
Total	12	18	6.4	105	30	7.6

Remark: HH=Household ; Days=Days/month; Hours=Hours/day

Part III - 3 Involvement of men in fisheries

a) Involvement of men in fisheries by village

Village	Fishing gear repair & preparation	Fishing	Fish trading	Fish processing	Fish culturing	No. of participation
Prek Pros	26	34	6	2	0	41
Prek Sangke	18	29	4	0	0	29
Prek Tal	12	17	1	0	0	19
Kampong Chin	15	22	0	2	0	23
Total HH	71	102	11	4	0	112
Percentage (%)	63.4	91.1	9.8	3.6	0.0	

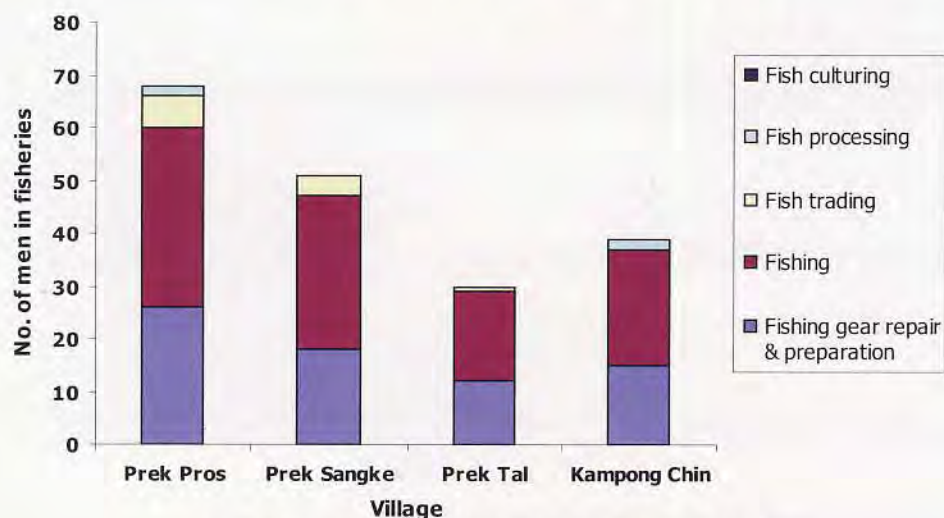


Figure 5. Involvement of men in fisheries by village

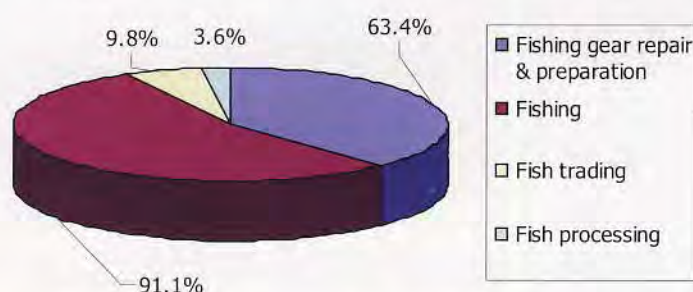


Figure 6. Involvement of men in fisheries by total

b) Involvement of men in fisheries by age group

Age group	Fishing gear repair & preparation			Fishing			Fish trading			Fish processing			Fish culturing		
	No. of HH	Days	Hours	No. of HH	Days	Hours	No. of HH	Days	Hours	No. of HH	Days	Hours	No. of HH	Days	Hours
16-24															
Prek Pros	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Prek Sangke	2	23	1.3	6	17	7.5	2	23	0.5	0	0	0.0	0	0	0.0
Prek Tal	6	21	3.0	8	21	6.5	0	0	0.0	0	0	0.0	0	0	0.0
Kampong Chin	2	28	2.0	3	20	7.0	0	0	0.0	0	0	0.0	0	0	0.0
Sub-total	10	24	2.1	17	19	7.0	2	23	0.5	0	0	0.0	0	0	0.0
25-35															
Prek Pros	4	10	8.0	7	23	8.0	2	25	2.0	0	0	0.0	0	0	0.0
Prek Sangke	3	24	5.0	8	24	9.0	0	0	0.0	0	0	0.0	0	0	0.0
Prek Tal	2	23	1.0	2	23	10.0	1	15	0.5	0	0	0.0	0	0	0.0
Kampong Chin	4	15	0.5	5	24	10.0	0	0	0.0	1	15	12.0	0	0	0.0
Sub-total	13	18	3.6	22	23	9.3	3	20	1.3	1	15	12.0	0	0	0.0
36-45															
Prek Pros	13	15	5.0	14	25	7.5	3	25	0.5	1	25	0.2	0	0	0.0
Prek Sangke	9	20	5.5	10	25	7.0	1	20	6.0	0	0	0.0	0	0	0.0
Prek Tal	1	30	0.3	2	19	8.3	0	0	0.0	0	0	0.0	0	0	0.0
Kampong Chin	7	20	3.0	12	21	9.0	0	0	0.0	1	7	6.0	0	0	0.0
Sub-total	30	21	3.5	38	23	7.9	4	23	3.3	2	16	3.1	0	0	0.0
46-55															
Prek Pros	6	17	7.0	9	22	7.5	1	20	0.5	1	20	2.0	0	0	0.0
Prek Sangke	2	7	2.5	2	20	5.5	0	0	0.0	0	0	0.0	0	0	0.0
Prek Tal	1	1	7.0	2	28	7.0	0	0	0.0	0	0	0.0	0	0	0.0
Kampong Chin	2	29	1.0	2	24	11.0	0	0	0.0	0	0	0.0	0	0	0.0
Sub-total	11	13	4.4	15	23	7.8	1	20	0.5	1	20	2.0	0	0	0.0
56-65															
Prek Pros	2	30	1.5	3	25	8.0	0	0	0.0	0	0	0.0	0	0	0.0
Prek Sangke	2	18	1.3	3	24	9.0	1	22	0.1	0	0	0.0	0	0	0.0
Prek Tal	2	16	1.5	2	9	8.5	0	0	0.0	0	0	0.0	0	0	0.0
Kampong Chin	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Sub-total	6	21	1.4	8	19	8.5	1	22	0.1	0	0	0.0	0	0	0.0
66-75															
Prek Pros	1	25	7.0	1	25	7.0	0	0	0.0	0	0	0.0	0	0	0.0
Prek Sangke	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Prek Tal	0	0	0.0	1	30	10.0	0	0	0.0	0	0	0.0	0	0	0.0
Kampong Chin	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Sub-total	1	25	7.0	2	28	8.5	0	0	0.0	0	0	0.0	0	0	0.0
Summary															
Prek Pros	26	16	5.6	34	24	7.7	6	24	1.1	2	23	1.1	0	0	0.0
Prek Sangke	18	19	4.2	29	23	7.8	4	22	1.8	0	0	0.0	0	0	0.0
Prek Tal	12	20	2.7	17	21	7.6	1	15	0.5	0	0	0.0	0	0	0.0
Kampong Chin	15	21	2.0	22	22	9.0	0	0	0.0	2	11	9.0	0	0	0.0
Total	71	18	4.0	102	22	8.0	11	22	1.3	4	17	5.0	0	0	0.0

Remark: HH=Household ; Days=Days/month; Hours=Hours/day

C) Summary of Involvement of men in fisheries by age group

Age group	Fishing gear repair & preparation			Fishing			Fish trading			Fish processing			Fish culturing		
	No. of HH	Days	Hours	No. of HH	Days	Hours	No. of HH	Days	Hours	No. of HH	Days	Hours	No. of HH	Days	Hours
16-24	10	24	2.1	17	19	7.0	2	23	0.5	0	0	0.0	0	0	0.0
25-35	13	18	3.6	22	23	9.3	3	20	1.3	1	15	12.0	0	0	0.0
36-45	30	21	3.5	38	23	7.9	4	23	3.3	2	16	3.1	0	0	0.0
46-55	11	13	4.4	15	23	7.8	1	20	0.5	1	20	2.0	0	0	0.0
56-65	6	21	1.4	8	19	8.5	1	22	0.1	0	0	0.0	0	0	0.0
66-75	1	25	7.0	2	28	8.5	0	0	0.0	0	0	0.0	0	0	0.0
Total	71	18	4.0	102	22	8.0	11	22	1.3	4	17.3	5.0	0	0	0.0

Remark: HH=Household ; Days=Days/month; Hours=Hours/day

Part III - 4 Involvement of men in household works and other businesses

Village	Laboring and other than fisheries	Household works	No. of participation
Prek Pros	3	24	41
Prek Sangke	1	15	29
Prek Tal	8	10	19
Kampong Chin	5	15	23
Total	17	64	112
Percentage(%)	15.18	57.14	

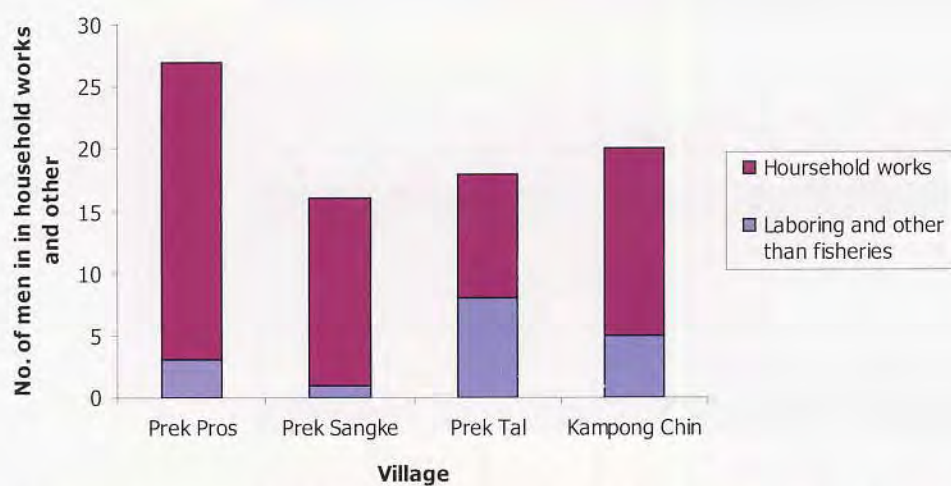


Figure 7. Involvement of men in household works and other businesses by village

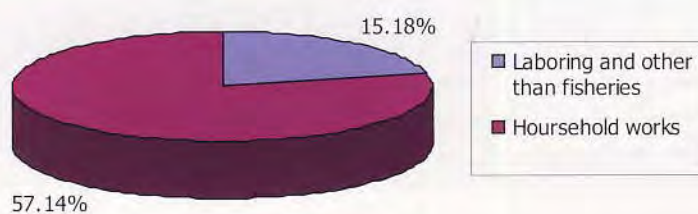


Figure 8. Involvement of men in household works and other businesses by total

b) Involvement of men in household work and other businesses by age group

Age group	Laboring other than fisheries			Household works		
	No. of HH	Days	Hours	No. of HH	Days	Hours
16-24						
Prek Pros	0	0	0.0	0	0	0.0
Prek Sangke	0	0	0.0	4	29	2.3
Prek Tal	4	11	6.0	5	25	3.0
Kampong Chin	1	3	5.0	3	23	4.0
Sub-total	5	7	5.5	12	26	3.1
25-35						
Prek Pros	1	20	4.0	4	19	2.0
Prek Sangke	0	0	0.0	4	25	3.3
Prek Tal	1	20	8.0	1	30	0.5
Kampong Chin	2	25	7.0	4	28	1.3
Sub-total	4	22	6.3	13	25	1.8
36-45						
Prek Pros	2	7	8.0	13	21	3.0
Prek Sangke	0	0	0.0	5	24	4.0
Prek Tal	2	15	8.0	0	0	0.0
Kampong Chin	2	17	6.0	7	22	2.0
Sub-total	6	13	7.3	25	22	3.0
46-55						
Prek Pros	0	0	0.0	4	18	4.0
Prek Sangke	0	0	0.0	1	15	4.0
Prek Tal	0	0	0.0	1	15	7.0
Kampong Chin	0	0	0.0	1	15	6.0
Sub-total	0	0	0.0	7	16	5.3
56-65						
Prek Pros	0	0	0.0	2	23	4.5
Prek Sangke	1	20	8.0	1	25	2.0
Prek Tal	0	0	0.0	2	23	3.5
Kampong Chin	0	0	0.0	0	0	0.0
Sub-total	1	20	8.0	5	23	3.3
66-75						
Prek Pros	0	0	0.0	1	15	7.0
Prek Sangke	0	0	0.0	0	0	0.0
Prek Tal	1	10	4.0	1	3	1.0
Kampong Chin	0	0	0.0	0	0	0.0
Sub-total	1	10	4.0	2	9	4.0
Summary						
Prek Pros	3	11	6.7	24	20	3.5
Prek Sangke	1	20	8.0	15	25	3.1
Prek Tal	8	13	6.5	10	22	2.9
Kampong Chin	5	17	6.2	15	23	2.4
Total	17	14	6.5	64	22	3.0

Remark: HH=Household ; Days=Days/month; Hours=Hours/day

c) Summary of Involvement of men in household works and other businesses by age group

Age group	Laboring other than fisheries			Household works		
	No. of HH	Days	Hours	No. of HH	Days	Hours
16-24	5	7	5.5	12	26	3.1
25-35	4	22	6.3	13	25	1.8
36-45	6	13	7.3	25	22	3.0
46-55	0	0	0.0	7	16	5.3
56-65	1	20	8.0	5	23	3.3
66-75	1	10	4.0	2	9	4.0
Total	17	14	6.2	64	20	3.4

Remark: HH=Household ; Days=Days/month; Hours=Hours/day

Annex 5 - 4

Analytical Result - Part IV**Part IV: Role of fishermen participation in Community Fisheries (CF) activities or other fishery or community related activities****Part IV - 1 Membership of Community Fisheries (CF) and other groups**

a) Membership of CF and others group by village

Village	Total Household	CF membership		Others Group	Percentage(%)	
		None	Member		CF Non-member	CF Member
Prek Pros	41	12	29	1*	29	71
Prek Sangke	29	6	23	0	21	79
Prek Tal	19	10	9	0	53	47
Kampong Chin	23	19	4	0	83	17
Total	112	47	65	1	42	58

Remark: * 1 person was a member of 2 groups CF and other group

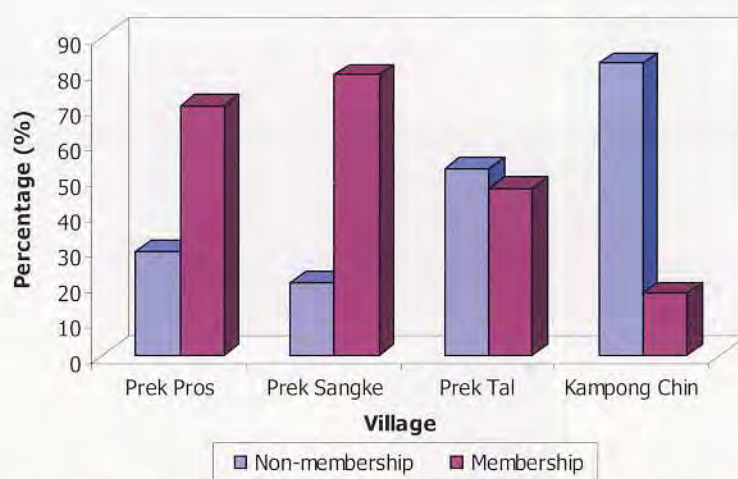


Figure 1. Membership of Community Fisheries group by village

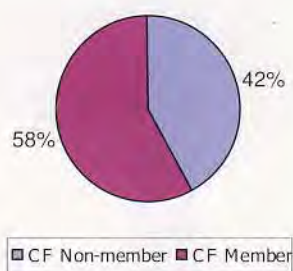


Figure 2. Membership of Community Fisheries group by total

b) Roles of members in CF and other groups

Village	CF		Others
	Member	Committee	Member
Prek Pros	27	2	1*
Prek Sangke	23	0	0
Prek Tal	9	0	0
Kampong Chin	4	0	0
Total	63	2	1

Remark: * 1 person was a member of 2 groups CF and other group

Part IV - 2 Involvement in organizational activities (day/hours per month/year)

a) Member's involvement in organization activities

Membership status by village	None parti. in CF Act.(person)	Parti. in CF Act.(person)	CF						Others		
			Meeting (person)	Times/yr	Hrs./d.	Patrolling (person)	Times/yr	Hrs./d.	Meeting (person)	Times/yr	Hrs./d.
Prek Pros	8	21									
Committee	0	2	2	12	3	2	126	3	0	0	0
Member	8	19	18	29	5	3	20	13	1	1	3
Prek Sangke	6	17									
Committee	0	0	0	0	0	0	0	0	0	0	0
Member	6	17	11	16	3	9	12	4	0	0	0
Prek Tal	3	6									
Committee	0	0	0	0	0	0	0	0	0	0	0
Member	3	6	5	7	6	2	6	9	0	0	0
Kampong Chin	0	4									
Committee	0	0	0	0	0	0	0	0	0	0	0
Member	0	4	4	18	3	0	0	0	0	0	0
Total	17	48	41	82	21	16	164	29	1	1	3
Percentage(%)	26	74	71			29			100		
Average				15	4		30	7		1	3

Remark: parti=participation, Act. =Activities, Hrs. /d= Hours/day

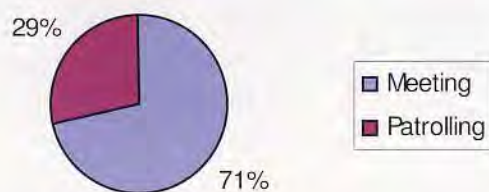


Figure 3. Community Fisheries' s member involve in the group activities by total (in percentage)

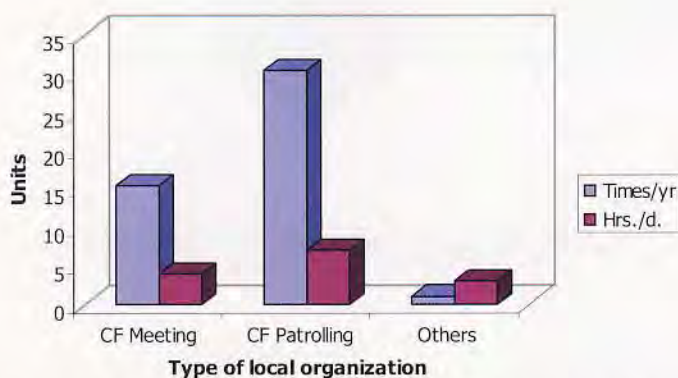


Figure 4. Period of member's in CF group and others group involve in the group activities

Part IV - 3 Participation in community development works or group activities

a) Participation in community development works by age group and by total

Age group	Total household of membership	Status		Participation of CF activities			
		Committee	Member	Patrolling	Percentage(%)	Meeting	Percentage(%)
16-24	4	0	4	1	1.8	1	1.8
25-35	15	0	15	3	5.4	10	17.9
36-45	30	1	29	8	14.3	16	28.6
46-55	9	1	8	2	3.6	6	10.7
56-65	7	0	7	2	3.6	7	12.5
66-75	0	0	0	0	0.0	0	0.0
Total	65	2	63	16	28.6	44	71.4

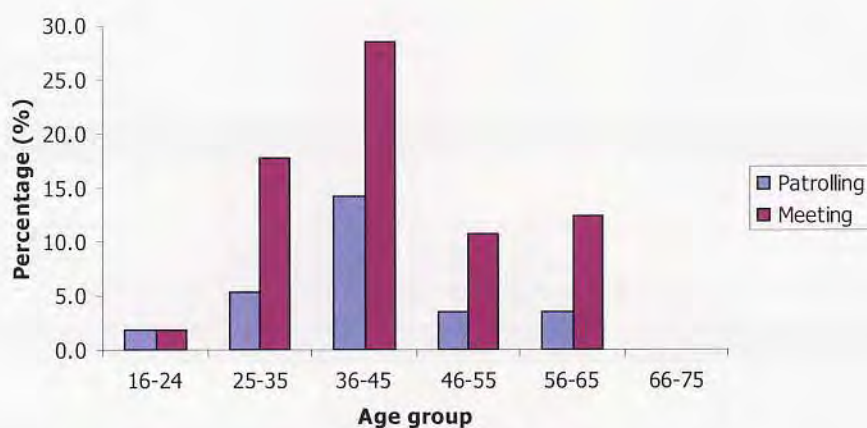


Figure 5. Participation in Patrolling and Meeting for CF activities classify by age group

b) Participation in community development works by age group and by village

Age group	Total household of membership	Status		Participation of CF activities	
		Committee	Member	Patrolling	Meeting
16-24					
Prek Pros	0	0	0	0	0
Prek Sangke	1	0	1	1	1
Prek Tal	3	0	3	0	0
Kampong Chin	0	0	0	0	0
Subtotal	4	0	4	1	1
25-35					
Prek Pros	5	0	5	0	5
Prek Sangke	8	0	8	3	3
Prek Tal	2	0	2	0	2
Kampong Chin	0	0	0	0	0
Subtotal	15	0	15	3	10
36-45					
Prek Pros	14	1	13	3	7
Prek Sangke	10	0	10	4	4
Prek Tal	2	0	2	1	1
Kampong Chin	4	0	4	0	4
Subtotal	30	1	29	8	16
46-55					
Prek Pros	7	1	6	2	5
Prek Sangke	1	0	1	0	0
Prek Tal	1	0	1	0	1
Kampong Chin	0	0	0	0	0
Subtotal	9	1	8	2	6
56-65					
Prek Pros	3	0	3	0	3
Prek Sangke	3	0	3	1	3
Prek Tal	1	0	1	1	1
Kampong Chin	0	0	0	0	0
Subtotal	7	0	7	2	7
66-75					
Prek Pros	0	0	0	0	0
Prek Sangke	0	0	0	0	0
Prek Tal	0	0	0	0	0
Kampong Chin	0	0	0	0	0
Subtotal	0	0	0	0	0
Summary					
Prek Pros	29	2	27	5	20
Prek Sangke	23	0	23	9	11
Prek Tal	9	0	9	2	5
Kampong Chin	4	0	4	0	4
Total	65	2	63	16	40

Part IV - 4 Incentive of member's participation

a) Incentive of CF's member and other group member

Local organization by village	Total household membership	Non-participation		Participation		Incentive		
		Number	Percentage	Number	Percentage(%)	No	Yes in cash	Yes in kinds
Prek Pros								
CF	29	8	28	21	72	21		
Others	1			1				1
Prek Sangke								
CF	23	6	26	17	74	17		
Others								
Prek Tal								
CF	9	3	33	6	67	6		
Others								
Kampong Chin								
CF	4	0	0	4	100	4		
Others								
Total	65	17		48		48		1
Percentage(%)								
CF						100	0	0
Others						0	0	100

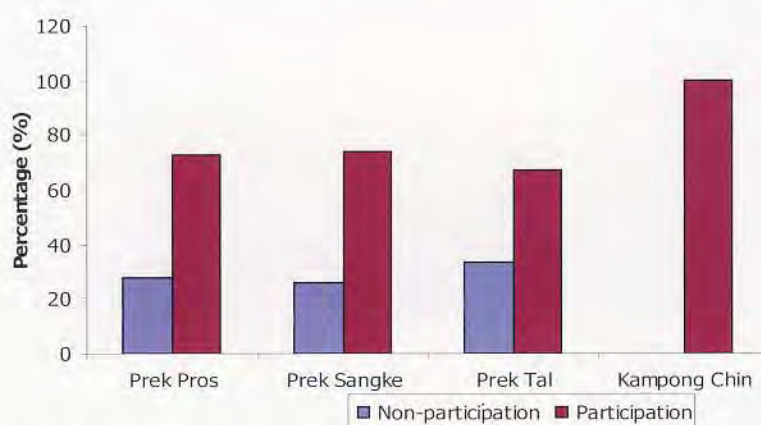


Figure 6. Status CF member who participate in group's activities by village

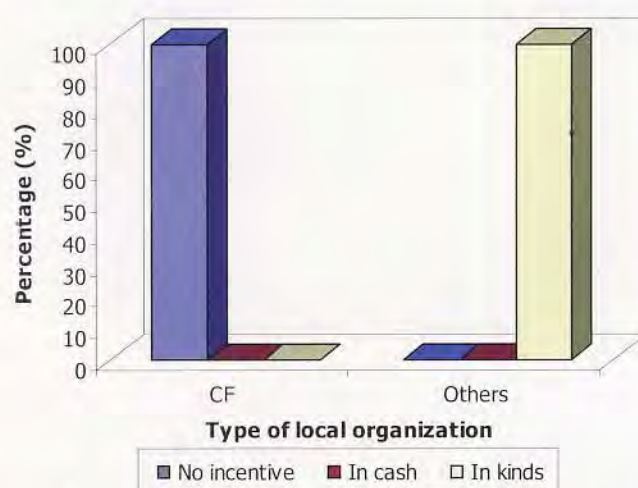


Figure 7. Incentive of CF's member and other group by total

Annex 5 - 5

Analytical Result - Part V**Part V: Problems, interests, needs and expectations****I. PROBLEM**

Village	Prepros		Prek Sanke		Prek Tal		Kampo. Chin		Total	
Issues	No.	%	No.	%	No.	%	No.	%	No.	%
- Total interviewees	41		29		19		23		112	
- No response / No comment	2		0		1		2		5	
A. Issue in fisheries										
01. Encroachment by industrial fishing boats	36	87.8	27	93.1	13	68.4	10	43.5	86	76.8
02. Declining fishery resources	8	19.5	2	6.9	7	36.8	7	30.4	24	21.4
03. Climatic changes	8	19.5	3	10.3	4	21.1	2	8.7	17	15.2
04. Price hike of bait fish (crab trap fishing)	6	14.6	2	6.9	0	0.0	0	0.0	8	7.1
05. Obsolete or too small fishing boat	1	2.4	2	6.9	1	5.3	2	8.7	6	5.4
06. Environmental degradation	3	7.3	1	3.4	0	0.0	1	4.3	5	4.5
07. Poor fish catch by each fisher	0	0.0	0	0.0	3	15.8	1	4.3	4	3.6
08. No intervention by the authorities for illegal fishing	0	0.0	4	13.8	0	0.0	0	0.0	4	3.6
09. Lack of money to procure fishing equipment	3	7.3	0	0.0	0	0.0	1	4.3	4	3.6
10. Too many fishers in the sea	1	2.4	1	3.4	1	5.3	0	0.0	3	2.7
11. Non access to the public credit scheme	1	2.4	0	0.0	1	5.3	0	0.0	2	1.8
12. Price hike of fuel	2	4.9	0	0.0	0	0.0	0	0.0	2	1.8
13. Lack of knowledge in aquaculture	1	2.4	0	0.0	0	0.0	0	0.0	1	0.9
14. Invasion to the fishing ground by other fishers	0	0.0	0	0.0	1	5.3	0	0.0	1	0.9
15. Loss of fishing gear by theft	1	2.4	0	0.0	0	0.0	0	0.0	1	0.9
B. Issue in socio-economics/infrastructure										
01. No water supply system	7	17.1	6	20.7	3	15.8	3	13.0	19	17.0
02. Insufficient income to sustain a family	6	14.6	4	13.8	1	5.3	4	17.4	15	13.4
03. Lack of medical care facilities	2	4.9	2	6.9	3	15.8	7	30.4	14	12.5
04. No electricity supply system	1	2.4	5	17.2	0	0.0	3	13.0	9	8.0
05. No other alternative job than fishing	0	0.0	2	6.9	1	5.3	3	13.0	6	5.4
06. Lack of road connection	1	2.4	0	0.0	1	5.3	2	8.7	4	3.6
07. Lack of public transportation	0	0.0	0	0.0	0	0.0	2	8.7	2	1.8
08. Poor house to live	0	0.0	0	0.0	0	0.0	2	8.7	2	1.8
09. No toilet facilities in a house	0	0.0	0	0.0	0	0.0	1	4.3	1	0.9
10. Lack of language education	0	0.0	1	3.4	0	0.0	0	0.0	1	0.9
11. Poor educational facilities	0	0.0	0	0.0	1	5.3	0	0.0	1	0.9
12. No job for family	1	2.4	0	0.0	0	0.0	0	0.0	1	0.9
C. Issue in agriculture / livestock										
01. Sea water inflow into paddy field	0	0.0	1	3.4	2	10.5	1	4.3	4	3.6
02. Lack of fund to procure livestock	1	2.4	2	6.9	0	0.0	0	0.0	3	2.7
03. Lack of knowledge on animal raising	0	0.0	1	3.4	0	0.0	0	0.0	1	0.9
04. Mice and insect infestation in paddy field	0	0.0	1	3.4	0	0.0	0	0.0	1	0.9
05. Breaking out fire in paddy field	0	0.0	0	0.0	1	5.3	0	0.0	1	0.9
06. Small paddy field	0	0.0	0	0.0	0	0.0	1	4.3	1	0.9

Figure 1: Problem by total



Figure 2: Problem by sector

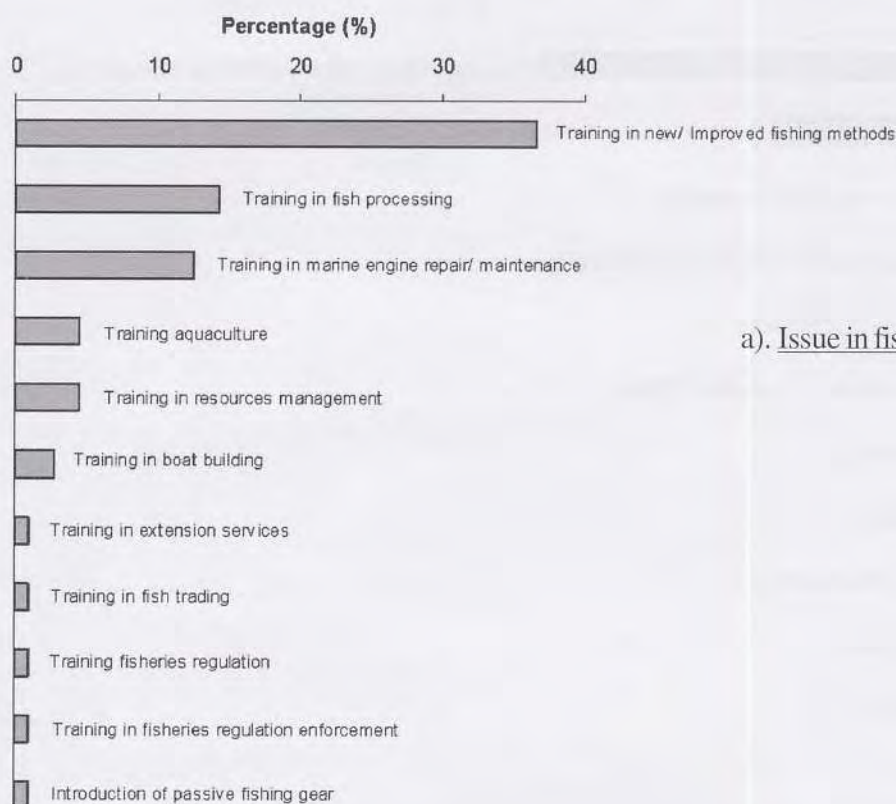


2. INTEREST

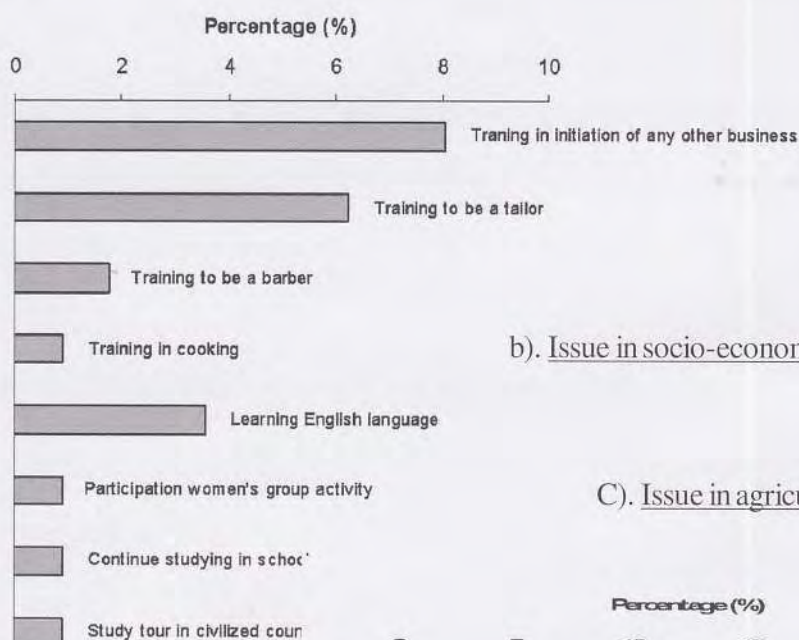
Village	Prepros		Prek Sanke		Prek Tal		Kamp. Chin		Total	
Issues	No.	%	No.	%	No.	%	No.	%	No.	%
- Total interviewees	41		29		19		23		112	
- No response / No comment	4		2		0		3		9	
A. Issue in fisheries										
01. Training in new / improved fishing methods	14	34.1	10	34.5	9	47.4	8	34.8	41	36.6
02. Training in fish processing	5	12.2	3	10.3	2	10.5	6	26.1	16	14.3
03. Training in marine engine repair/ maintenance	3	7.3	3	10.3	2	10.5	6	26.1	14	12.5
04. Training in aquaculture	2	4.9	1	3.4	1	5.3	1	4.3	5	4.5
05. Training in resources management	1	2.4	3	10.3	1	5.3	0	0.0	5	4.5
06. Training in boat building	0	0.0	0	0.0	1	5.3	2	8.7	3	2.7
07. Training in extension services	1	2.4	0	0.0	0	0.0	0	0.0	1	0.9
08. Training in fish trading	0	0.0	1	3.4	0	0.0	0	0.0	1	0.9
09. Training in fisheries regulation	0	0.0	1	3.4	0	0.0	0	0.0	1	0.9
10. Training in fisheries regulation enforcement	0	0.0	1	3.4	0	0.0	0	0.0	1	0.9
11. Introduction of passive fishing gear	0	0.0	0	0.0	1	5.3	0	0.0	1	0.9
B. Issue in socio-economics/infrastructure										
01. Training in initiation of any other business	5	12.2	2	6.9	2	10.5	0	0.0	9	8.0
02. Training to be a tailor	2	4.9	2	6.9	2	10.5	1	4.3	7	6.3
03. Training to be a barber	1	2.4	1	3.4	0	0.0	0	0.0	2	1.8
04. Training in cooking	0	0.0	0	0.0	0	0.0	1	4.3	1	0.9
05. Learning English language	0	0.0	3	10.3	1	5.3	0	0.0	4	3.6
06. Participation women's group activity	0	0.0	0	0.0	0	0.0	1	4.3	1	0.9
07. Continue studying in school	0	0.0	0	0.0	0	0.0	1	4.3	1	0.9
08. Study tour in civilized countries	0	0.0	0	0.0	0	0.0	1	4.3	1	0.9
C. Issue in agriculture / livestock										
01. Training in animal husbandry	8	19.5	7	24.1	5	26.3	6	26.1	26	23.2
02. Training in agriculture	5	12.2	1	3.4	6	31.6	2	8.7	14	12.5

Figure 3: Interests by total

Figure 4: Interests by sector

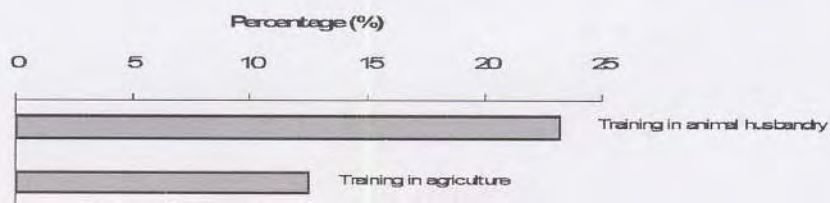


a). Issue in fisheries



b). Issue in socio-economics/ infrastructure

c). Issue in agriculture / livestock



3. IMMEDIATE NEED

Village	Prepros		Prek Sanke		Prek Tal		Kamp. Chin		Total	
Issues	No.	%	No.	%	No.	%	No.	%	No.	%
- Total interviewees	41		29		19		23		112	
- No response / No comment	8		1		0		0		9	
A. Issue in fisheries										
01. Procurement of a motorized / larger boat	9	22.0	3	10.3	0	0.0	0	0.0	12	10.7
02. Procurement of more fishing gear	2	4.9	3	10.3	0	0.0	4	17.4	9	8.0
03. Government intervention to prevent illegal fishing	3	7.3	4	13.8	0	0.0	0	0.0	7	6.3
04. An engine for the patrol boat	0	0.0	3	10.3	0	0.0	0	0.0	3	2.7
05. Construction of CF office building	1	2.4	1	3.4	0	0.0	0	0.0	2	1.8
06. Well organized marketing system	2	4.9	0	0.0	0	0.0	0	0.0	2	1.8
07. Public credit system with low interest	1	2.4	0	0.0	0	0.0	0	0.0	1	0.9
08. Kick-off fund for credit scheme to CF	0	0.0	1	3.4	0	0.0	0	0.0	1	0.9
09. Improvement of present fishing technology	1	2.4	0	0.0	0	0.0	0	0.0	1	0.9
10. Government subsidy for procurement of fishing equipment	1	2.4	0	0.0	0	0.0	0	0.0	1	0.9
B. Issue in socio-economics/infrastructure										
01. Water supply system	26	63.4	21	72.4	11	57.9	13	56.5	71	63.4
02. Construction of clinics/ hospitals	5	12.2	9	31.0	11	57.9	14	60.9	39	34.8
03. Electricity supply system	8	19.5	14	48.3	6	31.6	10	43.5	38	33.9
04. Construction of a toilet in the house	3	7.3	14	48.3	5	26.3	2	8.7	24	21.4
05. Creation of employment opportunity	1	2.4	6	20.7	2	10.5	4	17.4	13	11.6
06. Construction of roads	4	9.8	1	3.4	1	5.3	5	21.7	11	9.8
07. Construction of a house	4	9.8	3	10.3	0	0.0	1	4.3	8	7.1
08. Construction of more schools	0	0.0	0	0.0	3	15.8	3	13.0	6	5.4
09. Public transportation	0	0.0	0	0.0	0	0.0	2	8.7	2	1.8
10. More support from government / NGOs	2	4.9	0	0.0	0	0.0	0	0.0	2	1.8
11. Bicycles for children to commute to school	0	0.0	1	3.4	0	0.0	0	0.0	1	0.9
12. Laying telephone lines	0	0.0	0	0.0	1	5.3	0	0.0	1	0.9
13. Education facilities for the elderly	0	0.0	0	0.0	0	0.0	1	4.3	1	0.9
C. Issue in agriculture / livestock										
01. Construction dikes to protect sea water flow-in to paddy field	0	0.0	0	0.0	4	21.1	1	4.3	5	4.5
02. Bigger land for cultivation	1	2.4	0	0.0	1	5.3	1	4.3	3	2.7
03. Procurement of more fertilizer	1	2.4	1	3.4	0	0.0	1	4.3	3	2.7
04. More numbers of livestock	1	2.4	0	0.0	0	0.0	2	8.7	3	2.7
05. Development of irrigation system	0	0.0	0	0.0	2	10.5	1	4.3	3	2.7

Figure 5: Immediate needs by total

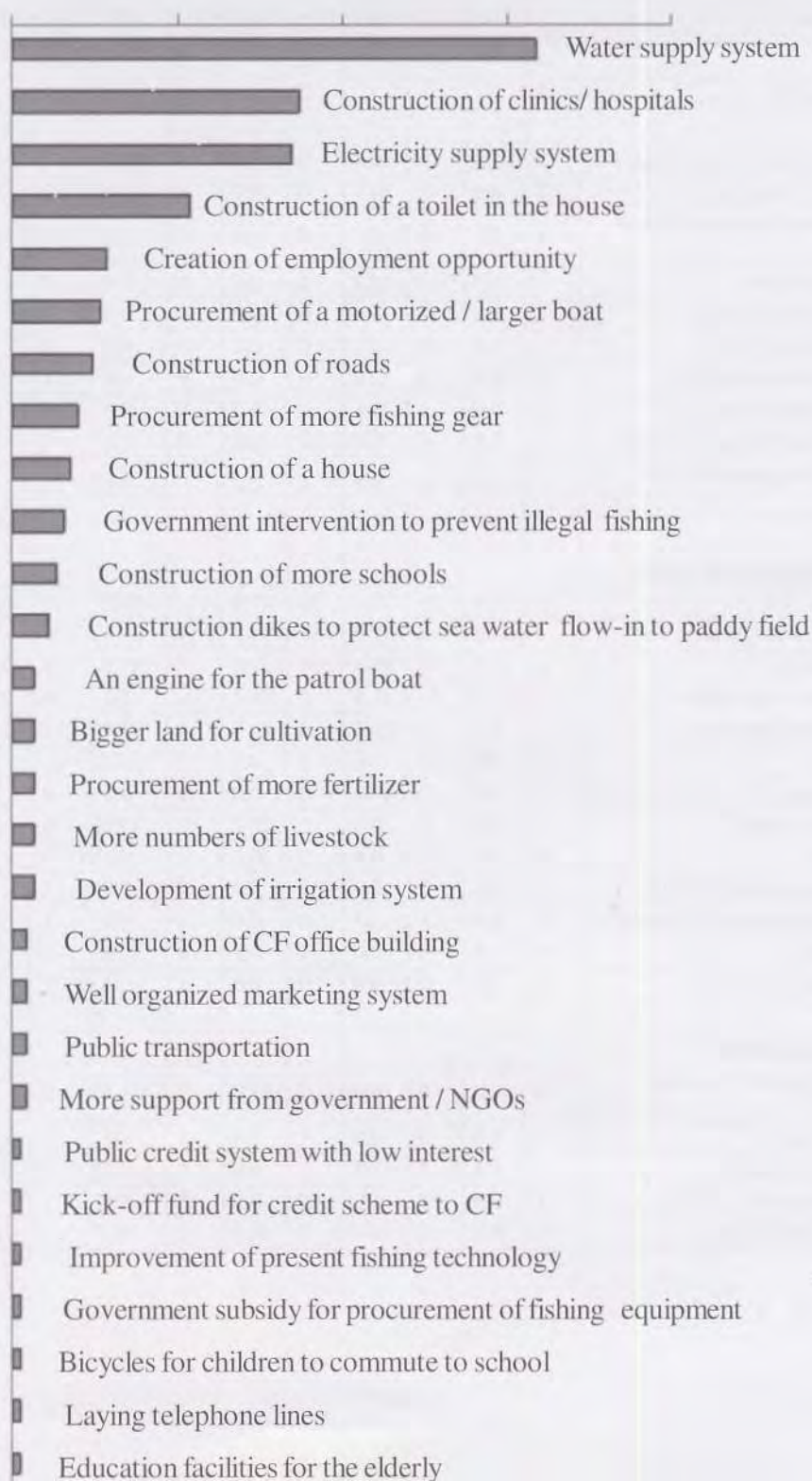
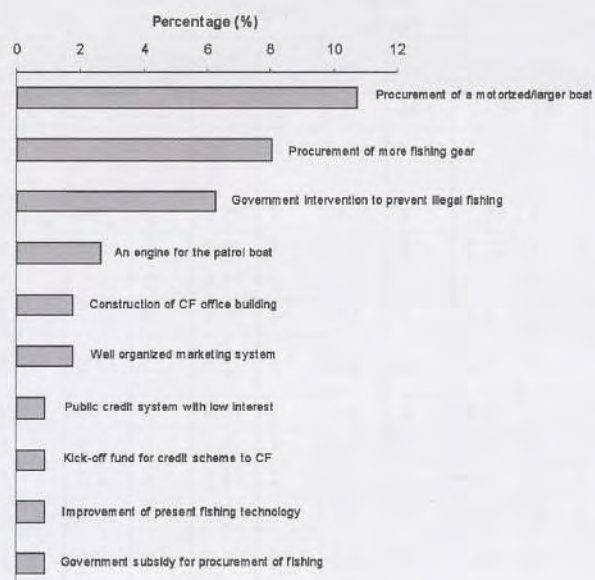
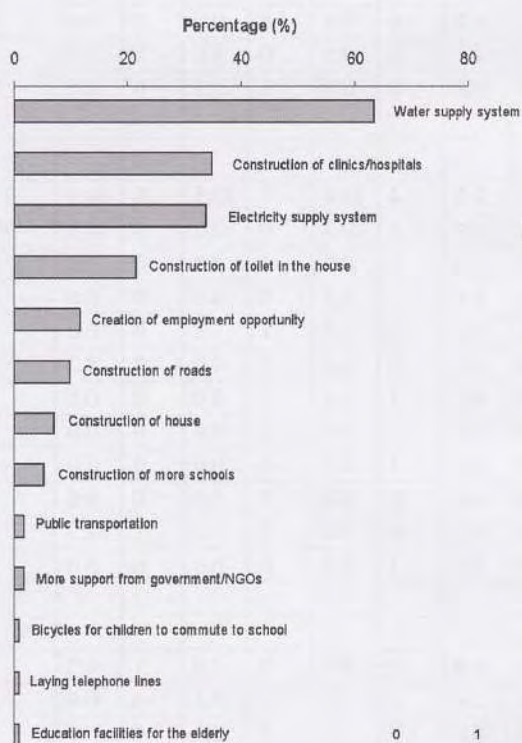
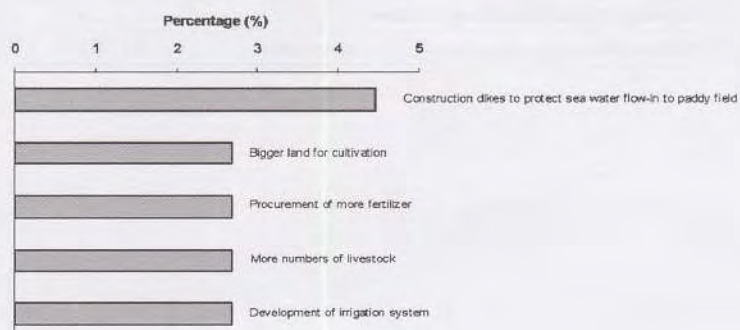


Figure 6: Immediate needs by sector

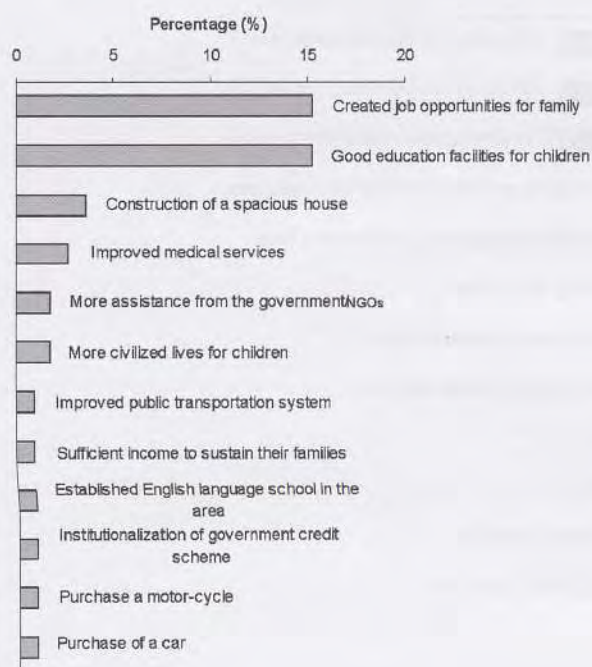
a). Issue in fisheriesb). Issue in socio-economics / infrastructurec). Issue in agriculture / livestock

4. EXPECTATION

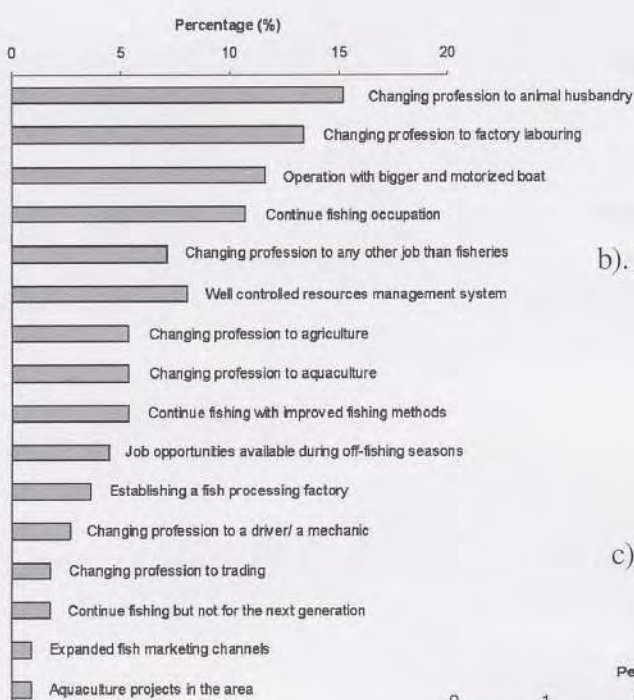
Village	Prepros		Prek Sanke		Prek Tal		Kamp. Chin		Total	
Issues	No.	%	No.	%	No.	%	No.	%	No.	%
- Total interviewees	41		29		19		23		112	
- No response / No comment	0		1		2		0		3	
A. Topics in fisheries										
01. Changing profession to animal husbandry	7	17.1	4	13.8	3	15.8	3	13.0	17	15.2
02. Changing profession to factory labouring	5	12.2	5	17.2	1	5.3	4	17.4	15	13.4
03. Operation with a bigger and motorized boat	7	17.1	1	3.4	3	15.8	2	8.7	13	11.6
04. Continue fishing occupation	2	4.9	1	3.4	4	21.1	5	21.7	12	10.7
05. Changing profession to any other job than fisheries	3	7.3	1	3.4	1	5.3	3	13.0	8	7.1
06. Well controlled resources management system	2	4.9	1	3.4	3	15.8	3	13.0	9	8.0
07. Changing profession to agriculture	3	7.3	1	3.4	1	5.3	1	4.3	6	5.4
08. Changing profession to aquaculture	2	4.9	1	3.4	2	10.5	1	4.3	6	5.4
09. Continue fishing with improved fishing methods	0	0.0	2	6.9	1	5.3	3	13.0	6	5.4
10. Job opportunities available during off-fishing seasons	5	12.2	0	0.0	0	0.0	0	0.0	5	4.5
11. Establishing a fish processing factory	4	9.8	0	0.0	0	0.0	0	0.0	4	3.6
12. Changing profession to a driver/a mechanic	1	2.4	1	3.4	0	0.0	1	4.3	3	2.7
13. Changing profession to trading	2	4.9	0	0.0	0	0.0	0	0.0	2	1.8
14. Continue fishing but not for the next generation	2	4.9	0	0.0	0	0.0	0	0.0	2	1.8
15. Expanded fish marketing channels	1	2.4	0	0.0	0	0.0	0	0.0	1	0.9
16. Aquaculture projects in the area	0	0.0	0	0.0	1	5.3	0	0.0	1	0.9
B. Topics in socio-economics/infrastructure										
01. Created job opportunities for family	3	7.3	4	13.8	2	10.5	8	34.8	17	15.2
02. Good education facilities for children	2	4.9	6	20.7	0	0.0	9	39.1	17	15.2
03. Construction of a spacious house	3	7.3	0	0.0	1	5.3	0	0.0	4	3.6
04. Improved medical services	1	2.4	2	6.9	0	0.0	0	0.0	3	2.7
05. More assistance from the government/NGOs	1	2.4	0	0.0	1	5.3	0	0.0	2	1.8
06. More civilized lives for children	0	0.0	0	0.0	0	0.0	2	8.7	2	1.8
07. Improved public transportation system	0	0.0	1	3.4	0	0.0	0	0.0	1	0.9
08. Sufficient income to sustain their families	0	0.0	1	3.4	0	0.0	0	0.0	1	0.9
09. Established English language school in the area	0	0.0	1	3.4	0	0.0	0	0.0	1	0.9
10. Institutionalization of government credit scheme	0	0.0	0	0.0	1	5.3	0	0.0	1	0.9
11. Purchase a motor-cycle	0	0.0	0	0.0	0	0.0	1	4.3	1	0.9
12. Purchase of a car	0	0.0	1	3.4	0	0.0	0	0.0	1	0.9
C. Topics in agriculture / livestock										
01. Increased numbers of livestock	4	9.8	0	0.0	0	0.0	1	4.3	5	4.5
02. Obtained more land for agriculture	1	2.4	0	0.0	1	5.3	0	0.0	2	1.8
03. Strict control of cutting trees in the mountain	0	0.0	0	0.0	1	5.3	0	0.0	1	0.9

Figure 7: Expectations in the future by total

Figure 8: Expectations in the future by sector



a). Issue in fisheries



b). Issue in socio-economics / infrastructure

c). Issue in agriculture / livestock

