



H Preliminary Report of Household Survey in PAKKLONG Sub-District, Pathew District, Chumphon Province



Southeast Asian Fisheries Development Center
TD/RES/90
LBCFM-PD No.33



Department of Fisheries,
Thailand
September 2004

**Preliminary Report of Household Survey in Pakklong Sub-District,
Pathew District, Chumphon Province**

**Phattareeya Suanrattanachai
Jinda Petchkamnerd
Kongpathai Saraphaivanich
and
Jirapa Kamhongsa**



Training Department,
Southeast Asian Fisheries Development Center



Department of Fisheries, Thailand

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ISBN: 974-9509-76-5

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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 lead department of SEAFDEC to implement coastal resources management program. This program is mainly supported by Japanese Trust Funds.

Under the coastal resource management program, TD and Department of Fisheries (DOF), Thailand 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 resource utilization. TD and the DOF, Thailand agree 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 to re-prior consider their own policies and formulate new direction for cost-effectiveness of coastal fisheries resource management plan and implementation.



Niwes Ruangpanit
Secretary-General

PREFACE

Household survey is an important activity which is required to conduct after the Locally Based Coastal Fisheries Management (LBCFM) project has been implemented. At beginning stage of the LBCFM project places an emphasis on Activity I base line survey covering socio-economic criteria and oceanographic and environmental criteria including biological data collection through catch landing survey. All these data collecting methods often make disturbance to local fishers to repeatedly give information that they give answer with the same question many times.

Main purpose of household survey consists of two basic reasons. First is to reduce and avoid making disturbance to local fishers when the project staff conduct data collection and survey. Second is to keep recording of community for the project evaluation at mid-term and termination of the project. This is to make comparison of pre- and mid- and post of the project implementation. Therefore, data of household survey is an crucial information for the project staff, policy-maker and local government agency concerned to make use the data to formulate supportive community development plan and activities.

P. Suanrattanachai and co-authors

23 September 2004

Acknowledgement

We (the author and co-author) should like to present our deepest gratitude to all the local people at Pakklong Sub-district, Pathew District, Chumphon Province for your help and cordial participation during the conduct of the survey, and also for the full support and friendship you have given without reservation. All colleagues have given their unstinting encouragement to finish conducting the survey in the field and complete this paper and to all people who directly and indirectly have helped us to complete this paper. All of you have our profound respect.

P. Suanrattanachai and Co-authors

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Preliminary Report of Household Survey in Pakklong Sub-District, Pathew District, Chumphon Province

Abstract

Objectives of household survey are to keep recording database of households in the project site to mainly use for implementing the Locally Based Coastal Fisheries Management (LBCFM) project and for evaluating the project at mid-term and termination. Seven villages of Pakklong Sub-district (Tambol) are target areas to conduct household survey for database collection. This sub-district officially administrates by Pakklong Sub-district Administrative Organization (Ongkarnborihan suantambol, Ao.Bo.To.). The survey results show that total number of households are 892 households. Source of income of households categorizes into two types that are non-fisheries and fisheries sectors. There are top three ranking of villages that households gain source of income coming from non-fisheries sector which are 93% of Baan Namphu (Moo 5) (Pakklong), 80% of Baan Bosamrong (Moo 2) and 76% of Baan Bonrai (Moo 6). Baan Tha-at (Baan Koh Teab, Moo 7) is a village (moobaan) that 94% of households earn income from fisheries sector. Baan Thungmaha (Moo 1) (42%) and Baan Thumthong (Moo 3) (35%) is at second and third ranking of villages which households have source of income relies on fisheries sector.

Keywords: household survey, LBCFM, Ao.Bo.To., source of income

Preliminary Report of Household Survey in Pakklong Sub-District, Pathew District, Chumphon Province

I. Introduction:

Southeast Asian Fisheries Development Center/ Training Department (SEAFDEC/TD) and Chumphon Marine Fisheries Research and Development Center (CMDEC) staffs are collaborating to implement the Locally Based Coastal Fisheries Management in Pathew District (LBCFM-PD) project, which is in the first year of the first phase (in 2001). Most of implementing activities in the first year are data collection and community survey, which usually conducted every month. However, these activities seem that they are not convenient to local people to respond or give the same data such as occupation, type and number of fishing gears, etc. to the staff. The staffs agree that household database survey should be conducted to obtain two objectives.

First objective is to collect household database at pre-project implementation stage to assess change of community at the end of the project termination. Second objective is to provide the household database for the staff that they can check more detail of respondent to save time-consuming of interviewing or collecting data. This objective is to avoid disturbing local people.

II. Objectives of the Household Survey:

1. To conduct household survey in 7 villages of Pakklong Sub-District to record as database to use for making an extension program and community development plans that put these plans to suit to target group with right time and right place.
2. To use as database of community to assess how community change which consider number of household, population, and occupation to evaluate the LBCFM-PD project

III. Methodology of the Survey

1. Contact a village people and request him for preparing household map of his own village which base on his informative knowledge and familiarity. The village people understand well his neighbor and location of the village.
2. Make a household survey plan by discussing among field survey staff. A staff takes responsibility to collect data at one site of village's road till he finishes the survey. This is to avoid a duplicated data collection.
3. Questionnaire of household survey is tool to collect data from all respondents by interviewing.

IV. Envisaged outcome of the survey

Household database may make helpful to policy maker, community development leaders and other government agencies to use for arranging community development plan. The government officers assess the capacity building of the community through socio-economic condition. Then, they may give ordering priority of local people's need and/or solution to target group, which the target group urgently needs help, or subsidies and including types of technology transfer.

V. Background and Geographic Site

Geographic structure of Pakklong Sub-District consists of 7 villages (Moobaan, in Thai see **Figure 1** Map of Pakklong Sub-district boundary), which are Baan Thung Maha (Moo 1), Baan Bo Sam Rong (Moo 2), Baan Thum Thong (Moo3), Baan Bang Waen (Moo 4), Baan Nam Phu (Moo 5), Baan Bon Rai (Moo 6), and Baan Tha-at (Moo 7). Each moobaan has a similar geographic location and land use. Moos 2, 3, 5 and 7 separate into two main land uses. One area is at plantation areas that most of village people engage in agriculture. Other area is along coastal areas that village people living surrounding here mostly engage in fisheries. This is not only at different utilizing areas, but also the name of living place is different.

Baan Thung Maha (Moo1) does not separate into two land use areas, but this village has two names. One is namely Baan Pakklong, other is namely Baan Thung Maha (see **Figure 2** Map of Baan Thung Maha). This preliminary report would use the later name. This village is as downtown of the Sub-district. This is because office of Sub-district Administrative Organization located at this village.

Baan Bo Sam Rong (Moo 2) has two name places, the first is Baan Tha-matra where is at plantation areas, and the second is Baan Bo Sam Rong where is at coastal areas (see **Figure 3** Map of Baan Bo Samrong).

Moo 3 also has both plantation and coastal areas. At coastal areas are called Baan Thum Thong and at plantation areas are named Baan Nhongtoh (see **Figure 4** Map of Baan Thum Thong).

Baan Bang Waen (Moo 4) is minor target village, this is because these villages 100% of local villagers are engaging in agriculture (see **Figure 5** Map of Baan Bang Waen).

Moo 5 has a bit of complicated governance and administration. This moobaan composes of two main living places (see **Figure 6** Map of Baan Nam Phu). They are named Baan Nam Phu and Baan Bang Boet. Villagers of Baan Nam Phu have household registration at Pathew District, Chumphon province, while villagers of Baan Bang Boet has household registration at Bang Saphan Noi District, Prachuabkirikhan Province, but the location of Baan Bang Boet is under territorial boundary of Chumphon Province. This may cause household survey data of Moo 5 separated into two Tambol (Sub-district) as seen in **Table 1**.

Moo 6 has total areas of village engaged in plantation, fishers of this village settle their household is near to beach (see **Figure 7** Map of Baan Bon Rai).

Moo 7 has a plantation area named Baan Tha-at and fishing community locates along the coastal areas named Baan Koh Thaip (see **Figure 8** Map of Baan Tha-at).



Figure 1 Map of Pakklong Sub-District Boundary

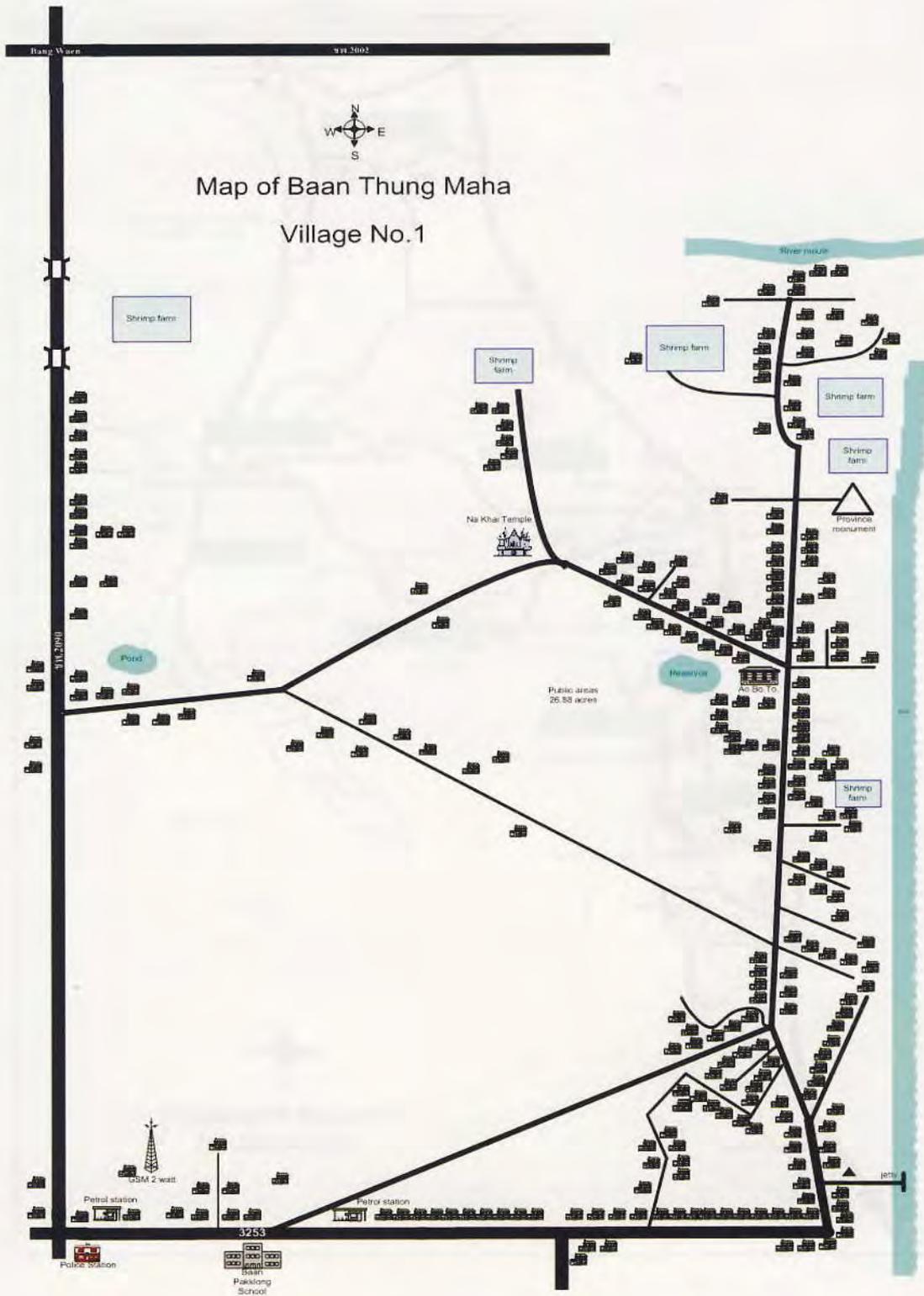
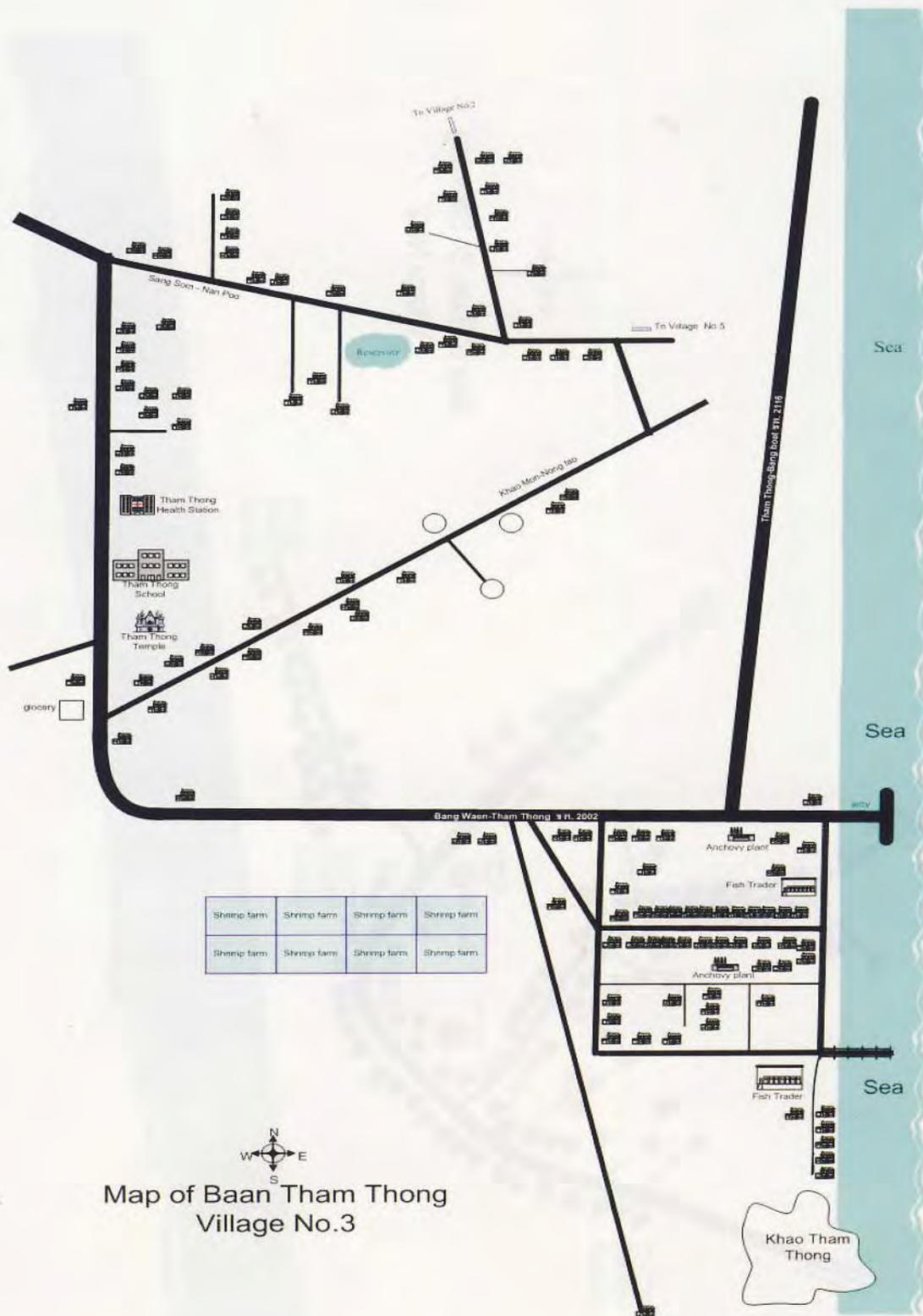


Figure 2 Map of Baan Thung Maha (Village No.1)



Figure 3 Map of Baan Bo Samrong (Village No.2)



Shrimp farm	Shrimp farm	Shrimp farm	Shrimp farm
Shrimp farm	Shrimp farm	Shrimp farm	Shrimp farm



Map of Baan Tham Thong Village No.3

Figure 4 Map of Baan Thum Thong (Village No. 3)



Figure 5 Map of Baan Bang Waen (Village No. 4)

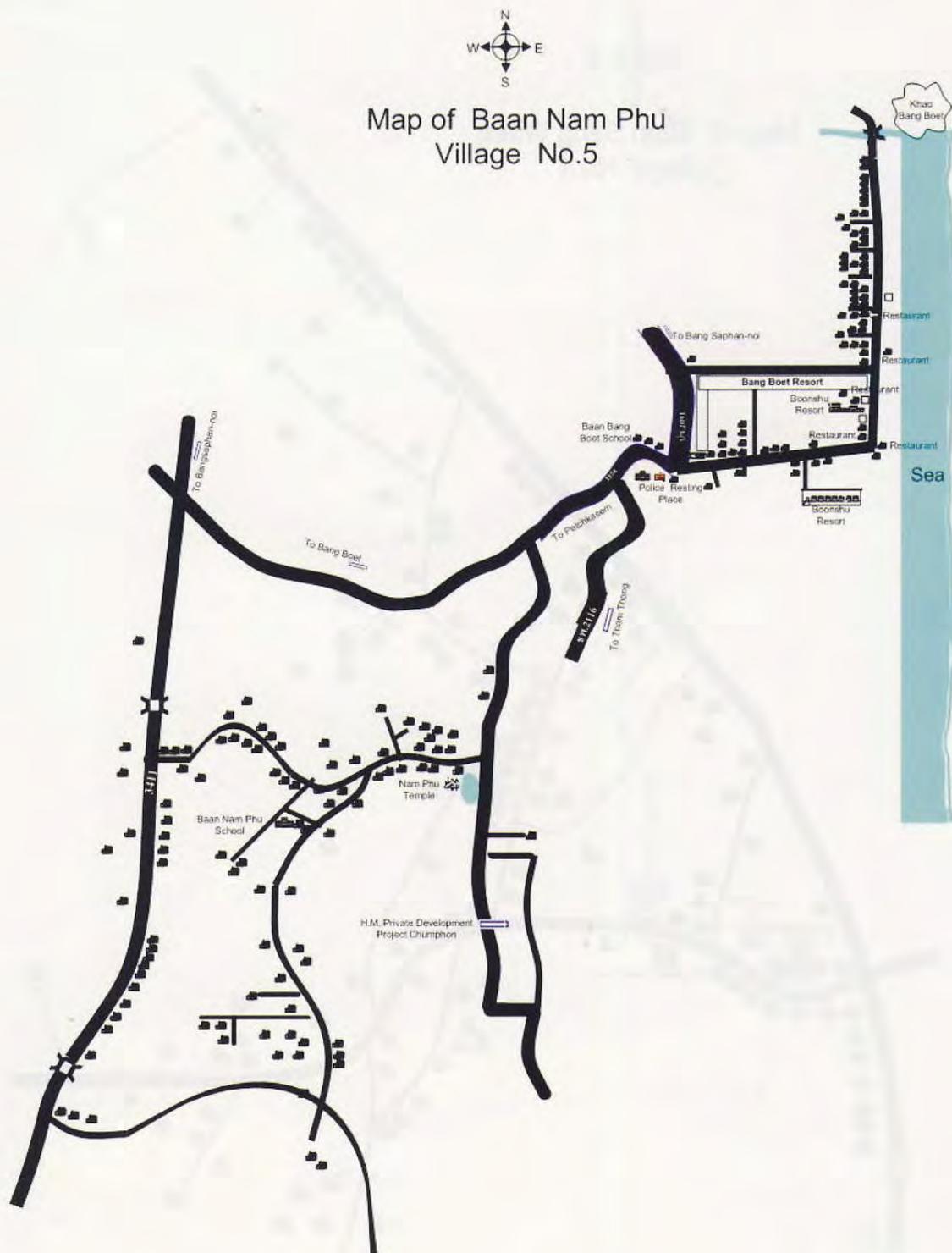


Figure 6 Map of Baan Nam Phu (Village No.5)

Table 1 Number of household in Tambol Pakklong

Moo	Non-registration		Registration		Registration > 1 HH		Total	
	No. of household	%	No. of household	%	No. of household	%	No. of household	%
Moo 1	17	9	163	86	10	5	190	21
Moo 2	10	9	91	83	9	8	110	12
Moo 3	8	8	81	84	7	7	96	11
Moo 4	5	4	110	92	4	3	119	13
5(Pakklong)	7	10	57	83	5	7	69	8
5 (Saithong)	7	11	46	75	8	13	61	7
Moo 6	12	8	127	88	5	3	144	16
Moo7	15	15	74	72	14	14	103	12
Total	81	9	749	84	62	7	892	100

Remark: HH = household
% of household in a village



Map of Baan Bon Rai
Village No.6

Figure 7 Map of Baan Bon Rai (Village No. 6)

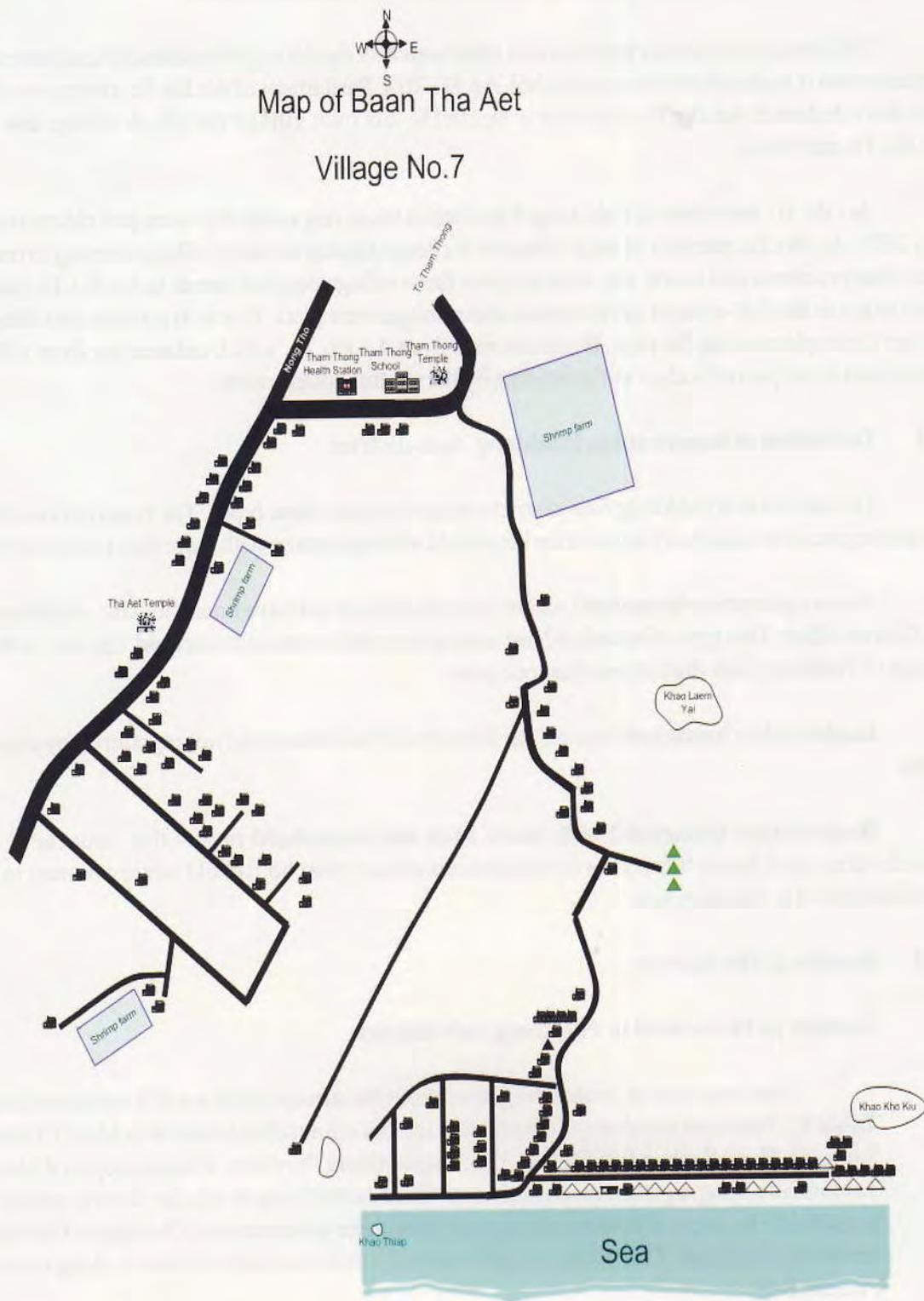


Figure 8 Map of Baan Tha Aet (Village No. 7)

VI. Community Structure and its Governance and Administration

Pakklong Sub-district governs and administers by Pakklong Sub-district Administrative Organization (Ongkarnborihan suantambol, Ao.Bo.To.). Parliament of Ao.Bo.To. composes of 14 members that each Ao.Bo.To. member is elected by his own village people. A village has two Ao.Bo.To. members.

Ao.Bo.To. members of Pakklong Sub-district taken responsibility were just elected on 20 July 2001. Ao.Bo.To. member of each village is in charge joining monthly village meeting to recognize what problems and needs are, then propose these village peoples' needs to Ao.Bo.To. parliament to put in the Sub-district development and management plan. This is to provide and allocate budget for implementing the plan. Budget comes from Ao.Bo.To. which collects tax from village people and some part of budget still subsidize by the central government.

VII. Definition of household in Pakklong Sub-district

Household in Pakklong Sub-district categorized into three types. The types of household are non-registration household, registration household and registration with more than one household.

Non-registration household means household does not have household no. registered at the District office. This type of household just immigrates and constructs household and stay at those village of Pakklong Sub-district less than one year.

Registration household means the household has household no. registered by district office.

Registration household with more than one household means this household has household no. and family's member or relatives construct other household nearby or next to the main household in the same area.

VIII. Results of the Survey

1. Number of Household in Pakklong Sub-district

Total numbers of household gained from the survey result are 892 households (see **Table 1**). This total numbers of households included household locates in Moo 5 Tambol Saithong, Bang Saphan Noi District, Prachuapkirikhan Province. Village people of Moo 5, Tambol Saithong register household no. to Tambol Saithong to ask for electric use in the household. But, areas of household placement are under governance of Chumphon Provincial territorial boundary. This village people normally utilize aquatic resources along coast of Pathew Bay.

Table 1 shows number of households in each village, which categorizes by type of household registration. Baan Thung Maha (Moo1) has total numbers of households are 190 households which are highest numbers of household in the Sub-district. Baan Nam Phu (Moo 5, Pakklong) has total numbers of households only 69 households. This village has lowest numbers of households in the sub-district. This table also illustrates that number of registration households which high top-three ranking numbers of this type are 163 households of Moo 1, 127 households of Moo 6 and 110 households of Moo 4.

Non-registration households mostly are local village people who get marry and then they separate their own family from parents and construct new house nearby the parents' household. There is few village people come from outside to immigrate into villages. There are some fishers from adjacent village move in such Baan Koh Thaip (Moo7) to temporarily construct household likes working place in this village during monsoon season in end of October to mid of January.

Figure 9 clearly gives feature of household number by percentage in each village. Each moobaan has high percentage of registration household, which is higher than 80%. Moo 7 has highest percentage of non-registration household. This number can explain that a family' s members are son or daughter get marry and then they construct new house which separate from their parents to take care of their family by themselves. So, these households do not have registration, yet. This is because some household is going on construction and some just finished.

Moo 7 also has percentage of household registration more than 1 household higher than other 6 moobaan. This means that real number of existing household is higher than counted number of household, because household registration more than 1 household is counted as one household as Amphoe (District) office certifies.

Moo 1 and Moo 6 are at first top-two ranking of high percentage of total households that Moo 1 is 21% and Moo 6 is 16%. Moo 5 (Pakklong) has lowest percentage of total households, which are only 8%.

2. Number of Household by Source of Income

Source of income categorizes into two types that are non-fisheries and fisheries sectors. Source of income comes from non-fisheries sector means head of households earn income from such agriculture, glossary and so on, which do not come from any fisheries sectors. Source of income comes from fisheries sectors mean that head of households gain income from capture fisheries and/or aquaculture. Number of household by source of income is explained into two levels, which are at Tambol level and internal moobaan level.

At Tambol level, Moo 5 (Pakklong, 93%), Moo 2 (80%) and Moo 6 (76%) are on top three ranking that village people earn income from non-fisheries sectors. Moo7 is a moobaan that 94% of household gains income from fisheries sectors (**see Figure 10**). Moo 1(42%) and Moo 3 (35%) is at second and third ranking of villages which households have source of income relies on fisheries sectors.

At internal moobaan level, Moo1, 2, 3, 4, 5(Pakklong), 5(Saithong) and 6 have percentage of household which have source of income comes from non-fisheries sectors rather than comes from fisheries sectors. Moo 7 is only one moobaan that major source of income receives from fisheries sectors.

3. Number of Fishing Household by Number of Fishing Boats

Six moobaans of Pakklong Sub-district and 1 moobaan of Tambol Saithong have total fishing households are 246 households. This number of fishing household categorizes

Figure 9 Number of Household by Type of Household Registration

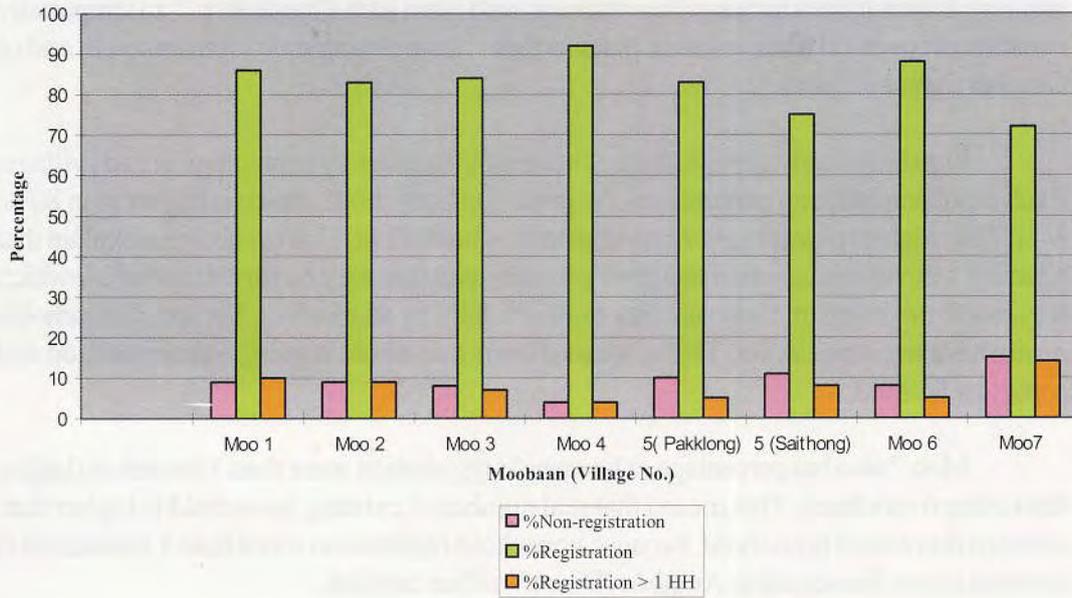
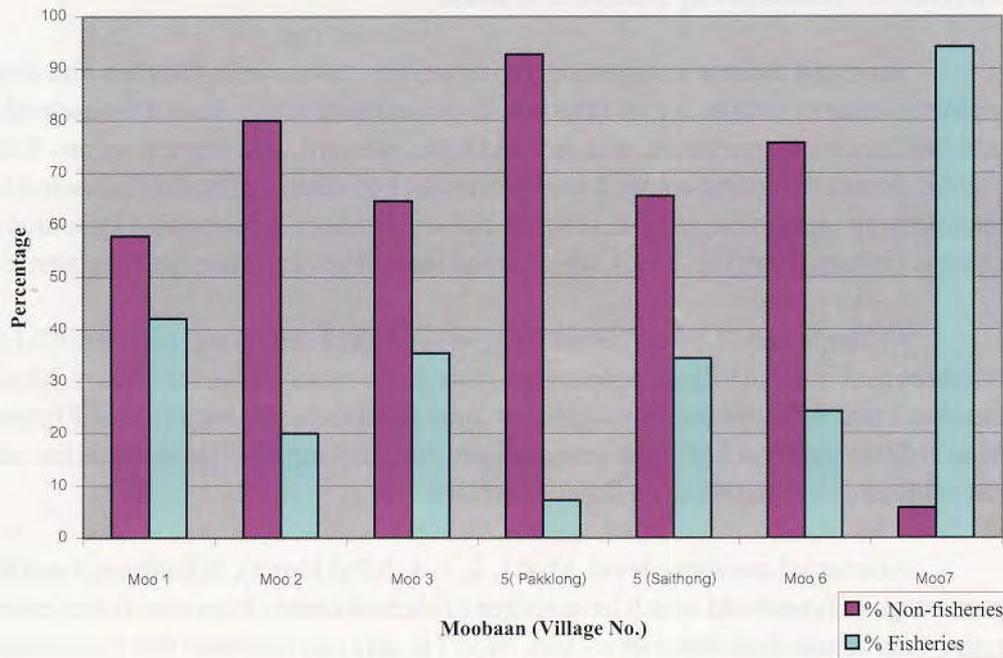


Figure 10 Source of Income by Type of Engagement



by number of fishing boat that belongs to a household without regarding household registration. The categories are without boat, with 1 boat, and with more than 1 boat.

Figure 11 verifies categories of fishing household by number of fishing boat. Moos 1, 5(Pakklong) and 5 (Saithong) have no fishing household engaged in fisheries sectors without boat. Moo 5 (Pakklong, 100%) and Moo 5 (Saithong, 100%) engage in fisheries sector by using 1 boat. Moos 6 (26%), 7(17%) and 1(16%) have fishing households engaged in fisheries sectors by using boat more than 1 boat.

When compares number of fishing household by number of fishing boat at Tambol level, Moo 1 (33%) has highest percentage of fishing household which composes of fishing household engaged in fisheries with 1 boat (84% of total Moo 1) and more than 1 boat (16%) have fishing households engaged in fisheries sectors by using boat more than 1 boat.

When compares number of fishing household by number of fishing boat at Tambol level, Moo 1 (33%) has highest percentage of fishing household which composes of fishing household engaged in fisheries with 1 boat (84% of total Moo 1) and more than 1 boat (16% of total Moo 1).

Moo 7 is at second ranking of Tambol level, which number of fishing households are 19% of total Tambol level. Categories of fishing households in Moo 7 comprise three types are 3% of without fishing boat, 79% of with 1 fishing boat and 19% of more than 1 fishing boat.

Moo 5 (Pakklong) and Moo 5 (Saithong) have percentage of fishing households, which are 3% and 9% of total Tambol level. These two villages have all fishing households do fishing with 1 fishing boat (100% of total fishing households at Moo 5 (Pakklong) and Moo 5 (Saithong)).

Figure 11 Number of Fishing Household by Number of Fishing Boat

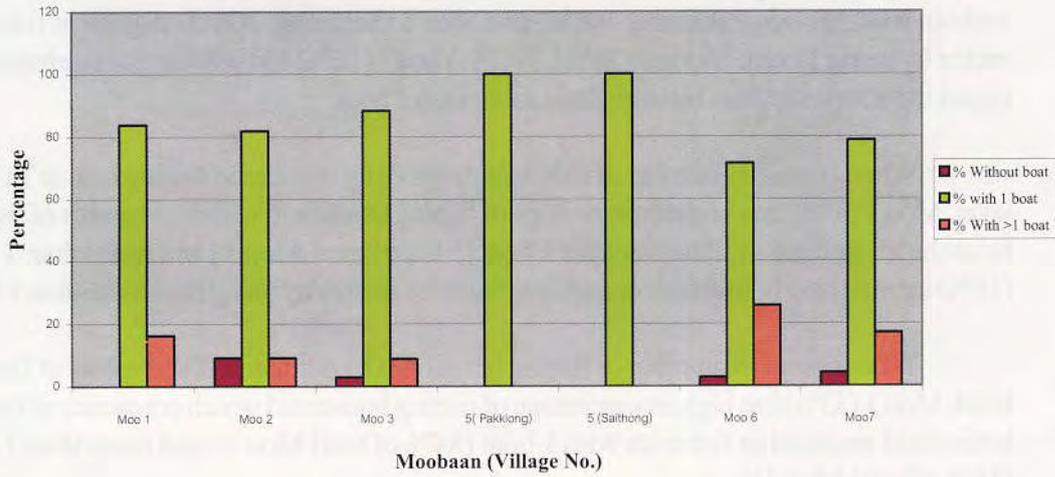
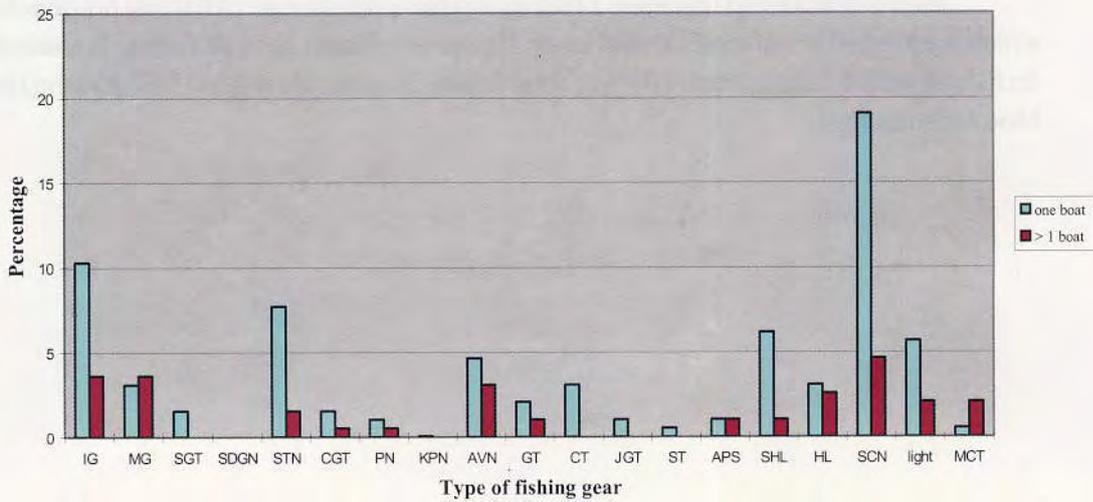


Figure 12 Type of fishing gear by number of fishing boat at Moo 1



4. Type of Fishing Gear Employed in the Community

Fishers live in Pakklong Sub-district engaging in 19 types of fishing gears. **Table 2** is number of fishing gear types combining with type of fishing boat in a target village. Fishers of Moo 1 have varieties of fishing gear types are 18 types. Moo 7 fishers engage in 16 types of fishing gears. Moo 5 (Saithong) and Moo 6 have the same number of fishing gear types which are 14 types.

Type of fishing gear employed in the community presents by comparison of fishing household who use 1 fishing boat and more than 1 fishing boats. Explanation of fishing gear types fundamentally expresses percentage of fishing gear types, but this will not make comparison between numbers of fishing boat in the same kind of fishing gear.

Types of fishing gear which exist at Moo 1 shown in **Figure 12**. Fishers of Moo 1 who use 1 fishing boat, engage in large cast net (squid cast net) about 19.07% of total fishing household in Moo 1. Indo-pacific mackerel encircling gill net (10.30%) and shrimp trammel net (7.73%) are second and third ranking of 18 fishing gear types in Moo 1.

Fishers live at Moo 2 engaged in 8 types of fishing gears (see **Figure 13**). Mullet gill net (34.09%) is highest percentage. Crab gill net (29.54%) and large cast net (11.36%) are at top-two and top-three ranking of fishing gear employment in Moo 2.

Figure 14 illustrates 11 fishing gear types at Moo 3. Moo 3 fishers popularly use large cast net (27.63%), squid trap (14.47%) and anchovy falling net (11.84%). Moo 5 (Pakklong) fishers are engaging in small-scale fishing gears (see **Figure 15**). Top-three ranking of fishing gear types are indo-pacific gill net (29.41%), squid hand line (17.65%) and mullet gill net (11.76%) and sardine gill net (11.76%).

Figure 16 verifies fishing gear types at Moo 5 (Saithong). Three main types of fishing gear are indo-pacific mackerel encircling gill net (23.94%), shrimp trammel net (18.31%) and large cast net (11.27%).

Moo 6 fishers mainly engage in large cast net (13.75%), luring light for squid (12.5%) and indo-pacific mackerel (10%) (See **Figure 17**). Moo 7 fishers employ indo-pacific mackerel encircling gill net, collapsible crab trap and sardine gill net (see **Figure 18**). Percentage of three main fishing gear types is 11.04%, 9.20% and 8.59%, respectively.

Figure 13 Type of fishing gear by number of fishing boat at Moo 2



Figure 14 Type of fishing gear by number of fishing boat at Moo 3

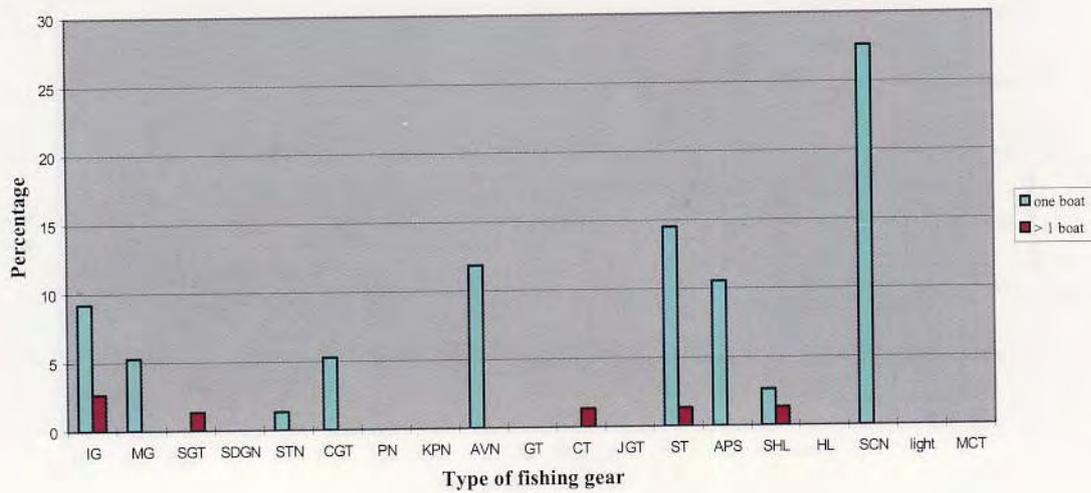


Figure 15 Type of fishing gear by number of fishing boat at Moo 5 (Pakklong)

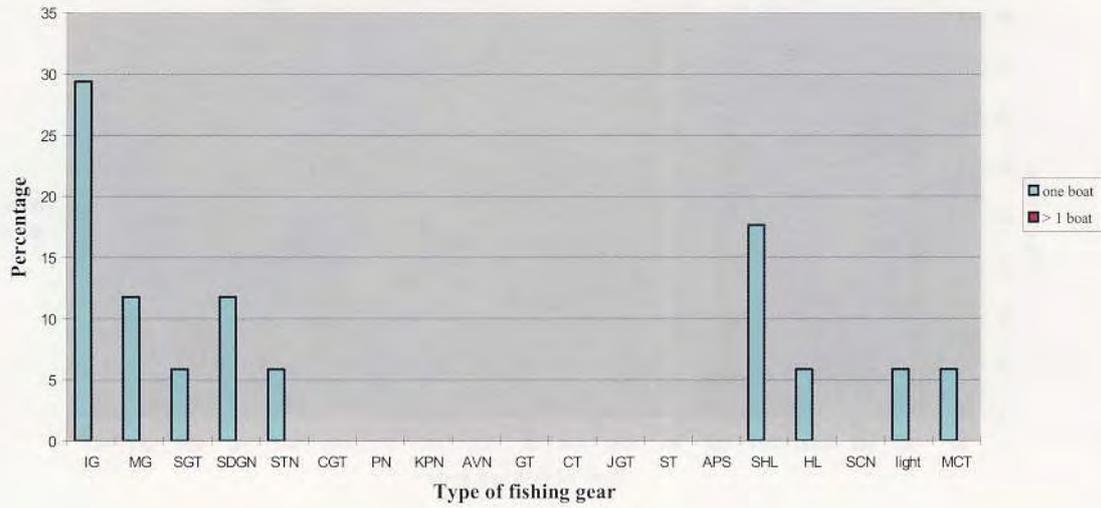


Figure 16 Type of fishing gear by number of fishing boat at Moo 5 (Saithong)

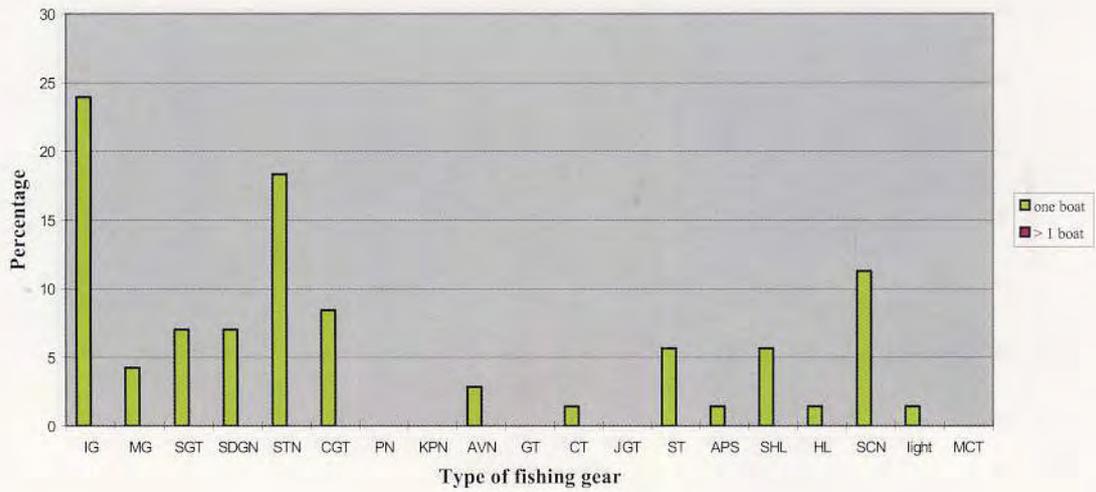


Figure 17 Type of fishing gear by number of fishing boat at Moo 6

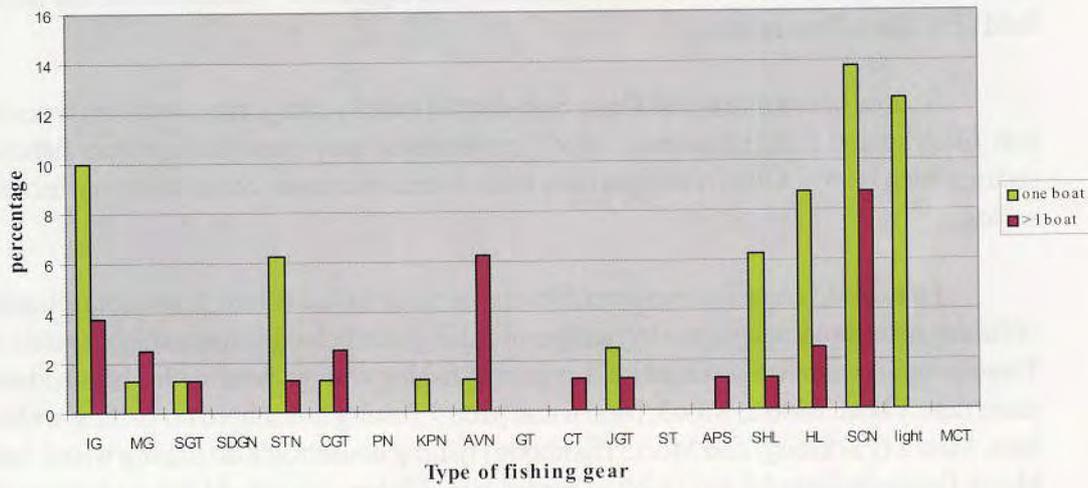
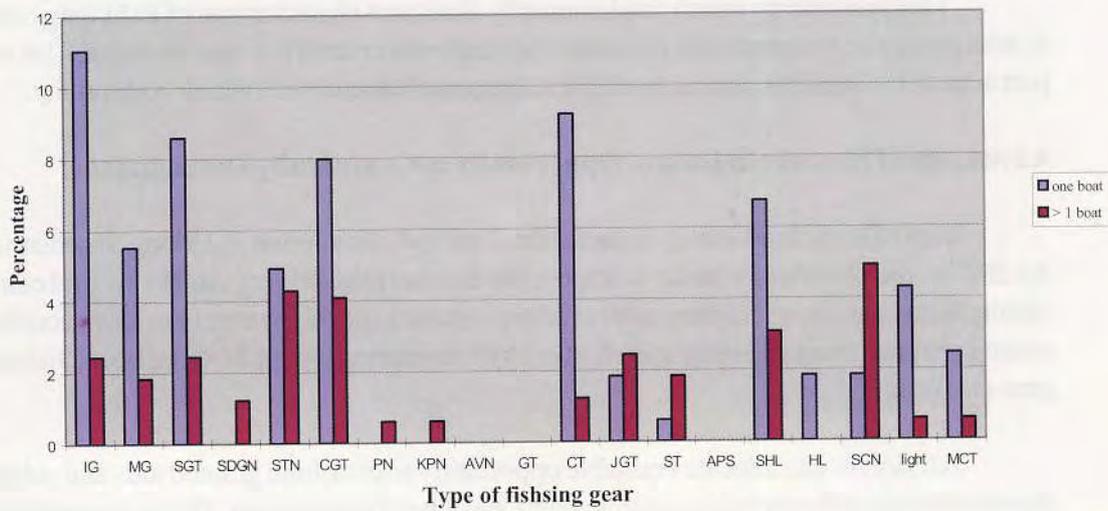


Figure 18 Type of fishing gear by number of fishing boat at Moo 7



5. Summary

Results of household survey show that total numbers of household are 892 households. These households categorize into three types, which are non-registration (9% of total household), registration (84% of total household), and registration with more than one household (7% of total household).

Source of income in Pakklong Sub-district mainly categorizes into two types are non-fisheries and fisheries sources. Moo 7 residence mostly earns income from fisheries sector, which is 95%. Other 6 villages have main source of income come from non-fisheries sector.

Household earns income from fisheries sector is called fishing household. Number of fishing household categorizes by number of fishing boat belong to that fishing household. Three categories are fishing household engage in fishing without boat, with 1 boat and with more than 1 boat. Moo 2, Moo3, Moo 6 and Moo 7 fishing household do fishing without boat. Moo 5 (Pakklong) and Moo 5 (Saithong) fishing households do fishing with 1 boat. Moo 6 fishing households have highest percentage of fishing household that do fishing with more 1 boat.

Type of fishing gear employed in Pakklong Sub-district consists of 18 types. Moo 1 fishing households generally employ in 18 types of fishing gear. Moo 2 fishing household employed in 8 types of fishing gear.

This preliminary report fundamentally illustrates characteristic of Pakklong Sub-district particular in community economic development criteria in fisheries sector. This report is useful to local residences to realize status and characteristic of their community.

6. Advantage of Household Data to Opportunity of Community Development

Data of household survey is useful database that can support Pakklong Sub-district Ao.Bo.To. and community leader to implement Tambol pilot project. Ao.Bo.To. and community leader can zoom out particularly fisheries sector to develop more or to solve conflict among resource users and other stakeholders by considering types of fishing boats, fishing gear and so on.

Ao.Bo.To. can allocate equitable opportunity to distribute granted aids and subsidies by prioritizing household economic status and type of engagement. This is to contribute underemployment households to get better life' condition.

Scenery of community geography and location illustrates utilization of land use and coastal areas. Ao.Bo.To. and community can assess and prioritize where should be given first priority and how outcome and impact will be. Then, they can formulate an appropriate plan and activities with low impact.

Abbreviation of Fishing Gear

Abbreviation*	Abbreviation**	Type of Fishing Gear
APN	APS	Anchovy purse seine
AsBN	AVN	Anchovy falling net
CC	CT	Collapsible crab Trap
CGN	CGT	Crab gill net
FTG		Four finger treadfin gill net
GT	GT	Grouper trap
HL	HL	Hand and line
IGN	IG	Indo-Pacific mackerel encircling gill net
JGT	JGT	Juvenile grouper trap
KPN	KPN	Krill push net
	Light	Luring light for squid
MeGN	MG	Mullet gill net
MCT	MCT	Mud crab trap
PG		Pomfret gill net
PN	PN	Push net
SCD		Sea cucumber diving
SCN	SCN	Large cast net
SG	SDGN	Sardine gill net
SHL	SHL	Squid hand line
SJ		Squid jig
SMS		Shrimp mud ski
ST	ST	Squid Trap
STN	STN	Shrimp trammel net
SWG	SGT	Sand whiting gill net

Remark: * is abbreviation of Pre-survey of the community to formulate implementation plans and activities of the LBCFM project: Project site in Pathew District, Chumphon Province

** is new abbreviation that use as reference of the paper

Author and Co-author's Office Position

Phattareeya Suanrattanachai	Socio-economic Section Head, Research Division, Training Department, Southeast Asian Fisheries Development Center : phattareeya@seafdec.org
Jinda Petchkamnerd	Fishery Biologist, Chumphon Marine Fisheries Research and Development Center, Department of Fisheries, Thailand : tangjinda@hotmail.com
Kongpathai Saraphaivanich	Assistance Researcher, Socio-economic Section, Research Division Research Division, Training Department, Southeast Asian Fisheries Development Center : kongpathai@seafdec.org
Jirapa Kamhongsa	Fishery Biologist Chumphon Marine Fisheries Research and Development Center, Department of Fisheries, Thailand



SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
Training Department
PO BOX 97, Phrasamutchedi,
Samut-Prakarn, 10290, Thailand