

**QUARTERLY REPORT NO.3
APR. – JUN. 2002
OF
LOCALLY BASED COASTAL RESOURCE
MANAGEMENT IN PATHEW DISTRICT,
CHUMPORN PROVINCE
(LBCRM-PD)**

Edited by

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Southeast Asian Fisheries Development Center**



Department of Fisheries

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PREFACE

This is a quarterly report of the activities of the LBCRM-PD (Locally Based Coastal Resource Management in Pathew District, Chumporn Province), during the period from April to June 2002.

Almost 9 months have passed since we finally obtained official approval. While we prepared to submit the survey results to the people at the project site, we have become involved in the establishment of a local management system with them. This quarterly report includes some parts of the survey results.

JICA's Expert

YAMAO, MASAHIRO

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I. OUTLINES OF ACTIVITIES DURING APRIL TO JUNE, 2002

1. Major Focal Points

During the period from April to June, the project had two major focal points besides the planned regular research activities. The first was the implementing of on-site training courses. The second was the socio-economic survey adopting simple census approach. Both activities took long procedure and some time to prepare and carry out.

1.1 A series of the on-site training were designed and planned by passing through the following procedures. Prior to the design and plan for this training, the project had a special training program that targeted its staffs and local government officers who were responsible for local fisheries management aspects. "Project Cycle Management (PCM)" was a major topic. Participants were trained and practiced on how to undertake on-site training program in order to encourage people's participation in any project activities. This program was conducted at the Chumporn Marine Fisheries Development Center (CMFDC). And then we started to prepare on-site training courses.

1.2 The major purposes of the on-site training courses were to disseminate the basic concept and framework of the project activities, and find solutions and problems as regards coastal resource management and community development. Through the processes of preparation and implementation, the project staff learned many things, including people's attitudes toward resource utilization, and their demand for community development.

1.3 Another focal point of the project activities was a basic household survey in all Moobaans. The socio-economic survey group of the Research Team proposed to conduct this survey to take an outlook at agro-based society in Tambol Pakklong, in collaboration with other teams' members. Such basic data on household, occupation and ownership of fishing devices will outline the socio-economic surroundings of all Moobaans, and represent basic figures on which any future research and monitoring activities will be able to rely. In fact, it took much more time to plan and implement this survey than we had expected, due to the lack of the basic information and data including maps in Tambol.

2. Activity I

<Socio-Economic Survey>

2.1 The socio-economic survey group has undertaken basic research activities since January 2002. In January, the pre-survey was conducted to get the real picture of coastal fisheries operations and illustrate the socio-economic conditions of fishers and their family. During the period from the end of February to the beginning of March, members of the survey group concentrated on squid and anchovy fisheries, which brought the major part of fishing household incomes and provided great deal of job opportunities. At present, these two kinds of fisheries contribute largely to the growth of local economy. At

the end of March, the socio-economic survey shifted to another topics of squid and anchovy fisheries from a viewpoint of production: processing and marketing. A senior researcher from the DOF was invited to conduct this research on this topic in collaboration with members of the survey group. In April, they conducted additional interviews and obtained supplemental figures.

2.2 One of the major assignments for the socio-economic survey group, during this quarter period, was data input and analysis that its members obtained and accumulated. As regards the results of the pre-survey, some members have continued to analysis the figures and make analytical description. The tables and figures are already distributed to the project staffs for reference (*Reference I: Phfarceyn's Tables*). This description is supposed to be published by the beginning of September.

2.3 A marketing system survey of anchovy and squid went into a final stage of analysis and description. In the process of preparing for publication, the DOF senior researcher who joined this survey provided a profound insight into a dynamic change in marketing systems in Tambol Pakklong, having given great impact to squid and anchovy fisheries development.

2.4 Moreover, the marketing survey included general information on large-scale fish traders ("*Phe Pla*"), and small-scale traders ("*Pho Kha*" and "*Mea Kha*"). A research report will show their functions and roles at production, processing and distribution stages. This will be published by the mid of September.

2.5 The socio-economic survey team planned to conduct a household survey in all Moobaans. This survey purposed to obtain the most basic data on households. The figures of the Marine Fisheries Census (1995) are too old to indicate the present situation of fishing households. The basic data and figures of household and population kept in local governments and the Sub-District Administrative Organization (Ao.Bo.To) are not always accurate. To illustrate the accurate picture of fishing households, we came to realize the necessity of households survey by adopting simple questionnaires (*Reference II: questionnaires*). We interviewed all households including agriculture, fisheries and other occupational households. This is because a large number of households are engaged in both agriculture and fisheries. Land property is one important factor to decisive the scale of production in fisheries business. Fisheries investment depends on accumulated funds in agriculture sector, and vice versa. Fishing and its related income sources are very supportive to agricultural households which are engaged in plantation products such as coconut, palm and rubber, as they often suffer from daily influx of cash.

2.6 Before conducting the household survey, members of the socio-economic survey group mapped all households including non-registered ones, in collaboration with the local people. The maps illustrated by them will be a valuable source identifying changes in social and economic surrounding. The project plans to publish a report with the results of the household survey soon.

2.7 Some members of the socio-economic survey group was also describing the situation of people's groups and community-based arrangements currently existing. The people have established a large number of groups, and most of them have participated in plural number of memberships. There are many different government agencies involved in the establishment of people's groups and the provision of generous supports. The project plans to publish a report until the end of August.

<Oceanographic, Environmental and Landing Survey>

2.8 Oceanographic and environmental survey have lasted since January 2002. During this quarter, the oceanographic survey group rearranged a regular sampling that would be conducted once every two months. At the twelve fixed stations, the group members collected data such as water quality, temperature, salinity, dissolved oxygen, nutrient, total bacteria count etc., water current and marine resource samples (zooplankton, fish larvae and benthos). Advised by a senior researcher of the DOF, estimate on carrying capacity of fish cage culture in the front of Moobaan 7 started.

2.9 Landing survey was conducted on monthly basis (at the end of every month). Members interviewed small-scale fishers who were involved in crab gillnets, shrimp trammel nets, and fish gillnets. They also collected information on fishing grounds, size and type of fishing gears.

2.10 The landing survey team was also responsible for mapping of fishing groups, fishing gears employed, and resource utilization at the project site. Both landing and mapping information provid basic information to all project staffs, even if the final result of survey is not published (*Reference III: Resource Maps of Sakuchai*).

3. Activity II

<Strengthen A Tie with the Local People>

3.1 In the process of preparing a series of on-site training courses, household survey, and any other project activities, members of the extension team supported other teams members. Through discussion and talk with fishers, resource users and people, the team understood deeply the current situation of coastal fisheries, and enhanced knowledge about the problems and conflicts that coastal fisheries have faced. The members of the extension team encouraged fishers and resource users to join any training programs.

<Plan for Management Activities>

3.2 The members of the Extension Team have begun to put together three sorts of management activities. The first is to making rules on cage culture in the front of Moobaan 7. The people are increasingly interested in fish cage culture, but the adequate areas for fish cage culture are scarce at the project site. Stiff Competition will take place in the construction of cage frameworks and cottages. Several fishers have preserved a certain space of fishing ground for cage culture by driving in stakes, although they do not yet have any aquaculture practices. There should be adjustment and coordination among aquaculturists, and between them and fishers who may use the preserved areas for fishing operation. On 25-26 June, the CMFDC arranged a training course concerning fish cage

culture. This group may have a role of fishing ground management for cage culture, in collaboration with the local government officers and members of the Extension Team.

3.3 Secondly, management of shell culture is becoming an important topic. Those fishers living in Moobaan No.6 and 1 establish a new group for shell culture and demand a financial support to the Provincial Government so as to purchase bamboo stakes. They are considering how to manage cooperative works in preparation and harvesting. Permission of shell culture is the most significant requirement. There should be coordination between the shell culture and fish cage culture, since their fishing grounds are overlapped. Thirdly, crab trap fishery will be a target of discussion, because they have exploited crab resources and faced the reduction of crab resources. The Research Team has provided basic information and background about the fisheries.

4. Activity III

<Impact of Training Activity>

4.1 During this quarter, the Activity III has made a go with the expansion of fish processing. On 23-24 May, a training course was set up by the CMFDC, inviting trainers from the DOF. This course was conducted twice, in Moobaan No.1 and 3. It successfully gave a great incentive to the participants. The number of women who are interested in fish processing has steadily increased. More than 20 members established a new women group with its membership extending only in Moobaan No.7, immediately after the training course. The group is attempting to exploit marketable products that effectively use local raw materials.

<Development of Processing Business>

4.2 In Moobaan No.1, the women group has continuously expanded the scale of production and increasingly marketed its products through provincial and nationwide networks. Along with the "One Tambol, One Product" policy, the central and local governments organize a number of festival for the promotion of local business. The women group is often invited to join the festival and sell their products. Members try to create new marketable products and test them in the festival. They pay much attention to packing and quality control of products.

4.3 The women group in Moobaan No.1 opened a permanent store closed to the pier in April. Six or seven members always produce processed goods and sell them at the store. The operation of store becomes at the core of women's activities, with advertising their cooperative activities to the local people. Members' participation is still weak, but the group activities have given a greater impact to the development of fishing processing at the project site.

4.4 In addition, on April 1, members of the saving group for production agreed to rename it as the women group for fisheries processing. In line of the policy designed by the Community Development Department (CDD), the Ministry of Interior, this group is seeking a new direction of development.

5 Activity IV

<Mobile Training Course>

5.1 During 22 – 26 April 2002, the project staffs from the CMFDC and the TD arranged a mobile training course at five sites. The purposes of this course were to disseminate the concept of the LBCRM-PD, and discuss the current situation and problems of coastal fisheries, and steer a direction of the project activities. We expected to increase people's participation in the project activities and arrange their demanded activities.

5.2 Before starting a mobile training course, the project staffs had to select training sites through consultation with the leaders of fishers groups and Moobaans. Considering the geographic distance and people's intimacy between Moobaans, we selected five sites. The project organized one training course for Moobaan No.1 and 6, although the number of participants reached to 68 persons, being more than those in other Moobaans. In Moobaan No.2, the number of participants was no more than 40 persons, since most of fishers were engaged both in agriculture and fisheries. In Moobaan No.5, the project staffs targeted not only those fishers living there but also those stakeholders who lived in neighboring Moobaans in Prachuab Khiri Kan Province and fished in the sea in the front of the project site. Considering the specific local surroundings, we decided to set up a training course in a neighboring Moobaan. This was a quite right decision, in that 56 fishers could join the course and exchanged opinions. In Moobaan No.7, the number of participants reached to 35 persons.

<Training for Cage Culture and Establishment of A Group>

5.3 During 25-26 June 2002, the CMFDC arranged a training course for fish cage culture. The course purposed to disseminate modern, productive and environmental friendly technology to fishers who are presently and in a near future engaged in cage culture. The main culture grounds will be in the sea in the front of Moobaan No.7. The number of participants was 35, coming from the whole area of Tambol. At the end of the training course, the participants agreed to establish a group whose membership consists of aquaculturists only. The group may have a function of coordination and adjustment in management aspects. We anticipate it to manage fish cage grounds properly according to the laws and regulations.

<Great Impetus to Expansion of Fish Processing>

5.4 During 27 – 29 May 2002, the CMFDC and the TD conducted training courses on fish processing technology targeting women in fishing households. The project prepared two sites for training: Moobaan No.1 and 3. There were 37 and 30 participants, respectively. The course held on 29 May focused on packing and marketing aspects. 35 participants were impressed with cost-effective packing methods.

5.5 On 23-24 June 2002, the Fish Processing Training Course Phase II was undertaken, according to the requests from the participants in Moobaan No.1, 3, 6 and 7. The DOF staffs demonstrated many different kinds of products and the participants tried to make new ones. There were two sites for this course. The total number of participants was 49.

5.6 The training courses for fish processing successfully encouraged women to start with a small-scale processing. In Moobaan No.7, more than 20 women established a new group extending its membership over their Moobaan. They thought it was neither convenient nor comfortable for them to join the Moobaan No.3-based group. With local intimacy, a number of housewives in Moobaan 7 constituted with the membership of a new group and started cooperative work for processing. At present, by using available raw materials in the Moobaan, they are attempting to explore new marketable products and sell them in local markets.

6 Activity VI

<Brochure>

6.1 The TD made a LBCRM-PD brochure and printed for effectively advertising (Reference IV: Brochure). It included the introduction, objectives and activities of the project. The demarcated zones map was also included. The project staffs distributed more than 500 copies to all Moobaans and those who were related to the project. This brochure was used as a text of the mobile training course held in April.

<Textbook Outlines of Project Proposal>

6.2 The TD and the DOF prepared the proposal for LBCRM-PD planning in Thai version. The project staffs distributed this book to community leaders, Ao.Bo.To leaders, and all related government agencies. The book figures out the backgrounds, purposes, objectives, target groups, designed activities, five year plan and the first year plan.

<Homepage>

6.3 The TD drew up and opened the LBCRM-PD homepage. This homepage gives the outlines of the project purposes, designed activities, and implemented activities with many photographs and figures. It is on SEAFDEC/TD website at www.seafdec.org/lbcrm/main.html.

7 Activity VI

<Preparation for Releasing Fingerling>

7.1 According to the first year plan, the DOF begun to arrange the releasing of fish and shrimp juveniles. The Chumporn Marine Culture Center will be responsible for this activity. The project staffs are preparing for the releasing activities and certain ceremonies in collaboration with the people and local NGOs.

8 Special Issues

<Steering Committee>

8.1 On 14 August, the Steering Committee was organized at the DOF. Chaired by Mr. Somusak Chulason (Senior Expert of the DOF), the project staffs outlined the activities having been implemented during the period from January to June, 2002. Members of the Committee discussed, and gave comments and suggestions in many points.

II. OUTCOMES, PROBLEMS AND SOLUTIONS

1. Outcomes

<Three Points of Development>

1.1 During these three months, the project has proceeded in the following three points and brought several outcomes. The first point concerns the enhancement of awareness about the purpose and objectives of the project activities among the people. Through discussing and exchanging opinions not only at mobile training courses but also in any occasions of daily contact to the people, they themselves develop awareness building on coastal resource management and community development. The second point concerns local business development. Given incentives by a series of training courses for fish processing, women participants have made vigorous attempts to expand the scale of production and increase amount of marketable products. The third point is that the project staffs steadily accumulate information and data on the status, trends and problems of fisheries business and resources at the project sites, by conducting scientific surveys and keeping deeper contacts with the people.

<Outcomes>

1.2 We recognize the following outcomes in the abovementioned three points.

Enhance Awareness Building

1. The majority of target fishers and resource users who joined mobile training courses enhanced awareness building about sustainable use of coastal resources.
2. The fishers and resource users are encouraged to join the project activities and assess the plan and purpose, and increasingly contribute the participatory project activities.
3. Those leaders who joined the training courses conducted before April have a vital role in the process of preparing and organizing mobile training courses.
4. The project staffs recognize the need for participatory training course and the manners in which to arrange it, through preparation for the mobile training course.

Local Business Development

1. Encouragement of fish processing activity has given a rise to gradual expansion of processing production through Tambol.
2. Three groups are established for fish processing, and the number of women who are involved in fish processing is increasing.
3. The success of the project activity for processing business is widely acknowledged by the people at the project site.
4. The project staffs grow up to guide the women groups according to their demand. At present, the members become more and more independent.

Accumulation of Information and Data

1. A series of regular survey give accurate information and data on the situation and trends of coastal resources and fisheries business, and the socio-economic surroundings of fishing communities and households.
2. Through analyzing process, the project staffs review their initial plan and access their past activities.
3. The project staffs starts with preparation for restoring the accumulated information and data to the people and the local society.

<Problems>

1.3 To implement the project activities effectively and plan the people-demanded ones, there are several problems to be resolved.

1. Lack of coordination between the teams

As the project has diversified its activities and objectives according to the teams' own plans, the project staffs find a difficulty to exchange information and opinion between the teams. This often makes their activities overlap with others.

2. Shortage of information to be provided for the people's participation

An increasing number of people join the project activities; however, the project staffs do not timely provide adequate and accurate information on the objectives and purposes of project activities. With more information, more and more people would have joined the project activities.

3. Duplicated activities and training programs

In Tambol Pakklong, other government agencies and NGOs also undertake different components of projects. They organize their own training courses and programs targeting those people whom we also target. The beneficiaries groups are often the same, and the content of activities, especially awareness and training courses, are duplicated. There should be coordination between the agencies involved.

4. Feeling of unfairness among beneficiary groups (in Activity III)

When supporting the women's group for fisheries processing (in Moobaan No. 1), some groups and non-members also want the same level or more help from the project staff. However, this is a plot activity, and the group's success is greatly attributed to the leaders and members' enthusiasm about the creation of alternative income sources. Its members seek their own investment funds and apply to subsidy schemes provided by local government. In this regard, we should disseminate their successful experiences and lessons to other groups and non-members.

<Solutions and Actions>

1.4 The project staff should take action to solve problems at the next stage of the project activities, as follows;

1. Increase the exchange of information between the teams

The Research Team, especially the socio-economic survey group, accumulates the basic and substantial information and data. These should be distributed to all the project members after they are converted into explainable factors.

2. Coordination and cooperation with other government agencies and NGOs

If necessary, the project should reschedule and re-plan any activities that overlap and are duplicated with other projects. Cooperation will be needed.

3. Prepare a newsletter and develop measurements to disseminate the outcomes of the project activities.

4. Plan for restoring the information and data accumulated through survey activities to the people.

In collaboration with the Extension Team and the Training Team, the Research Team should make plans for restoring the information and data within the next quarter. Although several parts of oceanographic and landing yearly-basis research are still continuing, the project will present the simplified substantial figures to the people as soon as possible.

Reference I

ผลการสำรวจครัวเรือนแยกตามการจดทะเบียนบ้านเลขที่

หมู่	ไม่มีบ้านเลขที่	มีบ้านเลขที่	มีบ้านเลขที่แต่มีบ้านมากกว่า 1 หลัง	รวม
1	15	184	5	204
2	9	112	3	124
3	8	85	3	96
5	11	124	9	144
6	12	138	1	151
7	15	94	11	120

หมายเหตุ บ้านที่มีเลขที่แต่มีบ้านมากกว่า 1 หลัง จากแบบสอบถามจะนับรวมเป็น 1

ผลการสำรวจครัวเรือนแยกตามจำนวนเรือ

หมู่	ไม่มีบ้านเลขที่		มีบ้านเลขที่		มีบ้านเลขที่แต่มีบ้านมากกว่า 1 ลำ		มีบ้านเลขที่แต่มีบ้านมากกว่า 1 หลัง		รวม
	ไม่มีเรือ	มีเรือ 1 ลำ	ไม่มีเรือ	มีเรือมากกว่า 1 ลำ	ไม่มีเรือ	มีเรือ 1 ลำ	ไม่มีเรือ	มีเรือ 1 ลำ	
1	8	7	117	56	11	1	1	3	204
2	9	0	91	19	2	0	3	0	124
3	7	1	52	30	3	1	2	0	96
5	7	4	101	23	0	0	9	0	144
6	9	2	106	23	9	1	0	0	151
7	12	3	54	33	7	1	3	7	120

หมายเหตุ บ้านที่มีเลขที่แต่มีบ้านมากกว่า 1 หลัง จากแบบสอบถามจะนับรวมเป็น 1

ผลการสำรวจครัวเรือนแยกตามแหล่งรายได้จากการทำประมง

หมู่	ไม่มีบ้านเลขที่				มีบ้านเลขที่				มีบ้านเลขที่แต่มีบ้านมากกว่า 1 หลัง				รวม
	ไม่ได้ลงทะเบียน	ลงทะเบียน	ลงทะเบียน	ลงทะเบียน	ไม่ได้ลงทะเบียน	ลงทะเบียน	ลงทะเบียน	ลงทะเบียน	ไม่ได้ลงทะเบียน	ลงทะเบียน	ลงทะเบียน	ลงทะเบียน	
1	7	8	0	0	119	59	2	6	1	4	0	0	212
2	9	0	0	0	93	16	3	4	2	0	0	0	128
3	6	1	0	0	61	33	0	0	1	2	0	0	104
5	7	3	0	1	113	21	0	0	7	2	0	0	154
6	9	3	0	0	107	31	2	0	0	1	0	0	153
7	10	4	0	0	59	40	2	8	3	5	1	0	132

หมายเหตุ: นับเฉพาะครัวเรือนที่ประกอบอาชีพประมงและเพาะเลี้ยงสัตว์น้ำ

ผลการสำรวจครัวเรือนแยกตามการประกอบอาชีพ

หมู่	ไม่มีบ้านเลขที่										มีบ้านเลขที่								มีบ้านเลขที่แต่มีบ้านมากกว่า 1 หลัง								รวม
	รับจ้าง	รับจ้างและค้าขาย	เกษตกร	ประมงและเกษตกร	ค้าขาย	เพาะเลี้ยง	รับจ้าง	ประมง	ประมงและค้าขาย	ประมงและเพาะเลี้ยง	ประมงและค้าขาย	เกษตกร	เกษตกรและรับจ้าง	เกษตกรและค้าขาย	เพาะเลี้ยงและรับจ้าง	ประมง	ประมงและรับจ้าง	ประมงและเกษตกร	ค้าขาย	เกษตกร	เกษตกรและรับจ้าง	เกษตกรและค้าขาย	รับจ้าง				
1	5	2	8	1	10	2	52	47	3	4	26	3	1	4	1	2	1	1	1					183			
2	1				1	2	7	7		1	55	3		1										97			
3	1		1		1		12	19			19	13						1	1					81			
5	1		2	1	10		24	12	3	1	15	9	4	5						1	1	1	1	101			
6	1		1		13		24	23	3	1	52	10	3	5			1	1						144			
7	3		3		4	2	4	15	10	1	19	7	3	10		2	3	3						89			

หมายเหตุ การนับจะนับเฉพาะครัวเรือนที่ประกอบอาชีพเท่านั้น

Reference II

สำมะโนชาวประมง ปี 2545

ชื่อผู้สัมภาษณ์.....วันที่สัมภาษณ์.....

ชื่อผู้ถูกสัมภาษณ์.....ความสัมพันธ์กับครัวเรือน.....

ที่อยู่ บ้านเลขที่.....หมู่.....ตำบล.....อำเภอ.....จังหวัด.....

ตอนที่ 1 ข้อมูลทั่วไปของครัวเรือน

ลำดับ	ชื่อ-สกุล	อายุ(ปี)	เพศ	การศึกษา	อาชีพ
1					
2					
3					
4					
5					
6					

รหัสเพศ
ชาย = 1
หญิง = 2
รหัสการศึกษา
ไม่เรียน = 0
อนุบาล = 1
ประถม = 2
มัธยม = 3
ปริญญาตรีขึ้นไป = 4

ตอนที่ 2 การประกอบกิจการประมงทะเลและเพาะเลี้ยงชายฝั่ง

2.1 ลักษณะการดำเนินงาน

- ทำประมงอย่างเดียว ทำทั้ง 2 อย่างแต่มีรายได้ส่วนใหญ่มาจากการทำประมง
 เพาะเลี้ยงสัตว์น้ำ ทำทั้ง 2 อย่างแต่มีรายได้ส่วนใหญ่มาจากการเลี้ยงสัตว์น้ำ

2.2 จำนวนคนที่ออกทำประมงทะเล/เพาะเลี้ยงชายฝั่งในรอบปีที่ผ่านมา

กิจกรรม	จำนวนสมาชิกในครัวเรือน (คน)	จำนวนลูกจ้างในแหล่งต่างๆ (คน)		
		ในจังหวัด	ต่างจังหวัด	ต่างประเทศ
การทำประมง				
การเพาะเลี้ยง				

ตอนที่ 3 การทำประมงทะเล

3.1 การทำประมงทะเล

เรือลำที่	ชื่อเรือ	ประเภทเรือ	ความยาวเรือ (เมตร)	การถือครอง
1				
2				
3				

รหัสเรือ

เรือวางท้อง = 1
เรือหางยาว = 2
เรืออื่นๆ = 3

รหัสการถือครอง

เจ้าของ = 1
เช่า = 2
เจ้าของร่วมกับผู้อื่น = 3

1 วา = 2 เมตร
1 ศอก = 0.5 เมตร

3.2 ชนิดเครื่องมือประมงที่ถือครอง

<input type="radio"/> IG อวนปลาหู	<input type="radio"/> MG อวนปลากระบอก	<input type="radio"/> SGT อวนปลาทราย	<input type="radio"/> SDGN อวนปลาหลังเขียว	<input type="radio"/> STN อวนกุ้ง
<input type="radio"/> CGT อวนปู	<input type="radio"/> PN อวนรุน	<input type="radio"/> KPN รุนเคย	<input type="radio"/> ACN ครอบกะตัก	<input type="radio"/> GT ลอบปลาเก๋า
<input type="radio"/> CT ลอบปู	<input type="radio"/> JGT ลอบลูกปลาเก๋า	<input type="radio"/> ST ลอบหมึก	<input type="radio"/> APS อวนล้อมกะตัก	<input type="radio"/> SHL ตกหมึก
<input type="radio"/> HL ตกเบ็ด	<input type="radio"/> SCN แหหมึก	<input type="radio"/> ไฟกระสือ	<input type="radio"/>	<input type="radio"/>

3.3 เครื่องมือประมงที่ใช้ทำประมงบ่อยที่สุด ในรอบปีที่ผ่านมา ตั้งแต่ 1 พฤษภาคม 2544 ถึง 30 เม.ย.45 ได้แก่ (ให้ใส่รหัสตามข้อ 3.2).....

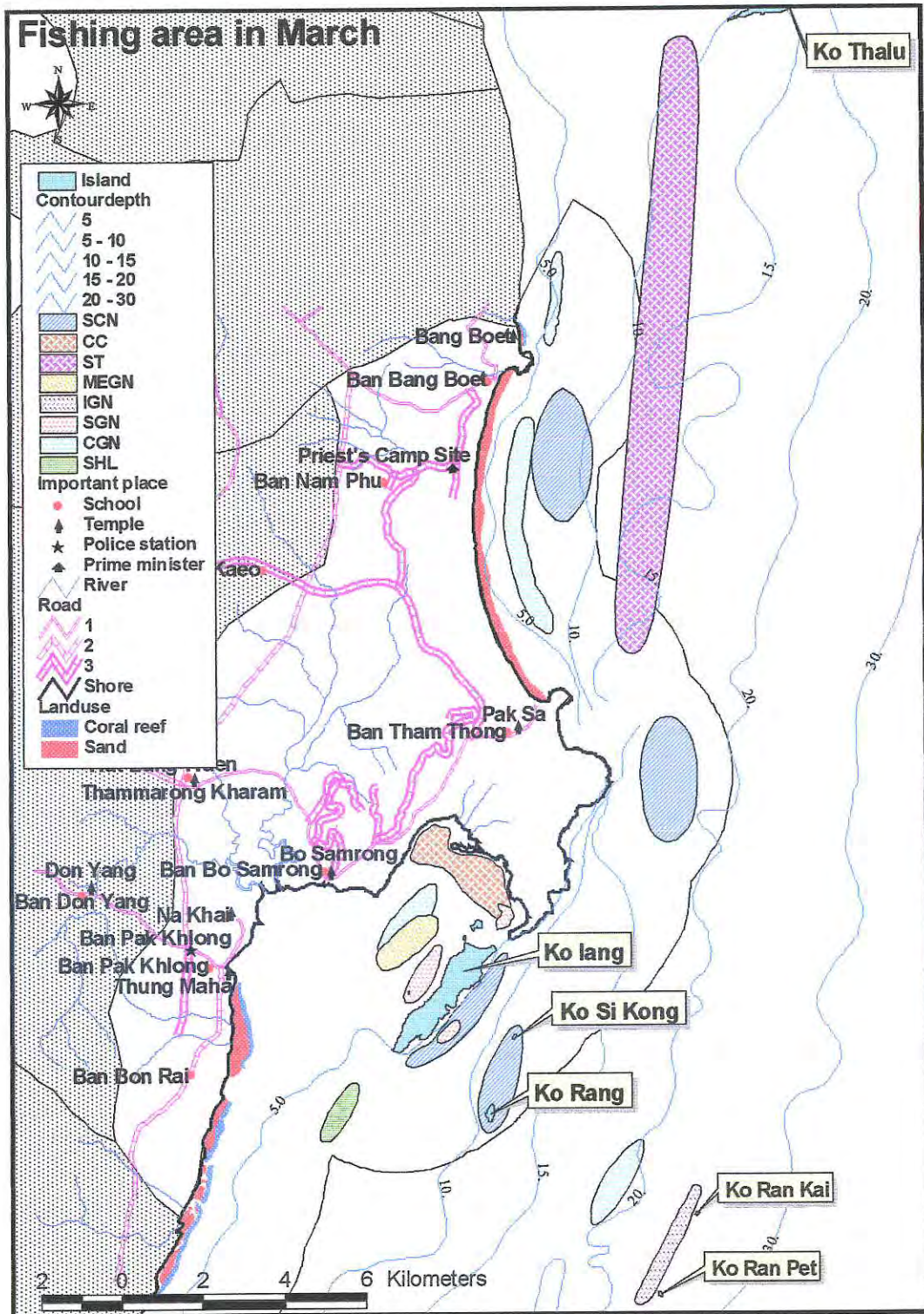
3.4 เครื่องมือประมงที่ทำรายได้สูงสุด ในรอบปีที่ผ่านมา ตั้งแต่ 1 พฤษภาคม 2544 ถึง 30 เม.ย. 45 ได้แก่(ให้ใส่รหัสตามข้อ 3.2).....

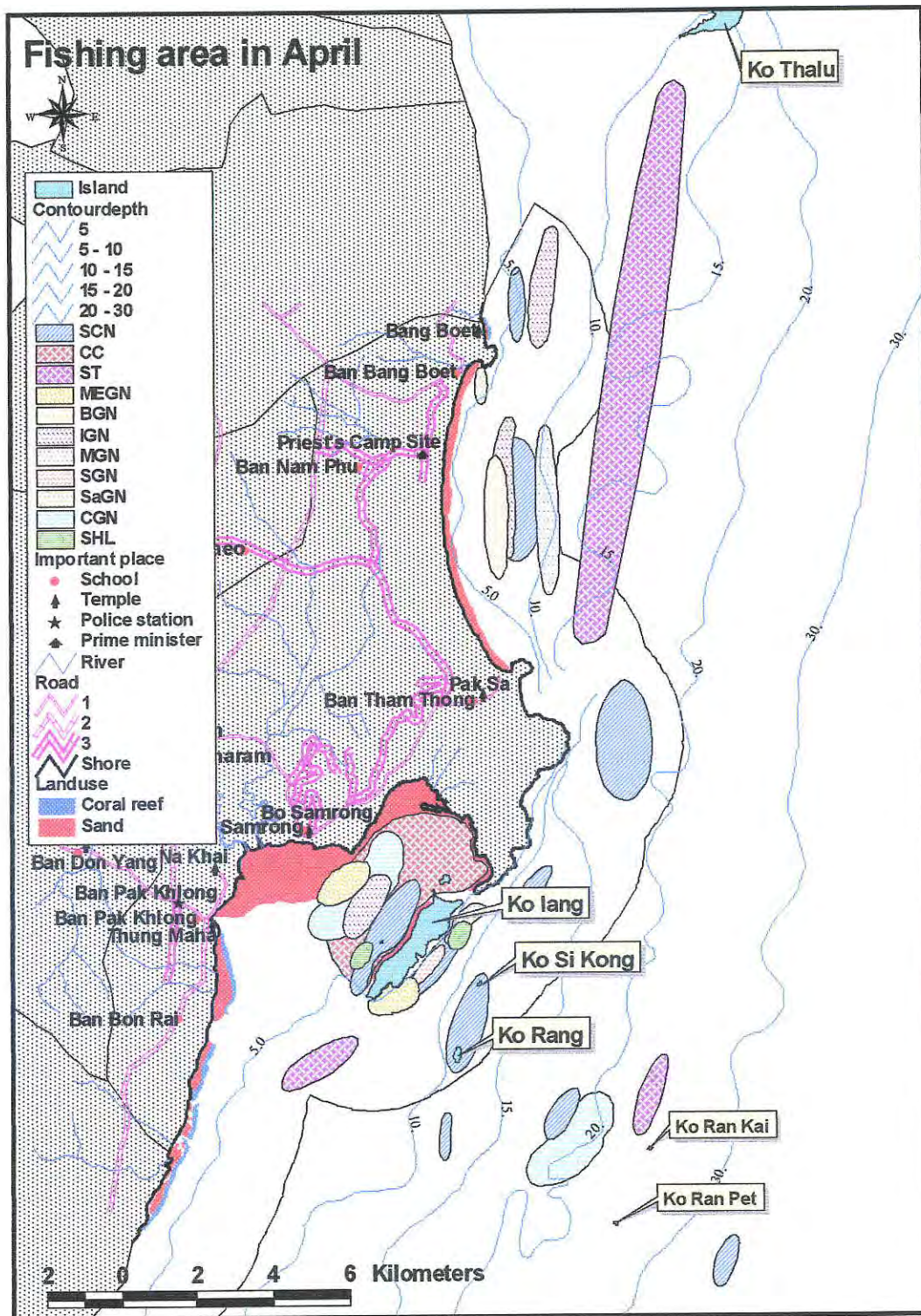
ตอนที่ 4 การเพาะเลี้ยงชายฝั่ง

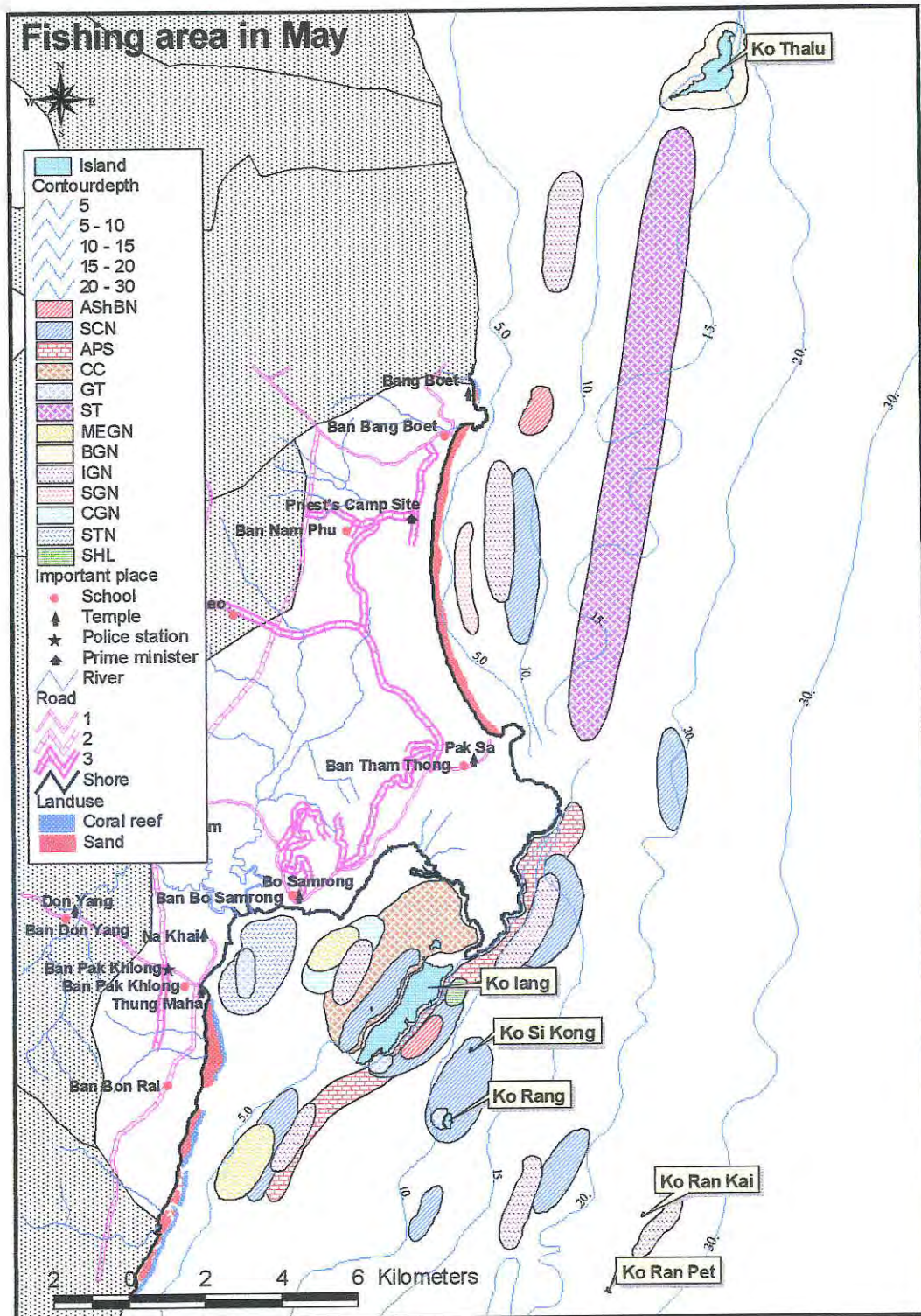
ชนิดสัตว์น้ำ	วิธีการเลี้ยง	เนื้อที่การเพาะเลี้ยง		ลักษณะการถือครอง	แหล่งพันธุ์สัตว์น้ำ
		ไร่	ตารางเมตร		

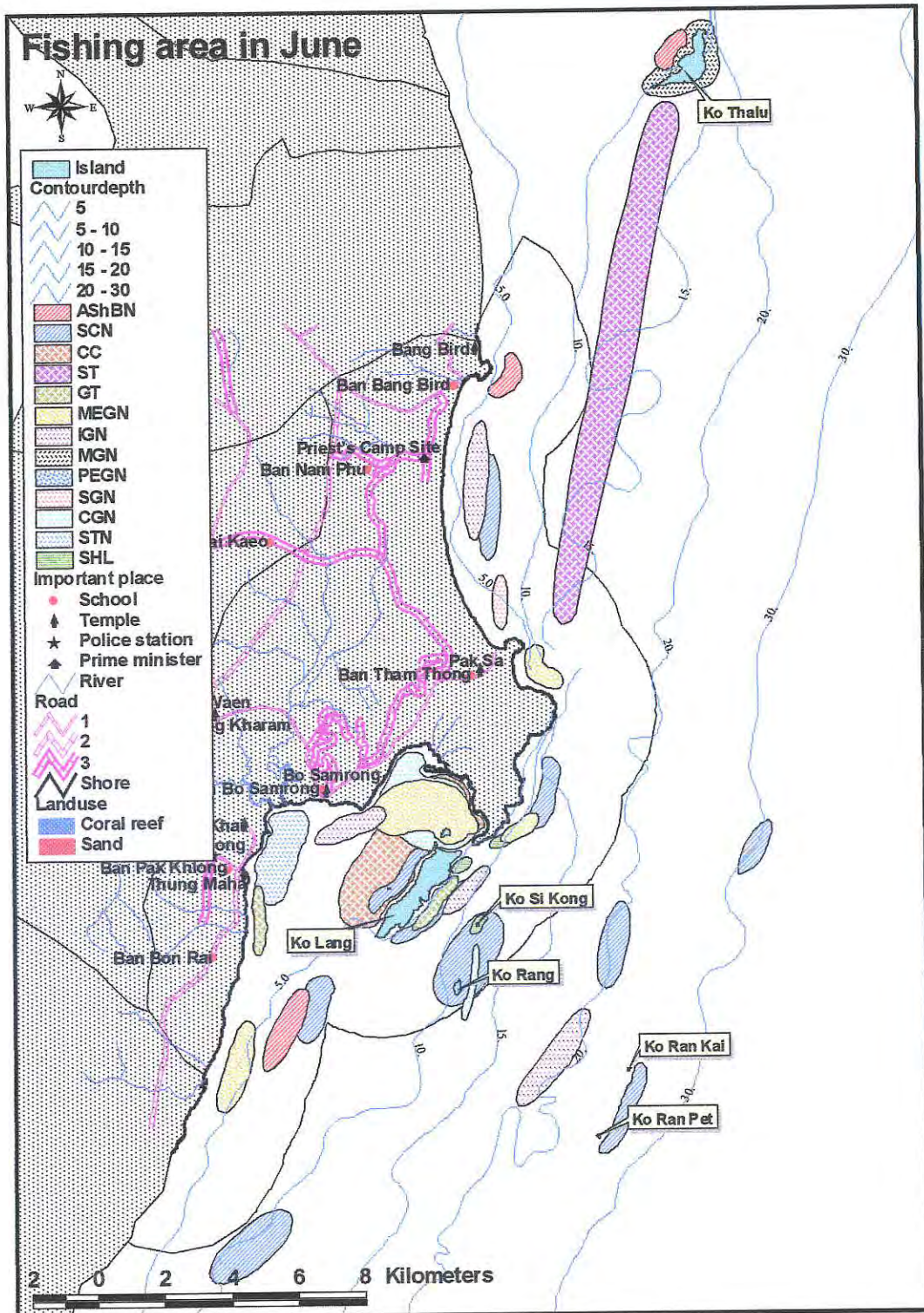
รหัสสัตว์น้ำ	วิธีการเลี้ยงกุ้ง	วิธีการเลี้ยงหอย	การถือครอง
กุ้งกุลาดำ = 1	แบบพัฒนา = 1	แขวน = 6	เจ้าของ = 1
ปลากะพงขาว = 2	แบบกึ่งพัฒนา = 2	ปักหลัก = 7	เช่า = 2
ปลากะพงแดง = 3	แบบธรรมชาติ = 3	หว่าน = 8	เป็นเจ้าของร่วมกับผู้
ปลาเก๋า = 4	วิธีการเลี้ยงปลา/ปู		อื่น = 3
ปลาอื่นๆ = 5	ในกระชัง = 4		
หอยแมลงภู่ = 6	ในบ่อ = 5		
หอยอื่นๆ = 7			

Reference III









Reference IV

