

TD/RP/18

January 1987

REPORT ON THE SEVENTH REGIONAL TRAINING COURSE  
FOR  
FISHERY EXTENSION OFFICERS IN MARINE CAPTURE FISHERIES  
5 November to 19 December 1986

Submitted by  
the Training Department  
Southeast Asian Fisheries Development Center  
to  
the Royal Government of the Netherlands

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## I. INTRODUCTION

The Training Department has conducted regional training courses for fishery extension officers since 1981, with assistance from the Royal Netherlands Government under the SIR Program. Six training courses with a total of 140 fishery officers from the countries in the South and Southeast Asian regions, were organized by the Department between 1981 and 1985.

Under its program for 1986, the Training Department organized the Seventh Regional Training Course for Fishery Extension Officers from 5 November to 19 December 1986. The emphasis of this course was placed on marine fishing technology which is of great importance to the countries in the South and Southeast Asian regions.

Invitations to nominate participants to the seventh training course were sent to eleven countries i.e., Bangladesh, Brunei, Burma, India, Indonesia, Maldives, Malaysia, Philippines, Singapore, Sri Lanka and Thailand. Eight countries responded and sent participants to attend the course:

Brunei	1
India	2
Indonesia	1
Malaysia	4
Philippines	4
Singapore	2
Sri Lanka	2
Thailand	4
Total	<u>20</u>

The list of participants and instructors is given as Annex A.

## II. OBJECTIVES OF THE COURSE

The objectives of the Seventh Regional Training Course for Fishery Extension Officers were:

1. To train the fishery officers and fishery extension workers in the basics of marine fishing technology, coastal navigation and seamanship;

2. To familiarize the participants with extension methodology, as well as the development of communication and media design for extension services; and

3. To provide shipboard training and study/observation trips for participants on the actual marine fishing practice and on infra-structures required for the development of fisheries.

### III. COURSE OUTLINE

The curriculum of the Seventh Regional Training Course consisted of the following five subjects for classroom study and field practice:

#### 1. Fishing Technology (12 days; classes and practice)

1.1 Fisheries in general

1.2 Fishery oceanography

1.3 Fishing gear in general

1.4 Fishing gear design and construction

1.5 Fishing methods

1.6 Auxiliary fishing gear and equipment

#### 2. Coastal Navigation and Seamanship (4 days)

2.1 Determination of ship's position

2.2 Chart reading

2.3 Seamanship

#### 3. Extension methodology (6 days)

3.1 Planning process in extension work

3.2 Development of communication and media design

#### 4. Shipboard training on board M.V. PAKNAM and M.V. PLATOO (10 days)

4.1 Trawl net

4.2 Bottom vertical longline

4.3 Marlin longline

4.4 Trap fishing

4.5 Purse seine

4.6 Squid fishing

4.7 Drift gill net

4.8 Navigation and seamanship

5. Study and observation trips (6 days)

5.1 Fish Marketing Organization

5.2 Fishing port

5.3 Fish processing plants

5.4 Net-making factory

5.5 Shipyard

5.6 Fishery cooperatives

5.7 Fishing villages

IV. TRAINING PROGRAM

1. Lectures and Practices

Training was carried out with all facilities and resources being fully utilized, both ashore and at sea (see Training Schedule in Annex B). In general, the daily training began at 0900 hrs. on weekdays with classroom lecture and discussion till 1200 hrs. For the afternoon session, either the continuation of class lecture, workshop practice at net loft, experiment or testing at laboratory from 1300-1600 hrs., was conducted. Lectures on theoretical subjects were occasionally followed either by demonstration in the workshop, on board the training vessel, or by field trips to relevant places, such as net-making factory, canning factory, cold storage, etc. Ten days were spent at sea on board M.V. PAKNAM, the 380 GT trawler, and M.V. PLATOO, the 67 GT purse-seiner, of the Training Department, to practise the fishing gears operation, navigation and seamanship (see Annex C for reference books and lecture notes employed in the course).

## 2. Field Trips

Various places related to fishing activities such as fishing villages in the provinces of Samut Sakhon, Samut Songkram and Rayong; fishing communities, with and without cooperatives; fish markets; fish processing plants in Bangkok and Samut Prakarn, a net-making factory, a cold storage plant, etc., were visited as follows:

- 8 November 1986 : 0600-1000 : Visited Fish Marketing Organization (FMO) in Bangkok, Briefing of the Organization's activities was given by the Deputy Director of FMO, who kindly took participants around to observe the fish landing and auction system of the fish market.
- : 1000-1200 : Visited Siam Brothers Co., Ltd., a net-making factory at Phra Pradaeng, Samut Prakarn, to observe the entire process of manufacturing fishing nets, i.e., twine making, net weaving, net cutting, etc. The participants much appreciated the manager's willingness to transfer knowledge.
- 15 November 1986 : 0630-1600 : Visited the fishing port and observed the canning process of sardines and tuna in a canning factory at Samut Sakhon province. Visited a fisheries cooperative of Samut Songkhram province to observe fish landing places owned by cooperatives and discussed the matter with a member of the cooperatives' Committee.
- 22 November 1986 : 0900 : By SEAFDEC bus to Prasae Estuary, Rayong province, to visit a fishing port, the Fishermen's Association, and the local fish market. Observed the local purse seiners, types and sizes of purse seines in use, crab gill net and squid lift net. Participants were also taken to a shrimp farm and fish farm (sea bass and grouper), a slip-way for the repair of local fishing boats, and an engine repair workshop. Overnight at Rayong.
- 23 November 1986 : 0800 : Visited Ban Phe fish market to observe the auction of squid, the local processing of dried squid and the fish meal plant. Left Rayong at 1000 for Pattaya in Chonburi province to visit the fishing port, the Marine Science Center of Srinakarinwirot University at Bang Saen and its aquarium and Marine Science Museum. Returned to the Center at 1730 hrs.

3. Shipboard Training at Sea: A ten-day shipboard training in fishing operations and coastal navigation was carried out on board M.V. PAKNAM, the 380 GT trawler and M.V. PLATOO, the 67 GT purse seiner. The cruising area was the Gulf of Thailand off the Province of Rayong.

M.V. PAKNAM left the pier on 1 December 1986, as scheduled, and headed to Rayong where all participants embarked on M.V. PLATOO. Purse seining, squid fishing and drift net fishing operations were demonstrated on 2 and 3 December. From 4 December all participants rejoined M.V. PAKNAM and headed for the selected fishing grounds. On the way, practice on fishing operations and coastal navigation were conducted alternately. All participants took part in the daily activities and were encouraged to prepare fishing gears themselves in order to find out if they worked well or needed adjustment. Coastal navigation was practised during sailing time, or during fishing operations, when there were idle periods between casting the nets and hauling them in. Both daytime and night-time fishing operations were carried out regardless of the normal rest periods. M.V. PAKNAM arrived at SEAFDEC pier at 1000 hrs. on 10 December 1986.

#### V. EVALUATION

Generally speaking, the end of course evaluation, in which the participants cooperated by answering a questionnaire, proved to be constructive. Most of them were in favour of the present training arrangements. The results of this inquiry are shown in Annex D.

The majority of participants agreed that the course was beneficial to extension work, but noted that more time should be dedicated to extension methodology, especially in development of communication and media design. They also suggested more practice in the workshop.

In view of the comments and suggestions received, some slight modifications of the living conditions at the SEAFDEC Training Department's dormitory as regards food and beverages and difficulties of communication with dormitory staff and security guards will be considered for future courses.

#### VI. CONCLUSION

In general, it can justly be considered that all the objectives of the training were achieved. Participants were satisfied with their six-week stay and training at the SEAFDEC Training Department. They all agreed that the course had provided valuable knowledge for the

work of an extension officer. Although some of the participants were not directly concerned with extension services when they joined the course, they expressed the view that the knowledge gained was beneficial and could be applied not only to the field of fisheries extension but also to their present work.

To conclude this report, it can be said that the Seventh Extension Course was conducted satisfactorily, all the objectives having been achieved.

V. EVALUATION

Generally speaking, the end of course evaluation by the participants cooperated by answering a questionnaire, which was constructive. Most of them were in favour of the present extension experiments. The results of this inquiry are given in Table V.

The majority of participants agreed that the course was beneficial to extension work, but noted that more time should be dedicated to extension methodology, especially in development of communication and media design. They also suggested improvements in the workshop.

In view of the knowledge and experience received, the staff modifications of the living conditions as well as the STAFFED TRAINING COURSE meant a definitely as regards food and beverages and facilities of communication with delivery staff and security guard will be considered for future courses.

VI. CONCLUSION

In general, it can justly be concluded that all the objectives of the training were achieved. Participants were satisfied with their six-week stay and training in the STAFFED TRAINING DEPARTMENT. They all agreed that the course had provided them with knowledge for the



MALAYSIA

**LIST OF PARTICIPANTS AND INSTRUCTORS**

**A. Participants**

**BRUNEI**

1. Mr. Ajamain Bin Haji Sawal  
Assistant Fisheries Officer  
Department of Fisheries  
Ministry of Development  
P.O. Box 2161  
Bandar Seri Begawan  
Negara Brunei Darussalam

**INDIA**

1. Mr. P. Ramanujan  
Instructor (General)  
Central Institute of Fisheries  
Nautical & Engineering Training  
Fishing Harbour  
Visakhapatnam - 53001  
India
2. Mr. Sebastian De Gonzaga  
Head, Integrated Fisheries Project  
Ministry of Agriculture  
Cochin, India

**INDONESIA**

1. Mr. Tyas Budiman  
Sub-directorate of  
Fishing Productivity  
Directorate General of Fisheries  
Salemba Raya 16  
Jakarta  
Republic of Indonesia

PHILIPPINES

2. Mr. Cesar B. Kimpa  
Supervising Fishery Extension Specialist  
Bureau of Fisheries and Aquatic Resources  
R.T. Lim Boulevard  
Lampasara City, Philippines

Annex A

**MALAYSIA**

LIST OF PARTICIPANTS AND INSTRUCTORS

1. Mr. Hamzah K.C. Ahammu  
Fisheries Assistant  
Fisheries Department  
8th & 9th Floor, Wisma Tani  
Jalan Mahameru  
50628, Kuala Lumpur  
Malaysia

Participants  
INDONESIA

2. Mr. Fooa Teck Heng  
Fisheries Assistant  
Fisheries Department  
8th & 9th Floor, Wisma Tani  
Jalan Mahameru  
50628, Kuala Lumpur  
Malaysia

3. Mr. Kapri Bin Salleh  
Fisheries Assistant  
Fisheries Department  
36th Floor, Komtar Pulau  
Penang, Malaysia

INDIA

4. Mr. Ab. Halim Bin Ab. Kadir  
Fisheries Assistant  
Department of Fisheries  
8th & 9th Floor, Wisma Tani  
Jalan Mahameru  
50628 Kuala Lumpur  
Malaysia

Project  
Head, Ministry of Agriculture  
Cochin, India

**PHILIPPINES**

1. Mr. Fernando G. Temporosa  
Fishery Extension Specialist  
Bureau of Fisheries and Aquatic  
Resources  
District Fishery Office  
Bacolod City  
Philippines
2. Mr. Jaafar B. Kimpa  
Supervising Fishery Extension Specialist  
Bureau of Fisheries and Aquatic Resources  
R.T. Lim Boulevard  
Lamboanga City, Philippines

INDONESIA

**PHILIPPINES**

ORILLANT

3. Mr. Juanito C. Dasilao, Jr.  
Fishery Technologist  
Bureau of Fisheries and Aquatic Resources  
Magsaysay Avenue  
Davao City, Philippines
4. Mr. Antonio C. Calisin  
Fishery Biologist  
Bureau of Fisheries and Aquatic Resources  
827 Calderon Bldg.,  
EDSA, Quezon City  
Philippines

**SINGAPORE**

1. Mr. Loke Kim Guan  
Assistant Primary Production Officer  
Department of Primary Production  
Maxwell Road  
Singapore
2. Mr. Ng Hong Nam  
Assistant Primary Production Officer  
Department of Primary Production  
Maxwell Road  
Singapore

**SRI LANKA**

1. Mr. Ariyatilaka Nerangan Chandradithya  
District Fisheries Extension Officer  
Ministry of Fisheries  
Sri Lanka
2. Mr. Azeez Mohamed Mansoor  
Fisheries Inspector Grade I  
District Fisheries Extension Office  
Trincomalee  
Sri Lanka

**THAILAND**

1. **Mr. Kanit Naksung**  
Extension Officer  
Fishery Extension Division  
Department of Fisheries  
Ministry of Agriculture and Cooperatives  
Rajdamnern Avenue  
Bangkok 10200
2. **Mr. Sutap Vattanapanich**  
Fishery Officer  
Fishery Extension Division  
Department of Fisheries  
Ministry of Agriculture and Cooperatives  
Rajdamnern Avenue  
Bangkok 10200
3. **Mr. Dumreang Charunya**  
Technician  
Exploratory Fishing Division  
Department of Fisheries  
Amphoe Muang  
Samut Prakarn 10270
4. **Mr. Pinit Thongchit**  
Fishery Officer  
Marine Fisheries Division  
Department of Fisheries  
89/1 Soi Sapanpla  
Yannawa, Bangkok 10120

**B. Instructors**

**I. TRAINING DEPARTMENT STAFF**

1. **Mr. Kazuo Inoue**  
Deputy Secretary-General and Deputy Chief  
of the Training Department  
Southeast Asian Fisheries Development Center  
Liaison Office of the Secretariat and the  
Training Department  
956 Olympia Building, 4th Floor  
Rama IV Road, Bangkok 10500

2. Mr. Somyos Soodhom  
Head of Training Division  
SEAFDEC Training Department  
P.O. Box 13-4, Phra Pradaeng  
Samut Prakarn 10130
3. Mr. Prasert Masthawe  
Head of Fishing Technology Section  
Training Division  
SEAFDEC Training Department
4. Mr. Somnuk Pornpatimakorn  
Head of Training Aids Unit and  
Instructor of Fishery Oceanography  
Training Division  
SEAFDEC Training Department
5. Mr. Masato Oishi  
Masterfisherman and Instructor  
of Navigation  
Training Division  
SEAFDEC Training Department
6. Mr. Yutaka Matsunaga  
Instructor of Fishing Gear Technology  
Training Division  
SEAFDEC Training Department
7. Mr. Bundit Chokesanguan  
Instructor of Fishing Gear Technology  
Training Division  
SEAFDEC Training Department
8. Mr. Kungwan Juntarashote  
Head of Statistics and Socio-economics Section  
Research Division  
SEAFDEC Training Department
9. Mr. Aussanee Munprasit  
Researcher in Fishing Gear  
Research Division  
SEAFDEC Training Department
10. Mr. Sutee Rajruchithong  
Acting Captain of M.V. PLATOO  
Ship Division  
SEAFDEC Training Department

11. Mr. Yuttana Theparoonrat  
Assistant Researcher in the Fishing  
Gear Technology  
Research Division  
SEAFDEC Training Department
12. Mr. Suppachai Ananongsuk  
Assistant Researcher in the Resources  
Evaluation  
Research Division  
SEAFDEC Training Department

II. GUEST LECTURER

1. Dr. Apichart Termvidchakorn  
Senior Biologist  
Exploratory Fishing Division  
Department of Fisheries  
Amphoe Muang  
Samut Prakarn 10270

**Program of the 7th Regional Training Course**

for

**Fishery Extension Officers in Marine Capture Fisheries**

**Course : Marine Fishery Extension**

**Duration : 45 days (5 November to 19 December 1986)**

**Schedule :**

**5 November (Wed.)**

1030-1200 : **Opening Ceremony**  
(Dr. Veravat Hongkul)

1300-1600 : **Course Orientation, Film and Slide shows  
on Fishing Industries**  
(Messrs. Somnuk Pornpatimakorn and Bundit Chokesanguan)

**6 November (Thu.)**

0900-1200 : **Fisheries in General**  
(Mr. Kazuo Inoue)

1300-1600 : **Fisheries in South and Southeast Asia**  
(Messrs. Kungwan Juntarashote and Somyos Soodhom)

**7 November (Fri.)**

0900-1200 : **Fishery Oceanography: I. An overview**  
(Mr. Somnuk Pornpatimakorn)

1300-1600 : **Fishery Oceanography: II. Application of  
oceanography to fisheries**  
(Mr. Somnuk Pornpatimakorn)

**8 November (Sat.)**

- 0500-1000 : Visit Fish Marketing Organization  
(Messrs. Budit Chokesanguan and Yuttana  
Theparoonrat)
- 1100-1300 : Visit net-making factory, Siam Brother  
Co., Ltd.  
(Messrs. Budit Chokesanguan and Yuttana  
Theparoonrat)

**9 November (Sun.)**

- 0900-1600 : Excursion in Bangkok  
(Messrs. Yuttana Theparoonrat and  
Suppachai Ananongsuk)

**10 November (Mon.)**

- 0900-1200 : Fishery Oceanography: III. Oceanographic  
analyses and forecasts  
(Dr. Apichart Termvidchakorn)
- 1300-1600 : Fishery Oceanography: IV. Numerical Models  
and Remote Sensing  
(Dr. Apichart Termvidchakorn)

**11 November (Tue.)**

- 0900-1200 : Fishing Gears in General  
(Mr. Aussanee Munprasit)
- 1300-1600 : Fishing Gears in General  
(Mr. Yutaka Matsunaga)

**12 November (Wed.)**

- 0900-1200 : Gill Net Fisheries  
(Mr. Yuttana Theparoonrat)
- 1300-1600 : Gill Net Fisheries (practice)  
(Mr. Yuttana Theparoonrat)

**13 November (Thu.)**

- 0900-1200 : Seamanship  
(Mr. Sutee Rajruchithong)
- 1300-1600 : - ditto -



14 November (Fri.)

0900-1200 : Auxiliary Fishing Gear and Equipment  
(Mr. Sutee Rajruchithong)

1300-1600 : Rope and Wire Splicing  
(Messrs. Bundit Chokesanguan and Yuttana  
Theparoonrat)

15 November (Sat.)

0630-1600 : Visit fishing port, Canning factory,  
cold storage etc. and fishery  
cooperatives at Samut Sakhon and  
Samut Songkhram provinces  
(Messrs. Sutee Rajruchitong, Yuttana  
Theparoonrat and Suppachai Ananpongsuk)

16 November (Sun.)

Free

17 November (Mon.)

0900-1200 : Purse Seine Fisheries  
(Mr. Prasert Masthawe)

1300-1600 : Purse Seine Fisheries  
(Mr. Prasert Masthawe)

18 November (Tue.)

0900-1200 : Trawl Fisheries  
(Mr. Bundit Chokesanguan)

1300-1600 : Trawl Fisheries  
(Mr. Bundit Chokesanguan)

19 November (Wed.)

0900-1200 : Squid Fisheries  
(Mr. Aussanee Munprasit)

1300-1600 : Net-making and Mending  
(Messrs. Aussanee Munprasit and Yuttana  
Theparoonrat)

20 November (Thu.)

0900-1200 : Modelling of Fishing Gear  
(Mr. Bundit Chokesanguan)

1300-1600 : Model Net Experiment in Water Tank  
(Messrs. Bundit Chokesanguan and Yuttana Theparoonrat)

21 November (Fri.)

0900-1200 : Miscellaneous Fisheries  
(Mr. Yuttana Theparoonrat)

1300-1600 : Squid Fisheries Practice  
(Messrs. Aussanee Munprasit and Yuttana Theparoonrat)

22 November (Sat.)

0900-1600 : Visit fishing village, shipyard, fish mill factory in Rayong Province  
(Messrs. Aussanee Munprasit and Yuttana theparoonrat)

23 November (Sun.)

0800-1600 : Visit Marine Science Center in Chonburi province  
(Messrs. Aussanee Munprasit and Yuttana Theparoonrat)

24 November (Mon.)

0900-1200 : Coastal Navigation  
(Mr. Masato Oishi)

1300-1600 : - ditto -

25 November (Tue.)

0900-1200 : - ditto -

1300-1600 : - ditto -

**26 November (Wed.)**

0900-1200 : Line Fisheries  
(Mr. Yutaka Mutsunaga)

1300-1600 : Line Fisheries Practice  
(Mr. Yutaka Mutsunaga)

**27 November (Thu.)**

0900-1200 : Coastal Navigation  
(Mr. Masato Oishi)

1300-1600 : - ditto -

**28 November (Fri.)**

0900-1600 : Excursion to the Crocodile Farm and  
Ancient City  
(Messrs. Somnuk Pornpatimakorn and  
Bundit Chokesanguan)

**29 November (Sat.)**

0900-1600 : Excursion to the Floating Market,  
Nakhon Pathom and Rose Garden  
(Messrs. Somnuk Pornpatimakorn and  
Bundit Chokesanguan)

**30 November (Sun.)**

Free

**1 December (Mon.) to 10 December (Wed.)**

0900 : All participants on board M.V. PAKNAM, to  
leave the pier at 0930 for shipboard  
training in:-

**1. Fishing Operations**

1. Purse seine (on board M.V. PLATOO  
on 2 Dec. at Rayong)

2. Squid fishing and drift gill net  
(on board M.v. PLATOO on 3 Dec.  
at Rayong)

3. Marlin longline

4. Trap net fishing

5. Bottom vertical longline

6. Trawl fishing

2. Coastal Navigation

1. Locating ship's position by magnetic compass, cross bearing, direction finder, radar, dead reckoning

2. Chart reading practice, application of chart to actual coast line and landmarks

3. Hand-drawn map of coastline and landmarks

4. The use of sextant in cross-bearing

5. Star map and how to identify stars commonly used in navigation

3. Oceanographic Survey Methods

1. Shipboard instruments

2. Collecting the oceanographic data

3. Processing and interpretation

M.V. PAKNAM arrives at SEAFDEC pier at 1000 hrs. on 10 December 1986

11 December (Thu.)

0900-1200

: Basic concepts of fishery extension work and principles of marine fishery extension (Mr. Kungwan Juntarashote)

1300-1600

: Program planning & process in extension work (Mr. Kungwan Juntarashote)

**12 December (Fri.)**

0900-1200 : Development of Communication  
(Mr. Somnuk Pornpatimakorn)

1300-1600 : Preparation of Graphic Media  
(Mr. Somnuk Pornpatimakorn)

**13 December (Sat.)** : Free

**14 December (Sun.)** : Free

**15 December (Mon.)** :

0900-1200 : Media Design and Development  
(Mr. Somnuk Pornpatimakorn)

1300-1600 : Slide and Sound-slide for Extension Work  
(Mr. Somnuk Pornpatimakorn)

**16 December (Tue.)**

0900-1200 : Media Design and Development  
(Mr. Somnuk Pornpatimakorn)

1300-1600 : Development of Materials  
(Mr. Somnuk Pornpatimakorn)

**17 December (Wed.)**

0900-1200 : Development of Materials  
(Mr. Somnuk Pornpatimakorn)

1300-1600 : - ditto -

**18 December (Thu.)**

0900-1200 : - ditto -

1300-1600 : - ditto -

19 December (Fri.)

12 December (Fri.)

0900-1100 : Presentation of Output (Mr. Somnuk Pornpatimakorn)

1100-1200 : Evaluation of the Course (Messrs. Somyos Soodhom, Prasert Masthawe, Somnuk Pornpatimakorn and Budit Chokesanguan)

1800-2100 : Closing Ceremony (Dr. Veravat Hongskul and Mr. Giovanni R. Van du Ludzt)

Media Design and Development (Mr. Somnuk Pornpatimakorn) : 0900-1200

Slide and Sound-slide for Extension Work (Mr. Somnuk Pornpatimakorn) : 1300-1600

16 December (Tue.)

Media Design and Development (Mr. Somnuk Pornpatimakorn) : 0900-1200

Development of Materials (Mr. Somnuk Pornpatimakorn) : 1300-1600

17 December (Wed.)

Development of Materials (Mr. Somnuk Pornpatimakorn) : 0900-1200

ditto : 1300-1600

18 December (Thu.)

ditto : 0900-1200

ditto : 1300-1600

**LIST OF DOCUMENTS**

- EXT/86/LN 1 Fisheries in General  
(Mr. Kazuo Inoue)
- 2 Fisheries in South and Southeast Asia  
(Messrs. Kungwan Juntarashote and  
Somyos Soodhom)
- 3 Fishery Oceanography: I. An Overview  
(Mr. Somnuk Pornpatimakorn)
- 3.1 Fishery Oceanography: II. Application of  
Oceanography to Fisheries  
(Mr. Somnuk Pornpatimakorn)
- 3.2 Fishery Oceanography: III. Oceanographic  
Analyses and Forecasts  
(Dr. Apichart Termvidchakorn)
- 3.3 Fishery Oceanography: IV. Numerical Models  
and Remote Sensing  
(Dr. Apichart Termvidchakorn)
- 3, Add. 1 Glossary of the Essential Terms in Fisheries  
Oceanography  
(Mr. Somnuk Pornpatimakorn)
- 3, Add. 2 Instrumentation: Shipboard Equipment  
(Mr. Somnuk Pornpatimakorn)
- 4 Fishing Gears in General  
(Mr. Aussanee Munprasit)
- 4.1 Fishing Gears in General  
(Mr. Prasert Masthawe)
- 4, Add. 1 Fishing Gears in General  
(Mr. Yutaka Matsunaga)
- 5 Gill Net Fisheries  
(Mr. Yuttana Theproonrat)
- 6 Line Fisheries  
(Mr. Yutaka Matsunaga)
- 7 Auxiliary Fishing Gear and Equipment  
(Mr. Sutee Rajruchithong)

- 8 Rope and Wire Splicing  
(Messrs. Bundit Chokesanguan and  
Yuttana Theparoonrat)
- 9 Purse Seine Fisheries  
(Mr. Prasert Masthawe)
- 10 Trawl Fisheries  
(Mr. Bundit Chokesanguan)
- 10.1 Trawl Fisheries  
(Mr. Bundit Chokesanguan)
- 11 Squid Fisheries  
(Mr. Aussanee Munprasit)
- 12 Modelling of Fishing Gear  
(Mr. Bundit Chokesanguan)
- 12, Add. 1 Modelling of Fishing Gear  
(Mr. Bundit Chokesanguan)
- 13 Model Net Experiment in Water Tank  
(Messrs. Bundit Chokesanguan and  
Yuttana Theparoonrat)
- 14 Miscellaneous Fisheries  
(Mr. Yuttana Theparoonrat)
- 14.1 Miscellaneous Fisheries  
(Mr. Yuttana Theparoonrat)
- 15 Net-making and Mending  
(Messrs. Aussanee Munprasit and  
Yuttana Theparoonrat)
- 16 Coastal Navigation  
(Mr. Masato Oishi)
- 17 Seamanship  
(Mr. Sutee Rajruchithong)
- 18 Basic Concepts of Fishery Extension Work  
(Mr. Kungwan Juntarashote)
- 19 Principles of Marine Fishery Extension Work  
(Mr. Kungwan Juntarashote)



- 20 Program Planning & Process in Extension Work  
(Mr. Kungwan Juntarashote)
- 21 Development of Communication  
(Mr. Somnuk Pornpatimakorn)
- 22 Media Design and Development  
(Mr. Somnuk Pornpatimakorn)
- 23 Preparation of Graphic Media  
(Mr. Somnuk Pornpatimakorn)
- 24 Slide and Sound-slide for Extension Work  
(Mr. Somnuk Pornpatimakorn)
- EXT/86/Ref. 1 BOTHAM C.N., 19976. Audio-Visual Aids for  
Cooperative Education and Training, FAO, Rome.  
99 pp. (TD/LN/35)
- 2 BRADFIELD, D.J. 1966. Guide to Extension  
Training, FAO, Rome. 171 pp. (TD/LN/55)
- 3 NEDELEC, C. 1982. Definition and Classification  
of Fishing Gear Categories, FAO, Rome. 51 pp.  
(TD/LN/70)
- 4 MASTHAWEE, P. and B. CHOKESANGUAN, 1986. Basic  
Fishing Technology, SEAFDEC/TD. 71 pp.  
(TD/LN/74)
- 5 JUNTARASHOTE, Kungwan and Suchote DAOSUKHO,  
1986. Handbook for Fishery Extension Workers in  
Southeast Asia. 103 pp. (TD/CIR/28)
- EXT/86/Inf. 1 General Information and Dormitory Regulations for  
the Participants in the Seventh Regional Training  
Course for Fishery Extension Officers in Marine  
Capture Fisheries, 5 Nov. - 19 Dec. 1986.

Annex D

Is there any other fishing gear, that should in your opinion be included for fishery extension officers in marine capture fisheries?

RESULTS OF EVALUATION

Yes: (7)

I. Inquiry by Questionnaire

1. Training Duration.

Too short: (3) Too long: (0) Fair: (17)

2. Number of subjects.

Too many: (2) Too few: (0) Fair: (18)

3. The content of subjects.

Too brief: (8) Too long: (0) Appropriate: (12)

4. Method of training.

Need more theory: (1) Need more practice: (9) Efficient: (10)

5. Comments on training facilities, training site, etc.

- 1) Training facilities are well equipped. (14)
- 2) Training site is also good. (14)
- 3) Training site is far from town. (3)
- 4) It would be better if auxiliary fishing gears, especially deck equipment, were added. (1)
- 5) It would be better if a lecture on improvement of the purse seine construction were added. (1)
- 6) Need more class room instruction on theory and practice of extension methodology. (4)
- 7) Trawl fishing is destructive so there is no need to study this kind of gear. (1)
- 8) The time for media design and development is too short. (2)

6. Is there any other fishing gear, that should in your opinion be included for fishery extension officers in marine capture fisheries?

Yes: (7)

- 1) Beach seine. (1)
- 2) Pole and line for tuna (2)
- 3) Luring purse seine. (3)
- 4) Stationary trap net. (1)
- 5) Mid-water trawl (1)
- 6) Bag net (1)

No: (13)

7. Is there any subject of this course which you feel did not directly concern your field of work as an extension officer?

Yes: (2)

- 1) Trawl fishing (1)
- 2) Oceanography (1)

No: (18)

8. Are study-trips to places related to fishery beneficial to you? If so, in what respect? Please comment, if not.

Yes: (18)

- 1) We gained a lot of knowledge in purse seine and squid fishing. (2)
- 2) It is very important to my work. (2)
- 3) We also have these in our place. (2)
- 4) All the knowledge gained from study trips could be applied for the betterment of fishermen. (7)
- 5) We gained a lot of knowledge in fish marketing, fish handling and status of fishermen. (2)
- 6) We have a clearer picture of the local fishing industry. (1)
- 7) We know the actual life of fishermen as well as the organization of various bodies related to fisheries. (1)

- 8) The experience from these can be applied in extension work and also make the subjects in this course easy to understand. (1)

No Comment: (2)

9. What fishing gears are mostly used in your local area of operation?

- 1) Trawl nets: (12)
- 2) Purse seine: (8)
- 3) Gill nets: (7)
- 4) Traps: (6)
- 5) Longlines: (5)
- 6) Beach seine: (3)
- 7) Hand line: (1)
- 8) Bag net: (1)
- 9) Cast net: (1)
- 10) Lift net: (1)
- 11) Dip net: (1)
- 12) Squid cast net: (1)

10. Back at home, are you continuing to work in the field of fishery extension?

Yes: (14) No: (6)

11. If not, in what field are you expecting to be posted?

- 1) Training officer (2)
- 2) Fishery enforcement officer (1)
- 3) collecting fishery data (2)
- 4) Assistant to biologist (1)

12. What part of year (month) is most suitable to your home office for dispatching participants to take part in such as course abroad?

- 1) Any month (11)
- 2) April-July (2)
- 3) September-December (5)
- 4) December-January (2)

13. Comments on the life at SEAFDEC/TD dormitory:

- 1) Very good (16)
- 2) Food quality is not consistent (3)
- 3) Dinner time is too early (1)

II. Additional comments by trainees during discussions on 19 December 1986:

- 1) Common kitchen and raw material should be provided for participants to cook their own meals during the holidays or according to request.
- 2) Coffee and tea should also be available during lunch and dinner.
- 3) Mussels or other shellfish should not be served to the Indian participants.
- 4) Need more chicken for Muslim participants.
- 5) Some of the food served was too hot or too sweet.
- 6) Difficult to communicate with dormitory staff and security guards.

14. Suggestions for course improvement.

- 1) Need more practice in coastal navigation and shipboard training (1)
- 2) Tests should be conducted at the end of the course (1)
- 3) Need more details on fishing gear and oceanography (1)
- 4) Need more practice in the workshop (4)
- 5) Case studies seem to be desirable (1)
- 6) Need more emphasis on extension methodology especially in development of communication and media design (5)
- 7) Need longer period of time for practice in materials development for media design (2)

III. Additional comments by trainees during discussions on 19 December 1986:

- 1) Need more emphasis on extension methodology.
- 2) Need more practice.
- 3) Some practice should be explained beforehand.
- 4) It would be better if mid-water trawl were included in the course.
- 5) Lecture notes should be given to the participants before the course starts.
- 6) It would be better if auxiliary fishing gears, especially deck equipment, were added.
- 7) Lecture notes should be brief but cover all the essentials.