

表Ⅲ. 3. 4. 1 メルシン及びエンダウにおける漁業関連の歴史

Before 1914:	<ul style="list-style-type: none"> - Endau was the district capital. - Endau was developed because of a ferry port to Pahang. - There were only two retail shops in Mersing. - Most of the people living in Endau and Mersing area were farmers. - Traditional Malay fishermen with sailing boats were engaged in fishing activities around Tioman Island.
1914:	<ul style="list-style-type: none"> - District Capital was moved from Endau to Mersing along with all government offices. - Big cargo boats came from Singapore to Mersing.
1918:	<ul style="list-style-type: none"> - The 13-mile road leading to the tin mine was completed at Mersing.
(1957:	<ul style="list-style-type: none"> - Malaysia got its Independence)
1963:	<ul style="list-style-type: none"> - Many Chinese fishermen came from the west coast, mostly from Pulau Ketam, to Endau/Mersing areas to obtain trawler boat license issued by the government. - Private jetties began to be constructed.
1971:	<ul style="list-style-type: none"> - The bridge to Pahang was completed at Endau. - The ferry port in Endau was closed.
1975:	<ul style="list-style-type: none"> - Mersing LKIM complex was established.
1984:	<ul style="list-style-type: none"> - Endau LKIM complex was established.

Source: Field Survey Phase 2 (The Feasibility Study on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, Oct. 1992)

表Ⅲ. 3. 4. 2 漁船移動による移転対象となる漁民数

Year	Landing Place		Type of Boat	Number of Boat	Number of Fishermen
	From	To			
1990-1995	Mersing	Endau	C2	12	72
1990-1995	Endau	Penyabong	A	20	40

表Ⅲ. 3. 4. 3 エンダウにおける漁民数の予測 (1990～2020年)

Boat Type	Fishing Gear	Crew/boat	1990		1995		2010	
			Boat	Crew	Boat	Crew	Boat	Crew
Class A	Trawl	2	25	50	5	10	-	-
	P. Seine	4	2	8	-	-	-	-
	Others	2.5	2	5	10	25	-	-
Class B	Trawl	4	39	156	30	120	-	-
	P. Seine	10	3	30	5	50	-	-
	Others	3	20	60	20	60	20	60
Class C	Trawl	4	78	312	60	240	70	60
	P. Seine	10	10	120	10	120	25	280
	Others	-	-	-	-	-	-	-
Class C2	Trawl	5.9	37	218	84	496	120	708
	P. Seine	15	2	30	5	75	10	150
	Others	-	-	-	-	-	-	-
Total			218	989	229	1,196	245	1,498

Source: Data for 1990 from Mersing DOF, 1992

表Ⅲ. 3. 4. 4 メルシンの観光用栈橋を利用する観光客船数と観光客数
(1983～1991年)

Year	Number of Boats	Number of Tourists
1983	4,766	48,438
1984	5,814	56,937
1985	5,261	51,723
1986	4,501	42,274
1987	3,940	41,531
1988	5,258	46,852
1989	7,054	81,611
1990	8,984	116,051
1991	7,587	117,359

Source: Majlis Perasmiaan Jeti Mersing, Jabatan Laut Johor, Sept. 1992

表Ⅲ. 3. 4. 5 メルシンにおける月別観光客数の推移 (1991年)

Months	Number of Passengers
January	1,133
February	4,263
March	9,880
April	13,864
May	16,593
June	17,378
July	11,370
August	14,807
September	11,980
October	9,622
November	5,459
December	1,010

Source: Majlis Perasmiaan Jeti Mersing, Jabatan Laut Johor, Sept. 1992

表Ⅲ. 3. 4. 6 漁民家庭の子供の人数

Number of Children	<3	3	4	5	>5
Number of wives	0	4	2	6	1

Remarks : 13 families in total

Source: Based on the interview with fishermen's wives during field survey Phase 2 (The Feasibility Study on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, Oct. 1992)

表Ⅲ. 3. 4. 7 漁民の資産状況

Asset	Yes	No
Land	11	2
House	12	1
TV	13	0
VCR	9	4
Telephone	8	5
Motorbike	9	4
Car	3	10

Remarks : 13 families in total

Source: Based on the interview with fishermen's wives during field survey Phase 2 (The Feasibility Study on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, Oct. 1992)

表Ⅲ. 3. 4. 8 漁民家庭の主婦の最終学歴

Education level	Primary school	Secondary school	None*
No. of wives	9	0	4

Remarks : 13 families in total (Note: * = because of the Japanese occupation)

Source: Based on the interview with fishermen's wives during field survey Phase 2 (The Feasibility Study on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, Oct. 1992)

表Ⅲ. 3. 4. 9 漁民家庭の主婦の子供に対する期待

	Yes	No
Do you expect your children to be fishermen?	13	0
Do you plan to give your children higher education, if they wish?	13	0

Remarks : 13 families in total

Source: Based on the interview with fishermen's wives during field survey Phase 2 (The Feasibility Study on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, Oct. 1992)

表Ⅲ. 3. 4. 10 漁民家庭の主婦の出産場所

All were at home	All were in the hospital	Home/hospital
1	1	11

Remarks : 13 families in total

Source: Based on the interview with fishermen's wives during field survey Phase 2 (The Feasibility Study on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, Oct. 1992)

表Ⅲ. 3. 4. 11 漁民家庭の主婦の車、モーターバイク等運転状況

	Yes	No
Motorbike	3	10
Car	1	12

Remarks : 13 families in total

Source: Based on the interview with fishermen's wives during field survey Phase 2 (The Feasibility Study on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, Oct. 1992)

表Ⅲ. 3. 4. 12 漁民家庭の主婦の情報源

	TV/radio	Newspaper	Gov. office
Where do you mainly get the information about health, education, political matter etc.?	13	4	1

Remarks : 13 families in total

Source: Based on the interview with fishermen's wives during field survey Phase 2 (The Feasibility Study on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, Oct. 1992)

表Ⅲ. 3. 4. 13 漁民家庭の主婦の就業状況

	Yes	No
	3	10

Remarks : 13 families in total

Source: Based on the interview with fishermen's wives during field survey Phase 2 (The Feasibility Study on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, Oct. 1992)

表Ⅲ. 3. 4. 14 漁民家庭の主婦の就業希望状況 sted in Working outside the Home

	Yes	No
	8	5

Remarks : 13 families in total

Source: Based on the interview with fishermen's wives during field survey Phase 2 (The Feasibility Study on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, Oct. 1992)

表Ⅲ. 3. 4. 15 新漁港建設による雇用機会の創設状況

	Clerical		Workers		Total
	Male	Female	Male	Female	
Coffee	-	-	-	3	3
Retail shop	-	-	-	3	3
Processing plant					
Freezing (Cuttlefish)	3	1	4	22	30
Freezing (Round scad)			3	10	13
Surimi plant	3	1	6	12	22
Dried fish plant	1	1	2	6	10
Ice plant	2	1	19	-	22
Shipyard	3	1	7	-	11
Total	12	5	41	56	114



写真Ⅲ. 3. 4. 1 エンダウLKIMコンプレックスにおけるヘッドカッティング



写真Ⅲ. 3. 4. 2 水産物加工工場でのヘッドカッティング

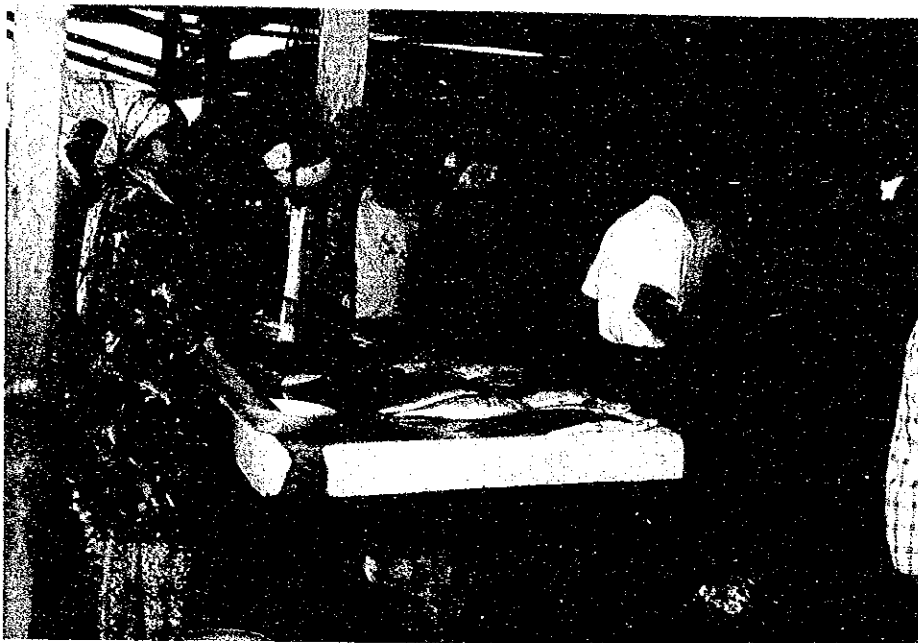


写真 Ⅲ. 3. 4. 3 メルシン小売市場での水産物販売



写真 Ⅲ. 3. 4. 4 魚粉工場における屑魚用布袋の洗浄

IV. 結論と提言

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結論と提言

(1) 水産物流通システム改善計画

パイロット・プロジェクトにより、組織・制度改善と漁港及び関連施設整備が実施されることにより、水揚げの比重は既設民間棧橋から新漁港へ移動し、最終的には、水揚げは一点集中型にかわるであろう。この結果、水産物流通システムの合理化が進むと同時に、漁民主導の水産物流通システムが確立され、漁民所得は向上する。

(2) 水産物流通情報システム改善計画

民間による、既存の水産物流通情報システムを漁民及びA F Aに適用することにより競争の原理を確立する。既存の全国ネットワークで進行中の公的情報システムはパイロット・プロジェクトの支援的位置づけに過ぎない。

(3) 組織・制度改善計画

A F A組合員資格の改善、信用制度改善及び組合活動強化のために政府および漁民各層を含む組織・制度改善委員会を設置する。パイロット・プロジェクトの立ち上がりから数年間は、L K I Mを含む政府関係機関からの人的支援が必要であるが、最終的には漁民による自主的運営に委ねる。この移行過程におけるプログラム作成が、改善委員会の役割である。

(4) 漁港および水産物流通施設整備計画

- 1) 建設用地取得、民間棧橋の一部撤去、魚粉工場移転、漁民居住地移転および建設残土処理等に関する州政府の対策が必要である。
- 2) 河川内および河川沿いの開発が進められると、土砂堆積が進行する恐れがあるので、事前に開発に対する環境アセスメントを行うべきである。

(5) 建設費の補助

漁民への脾益効果を考え、基本施設については50%程度の国庫補助と、低利ローンの導入及び施設の民有化が必要となろう。

(6) パイロット・プロジェクト運営計画

当初は、政府が直接運営を行うが、運営開始後早い時期に、完全な民間運営とされるべきである。運営の一体性を確保するため、プロジェクト全体は一つの組織が統括し、各施設については、民間への移管または運営のリース方式とすべきである。AFAは、当該プロジェクト運営の1民間組織として位置づけられる。組織運営に当たり、運営委員会を設置すべきである。運営委員会は、MOA、DOF、LKIM、BPM、NFA、SFA、州政府代表、州支部（DOF、FDA、LKIM、BPM）、漁船主、漁船員、水産物流通業者、水産物加工業者の代表者からなる。

(7) 技術移転方式

パイロット・プロジェクトの運営が軌道に乗るまで、外国から専門家グループを招請し、かつ将来プロジェクトの運営の中核となるべきスタッフの外国での研修を行う必要がある。技術移転対象分野は、漁港運営、漁民組織を含む水産流通全般にわたる。外国からの技術移転については、単なる技術のみの移転ではなく組織制度上のノウハウ移転も含まれるため、援助方式のパッケージ化を図る必要があろう。

このパイロット・プロジェクトは国内各地での同種のプロジェクトの整備のモデルとなるだけでなく、将来は国際的な技術移転基地として位置づけられるであろう。

(8) 水産資源管理改善計画

当該調査は、水産物流通システム改善のための調査であり、漁業生産環境改善に関する調査を行っていない。ただし、トロール漁業の急成長等の影響を強く受け、近年漁獲量の伸びが低迷し、かつ漁獲効率の低下が顕著である。当該調査で提案された水産物流通システムの効果をさらに高めるためには、沿岸域の水産資源管理システムの整備は緊急課題である。このため、ジョホール州メルシン地区ペニャボンの前面海域を対象として沿岸海域の総合利用に関する調査を実施することが望ましい。

添 付 資 料

添付資料－ 1. 調査関係者

(1) 作業監理委員会

1) 委員長	高木 伸雄 (第1次)	水産庁漁港部計画課 課長補佐
	岸野 昭雄 (第2次)	水産庁漁港部建設課 上席工事検査官
2) 委員	廣吉 勝治	東京水産大学 資源管理学科 教授
3) 委員	大槇 正紀	農林水産省水産工学研究所
		水産土木工学部 漁港施設研究室長

(2) 調査団

1) 総括	草野 千夫	(システム科学コンサルタンツ(株))
2) 水産経済	アベチ イサム	(")
3) 漁業資源	赤岡 民夫	(")
4) 流通組織制度	ジョン・W ガー	(Development Alternatives Inc., USA)
5) 漁民組織	森本 孝	(システム科学コンサルタンツ(株))
6) 漁港計画	田中 幹夫	(")
7) 水産流通施設計画	矢花 昭男	(")
8) 自然条件	岡田 伸司	(")
9) 流通情報及び社会環境	石田 洋子	(")
10) 土木(積算)	ケン・イング・ガン	(")
11) 建築計画	丸藤 睦	(")

(B) マレーシア政府

(1) Technical committee members

1) Dato Dr. Kudus Ahmad (Chairman)	MOA
2) Tuan Shaik Ahmad Soekarno	MOA
3) Mohd Tamin Mohd Yusof	MOA
4) Abu Bakar Said	MOA
5) Puan Siaw Lean Sim	MOA
6) Cik Zunika Muhammed	EPU
7) Thambi Abu Hassan	MOA
8) Tuan Haji Magirin Haron	LKIM
9) Abdul Malek Zakaria	LKIM
10) Abdul Rahim Md. Mustaffa	LKIM
11) Cik Halinah Mohd Zain	LKIM

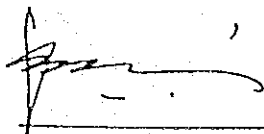
(2) Steering Committee members

1) En Kassim Sarbani (Chairman)	EPU
2) Cik Kamariah Ramli	EPU
3) En K. Thilainnadarajan	EPU
4) Cik Zunika Muhammed	EPU
5) Mohd Tamin Mohd Yusof	MOA
4) Abu Bakar Said	MOA
5) Puan Siaw Lean Sim	MOA
7) Thambi Abu Hassan	MOA
8) Tuan Haji Magirin Haron	LKIM
9) Abdul Malek Zakaria	LKIM
10) Abdul Rahim Md. Mustaffa	LKIM

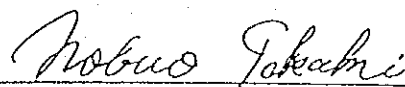
SCOPE OF WORK
FOR
THE FEASIBILITY STUDY
ON
THE PILOT PROJECT FOR IMPROVEMENT OF FISH MARKETING AND
DISTRIBUTION SYSTEM
IN
MALAYSIA

AGREED UPON
BETWEEN
THE ECONOMIC PLANNING UNIT
OF
THE PRIME MINISTER'S DEPARTMENT
ON BEHALF OF
THE GOVERNMENT OF MALAYSIA
AND
THE JAPAN INTERNATIONAL COOPERATION AGENCY

Kuala Lumpur
4th December, 1991



Mr. Kassim Sarbani
for Director General,
Economic Planning Unit
Prime Minister's Department,
on behalf of
The Government of Malaysia



Mr. Nobuo Takaki
Leader
Preparatory Study Team,
Japan International
Cooperation Agency

I . INTRODUCTION

In response to the request of the Government of Malaysia, the Government of Japan has decided to conduct the Feasibility Study on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia (hereinafter referred to as "the Study"), in accordance with the relevant laws and regulations in force in Japan.

Accordingly, the Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of technical cooperation programs of the Government of Japan, will undertake the Study in close cooperation with the authorities concerned in the Government of Malaysia.

The present document sets forth the scope of work with regard to the Study.

II . OBJECTIVE OF THE STUDY

The objective of the study is to conduct a feasibility study on implementation of a pilot project incorporating institutional building and the physical plan of facilities in East Johor as a model case for the improvement of existing fish marketing and distribution system in Malaysia.

III . OUTLINE OF THE STUDY

1. The Study Area

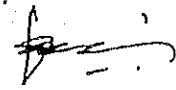
The Study area shall cover East Johor.

2. Scope of the Study

The Study shall be conducted in two (2) phases.

In the first phase, alternative plans for a pilot project shall be formulated based on background survey and the data analysis. In the second phase, feasibility study on the selected plan shall be conducted.

Breakdown of each phase of the study is given as follows.

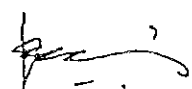

NT

Phase 1

1. Data collection and field survey
 - (1) Social and economic background
 - (2) Marketing and distribution system of fisheries products
 - (3) Existing facilities and infrastructure for fish marketing and distribution
 - (4) Fisheries production
 - (5) Quality and handling methods of fisheries products
 - (6) Organization and institution
 - (7) Socioeconomic survey on fisheries communities
 - (8) Survey on natural conditions on project site
2. Formulation of alternative plans for the pilot project
 - (1) Projection of the future fish landing and usage of the facilities at the project site
 - (2) Establishment of viable institution
 - (3) Data collection for designing and costing of a fishing port and facilities
 - (4) Formulation of alternative plans
 - (5) Cost estimation and evaluation of each plan
 - (6) Selection of the optimal plan for the pilot project

Phase 2

1. Field survey
 - (1) Data collection for designing and costing of the selected plan
 - (2) Detailed study of natural conditions including soil investigation
 - (3) Preliminary environmental impact assessment of the project
 - (4) Supplementary study on organization and institutional building
2. Formulation of physical plan
 - (1) Basic concept of physical plan
 - (2) Basic design of the fishing port and facilities
 - (3) Basic plan of the organization and the institution
 - (4) Operation and management plan of the complex including marketing and distribution scheme


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- (5) Cost estimates
- (6) Economic and financial analysis

IV STUDY SCHEDULE

The Study will be executed in accordance with the attached tentative work schedule.

V. REPORT

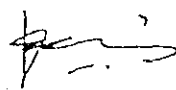
1. JICA shall prepare and submit the following reports in English to the Government of Malaysia.
 - (1) Inception Report
Twenty-five (25) copies at the commencement of the field survey (Phase 1 study).
 - (2) Progress Report
Twenty-five (25) copies at the end of the field survey (Phase 1 study).
 - (3) Interim Report I
Twenty-five (25) copies before the commencement of the field survey (Phase 2 study)
 - (4) Progress Report II
Twenty-five (25) copies at the end of the field survey (Phase 2 study).
 - (5) Draft Final Report
Twenty-five (25) copies at the end of the phase 2 study (end of formulation of detailed plan). The Government of Malaysia is requested to provide its comments on the Draft Final Report within one (1) month after receipt of the Report.
 - (6) Final Report
Fifty (50) copies within two (2) months after receiving the comments from the Government of Malaysia on the Draft Final report.
2. The Study Team shall ensure that all data, information, maps materials and findings connected with the Study are kept.

confidential and not revealed or disposed off to any third party except with the prior written consent of the Government of Malaysia. Such maps and aerial photographs are to be returned to the Government of Malaysia immediately upon completion of the Study. All reports when finalized and submitted to the Government of Malaysia shall remain the property of the Government of Malaysia.

VI. UNDERTAKING OF THE GOVERNMENT OF MALAYSIA

1. To facilitate smooth conduct of the Study, the Government of Malaysia shall take necessary measures:

- (1) To inform the members of the Study Team of any existing risk in the Study area and to take any measures deemed necessary to secure the safety of the Study Team.
- (2) To ensure the necessary entry permits for the Study Team to conduct field surveys in Malaysia and exempt them from consular fees.
- (3) To exempt the members of the Study Team from taxes and duties, as normally accorded under the provision of Malaysian General Circular No. 1 of 1979, on equipment, machinery and other materials brought into and out of Malaysia for the conduct of the Study.
- (4) To exempt the members of the Study Team from Malaysian income tax on their official emoluments in respect of their period of assignment in Malaysia in connection with the conduct of the Study, but the Government of Malaysia shall retain the right to take such emoluments into account for the purpose of assessing the amount to be applied to income from other sources.
- (5) To provide necessary facilities to the Study Team for remittance as well as utilization of funds introduced into Malaysia from Japan in connection with the conduct of the Study.
- (6) To secure permission for entry into private properties or restricted areas for the conduct of the Study.
- (7) To provide the Study Team with medical services when needed, but the expenses will be chargeable to the members of the


N.T

Study Team.

- (8) To provide the Study Team with available data, maps and information necessary for the execution of the Study.
- (9) To make arrangements for the Study Team to take back to Japan the data, maps and materials connected with the Study, subject to the approval of the Government of Malaysia, in order to prepare the reports.
- (10) To appoint counterpart personnel to the Study Team during the Study period.
- (11) To provide the Study Team with suitable office space with clerical service and necessary office equipment in Kuala Lumpur and Johor.
- (12) To provide the Study Team with adequate means of local transport for official travel only.
- (13) To indemnify any members of the Study Team in respect of damages arising from any legal action against him in relation to any act performed or omissions made in undertaking the Study except when the two Governments agree that such a member is guilty of gross negligence or willful misconduct, and
- (14) To nominate the Ministry of Agriculture to act as the main counterpart agency for the Study and the Economic Planning Unit as the main coordinating body in relation to other relevant Governmental and non-Governmental organization.

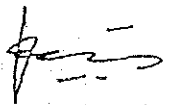
VII. UNDERTAKING OF JICA

In order to conduct the Study, JICA shall take the following measures:

1. To dispatch, at its own expense, the Study Team to Malaysia.
2. To pursue technology transfer to the Malaysian counterpart personnel(s) in the course of the Study.

VIII. CONSULTATION

JICA and the Government of Malaysia shall consult with each other in respect of any matter that is not agreed upon in this document and which may arise from or in connection with the Study.


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Minutes of Meeting of The Steering Committee
for Feasibility Study on The Pilot Project
for Improvement of Fish Marketing and
Distribution System In Malaysia

Venue : Economic Planning Unit

Date : December 3, 1991

Time : 10.00 a.m.

ATTENDANCE

Members of the Committee who were present at the meeting are shown in Appendix A.

INTRODUCTION

2. The Chairman welcomed members of the Preliminary Study Team as well as officials from the Embassy of Japan and JICA Malaysia Office. He then introduced members of the Malaysian side.

3. At the invitation of the Chairman, the Leader of the Study Team expressed his pleasure to attend the first meeting of the Steering Committee. The meeting was informed that the Study Team had visited Endau, Mersing and Kuala Sedili.

DISCUSSION

4. The proposed Scope of Work of the Study and other related matters were discussed by the Steering Committee. The summarized results of the discussion are as follows:-

a) Pilot Project Site

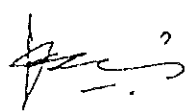
The Malaysian side requested that Endau in East Johor be selected as the pilot project site since this area has been identified in the Sixth Malaysia Plan. In this regard, the Japanese side was of the view that in order to improve the fish marketing and distribution system in Endau, field surveys and discussions have to be done. The Japanese side also agreed to make alternative plans for the pilot project at Endau.

However, the Study Team anticipated that at Endau, there would be some difficulties in developing the identified site since it is being occupied by private jetties without permission of the authorities. The Malaysian side gave the undertaking that LKIM will secure the land as soon as possible.

b) Study Schedule

The Malaysian side requested the period of the study to be shortened by using data of the previous study as much as possible so that LKIM can implement the project at the end of 1993.

The Japanese side took note of this request which would be conveyed to the Japanese authorities for consideration. With the proposed shorter study period, the study team anticipated that the Final Report of the study can be submitted to the Government of Malaysia by March 1993.



c) Technical Committees

The Japanese side requested the Malaysian side to establish technical committees both for institutional and for physical planning, so that the study will be carried out smoothly. The Malaysian side suggested that the present technical committee chaired by the Ministry of Agriculture will function as usual. However, another ad-hoc technical committee at the state level will be established and also chaired by the Ministry of Agriculture. Members of the ad-hoc technical committee will comprise of all the relevant agencies in the state. The study team observed that the proposal from the Malaysian side is in line with their suggestion and agreed with the Malaysian proposal for the creation of the ad-hoc technical committee.

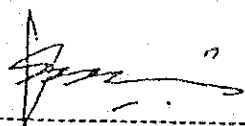
d) Transfer of Technology

The Malaysian side requested that counterpart training be carried out in Japan. The Japanese side responded that training can be carried out in Malaysia and also in Japan. However, this request will be conveyed to the Japanese authorities for consideration.

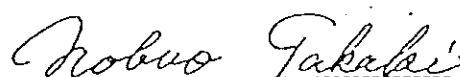
The Malaysian side also requested that experts be attached to the project after completion of the construction to assist in the operation of the management plan of the complex. The Japanese side took note of the request.

The Steering Committee meeting adjourned at 11.30 a.m. with the Chairman thanking the members for their attendance.

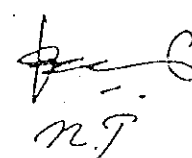
KUALA LUMPUR
December 4, 1991



Mr. Kassim Bin Sarbani,
for Director General,
Economic Planning Unit,
Prime Minister's Department,
On Behalf of
The Government of Malaysia.



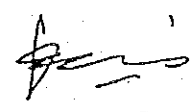
Mr. Nobuo Takaki,
Leader, Preliminary Study Team,
On Behalf of
Japan International
Cooperation Agency.



Attendance


Malaysian Side

- | | | |
|----|--|-----------|
| 1. | Mr. Kassim bin Sarbani,
Director,
Agriculture Section, EPU. | Chairman |
| 2. | Mr. Mohd. Tamin b. Mohd. Yusof,
Principal Assistant Secretary,
Ministry of Agriculture. | |
| 3. | Mr. Abu Bakar bin Said,
Assistant Secretary,
Ministry of Agriculture. | |
| 4. | Mr. Hj. Mohd. Idris bin Zainuddin,
Director of Marketing,
Fisheries Development Authority,
of Malaysia. | |
| 5. | Mr. Abdul Malik Zakaria,
Deputy Director of Marketing,
Fisheries Development Authority,
of Malaysia. | |
| 6. | Mr. Abdul Rahim b. Md. Mustaffa,
Officer,
Fisheries Development Authority,
of Malaysia. | |
| 7. | Mr. K. Thillainadarajan,
Principal Assistant Director,
Economic Planning Unit. | |
| 8. | Ms. Kamariah binti Ramli,
Principal Assistant Director,
Economic Planning Unit. | |
| 9. | Ms. Zunika Binti Mohamed,
Assistant Director,
Economic Planning Unit. | Secretary |


N.T

Japanese Side

1. Mr. Nobuo Takaki, Team Leader
Deputy Director,
Planning Division,
Fishing Port Department,
Fisheries Agency,
Ministry of Agriculture, Forestry and Fisheries.
2. Dr. Katsuji Hiroyoshi,
Professor,
Fishery Resource Management Division,
Tokyo University of Fisheries.
3. Mr. Akito Sato,
Office of the Overseas Fisheries Cooperation,
Fisheries Agency,
Ministry of Agriculture, Forestry and Fisheries.
4. Mr. Kazuo Udagawa,
Special Advisor,
Fisheries Technical Cooperation Division,
JICA.
5. Mr. Shunichi Hamada,
Embassy of Japan.
6. Mr. Toshiyuki Akagi,
Embassy of Japan.
7. Mr. Kuniaki Nagata,
JICA,
Malaysia Office.



MINUTES OF THE STEERING COMMITTEE MEETING ON
THE FEASIBILITY STUDY OF THE PILOT PROJECT
FOR THE IMPROVEMENT OF FISH MARKETING AND
DISTRIBUTION SYSTEM

AGREED UPON BETWEEN

THE ECONOMIC PLANNING UNIT

OF

THE PRIME MINISTER'S DEPARTMENT

ON BEHALF OF

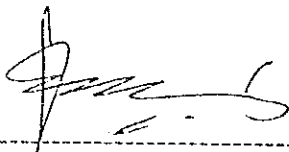
THE GOVERNMENT OF MALAYSIA

AND

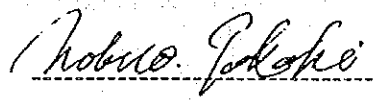
THE JAPAN INTERNATIONAL COOPERATION AGENCY

KUALA LUMPUR

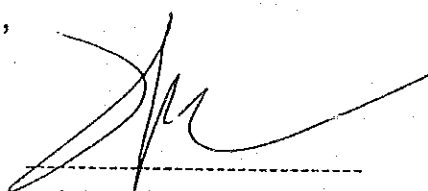
30th March, 1992



Mr. Kassim B. Sarbani,
for Director General,
Economic Planning Unit,
Prime Minister's Department,
On Behalf of
The Government of Malaysia



Mr. Nobuo Takaki
Leader, Advisory Team,
On Behalf of
Japan International
Cooperation Agency



Mr. Tateo Kusano
Leader, Study Team
On Behalf of
Japan International
Cooperation Agency

**MINUTES OF THE STEERING COMMITTEE MEETING ON
THE FEASIBILITY STUDY OF THE PILOT PROJECT
FOR THE IMPROVEMENT OF FISH MARKETING
AND DISTRIBUTION SYSTEM**

Date : 30 March, 1992
Time : 10.00 a.m.
Venue : Meeting Room "D"
Economic Planning Unit,
Prime Minister's Department,
Jalan Dato' Onn,
50502 KUALA LUMPUR.

ATTENDANCE

1. Members of the Committee who were present at the meeting are shown in Appendix A.

INTRODUCTION

2. The Chairman welcomed members of the Advisory Team and the Study Team as well as officials from the Embassy of Japan and JICA Malaysia Office. He then introduced members of the Malaysian side.
3. At the invitation of the Chairman, the Leader of the Advisory Team expressed his pleasure in attending the Steering Committee meeting. He hoped this meeting would benefit both parties involved in the study.

**GENERAL BRIEFING ON THE SCOPE OF
WORK OF THE FEASIBILITY STUDY**

4. The Steering Committee was briefed by the leader of the Study Team regarding the Inception Report which was earlier discussed in the Technical Committee

Meeting on the 26th. March, 1992. He informed the meeting that the study will be divided into 2 phases i.e. Phase 1 and 2. In both phases work will be done both in Malaysia and Japan. Matters pertaining to data collection will be mostly done in Malaysia while the analysis of the data will be done in Japan.

5. As has been agreed in the Technical Committee Meeting some surveys are not necessary to be carried out but sufficient to be based on secondary data rather than primary data. These are information with respect to existing conditions in fish resources, current conditions in fish production, supply and demand balance of fish products. Decision to use secondary data is to avoid unnecessary wastage of time since information on such aspects can be easily obtained from the Fisheries Department of Malaysia.

DISCUSSION ON SCOPE OF WORK OF THE FEASIBILITY STUDY

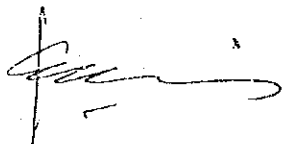
6. The Steering Committee Meeting agreed with the proposed work that is going to be undertaken during the course of the study. However the following points need to be highlighted:-

i) Base Year

With regard to work in Japan for Phase I of the Study, the Study Team agreed to take year 1990 instead of 1989 as base year in projecting estimations on the size and number of fishing boats, the volume of fish landed etc. to year 2010 and 2020.

ii) Phase II Study

For work in Japan Item 1(a) "Characterization concerning the fishing port" needs to be elaborated incorporating the work on three scenarios as has been agreed at the Technical Committee Meeting. These 3 scenarios have to be based on the requirements



for the future development of the port up to year 2020. Characteristics which could determine the size of the future port may be influenced by boat sizes, physical and economic conditions of study area. The Study Team agreed to consider the 3 scenarios whether to establish the need to have a small, medium or large size fishing port in the study.

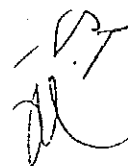
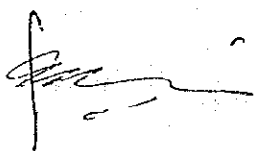
iii) Computerized Marketing System

Regarding the Computerised Marketing System, the Study Team agreed to the request to develop the concept of the system.

iv) Japanese Technical Cooperation

The Malaysian side requested that technical cooperation to this project be formulated with the objective of implementing the project management and operation. The Japanese side responded that this request will be given due consideration.

7. The meeting adjourned at 11.05 a.m. with thanks from the Chairman.



Attendance

Malaysian Side

1. Mr. Kassim Bin Sarbani
Director of Agriculture, EPU - Chairman
2. Mr. Mohd. Tamin B. Mohd Yusof
Ministry of Agriculture
3. Mr. Hj. Magirin B. Haron
Fisheries Development Authority of Malaysia
6. Mr. Abd. Rahim B. Md. Mustaffa
Fisheries Development Authority of Malaysia
7. Mr. Mohd. Sani B. Mistam
Economic Planning Unit
8. Ms. Kamariah Bte Ramli
Economic Planning Unit
9. Mr. Badaruddin Bin Mahyudin
Economic Planning Unit - Secretary

Japanese Side

1. Mr. Nobuo Takaki
Deputy Director,
Planning Division,
Fishing Port Department,
Fisheries Agency - Leader, Advisory Team
2. Mr. Hideki Tomobe - Advisory Team
3. Mr. Makio Shichijo - Embassy of Japan
4. Mr. Toshiyuki Akagi - Embassy of Japan
5. Mr. Kuniaki Nagata - JICA Malaysia Office
6. Mr. Tateo Kusano - Leader, Study Team
7. Dr. I. Allahpichay - Study Team Member
8. Mr. Mikio Tanaka - Study Team Member
9. Mr. Shinji Okada - Study Team Member

MINUTES OF THE STEERING COMMITTEE MEETING ON
THE FEASIBILITY STUDY OF THE PILOT PROJECT
FOR THE IMPROVEMENT OF FISH MARKETING AND
DISTRIBUTION SYSTEM

AGREED UPON BETWEEN

THE ECONOMIC PLANNING UNIT

OF

THE PRIME MINISTER'S DEPARTMENT

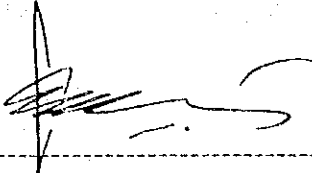
ON BEHALF OF

THE GOVERNMENT OF MALAYSIA

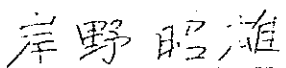
AND

THE JAPAN INTERNATIONAL COOPERATION AGENCY

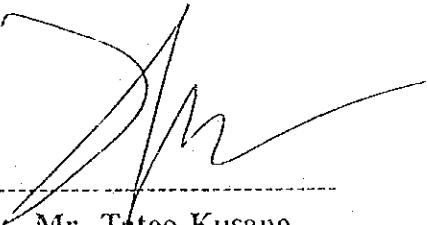
KUALA LUMPUR
25th. August, 1992



Mr. Kassim B. Sarbani,
for Director General,
Economic Planning Unit,
Prime Minister's Department,
On Behalf of
The Government of Malaysia



Mr. Masao Kishino
Leader, Advisory Team,
On Behalf of
Japan International
Cooperation Agency



Mr. Tateo Kusano
Leader, Study Team
On Behalf of
Japan International
Cooperation Agency

MINUTES OF THE STEERING COMMITTEE MEETING ON
THE FEASIBILITY STUDY ON THE PILOT PROJECT
FOR THE IMPROVEMENT OF FISH MARKETING
AND DISTRIBUTION SYSTEM

Date : 24 August, 1992
Time : 3.00 p.m.
Venue : Meeting Room "B"
Economic Planning Unit,
Prime Minister's Department,
KUALA LUMPUR.

ATTENDANCE

1. The attendance list of the members of the Committee who were present at the meeting is shown in Appendix A.

INTRODUCTION

2. The Chairman welcomed members of the Advisory Team and the Study Team as well as officials from the Embassy of Japan and JICA Malaysia Office.

Introduction Remarks by the
Leader of the Advisory Team

3. The leader of the Advisory Team informed the meeting that the Study Team will be presenting the Interim Report for consideration.

BRIEFING ON THE INTERIM REPORT
OF THE FEASIBILITY STUDY

4. The Steering Committee was briefed by the leader of the Study Team regarding the Interim Report which had been discussed in the Technical Committee Meeting held at 10 a.m. on 24th. August, 1992. He informed the meeting that the contents of the

Interim Report is divided into three parts namely the Analysis of Current Conditions, Future Projections and Improvement Plans.

5. In the Analysis of Current Conditions, the Study Team found that the decrease in fish production was caused mainly by overfishing in the Study area and the overharvesting of trash fish. With regards to price, it was found that the price at the production area is quite unstable compared to the prices at the consumption area. It was also concluded that the BPM credit system does not extend credit to the fishermen for their fishing operations. The Study also concluded that the AFAs are weak financially as well as lacking in management expertise. In terms of facilities there is a need to build a port and introduce new facilities to cater for future demand.

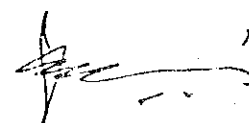
6. In the Improvement Plan, some suggestions were made by the Study Team. One of the short term measures proposed to solve the problem of fishing resources is the introduction of concrete artificial reefs. The key suggestions to improve the fishery sector are the introduction of exclusive use of fishing rights fishing rights by AFA and the strengthening of AFA management. The Study Team also made suggestion to build a fishing port at site 2 of the Endau River. The Endau port will be the center of landing, whereas Mersing and Penyabong will serve as supporting ports for small boats.

Discussion on the Interim Report

i) *Fish Production Findings*

7. The Steering Committee agreed with the Study's findings that there is overfishing in the Study area and substantial volumes of trash fish are being caught. The Meeting was informed that the Department of Fisheries will provide the Study Team with data on the types of trash fish for a detailed analysis to be done.

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ii) *Exclusive Use of Fishing Rights by AFA*

8. The proposal that AFA should be given exclusive use of fishing rights is acceptable to the Steering Committee as this would mean decentralization of authority over fishing areas. The Meeting was also informed that presently fishing areas are zoned to demarcate the type of vessels and equipments that can be used in specific zones. Granting exclusive use of fishing rights to AFA can be regarded as an extension of the zoning concept. However, to effect the exclusive use of fishing rights is a long term strategy since the AFA members have to be educated and trained in resource management and be made aware of their rights and the importance of managing available resources to optimize the benefits for a long term. Since the idea of exclusive use of fishing rights is very new to Malaysia, the Study Team agreed with the proposal that the Team should examine ways of developing the exclusive use of fishing rights areas so that resources can be sustained.

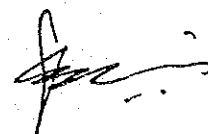
iii) *Price Fluctuations*

9. It was noted in the Study that the price of fish is more stable in the consumption area compared to the production area which suffers more fluctuation. The Study Team agreed to the proposal that an analysis should be done on this so that measures can be introduced to improve the situation which will benefit both producers and consumers. The analysis will be done in Phase II of the Study.

iv) *Credit System*

10. The findings that BPM does not provide loans for operating expenditure was acknowledged. From discussion with BPM, the reluctance of BPM to extend credit for operations stemmed from the fact that there is more uncertainty and risk in fishing activities compared to farming activities which are more tangible. Moreover, the management cost to supervise these loans are high. The Study Team was requested to look into ways of overcoming this problem so as to enable fishermen to avail themselves to the credit facilities.

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v. *Institutional Strengthening*

11. After examining the AFAs in the Study area, the Study concluded that the AFAs are weak financially as well as lacking in management expertise as indicated by the decline in their earnings and membership. The Steering Committee agreed with the measures proposed to strengthen AFA. The need to review the AFA membership into full membership and quasi membership is accepted. This could lessen the conflict of interest between boat owners, boat crews and traders who are presently members of AFA and having the same rights. The Study also proposed that an AFA school be set up to train managers of AFAs. The Steering Committee was of the opinion that a school will be too ambitious and suggested that the Study Team look into the possibility of introducing the training of AFA managers by LKIM in their training center.

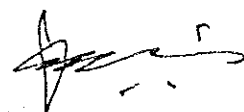
vi) *Site of Fishing Port*

12. Alternative site 2 proposed for the fishing port was agreed by the Steering Committee. However, the Study Team was requested to calculate the costing for planned capacity 1995 taking into account extension of basic facilities so that the maximum size of port can be built at one time with the other facilities being built in stages.

vii) *Presentation of Pages 146-158 of the Report*

13. The Study Team requested permission to present pages 146-158 of the Report to the local fishing community, especially AFAs in the Study area to gauge their reaction on the proposal of AFA economic activities. The Steering Committee suggested that pages 146-158 with the exclusion of the issue on exclusive use of fishing rights should be discussed first with LKIM officers before venturing to discuss with the local fishing community.

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viii) *Presentation of the Report to Government Agencies in the Study Area*

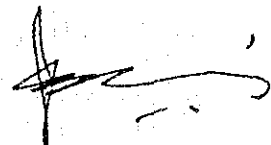
14. The Steering Committee agreed with the proposal that the Report be presented to Government agencies in the Study area to get their views on the proposals of the Report since they will be directly involved in the implementation of the proposals. The presentation will be done in October at Johor Bahru.

ix *Japanese Technical Cooperation*

15. The Chairman brought to the attention of the Study Team, item (iv) of paragraph 6 of the Minutes of Steering Committee held on 30 March, 1992 regarding the despatch of a technical expert to assist in implementing and operationalising the project. JICA Representative in Malaysia responded that this request is outside the scope of the project and a separate application should be forwarded to JICA by September so that it can be considered for Japanese fiscal year 1993. LKIM will take the necessary action to forward the application.

16. The meeting adjourned at 4.45 p.m. with words of thanks from the Chairman.

岸野



Attendance

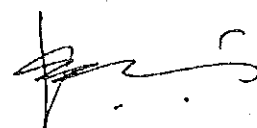
Malaysian Side

- | | | | |
|----|---|---|-----------|
| 1. | Mr. Kassim Bin Sarbani
Director, Agriculture Section,
Economic Planning Unit. | - | Chairman |
| 2. | Mr. Hj. Mohd. Tamin B. Mohd Yusof
Ministry of Agriculture | | |
| 3. | Mr. Hj. Magirin B. Haron
Fisheries Development Authority of Malaysia | | |
| 6. | Mr. Abd. Rahim B. Md. Mustaffa
Fisheries Development Authority of Malaysia | | |
| 7. | Mr. Mohd. Sani B. Mistam
Economic Planning Unit | | |
| 8. | Ms. Kamariah Bte Ramli
Economic Planning Unit | | |
| 9. | Ms. Zunika Mohamed
Economic Planning Unit | - | Secretary |

Japanese Side

- | | | | |
|-----|------------------------|---|-----------------------|
| 1. | Mr. Masao Kishino | - | Leader, Advisory Team |
| 2. | Dr. Seiki Omaki | - | Advisory Team Member |
| 3. | Mr. Yasuhiro Yoshizuka | - | Advisory Team Member |
| 4. | Mr. Makio Shichijo | - | Embassy of Japan |
| 5. | Mr. Toshiyuki Arita | - | JICA Malaysia Office |
| 6. | Mr. Tateo Kusano | - | Leader, Study Team |
| 7. | Mr. Tan Eng Guan | - | Study Team Member |
| 8. | Mr. Teruo Yabana | - | Study Team Member |
| 9. | Mr. Mikio Tanaka | - | Study Team Member |
| 10. | Ms. Yoko Ishida | - | Study Team Member |
| 11. | Dr. I. Allahpichay | - | Study Team Member |

岸野



MINUTES OF MEETING OF THE STEERING COMMITTEE
FOR FEASIBILITY STUDY OF THE PILOT PROJECT
FOR THE IMPROVEMENT OF FISH MARKETING AND
DISTRIBUTION SYSTEM IN MALAYSIA

AGREED UPON BETWEEN

THE ECONOMIC PLANNING UNIT

OF

THE PRIME MINISTER'S DEPARTMENT

ON BEHALF OF

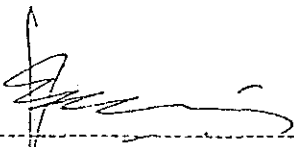
THE GOVERNMENT OF MALAYSIA

AND

THE JAPAN INTERNATIONAL COOPERATION AGENCY

KUALA LUMPUR

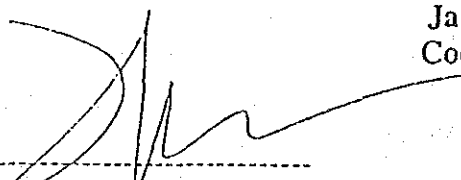
January 13, 1993



Mr. Kassim B. Sarbani,
for Director General,
Economic Planning Unit,
Prime Minister's Department,
On Behalf of
The Government of Malaysia



Mr. Masao Kishino
Leader, Advisory Team,
On Behalf of
Japan International
Cooperation Agency



Mr. Tateo Kusano
Leader, Study Team
On Behalf of
Japan International
Cooperation Agency

MINUTES OF MEETING OF THE STEERING COMMITTEE
FOR FEASIBILITY STUDY ON THE PILOT PROJECT
FOR THE IMPROVEMENT OF FISH MARKETING
AND DISTRIBUTION SYSTEM IN MALAYSIA

Venue : Bilik Gerakan,
Economic Planning Unit,
Level 2, Block K,
Pusat Bandar Damansara,
KUALA LUMPUR.

Date : January 13, 1993

Time : 9.30 a.m.

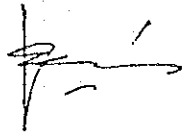
ATTENDANCE

1. Members of the Committee who were present at the meeting is shown in Appendix A.

INTRODUCTION

2. The Chairman welcomed Leader of the Advisory Team and members of the Study Team as well as official from JICA Japan.
3. At the invitation of the Chairman, the leader of the Advisory team expressed his pleasure in attending the Steering Committee and inform the meeting that the study has come to an end and the Study Team had come up with several proposals which would be discussed in the meeting.

辛野



DISCUSSION

4. The Study Team Leader briefed the Steering Committee members regarding the Draft Final Report which was also discussed in the Technical Committee Meeting held at 3.30 p.m. on 12th January, 1993. He informed the meeting that the contents of the report are divided into the Analysis of Current Conditions, Future Projections, Future Plans, Project Evaluation and Conclusion and Recommendations.

5. The representative of the Technical Committee expressed the view of the Committee that generally the Committee agreed with the Draft Final Report. The Technical Committee also requests the team to give some options regarding the proposed project cost. The Committee also take notes of the recommendation for implementation of fishing right and the fisheries resources management study.

6. The Steering Committee generally agreed with the Draft Final Report, and that the recommendations are acceptable and will try to implement all of them despite some constraints which Malaysia faces now. The Steering Committee request that:

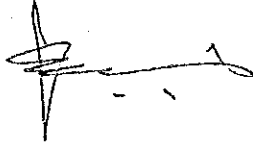
- (i) the Study Team come up with several alternatives regarding the reformation of management of the proposed port in the Final Report.
- (ii) the Study Team should come up with several options for the construction of both the basic and functional facilities of the proposed port due to financial constraints.
- (iii) the Final Report should also contain detail items of the proposed infrastructures which would be built with the port.

7. The Government of Malaysia will convey to the Study Team its comments on the Draft Final Report by February 12, 1993. Fifty (50) copies of the Final Report within two (2) months after receiving the comments on the Draft Final Report will be submitted to the Government of Malaysia.

李野

8. The Steering Committee took note of the requirement of foreign technical assistance for the implementation of the pilot project.

9. The Steering Committee Meeting adjourned at 11.50 a.m. with the Chairman thanking the members for their participation and contributions.



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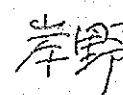
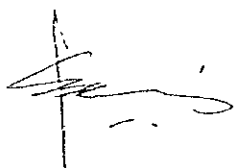
Attendance

Malaysian Side

1. Mr. Kassim Bin Sarbani
Director, Agriculture Section,
Economic Planning Unit. - Chairman
2. Mr. Hj. Mohd. Tamin B. Mohd Yusof
Ministry of Agriculture
3. Mr. Hj. Magirin B. Haron
Fisheries Development Authority of Malaysia
4. Mr. Abd. Rahim B. Md. Mustaffa
Fisheries Development Authority of Malaysia
5. Mr. Abd. Bakir b. Hj. Zin,
Economic Planning Unit
6. Ms. Zunika Mohamed
Economic Planning Unit - Secretary

Japanese Side

1. Mr. Masao Kishino - Leader, Advisory Team
2. Mr. Tateo Kusano - Leader, Study Team
3. Dr. I. Allahpichay - Study Team Member
4. Mr. Takashi Morimoto - Study Team Member
5. Mr. Mikio Tanaka - Study Team Member
6. Mr. Yasuhiro Yoshizuka - JICA, Japan Office



添付資料－ 6. 特 別 会 議

(1) Ad hoc meeting at Mersing (Phase 1)

Ad hoc meeting at state level in Mersing with key persons related to FMDS project in Endau on 18 April 1992, and chaired by Mr. Tamin Yusof, MOA. The attendance is as follows.

	Name	Position	Department/Agency
1	Mohd Tamin Yusof	Principal Asst. Sec.	MOA, Kuala Lumpur
2	Wang Yok Han	Wakil Pengarah	DOF, Johor State
3	Mohd. Yatim	Engineer	Pejabat Pelabohan Mersing
4	Zulkefli Hasan	Wakil Pengarah	Wakil Pengarah JPS, Johor
5	Abdul Razal Dahalar		Kej. Pantai JPS, Ibu Pejabat
6	Mohd Diah Md Saleh	Account Officer	LKIM Mersing
7	Saedon Ab Majid	Development Officer	LKIM Johor Baru
8	Rosli Daud	Engineer	JKR HQ KL (Port Section)
9	Hashim b. Shafie	Manager	Persatuan Nelayan, Endau
10	Rokiah Mohamad	Head	MARDI, Kuala Tereng. Branch
11	Hj. Mohd Zaini b. Osman		Pentadbir Tanah Mersing Dist.
12	Balasingam	District Engineer	Jurutera Daerah, JPS Mersing
13	Borhanudin b. Baharudin	Asst. Port Officer	Marine Dept. Mersing
14	Mohd Shuhali b. Abd. Kadis	Manager	LKIM Complex, Kuantan
15	Chin Peng Yong	Manager	FDA Mersing
16	Mohd Nor Haron	State Director	Pengarah LKIM, Johor
17	Abd. Rahim Md. Mustaffa	Development Officer	LKIM, KL
18	Aziz Ismail	Credit Officer	BPM, Mersing
19	Romli Ali	Gen. Manager	BPM, Mersing
20	Hassan Othman	Prin. Asst. Sec.	State EPU
21	Mohd Jaffar Dariman	Wakil Pengarah	Farmers Organization
22	Ab. Halim Ahmad	Gen. Manager	Area Farmer Organization
23	Hassan Long Ahmad	Wakil Pengarah	JKR, Johor
24	Abu. Bakar b. Said	Asst. Secretary	MOA, KL

(2) Ad hoc meeting at Johor Bahru (Phase 2)

Seminar on FMDS project in Endau was held on October 11, 1992 and chaired by Dato Dr. Abdul Kuddus Ahmad, MOA. The attendance is as follows.

	Name	Department/Agency
1	Dato Dr. Abdul Kudus Ahmad	MOA, KL
2	Mohd Tamin Yusof	MOA, KL
3	Lim Chai Hock	MOA, KL
4	Tambi Abu Hassan	MOA, KL
5	Chan Huan Seng	MOA, KL
6	Ms. Kamariah Ramli	EPU, KL
7	Hashim Ahmad	DOF, KL
8	Mohd Shaupi Derahman	DOF, KL
9	Lim Chai Fong	DOF, KL
10	Ng Fong Onn	DOF, KL
11	Y. M. Raja Mohd. Nordin Raja Omar	DOF, KL
12	Magirin Haron	LKIM, KL
13	Abdul Rahim Mustaffa	LKIM, KL
14	Kevin Hiew Wan Fhang	DOF, Johor Bahru
15	Abdullah Jaafar	DOF, Johor Bahru
16	Rahim Sharif	DOF, Johor Bahru
17	Mohd. Nor Haron	LKIM Johor Baru
18	Chin Peng Yong	LKIM, Mersing
19	Saedon Abd. Maajid	LKIM, Johor Bahru
20	Mohammad Ismail	LKIM, Johor Bahru
21	Nazarudin	LKIM, Mersing
22	Ms. Rokiah Mohammad	MARDI, Terengganu
23	Hussain Taib	AFA, Mersing
24	Osman Maarof	AFA, Kuala Sedili
25	Hashim Shafie	AFA, Endau
26	Hassan Othman	UPEN, Johor
27	Tarmedi Hj. Omar	UPEN, Johor
28	Ziauddin Abdul Latif	JKR, KL
29	Rosli Daud	JKR, KL
30	Yahaya Sarpan	District Office, Mersing
31	Ms. Farida Mohd. Ali	Land Office, Pahang
32	Mohd. Faroullah b. Zainon Hamzah	Secretary, MOA

Socio-economic Survey of Fishing Communities

1. Objective

The objectives of this survey were to grasp the demographic profile, the current conditions in fish marketing/distribution, the use of fish marketing/distribution facilities, the activities of fishermen organizations, and the economic conditions of fishermen households.

2. Study Approach

(1) Master list of fishermen

Master list of fishermen by category of boats including details such as license number, IC number, address, etc. for Mersing and Endau were obtained from DOF in KL for sampling purposes in the village survey.

(2) Sampling method and survey period

The sampling method and number of samples for Endau and Mersing are shown in Table 1. The survey period covered about 16 days including the training of enumerators. The enumerators were locally recruited, and the chief enumerator and assistant were of Chinese origin, and they were recruited from Kuala Lumpur. The chief enumerator and assistant have considerable experience in carrying out surveys, particularly of fishermen communities in peninsular Malaysia.

(3) Interview itinerary of enumerators

Enumerators were selected in the study area (10 in Endau and 10 in Mersing) and they were trained by the chief enumerator and his assistant. The survey period was about 16 days, including the training, and the enumerators visited each household for the interview.

(4) Questionnaire

Four sets of questionnaire were prepared; covering (1) socio-economic profile, (2) members of AFA, (3) non-members of AFA, and (4) credit condition. The questionnaires were tested in the study area, finalized and then translated into the Malay language. Some of the major items in the questionnaire are listed below.

(A) Socio-economic survey

- 1) Household characteristics
- 2) Land/house/living conditions
- 3) Assets and savings
- 4) Other working conditions

- 5) Fish production by boat owners/skipper
- 6) Marketing channel
- 7) Working conditions of crew
- 8) Communication and source of information

(B) Survey of AFA members

- 1) Fishing status
- 2) Knowledge of changes in AFA membership
- 3) Knowledge of economic activities
- 4) Opinion on the introduction of Japanese AFA fish marketing functions

(C) Survey of members

- 1) Fishing status
- 2) Evaluation of AFA from non-member fishermen
- 3) Knowledge of changes in AFA membership
- 3) Knowledge of economic activities
- 4) Opinion on the introduction of Japanese AFA fish marketing functions

(D) Financial aspect

- 1) Source of loan and equity for boat
- 2) Daily operational expense for fishing

3. Analysis

3.1 Socio-economic Aspects

The total number of fishermen households covered in the survey were 377 (Mersing, 145; and Endau, 232)(Table 1). Of the 145 samples taken in Mersing, 84 were boat owners, i.e. about 57 percent, and the rest were crew. There were 297 registered boats in the Mersing area, and therefore about 28 percent (84 boat owners) were surveyed. Of the 232 surveyed in the Endau area, 110 were boat owners, i.e. 50 percent and the rest were crew. In Endau there were 222 registered boats, and therefore 50 percent were surveyed. Some of the results of the analysis with respect to socio-economic and financial aspects of boat owners are summarized below.

(1) Household size

The distribution of households according to different size classification is given in Table 2. In the study area, about 40 percent of the households have 6-8 persons per household while the proportion with nine or more was about 14 percent. The average size of all households in Mersing District in 1991, according to the Population and Housing Census (1991) has been estimated as 4.9 people. In the study area, about 34 percent of the households are in the 2-5 person classification.

(2) Educational attainment

Education is normally recorded in terms of the highest certificate obtained of those who went to school. As can be seen in the Table 3, about 12 percent of all household heads had no formal education while 52 percent had only a primary education, and 36 percent had a secondary education. There are no household heads having a college or university education in the samples surveyed. The 52 percent in primary education implies that there were a large number of unqualified school leavers.

(3) Number of income earners/working members

Income earner refers to a working member of the household. About 76 percent indicated that there was only one working member, i.e. fisherman himself, while only 15 percent indicated two income earners in the family (Table 4).

(4) House ownership status and type of house

The house and land ownership status is shown in Table 5. About 41 percent of the households reported that they were living in their own houses which were built on their own land. Only 27 percent reported that they were renting their house and land. It should also be noted that a significant percentage (21%) reported that they were staying in their own house but renting the land on which the houses were built. Another point worth noting is that about 11 percent reported that they were squatters, i.e. they owned their own house on government land.

About 62 percent of the houses were of plank and zinc while only 20 percent were of concrete and bricks. Houses of atap/bamboo represented only a negligible percentage (2%)(Table 6).

One of the most basic household amenities is water supply. More than 80 percent of the households receive their water supply from water piped in to their houses while those sharing water from a common piped water supply represented about 6 percent. About 14 percent of the households got their water supply from wells. Electricity is the most common energy source for lighting, with nearly 98 percent using electricity for this purpose.

From the above findings, it can be summarized that the physical state of each household was satisfactory. The presence of basic amenities such as piped water and electricity reflects the good standard of living enjoyed by the people in the study area.

(5) Household savings and assets

An examination of household savings provides some insight into the asset standing of the sampled households. As can be seen in the Table 7, that about 40 percent reported having no cash savings. About 6 percent reported savings in the post office and 38 percent with the Pilgrimage Board (Tabung Haji). Only 15 percent reported keeping their savings at home. It was not possible to get the average cash savings per household. In addition to tangible assets such as fishing boats and equipment own by boat owners, about 37 percent reported having motorcycles; 20 percent having cars; and 9 percent having vacant land.

(6) Working conditions during the monsoon season

With regard to activities during the monsoon, about 35 percent are involved in activities such as net repairing, agricultural labour, processing, etc. while 40 percent reported doing nothing, indicating that unemployment rate is high during the monsoon season.. About 24 percent of those reported fishing in the monsoon season; almost 50 percent are in Class C/C2 fishing boats (Table 8).

With regard to supplementary business activities, about 12 percent of the surveyed reported involvement in fish trading and about 6 percent in processing, retailing, and transportation. About 82 percent are not involved in any supplementary business.

(7) Supplementary business activities besides fishing

With regard to other business activities in addition to fishing, 12 percent indicated independent business activities and 6 percent in cooperation with others; while about 80 percent indicated having no business activities. Boat owners were more involved in business than the crew (boat owners, 20% and crew 4%) (Table 9).

With regard to the type of business involved, about 63 percent indicated fish trading as their main activity, followed by processing (belachan, keropok), retail shop and transportation (Table 10).

(8) Expenditure on food, clothing, etc.

With regard to monthly expenditure on food, clothing, etc., about 38 percent reported spending less than M\$350 monthly (Table 11). Those in the category of more than M\$600 per month were about 20 percent; of which 56 sampled (72%) were boat owners. About 53 percent reported that their income was sufficient to cover their monthly expenditures, and the remaining 47 percent reported insufficient income. This group also indicated that this insufficiency was covered by Towkey and friends.

(9) Marketing channel of fish

In the study area, about 52 percent of the boat owners surveyed reported that they land their catch at the LKIM complex and 47 percent at the private jetties (Table 12). In Endau 60 percent landed their catch at private jetties and 39 percent used the LKIM complex; while in Mersing area about 69 percent used the LKIM complex and 30 percent used private jetties (Tables 13 & 14). The percentage of boat owners landing their catches at LKIM complexes is rather high compared to the landing volume noted in the records of LKIM. It could be that the respondents to this interview survey were not regularly landing their catches at LKIM, but on an irregular basis.

Among the reasons for using the private jetties, 63 percent cited the credit access for diesel and oil, 14 percent for better fish price, and 9 percent cited loan ties (Table 15).

3.2 Credit Aspects of Boat Owners

(1) Period of boat purchase/construction

Of the 193 boat owners sampled in the study area, slightly more than 41 percent reported that their boats were purchased or constructed during 1986-1990; 25 percent during 1981-1985 and 33 percent before 1980. As shown in the Table 16, the construction of class A boats decreased from 53 before 1980 to 19 during 1986-1990. This is in line with the fishing policy to promote deep sea fishing while discouraging coastal fishing as measure of coastal resource management.. In particular there was significant increase in Class C/C2 boats.

(2) Source of capital for boat construction

The source of capital to fund boat construction for 26 percent of the boat owners was their own savings and 55 percent indicated using a portion of their savings; 19 percent of the boat owners utilized other sources (Table 7). About 62 percent of the boat owners indicated they are in debt from loans. With regard to the source of loans (Table 18), about 46 percent reported loans from BPM and 38 percent from local and outside wholesalers (fish traders). Capital from the Development Bank was only 4 percent and only 7 percent from the SKK/SPKP. In the survey conducted in Endau/Mersing during the Nationwide FMDS study (1991), about 24 percent indicated using their own savings for boat construction, and 53 percent indicated that they took loans from the BPM and 29 percent from fish traders.

(3) Loan approval and out-of-pocket expense

About 54 percent of the boat owners surveyed indicated that it took about two months for loan approval; 25 percent showed 3-4 months and for 10 percent it took nearly six months (Table 19)

With regard to out-of-pocket expense for loan transactions, about 47 percent indicated that it cost them more than M\$200 and 30 percent indicated less M\$50 (Table 20).

(4) Reasons for not taking a formal loan

Of the more than 90 boat owners surveyed who did not take loans from a formal source, about 40 percent indicated they had sufficient savings/finance, 25 percent stated they had access to an informal source, while 17 percent indicated lack of collateral (Table 21). About 7 percent reported fear of losing their collateral and fear of refusal by the bank as other reasons.

(5) Repayment of loans from a formal source

Only 57 percent indicated they have repaid their loans on schedule, 35 percent were behind schedule, and 7 percent indicated repayment ahead of schedule (Table 22)

(6) Fishing operation cost

About 40 percent of the boat owners reported that their daily fishing operation costs were funded by fish traders, and about 58 percent from their own savings. Class C/C2 boat owners borrowing from fish traders were 48 percent while there were 36 percent in class A/B boat owners (Table 23).

With regard to repayment of informal loans for fishing operations, more than 90 percent of the boat owners irrespective of class of boats, indicated the payment was through deduction of fish sales, and the rest through cash payment (Table 24).

(7) Savings

With regard to savings by boat owners (Table 25), about 65 percent indicated savings, and the boat owners of class C/C2 (90%) were more keen in saving than those in class A/B (54%).

Savings ranged from less than M\$500 for 17 percent of the boat owners to M\$200-1000 for 18 percent (Table 26). About 4 percent showed a savings of more than M\$10,000.

3.3 Fishermen's Consciousness of the AFA

(1) AFA revolving fund loan system (for fishermen)

1) Utilization of AFA revolving funds

If a revolving fund is made available for fishing operations through the AFA, 95 percent of the total number of fishermen, both members and non members, responded positively (Table 27) on the introduction of the new system

(Note: A through C2 indicates the size of fishing boats; A-class, below than 25 tons; B-class, from more than 25 to 39.9 tons; C-class, from 40 to 69.9 tons and C2-class, more than 70 tons.)

2) Agreement of fishermen to allow AFA consignment of their fish catch in exchange for the right to use AFA revolving funds

Approximately 72 percent of boat owners agreed to AFA consignment of their fish catch. Another 17 percent responded favorably only if it was a small portion of the catch. Less than 1 percent answered negatively, despite the access to AFA credit (Table 28).

3) Refusal to use AFA revolving funds

There were 33 respondents who answered negatively to the use of AFA revolving funds (Table 29). Of this group, 15 percent said they would use their own capital, 58 percent had their own means of credit, and 27 percent did not like the obligation of consigning their fish to the AFA.

4) AFA retail of fish products

Fishermen were asked if they were willing to sell their fish to the AFA if the price was high, irrespective of credit obligations to either the AFA or another party. Of the respondents, 47 percent answered they would always sell their fish to the AFA if the purchase price was high, and 38 percent answered most probably. On the whole, despite loan obligations to fish traders, 85 percent of the respondents indicated that they would sell their fish to the AFA if the purchase price was high. Therefore, the rise in the utilization rate of AFA fish marketing activities by fishermen is dependent on price (Table 30)

(2) Feasibility of introducing Japanese AFA fish marketing methods

A brief explanation of some of the Japanese AFA functions is given below. Fishermen were asked to give their evaluation and opinion on the possibility of introducing such practices to the AFA in Malaysia.

- Due to the signing of a consignment contract between the AFA and its members, the majority of the fishermen sell their fish through the AFA.
- Therefore, wholesalers in production markets purchase fish at the auctions managed by the AFA.
- Fishermen are paid for their fish catch by the AFA, which collects the money from the wholesalers.
- In order to receive payment for their fish, fishermen open accounts with the AFA where their payment is deposited. Due to this practice, fishermen maintain savings accounts with the AFA, which also enables them to obtain credit easily from the revolving fund.

1) Consensus on Japanese AFA practices

In response to the overall practices of the Japanese AFA in the production markets, 76 percent thought the practices excellent, 21 percent declined to give an opinion, and 2 percent responded negatively. Overall, the consensus on Japanese AFA practices was highly favorable (Table 31).

2) Fishermen participation ratio, if the practices of the Japanese AFA were introduced.

If the Japanese AFA form of distribution/marketing practices was introduced, 49 percent of the respondents said they would participate and 17 percent answered they would like to, but would be unable to do so because of credit obligations to fish traders. Ratio of fishermen who expressed interest in participating was 56% (127/193) and the ratio of those who clearly expressed disinterest was a low 3 percent. It appears that the majority of the respondents supported the introduction of the Japanese AFA form of distribution/marketing practices (Table 32).

3) Feasibility of introducing Japanese AFA practices

Of the respondents, 30 percent stated that all of the aforementioned practices could be introduced, 42 percent answered that only some of the practices were possible, and only 4 percent responded that they were completely impossible. Although some agreed that a few of the practices could be implemented, they expressed doubt that all of the practices could be adopted (Table 33).

4) The most easily adaptable function of the Japanese market

Although only 82 respondents were anticipated to agree to partial introduction, there were 116 respondents. Respondents who agreed to the opening of an account with the AFA to receive payment for their fish catch and for savings purposes were 81 percent. Consequently, it can be concluded that there will be no difficulties in getting members

to open accounts with the AFA, in order to receive payment for their fish consignment. The total ratio of respondents who would agree to consignment contracts with the AFA and who would be willing to consign a large portion of their fish catch was 15 percent (Table 34).

- 5) The most difficult practice to introduce, according to the respondents who stated it was impossible to introduce Japanese AFA practices.

Although this question was asked of seven people who responded negatively to the introduction of Japanese AFA practices, 21 people responded. Among the boat owners who answered, approximately 5 percent disliked the idea of signing a consignment contract with the AFA, in order to sell their fish through the association. However, this ratio is very low and it was concluded that introduction of a fish consignment contract between the fishermen and the AFA was feasible (Table 35).

- (3) Consciousness of the AFA and its activities (interview of AFA members)

- 1) Who does the AFA belong to?

The AFA members who responded that the association belonged to the fishermen themselves, were 43 percent (Table 36). However, 40 percent of the members replied that the organization belonged to LKIM and other governmental agencies. Those who responded they didn't know were 64 percent, although it included members who believed that LKIM, etc. operated the association. This reflects the fact that the members' awareness and understanding of the AFA are low.

Moreover, in contrast to 48 percent of the boat owners who believed the association belonged to them, only 33 percent of the fishing boat crew members had the same awareness. The ratio of responsible captains of boat crews who were aware that the AFA belonged to the members, was high.

- 2) The role of the AFA in upgrading fishing operations and fishermen livelihoods and its evaluation

Fishermen who thought the AFA had a slight effect on their fishing operations and livelihood were 66 percent and 24 percent felt the AFA had a strong effect. Approximately 90 percent of the fishermen felt the AFA had a bearing on their work and livelihood (Table 37). However, 60 percent felt the association was not fully carrying out its role and 8 percent felt the AFA was not fulfilling any role at all.

3) The social activity in need of the most reinforcement

Of the social activities carried out by the AFA, 63 percent expressed their desire for the association to provide more educational assistance for their children, followed by 19 percent who wanted more seminars on fishing technology. Compensation in the event of accident or death was not available at the Mersing AFA; and therefore, there were few respondents who expressed the desire for such an AFA benefit.

4) Comprehensive social welfare activities

Only 50 percent of the respondents felt that the social welfare activities of the AFA were comprehensive and 47 percent felt they were not. Therefore, it was concluded that more comprehensive social welfare activities were required (Table 38).

(4) Knowledge of AFA membership qualifications and structure of the organization (survey of AFA members)

1) If current annual AFA membership dues are high

Approximately 58% of the fishermen felt that AFA annual membership dues (Endau: M\$2.00, Mersing: M\$1.00) were sufficient, while 41 percent replied they were cheap (Table 39). In reality, the membership dues are equivalent to one or two cups of coffee and is not an exorbitant fee. It is surmised that 58 percent of the respondents said the dues were sufficient because they did not want them raised.

2) Amenable to an increase in membership dues

In response to this issue, 54 percent of the fishermen said they were amenable to an increase in membership dues and only 5 percent replied negatively. It is concluded that 41 percent of the non-respondents were apathetic about this issue (Table 40).

3) Fairness in having the same annual membership dues for both the boat owners and ordinary crew members

Despite the differences in income, 52 percent of the respondents replied that the current system was fair and only 18 percent expressed unfairness. However, the ratio of crew members who thought it was unfair was slightly higher than boat owners (Table 41).

4) Pros and Cons of having fishing industry personnel other than fishermen, in the AFA

Fishermen who have given thought to this issue were only 24 percent and 74 percent had never considered it (Table 42).

5) Appropriateness of the present composition of AFA members

Current composition of AFA members was acceptable to 48 percent of the respondents and 17 percent thought it was unsuitable (Table 43). Those who supported the present situation were 55 percent, more than half of the respondents. In contrast, only 9 percent expressed the need to change the situation. However, in view of the fact that 17 percent considered the situation inappropriate, it is concluded that changing the present membership structure would not encounter opposition.

6) Restricting AFA membership to only boat owners and skippers
(a boat owner cooperative)

Only 13 percent of the fishermen were in support of revising the AFA to a boat owner cooperative and 54 percent were against it. Among the respondents who did not support the revision, 59 percent were crew members and 50.65 percent were boat owners. The ratio of crew members against the revision was slightly higher than the ratio of boat owners. Therefore, it was concluded that to exclude crew members from the AFA would encounter opposition (Table 44).

7) Restricting AFA membership to only three groups, boat owner, skipper,
and crew member

Support of the revision in AFA membership to include only fishermen, i.e. boat owners and crew members was 31 percent and those in opposition were only slightly higher at 33 percent. Opposition to this revision is less than the opposition to a revision that would exclude crew members (Table 45).

8) Creating an organization limited to only fishing boat crew members

Overall, only 13 percent were in agreement to creating an organization limited to crew members and 51 percent were in opposition. Of the opposition, 33 percent were crew members and 60 percent were boat owners (Table 46).

(5) Consciousness of the AFA by non-members

1) Past membership in the AFA

Among the 141 fishermen who were currently not in the AFA, 81 percent had been members in the past. Of this ratio, 90 percent were boat owners and 77 percent were crew members (Table 47).

2) The major reasons for not joining the AFA

Of the 141 fishermen who were not in the AFA, 44 percent replied there was no particular reason why they had not joined, 35 percent said they did not know much about the association, and only 11 percent stated that AFA membership held no merits for them (Table 48).

3) Willingness to join the AFA

114 fishermen who had been AFA members in the past were asked if they would be willing to rejoin the AFA (Table 49). However, only 60 out of the 114 fishermen responded. Of the total 141 non-members, 35 percent clearly stated their willingness to join and 8 percent answered negatively. Of the ratio of fishermen who were willing to join, 46 percent were boat owners and 30 percent were crew members. Boat owners were more willing to join than crew members.

4) Revising annual membership dues (Mersing: M\$1.00, Endau: M\$2.00)

Members as well as non-members were asked their opinion on current annual AFA membership dues (Table 50).

Those who felt that present annual membership dues were sufficient were 55 percent and those who stated it was cheap were 43 percent. Of the respondents who thought the dues were cheap, 59 percent were boat owners and 43 percent were crew members. Despite the fact that in reality, membership dues are not high for crew members as well, fishermen are cautious when answering questions pertaining to fees or income and try to give their answers in minimum terms.

5) Appropriateness of the M\$200 compensation money paid by the AFA as part of their social welfare activities. (Endau AFA only)

Fishermen who felt the amount was appropriate were 68 percent, and those who felt it was insufficient were 37 percent (Table 51).

6) In order to implement the system of compensation, it is necessary to pay annually M\$5.00 in insurance. The appropriateness of this amount was asked.

Fishermen who responded the amount was appropriate were 95 percent and those who felt it was high was about 5 percent (Table 2.3.52).

7) Increase the amount of insurance that supports compensation payments

Fishermen who were in agreement with an increase in insurance payments were 84 percent and those who were in opposition were 17 percent (Table 53). Of the ratio of

fishermen who agreed to an increase, 94 percent were boat owners and 84 percent were crew members. Of the ratio of those who were in disagreement, 9 percent were boat owners and 26 percent were crew members.

- 8) Fairness of membership dues, despite the differences in assets and position among members

Those who responded that membership dues were fair despite such differences, were 26 percent, while those who stated it was unfair were 36 percent. The ratio of those who felt it was unfair, was roughly 10 percent higher. Of the ratio of fishermen who responded it was fair, 20 percent were boat owners and 26 percent were crew members. Of the ratio of fishermen who thought it was unfair, 28 percent were boat owners and 37 percent were crew members. As a result, crew members appeared to feel more strongly that membership dues were unfair (Table 2.3.54).

- 9) Implement a slight difference in membership dues based on the member's assets, position, and work

Fishermen who opposed implementing different membership dues based on the above, were an overwhelming 52 percent in contrast to the 12 percent who were in support of such measures (Table 55). Among the opposition, 64 percent were boat owners and 48 percent were crew members. The opposition of boat owners was slightly higher.

- 10) Satisfaction with the current status quo of member composition

Fishermen who were satisfied with the present status quo of member composition were 27 percent, those who expressed dissatisfaction were 9 percent, and the majority of 63 percent were undecided (Table 56).

- 11) Restricting AFA memberships to boat owners and skippers (AFA for boat owners only)

An overwhelming 48 percent of the fishermen opposed such restrictions and only 6 percent expressed support (Table 57).

- 12) Restricting AFA memberships to boat owners and crew members

Fishermen who supported this restriction were 35 percent and those who opposed it were 15 percent. Hence, it was concluded that the possibility of implementing this revision was comparatively high, in contrast to the idea of restricting memberships to only boat owners (Table 58).

13) Separating AFA constituency into full members and Associate-members

1. Full Members: Boat owners, Skippers, Crew members

2. Associate-Members: Processors, Retailers, Others

The ratio of fishermen who supported such a classification were slightly higher at 28 percent and those in opposition were 23 percent. Of the supporters, 39 percent were crew members and 15 percent were boat owners. The ratio of crew members who were in agreement with the measure was higher than the ratio for boat owners. The ratio of boat owners who opposed the measure was twice that of the supporters and the crew members who supported the measure was twice that of the opposition. A clear split in opinion between the boat owners and crew members was observed (Table 59).

14) Support/Opposition of an organization restricted only to crew members

Overall support for an organization restricted to crew members was 18 percent; and 58 fishermen or 41 percent expressed opposition (Table 60). Opposition of such an organization was higher among the boat owners than crew members.

Table 1 Distribution of Boat Owners and Crew in the Survey by Race

	Mersing			Sub-Endau			Mersing/Endau		
	Boat Owners	Crew	Total	Boat Owners	Crew	Total	Boat Owners	Crew	Total
Bumi	52	54	106	68	105	173	120	159	279
Non-Bumi	32	7	39	42	17	59	74	24	98
	84	61	145	110	122	232	194	183	377

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 2 Distribution of Household Size

	Mersing	Endau	Total
Less than 2 persons	14 (10%)	33 (14%)	47 (12%)
2 - 5 persons	42 (29%)	85 (37%)	127 (34%)
6 - 8 persons	73 (50%)	78 (34%)	151 (40%)
More than 9 persons	16 (11%)	36 (16%)	52 (14%)
	145 (100%)	232 (100%)	377 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 3 Distribution of Household by Educational Status

	Mersing	Endau	Total
No schooling	25 (17%)	22 (9%)	47 (12%)
Primary education	88 (61%)	107 (46%)	195 (52%)
Lower secondary	12 (8%)	52 (22%)	64 (17%)
Higher secondary	20 (14%)	51 (22%)	71 (19%)
	145 (100%)	232 (100%)	377 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 4 Distribution of Household by Working Persons

	Mersing	Endau	Total
One person	118 (83%)	168 (74%)	286 (76%)
Two persons	16 (11%)	40 (18%)	56 (15%)
Three persons	6 (4%)	16 (7%)	22 (6%)
Four persons	2 (1%)	4 (2%)	6 (1%)
Five persons	3 (2%)	4 (2%)	7 (1%)
	142 (100%)	228 (100%)	377 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 5 Distribution of House Ownership Status

	Mersing	Endau	Total
Own house & land	37 (26%)	117 (50%)	154 (41%)
Own house & rented land	49 (34%)	32 (14%)	81 (21%)
Own house & squatting	13 (9%)	28 (12%)	41 (11%)
Rented house & land	46 (32%)	55 (24%)	101 (27%)
	145 (100%)	232 (100%)	377 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 6 Distribution of House by Type

	Mersing	Endau	Total
Concrete/bricks/tiles	31 (21%)	45 (19%)	76 (20%)
Concrete/zinc	26 (18%)	35 (15%)	61 (16%)
Plank/zinc	85 (59%)	149 (64%)	234 (62%)
Atap/bamboo	3 (2%)	3 (1%)	6 (2%)
	145 (100%)	232 (100%)	377 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 7 Household Savings

	Class A/B	Class C/C2	Crew	Total
Post Office	10 (8%)	2 (3%)	9 (5%)	21 (6%)
Pilgrimage Board	54 (41%)	50 (81%)	41 (22%)	145 (38%)
At Home	14 (11%)	6 (10%)	35 (19%)	55 (15%)
None	54 (41%)	4 (6%)	98 (54%)	156 (41%)
	132 (100%)	62 (100%)	183 (100%)	377 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 8 Working Condition During Monsoon

	Class A/B	Class C/C2	Crew	Total
Net repairing	15 (12%)	12 (19%)	18 (10%)	45 (12%)
Agri. labour	14 (11%)	2 (3%)	8 (4%)	24 (6%)
Processing	0 (0%)	2 (3%)	3 (2%)	5 (1%)
Other work	26 (20%)	9 (15%)	25 (14%)	60 (16%)
Fishing	18 (14%)	30 (48%)	44 (24%)	92 (24%)
None	57 (44%)	7 (11%)	87 (47%)	151 (40%)
	130 (100%)	62 (100%)	185 (100%)	377 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 9 Other Business Activities Besides Fishing

	Boat Owners	Crew	Total
Individually	38 (20%)	8 (4%)	46 (12%)
Cooperation	21 (11%)	3 (2%)	24 (6%)
None	134 (69%)	173 (94%)	307 (81%)
	193 (100%)	184 (100%)	377 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 10 Kind of Business Activities

	Boat Owners	Crew	Total
Fish trading	44 (72%)	0 (0%)	44 (63%)
Processing	2 (3%)	2 (22%)	4 (6%)
Retail shop	4 (7%)	1 (11%)	5 (7%)
Transport	4 (7%)	0 (0%)	4 (6%)
Others	7 (11%)	6 (67%)	13 (19%)
	61 (100%)	9 (100%)	70 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 11 Monthly Expenditure on Food, Clothing, etc.

	Class A/B	Class C/C2	Crew	Total
< \$350	38 (29%)	6 (10%)	101 (55%)	145 (38%)
\$351-\$400	38 (29%)	8 (13%)	33 (18%)	79 (21%)
\$401-\$500	26 (20%)	6 (10%)	14 (8%)	46 (12%)
\$501-\$600	8 (6%)	6 (10%)	15 (8%)	29 (8%)
>\$601	20 (15%)	36 (58%)	22 (12%)	78 (21%)
	130 (100%)	62 (100%)	185 (100%)	377 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 12 Landing of Fish Catch (Mersing/Endau)

	Class A/B	Class C/C2	Total
Private Jetty	44 (34%)	47 (76%)	91 (47%)
LKIM Complex	85 (65%)	15 (24%)	100 (52%)
Beaching	2 (2%)	0 (0%)	2 (1%)
	131 (100%)	62 (100%)	193 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 13 Landing of Fish Catch (Endau)

	Class A/B	Class C/C2	Total
Private Jetty	31 (45%)	36 (84%)	67 (60%)
LKIM Complex	37 (54%)	7 (16%)	44 (39%)
Beaching	1 (1%)	0 (0%)	1 (1%)
	69 (100%)	43 (100%)	112 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 14 Landing of Fish Catch (Mersing)

	Class A/B	Class C/C2	Total
Private Jetty	13 (21%)	11 (58%)	24 (30%)
LKIM Complex	48 (77%)	8 (42%)	56 (69%)
Beaching	1 (2%)	0 (0%)	1 (1%)
	62 (100%)	19 (100%)	81 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 15 Reasons For Landing of Fish at Private Jetty

	Class A/B	Class C/C2	Total
Jetty Owner's Boat	5 (11%)	8 (18%)	13 (14%)
Price is better	9 (20%)	4 (9%)	13 (14%)
Credit tie	6 (13%)	2 (4%)	8 (9%)
Diesel/ice credit	26 (57%)	31 (69%)	57 (63%)
	46 (100%)	45 (100%)	91 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 16 Period of Boat Purchase/Construction

	Class A/B	Class C/C2	Total
Before 1980	63 (48%)	1 (2%)	64 (33%)
1981-1985	32 (24%)	17 (27%)	49 (25%)
1986-1990	36 (27%)	44 (71%)	80 (41%)
	131 (100%)	62 (100%)	193 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 17 Source of Capital for Boat Purchase/Construction

	Mersing	Endau	Total
From Own Saving	25 (30%)	26 (23%)	51 (26%)
Partly from Own Saving	39 (48%)	67 (60%)	106 (55%)
Other Source	18 (22%)	18 (16%)	36 (19%)
	82 (100%)	111 (100%)	193 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 18 Main Source of Loan

	Class A/B	Class-C/C2	Total
BPM	43 (57%)	8 (22%)	51 (46%)
SKK/SPKP	1 (1%)	7 (19%)	8 (7%)
Development Bank	3 (4%)	1 (3%)	4 (4%)
Local Wholesaler	16 (21%)	3 (8%)	19 (17%)
Outside Wholesaler	2 (3%)	1 (3%)	3 (3%)
Singapore Wholesaler	7 (9%)	13 (36%)	20 (18%)
Processor	1 (1%)	1 (3%)	2 (2%)
Other	2 (3%)	2 (6%)	4 (4%)
	75 (100%)	36 (100%)	111 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 19 Time Taken for Loan Approval

	Class A/B	Class-C/C2	Total
0-2 months	39 (50%)	28 (61%)	67 (54%)
3-4 months	23 (29%)	9 (20%)	32 (26%)
5-6 months	8 (10%)	4 (9%)	12 (10%)
> 6 months	8 (10%)	5 (11%)	13 (10%)
	78 (100%)	46 (100%)	124 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 20 Expenditure by Loanee for Loan Transaction

	Class A/B	Class-C/C2	Total
<\$50	21 (27%)	15 (33%)	36 (29%)
\$51-\$100	14 (18%)	4 (9%)	18 (14%)
\$101-\$200	10 (13%)	3 (7%)	13 (10%)
>\$200	34 (43%)	24 (52%)	58 (46%)
	79 (100%)	46 (100%)	125 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 21 Reasons for Not Taking Loan

	Class A/B	Class-C/C2	Total
Have sufficient finance	28 (41%)	10 (42%)	38 (41%)
Afraid of losing collateral	3 (4%)	0 (0%)	3 (3%)
Afraid of refusal by bank	2 (3%)	2 (8%)	4 (4%)
Lack of collateral	15 (22%)	1 (4%)	16 (17%)
Have access to informal credit	14 (21%)	9 (38%)	23 (25%)
Other reasons	6 (9%)	2 (8%)	8 (9%)
	68 (100%)	24 (100%)	92 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 22 Repayment of Loan 3.3.22

	Class A/B	Class-C/C2	Total
Ahead of Schedule	6 (8%)	3 (6%)	9 (7%)
On Schedule	46 (59%)	25 (53%)	71 (57%)
Behind Schedule	25 (32%)	19 (40%)	44 (35%)
Loan not paid	1 (1%)	0 (0%)	1 (1%)
	78 (100%)	47 (100%)	125 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 23 Source of Fishing Operation Cost

	Class A/B	Class-C/C2	Total
Bank	1 (1%)	3 (5%)	4 (2%)
Fish trader	47 (36%)	30 (48%)	77 (40%)
AFA	1 (1%)	0 (0%)	1 (1%)
Own	81 (62%)	29 (47%)	110 (57%)
	130 (100%)	62 (100%)	192 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 24 Repayment of Fishing Operation Cost

	Class A/B	Class-C/C2	Total
Deduct from fish sales	48 (92%)	23 (92%)	71 (92%)
By cash	4 (8%)	2 (8%)	6 (8%)
	52 (100%)	25 (100%)	77 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 25 Saving Accounts

	Class A/B	Class-C/C2	Total
Yes	70 (54%)	56 (90%)	126 (65%)
No	60 (46%)	6 (10%)	66 (35%)
	130 (100%)	62 (100%)	192 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 26 Saving Amount

	Class A/B	Class-C/C2	Total
<\$500	26 (20%)	7 (12%)	33 (17%)
\$500-1000	24 (18%)	11 (18%)	35 (18%)
\$1000-3000	14 (11%)	4 (7%)	18 (9%)
\$3000-5000	7 (5%)	9 (15%)	16 (8%)
\$5000-10,000	1 (1%)	16 (27%)	17 (9%)
>10,000	0 (0%)	7 (12%)	7 (4%)
None	60 (45%)	6 (10%)	66 (34%)
	132 (100%)	60 (100%)	192 (100%)

Remarks: Based on Field Survey Phase 1 (The F/S on the Pilot Project for Improvement of Fish Marketing and Distribution System in Malaysia, April/May 1992)

Table 27 Use of AFA Revolving Fund

	AFA Member						Non-Member						
	A	B	C	C2	Sub-total	%	A	B	C	C2	Sub-total	% Total	%
No response	0	1	0	0	1	0.69	0	0	0	0	0	0.00	1 0.55
Will always use	55	17	9	9	90	62.50	5	2	7	5	19	51.35	109 60.22
Will probably use	18	11	11	7	47	32.64	2	3	9	3	17	45.95	64 35.36
Will not use	3	2	1	0	6	4.17	0	0	1	0	1	2.70	7 3.87
Total	76	31	21	16	144	100.00	7	5	17	8	37	100.00	181 100.00

Table 28 Fish Consignment in Exchange for Credits

	AFA Member						Non-Member						
	A	B	C	C2	Sub-total	%	A	B	C	C2	Sub-total	% Total	%
No response	3	3	1	0	7	4.55	1	0	1	0	2	5.13	9 4.66
Will always consign most	43	13	3	8	67	43.51	4	1	2	1	8	20.51	75 38.86
Perhaps consign most	24	11	9	4	48	31.17	3	3	6	4	16	41.03	64 33.16
Only a small volume	8	4	7	4	23	14.94	0	1	7	1	9	23.08	32 16.58
Will not consign	2	0	0	0	2	1.30	0	0	0	0	0	0.00	2 1.04
Do not know	6	0	1	0	7	4.55	1	0	1	2	4	10.26	11 5.70
Total	86	31	21	16	154	100.00	9	5	17	8	39	100.00	193 100.00

Table 29 Non-Acceptance of AFA Credit

	AFA Member						Non-Member						
	A	B	C	C2	Sub-total	%	A	B	C	C2	Sub-total	% Total	%
Use own capital	3	1	0	0	4	17.39	1	0	0	0	1	10.00	5 15.15
Use another source	2	4	5	1	12	52.17	0	1	6	0	7	70.00	19 57.58
Dislike AFA	0	0	0	0	0	0.00	0	0	0	0	0	0.00	0 0.00
Don't like obligation of consi	3	2	0	2	7	30.43	1	0	0	1	2	20.00	9 27.27
Total	8	7	5	3	23	100.00	2	1	6	1	10	100.00	33 100.00

Table 30 AFA Purchase of Fish Catch

	AFA Member						Non-Member						
	A	B	C	C2	Sub-total	%	A	B	C	C2	Sub-total	% Total	%
No response	0	1	0	0	1	0.65	0	0	0	0	0	0.00	1 0.52
Will always sell	38	16	7	12	73	47.40	4	1	8	5	18	46.15	91 47.15
Perhaps will sell	30	13	11	4	58	37.66	4	4	6	2	16	41.03	74 38.34
Want to, but cannot	8	0	1	0	9	5.84	1	0	2	1	4	10.26	13 6.74
Will not sell	10	1	2	0	13	8.44	0	0	1	0	1	2.56	14 7.25
Total	86	31	21	16	154	100.00	9	5	17	8	39	100.00	193 100.00

Table 31 On Japanese AFA Practices

	AFA Member							Non-Member							
	A	B	C	C2	Sub-total	%		A	B	C	C2	Sub-total	% Total	%	
No response	0	0	1	0	0	1	0.65	0	0	0	0	0	0.00	1	0.52
Excellent	14	23	3	1	4	31	20.13	6	0	2	1	9	23.08	40	20.73
Good	30	48	17	13	7	85	55.19	1	5	12	4	22	56.41	107	55.44
Not good	1	1	1	1	0	3	1.95	0	0	0	1	1	2.56	4	2.07
Don't know	12	14	9	6	5	34	22.08	2	0	3	2	7	17.95	41	21.24
Total	57	86	31	21	16	154	100.00	9	5	17	8	39	100.00	193	100.00

Table 32 Participation Ratio in AFA with Introduction of Japanese AFA Practices

	AFA Member							Non-Member							
	A	B	C	C2	Sub- total	%		A	B	C	C2	Sub- total	% Total	%	
No response	1	1	0	0	2	1.30		0	0	0	0	0	0.00	2	1.04
Will join	45	14	8	10	77	50.00		4	4	7	2	17	43.59	94	48.70
Cannot join	18	3	2	1	24	15.58		2	0	3	4	9	23.08	33	17.10
Don't want to join	1	2	0	0	3	1.95		1	0	0	1	2	5.13	5	2.59
Don't know	21	11	11	5	48	31.17		2	1	7	1	11	28.21	59	30.57
Total	86	31	21	16	154	100.00		9	5	17	8	39	100.00	193	100.00

Table 33 Feasibility of Japanese AFA Practices

	AFA Member							Non-Member						
	A	B	C	C2	Sub-total	%	A	B	C	C2	Sub-total	% Total	%	
No response	0	2	0	0	2	1.30	0	0	0	0	0	0.00	2	1.04
All feasible	36	1	3	4	44	28.57	5	3	3	2	13	33.33	57	29.53
Some feasible	31	19	9	6	65	42.21	2	1	11	3	17	43.59	82	42.49
All unfeasible	1	2	1	0	4	2.60	1	0	0	2	3	7.69	7	3.63
Don't know	18	7	8	6	39	25.32	1	1	3	1	6	15.38	45	23.32
Total	86	31	21	16	154	100.00	9	5	17	8	39	100.00	193	100.00

Table 34 Most Adaptable Japanese Activity

	AFA Member						Non-Member								
						Sub- total	%						Sub- total	% Total	%
	A	B	C	C2	A			B	C	C2					
AFA & Consign Contract	8	0	0	0	8	10.81	0	0	0	0	0	0.00	8	8.42	
AFA & Partial Contract	7	0	2	1	10	13.51	0	0	0	0	0	0.00	10	10.53	
Traders purchase from AF ₂	2	1	1	0	4	5.41	0	0	0	0	0	0.00	4	4.21	
Payment thru AFA	19	20	7	5	51	68.92	2	1	13	5	21	100.00	72	75.79	
AFA accounts & savings	1	0	0	0	1	1.35	0	0	0	0	0	0.00	1	1.05	
Total	37	21	10	6	74	100.00	2	1	13	5	21	100.00	95	100.00	

Table 35 Most Unfeasible Japanese Practice

	AFA Member							Non-Member						
	A	B	C	C2	Sub-total			A	B	C	C2	Sub-total	Total	%
AFA & Consign Contract	1	1	0	0	2			0	0	1	1	2	4	19.05
AFA & Partial Contract	1	1	1	2	5			0	0	0	1	1	6	28.57
Traders purchase from AF ₂	2	2	0	0	4			1	0	1	0	2	6	28.57
Payment thru AFA	3	0	1	1	5			0	0	0	0	0	5	23.81
AFA accounts & savings	0	0	0	0	0			0	0	0	0	0	0	0.00
Total	7	4	2	3	16			1	0	2	2	5	21	100.00

Table 36 Who Does AFA Belong To?

	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	4	4	4.88	4	1.69
Fishermen Organization	24	50	74	48.05	14	13	27	32.93	101	42.80
Govt. organization	26	33	59	38.31	7	29	36	43.90	95	40.25
Don't know	9	12	21	13.64	3	12	15	18.29	36	15.25
Total	59	95	154	100.00	24	58	82	100.00	236	100.00

Table 37 AFA Role in Upgrading Operations & Livelihood

	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	1	1	2	1.30	0	3	3	3.66	5	2.12
No effect	4	13	17	11.04	0	1	1	1.22	18	7.63
Slight effect	46	56	102	66.23	15	38	53	64.63	155	65.68
Good effect	8	25	33	21.43	9	16	25	30.49	58	24.58
Total	59	95	154	100.00	24	58	82	100.00	236	100.00

Table 38 Social Activity In Need of Most Reinforcement

	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	11	6	17	11.04	0	3	3	3.66	20	8.47
Educational aid	35	61	96	62.34	16	36	52	63.41	148	62.71
Death disaster compen.	4	14	18	11.69	2	3	5	6.10	23	9.75
Fishing lectures	9	14	23	14.94	6	16	22	26.83	45	19.07
Total	59	95	154	100.00	24	58	82	100.00	236	100.00

Table 39 Social Welfare Activities

	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	2	1	3	1.95	0	2	2	2.44	5	2.12
Very satisfactory	0	6	6	3.90	0	1	1	1.22	7	2.97
Satisfactory	20	50	70	45.45	13	30	43	52.44	113	47.88
Not good	37	38	75	48.70	11	25	36	43.90	111	47.03
Total	59	95	154	100.00	24	58	82	100.00	236	100.00

Table 40 Membership Dues

	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	2	2	2.44	2	0.85
High	0	1	1	0.65	0	0	0	0.00	1	0.42
Suitable	40	51	91	59.09	8	38	46	56.10	137	58.05
Cheap	19	43	62	40.26	16	18	34	41.46	96	40.68
Total	59	95	154	100.00	24	58	82	100.00	236	100.00

Table 41 Increase in Dues

	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	28	36	64	41.56	5	27	32	39.02	96	40.68
For	30	52	82	53.25	19	27	46	56.10	128	54.24
Against	1	7	8	5.19	0	4	4	4.88	12	5.08
Total	59	95	154	100.00	24	58	82	100.00	236	100.00

Table 42 Fairness of Dues

	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	20	27	47	30.52	6	18	24	29.27	71	30.08
Fair	32	55	87	56.49	15	21	36	43.90	123	52.12
Unfair	7	13	20	12.99	3	19	22	26.83	42	17.80
Total	59	95	154	100.00	24	58	82	100.00	236	100.00

Table 43 Pros/Cons of Having members Other than Fishermen

	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	1	0	1	0.65	0	3	3	3.66	4	1.69
For	12	28	40	25.97	7	11	18	21.95	58	24.58
Against	46	67	113	73.38	17	44	61	74.39	174	73.73
Total	59	95	154	100.00	24	58	82	100.00	236	100.00

Table 44 Composition of Members

	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	2	2	2.44	2	0.85
Good	32	42	74	48.05	16	23	39	47.56	113	47.88
Unsuitable But Keep	6	13	19	12.34	1	7	8	9.76	27	11.44
Unsuitable/Revise	1	7	8	5.19	0	10	10	12.20	18	7.63
Bad/Revise	1	2	3	1.95	0	0	0	0.00	3	1.27
Don't know	10	16	26	16.88	0	10	10	12.20	36	15.25
No Idea	9	15	24	15.58	7	6	13	15.85	37	15.68
Total	59	95	154	100.00	24	58	82	100.00	236	100.00

Table 45 Restricted Membership-Boat Owners/Skippers

	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	2	2	2.44	2	0.85
For	5	20	25	16.23	0	5	5	6.10	30	12.71
Against	30	48	78	50.65	19	29	48	58.54	126	53.39
Don't know	12	14	26	16.88	2	14	16	19.51	42	17.80
No Idea	12	13	25	16.23	3	8	11	13.41	36	15.25
Total	59	95	154	100.00	24	58	82	100.00	236	100.00

Table 46 Restricted Membership-Boat Owners/Skippers/Crew

	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	2	2	2.44	2	0.85
For	15	30	45	29.22	5	24	29	35.37	74	31.36
Against	21	34	55	35.71	11	13	24	29.27	79	33.47
Don't know	14	16	30	19.48	6	13	19	23.17	49	20.76
No Idea	9	15	24	15.58	2	6	8	9.76	32	13.56
Total	59	95	154	100.00	24	58	82	100.00	236	100.00

Table 47 Organization Only For Crew Members

	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	2	2	1.30	0	2	2	2.44	4	1.69
For	5	12	17	11.04	1	13	14	17.07	31	13.14
Against	34	59	93	60.39	12	15	27	32.93	120	50.85
Don't know	8	9	17	11.04	4	21	25	30.49	42	17.80
No Idea	12	13	25	16.23	7	7	14	17.07	39	16.53
Total	59	95	154	100.00	24	58	82	100.00	236	100.00

Table 48 Past AFA Membership

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub-total	%	Captain	Crew	Sub-total	%	Total	%
No response	0	0	0	0.00	0	2	2	1.96	2	1.42
Yes	17	18	35	89.74	4	75	79	77.45	114	80.85
No	2	2	4	10.26	8	13	21	20.59	25	17.73
Total	19	20	39	100.00	12	90	102	100.00	141	100.00

Table 49 Reasons For Not Joining AFA

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub-total	%	Captain	Crew	Sub-total	%	Total	%
No response	3	4	7	17.95	0	6	6	5.88	13	9.22
No merits	3	1	4	10.26	0	12	12	11.76	16	11.35
Against AFA manag.	0	0	0	0.00	0	1	1	0.98	1	0.71
Can't pay dues	0	1	1	2.56	0	0	0	0.00	1	0.71
Don't know about AFA	3	4	7	17.95	10	31	41	40.20	48	34.04
Political reasons	0	0	0	0.00	0	0	0	0.00	0	0.00
No reason	10	10	20	51.28	2	40	42	41.18	62	43.97
Total	19	20	39	100.00	12	90	102	100.00	141	100.00

Table 50 Willingness To Join AFA

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub-total	%	Captain	Crew	Sub-total	%	Total	%
No response	11	8	19	48.72	11	51	62	60.78	81	57.45
Yes	7	11	18	46.15	0	31	31	30.39	49	34.75
No	1	1	2	5.13	1	8	9	8.82	11	7.80
Total	19	20	39	100.00	12	90	102	100.00	141	100.00
60 Respondents										
Yes	7	11	18	90.00	0	31	31	77.50	49	81.67
No	1	1	2	10.00	1	8	9	22.50	11	18.33
Total	8	12	20	100.00	1	39	40	100.00	60	100.00

Table 51 Opinion On Dues

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
	0	0	0	0.00	0	1	1	0.98	1	0.71
	0	0	0	0.00	0	1	1	0.98	1	0.71
	8	8	16	41.03	4	58	62	60.78	78	55.32
	11	12	23	58.97	8	30	38	37.25	61	43.26
Total	19	20	39	100.00	12	90	102	100.00	141	100.00

Table 52 Opinion On Compensation

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	0	0	0.00	0	0.00
High	0	0	0	0.00	0	0	0	0.00	0	0.00
Suitable	8	6	14	41.18	4	47	51	73.91	65	63.11
Not enough	9	11	20	58.82	1	17	18	26.09	38	36.89
Total	17	17	34	100.00	5	64	69	100.00	103	100.00

Table 53 Annual Insurance Dues

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	0	0	0.00	0	0.00
High	0	0	0	0.00	0	4	4	5.80	4	3.88
Suitable	17	17	34	100.00	5	59	64	92.75	98	95.15
Very high	0	0	0	0.00	0	1	1	1.45	1	0.97
Total	17	17	34	100.00	5	64	69	100.00	103	100.00

Table 54 Increase Insurance Dues

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	0	0	0.00	0	0.00
Support small increase	4	5	9	26.47	0	21	21	30.43	30	29.13
Support increase compe	13	9	22	64.71	5	29	34	49.28	56	54.37
Impossible	0	3	3	8.82	0	14	14	20.29	17	16.50
Total	17	17	34	100.00	5	64	69	100.00	103	100.00

Table 55 Fairness of Membership Dues

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	0	0	0.00	0	0.00
Fair	6	2	8	20.51	1	27	28	27.72	36	25.71
Unfair	1	11	12	30.77	6	32	38	37.62	50	35.71
Don't know	12	7	19	48.72	5	30	35	34.65	54	38.57
Total	19	20	39	100.00	12	89	101	100.00	140	100.00

Table 56 Different Dues

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	2	2	1.96	2	1.42
For	2	2	4	10.26	1	12	13	12.75	17	12.06
Against	14	11	25	64.10	8	41	49	48.04	74	52.48
Don't know	3	7	10	25.64	3	35	38	37.25	48	34.04
Total	19	20	39	100.00	12	90	102	100.00	141	100.00

Table 57 Satisfaction with Status Quo

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	1	1	0.98	1	0.71
Suitable	7	8	15	38.46	1	22	23	22.55	38	26.95
Unsuitable	2	0	2	5.13	4	7	11	10.78	13	9.22
Don't know	10	12	22	56.41	7	60	67	65.69	89	63.12
Total	19	20	39	100.00	12	90	102	100.00	141	100.00

Table 58 AFA For Boat Owners

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	1	1	0.98	1	0.71
For	0	0	0	0.00	1	8	9	8.82	9	6.38
Against	9	12	21	53.85	7	40	47	46.08	68	48.23
Don't know	10	8	18	46.15	4	41	45	44.12	63	44.68
Total	19	20	39	100.00	12	90	102	100.00	141	100.00

Table 59 AFA for Boat Owners/Crew

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	1	1	0.98	1	0.71
For	3	6	9	23.08	7	33	40	39.22	49	34.75
Against	2	4	6	15.38	1	15	16	15.69	22	15.60
Don't know	14	10	24	61.54	4	41	45	44.12	69	48.94
Total	19	20	39	100.00	12	90	102	100.00	141	100.00

Table 60 Fully Quasi Members

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	1	1	0.98	1	0.71
For	3	3	6	15.38	1	32	33	32.35	39	27.66
Against	7	7	14	35.90	1	17	18	17.65	32	22.70
Don't know	9	10	19	48.72	10	40	50	49.02	69	48.94
Total	19	20	39	100.00	12	90	102	100.00	141	100.00

Table 61 AFA For Crew Members Only

	NON AFA MEMBER				NON AFA MEMBER					
	Boat Owner	Owner Skipper	Sub- total	%	Captain	Crew	Sub- total	%	Total	%
No response	0	0	0	0.00	0	1	1	0.98	1	0.71
For	0	4	4	10.26	0	21	21	20.59	25	17.73
Against	9	9	18	46.15	7	33	40	39.22	58	41.13
Don't know	10	7	17	43.59	5	35	40	39.22	57	40.43
Total	19	20	39	100.00	12	90	102	100.00	141	100.00

添付資料－ 8. 参考文献

	Title	Source	Year
1	Daily and monthly records of fish landed at the complex and fish consigned to various destinations	LKIM(Endau, Mersing & K. Sedili)	April/May 1992
2	Annual reports of LKIM	LKIM, KL	1987/1988
3	Distribution of Fresh Chilled Fish Imported through BKH Complex	LKIM, KL	1988-90
4	Quantity of Fish Landed in JB Wholesale Market (Tampoi)	LKIM, JB	1989-1990
5	Quantity and Value of Fish in JB Retail Market	LKIM, JB	1989-1990
6	Quantity and Value of Export/Import of Fish through Tambak	LKIM, JB	1989-1991
7	The Second Outline Perspective Plan (1991-2000)	GOM	1991
8	Sixth Malaysia Plan (1991-1995)	GOM	1991
9	Economic Report Volume 20	MOF	1991/92
10	Preliminary Count Report - Population & Housing Census of Malaysia	DOS	1991
11	Kelulusan Mengikut Jenis Pinjaman 1970-1991 (loans made-number of borrowers and amount)	BPM	1991
12	Agricultural Credit Survey, Malaysia	FAO	1986
13	Agriculture Organization of the United Nations, Rome	FAO	
14	Study on Fish Marketing and Distribution System in Malaysia	JICA	March, 1991
15	Measures of Schemes for the Improvement of Agricultural Financing for Small Farmers	BPM	April 11-17, 1988
16	Rethinking Artisanal Fisheries Development: Western Concepts,	World Bank	October, 1980
17	Sociocultural Aspects of Developing Small-Scale Fisheries: Delivering Services to the Poor	World Bank	October, 1981
18	No. of registered boats in Mersing district	DOF Mersing	1990
19	No. of registered boats in Johor state	DOF Mersing	1990
20	Laporan Penyata Kewangan.	PNK.Kuala Sedili	1990/1991
21	Laporan Penyata Kewangan	PNK. Mersing	1990/1991
22	Laporan Tahunan	PNK.Endau	1989/1990/1991
23	Laporan Tahunan	PNK.Kuala Sedili	1990/1991
24	Laporan Tahunan	PNK.Mersing	1990/1991
25	Laporan Tahunan	PNK.Endau	1990/1991
26	Laporan Prestasi Projek PNK Bagi Tahunan	LKIM	1990/1991
27	Laporan Penyata Kewangan	PENAJA	1991
28	Laporan Tahunan	PENAJA	1991
29	Laporan Tahunan	NEKMAT	1990
30	Laporan Penyata Kewangan	PNK.Kuantan	1991
31	Laporan Tahunan PNK..	PNK.Kuantan	1991
32	Laws of Malaysia Act.44	GOM	1971
33	Laws of Malaysia Act.A694	GOM	1972
34	Laws of Malaysia Act.A201	GOM	1973
35	Laws of Malaysia Act.A261	GOM	1974
36	Weather Records at Mersing	Malaysian Meteo. Service	1992
37	Monthly Summary of Marine Meteorological Observation	JKR	1985-89
38	Malaysian Tide Tables 1992	Motion Smith Marine House	1992
39	Marine Chart, Offshore East Coast	Motion Smith Marine House	1986, 1989
40	Malaysia National Coastal Erosion Study, Final Report, Volume 1,	JPS HQ Library	1985
41	Malaysia National Coastal Erosion Study, Phase II Feasibility	JPS HQ Library	Jan. 1989
42	Topographic Map, Endau, Malaysia Nationwide Rivermouth Study	JICA	1975
43	State of Pahang Road Map	JKR Kuantan	1990

	Title	Source	Year
44	Stabilization of River-Mouths, The Pengkalan Datu Seaworks	JPS, Mersing	1990
45	Report on the Federation's Dredging, The Ports of Kota Baru, etc.	JPS, Mersing	1960
46	Hydraulic Study of Approach Channel, Kuala Besut Fishing Port,	JPS, Mersing	1979
47	Endau Ferry Jetty Plan Drawings	JKR	Apr-92
48	Endau Bridge Construction Site Profile (Drawing)	JKR	Apr-92
49	Endau Ferry Jetty Site Soil Profile	JKR	Apr-92
50	Endau Fishing Port Planning Site Water Supply Trunk Line Map	JKR	Apr-92
51	Endau Fishing Port Planning Site Electricity Supply Trunk Line Map	FDA, Mersing	Apr-92
52	Land Registered Map Endau (Fishing Port Planning Site)	Land Office, Mersing	Apr-92
53	Comparison of Soundings Alignment, Mersing, May 1980 and April 1982	JICA	Apr-92
54	Records of Rainfall Along the Endau River	JPS, Mersing	Apr-92
55	Request to Dredge in Endau Mouth, Jan. 27, 1992	JPS, Mersing	Apr-92
56	Kuantan Fishing Port Drawing	JKR, KL	Apr-92
57	Advance in food research III,	UPM	Nov. 1990
58	Production and acceptability testing of fish crackers (Keropok) prepared by extrusion method	UPM	1981
59	The application of technology to the processing of dry-salted fish in peninsular Malaysia: Comparison of sun-dried and oven-dried fish,	UPM	1982
60	Intermediate technology for fish cracker (Keropok) production	UPM	1981
61	Perusahaan memproses keropok	MARDI	1983
62	Kursus teknologi memproses makanan	MARDI	1992
63	Laporan Prestasi Tahunan Pelabuhan Perikanan Chendering	LKIM Chendering	1991
64	Laporan Prestasi Kompleks Perikanan LKIM Pulau Kambing	LKIM P.Kambing	1991
65	Layout drawing of existing electric supply line neighboring the proposed site and information of electric supply system in Mersing	NEB	30-Apr-92
66	Layout drawing of existing water supply line neighboring the proposed District office, Mersing site and information of water supply system in Mersing District		22-Apr-92
67	State of Johor Road Map	JKR HQ	
68	Consumer Price Index for Malaysia,	DOS	Dec 1991, Jul & Aug 1992
69	Building Cost Index by category of Building and Region	DOS	Jan 1980 - Apr 1992
70	Special Release 1 for Civil Engineering Works,	DOS	Apr & Aug 1992
71	Nama dan Alamat Pembekal Pengeluar Bahan Binaan	JKR, K.L	1992
72	Kos purata semeter persegi bagi kerja-kerja pembinaan bangunan	JKR, K.L	Jan - Jun 1992
73	Purata kadar kadar harga yang ditawarkan	JKR, K.L	1989
74	Jadual kadar harga untuk kerja kerja kecil and memperbaiki	JKR, K.L	1992
75	Data on Membina dan menyiapkan Kompleks Perikanan di Kampong Peramu, Kuantan, Pahang Darul Makmur	JKR, K.L	1988
76	Data on Projek Pembinaan Jeti Perikanan di Kukup, Pontian, Johor	JKR, K.L	1992
77	Data on Membina Jeti dan Tambatan Bot di Kompleks Perikanan Kampung Peramu Kuantan, Pahang Darul Makmur	JKR, K.L	1991
78	Data on Pembinaan Struktur Pendaratan Pengkalan Feri Johor - Singapura di Tanjung Belungkor, Johor Darul Takzim	JKR, K.L	
79	Data on Pembinaan Pengkalan Marin Polis di Kemaman, Terengganu	JKR, K.L	1992
80	Data on Pembinaan Jeti Kargo dan Kerja kerja Berkaitan di	JKR, K.L	1992
81	Data on Membina dan menyiapkan kemudahan pendaratan bot bagi ILPM di Chendering, Kuala Trengganu, Trengganu Darul Iman	JKR, K.L	1991

	Title	Source	Year
82	JKR Schedule of Rates (for use in lump sum contracts)	JKR, K.L	1985
83	Practical Guide to Customs Duties Order, All amendments up to 15th April 1992 including 1992 Budget	Published by MDC Sdn.Bhd	1992
84	Scale of Fees	Board of Engineers, Malaysia	1982
85	Cadangan Rangkaian / Perhubungan Komputer LKIM	LKIM	Sept., 1992
86	Konfigurasi Sistem Yang Sedia Ada	LKIM	Sept., 1992
87	Introduction of Telita System "Telita a closer look"	LKIM	Sept., 1992
88	LKIM Instruction for Fish Market Information System	LKIM	Sept., 1992
89	Panduan Menentukan Saiz Ikan	LKIM	Sept., 1992
90	LKIM Fish Market Information System	LKIM	April, 1992
91	Khidmat Sokongan Pemasaran	LKIM	Sept., 1992
92	Teleksikan	LKIM	June, 1992
93	Infotish International, No. 4/92	Infotish	Jul/ Aug, 1992
94	Infotish Trade News, No. 11/92	Infotish	16-Jun-92
95	Standard forms for data collection	LKIM	Sept., 1992
96	State of the Marine Environment in the East Asian Seas Region, UNEP Regional Seas Reports and Studies No. 126	UNEP	1990
97	River Input to Southeast Asian Seas, United Nations Educational, Scientific, and Cultural Organization, Paris	UNESCO	Nov-80
98	Strategies and Enforcement of Industrial Waste Water Control in Malaysia (A Case Study)	DOE	Sep-82
99	A Brief on the Provision of Water and Control of the Disposal of Wastes as Prerequisites to the Development of the Human	DOE	Aug-77
100	Environment Quality Act 1974, Environmental Quality (Sewage and Industrial Effluents) Regulations	DOE	1979
101	Frequency of Fishing Boats Coming into Kuantan Fishing Port 1992	LKIM Kuantan	Sep-92
102	Proposed construction site and land map of the surrounding area	Mersing land Office	Sep-92
103	Table on drinking water tests of the Endau District	Water Dept. Mersing	Sep-92
104	Dynamic trunk line and the unit cost for construction of the substation	JKR	
105	A Handbook of Environmental Impact Assessment Guidelines	DOE	Oct. 1989
106	Map of District of Mersing	Survey Dept. Johor	1992
107	Pelan Jalan Bandar Mersing	Survey Dept. Johor	1992
108	Town Map of Endau	Survey Dept. Johor	1992
109	Area Map around the Mersing LKIM Complex	Mersing LKIM	Sept., 1992
110	Population of Town of Mersing/Endau	Mersing Town Office	Sept. 1992
111	Majlis Perasmian Jeti Mersing	Jabatan Laut Johor	Sept. 1992
112	A Study on Socio-economic Profile of Fishermen in Selected Areas	LKIM	Jun-86

