Final Project 2004



A CRITICAL APPRAISAL OF THE STRATEGY AND STRUCTURE OF THE FISHERMEN'S ASSOCIATIONS IN MALAYSIA

Jamaludin Othman Fisheries Development Authority of Malaysia 7th Floor, Wisma PKNS, Jalan Raja Laut, 50784 Kuala Lumpur, Malaysia jamalo@hotmail.com

> Supervisor Helgi Gestsson <u>helgig@unak.is</u> University of Akureyri

ABSTRACT

There is a strong belief in Malaysia that the Fishermen's Association is a potential vehicle for Malaysian fishermen to rely on. This study examines the role and performance of the Fishermen's Association in Malaysia. Strategic models are used to evaluate the economic and strategic performance of the Fishermen's Association and to analyse the connection between their strategy and external market circumstances, the association's internal resources and competitive capabilities.

The paper also addresses the extent and the sources of competition from rivals in the fish brokers industry in Malaysia. It evaluates the part of the Fishermen's Association not competing in that market and analyses how the internal strength of the Fishermen's Association plays a part in influencing the competitiveness of local fish brokers in Malaysia.

Strategic planning analysis was used to evaluate the present situation. For the evaluation of the economic and strategic performance secondary data and both qualitative and quantitative analysis was used in this study and as a result, there is evidence to suggest that the strategy of the Fishermen's Association needs to be revised to develop further. Approaches to increase competition and new methods to amend adverse effects of rivalry are put forward at the end of the study.

Table of Contents

1	INTRODUCTION	.7
2	BACKGROUND	. 8
2.1	Malaysia today	. 8
2.2	Malaysian economy	8
23	Fishing industry in Malaysia	0
	.3.1 Fisheries Comprehensive Licensing Policy (FCLP)	
	.3.2 Third National Agricultural Policy (NAP 3)	
	.3.3 The Ministry of Agriculture and Agro-Based Industries (MOA)	
	······································	
2.4	Fishermen's associations in Malaysia	
2.	.4.1 Formation of the Fishermen's Association	16
2.	.4.2 Number of Area Fishermen's Associations	17
2.	.4.3 The general meeting and the board of directors	18
2.	.4.4 Number of association members	19
2.	.4.5 Economic and social activities	19
3	THEORY AND METHOD	21
3.1	Strategy, structure and strategic performance	21
3.1	Strategy, structure and strategic perior mance	41
3.2	A model of strategic management	21
4	COMPETITIVENESS OF THE FISH BROKERS INDUSTRY IN MALAYSIA	24
-		
4.1	Dominant economic features	24
4.2	Competitive forces	26
4.3	Drivers of change	28
4.4	Competitive position	28
4.5	Competitive moves	30
4.6	Key factors	31
47	The attractiveness of the industry	32
т• <i>1</i>	The address of the industry	<u> </u>
5	OPERATIONS OF OTHER AFAS	34
6	RESOURCES AND COMPETITIVE CAPABILITIES	35

6.1	Present strategy	35
	5.1.1 Correlation between the objectives of the AFA by activities	
	5.1.2 Activities of the AFAs	
6	5.1.3 The economic performance of the Fishermen's Associations	
6.2	Profit and loss account statement	38
6.3	Market share in the fish brokers industry	38
6.4	Return on equity	39
6.5	SWOT analysis	41
6.6	Prices and cost	42
6.7	Relative position to rivals	43
6.8	Strategic issues	44
7	A FISHERMEN'S ASSOCIATION IN ICELAND –	46
7.1	Formation of SIF	46
7.2	Turning point	46
7.3	Increased competition in the selling of salted fish	46
7.4	Transformation	47
8	DISCUSSION AND SUGGESTIONS	47
8.1	The variety of activities	48
8.2	Strengthening of the strategy	49
8.3	Strengthening the structure	50
9	CONCLUSION	52
AC	KNOWLEDGEMENTS	53
LIS	ST OF REFERENCES	54
API	PENDIX 1	56
API	PENDIX 2	57

Othman

LIST OF FIGURES

Figure 1: Geographical location of Malaysia as shown in the World Fact book 2004	8
Figure 2: GDP by economic sector in Malaysia 1983-2003 (World Bank Group 2005)	9
Figure 3: Schematic view of the fishing zone and permitted fishing gear in Malaysia (Og	gawa
2004)	10
Figure 4: Organisational structure of the Ministry of Agriculture in Malaysia showing	
departments and organisations of fisheries highlighted.	13
Figure 5: Three tier structures for the Fishermen's Associations in Malaysia	16
Figure 6: Organisational chart of a Fishermen's Association.	18
Figure 7: The five competitive forces in the fish brokers industry.	27
Figure 8: Competitive position of FAs and other fish brokers	29
Figure 9: Economic activities of AFAs who do not by or sell fish (cluster 3)	34
Figure 10: Profit and loss of AFAs in cluster 3 in the years 2000 – 2002.	35
Figure 11: Total number of AFAs involved in different activities	37

LIST OF TABLES

Table 1: Total landing of the capture fishery in Malaysia. Value is shown as RM and (USD))
(DOF 2004 a)	
Table 2: Projected production and demand in thousands of tons for fish in Malaysia (2000 -	_
2010) (MOA 2004 c)	. 12
Table 3: Registered FAs, number of members and value of shares from 1975 until 2003	
(FDAM 2004)	. 19
Table 4: The most popular action that rivals are likely to take	. 23
Table 5: Dominant economic characteristics of the fish brokers industry in Malaysia	. 25
Table 6: Total number of licenses issued in 2003 (FDAM 2003)	. 27
Table 7: Annual per capita consumption of fish for human food(FAO 1999 and 2001)	. 28
Table 8: The most competitive moves rivals are likely to take	. 30
Table 9: Key success factors (KSFs)	
Common types of key success factors (KSFs)	. 31
Table 10: Industry and competitive analysis – summary	. 32
Table 11: Correlation (importance) of AFAs activities by objectives	. 35
High important activities three points, activities of medium important one point and activities	es
of little or no important of AFAs objectives are awarded no points	. 35
Table 11: Correlation (importance) of AFAs activities by objectives	. 36
Table 12: Profit of AFAs by category (FDAM 2003)	. 38
Table 13: Profit of AFAs in 2000 – 2002	. 38
Table 14: Market share in RM by the main players in the fish broker industry in Malaysia.	. 39
Table 15: Return on equity of AFAs from 2000 to 2002.	. 40
Table 16: SWOT analysis of AFAs in cluster 1.	.41
Table 17: Profit margins of AFAs in fish marketing activities (cluster 1)	. 42
Table 18: The price in RM of the fish marketing supply chain	. 42
Table 19: Weighted competitive strength assessment	
Table 20: The AFAs situational analysis	. 44

LIST OF ABBREVIATIONS

AFA DOF	- -	Area Fishermen's Association Department of Fisheries
EEZ	-	Exclusive Economic Zone
FAO	-	Food and Agriculture Organisation of the United Nations
FDAM	-	Fisheries Development Authority of Malaysia
FCLP	-	Fisheries Comprehensive Licensing Policy
GDP	-	Gross Domestic Product
GNP	-	Gross National Product
GRT	-	Gross Registered Tonnage
IADP	-	Integrated Agricultural Development Project
KM^2	-	Kilometre Square
KSF	-	Key Success Factors
NFA	-	National Fishermen's Association
MOA	-	Ministry Of Agriculture and Agro-Based Industry
MT	-	Metric Tons
NAP3	-	Third National Agricultural Policy
NES	-	Not elsewhere Specified
NM	-	Nautical Mile
RM	-	Ringgit Malaysia (Currency of Malaysia)
ROE	-	Return on Equity
SFA	-	State Fishermen's Association
UIFP	-	Union of Icelandic Fish Producers
USD	-	Dollar of the United State of America

1 INTRODUCTION

The fisheries sector is considered a part of the Malaysian national agricultural industry, and comprises about 1.6% of the Gross Domestic Product of Malaysia (MOA 2005). The sector has played a major role in the supply of foods and local development. It is a principal source of income and employment for 86,000 fishermen in Malaysia, particularly in rural areas. (DOF 2005 d).

Accordingly, governments continue to put priority on fisheries development by instituting a variety of measures aimed at fostering the growth of the sector. Critical to this development has been the contribution made by Fishermen's Associations.

Fishermen's Associations were established in order to develop fishery resources and to raise the social and economic status of fishermen. The associations provide a number of services and facilities to their members, among others, offering technical assistance, bulk purchase of supplies, advice on the conservation of fishery resources and setting up facilities for credit, processing and marketing. There is presently a three – tier structure comprising 74 Area Fishermen's Associations, 12 State Fishermen's Associations and one National Fishermen's Association.

However, not all of the Fishermen's Associations have been equally successful in their operations of economic and social activities. Most have not had the desired impact on the economic welfare of the Malaysian fishermen. More than 50% of the associations show a medium or poor performance in their economic activities (FDAM 2002).

The aim of this project is to make an in-depth study of the role of Fishermen's Associations and use strategic planning analysis to evaluate the present situation. For the evaluation of the economic and strategic performance of the Fishermen's Associations secondary data and both qualitative and quantitative analysis will be used.

The research question relates to a part of the original purpose of the Fishermen's Associations of raising the social and economic status of fishermen in Malaysia:

How does the strategy and structure of the Fishermen's Associations in Malaysia affect the economic performance of the associations?

The outcome of this study should add to the understanding of:

- a) how to plan future operations of the Fishermen's Associations in Malaysia;
- b) the role of the Fishermen's Associations and other stakeholders in the fishing industry in Malaysia;
- c) the importance the operations of the Fishermen's Associations have on the objectives of the Fisheries Development Authority of Malaysia (FDAM); and
- d) the importance that business managers of the Fishermen's Associations fully realize the capability of their associations.

2 BACKGROUND

2.1 Malaysia today

Malaysia covers a total area of $329,750 \text{ km}^2$ (Figure 1) comprising of eleven states in the peninsular of Malaysia, the two states of Sarawak and Sabah in Northern Borneo and a number of islands, the two largest being Langkawi and Penang. The country is predominantly rural, with an estimated population in 2002 of 22.5 million, of which 82.2% live in Peninsular Malaysia, 9.4 % in Sarawak, and 8.4 % in Sabah. Urbanization has however increased, with the proportion of the population living in urban areas rising from 29% in 1970 to 41% in 2002. (World fact book 2004)



Figure 1: Geographical location of Malaysia as shown in the World Fact book 2004.

Peninsular Malaysia, Sabah and Sarawak are located in Southeast Asia and have characteristic equatorial climates with uniformly high temperatures and rain in all seasons, there is nevertheless a fundamental difference in their geographical position. Peninsular Malaysia forms the southern tip of the Asian mainland, bordered by Thailand to the north, and by the island of Singapore on its southernmost tip. On its western side, facing the sheltered and calm waters of the Straits of Malaysia, Peninsular Malaysia flanks one of the oldest and most frequented maritime highways of the world. On the other hand Sabah and Sarawak lie off the track of the main shipping routes, along the northern fringe of the remote island of Borneo, bordered by Indonesia and in the North-eastern Sarawak, by Brunei (World fact book 2004)

2.2 Malaysian economy

The Third National Agricultural Policy (NAP 3 a) is one of the most forward looking and prosperous economies in Asia primarily because of its mixture of agriculture and industry. The economy is mainly export-oriented. Previously, tin was considered to be the mainstay of the national economy. With the introduction of new economic policies in 1970, providing

generous incentives for investment, the economic base was, diversified to include other areas of industry and agriculture.

The gross national product is growing more rapidly than the population. GNP per capita is, after Brunei and Singapore, the third highest in Southeast Asia. Growth largely depends on an expanding manufacturing sector. However income distribution is very uneven, particularly in rural areas, and poverty is widespread. Despite government efforts, wealth is distributed primarily along ethnic lines. While Malays are the biggest group, in economic terms they are dominated by ethnic Chinese, who lead economic activity in both urban and rural areas. Rice is the dominant food crop, commonly grown in the hilly areas, with domestic production meeting roughly 80% of demand. Fish is the main source of protein.

On the whole, agriculture accounts for approximately one-third of the gross domestic product and employs up to one-third of the work force. Manufacturing industries account for approximately one-fourth of the GDP. The sector employs about one-sixth of the work force. Overall, rubber goods, iron and steel products, and electronics are important manufactures.

A survey of Malaysia's economic development reveals that the Malaysian economy is shifting from agriculture to industry. From 1983-2003, the contribution of agriculture to GDP shows an average drop of 3.7% annually. Fisheries comprise about 1.6% of the Gross Domestic Product and have played a major role in the supply of foods and in local development. It is the principal source of income and employment for about 86,000 fishermen in Malaysia, particularly in rural areas of Malaysia. Figure 2 below shows the economic growth by sector in Malaysia (World Bank Group 2005).

STRUCTURE of the ECONOMY					
	1983	1993	2002	2003	Growth of investment and GDP (%)
(% of GDP)					
Agriculture	20.0	13.8	9.2	9.7	⁵⁰ T
Industry	38.5	40.1	47.3	48.5	
Manufacturing	19.3	25.9	30.5	31.1	
Services	41.5	46.1	43.5	41.8	98 99 00 01 02 0
Private consumption	56.4	48.3	44.1	43.7	-50 L V
General government consumption	15.2	12.6	13.8	13.9	GDIGDP
Imports of goods and services	56.1	79.0	96.5	93.3	GDIGDP
	1983-93	1993-03	2002	2003	Growth of exports and imports (%)
(average annual growth)					
Agriculture	2.9				30 -
	2.5	1.1	2.6	5.7	
0	8.1	1.1 5.6	2.6 4.1	5.7 7.2	15 -
0					15
ndustry Manufacturing	8.1	5.6	4.1	7.2	
Industry	8.1 12.4	5.6 6.3	4.1 4.1	7.2 8.3	
ndustry Manufacturing Services Private consumption	8.1 12.4 7.5	5.6 6.3 4.5	4.1 4.1 3.3	7.2 8.3 3.1	
Industry Manufacturing Services	8.1 12.4 7.5 6.2	5.6 6.3 4.5 3.9	4.1 4.1 3.3 4.4	7.2 8.3 3.1 6.6	

Figure 2: GDP by economic sector in Malaysia 1983-2003 (World Bank Group 2005).

2.3 Fishing industry in Malaysia

The fishing industry plays an important role in the Malaysian economy. The three main contributions of fisheries to the national economy are: it's a source of food, it generates employment opportunities either directly or in processing plants, and it's an earner of foreign exchange. Fish is generally acceptable to all the ethnic groups in Malaysia and plays a key role as a source of protein in the diet of many people. Nationally, it accounts for about 22 % of the total protein intake and 50 % of the animal protein supply. (NAP3 2004 b)

Marine fisheries from inshore waters of Malaysia is still the most important sub sector, as it contributes 80% of total fish production and employ 80% of the fisheries labour force.(FAO 2004 a). Fish stocks along the coasts have been severely depleted, such that the government has stopped issuing new licences for fishing craft and created a series of zones within the inshore waters to control the types of vessels and equipment used. Reducing the number of inshore fishers is a priority, and they are being encouraged to move to aquaculture, fish processing, or deep-sea fishing. Aquaculture on mudflats (for cockle farming), and fresh and brackish water, ponds (for carp, tilapia, and barramundi) currently provides about 10% of domestic fish consumption, but the sector is being aggressively promoted, and is expected to be a significant supplier of Malaysia's growing demand for fish in the future (MOA 2004 b).

2.3.1 Fisheries Comprehensive Licensing Policy (FCLP)

Under the Fisheries Act of 1985, Malaysia introduced a Fisheries Comprehensive Licensing Policy (FCLP), which aims at ensuring a more equitable allocation of resources, reducing conflict between traditional and commercial fishermen, preventing the over exploitation of the inshore fisheries resources, restructuring of the ownership pattern of the fishing units in accordance with the New Economic Policy, and promoting deep-sea and distant-water fishing. (FAO 2004 a)

The FCLP divides the Malaysian fisheries waters into four fishing zones depending on distance from shore (Figure 3), namely Zone A (shoreline to 5 nautical miles.) is reserved exclusively for traditional fishery, and Zone B (5 to 12 nautical miles) is reserved for commercial fishing gear vessels (trawlers and purse seines) using vessels of below 40 GRT. Zone C (beyond 12 nautical miles) is for commercial gear operated by fishing vessels of below 70 GRT, while Zone C2 is for deep-sea fishing vessels of 70 GRT and above.



Figure 3: Schematic view of the fishing zone and permitted fishing gear in Malaysia (Ogawa 2004).

In 2003 the fishing industry provided direct employment to some 86,000 fishers (DOF 2004 d), and to numerous others in the secondary and tertiary sectors, as well as in ancillary industries. The majority, 51,000 fishermen, work in Peninsular Malaysia, 12,000 in Sabah and

22,000 in Sarawak. According to statistics for 2002, aquaculture provides employment to some 20,000 people, over 65% of which are engaged in freshwater farming.

The fishing industry in Malaysia is characterized by a distinct dualism between the smallscale and large-scale commercial operators. Small-scale fishermen do most of their fishing close to shore. They make little use of specialized skills and are characterized by low productivity, a high incidence of poverty and limited market outlets. The operations of the large-scale commercial fishermen, on the other hand, are carried out on a larger scale and are highly profit-motivated.

Total landings of the capture fishery in 2003 amounted to about 1.3 million tons with inshore fisheries contributing 80% (Table 1). Within the offshore fisheries, the commercial fishing vessels (trawlers and purse seiners) produced 153,000 tons of fish, which constitutes only 20% of the total catch.

	20	000	20	001	20	002	20	003
	(Mt)	(Value)	(Mt)	(Value)	(Mt)	(Value)	(Mt)	(Value)
	,000	'000 '	'000	'000'	'000	'000 '	'000	'000 '
Inshore	1,160,	3,974	1,102	3,725	1,125	3,725	1,143	3,782
fishermen		(1,045)		(0.980)		(0.980)		(0.995)
Offshore	0.124,	425	0.128	0.435	0.146	0.485	0.153	0.507
fishermen				(0.114)		(0.127)		(0.113)
Total	1,285	4,399	1,231	4,160	1,272	4,210	1,297	4,289
				(1,094)		(1,170)		(1,128)

Table 1: Total landing of the capture fishery in Malaysia. Value is shown as RM and (USD) (DOF 2004 a).

About 70% of fish landed by trawlers in Malaysia is used for human consumption, mostly fresh but also frozen and cured. The other 30% is processed into fertilizer and fishmeal (DOF 2004 c). Almost all the fish landed by other vessels are used for human consumption. High demand for fish heightens competition between fish brokers, fish assemblers, whole sellers, fish processors and the Fishermen's Associations.

According to FAO statistics for 1999, 2000 and 2001 (FAO 2004 a) the average total production of fish in Malaysia by species is about 1,413,000 tons a year. This is including aquaculture activities. Excluding aquaculture, the average total marine capture for the above period in Malaysia is about 1,259,000 tons.

2.3.2 Third National Agricultural Policy (NAP 3)

Although the contribution of agriculture within the economy of Malaysia has been declining for some years, it continues to be a strong sector. In order to further improve its competitiveness the government is implementing the third national agricultural policy, NAP 3 that outlines the new policy which sets the strategic directions for agricultural development to the year 2010. NAP 3 will focus on new approaches to increase productivity and competitiveness, strengthen links with other sectors, venture into new frontier areas as well as conserve and utilise natural resources on a sustainable basis (MOA 2004 b).

NAP 3 was initiated in 1996 to cover the period from 1998-2010. In it the government seeks to provide a gradual but effective transformation of the fisheries sector so that it will be fully commercialized. The fishing effort in the offshore areas will be increased to the optimum,

according to the sustainable level of the fisheries resources. Aquaculture will be aggressively developed to supplement production from capture fisheries, as well as to cater for exports.

The demand for fish and fishery products is expected to continue to increase substantially, owing to high population growth and increasing per capita income. It is unlikely that fish supplies from domestic sources can be increased at the same pace. Fish imports are thus anticipated to grow, as well as fish prices.

By 2005, the projected total production of fish in Malaysia is expected to have increased by 11.6% from the year 2000 (Table 2). According to the Ministry of Agriculture the increase of production is due to proper management in the fisheries sector in order to enhance the capacity in fisheries management extension planning, monitoring and evaluations, surveillance of exclusive economic zone (EEZ) and in improving the delivery of services and facilities to the fishermen, the private sector and all other stakeholders (MOA 2004 c)

Table 2: Projected production and demand in thousands of tons for fish in Malaysia (2000 – 2010) (MOA 2004 c).

	1985	1990	1995	2000	2005	2010
Total fish production ('000 t)	801	1,003.6	1,241.1	1,531	1,708.8	1,933.3
Of which aquaculture						
capture fisheries	55.0	52.3	132.7	255.2	403.2	601.4
	746.0	951.3	1,108.4	1,285.8	1,305.6	1,331.9
Food fish supply ('000 t)	500.0	564.6	764.5	1,012.0	1,228.2	1,500.4
Per capita consumption (kg/year)	33.4	34.8	39.1	49.0	53.0	56.0
Food fish demand ('000 t)	527.0	619.9	809.3	1,142.0	1,369.5	1,591.0
Self-sufficiency level (%)	94.9	91.1	94.5	89.0	89.7	94.3
Food fish trade ('000 t)						
Export	149.0	145.4	185.2	170.0	179.7	225.4
Import	176.0	200.7	230.0	300.0	321.0	316.0

2.3.3 The Ministry of Agriculture and Agro-Based Industries (MOA)

The Ministry of Agriculture is a Cabinet Ministry which has an overall mandate in the sphere of management, development and conservation of agriculture in the country including fisheries resources. Figure 4 below, shows the organisational chart of the Ministry of Agriculture and Agro-based Industries.



Ministry Of Agriculture and Agro-Based Industry organisational chart



The functions of the Ministry are (MOA 2004 a):

- To plan and implement the policy and strategy of the Agricultural Development Programme.
- To undertake the task of monitoring, evaluating and coordinating the implementation of programmes which are carried out within Integrated Agricultural Development Project (IADP) and other bodies.
- To provide economic analysis services including collecting, analyzing and dissemination of information.
- To establish and manage services and research programmes and to introduce agricultural management information systems.

- To ensure the participation of Agricultural Ministry in international programmes.
- Act as a one stop agency for the private sector to get advice and expertise in the agricultural sector.

Under the current Ministry four departments and seven agencies, each with different role and functions, were set up in order to develop the Agricultural sector in Malaysia in accordance with the new policy.

There are two important government agencies committed to the fisheries industry of Malaysia: The Department of Fisheries (DOF) and The Fisheries Development Authority of Malaysia (FDAM). Both are highlighted in Figure 4, the organisational chart of MOA.

The DOF is entrusted with the role of developing, managing and regulating the fisheries sector. Its objectives are to increase the national fish production, manage the fisheries resources on a sustainable basis, develop a dynamic fisheries industry, intensify the development of fish-based industries and maximise the income of the fisheries industry.

The functions of the Department of Fisheries are stated as (DOF 2004 e):

- To formulate policies and strategies for the development and development planning for the fisheries industry in general;
- To enforce the Fisheries Act 1985 and the Exclusive Economic Act 1984;
- To manage and conserve and rehabilitate fisheries resources;
- To conduct fisheries research;
- To promote sustainable aquaculture;
- To provide fisheries extension services;
- To train fishermen, farmers and down stream industry entrepreneurs;
- To control fish diseases and provide quarantine services;
- To promote recreational fisheries;
- To monitor pollution affecting the fisheries resources;
- To provide basic fishery data; and

• To establish standards and to inspect fisheries products with the co-operation of other related agencies.

The FDAM is a statutory body, under the Ministry of Agriculture established through the Fisheries Development Authority of Malaysia Act (FDAM 1971). The main programs of FDAM are fishing industries development, marketing and support services, fishermen institutional development and entrepreneurial development.

According to section 4 of the Fisheries Development Authority Act 1971, the functions of FDAM are as follows:

- To promote and develop an efficient and effective management system for fisheries enterprises and fish marketing;
- To provide and supervise credit facilities for fish production and to ensure that these facilities are fully utilized;
- To participate in fisheries enterprises, such as boat building, production and supply of fishing gears;
- To encourage the formation of fishermen's Associations and to facilitate and strive for their economic and social development;
- To register, control and supervise Fishermen's Association and to provide allocations for matters related thereto; and
- To control and coordinate the implementation of the above activities.

In order to organize and coordinate the activities of the Fishermen's Associations the FDAM recruits, trains and pays the salaries of the managers, account clerks and development assistants of the associations.

2.4 Fishermen's associations in Malaysia

According to the Fishermen's Association Act 1971, Act 44, an Area Fishermen's Association may be formed in accordance with the provisions of the Act or any regulations made there under. Any two or more Area Fishermen's Associations may be registered to one State Fishermen's Association, whereas any two or more State Fishermen's Association registered in accordance with this Act may, with the approval of the registrar, join a National Fishermen's Associations (AFA), 12 State Fishermen's Associations (SFA) and one National Fishermen's Association had been formed (see Figure 5).

Othman



Figure 5: Three tier structures for the Fishermen's Associations in Malaysia.

An association is a business organisation run for the mutual benefits of a group that has a common interest with the association's principles. According to the Fishermen's Association Act 44, the objectives of the Fishermen's Associations are:

- a) to manage and operate financial support schemes to provide credit and capital resources to members;
- b) to promote member education and training including circulation of information on matters of interest to members;
- c) to organise exhibitions, fairs and displays;
- d) to organise fishing operations or aquaculture; the assembling, storage, processing, distribution and disposal of member's products;
- e) to provide health centres, nurseries, thrift institutions, insurance, mutual aid and other welfare programmes;
- f) to assist in investigations on and the collection of statistics of the fishing industry;
- g) to provide buoys and other navigation aids and fishing harbour facilities;
- h) to mediate in disputes involving members arising in the fishing industry; and
- i) to organise member participation in conservation programmes directed by the Director General of Fisheries.

2.4.1 Formation of the Fishermen's Association

In Malaysia, Fishermen's Associations are registered under the Fishermen's Association Act 1971, Act 44, which was enacted with the principal objective of promoting the socio – economic interests and well – being of the fishermen.

An AFA must have its own constitution which governs its operations. These constitutions must be in accordance with the Act. For example, general meetings must be held at least once a year, and at such meetings, every member must have one vote only. The general meeting

must also set out the objectives and functions of the AFA, decide who are eligible for membership, how the surpluses are to be disposed of etc. Registration gives the AFA legal status, enables them to enter into contracts both with non members and with other parties and if necessary, to sue or be sued in its own name. Without registration, the members have no legal protection.

Area Fishermen's Associations are owned by its members, and membership is open to anyone who resides in the area of operations of associations and who has attained the age of 18 years and if they meet the following conditions (Act 44 1971 b).

- a) Any person who is engaged in catching, harvesting or the culture of aquatic organisms for a minimum period of ninety days in a year;
- b) Any person who is a fish processor, handler or dealer; and
- c) Any person who derives sixty per cent or more of their total income from their occupation with the fishing industry.

2.4.2 Number of Area Fishermen's Associations

At the end of the year 2003, 74 Area Fishermen's Associations were registered at the Fisheries Development Authority of Malaysia. The number of AFAs per area is as follows:

a)	West Peninsular Malaysia	-	30 AFAs (41%)
b)	East Peninsular Malaysia	-	21 AFAs (28%)
c)	Sarawak	-	14 AFAs (19%)
d)	Sabah	-	9 AFAs (12%)

The organisational structure of a Fishermen's Association is shown in Figure 6 below:



The organisation chart of a Fishermen's Association

Figure 6: Organisational chart of a Fishermen's Association.

2.4.3 The general meeting and the board of directors

The general meeting consists of all the members of the AFA, each of whom has one vote, regardless of the financial participation or the value of his transaction with the AFA. The general meeting takes place at least once a year and is the body which elects the members to the board of directors and discusses strategies and programmes.

The general meeting is the highest authority of an AFA and very important. The meeting can request the inclusion in its agenda of anything it deems relevant. At the general meeting the chairman of the board of directors presents the Association's official report giving details of the AFA's activities during the previous period; submitting financial statements at the meeting for approval, and appointing auditors. In brief, it may be said that in a democratically managed AFA, the general meeting is the source of all authority, of all directives and of all decisions, including a resolution to close down the AFA.

The board of directors is the body responsible for administering the AFA. It must ensure that the decisions made at the general meeting are carried through and that the directives it has given are properly implemented. The board of directors comprises a limited number of members. The board elects its chairman from among its members. It has been the custom that each member comes from different villages in the area of the AFA. The term of office of the members is normally two years. Depending on the constitution of the AFA, board members are eligible for re-elections.

2.4.4 Number of association members

At the end of 2003, 87 Fishermen's Associations were registered at the FDAM with 60,018 members and since 1975, total accumulated shares of a value of RM 2,471,099 (USD 650,289) have been issued to the members (Table 3). According to the AFA's constitution, each member has to own a minimum share of the value of RM5 (one share) and the maximum shareholding permitted is a maximum of 25% of the total accumulated share issue. The share is registered in a separate account and can not be used directly for financing any economic activities. However, when the AFAs make sufficient profits at the end of each year, its surplus is returned to its members according to the percentage of their total share holding. In addition, each member is also required to pay RM 1 membership fee each year.

YEAR	NO. REGISTERED FISHERMEN'S ASSOCIATIONS				NO.MEMBERS	TOTAL SHARES (RM'000)
	AFA	SFA	NFA	TOTAL		
1975	21	-	-	21	10,637	-
1980	48	-	-	48	36,347	0.261
1985	58	8	1	67	44,995	0.364
1990	63	11	1	75	54,671	0.580
1995	70	11	1	82	53,140	0.888
1996	70	11	1	82	53,368	1,017
1997	70	12	1	83	54,418	1,080
1998	70	12	1	83	52,012	1,172
1999	70	12	1	83	52,743	1,691
2000	70	12	1	83	53,368	1,748
2001	70	12	1	83	54,486	1,751
2002	71	12	1	84	55,054	1,825
2003	74	12	1	87	60,018	2,471

Table 3: Registered FAs, number of members and value of shares from 1975 until 2003 (FDAM 2004).

2.4.5 Economic and social activities

The Fishermen's Associations are to provide fishermen with services which enable them to enjoy higher economic returns. The Fishermen's Associations will also strengthen their financial standing through activities such as marketing and input supplies like water, ice, diesel, transportation and boats. These activities will help the fishermen, especially artisanal fishermen, who fish from small fishing boats and have no marketing outlet except for fish brokers. Fishermen's Associations can help them by providing facilities such as transport, packaging and storage, which an individual can not do on his own.

At the end of the year, if the Fishermen's Associations economic activities are making a profit, all the members will get a benefit, either through a rebate or dividend from the shares invested by the members.

Social activities and social obligations are two of the Fishermen's Associations' objectives. By providing social facilities like basic infrastructure such as village roads, jetties, water supply and health education, the activities of the Association benefits its members. Even though the social activities will not bring any economic returns in term of income to the association it will bring the members closer to the association. The economically weaker associations can get a grant from the FDAM for social activities. Normally the FDAM will provide funds without charging any interest to the association.

At the end of 2003 there were more fishermen involved in the Fishermen's Associations in Malaysia than ever before. Of the then 86,000 fishermen in Malaysia about 70% or 60,000 were members of Fishermen's Associations (FDAM 2004). Membership may continue to rise because of the efforts on the part of the MOA and its agencies to use the Fishermen's Associations as a vehicle for the development of fishing communities. The FDAM will then act as a catalyst and facilitator of the fishing industry's development and ensure the well-being and empowerment of the fishing community.

The Area Fishermen's Associations can be categorized as multi-purpose associations which offer the members various different but related or complementary economic activities, such as fish marketing, input supply, credit facilities, processing, retail store etc. It is generally believed that a multi-purpose association fulfils a greater need and has a better chance of success than a single-purpose association which restricts itself to one particular economic activity. The advantage is that for the multi-purpose association it is possible to establish a close linkage between credit, marketing and supplies. The Area Fishermen's Associations can then provide a credit to a member for his supplies, market his catch and record the loan at the same time. This idea was introduced by the FAO in 1988 in their Fishermen's Association Structure study and suggested that the FAs should introduce such credits in order to enable fishermen to get higher prices for their product. (FAO 1988).

At present the Area Fishermen's Associations in Malaysia can be divided into 3 clusters; (See Appendix 1)

- a) Cluster 1 AFAs which are involved in buying and selling fish
- b) Cluster 2 AFAs which buy fish for their own use
- c) Cluster 3 AFAs not involved in buying or selling fish.

The AFAs in clusters 1 and 2 are a part of the fish brokers industry in Malaysia. The AFAs in cluster 3 are either selling supply to the fishermen, directly involved in social activities or not involved in economic activities.

3 THEORY AND METHOD

3.1 Strategy, structure and strategic performance

What is strategy?

According to Richard Lynch (2003: page 6) "strategy can be described as the identification of the purpose of the organisation and the plans and actions to achieve that purpose. Strategy is the pattern of major objectives, purposes or goals and essential policies or plans for achieving those goals, stated in such a way as to define what business the company is in or is to be in and the kind of company it is or is to be".

Hax and Majluf, (1996: page 264) state that "corporate strategic thrusts constitute a powerful mechanism for translating the direction the organisation is to take. According to them there are three dimensions involved in defining the strategic trusts of the firm:

- *a) the agenda*
- b) the assignment of responsibilities, and
- c) the measures of control."

In modern business strategic management is recognized as an important and independent element in the success of firms. In business organisations it is required that strategic planning be multi-dimensional, dealing with a wide variety of possible outcomes across widely varying product lines and geographical markets.

3.2 A model of strategic management

For the purpose of this study, the Performance Evaluation Techniques (PET) (models) from the work of Thompson and Strickland (2001) will be used to analyze the groundwork for matching the Fishermen's Association strategy both to its external market circumstances and to its internal resources and competitive capabilities.

For the first part, PET uses an industry and competitive analysis method. For the second part an evaluation will be made on the AFA's resources and competitive capabilities, thereby evaluating the AFA's performance. For this evaluation technique both quantitative techniques and qualitative grading and assessment of factors and situations are used.

The Industry and Competitive analysis has seven main questions:

1) What are the industry's dominant economic features?

This question gives an overview of the industry's dominant economic features. The factors to consider in this question are market size, scope of competitive rivalry, market growth rate, number of rivals and their relative sizes, etc. Knowledge of the industry's economic features is important because of the implications they have for the strategy.

2) What is the competition like and how strong is each of the competitive forces?

This question gives understanding to the industry's competitive process in order to discover the main source of competitive pressure and how strong each competitive force is. This analytical step is essential because managers cannot devise a successful strategy without understanding the industry's competitive character.

For this question The Five – Forces Model of Competition from the Harvard professor Michael Porter is used and questions are asked on:

- a) The rivalry among competing sellers in the industry.
- b) The market attempts of companies in other industries to win customers over to their own substitute products.
- c) The potential entry of new competitors.
- d) The bargaining power and leverage of inputs suppliers can exercise.
- e) The bargaining power and leverage exercisable by buyers of the product.

This model is a powerful tool for systematically diagnosing the chief competitive pressures in a market and assessing how strong and important each one is. Not only is this model the most widely used technique of competition analysis, but it is also relatively easy to understand and apply. From a qualitative evaluation the prospect of industry profits is assessed.

3) What are the drivers of change in the industry and what impact will they have?

This question helps to analyse how the industries' environment may change drastically through a change in a few external drivers. All industries are characterized by trends and new developments that gradually or speedily produce changes and are important enough to require a strategic response from participating firms.

4) Which companies are in the strongest/weakest positions?

This question examines the industry's competitive structure and studies the market positions of rival companies. A technique for revealing the competitive positions of industry participants is strategic group mapping. This analytical tool is a bridge between looking at the industry as a whole and considering the standing of each firm separately. It is most useful when an industry has so many competitors that it is not practical to examine each one in depth.

5) What strategic moves are rivals likely to make next?

This question discusses what competitors are doing by monitoring their actions, and trying to understand their strategies and anticipating what moves they are likely to make next. Good clues about what moves a specific rival may make next come from studying its strategic intent, monitoring how well it is faring in the marketplace, and determining how much pressure it is under to improve its financial performance. Aggressive rivals with ambitious strategic intent are strong candidates for pursuing emerging market opportunities and exploiting weaker rivals. Categorizing the objectives and strategies of competitors is shown in Table 4.

Competitive scope	Strategic intent	Market share objective	Competitive position	Strategic posture	Competitive strategy
- Local - Regional - National - Multi- country	- To be dominant leader - Over take a particular rival (not necessarily the leader)	- Aggressive	 Getting stronger on the move. Going after a different market position (trying to move from a weaker to a stronger position) 	 Mostly offensive Aggressive risk-taker 	Mostly focusing on a market niche - High end - Buyer with special needs Pursuing differentiation based on - Quality - Service - Technology
			position)		- Other attributes

 Table 4: The most popular action that rivals are likely to take.

6) What are the key factors for competitive success?

The key success factors are those things that most affect the ability of industry members to prosper in the market place. They are the strategy elements, product attributes, resources, competencies, competitive capabilities, and business outcomes that spell the difference between profit and loss. Key success factors have to be the concern of every industry member and are what he must be competent at doing or concentrate on achieving in order to be competitively and financially successful.

7) Is the industry attractive and what are its prospects for above-average profitability?

The final step of the industry and competitive analysis is to use the answers to the previous six questions to draw conclusions about the relative attractiveness or unattractiveness of the industry.

The second part of the study uses five main question for analyzing the internal resources and capabilities of the Fishermen's Associations. To explore these questions, four new analytical techniques will be introduced SWOT analysis, value chain analysis, strategic cost analysis and competitive strength assessment analysis. These techniques are basic strategic management tools because they expose the company's resource strengths and deficiencies, its best marketing opportunities, the outside threats to its future profitability, and its competitive standing relative to rivals

Analyzing the profitability of the Fishermen's Associations is quite important, so in this case profitability ratios will be used, such as return on equity, profit margin, profit and loss and their main economic activity. These measures enable the analyst to evaluate the association's profits with respect to a given level of sales, a certain level of assets, or the members' investment. Without profit, the association can not attract new members and also with a good record it will be easier for the association to get outside capital.

The five main questions are:

a) How well is the company's present strategy working?

To evaluate how well the FA's present strategy is working, the study will look at the FA's competitive approach, whether it is striving to be a low-cost leader or not.

b) What are the FA's resource strengths and weaknesses and its external opportunities and threats?

For this question the SWOT analysis is grounded in the basic principle that strategymaking efforts aim at producing a good resource capability and examining its external threats situation.

c) Are the company's prices and costs competitive?

This question discusses the FA's business position. Is it strong or weak and are its prices and costs competitive?

d) How strong is the company's competitive position relative to its rivals?

This question helps to analyse how the FA's market position can be expected to improve or deteriorate if the present strategy is continued, this question also will determine how the FAs rank relative to key rivals on each key success factor.

e) What strategic issues does the company face?

For this question one table will be constructed and drawn upon prior to analysis. This way the FA's overall situation is put into perspective, and one can look at exactly where they should focus their strategic attention.

4 COMPETITIVENESS OF THE FISH BROKERS INDUSTRY IN MALAYSIA

4.1 Dominant economic features

In Malaysia, fishermen sell their catch to licensed fish brokers who sell the fish on to other brokers, wholesalers, processors or fishmeal factories, but not directly to the consumer. The Malaysian fisheries production (not including aquaculture) is therefore an estimate of market size for the fish brokers industry. The biggest part of the operations of the FAs is linked to the fish broker industry, directly or indirectly. As seen before the AFAs can be grouped into different clusters according to their economic activities; those with AFAs involved in buying fish for business and buying fish for own use.

There are 32 or (43%) of all Area Fishermen's Association in cluster 1, in which their activities mainly involve buying fish from the fishermen and selling it back either through auction activities or consigning the fish to wholesale market. The associations in this cluster are also the most active ones. The majority having four or more economic activities and they are directly involved with the fishermen and their members.

In cluster 2 there are 6 or (9%) of AFA's. Their main activities involve buying fish for their own uses, either for agro-tourism activities such as for seafood restaurants or processing activities such as fish crackers or fish paste.

Table 5 below shows the economic character of industries including market size, scope of competitive rivalry, economic scale and industry profitability in Malaysia. An industry's

economic traits and competitive conditions and how they are expected to change will determine whether its future profit prospects will be poor, average or excellent.

	i) Demand for fish and fishery product is expected to continue to increase, owing to high population growth and increasing per capita income.ii) Projected supply and demand of fish (in million tons)						
Market size:	Table Fish	2000	2005	2010			
	Local Supply	0.90	1.23	1.50			
	Local Demand	1.10	1.30	1.60			
	Shortfall	0.20	0.07	0.10			
Scope of competitive rivalry:		i) Due to insufficient supply of fish, most of the fish landed in Malaysia is sold and distributed for local consumption.					
Capacity surpluses or shortages:	i) When there is a surplus of fish it will push the prices and profit margins down; but when there are shortages it will bring the prices up.						
Buying power	i) During a glut period, fish brokers have the power to deny or lower the price of a part of the catch since it is easy to switch from buying from one fisherman to the next.						
	ii) Fishermen normall an informal agreemer	•	1				
Capital requirement:	 i) High capital requirements make investment decisions critical and timing becomes important because it involves perishable products. 						
Economies of scale :	 i) Only a few of the fishing boats have access to central landing ports. So, if the fish brokers with operations in the landing ports want to increase their handling volume they will also have to increase the costs of their operation, since they have to go to from the landing ports to the villages of the fishermen to buy the fish. 						
Industry profitability:	i) The prospect is positive. Under the National Agriculture Policy III (NAP3) Malaysia has embarked on development of the fishing industry. According to NAP3 it will be fully commercialized, with emphasis on deep sea fishing and aquaculture.						
	ii) Since there is insufficient supply of fish and prices go up during periods of strong demand, higher profits are expected.						

 Table 5: Dominant economic characteristics of the fish brokers industry in Malaysia.

The government of Malaysia is increasing efforts to sustain growth of fish production, and to make the Malaysian fishing industry more competitive internationally. Product development should be made according to export orientation through downstream activities such as processing of catches into value added fishery products.

4.2 Competitive forces

Figure 7 shows that an important part of industry and competitive analysis is to delve into the industry's competitive process to discover the main sources of competitive pressure and how strong each competitive force is.

Five forces of competition will be examined in the Malaysian fish industry:

a) Rivalry among fish brokers in the industry.

Fish brokers are competing hard for business. There are many fish brokers, but the companies and associations are few. This intensifies competition. When fish brokers are similar in size and capability, they can usually compete on a fairly even footing. When fish is scarce it usually results in an increase in the fish price. When one or more competitor sees an opportunity to better meet customer needs or is under pressure to improve its performance then they will compete hard and are willing to pay any price.

This force is strong and lowers the expectations of profits in the industry.

b) The attempts of companies in other industries to win customers over to their own substitute products.

The biggest substitute product for the fish brokers industry is the aquaculture industry. The second is other food industries. The Third National Agriculture Policy aims to maximize income from aquaculture and deep sea fishing. Aquaculture can not only supplement fish capture in Malaysia but can also put a pressure on the price of caught fish.

This force is moderately strong and does not have a great effect on the industry's profits.

c) The potential entry of new competitors.

Malaysia faces depletion of fish resources and stagnation of fish production due to local over exploitation. There is a need to tap the potential of deep sea stocks. The government is encouraging the private sector to invest in this industry and provides facilities such as easy loans, landing ports and fish markets. The government is also encouraging the investors to become fish brokers in order to encourage healthier competition. For this a licence is needed, good negotiation skills, working capital and strong personal contacts.

The threat of entry is low so the force is weak and should keep up profits.

d) The bargaining power and leverage of inputs suppliers can exercise.

Marine fisheries from the inshore waters of Malaysia are the most important sub sector as it contributes 80% of total fish production and supports 80% of the fisheries labour force (mainly artisanal fishermen). This group normally has no bargaining power and sells its catch directly to the fish brokers.

This force is weak and should keep up profits.

e) The bargaining power and leverage exercisable by buyers of the product.

Every wholesaler and fish broker that is trading fish in a FDAM fish landing complex and in the wholesales market needs a license that is issued by the FDAM. Normally the license issues are limited due to the place and space in the wholesales market. There are four different types of licences issued to fish brokers in Malaysia, and is controlled by the Licensing Board under the Fisheries Development Authority of Malaysia.

Details of licences issued in 2003 and types of licenses are given in Table 6.

No.	Type of license	No. of licenses issued in 2003
1.	Import	344
2.	Export	229
3.	Wholesales	239
4.	Auction	1,925
	Total	2,807

Table 6: Total number of licenses issued in 2003 (FDAM 2003).

Wholesalers are one of the important competitive forces in the fish industry; they also often dictate the price since they normally buy in big bulk. Buying in large amounts means that the wholesalers will pay a low price to the local brokers, in fact only giving the brokers a fixed margin of the sales price.

This force is strong and it keeps the profit of the industry down.

The following figure shows the above mentioned forces in the fish brokers industry.



Figure 7: The five competitive forces in the fish brokers industry.

Two of the strongest forces, competition between rivals and the power of buyers are strong and keep the industry profit down. The force of substitute products can possibly have an effect on the highest prices. The threat of entry does not directly affect the profits but the bargaining power of suppliers is week and this has a positive effect on profits. All together, profits in the fish brokers industry in Malaysia appear to be moderate and can not be expected to get much higher.

4.3 Drivers of change

There have been changes in the pattern of fishery products consumption in recent years. Such changes have been brought about by increased income of the population and associated changes in their lifestyle, and have been directed generally towards a preference for fresh (gourmet, high value products) healthy, safe and convenient products. People have become selective about the product related to price. Thus the patterns of fishery products consumption in Malaysia have become quite diversified and complex. Under these circumstances, supermarkets and restaurants have grown fast.

The demand for fish and fishery products is expected to be one of the main drivers of change in the industry. Annual per capita consumption of fish for human food for Malaysia was expected to increase from 57.7 kilograms in 1999 to 60 kilograms in 2001 (FAO 2004 d). And also in neighbouring countries like Indonesia, Thailand, Singapore and Vietnam there is an increase of demand for fish (Table 7).

Country	Estimated average live weight equivalent (Kilograms per capita)								
	1997-1999	1999-2001							
Indonesia Malaysia Thailand Singapore Vietnam	19.0 57.7 28.6 26.7 17.9	20.2 60.0 32.3 29.3 18.6							

Table 7: Annual per capita consumption of fish for human food(FAO 1999 and 2001).

The Malaysian Government is encouraging deep-sea fishing activity and is supporting this development by way of granting adequate incentives, infrastructure and training programmes. Future development is expected to focus on further expansion of fresh and processed fish products and related manufacturing activities, catering for both domestic and export market needs.

4.4 Competitive position

Strategic group mapping is being used to look at the industry as a whole and consider the standing of each firm separately. Group mapping can often identify variable profit potential of different strategic groups due to the difference in competition in each group. The variables used to differentiate between the types of brokers are price paid to the fishermen and the service given by the fish brokers to the fishermen. Those paying higher prices and offering more services will be in a better position when competing for the catch. It can generally be said that the closer the strategic groups are to each other on the map, the stronger the

competitive rivalry tends to be among the clusters. In this case cluster of groups 1 consist of AFA from cluster 1, AFA in cluster 2, local fish brokers and fish brokers representing wholesalers. They can be considered as the most competitive cluster in order to get fish supply from the fishermen in Malaysia when not buying in bulk. Meanwhile group 2 consist of SFA, NFA, Fish brokers from outside the region and fish brokers representing producers, they normally buy in bulk for their supply.

Normally, group 1 competitors will try to get a good quality of fish for their customers. In order to get this type of fish they will give a better service and offer better prices to the fishermen. While in group 2 are those mainly involved in processing of fish and as such, they always need supplies of fish just to compliment their present stock. This group normally doesn't give services such as facilities to the fishermen (see Figure 8).



Figure 8: Competitive position of FAs and other fish brokers.

4.5 Competitive moves

What separates a powerful business strategy from a weak one is the strategist's ability to forge a series of moves and approaches capable of producing a sustainable competitive advantage. In this case crafting competitive moves and market approaches that can lead to a sustainable competitive advantage and building competitively valuable competencies and capabilities is important. The most popular actions that rivals are likely to make in order to maintain sustainability is outlined in Table 8.

Competitive	Strategic intent	Market share	Competitive	Strategic	Competitive
scope	Strategie moone	objective	position	posture	strategy
				1	
- Most of the	- Normally the	- The fish broker	- The fish broker	- AFAs from	In order to win the
competition	local fish broker	representing	representing	cluster 1 and 2	competition most of
among the fish	always wants to	wholesalers and	wholesalers and	do mostly have	the fish brokers
brokers is	be dominant	local fish brokers	local fish brokers	a non	representing
happening at the	leader at local	will normally	always look for	aggressive	wholesalers and
local and	competition.	react aggressively	survival and	strategy.	local fish brokers
regional area		with expansion via	getting stronger in		will focus on a
only.	- On the other	both acquisition	everything they	- While local	market niche
	hand AFA	and internal	do;	fish brokers do	- High end
	Cluster 1 and 2	growth. This is		mostly have an	- Buyer with special
	always want to	due to their	- They are also	aggressive risk-	needs
	compete with a	control the market	always going after	taking strategy.	
	particular rival	share.	a newt market		They also will be
	but do not		position (trying to		pursuing
	necessarily want	Mean while AFAs	move from a		differentiation based
	to become the	cluster 1 and 2	weaker to a		on
	industry leaders.	will normally try	stronger position)		- Quality
	They do not aim	to hold on to			- Service
	for leadership to	present share.	Meanwhile the		- Technology
	make sure the		AFAs from cluster		- Other attributes
	competition will		1 and 2 only have		
	be better		limited		
	balanced.		possibilities		
			because their		
			mission is only to		
			dispose of their		
			members catch as		
			soon as possible		
			and to give a high		
			return to the		
			members.		

Table 8: The most competitive moves rivals are likely to take.

The most likely competitive moves of local fish brokers and fish brokers representing wholesales market are that they will always be looking for a greater market share. They will also always have cost advantages, since they are normally working with their own families. This group seems competitively stronger than AFAs from cluster 1 and 2.

4.6 Key factors

There is a need to further develop the operations of the Malaysian fish brokers industry in order to meet the demand of the growing population. The government is also putting greater efforts to sustain growth in fish production, both catch and aquaculture, and to make the industry more competitive internationally by developing export orientation through downstream activities such as processing of catches and harvests into value added fishery products. Therefore, the main key success factors in both the fish and the fish brokers industry are connected to the quality of the fish, the handling of the fish, product development and the marketing of fish. Below are the common types of key success factors (Table 9).

Common types of key success factors (KSFs)								
Technology related	i) Technical capabilities to make innovative improvements in production processes and the development of products							
	ii) Capabilities to use the internet to disseminate information, take orders, deliver products or service.							
Distribution related	i) A strong network of the wholesale market							
	ii) Owning or having contracts with retail outlets							
	iii) Low distribution costs							
	iv) Fast delivery							
Marketing related	i) Fast and accurate decision making processes since brokers deal in perishable goods.							
	ii) Maintaining the freshness of the product							
	iii) Favourable image/ reputation with fishermen and buyers.							
Skills related	i) Quality control know how							
	ii) An ability to sell the product into the market very quickly							
	iii) An ability to develop innovative products and product improvements							
	iv) Marketing know how							
Organisational capability	i) Superior information systems to broaden the marketing information							
	ii) Structure helping to respond/ decide quickly							
	iii) Financial strength							
Other types	i) Convenient locations							
	ii) Pleasant employees in all customer contact positions							

4.7 The attractiveness of the industry

Table 10 below shows the competitive analysis of the fish brokers industry in Malaysia. If an industry's overall profit prospects are above average, the industry can be considered attractive; if its profit prospects are below average, it is unattractive. The important factors on which to base such conclusions include:

- a) The industry's growth potential
- b) Whether competition currently permits adequate profitability and whether competitive force will become stronger or weaker.
- c) Whether industry profitability will be favourably or unfavourably affected by the prevailing driving forces.
- d) The company's competitive position in the industry and whether its position is likely to grow stronger or weaker.

	TABLE FOR AN INDUSTRY ANI	O COMPETITIVE ANALYSIS - SUMMARY
	Dominant economic characteristics of the ndustry environment.	4. Competitive position of major companies
a) I N	Demand for fish and fishery products in Malaysia is expected to increase but the fish	a) Favourable position/ why The variable in this matter is price paid and the service giver
b) Т	upply is insufficient. There are surplus and shortage seasons of upply in fish every year in Malaysia.	by the fish brokers to the fishermen. Those giving higher prices and more services will be in a favourable position.
		b) Unfavourable positioned/ why
supp	ermen normally need credit from brokers for blies so they have an informal agreement to sell fish to the fish broker at a fixed price.	Those giving lower prices and less services will be in an unfavourable position.
:) N	Not all states have central fish landing facilities.	5. <u>Competitor analysis</u>
2.	Competition analysis	a) Strategic approaches/predicted moves of key competitors
a)]	Rivalry among competing sellers	
	Fish Brokers are the main players in the fish industry.	Going after a different market position (trying to move from a weaker to a stronger position) Those who have the ability to forge a series of moves and approaches capable of producing sustainable competitive advantage.
b)	Threat of potential new entrant	
	There will be no effect from a new entrant. As a matter of fact, the government encourages new entries to ensure healthy competition.	 b) Whom to watch and why Mostly offensive and aggressive risk-takers should be watched closely because this type of player will usually try to penetrate the whole market without consideration to other people.
c)	Competition from product substitutes	6. <u>Key success factors</u>
	Competition from product substitutes is not serious because marine fish is in high demand.	The main key success factor are: a) Quality/product performance b) Reputation/image c) Marketing know how

Table 10: Industry and competitive analysis – summary.

d)	Power of suppliers	<i>d</i>) '	Technology skill					
u)	1) <u>I ower of suppliers</u>		Distribution capability					
	Most of the artisanal fishermen have no		Financial Resources					
	power and sell their catches to the fish	g) Relative Cost positionh) Customer service capability						
	brokers directly.							
		1) S	ocial obligation					
e)	Power of buyers							
			ndustry prospects and overall attractiveness					
	The wholesaler can often dictate the price	a) <u>F</u>	Factors making the industry attractive					
	since they buy the fish in bulk. This force is							
	strong and keeps profits down.	The	e encouragement from the government and the potential					
		sec	tors yet to be developed, such as deep sea fishing and					
		aqu	aculture, and also the high demand of fish are making the					
3. D	riving force	ind	ustry attractive.					
Ther	e have been changes in the trends of fishery	b) Factors making the industry unattractive						
	ucts consumption in recent years. Such	, ·						
	ges have been brought about by increased	The	The lacking of the possibility of a central landing for fish in					
income of the population and associated changes in		many areas will add to the difficulty for the fish brokers to						
their lifestyle, and have been directed generally		organise their logistics better and will result in higher costs						
towards a preference for fresh (gourmet, high value			ng incurred.					
products) healthy (safe products) and convenient		001	ing incurred.					
-		c)	Special industry issues / problems					
products.		()	<u>Special industry issues / problems</u>					
Daam	ale have become selective shout the product		a) Using modern technology such as internet or other					
People have become selective about the product			a) Using modern technology such as internet or other					
related to price. Thus the patterns of fishery			media will help the fish brokers with marketing					
products consumption in Malaysia have become quite diversified and complex. Under these			information from outside their normal business area.					
	imstances, supermarkets and restaurants have	d)	Profit outlook					
grow	vn fast.							
			From the competition analysis it can be concluded that					
			the industry prospects are good and profits may be					
			expected to be stable.					

5 OPERATIONS OF OTHER AFAS

The AFAs not buying or selling fish for business or their own use are in cluster 3. There are about 36 such AFAs (48%) and most of them active in two to three economic activities. Figure 9 below, shows the economic activities of these AFAs.



Figure 9: Economic activities of AFAs who do not by or sell fish (cluster 3).

The main activities in this cluster are diesel supply and civil works. Ten AFAs in this cluster are involved in activities that are directly related to the operations of the fishermen or the Association, such as activities like civil work, agro-tourism and palm oil production. Five AFAs didn't show any economic activities in their account statement. They only show entries in their general account. That means that they have no specific activity to generate income for the association. Most of them have a negative balance in their profit and loss account for the years 2000, 2001 and 2002.

In 2000, the cluster 3 AFAs together faced a negative balance of RM 378,339 (USD 99,562), in 2001 the total showed a profit of RM 1,133,239 (USD 298,220) and a profit of RM 1,511,178 (USD 397,768) in 2002. The profit in 2001 is related to the fact that the federal government started subsidizing the price of diesel to the fishing industry that year and that the 20 AFAs involved in that activity showed a high profit. The same happened in 2002 where there the AFAs in cluster 3 showed an increase in total profits of RM 451,738 (USD 118,878) or 40% over the previous year (Figure 10).



Figure 10: Profit and loss of AFAs in cluster 3 in the years 2000 – 2002.

6 **RESOURCES AND COMPETITIVE CAPABILITIES**

6.1 Present strategy

6.1.1 Correlation between the objectives of the AFA by activities

When the economic activities of the AFAs are evaluated according to the objectives set out in their constitutions, fish marketing is the most important activity (Table12). Meanwhile the activity of operating fishing boats has the second highest total of 17 points, followed by supply of ice that has a total of 15 points. These top three activities are closely related and are directly beneficial to the fishermen or the members of the associations. The next three activities that show high correlation to the objectives are fish processing, fishing gears supply and fish transport.

On the other hand, aquaculture, diesel supply and retail shop only show an average of between five to eight total points of importance. These activities also play an important role but should not become economic priority activities of the associations.

Activities like civil works, public pump stations, forwarding agents and palm oil production show the lowest value of importance points, only zero to two points. These activities are the least important or not at all important activities. Palm oil production is not related at all with the fishing industry.

Table 11: Correlation (importance) of AFAs activities by objectives.

High important activities three points, activities of medium important one point and activities of little or no important of AFAs objectives are awarded no points.

6.1.2 Activities of the AFAs

The list below shows the 17 economic activities the AFAs are involved in according to their importance:

10. Training center

12. Fish meal

14. Civil work

11. Diesel transport

- 1. Fish marketing
- 2. Fishing boat
- 3. Ice supply
- 4. Processing
- 5. Fishing gears supply
- 6. Fish transport
- 7. Aquaculture
- 15. Public pump station16. Forwarding agent

13. Agro-tourism

- 17. Palm oil production
- 8. Diesel supply
 9. Retails shop

Table 11:	Correlation	(importance)	of AFAs acti	vities by objectives.
-----------	-------------	--------------	--------------	-----------------------

	AFA OBJECTIVE \ ACTIVITIES	Fish marketing	Fishing boat	Ice supply	Processing	Fishing gears	Fish transport	Aquaculture	Diesel supply	Retail shop	Training centre	Diesel transport	Fish meal	Agro-tourism	Civil work	Public pump station	Forwarding agent	Palm oil production	Social obligation
1.	To Provide credit	3	3	1	3	3	1	1	1	1	0	0	0	0	0	0	0	0	0
2.	To promote education	1	1	1	1	0	1	1	1	1	1	0	0	1	1	0	0	0	3
3.	To organise exhibitions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4.	To organise fishing operations	3	3	3	3	3	3	3	3	1	0	0	3	1	1	1	0	0	0
5.	To provide welfare programmes	1	1	1	0	0	1	0	0	1	3	0	0	0	0	0	0	0	3
6.	For collection statistics	3	3	3	3	0	3	1	0	0	1	0	0	1	1	0	1	0	3
7.	To provide fishing harbour facilities	3	3	3	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0
8.	To be mediator	3	0	3	0	3	3	1	1	1	0	3	0	0	0	0	0	0	3
9.	Participate in any programmes directed by Director General DOF	3	3	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	3
	Total weighted	20	17	15	13	12	12	8	6	5	5	4	3	3	3	1	1	0	15
	Projected priority activities for AFA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	


Figure 11: Total number of AFAs involved in different activities.

The three most popular economic activities that the AFAs are involved in are diesel supply, fish marketing and civil works (Figure 11). The most popular activity is diesel supply in which 49 (65.3%) AFAs are involved. On the other hand 32 or 42.6% are involved in fish marketing activities. Meanwhile 30 (40%) of the AFAs are involved in civil works. And there are about 1%-23% involved in other activities.

6.1.3 The economic performance of the Fishermen's Associations

In the FDAM annual report for the year 2002 the AFAs are categorized by monthly profits. Table 12 shows that the difference between the economic performances of the AFAs is considerable. The high profit AFAs are divided into two categories, same as for the middle profit AFAs and the low profit AFAs.

NO.	STANDARD	CATE GORY	PROFIT PER/MONTH		YE	AR	
			(RM)	20	01	20	02
				AFA	SFA	AFA	SFA
1.	HIGH PROFIT	A 1	10,000 >	6	1	18	1
		A 2	5,000 - 9,999	7	2	11	3
2.	MIDDLE	B 1	3,000 - 4,999	4	1	9	1
	PROFIT	B 2	1,000 - 2,999	17	0	8	1
3.	LOW	C 1	<1,000	23	5	10	2
	PROFIT	C 2	LOSS	13	3	15	4
	TOTAL			70	12	71	12

 Table 12: Profit of AFAs by category (FDAM 2003).

In 2002 only about 40% of the AFAs in Malaysia were in the high income group and 60% were in the middle group or low income group.

6.2 Profit and loss account statement

Analyzing the profitability of the Fishermen's Association is quite important so in this case the profitability ratios such as return on equity, profit margin, profit and loss of the Area Fishermen's Associations and their main economic activity will be used. These measures enable the association's profits to be evaluated with respect to a given level of sales, a certain level of assets, or their members' investment. Without profit, the association can not attract new members. A good performance will also make it easier for the associations to get outside capital.

From the profit and loss accounts for the years 2000 to 2002 (see Appendix 3) the net profit or loss of the each AFA can be found. It shows the revenues of the business less the total costs incurred during the period. For the purpose of this project, the accounts of AFAs for the years 2000, 2001 and 2002 were studied. Table 13 below shows that the total profits of the AFAs have been increasing from the year 2000.

Most of the AFAs made a profit in the year 2001. From the start of 2001, the government subsidised the price of diesel to the fishing industry and all the AFAs became the sole agents delivering the subsidized diesel.

	2000	2001	2002
Cluster 1	584,991	2,890,425	4,320,990
Cluster 2	266,052	826,564	912,523
Cluster3	-390,750	1,157,408	1,744,143

Table 13: Profit of AFAs in 2000 – 2002.

6.3 Market share in the fish brokers industry

The AFAs present strategy was evaluated on the basis of their market share compared to other fish brokers. Fish marketing is the most important activity between the fishermen and the Fishermen's Association. Analyzing the data for 2000 to 2002 shows that the overall market share of the FAs in the fish brokers industry is only about 1% of the total fish landings, this

means that 99% of the fish in the country was handled by fish brokers other than the FAs (Table 14).

Further efforts must be made by the management of the FAs and the related agencies to help more FAs get involved in fish marketing activities. Through fish marketing activities, the AFAs can sell the fish directly to the wholesale market and bypass other fish brokers. This could reduce the cost incurred and at the same time the fishermen will get a higher price and the consumer a more reasonable price in the market.

	2000 (RM)	%	2001 (RM)	%	2002 (RM)	%
Inshore	3,974,000,000		3,725,000,000		3,725,000,000	
Off-Shore	425,900,000		435,100,000		485,100,000	
Total Landing	4,399,900,000		4,160,100,000		4,210,100,000	
Fish Handling National fishermen						
association State fishermen	21,478,251		21,788,273		21,843,568	
association Area fishermen association	1,297,394		1,204,762		492,438	
(Cluster 1) Area fishermen association	17,925,406		16,616,177		18,243,855	
(Cluster 2) Sub Total (Area Fishermen's	289,663		340,984		845,306	
Association) Sub Total	18,215,069	0.41%	16,957,161	0.46%	19,089,161	0.51%
(All FA) Others Fish	40,990,714	0.93%	39,950,196	0.96%	41,425,167	0.98%
Brokers	4,358,909,286	99.07%	4,120,149,804	99.04%	4,168,674,833	99.02%

Table 14: Market share in RM by the main players in the fish broker industry in Malaysia

6.4 Return on equity

The return on common equity measures the return earned on members' investment in the association. Generally, the higher these returns, the better off are the AFAs. Return on equity is calculated as follows:

Return on equity = <u>Earnings available for stockholders</u> Stock equity

All AFAs have increased the ROE from 2000 to 2002 (Table 15). The increase of ROE in cluster 1 is greater than for clusters 2 and 3 where the ROE for cluster 2 decreased from 2001 to 2002.

Overall, the ROE shows that the operations of the AFAs were showing positive returns in 2000 - 2002.

The difference of ROE and the average profit between clusters is mainly because of the following factors:

i. Cluster 1 is involved in more activities than clusters 2 and 3. On average cluster 1 is involved in five to eight activities compared to three to five activities in cluster 2 and one to three activities in cluster 3.

ii. Total assets in cluster 3 are much less compared to the other clusters and therefore they have a harder time being as active as the other clusters.

iii. Total number of AFAs in each cluster varies. Cluster 1 consists of 32 AFAs, while seven are in cluster 2 and cluster 3 consists of 36 AFAs.

	2	2000		001	2	002
	ROE (%)	Ave. Profit	ROE (%)	Ave. Profit	ROE (%)	Ave. Profit
Cluster 1	2.23.	18,281	12.45	90,329	17.10	135,031
Cluster 2	10.64	38,007	28.71	118,081	22.03	130,360
Cluster 3	-3.38	-11,164	9,7	32,150	11.86	48,448
All AFAs	1.14	6,220	12.82	65,870	16.00	94,292

 Table 15: Return on equity of AFAs from 2000 to 2002.

6.5 SWOT analysis

The Fishermen's Association resource strengths and weaknesses and opportunities and threats were reviewed using the strategic management tool – SWOT analysis – Strengths (S), Weaknesses (W),Opportunities (O) and Threat (T) as seen in Table 16 below:

Strengths (S)	<u>Weaknesses (W)</u>
1. The AFA's main business is mainly inside the fish landing complexes belonging to the FDAM. There are good facilities that the AFAs can use. Some of the complexes are managed by the AFAs.	1. The business is limited to the customers in the fish landing complexes only. The type of business possible is related to the fishery sector only.
2. Fish suppliers and fishermen are close to the AFAs management area and it is easier to involve them in fish trading.	2. Fishermen do not feel that the AFAs are business partners and find local traders more comfortable to deal with.
 3. Have a close link to the FDAM and DOF office. FDAM has located staff and development funds for AFAs. 4. FDAM has the duty of placing key staff at AFAs. 5. 10 board members that are selected by the annual meeting to the board of the AFAs act as a backup to the management. 6. AFAs influence makes it easier to get support from local politicians. 	 Some clients prefer to deal with local fish brokers rather than AFA staff. Some managers and staff are not business minded. They are not efficient in accounting or in human management. Positions are not permanent and staff could be transferred at anytime whenever they are needed in other positions. Too few of the AFAs are involved in fish marketing.
Opportunities (O)	<u>Threats (T)</u>
1. Given priority by the FDAM to do business in more complexes than now. Most of the fishermen and complex's customers are members of the AFAs	1. Currently fish trading is often monopolised by local fish brokers and traders.
2. Fishermen are normally members of AFAs and have contact with AFA officers under some circumstances.	 Most of the fishermen have ties to fish brokers and are indebted to them. Government procedures need to follow specific
3. The government has special funds and aids to assist in the AFAs development.4. AFAs are allowed to appoint their own managing	regulations which some AFAs cannot comply with4. Decisions by the managers of the AFAs are sometimes not agreed to by the board members and local politicians. Some decisions must also have
staff to operate the business and have the power to make immediate decisions regarding operations5. The public is more content with the AFAs doing the	Registrar Admittance. This can undermine the future operations of the AFAs 5. Negative reputation of AFAs that have tried to
fish trading compared to other traders.	operate in fish marketing but failed. For them it is hard to get started again.

6.6 Prices and cost

Price and cost is very important in industry. The most telling signs of whether an AFA's business position is strong or weak are whether its prices and costs are competitive to the prices of industry rivals.

From the study it can be calculated that the average margin of the AFAs in cluster 1 from its fish marketing activities is about 6.3%. This margin is considered very low compared to some other industries but in order to gain a profit, the AFAs must increase the volume of fish taken from the fishermen. For this to happen, the AFAs must offer a better service to the fishermen in order to get a higher volume of fish or offer a higher price to them.

From Table 17 below it can be seen that the margin percentage for fresh marine fish varies from year to year. In Malaysia, the price of fish goes up and down in accordance with market conditions, the main factors of influence are quality, volume, size, distance to the market and festivals.

 Table 17: Profit margins of AFAs in fish marketing activities (cluster 1).

	<u>2000</u>	<u>2001</u>	<u>2002</u>
Gross margin	6.40%	6.20%	6.50%
Net margin	6.84%	6.61%	6.95%

In the 1999, 2000, 2001 and 2002 annual reports of the FDAM, information on the landing price, whole sales price and the retail price for these years are published. The price of the fish brokers industry for the same years can also be found if the assumption is made that the margin of the AFAs each year is the same as the fish brokers industry. This is put forward in Table 18 below where the prices in the fish brokers supply chain from the fisherman to the consumer are shown for each stage. The margin of the wholesalers that are selling the fish at the wholesale market varies from 4% to 30%. On the other hand, most of the time, the retailers are selling the fish to the consumers at the average margins of 25.8%, margins much higher than in the wholesale market. The price is 68.8% higher in retails from what the landing price is and 64.3% higher from the fish brokers get.

Table 18: The price in RM of the fish marketing supply chain.

	Landing price	Fish brokers	Whole sales	Retails
1999	4.90	5.21	6.01	7.40
2000	5.39	5.73	5.99	7.78
2001	5.78	6.14	6.90	8.22
2002	3.25	3.46	6.02	7.74

6.7 Relative position to rivals

In Table 19, a qualitative approach is used to determine how strong a competitive position the AFAs hold in relation to their close rivals. Each of the industry's key success factors is examined and a pertinent indicator of competitive capability and potential competitive advantage is given for the AFAs and their competitors. The list of industry's key success factors is used as to determine the competitive advantage or disadvantage. The AFAs and their key rivals are then rated on each strength indicator. Rating scales from 1 to 10 are used. The sum of each group strength overall ratings is as a measure of competitive strength for each competitor.

Table 19 shows that the AFAs in cluster 1 and 2 are weaker compared to other local fish brokers. The AFAs are weaker than rivals in distribution capability and lack in skills in marketing, technology and relative cost position.

In the table different weights are qualitatively given to each key success factor according to the importance of the successful competition in the fish brokers industry. Each competitor is then given a qualitative grade for their strength in each key success factor. The weights and the grades are then put together for the weighted overall strength rating.

		AFA	AFA	Fish	Fish		Fish
Key Success Factor	Weight	Cluster	Cluster	Broker	Broker	NFA	Broker
		1	2	7	7		8
Quality/product performance	0.10	8/0.8	6/0.6	8/0.8	8/0.8	6/0.6	6/0.6
Reputation/Marketing skills	0.10	7/0.7	7/0.7	7/0.7	8/0.8	6/0.6	7/0.7
Technology skill	0.05	5/0.25	5/0.25	5/0.25	6/0.3	5/0.25	5/0.25
Distribution capability	0.15	5/0.75	4/0.6	6/0.9	7/1.05	6/0.9	7/1.05
Financial Resources	0.10	7/0.7	6/0.6	6/0.6	6/0.6	8/0.8	7/0.7
Relative Cost position	0.30	7/2.1	6/1.8	8/2.4	9/2.7	8/2.4	8/2.4
Customer service capability	0.15	6/0.9	6/0.9	7/1.05	7/1.05	5/0.75	6/0.9
Sosial obligation	0.05	7/0.35	7/0.35	6/0.30	8/0.40	7/0.35	6/0.30
Sum of weights	1.00						
Weighted overall strength rating		6.55	5.8	7	7.7	6.65	6.90

Table 19:	Weighted	competitive strength	assessment.
-----------	----------	----------------------	-------------

Rating scale: 1 = very weak; 10 = very strong

6.8 Strategic issues

Table 20 shows the AFA's overall competitive situation and puts it into perspective. It indicates where the management of the AFAs should focus their strategic attention. The information below will help the managers to craft a strategy and evaluate whether they should continue with the present strategy or change it to a better one.

AFAs situational analysis			
1. Strategic performance indicators	2000	2001	2002
Market share (All FA)	0.93%	0.96%	0.98%
Market share (AFA)	0.41%	0.46%	0.51%
Sales growth	0.05%	0.05%	0.05%
Net profit margin	6.84%	6.61%	6.95%
Return on equity			
- Cluster 1	2.23%	12.45%	17.10%
- Cluster 2	10.64%	28.71%	22.03%
- Cluster 3	-3.38%	9.7%	11.86%

Table 20: The AFAs situational analysis

Internal resource strengths and competitive capabilities

- 1. The AFA's main business is concentrated mainly inside the fish landing complexes belonging to the FDAM. There are a lot of facilities that the AFAs can use. Some of the complexes are managed by the AFAs.
- 2. Fish suppliers and fishermen are close to the AFAs management area and it is easier to involve them in fish trading.
- 3. Have a close link to the FDAM and DOF office. FDAM has located staff and development funds for AFA.
- 4. FDAM has the duty of placing key staff at the AFAs.
- 5. 10 board members that are selected by the annual meeting to the board of the to AFAs act as a backup to the management.
- 6. AFA's influence makes it easier to get support from local politicians.

Internal weaknesses and resource deficiencies

- 1. The business is limited to the customers in the fish landing complexes only. The type of business possible is related to the fishery sector only.
- 2. Fishermen do not feel that the AFAs are business partners and find local traders more comfortable to deal with.
- 3. Some clients prefer to deal with local fish brokers rather than AFA staff.
- 4. Some managers and staff are not business minded. They are not efficient in accounting or in human management.
- 5. Positions are not permanent and staff may be transferred at anytime.
- 6. Too few of the AFAs are involved in fish marketing.

External opportunities

- 1. Given priority by the FDAM to do business in more complexes than now. Most of the fishermen and complex's customers are members of the AFAs
- 2. Fishermen are normally members of AFAs and have contact with AFA officers under some circumstances.
- 3. The government has special funds and aids to assist in the AFAs development.
- 4. Are allowed to appoint their own managing staff to operate the business and have the power to make immediate decisions regarding the operations
- 5. The public is more content with the AFAs doing the fish trading compared to other traders.

External threats to the company's well-being

- 1. Currently fish trading is often monopolised by local fish brokers and traders.
- 2. Most of the fishermen have ties to fish brokers and are indebted to them.
- 3. Government procedures need to follow specific regulations which some AFAs cannot comply with..
- 4. Decisions by the managers of the AFAs are sometimes not agreed to by the board members and local politicians. Some decisions must also have Registrar Admittance. This can undermine the future operations of the AFAs

5. Negative reputation of AFAs that have tried to operate in fish marketing but failed. For them it is hard to get started again.

3. Competitive strength assessment rating scale: 1 = very weak; 10 = very strong			
Quality performance	8		
Reputation/Marketing skills	7		
Technology skills and know-how	5		
Distribution capability	5		
New product innovation capability	7		
Financial resources	7		
Customer service capability	6		
Social obligation	7		
Overall strength rating	6.5		

4. Conclusion concerning competitive position

In general it can be said that the FAs present position is likely to deteriorate if the present strategy is continued. For this not to happen the FAs need to revise their strategy and improve their key success factors such as their distribution capability, relative cost position and customer service capability. Even though the AFAs have an advantage in industry through the support from the government agencies a drastic change is badly needed, because one day the AFAs will have to run their own operations on their own, without aid from the government.

5. Major Strategic Issues the AFA must address

The major strategic issues for the AFA are to be found in the discussions and conclusion part of this study.

7 A FISHERMEN'S ASSOCIATION IN ICELAND -

7.1 Formation of SIF

The SIF Group is a leading Icelandic company in sales and marketing of seafood internationally. Approximately 1,700 employees in 15 countries currently work for the SIF Group in value-added production, marketing and sales of seafood products to more than 60 countries around the globe, with an annual turnover of USD 800 million. (SIF 2003)

SIF was formed in July 1932. It was originally a co-operative owned by producers in the Icelandic fish industry but changed their ownership form to a limited liability company in 1990. The SIF Group, originally known as the Union of Icelandic Fish Producers (UIFP), was established as a non-profit co-operative company whose main aim was to sell its members' products for as high a price as possible and to push for increased quality of production. The aim of the company was not to build up assets but to retain sufficient commission to enable it to pay the operational costs. Then, at the end of each year, the amount left after the operational cost had been paid was given back to the members in proportion to their export through the UIFP (SIF 2003).

When the UIFP was established, there were around 322 members, but after a difficult period during the Second World War and the aftermath of the war, the number of members went down to 138 in 1949. This was mainly due to there being fewer companies in salt fish production in Iceland as well as increased competition from other production methods such as freezing.

7.2 Turning point

According to Ogmundur H. Knutson and Helgi Gestsson (2004) the period 1957 - 59 was in many ways an important turning point in the history of the UIFP due to members becoming increasingly dissatisfied with its operation. There were mainly three issues, which dissatisfied the members. Firstly, the sales organisation in many ways appeared to have stagnated; secondly, the members found that the UIFP did not pay as much attention to matters of its members common interest as it should have done; thirdly; the members were of the opinion that they had very little to say in the governance of the UIFP as they found the board too remote from the members and their needs.

The dissatisfaction with the governance and the increased emphasis on matters of common interest resulted in the UIFP establishing a special interest committee to take care of common interest matters and as a result the operations of the UIFP increased very fast mainly due to increased service to members as well as the broadening of its role.

7.3 Increased competition in the selling of salted fish

During the period before 1990, UIFP almost had a monopoly on the export of salted fish from Iceland due to limits in the number of export licenses granted by the ministry of Fishery and later the Foreign Ministry. However, at this time other companies got a limited license to export salted fish from Iceland, but usually in very little quantity or by rather strict conditions. In 1991 Iceland's government adapted to free trade between European countries and granted companies other than the UIFP limited experimental licenses to export salted fish mainly to Latin-America and Mediterranean countries. After these experimental licenses were granted

and with the prospect of free trade with EU countries, it was clear that the exclusive licenses that the UIFP had on export was be abolished in January 1993.

In order to maintain competitive in the market, the UIFP changed its strategy and bought a French company Nord Morue that operated secondary processing and selling of fish products. The main emphasis of this company was on producing consumer packed products from salted and smoked fish. The involvement of the UIFP in secondary processing in France means that the UIFP is going deeper into the supply chain by increasingly selling products to supermarkets instead of rather traditional salt fish markets in Mediterranean countries. Hence, the market for the UIFP changed from small shops and distribution companies for salted fish to direct selling to supermarkets where reliability and long-term relationship is often one of the main issues.

7.4 Transformation

Due to the poor performance and declining in salt fish production, the UIFP members agreed that they should go one step further in the changes of the UIFP by changing the ownership of the UIFP into limited liability form, to increase the flexibility of the UIFP as a company. After these changes, it is estimated that the UIFP and subsidiaries controlled around 16% of the total salt fish sale in the world, making the UIFP the biggest single seller of salted fish in the world. Then in 1999, Icelandic Seafood and the UIFP merged under the name of UIFP. In this way the UIFP diversified significantly from the time before the merger with Icelandic Seafood, when it defined its role as an 'international marketing and production company in chilled fish production'. Now UIFP handles frozen fish products as well, so theoretically it covers almost all forms of fish product exported from Iceland. On December 29, 1999 it was agreed to merge Iceland Seafood and SIF, under the SIF name.

Today, the SIF Group is one of the world leaders in sales and marketing of seafood products. SIF operates workplaces in many countries, conducts research and development and supplies an enormous product range. Some 1,900 people are employed by the group in 13 countries in value-added processing, marketing and sales of seafood products to more than 60 countries all around the world.

8 DISCUSSION AND SUGGESTIONS

This study has examined the role and the performance of the Fishermen's Association in Malaysia. In the context of the further enhancement of the contribution of the AFAs and to appraise the present performance of the AFAs, there are a few major points of importance that need to be considered by the management of FDAM, the AFAs and all other related agencies. This needs to be considered for the growth of the fishing industry in Malaysia as a whole.

For whatever reason, the Malaysian fishermen, and especially the artisanal fishermen, remain one of the oldest and most traditional forms in the economy of the country. And not unlike many other traditional industries, the struggle for survival has proven to be a difficult one. Coincidently the majority of the members of the AFAs in Malaysia are artisanal fishermen. So, by appraising the performance of the Fishermen's Association the aim is also to help their members and the fishermen as a whole.

Strengthening the Fishermen's Association is a priority task. In order to strengthen the AFAs various angles have to be looked at, such as their staffs' entrepreneurial, managerial, organisational and technical training. The bettering of their staffs' personal and group

attributes such as integrity, commitment, dedication, loyalty, industriousness, social consciousness and community involvement is needed although no general consensus can be reached on the ideal Fishermen's Association. From this study the major points to be considered for improving the AFA's are discussed in the text below.

8.1 The variety of activities

The AFA's in Malaysia are categorized as multi-purpose associations, which offer their members various different but related or complementary services. The study identified that the associations involved in more economic activities, and at the same time activities better related to their objectives, earn more profit compared to the AFAs with fewer activities. This is seen from the annual profits of the AFAs in 2000, 2001 and 2002 where the AFAs from cluster 1, that have on the average five to eight activities, are earning a higher profit than the AFAs in cluster 2 which have only three to four activities on average, while AFAs from cluster 3 only have an average of one to three activities.

This finding is supported by a regression analysis (See appendix 2), where the study found that the correlation for profits to the number of activities for Cluster 1 has a P value of 0.00218 (less than 0.05 indicates significant correlation). This means that if AFAs in cluster 1 are to add one activity to their operation, the analysis shows that there is a 95% probability that their profits will increase by over RM 70,000 (USD 18,400). AFAs in cluster 2 have no correlation between the number of activities and profits. A positive correlation (RM 35,300) was found for the AFAs in cluster 3 (P value of 0.012).

This indicates that the AFAs which are involved in economic activities that are important to the AFAs objectives are doing better than others. For AFAs in cluster 1 and 3 the advice is to consider investing more in economic activities in order to increase profit. According to the study, activities closely related to the objective of AFAs such as marketing activities followed by ownership and operations of fishing boats and input supply will make the AFA look a more promising entity to members. Fish marketing activities will provide a direct service to the fishermen and will enable the members to enjoy higher economic returns and at the same time the AFAs will strengthen their financial standing through higher volumes of fish sold.

New activities, which are related to the objectives of the AFAs other than fish marketing activities and other activities that the AFAs are presently involved in, that could be started through the FAs efforts are as follows:

New activities

- Maintenance of fishing gear and equipment,
- Manufacture of fishing gear and equipment,
- Technical services,
- Insurance of fishing vessels and equipment,
- Insurance of fishermen,
- Social and educational services.

The economic activities that the AFAs are presently involved in that should be developed further are:

Develop further

- Ownership and operation of fishing vessels,
- Provision of credit for fishermen and encouragement of economy,
- Warehousing and cold storage,
- Fish processing,
- Supply of fishing gears and equipment

8.2 Strengthening of the strategy

The AFAs in cluster 1 in this study were found to have the greatest potential of the AFAs. Their financial situation is stronger than that of the others AFAs for satisfying a basic need in fish marketing. This study indicates that a better formed strategy of these AFAs can lead to an increased market share in the fish brokers industry. For the AFAs to better their position in the market they have to evaluate their key success factors and improve them continuously.

The following key success factors should be given careful consideration in efforts to increase the competitive standing of the AFAs:

a) Quality/product performance

The AFAs need to make sure that the quality of fish is maintained in the appropriate manner through grading, weighting, and using the appropriate volume of ice in order to maintain freshness. This is because of the tremendous increase in the fish demand trend, since the working consumer has less time in the kitchen and needs good quality fish.

b) <u>Reputation/marketing skills</u>

The AFAs must look after the social interests of their members. Most of the AFAs operation offices are located in fishing villages. Instead of just operating as an association office they must also get involved in social programmes within the community so that the fishermen's communities will identify more strongly with the AFAs. The marketing skills of the staff of the AFAs have to be improved so that they can capitalize on the possibilities in the market.

c) Technology skills

The AFAs must improve technology skills in order to be able to compete successfully. Those AFAs with marketing activities must have proper or at least basic landing facilities such as a crane off load to the catches, sorting and grading areas, and packaging areas for the fish brokers and enough storage capacity. All this technology is important in order to maintain freshness and increase the speed to dispose of the fish. Such facilities will also attract fishermen to come and sell their catch to the AFAs.

d) Distribution capability

One of the most important factors in fish marketing is the capability of the fish broker to distribute the fish as soon as possible and to as many places as possible. The fishermen in Malaysia normally rely on the fish brokers to sell or distribute their catch to the market. If distribution channels are lacking, the fish will remain unsold or the price of the fish will fall.

Should this be the case, AFAs must get involved in fish marketing activities, not only to help their members but also to gain profit from the activity. The AFAs must try to find new and permanent distribution channels to stay competitive.

e) Financial resources

Financial resources are very important to become competitive in the fishing industry. Fishermen normally need to be paid for their fish up front. The AFAs must always have sufficient funds to buy the fish otherwise the fishermen will sell their catches to other fish brokers. The AFA can get a soft loan from government agencies or government bank.

f) Relative cost position

The AFAs must make sure that all unrelated costs are avoided in order to be competitive. Most of the local fish brokers are working in a family business. That way they can reduce their out of pocket costs but still keep the business open for long hours. In order to compete with that the AFAs must change their present way of doing business and not just work at the same time as government offices. As an economic entity their working hours must follow the needs of the environment around them but still take care not to have to pay too much in salaries.

With respect to prices and costs, the AFAs prices and costs must be competitive. The AFA prices must be at least as high as the others fish brokers' prices. Since the margin of business is so small the AFAs must try to buy more fish so that they can handle more volume in order to increase their profit.

g) Customer service capability

The AFAs must realise that they must distinguish themselves from the competition through an exemplary focus on customer and employee needs and satisfaction, while ensuring that their standards remain at or above the level of the competition. Special attention is needed for this matter from time to time to check customer needs.

h) Social obligations

Social obligations play an important role for the AFAs and though the economic activities are very important, the AFAs should not neglect their social obligations. The AFAs can be considered agents of the government and their activity is monitored closely by government bodies. Every year the AFAs can apply for and will receive social funding from government agencies. The scope of AFAs activities in this field could and should be further expanded. The AFAs can provide social facilities and services such as community halls, jetties, village roads and offer educational activities. As for women, the AFAs may initiate income generating activities for women in tourism and other business that can increase their family's income.

8.3 Strengthening the structure

The success or failure of the AFAs depends primarily on the needs and motivation of its members. The membership should be voluntary and the members should be seeking a long-term benefit. Considering the above, stronger support to members from government should be provided in the following areas:

a) <u>Organisation of local marketing</u>

The AFAs can serve as efficient first-stage marketing organisations by accepting fish on consignment from their members and then selling the catch at auction or local market, thus, bringing benefits of resources directly to the fishermen. At the same time, the AFAs should diversify their role by securing constant fish supplies by creating a supply link in between all AFAs that are involved in fish marketing activities.

b) Consideration of the role of the fish brokers

A very important function of the AFAs is marketing. Ideally, the marketing system should be designed so that the AFAs' members receive the highest price for their catch and consumers can purchase the product at a fair price. Thus, the amount of profit taken by other brokers (middlemen) should be minimised. The actual role assigned to fish brokers should be considered on a case by case basis.

c) <u>Human factor</u>

People are one of the most important factors determining the success or failure of the operation of a company or association. A sufficiently good overview of cooperative operations should be given to the members as well as to the board of directors and managers regarding the most important principles and business practices of the associations. At the same time the AFAs that have stable incomes and are capable business entities should employ, and pay, full-time skilled managers directly from the open labour market.

In order to get a new injection of ideas and new approaches in management, the AFAs should be looking at bringing in personnel from the corporate sector and expatriate consultants onto their board of directors.

9 CONCLUSION

The fishing industry in Malaysia has shown great potential for future development as a commercial industry. Demand for fish is growing. To meet the future demand from an increasing population an increase in fish production will be required. But nevertheless the role of Fishermen's Associations is becoming even more important as agents for the positive development in the fishing industry.

The AFAs, SFAs and the NFA are directly involved in the fish brokers industry. They are supposedly helping the fishermen, the society of fishermen and their own association members to increase their income and economic status. On the other hand, after more than 30 years since the formation of the Fishermen Associations the study shows that the performance of AFAs in Malaysia on average is below what should be expected. And many of them appear not to be operating according to the objective of their formation. As a result the fishermen, especially the artisanal fishermen, still do not enjoy an acceptable standard of living.

The AFA management should take notice of the example from how the fisheries associations or cooperations are managed in other countries. For example, in Iceland the UIFP was established as a non-profit co-operative company whose first main aim was to sell its members' products for as high a price as possible and to push for increased quality of production. Today, after going through many changes, the UIFP is known as the SIF Group and is a world leader in sales and marketing of seafood products. SIF operates workplaces in many countries in the world.

In Malaysia, the government in general strongly supports the fishing industry. A New Agricultural Policy has been formulated to ensure that the capability of the fishing industry continues to enhance productivity and market driven growth. The AFAs should take advantage of their strong relationship with the government.

In the next ten years the AFAs that are really involved in marketing activities could form marketing networks and slowly start the change from government subsidised associations to fully business oriented companies drawing on the experience of companies like the UIFP Group from Iceland, now one of the biggest in sales and marketing of seafood products in the world.

The AFAs should change for the good of their members and for the good of all fishermen in Malaysia. Some Constraints to the effective development of AFAs have been identified and developed in this paper. The management of the FDAM and the AFAs should consider the issues put forward in this study.

ACKNOWLEDGEMENTS

I wish to thank Dr. Tumi Tomasson, the UNU/FTP Programme Director for accommodating me in the programme. Also my thanks goes to Mr. Thor Asgeirsson, Deputy Director of the Programme for his sincere comments and excellent arrangement of the whole training programme.

I would like to extend my deepest appreciation and thanks to my supervisor Associate Professor Helgi Gestson for his support, advice and generous guidance. Your enthusiasm to see this study through to the end is really appreciated.

My sincere appreciation also goes to the following people and organisations for their friendly assistance and guidance: Dr. Eyjolfur Gudmundsson for ferrying me from my hostel to the University. My appreciation also goes to Mr. Bjorgvin Bjorgvinsson from the SIF Group for giving a special talk about SIF as my reference in this study and to Ms. Sigridur Kr. Ingvarsdottir the programme officer. To all fellows of the UNU-FTP 2004, especially those fellows who were with me in Akureyri, thank you for your support.

Last but not lease, my sincere thanks goes to my wife Mariani Ahmad, for her support and taking good care of our family whilst I have been away, and also to my four children. who have been staying patiently thousands of miles away from me.

LIST OF REFERENCES

(Act 44 1971 a): Fishermen Association Act 44, 1971(Section 5 a), Kuala Lumpur

(Act 44 1971 b): Fishermen Associations Act, Act 44 Section 6(3), 1971, Kuala Lumpur

Arnoldo C. Hax and Nicolas S. Majluf, *The Strategy Concept and Process* Second Edition, 1991USA, *Prentice*-Hall International, Inc.

DOF (2004): Department of Fisheries Act 1985. Kuala Lumpur: DOF. DOF 2004 a). *Statistics 1999*, Kuala Lumpur. Department of Fisheries DOF 2004 c). *Statistics 2001*, Kuala Lumpur. Department of Fisheries DOF 2004 d). *Statistics 2003*. Kuala Lumpur: Department of Fisheries. http://agrolink.moa.my/dof/Data_Perikanan/Perangkaan_2003/all_2003.html

DOF 2004 e). Function of Department of Fisheries http://agrolink.moa.my/dof/Maklumat_Am/visi_dof_bm.html

Dr. Ogmundur H. Knutsson and Heigi Gestsson, *Case in Strategy an Invitation of a Merger*, 2004 University of Akureyri, Iceland

FAO 2004 a) Food and Agricultural Organisation (FAO), *Fishery Country Profile: Malaysia* [December 2004] http://www.fao.org/fi/fcp/en/mys/profile.htm

FAO 2004 b)Food and Agricultural Organisation (FAO) 1988 *Fishermen's Association in Malaysia* [January 2005] http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/006/AD126E/AD126E00.htm

FAO 2004 c) Food and Agricultural Organisation (FAO) 1988 *Fisheries Data In Malaysia* [November 2004] http://apps.fao.org/faostat/collections?version=ext&hasbulk=0&subset=fisheries

FAO 2004 d). Food and Agricultural Organisation (FAO) *1999 Annual per capita consumption of fish for human food FAO* <u>http://www.st.nmfs.gov/st1/fus/fus99/per_capita99.pdf</u> [December 2004]

FDAM 1971 (a). Fisheries Development Authority of Malaysia (FDAM). *Act 1971, Part 2 Section 4*, Malayan Law Journal Sdn Bhd, 2001 Kuala Lumpur

FDAM 1971. Fisheries Development Authority of Malaysia (FDAM). Act 1971. (Act 49). Kuala Lumpur:

FDAM 2000. Fisheries Department Authority of Malaysia (FDAM). Annual Report of Fisheries Department Authority of Malaysia. Kuala Lumpur FDAM 2001. Fisheries Department Authority of Malaysia (FDAM). Annual Report of Fisheries Department Authority of Malaysia. Kuala Lumpur

FDAM 2002. Fisheries Department Authority of Malaysia (FDAM). Annual Report of Fisheries Department Authority of Malaysia. Kuala Lumpur

FDAM 2003. Fisheries Department Authority of Malaysia (FDAM). Annual Report of Fisheries Department Authority of Malaysia. Kuala Lumpur

FDAM 2004. Fisheries Department Authority of Malaysia (FDAM). Annual Report of Fisheries Department Authority of Malaysia. Kuala Lumpur

Geographical location of Malaysia [December, 2004] <u>http://www.faqs.org/docs/factbook/geos/my.html</u>

John McMahan (2005) *Historical Perspective on Strategic Management* [January 2005] http://www.johnmcmahan.net/writing/Historical%20Perspective.pdf

(MOA 2004 a) Functions of the Ministry of Agriculture in Malaysia <u>http://agrolink.moa.my/index.php?module=ContentExpress&func=display&ceid=65&bid=33</u> <u>&btitle=About%20MOA&meid=75</u>

(MOA 2004 b) National Agriculture Policy 3 of the Ministry of Agriculture, Kuala Lumpur

(MOA 2004 c) National Agriculture Policy 3 of the Ministry of Agriculture, Kuala Lumpur

MOA 2005. National Agriculture Policy 3 of the Ministry of Agriculture....

Richard Lynch, Corporate Strategy 2003: Prentice Hall

SIF Group 2003. Annual Report, 2003

The World Fact book 2004 (January, 2005) http://www.faqs.org/docs/factbook/geos/my.html

Thompson A A. and Strickland A J. and, *Strategic Management, Concept and Cases* 1998. USA: Irwin/ McGraw-Hill

(Yasuki Ogawa, Japan Agriculture Research Quarterly, *Marine Fisheries Management and Utilization of Fishing Ground in Malaysia* JARQ 38 (3), 209-212 (2004) http://ss.jircas.affrc.go.jp/engpage/jarq/38-3/38-03-10.pdf

APPENDIX 1

Number of Area Fishermen's association by Cluster

	CLUSTER 3
YING FISH FOR OWN USED	NOT BUYING FISH
luk Bahang lir Perak labuhan Kelang elaka Selatan tiu	 P. Langkawi Yan Seberang Prai Ujung Batu Kerian Matang Sungai Tinggi Manjung Utara Manjung Selatan Pulau Pangkor Port Dickson Muar Batu Pahat Johor Selatan Pengerang Mersing Rompin Pekan Paka Dungun Marang K. Terengganu Utara Semerak Bachok Kota Bharu Bintulu Kabong Sebuyau Buntal Layar Rimbas Satang biru W.P Labuan Kota Belud Semporna Kudat

APPENDIX 2

Correlation for Cluster 1

Regression Statistics	
Multiple R	0,521983171
R Square	0,272466431
Adjusted R Square	0,248215312
Standard Error	207941,1088
Observations	32
ANOVA	
	df

	df	SS	MS	F	Significance			
					F			
Regression	1	4,85805E+11	4,85805E+11	11,23521066	0,00218248			
Residual	30	1,29719E+12	43239504740					
Total	31	1,78299E+12						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
Intercept	-43306,466	64646,18447	-0,6698998	0,508045605	-175331,588	88718,65547	-175331,5875	88718,65547
No	70418,56683	21008,57387	3,351896577	0,002182482	27513,3352	113323,7984	27513,33521	113323,7984

Othman

Correlation for Cluster 2

SUMMARY OUTPUT

Regression Statistics									
Multiple R	0,01219165								
R Square	0,000148636								
Adjusted R Square	-0,199821636								
Standard Error	238914,1121								
Observations	7								
ANOVA									
	df	SS	MS	F	Significance F				
Regression	1	42427080,21	42427080,21	0,000743292	0,97930435				
Residual	5	2,854E+11	57079952953						
Total	6	2,85442E+11							
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%	
Intercept	145436,5	560303,2583	0,259567471	0,805546131	-1294868,878	1585741,878	-1294868,878	1585741,878	
No	-7035,5	258056,7349	-0,027263385	0,97930435	-670391,4551	656320,4551	-670391,4551	656320,4551	

Othman

Correlation for Cluster 3

SUMMARY OUTPUT

Regression Statistics								
Multiple R	0,448369057							
R Square	0,201034811							
Adjusted R Square	0,17250034							
Standard Error	83494,19119							
Observations	30							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	49114979200	49114979200	7,045331627	0,012955638			
Residual	28	1,95196E+11	6971279962					
Total	29	2,44311E+11						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
	-	Enor	l Stat	r-value	Lower 95%	opper 95%	Lower 95,0%	opper 95,0%
Intercept	3204,211292	30402,88911	-0,105391671	0,916816423	-65481,70566	59073,28308	65481,70566	59073,28308
No	35502,61591	13375,48793	2,654304358	0,012955638	8104,171271	62901,06055	8104,171271	62901,06055