CHAPTER NINE

CONCLUSION AND RECOMMENDATIONS

Tuna is rapidly growing in importance as a source of food. It is one of the world’s most important fish food. Whether fresh, frozen, processed or canned, the demand for it is growing.

9.1 COMPREHENSIVE APPROACH

It has been shown that the tuna industry is indeed a worthwhile industry to be developed, especially so now in Malaysia. A comprehensive approach however must be adopted. It will have to be in stages as we implement the whole programme of developing the industry. We should not be concerned only with harvesting tuna from our waters. We should gear ourselves to processing and marketing of value-added product. The development of the tuna industry will provide Malaysia with an alternate source of foreign exchange and will motivate and assist in the development of other supporting industries.
However, we do have some weaknesses.

(a) We do not have the necessary infrastructure essential for the development of the tuna industry. There is no deep-sea port facilities, no supporting facilities for the repairs of the vessels, equipment and fishing nets and no industrial cold rooms to support the industry.

(b) We do not have the experience nor the expertise. We are not known to be sea-faring nation.

(c) The fishery industry in itself has not been attractive. The Government has not provided sufficient support and benefits to develop the industry. The current industry is mainly a traditional one. More needs to be done to meet the demands of modern deep sea fishing. However all these weaknesses can be overcome.

9.2 VISION AND ROLE OF GOVERNMENT

- What is needed is a vision and a mission. We have seen the wonders it has done for the automobile industry. We are also aware of the "push" and drive that is needed to achieve
any success. Coming from our Prime Minister, Datuk Seri Dr. Mahathir Mohamad and through the government this vision can be made clear for all to achieve.

- The following Vision and Mission can be achieved.
- Vision:

To be a leading tuna exporter in an environment which sees the development of the tuna industry in an environmentally friendly manner.

The Mission

To provide the support and infrastructure for the development of the tuna industry.

We have the added advantage of knowing the progress and problems that are faced by Thailand, the Philippines and Indonesia. We will be able to learn from their experience. In fact we could leap-frog by using the newest technology available to establish a competitive edge.

The support of the Malaysian government is very important. In his message on 29 November 1996 for the launching of the Second Industrial Master Plan (1996-2005) our Prime Minister, Datuk Seri Dr. Mahathir Mohamad encourages close cooperation between the Government and the private sector. "The cordial Government-private sector
collaboration and partnership will continue to be fostered as it is among the critical success factors for Malaysia to advance into the next decade,” said the Prime Minister.

The 7th Malaysia Plan envisages that the fisheries can be expected to grow at a rate of 3.7% per annum. Deep sea fishing activities will be further developed, particularly through joint ventures with the private sector from other countries. Training in deep sea fishing will be intensified to create more competent fishing crew. In addition, traditional fishermen will be encouraged to participate in deep sea fishing as well as in non-fishing activities.

Integrated fish landing and processing complexes need to be established in strategic locations such as Chendering and Kuantan, while new ones could be established in locations such as Endau-Rompin, Kuala Kedah, Kuala Linggi and Labuan, in order to accelerate the development of deep sea fishing. To attract fishermen to land their catches, these complexes must be equipped with ice factories, market halls and dealer’s offices as well as slipways, vessel maintenance and repair services. In addition these complexes will be integrated with fish processing parks to be developed by the private sector.

Reports from the landings of tuna from our waters as well as similar reports from Philippines and Indonesia, indicate that there is abundant tuna available, especially skipjack
which is suited for canning. We have the resources. We are also endowed with suitable sea fronts that could be developed into suitable deep-sea ports. For example, we have an ideal location in the island of Labuan. The setting up of a deep-sea port on this island will be most appropriate. Furthermore being a tax free port Labuan could offer various incentives to attract development.

Today, Malaysia has made itself known in the world market. The export of our cars as well as our launching of the Multimedia Super Corridor Highway has earned us a good reputation. The fact that canned tuna though made and packed elsewhere is now sent to Malaysia to be labeled speaks volumes for our reputation. Just only very recently, on 21 February 1997, it was announced that the Government will be offering a package of incentives for companies producing goods with Malaysian brand names. The package will include fiscal incentives, flexibilities and other means of support.

We should take advantage of the current situation and proceed to develop the industry here ourselves. Currently there is no processing and very little canning is done here. Most of the canning is done in Thailand as these processes are labour intensive and the cost of labour is cheaper there. However with the introduction of modern technology, there will be available capital intensive machineries which employ automation and robotic technologies that will reduce the need for labour and which will provide greater efficiency.
Furthermore we could always attract and “import” the labour we require from countries where labour is cheap.

The stress on productivity and global competitiveness should be emphasised. We should focus on producing of high value-added products, high level of technological utilisation, efficient use of human resources as well as intensive use of knowledge and information in production processes. We should shift towards areas where we have the competitive advantage. The political climate, the availability of resources and the dream to succeed should give us the edge.

9.3 OPPORTUNITIES

Ongoing changes in the economic and political system of the world will directly or indirectly, influence the development of fisheries in Malaysia. With the WTO (World Trade Organisation), more competitive products are available in the world market. It implies that Malaysia tuna will be continually in demand if it is competitive in quality, price and trade management. Under the WTO regime, and so-called globalised economy, capital and input factors can freely move from one country to another. The aforesaid changes are opportunities if they can be capitalised. They can also be a threat if no action is taken to handle it.
Establishment of trading blocks and agreements could hamper the flows of free trade as aspired by the WTO. New trading block such as AFTA (ASEAN Free Trade Area) can bring about trade diversion and trade creation. AFTA is an association of ASEAN countries namely Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand.

The ultimate objective of AFTA is to increase ASEAN’s competitive edge as a production base geared for the world market. A critical step in this direction is the liberalization of trade in the region through the elimination of intra-regional tariffs and the elimination of non-tariff barriers. This will have the effect of making ASEAN’s manufacturing sectors more efficient and competitive in the global market. At the same time, consumers will source goods from the more efficient producers, thus creating intra-ASEAN trade. As the cost competitiveness of manufacturing industries in ASEAN is enhanced and with the larger size of the market, investors can enjoy economies of scale in production. In this manner, ASEAN hopes to attract more foreign direct investments into the region. This will in turn stimulate the growth of supporting industries in the region for many direct foreign investments.
9.4 THREATS

Evolution in technology will influence the tuna industry. With high technology the production process (fishing and processing) can be undertaken more efficiently. As a consequence, products resulting from such technology are more competitive. The high technology in fishing and processing cannot be avoided. Without employing new technologies in both fishing and processing, we will face problems in our tuna industry.

Whilst we are aware of the opportunities, we should equally be concerned with the threats. Needless to say, the biggest competitors are our neighbouring countries. We have seen how Thailand, the Philippines and Indonesia are looking ahead to develop their tuna industry.

Thailand is specialising in the canning and marketing of its products. Its canners have even introduced Thai flavours and receipes into canned tuna. Recently they introduced tuna sausages into the market.

The Philippines, on the other hand is more concerned with harvesting the tuna from the seas and is at a crossroad. Whilst the industry is experiencing growth, they are
concerned with the need to increase access to international waters. There is a need to conserve and better manage the fish stocks off their own waters.

Indonesia has the resources. It seems keen to move away from exporting of frozen products to processing of fresh and canned products. With abundant cheap labour Indonesia is catching up with Thailand.

9.5 STRATEGIES

In summary we should adopt the following strategies:

1) The Government should play an active role initially in spearheading this whole development. This is too big a task to leave to the private sector to provide the leadership. Privatisation could be an answer. There could also be Smart Partnerships. In any event, the direction should come from the Government.

2) The first step is to ensure we have sufficient number of vessels to harvest tuna. The Government should then assist in the financing of such vessels, either by building or purchasing them. The Philippines sought the assistance of AGRODEV Canada Inc., to assist them in identifying the number of vessels required in harvesting the tuna in their waters. We could seek similar advice. The vessels, both for longlining and
purse seining, should be considered. New vessels now have modern technology which makes the harvesting of tuna easier.

3) There must also be a concerted effort to ensure that the fishing crew will eventually be made up of mostly Malaysians. This has been done in Indonesia. There were not many Indonesians when the industry got started. Today it has more than 80% or more than 2500 local fishermen in the tuna industry. The transfer of technology was also a necessary condition for obtaining approval of licences for fishing.

4) The Malaysian government could ensure suitable deep-sea harbour facilities equipped with the necessary infrastructure needed for the repairs of vessels, nets, cold storages and availability of supplies, etc.

5) The profit potential is great if we process the tuna before marketing them. There is growing interest in Asian countries for value-added tuna products. A study carried out by the University of New South Wales in 1992 has shown that there is significant potential for adding value to Pacific Island tuna by processing them into some speciality dried products.
The table below shows the huge profit margins when there is value-added to the tuna in its raw form. For example, *Katsuobushi*, in flakes, has an approximate raw material cost of Australian $0.50. After it has been processed into *Katsuobushi*, in flakes, can be retailed for Australian $62. In terms of value-added there has been an increase of 12.400 %! Similarly, the increase of value-added for the other products can be seen from the table.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Retail Price/Kg (A$)</th>
<th>Approx. raw material cost (A$)</th>
<th>Value added (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teriyaki Tuna</td>
<td>20</td>
<td>1.00</td>
<td>2,000</td>
</tr>
<tr>
<td>- Tokelau</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Katsuobushi</td>
<td>45</td>
<td>0.75</td>
<td>6,000</td>
</tr>
<tr>
<td>- Sheet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Katsuobushi</td>
<td>62</td>
<td>0.50</td>
<td>12,400</td>
</tr>
<tr>
<td>- Flakes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Katsuobushi /</td>
<td>172</td>
<td>1.00</td>
<td>17,200</td>
</tr>
<tr>
<td>Mixed seasoning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Tuna Piko</td>
<td>320</td>
<td>1.00</td>
<td>32,000</td>
</tr>
</tbody>
</table>

However a feasibility study will have to be carried out to identify the demands of the market in this respect.

*Katsuobushi* is an important traditional tuna product in Japan. It is sliced to eat or used to make broth or as raw materials for seasoning. Only skipjack is used for *Katsuobushi*. Japanese imports of dried skipjack have continued steadily over the last few years. Imports for Solomon Islands processed under Japanese control have almost doubled over the period 1991 - 1994 due to acceptable quality. The dried skipjack imports may take various forms. Due to safety considerations, exports to Japan have to be carried out under the license from a reputable Japanese manufacturer. It is virtually impossible to get into the Japanese market without prior arrangement with a local counterpart. For the manufacturing operations the Japanese partner will usually provide the know how in the form of an experienced operator who will supervise and guide the production process in the initial stages. Definitely, here smart partnership with a Japanese counterpart should be the strategy.

6) Thailand and the Philippines are the world’s number one and two canners respectively. Our “late” entry has its advantages. The key to compete will require finding a niche in the market. The high costs in Europe is “driving” away canners from Europe to our part of the world. We have and can provide the necessary
incentives to attract them. As such the transfer of technology should facilitate our entry into tuna processing. It is interesting to note that waste from the canning process is used in the production of several value-added tuna products such as pet food and fish meal as well as for feed for other animals. There is actually no waste at all.
DEFINITION OF INDUSTRY'S TERMINOLOGY

**Cold storage**: A facility to store frozen products. Depending on the type of product stored and the duration of storage, the temperature is maintained between -20 °C and -60 °C.

**Katsuobushi**: Smoke dried skipjack loins prepared using a traditional process which involves mould induced fermentation. *Katsuobushi* is a Japanese speciality used in seasoning soups and other preparations.

**Loining**: A process which involves separating the trunk of the fish into four muscle blocks - two upper and two lower - along the backbone. Loining in developing countries for export to canneries is a rapidly expanding activity.

**Sashimi**: A Japanese term for prime quality tuna flesh used in a variety of Japanese fish dishes. *Sashimi* is consumed raw or lightly cooked. The main tuna species used for *sashimi* are Bluefin, Bigeye and Yellowfin.