

TECHNICAL COOPERATION PROGRAMME



ASSISTANCE IN MARINE FISHERIES LEGISLATION

Indonesia

Report of the Fisheries Management Specialist

Based on the Work of

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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Summary of Major Conclusions and Recommendations

The need to define "fisheries management"

In Indonesia there is considerable confusion over the term "fisheries management". The term should be carefully defined and the definition should contain the sentiments that fisheries management is objective oriented and that resource sustainability is not the only legitimate objective. For the benefit of less sophisticated resource managers, the definition should be conceptually simple.

It is suggested that in the Indonesian context an appropriate definition could be: "Controls that government places on fisheries activities in support of specific agreed objectives". Subsequently, "management-supporting activities" should then be defined as being those activities necessary for the effective planning, implementation, and enforcement of those controls.

Objectives of fisheries management

It is important that the fisheries law mentions the specific objectives of fisheries management in Indonesia. Because the establishment of objectives is a key policy issue in fisheries, these objectives should be established by MOSEF officials only after considerable discussion.

Decentralization of management authority

With respect to fisheries management, much of the change created by Law 22/99 involves the transfer of "management authority". The precise meaning of this phrase is therefore critically important, but is not defined in Law 22/99.

In the process of decentralization if a province or district places restrictions on the entry of outsiders, a fundamental change in the character of Indonesian fisheries may occur. The decision as to whether under the spirit of autonomy, a change should occur from the present open access situation is very important, and far beyond the scope of the work of an outside consultant. Important high-level policy decisions are required on any limiting of access in the decentralization process.

The policies on restricting access should be made at a high governmental level after considering the relevant factors (Section 4.1). There is some degree of urgency in clarifying the situation due to:

- The longer it takes the national government to articulate a clear policy on the issue, the greater the expectations will grow at the lower levels of government.
- The degree of restriction on outsiders, if any, permitted under decentralization must be articulated by national authorities in order that the present project on fisheries legislation can proceed effectively and conclusively.

Other important aspects of decentralization include:

- The capacity for lower levels of government to manage fisheries resources.
- Evolution in attitude of the national fisheries agency to the role of a service provider.
- The objectives of decentralized fisheries management.
- Inter-province and inter-district management coordination mechanisms.
- Management of highly mobile fishery resources.
- The level of fines which can be levied by provinces/districts.
- Clarifying responsibilities and jurisdiction in enforcement, disposal of licensing fees, and fines from successful prosecutions.
- Mechanisms for coordination of national fisheries management policies.

A change of institutional orientation in DGF/MOSEF	<p>There are two areas in which an evolution in the institutional orientation and staff attitudes could result in fisheries management which is more relevant to the current circumstances:</p> <ul style="list-style-type: none"> • DGF/MOSEF should assume more of a role as the guardian of Indonesia's fisheries resources. • DGF/MOSEF should become more of a service provider to the fisheries agencies in the lower levels of government. <p>Both individuals and the private sector can and do carry out action leading to increased production from fisheries resources. However in many respects only the government can serve as a guardian of the fisheries resources to prevent over-exploitation. If the staff of DGF are largely preoccupied with increasing fisheries production, there appears to be no government agency which has as its major concern the protection of fisheries resources.</p>
Enforcement of fisheries legislation	<p>A key weakness in fisheries management in Indonesia is the enforcement of existing legislation. Many of the problems in the management of fisheries in the country relate to enforcement difficulties and new initiatives, such as improved legislation, will have little positive effect unless this weak link in the system is improved.</p> <p>It is easy to cite the deficiencies in the enforcement of fisheries legislation, and indeed this has been done in a multitude of reports by consultants in the past. Emphasis should therefore be placed on solutions which address the fundamental underlying problems. Five suggestions are offered.</p>
The quality of fisheries statistics	<p>One of the core issues associated with the quality of fisheries statistics is the lack of political will to improve the system. In many developing countries senior decision makers may not realize the importance of the statistics for fisheries and the topic is often thought of as a rather dull and mundane subject. What is required in Indonesia is a sensitization of senior decision makers in MOSEF about the importance of reliable fisheries statistics. Other possibilities for improving the statistical system are obvious to those that are familiar with the system, but all ultimately depend on an increase in political will.</p>
Resource assessment methodology	<p>A major problem is the working concept that the difference between present fish catches and the potential yield represents a surplus which is available for harvesting by additional fishing effort.</p> <p>Although the concept of MSY is widely used in Indonesia, as the fisheries develop and effort increases, the MSY concept becomes less relevant and information from the fishery assumes a greater importance in determining any remaining potential.</p> <p>Those individuals that make the resource estimates should also take on the responsibility of conveying to the users of the information an idea of how accurate the information is.</p> <p>A critical resource assessment difficulty is likely to arise in decentralized management. That is, with little or no ability for provinces/districts to make objective fisheries resource assessments, local governments may be pressured to establish unrealistically high potential figures.</p>
Fisheries management plans	<p>Because fishery management plans could address many of the weaknesses in fishery management in Indonesia, they should be required for all substantial fisheries.</p>

The fisheries licensing system

Because much of fisheries management in Indonesia is based on licensing, difficulties with licensing have negative effects in many areas of the fisheries sector. Rectifying these problems is therefore fundamental in improving fisheries management in the country. The main problems appear to fall into two general areas: lack of clear objectives for licensing and weak enforcement of the licensing requirements:

- The objectives of the licensing system should be clarified. At present the system is nominally about resource protection, but the generation of revenue seems to be where most of the interest lies.
- The licensing system will simply not work if the relatively straightforward requirement for a license cannot be enforced. Section 5.5 of this report makes five suggestions on improving enforcement of licensing requirements.

Comments on specific laws, regulations decrees

Comments are made on:

- Law 9/85 on Fisheries
- Desirable components of a national fisheries law
- Ten other fisheries laws, regulations, and decrees

Apart from the elements contained in Law 9/85, other desirable components of a national fisheries law include:

- The national law should engender in the national fisheries agency a greater sentiment of (a) guardianship of the fisheries resources of the country, and (b) being a service provider to the fisheries agencies in the lower levels of government.
- There should be some statement that management action must be consistent with stated objectives.
- The requirement for fishery management plans for the substantial fisheries should be stated in the national fisheries law, together with the concept that in the plan formulation process the relevant stakeholders should be consulted.
- Because much fisheries management in Indonesia is based on spatial arrangements, there should be some mention in the law on the technique(s) permissible to establish geographic positions.
- For VMS, there should be a statement that the Minister may require that vessels of certain categories shall have installed, maintained and fully operational at all times a VMS transponder and shall be responsible for all operational and maintenance costs of the transponder and cooperate fully in their utilization.
- There should be a requirement that the Minister shall determine in a transparent manner the allowable catch for each of the six groups of fish in the nine management areas.

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1.0 Introduction

The overall objective of project TCP/INS/8922 is to draft primary and secondary legislation that facilitates the implementation of policies designed to achieve sustainable marine fisheries development. Within this context, a fisheries management specialist was recruited to review aspects of fisheries management in Indonesia, focusing on those issues of relevance to a revision of fisheries legislation. Terms of reference for the consultant are given in Appendix 1.

The consultant visited Indonesia during the period June 17 to July 7. Although most of this period was spent in Jakarta, visits were made to Medan (North Sumatra Province), Surabaya (East Java Province), and Denpasar (Bali Province). At these four locations the consultant met formally with 39 individuals to discuss fisheries management issues. In addition to meeting officials from the various levels of government, efforts were made to obtain the views of the commercial, NGO, and academic sectors. A list of individuals contacted is given in Appendix 2.

Major constraints experienced by the consultant were non-availability of key officials and of translations of fisheries-related regulations and decrees. Twenty days is obviously a short period to review the management situation in a country that in some respects is the world's largest fishing nation. This report should therefore be considered a collection of preliminary impressions, rather than a presentation of definitive results.

The consultant carried out work previously on fisheries management in Indonesia under FAO project TCP/INS/4553. During that assignment a report was produced¹ and because many issues discussed are still applicable, portions of that report are used in the present document. In addition to the nine laws/regulations/decrees translated in the earlier work², the Management Specialist and the National Management Consultant, M. Badrudin, translated four decrees during the present consultancy. These and other translations by the two consultants and other agencies appear in Appendix 5.

The present report attempts firstly, to review some basic aspects of fisheries management in Indonesia. Subsequently, specific legislation is examined, focusing on those elements which should be modified or incorporated into new laws and regulations.

2.0 Background

At present there are great changes in the management of fisheries resources in Indonesia. Presidential Decree 355/M of 1999 created the Ministry of Sea Exploration and Fisheries (MOSEF) which has responsibility over fisheries and other aquatic affairs. Law 22 of 1999 gave the authority to regions for the exploration, exploitation and management of marine wealth in defined areas. In addition, there is an increasing amount of attention from international agencies, bi-lateral donors, and NGOs on improving the effectiveness in the management fisheries and other coastal resources of

¹ Gillett, R. (1996). Marine Fisheries Resources and Management In Indonesia With Emphasis on the Extended Economic Zone. Workshop Presentation Paper Number 1, FAO Project TCP/INS/4553, "Strengthening Marine Fisheries Development in Indonesia", 35 pages.

² Badrudin, M. and R. Gillett (1996). Translations of Indonesia Fisheries Laws Relevant to Fisheries Management in the Extended Economic Zone. Technical Paper Number 9, FAO Project TCP/INS/4553, "Strengthening Marine Fisheries Development in Indonesia", 26 pages.

Indonesia. This is also a period of realization that the past trend of expansion of fish catches cannot continue forever and of the need for government intervention to assure resource sustainability. Finally, there is presently a spirit of reform to address some of the problems that have plagued various aspects of Indonesian society and economy, including the fisheries sector.

These new administrative structures and legal regimes, together with changing attitudes create a both a need for more relevant legislation and a window of opportunity for having the proposed legislation adopted. It is, however, also a period of great uncertainty, lacking in clear government directives and policies. The present situation could therefore be considered as both an opportune time, as well as difficult period to revise important fisheries legislation.

3.0 What is “Fisheries Management” ?

3.1 Confusion about “Fisheries Management”

In Indonesia there are many different perceptions of what “fisheries management” actually is. Consider:

- Many people feel that it is all the activities of the government fisheries agencies, while others feel that it is the controls placed on fishing activities. In some cases, it appears to be taken as the management of fisheries development.
- The terms “market-led fisheries management” and “risk-type fisheries management” have appeared in fisheries agencies reports suggesting different perceptions of management.
- One senior government official stated that fisheries management was the control over the interaction between fishermen and resources/habitat.
- In the general public, there is some confusion between the management of a fishing business and fisheries management.
- Sometimes the terms “conservation of fisheries resources” and “fisheries management” are used synonymously, while at other times the terms appear to represent quite different concepts.
- The manager of a large internationally-funded fisheries project in Indonesia has indicated that the term fisheries management should only refer to action leading to sustainability of the resource, while an international treaty to which Indonesia is likely to become a signatory is concerned with “conservation and management”, implying that management are actions related to subjects other than sustainability.
- Several international observers of the fisheries situation in Indonesia have commented that fisheries management is very misunderstood in the country.
- In the Bahasa language “fisheries management” is translated as “pengelolaan perikanan”, which is very wide and is often taken to mean all DGF activities.

In Indonesia at present, it is especially important to define in law the term “fisheries management”. This is because:

- As Indonesian fisheries become more fully exploited and as interest in promoting fisheries management increase, it is critically important that all parties involved are actually referring to similar concepts.

- In a country where the principles of fisheries management are not well understood, a clear definition of fisheries management could promote a greater understanding of the need for, and benefits of fisheries management.
- Some individuals have stated that the ambiguity of the term has been the justification for placing “conservation” in another ministry outside the one responsible for fisheries and having that agency continue to focus on production.
- Under the decentralization law (Law 22/99) it is stated that the regions shall have the “authority to manage marine wealth”. Discussion during the consultant’s visit indicate there are considerable differences in opinion as to what this actually is, and clarification is urgently required.
- It was also noticed during the consultant’s travel that at the province/district level, the actions that officials referred to as “fisheries management”, apparently had no clear objectives.

In summary, because of the confusion surrounding this terminology and increasing importance of management in the future of Indonesia, it is very important to clearly define the term “fisheries management” in the fisheries law.

3.2 Defining “Fisheries Management”

The various fisheries-related laws were examined for a clear definition:

- Law 9/85: “Management of fish resources” is all efforts intended to contribute to the optimal and sustainable use of fisheries resources.
- Decree 15/1984: “Management” - all efforts and actions by the Government with a view to the directing and controlling the benefits that are obtainable from the natural resources in the Indonesian Exclusive Economic Zone.
- Decree 996/1999: “Fisheries resource management” is all efforts to attain the objectives that fisheries resources be utilized optimally and continuously.

There appear to be problems with the above definitions. There are advantages of having a new definition that is simpler, clearer, convey basic concepts, and reflects the reality of past fisheries management in the country. Ideally, such a definition would include:

- The idea that there should be specific objectives for management, and not management for management’s sake. This is to address the situation of management without objectives; there are presently cases in Indonesia where vessel licensing is required, but this does not seem to be related to any objective.
- In addition to resource sustainability, there are other legitimate objectives of fisheries management. The 1970s trawl ban has been cited as one of the most effective examples of fisheries management in Indonesia, but it appears that the objective was the protection of the interests of small-scale fishermen, and not resource sustainability.
- For the benefit of those who are unfamiliar with the concepts, there are advantages of conceptually simplifying the term so that “management” is various types of controls, while there are management-supporting activities (data gathering, surveillance, enforcement).

The FAO Code of Conduct for Responsible Fisheries does not offer much enlightenment on the definition. Although the Code uses the term “fisheries management” 36 times in

the text, it is not defined. However, in associated technical guidelines³ fisheries management is defined as: "The integrated process of information gathering, analysis, planning, consultation, decision-making, allocation of resources and formulation and implementation, with enforcement as necessary, of regulation or rules which govern fisheries activities in order to ensure the continued productivity of the resources and accomplishment of other fisheries objectives". Although this definition has some of the required attributes mentioned in the preceding paragraph, there are advantages of a definition of fisheries management that is somewhat simpler, especially in the era of decentralization where management authority is to be devolved to levels of government where there is much less technical capacity and less familiarity with abstract management principles.

It is suggested that in the Indonesian context an appropriate definition could be: "Controls that government places on fisheries activities in support of specific agreed objectives". Subsequently, "management-supporting activities" should then be defined as being those activities necessary for the effective planning, implementation, and enforcement of those controls.

3.3 Establishing Objectives for Fisheries Management

Subsequent to establishing a clear and simple definition of fisheries management, it is important that the law also establish, in both general and specific terms, the objectives of fisheries management. The present legal provisions are relevant:

- The Indonesia Constitution states that "land and water and natural wealth contained there in shall be in State control and *used for the greatest possible of prosperity of the people*".
- Law 9/85 states: "the government is to carry out sound and integrated fisheries resource management *with the objective of sustainability of fish resources and their environment for the benefit of Indonesian people*"

The problem of the specific objectives established by Law 9/85 is the implication that the *only* objectives are the sustainability of the resources/environment. Other legitimate objectives (some of which have been the *de facto* objectives of much fisheries management in Indonesian in the past) include generation of revenue, protection of small-scale fishermen, providing food security, and creation of employment.

In contrast with the Indonesia situation, it should be noted that the Philippine Fisheries Code of 1998 clearly establishes five objectives for the fisheries sector.

It is important that the fisheries law mentions specific objectives (possibly in some hierarchy), but as the establishment of objectives of fisheries management (and their priority) is a key policy issue in fisheries, these objectives should be established by MOSEF officials only after considerable discussion. Possible objectives of fisheries management include:

- Protecting the sustainability of fisheries resources
- Generation of government revenue
- Protection of the interests of small-scale fishers

³ FAO (1997). Fisheries Management. FAO Technical Guidelines for Responsible Fisheries, Number 4, Food and Agriculture Organization of the United Nations, Rome.

- Safeguarding the food security of rural people
- Maximizing fisheries production and associated economic benefits

It should be stressed that setting the objectives of fisheries management should be one of the most important activities of the fisheries agencies. Several countries neighboring Indonesia have spent many months in a formal process to deliberate and settle on objectives for the management of their fisheries.

4.0 Decentralization and Fisheries Management

Law Number 22 of 1999 regarding regional governance has major implications for fisheries management in Indonesia. Of special relevance are:

- Article 2: The territory of the Unitary State of the Republic of Indonesia shall be divided into autonomous Provincial Regions, District Regions, and Municipal Regions.
- Article 3: The area of Provincial Regions shall consist of inland area and marine area of twelve nautical miles measured from the coastline toward the open sea or island waters.
- Article 10: Regions have the authority to manage national resources located in their area and shall be responsible to maintain the environment conservation in accordance with laws and regulations. Regional authority in marine areas as intended in Article 3 shall cover exploration, exploitation and management of marine wealth to the extent of the aforementioned marine area boundaries. The authority of District regions and Municipal regions shall extend one-third of the marine areas of the Provincial Regions.
- The Official Elucidation of Law 22: Specifically for traditional fish catching, marine area shall not be limited.

Prior to a discussion of the fisheries management implications of this autonomy, it is necessary to understand both the details of the decentralization process and specifics of the authority to be transferred. In order to determine this, meetings were held with officials of the Ministry of Autonomy, MOSEF, and fisheries services of the provinces/districts. In addition, MOSEF documents on the subject were studied. These discussions suggested there is a large difference in opinion between the national ministries and lower levels of government as to the actual changes to take place in decentralization. In the context of the consultant's discussions, the following generalizations can be made:

- Because much of the changes involve the transfer of "management authority", the precise meaning of this phrase is critically important. Considerations on defining "fisheries management" are covered in Section 3 of this report.
- Although there is considerable uncertainty, discussions with the national level officials suggest they are thinking of devolving specific tasks/activities to provinces/districts, while those in the districts anticipate receiving considerable power.
- According to one discussion paper by MOSEF⁴ on the partitioning of fisheries responsibilities between the central and provincial government, it appears that

⁴ This semi-confidential document obtained from MOSEF suggests a partitioning of responsibilities between the central government (32 items) and provincial governments (20 items).

the Ministry is focusing on the more tangible activities of the former DGF, while not clarifying the details of the very important (but more abstract) division of fisheries management responsibilities. While the paper gives considerable details on 32 activities to be carried out at the national level and 20 for the provincial level, the details of the partitioning of management authority are not clear:

- The central government should establish *inter alia* (a) the norms, policy, guidelines, and standardization in the fields of exploration, exploitation, protection, management, and control of fisheries resources and (b) standards for management and natural resource protection.
- The provinces should be responsible for conservation and management of fish stocks and fish sanctuaries in the area between 4 and 12 nautical miles.
- At the various levels of government there appears to be great enthusiasm for receiving power (citing that the particular level is closer to the action) while also indicating reluctance to devolve power to a lower level (citing lack of administrative/technical capacity at the lower level).
- The most contentious issue in decentralization is likely to be whether the regional entities can restrict the entry of outsiders into their marine areas. Due to its importance, this issue is explored further in Section 4.1 below.

In the interface between decentralization and fisheries management, there appears to be much uncertainty on many of the issues. This is likely to be due to a combination of three factors: (1) the complexity of the situation, (2) government policies on the issues are not fully developed and are still in the process of evolving, and (3) in the short period of the consultancy it was not possible to interview a sufficient number of people to gain a thorough understanding of the situation.

Nevertheless, certain observations on the fisheries management implications of decentralization can be made at this point regardless of the apparent lack of clarity of the situation. These observations are discussed in the following sections in two categories:

- Open access vs. restricted access to fisheries resources
- Other issues which must be addressed

4.1 Open Access vs. Restricted Access in Decentralization

In the process of decentralization if a province or district places restrictions on the entry of outsiders, a fundamental change in the character of Indonesian fisheries may occur. The restrictions may consist of outright bans on outsiders, charging them extra fees, or placing extra gear or vessel requirements beyond those mandatory for local residents. This would alter one of the basic characteristics of fisheries in Indonesia – the open access nature in which there is generally no preferential treatment of groups of fishers. This major shift is described in an ADB/Co-Fish document⁵:

“The idea of establishing local boundaries on the sea is not fully in conformity with the grand concept of Archipelagic State or *Wawasan Nusantara*. According to this grand concept, the sea as liquid media is perceived to be functioning as a unifying factor to make the existing thousands of Indonesian islands get together to form a

⁵ Diraputra, S. (2000). Regulatory regime of coastal fisheries management in the District of Bengalis. Technical Report of the Legal Specialist, ADB Co-Fish Project.

single unit of land and water. Therefore, for whatever reasons, any efforts to establish territorial divisions within the marine space of the Indonesian Archipelago will be contrary with the grand concept of national unity of the country as a whole."

It also should be pointed out that Law 9/85 gives the minister responsible for fisheries the power to make regulations on many aspects of fisheries (fishing gear, technical specifications of fishing vessels, amount of fish catch, and prohibitions dealing with size/species, fishing grounds, zones, and seasons), but not specifically about restricting the access of certain groups of fishers to resources.

On the other hand, it is difficult to imagine that devolution of management authority to the provincial and district levels would not include some form of preferential access for local residents. There are also other powerful arguments for restricted access, including:

- One of the more effective cases of fisheries management in Indonesia seems to be the Bali Straights sardine fishery where participation is limited to fishers from only two areas.
- Given the poor or non-existent enforcement in most Indonesian fisheries, restricting access may be one of the few effective fisheries management tools available.
- Even if the enforcement situation could be strengthened, most other management tools either do not address the issue of excess fishing pressure (i.e. zonation by vessel size and gear type) or are ineffective at preventing excess effort (i.e. limited licensing).
- Restricting access results in special use rights for resident groups and those groups have both an interest in enforcing these rights and a have a long-term interest in the well-being of the resource. Both of these create favorable conditions for effective fisheries management.

In discussions of restricted access in Indonesia, biological characteristics are often used as argument against local management; i.e. that restriction of access would be ineffective given that the management area does not encompass the full range of the stocks. Although largely true for the highly mobile tunas, the prevention of localized excess effort could do much to alleviate decreases in abundance of many or most of the target species of the small-scale fisheries.

The decision as to whether under the spirit of autonomy, a change should occur from the present open access situation is very important, and far beyond the scope of the work of an outside consultant. Important high-level policy decisions are required on any limiting of access in the decentralization process. These decisions should be made by Indonesian leaders and considerations should include:

- The social conflicts generated could be considerable, at least in the short term.
- The position of fishers from land-locked districts should be taken into account
- Geographic proximity to the resource may not be the only legitimate criteria for limiting access in a country with a long heritage of movement of fishers

It should also be pointed out that lower levels of government can be empowered to make fisheries management decisions that fall somewhat short of the power to exclude outsiders. Two of these schemes are:

- A system mentioned by several DGF staff which roughly mirrors the UNCLOS provision on the obligations to permit foreign fishing activity. That is, the fishery

resources of the provinces/districts are for the use of local residents, except in the case where the resources are being under-utilized, in which case outsiders are allowed to harvest the surplus.

- A system in which the local government is allowed to make management rules for the exploitation of fisheries resources. The idea is that this low level of government is the most familiar with the resource, with the issues associated with exploitation, and has a genuine long-term interest in the well-being of the resources. The local rules are, however, applied equally to all groups of fishers, both local and outsiders, and therefore there is no preferential access for any group.

The policies on restricting access should be made at a high governmental level after considering the relevant factors. There is some degree of urgency in clarifying the situation:

- Firstly, the longer it takes for the national government to articulate a clear policy on the issue, the greater the expectations will grow at the lower levels of government. According to district level officials, the incidence of local fishermen taking violent action against intruding fishermen from other districts/provinces is increasing.
- The degree of restriction on outsiders, if any, permitted under decentralization must be articulated by national authorities in order that the present project on fisheries legislation can proceed effectively and conclusively.

4.2 Other Important Fisheries Management Issues in Decentralization

Although the degree of restriction of access to fisheries resources is an important issue in the decentralization process, there are several other issues related to fisheries management which must be addressed. These include:

- The capacity for lower levels of government to manage fisheries resources
- Evolution in attitude of the national fisheries agency to the role of a service provider
- The objectives of decentralized fisheries management
- Inter-province and inter-district management coordination mechanisms
- Management of highly mobile fishery resources
- The level of fines which can be levied by provinces/districts
- Clarifying responsibilities and jurisdiction in enforcement, disposal of licensing fees, and fines from successful prosecutions
- Mechanisms for coordination of national fisheries management policies

The capacity and technical competence for lower levels of government to carry out fisheries management are important considerations, and are often used as justification by higher levels of government for a reluctance to devolve authority. Tan et al. (1996)⁶ examined the qualifications at the various levels of the government fisheries agencies and the results are given in Table 1.

⁶ Tan, C.K., R. Gillett, J. Sciortino, and M. Shawyer (1996). Strengthening Marine Fisheries Development In Indonesia - Final Report. FAO Project TCP/INS/4553, "Strengthening Marine Fisheries Development in Indonesia", FAO, Rome, 82 pages.

Table 1: Manpower in Fisheries Institutions

No.	Location	Degrees		Non Degrees		TOTAL
		IV	III	II	I	
1	Directorate General of Fisheries	70	294	215	11	590
2	Development Centres	5	148	345	89	587
3	Projects	3	32	45	1	81
4	Government Owned Company	7	68	189	1	265
5	Fishing Harbour	12	167	616	53	848
6	Provincial Fishery Services (Central Government)	17	802	1249	0	2068
7	Provincial Fishery Services (Local Government)	76	351	422	2	851
Total		190	1862	3081	157	5290

Note : I, II, III and IV represent grade of service with IV being the highest grade

With 1246 fisheries agency staff at the provincial fisheries services with degrees in fisheries-related fields, the situation with respect to general education level in the provincial agency appears relatively good. This observation is consistent with the opinion of a noted fisheries academic⁷, who also notes that in general the education level in the provincial agencies decreases with the distance away from Java and the level declines markedly descending to the district level.

It should be noted that education level in fisheries should not be equated with competence in fisheries management, or even an understanding of the need for and value of fisheries management. In the opinion of several fisheries researchers, expertise in resource assessment is one of the most critical deficiencies at the district and provincial levels. This contention was supported by the visits to Medan, Surabaya, and Denpasar during the consultancy.

In general, there is a strong case for enhancing the capability in fisheries management at the provincial/district levels. This could be done by providing training courses in fisheries management, transfer of technology from MOSEF, and possibly by decentralization of some staff from MOSEF Jakarta. In addition, there appears to be considerable interest in the donor community to provide support for enhancing regional fisheries management capacity.

The effectiveness of decentralized management has much to do with the corporate culture of MOSEF. In some respects, DGF has in the past assumed an attitude of proclaiming or proscribing on fisheries management issues. Because of the devolution of authority and of the capacity situation in provinces/districts, MOSEF must undergo a shift in attitude to become a service provider to the fisheries agencies in the lower levels of government. Section 5.1.1 discusses this and other desirable changes in the corporate culture of the national agency responsible for fisheries management.

Another important consideration concerning capacity for fisheries management at the provincial/district levels is the objective of the fisheries management to be carried out.

⁷ Professor D.Monintja, personnel communication, June 2000

For example, much of the present management (i.e. the licensing system) appears to have as a major objective the generation of government revenue. The technical skills required for this objective are considerably less sophisticated than if the objective of management is the protection of the sustainability of the resources.

This introduces the subject of objectives. Ideally, under decentralization management authority is devolved to lower levels of government in which the officials are more sensitized to changes in resources and are closer to the communities that have a long-term interest in the sustainability of the fisheries. It is, however, quite possible that in some regions officials will have the sole objective of deriving the maximum revenue from the fisheries and the resources may consequently suffer. This is an issue that may require detailed guidelines from the central government.

Coordination of fisheries management between provinces and between districts will become increasingly important under decentralization. In the past there has been a system of Coordination Forums for Management of Fisheries Resources (FKPPS). Because these have been fairly loose arrangements, under decentralization there is a need to give inter-province and inter-district cooperative management arrangements a solid legal basis. Lessons learned from existing cooperative arrangements (i.e. Bali Straight sardinella fishery) should be incorporated into the new systems.

Fisheries for sedentary species and species with a localized stock structure can generally be managed within relatively small geographic areas, which is compatible with decentralization. On the other end of the spectrum, the management of species which are highly mobile require nation-wide or international management arrangements for effective management for sustainability. For this reason, provision should be made for the management of tuna by some form of national management body. Cooperation will be required with international tuna management bodies in the east (MHLC, see Section 5.6) and in the Indian Ocean.

Law 22/99 Article 71 limits the fines imposed by regional regulations to a maximum of five million rupiah. This level of fine (US\$555 at the present exchange rate) appears to be quite low and may not serve as an adequate deterrent for industrial scale fishing operations, which appear to be some of the worst offenders at the present time.

On the other hand, representatives of large commercial fishing interests have expressed the impracticality of obtaining licenses and complying with the regulations of a multitude of different jurisdictions.

From discussions with central government officials and visits to three provinces, it appears that there is an urgent need to clarify three areas:

- The destination of funds received from licensing fees – there are advantages of having at least some of the funds earmarked for fisheries management purposes.
- Jurisdiction of enforcement of fisheries legislation – without improved clarity and an efficient partitioning of responsibilities, it is unlikely that the present dysfunctional system will improve (Section 5.2.1).
- The disposal of fines from successful fisheries prosecutions – if part of the funds can be retained at the local level, an incentive is created for diligent enforcement of fisheries rules.

Although the central government authorities may have endeavored to provide some detail on these three issues, there appears to be great differences in opinion of the situation between individuals in the central government agencies and those in the regions.

The general idea of the central government for the decentralization appears to be a coordination of the various fisheries management activities under a national framework, where certain policies are clearly defined and are to remain consistent throughout the country while flexibility is allowed for other issues. The difficulties associated with the administration required to insure standardization of the important fishery management policies in over 300 districts should not be under-estimated. The national policy coordination mechanisms become critically important.

In Section 5.4 the need for fisheries management plans are discussed. There appears to be at least some potential for the management plans to act as policy coordination mechanisms. That is, a requirement to have a plan in place before any management action is taken, and the use of template fisheries management plans in which certain elements are fixed by the central government and other components of the plan are to be determined by local authorities.

5.0 General Issues in Indonesian Fisheries Management

Prior to a discussion of facets of fisheries management in specific legislation in Section 6, a review of general issues in Indonesian fisheries management is given below. The intention is that, although these topics may not be directly connected to the legal situation, legal specialists undertaking modifications of the fisheries laws should at least be aware of these topics and their implications.

The important general issues in Indonesian fisheries management include:

- A change in the institutional culture in DGF/MOSEF
- Chronic problems: enforcement and fisheries statistics
- Resource assessment methodology
- Fisheries management plans
- Fisheries licensing

5.1 A Change of Institutional Orientation in DGF/MOSEF

In countries throughout the world, large government agencies frequently have difficulty in making internal adjustments in response to rapidly changing times. Indonesia is no exception. It appears that there are two areas in DGF where an evolution in the institutional orientation and staff attitudes could result in fisheries management which is more relevant to the current circumstances. These areas are:

- DGF/MOSEF should become more of a service provider to the fisheries agencies in the lower levels of government.
- DGF/MOSEF should assume more of a role as the guardian of Indonesia's fisheries resources.

5.1.1 Providing Services

In Section 4.2 the point was made that there is little capacity for fisheries management in the regions, but that under decentralization the regions will be receiving considerable management authority. In order to cater for these changing circumstances, DGF may need to change its stance from what could sometimes be described as one of proclaiming or proscribing to the lower levels of government, to one offering assistance where it is needed. In short, becoming more oriented to providing services to lower levels of government. This could involve increased involvement in workshops for the transfer of management technology⁸, more frequent visits to the regions, greater attention to ascertaining the needs in the provinces/districts, a rearrangement of the work programmes to be more oriented to the regions, and perhaps even a re-deployment of a substantial number of staff to areas outside of Jakarta.

This sentiment of increased emphasis on providing services is applicable for not only DGF but also the fisheries-related research institutes of MOSEF. Research should become more oriented to the management needs of the regions, especially in providing resource assessment. In this regards, it should be noted that two of the provinces visited during the consultancy, East Java and North Sumatra, are still using resource assessments made two decades ago even though newer assessments have been made.

5.1.2 The Guardian of Indonesia's Fishery Resources

One very notable feature of the DGF is its emphasis on increasing production from fishery resources. The activities of DGF appear to be largely oriented to development, increasing the harvesting levels, promotion of fleet growth and mechanisms to harvest all of the potential in the major resource categories. In short, the goal of fisheries management in Indonesia has been to increase the production from the fishery resources. This seems to be well-engrained in the institutional orientation of DGF.

As mentioned in Section 3.3, there are several legitimate objectives of fisheries management in Indonesia, including both protecting the sustainability of fisheries resources and maximizing fisheries production and associated economic benefits. A problem occurs when the production objective interferes with the resource protection objective. There are two ways in which this may happen:

- The DGF's work programme is largely oriented to the goal of increasing production, which means that less attention can be focused on resource protection.
- There is the possibility that the enthusiasm to increase production may compromise DGF's objectivity for its resource protection functions. Appendix 3 contains what could be an example of this. It shows that the enthusiasm for promoting vessels may be reducing the effectiveness of the licensing system to prevent excess effort.

In reconciling the management objective of maximizing production with the objective of resource protection, DGF is required to prioritize these two goals. From the consultant's

⁸ Flewelling (1999, FAO Fishcode Project) suggests the development of a course in the art of fisheries management.

limited exposure to the internal workings of DGF, it appears that much more importance is given to maximizing production. However the basic fisheries law of Indonesia, Law 5/85 seems to attach greater importance to resource protection as it states "the government is to carry out sound and integrated fisheries resource management with the objective of sustainability of fish resources and their environment for the benefit of Indonesian people".

Another important issue concerns the essential role of government – to perform functions that individuals or the private sector are unable to do. Both individuals and the private sector can and do carry out action leading to increased production from fisheries resources. However in many respects only the government can serve as a guardian of the fisheries resources to prevent over-exploitation. The problem is that DGF appears eager to fulfill its production-encouraging role (which other sectors can also do) while downplaying its resource protection role (which only government can realistically do). If the staff of DGF are largely preoccupied with increasing fisheries production, what government agency then has as its major concern the protection of fisheries resources ?

Finally, some comment should be made about altering the objective of "promotion of fisheries production", to a modified objective of "promotion of sustainable fisheries production". Several individuals have mentioned that this new goal will rectify past problems. Unless a major shift in institutional orientation and staff attitudes takes place along with the insertion of the single word "sustainable", the net result may be very little change in the way DGF addresses its resource protection responsibilities.

In summary, there appears to be a strong case for a change in institutional orientation of DGF to become the principal guardian of the fisheries resources of Indonesia.

In fairness, it should be noted that some change in DGF has taken place on this issue in the last few years. Some observers outside DGF have noted that DGF is taking a greater interest in resource sustainability. This has apparently come about as a result of both criticism of DGF's past attitude and influential individuals within DGF being more assertive on the need to enhance resource protection work.

To further change attitudes and orientation it is suggested:

- The individuals within DGF who have been vocal about the need for greater commitment to resource protection be placed in positions where they can continue their contribution to altering the institutional culture of DGF.
- In any re-drafting of the fisheries law, there should be a clear and unambiguous statement that the primary function of the national fisheries resource management agency should be resource protection.
- Groups such as NGOs and others concerned about unsustainable resource use be given an opportunity to influence, or at least comment on, the major decisions on resource use. In this regard, the empowerment of NGOs by the environmental management law (Section 6.2.1) should be noted.

5.2 Chronic Problems: Enforcement and Fisheries Statistics

Most of the international fisheries missions to visit Indonesia in the last two decades have made comments about the necessity for improving fisheries enforcement and for improving the quality of the fisheries statistics. Unfortunately, it appears that little

progress has been made. The decentralization process, the new ministry, several donor initiatives, the reform process in Indonesian governance, and the present fisheries legislation project may create new opportunities to address these two chronic problems.

5.2.1 Enforcement of Fisheries Legislation

A key weakness in fisheries management in Indonesia is the lack of enforcement of existing legislation. Many of the problems in the management of fisheries Indonesia relate to enforcement difficulties and new initiatives, such as improved legislation, will have little positive effect unless this weak link in the system is improved. Much has been written about fisheries enforcement in Indonesia⁹, but a few additional comments are warranted. These are in the areas of:

- Jurisdiction/responsibilities in fisheries enforcement
- The failure of the licensing system
- Vessel markings
- Vessel monitoring
- Address fundamental problems of fisheries enforcement

The jurisdiction and responsibilities in fisheries enforcement seem to be very confused. As evidenced by the visit to North Sumatra Province. Provincial fisheries officials were unsure of the enforcement responsibilities in their newly-acquired 12-mile fisheries management zone. In addition, the present involvement of the provincial fisheries services in fisheries enforcement is apparently quite limited. Data from the East Java Provincial Fisheries Service¹⁰ for the 12 month period ending in April 2000 indicate the type and number of cases where they were involved in fisheries enforcement. This consisted of blast fishing (3 cases), cyanide fishing (5), use of mini-trawl gear (3), fishing zone violations (7), and infractions of rules concerning fixed light fishing. It is notable that this agency, with 250 staff and working in a region where there is in excess of 35,000 fishing vessels, was only involved in 20 cases of fisheries enforcement. Also noteworthy is the fact that there were no cases recorded involving fishing by unlicensed vessels.

New or modified fisheries legislation should contain a clear statement of responsibilities, authorities, and jurisdictions in fisheries-related enforcement. Because MOSEF has a special interest in fisheries (as oppose to the Navy with a wide range of priorities), the role of MOSEF in enforcement should be strengthen and clarified.

Much of fisheries management in Indonesia is based on licensing. Although the enforcement of the requirement for a vessel to possess a license appears straightforward, compliance is very weak. Unless there is better enforcement of the relatively simple licensing requirements (i.e. prosecution of unlicensed vessels), other initiatives in fisheries management (VMS, data improvement, linking licensing to resource availability) are not likely to succeed. Therefore as a priority, steps should be taken to improve compliance with this fundamental requirement. These could include:

- Stiffer penalties for unlicensed vessels

⁹ For example, Flewwelling, P. (1999). Report on Travel to Indonesia. FAO Fishcode Project, Mission Report No.31, Food and Agriculture Organization of the United Nations, Rome. There are other reports on fisheries enforcement in Indonesia by COREMAP, ADB, FAO, and the Australian government.

¹⁰ East Java Provincial Fisheries Service (2000). Daftar Laporan Pelanggaran April 1999 S/D. Maret 2000.

- Incentives for enforcing the licensing requirement, or conversely, penalties for officials for non-enforcement
- Allowing in-port enforcement of the licensing requirement by the fisheries agencies
- Having a portion of any licensing fee stay at the level of government that supervises the license-enforcing officials
- Making unlicensed vessels easier to detect

The subject of making unlicensed vessels easier to detect introduces the topic of vessel markings. Much fisheries management in Indonesia is based on spatial arrangements: (a) under decentralization the districts have 4-mile zones, and provinces have 12 mile zones (b) Minister of Agriculture and Fisheries Decree No.392 of 1999 establishes three fisheries zones based on the distance from land. Vessel markings are crucial for establishing both which vessels are licensed and what zones they are licensed for. Markings are also important for the effectiveness of surveillance at sea, as much information can be determined about a vessel without having to go through the boarding process.

- Ministry of Agriculture Decree number 392 establishes a coloration system¹¹, but this does not enable identification of specific vessels or assist in compliance with the licensing system.
- Ministry of Agriculture Decree Number 996 of 1999 states: "For surveillance purposes, every fishing boat or fish transporting boat doing fishing or fish transportation are obligated to use identification sign in according with the used gears as given by the provisions". It is unclear what "the provisions" refers to.

It is therefore recommended that all licensed vessels should be marked in accordance with the 1989 FAO standard specifications for identification and marking of fishing vessels¹². The enforcement of this can be simplified by requiring a picture of the vessel properly marked on the license application.

A new national MCS programme is about to be adopted by MOSEF. According to officials of the Ministry, a vessel monitoring system (VMS) is a central feature of the new programme, in which all non-traditional craft greater than 30-GT must carry VMS transponders. The concept is that MOSEF will not issue a license to a vessel unless: (a) the vessel transmits VMS data as required (b) the vessel's past fishing has been in the zones where it is authorized. Although this system has many positive features and should certainly be promoted, the following should be noted:

- This new scheme does not get around the problems of the weak enforcement of the licensing requirement. In fact, it is highly dependent on compliance with licensing.
- As VMS basically produces information on vessels with transponders, enforcement at sea of illegal vessels (a weak point in the present system), is still quite necessary.

¹¹ For example, under the decree all fishing vessels permitted in the second fishing zone must be marked with the color yellow on the hull a minimum of one-quarter of the topsides on both the right and left sides.

¹² More complete information on vessel marking is available in FAO Fisheries Technical Paper No.338

- MOSEF should not underestimate the magnitude of the task associated with commencing a VMS system involving thousands of vessels¹³, and subsequent use of the information.

It is easy to cite the deficiencies in the enforcement of fisheries legislation, and indeed this has been done in a multitude of reports by consultants in the past. Emphasis should therefore be placed on solutions which address the fundamental underlying problems. Some thought should be given to:

- Having those groups of people who are negatively affected by weak enforcement have some input into the enforcement arrangements. This could be done by having the negatively affected groups participate in the development of fisheries management plans (which include enforcement, Section 5.4) or having mechanisms so that these groups are able to effectively complain to the entity overseeing the enforcement agency¹⁴.
- Providing incentives for enforcement. At present there appear to be few incentives for enforcement, or even negative incentives. It would be especially important to provide incentives to the Navy. Monetary incentives are not always required, as promotions can be effective.
- Providing incentives for prosecution. If at least a portion of the fines from successful prosecution could be retained by, for example, the districts conducting the prosecution, there would be strong motivation for effective prosecution.
- Generating political will for better enforcement. In other countries this has been done by adding up and publicizing the costs of poor enforcement.
- Generating publicity for enforcement activities. A powerful tool for encouraging compliance is the media coverage of the fate of those individual apprehended and successfully prosecuted.

In addition to measures which address the fundamentals, the following is also suggested:

- Build on successful cases. Although the cases of effective enforcement of Indonesian fisheries legislation are not common, there are at least some (i.e. Komodo area). The factors leading to success (in the Komodo case, incentives and publicity) should be incorporated into other enforcement programmes.
- Make use of the enforcement-related findings of the COREMAP and Co-Fish projects as they become available.
- Make greater use of the administrative aspects of licensing to encourage compliance.
 - "no data, no license"
 - "no proper vessel markings (demonstrated by a photograph), no license"
 - "no VMS data, no license"
- Undertake a pilot project of enforcement improvement at one location. Perhaps through donor resources, enhance the enforcement in a discrete fishery as a positive example of what could be done.

¹³ According to 1997 DGF statistics, there are 3,381 fishing vessels larger than 30 GT in Indonesia. According to DGF licensing figures there were 7,531 vessels larger than 30 GT licensed by DGF to fish in Indonesia.

¹⁴ Restrictions on access by outsider groups are characteristically enforced quite well because the negatively affected groups (ie. locals) are often involved in enforcement process, albeit sometimes without a legal basis.

- Increase the level of fines for fisheries offenses. The present levels do not appear to provide a deterrent¹⁵, nor are they large enough to partition between agencies or levels of government in an incentive programme.
- BAKORKAMLA (the government board that coordinates all enforcement activities at sea) should be strengthened through a regulation or Presidential decree. Presently, the board exists simply by virtue of an exchange of letters between concerned Ministers.
- It should be recognized that the small-scale inshore fisheries have much different enforcement problems and opportunities than the larger scale commercial fisheries. As much as practical, enforcement related to small-scale fisheries should be devolved to the community level. The results of the COREMAP and Co-Fish projects should be especially useful in addressing enforcement issues in these fisheries.

5.2.2 The Quality of Fisheries Statistics

The other major chronic problem in the management of fisheries in Indonesia is the quality of the fisheries statistics. Fisheries statistics cover production, production units, and socio-economic data for marine, inland open water, and aquaculture operations. As with fisheries enforcement, many of the international fishery missions to have visited the country in recent years have commented on the quality of fisheries statistic. These include:

Bettencourt and Lundin (1994): "Regular monitoring of fishing stocks can considerably be facilitated by an improvement in the reliability of the catch and effort statistics".

Agrodev (1994): Major constraints for fisheries management in Indonesia include a lack of statistical information on the EEZ fisheries.

Martosubroto (1995): "Reliability of assessments very much depends on data and information used as a base. Therefore, it is of great importance that fishery statistics be enhanced to improve their reliability".

Tan et al. (1996): "The sub-directorate of data and statistics has to be beefed up..... Focus will also be given to the collection of data on fisheries in the EEZ. Presently, this is not done on a routine basis. Compilations are made from whatever reports that are provided by fishing companies without checking for accuracy. As a result, there is insufficient reliable data on the fishing activities in the EEZ."

Gillett (1996): "Virtually all missions visiting Indonesia in the past decade to review marine fisheries resources, stock assessment, or fisheries management have concluded that there is an urgent need for better data from the existing fisheries. The situation is especially acute in the EEZ.....Even though tuna is the second most important fishery commodity exported from Indonesia, due to lack of data it is not possible to make reasonable fleet expansion plans, address crucial questions raised by artisanal fishermen concerning falling catch rates, or effectively cooperate internationally with countries that share the resource."

¹⁵ The maximum level of fine for an environmental offense (Law 23/97) is Rp. 750 million, or 7.5 times greater than for a fisheries offense.

Venema (1997): "The estimates of the potentials of skipjack and other tunas as made in the 1991 report therefore have to be classified as pure guesswork, not based on factual information. A further aggravating factor is that the statistics are most likely not reliable and that therefore the gap between the so-called 1991 potential and the 1992 landings may not exist at all..... It is not clear how the group of researchers has been able to produce estimates of the potentials of skipjack and other large tunas. There is a consensus among tuna specialists that at this stage of knowledge of these resources nobody can make reasonable predictions of the potentials of these species....Therefore, the Workshop had to come to the conclusion that much emphasis should be placed on better data collection, through improvements in the statistical data collection system, observer and log book systems."

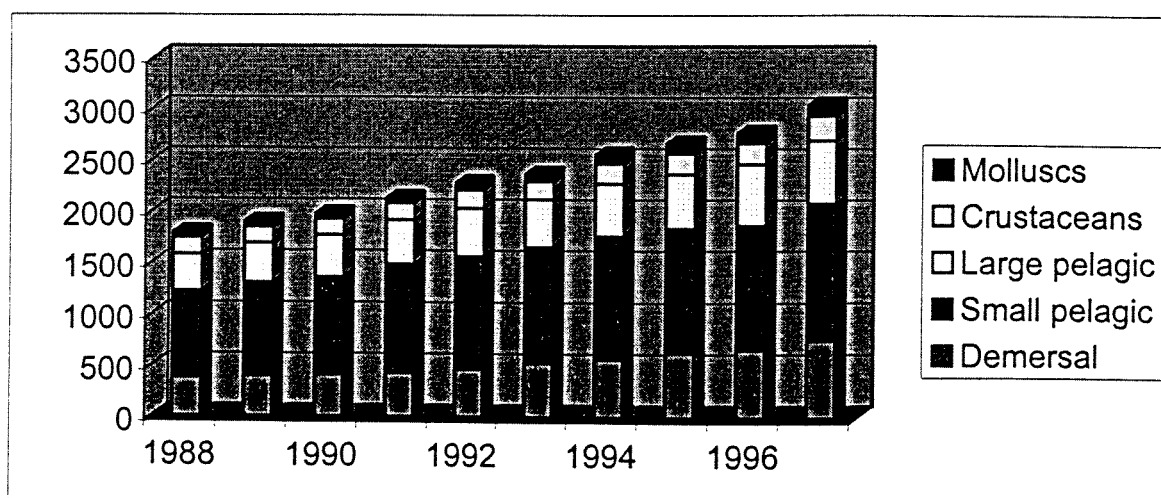
Flewelling (1999): A major challenge facing fisheries managers includes "the lack of a credible fisheries data system for management and operational purposes".

Fegan (2000): "There are no credible statistics in Indonesia on the catch of any of the three project target speciesDGF appears not to enforce its own license requirement that vessel forward fishing logs to DGF".

The system for statistics now in use was established by FAO in 1974/75 and has been described as the world's largest national fisheries statistical system. Its current legal basis is from Article 14 of Law 9/85: "The government shall maintain an information system and shall collect, process, and disseminate technical data and fisheries production data to support the management of fisheries resources and development of fishing businesses."

It has been said that the fisheries statistical system is far too oriented to demonstrating that production from the sector has risen precisely according to schedule. Indeed the increases in the figure below do appear extremely regular.

Marine Fisheries Production in Indonesia



Source: 1997 DGF statistics

Many problems with the statistical system could be cited, but one example serves to describe the nature of the problem. The latest fisheries statistical publication available

contains information for the calendar year 1997 and indicates that there were 3,381 vessels larger than 30 GT operating in Indonesia. Greenwald (2000), using DGF Enterprise Sub-Directorate information states that in April 2000 there were 7,531 fishing vessels larger than 30 GT actually licensed in Indonesia, and that this may under-represent the actual number of vessels by 20%.

This degree of accuracy implied by the above example should be compared with the relevant section in the FAO Code of Conduct for Responsible Fisheries:

“States should ensure that timely, complete and reliable statistics on catch and fishing effort are collected and maintained in accordance with applicable international standards and practices and in sufficient detail to allow sound statistical analysis. Such data should be updated regularly and verified through an appropriate system.”

In the mid-1990s there was a Japanese sponsored initiative to improve agriculture statistics (which included fisheries statistics). Details of actual improvements made, if any, were not available to the consultant. Reports from a recent Australian mission (Fegan 2000) indicate that many of the same problems that plagued the system a decade ago (e.g. lack of verification of fishery company catch reports) still exist.

One of the core issues involved with the quality of fisheries data concerns lack of political will to improve the system. In many developing countries senior decision makers may not realize the importance of the statistics for fisheries and the topic could easily be thought of as a rather dull and mundane subject. What is required in Indonesia is a sensitization of senior decision makers in MOSEF about the importance of reliable fisheries statistics. It should be stressed to them that much of what is being done in fisheries development and fisheries resource protection could be based on false information and therefore be less than fully effective. Other possibilities for improving the statistical system are obvious to those that are familiar with the system, but all ultimately depend on an increase in political will. These other improvements include:

- Fisheries regulations should (a) be more specific as the exact data requirements from fishers and (b) have greater penalties for non-compliance.
- There should be an immediate implementation of a “no data, no license” policy, possibly through legislation.
- Verification of reported catches should be an important aspect to improvements in the system. Observers could be an important component of this verification.
- The statistical system should be insulated from attempts to manipulate the data to show annual production targets have been reached.
- The interest of international agencies and the donor community in improving the statistics should be utilized:
 - Lessons from the CORMAP and ADB projects should be used when designing improvements.
 - Australia is interested in improving the fisheries statistics of Indonesia, especially those covering shared fisheries resources.

5.3 Resource Assessment Methodology

Several observers have noted the large importance that the DGF attaches to the concept of maximum sustainable yield, or how it is often expressed in Indonesia,

“potential yield”. Development projections, fleet expansion plans, ideas on development opportunities, objectives of fishery management and many aspects of the work programme of the DGF revolve around the notion of MSY.

The faults associated with using maximum sustainable yield as a management tool are numerous and mostly relate to over-simplifying the dynamics of an exploited fishery. The drawbacks of MSY have been mentioned in several reviews of the fisheries management situation in Indonesia. Nevertheless, the concept is embodied in both the Indonesian fisheries legislation and in the UNCLOS treaty and the reality is that it will be a central feature in Indonesian fisheries management for the foreseeable future. The concept of MSY, due to its simplicity can play a very useful role in the country, providing that its shortcomings are acknowledged and compensated for. In an earlier report by the consultant (Gillett 1996), several problems associated with the use of MSY were highlighted and these concerns remain valid.

In recent years it appears that one aspect of MSY is becoming increasingly institutionalized, despite a fundamental flaw. Attention should therefore be drawn to the issue. The problem is the concept that the difference between present fish catches and the potential yield represents a surplus which is available for harvesting by additional fishing effort. (See Table 3 in Greenwald (2000) describing licensing procedures). Aside from the obvious problems (poor statistics to estimate present catches, difficulty in estimating the potential), there is a conceptual problem. The concept is only valid for under-exploited fisheries; in a fishery which is over-exploited additional effort to reach the “potential” can actually result in reduced catches. In more technical terms, if production is less than MSY, the fishery could be operating on the downward sloping (right side) of the yield curve.

The technique of using the difference between present catches and potential catches is most appropriate in the early development stages of a fishery. As the fishery develops and effort increases, the concept becomes less relevant and information from the fishery assumes a greater importance in determining any remaining potential. Expressed in simplistic terms, as a fishery grows, thinking on remaining potential should undergo a change from “How close are we from MSY?” to “what is the CPUE doing?” Despite this, there appears to be an over-emphasis on the “MSY minus catches” approach to ascertain development potential¹⁶. Several fisheries specialists have commented that for the important fisheries in Indonesia, a careful sampling of CPUE would be much more informative than analysis dependent on the dubious national fisheries statistical system.

There should also be mention of the implied high precision of resource estimates. Because these estimates are used for development and regulatory purposes, the estimates are extremely important. Those individuals that make the resource estimates should also take on the responsibility of conveying to the users of the information an idea of how accurate the information is. The opposite, however, appears to be the case:

- Even with the best of catch/effort data (which is not the case in Indonesia), the precision of fish stock assessment is actually quite poor. In a recent examination of the subject, a recognized international authority on stock assessment stated that he was not aware of any fishery in the world where a sustainable quota

¹⁶ The recent publication “Estimasi Potensi dan Tingkat Pemanfaatan Sumber Daya Ikan Laut Indonesia Tahun 1997” by CRIFI is an example.

could be truthfully said to be assessable within an accuracy of 40% (Walters 1996).

- This should be compared to a recent publication by Indonesian fisheries researchers¹⁷ which gives the percent exploitation of potential for 11 major species groups in 9 areas of Indonesia to a precision of one percent.

A critical resource assessment difficulty is likely to arise in decentralized management. That is, with little or no ability for provinces/districts to make objective fisheries resource assessments, local governments may be pressured to establish unrealistically high potential figures. Indeed this already seems to be occurring:

- In a 1997 publication¹⁸ citing 1995 data North Sumatra Provincial Fisheries Service indicates the potential yield of demersal fish of 453,600 tonnes in the EEZ adjacent to west Sumatra. This appears to be much greater than the national estimates of potential; DGF 95 and Decree 995 estimated the potential for *all* the EEZ area of the Indian Ocean (Aceh to Nusa Tenggara) as being 134,000 tonnes and 135,000 tonnes respectively. They also indicate the potential for their west coast capture fisheries as being 1,107,815.6 tonnes¹⁹, while Decree 995 recognizes 6,258,600 for *all* of Indonesia.
- Similarly, the East Java Provincial Fisheries Service indicated²⁰ in 1998 that its marine fisheries potential is 618,418.80 tonnes, substantially above the latest total recorded catch of 226,764.87 tonnes.

New roles for the national fisheries agency under-decentralization are covered in Section 5.1. Assistance to the regions in resource assessment, especially in moderation of resource estimates, appears to be a very important new task.

5.4 Fisheries Management Plans

Many countries require fishery management plans and use them as a tool to organize their fisheries management. An examination of the current Indonesian fishery legislation indicates that there is no legal requirement for fishery management plans.

Fishery management plans could address many of the weaknesses in fishery management in Indonesia. These include:

- The objectives of much fisheries management in Indonesia are unclear, and for some of the management interventions there appears to be no objectives. A core feature of fisheries management plans are the establishment of objectives, and in doing so, the resulting management becomes oriented towards these objectives. In other words, plans encourage the idea of management not for management sake, but rather for clear purposes.
- Many of the stakeholders in Indonesia's fisheries are presently not included in the formulation of fisheries management measures²¹. A legal requirement to

¹⁷ CRIFI (1999). Estimasi Potensi dan Tingkat Pemanfaatan Sumber Daya Ikan Laut Indonesia Tahun 1967. Central Research Institute for Fisheries, Jakarta, 7 pages.

¹⁸ Dinas Perikanan Propinsi Daerah Tingkat I Sumatra Utara (1997). Peluang Investasi Bidang Perikanan di Sumatra Utara, 36 pages.

¹⁹ Note the precision of estimate as being within 100 kgs.

²⁰ East Java Provincial Fisheries Service (1998) Peluang Pengembangan Investasi Perikanan Di Jawa Timur. 63 pages.

consult with relevant stakeholders in the plan formulation process assures stakeholder input and the relevance of subsequent management to stakeholders can be increased.

- The management process in some of the Indonesian fisheries is not transparent. Fishery management plans cover the entire management process and legal mechanisms can be used to discourage departure.
- Because the enforcement measures associated with a fishery are detailed in the plan, much of the present confusion over responsibilities/jurisdiction in fisheries enforcement is eliminated. Because the stakeholders, including fishers, have participated in the plan formulation process, they are in a better position to complain if the agreed enforcement has not taken place²².
- As the principles of fisheries management are not widely understood in Indonesia, management plans can be an effective mechanism for showing how management operates. This is especially important in the era of decentralization where management authority is to be devolved to levels which may have a poor understanding of the mechanics of fisheries management.
- One of the difficulties of decentralization of management authority will be to assure some degree of consistency of management across the country. This requirement could be accommodated by the use of template fisheries management plans in which certain elements are fixed by the central government and other components of the plan are to be determined by local authorities.

It should also be noted that the FAO Code of Conduct for Responsible Fisheries (which Indonesia has endorsed) encourages fishery management plans: "Long-term management objectives should be translated into management actions, formulated as a fishery management plan or other management framework".

A fishery management plan is not necessarily a complex document. In fact, simple management plans may be the most appropriate for many of the fisheries in Indonesia. The important elements of a plan appropriate for Indonesia could be:

- Introduction:
 - What is a tuna plan ?
 - The scope of the plan: species and geographic area to be covered
- A description of the fishery
 - Fishery activities
 - Levels of exploitation
 - Economic characteristics of the fishery
 - Important issues in the fishery
- Resource assessment information or indicators of the condition of the fishery
- Legislation relevant to the management of the fishery
- Objectives of management interventions
- Strategies for achieving the objectives
- Monitoring and enforcement measures
- Revising the plan

²¹ It is interesting to note the environment law (Law 23/97) states: "Every person has the right to play a role in the scheme of environmental management in accordance with applicable laws and regulations".

²² A concept in Article 25 of the Environmental Management Law (Law 23/97) has applicability here: "A third party which has an interest has the right to submit an application to the authorized official to carry out an administrative sanction..."

FAO (1999) contains a good example of a fishery management plan for the Bali Strait sardinella fishery.

From the above it appears that there is a strong case for having a legal requirement for management plans for important fisheries in Indonesia. Information on the requirements for plans from the laws of two Pacific Island countries, Tonga and Papua New Guinea, may assist in formulating the details for Indonesia fisheries legislation.

Tonga:

1. The Director shall progressively prepare and keep under review plans for the conservation, management and development of fisheries in the fisheries waters.
2. Each fishery plan shall indicate the present state of exploitation of the fishery, the objectives to be achieved in the management and development of the fishery, the management, licensing and development of measures to be applied, the statistical and other information to be gathered on the fishery, and the amount of fishing, if any, to be allowed to foreign fishing vessels.
3. In the preparation and review of each fishery plan, the Director shall consult with any local government authority and with the local fishermen concerned.
4. Each fishery plan and each review thereof shall be submitted to the Minister for approval.
5. A Fishery Management Plan shall be kept under review and shall be revised as necessary.
6. Each Fishery Management Plan, and each review of a Fishery Management Plan, shall be endorsed by the Board and submitted to the Minister for approval and shall be notified in the National Gazette.

Papua New Guinea

1. Notwithstanding section 3(2), this Section applies to all persons, all vessels and all fishing and related activities.
2. The Managing Director may, and where the Minister so requires shall, cause to be drawn up a Fishery Management Plan in respect of any fishery resource in the fisheries waters.
3. A Fishery Management Plan shall:
 - identify the fishery and its characteristics, including its current state of exploitation;
 - specify the objectives to be achieved in the management of the fishery;
 - identify any possible adverse environmental effects of the operation of fishing activities in the fishery; and
 - identify where appropriate any relevant customary fishing rights or practices.

There is a strong case for fishery management plans for the important fisheries for Indonesia. The small-scale inshore fisheries are more problematic. With the multitude of gear types and species and over 81,000 km of coastline, a requirement for fishery management plans for *all* the fisheries in Indonesia may not be practical. A possible solution to this dilemma is a requirement for fishery management plans for all substantial fisheries in Indonesia and, for the small-scale fisheries, a requirement to state the objectives and associated enforcement in the implementing regulation/decreed.

5.5 The Licensing System

An important component of fisheries management in Indonesia is the licensing system. The legal basis for this is contained in several laws, regulations, and decrees, including:

- Article 10 of Law No.9 of 1985 on Fisheries requires that an individual or body corporate engaging in fishery activities shall obtain a license.
- Government Regulation No.15 of 1990 gives authority to the governors of provinces to license Indonesian vessels of up to 30 gross tonnes.
- Minister of Sea Exploration and Fisheries Decree No.45 of 2000 on Fisheries Licensing defines the various types of licenses that must be possessed to carry out fishing in Indonesian waters and Indonesian EEZ. It also specifies the application procedures for the licenses and how the license can be cancelled.
- Joint Decree of the Minister of Agriculture and the Minister of Communications No. 492 of 1996 details the simplification of licensing for fishing vessels.
- Minister of Sea Exploration and Fisheries Decree No.46 of 2000 establishes a licensing team in MOSEF and gives details on its functions and composition.

A description of the present licensing system is given in Greenwald (2000). He gives the application procedures and states that 7,531 vessels larger than 30 GT have been licensed by DGF in April 2000.

Because much of fisheries management in Indonesia is based on licensing, difficulties with licensing have negative effects in many areas of the fisheries sector. Rectifying these problems is therefore fundamental in improving fisheries management in the country. The main problems appear to fall into two general areas: lack of clear objectives for licensing and weak enforcement of the licensing requirements. These two categories have been covered in Section 3.3 and Section 5.2.1 of this report respectively.

The objectives of the licensing system should be clarified. At present the system is nominally about resource protection, but the generation of revenue seems to be where most of the interest lies. Appendix 3 may represent a situation of over-enthusiasm to expand the number of licenses available at the expense of the resource. Although generation of revenue could be a legitimate goal of management, if that is to be the primary objective of the licensing system, other mechanism of limiting fisheries effort must be devised.

The licensing system will simply not work if the straightforward requirement for license cannot be enforced. Greenwald (2000) estimates that about 20% of the fishing vessels greater than 30 GT do not have proper fishing licenses. Section 5.2.1 of this report makes five suggestions on improving enforcement of licensing requirements.

Licensing can also be a tool for encouraging compliance with other management-related measures, including requirements for VMS, vessel marking, and statistical data from the fisheries. Experience in other regions of the world have shown that the government licensing unit can be an effective agent of compliance due to its ability to refuse a license. To do this effectively, the unit doing the licensing requires both technical capacity and strong links to other units in the government fisheries management agency. For example, to use licensing to improve the quality of statistical data, the licensing unit

would need both some technical ability in fisheries data in order to scrutinized the information supplied by vessels and close ties to the unit in DGF which processes the data. Similarly, to use licensing as a tool for resource protection, the licensing unit should work closer with the resource management unit.

There has been some mention of transferring the unit which is responsible for fisheries licensing from DGF to the Secretariat General of MOSEF. However, the case has been made in the preceding paragraph that for certain objectives, the *opposite* should occur; the unit should be closer to certain technical expertise found in the DGF. This again emphasizes the point made in earlier sections of this report that clear objectives should be established for management. If the objective of the national fisheries licensing scheme is to generate government income, there are some good arguments for having the licensing unit in Secretariat General of MOSEF. It is recommended that the licensing team in MOSEF established by Decree No.46/2000 consider carefully the issue of transfer of the licensing unit in view of the objectives of the system.

5.6 Tuna Management and the Multilateral High Level Conference

The Multilateral High Level Conference (MHLC) is developing a Convention for the management of highly migratory fish stocks in the Western Pacific Ocean. The stated objective of the draft MHLC Convention is to ensure the long-term sustainable use of highly migratory fish stocks in accordance with the 1982 United Nations Convention of the Law of the Sea and the 1995 United Nations Fish Stocks Agreement (UNFSA).

The draft Convention establishes a Commission with the authority to determine the total allowable catch or level of fishing effort, and adopt other conservation and management measures within the Convention Area. The present draft Convention (version 18 April) is a document of 45 articles in 23 pages plus four annexes in four pages. It envisages a management body extending from central Indonesia to the northern-eastern limit of the range of albacore off the west coast of Canada. The membership of the Commission is likely to be:

Type Entity	Number
Indonesia	1
Pacific Island countries	14
Australia, NZ, Philippines	3
DWFNs: Japan, Taiwan, China, Korea, USA, Canada	6
France	1
French territories	2
Uncertainties: EU	1
Total	28

The most recent MHLC was held in Honolulu in April 2000 and another meeting is scheduled for Honolulu at the end of August 2000.

It is likely that the MHLC process will have an effect on tuna management in Indonesia, and that there will be some implications for Indonesian fisheries legislation, possibly laws 5/83 and 9/85. However, many of the management provisions of the draft convention are unclear at this point or are still open to negotiation. The situation should be much

clearer after the next MHLC session, at which time any impact on revising legislation under the FAO TCP project should be ascertained.

6.0 Legal Provisions Dealing with Fisheries Management in Indonesia Legislation

Several projects have reviewed the legal provisions dealing with fisheries management in Indonesia. These include Lang (1992), Agrodev (1994), and several reports by the COREMAP and ADB Co-Fish projects (i.e. COREMAP ACIL, (1999) and Diraputra (2000)). The following should be considered an additional contribution to the existing suggestions for improvement, rather than a definitive statement on the subject.

6.1 Law Number 9 of 1985 on Fisheries

6.1.1 Commentary

Article 1

Although it may be simply an artifact of the Bahasa/English translation, the definition of “fish resources” may have a marine bias and ignore freshwater organisms: “Fish resources are all fish and all organisms living in the sea”. Ministry of Agriculture Decree Number: 996 of 1999 defines fisheries resources to be “all types of fish including other water biota”.

The definition of “fishing” needs some modernization. A country to the northeast of Indonesia (the Federated States of Micronesia) uses the following definition of “fishing”:

- The actual or attempted searching for, catching, taking or harvesting of fish;
- Any activity which can reasonably be expected to result in the locating, catching, taking or harvesting of fish;
- The placing, searching for or recovering of any fish aggregating device or associated electronic equipment such as radio beacons;
- Any operation at sea directly in support of or in preparation for any activity described in this paragraph except for operations defined as “related activities”;
- The use of an aircraft in relation to any activity described in this paragraph except for flights in emergencies involving the health or safety of crew members or the safety of a vessel.

It should be noted that “fishing is defined several different ways in the various regulations/decrees.

A “fish aggregating device” should be defined to mean any man-made or partly man-made floating or semi-submerged device, whether anchored or not, intended for the purpose of aggregating fish, and includes any natural floating object on which a device has been placed to facilitate its location.

Because of the strong justification given in Section 3 of this report, there should be a definition of “fisheries management”. Ideally, the definition would contain the sentiments that management is objective oriented, that resource sustainability is not the only legitimate objective, and that for the benefit of less sophisticated resource managers, the

definition should be conceptually simple. A suggested definition, consistent with the FAO Code of Conduct for Responsible Fisheries is given in Section 3.2.

The Official Elucidation of Law 22/99 (the decentralization law) states that “specifically for traditional fish catching, marine areas shall not be limited”. This indicates that it is important to define “traditional fish catching”. Ideally, the definition would encompass several attributes:

- The scale of the operation – small scale
- The disposition of the catch – that it is primarily for non-commercial uses
- The gear type – not highly mechanized
- The historical involvement – that the type of fishing is not a new technique

The terminology associated with electronic fishing vessel monitoring systems (VMS) should be defined: VMS, transponder, VMS data. The Solomon Islands law contains the following: “vessel monitoring system means the system employed to monitor the position and activities of fishing vessels for the purposes of the effective management of fisheries”.

Article 2

The fact that “Indonesia waters” does not include the EEZ has led to considerable confusion in the past. Therefore this should be stated to clarify the matter.

Article 3

Although a general goal for fisheries management is established by the law (“to secure the greatest possible benefit for the Indonesian people”), the specific objectives require some additional attention. As it is presently stated in Law 9/85, there is the implication that the *only* objectives are the sustainability of the resources/environment. Other legitimate objectives (some of which have been the *de facto* objectives of much fisheries management in Indonesia in the past) include generation of revenue, protection of the interests of small-scale fishermen, providing food security, and creation of employment. As indicated in Section 3.3, MOSEF should decide what the objectives of fisheries management should be and, should there be more than one objective, establish some hierarchy of priority.

It should be noted that in the various subsidiary regulations and decrees, the stated objectives of fisheries management are quite different than given here.

It is important to specifically state in this article that management action must be consistent with stated objectives.

Article 4

There should be a strong statement that the subsequently specified controls are intended for the support of the objective(s) named in Article 3, in order to reinforce the concept of goal-oriented management.

A problem has arisen in the past over the technical aspects of fishing gear. Regulations have banned certain types of fishing gear, but the intent has been circumvented by

changing the name of the fishing gear. In other cases, the name of the gear is confusing. Consider:

- When trawl gear was banned, the use of identical “fish net” and other gear began. In 1993, for example, 25% of the 2127 vessels licensed by DGF used “fish net” gear and a further 11% were “shrimp nets”.
- Decree 392 of 99 bans “modified gear” in certain zones. Not even the National Management Consultant on this project, M.Badrudin, who has worked as a marine researcher for 26 years in Indonesia, knows what this is.

With regards to gear, the Law should state that the subsidiary regulations must use technical specifications, rather than gear names, for controls related to gear.

Although the Minister may make a number of named controls, the issue of whether he can make controls which give certain groups of people preferential access to fisheries resources (Section 4.1 of this report) is unclear. As this is a major fisheries management issue in decentralization, it should be clarified.

To help correct the weak enforcement situation, there should be specific mention that the Minister can make regulations on the marking of fishing vessels.

Because many of the named controls do not address underlying issues of excess effort, there should be specific mention that the Minister can make regulations on the establishment of fisheries sanctuaries, closed areas or “no take zones”. In other countries, these sanctuaries have been relatively easy to enforce and they have the additional desirable characteristic of serving as a catalyst for villagers for thinking about conservation. There is some mention in Article 8, but that refers to scientific, cultural, or environment purposes, rather than for protection of fishery resources.

There is no mention that the Minister may ban the harvest of certain named species. This should be included because of past problems. For example, there is a ban on the harvest and export of a number of marine species, including trochus, but this is part of a Ministry of Forests conservation initiative²³ and is largely ignored. Indonesia is, ironically, the world’s largest exporter of trochus.

Article 10

There should be a statement as to the objective(s) of the fisheries licensing system. If there are multiple objectives, there should be a prioritization. If generation of revenue is an objective, there should be some statement about its disposal. There are advantages to specifically stating that at least some of the money is to be dedicated to fisheries management.

Commercial sport fishing for tourists is developing rapidly in areas similar to Indonesia. As this type of activity could produce substantial benefits for Indonesians, there should be some accommodation so that tourists are exempt from the licensing and fee requirements.

²³ Minister of Forestry Decree No.12/1987 gave protection to trochus and 14 other invertebrate species

Article 12

There appears to be a substantial number of “Indonesian flagged vessels” which are also registered elsewhere, which contradicts the intent of the law. Although this is beyond the scope of the fisheries law, the relevant shipping law should require evidence of closure of foreign registration prior to being registered in Indonesia.

Article 13

There could be some statement such as “in principle, aspects of fisheries management for the small-scale inshore fisheries should be devolved to lowest level practical”.

Article 14

There should be a statement that the government agency responsible for fisheries shall periodically review the system to ensure high quality collecting, processing, and disseminating of statistical information.

Article 21

There should be some guidance on the partitioning of management responsibilities between the national government and provinces/districts. This should include how certain crucial policies can be made consistent throughout the country, possibly through the use of template fisheries management plans (Section 5.4).

Part VIII

Considering the lowered value of the rupiah, there is a case for stiffer fines.

Article 31

To understand who is qualified to investigate and enforce this law requires both Law 5 of 1983 and Law 8 of 1981. Considering the confusion over enforcement responsibilities noted in Section 5.2.1 of this report, there are advantages of clarifying in Article 31 the situation. There should be a clear statement of responsibilities, authorities, and jurisdictions in fisheries-related enforcement.

Because MOSEF has a special interest in fisheries (as oppose to the Navy with a wide range of priorities), the role of MOSEF in enforcement should be strengthened and clarified. Special attention should be focused on more effective enforcement of the licensing requirements, including a specific statement allowing in-port enforcement by the fisheries agencies.

Subsection 2 indicates that “public officers qualified in fisheries matter could be empowered for investigation of offenses against this law”, but the mechanism for doing so is not specifically stated. Considering the weaknesses in enforcement, confusion over responsibilities, and need for extra enforcement under decentralization, there is a case for giving the Minister responsible for fisheries matters, the power to name the category of fisheries staff which are empowered. A similar sentiment is contained in Ministry of Agriculture Decree Number 996 of 1999: “Fisheries resources surveillance officer is Civil government official who is promoted and appointed by Ministry of

Agriculture to do the job of surveillance against management and utilization of fisheries resources”.

6.1.2 Other Desirable Components of a National Fisheries Law

Numerous reports have drawn attention to the fact that one of the major weaknesses of this law is that its effectiveness has been constrained by the very few number of subsidiary regulation which have come into effect in the 15 years since the law was enacted. Flewwelling (1999) states that only one implementing regulation has been passed. COREMAP ACIL (1999) states that three government regulations are still needed: concerning dangerous fishing means (Art.6), pollution (Art.7) and the development of fishery facilities.

Other desirable attributes of a national fisheries law are:

- The national law should engender in the national fisheries agency a greater sentiment of (a) guardianship of the fisheries resources of the country, and (b) being a service provider to the fisheries agencies in the lower levels of government.
- There should be some statement that management action must be consistent with stated objectives.
- There should be some mention of inter-province and inter-district coordination mechanisms of fisheries management, possibly through province/district legal recognition of arrangements such as FKPPS²⁴.
- Strong justification for fisheries management plans is given in Section 5.4 of this report.
 - The requirement for fishery management plans for the substantial fisheries should be stated in the national fisheries law, together with the concept that in the plan formulation process the relevant stakeholders should be consulted.
 - For other fisheries, especially the small-scale fisheries, there should be a requirement in the national fisheries law that, prior to each management intervention: (a) the concerned fishers are formally consulted, and (b) the objectives and associated enforcement arrangements are explicitly stated in the implementing regulations/decrees.
- Much fisheries management in Indonesia is based on spatial arrangements: (a) under decentralization the districts have 4-mile zones, and provinces have 12 mile zones (b) Minister of Agriculture and Fisheries Decree No.392 of 1999 establishes three fisheries zones based on the distance from land. For enforcement/prosecution purposes, there should be some mention in the law (or at least subsidiary legislation) on the technique(s) permissible to establish geographic positions. This should cover GPS, VMS, and aerial photography.
- For VMS, there should be a statement that the Minister may require that vessels of certain categories shall have installed, maintained and fully operational at all times on board a vessel a VMS transponder and shall be responsible for all operational and maintenance costs of the transponder and cooperate fully in their utilization.
- There should be a requirement that the Minister shall determine in a transparent manner the allowable catch for each of the six groups of fish in the nine management areas. Presently, Government Decree 15/84 requires this for only the Indonesian Exclusive Economic Zone. A possibility is:

²⁴ Decree No.995 of 1999 establishes FKPPS, but its relationship to province/district management authority is unclear.

- “The total allowable catch shall be determined in a transparent manner and it shall be done in the light of the findings of research, surveys, evaluation of fishing activities, and particular attention shall be paid to prevention of excess fishing effort”.
- Consideration should be given to incorporating some of the positive features of the 1997 environmental management law into the national fisheries law.

6.2 Law Number 23 of 1997 Regarding Environmental Management

The law is newer and much more abstract than the fisheries law. As it contains many positive features, the major value of a fisheries management oriented review of this legislation appears to be to identify desirable concepts which could be incorporated into a new or modified fisheries act. This approach has the advantage that any of the concepts desirable for a fisheries law (some of which may be somewhat radical) already have a precedent in Indonesian law.

6.2.1 Positive Features of Law 23/97 which have Applicability to the Fisheries Law

The positive features of Law 23/97 which could have applicability to the fisheries law include the concepts:

- Article 5:
 - Every person has the right to environmental information which is related to environmental management roles.
 - Every person has the right to play a role in the scheme of environmental management in accordance with applicable laws and regulations.
- Article 10: the government must:
 - Develop and apply instruments of a pre-emptive, preventative, and proactive nature in the effort to prevent decreases in environmental supportive and carrying capacity.
 - Give awards to meritorious people or foundations in the environmental field.
- Article 15: Every plan of a business and/or activity with the possibility that it can give rise to a large and important impact on the environment, must possess an environmental impact analysis.
- Article 25:
 - The Governor/Head of the Level 1 Region has the authority to carry out administrative sanctions against the party responsible for a business and/or activity to prevent and end the occurrence of an infringement....
 - A third party which has an interest has the right to submit an application to the authorized official to carry out an administrative sanction...
- Article 37:
 - The community has the right to bring a class action to court and/or report to law enforcers concerning various environmental problems which inflict losses on the life of the community.
 - If it is known that the community suffers as a result of environmental pollution and/or damage to such an extent that it influences the basic life of the community, the government agency responsible in the environment field can act in the community interest.

- Article 38: In the scheme of implementing responsibility for environmental management consistent with a partnership principle, environmental organizations have the right to bring legal action in the interest of environmental functions.
- Article 40: The maximum level of fine for an environmental offense is Rp. 750 million, or 7.5 times greater than the maximum for a fisheries offense.

6.2.2 Possible Weaknesses of Law 23/97

Possible weaknesses of Law 23/97 include:

- Article 1: The definition of environmental management is not conceptually simple and may not be understood by, for example, even senior staff in provincial fisheries agencies.
- Article 40: Considering both the weak enforcement and confused enforcement responsibilities dealing with fisheries resources, the provision for marine enforcement seems inadequate: "Investigational of environmental crimes in Indonesian waters and the EEZ is carried out by investigators according to applicable laws and regulations"

6.3 Law Number 22 of 1999 Regarding Regional Governance

The points in the Regional Governance Law which require additional attention were covered in Section 4 of this report. To reiterate:

- Article 1: With respect to fisheries management, much of the change created by this law involves the transfer of "management authority". The precise meaning of this phrase is therefore critically important, but not defined.
- Article 3 and Article 10: there needs to be some clarification of what may be overlapping jurisdiction:
 - The relationship between the 4 and 12 mile district/provincial management authority areas and the zones by gear type established by Minister of Agriculture and Fisheries Decree No.392 of 1999 should be clarified.
 - The relationship between the 4 and 12 mile district/provincial management authority areas and the division of licensing authority based on vessel size (under 30 GT, over 30 GT; as per Government Regulation 15 of 1990) between the regions and the national government should be clarified. In other words, which agency would license a vessel under 30 GT for fishing more than 12 miles from land?
- Article 7: The relationship is not clear between:
 - the "policies on.....natural resource utilization as well as....conservation" of Article 7 which are retained by the national government; and
 - the "management authority...[covering] exploration, exploitation, and management of marine wealth" of Article 10 which is devolved to the provinces/districts.
- Article 71: The maximum fine permitted Rp. 5 million (US\$555 @ 9000) does not seem sufficiently large to be an effective deterrent. For example, the maximum amount permitted for a national environmental offense is 150 times greater.
- Article 89: If specific mention could be made of shared fishery resources, the desirable inter-province and inter-district cooperation may become more likely.

Two important issues require clarification:

- The most contentious issue in decentralization is likely to be whether the regional entities can restrict the entry of outsiders into their marine areas.
- Law enforcement responsibilities and jurisdictions should be clarified for harbours, and the 4 mile and 12 mile zones.

6.4 Law Number 5 of 1983 on the Indonesian Exclusive Economic Zone

As stated in Section 5.6 of this report, it is likely that the MHLC process will have an effect on tuna management in Indonesia, and that there will be some implications for Indonesia fisheries legislation, possibly for Law 5/83. However, many of the management provisions of the draft convention are unclear at this point or are still open to negotiation. The situation should be much clearer after the next MHLC session in August 2000, at which time any impact on revising Law 5/83 should be ascertained.

Article 13: If any other officials, besides Navy officers, have the power to enforce the law and conduct enquiries (as implied by discussions with enforcement personnel), then this Article should be revised to reflect the current enforcement situation.

Articles 16 and 17: Considering the lowered value of the rupiah, there is a case for stiffer fines in this law, especially since many of the violators are likely to be foreigners.

6.5 Government Decree No. 15 of 1984 on Fisheries Resources Management in the Indonesian Exclusive Economic Zone

Article 1:

- The definition of management does not convey the idea that it should be for an objective. A more goal-oriented definition could reduce management without objectives. For example, some of the fisheries licensing that is occurring presently is not for revenue generation (low or no fee), not for statistical purposes (many unlicensed vessels), and not for resource protection (no limit on licenses).
- According to the definition given, conservation is a sub-set of management, which is desirable as it conveys the idea that management can have multiple objectives.
- The definition of "fishing" needs some modernization, as per above comments on Law 9/85.

Article 2: It is stated that "the natural resources in the Indonesian Exclusive Economic Zone shall be utilized for the development of Indonesian fisheries".

- This seems to convey the sentiment that the rent on EEZ fisheries should be invested in Indonesian fisheries development, which may not be the intention.
- Because of the contention that there should be a shift in attitude from exploitation to guardianship of the fisheries resources by the government fisheries agency, there is a strong case for a change to ".....utilized for the development and management of Indonesian fisheries". Similarly, paragraph 2 should be changed from "increasing capacity" to "assuring sustainability".

Article 4: As a measure to address possible over-enthusiasm for increasing production, paragraph 2 should be modified to state "The allowable catch shall be determined in the light of the findings of research, surveys, evaluation of fishing activities, and particular attention shall be paid to prevention of excess fishing effort".

Article 7: There should be a stipulation that the permit will not be renewed if accurate data on fishing activity has not been supplied.

Articles 9 to 16: Many of the elements are not relevant due to the ban on foreign fishing activity.

Article 14: There needs to be specific protection for inspectors/observers, such as:
 "Any person who assaults obstructs, resists, delays, refuses boarding to, intimidates or fails to take all measures to ensure the safety of or otherwise interferes with an inspector/observer in the performance of his or her duty or fails to comply with any lawful instruction or direction given by an inspector/observer commits an offence."

Articles 19 and 20: The fine levels need to be increased.

6.6 Minister of Agriculture Decree No.51 of 1997 On the Deployment and Utilization of FADs

Article 1: The definition of a "fish aggregation device" (FAD) is not very comprehensive: "A FAD is an auxiliary fishing gear placed at sea. There are 3 types of FADs: 1) Bottom FAD 2) Shallow water FAD for use in water up to 200 metres deep 3) Deep sea FAD: for use in water more than 200 metres." A better definition consistent with the latest tuna fishing methods could be: "a fish aggregation device is any man-made or partly man-made floating or semi-submerged device, whether anchored or not, intended for the purpose of aggregating fish, and includes any natural floating object on which a device has been placed to facilitate its location.

Article 2: The scheme of regulation for FADs is: "Bottom FADs and shallow water FADs are to be regulated by local government as follows: up to 3 nautical miles from the low water line of every island will be regulated by the district government (b) from 3 to 12 miles offshore by the provincial government". This must be changed to scheme of less than four miles and greater than four miles, to be consistent with Law 22/99.

6.7 Minister of Sea Exploration and Fisheries Decree No.45 of 2000 on Fisheries Licensing

Article 1: The definition of fishing given is: "Fishing is any activity with the objective to obtain fish in water which is not from culture using any gear or method including activities that use a vessel for transferring, storage, processing, cold storage, preservation, or transportation." An important aspect of fishing is the searching for fish (i.e. tuna purse seining). It is not clear whether this is included in this definition. As stated in Section 6.1.1, a more comprehensive definition is:

- The actual or attempted searching for, catching, taking or harvesting of fish;

- Any activity which can reasonably be expected to result in the locating, catching, taking or harvesting of fish;
- The placing, searching for or recovering of any fish aggregating device or associated electronic equipment such as radio beacons;
- Any operation at sea directly in support of or in preparation for any activity described in this paragraph except for operations defined as related activities.
- The use of an aircraft in relation to any activity described in this paragraph except for flights in emergencies involving the health or safety of crew members or the safety of a vessel.

There are also two general points:

- The objectives of the various licensing schemes should be established.
- The significance of the fisheries management areas should be explained.

6.8 Minister of Agriculture and Fisheries Decree No.392 of 1999 on Fishing Zones

Article 2: There needs to be some clarification of what may be overlapping jurisdiction between the zones established by this decree and the 4 and 12 mile district/provincial management authority areas established by Law 22/99.

Article 3:

- There should be technical definitions for “un-modified” and “non-fixed fishing gear”
- In addition to the color markings, there should be a marking scheme which allows identification of specific vessel, i.e. the vessel license number.

Article 7:

- It may not be feasible to catch skipjack with nets with mesh size of less than three inches.
- This appears to be a case requiring a technical description of the gear, or a “skipjack purse seine vessel” could be called a “yellowfin purse seine vessel”, mirroring the situation where banned trawl vessels became legal “fish net” vessels.

Article 9: Paragraphs 1 and 2 appear to be almost identical.

Article 11: The fine of Rp. 25 million is small. A tuna purse seiner in a single set of the net can catch fish worth 50 times that amount.

6.9 Minister of Sea Exploration and Fisheries Decree No.46 of 2000 on Fisheries Business Licensing Team

The task for the team of “Carry out evaluations of fisheries business licensing procedures” should be modified so that the evaluation specifically includes determining if the scheme is accomplishing its objectives.

6.10 Ministry of Agriculture Decree Number 996 of 1999 on Implementation Guidelines Concerning the Surveillance of Fisheries Resources

Article 1: The objective of “fisheries resource management” implies a strong production orientation and seems to go against the resource protection sentiment of Law 9/85 which states: “the government is to carry out sound and integrated fisheries resource management with the objective of sustainability of fish resources and their environment for the benefit of Indonesian people”.

Article 3: The statement “Surveillance of Fisheries Resources and its environment is conducted based on the principles of monitoring, controlling, surveillance and or investigation” needs some elaboration. There is some sentiment in Indonesia that the solution to enforcement is to “implement MCS”, which is rather circular reasoning.

Article 9: The statement “every fishing boat or fish transporting boat doing fishing or fish transportation are obligated to use identification sign in accordance with the gears used as given by the provisions” requires clarification.

Articles 13 to 24: Consultant is not able to comment due to unfamiliarity with arrangement

6.11 Minister of Agriculture and Fisheries Decree No.995 of 1999 on Fish Resource Potentials and their TACs

A major difficulty with this decree is the transparency of the procedures used to establish the potentials. This however, should be addressed in the fisheries law.

Given the poor data with which the potentials have been estimated, the implied accuracy given on the table (to within 100 tonnes) is misleading.

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Appendix 1: Terms Of Reference

International Fisheries Management Consultant

The incumbent will, under the supervision of and in collaboration with the operating and lead technical unit (LEGN), the Marine Resources Service (FIRM) and in collaboration with the National Fisheries Management Consultant and in consultation with DGF and its appropriate Divisions, and other Government institutions:

1. review the legal provisions dealing with fisheries management in various laws/acts (Fisheries Law, EEZ Law, Environmental Law);
2. review institutional framework in fisheries management and identify the strengths and weaknesses of the institutions concerned. The consultant should provide recommendations to strengthen the management system in the light of decentralisation (Law 22/99);
3. assess management supporting information (biological, socio-economics and fishery statistics) and the mechanism flow of such information in the light of decentralization and participatory management;
4. liaise closely with the national consultant to obtain information in the field and to present a report to FAO.

Appendix 2: People Contacted

Jakarta, June 19-24

Hideai Imai
FAO Office

Verra Vidian
FAO Office

M.Badrudin
National Fisheries Consultant

Melda Camila
National Legal Consultant

Christine Stewart
Legal Consultant

Sjarif Osman Maksoem
Directorate of Fisheries Resource Management
Directorate General of Fisheries

Parlin Tambunan
Sub-Directorate of Capture Fisheries
Directorate General of Fisheries

Badia Subuea
Legal Section, Directorate of Fisheries Resource Management
Directorate General of Fisheries

Suharyadi Salim
Fisheries Institute Semarang

Enni Soetopo
Sub-Directorate of Programme Cooperation [formerly]
Directorate General of Fisheries

Yulianto
Sub-Directorate of Programme Cooperation [formerly]
Directorate General of Fisheries

Gomal Tampubolon
Fishing Vessel Development Sub-Directorate
Directorate General of Fisheries

Daniel Monintja
Bogor University

Lars Engval
ADB CO-FISH Project

Garry Spiller
ADB CO-FISH Project

Pierre Comeau
ADB CO-FISH Project

Alec Dawson-Sheppard
COREMAP Project

Medan, June 26-27

Sofyan Sori Nasution
Head, North Sumatra Provincial Fisheries Service

Kaharuddin Siregar
Chief of Enterprise and Licensing Section
North Sumatra Provincial Fisheries Service

Robert Napitupulu
Licensing Section
North Sumatra Provincial Fisheries Service

Dwiworo Sunaringsih
Fisheries Resource and Protection Section
North Sumatra Provincial Fisheries Service

Tongku Karim Ritonga
Head of Medan District Fisheries Service

Surabaya June 28-29

Suparwoko
Head of Sub Dinas Fishing Business
East Java Provincial Fisheries Service

Bambang Purwanto
Head of Administrative Division
East Java Provincial Fisheries Service

Sri Rejeki
Staff of Sub Dinas Extension
East Java Provincial Fisheries Service

Achmad Muntasir
Head of Surveillance Section, Sub Dinas Living Resources
East Java Provincial Fisheries Service

Sherley
Staff of Sub Dinas Production
East Java Provincial Fisheries Service

Denpasar, June 30 - July 1

Ketut Mordinartha
 Fisheries Control Unit
 Living Resource Management Unit
 Bali Provincial Fisheries Service

Rusman
 Fisheries Observer
 Bali Provincial Fisheries Service

Peter Mous
 Coastal and Marine Program
 The Nature Conservancy

Jakarta, July 1 - 7

Colonel Aji Sularso
 Directorate of Sea Enforcement and Protection

Hanung
 Legal Bureau
 Secretariat General

Ms. Tini
 Legal Bureau
 Secretariat General

Bambang Suboko
 Executive Director
 Indonesian Fisheries Federation (Gappindo)

Charles Greenwald
 Fisheries Economist

Lars Engval
 ADB CO-FISH Project

Rapiuddin Hamarung
 Deputy, Authority and Organization
 State Ministry of Autonomy

Purwanto
 Directorate of Fisheries Resource Management
 Directorate General of Fisheries

Rokhmin Dahuri
 Director General
 Directorate General of Coastal, Beach, and Small Island Affairs

Bambang Wahyudi
 Secretary, Directorate General of Coastal, Beach, and Small Island Affairs

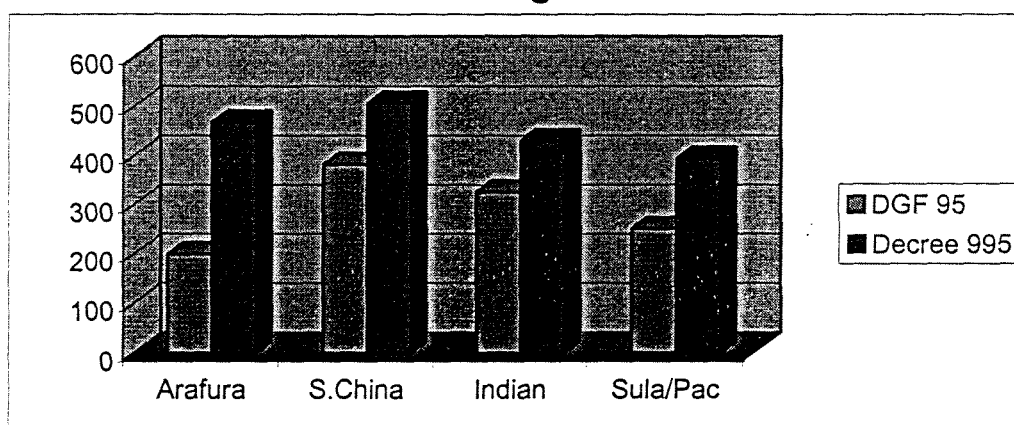
Appendix 3: Changes in DGF Estimates for the Licensing System

DGF in theory uses the licensing system to prevent excess fishing effort in the major fisheries. The system is basically to add up all the expected catches for all licensed vessels in a fishery and if this is less than the MSY, then additional licenses are available. The system requires good estimates of both MSY and annual catches of the various categories of vessels. Work by FAO in the mid-1990s²⁵ showed that for some of the major fisheries in Indonesia, the number of licensed vessel could be expected to catch more than the MSY. That study recommended that a procedural mechanism should be instituted so that when the expected catch for a fishery reaches the level of the total allowable catch, additional licensing for that fishery legally ceases.

According to a recent ADB Co-Fish Project paper²⁶, presently a license is not issued if the accumulated total expected catch for the fishery exceeds the MSY estimate. This policy seems to be in accordance with the recommendations of the earlier FAO report. A closer examination of the mechanics of the calculation, however, reveals some difficulties.

The MSY figures which DGF used in the mid-1990s for licensing were compared to the figures used at present. Similarly, the expected catches for various types of vessels in the mid-1990s were compared to those used at present. Strict comparisons are made difficult by using slightly different vessel sizes and the fact that the consultant did not have all the mid-1990 estimates at his disposal. Nevertheless, a comparison of one fish group and one vessel size was made and the results are shown in the figures below.

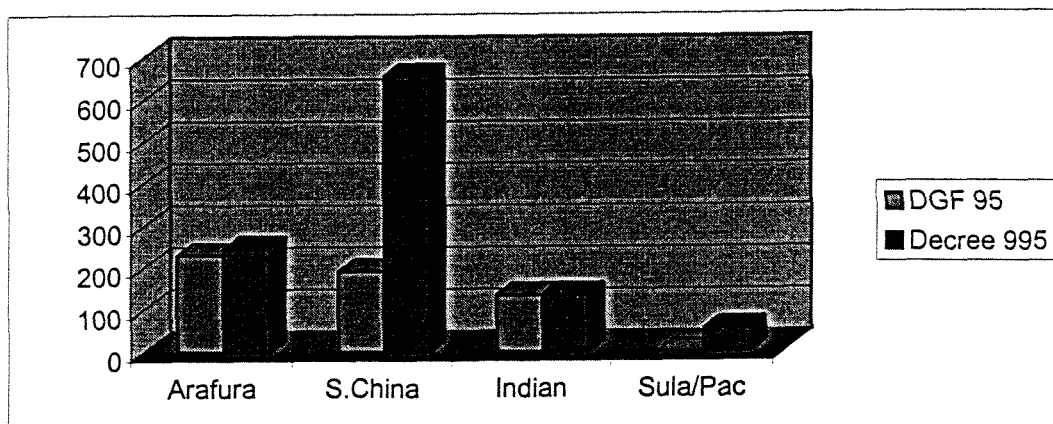
Small Pelagics MSY



²⁵ Gillett, R. (1996). Marine Fisheries Resources and Management In Indonesia With Emphasis on the Extended Economic Zone. Workshop Presentation Paper Number 1, FAO Project TCP/INS/4553, "Strengthening Marine Fisheries Development in Indonesia", 35 pages.

²⁶ Greenwald, C. (2000). Indonesian Fisheries Licensing Practices – National and Provincial Levels. ADB Co-Fish Project,

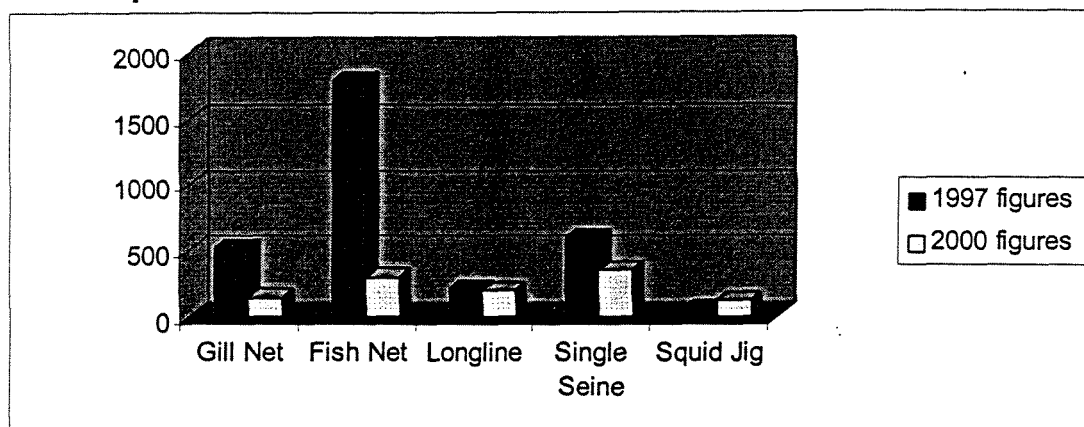
Demersal Fish MSY



The above graphs show that the MSY estimates were increased for the two groups of fish in several areas.²⁷

A comparison of the expected annual catches of vessels between the two periods is more difficult because the size categories were altered. However taking one size category, the results of the comparison are graphed below.

Expected Annual Catches of 200 to 300 GT Vessels²⁸



This indicates that for the size of vessel examined, the DGF annual catch estimates for most gear types have decreased between the mid-1990s and 2000. Decreases in estimates of expected annual catches²⁹ in conjunction with increases in MSY estimates create a situation in which DGF can substantially increase the number of licenses available within a system that is nominally for prevention of excess fishing effort.

²⁷ It has been pointed out that DGF together with various other agencies and institutes (CRIFI, MFRI, Indonesian Sciences Institute, Bogor University, BPPT, and LAPAN) are responsible for the MSY estimates and therefore they are likely to accurately reflect the resources. However observers of the Indonesia fisheries situation have noted that manipulation of data may have taken place since the procedures used have not been transparent.

²⁸ The vessel size category for the Decree 995 (220 to 400 GT) is actually larger than that that for DGF 995, so the difference is even greater.

²⁹ It should be noted that a decrease in expected catches could be indicative that the resource is becoming more fully exploited, rather than the situation suggested by increasing the MSY estimate.

Appendix 4: Abbreviations

ADB	Asian Development Bank
DGF	Directorate General of Fisheries
DWFN	Distant Water Fishing Nation
EEZ	Exclusive Economic Zone
FAD	Fish Aggregation Device
FAO	Food and Agriculture Organization of the United Nations
FFA	Forum Fisheries Agency
FKPPS	Forums for Management of Fisheries Resources
JICA	Japan International Cooperation Agency
MCS	Monitoring, control, and surveillance
MHLC	Multi-Lateral High Level Conference on the Conservation and Management of Highly Migratory Fish Stocks in the Central and Western Pacific
MOSEF	Ministry of Sea Exploration and Fisheries
MSY	Maximum sustainable yield
TAC	Total Allowable Catch
TCP	Technical Cooperation Programme
TOR	Terms of reference
UNCLOS	United Nations Conference on the Law of the Sea
VMS	Vessel Monitoring System
WCPO	West-Central Pacific Ocean

Appendix 5: Translations of Indonesia Fisheries Laws Relevant to Fisheries Management

by
M.Badrudin and R.Gillett

Contents

Law Number 9 1985 - Fisheries Law

Government Decree No. 15 of 1984 on Fisheries Resources Management in the Indonesian Exclusive Economic Zone

Government Regulation 15 of 1990 - Regulation of Fishing Businesses

Minister of Agriculture Decree No.815 of 1990 - Fishing Business Licensing

Minister of Agriculture Decree No.816 of 1990 - On the Use of Charter of Foreign Flag Fishing Vessels for Fishing in the Indonesian Exclusive Economic Zone

Ministerial Decree No. 144 of 1993 - On Appointing a Port as a Fishing Base for Chartered Foreign Flag Fishing Vessels for Fishing in the EEZ

Ministerial Decree No. 57 of 1995 - On the Modification of Decree No. 144 of 1993

Ministerial Decree No. 473 of 1985 - Amount of Allowable Catch in the Indonesia EEZ

Ministerial Decree No.475 of 1985 - Permit for Private and Foreign Companies to Fishing in the Indonesian EEZ

Letter of Instruction from Minister of Research and Technology 557 of 1985 - On the Development of the Fishing Fleet

Minister of Agriculture Decree No.51 of 1997 on the Deployment and Utilization of FADs

Minister of Sea Exploration and Fisheries Decree No.45 of 2000 on Fisheries Licensing

Minister of Agriculture and Fisheries Decree No.392 of 1999
on Fishing Zones

Minister of Sea Exploration and Fisheries Decree No.46 of 2000 on Fisheries Business Licensing Team

Minister of Agriculture and Fisheries Decree No.995 of 1999 on Fish Resource Potentials and their TACs

Ministry of Agriculture Decree Number: 996 of 1999 on Implementation Guidelines Concerning the Surveillance of Fisheries Resources (COREMAP translation)

Law Number 9 1985 - Fisheries Law

Consideration:

Large zone, large potential, provides basic capital for development and increase in social welfare

In framework of national development management of resource should be done properly based on justice, equity, increasing employment, social welfare and sustainability of resource and environment, and increase in national security

Former legislation is limited in scope and has difficulty in adapting to rapid development

Chapter 1: General definitions:

Article 1:

- Fisheries consists of all activities dealing with management and exploitation of fishery resources
- Fish resources are all fish and all organisms living the sea.
- Management of fish resources is all efforts intended to contribute to the optimal and sustainable use of fisheries resources
- The utilization of fish resources is all activities in fishing and aquaculture
- Fishing businesses are all companies which engage in fishing and aquaculture including storage, chilling, and preserving for commercial purposes
- Fishing is all activities intending to catch or obtain fish in open waters with or without gear, including the use of vessels for loading, transporting, storing, chilling, processing, or preserving
- Fishing gear is all facilities and equipment or other items used to catch fish
- Fishing vessels are boats, canoes, other floating vessels use to catch fish or for surveys and exploration
- Fish culture is all activities for husbandry, grow-out, and/or rearing and harvesting
- Fishermen are people whose main activity is fishing
- A fish farmer is a fisherman who cultures fish
- The environment of fisheries resources is the water in which fish lives including biota and the other natural elements
- Fish resource pollution is the mixing of fish and other living creatures, material, energy, and/or other components caused by human activity so that the fish resources are diminished and do not live normally or causes harm to resource users
- Resource degradation consists of human activities which result in declining potential, leading to problems with localized sustainability or with the life cycle of fish
- Fish environmental pollution is the introduction of living creatures, material, energy, or other component to the environment so that the environmental quality declines to a certain level resulting in the quality of the environment being diminished
- Fish environment degradation is the change in the environment of fish in certain waters physically, chemically, or biologically so that the environment is no longer suitable habitat for fish, feeding, spawning or sheltering
- The government is defined as being the Government of the Republic of Indonesia
- The Minister is the Minister responsible for fisheries

Article 2:

The fishing areas of Indonesia consist of:

Indonesian waters

Rivers, lakes, ponds, marsh, and other water bodies of Indonesia

The EEZ

Chapter 3: Fisheries Resource Management

Article 3:

Fisheries resource management in Indonesia is intended to achieve maximum benefit for the nation

To obtain the objective above, the government is to carry out sound and integrated fisheries resource management with the objective of sustainability of fish resources and their environment for the benefit of Indonesian people

Article 4:

To implement fish resource management the Minister may make regulations about:

Fishing gear

Technical conditions of fishing vessels without affecting existing vessel safety laws

Amount of fish catch, and size/species prohibitions

Fishing grounds, zones, seasons

Prevention of pollution and degradation, rehabilitation of fish and the fisheries environment

Stocking of exotic species

Fish culture activity and fisheries reserves

Prevention and curing fish pests and diseases

Other miscellaneous items needed to achieve the objectives of fisheries resource management

Article 5:

Inter-Island or international live fish transportation shall be in accordance with the existing fish quarantine regulations

Article 6:

Individuals and firms are prohibited from using destructive fishing techniques

Destructive fishing for scientific/research purposes shall be covered by regulations

Article 7:

Individuals and firms are prohibited from causing pollution and environmental degradation

Pollution and environmental degradation for scientific/research purposes shall be covered by regulations

Article 8:

For scientific, cultural, or conservation purposes, the government may prohibit the taking of certain species of fish or fishing in certain areas

To achieve the above, the government may limit fishing or aquaculture in those areas

Chapter 4: Exploitation of Fish Resources

Article 9:

Fishing business in Indonesia is exclusively for Indonesian citizens or companies

The exception to this is only for fish capture, provided that it is in accordance with international treaties

Article 10:

All individuals and companies carrying out fishing business should be licensed
Subsistence fishermen and subsistence fish farmers need not be licensed
The implementation of the above shall be by government regulation

Article 11:

Individuals or companies involved in fish capture or aquaculture in the sea or other waters are required to pay a licensing fee
This does not apply to subsistence fishermen and subsistence fish farmers
The implementation of the above shall be by government regulation

Article 12:

Fishing vessels used by Indonesian citizens or companies for fishing activities in the Indonesian fishing area shall be Indonesian flagged vessels
The exception to the above is for research and other scientific activities and fishing in the EEZ

Article 13:

Fishing and aquaculture activities for non-commercial purposes shall be regulated by the Minister

Chapter 5: Promotion and Development

Article 14:

The government shall maintain an information system and shall collect, process, and disseminate technical data and fisheries production data to support the management of fisheries resources and development of fishing businesses

Article 15:

The government shall develop and maintain research and other scientific activities in fisheries
To accomplish the above, the government may arrange cooperation with national and international institutions

Article 16:

The government shall provide education, training, extension, and guidance in fisheries
To accomplish the above, the government may cooperate with communities and other institutions

Article 17:

The government shall encourage, support, assist, and protect small-scale fishermen and fish farmers, especially through cooperatives

Article 18:

The government shall develop and maintain fisheries infrastructure
The procurement, location, function, management, and use of fisheries infrastructure shall be regulated by the government

Article 19:

The government shall regulate, supervise, and provide guidance on the quality of fish products

Article 20:

The Minister may prohibit the import or export of certain fish species

Chapter 6: Delegation of Authority and Assistance

Article 21:

Delegation of authority and withdrawal of this authority to the provincial government level is to be covered by government regulations

Article 22:

The central government may authorize and assist the provincial government in carrying out certain tasks

Chapter 7: Control and Surveillance

Article 23:

To insure effective and efficient management and resource exploitation, control and surveillance will be implemented

Implementation will be by government regulation

Chapter 8: Penalties

Article 24:

Whoever in the fishing area of Indonesia as given in Article 2 A and B commits an offense as mentioned in Article 6 (1) and Article 7 (1) may be sentenced to a jail term of up to 10 years and/or a fine up to Rp. 100,000,000

Article 25:

Whoever in the fishing area of Indonesia as given in Article 2 A and B fishes without license as mentioned in Article 10:

Using a fishing vessel of 30 gt or more may be sentenced to jail for a term of up to 5 years and fined up to Rp. 50,000,000

Using a fishing vessel of less than 30 gt may be sentenced to jail for a term of up to 2.5 years and fined up to Rp. 25,000,000

Article 26:

Whoever in the fishing area of Indonesia as given in Article 2 A and B carries out aquaculture without license as mentioned in Article 10 may be sentenced to jail for a term of up to 6 months and fined up to Rp. 5,000,000

Article 27:

Whoever commits an offense as mentioned in Article 4 may be fined up to Rp. 25,000,000

Whoever commits an offense as mentioned in Article 20 may be fined up to Rp. 5,000,000

Article 28:

The offenses mentioned in Article 24 and 25 are considered felony offenses

The offenses mentioned in Article 26 and 27 are considered misdemeanor offenses

Article 29:

Material and equipment used in the offenses 24, 25, 26, and 27 may be confiscated by the government

Article 30:

Whoever commits an offense against this law in the EEZ shall be sentenced in accordance with Law No.5 1983

Chapter 9: Miscellaneous

Article 31:

The enforcing officer entitled to carry out the investigation of offenses against this law in Indonesian waters is the investigator as mentioned in Article 14 (1) Law No. 5 1983

Public officers qualified in fisheries matter could be empowered for investigation of offenses against this law

This officer above is entitled to:

Receiving the report concerning the offense

Examine, summons and question the accused offender

Search the fishing vessel, carrier vessel, and fish storage area used in carrying out the offense

Confiscate the fish, fishing gear, and documents in the offense

4. Investigation and authority as mentioned in this article is carried out in accordance with Law No.8 1981

Chapter 10: Transition period

Article 32:

All existing regulations in fisheries provided that they are not contradictory with this law shall still be valid until the new regulations based on this law are issued

Chapter 11: Final remarks

Article 33:

When this law is becomes effective, the following is no longer valid:

Law 157 of 1916

Law 396 of 1920

Law 144 of 1927

Law 145 of 1927

Law 442 of 1939 with the exception of regulation on the enforcement of law at sea

Article 34:

Anything which is not covered in sufficient detail in this law shall be clarified by regulations

Article 35:

This law is valid beginning the date of signature.

[Signed by the President 19 June 1985]

Government Decree No. 15 of 1984 on Fisheries Resources Management in the Indonesian Exclusive Economic Zone

(from the FAO Translations)

PART I - GENERAL

Article I.

In these Regulations there shall be understood by :

- (a) "Management" - all efforts and actions by the Government with a view to the directing and controlling the benefits that are obtainable from the natural resources in the Indonesian Exclusive Economic Zone;
- (b) "Conservation of natural resources" - all efforts with a view to protecting and rendering self-sustaining the natural resources of the Indonesian Exclusive Economic Zone;
- (c) "Fishing" activities directed to catching fish, other than fish raised in fish farms, from the waters by means of gear or in any manner, and includes activities entailing the use of vessels for transport, preservation, cold storage, long terms conservation and management;
- (d) "Fishing vessels" - vessels or boats or other craft used to carry out fish catching, and includes vessels, boats and other craft used for fisheries surveys or exploration;
- (e) "Allowable catch" - quantity of natural resources that may be taken compatibly with their conservation in the Indonesian Exclusive Economic Zone;
- (f) "Fishing fee" - the sum that a foreign fishing firm that has obtained a fishing permit for the Indonesian Exclusive Economic Zone is required a fishing permit for the Indonesian Exclusive Economic Zone is required to pay to the Indonesian government.

PART II - UTILIZATION

Article 2.

(1) The natural resources in the Indonesian Exclusive Economic Zone shall be utilized for the development of Indonesian fisheries.

(2) Pursuant to sub-regulation (1), the Government shall organize facilities with a view to increasing the capacity of the Indonesian fisheries.

(3) In order to achieve optimum utilization of the natural resources of the Indonesian Exclusive Economic Zone, individuals and bodies corporate of Indonesian nationality shall be allowed to operate together with foreign nationals or bodies corporate in joint ventures or under other kinds of cooperation in accordance with the law.

Article 3.

Foreign nationals or bodies corporate shall be admitted to engage in fishing activities in the Indonesian Exclusive Economic Zone if the Indonesian nationals or bodies

corporate engaging in fishing activities are unable to make complete use of the catch volume allowed by Government regulations.

PART III - CONSERVATION

Article 4.

(1) The Minister for Agriculture shall determine the allowable catch for each species of fish resource in the Indonesian Exclusive Economic Zone.

(2) The allowable catch shall be determined in the light of the findings of research, surveys, evaluation of fishing activities.

Article 5.

The Minister of Agriculture shall determine the number of fishing vessels and fishing gear allowed to each vessel bearing in mind the allowable catch determined pursuant to regulation 4.

Article 6.

In order to ensure the conservation of natural resources it shall be prohibited to engage in fishing activities in the Indonesian Exclusive Economic Zone by means of explosives, poisons, electricity and other dangerous matters or tools.

PART IV - PERMITS

Article 7.

Individuals and bodies corporate engaging in fishing activities in the Indonesian Exclusive Economic Zone shall be required to be in possession of a permit issued by the Government of the Indonesia.

Article 8.

Permits to engage in fishing activities in the Indonesian Exclusive Economic Zone shall be granted to individuals and bodies corporate of Indonesian nationality engaging in fishery activities in accordance with the fisheries laws.

Article 9.

(1) Permits to engage in fishing activities in the Indonesian Exclusive Economic Zone shall not be granted to individuals and bodies corporate, as stated in regulation 3, unless an agreement has been first signed between the Government of the Republic of Indonesia and foreign country whose nationals such individuals or bodies corporate are.

(2) The permits mentioned in sub-regulation (1) shall be granted only if the nationality of the fishing vessels is the same as the individuals and bodies corporate concerned.

Article 10.

(1) Foreign individuals or bodies corporate intending to engage in fishing activities in the Indonesian Exclusive Economic Zone shall be required first to apply to the Minister for Agriculture or to an official designed by that Minister for a fishing permit.

(2) In the letter of application referred to in sub-regulation (1), the applicant shall state:

1. the number of vessels to be used;
2. name, address and nationality of the owner of the vessel or vessels;

3. the name of the vessel or vessels;
4. the call-sign used to identify the vessel or vessels;
5. country of registration, registration number and the flag flown by vessel or vessels;
6. overall length of the vessel or vessels;
7. gross tonnage of the vessel or vessels;
8. horsepower rating of the vessel or vessels;
9. fish hold capacity of the vessel or vessels;
10. name, address and nationality of the master;
11. number of crew;
12. kind and number of fishing gear used/transported by each vessel;
13. intended fishing grounds.

Article 11.

(1) The fishing permit for foreign individuals or bodies corporate allowed to fish in the Indonesian Exclusive Economic Zone shall be issued in the form of a letter by the Minister for Agriculture or by the official designated by the official designated by the Minister.

(2) In the permit letter referred to in sub-regulation (1), the following data shall be annotated.

1. name and nationality of the vessels owner;
2. name of the vessels; 3. call-sign of the vessels;
4. country of registration, registration number and flag flown by the vessel;
5. overall length of the vessel;
6. gross tonnage of the vessel;
7. horsepower rating of the vessel;
8. fish hold capacity of the vessels;
9. name, address and nationality of the master;
10. number of crew;
11. kind and number of fishing gear transported or used by each vessel;
12. intended fishing grounds;
13. identification marks that the vessel is required to display;
14. port or other place of reporting;
15. conditions to be complied with as regards catch.

Article 12.

(1) The fishing permit letter referred to in sub-regulation 11(1) shall be valid for one year.

(2) Foreign nationals or bodies corporate intending to continue fishing activities in the Indonesian Exclusive Economic Zone following the expiry of the fishing permit referred to in sub-regulation (1), shall be required to submit an application for a fresh permit in accordance with these Regulations, not less than 30 days before the previous permit expires.

Article 13.

(1) The fishing permit shall be issued under the name of the applicant. Each vessel used for fishing must have its permit.

(2) The original fishing permit shall be kept on board at all times,

(3) The transfer of a fishing permit shall be prohibited

Article 14.

(1) Any foreign individual or body corporate using a fishing vessel and in possession of a fishing permit as referred to in regulation 13 shall report to the official appointed by the Minister for Agriculture, or by the official designated by the Minister, at the port or other place of reporting, before, during and following fishing activities.

(2) In the course of fishing activities in the Indonesia Exclusive Economic Zone any vessel used by the foreign individuals or bodies corporate shall take on board any inspectors appointed by the Minister for Agriculture or by an official designated by the Minister and allow them to inspect the vessel.

Article 15.

Foreign nationals or bodies corporate that have been granted a fishing permit to operate in the Indonesian Exclusive Economic Zone in accordance with these Regulations, shall be required to appoint a legally established Indonesian firm to represent their interests, and to submit such appointment for the approval of the Minister for Agriculture or of an officer appointed by the Minister.

Article 16.

(1) Foreign nationals or bodies corporate that have been granted a fishing permit to operate in the Indonesian Exclusive Economic Zone shall be required to pay a fishing fee in the amount and subject to formalities to be established by the Minister for Agriculture by agreement with the Minister for Treasury.

(2) The said fee shall comprise:

- (a) a registration fee for each fishing vessel in respect of which a fishing permit is applied for ;
- (b) a fishing permit change fee, to be paid for every modification in the terms of the fishing permit;
- (c) a fishing fee for each vessel used in fishing activities

(3) In addition to the fees stated in sub-regulation (2), a fishing vessel shall pay anchorage dues when reporting in the port, in accordance with the regulations.

PART V - CRIMINAL REGULATION AND WITHDRAWAL OF PERMIT

Article 17.

Any person engaging in fishing activities in the Indonesian Exclusive Economic Zone without being in possession of a fishing permit in accordance with these Regulations shall be prosecuted under section 16 (1) and (2) of Law No. 5 of 1983.

Article 18

Any person who damages or destroys objects used in committing the offense referred to in regulation 17, with the intention to elude their confiscation when the vessels is being inspected shall be prosecuted in conformity with section 17 of Law No. 5 of 1983.

Article 19

The penalty for any fishing vessel making use of any gear or substances prohibited under regulation 6, for fishing in the Indonesian Exclusive Economic Zone, shall be a fine of not more than 75 million rupiah and the withdrawal of the fishing permit.

Article 20

If a fishing vessel used by an applicant who has granted a fishing permit in accordance with these Regulation violates the conditions laid down in the fishing permit, the penalty shall be a fine of 25 million rupiah and the withdrawal of the fishing permit.

Article 21

(1) Offenses under regulations 17, 18 and 19 shall be criminal offense.

PART VI - TRANSITIONAL PROVISIONS**Article 22.**

(1) Within not more than three months from the entry into force of these Regulations, all fishing permits granted to foreign fishing vessels to operate in the Indonesian Exclusive Economic Zone shall be renewed in accordance with these Regulations.

(2) For all the foreign vessels renewing their fishing permits as required by sub-regulation (1), the applicants shall be required to pay the fishing fees provided for in regulations 16.

PART VII - FURTHER PROVISIONS**Article 23.**

The Minister for Agriculture shall in agreement with the Minister of Transport and the Commander-in-chief of Armed Forces designate the port of reporting and shall prescribe the reporting formalities for foreign fishing vessels and the inspection procedures required by regulations 14.

Article 24

The Minister for Agriculture shall make detailed regulations for all the matters having to do with the use made of the natural resources in the Indonesian Exclusive Economic Zone not governed by these Regulations, in consultation with other Ministers on individual matters that fall within their respective terms of reference.

PART VIII - FINAL PROVISIONS

Article 25. These Regulations shall enter into force on the date of promulgation.

Government Regulation 15 of 1990 Regulation of Fishing Businesses

[only parts relevant to foreign/EEZ fishing translated]

Article 1:

5. A license (IUP) is written permission that should be possessed by a fishing company in order to carry out fishing business using production facilities specified in the license.

6. PPKA is approval given to a fishing company which possesses IUP to use foreign flag fishing vessel in cooperation with foreign individual or foreign company to fish in the Indonesian EEZ

10. SPI is a license that shall be possessed by every fishing vessel of Indonesian flag for fishing activities in Indonesian waters and/or EEZ and this letter is issued under the company IUP

11. SIPI is a license which shall be possessed by every foreign fishing vessel used by an Indonesian fishing company (which must possess IUP and PPKA) for fishing in the EEZ

Article 7: The SPI is valid for a period of three years and the renewal will be also for a three year period, provided that the vessel is still used for fishing business

Article 9:

1. A company with IUP intending to use foreign flag fishing vessel to fish in the EEZ shall possess PPKA which is valid for a period of three years

2. The PPKA specifies the location of the fishing areas, number and sizes of vessel, and fishing gear

3. A foreign fishing shall possess SIPI

4. SIPI shall be valid for a period of one year and renewal shall be for a period of one year, provided that the government policy of using foreign vessels continues

Article 10:

[delegation of authority for licensing vessels to less than 30 gt to the governors of provinces]

Article 13:

2. The holder of PPKA is required to:

A. Comply with the regulations for PPKA and SIPI holder

B. Submit a report of business activity every three months

Article 16:

2. SIPI may be canceled if the fishing company:

A. Does not comply with the regulations for PPKA and SIPI

B. Uses the fishing vessel for other purposes

C. The company is no longer operating the vessel to which SIPI was issued

D. IUP or PPKA is canceled by the government

Article 17:

Cancellation of IUP, SPI, PPKA, and SIPI is done by the Minister

Article 20:

1. Fishing fees as mentioned in Article 19 are 2.2% of total selling price for capture fish and 1% for aquaculture

Article 21:

The fishing fee for foreign flag fishing company fishing in the EEZ is regulated by the Minister with approval of the Minister of Finance. The money collected shall be used for national fisheries development

Article 22:

70% of the fishing fees collected are for the central government and 30% for provincial government. These fees are to be used for fisheries development

[signed by President 29 May 1990]

Minister of Agriculture Decree No.815 of 1990 Fishing Business Licensing

[only parts relevant to foreign/EEZ fishing translated]

Article 4:

IUP is given to a fishing company provided that the company possess the following:

- A. Business plan
- B. NPWP [tax number]
- C. Company or cooperative charter
- D. Technical documents of the vessels
- E. Specific location for culture (for aquaculture)
- F. Environmental impact assessment

Article 5:

- 1. Fishing vessels used shall have an SPI for Indonesian flag or SIPI for foreign flag
- 2. Validity for SPI is three years and may be extended for another three years provided that the vessel is still being used by the specified fishing company for the same purpose
- 3. SIPI shall be valid for a period of one year and renewal shall be for a period of one year provided that the government policy of using foreign vessels continues

Article 6:

- 1. A fishing company possessing IUP intending to use a foreign flag vessel in EEZ must possess PPKA, which is valid for a period of three years
- 2. The PPKA specifies the fishing ground, number and size of fishing vessels, fishing gear used and country of origin

Article 12:

- 1. PPKA as mentioned in Article 7 (3) is given to an Indonesian fishing company provided that:
 - A. The company possesses IUP
 - B. There is a charter agreement between the owner of the vessel and the Indonesian fishing company
 - C. There is a business plan
- 2. SIPI as mentioned in Article 7 (3) may be given to a fishing company provided that the company possesses/furnishes:
 - A. IUP and PPKA
 - B. Information on the shareholders
 - C. Business charter
 - D. General arrangement diagram of vessel
 - E. Specifications of the vessel
 - F. Captain's passport
 - G. List of crew
 - H. Security clearance from (BAIS) Mabres Abri
- 3. The application for PPKA and SIPI is to be submitted to the Director General of Fisheries using Form Phn-1
- 4. Within 6 months of receiving the application an approval or rejection letter will be sent to the applicant. This approval will be based on:
 - A. The number of fishing vessels allowed to fish in the EEZ
 - B. The level of exploitation of fish resource in the EEZ

Article 15:

2. The holder of PPKA must submit a business activity report every three months

Article 19:

1) PPKA will terminate if:

- A. The time allocation is completed
- B. It is returned to the issuing authority before the expiration date
- C. The fishing company becomes bankrupt
- D. The fishing company ceases business
- E. The fishing company is handed over
- F. It is canceled by issuing authority
- G. IUP is canceled

2. PPKA may be canceled by the issuing authority provided:

- A. The fishing company does not comply with the regulations attached to PPKA
- B. The fishing company intentionally does not submit a business activity report three times consecutively or submits a false report
- C. The fishing company within one year after receiving PPKA does not commence business activity
- D. IUP is canceled

Article 20:

1. SIPI will be terminated if:

- A. Time allocation is completed
- B. It is returned to the issuing authority before the expiration date
- C. SIPI is canceled by issuing authority
- D. PPKA is canceled by issuing authority
- E. IUP is canceled by issuing authority
- F. The fishing vessel is no longer used by PPKA holder

2) SIPI may be canceled by the issuing authority if:

- A. The fishing company does not comply with the regulations attached to PPKA and/or SIPI
- B. The fishing vessel is no longer used for fishing activity
- C. The fishing vessel with the attached SIPI is no longer used
- D. IUP and/or PPKA is canceled by the issuing authority

[signed by the Minister of Agriculture 1, November, 1990]

Minister of Agriculture Decree No.816 of 1990 On The Use Of Charter Of Foreign Flag Fishing Vessels For Fishing In The Indonesian Exclusive Economic Zone

Article 1:

1. Indonesian fishing companies possessing IUP intending to use foreign flag fishing vessel through charter arrangements for fishing in the EEZ must possess PPKA which is valid for a period of three years
2. The foreign flag fishing vessel mentioned above must possess SIPI

Article 2:

1. The allowed fishing gear used by the Indonesian fishing company are:
 - A. Longline
 - B. Pole/line
 - C. Purse seine
 - D. Fish net
 - E. Gillnet
 - F. Various types of line fishing
2. Fish net as mentioned in Article 2 (1) must not be used in the EEZ of the Malaka Straits
3. Gillnets as mentioned in Article 2 (1) may not exceed 2.5 km in length

Article 3:

1. DGF shall specify a fishing port as the base of the chartered foreign flag fishing vessel as mentioned in Article 1.
2. The foreign fishing vessel as mentioned in Article 1 using fish net gear fishing in the EEZ of the Sulawesi Sea must be based in Tarakan Fishing Harbour or Nunukan Harbour, both of East Kalimantan.

Article 4:

1. The Indonesian fishing company as mentioned in Article 1 must export or sell locally the catch
2. The export fish as mentioned above must be through a port in Indonesia with an open L/C
3. The Indonesian fishing company is obliged to gradually increase the use Indonesian crew and within 6 months of the date of issuing SIPI at least 30% of the total crew of each vessel must be Indonesians

Article 5:

1. The Indonesian fishing company as mentioned in Article 1 should pay a fishing license fee for every vessel used as follows:
 - Longliner: US\$71 for each cubic meter of fish hold volume
 - Pole/line: : US\$85 for each cubic meter of fish hold volume
 - Purse seine: US\$89 for each cubic meter of fish hold volume
 - Fish net: : US\$173 for each cubic meter of fish hold volume
 - Gillnet and other misc. gear except trawl: US\$46 for each cubic meter of fish hold volume
2. The fishing license fee must be completely paid before the SIPI is given to the applicant

Article 6:

[about payment procedures]

Article 7:

The Indonesian fishing company must display on the chartered vessel a special identification given in the SIPI according to the Ministerial Regulation

Article 8:

The DGF may limit the number of chartered foreign flag fishing vessels and their fishing grounds

Article 9:

1. The SIPI of the foreign fishing vessel issued before this decree remains valid during the specified period of validity

2. An SIPI application for a foreign flag fishing vessel to be used by the Indonesian fishing company which is in the application process and for which the security clearance has not yet been obtained, shall be terminated.

[signed by the Minister of Agriculture 1 November 1990]

Ministerial Decree No. 144 Of 1993 On Appointing A Port As A Fishing Base For Chartered Foreign Flag Fishing Vessels For Fishing In The EEZ

Article 1:

The port appointed as a base for a chartered foreign flag fishing vessel for fishing in the EEZ before and after carrying out fishing is called a fishing base:

A. For the fishing area in the South China Sea and the Pacific Ocean are:

1. Tanjung Pinang harbour, Riau Province
2. Tarempa coastal fishing port, Riau Province
3. Batam harbour, Riau Province
4. Tarakan fishing port, East Kalimantan Province
5. Nunukan harbour, East Kalimantan Province
6. Sebatik fishing port, East Kalimantan Province
7. P.T. Perikanan fishing harbour, Bitung, North Sulawesi Province
8. Dagho fishing port, North Sulawesi Province
9. Sorong fishing port, Irian Jaya
10. Biak harbour, Irian Jaya

B. For the fishing of the EEZ of the Sulawesi Sea:

1. Tarakan fishing port, East Kalimantan Province
2. Nunukan harbour, East Kalimantan Province
3. Sebatik fishing port, East Kalimantan Province

C. For the fishing grounds of the EEZ of the Indian Ocean and Arafura Sea:

1. P.T. PSB, Sabang fishing port, Aceh Province
2. Sibolga harbour, North Sumatera Province
3. Pulau Tello fishing port, North Sumatera Province
4. Bungus fishing port, West Sumatera Province
5. Pulau Baai harbour, Bengkulu Province
6. Pelabuhan Ratu fishing port, West Java Province
7. Jakarta fishing port, Jakarta Province
8. Cilacap harbour, Central Java Province
9. Benoa harbour, Bali Province
10. Kupang fishing port, East Nusa Tenggara Province
11. Com harbour, East Timor Province
12. Ambon harbor, Maluku Province
13. Perum Perikanan Maluku Ambon fishing port, Maluku Province

Article 2:

1. The foreign flag fishing vessel chartered by an Indonesian company for fishing in the Indonesian EEZ at the date of departure of the country of origin must possess the original copy of the SIPI on the vessel

2. At the start of fishing and after completion of fishing in the EEZ, the fishing vessel as mentioned above must report to the officer appointed by the Directorate of Fisheries at the base as mentioned in Article 1 according to the following procedure:

A. At least three hours before leaving the base for fishing the vessel must inform the departure to the local officer for:

1. Checking the IUP, PPKA, and SIPI and fishing gear to be used
2. Checking the identification markings on the vessel as attached in Appendix 1 of this decree
3. Checking the requirement for a minimum of 30% Indonesia crew
4. Checking the fishing logbook as mentioned in Appendix 2A

B. After from returning from fishing activity the vessel must report its arrival to the officer and submit form 2E

Article 3:

If it is required, the DGF is authorized to modify the form as mentioned in Article 2 (2).

Article 4:

The officer is authorized to examine the vessel before or after the vessel completes in the Indonesian EEZ

Article 5:

The fishing vessel as mentioned in Article 2 (1) must obey all applicable Indonesian regulations.

Article 6:

These regulations shall be effective upon signature

[signed 27 February 1993 by the Minister]

Appendix 1:

1. The forward one-third of the hull should be painted violet
2. In the violet-painted part there must be black painted numbers/letters as big/clear as possible.
3. The first number shall indicate the fishing gear used
4. The next group of numbers shall indicate the license number
5. The code for fishing gear is as follow:
 - a. number 1 = longline
 - b. number 2 = pole/line
 - c. number 3 = purse seine
 - d. number 4 = gill net
 - e. number 5 = fish net
 - f. number 6 = other gear

[the first two letters are the code of the company]

Ministerial Decree No. 57 of 1995 on the modification of Decree No. 144 of 1993

Modification is made by adding two harbours as a base for foreign flag fishing vessels chartered by Indonesian companies

New Article 1:

D. For the Indian Ocean, an additional base is Belawan fishing port

E. For the Arafura Sea, an additional base is Ternate

[signed 20 January 1995 by the Minister]

Ministerial Decree No. 473 of 1985 Amount of Allowable Catch in the Indonesia EEZ

Article 1:

Total amount of allowable catch of natural resources in the Indonesian EEZ is determined as follows:

Species	Potential	Allowable catch
Small pelagics	1,285, 900	1,115,731
Tuna	83,435	75,915
Skipjack	98, 760	88,884
Demersal	647, 500	582,731

Article 2:

The total units of fishing boat/gear which are allowed to fish in the Indonesian EEZ is determined by considering the productivity of the boat/gear with respect to the target resource group.

Article 3:

The total allowable catch as stipulated above will be revised based on the results of research, evaluations, surveys, and fish capture activities.

Article 4:

This decree is effective from the date of signature

[signed by Minister on 27 June 1985]

Ministerial Decree No.475 of 1985 Permit for Private and Foreign Companies to Fishing in the Indonesian EEZ

The license for fishing in the Indonesian EEZ is regulated as follows:

Article 1:

1. An application for a fishing license in the Indonesian EEZ by private or foreign corporation should be submitted personally through the Indonesian agent to the Director General of Fisheries
2. The application for license stipulated in Section 1 must be submitted after government of origin of the company or private individual has bilateral agreement on fisheries with Indonesian government
3. The application for the above stipulated license must be made on the form given in Attachment 1 of this decree

Article 2:

1. The Director General of Fisheries will approve or deny the application based on determination of total allowable catch and state of utilization by Indonesian fishing companies in the Indonesian EEZ as well as the content of bilateral agreements as given in Article 1 (2).
2. If the application for the license is approved, the Director General of Fisheries will issue the license and will inform the applicant that it will be available upon payment of a registration fee and a licensing fee.
3. After the applicant pays all the required fees the Director General will give the fishing license

Article 3:

1. The license holder can request a modification of the approved license from the Director General of Fisheries
2. The meaning of "modification" above covers the following items:
 - a. Replacement of crew or changes in number of crew given on the license
 - b. Changes of fishing checkpoint base as listed on the license
 - c. Physical damage to or misplacement of license
3. If the application for the modification for the fishing license is approved, the Director General of Fisheries will issue the modified and will inform the applicant that it will be available upon payment of a registration fee and a licensing fee.
4. The modified fishing license is given to the applicant after all required fees are paid

Article 4:

1. The fishing license is valid for a period of one year
2. If a fishing license has expired, it must be renewed prior to any fishing operation in the Indonesian EEZ
3. An application for renewal must be made 30 days before expiry

Article 5:

The fishing license must be on the fishing vessel

Article 6:

The fishing license is non-transferable to other fishing vessels or other owners

Article 7:

Foreign companies which have a fishing license for the EEZ must have an associated fishing company in Indonesia.

Article 8:

License holders must carry identification and the vessels must be marked as given in Attachment 3 of this decree

Article 9:

The fishing vessel captain has the following obligations:

- a. Report departures/arrivals to harbor checkpoint specified in the fishing license
- b. Allow inspection of the fishing vessel
- c. Allow other inspectors to inspect the fishing vessel under the Ministerial decree on controlling foreign fishing vessels in the EEZ

Article 10:

The fishing vessel licensed fishing vessel is prohibited from:

- a. Using explosives, poison, electrical or other such destructive fishing techniques
- b. Carrying passengers or cargo which is not listed on the fishing license before, during or after fishing while in Indonesian waters

Article 11:

The fishing license is not valid if:

- a. Expired
- b. Revoked due to fraud
- c. Physically damaged and not legible or has been lost

Article 12:

Penalties for violating provisions of Article 10:

- a. Using explosives, poison, electrical or other such destructive fishing techniques: as per Article 19 of the Government Regulation 15/1984
- b. Fraudulent statements on application for a fishing license will be punished under article 20 of Government Regulation 15/1984

All licenses for foreign companies fishing in Indonesian EEZ which do not conform with this decree are declared no longer valid.

This decree is valid on from the date of signature

[signed by the Minister 1 July 1985]

Letter of Instruction from Minister of Research and Technology 557 of 1985 On the Development of the Fishing Fleet

To the Junior Minister for the Promotion of Domestic Product Utilization:

Paragraph 1:

As directed by the President on 10 October 1985, I request your attention and your assistance in order to promote the development of a fishing fleet for use in the Indonesian EEZ. I request that all the fishing vessels be constructed in domestic shipyards.

Paragraph 2:

It is prohibited to import used fishing vessels.

Paragraph 3:

Those individuals who have a license to import a fishing vessel and the vessel is now under construction may proceed, however for those vessels not yet under construction, this construction must be in Indonesia.

Paragraph 4:

There will be a provision for assistance for technology, design, quality control, and other factors required for domestic construction by Indonesian shipyards by the government agency BPPT/PT. PAL directly or indirectly without charge.

Paragraph 5:

I request your compliance for the above and I appreciate your attention and assistance.

[signed 11 October 1985]

Minister of Agriculture Decree No.51 of 1997 on the Deployment and Utilization of FADs

Translation: Badrudin/Gillett

Considerations:

- The use of FADs could increase productivity and decrease cost of fishing so the deployment and utilization is rapidly developing.
- This development if not regulated and managed properly could destroy the fish migration pattern and affect sustainability of the resource and create conflict among fishermen
- To avoid these problems, there is a need to regulate the deployment and utilization of FADs

It has been decided that to issue the following regulations.

Chapter 1 (General)

Article 1 (Definitions)

A FAD is an auxiliary fishing gear placed at sea.

There are 3 types of FADs: 1) Bottom FAD 2) Shallow water FAD for use in water up to 200 metres deep 3) Deep sea FAD: for use in water more than 200 metres (as shown in Appendix 1).

Fishing gear is defined as facilities and equipment or other materials used to catch fish. Fisheries businesses are defined as all kind business either by individuals or companies in capture or aquaculture including activity of storage, freezing, or preserving for commercial purposes. Fishing companies are the companies which operate fishing businesses done by individual Indonesian citizens or licensed companies.

A fisherman is a person whose earnings are from fishing.

Permission for deep sea FAD deployment is written permission that must be possessed by the fishing company.

Article 2

There are three types of FADs: bottom, shallow and deep water

Bottom FADs and shallow water FADs are to be regulated by local government as follows:

up to 3 nautical miles from the low water line of every island will be regulated by the district government (b) from 3 to 12 miles offshore by the provincial government

Chapter 2 Deployment of Deep Sea FADs

Article 3

Deployment of deep sea FADs can only be done by (1) fishing companies (2) government institutions (3) research institutes and universities in the framework of development of science and technology

Article 4

Fishing companies as mentioned above wishing to deploy deep sea FADs must have advanced permission from the Director General of Fisheries.

Government and research institutes wishing to deploy deep sea FADs must inform of the deployment in writing to the Director General of Fisheries.

Article 5

To obtain permission to deploy deep sea FADs as mentioned above, fishing companies must make an application form to the Director General of Fisheries with three items: (1) copy of the fishing business license (IUP) (2) the planned time and location of the deployment (3) design of the FAD. This must be done on the form attached as Appendix 2

Permission for the deep sea FAD is for a duration of 3 years and can be extended to the end of the life of the FAD using the in Appendix 3.

Article 6

For the sustainability of the resource and to avoid social conflict the Director General of Fisheries can limit the number of deep sea FADs

Article 7

Fishing companies as mentioned above can deploy FADs provided that the deployment does not:

- Disturb shipping routes
- Occur within a distance of 10 nautical miles from another FAD
- Disturb the migration route of fish
- Occur in water less than 200 metres
- Occur within 12 miles of the coast
- Affect the sustainability of the resource

Government institutes and research agencies can deploy FADs provided the deployment does not disturb the shipping routes

Article 8

Government institutes and research agencies as the owners of the deep sea FADs must mark the FAD and assure the FAD remains at the specified position

Fishing companies as the owners of the deep sea FADs must remove the FAD if:

- Permission period expires
- Permission has not expired but FAD ceases to function
- Permission has not expired but FAD is not being used
- Permission is not received for FAD deployment or the deployment does not agree with the regulation as mentioned in Article 7

Chapter 3: Utilization of Deep Sea FADs

Article 9

The utilization of the deep sea FAD can only be done by the deploying company.

The utilization of the deep sea FAD can be done by other companies/parties with the permission of the owner

The deploying company as mentioned above must give opportunity to small scale fishermen to catch fish around the deep water FAD in the in the EEZ of Indonesia.

Article 10

The utilization of deep sea FADs in Indonesian waters as mentioned by Article 9 can only be done by in cooperation with the fishermen (nuclear estate system) using the following fishing gear: pole/line, handline, trolling.

The utilization of the deep sea FADs by fishing companies using purse seines can only be permitted in the EEZ and the deployment point shall be a minimum of 20 nautical miles from the outer limit of the territorial waters³⁰.

The utilization of of deep sea FADs by small-scale fishermen can only be done using handlines or troll gear.

Article 11

Deep Sea FADs deployed by government agencies and research institutes can only be utilized in the framework of science and technical development. Deep sea FADs deployed by government agencies and research institutes must be removed if no longer being utilized.

Chapter 4 Surveillance

Article 12

Fishing companies holding permission for deep sea FADs must submit a report every 6 months to the DGF with copy to the provincial fisheries service, using a form as attached in Appendix 4.

If the fishing company does not submit the report for two 6 month periods consecutively, the permission for using the FAD will be withdrawn.

Chapter 5 Changes

Deep sea FADs already deployed before the effective date of this decree must submit an application for the FAD to DGF within 6 months of the effective date of the decree.

Chapter 6 Closing

The decree is effective at the date of signature [Signed 20 January 1997]

³⁰ Translator's note: this would be 32 nautical miles off the shoreline

Minister of Sea Exploration and Fisheries Decree No.45 of 2000 on Fisheries Licensing

Badrudin/Gillett translation

Chapter 1: General definitions:

Article 1:

- A fisheries business is any business either individual or corporate to fish or to culture including activities of transferring, storage, processing, cold storage, preservation, and transportation of fish for commercial purposes.
- A fisheries company is any Indonesian especially established for fisheries business.
- Fishing is any activity with the objective to obtain fish in water which is not from culture using any gear or method including activities that use a vessel for transferring, storage, processing, cold storage, preservation, or transportation.
- Fish transportation is the activity of collecting and/or transporting fish using a fish transport vessel, either by a fisheries or non-fisheries company.
- Fish culture is any activity for rearing, growing out, reproducing or harvesting the subsequent fish products by any gear or method and includes storage, cold storage, or preservation for commercial purposes.
- Fisheries vessel is any vessel or canoe or any other floating gear used to fish, including vessels for survey purposes or fisheries exploration
- Fishing vessel is any vessel specially used for fishing, including a vessel for holding fish, or cold storage or preservation of fish.
- Fish transport vessel is any vessel specially used for fish transport including the loading, holding, keeping, cold storage
- Fishing gear is a facility or equipment or other device used for fishing.
- Auxiliary fishing gear is a facility or equipment or other device used for increasing the efficiency and effectiveness of fishing.
- Fisheries management area is the Indonesian waters and Indonesian EEZ.
- Fishing fleet unit is a group of fisheries vessels consisting of fishing vessel without fish hold and supporting vessels and fish carrier vessels.
- Business plan is a plan of activities that will be carried out by fisheries company in three years time covering numbers, type, and size of fisheries vessel and/or fishing gear, fishing ground, and the investment plan for obtaining a fisheries license
- Change of business plan is an adjustment of number, type, and size of fisheries vessel and/or fishing gear, fishing ground, and investment plan in the framework of obtaining a fisheries license
- Minister is the Minister of Sea Exploration and Fisheries
- Director General is the Director General of Fisheries.

Chapter 2: Type of Fisheries License

Article 2: Types of fisheries license include:

- IUP (business license in fisheries) is a written permission possessed by a fishing company to carry out culture fisheries or capture fisheries using a fishing vessel and fishing gear. This permission specifies fishing grounds, and the number of vessels to be used fishing and/or fish transportation

- PPKA (approval for the use of foreign fishing vessel) is approval given to an IUP-holding fishing company to use a foreign-flagged vessel for fish transport
- SPI (fishing license) is a license that must be possessed by each Indonesian flagged fishing vessel to carry out fishing in the fisheries management area as a required part of the SPI.
- KIKPPII (Indonesian vessel fishing license and fish transport license) is a license which must be possessed by a Indonesian vessel in a fishing fleet to carry out fishing and fish transport by fisheries company
- SIKPII (Indonesian fish transport vessel license) is a license which must be possessed by Indonesian flagged fish transport vessel to carry out fish transport activity by fisheries company.
- SIKPIA (Foreign vessel fish transport license) is a license which must be possessed by foreign flagged fish transport vessel to carry out fish transport activity by fisheries company.
- SPKPIA (Letter of approval for foreign fish transport vessel) is a letter of approval which must be possessed by each foreign-flagged fish vessel to carry out fish transport activity by non-fisheries company

Chapter 3: Licensing Procedures for IUP, PPKA, SPI, SIKPPII, SIKPII, SIKPIA, and SPKPIA

Part One IUP

Article 3:

Every fishing company carry out business activity in the fisheries management area is required to have IUP

Fisheries management areas as mentioned above consists of:

- Malaka Straits
- Natuna and South China Sea
- Java Sea and Sunda Strait
- Flores Sea and Makassar Straits
- Banda Sea
- Maluku Sea, Tomini Bay, and Ceram Sea
- Sulawesi Sea and Pacific Ocean
- Arafura Sea
- Indian Ocean

Application for IUP is made by a fisheries company to the Director General using form Phn-1 and should be completed with

- Business plan
- Finance and tax report
- Tax identification number
- Deed of establishment of the legal entity or individual business
- Data on company personnel
- Statement of ability to pay fishing fee in accordance with existing regulations
- Presentation of environmental management effort/environmental monitoring effort/environmental impact assessment for business in fish culture activity

- Recommendation from local government (provincial/district/town) for carrying out business in fish culture activity

The IUP mentioned in Article 3 is valid for the whole life of the company and evaluation will be carried out every three years.

Fisheries companies which intend to change their business plan must apply for a new IUP to the Director General

A change of IUP mentioned above can be only be done after one year subsequent to original issue

If the fisheries company does not implement its annual business plan the Director General can change the IUP in accordance with the real annual achievement of the company

Part Two: PPKA [describes similar procedures]

Part Three: SPI [describes similar procedures]

Part Four: SIKPPII [describes similar procedures]

Part Five: SIKPII [describes similar procedures]

Part Six: SIKPIA [describes similar procedures]

Part Seven: SPKPIA [describes similar procedures]

Chapter 4: Penalties

Article 27

The Director General is authorized to apply administrative penalties for the violation by the holders of for IUP, PPKA, SPI, SIKPPII, SIKPII, SIKPIA, and SPKPIA

Administrative sanctions mentioned above can be in the form of a verbal warning, or written warning, and/or cancellation of the above licenses.

The cancellation of the licenses mentioned above is applicable to the fisheries company that

Has received two warnings each within a month, or

Has been convicted by a court.

Chapter 5: Miscellaneous Provisions

Article 28

SPI, SIKPII, and SIKPII can only be given to the vessel owner having the same name on the register and the IUP.

Article 29

If a fisheries vessel wishes to apply for SPI or SIKPPII where the operation involves using a FAD, the application must be accompanied by application for permission to use a FAD

Chapter 6: Transitional Provisions

Article 30

The procedure of giving IUP, PPKA, SPI, SIKPPII, SIKPII, SIKPIA, and SPKPIA and obligations of fisheries companies are based on existing regulations

IUP, PPKA, SPI, SIKPPII, SIKPII, SIKPIA, and SPKPIA which is already possessed by the fisheries company before this regulation is still valid until the end of the validity period.

- Fisheries company already possessing IUP, PPKA, SPI, SIKPPII, SIKPII, SIKPIA, and SPKPIA before this decree must be re-registered within six months after the effective date of this decree.

Article 31

With the enactment of this decree, all decrees that regulate fisheries businesses licenses continue to be valid providing they do not contradict this decree

Chapter 7: Closing

Article 32

This decree becomes effective on the date of issue [Signed 8 June 2000]

Minister of Agriculture and Fisheries Decree No.392 of 1999 on Fishing Zones

Badrudin/Gillett translation

Article 1

Without lowering the status of previous regulations on the subject, by this decree fishing zones are established.

Article 2

Indonesia fishing waters are divided into three zones:

- First fishing zone
- Second fishing zone
- Third fishing zone

Article 3

The first fishing zone mentioned in Article 2 is for coastal waters up to six nautical miles seaward from the low tide line on the coast

- The first fishing zone mentioned in Article 2 is divided into the following sub-zones:
- Zero to three nautical miles from the seaward from the low tide line on the coast
- Three to six nautical miles from the seaward from the low tide line on the coast
- The sub-zone from zero to three nautical miles mentioned above is reserved for:
- Fixed fishing gear
- Un-modified, non-fixed fishing gear, and/or
- un-motorized fishing vessels less than ten metres in length
-

The sub-zone from three to six nautical miles mentioned above is reserved for:

- Modified non-fixed fishing gear
- Fishing vessels
- Unmotorized and/or outboard engine powered not more than 10 metres in length
- Outboard [sic] and inboard powered with maximum length of 12 meters or maximum of five gross tones, and/or
- Using purse seine gear the maximum length of which is 150 metres
- Drift gill net the maximum length of which is 1000 metres

All fishing vessels permitted in the first fishing zone must be marked with a color on the hull a minimum of one-quarter of the topsides on both the right and left sides as follows:

- White color for fishing vessels entitled to fish in the zone zero to three miles offshore
- Red for the for fishing vessels entitled to fish in the zone three to six miles offshore

Article 4

The second fishing zone mentioned in Article 2 is for coastal waters up from six to twelve nautical miles seaward from the low tide line on the coast

The second fishing zone mentioned in Article 2 is reserved for:

- Inboard fishing vessels of a maximum size of 60 GT

- Fishing vessel using fishing gear:
- Purse seine gear of maximum length 600 metres operated using one vessel not belonging to a group seining operation or a maximum 1000 metres operated using two vessels not belonging to a fleet
- Tuna longline containing a maximum of 1200 hooks
- Drift gillnet of maximum length of 2500 metres

All fishing vessels permitted in the second fishing zone must be marked with the color orange on the hull a minimum of one-quarter of the topsides on both the right and left sides

Article 5

The third fishing zone mentioned in Article 2 is for coastal waters from 12 twelve nautical miles from the coast to the inner limit of the EEZ.

The third fishing zone mentioned in Article 2 is reserved for:

- Indonesian flagged and foreign flagged fishing vessels of maximum 350 GT regardless of type of fishing gear
- Fishing vessels between 350 to 800 GT using purse seine gear can only be operated in waters beyond 100 miles from the baseline
- Fishing vessels using purse seine gear in a group seine operation can only be operated in waters beyond 100 miles from the baseline
- Foreign flagged fishing vessels can be operated in the third fishing zone provided that the operation is consistent with existing regulations.

All fishing vessels permitted in the second fishing zone must be marked with the color yellow on the hull a minimum of one-quarter of the topsides on both the right and left sides

Article 6

All fishing gear used in the fishing zones must be marked

The implementation of the fishing gear marking will further regulated by the Director General of Fisheries.

Article 7

Fishing vessels using nets with mesh size less than one inch and skipjack purse seine vessel with nets with mesh size of less than three inches are prohibited. There is an exception for vessels using anchovy nets and lift nets.

Article 8

An exception to this decree is allowed for fishing vessels for research activities, surveys, exploration, and fisheries training with the approval of the Director General of Fisheries.

Article 9

All fishing vessels using fishing gear allowed to operate in the first fishing zone are also allowed to operate in the first, second and third zones.

- All fishing vessels using fishing gear allowed to operate in the first fishing zone are also allowed to operate in the second and third zones.
- All fishing vessels using fishing gear allowed to operate in the second fishing zone are also allowed to operate in the third zone.
- All fishing vessels and fishing gear operated in the third fishing zone are prohibited from operating in the first and second zones.

Article 10

The Director General of Fisheries shall state the prohibited fishing zones on the SPI and SIPI for each vessel.

The head of the Provincial and District Fisheries Service shall state the prohibited fishing zones on the SIKP for each vessel.

Article 11

For every fishing vessel which violates the regulations dealing with fishing zones, fishing vessel, fishing gear, fishing vessel marking and fishing gear marking the SPI or SIPI or IUP will be cancelled and/or fined up to a maximum of 25 million rupiah in accordance with Article 27 of Law Number 9 of 1985 on Fisheries.

Article 12

The implementation of marking mentioned above must be done at the latest one year after the effective date of this decree

Article 13

With the enactment of this decree the previous decrees No. 607/76, 608/76, and 300/78 are no longer valid.

Article 14

This decree is effective of the date of issue

[issued is Jakarta 5 April 1999]

Minister of Sea Exploration and Fisheries Decree No.46 of 2000 on Fisheries Business Licensing Team

Badrudin/Gillett translation

It has been decided:

First

A fisheries business licensing team is established with the members given in the attachment.

Second

The tasks of the team are as follows:

- To coordinate fisheries business licensing activities
- To plan, prepare, and implement fisheries business licensing procedures
- Carry out evaluations of fisheries business licensing procedures
- Submit a report to the Minister on implementation

Third

In the implementation of the tasks the team is responsible to the Minister

Fourth

For the acceleration of the tasks, the Chairman can establish a technical fisheries business licensing team

Fifth

Further implementation details shall be decided by the Chairman

Sixth

This decree is valid at the date of issue

[issued in Jakarta, 8 June 2000]

Members of the Fisheries Business Licensing Team

Number	Position	Position in the Team
A) Director	Minister	
B) Team Members		
1	Director General of Fisheries	Chairman
2	Director General of Surveillance and Sea Protection	Vice-Chairman
3	Director of Fisheries Business of the Directorate General of Fisheries	Secretary
4	Director of Production of the Directorate General of Fisheries	Member
5	Director of Surveillance and Marine Service Protection of the Directorate General of Surveillance and Sea Protection	Member
6	Director of Research and Living Resource Exploration of the Directorate General of Harmonization of Research and Sea Exploration	Member
7	Director of Compliance and Legal Enforcement Directorate General of Institutional and Capacity Building	Member
8	Director of Community Socio-Economic Empowerment of the Directorate General of the Coastal and Small Island Affairs	Member
9	Head of the Legal Aids Division of the Bureau of Legal And Licensing of the Secretariat General	Member

Ministry of Agriculture Decree Number: 996 of 1999 on Implementation Guidelines Concerning the Surveillance of Fisheries Resources

COREMAP Translation

Considering:

that the utilization of Fisheries Resources in fisheries regional of RI must be implemented optimally and with responsibility.

that in regard with the increased intensity of utilization of fisheries resources, improvement of controlling is needed to protect fisheries resources and its environment, so that it can be utilized continuously.

that based on (a) and (b) it's a need to enact implementation guidelines concerning the surveillance of Fisheries resources.

Recognizing:

RI Law No. 8 of 1981;

RI Law No. 5 of 1983;

RI Law No. 9 of 1985;

RI Law No. 28 of 1997;

Government Regulation of Republic of Indonesia No. 27 of 1983;

Government Regulation of Republic of Indonesia No. 15 of 1984;

Government Regulation of Republic of Indonesia No. 15 of 1990 jo Government Regulation No. 46 of 1993;

Presidential Decree of Republic of Indonesia No. 44 of 1974;

Presidential Decree of Republic of Indonesia No. 23 of 1982;

Presidential Decree of Republic of Indonesia No. 61 of 1998;

Presidential Decree of Republic of Indonesia No. 122/M of 1998;

Ministry of Justice Decree No. M14 of 1983;

Ministry of Agriculture Decree No. 815/Kpts/IK.120/11/1990 jo Ministry of Agriculture No. 128/Kpts/IK.120/4/ 1999;

Ministry of Agriculture Decree No. 144/Kpts/ IK.420/2/1993 jo Ministry of Agriculture No. 14/Kpts/IK.410/1/1998;

Ministry of Agriculture Decree No. 375/Kpts/ IK.250/5/1995;

Ministry of Agriculture Decree No. 805/Kpts/ IK.120/12/1995;

Ministry of Agriculture Decree No. 957/Kpts/ IK.120/12/1996;

Ministry of Agriculture Decree No. 26/Kpts/ OT.210/1/1998;

Ministry of Agriculture Decree No. 1016/Kpts/ OT.210/12/1998;

Ministry of Agriculture Decree No. 392/Kpts/ IK.120/4/1999;

DECIDED:

To Enact:

MINISTRY OF AGRICULTURE DECREE IMPLEMENTATION GUIDELINES
CONCERNING THE SURVEILLANCE OF FISHERIES RESOURCES

CHAPTER I

GENERAL PROVISIONS

Article 1

In this Decree the meaning of:

- Fisheries resources are all types of fish including other water biota.
- Fisheries resources management is all efforts to attain the objectives that fisheries resources be utilized optimally and continuously.
- Utilization of fisheries resources is activity of fishing and fish cultivation.
- Fisheries resources surveillance officer is Civil government official who is promoted and appointed by Ministry of Agriculture to do the job of surveillance against management and utilization of fisheries resources.
- Fishing boat is vessel or perahu or other tools that float can be used to catch fish including to do survey or fisheries exploration.
- Fishing is activity in the purpose to catch the fish in the water which is not in the area of cultivation using gear or any ways including the activity using vessel for loading, transporting, holding, and cold storage, processing or fish preserving.
- Fisheries transport ship is the ship specifically used for fish transportation includes loading, fish holes, storage, frozen or preserving.
- Fish cultivation is activity for maintaining fattening and or breeding of fish and fish harvesting.
- Gear is tool and equipment or other articles used to catch fish.
- Fisheries resources environment is water place where fisheries resources live including biota and surrounding natural factor.
- Fisheries ventures are all ventures personal or company for fishing or fish cultivation including activity of holding, cold storage frozen or fish preservation for commercial purposes.

Article 2

Surveillance of the fisheries resources included its environment is conducted with the purpose that fishing activity, transportation and or fisheries cultivation to be carried out properly in according with the rule and the legislation that being enforced.

Surveillance of fisheries resources including its environmental is conducted in order that fishing activities, transportation and or fisheries cultivation can be go on continuously, prolonged and be liable to maintain fisheries resources conservation and its environment.

Article 3

Surveillance of Fisheries Resources and it environment is conducted based on the principles of monitoring, controlling, surveillance and or investigation.

The scope of the surveillance of the fisheries resources and its environment including surveillance on fisheries ventures e.g. catching, transporting and or fisheries cultivation.

CHAPTER II

SURVEILLANCE ON CATCHING AND FISH TRANSPORTATION

Article 4

Surveillance on fisheries venture is conducted against catching and or transportation done by fisheries company, fishers and or fish farmer.

Article 5

Surveillance on catching and or fish transportation as stated in article 4 is done against:

- Fishing boat which is mooring at the pier, docking, sailing, and or doing fishing operation;
- Fish transportation boat that is mooring at the pier, docking, and or doing fishing operation;
- Other fish transportation tools;
- Fishing gears and or any supporting fishing gears.

Surveillance on fishing and fish transportation is done at:

- Fishing port as fishing infrastructure;
- Fish Landing base for fish;
- Port appointed as base port; or
- Other places appointed in according to rule and legislation in effect.

Article 6

Surveillance is conducted through document checking and or fishing boat condition, fishing gears, transportation boat, other transportation, supporting gears, amount and composition of crew in a fisheries activity unit and its production.

Article 7

Document checking as stated in article 6 includes:

- Copy of Fisheries Venture License;
- Original fishing Letter;
- Copy of agreement of the usage of Foreign Vessel;
- Original Fishing Permit;
- Original Foreign Fishing Transport Vessel Permit;
- Original Indonesian Fishing Transport Vessel Permit;
- Original Indonesian Fishing and Transportation Vessel Permit;
- Original Foreign Fishing and Fish Transportation Vessel Permit;
- Original Agreed Letter for Indonesian Fish Transporting Ship;
- Original Agreed Letter for Foreign Fish Transporting Vessel;
- Document Pertaining to manpower; and or
- Vessel Document (Measurement Letter, Certificate of Seaworthy and Crew, copy of Gross Act).

Article 8

Physical examination of Fishing Boat and or Fish Transportation boat as its stated in article 6 include measurement of tonnage, types, brand, ship mark, national flag; fish

holes, types, mark serial number and straight of engine, types, size, form and ship identification.

Physical examination of fishing gears as mentioned in article 6 consists of; types, supporting gears, size of seine, and the size of other gears.

Physical examination of other transport tools as its mentioned in article 6, consist of types, size and form supporting gear and others.

The examination of product of catching as its mentioned in article 6 which is transported consist of fish origin, type, size, amount and fish physical condition in according with the rule and legislation in effect.

Article 9

Beside physical examination of the fishing boat and or fish transport boat as its stated in article 6, the surveillance is also done on:

- Fishing traffic lane;
- Fishing area/ground;
- Fisheries protected area and or
- Environmental rehabilitation of fisheries resources.

For surveillance purposes, every fishing boat or fish transporting boat doing fishing or fish transportation are obligated to use identification sign in accordance with the gears used as given by the provisions.

Article 10

Every fishing boat master or Fish Transportation master boat that his vessel has to have permits as stated in article 7 para b,c,d, o,f,g, h, and or must fill fishing log book or fish transport log book;

Based on the result of the log book data as its stated in para (1), WASDI official must fill in Operational Sea worth Format (LLO);

LLO as its stated in para (2) be used to determine whether or fishing boat or fish transport boat can fish.

CHAPTER III

SURVEILLANCE FISH CULTIVATION AND ITS ENVIRONMENT

Article 11

The surveillance of fish cultivation and its environment is conducted against fisheries activities:

- Germination activities; and or

- Fattening activities;
- Either in freshwater or brackish water.

Surveillance of fish cultivation and its environment is done by method of document examination and or physical examination.

Article 12

Document examination as stated in article 11 (2) include:

- IUP – Fisheries Venture Permit
- BKPM Agreement of BKPM – (for fisheries venture with foreign investment or internally);
- AMDAL document for the obligated venture.

Physical examination as stated in article 11 (2) include the examination on:

- type of the used technology;
- type of means and supporting means include quantity and type of food, quantity and type of the used medicine and chemical, the extent of area of cultivation and other equipment related with operational cultivation of fish;
- Types of cultivated fish;
- The quality of liquid waste, solid waste or gas waste;
- Every activity that could cause the pollution and destroys the environment of fisheries resources or causes fish disease or infection of fish.

CHAPTER IV

SURVEILLANCE OFFICER

Article 13

Surveillance Fisheries Resources (SFRO) is a functional official in Fisheries sub-sector.

The appointment to be a functional official mentioned above will be followed in consistent with law and regulation being enforced.

Prior to the functional assignment declared this decree to be followed.

Article 14

SFRO consist of:

- Status SFRO is PPNS with status; and
- SFRO is not PPNS.

The requirement to be a SFRO as declared in (1) (a) are:
Government official;

- At least passes rank of II/b of 2 (two) years of working duration;
- Passed the PPNS course accordingly with the current law and legislation.

Article 15

WASDI – SFRO established by Ministry of Agriculture with recommendation of DGF.

DGF arrange the procedures in detail relating recommendation, mutation and appointment as WASDI-SFRO

Article 16

Conduct education and training to promote the knowledge and skill of WASDI-SFRO.

Education and training as stated in (1) are to be conducted by DGF or in cooperation with BPL of Agriculture and or MABES POLRI – Police Central Command.

Article 17

WASDI which is not current PPNS have authority:

- enter places where the examination is taken place
- ask document to be examined;
- take fish samples or material needed for laboratory examination;
- take photo or video camera of ship, fish or other examined materials.
- Conducting examinations of document, ship and fishing gears to be used as consideration in extension of fishing permit or transport of fishing in according at the request of the ship owner.
- In case of the fisheries criminal offence, WASDI has to make report to PPNS Fisheries in according with the legislation being enforced.

WASDI members which have PPNS status by the exception of having powers as in (1) also have the powers to:

- receive report of accusation from anyone regarding violation of Fisheries law;
- Conduct subpoena to the suspect and examine the suspect on the offence against the lower and legislation.
- Search the fishing boat, fishing transportation means and fishing hole storage (cold) which is supposed to be involved the offence.
- In case of Fisheries criminal offence, WASDI execute seizure on catches, gears, and related documents used in infringement of the Fisheries Law;
- In the case of suspicion of the Fisheries criminal offence, WASDI should propose for postponement issuing permit, frozen, cancellation permit accordingly to the law and legislation.
- In case of Fisheries criminal offence PPNS shall conduct investigation in according with law and legislation being enforced.

Article 18

Each WASDI prepare work plan on surveillance for their own area, in detail in monthly activity.

Preparation work plan as stated in (1) be coordinated by the highest rank of WASDI member.

If the highest rank is more than one, the coordinator shall be the most senior.

Work plan as stated in (2) should be presented to the head of administration unit of WASDI together with their yearly work plan.

CHAPTER V

THE RESPONSIBILITY OF FISHERIES COMPANIES, FISH FARMER AND FISHERS

Article 19

Fisheries company, fish farmer, and or fishers conducting fish catch, transport fish and fish culture have the responsibility to:

- Receive WASDI, doing surveillance job.
- Give data, information and facts needed by WASDI.
- Give samples materials, fish and other things needed by WASDI to examine or to laboratory test as an evident.
- Fill and return the format given by WASDI.
- Respond to Wasdi subpoena concerning the surveillance duty.

CHAPTER VI

SURVEILLANCE FACILITIES, REPORTING AND TECHNICAL DIRECTIVE

Article 20

WASDI to implement its daily duties responsible to the Head of SATMINKAL local Administration unit.

WASDI in executing its duties shall report routinely once every three months to Head Satminkal and carbon copy to DGF.

Surveillance facilitates and design format which is required and according to the detail requirement of DGF of formal using in this decree will be provided by DGF.

Expenses for executing surveillance in the decree is to be burdened to APBN, APBD of each SATMINKAL and or the society in according with current law and legislation.

Article 21

To promote the surveillance activities of fisheries resources the government can endorse participation the fisheries community to be involved in SISWASMAS.

The procedures of implementation of SISWASMAS shall be further arranged by DGF.

Article 22

Technical guidelines of this decree shall be further arranged by DGF.

CHAPTER VII

TRANSITIONAL PROVISIONS

Article 23

WASDI, that has been promoted prior to this decree is declared as WASDI according to this decree and shall be confirmed at least 6 (six) months from the Decree date.

CHAPTER VIII

CLOSING

Article 24

Fisheries company, fish farmer, and or fishers who fail to comply to this decree should be given administration sanction and criminal sanction in accordance with the fisheries and legislation.

WASDI which is not executing the rule given by this decree shall be given sanction in according with the rule and legislation being enforced.

Article 25

This decree takes effect as of the date of its promulgation.

Enacted in : Jakarta

Date : 27th September 1999

MINISTRY OF AGRICULTURE, SOLEH SOLAHUDDIN

Minister of Agriculture and Fisheries Decree No.995 of 1999 on Fish Resource Potentials and their TACs

Badrudin/Gillett translation

Article 1.

Definitions:

Fish resources potentials are the availability of fish in the Indonesian waters with their environmental carrying capacities that can be utilized through fish capture and culture activities without disregarding their sustainability and their environment.

TAC is the amount of fish resources that can be exploited taking into account their conservation in Indonesia waters.

Fish resources group is a grouping that consist of several species of the same or similar biological and environmental characteristics.

Article 2.

(1) The fish resources potential and TAC are as follows:

In Indonesian waters

The amount of fish resources of :

+ 6.258 million tonnes/year

+ 1.518 billion fishes/year (ornamental fish)

The amount of TAC

+ 5.006 million tonnes/year

+ 1.214 billion fishes/year (ornamental fish)

Detail figures of fish resources potential and their TAC mentioned above are presented in Appendix 1.

In IEEZ

The amount of fish resources potential of + 1.858 million tonnes/year

The amount of TAC: + 1.487 million/year.

Detail figures of fish resources potential and their TAC mentioned above are presented in Appendix 2.

(2) The amount of fish potentials and TAC mentioned above excludes the fish resources and TAC in the rivers, lakes, swamps and other water bodies.

Article 3.

The fish resources in Indonesian waters and IEEZ consists of 6 groups:

- Large pelagics
- Small pelagics
- Demersals
- Shrimps
- Squids
- Coral fish
- Ornamental fish

The main fish compositions of each group are presented in Appendix 3.

(2) The Indonesian waters and the IEEZ are divided into 9 Fisheries Management Zones based on fishing ground. These include:

- Malaka Str.;
- Natuna waters and South China Sea;
- Java Sea and Sunda Str.;
- Flores Sea and Makassar Str.;
- Banda Sea.
- Maluku Sea and adjacent waters;
- Sulawesi Sea and Pacific Ocean;
- Arafura Sea; and
- Indian Ocean.

The map and the Fisheries Management Zone are depicted in Appendix 4.a. and 4.b.

Article 4.

The TAC of fish resources in Indonesian waters and IEEZ mentioned are to be used as the basis for:

- Providing IUP, SPI and or SIPI; and or
- Carrying out control and surveillance of fish resources

Article 5.

In the framework of the control and surveillance of fish resources mentioned above a Coordination Forum for Fish Resources Exploitation and Management (FKPPS) is established.

The FKPPS membership, tasks and functions, responsibilities and working mechanisms mentioned above are established in a separate decree.

Article 6.

The potential of fish resources and their TAC mentioned above are to be reviewed at least every three years.

Article 7.

With the inactment of this decree, the M.A.D. No. 473a/Kpts/IK.250/6/1985 concerning the TAC in the IEEZ is no longer valid.

Article 8.

This decree is effective at the date of issue [Issued in Jakarta: 27 September 1999]

- Caption for Appendix 1: Fish Resource Potential and TAC in Indonesian Waters by Management Area and Fish Group
- Caption for Appendix 2: Fish Resource Potential and TAC in Indonesian EEZ by Management Area and Fish Group
- Caption for Appendix 3: Main composition of the Fish Groups

