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Advice to the Ministry of Marine Affairs and Fisheries on fisheries management planning and implementation

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COASTAL RESOURCES CENTER

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Glossary:

CRC	Coastal Resources Center at University of Rhode Island
DKP	Dinas Kelautan dan Perikanan (Department of Marine Affairs and Fisheries)
FMA	Fisheries Management Authority
FMP	Fishery Management Plan
GT	Gross Tons
IMACS	Indonesia Marine and Climate Support
KKP	Kementerian Kelautan dan Perikanan (Ministry of Marine Affairs and Fisheries)
MMAF	Ministry of Marine Affairs and Fisheries
PDA	Plan Development Authorities
PDT	Plan Development Team
USAID	United States Agency for International Development
WPP	Wilayah Pengelolaan Perikanan

Introduction

Two previous reports in this series advised the Ministry of Marine Affairs and Fisheries (KKP) on strengthening the process for fisheries management planning in Indonesia. The two reports (Sutinen 2013a, 2013c) identified several shortcomings in the current arrangements for fisheries management planning and implementation, including inadequate consultation in the plan development process, incomplete or weak contents of fishery management plans (FMPs), a lack of performance monitoring, and compliance and enforcement planning.

Other problem areas include dispersed fisheries management authority among national, provincial and district governments; weak use, or misuse, of management standards, reference points, and decision control rules; and an apparent reliance on a narrow set of management measures (e.g., license limitation) without adequate consideration of other measures that may have more potential for conserving fishery resources. Another major obstacle to better fisheries management, not addressed herein, is the high degree of illegal fishing, due in part to poorly resourced surveillance operations in Indonesia.

To further strengthen fisheries management planning and implementation this report proposes alternatives for restructuring the institutional and organizational arrangements for fisheries management planning and implementation. The restructuring alternatives are presented below in two phases: near-term (out to three to five years) and long-term (beyond five years).

Near-Term Restructuring Alternatives

Under existing Indonesian fisheries law, the Ministry of Marine Affairs and Fisheries (KKP) has management authority in marine waters beyond 12 nm from the shore; Provincial governments' departments of marine affairs and fisheries (DKPs) in marine waters between 4 and 12 nm from the shoreline; and District governments' departments of marine affairs and fisheries (DKPs) in marine waters up to 4 nm from the shoreline. The decentralization of fisheries governance, which disperses fisheries management authority among three levels of government, seriously complicates fisheries management with issues that should be addressed in the immediate future. Two important such issues are licensing of fishing operations and management of transboundary fisheries.

Licensing

Decentralization of governance grants the authority to issue fishing licenses to each of the three levels of government. The Ministry of Marine Affairs and Fisheries issues fishing licenses to fishing vessels larger than 30 GT; provincial governments' DKPs to vessels larger than 10 GT up to 30 GT; and district governments' DKPs to fishing vessels larger than five GT up to 10 GT. No licenses are required for fishing vessels of five GT or less.

Fisheries management authorities rely heavily on limited licensing to control fishing effort. However, the provision that governments at all three levels can issue fishing licenses complicates efforts to limit the numbers of fishing vessels, especially for fisheries that

occur in two or more of the zones. As a result, there is no effective control on the number of fishing licenses issued.¹

There are two alternatives to resolving this issue: coordinate the issuance of fishing licenses to maintain effective control of the number issued, or replace license limitation with other, more effective management measures.

Coordinating the issuance of fishing licenses presents a very challenging task. The challenges include (i) the large number of provincial and district DKPs that currently issue fishing licenses; (ii) the lack of capacity in many of the DKPs; and (iii) the likely resistance to what may appear to be re-centralization of governance.

Replacing limiting general fishing licenses with other measures appears to have better prospects. For example, FMPs could require a separate permit to participate in each fishery under management. Only general fishing licenses would be required to participate in fisheries not under an FMP; and fishery-specific permits would be required to participate in each fishery under an FMP. The fishery-specific permits could also be tied to other fishery management measures (output and/or input controls). Focusing on other management measures are less likely to be challenged in a court of law and, if designed well can win universal support across all Ministries, Provinces, District administrations, industry, and poverty alleviation authorities.

KKP has the sole authority to control fishing gear, which presents the potential to create new laws or regulations to manage the fishery with gear controls. After getting across the broad buy-in on restricting the use of trawl nets (which is already done in regards to area of operation), the Ministry could, for example, make the use of trawl nets in the Arafura Sea allowed only by permit under certain conditions.

There are several options available to KKP that would be effective in controlling fishing effort and fishing mortality. The Ministry could cap the amount of trawl nets presently in use; charge a fee for every meter of headline; gradually restrict the amount of combined headline and ground-line allowed; introduce a new law allowing trawl net permit holders to transfer net entitlements among themselves with a percentage reduction in net entitlement reverting back to MMAF on each transaction.

Transboundary management

Decentralized fisheries governance also presents challenges to effectively managing fisheries that occur in two or more zones of jurisdiction. Consider, for example, a transboundary fishery that occurs in all three zones of jurisdiction, from within 4 nm to beyond 12 nm. All three levels of government (national, provincial, district) have the legal authority to manage the fishery. In other words, KKP and the DKPs are the fisheries management authorities (FMAs) in their respective zones of authority.

Two potential problems arise as a result of this dispersed authority. One is that two or three of the authorities implement separate, uncoordinated FMPs that apply only in their

¹ Even if the number of licenses were effectively controlled, experience in several fisheries in other countries show that license limitation cannot control the amount of effective fishing effort and fishing mortality (see Sutinen 1999).

respective zones of authority. The other potential problem is that only one authority implements an FMP that applies only to its zone of authority. Clearly, management cannot succeed under these circumstances.

Other countries have addressed this issue of dispersed authority by negotiating formal agreements among fisheries governance levels that (1) designate a lead fishery management authority and (2) create arrangements for the other authorities to implement congruent plans in their zones of authority. The plans are congruent in terms of management measures, and cooperative surveillance and enforcement operations. KKP and the DKPs should resolve this issue in similar ways in the near term; otherwise, effective control of managed fisheries cannot be realized.

Regional development of FMPs

Fisheries management authorities (KKP, DKP) at each level effectively function as Plan Development Authorities (PDAs) since they are responsible for developing fisheries management plans for the fisheries over which they have authority to manage. These fisheries management authorities have customarily appointed a group of government staff to develop an FMP for a fishery – hereafter referred to as a Plan Development Team (PDT). In other words, an FMA serves as the PDA, which forms a PDT to develop an FMP for each fishery.

It is also important to note that KKP and the DKPs at present are responsible for implementing FMPs as well as developing FMPs. Several countries use this arrangement for fisheries management planning and implementation. Canada, which has an exemplary fisheries management program, uses this government-centric arrangement.² In Canada, the Department of Fisheries and Oceans (DFO) is the designated fisheries management authority. When DFO establishes that an FMP needs to be developed or revised, a regional office of DFO's Resource Management unit establishes an in-house PDT, known as an Integrated FMP Development Committee. The Committee consists of DFO staff from various DFO units (e.g., Science, Policy and Economics, Conservation and Protection).

Unlike Canada, however, KKP develops FMPs centrally in its Jakarta offices. It does not have the capacity in its regional offices to prepare FMPs for fisheries in their regions, a major shortcoming of the current set of arrangements. Within the current set of arrangements, KKP could in the near term send plan development teams (PDTs) to the ports and communities where a fishery is based.

For example, a PDT for the finfish trawl fishery in the Arafura Sea could be temporarily located in Ambon or other city in the Maluku province. The PDT would gather information and hold consultations with fishers and other stakeholders with interest in the finfish trawl fishery. On the other hand, a PDT for the Arafura Sea shrimp fishery may best be located in Jakarta where most of the shrimp companies are located.

² Other jurisdictions using the government-centric arrangement approach include some European countries and Australian states (e.g., New South Wales, Northern Territory).

Provincial and district DKPs, with their proximity to the fisheries in their zones of authority, probably have adequate access to fishers and other stakeholders. A major shortcoming at this level of governance is that some provincial and many district DKPs do not have the capacity to develop FMPs.

Consultation

As emphasized in an earlier report, KKP needs to strengthen its capacity to consult with stakeholders. The Ministry has not developed strong relationships with fishery stakeholders and most stakeholders are not very knowledgeable about fisheries management and the process for developing FMPs. This needs to change. In the near term, KKP should incorporate consultation into every step of the plan development process. In the long term, KKP should formalize consultation with a streamlined and efficient process.

There are good models of consultation processes that KKP can use to design a formal process to use for fisheries management planning (see Sutinen 2013a).³ Effective consultation operates under a set of principles, such as the following from Canada's Department of Fisheries and Oceans:

- *Accountable* - Advisors need to be selected so they are accountable to the groups they represent. At the same time, DFO has to be accountable for its actions to the Committee.
- *Open and Accessible* - Consultation should involve all parties who can contribute to or are affected by the outcome of the consultation
- *Effective* - To begin with, the committees require clear mandates, priorities, and procedures. When running, they require skilled management.

Another set of principles, from the Australian State Government of Victoria, Department of Primary Industries, Fisheries unit:

- The purpose of consultation and any consultation process should be clear, open, timely and transparent.
- The level of consultation should reflect the likely impact of decisions on persons and fisheries resources.
- The consultation process should be adequately resourced.
- The consultation process should be flexible and designed to take into account the number and type of persons to be consulted and their ability to contribute to the process.
- The consultation process should involve consideration of representative advice that represents the views and values of the persons represented.

³ For the case of Australia, see www.afma.gov.au/managing-our-fisheries/consultation/; a Canadian case, see www.pac.dfo-mpo.gc.ca/consultation/ground-fond/gtac-ccpfc/tor-man-eng.htm; and guidelines for consultation and a useful template, see www.dpi.vic.gov.au/fisheries/consultation/Principles-of-Good-Consultation.

A first step is to identify stakeholders and to organize a set of advisory groups or committees for each FMP to be developed or revised. The advisory groups should represent distinct interest groupings, such as their target species, gear type, and/or location. As an example, six advisory groups have been formed for Canada's Pacific groundfish IFMP:

- Halibut Advisory Board
- Sablefish Advisory Committee
- Ground fish Trawl Advisory Committee
- Ground fish Hook and Line Advisory Committee
- Commercial Industry Caucus
- Ground fish Integrated Advisory Board

The next step is to develop a mandate and terms of reference for each advisory group that clearly define what is expected of each group. For example, the mandate for the Ground fish Trawl Advisory Committee (above) is to provide a forum to

- Communicate information between the industry, stakeholders and DFO;
- Assist the development of annual management plans for the Ground fish trawl fishery;
- Assist the development of long-term management strategies for the Ground fish trawl fishery;
- Provide assistance, information, and recommendations to DFO regarding biological research for all species caught in the Ground fish trawl industry;
- Advise the Minister of Fisheries and Oceans on the use of discretionary penalties against Ground fish harvesters caught violating the rules and regulations of the trawl fishery; and
- Recommend Ground fish trawl representatives to other advisory bodies as required.

Finally, it is important to establish a set of standard operating procedures to guide the advisory groups in their deliberations. Guides and templates for creating standard operating procedures are readily available on the internet.⁴ As an example, the standard operating procedures for the Fisheries Council of South Australia⁵ provides detailed guidance on the Council's

- Functions (terms of reference, mandates, etc.)
- Relationships with the government, other advisory bodies, stakeholder groups, etc.
- Meeting procedures, including decision-making procedures, record keeping, etc.
- Administrative arrangements, such as remuneration, support staff
- Membership, including terms and conditions of membership

It is recommended that KKP staff draft a set of guidelines and operating procedures for conducting consultation with stakeholders throughout the fisheries management planning process. The staff should periodically review and revise the document as needed.

⁴ See for example www.admin.ox.ac.uk/media/global/.../ctrng/.../SOP_Template_v2.1.doc

⁵ Available at

www.fisheriescouncil.sa.gov.au/_data/assets/pdf_file/0012/88797/fisheries_council_procedures_14sept07.pdf

Other FMAs, namely the provincial and district DKPs, also need to foster productive consultation with stakeholders. Due to their proximity to the fisheries in their zones of authority, some DKPs appear to regularly consult with stakeholders. It is likely, however, that they too can improve their consultation procedures.

Consultation, if done well, can have a major, positive influence on the performance of fisheries management programs. If done poorly, however, it can be very detrimental to fisheries management. Therefore, it is imperative for KKP and the DKPs to approach consultation carefully, systematically, and vigorously. As emphasized in Sutinen (2013c)

Consultation with stakeholders is an essential step in fisheries management planning. Meaningful consultation is a distinguishing feature of exemplary fishery management programs. One of the principal benefits of consultation is that, if done well, consultation creates a sense of ownership and support for the management program among stakeholders. If stakeholders have opportunities to be part of and contribute to developing an FMP, they are more likely to support decisions that they otherwise would oppose. Consultation can yield superior information on the fishery, more and better ideas, build trust and minimize conflicts.⁶

Long-Term Restructuring Alternatives

During the period that the Ministry is restructuring short-term arrangements, KKP should begin planning for restructuring the arrangements for fisheries management planning and implementation in the long-term (five years and out). Restructuring should consider the following two components of long-term arrangements: greater autonomy of fisheries management planning and implementation authorities; and capacity for regional fisheries management planning.

Autonomy of fisheries management planning and implementation authorities

Many countries with exemplary fisheries management programs have established fisheries management authorities that have some degree of autonomy from government ministries and departments. The experiences in these countries demonstrate that autonomous authorities for fisheries management planning and implementation have more administrative flexibility with fewer bureaucratic constraints, greater involvement of stakeholders in fisheries management decisions, and experience less ministerial or departmental involvement in day-to-day decision-making. Examples of such semi-autonomous fisheries management authorities include AFMA, South Australia's Fisheries Commission and the United States' Regional Fisheries Management Councils.

Greater autonomy also is expected to promote development of more fisheries-specific expertise among fisheries management planning and implementation authorities. As it now stands, the practice of moving KKP personnel to other departments and units inhibits the desire and ability of staff to specialize in a specific fishery, region, or subject matter. The practice results in personnel who may be versatile but not have the in-depth knowledge of the issues they are assigned to work on.

⁶ For more information on consultation, including consultation methods, see Hindson, et al. (2005, pp 17-22), and the excellent *Guidelines for Effective Regulatory Consultations* (Treasury Board of Canada, 2007).

Fisheries management planning and implementation require personnel that have in-depth knowledge and expertise on the specific fisheries of concern. Authorities with greater autonomy are expected to avoid having their staff moved out of the organization and allowing their staff to develop the in-depth expertise to produce better FMPs and implement them more effectively.

There are three alternative sets of arrangements for fisheries management planning and implementation deserve consideration for restructuring. The three alternative arrangements create authorities that have greater autonomy from governmental ministries and departments than the government-centric approach above.

Alternative I

The first alternative is where the PDA is more, but not entirely, autonomous or separate from the government department implementing FMPs. This arrangement is common in several countries.⁷ A separate body (commission, council), comprised of fishing and other interests, experts, and government officials, takes the lead in developing FMPs. In most cases, the separate PDA develops FMPs with the assistance of a government department.

Alternative II

The second alternative is where a quasi-governmental body (separate from the fisheries ministry or department) is responsible for both developing and implementing FMPs. The Australian Fisheries Management Authority, which both develops and implements FMPs for Commonwealth fisheries, is the principal example of this arrangement. AFMA reports directly to the Minister for Agriculture but is largely autonomous from the Department. AFMA is responsible for day-to-day management of commonwealth fisheries, and the Department of Agriculture, Fisheries and Forestry has responsibility for strategic fisheries policy advice and leading international and inter-jurisdictional negotiations.

In this alternative the authority is more autonomous from government involvement than in the first alternative, above.

Alternative III

The third alternative establishes or allows a non-governmental body to serve as a PDA. For example, New Zealand encourages groups holding catch quotas to develop and implement plans for managing the group's quota allocation. Producer organizations in Europe also manage their quota allocation under the Common Fisheries Policy. In these cases, the government sets the quota and devolves to groups of producers the authority to develop and implement plans to catch their quota share. The government still plays a major role. It sets the standards to which plans must conform, retains plan approval authority, and shares implementation tasks with the producer organization. For example, the organization may develop and implement a compliance plan and share surveillance and enforcement authority with the government; or the government may retain full authority for surveillance and enforcement.

...

⁷ Examples of this arrangement are found in South Australia and a few other Australian states and in the United States at both federal and state levels.

To move forward on this issue, I suggest that the Ministry form a team to study the issue of whether and how to create a more autonomous fisheries management planning (and perhaps, implementation) authority. The team should include members of relevant ministries (e.g., KKP, planning, treasury) and external experts on public administration of natural resource management organizations. The study *New Directions for Commonwealth Fisheries Management in the 1990s* can serve as a useful model for this effort.⁸

Regional fisheries management planning capacity

A regional capacity for fisheries management planning should be developed in the long term. Regional planning capacity, in the form of PDAs based in the regions, has numerous advantages, especially in a country as large and diverse as Indonesia. Experiences in other countries clearly show the advantages of regional authorities for developing FMPs. Regional PDAs, physically located near the fisheries for which they are responsible, have easier and more frequent access to fishers and other stakeholders than if located in a distant city – such as a central PDA in Jakarta. Regional PDAs are more likely than a central PDA to develop better FMPs with more support from fishers and other stakeholders.

For the long-term, I advise KKP to establish regional semi-autonomous fisheries councils or commissions to function as PDAs, or even as FMAs (fisheries management planning and implementation authorities).

How many regional PDAs should be established? Where should they be located? These questions cannot be answered at this time. I suggest that KKP establish at least one pilot PDA within three years for one WPP, with the responsibility of developing FMPs for some of the WPP's fisheries.⁹ The pilot regional PDA should, of course, be monitored and evaluated over time. If needed, adjustments in the structure and operations of the PDA can be made to improve its performance. After five years, KKP may have sufficient information to consider implementing PDAs in other regions.

The issue of where they should be located should be examined at length. I suggest that a study team begin by evaluating the advantages and disadvantages of establishing a PDA in each of the 11 WPPs – assuming some degree of semi-autonomy from KKP. And, then compare this default arrangement with other options (e.g., regional offices of one PDA, two or three regional PDAs). It may be beneficial to involve some members of the 'autonomous study team' in this study to ensure consistency between the two studies.

Concluding Remarks

This report advises the Ministry of Marine Affairs and Fisheries on several ways to strengthen its fisheries management planning and implementation policies and practices. There are two sets of restructuring proposals – one for near-term and another for long-term restructuring.

⁸ Available at www.afma.gov.au/about-us/legislation-and-policy/.

⁹ WPP 718 may be a good candidate for the first regional PDA since KKP currently is developing one or more FMPs for Arafura Sea fisheries.

Near-term restructuring

The proposals for restructuring the arrangements for fisheries management planning and implementation in the near-term (out to three to five years) are as follows:

1. Avoid limiting fishing licenses to control fishing effort and replace with other, more effective management measures;
2. Establish formal agreements among KKP and the provincial and district DKPs that designates a lead management authority in one of the levels of fisheries governance, and that requires the other authorities to implement congruent FMPs in their zones of authority.
3. Temporarily re-locate KKP plan develop teams to the region where the fishery is based (e.g., Arafura Sea PDT to Ambon);
4. Incorporate consultation with stakeholders in every step of the plan development process;
5. Draft guidelines and operating procedures for conducting consultation with stakeholders based on other countries guidelines and procedures.

Long-term restructuring

The proposals for restructuring the arrangements for fisheries management planning and implementation in the long-term (beyond five years) are as follows:

1. Prepare for long-term restructuring by establishing, during the first three years, a planning team and process for restructuring the arrangements for fisheries management planning and implementation in the long-term;
2. Commission a study of whether and how to create semi-autonomous fisheries management planning (and perhaps, implementation) authorities. Three alternatives for the study to consider are
 - a. One or more semi-autonomous PDAs that work directly with KKP and the DKPs to develop FMPs;
 - b. One or more quasi-government bodies that have the capacity to, and are fully responsible for developing FMPs;
 - c. Non-governmental organizations, such as producer organizations, authorized to develop plans for managing their portion of a fishery (quota, area, etc.) under the supervision of KKP.
3. Develop regional capacity for fisheries management planning
 - a. First with a pilot in one region such as WPP 718; and
 - b. Commission a study of the advantages and disadvantages of establishing a PDA in each of the 11 WPPs – assuming some degree of semi-autonomy from KKP

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