INTEGRATED COASTAL MANAGEMENT IN A DECENTRALIZED INDONESIA: HOW IT CAN WORK

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ABSTRACT

This paper describes the mechanics of establishing a voluntary, incentive-based integrated coastal management program in Indonesia that is consistent with the newly established laws relating to decentralization. It first offers a close analysis of those laws, specifically Act No. 22/1999 and its implementing Regulation No. 25/2000 regarding management authorities, and Act No. 25/1999 and its implementing Regulation 104/2000 regarding financial relations and financial management. The paper then discusses why these new laws increase the need for a vertically and horizontally integrated coastal resource management (ICRM) program in Indonesia. Lastly, the paper describes how a program can be developed under decentralization. The paper proposes a voluntary program in which the central government establishes standards and guidelines for developing provincial and district ICRM programs. In addition to developing standards, the central government would also put in place specific programs providing incentives available to provinces and districts that prepare a ICRM plans in accordance with these standards and guidelines. After coordination with relevant village and provincial governments, the districts, through the provincial government, would submit their plan for approval by the central government. Upon approval, the central government would provide technical and financial assistance, and as additional incentive, would commit to adhering to the regional plan itself. The paper further identifies sources of discretionary funding available to the central government to use for financing such a program.
Key words: Keywords: ICRM, Decentralization

ABSTRAK

Makalah ini menggambarkan mekanisme dari penyelenggaraan program Pengelolaan Sumberdaya Pesisir Secara Terpadu (PSPT) di Indonesia berkaitan diterbitkannya undang-undang otonomi daerah. Hal yang dibahas adalah UU 22/1999 serta peraturan pelaksanaannya menurut PP No. 25/2000 tentang wewenang pengelolaan, dan UU 25/1999 serta PP 104/2000 tentang pengelolaan keuangan dan pembagian pendapatan. Makalah ini juga membahas arti penting dari rejim PSPT terhadap pelaksanaan otonomi daerah. Hal lain yang juga dibahas adalah gambaran program yang dapat dikembangkan dalam bingkai otonomi daerah. Diungkapkan pula suatu program yang berkaitan dengan akan dipublikasikannya pedoman dan petunjuk bagi daerah oleh pemerintah pusat dalam menyusun rencana PSPT, sehingga jika Kabupaten/Kota akan melaksanakan berbagai macam peraturan tentunya harus mengacu pada pedoman dan petunjuk tersebut. Setelah melakukan koordinasi dengan pemerintah daerah dan propinsi, pemerintah kabupaten/kota, melalui pemerintah propinsi mengirimkan rencana pengelolaannya untuk disetujui oleh pemerintah pusat. Setelah disetujui, pemerintah pusat akan menyediakan bantuan teknis dan finansial. Lebih jauh makalah ini mengidentifikasi sumber-sumber pendanaan yang ada bagi pemerintah pusat untuk digunakan sebagai pembiayaan beberapa program pengelolaan tersebut.
Kata kunci: PSPT, Otonomi Daerah

REFORMASI AND DECENTRALIZATION

Even though Indonesia is the largest archipelago state in the world, with the second longest coastline behind Canada, integrated coastal resource management (ICRM) has only recently become a subject receiving any significant attention from the central government (Dahuri and Dutton, 2000). The government first addressed it in Repilita IV, in 1984, but it was not until 1994, in Repelita VI, that the national government considered the marine sector independent from other institutional and economic sectors (BAPPENAS, 1994). Since then, great strides have been made in promoting marine and coastal management issues, such as food security and fish production, hazards mitigation and control, land-based pollution and environmental protection of marine areas, within larger planning efforts. Progress to date is has largely been assisted by outside donor organizations, but received a tremendous boost from the central government itself with the creation of a new Ministry of Marine Affairs and Fisheries in 1999 - "DKP", 2001a). With this new ministry, there is now an opportunity for the development of a strong nationwide program for integrated coastal management (Kusumaatmadja 2000).

At the same time that these efforts are getting underway in the central government, the government reform movement (reformasi) has triggered a tremendous push to decentralization. Since independence in the 1945, and particularly since the New Order in 1965, Indonesia has operated under a centralized governance structure, with virtually all mandates emanating from the central government in Jakarta (MacAndrews, 1986). This regulatory structure is implemented through regional laws (Perdas) issued at the provincial level (enactments by the Governor and Provincial Parliaments or "DPRD I"), and regency level (enactments by the Regent, [or Bupati] and Regency Parliaments or "DPRD II").1 (Podger, 1994). With reformasi and the rise of democracy in Indonesia since the fall of President Soeharto in 1998, there has been a growing demand for transparency, honesty, and especially autonomy from the central government. The central government has responded with a series of laws shifting both the political power and the financial contròl from the central government to individual regencies, and enacting new legislation regarding corruption, collusion, and nepotism (Korupsi, Kolusi, Nepotisma). The result is nothing less than a revolution in governance

DECENTRALIZATION OF MANAGEMENT AUTHORITY

With the enactment of Act No. 22/1999 on regional autonomy and Act No. 25/1999 on financial relations in 1999, regional autonomy has become a fast reality. These two laws create the legal and financial framework for governance primarily by regencies, with assistance from both provincial and central levels of government (Alm and Bahl, 1999, Bell, 2001). Article 4 of Act No. 22/1999 sets the general tone, that the law is intended to arrange and organize local societies, through their own decisions, based on their own aspirations. Article 7(1) provides that the new authority for regencies covers every governance field except foreign affairs, defense and security, justice, finance and religion. However, the central government can issue regulations to withhold other areas of governance for itself. Article 7(2) provides that the central government also retains authority to develop policy regarding a host of subjects, including natural resource use and conservation. With respect to natural resources, Article 10(1) provides that the regional administration is authorized to manage available natural resources in its area, and is responsible for "maintaining environmental preservation pursuant to law."2

Act No. 22/1999 has tremendous bearing on coastal resources management. Most directly, Article 3 establishes a territorial sea under the jurisdiction of the province that extends up to 12 nautical miles from the coastal shoreline. Within this territory, Article 10(2) elaborates that provincial authority includes three categories: (a) exploration, exploitation, conservation, and management of the sea area; (b) administrative affairs; and (c) law enforcement. Pursuant to Article 10(3), the regency may establish jurisdiction over one-third of the provincial waters, seaward from the island shoreline, or 4 nautical miles from the coastal shoreline. However, there are two notable exceptions to this regional authority. First, the seabed underneath the sea territory is not explicitly included in the maritime area, so that authority for management of the seabed appears to remain under central government control (although some regional governments are already establishing Perdas concerning mining of resources from the seabed, such as coral and sand). This includes rights to conduct activities on the seabed, such as oil, gas and mineral extraction. Second, the elucidation of Article 10(2) explicitly states that traditional fishing rights are not restricted by the regional territorial sea delimitation.

However, the authority for regencies is not absolute. According to Article 9, the province maintains authority in three circumstances: (1) cross-jurisdictional regency administration; (2) authority not yet, or not able to be, handled by the regency; and (3) administrative authority delegated from central government. Article 12 provides that Articles 7 and 9 shall be implemented through government regulations. Until such regulations are enacted, the parameters of this authority are unclear.

There is one principal regulation, however — Regulation No. 25/2000 - that fills in many of the gaps, clarifying the roles of the central and provincial governments in light of the authority delegated to the regency in Act No. 22/1999. Regulation No. 25/2000 provides that the authority of the national government generally relates to establishing policies, guidelines, criteria, and standards, and, supervision on a host of issues. The elucidation following Regulation No. 25/2000 defines these terms with language that clearly conveys that subsequent, more specific action is required. Thus the role of the central government is primarily one of indirect action rather than direct regulation and control, with specific action to follow at the regional level. However, the central government maintains the ability, pursuant to Article 7 of Regulation No. 25/2000, to take administrative action against a regional government that fails to implement existing laws or regulations.

Regulation 25/2000 states that with respect to the maritime areas within the jurisdiction of the central government, specifically within the Exclusive Economic Zone (EEZ) beyond the twelve mile mark out to two hundred nautical miles, the central government maintains direct responsibility for activities. The central government can determine conduct of exploration, conservation, processing and exploitation of natural resources in the waters outside the twelve miles (Art. 2(3)(2)(a)). Other responsibilities outside the 12 mile mark include law enforcement and regulation of waterways (Art. 2(3)).

The difference between the role of the central government generally and its role within its own jurisdictional territory is illustrated by the language in Regulation No. 25/2000 regarding natural resource conservation: Generally, the central government is to "determine guidelines on management and protection of natural resources" (Art. 2(4)(g)); but within its own jurisdiction, the central government is to "manage and to implement protection of natural resources in maritime areas beyond twelve miles" (Art. 2(4)(h)). The difference is thus one of developing guidelines for management by regional governmental entities, compared with management and implementation directly.

The role of the province is significantly more complicated and uncertain. Article 3 of Regulation No. 25/2000 reiterates the three circumstances in which the province maintains authority. Further, Article 3(5) provides that in virtually all sectors, any activity that involves multiple regencies is to be managed or authorized by the province. For example, the province is to manage environmental issues and water resources that cross two or more regencies, and to evaluate and analyze environmental impact assessments (AMDAL) for activities that involve more than one regency (Art. 3(5)(16)(a-d)).

As with central government authority in the EEZ beyond twelve nautical miles, Regulation No. 25/2000 gives the province clear autonomous authority within the territorial waters between four and twelve nautical miles. The regulation specifies that provincial authority includes the supervision of fishery resources and licensing of permits for cultivating and catching fish, and management of non-oil mineral and energy resources (Art. 3(5)(2)(a-e)).

If the province seeks to act in lieu of the regency, one of two conditions must be satisfied: (1) if the regency cannot have, or does not yet have, sufficient capacity, then the province can carry out the authority; or (2) if the regency decides, through mutual agreement with the province, then the authority is to be handled by the province. In either case, the authority must be transferred from the regency through a formal process. First, there must be a decision by the regent (bupati) and the governor, and this decision must be approved by the respective DPRDs. The decision must then be reviewed by the Board of Consideration of Regional Autonomy within the central government, and be approved by the President. In the event of such transfer, implementation of the authority is to be funded from financial equilibrium funds transferred from central to regional governments. In the event that the regency declares its ability to handle such authorization, the province must return the authority to the regional government without necessarily obtaining the approval of the central government.

The provinces are the wildcard in the new decentralized regime. On the one hand, they have a minimal role in Indonesia's new power structure, with authority and funding almost completely bypassing them. Under Act No. 22/1999 and Regulation 25/2000, the provinces apparently have been largely cut out of any meaningful role of governance. Even were they to have one, under Act No. 25/1999, they have little financial means to carry it out with most financial resources, as with authority, flowing directly to the regencies. On the other hand, the provinces are not to be completely dismissed just yet. While Article 9 of Act No. 22/1999 limits their authority to three situations, these situations are presently very vague but potentially very broad. It is likely that the role of the provinces will be decided on a case-by-case basis, where strong governors may very well take advantage of the law's ambiguity and try to secure significant amounts of authority, while weaker governors will not be able to resist the general push towards district-level management.

DECENTRALIZATION OF FINANCIAL AUTHORITY

If Act No. 22/1999 is the vehicle for decentralization, then Act No. 25/1999 is the engine. It provides for an almost complete shift of budgetary management from the central government to regional governments. Article 1 of Act No. 25/1999 recognizes two basic budgets for governance: a central government budget for revenues and expenditures (APBN), and regional budgets for revenues and expenditures (APBD). Article 3 provides that regional revenue sources can consist of original revenues, loans, and equilization funds. According to Article 4, original revenues include taxes, retributions and revenues from regionally owned enterprises. According to Article 6, equilibrium funds consist of money derived from the APBN, and is divided into three components: (1) the region's portion of the proceeds from land and building tax, tax on land and building acquisitions, and proceeds from natural resource conversion; (2) general allocation funds; and (3) specific allocation funds (see Figure 1, end of paper).

With respect to the first component of the equilibrium fund, the central government gets 20 percent of natural resource revenues, specifically forestry, fishing and mining, while the regional governments get 80 percent (Art. 6(5)). From oil production, the central government gets 85 percent and the regional government gets 15 percent, and from natural gas production, the central government gets 70 percent and the regional government gets 30 percent (Art. 6(6)).

With respect to the second component of the equilibrium fund - the general allocation fund - the central government must provide the regional governments with at least 25 percent of the APBN (Art. 7(1)). Of this general allocation, 10 percent goes to the provinces and 90 percent to the regional governments. Article 7(3) provides that with any change in authority between the province and the regency, the percentage in funding levels must change accordingly (i.e., if transfer of authority is made between the two as described above). Article 7 also provides a formula for determining the share of individual provinces. This fund is the key mechnaism for attempting to balance and equalize funds among regions (Lewis, 2001).

With respect to the third component, — also from the APBN - specific allocation funds can go to help finance specific regional needs. This includes reforestation funds, of which 40 percent go to regional governments and 60 percent go to the central government (Art. 8(4)).

Act No. 25/1999 also provides, in Article 16, for a Contingency Fund (again from the APBN) for emergencies, which includes everything from natural disasters to shortfalls in regional funding. Until recently, much of the funding to the regencies has been distributed through this fund, rather than the manner otherwise provided in Act No. 25/1999, but as of July 1, 2001, the first disbursement from the General Allocation Fund was made to the regencies (GTZ, 2001).

Regulation No. 104, enacted in November 2000, elaborates on funding allocations in Articles 6, 7 and 8 of Act No. 25, specifically what revenues are subject to redistribution, what allocation exists between regencies and provinces, and what procedures are to be used to make the redistribution. Articles 9 and 10 of Regulation 104 relate to forestry and mining revenues, and provide that of the 80 percent revenues that go to regional governments, 16 percent go to the relevant provincial governments, while the remainder go to the regencies according to various distributions, with the bulk going to the particular regency in which the activity is taking place.

Article 11 of Regulation 104 relates to fisheries revenues. Section (1) defines these revenues to include levies on fishery exploitation and levies on fishery production. Section (2) states that these revenues "shall be distributed in equal sums to regencies throughout Indonesia." This is a fundamental difference compared with regional revenues from other natural resource uses, which are distributed primarily to the regency of origin. This difference highlights the fact that fisheries are treated as true commonly owned, national resources, to be shared by all. The result of this difference is that an individual regency will receive significantly less revenue from fishing activities within its own jurisdiction than other natural resource activities. This provision removes much of the pecuniary interest - and the immediate incentive — for regencies to sell off fishing rights, as they are already doing with concessions in the forestry sector.

In general, Act 25/1999 provides that the regencies will receive most of the public revenues. However, as much of the income is derived from natural resource use, the revenue distribution will vary enormously from region to region (Brown, 1999; U.S. Embassy, 1999). This disparity among regions is exacerbated by the fact that distributions of the general allocation fund are made independent of natural resource revenues (Lewis, 2001). More importantly, most of the income is to be used for administrative expenditures, such as operating new bureaucracies in the regions, and to support the transfer in each region of thousands of civil servants from central government rosters to the regional governments (GTZ, 2001). For example, in two regencies in central Java, it is estimated that upwards of 86 percent of the new funding will go to pay civil service salaries (MacClellan, 2001). Thus, very little new revenue will go to development projects and resource conservation.

While these four laws — Acts No. 22/1999 and 25/1999, and Regulations No. 25/2000 and 104/2000 — form the central pillars of decentralization, it is estimated that almost 1000 other regulations, decrees and guidelines will need to be modified and brought into line with these laws in an attempt to flesh out the meaning and process of decentralization. Even still, numerous questions remain as to the extent of central and provincial authority, and exactly how the authority is to be exercised in light of the decentralization emphasis on regency and authority (Bell, 2001). There is an effort by the central and provincial governments to revise the newly established system to restore some authority to themselves. For example, the DPR recently commissioned a study to revise Act No. 22, which recommended that regional jurisdiction over territorial seas within twelve miles of the coastal boundary baseline be revoked, with jurisdiction of those waters being returned to the central government (Hoissein, 2001). A new law to revise Act No. 22/1999 is currently being drafted, and is expected to be completed for review by the DPR sometime before the end of the year.

THE NEED FOR AN INTEGRATED COASTAL MANAGEMENT PROGRAM

The existing legal regime governing resources in Indonesia is, in a word, sectoral, meaning that they are not managed as a whole, but as individual elements. There are approximately 20 Acts that relate to coastal resource management in particular (Putra, 2001). These Acts can be loosely grouped into six categories. Marine spatial laws relate to geographic delimitations of the ocean, and jurisdictional control over the maritime zone. Marine sectoral laws relate to sectoral uses of ocean resources. Terrestrial spatial laws relate to general planning aspects on the land, as well as jurisdictional issues regarding land management. Terrestrial sectoral laws constitute the bulk of laws relating to coastal resource management. These include laws relating to terrestrial economic and social sectors, but that affect the sea. In recent years, environmental legislation has sprung up relating to environmental protection and natural resource conservation, including: Act No. 5/1990 concerning Living Resource Conservation and Preservation; Act No. 5/1994 ratifying the Biodiversity Convention; and Act No. 23/1997 concerning Environmental Management. These laws are not sectoral, because they do not govern any one sector. Rather, they form a substantive and procedural overlay for all other sectors, and their requirements must be satisfied in the conduct of all activities. Finally, there is the legislation relating to decentralization, which also forms an overlay to all other laws.

There are generally three reasons for the profound number of conflicts, gaps and overlaps in Indonesian law. First, Indonesian laws themselves are so vague and broad that conflicts often arise even within a single Act (i.e., one Act may offer two or more broad goals or principles that, when applied in specific circumstances, may conflict). For example, in Act No. 9/1985 relating to Fisheries, Article 7(1) prohibits damage to the marine habitat, yet the Act also allows bottom trawl fishing and other capture fishing gear types that, depending on the situation, can be very destructive to surrounding habitat. Second, the rules of statutory construction for resolving differences among laws are vague and broad. As in most countries, Indonesia recognizes the premise that laws enacted later in time take priority over laws enacted earlier in time, and laws that are more specific take priority over more general laws. These rules of legal interpretation are not codified, however, so there is no consistent application by the judiciary (Diantha, 2001).

Furthermore, the rule of interpretation that is codified in a typical Act is extremely weak: each Act states that previous laws remain valid unless specifically in conflict with the new Act. Rather than explicitly replacing one law for another, the Act offers only an implicit replacement. Such an implied repeal is often very difficult to interpret. Third, where conflicts do arise, they are generally not resolved through the judiciary. Rather, they historically have been resolved with the issuance of a Presidential Decree or Ministerial Decree. This approach - where the executive branch of government resolves disputes among laws enacted by the legislature - makes a highly politicized legal system with little certainty, as opposed to an approach in which the judiciary resolves disputes and adheres to its own precedents. (Heydir, 1984).

These conflicts are exacerbated in coastal management issues because coastal management involves a particular bio-geographic space (i.e., the coastal area) in which many sectors operate rather than focusing on activities within a particular sector (Purwaka, 1995; Putra, 2001). For example, there are conflicts and overlaps in definitions of terms among different Acts, particularly terms that define protected areas. Many of these defined areas appear almost identical in purpose, and yet they have different classifications under different laws, which give rise to different uses.3 As one example of a conflict between marine and forestry sectors, Act No. 41/1999 relating to Forestry allows for harvest of coastal mangrove forests; however, such harvest conflicts with the prohibitions against damaging habitat of fishery resources, contained in Article 7(1) of Act No. 9/1985 relating to Fisheries. As another example of conflict between the fisheries and natural resources sectors, Act No. 9/1985 has an extremely broad definition of the term "fish" that can be harvested under that law, including sea turtles, marine mammals such as whales and manatees, sea cucumber and corals; however, Act 5/1990 relating to Conservation of Natural Resources protects fish and wildlife that are threatened with extinction.

Conflicts are also exacerbated with respect to enforcement. Different Acts have different sanctions and liability for similar offenses. Sanctions, such as criminal versus civil penalties, vary widely. Different Acts also have different standards of liability, such as negligence, intentional or strict, for almost identical violations. This complicates enforcement and prosecution efforts. There are countless other examples, especially in looking at regulations and decrees. There is a profound need to develop a new umbrella law that serves to coordinate existing laws and create new mechanisms to resolve legal discrepancies. This is the primary reason why a new nationwide coastal management program is necessary.

A second reason is to support and increase the growing number of community-based coastal conservation projects currently underway in Indonesia. Since the mid-1990s, there has been a growing realization that greater autonomy and community-based governance was likely to be more effective in protecting the environment (CIDE, 1995; White et al. 1994). Since then, numerous projects have been carried out in Indonesia that support community-based management of natural resources, with good success (Dutton et al. 2001). Particularly in the marine and coastal sector, projects in the last 10 years have, at the local level, raised awareness, developed capacity and skills for resource management, and established conservation areas (Sofa, 2000). There is a desire among the central government and other groups to establish a national mechanism to replicate such projects (Crawford and Tulungen, 1999).

A third, related reason is to provide formal guidance to regional governments and communities that now have authority to manage their coastal resources, but as of yet do not have the ability or experience to do it themselves. This guidance would draw heavily from the community-based models that already exist, and shape new models for the future (Crawford, et al. 1998). While regional differences must be accommodated, there are still several basic principles that are relevant in all regions (Cicin-Sain and Knecht, 1998). These include the establishment of an ongoing, adaptive process for resource management specifically addressing coordination, collaboration or integration among both (i) different activities that affect the coast, its resources and its inhabitants, and (ii) different groups within society involved in, or affected by those activities. In addition, a synthesis of conservation and use of coastal resources must be achieved for the benefit of present and future generations dependent on these resources. There are also certain methodologies that apply generally in coastal resource management, regardless of regional differences (Clark, 1996). There is a great need to convey these principles and methodologies to the regions through national guidance and direction before unrepairable damage or loss of these coastal resources occurs.

DEVELOPING A NEW INTEGRATED COASTAL MANAGEMENT PROGRAM IN A DECENTRALIZED INDONESIA

An integrated, decentralized coastal resource management program can fit comfortably into Indonesia's new governance structure and is needed to ensure alignment of budgets with appropriate priorities (Knight, 2000). The general framework entails promulgation of national guidelines and standards to be implemented at the regional level, which is exactly the vision behind Law No. 22/1999 and Law No. 25/1999. This section addresses four overarching questions: (1) how would the central government implement the program (in particular, should it create a mandatory or voluntary program)? (2) how would the regional government implement the program? (3) what potential incentives are available to support implementation of the program? (4) how would the program be funded?

THE ROLE OF THE CENTRAL GOVERNMENT

The new role of the central government under Act No. 22/1999 and its regulations is to develop guidelines and policies rather than directly control and manage activities. Specifically, the central government can establish policies and guidance under Article 7(2) of Act No. 22/1999, and can enforce laws and regulations under Article 7 of Regulation No. 25/2000. The question arises as to the nature and consequence of these guidelines and policies. Can it require adherence to these guidelines and policies if management authority rests with the regencies? Even if it has authority to require such adherence, can it, as a practical matter, enforce such adherence? While the answer to the first question is yes, the answer to the second question is likely no. First, with implementation of policy now at the regional level, policy emanating from the national level may increasingly have little meaning or respect in the regions. Second, with budgetary and financial matters now being exercised almost completely at the regional level, national policy is likely to be given even less attention in regional government decision making and budget allocations. Third, any national policy necessarily must be broad and general enough to cover regional differences, thus creating lots of room for differing interpretations of the policy and thereby making any effort at consistent enforcement extremely difficult.

Consequently, it makes sense to look at whether new national programs, such as for ICRM, should be voluntary in nature. A voluntary program would avoid the obvious questions about the extent of central government authority in enacting and enforcing a mandatory program. First, even though a mandatory program may seem to be the stronger alternative, if implementation is not likely to follow at the local level, and enforcement is not likely to come from the national level, then a voluntary program obviously would be more effective. Second, a voluntary program would be acceptable to the community implementing it - by its nature as a voluntary program — so it would stand a better chance of being implemented and enforced by the communities which are closest to the resources. This is already demonstrated with the community-based projects in Northern Sulawesi, in which villages have adopted coastal management ordinances that they themselves drafted. In terms of enforcement, these village level ordinances include penalties for those violating these coastal management ordinances that have already been used to enforce inter-village violations.

A voluntary program would also allow the regional and central governments to effectively transcend the confines of Act No. 22/1999 and Regulation No. 25, because those laws recognize such mutually agreeable arrangements. Specifically, Article 3(d) and Article 4 of Regulation No. 25/2000 provide the flexibility. Article 3(d) provides the general authority for delegation agreements. Article 4(a) states more specifically that the regencies can delegate any portion of their authority to the province; under section (i), the provinces can delegate any portion of their authority to the central government; and under section (j), the central government or province can redelegate the authority. Thus, a voluntary arrangement would allow the various levels of government to delegate different responsibilities and activities among each other based on their respective strengths and weaknesses. See Figure 2, end of paper.

The question then becomes how to encourage voluntary implementation in line with guidance issued from the central government. The answer lies in the central government's ability to craft a package of incentives that would entice provincial and district level governments to adopt and implement an ICRM program. This package would include financial and technical assistance, in the form of grants and loans, advice and guidance, training and outreach, which is consistent with the role of the central government as envisioned in Act No. 22/1999 and its regulations.

The central government could offer additional incentives: for example, the central government could agree that its own activities must comply with the provisions of any regency ICRM program if that program is certified in compliance a national ICRM law and guidelines promulgated by the central government. This type of compliance is not required under Act No. 22, particularly for areas of governance enumerated in Article 7. However, as incentive for regencies (and provinces) to adopt ICRM programs, the central government can commit to this approach. For example, if a regency were to develop and receive national certification of its ICRM program consistent with the requirements of the central government law, then future activities by the central government, especially those relating to economic development, infrastructure development, and natural resource management in the coastal area, would be required to be consistent with the regency ICRM program. In such a case, a finding of compliance from the regency (or province) would be required prior to the central government initiating activities. Such an arrangement also furthers the spirit of decentralization, providing even greater deference to local governments than required under Act No. 22/1999.

However, such benefits and incentives should not be given to regional governments without any strings. There must be some standards and criteria that they must follow in order to ensure that they develop and implement an ICRM program that deserves those benefits. Article 2(3)(2)(d) of Regulation 25/2000 specifically recognizes that the central government has authority to set standards for management of the coasts. In this case, the central government must develop minimal requirements with which the local governments need to comply in order to receive any benefits. These would include obligations imposed by international treaties to which Indonesia is a party, and requirements that are in the public interest. Authority for these requirements stems from not only the general provisions of Article 7 of Act No. 22/1999, but also the provisions relating to central government supervision in Articles 112-114 of Act No. 22/1999. These articles state that the central ogvernment should foster and supervise implementation of decentralization by providing manuals and regulations. Regional governments are required to submit newly enacted Perdas to the central government, which is authorized to cancel the regulations if they contravene the public interest or other higher laws.

The central government should exercise this authority in three instances. First are minimal general environmental and public health requirements on activities affecting coastal resources and populations. Among others, this includes such standards as wastewater treatment and discharge requirements, solid waste disposal, pesticide and herbicide use, and extraction of renewable coastal resources such as fishing quotas and mangrove harvest yields etc. As in other countries, regional governments would be open to set more stringent standards but must at least meet these national standards protecting public health and general environmental protection.

Second, it should include basic substantive requirements for coastal development. This includes spatial planning and land-use requirements specifically for coastal areas,, issuing standards for spatial planning, mandating priorities for coastal-dependent uses, and identification of areas for special management actions, environmental protection or hazards control.

Third, it should impose procedural requirements to ensure coordination and transparency, such as interagency review coordination, development permit review processes, mandatory public participation and stakeholder involvement, transparent dispute resolution procedures, and other requirements all focused on pushing control of coastal management decision making to the lowest level possible (i.e., to the level of coastal residents and resource users).

The central government would provide assistance to local governments to develop ICRM plans that meet these requirements, formally approve those plans that satisfy them, and provide the incentives and benefis to any regional government with an approved plan. Within the ICRM plan development process regional governments would have broad latitude to develop plans that suit specific local needs. While process and general public welfare standards would be in place through the national law and national guidance, regional governments would decide on appropriate coastal resource management approaches based on locally held public values and aspirations. The central government would then monitor and review implementation of such plans to ensure they are faithfully carried out consistent with the intent of the national program and to verify continued entitlement to incentives provided through the central government.

As an example, for ICRM planning purposes, regional governments would define the boundaries of the 'çoastal area' covered under the ICRM plan, particularly the landward boundary, in a way that suits their particular needs. This will allow each regency or provincial government, through an open and participative process, to address the tremendous range of biophysical and ecological differences seen from region to region. Boundaries for the coastal area could be defined in a number of different ways based on these variations, ranging from narrow political, or otherwise arbitrary boundaries, to broad ecosystem-based boundaries covering large inland areas (Suominen, 1994). At the same time, the central government should provide minimum standards and guidelines to regions in defining the coastal area. For example, a minimum standard might require all regional definitions to include ecological criteria, or might allow regional governments to define the coastal area using political boundaries such as the limits of the territorial sea of a certain distance. Minimum standard guidelines would include a broad discussion of the methodologies such as these for determining the extent of coastal areas covered by ICRM plans as well as other elements important to planning such as use of GIS or scales of maps.

The next question is how the central government would establish and implement such a program. The key to ICRM is the development of a procedural mechanism for coordinating management and ensuring appropriate budgetary decisions. The most obvious mechanism is the establishment of an interagency council with adequate authority delegated from the sectoral agencies. Although still very early, the process for identifying a coordinating structure at the national level has already begun with the recent establishment of the Ministry of Marine Affairs and Fisheries and the National Maritime Council. The DKP is currently leading the development of the Academic Draft (formal supporting documentation required for all new proposed legislation) report in support of a new national act to be prepared (DKP, 2001). Also, DKP recently initiated interdepartmental meetings to begin raising the awareness of other ministries of the potential of a national program and to explore how coordination might be accomplished.

However, coordination of a successful ICRM program must have a mechanism to elevate unresolved issues to a body higher than any individual sectoral ministry, including DKP. For example, if the members of a coordinating body cannot resolve a conflict, the conflict should be handled by a Coordinating Minister, or perhaps more appropriately, the President. While other models exist, the important point is that successful implementation of a national ICRM program must involve an interdepartmental coordinating body with a dispute resolution mechanism.

THE ROLE OF REGENCY GOVERNMENTS

The big winners under Act No. 22/1999 and its regulations are the regencies. Except for the few areas of governance withheld under Act. No. 22, they essentially have authority for all decision-making within their jurisdiction, unless otherwise stipulated by central government regulation, or in certain circumstances in which the province has been given authority. Unless issues of national interest are violated, regencies can certainly manage coastal resources as they see fit, independent of any national program. However, a national program can provide guidance and assistance that they otherwise will not have at their disposal. In fact, it is expecetd that some regencies would initiate a program independent of the central government guidance, although if properly designed, the incentives available for a national program should achieve widespread participation.

Compared with central and provincial governments, regencies are best positioned to develop ICRM programs tailored to local contexts, resource supplies and public aspirations and values. Regencies are close enough to the resources and its users at the local level, and yet it still large enough to coordinate among neighboring villages. It is incumbent that any ICRM program developed at broader levels of government provide for meaningful participation down to the most local level. However, through sub-regency (kecematen) offices, the regencies generally have strong connections with village and sub-village governing bodies. In general, development of all ICRM plans must be done in close cooperation between regency and village governing bodies, and include all stakeholders, public and private.

The regency would be responsible for first deciding whether it wanted to engage in an ICRM program sponsored by the central government. Once an individual regency made the decision to develop an ICRM program, the central government could provide financial grants and technical assistance for the endeavor Development of the ICRM program would follow the requirements laid out in the central government guidance and be done in cooperation with the provincial and central levels of government, as well as constituents and stakeholders within the regency. Once completed and approved, the regency ICRM program (through specific activities) should be carried out by not only the regency, but by kecematen and desa levels as well. The regency program would provide for "nested" ICRM action plans at these levels, which would allow for plans that and again, more closely reflect public values and aspirations within individual communities. The development of village level ICRM plans in North Sulawesi stands as a good example where villages have initiated local plans that are now being legally recognized by Minahasa Regency government.

Within the framework established by the central government, regencies also would develop the necessary procedural mechanisms for coordination and collaboration, similar to cross-sectoral coordination established at the central government level, and would ensure that the necessary substantive requirements outlined in the national guidance are satisfied. Beyond satisfying those minimal requirements, regencies would have flexibility to structure ICRM plans in whatever way best met local needs and conditions, and to use whatever mechanisms judged locally appropriate to satisfy the broader goals and objectives of the national ICRM program. In this way, a voluntary national ICRM program is in line with the intent of regional autonomy provided through Act No. 22/1999 and its implementing regulations.

While the regency is the most logical level for management of coastal resources, it might not be the most logical level for coordination with the central government. Of 332 regencies, 245 have a coastline. While not all regencies would be expected to take part in a voluntary ICRM program, it is to be hoped that most would. In any event, the number can potentially be huge, which would create a tremendous logistical challenge for the central government in assisting, approving, and monitoring eachindividual ICRM program. At least in terms of regency-level ICRM programs, provincial governments may have a potentially important role.

THE ROLE OF THE PROVINCES

The role of the provinces would need to be defined explicitly, as their authority under the regional autonomy laws is ambiguous. For example, provinces have authority to manage cross-jurisdictional issues involving multiple regencies. It will be hard to find an issue in natural resource management that does not cross the jurisdiction of more than one regency. This is especially true in coastal resources management where marine resources are highly mobile (as is pollution) and where there is often a strong connection between terrestrial activities and impacts to coastal water quality and resources. Even within the four mile sea territory under jurisdiction of the regencies, provinces could argue that they can manage activities that affect other regency waters. Consequently, provinces could conceivably seek to assume much of coastal resource management themselves. In addition, provinces can assume authority for activities over which regencies do not yet have, or cannot have, capacity to manage. This again can be seen to be extremely broad. However, the process for transfer of authority requires the agreement of the regency, which may have a different opinion as to available capacity. Consequently, this provision may be used rarely.

Regardless of the authority that the province can attain for itself, actually enjoying that authority may prove difficult, since it has relatively little additional funding under Act No. 25/1999. The distribution of revenues, particularly revenues derived from natural resource consumption, is going to play out between the central government and the regencies. As a result, the role of the provinces will, almost as a matter of default, take on a tone of guidance and policy, rather than actual management (Kaimudin, 2000). On cross-boundary issues, they may have a stronger hand in shaping policies, coordinating activities, and settling disputes, but it is doubtful it will amount to more than that.

Such a role for the provinces would be consistent with an ICRM program. Indeed, this is the type of role that should be explicitly delineated for provinces. Specifically, they would assume three responsibilities., each perfectly valid under Act No. 22. First, the province could prepare guidelines and standards to elaborate upon the central government guidelines. Given the breadth and generality of guidelines and standards that will come from the central government, more specific guidelines and standards from the provincial government could prove very useful. The differences among provinces that must be addressed in ICRM are enormous. There is a great difference among provinces in information access, resource wealth, industrial and manufacturing base, and urban and rural development. These differences can be more adequately addressed at the provincial level than at the central level. Second, provinces could review regency plans and package them to facilitate central government approval of them. Even if provinces do not have formal control over regency decision-making, they could play important roles in facilitating and coordinating review of regency plans by the central government. Provinces could also make recommendations both to local and central governments as to improvements to the plans in terms of local conditions or broader inter-regency, inter-province or inter-sectoral coordination. Third, provinces could serve as the liaison or middleman for technical assistance to help implement the ICRM programs at the local levels.

In addition to these general responsibilities, the province can, with agreement of the regency, manage coastal resources either in lieu of the regency or jointly with the regency. In the event that a regency does not have adequate authority for coastal resource management, the national program can provide - as a stipulation for certification and receipt of financial assistance - that the regency allow the province to assist it in its responsibilities. Such an arrangement would be an innovative but powerful use of the delegation authority under Articles 3 and 4 of Regulation No. 25/2000.

FUNDING AN ICRM PROGRAM

As mentioned earlier, a voluntary ICRM program must be based on a package of incentives that will encourage participation by the regions. This requires, above all else, funding. Regencies will already receive significant new funding pursuant to Act No. 25/1999. Currently, it is expected that most of this funding will be devoted to administrative expenditures. As a result, additional funding, from either the central government or provincial government, would provide opportunities to engage in management and conservation activities and would provide an incentive for regencies/cities to engage in an ICRM program. The question, of course, is where the central and provincial governments would get the funding. There are several possibilities.

The most straightfoward possibility is that the central government, most likely DKP, dedicates a portion of its budget for grants for ICRM program development and implementation. In addition to grants, the central government can use its own funds to establish a revolving loan fund for projects. However, given the lack of funding at the central government level, particularly as Act No. 25/1999 gets implemented more consistently in the future, there is likely to be only relatively small amounts available and this may not provide adequate incentive for regional governments. As an illustration, the year 2000 budget for DKP is 498 billion rupiah. Of this, 70 billion funds the Direktorat Genderal Pesisir dan Pulau-Pulau Kecil, and 13 billion rupiah are used for grants to the provinces for coastal resource management and conservation. The funds are distributed based on proposals submitted to DKP from the provinces (Rudianto, 2001).

The most promising possibility is that the central government can use specific allocation funds under the APBN equilibrium fund to support an ICRM program. These monies, pursuant to Article 8 of Act No. 25/1999, are not required to be distributed to regional governments, but are available for specific needs. According to Article 8(2)(b), this includes national priorities, which certainly can be enunciated to include ICRM. The central government would make distributions from this fund to regional governments that have ICRM plans approved by the central government, or that are initiating plans to submit for approval. It does not appear that the central government has any discretion to change the regional allocation, or to attach any conditions to the distribution under Article 7 of Act No. 25/2000.

A third, more visionary possibility would require a new act and amendments to Law No. 25/1999. It would also cure the most profound shortcoming in the new financial decentralization scheme. This shortcoming concerns the freedom of the regional governments to use natural resource revenues for any purpose whatsoever. These revenues can be used for administration, development, physical infrastructure, social infrastructure, etc. The freedom, of course, is desirable, but what is missing is a requirement that some of those revenues be reinvested in the management and conservation of natural resources - the very resources responsible for generating those revenues in the first place. A short-sighted regional government will extract natural resources to the point that they are depleted or over-exploited, thus destroying its future revenue stream and depriving future generations of meeting basic needs through these same resources.

Consequently, the central government should amend the fiscal decentralization regime to impose a requirement that regional governments use some specific percentage of their revenues generated from natural resources for natural resource conservation and management. The concept of establishing a reserve derived from revenues is similar to the Reforestration Fund, used for replanting areas harvested for timber resources. Under Act No. 25, regional governments have several sources of new funding: original revenue receipts, equilibrium funds, and loans. It is only a portion of the equilibirum fund - that portion which, according to Article 6(1)(a), is derived from natural resources - that would be subject to this new requirement. Consequently, the restrictions would not be too onerous, with complete regional automony still available for other revenue sources.

Under this hypoethetical scenario, an ICRM program could be funded through the revenues derived from natural resource use, specifically revenues derived from fisheries. As discussed above, these revenues are treated as a common resource and are to be divided equally across all regional governments. However, under a new law, the central government could hold some portion of these revenues in escrow for individual regional governments until these governments engaged in developing and implementing an approved ICRM program. This may be politically infeasible at this point, but given the constant shifts taking place in implementation of decentralization, it should be entertained considering the tremendous potential for resource damage and loss that Indonesia faces without immediate action.

CONCLUSION

In terms of the four overarching questions regarding the feasibility of an integrated coastal management program in Indonesia, this paper attempts to provide concrete answers.

(1) What should be the role of the central government in such a program? Given the legal and political climate in Indonesia, the central government should remain faithful to the principles of decentralization and regional autonomy. Consequently, it should not take a heavy-handed approach to coastal management, but rather create a voluntary program based on incentives. To be sure, there may need to be mandatory requirements for specific pollution controls, and controls over other types of impacts, but an overall coastal management program should be voluntary. Minimal standards and criteria would need to be ensured through a certification process if benefits are to accrue to the regional governments. While the Ministry of Marine Affairs and Fisheries should have the lead in managing the program, if the program is to rise above sectoral politics and policies, there should be an inter-agency body that has respect and coordinating authority above all ministries, with disputes to be resolved by the President.

(2) Who in the regional government should be responsible? All levels of regional government - kecematan, regency and province - need to be involved with coastal management if it is to be a successfully vertically and horizontally integrated program The bulk of management responsibility must lie with the regency. However, coordination among regencies, and between regencies and the central government, should be accomplished by the provinces. Furthermore, the regencies will need to involve desas and communities in planning and management, and rely on their input for developing programs.

(3) What incentives exist to implement the program? The incentives should come in the form of financial and technical assistance. In addition, the central government should comply any regency ICRM approved program as additional incentive for regencies to seek approval for a voluntary program.

(4) How will the program be funded? Of course, under Act No. 25, the majority of funds to implement regency programs will come directly from original revenues or revenues from taxes and natural resource consumption. However, the central government can fund an integrated coastal management program through discretionary funding using its own share of general allocation fund under the equilibrium fund, or using specific allocation funds under the equilibrium fund.

Assuming that an ICRM program would be a voluntary, incentive-based program, regency, provincial and central governments could enter into special arrangements as they saw fit. The transfer of authority from regencies to the provinces for certain issues, and the agreement of regencies to have their activities reviewed by the central government, would be conditions for their receipt of incentives and other benefits. This is not required under Act No. 22/1999, but certainly allowed under Act No. 22/1999, and would lend the program greater ease in execution and coordination. The flexibility allowed under that law is powerful, and can be used to create innovative, collaborative programs for natural resource management. Indeed, an integrated, decentralized coastal resources management program is only one such example of the ways in which decentralization can further natural resource conservation in Indonesia.

Overview of Regional Funding Sources under Act No. 25/1999 and Regulation No. 104/2000

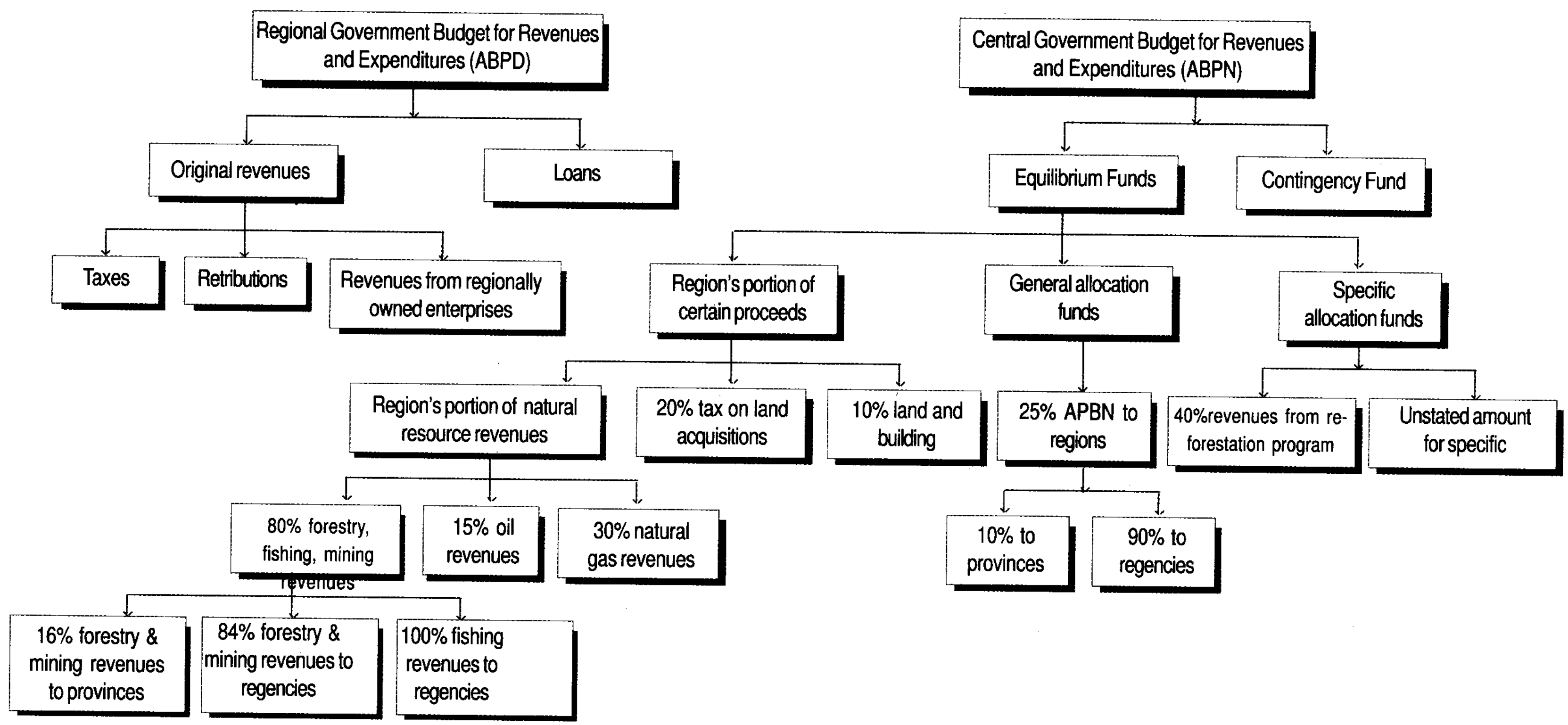

Figure 1. Funding for regencies and provinces is comprised of a multitude of sources, a combination of original revenues from their own ABPD, and funding from the central government's ABPN. This diagram depicts the breakdown of various accounts and revenue streams that make up regional funding sources. © Jason Patlis Fulbright Senior Scholar, 2000.

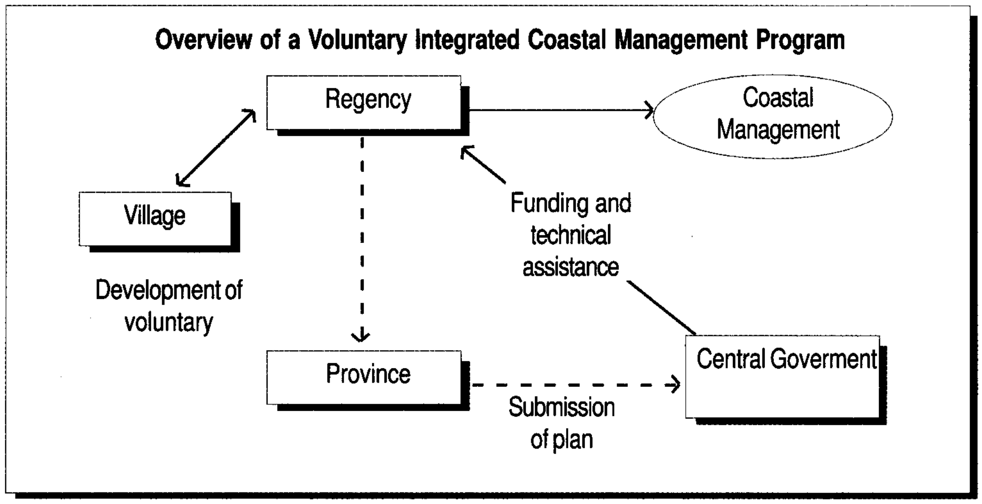

Figure 2. The kabupaten has authority to manage coastal resources directly, or it will have the option to work with desas and the province to develop a plan for submission to the central government. If approved, the central government will provide funding and technical assistance for coastal management. ©Jason Patlis, Fulbright Senior Scholar, 2000

REFERENCES

Alm, J. and R. Bahl, 1999. Decentralization in Indonesia: Prospects and Problems.

BAPPENAS, Repelita VI, 1994/95-19898/99.

Bell, G. F. 2001. The New Indonesian Laws Relating to Regional Autonomy: Good Intentions, Confusing Laws, Asian-Pacific Law & Policy Journal, Vol. 2, p. 1.

Bennett, C., 2000. Village Governance and Decentralisation of Natural Resource Management in Indonesia: Of 'Responsibility', Accountability and National Unity, Working Paper, Development Planning Assistance, Sub-Project: SP-81 Natural Resource Management Policy under Decetnralization, Bappenas.

Brown, T. H., 1999. Economic Crisis, Fiscal Decentralization and Autonomy: Prospects for Natural Resource Management, Natural Resources Management (NRM) Project.

Cicin-Sain, B. and R.W. Knecht, 1998. Integrated Coastal and Ocean Management: Concepts and Practices, Island Press.

CIDE (Center for International Development and Environment), World Resources Institute, and the Foundation for Sustainable Development, 1995. Strengthening Local Community-NGO-Private Sector-Government Partnerships for the Environmental Challenges Ahead: Indonesia Environmental Threats Assessment and Strategic Action Plan, US Agency for International Development.

Clark, J. R., 1996. Coastal Zone Management Handbook, Lewis Publishers.

Crawford, B.R., I.M. Dutton, C. Rotinsulu, and L.Z. Hale, 1998. Community-Based Coastal Resources Management in Indonesia: Examples and Initial Lessons from North Sulawesi. Proceedings of International Tropical Marine Ecosystems Management Symposium (Dight, Ian, Kenchington, R., Baldwin, J. eds.), ICRI.

Crawford, B. R. and J. Tulungen, 1999. Scaling-up Models of Community-Based Marine Sanctuaries into a Community-Based Coastal Management Program as a Means of Promoting Marine Conservation in Indonesia, Working Paper, Center for Marine Conservation, University of Rhode Island.

Dahuri, R., and I. M. Dutton, 2000. Integrated Coastal and Marine Management Enters a New Era in Indonesia. Integrated Coastal Zone Management, Issue 1, p. 11-16.

Departemen Dalam Negeri dan Otonomi Daerah, 2000. Peraturan Pemerintah No. 25, concerning Authority of the Government and Authority of the Province as an Autonomous Region.

Departemen Dalam Negeri dan Otonomi Daerah, 2000. Peraturan Pemerintah No. 104, concerning Fiscal Balance.

Diantha, P., 2001. Fakultas Hukum Unud, pers. comm. July 12, 2001.

DKP (Departemen Kelautan dan Perikanan), 2001a. Annual Report 1999-2000.

DKP (Departemen Kelautan dan Perikanan), 2001b. Direktorat Jenderal Pesisir dan Pulau-Pulau Kecil, Naskah Akademik Pengelolaan Wilayah Pesisir, Draft Pertama.

Dutton, I.M., K. Shurcliffe, D. Neville, R. Merrill, M. Erdmann, and M. Knight, 2001. Engaging Communities as Partners in Conservation and Development, Van Zorge Report on Indonesia, Vol III, No. 8, p.4.

Dutton, I. M., F. Sofa, and J. Tulungen, 1998. Proyek Pesisir: Towards Decentralized and Strengthened Coastal Resources Management in Indonesia. *In* Bengen. D. (ed.), Proc. First National Coastal Conference, 19-20 March 1998, Institut Pertanian Bogor, A63-A73.

GTZ (Deutsche Gesellschaft fur Technische Zusammenarbeit), 2001. Project Support for Decentralization Measures (SfDM), Decentralization News Issues No. 1-8. www.gtzsfdm.or.id.

Heydir, L., 1986. Peran Sekretariat Negara Dalam Proses Pembentukan Peraturan Perundangan, Departemen Pendidikan dan Kebudayaan, Skripsi. Universitas Gadjah Mada, Fakultas Hukum.

Husbandi, F. 1999. Desentralisasi Pengelolaan Sumber Daya Pesisir dan Laut, Jurnal Hukum Lingkungan, Tahun V, Vol. I, pp. 97-100.

Hoessein, B., 2001. Pemikiran Filosofis, Yuridis dan Sosiologis Revisi UU No. 22 Tahun 1999 dan UU No. 25 Tahun 1999. Sekretariat Jenderal Dewan Perwakilan Rakyat, Rebuplik Indonesia and U.N. Development Program.

Kay, R. and J. Alder, 1999. Coastal Planning and Management, E&FN Spon.

Kaimudin, L. 2000. Decentralization of Coastal and Marine Reosurce Management. Paper presented at the Second Conference on the Management of Indonesian Coastal and Marine Resources, Makassar, 15-17 May.

Knight, M., 2000. The United States Experience in Decentralized Coastal Management: Lessons for Indonesia.

Kusumaatmadja, S., 2000. National Marine Exploration and Fisheries Policy. Statement by the Minister, February 14.

Lewis, B. D., 2001. Dana Alokasi Umum: Description, Empirical Analysis, and Recommendation for Revision. Paper prepared for the Indonesian Regional Science Association Conference, Jakarta, March 20-21.

MacAndrews, C., 1986. Central Government and Local Development in Indonesia, Oxford University Press.

MacClellan, R. 2001. Chief Science Officer, U.S. Embassy, pers. comm. March 22.

Podger, O., 1994. Government in Regions: An Overview of Government Organization within Provinces and Regions of Indonesia.

President of the Republic of Indonesia. 1999. Undang-Undang No. 22, concerning Regional Administration.

President of the Republic of Indonesia . 1999. Undang-Undang No. 25 concerning the Fiscal Balance Between the Central Government and the Regions.

Purwaka, T. H. 1995. Policy on Marine and Coastal Resource Development Planning. Occasional Paper Series No. 8, Center for Archipelago, Law and Development Studies, Bandung.

Putra, S., 2001. Head of Sub-Directorate of Integrated Coastal Zone Management, Direktorat Jenderal Pesisir dan Pulau-Pulau Kecil, DKP, pers. comm. March 5.

Rudianto, M. E., 2001. Head of Sub-Directorate for Rehabilitation and Coastal Resources Utilization, Direktorat Jenderal Pesisir dan Pulau-Pulau Kecil, DKP, pers. comm. March 9.

Sofa, F., 2000. Program Pengelolaan Pesisir dan Kelautan di Indonesia: Sebuah Tinjauan. Proyek Pesisir Technical Report.

Suominen, S. B. and C. Cullinan, 1994. Legal and Institutional Aspects of Integrated Coastal Area Management in National Legislation, Food and Agriculture Organization of the United Nations.

U.S. Embassy, 1999. Economic Report: Where the (Natural Resource) Wealth Is, May 18.

White, A.T., L.Z. Hale, Y. Renard and L. Cortesi, 1994. Collaborative and Community-Based Management of Coral Reefs, Kumarian Press, West Hartford, CT.

1 A note on terminology: this paper uses the terms 'regency' and 'district' interchangeably, translating into 'kabupaten' in Bahasa Indonesia. Other terms used include 'city' ('kota'), which, under Indonesian law, has the same jurisdictional authority as kabupaten. 'Regional government' refers to both the regency and provincial levels. This paper also uses the term 'act' (undang-undang) to describe a law that is enacted by the national parliament (DPR) and signed by the President of the Republic of Indonesia. 'Undang-undang' is often translated as 'law,' but as noted by Mr. Koesnadi Hardjasoemantri, the term 'law' is a general reference to governing rules and regulations, rather than the particular type of rule constituting an 'undang-undang.'

2 There is some debate as to the meaning of the clause "pursuant to law" in that paragraph, and whether this clause gives the regions authority only insofar as existing national laws allow, which effectively would undermine much of the authority that Act No. 22/1999 purports to give to the regions. The authors believe that the language is sufficiently clear that regional governments still must comply with obligatory national laws.

3 Specifically, protected areas are established under Act No. 9/1985 relating to Fisheries, under Act No. 5/1990 relating to Conservation, under Act No. 41/1999 relating to Forestry, and under Act No. 24/1992, regarding spatial planning.