

CHAPTER 6

NAVIGATING A COURSE FOR ICM IN INDONESIA: THE INDONESIA COASTAL RESOURCES MANAGEMENT PROJECT

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This chapter focuses on adaptive management as highlighted by key aspects of the Indonesia Coastal Resources Management Project, known locally as *Proyek Pesisir*. It explains how the project used experiences as they occurred, reflected on those experiences, and adapted project implementation strategies to address the constantly changing context. It describes how the project took maximum advantage of lessons learned from ongoing field implementation. It emphasizes the complexity, the challenges and the time required to build a fully functional integrated coastal governance system.



THE INDONESIAN CONTEXT

The importance of Indonesia's coastal and marine resources to the economic well-being of the nation cannot be underestimated. It has one of the longest coastlines and is the largest archipelagic nation in the world with over 17,000 islands and a population of more than 200 million people. Approximately 24 percent of Indonesia's gross domestic product (GDP) is derived from coastal and marine-related activities and resources which employ approximately 15 million people. While oil and gas make up a significant proportion of the coastal and marine GDP, tourism, capture fisheries and mariculture are also significant. Fisheries and mariculture provide not only important export earnings but also a substantial portion of the protein in the local diet.

Coastal management issues in Indonesia are typical of the region. Environmental issues include pollution of most of the estuaries located adjacent to urban areas, coral reef degradation from destructive fishing

practices, sedimentation from logging and conversion of forests to agricultural lands, coral mining, and overfishing. Almost half of Indonesia's mangroves have been lost to mariculture ponds, reclamation and logging. Of those remaining, most have been degraded by local communities that cut the mangroves for firewood and for constructing homes. In spite of the abundance of coastal and marine resources, most coastal communities are considered to be among the poorest of the poor with average household incomes below the poverty threshold. Since the Asia financial crisis struck in 1997, the number of people living in poverty has increased. Socioeconomic conflicts between small-scale users (typically fishers) and larger-scale private sector enterprises are common.

Institutionally, strong autocratic leaders have ruled the country since Indonesia gained independence from the Dutch after World War II. Until recently, most decisions concerning development and planning were made by centralized planning and decisionmaking agencies based in Jakarta, Indonesia's capital. Under this centralized system, accusations of rampant cronyism and corruption were commonplace. From a coastal management perspective, there were few mechanisms at the central or local level for coordinated coastal resources management planning. Historically, coastal and marine resources management has been primarily sectorally based (Sloan and Sughandy, 1994), and this remains so today.

The Indonesian government has long been aware of the coastal and marine resources management issues facing the country. In the 1980s and 1990s, millions of dollars were invested by the international development community to strengthen coastal and marine management and planning capacity in Indonesia (Sofa, 2000). These efforts were focused on developing university capacity, large-scale spatial planning and mapping using geographic information systems (GIS), national parks planning (Alder et al., 1994) and fisheries development. They included the Coastal Resources Management Project in Segara Anakan funded by the Association of Southeast Nations (ASEAN) and the United States Agency for International Development (USAID), and the Marine

Resources and Environmental Planning Project funded by the Asia Development Bank (ADB). A number of international non-governmental organizations (NGOs) have also been active, including The Nature Conservancy (TNC), which has invested in the Komodo National Park. ADB had also made a number of project investments in fisheries sector development. However, by the late 1990s there was little evidence that these investments had resulted in any substantive or concrete management changes on the ground (Dahuri and Dutton, 2000).

Indonesia underwent a dramatic political transformation in the late 1990s during the implementation of Proyek Pesisir. During the project design phase and initial start-up from 1995 - 1997, there were few expectations that the highly centralized planning and control mechanisms that governed Indonesia would change in the short term. However, the centralized governance system that was built up since independence in 1946 started to unravel during the Asia financial crisis of 1997. Indonesia suffered greatly during this period. The country's rupiah (RP) devalued from 2,500 to 15,000 to the U.S. dollar in a matter of months. The banking and manufacturing sectors experienced a devastating downturn. The economic crisis was exacerbated in 1998 by the El Nino that produced a major coral bleaching event worldwide, as well as a long period of drought that set off forest fires in Sumatra and Kalimantan. The latter created a regional haze that significantly affected neighboring countries and contributed to a perception of Indonesia as "out of control."

The economic difficulties experienced by the country in 1998 eventually led to the resignation of President Suharto after rioting broke out in Jakarta and several other locations in the country. Following Suharto's resignation, there was a period of considerable uncertainty as the country transformed its governance system to a democracy and instituted a number of important reforms. Several restive provinces threatened to break away from the country and laws were passed in 1999 with significant concessions for natural resources-rich provinces such as Papua, East Kalimantan and Aceh. The province of East Timor was successful and achieved its long-sought goal to become independent. Communal vio-

lence flared in the Maluku and Kalimantan. The country is now struggling to rebuild lost economic ground and address social and political problems that continue to plague the country. In spite of these issues, much progress has been made towards decentralized and democratic forms of governance in Indonesia.

Coastal resources have continued to experience decline since the turn of the millennium and start of the reform era. However, the policy context for coastal resources management has undergone a dramatic shift and leaves hope for optimism. In 1999, the nation created a ministry with responsibility for coastal and marine resources management—the Ministry of Marine Affairs and Fisheries (MMAF) (Dahuri and Dutton, 2000). National laws on fiscal decentralization and regional autonomy were enacted with significant repercussions on coastal and marine resources management (Patlis et al., 2000). Law No. 22 of 1999 gave authority for management of marine resources out to four and 12 nautical miles, respectively, to district and provincial governments. A greater share of natural resource revenues, including fisheries revenues, is now channeled to regional governments (Law No. 25, 1999). Within this backdrop, *Proyek Pesisir* charted a course to assist institutions at the national and local level to make progress towards improved governance of coastal resources. Through these dramatic events, decentralized governance and democratic processes remained the central goal of *Proyek Pesisir*.

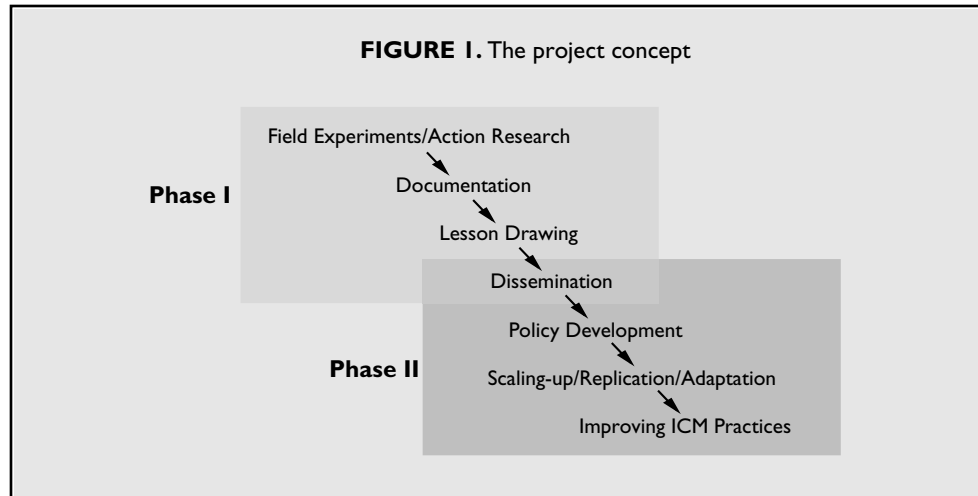
PROJECT DESIGN

At the request of the USAID Indonesia mission, the University of Rhode Island Coastal Resources Center (CRC) developed the initial project design in 1995. The design team consisted of several U.S. experts with international experience in integrated coastal management (ICM) and one Indonesian ICM expert from Institut Pertanian Bogor—Bogor Agricultural Institute (IPB)—who became the minister of Marine Affairs and Fisheries in 2000. The design team drew heavily on lessons from early international efforts in coastal management supported by USAID through the Coastal Resources Management Program (CRMP) and on

local Indonesian experience. Although Indonesia had a highly centralized system at the time *Proyek Pesisir* was being created, the design premise was that a participatory and decentralized approach was necessary to achieve effective coastal management, and improved resource conditions and quality of life for the nation's coastal communities. In order to test this premise and provide tangible examples of how an integrated coastal management (ICM) approach could be positively applied in Indonesia, the project called for the establishment of several pilot field experiments (CRC, 1995). The objective was to use local demonstration sites to test, learn and demonstrate how to apply decentralized and participatory management principles in the Indonesia context. These demonstrations could improve conditions at pilot sites, provide models for adaptation and replication by other programs and projects, and be used as a basis for policy recommendations at the national level. It was envisioned that this could eventually lead to the adoption of locally tailored strategies for effective coastal management in other regions of the nation as well. In addition to field demonstrations, the original design emphasized the need for documentation and dissemination of project field experience to bolster the argument that a new approach could be more effective than the existing practices.

Implicit in the original design was an emphasis on local action with little initial emphasis on national policy initiatives until on-the-ground results could be demonstrated. This design addressed local stakeholder concerns—expressed during the design process—that the centralized system of coastal resources management was not working effectively and new approaches were needed. The idea was first to achieve documented impacts at the local scale. Partners within CRMP and the government of Indonesia counterpart agencies seemed willing to experiment with this new approach on a small scale.

When enormous political and institutional changes brought a dramatic shift in context, the project developed a new *Life-of-Project Strategy* (CRC, 1999) that mapped out modified objectives for the second phase of the project. This new strategy included assisting the MMAF with several



national policy initiatives for coastal management. It also emphasized the need to demonstrate how decentralized and participatory coastal management—examples of which were emerging from the field sites—could be institutionalized locally and nationally.

The initial project design called for developing special area management plans, similar to the successful strategies used by CRMP I in Sri Lanka, Thailand and Ecuador as well as in the U.S. However, Indonesia had a complex administrative system with multiple layers of government administration extending from central government to the village level. In light of this, the project quickly realized that one approach alone could not be applied to all locations (Crawford et al., 1999). Instead, a range of approaches were tailored to local conditions, capacity and context. The evolving strategy acknowledged that even when the approach being developed by one provincial location differed from that being developed by another, those approaches could complement and be used in conjunction with one another. There could be several initiatives in a specific geographic location operating at different geographic or administrative scales and linked to one another through various coordination mechanisms, and with varying roles and responsibilities. This is referred to as “nested” or tiered systems of governance common in decentralized situations. (See Chapter 8.)

PROJECT GOALS AND OBJECTIVES

The goal of Proyek Pesisir was “decentralized and strengthened natural resources management.” While this goal remained unchanged throughout the life of the project, specific objectives to achieve this goal evolved over time to include:

- ❖ Testing and demonstrating decentralized and participatory coastal resources management approaches
- ❖ Strengthening the human resources and institutional capacity of local counterpart institutions
- ❖ Documenting project activities and lessons learned, and disseminating broadly
- ❖ Developing decentralized and participatory policies for coastal management

The primary objective in the early years of the project was to test and demonstrate how—in contrast to a centralized governance system—a decentralized and participatory coastal resources management approach could result in improved quality of life for coastal communities and improved environmental conditions. Three provinces were chosen for demonstration activities: North Sulawesi, Lampung and East Kalimantan. Papua province was added in the sixth year of the project at the request of USAID, as this became one of their priority provinces after decentralization took place. However, since the Papua activities are a minor component of the overall project, they are not discussed in this chapter.

Different models of coastal management were tested based on what was considered an appropriate strategy in each province. Each province prepared and implemented a management plan that addressed coastal issues typical to that province and the nation as a whole. The models tested included a community-based approach in North Sulawesi, a

provincial strategic planning approach in Lampung, and a bay and watershed management approach in East Kalimantan.

The second objective of the project was to strengthen human resources and institutional capacity of local counterpart institutions, primarily through training opportunities. This objective was a focus in the early phase of the project. Later phases placed more emphasis on institutional and organizational development, with a major effort at establishing legal frameworks. This change in strategy acknowledged the need for a strong policy mandate and institutional framework to sustain implementation and adoption of new coastal management practices after the project completion.

The third objective of the project aimed to document activities and lessons learned, and disseminate this information broadly throughout the country. IPB, the country's premier university for coastal and marine resources management, was slated to play an influential role as a partner for documentation and dissemination of project experience as well as in policy development. At the same time that CRMP II was slated to begin in 1995, other internationally supported coastal and marine resources management projects, including the multi-donor funded Coral Reef Rehabilitation and Management Project (COREMAP), were also being designed. The hope was that Proyek Pesisir could get a quick start and provide experience and lessons of use to these other projects.

The final objective of the original design was policy development. The process for detailing how this would occur was deferred, however, until initial project implementation was well underway. Only in the project's second phase, after the 1999 government reforms, did policy opportunities present themselves at the local and national levels. Once those opportunities were real, CRMP II aggressively pursued this objective.

DELIVERY STRATEGIES

The project used several strategies to achieve its objectives. At the start, the project established a strong in-country project office and project team

with a decentralized structure. Since there was no single agency at the national or local level with direct authority for coastal management in Indonesia, CRMP II established a strong project management unit with a full complement of technical and administrative staff. The aim was to give the in-country team wide latitude in decisions about who they worked with and to maximize the team's ability to adapt its efforts as necessary as the capability and interests of various institutions became evident. Annual self-evaluation strategies were incorporated into the work planning process and annual work plans were produced in the early years based on the initial project design. Indonesian program managers were assigned responsibility for implementation of the annual workplans. A life-of-project strategy for the period 2000 - 2003 was developed and the initial project strategy was modified to incorporate new CRMP II strategic directives as well as lessons learned in the first two years of the project. Further, modifications to the project design were made again in 2000 in response to a review of the USAID Natural Resources Management portfolio. This combination of internal and external reviews and assessments reinforced the direction of the original project goal, but prompted considerable changes to the Proyek Pesisir's strategies and activities.

At the national level, the project worked with the Regional Development Board (BANGDA) in the Ministry of Home Affairs as the national implementing agency. Most of the international coastal and marine resources management projects were administered at that time by BANGDA. Because Proyek Pesisir was a decentralized coastal management project, BANGDA was the logical national counterpart, given their emphasis on regional development planning and their close relationships with provincial planning authorities. However, the National Development Planning Board (BAPPENAS) also played a role as the coordinating agency for the overall USAID-government of Indonesia Natural Resources Management II Project (NRM II Project). In 1995, at the start of CRMP II, however, there was no single institution at the national level responsible for coastal management. Instead, authority was dispersed among various sectoral agencies. If the project was located within one of

the sectoral agencies, the concern was that it would take on the character of a sectoral project. This would have made it difficult for the project to address what many people believed to be one of many coastal management problems in Indonesia—a lack of inter-agency coordination and integrated planning. After the MMAF was created, it became the project's national counterpart agency, replacing BANGDA.

The project management units, particularly at the field level, worked with a large number of partners and at many levels of government. However, a government agency always served as the lead partner institution. In Indonesia a sustained ICM initiative could only be achieved if built into and nested within the nation's governmental structure.

Provincial-level project field offices were established and local staffs were hired. BANGDA channeled Indonesian counterpart funds to the Provincial Planning Board (BAPPEDA) in each of the provinces where the project was active. Each province established inter-agency working groups chaired by a BAPPEDA representative. The purpose of these working groups was to ensure that integrated and cross-sectoral planning and implementation could occur. The project worked with local partners that included provincial agencies and other institutions at the district/municipal, sub-district and village level, and included universities and non-governmental organizations (NGOs). The choice of the partners with which to work was influenced by the issues and coastal management practices being promoted.

North Sulawesi province was selected as an initial focal point for a number of reasons. First, USAID wanted to continue building on the previous natural resources management projects it had funded in the province. One of these was a project that concentrated on the province's marine park planning at Bunaken National Park. Second, local government felt that it had received little attention during the Bunaken project and wanted an initiative that would address coastal management and development issues outside the marine park. A third reason was that the Minahasa district of North Sulawesi was one of a few districts in the

country granted a degree of decentralized authority by the central government prior to 1999. While the North Sulawesi site was the first where the project began to operate, more were to follow. In the first year of Proyek Pesisir, a national steering committee developed criteria for selection decisions. Based on those criteria, it chose Lampung and East Kalimantan as additional project sites.

Unique to the project strategy was an effort to develop a group at IPB that would lead project learning and serve as a center for information collection and dissemination. The Center for Coastal and Marine Resources Studies (CCMRS) at IPB was contracted to serve in this role. However, while IPB had strong scientific capacity in various marine science disciplines, its ability to manage a learning process approach within the project and undertake practical efforts to improve coastal resources management and policy development was not well developed. Hence, another project objective emerged—to strengthen IPB's capacity to serve as this collection and dissemination agent. Advisors were found to assist the IPB team in building their skills in documentation, lesson drawing and capacity building strategies. CCMRS developed a specialized library and information center on coastal resources management and conducted national training events on coastal resources management that incorporated lessons learned and project experience into the curriculum. The project helped CCMRS to launch a peer-reviewed Indonesian scientific journal, the *Jurnal Pesisir dan Lautan* (Indonesian Journal of Coastal and Marine Resources).

During the second year of the project, CCMRS implemented the project field program in Lampung province. One reason for selecting Lampung was its physical proximity to IPB, thereby offering a living laboratory in which CCMRS could learn about coastal resources management first-hand. The university assigned a faculty member to work full-time as the project field program manager in the provincial capital of Lampung. Other IPB faculty served as technical advisors for activities in the province with support from local advisors and the University of Lampung (UNILA).

Starting in 2000, the project worked with the MMAF to establish a national coastal management program through a national law. Proyek Pesisir assisted with strategic planning within the ministry. It also helped develop guidelines for provinces and districts to use in coastal management and spatial planning.

At the same time that the project was pushing forward with its national policy initiative, models of local and participatory coastal management planning were taking shape at the field sites. The project started working more closely with local institutions to develop strategies for institutionalizing these practices. In Lampung and East Kalimantan, this entailed establishing institutional arrangements and local government budgeting to implement the plans. In North Sulawesi, the process was more complicated. The village management plans were adopted as a formal village ordinance, and implemented by village government and management committees. Meanwhile, the project worked to establish a district-wide program by developing a law that would support the existing sites and other villages engaged in community-based planning and management.

THE PROCESS OF DEVELOPMENT AND REPLICATION OF LOCAL ICM PRACTICES AT THE FIELD SITES

North Sulawesi

In North Sulawesi province, a large number of isolated fishing-farming villages are scattered along a coastline of farmed hillsides with fringing coral reefs. Urban and industrial development issues are minor. While coastal resource conditions are still good, resources are threatened by bomb and cyanide fishing, coral mining, sedimentation from hillside farming and overfishing (Pollnac et al., 1997).

In North Sulawesi, initial assessments pointed to limited government capacity. The planning framework had to be kept simple. It was essential to propose a pilot management area that was within existing administrative boundaries. This avoided the need for a separate administrative

structure outside of the existing governance framework. The North Sulawesi program started with community-based approaches appropriate to the rural and isolated nature of coastal villages in the Minahasa District. On the advice of the head of the provincial BAPPEDA, the program concentrated initially on village-level activities. Three villages were selected for the development of participatory integrated coastal development and management plans (Crawford et al., 1998). Each village developed a community-based issue profile. Each village plan called for small-scale marine sanctuaries (no-take reserves) based on examples visited during study tours to the Philippines. Cross-visits to sites and discussions with visitors from the Philippines were extremely important in building local government support to test community-based approaches and in motivating village communities to believe the process could work and would provide local benefits. Management plans and sanctuaries were formalized through a village ordinance and implemented through a village management committee. While the villages were the focus of the participatory planning process, sub-district and district government institutions were involved in the planning through a District Task Force. The task force consisted of government agencies and other representatives. The task force assisted village committees with drafting plans, attended public meetings, reviewed plans and concurred on the final plans approved by the villages. The approach is best defined as a co-management process, where the major responsibility for planning, management and implementation is by the community, but the project proceeds with the active support and assistance of sub-district and district government, especially in the planning phase.

The North Sulawesi program chose to use the same predictors of success for community-based initiatives as had been used in the Philippines (Pollnac et al., 2001). These predictors include local government support, funding and continuing advice from outside institutions. The need for support from higher-level authorities is extremely important in Indonesia where there is a long tradition of authoritarian leadership. This was reinforced by results of community surveys conducted in 2002, which indicated that local communities trust their local government

leaders more than friends, the media, universities or NGOs for advice on resources management. In North Sulawesi, local government (province and district) support was seen as essential in catalyzing community action. The additional benefit that resulted from this co-management approach was that provincial and district government counterparts viewed the pilot models as highly successful and therefore were motivated to establish a formal community-based management program later in the project.

North Sulawesi implemented early actions in all its pilot field sites during the management planning process. This strategy applied a practice developed in CRMP I in Ecuador. Early actions were designed to lead to quick and tangible results while a longer-term planning process continued. Examples of early actions in North Sulawesi included Crown-of-Thorns starfish clean-ups, mangrove planting, construction of latrines, and provision of capital (revolving funds) to community groups for supplemental livelihood projects and construction of community information centers. The project experimented with providing small grants to villages as part of the early action strategy. Both USAID and Indonesian government counterpart funds were used for these “block grants.” Village management groups prepared simple proposals to address coastal management issues. Proposals had to be approved by village government and involve as large a number of individuals in the community as possible. When proposals were funded, village groups became responsible for fiscal and programmatic management and for reporting. What was being tested by this small-grants initiative was whether communities were capable of managing small-grant funds. If proven successful, a small-grants program could be used by the district government as a decentralized mechanism for implementing ICM. Results of an internal assessment summary determined that not all projects were successful, and there were occasional problems with financial management. However when staff were properly supervised and trained, community grants were effective in catalyzing a large range of activities on community concerns and coastal resources management issues (Crawford et al., 2000; Pollnac et al., 2003).

In spite of the results of the internal assessment, an external mid-term project evaluation determined that block grants to the communities tainted the participatory process—by making communities too dependent on external funding as an incentive for taking action on coastal management issues. As a result, block grants were discontinued and local government has not integrated this concept into its coastal management program. In retrospect, field extension agents continue to believe block grants are useful tools for understanding implementation issues and are instrumental in building support for initiatives where benefits are more long term (e.g. marine sanctuaries). Recognizing the array of opinions on the value of block grants to communities, Proyek Pesisir continues to believe these grants remain an unrealized but potentially important tool. Without such financial support mechanisms, expectations for what communities can achieve and sustain on their own must be modest.

Throughout the North Sulawesi program, district government remained active in village management planning workshops, and village governments remained committed to local village planning and implementation. However, it was the level of support from the various village heads that most influenced the speed and degree of success at the different village sites. While coordinating functions of line agencies seemed easy to facilitate, getting those agencies to support villages on field-level specific implementation activities remained difficult. Where the project either facilitated the field actions of line agencies or where there were specific directives from the district-level Bupati (the Bupati has powers similar to those of a U.S. governor) their involvement was more successful. An example is the certification of land tenure for 220 households on Talise Island. This reinforces findings from the comparative study of Philippine community-based coastal management initiatives where local leadership support emerged as a predictor of success.

As the village-level planning and implementation process continued, the project worked to design a broader effort to scale-up community-based approaches to a larger number of villages (Crawford et al., 1999). This

was viewed as the only way for a community-based strategy to achieve regional-scale impact or be worthy as a district-wide program. This prompted a review of the approaches used by the pilots, and a discussion of how the pilot process could be adapted for implementation in multiple sites and carried out by local government.

A strategy was developed that concentrated activity in two adjacent sub-districts where 24 coastal villages could be simultaneously involved in a community-based planning process. The initiative was voluntary. In order to receive technical assistance with planning and to receive support for capacity building, villages were required to submit letters of interest and nominate unpaid volunteer community organizers. This was an experiment in how to develop more cost-effective means of service delivery—service delivery that was not dependent on foreign assistance and which could achieve economies of scale.

Initial attempts to institutionalize community-based approaches through existing government programs in North Sulawesi failed when budgetary allocations were not forthcoming and no single agency had a legal mandate to carry out ICM activities. It was time for Proyek Pesisir to try a different approach. The decision was to develop a district law that would empower communities to undertake their own community planning efforts and designate a lead agency to assist communities in this process. This approach to establish a local-level “legal framework” reflected the strategy used to initiate a national law. However, the North Sulawesi process was somewhat different. Rather than working primarily with the executive branch of government to develop the law, the new democratic framework placed considerable power in the hands of local legislative bodies. The project worked with the social welfare committee of the district legislature (which had a strong interest in community development approaches) to draft the district law. The committee, in cooperation with local NGOs, carried out a broad-based stakeholder consultation process. This was the first time that process had been undertaken to support the development of a district ordinance.

The effort paid off. In June 2002, the new Minahasa district community-based ICM law was passed. The law calls for the creation of an inter-agency coastal management board and allows for coordinated review of village and sub-district plans. It also calls upon sector agencies to coordinate delivery of services to villages. The board advises the *Bupati* on district-wide coastal management issues that need to be addressed at a level higher than village scale. The law provides a process for traditional use rights to be formally acknowledged and legitimized by local government. The project disseminated the law provisions widely to coastal villages and is working to establish the district management board through formal appointment by the Bupati.

The Office of Fisheries and Marine Affairs in Minahasa is committed to implementing the new law and continuing the scaling-up program. They have assigned a full-time employee to this effort. However, the office still lacks the capacity, funding and human resources to do the job adequately. Fortunately, another district-level institution, the Village Community Development Board (Badan Pembangunan Masyarakat Desa, or BPMD), is committed to the effort. BPMD has also assigned one person at the sub-district level to coordinate scaling-up activities in the Likupang region, to implement training on community organizing, and to support village planning activities and meetings.

In 2003, the North Sulawesi Provincial Legislature passed a complementary coastal law that further strengthens the mandate to carry out community-based initiatives. However, in North Sulawesi, local government budgets are extremely tight under the new decentralization laws. In 2002, no funds were allocated for development activities. The local budget for implementation of this new law is likely to be small. This is a major challenge in the institutionalization of the community-based models that have been developed.

Lampung

Lampung Province is at the southern end of the large island of Sumatra and is a gateway to the heavily populated island of Java. It contains sig-

nificant manufacturing, commercial fishing and mariculture (shrimp mariculture and pearl farming) industries. Lampung struggles with a number of issues including serious user conflicts, pollution in the upper reaches near the capital city of Lampung, degraded coral reef habitats from sedimentation, and destructive fishing. The east coast has seen a loss of large areas of mangrove forests to commercial shrimp mariculture.

In Lampung, provincial government wanted to start with a provincial-level strategic planning process. The intensive use of coastal resources in the province, combined with the multiple conflicts that existed between large-scale industries, such as pearl and shrimp farming, and small-scale fishing, argued for such a starting point. The approach was to build on the Marine Resources Evaluation and Planning Project (MREP) that had been developed in several other Indonesian provinces and to adapt the process to integrate a participatory planning process. The process included developing an atlas as a means of profiling coastal issues and as one step in engaging stakeholders in a consensus-building process. This was a new approach and one which capitalized on the visual (versus written) orientation of many Indonesians. The atlas was a step towards a provincial strategic plan. The strategic plan itself was completed in two years after a stakeholder consultation process at the district and sub-district levels. NGOs also played an important role in the stakeholder consultation process. The planning process was managed through a Provincial Steering Committee led by BAPPEDA.

The provincial plan, once completed, provided the policy framework within which community initiatives could be authorized. This became *Proyek Pesisir*'s first attempt to replicate the initial community-based model developed in North Sulawesi in the very different ecological, political and social setting in Lampung. The first on-the-ground initiative was in an area where shrimp ponds and mangrove management were the main issues—issues that were of minor importance in the North Sulawesi sites.

The village management plan for the community-based sustainable mariculture took three years to complete. This compares to two years in North Sulawesi. It is important to look at some of the reasons for needing an additional year for the process in Lampung. First, Lampung had fewer resources available for this activity. The community was more complex and diverse. Lampung replicated the community-based marine sanctuary model on Sebesi Island—an area with a smaller and more homogenous community. Here the process took about 18 to 24 months—a slightly longer period than in the first pilot site in Blongko, North Sulawesi, but less than at the mariculture site in Pematang Pasir in Lampung. On Sebesi Island, the project employed part-time extension workers rather than the full time extension workers used in North Sulawesi. Philippine studies (Pollnac et al., 2001) have shown that a full-time field worker is not a critical predictor of success for community-based initiatives. Using the part-time approach in Sebesi Island and in the scaling-up sites in North Sulawesi, therefore, seemed acceptable. At the same time, the Sebesi Island example demonstrates that while having a part-time field worker can be effective, it may also lengthen the time needed to reach completion.

By 2003, the Lampung coastal strategic plan was not yet formally adopted through an executive order nor was there an inter-agency committee responsible for implementing the plan. However, it is endorsed and has been implemented by BAPPEDA for several years. The small investment in strategic planning with the provincial government has worked well. A recent evaluation documented that over US \$400,000 is being spent annually to implement the plan's activities province-wide (Wiryanawan et al., 2002). It is uncertain, however, what percent of these funds are newly budgeted tasks versus ongoing activities that now are captured within the plan framework. BAPPEDA currently manages the atlas databases and is responsible for periodically updating GIS information. BANGDA, in the Ministry of Home Affairs, recommended that other provinces replicate these atlases. More than a half-dozen provinces have followed that recommendation.

The Lampung approach differed considerably from that of North Sulawesi. North Sulawesi followed a bottom-up approach to development of a program whereas Lampung operated top down. In North Sulawesi, the program is primarily at the district level, and supports community-based initiatives, while in Lampung the approach was to work primarily at the provincial level in support of provincial and district activities. North Sulawesi used a legal instrument to develop a formal institutional framework and program at the district level after the community level plans had been developed. In contrast, Lampung illustrates a non-legal approach. While Lampung has been able to obtain significant budgetary allocations for provincial and district-led actions, North Sulawesi has been less successful in allocating local resources for implementation.

East Kalimantan

East Kalimantan, the Indonesian part of the island of Borneo, is one of the richest provinces with large reserves of natural gas and oil, as well as forestry and mineral resources. The province has benefited tremendously from decentralization in terms of revenues returned from natural resources exploitation. There is great concern over the pace of forest degradation, the loss of mangroves for conversion to shrimp and fish farms, as well as pollution from mining, and the oil and gas industry. While indigenous tribes populate the interior of this very large province, the coastal population, including Balikpapan, where Proyek Pesisir has focused its work, is populated largely by immigrants who arrived in the last century. The coastline consists primarily of estuarine, delta and bay systems.

In East Kalimantan, the initial strategy was to strengthen capabilities in provincial planning and GIS. The provincial government had requested a pilot bay and watershed planning initiative in Balikpapan Bay. Although East Kalimantan already had a coastal management plan developed by the MREP project, it was prepared with little or no stakeholder consultation, did not adequately address bay and watershed

management issues, and needed updating. After one year, the Proyek Pesisir activities focused on watershed planning in Balikpapan Bay. This was the result of two factors. First, the project office was in Balikpapan rather than the capital of Samarinda (several hours away by car). This made provincial coordination difficult and infrequent. In addition, the project lacked the resources or capacity to work simultaneously at both the provincial and watershed scales.

The bay planning initiative had a mixed start. It was strong in formulating issues and conducting initial stakeholder consultation meetings. However, its engagement with local government partners was weak, especially with the Balikpapan municipal government and with large-scale private sector operations, such as the oil companies. This created a lack of buy-in to management recommendations. Personnel changes led to a redesign of the project strategy. This included reducing significantly the number of the project's community-level activities that were diverting attention from the bay-wide planning effort. Instead, the project concentrated on building greater commitment and ownership of the plan by local government. More than a year after this change in strategy, local government was, in fact, more involved and committed.

The Balikpapan Bay plan was approved in July 2002, an agreement signed by the governor of the province, the heads of the four local administrations that make up the bay watershed, and the minister of Marine Affairs and Fisheries. Prospects for successful implementation of the plan are good. Local government agencies are funding implementation initiatives that address issues of interest to multiple partners and that require institutional coordination, such as mangrove management and erosion control. A bay management council is being organized. Although large-scale private sector interests such as the oil and plywood companies are major users of the bay, their involvement has been weak. Increasingly, however, these private sector groups are being brought into the implementation process. Private industry is now represented on the bay council and at least one company has provided grant funds to NGOs for implementation of environmental awareness and coastal community

livelihood development activities. Provincial and other local governments are interested in expanding the bay and watershed planning approach to other areas within the province. There are also discussions about developing provincial coastal management legislation—although what form this will take is still unclear.

In this project, concerted efforts have been made to develop NGOs as advocates for the bay and its watershed. The Forum to Save Balikpapan Bay (Forum Selamatkan Teluk Balikpapan, or FSTB) was formed in February 2001 as a response to public demand that issues in the bay must be addressed. FSTB has diverse membership ranging from women's representatives; junior high, senior high and university students; teachers; and assorted others. There are almost 500 members campaigning and promoting public discussions on the need to save Balikpapan Bay from its pressing challenges including unplanned development, sedimentation, pollution and overfishing. In April 2002, just a year after FSTB was established, its members formed another NGO named Yayasan Sahanbat Teluk Balikpapan (YSTB). YSTB has been actively working with the government of Balikpapan—especially the environmental office, and other local environmental NGOs—to promote mangrove planting in several villages. YSTB has also facilitated exchanges and learning among farmers, fishermen and policymakers on successful reforestation projects. Local government and private sector interests see NGOs as an important partner in community-level education and livelihood development.

THE DEVELOPMENT OF NATIONAL POLICIES AND PROGRAMS

In the first two years of the project, the national counterpart agency BANGDA catalyzed and supported project activities in the provinces. The institutional changes that occurred at the national level in 1999, when MMAF was created, provided new opportunities to do this.

In 2000, MMAF was designated as the new counterpart institution for the project. Ironically, at the same time that authority for coastal management was given to a single institution at the national level, the

decentralization laws gave districts and provinces jurisdiction over the most important coastal areas out to 12 nautical miles. This created instant demands to increase local capacity and a search for concrete examples of local coastal management initiatives that could be replicated and adopted in other projects and provinces. The objectives at the national level, therefore, were no longer to create models of good practice but rather to institutionalize the field models already developed by the project and to create the conditions that would foster the adoption of these models by local governments.

The project assisted the new ministry in laying the groundwork for a national law that would formally establish a national coastal management program within the new decentralized governance context. While the process for developing this law was underway, national policy guidelines on coastal management and spatial planning were also being developed. These guidelines are voluntary and provide no incentives for local government to comply. They merely provide local government with guidance on good coastal management practices and lessons learned from previous efforts.

The proposed national coastal program is loosely modeled after the U.S. Coastal Zone Management Program. It calls for national government to support local coastal management initiatives and ensures that local government addresses national interests. The law, if passed, will establish an integrated structure and funding mechanism whereby national government helps to build the capacity of regional government and provides funding for local-level planning and implementation. It calls for a certification program, and a set of conditions under which local governments can voluntarily participate in the national program and become eligible for matching funds. Conditions include public participation and stakeholder consultation in the planning process. The program also provides a vehicle for disseminating best practices in coastal management and promotes the establishment of provincial, district and village-level conservation areas.

Another feature of the proposed national law is the Sea Partnership Program. This exploits the potential of the Indonesia Coastal University Network (INCUNE)—universities located throughout the country—to play a lead role in developing and promoting sustainable coastal resources management and in contributing to economic development within their respective regions. INCUNE was created with support from Proyek Pesisir under the leadership of CCMRS. The Sea Partnership Program creates an institutionalized coastal resources research and extension effort throughout the nation supported by MMAF. Such a program has the potential to build local capacity and provide for better government-university-private sector partnerships. While the Sea Partnership Program is proposed as part of the national law, MMAF has decided to start planning and implementing the program now as part of ongoing initiatives within its Directorate of Small Islands and Coasts.

An important feature of drafting national legislation has been a highly participatory consultation process. Scores of meetings were held with nationally based stakeholder groups and legal experts to develop an “academic draft” that sets forth the rationale and justification for creating a new law. The academic draft paved the way for drafting the actual law itself. This started a new round of consultations with national stakeholder groups, and also incorporated a series of regional stakeholder consultations held outside of Jakarta. This was an extremely important step since regional governments and resource users will be the main beneficiaries of the program.

NGOs have been very active in the consultation process. NGOs hosted a regional public consultation meeting in Java. Indigenous NGOs, Jaring Pela and Aman in particular, have been active and have made specific recommendations to include a section in the legislation that recognizes traditional rights. If the national coastal law is passed and addresses traditional rights, it will be the first time since independence that traditional marine tenure has been recognized by national government.

| TABLE 1: NORTH SULAWESI PROFILE | | | | | |
|---------------------------------|---|------------|--|---|---|
| Scale | Location | Time Frame | Orders of Outcomes Achieved | | |
| | | | First | Second | Third |
| Province | North Sulawesi | 9 months | <ul style="list-style-type: none"> • Law under development | | |
| District | Minahasa | 2 years | <ul style="list-style-type: none"> • Law passed • Lead agency designated • Council formed | <ul style="list-style-type: none"> • Local budget for implementation being formulated | |
| Sub-District/Village | Likupang | 1 year | <ul style="list-style-type: none"> • Planning started in multiple villages • CB-MPAs established • CRM plans adopted • MPA ordinances passed | <ul style="list-style-type: none"> • Mangrove planting underway • MPA marker buoys and signboards placed | |
| Local/Village | Pilot sites of Blongko, Talise, Bentenan-Tumbak | 5 years | <ul style="list-style-type: none"> • ICM plans developed • MPAs developed • Ordinances passed • Committees established | <ul style="list-style-type: none"> • Mangroves planted • Dikes constructed • MPAs demarcated • Bomb fishing declining • Community perceptions concerning impacts of resource use improving | <ul style="list-style-type: none"> • Reef quality improving • Mangrove area increasing • Some livelihood projects successful |

PROJECT CONTRIBUTIONS TO PROGRESS TOWARDS ICM IN INDONESIA

North Sulawesi

The Proyek Pesisir pilot sites have gone through a full cycle of an ICM program from issue identification to summative evaluation. This has provided useful insights into a number of implementation issues facing communities.

These include insights on how to promote the efficient and effective functioning of management committees, how to encourage or enforce compliance with rules, and how to determine a realistic scope and breadth of activities that can be sustained without significant external project support. These sites are providing outstanding learning centers and applied research laboratories.

The project has also worked to establish enabling conditions at the district level to help support the village-scale efforts. This includes having institutional structures and a legal mandate in place. Budgeting for implementation remains uncertain and is the major threat to the continued success of these efforts.

At the district level, modifications are being made to the original pilot site strategies. The aim is to determine if scaling-up and diffusion of the community-based innovations can occur in a more cost-effective manner and be implemented within the existing capacity of local institutions.

Implementation activities in the scaling-up sites focus primarily on establishing marine sanctuaries and on mangrove reforestation. Starting with such small, simple actions has proven to be a successful strategy elsewhere. Communities have shown great interest in the marine sanctuary concept, and local government is interested in this simple and manageable planning process. Over an 18-month period, the approach has resulted in 22 community-based MPAs covering 650 hectares, compared to four MPAs in the original pilot sites covering 116 hectares. To date, only some management plans have been completed.

Lampung

The Lampung case is interesting in that it received the most modest investment (in total dollars expended) and has reaped the largest returns in respect to local funding allocated for implementation. The three years needed to complete the Lampung planning process were similar to the time needed by the community sites in North Sulawesi, but much less than the time needed in Balikpapan Bay. A recent evaluation demonstrated that approximately 40 percent of the activities for 2001 called for in the Lampung plan have been implemented. Over 3.2 billion RP in provincial and district funds in addition to 800,000 RP in national funds were spent on implementation in 2001 (Wiryanawan et al., 2002). It is unclear, however, how much were already-existing funds that are now counted as implementation expenditures. Even if all of the effort contains no new funds, the plan provides for coordinated planning and implementation that previously did not exist. Based on the Lampung experience, networked program models for institutional arrangements at the provincial level may be more appropriate in the current governance framework. The small project investment at the provincial level seemed to have paid off and Second Order outcomes are starting to be realized. Third Order outcomes remain undocumented.

Meanwhile, community-based sites in Lampung are only just now entering the implementation phase. Several small marine sanctuaries have been established on Sebesi Island and a management plan for sustainable community-based mariculture has been adopted in Pematang Pasir. Insufficient time has passed to determine implementation success at these community sites.

East Kalimantan

In Balikpapan Bay, the bay planning process took longer than anticipated. In the course of the effort, significant lessons were learned about institutional engagement for large-scale planning. It is likely that adoption of the process in other locations could move more quickly. A management plan has been approved, institutional structures are in place,

and financial allocations for initial implementation have been budgeted. Civil society organizations have been established to advocate for the bay environment. However, it is still too early to predict how implementation will play out and what issues will be encountered in this stage of the process.

National

At the end of 2003, the national law was being introduced to Parliament. If it is passed, another phase of planning will be needed to begin implementation of the national program. It will likely take a year to get the program up and running, although elements could be quickly tested in other foreign-assisted projects. Initially, the national program will trigger a round of local-level planning. In only a few rare instances (e.g., North Sulawesi) will an existing program be in a position to be certified immediately. While the national program may start its implementation within a year or two, implementation in the provinces and districts will likely lag for another several years until they have completed their local planning processes, achieved certification by the national program and are ready to move their plans into the implementation phase. Regardless of whether or not the law is passed, the drafting and public consultation process has initiated a national discussion on national-level coastal management issues, and on the roles of local and national government. It has begun to build a national constituency in support of improved management of coastal and marine resources.

Institutional behavior changes are already evident within MMAF and these will translate into adoption of some of the project concepts into the ongoing programs of the ministry (Taryoto, 2002). MMAF can implement a number of the suggested strategies even without a law and donor-assisted projects such as the ADB-funded Marine and Coastal Resources Management Program (MCRMP) are good vehicles for helping do this. If the law does not pass, there are two important elements that stand to be lost—the formation of a national inter-ministerial council and the recognition of traditional use and management practices.

REFLECTIONS AND SEEDS FOR THE FUTURE

The project has progressed on many fronts, achieving primarily First Order outcomes, some Second Order outcomes, and Third Order outcomes only at the local or village scale. This illustrates what realistically can be achieved over a six-year period within a context of substantial political instability and major governance transformations, and in a country as large and complex as Indonesia. Today, the nation is on the threshold of having substantial new institutional arrangements in place that may enable it to make more rapid on-the-ground progress. Full implementation can bring real change to the lives of coastal communities and the condition of coastal environments. Moving more fully into implementation and achieving more Second and Third Order outcomes is the challenge of the next decade. MMAF is well on the way to achieving these goals by forging ahead with programs on several fronts—sea partnerships, community empowerment, and a national coastal resources management program. While the national government can help enable action on the ground, the real challenge is at the local level—building the capability of district and provincial governments, creating effective institutional structures and obtaining budgetary allocations for implementation. Working models at this scale are emerging.

The following are important lessons learned during the course of Proyek Pesisir—lessons that will be useful for project designers and implementers of future ICM projects in Indonesia or elsewhere.

Make the system whole

The project has been able to develop and document innovative participatory approaches to coastal management that are now beginning to be implemented by local governments. While building from the ground up, the project has also assisted the MMAF in developing support structures from the top down. Systems at the local and national levels are not yet fully developed, nor have the connections between them been fully and formally established. However, most of the pieces to complete the puzzle of ICM for Indonesia are now present. Refining the pieces at the local

and national levels and connecting them into a fully functioning vertically integrated system for coastal management is a continuing challenge and will take more than a decade to develop.

Move beyond individual capacity development to institutional and organizational development

Improving capacity for coastal management in a nation like Indonesia involves more than addressing individual skill development or improving the capacity of a specific institution. Capacity building requires addressing the entire ICM governance system and how levels of government interact. The new decentralization laws created opportunities at the local level by providing them with authority for coastal resources management, but no comprehensive program has as yet been provided to develop their capacity to exercise their new authority. In the project sites of East Kalimantan and Lampung, provinces are providing funding for local coastal management initiatives. In North Sulawesi, where government has experienced a reduction in available revenue under decentralization, funding is minimal and remains problematic. However, the decentralization legislation has allowed the Minahasa district and North Sulawesi government to move forward with development of local coastal management laws. Beyond the project sites, the picture is less clear and will likely be uneven among the many districts and provinces. The critical challenge now for lead agencies in the project sites is to develop organizational strategies for implementation and secure funding allocations for those activities.

Promote the role of universities and NGOs

The CRMP has always believed that strengthening universities so they contribute to ICM programs and support local government is an important element of success. Usually, centers within the universities (such as CCMRS) act as contract service providers to government institutions. These relationships are rarely in the form of long-term cooperative partnerships between government and universities and tend to be ad hoc,

opportunistic and project-driven. University involvement in the Proyek Pesisir has produced some useful examples of long-term service relationships either directly with communities or with local governmental institutions. These relationships have illustrated elements of effective research and extension systems. This plants the seeds and lessons for the local Sea Partnership Program currently under development by MMAF that will set up formal structures and funding for cooperative regional university-local government partnerships. Local government typically views universities as credible and competent partners, particularly when compared to NGOs. However, universities in Indonesia play a technical advisory role and not a community-organizing or advocacy role. Nonetheless, strengthened universities can add important dimensions to the overall coastal management institutional support system.

NGO involvement has had mixed results. The Indonesian government under the old autocratic system was very reluctant to engage NGOs and most relationships between government and NGOs can be characterized as adversarial and distrustful rather than cooperative. This is very different from the Philippine context where NGOs are playing a very active role and government is more open to their involvement. Indonesian NGOs are also wary of working with government. NGOs have participated as stakeholders in larger-scale planning such as in Balikpapan and Lampung and have sat on multi-institutional task forces and working groups. They have also been in a service provider role similar to that played by universities. However, this role has not always been effective due to philosophical differences in approaches, as well as the reluctance of NGOs to work as partners with government. Often there have been real or perceived weaknesses in the NGOs' technical capacity and skills for implementation. NGOs can play an important role in working directly with communities as well as advocates for coastal management programs. They have the opportunity to influence and shape local institutional arrangements and programs, but whether they will be able to fulfill this role is uncertain.

Design for the diffusion of good practices in ICM

North Sulawesi became a popular visitation spot for coastal management projects and for a while was bombarded with visitors from all over the country. This was useful in providing opportunities to influence international projects such as those supported by the Japan International Cooperation Agency (JICA), COREMAP and MCRMP. Some are adopting similar community-based approaches based on the CRMP experience (Taryoto, 2002). However, the impacts of these visits to North Sulawesi were never tracked, and their influence on other donor projects is not fully known. What is known is that JICA used a similar process in developing a community-based marine sanctuary in Basaan village in North Sulawesi and is planning to do so in four additional village locations; and COREMAP in Riau developed eight village-based no-take marine reserves. The new ADB-supported MCRMP administered within MMAF is also drawing on several project-developed and tested practices (Taryoto, 2002).

The demand for tangible local models is illustrated by the Lampung coastal atlas being independently replicated in nine other provinces at the urging of the initial national counterpart agency, BANGDA. Several districts also started to develop atlases. Unfortunately, although districts replicated the product, most failed to adopt the consultation process that had been used to validate data and to build stakeholder consensus on issues. There are several reasons why the participatory process was not followed. The costs and the time involved to conduct extensive stakeholder consultation are high and local officials in provinces outside the pilot sites were unconvinced of the importance of the participatory processes. Only one province subsequently developed a coastal strategic plan after producing an atlas.

Other examples of good coastal management practices are also starting to be replicated. This includes a proliferation of draft district and provincial coastal management laws and a desire by some local governments to emulate the Balikpapan Bay and watershed planning example.

Develop realistic indicators appropriate to the scale, time frame and primary objectives of the project

The USAID results framework for performance monitoring and reporting emphasized the geographic reach of the program with the highest order outcomes targeting increasing hectares of habitat under “improved” or “effective” management. Several intermediate indicators that were primarily output-oriented—number of persons trained, publications produced—were also tracked. These were seldom good indicators of project accomplishments and more qualitative narrative descriptions tended to be more informative. In addition, hectares under improved and effective management were difficult to document, since improved environmental conditions and probable causal linkages to project activities are difficult to demonstrate except on a very small scale. Since most of the progress has been in creating capacity and developing institutional structures for management, hectare targets are long-term goals unlikely to be realized during a six-year project. In addition, these targets provided no insights into the social or economic dimensions of coastal change. In the future, projects such as this need to incorporate social and economic indicators from which to judge project performance. While socioeconomic and environmental change may be the long-term goals, for a short-term project, more realistic intermediate indicators are needed that capture the essence of First Order enabling conditions and analyze the advance into the Second Order behavior changes.

Practice adaptive management

The remarkable upheavals and transformations that Indonesia has gone through in a few short years since 1997 are often forgotten when discussing project activities and performance. One of the most important features of this project is that it rode the dragons of change by continually assessing and adapting its strategies—sometimes successfully and sometimes not. As an ancient Chinese philosopher once remarked, “In the chaos of change, there is opportunity.” This accurately portrays the journey of this project. This sentiment was repeated by an international

coastal management expert with long experience in Indonesia who remarked, "This was the right project at the right time."

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CRAFTING COASTAL GOVERNANCE IN A CHANGING WORLD

STEPHEN BLOYE OLSEN, EDITOR

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The relationship between the U.S. Agency for International Development (USAID) and the Coastal Resources Center (CRC) at the University of Rhode Island has been a true partnership. Together we have faced the difficulties, surprises and successes that mark any attempt to apply new ideas to old problems. The knowledge that we are a single team working for the same goals, and defining together the changes in strategy required by our own learning and the changing circumstances in each country and the world at large, has been central to success of the Coastal Resources Management Program.

A great many people in USAID, in CRC and in the countries where we have worked have contributed to what has been achieved and learned. The authors of this volume thank everyone involved for their creativity, their energy and their leadership in addressing the complex issues in coastal regions. Most especially we thank our in-country teams and our partner institutions who taught us how what was being learned elsewhere could be appropriately applied to their own cultures and the needs of their countries. We have not attempted to list all those that have contributed to the ideas and the experience presented in this volume. To do so would require several long paragraphs.

While so many contributors to the program, one name stands out: Lynne Hale, former associate director of CRC. Lynne left CRC in the last year of the program—but only after setting in motion the drafting and redrafting that has resulted in this volume of reflections, experience and future directions. Lynne was CRC's point person with USAID. She led the design of the CRMP II field programs and made sure that they capitalized on what had been learned from the first set of field programs. Throughout the 18 years of the program Lynne's passion, perseverance and perception made it the success it became. All who have contributed to this volume thank her and wish her well in the next stage of her career.

PREFACE

OCEANS, COASTS, WATER, AND THE EVOLVING USAID AGENDA

By Bill Sugrue

Director

Office of Environment and Natural Resources

Bureau for Economic Growth, Agricultural and Trade

U.S. Agency for International Development

Since 1985, the U.S. Agency for International Development (USAID) has partnered with the University of Rhode Island Coastal Resources Center (CRC) in carrying out the Coastal Resources Management Program (CRMP). CRMP is a pioneering initiative working with developing countries around the world to advance the principles and practices of integrated coastal management (ICM). During this 18-year partnership, USAID and CRC, together with partners in the field, have learned a great deal about the complexities and challenges of better managing our coasts. This has included learning how to balance the need for ecologically healthy coasts with the need to promote a better quality of life for those who live and work there. Throughout this process, CRC has been an instrumental force in promoting a “learning agenda” for (ICM). In the selected CRMP stories included in this book, you will share in some of that learning. Let me summarize here some of the key principles that underlie the ICM learning agenda.

ADVANCE INTEGRATED WATER AND COASTAL RESOURCES MANAGEMENT FOR IMPROVED ENVIRONMENTAL PROTECTION AND MANAGEMENT

It is essential that ICM and integrated water resources management (IWRM) be mainstreamed into sustainable development efforts. ICM and IWRM are essential foundations for improvements in health, food security, economic development, democracy and governance, and biodiversity conservation. We must recognize the interdependence of these development goals. The interdependence of human health, food security, governance and the other human activities is obvious. How development objectives are pursued in these sectors can have dramatic impacts on biodiversity, and on the biosphere. The biosphere is currently in free-fall, so the significance of these impacts is not trivial. Conversely, biodiversity conservation programs, properly conceived, can significantly support CRMP objectives in economic development, food security, governance and other areas. The challenge to development assistance organizations is to ensure that they move beyond single sector responses to more integrated, cross-sectoral approaches that do justice to the exceedingly complex and interrelated factors that shape our world. Principles of integration as practiced in ICM and IWRM must be given the commitment of time and resources that they deserve.

CREATE STRONG GOVERNANCE AT ALL LEVELS

Good governance is more than just good government. It encompasses a range of processes in which public, private and civil societies organize and coordinate with each other to make decisions, and distribute rights, obligations and authorities for the use and management of shared coastal resources. A central operating principle of the CRMP has been that effective governance systems are what create the preconditions for achieving sustainable environmental and social benefits. We have learned that good coastal governance functions best when it exists as part of a nested system—that is, one that operates simultaneously at scales ranging from the local to the global. For example, sub-national and community-based management efforts stand the best chances to be effective and to be sustained

over the long term when they are supported by policies and institutional structures at the national level. Meanwhile, national-level initiatives build capacity for ICM governance across spatial and sectoral scales, providing support to local initiatives while addressing coastal development and conservation of more wide-ranging national interest.

PROMOTE PRIVATE AND PUBLIC PARTNERSHIPS

Participatory approaches to conservation are now recognized as one of the few means to ensure sustainable management of ecosystems and natural resources while also meeting local peoples' livelihood needs. This participation is most effective when it includes both the public and private sectors. ICM and IWRM are too complex for one institution or group of constituencies to "go it alone." Forging carefully selected, strategic private-public partnerships can help.

Eco-tourism is just one of the issues around which coastal programs are testing such partnerships. The hope is that by partnering with the private tourism sector, chances improve for achieving environmentally sound, financially sustainable, and culturally appropriate coastal tourism development. When these partnerships succeed, eco-tourism can have significant, positive impacts on local economies and can provide strong incentives for sound environmental protection and management. A caution is that "environmentally sound" and "culturally appropriate" cannot be throwaway lines. They need to be taken seriously. Not all eco-tourism is very "eco," and unless there is true and transparent participation—i.e. the local community is fully engaged, not simply consulted—the impact of tourism on local communities can be destructive economically, socially, and culturally, and the impact on the environment catastrophic and permanent. It is not easy to do this right—but it is essential to do so.

EMPOWER COASTAL COMMUNITIES TO SELF-MANAGE THEIR RESOURCES

This must be done while promoting alternative livelihood and food security objectives. In cases where local social and economic networks are

already well established and thriving, even at relatively low income levels, poorly conceived outside interventions can be extremely and negatively disruptive. Since poverty is not solely a function of income, but also of control of assets, empowerment, and control over one's fate, even the most well-intentioned efforts at poverty reduction or economic growth can have the opposite effect on people if existing arrangements are not taken fully into account. This is especially worthy of consideration in the case of indigenous communities. In such cases, poverty prevention, rather than poverty reduction, may be the appropriate goal. In this way, intact communities with essentially sound traditions of resource management may best be assisted by simply strengthening and supporting their control over local resources. Only modest, incremental initiatives aimed at ensuring continued food security and additional income streams may be called for; but here again, full engagement of the community, not simply consultation, must be the norm.

ADVANCE INSTITUTIONAL STRENGTHENING AND CAPACITY BUILDING AT BOTH THE NATIONAL AND LOCAL LEVELS

Inadequate capacity to practice ICM and to design and implement strategies that lead to more sustainable forms of coastal development remains a primary factor limiting progress in ICM. Too often, development projects bring in external expertise and funding without a parallel effort to build and strengthen in-country partner organizations—leaving partner organizations and the larger ICM effort vulnerable to failure when outside assistance ends. CRMP has used a different approach. Its preference has been to strengthen institutions over extended periods of time and to transfer the skills and the responsibilities for implementation to CRMP collaborating organizations. This approach is grounded in the belief that long-term collaborative relationships with partners maximizes learning and increases the probability that productive efforts will be sustained over many years.

The CRMP experience has also demonstrated the value to be derived from cross-portfolio learning. For example, we have seen how communities in the Philippines that developed community-based marine sanctuaries were able to provide useful insights to Indonesian practitioners attempting to

establish their own marine reserves. Similarly, experience in Ecuador and Sri Lanka in the development of shoreline management guidelines helped CRMP undertake the process more efficiently in Tanzania.

While USAID, through its overseas missions, presently supports coastal and marine activities in over 40 countries, only a small handful of those USAID missions have been able to invest in a more comprehensive ICM approach, with broad attention to all of the general principles cited above. The challenge remains to enhance the dialogue between development agencies and national governments on the economic, social and environmental values of marine and coastal resources, and the proper level of investment to maintain these resources as national and local assets. These priority challenges, which must be faced, and which will help guide USAID's future directions include the need to:

- ❖ Mainstream applied fisheries research and management into ICM programs, and promote effective governance of commercial, artisanal, and subsistence capture and culture fisheries. Science and technology advances must influence decisions on coastal resource management in a context of good governance. Both are crucial.
- ❖ Establish networks of marine protected areas with substantial ecological reserves in all regions, while ensuring the sustainability of these activities through the development of alliances and partnerships. Conservation groups and their allies in government and the private sector have made good progress over the past 20 years in establishing parks and reserves to preserve terrestrial biodiversity. The scientific basis for defining these reserves, and managing and linking them, has grown more sophisticated. The number and variety of partners supporting these efforts has grown as well. Coastal and marine reserves need to catch up. Strong partnerships among conservation groups, government, the private sector, and local communities will be essential.

- ❖ Enhance coastal and nearshore water quality through partnership programs to control both point and non-point sources of marine pollution, while addressing the impact of the growing number of coastal megacities. There has been little meaningful engagement in a significant way with the challenges of coastal resource management in the context of megacities. This is a huge challenge that needs to be confronted for reasons of human welfare and environmental quality.
- ❖ Reduce the vulnerability of coastal populations and their infrastructure to the growing threat of flooding, storm surge, and coastal erosion due to climate change and rising sea levels. Mitigation efforts are essential. A great deal remains to be done that has not yet been done. But serious—even drastic—efforts in mitigation do not eliminate the need to undertake, simultaneously, ambitious initiatives in adaptation because sea level rise and other effects of global climate change seem inevitable.

What is next? Clearly, coastal and freshwater management challenges and needs will not abate in the foreseeable future. World leaders reaffirmed at the 2002 World Summit on Sustainable Development in Johannesburg the central role that these resource issues will continue to play in the sustainable development agenda. USAID is in full agreement with that affirmation and remains committed to full engagement on these issues.