

CHAPTER 6

CHARACTERISTICS OF CO-MANAGEMENT INSTITUTIONAL ARRANGEMENTS IN COGTONG BAY

The experience of the two villages of Cogtong and Marcelo represents a bold attempt to heighten environmental awareness among village residents and advocate a shared responsibility for coastal resource management. The path was not easy. It was marked by obstacles at various stages that ranged from the fragmentation of functions on coastal resource management, to conflicting government policies on fishpond development in the 1980s, to weak law enforcement efforts after project completion in 1991. The fairly successful co-management experience of Cogtong Bay may be attributed, in part, to the painstaking efforts of the Mangrove Rehabilitation and Coastal Resource Management Project, provision of legitimate property rights through the issuance of Certificates of Stewardship Contracts (CSCs) by the national government, and deliberate involvement of CSC holders and resource users as active partners in coastal resource management.

In light of comparative changes in the performance indicators of co-management before the project and now, village fishers perceived positive and statistically significant increases in almost all indicators. In particular, larger increases were perceived in information exchange on both mangrove management and fisheries management, knowledge of mangroves, compliance with mangrove rules, and control over mangroves. The project imbued the village residents with a sense of empowerment and built their confidence to take action on collective concerns. It invoked the basic principle of control and accountability (Ferrer 1993), where control over an action rests with the people who will bear its consequences. It also helped village residents understand their own situation and jointly address felt needs.

Given below are insights into the characteristics of functional co-management institutional arrangements in Cogtong Bay, which have been drawn from key informant interviews, regression analysis, household survey data, and secondary materials.

1. **Recognition of a resource crisis/resource management problem.** The Cogtong Bay experience affirms that the recognition of resource management problems (i.e., declining mangrove stands, lower fish catch, disappearance of high-value fishes, and conflicts between resource users) prompts resource users to enter into collective arrangements, largely due to the threat to their survival and economic livelihood. On the part of the project, it hastened the awakening process by drawing attention to the importance of sustaining the Bay's resources and challenging the coastal residents to take action. Thus, co-management requires some impetus (Pomeroy and Berkes 1997). It does not occur automatically.

Correlation results show that the assessment of resource conditions 15 years ago as bad is positively associated with perceived changes in material and ecological gains. This is closely linked to problem recognition and to the effects of concrete measures carried out by the fishers and the government to avert further damage to the resource base. The regression results of Cogtong village, moreover, indicate that the pre-project resource condition shapes perceived changes in the performance of co-management. An awareness of resource conditions is a vital

- explanatory variable underlying co-management institutional arrangements in the area.
2. **Extent of dependence on coastal resources.** A heavy dependence on coastal resources places the survival and livelihood of village residents at risk if nothing is done to halt progressive resource deterioration. The two villages covered by this case study are both dependent on coastal resources, as shown by their occupational structure. In Marcelo, a village of Mabini, 87 percent of the village residents rely on coastal resources for their livelihood. In Cogtong, Candijay, the extent of dependence is relatively lower at 63 percent, but is still substantial. Such dependence was partly responsible for the active participation of coastal residents during the project phase. After project completion, the village residents pushed for new resource management initiatives, such as the establishment of a fish sanctuary around Lumislis Island and the continuing recognition of communal mangrove areas for firewood gatherers. Patrolling activities in Marcelo continued, but on a more limited scale, due to limited funds for fuel/gas. In Cogtong, plans are underway for a new 50-hectare mangrove reforestation contract with the government. All of these initiatives are meant to improve the condition of coastal resources, upon which the survival of most village residents depends.
 3. **Capability building.** Co-management requires a conscious effort to develop and strengthen the capability of resource users and stakeholders for collective action, dialogue, leadership and sustainable resource management. At the case study sites of Cogtong and Marcelo, the external agents placed a premium on training and social preparation in the initial phase of project implementation, which addressed not only technical and managerial aspects but also behavioral and attitudinal dimensions. Reversing the effects of destructive and unsustainable practices called for new management skills, values and perspectives. Partners were equipped for new tasks and challenges so they could carry out and sustain project initiatives.
 4. **Trust between partners.** Co-management arrangements are enhanced when mutual trust and respect are in place. In Cogtong Bay, the coastal residents were skeptical of the government's commitment to project goals in the beginning due to conflicting policies on clear-cutting mangrove areas. However, when the external agents called the attention of the government and when measures were pursued to vigilantly enforce laws against illegal mangrove cutting and illegal fishing during the project phase, trust began to develop among the resource users and partner organizations.
 5. **Involvement of resource users in law enforcement efforts.** Resource users, who have more stake in sustaining their resource base, must be actively involved in monitoring illegal mangrove cutting and illegal fishing activities. Police officers who do not depend directly on coastal resources for their livelihood are more susceptible to bribery since their livelihood is not directly hurt. If most fishers share in the responsibility for monitoring and enforcement, social pressure and reprisal from fellow resource users who are concerned with sustainable resource use will help reduce the incidence of rule violation and corruption in the village. Government intervention, nonetheless, is warranted in the enactment of legislation, apprehension and punishment of violators, and provision of enforcement facilities and equipment.
 6. **Provision and enforcement of legitimate property rights.** In Cogtong Bay, legitimate property rights defined the required mechanisms to optimize resource use and conservation, particularly for mangroves. The holders of Certificates of Stewardship Contracts (CSC) took it upon themselves to manage their reforested mangrove areas and protect them from illegal cutters, long after the project has been completed. When user rights are clearly specified and

enforced, there is a greater chance that the intervention will be sustained.

The integrated regression results on the two case villages, moreover, indicate that the possession of property rights is a key explanatory variable that influences perceived changes in the overall performance of co-management. It is also associated with perceptions of positive changes in resource control, satisfaction with mangrove management, rule compliance, information exchange, and knowledge of mangroves.

7. **Continuing support from local leadership.** Continuing support from local leadership is crucial to viable co-management arrangements. During the project phase, the active partnership between the Municipal Government and the village fishers in law enforcement was a potent force in the reduction of illegal fishing and illegal mangrove cutting. With the change in political leadership during the post-project phase, the financial support of the municipal government for patrolling and enforcement operations weakened. This situation led to the resumption of illegal activities in Cogtong. Efforts, however, are now being pursued to revive patrolling operations and apprehend law violators. The experience shows that the lack of vigilance in law enforcement during the post-project phase and waning support from the municipal government as an offshoot of the change in political leadership threaten the sustainability of co-management arrangements in poor coastal villages. By themselves, poor artisanal fishers are ill-equipped to fight illegal activities and to sustain the expenses of day-to-day patrolling operations.
8. **Existence of enabling legislation for devolution.** The devolution of coastal resource management functions from the national government to local government units (LGUs), primarily through the enactment of the Local Government Code of 1991, has helped clarify jurisdiction over coastal resources. During the project phase, issues of jurisdiction and conflicting government policies hampered project implementation.

Until the early 1990s, the national government wielded authority over coastal resources, primarily through the Bureau of Fisheries and Aquatic Resources and the Department of Environment and Natural Resources. The administrative power shift that came with the passage of the Local Government Code during the post-project phase placed LGUs in the forefront of coastal resource management. Now, the LGUs have the authority to enact local ordinances on the control of fisheries within municipal waters, establishment of fish sanctuaries, and management of communal mangrove forests. In recent years, the LGUs in Candijay and Mabini have started to actively address these concerns. Village Councils in Cogtong and Marcelo have endorsed relevant measures to the Municipal Council for action. Without an enabling legislation, it would be extremely difficult for LGUs to assert authority over these vital areas.

9. **Shared vision and commitment to sustainable coastal resource management.** Formal legislation must be complemented by a continuing advocacy of sustainable resource management and by concrete measures to achieve a conscious sharing of responsibility between the government and resource users. Given the shifts in political leadership that come with the election of new officials to powerful positions at the local level, authority may fall into the hands of leaders who do not share the same vision, goal, and commitment. An enlightened and environmentally conscious political leadership is imperative. Such leadership is likely to act more promptly and positively on measures which involve resource users and coastal residents as valuable partners in coastal resource management arrangements.