

REVIEW OF CBCRM/COMANAGEMENT

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I. CBCRM INITIATIVES AND LESSONS IN TAM GIANG LAGOON

1.1 The development of community based management approach

The main issues in natural resource governance and management of coastal resources in the Tam Giang lagoon are a result from the rapid changes in socio-economic development, the introduction and rapid adoption of new technologies (particularly intensification of aquaculture), and the changes in institutional arrangements and regulatory environment resulting from that. Though the overall production from the lagoon has until recently continued to increase, there are now clear indications that the limits to this growth are being reached.

Winners in the development have been the adopters of intensive aquaculture practices, including farmers who have turned their paddy fields into shrimp farms, but also many fisherfolks who enclosed their fish corrals with nets and started aquaculture activities within their enclosures. The losers are the fisherfolks who were not able to enclose their fish corrals or who rely on fish capture with mobile gear.

The rapid shrinking of the 'open area' in the lagoon not only limits the opportunities for fish capture, but also hinders transport and the water circulation required for maintaining a productive environment for the aquatic resources. Government agencies are increasingly aware of the need to maintain the environment for economic activities on which 300 000 people depend. Ironically their proposed interventions (e.g. maintaining open waterways, restrictions on further net enclosures in remaining open areas) affect those families most, who have benefited least from the recent economic boom in the lagoon.

In response to the over-exploitation and degradation of the rich natural resource base in the Tam Giang Lagoon and other coastal areas of Vietnam, IDRC (Canada) provided support to a lengthy participatory research to investigate problems in resource management. Over a period of 7 years, local farmers, fishers, and government officials joined with the research team in a series of collaborative learning and testing interventions. This led to a pilot implementation of a new model for participatory planning and resource co-management in Quang Thai, a part of the larger lagoon system, in 2003. This not only helped to resolve conflicts and ensure a more equitable access to the resources, but also improved the prospects for better governance of lagoon resources in the future. The key to this achievement was a common understanding of the Community-Based Natural Resource Management approach developed among the stakeholders. The essential elements included full engagement of local stakeholders, recognition of customary access rights, changes to the processes of local planning and resource governance, and changes to the organizations and roles of the key stakeholders. The research team also adopted a new role as a facilitator of learning, capacity-building, and more importantly, negotiation and consensus building among the stakeholders.

The followed up research was to identify the processes and means for the scale up of the application of the participatory planning with respect to ecosystem base and multiple community involvement. The participatory planning was successfully

replicated in Quang Loi lagoon in 2004 that had similar context of Quang Thai. Along with that, in the period of 2004-2005, it was being carried out and further developed in Sam Chuon, a lagoon located in the middle of the larger lagoon system with four surrounding communes. The activities in supporting the scaling up of participatory planning include (1) building community movements for enlarging common lagoon areas and reorganizing exploitation based on livelihood problem solving; (2) supporting community capacity building through strengthening of the Fishing Unions newly established; and (3) improving local livelihoods with participatory technology development. The research and capacity building for CBCRM and/or co-management has successfully supported the legalization of a new provincial regulation on fishery management, which was issued in December 2005. The regulation adopted CBCRM as a formal management strategy over the lagoon fishery resources and recognized the newly established Fishing Unions as the legally appropriate community partners in co-management arrangements.

The initiatives and lessons on CBCRM and/or co-management in Tam Giang lagoon provided important inputs to research and application of participatory approach for coastal resources management in other areas in Central Vietnam through networking and capacity building to support other institutions and groups in the region. This is a case study review presenting overall research process, activities and key findings, especially the participatory planning process and how its application is scaled up for larger effects in supporting CBCRM and local governance. It also conveys methods for capacity building of local stakeholders during the implementation of the project, 2003-2006.

Lessons

1. The evaluation indicated that the project achieved much progress during 2003-2005 in terms of CBCRM development. These had benefited much from the preceding participatory research that proved effective in helping the concerned stakeholders understand the approaches pursued in context, instead of defining problems in simplistic terms and making assumptions about their causes and solutions. These form a solid basis for consolidation of the CBCRM processes and frameworks, and their scaling up and out.
2. The focus on sustainable livelihood problem solving made the approach adaptive and responsive to the rapid changes in lagoon exploitation. For example, participatory research dealt with the new expansion of pen culture through planning, user organization development and PTD. The approach not only provided effective analysis tools but also incentives to engage local people and government officials in learning and actions for CBCRM improvement.

1.2 Emerging Participatory Planning for Resource Governance

The IDRC supported project on CBCRM in Central Vietnam carried out participatory planning for lagoon resource governance in Quang Thai. The key problems addressed in the participatory planning included (1) rapid degradation of the lagoon environment and fishery resources; (2) unsustainable livelihoods of the local communities; (3) poverty of the traditional fishing families; and (4) lack of means and process for effective local planning for resource governance (Tuyen et al 2004). These

problems were also identified in the whole lagoon system including the Sam Chuon lagoon. However, their extent and priority may vary from one community to the other. The pilot application was successful in developing the planning process and methods supporting the application and scale up.

In the pilot stage, local farmers, fishers, and government officials joined with the research team in a series of collaborative learning and testing interventions. These initiatives generated a new understanding of the conflicts among user groups and degradation of the lagoon resources as they relate to changes in use rights and production systems. This led to a pilot implementation of a new model for



Figure 9. The emerging model for participatory local planning for natural resource management.
Source: CBCRM 2004.

participatory planning and resource co-management in the Quang Thai lagoon in 2003. The planning not only helped to resolve conflicts and ensure a more equitable access to the resources, but also improved the prospects for better governance of lagoon resources in the future. The overall process of participatory planning developed includes the following key steps (1) facilitating participatory learning and building awareness of lagoon context and use; (2) building local capacity (of planning) including strengthening community organizations; (3) involving government and other stakeholders; (4) building consensus on planning approach and priority with government; (5) planning and actions at the community and resource user group levels; and (6) plan consolidation, regulation development, and allocation of management functions (Tuyen et al, 2004)

Key elements of the participatory planning identified are (1) Common understanding among local stakeholders of the problems, priority, and planning approach; (2) the planning facilitators (research team) capable of providing overall supports; (3) the community organizations strengthened; (4) the functional departments at various levels taken part; (5) the active participation of fishers and the farmers (Tuyen et al, 2004)

1.3 Participatory Planning Scaling Up

The research team took up the challenge in identifying the processes and means for scaling up of participatory planning as a response to the question on possible CBCRM applications. This scale up was carried out from a single community to

include a larger social-ecological system management with multiple community involvement. In this line, the participatory planning was replicated successfully in Quang Loi lagoon (in 2004). This lagoon area is located next to Quang Thai, and has a similar social-ecological context. Also started in 2004, the scale-up efforts were carried out in Sam Chuon lagoon (this area shapes like a bay located in the middle of the larger lagoon system with four communes surrounding it). In this area, the Phu An commune (people's committee) did not allow 86 traditional households (out of hundred households) to continue pen aquaculture practices. This enforcement was simply based on the direction from district government without solid evidence or a legal base e.g. clear zoning with approval from an authorized institution. The social-ecological context in Sam Chuon is very complex with dense and diverse exploitation activities and conflicts such as the one between the commune and local users. In this area, participatory planning was further developed, with various adaptive learning activities.

The adaptive learning for the scaling up of participatory planning in Sam Chuon involved interactions/actions among the horizontal and among vertical linkage groups and/or local stakeholders. The major field activities included (1) carrying out participatory learning for awareness building among local stakeholders on situation, priority and appropriate approaches e.g. follow up workshops and field investigation; (2) building community movements/actions for enlarging common lagoon areas and reorganizing exploitation based on livelihood problem solving e.g. opening water ways and space among net-enclosure units to facilitate water flows; (3) facilitating negotiation for consensus building among levels and incorporation of community-based approach application into current local work plan e.g. carrying out community consultations and action promotion as commentary to the top-down enforcement of waterway opening; (4) building community capacity through establishment and strengthening of the Fishing Unions that involved membership of fishing households; and (5) supporting local livelihoods with participatory analyses of current aquaculture to facilitate promotion of multi-species culture and environmental friendly aquaculture.

Lessons

3. The improved capacity of the project team was crucial in support to CBCRM development e.g. the team adopted a new role in local planning. They worked as facilitators of learning, capacity-building, and more importantly, negotiation and consensus building among the stakeholders. However, the research team capacity is neither possible nor necessarily to undertake large scale activities in CBCRM scale up. Therefore, building capacity or transferring the consultancy roles to local institutions/departments is very important in next steps of CBCRM scale up. Local resource Users' organization network e.g. Fishing Union, is proposed as a means for this purpose
4. It was also found that community capacity and institutional arrangements were far from sufficient to undertake the new roles in co-management arrangement (or the decentralized management context). The improvement of local community capacity involves not only the organization development e.g. Fishing Union, but also the means and methods in building consensus, providing incentives to

people, improving equity and facilitating the actions in the larger social-ecological system such as the whole of Tam Giang lagoon.

1.4 Initiatives on Building CBOs and Resource Users' Organizations

The IDRC supported project on CBCRM in Central Vietnam has provided support to build different forms of CBOs as a means for awareness building, promoting local participation and facilitating learning and actions for the lagoon resource management. The following Table provides a summary of the project initiatives on CBOs development.

A summary of CBCRM initiatives on CBO building in Tam Giang lagoon

Description	board for livelihood development	self-management for electric fishing ban	joint committee for opening waterway	Fishing unions in participatory planning
CBNRM problem areas	Poverty and low participation	Ineffective law enforcement	Conflicts and inequality	Ineffective local planning for governance
Key CBO objectives	Implement livelihood developments targeting the poor	Enforce a community ban of electric fishing	Carry out the participatory action research	Organize learning and community actions
Type of CBOs (legal base)	Local self-management organization	Local self-management organization	Local self-management organization	economic organization/ association
Organizational structure	Village board and villager land-based groups	Village board and support staff	commune board, divisions, and groups	Nation/province, basic units, and groups
Membership	Whole community or selected groups	Selected individuals	Selected individuals	Selected households
Organizing method	Based on existing organizations	New establishment	New establishment	New establishment
Project/donor supports	Technical, partial operation costs & seed capital	Technical and partial operation costs	Technical and partial operation costs	Technical, part operation costs, & seed capitals
Possible long term finance sources	Loan interests, service organization	Fishers' contribution & local government	Local government	Member fees, loan interests, & tax collection
Social/political support network	none	none	none	VINAFIS and the father land front
Uncounted	Weak legal base, livelihood	Weak legal base & powers,	Weak legal base & powers,	Broad responsibility

constraints	change members increased & limited capacity	violent threats & limited capacity	conflicts & limited capacity	& limited capacity
General Evaluation	Could be sustained if more technical support provided	No longer sustained	No longer sustained	Sustained, capacity building needed

Source: Tuyen, 2004

In supporting the process of bottom up decision making, particularly at grass root levels, the project developed different initiatives to build community-based organizations (CBOs). This was as part of community empowering and capacity building for CBCRM and also as a means for promoting local participation in learning and actions in resource governance and management. The activities for building of CBOs involved local livelihood development, increased community participation, improved equality in distribution of powers and benefits, and resolution of conflicts in resource use and access. Among others, the CBOs played central roles in building of awareness of resource degradation, banning of destructive and illegal fishing, improving technology based on local knowledge, and participatory planning for resource governance. The process of supporting CBOs has recently led to the establishment and strengthening of the Fishing Union units (FU) in a number of villages around Tam Giang lagoon. Moreover, this also produced an important impact on the issuance of a new regulation by the province government on lagoon fishery management, which recognizes FUs as key community partners in co-management. In this line, the FUs are to be supported to strengthen capacity and legal status so that it is capable of receiving the lagoon lots with communal use rights and in promoting community based management and co-management arrangements in the near future.

In a participatory evaluation conducted at the northern Tam Giang lagoon communities, the participants indicated that the FUs was undertaking the most important roles in the following activities:

- organizing learning activities and community actions in the participatory planning for resource governance
- organizing campaign for stopping electric fishing in-community
- patrolling to enforce ban of destructive fishing in collaboration with commune security force
- facilitating exchanges among villagers for technical improvement
- supporting working together to protect production and the environment

The most important impact was the FU initiatives on dealing with the destructive fishing. After carrying out the participatory planning, the FUs were much more active in enforcing the ban of electric fishing (2004-2005). Since this had been very critical problems for all time, the commune government also put more efforts and supports to the FUs. The FU in Quang Thai initiated contact with FU in Quang Loi, and also with Thon 8 in Phong Hai (which is not part of the project areas). In response, the project also provided technical facilitations. Through a number of meetings and workshops they developed the action plan together, cooperation activities, and improvement of enforcement strategies. They were actually able to get cooperation

going across village boundaries. The major shifts in strategies for dealing with electric fishing were:

- three villages were able to patrol in the lagoon at the same time with ad hoc scheduling through the telephone (fixed schedule did not effect)
- the main task of the FUs were not dealing with outsiders but with the insiders (the members with community), e.g. conducting community monitoring to continuously update the list of electric fishing households of the village
- the villager participants in the ban increased much. It was not only the FU executive board members but also the user group heads and core villagers, e.g. setting number of electric fishing households in the group that to be persuaded to give up the practice
- the local communication was involved, e.g. the loud speaker, to publicize the name of households who were continue electric fishing
- improved punishment regulation with more authority to local community and commune government (more decentralized)

As a result of strengthening of community capacity, the electric fishing practice was much reduced. Through different group discussions in the participatory evaluation (2005) about 50 villagers and local officers agreed that percentage of electric fishing households within their community reduced at 70%. Numbers of electric fishing outsiders, who practice drag net motorized boats reduced substantially.

Among others, more effective community ban of electric fishing produced important positive impacts on the lagoon resources, environment and people livelihoods. The evaluation indicated an increased catch of some local fish species during the 2004-2005. Re-generation of the lagoon fresh-water macrophytes was also much faster (reduced motorized dragnets that damaged substrate). This supported improvement of aquatic habitat and feed for pen culture. A significant increase of income (at 20-25%) of most of households from both the natural fishing and fish penculture in 2004 and 2005 was confirmed by the villagers.

At policy level, the CBO building together with participatory planning scale up in the lagoon supported significantly the development of the province policy on resource governance. In December 2005, the People Committee of Thua Thien Hue province issued Legal Regulation** on fishery management in the lagoons which formally supported the CBCRM practices. Among others the regulation recognizes the newly established Fishing unions as the appropriate partners in co-management. It has legal base in receiving the lagoon fishing lot allocation under the communal use rights. The regulation also formalized the new roles of the FUs in local planning procedure and in management of the lagoon areas in a more decentralization process.

Lessons

5. Building capacity of CBOs, such as the establishment and support of Fishing Unions (FUs) provided positive impact on the ban of electric fishing which had been one of the critical issues in lagoon resource protection and regeneration. One of the changes was for the community ban to also target its members and not

** Decision No 4260/2005/ QD-UBND, 19 December 2005

just users from other communities. The FUs facilitated the raising of the perception that the ban should include community members. Monitoring was carried out to continuously update the list of households practicing electric fishing, and this list was regularly publicized through the loudspeaker system.

II. COASTAL WETLAND MANAGEMENT AND LESSON

This is a review on the coastal wetland management in Vietnam to make an analysis of management experience to date. The selection of wetland sites for review includes Xuan Thuy National Park, Tam Giang – Cau Hai lagoon, Xuan Dai bay and Nai lagoon

2.1 Problems and Management objectives

The common threats to the wetland boundaries are mainly from land area reclamation and/or water area claims illegally for various uses. The most critical threat is construction or conversion of lands into aquaculture ponds. This took place with various land and water allocation in a privatization process of the wetland area associated with expansion of aquaculture, mainly for shrimp culture. This was partly due to increasing population density in combination with change in land and or water area use. Other problems are illegal and high intensity of wetland resources exploitation that produced negative affects on biodiversity. Poverty of local resource users who rely on natural resource for their livelihoods is considered as the main pressure. This is also as parts of ineffectiveness of management and protection, even though after establishment of the wetland protected areas e.g. Xuan Thuy Ramsar

The management objectives of the wetlands areas area response to problems at the sites and conservation of natural resources for the long-term local socio-economic development. The common management objective of all sites is not only to conserve wetland resource but also to improve and sustain livelihoods of local communities and the resource users. Improvement of environments and functions of wetland is also emphasized in all review sites. However, based on the wetland designation set up the overall management objective in Xuan Thuy national park is emphasized with protection. Direct access and exploitation is restricted. Meanwhile the management objective at the “open use” wetlands (Tam Giang lagoon, Nai lagoon and Xuan Dai bay) is to sustain and rehabilitation of natural resources and ecosystem functions. In the case of Tam Giang lagoon, the sensitive areas e.g. O Lau river estuary and spawning areas in Sam Chuon and Cau Hai are under planning stage for defining protected zones within the lagoon systems.

2.2 The management practice

There is a wide range of institutions that undertake roles and responsibility for management . In the protected wetland sites (Xuan Thuy National Park) the Management board is established to take direct and overall management responsibility. However, the roles of the management boards may be limited within the designated core and buffer zones of the protected areas, which can be seen as parts of the whole

wetland. Therefore influence capacity is also mainly within the boundary of protected areas. The management boards report directly to the district government . They are hardly representing to the direct resource users as primary stakeholders. Local government at different levels undertakes responsibility for direct management of adjacent of the protected areas and also produces important influence to the whole wetland ecosystem.

In the “open use” wetland areas, commune government undertakes overall and direct management responsibility. The commune government implements activities for livelihoods, socio-economic development, and resource protection. It also implements the management guidelines, regulations and policies that issued by the high levels e.g. district, province and national government. In the study wetland sites, the commune government have management jurisdiction over its territory, which included components outside the protected areas. Therefore the separate capacity of either commune government or the management boards to influence the whole ecosystem is limited. This implies that the role of higher government e.g. district and province government is crucial. The influence of district and province government is carried out through line agencies e.g. DoFI, DONRE, and DARD. The local government is at certain level represent to most stakeholders. However, the management decision may not take accounts of most stakeholders’ interests and concerns due to low capacity and prevail conventional top down approach.

In general, the ultimate decision making on management of a specific wetland area is undertaken by the local government e.g. the province government. Therefore all relevant sector departments or line agencies are more or less involved and to take certain responsibility. In the protected areas (Xuan Thuy National Park) DARD undertakes a major role and management responsibility. In the “open wetlands” DOFI has more management roles compared to other departments. In specific wetland areas, the key management line agencies or provincial departments are commonly work with relevant institutions for the management practices.

The people and community organizations also undertake important roles in management. These organizations are representing well to the primary stakeholders. These organizations can be categorized as follows. (1) The community-based organizations are established without sound formal legal base e.g. interest groups or self-management for natural resource management. (2) The social and political organizations are the government based e.g. Farmer’s Unions, Women’s Union etc. and (3) The social and professional organizations e.g. Fishing Associations are supported to take the central roles in community-based co-management to be set up in Tam Giang- Cau Hai lagoon. These organizations take increasing roles in organizing activities at grassroots levels for livelihood developments and resource utilization and protection. The roles and responsibility of the people and community organizations depend very much on management approach. In context where the top down management is prevail the management role of these organizations are very limited. Research under VEEM program (1998-2001)¹ indicated that application of

¹ Vietnam Economic and Environment Program supported by IDRC/CIDA Canada, 1999-2001

community-based management in Tam Giang lagoon was one step ahead compared the other wetland sites under reviews.

2.3 Lessons and responses for adaptive management

Key negative experience in the coastal wetland areas in this study review is related to supports of shrimp culture development. The shrimp culture development in the 1990s created critical threats to the wetland boundaries and biodiversity. Therefore reduced the environmental services and functions of the wetland ecosystems. This activity also brought in very high risks and high technology dependence for the direct resource users of wetlands. Common management problems regarding shrimp culture development included:

- Planning for wetland ecosystem management neither developed nor appropriate
- The wetland management institutions lack of capacity for law and/or regulation enforcement
- Lack of management methods appropriate to wetland management
- Local policy is bias to economic development
- High density of poor people who rely on wetland resources for livelihoods
- Unclear roles and responsibility of wetland ecosystem management
- Unclear user's right regime over the land and water areas

Positive experience found in all wetland sites is the promotion of local participation in the management. A numerous examples to highlight the values of people participation and application of participatory approach in the wetland management. Community-based management had been applied in pilot scales in all wetland areas as an early stage of co-management that supports legalization of community roles and responsibility in natural resource management. In Tam Giang lagoon system, the application of CBM involved participatory planning improved local planning quality at commune and village level. This is a type of integrated and detail planning that has not been paid attention in current standard planning which is mainly (separate) sector planning e.g. fishery planning, aquaculture planning, tourist planning etc. The sector planning is normally carried out at district level; therefore the planning at commune and village is still a gap. The application of local participatory planning at commune and village levels also revealed the needs on strengthening of resource user's organizations and/or community organization. This activity in the tam Giang lagoon helped define the new roles of the management partners in a bottom up approach.

In Nai lagoon and Xuan Dai bay strengthening of resource user's organizations facilitated the awareness building on national resources and environment management. The fishing communities in Xuan Dai were able to promoted villager's contribution by giving adult lobsters to release into the bay as parts of resource conservation. In Nai lagoon the shrimp farmer's organization undertaken the awareness building on the environmental education and set up self-management mechanism that develops regulation on irrigation supply and discharges in the aquaculture areas. The self-management was able to enforce the regulation that develops based on community.

CBM in Xuan Thuy National park has been promoted in many activities for the wetland resource conservation and livelihood development. In 2004, community-based approach was employed for project development on sustainable management and utilization of fishery resource in the National Park. The objective was to build co-

management of fishery resources based on consensus in responding to local needs and taking accounts of long-term conservation. The CRM helped legalization of cooperation among stakeholders regarding benefits and responsibility for the management, especially for the aspects that lack of coverage of the current legal framework. The co-management set up took account of appropriate local needs for livelihoods, recognized their customary access to the wetland areas. This also facilitated the local community to develop regulation and participation in monitoring of the wetland resource protection. The project on management of natural clam seeds within the core zones of the national park, bird conservation in Con Lu, bee keeping, and eco-tourism involved different stakeholders in the management of the National Park using community-based approaches.

Planning and institutional arrangement to develop protected areas can be seen as important efforts for effective conservation of the wetland ecosystems and sustainable use of natural. The application of protected area strategy is a response to damage and degradation of wetland resources. In all study wetland areas the local government have identified potentials and made proposal for wetland protected areas. The Xuan Thuy Xuan Thuy National park was established quite recently (2003).

The planning and development of protected areas has been great efforts in Tam Giang lagoon. The proposal of O Lau estuary, part of lagoon, for the Ramsar site has been made and in the processing. In 2003 the overall planning for aquaculture development was developed by Department of Fishery and approved by the province People committee. The aquaculture planning includes Low tide shrimp culture area, which is Submerged area, permanent or temporary, along the lagoon coast. High tide shrimp culture area is non-submerged area on lagoon coast. Usually it is the area on the lagoon coast inside the saline prevention dam, or the area on the lagoon dunes, or the coast sand soil area. This can be seen as efforts to sustainable aquaculture development. In certain extent it was to control rapid expansion of aquaculture in the productive lagoon areas.

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