

Current Fisheries and Aquaculture Policies Relevant to RFLP

Executive Summary

The Philippine government has fully recognized the decline in growth in fisheries production over the last 3 decades. In order to reverse the downward trend and ensure a sustainable fish supply for food security and poverty alleviation, it has continually provided policies, programs and measures that can generate fish production, provide livelihood opportunities and develop the coastal environment and economy. It has also embarked on people empowerment as it realized that people are the best source of development. Among the policies and programs addressing fisheries production, coastal resource management (CRM) and recently, community-based coastal resource management (CBCRM) have gained popularity and are delivering success. The successes from CRM or CBCRM are not necessarily financial gain but in implementation of CRM plans and habitat protection. These programs can greatly assist the Regional Fisheries Livelihood Program (RFLP) by protecting the marginalized fishing communities and the environment and by seeking livelihood opportunities through consultation with different sectors of society. Although social, ecological and economic factors have been studied, greater government research and development priority is needed for fisheries biology and stock assessment. It is imperative that at least rapid assessments of the fisheries biology in the coastal communities should be undertaken as part of the CRM planning process.

The Philippine Fisheries Policy

The 1987 Constitution contains provisions dealing with the State's absolute control over natural resources, including fisheries and other coastal resources, while also giving attention to coastal communities (Green et al., 2003). The Constitution states that all natural resources are owned by the State and that the "State may directly undertake such activities, or it may enter into co-production, joint venture, or production-sharing agreements with Filipino citizens, or corporations or associations at least sixty percentum of whose capital is owned by such citizens" (Article XII, Section 2).

However, the constitution provides that small-scale utilization of natural resources is allowed. Furthermore, the Constitution provides that the "State shall protect the nation's marine wealth in its archipelagic waters, territorial sea, and

exclusive economic zone, and reserve its use and enjoyment exclusively to Filipino citizens" (Article XII, Section 2).

The 1987 constitution is particularly relevant to RFLP output 1 on co-management (see Table 1 which summarizes the relevance of government policies to the achievement of RFLP outputs) mechanisms because it provides protection to the nation's marine wealth in its archipelagic waters and territorial sea. The charter also protects the rights of small-scale inshore fishers by allowing for small-scale utilization of natural resources and reserving all the resources for the use and enjoyment exclusively of Filipinos. The state's interest for production-sharing agreements with Filipino-owned corporations implies also its willingness to facilitate the access of small-scale fishers to micro-finance in equity with large companies/corporations.

The current policy environment is a result of the continuing struggle of the local fishers movement. The policies during the era of President Marcos can be characterized as one of democratic space (the degree of tolerance to the exercise of freedom (press, speech, movement, enterprise, etc.)) in every activity. The fishers movement blamed the Fisheries Code of 1975 (or Presidential Decree (PD) 704) for marginalizing the small-scale fishers and aggravating the depletion of fishery resources. This is because PD 704 considered the fishery industry as a priority sector for investment that required maximum utilization of fishery resources. As an example, this frame of thinking encouraged the widespread conversion of mangrove forests into fishponds.

PD 704 is significantly detrimental to almost all RFLP outputs because it appears to be serving only the corporate world, transforming the fishery industry into huge production machineries. If this transformation may have provided equity of participation and income allocation, then it would be providing diversified income for small-scale fishers. However, the act may be structured only to fit only the cronies and their associates, leaving small fishers vulnerable to poverty.

The People Power revolution in 1986 which toppled the Marcos Administration widened the democratic space (freedom was fully expressed) and allowed different sectors to lobby for reforms. Various fishers' movements from different parts of the country (e.g., fishers' federations in Laguna de Bay, fishers included in farmer groups lobbying for land reform) soon focused their attention on reforming PD 704. The demands ranged from expanding the municipal waters for exclusive use of municipal fishers from seven to fifteen kilometers; the formation of Fisheries and Aquatic Resources Management Boards to

institutionalize the participation of fishers communities in the formulation of fisheries policies at different levels; the prohibition of converting mangrove forest into fishponds; and access of fishers communities and organizations to different property rights instruments such as the Fishpond Lease Agreement and Foreshore Land Agreement.

More than a decade of lobbying and campaigning ensued before a Fisheries Code was finally passed. Several provisions were compromised but a step forward from the previous law was achieved.

Fisheries Code (R.A. 8550) of 1998

The Fisheries Code is an act providing for the development, management and conservation of the fisheries and aquatic resources of the country. The Code is a consolidation of prior fishery laws and an update of prior laws related to fisheries. It establishes coastal resource management as the approach for managing coastal and marine resources. Salient new features of the code include the following:

- the expansion of municipal waters from seven (7) to fifteen (15) kilometers;
- the decentralization of management of municipal waters to local government units;
- the reconstitution of the Bureau of Fisheries and Aquatic Resources (BFAR) from a staff agency to a line agency;
- the limitation on size and duration of leases of fishponds;
- the prohibition of converting mangrove forests into fishponds and the reversion;
- the adoption of maximum sustainable yield (MSY) as a basis for fisheries management; and
- the creation of the fishers-led Fisheries and Aquatic Resource Management Councils (FARMC) at different levels of government.

The 1998 Fisheries code is particularly relevant to all RFLP outputs. It is fully supportive of co-management mechanisms and protection of marginalized fishers. The Code is very comprehensive in all fisheries and aquaculture aspects although there are still some aspects to be amended in response to the clamors from various sectors. It also protects the rights of small-scale inshore fishers by restricting entry of industrial scale vessels into inshore waters although small-scale fishers' movements claimed that the Fisheries Code favors the operations of

commercial fishers which eventually exacerbate the monopoly of these fishers over fishing gear and technology and the whole fisheries production system.

From the Third World Network Features (De Souza, 2002) in its October 2002 article entitled, "FISHING INDUSTRY NOT SAFE FROM GLOBALISATION NET ", the following section "Fisheries Code for Whom?" appeared:

Pamalakaya has already pointed out that certain provisions in RA 8550, the Philippine Fisheries Code, facilitate the entry of commercial fishing boats into municipal grounds that should be reserved for small fishermen.

The group said that although RA 8550 forbids commercial fishing in municipal waters with a depth of less than seven fathoms, it does not specifically forbid commercial operations in waters greater than seven fathoms even if these fall within the 10.1 to 15 kilometers distance from the shoreline prescribed by law.

Through these deceptive provisions, the territory of deep-sea fishing vessels has been expanded to include 96.3% of territorial waters in the Philippines.

This has forced municipal fishermen to venture further out to sea since commercial boats already overfish coastal waters. Since most small-scale fishermen rely only on small, non-motorised boats, they can only fish as far as they can paddle or sail.

In order to survive, small fishermen are forced to fish in groups. And lack of resources forces them to rent boats and gear or give their services to large or medium- scale fishermen in exchange for either cash or a share of the catch.

Agriculture and Fisheries Modernization Act (AFMA) (R.A. 8435) of 1998

The AFMA details measures to sustain the development in the sectors of agriculture and fisheries. The stated objective of this Act is to transform these sectors from resource-based into technology-based industries and to enhance profits in these sectors especially for small farmers and fishers. AFMA is geared towards modernizing the fisheries sector thereby making local industries more competitive in international trade. AFMA is seen by civil society as out of line with the goals of the Fisheries Code; while the Fisheries Code prioritizes conservation, AFMA encourages increased production.

It is imperative though for the Philippines to upgrade its technology to enhance fish production and attain food security for its growing populace, as long as habitats can be protected and biodiversity maintained. This policy will supply

the needed infrastructure, facilities and equipment to enhance production and develop diversified products for the domestic and international markets. However, presently, the increases in production through better technology have not yet been fully felt by the fisheries industry. Production from bio-technology, recirculating systems and genetics is still limited in the country.

AFMA is not relevant to RFLP output 1 on co-management mechanisms because it promotes corporate-type production. However, the Act is significantly relevant to all the other outputs especially on product safety, waste reduction, diversified income and access to microfinancing. If small-scale fishers' welfare is well protected, AFMA should boost the income of small-scale fishers and improve local economies. AFMA is also relevant to regional sharing of knowledge, expertise and technology from other Southeast and East Asian countries so that more enterprises can be created.

Local Government Code (R.A. 7160) of 1991

The Local Government Code (LGC) of 1991 devolves certain responsibilities for fishery resources and powers for their management to local governments. The Code gives local governments the mandate to manage municipal waters within a distance from the coast of 15 kilometers seaward, and to enact and enforce appropriate fishery ordinances. Joint undertakings with non-government organizations, people's organizations and other stakeholders for the promotion of ecological balance are also encouraged and promoted by the Code.

LGC is very relevant to RFLP outputs 1 and 2 as it promotes and supports co-management with several non-government and peoples' organizations for the welfare and protection of the poor including fishers. The Code, however, will only have relevance to output 3 when it deals with fisheries gears and when joint initiatives are undertaken with various stakeholders on value-addition for aquatic marine products. The Code, is also relevant to outputs 4 and 5, as it will assist fishers to more efficiently utilize fishery resources.

Indigenous Peoples Rights Act (IPRA) of 1997

Formulating private community-based property rights may currently be best exemplified by the IPRA of 1997. The law was also borne out of the widened democratic space available after the Marcos era. Massive land grabbing and development aggression in ancestral domains prompted coalition building of indigenous peoples, who were frequently dispersed and separated from each other. The advocacy campaign for the IPRA was ridden with controversy, such

as the proper representation of diverse Indigenous Peoples (IP) communities and the submission of their traditional claims and culture to the legal system.

The IPRA recognizes the property rights of indigenous cultural communities over their ancestral domains and ancestral lands. A traditional tribal council (composed of the tribal chief, council members, and spiritual advisers) is recognized by the law to draft policies on natural resource use and development plans in the ancestral domain. The tribal council can exercise their political control by invoking the use of their traditional tribal justice system as a sign of their cultural identity and autonomy from national laws.

The issuance of the Certificate of Ancestral Domain Title (CADT) was slow and full of controversy. Also, the autonomy of the tribal councils continued to be undermined by national government priorities (e.g., opening up ancestral domains to mining exploration). The National Commission on Indigenous People, the national agency representing the IPs, has been charged by some sectors for not providing enough services for the IP communities and for misrepresenting IP communities on mining-related issues.

Although IPRA has gone through many controversies regarding its constitutionality and its adherence to the culture of the indigenous people, it provides opportunities for indigenous people to establish community-based property rights over ancestral waters, including marine waters. This has been done by the Calamian Tagbanwa in Northern Palawan. The management plan of the tribal council over their ancestral domain became more coherent after they were issued a CADT. Traditional beliefs and practices were enhanced when national laws recognized their mandate over the ancestral domain. It also strengthened the participation of the IPs in legal policy making, thus reducing conflicts between different stakeholders. The Tagbanwa currently enjoy benefits from ecotourism while preserving their culture and conserving their ancestral land and waters.

As with LGC, IPRA provides similar relevance to RFLP outputs 1, 2, 4 and 5. The success of the tribal council's management plan relied heavily on the recognition of the community-based property rights over ancestral waters. The success then flowed to policy-making, peace restoration and economic benefits through eco-tourism.

National Integrated Protected Areas System of 1992

The passage of Republic Act 7586 in 1992, known as the National Integrated Protected Area System (NIPAS) has been hailed as one of the most progressive attempts to embody into law scientifically-advanced principles of establishing protected areas. The NIPAS Act aims to remedy the weakness of past efforts at establishing protected areas by applying scientific principles in resource management planning. NIPAS highlights the importance of bio-diversity conservation. The NIPAS also adopts a co-management approach, as each established protected area is administered by a Protected Area Management Board (PAMB). The PAMB is led by officials of the Department of Environment and Natural Resources (DENR) and includes representatives from the local government, non-government organizations (NGO) and people's organizations (PO), who are considered as active partners and decision-makers in matters pertaining to planning, protection and administration of the national park.

To some sectors, the NIPAS represent a paradigm shift in how government approaches conservation, in the sense that it is premised on the belief that environmental programs should address or complement the social and economic needs of local communities. Moreover, current discourse about protected area and watershed management has successfully refuted the view that human settlements are incompatible with the conservation objectives of the protected area and watersheds. In other words, people can become effective resource users and managers.

Conflict sometimes arises in areas where PAMBs are inactive or where fishers movements are being undermined by the PAMB. The DENR-led PAMB are sometimes not aligned with local communities and local politics. This has pushed some communities to form FARMCs, even though the Fisheries Code exempts protected areas under the NIPAS from the formation of FARMCs. Forming FARMCs allows more space for fishers to participate in policy-making but does not ensure that the policies will be carried by the PAMB.

In the formal organization of PAMB, NIPAS supports co-management and gives strong protection to small-scale fishers. However, NIPAS is not relevant to RFLP outputs 3, 4, 5 and 6. A longer time will be needed for PAMB to evolve from conservation-based goals to production-oriented activities.

Community-Based Forest Management of 1995

Community-based forest management (CBFM) is the national strategy to ensure sustainable development of the country's forestlands resources (Executive Order (EO) 263). The CBFM provides legal instrument for local PO's to manage and benefit from forests, including mangrove forests. As of March 2005, there were 1,577 community-based forest management agreements (CBFMA) covering 1,575,300 hectares of forest (DENR, March 2005).

In 2005, the DENR Secretary ordered the immediate cancellation of all CBFMAs in eight regions probably through pressure from big Forestry corporations and politicians. Directly affected were 1,051 CBFMAs covering 662,300 hectares of forest which will become "open access" again and approximately 115,370 households who manage and protect, develop and benefit from the forest resources. In a consultative workshop on CBFM, the current DENR Secretary was confronted by PO representatives on the issue. The DENR Secretary responded by stopping further cancellation of CBFMs and ordering an evaluation of those which were cancelled. From that time on, DENR has continued to enter into partnerships with POs for the approval of CBFMA and no more cancellations have been ordered.

CBFM is pro-co-management and protects people in rural communities making it very relevant to RFLP outputs 1 and 2. There is no relevance of CBFM to outputs 3 and 6 and has slight relevance to outputs 4 and 5 as some projects will generate livelihood and require financing.

Integrated Coastal Management

Through an EO 533 signed in 2006, Integrated Coastal Management (ICM) has been adopted by government as the national strategy for the sustainable development of the country's coastal and marine resources. The EO also specifies the establishment of supporting mechanisms for its implementation, specifically the development of a National ICM program. This ICM program is supposed to be a consultative process involving the relevant agencies, sectors and stakeholders. The program also specifies the provision of direction, support and guidance to LGUs in the development and implementation of local ICM programs. While the program is a positive development in terms of creating more policy space for CBCRM, the Order is silent on the participation of the National Fisheries and Aquatic Resource Management Councils (NFARMC) and local FARMCs in the planning. The FARMCs participation could have served to counterbalance the usual "top-down" mode of government planning.

Through several experiences and lessons learned, ICMs will prosper only through co-management, where the voices and participation of the fishing community are included in the ICM planning process. ICM has no relevance to RFLP outputs 3 and 6. There will be slight relevance of ICM to RFLP outputs 4 and 5 as ICM will support fisheries-related or alternative income-generating projects suggested by fishers through a “bottom-up approach” and which will require financing.

Government Plans and Programs

Comprehensive National Fisheries Industry Development Plan

Comprehensive National Fisheries Industry Development Plan (CNFIDP) is a framework for improvement for fisheries management in the Philippines. It was developed with the private sector (including NGOs, POs, and commercial and aquaculture sectors) through a series of consultations. The final draft version of the CNFIDP completed in the last quarter of 2006 has been submitted to BFAR for adoption and implementation. CNFIDP calls for more investment towards research and development, especially in aquaculture, with the goal of making Philippine fisheries more competitive in the global market.

CNFIDP provides more support to the Fisheries Code and AFMA in the exercise of co-management to make the fisheries industry of the country attain global status. The Program helps small-scale fishers as the development plan was conceived through participatory consultation. To make the Philippine Fisheries Industry more globally competitive, the fishery products must be safe and with minimal waste. Further, while CNFIDP may not provide diversified income, it will assist the fishers’ organizations in seeking funds to initiate production. The sharing of knowledge in region must be encouraged by CNFIDP and the Medium Term Philippine Development Plan (MTPDP) for the development of state-of-the-art Philippine fishery and marine products for global and regional competitiveness.

Aquaculture Development

The Aquaculture for Rural Development (ARD) Program is the Philippine government’s platform for realizing the goals of MTPDP for agriculture. The priority of the MTPDP is job generation through agribusiness. In the fisheries sector, 17,000 hectares of aquaculture and mariculture areas are targeted, but not yet delineated for agribusiness development. Government expects to generate some 700,000 new jobs from this sector.

The ARD is criticized by civil society for its market-led approach, inconsistent with the goals of sustainable development, and the exclusive and preferential rights of municipal fishers. Because of the high capital required for the establishment of fish cages, very seldom do fishers organizations engage in mariculture as operators. Some sectors complain that only a few fishers become fish cage workers but the majority are dislocated from their fishing grounds and are forced to use fishing nets instead of cheap hook and lines (since fish would no longer take their bait). In addition, their livelihoods become more vulnerable to fishkills due to the degraded water quality conditions and localized pollution near fish cages.

ARD provides relevance to co-management but most of the aquaculture and mariculture projects are still dictated by top management. Small-scale fishers are protected as the development is focused on the rural communities. These aquaculture and mariculture projects should produce safe products and with minimum waste. Small-scale fishers are also provided with diversified income through employment in mariculture projects as cage and net fabricators, feeders, cage watchers, and other ancillary services. In BFAR's Mariculture Park Program, fishers are provided with opportunities to participate as cage operators through its Rent-to-Own scheme whereby fishers operate their cage culture unit with initial financing from BFAR. There will be regional sharing of knowledge and experience most especially if fishers culture high-value fishes such as groupers and snappers which are also cultured in Southeast Asian countries.

Key fisheries management measures

A range of fisheries management options currently being used by both government and civil society groups are given legal mandate by the current policy environment. These management options include:

1. **Fishery habitat management or Conservation Zones** - A popular approach is the establishment of marine protected areas (MPA). MPAs refer collectively to areas in the marine region, whether coastal or offshore, set aside for management and conservation measures or to areas where some semblance of protection, whether legislated or not, is exercised. MPAs are also referred to as fish sanctuaries, marine reserves, and a few other terms. These are still used within the context of local government and community-based projects but the use of "marine protected area" is now most common at the national level to refer to any such marine or coastal protected areas, often within the

context of a broader coastal management regime or program. In fact, the Fisheries Code provides that at least 15% of coastal areas of each municipality shall be designated as fishery refuge and sanctuary areas. However, this is not widely observed. The concept of defining zones to limit fishery activities and defining areas for fishery conservation and regeneration has been applied in developing Coastal Development Plans through some municipal fishery ordinances. It has been noted that a large number of MPAs have been declared in the Philippines but less than 20% of these are functional. Despite this, there have been several documented cases where MPAs have been successful in conserving and regenerating resources and uplifting the fisheries in the locality. These successful MPAs are mostly in areas where fisheries are closely associated with seagrass beds and where other fishery management measures are used in combination.

MPAs have only been successful when co-management exists. In fact, small-scale fishers exercise their territorial use rights to ensure the success measured by habitat protection and increased fish stocks or abundance in the area. MPAs provide strong protection to small-scale fishers as they are the one of the main reasons for the establishment of MPAs. While small-scale fishers may be banned from the areas where they obtain their livelihood, any alternative livelihoods promoted should prevent fishers and their families from starving, until such time as the fish stocks have returned to normal levels and the fishers are allowed to fish using habitat-friendly gears. In some areas, eco-tourism is the common alternative livelihood, but in other areas where tourism potential is absent, innovation is needed to develop alternative livelihoods.

- 2. Temporal and Spatial limitations on fishery activities** - This involves the declaration of a Closed Season wherein the taking of specified fishery species by a specified fishing gear in a specified area or areas in Philippine waters is prohibited during a specific time period. Limited entry and fishery activities may be applied in overfished areas. Closed seasons have been applied at the local level either to regenerate fish stocks in a severely depleted fishing ground or to conserve the population of a target species by prohibiting its capture during the reproductive stages of its life cycle.

Limiting fishing reduces fishing pressure, but should only be done after consultations with small-scale fishers. Again, the success of this activity hinges on community protection of the local area and the community in turn, must be protected by the implementation of a closed season. However, the small-scale fishers must be provided with other income generation opportunities if their

only means of livelihood has been taken away from them. With lessened or no fishing activity in an area, there should also be minimum or no waste by-products from fishing.

3. **License Control** - Access to fishery resources can be controlled by limiting the number of licenses based on the Total Allowable Catch (TAC). Aside from the actual number of licenses released, license fees must reflect the resource rent. However, this measure is seldom used. A more commonly employed measure is a moratorium on the issuance of new commercial fishing licenses. License fees are also still not based on the resource rent, primarily due to strong political lobby of the commercial fishing sector.

The issuance of licenses is strongly relevant to the small-scale fishers in as much as strict regulation on the number of licenses to be issued based on TAC will limit access to fishery resources and provide protection to the resource that small-scale fishers rely on for their livelihood. However, these benefits are easily dissipated by the non-attainment of the objectives of this key measure.

4. **Catch Ceilings** - Limitations or quotas may be established for a specified period of time, area and target species. Again, this measure is seldom employed due to the lack of accurate time series data. An example of its application is the incorporation of TAC in the Philippine National Tuna Plan for specific tuna species.

As with closed seasons, catch ceilings limit fishing pressure at key times and as such, should provide protection to small-scale fishers (RFLP output 2). Reducing fishing pressure should also reduce waste from capture fishing.

5. **Fishing Gear limitation or prohibition** - the fisheries code provides a wide array of prohibition on fishing gears which destroy fish habitat (e.g., fishing using explosives and poison, *muro ami*), harvesting of juvenile fish (e.g., fine mesh nets), and over-exploitation of near -shore fisheries (e.g., all active fishing gears in municipal waters).

This measure provides protection to small-scale fishers by protecting the fishery resources on which they rely for their livelihood. Banning destructive fishing gears reduces wastage of fishery resources.

6. **Biodiversity Protection** - Species-specific closed seasons are implemented for rare, threatened and endangered species. Also, the capture of broodstock of high commercial value e.g. milkfish or Sabalo (*Chanos chanos*), is deemed unlawful. To further protect indigenous and endemic species, limitations are imposed on the introduction of exotic aquatic species and the obstruction of defined migratory paths of various species.

Maintaining bio-diversity may have some relevance to small-scale fishers by maintaining species diversity and habitat and the maintenance of a sustainable fishing livelihood.

7. **Market-Based Restrictions** -market-based solutions are also used to deter illegal and destructive practices. This includes limitations or prohibitions on the importation/exportation of fish and fishery species; exportation of broodstock, eggs and fry; and handling, transporting and sale of illegally caught fish.

This particular measure which is meant to prevent illegal and destructive practices on fisheries resources will also protect the welfare and livelihood of small-scale fishers. This measure will also reduce wastage of fishery resources.

However, these measures are presently facing strong challenges. Few studies on stock assessment, abundance, migration and recruitment of fish groups or species have been conducted, so there is only limited scientific data on which to make decisions related to closed seasons, total or partial bans of specific fish species or specific fishing gears. Banning the importation of high-value non-indigenous species will leave the Philippines trailing other Southeast Asian countries in aquaculture development. Similarly, the export of milkfish fry to other countries like the Pacific islands which demand it to intensify their aquaculture is impossible unless Section 61 of the Fisheries Code is amended.

It should be noted that establishment of MPAs was done by the Department of Agriculture (DA). Problems arise when local governments fail to see the need to pass complementary municipal fishery ordinances. This is especially true when encroachment into the MPA's occurs, when the community, the LGU, and the DA all blame each other for failing to protect the MPA.

Overview of community-based systems

Though the Philippine policy environment provides the needed space for community-based resource management, this does not necessarily lead to community-based resource management.

The term “community-based” suggests different approaches to different stakeholders and coastal resource managers. At the one extreme, community-based refers merely to involving fishers in CRM, either as beneficiaries or as stakeholders who need to be consulted. This level of participation in a community-based system is already being initiated under current policies in the Philippines. These approaches are often called co-management, where there is a partnership arrangement between the community of local resource users (fishers), government, other stakeholders (boat owners, fish traders, boat builders, business people, etc.) and external agents (NGOs, academic and research institutions), who share the responsibility and authority for the management of the fishery.

On the other extreme, community-based coastal resource management (CBCRM) suggests a major, if not a leadership role, in managing coastal resources and addressing the needs of coastal communities. While this form of CBCRM has not yet been legitimized, it is being implemented in several areas of the Philippines where a strong civil society is making their voice known.

Co-Management

Through consultations and negotiations, the partners develop a formal agreement on their respective roles, responsibilities and rights in management, referred to as ‘negotiated power’. Co-management is also called participatory, joint, stakeholder, multi-party or collaborative management. Co-management covers various partnership arrangements and degrees of power sharing and integration of local (informal, traditional, and customary) and centralized government management systems. These co-management systems are commonly employed by government programs e.g., Asian Development Bank-funded Fisheries Resource Management Program, Coastal Environment Program and large scale integrated coastal resource management programs e.g., the United States Agency for International Development-funded CRM Program.

The establishment FARMC by the Fisheries Code is an example of how fishers are able to participate in fisheries policy-making. The FARMC is a recommendatory body composed of representatives from government, fishers

and non-governmental organizations. The majority of its members are representatives of different fishers' organizations. FAO 196 was subsequently passed to provide guidelines on the creation and implementation of FARMCs. FAO 196 also defined the composition, tenure and functions of FARMCs at each level. The introduction of FARMC was exceptional in the sense that it forces LGUs to clearly distinguish between agriculture and fisheries. The FARMC highlighted the fact that the Municipal Agriculture Offices are predominantly agriculture-focused and fisheries-incompetent. This has also emphasized the need for participatory decision-making, given that the real experts in fisheries are the fishers themselves.

Another example is the PAMB, the policy-making body for protected areas. The PAMB is led by the Department of Environment and Natural Resources (DENR) official in the locality and includes representatives from the local government unit (LGU), fishers' organizations and NGOs. Unlike the FARMC, the PAMB has the power to make policies under the NIPAS Act. However, there are several areas where the PAMB fails to meet the needs of fishers for a wide variety of reasons, and fishers' organizations are lobbying for the creation of FARMC's to better voice their needs.

EO 533 provides for a mechanism for DENR to lead integrated coastal resource management systems that would bring together various concerned government agencies and recognize the contribution of civil society.

Community-Based Coastal Resource Management

Often distinguished from Co-management is Community-based Coastal Resource Management (CBCRM), a process whereby local people and communities organize themselves and play a central role in identifying their resources and their development priorities, and implement coastal resource management activities. CBCRM is often advocated and implemented by civil society using the available democratic space in the policy environment. CBCRM in the Philippines originated from two traditional social movements, the conservationists and those concerned with human rights. The guiding ideas of CBCRM included participation, empowerment and equity (Ferrer et al., 2004). As such, CBCRM is often in conflict with the government-centered or top-down approach wherein government officials and agencies take the lead role in formulating policies, choosing appropriate management technologies and implementing natural resources management programs.

The community-based approach rests on the premise that people who actually use a given resource, and who have first-hand knowledge of such a resource from their daily interaction with the natural environment, are in the best position to protect and manage it.

CBCRM thus asserts the principle of local community control and initiative while recognizing the importance of institutional and policy contexts in influencing its performance in harnessing local resources and using them productively, equitably and sustainably to meet community needs. CBCRM commonly employs the following methods: 1) Community Organizing; 2) Participatory Research; 3) Capability Building through education; 4) Coastal Resources Management; and 5) Networking, Advocacy and Governance (Ferrer et al., 2004). CBCRM has gained wide popularity in the Philippines as a development strategy amongst NGOs. Even the MTPDP of the Arroyo government espouses a community based approach when addressing coastal environmental problems. However, the actual application of a community-based approach is still limited and remains an exception instead of the rule.

Though there is no consensus on the definition of “community,” it is becoming evident that “community” is broadening from initially the marginalized and disempowered sectors of coastal dwellers to a wider base that includes stakeholders, government, market forces and other actors. Evidently, there is a growing concern over striking a balance between excluding others from accessing resources and making benefits inclusive to a wide range of stakeholders. This definition of “community” is manifested by continuing experimentation of CBCRM practitioners with different strategies. It also places emphasis on the role of social capital, including linking and consolidating social relationships, on CBCRM’s impact and sustainability.

With the term CBCRM being widely used to refer to coastal resource management efforts with the participation of local coastal dwellers, it is practical to at least identify key elements and processes of CBCRM:

- Works primarily and initially with the marginalized and disempowered sectors of the community, but has evolved to include the wider community, other stakeholders and actors in managing coastal resources
- Recognizes that the primary management unit is the evolving community and undertakes CRM in the context of community transformation by ensuring social and economic equity, holistic and integrated management, and sustainable livelihoods and development.

- Transforms power relationships by building the capacities of marginalized sectors of the community and by facilitating other stakeholders and actors to be more sensitive and responsive to the needs and desires of disempowered groups towards articulating the goals of citizens empowerment- where citizens share decision-making responsibilities over plans, programs, policy and management; negotiate any attempt at change by outsiders; and access and engage in conflict management mechanisms.
- Builds on existing local community institutions and bodies of knowledge to facilitate collective action for the management of resources.
- Responds to the dynamic and changing needs of evolving communities and coastal resources by adopting adaptive and learning structures, processes and rules.
- Operates initially in manageable geographic scales with the intention of influencing/shaping resource management and community development of a larger common pool of resources.

Despite the expanding scope of a CBCRM community, practitioners are conscious of inequitable power relationships within this community. Transforming power relationships within and outside the community remains a primary goal of CBCRM and the distinguishing mark that separates it from co-management.

The unique nature of CBCRM and the manner by which it has been embraced by communities, NGOs and even government and international development agencies has strongly legitimized CBCRM as a distinct and countervailing development philosophy and strategy (Vera et al., 2004). In the socio-cultural and political realm, one of the major gains of CBCRM identified is “people’s participation and empowerment” in coastal resources management (Ferrer et al, 2001). There is a noted increase in the formation and strengthening of POs, various expressions of community empowerment, and skills and knowledge of both men and women. The emergence of women leaders must be doubly stressed as a major gain of CBCRM over the years (Vera et. al. 2004).

On governance, there is a noted increase in institutionalization of resource management measures, networking and partnership building among organizations (from the community level to NGOs, LGUs and external agencies), participation in local legislation, and better enforcement of fishery laws(Vera et. al. 2003).

For ecological and biophysical aspects, gains have been made in natural habitat protection, enhanced regulations on resource use, and increased bio-diversity (Vera et. al. 2003).

Economically, although livelihood diversification and increased fish catch have been recorded, the impact of income has been limited. This is discouraging given that a primary motivation for participation in CBCRM is reportedly socio-economic gain.

CBCRM is extremely relevant to co-management as it transfers power to the community and is especially relevant to the protection of fishers as one of its objectives is the sustainable management and use of all resources in the community.

Participation in policy-making and enforcement

Local Sectoral Representatives

The campaign to create Local Sectoral Representatives (LSR) will help enhance the participation of municipal fishers, and other groups in policy-making. The LSR bill will add three seats to the *Sangguniang Bayan* (Municipal or Town Council). The LSRs will have to come from the marginalized groups within the municipality/city. The LSR bill is based on the constitution and was filed in the previous Congress. Hopefully, more headway will be achieved during this Administration.

Again, the strength of having representatives in policy making or recommendatory bodies lies not in the strength of the law mandating, but in representation and providing political voice to fishers' organizations which it represents.

LSR will be supportive of small-scale fishers as it brings to the municipal or town council the voice of small-scale fishers.

Fisheries and Aquatic Resource Management Council

While the creation of FARMCs as mandated by the Fisheries Code has opened up governance to community participation, there are still issues that need to be addressed with the FARMC structure, the selection process, and clarification of the roles and internal mechanisms, that would help to make it more effective venue for pursuing the objectives of the fisheries sector it is supposed to represent. The Fisheries Code failed to devolve powers to communities by keeping the FARMCs as mere policy-recommendatory bodies. With most municipal FARMCs organized by the LGU and BFAR, FARMCs have become

vulnerable to partisan local politics. The strength of the Municipal FARMC lies in the political strength of the fishers' organizations and not in the policy itself. Weak or unorganized municipal fishers will fall prey to the whims of local politicians. One of the major amendments recommended by NGO and PO groups for the review of the Fisheries Code is the section on FARMC.

FARMC will be very relevant to all the RFLP outputs as its basic mandate is the welfare of fishers and the protection of the resources from which the fishers obtain their basic livelihood. FARMC should ensure that fisheries products are safe, fisheries resources are not wasted, income sources diversified and access to micro-finance services is provided to small-scale fishers to improve their livelihoods, and also that regional sharing of knowledge is supported so that fishers can better adopt modern technologies.

Enforcement

The Fisheries Code provides for the participation of fishers in fishery law enforcement through deputized fish wardens or *Bantay Dagat* within municipal waters. A measure of local government's sincerity towards community based approaches to coastal resource management is its willingness to allocate sufficient resources for law enforcement. A particular challenge for many POs is that while they are willing to risk life and limb in *Bantay Dagat* operations, resources are needed to sustain such efforts. While the Fisheries and the Local Government Code prescribes modes of cooperation between LGUs and civil society, resource allocation is still an area where NGO and PO advocacy is critical. At most, the Fisheries Code recognizes the vigilance of the municipal fishers in enforcing fishery laws in the municipal waters. Aside from the LGU being allowed to seek the assistance of the DA in training, the Fisheries Code does not provide for any other financial, physical or technical assistance to the *Bantay Dagat*. The allocation of resources is also needed to address practical concerns of *Bantay Dagat* such as insurance coverage and social security.

Fishery law enforcement is strongly relevant to co-management because it involves the community in fishery law enforcement in municipal waters. It also is strongly relevant to the protection of small-scale fishers as the community's fisheries resources are likewise protected through the enforcement of fishery laws.

Judicial processes

Related to enforcement issues is advocacy for the creation of Special Courts to process coastal law enforcement related cases. It is a source of great frustration

for NGOs and POs, who make tremendous efforts to apprehend illegal fishers only to see them set free because of a lack of political will and in some cases, the courts' ignorance of marine laws. The creation of special courts would also address the dynamics of patronage politics.

Thus advocacy is relevant to the protection of small-scale fishers as it further strengthens the enforcement and punishment of violators of municipal ordinances.

Fisheries Liberalization

Fisheries liberalization threatens the livelihoods of fishers in several ways. First, the opening of international markets will increasingly stimulate the modernization and production-centered program of the government. Further marginalization can be expected from the promotion of aquaculture products.

Second, liberalization may provide access for foreign vessels and/or foreign companies/ individuals to local fishing grounds, as experienced in the RP-Taiwan Agreement in the 1980s. For example, the current RP-China bilateral agreements focus on cornering investments in different fisheries sector areas. Foreign vessels will provide strong competition to local commercial and municipal fishers for the capture of already depleted fishery resources; suppress local market prices if their catch is sold locally; and cause shortages of local food fish supply if their catch is sold to foreign countries. Moreover, regulation of foreign vessels to ensure operations comply with Philippine CRM policies will be difficult. Currently, patrolling the country's exclusive economic zone (EEZ) continues to be a major challenge because the government has too few resources to restrict access to the country's extensive coastline and territorial waters. Violators, like the perennial case of Chinese fishing vessels in Philippine waters, caught by *Bantay Dagat* and local enforcement units, are often set free for "diplomatic" reasons.

Third, dumped imported fish may flood the local fish markets causing depressing fish prices all year round. This decreases the income of small-scale fishers, increases their vulnerabilities during the stormy season and increases spoilage of unsold fish products. Even commercial fishers are forced to increase their production, thus, continuing the encroachment into municipal waters in an effort to save their business. Current trade policies under the Fisheries Code restrict the importation of fish to canneries, processing plants and institutional buyers (i.e., restaurants, airlines, hotels). An escape clause was provided wherein the DA Secretary can issue a Certificate for the Necessity to Import which allows

the importation of fish for sale in local markets. This provision is considered to be inconsistent with Philippine international commitments to trade liberalization. Despite this protectionist policy, research shows that large volumes of frozen fish are rampantly being smuggled into the country and distributed in both coastal and non-coastal domestic markets. The challenge, therefore, is to protect the livelihoods of millions of fishers from the influx of cheap imported fish.

The Doha Round of the World Trade Organization (WTO) negotiations gave a temporary reprieve for fishers' groups engaged in trade advocacy. But while the WTO is for the moment dormant, new arenas are emerging such as the Association of Southeast Asian Nations (ASEAN), which highlight the same issues as the WTO including liberalization of tariffs and removal of non-trade barriers. It has consistently been argued that greater access to domestic markets will inevitably lead to depressed prices of locally caught fish and lower income for municipal fishers. Lower income from fishing may force municipal fishers to increase fishing activity to compensate for the low value of fish. Opening markets adds extra pressure on the resources by encouraging catches beyond the rejuvenation capacity of resources, leading to unsustainable fisheries. Increased trade liberalization in the fisheries and forest sectors may therefore result in reduced resource conservation. Trade liberalization, without effective fisheries management, is likely to adversely impact resources.

This act is relevant to the protection of small-scale fishers, but its effect may be detrimental to small-scale fishers. As stated above, the fisheries trade liberalization may even prevent small-scale fishers from selling their product in local markets.

Fisher settlement areas

The Philippine Fisheries Code legalizes the establishment of fisher settlement areas, to be done in coordination with concerned government agencies, where certain areas of the public domain, especially near the fishing grounds, shall be reserved for the settlement of municipal fishers.

However, the provision is weak for several reasons. First, the law has identified that the Department of Agriculture (referred to as "the Department" in the Fisheries Code), as the government agency to lead the implementation of the provision, while the DENR which has jurisdiction over public lands, the Department of Agrarian Reform which verifies the inclusion or exclusion of the

possible settlement areas in the Comprehensive Agrarian Reform Program (CARP), and the LGUs, which are vested with the authority to zone lands within their jurisdiction, would have been more appropriate agencies to implement the provision. Second, the section does not provide for the participation of fishers in the establishment of settlement areas. Third, the Fisheries Code fails to allocate the necessary financial resources to implement the provision. Lastly, the provision fails to establish a security of tenure for the fishers because it deprives them of the bundle of rights associated with land ownership.

The NGOs for Fisheries Reform, an NGO network is actively pressing for the issuance of a Joint AO to concretize this provision, specifically in providing socialized housing “as a primary strategy in providing shelter for the under-privileged and homeless municipal fishers”.

This provision is definitely very relevant to the protection of small-scale fishers, but strong efforts are needed to transform the intention of this provision into reality.

Magna Carta of Women (RA 9710)

Women fishers belong to one of the most marginalized groups in the country. Their contribution to fisheries has largely been ignored as fishing is considered a male occupation. Fishery statistics do not even disaggregate data by gender for the different sub-sectors and phases in the fish production process. Moreover, the roles of women in the production process are not assigned economic value as it is relegated to being an extension of their roles as mothers and housewives. As a result, women have less access to productive resources and political leverage in decision making. Local NGO networks are currently pushing for the passage of a more responsive Magna Carta of Women to address these issues. These NGOs are voicing concrete recommendations to enhance the current bill including “ensured representation” of women fishers in resource management bodies, specifically the National Fisheries and Aquatic Resources Management Council (NFARMCs), local FARMCs, and other co-management bodies or mechanisms, and “mandatory consultation” with women fishers in the development of the CNFIDP and other programs, policies and services promoting the welfare and interests of fishers. The recommendations also specify that equal status should be given to both men and women in the issuance of stewardship or lease agreements and other fishery rights for the management of coastal and aquatic resources. The Magna Carta of Women is in the final stages of review in the House of Representatives. A similar bill is to be filed in the Philippine Senate.

Presently, various activities and provisions are being undertaken to ensure the protection of women in fisheries, allowing their participation in organizing and management and provide them with better access to help the family gain opportunities for employment and other diversified income. Thus, this provision is relevant to RFLP outputs on co-management, protection of small-scale fishers, diversified income and access to microfinancing.

Recommendations and Issues

The above-mentioned fisheries policies, government plans and programs, key fisheries management measures, participation in policy-making and more importantly, the community-based coastal resource management can provide the frameworks from which the RFLP can achieve its objectives. Although, at times conflicts arise between national and local agencies and stakeholders, continuous consultations and fora can resolve the conflicts. It is best to remember that the policies and frameworks are just as important as the people who participate and effect the change in their community.

It is therefore required that in areas where RFLP is to be implemented, community organizing should be the first and foremost priority. The *barangay* or municipal fishery/coastal resource management plan will then be drafted with lead consultation from the community. This “bottom-up” approach will ensure the involvement and participation of the people as they themselves will be at the forefront of the project.

It is constantly observed that in most of the ICM and CBCRM conducted in the country, while social, ecological and economic factors are given due consideration, bio-physical issues are largely ignored, despite coastal communities being fishery resource-dependent. A case in point is the policy option for the Live Reef Food Fish Trade in Northern Palawan (Pomeroy *et al.*, 2005). As people debated the socio-economic impacts of a complete or a partial banning or closed fishing season, it was realized that there were no data or reliable information on grouper stocks (the main live reef food fish targeted), their biology and life cycle, and most importantly their reproductive condition and recruitment. At the very least, RFLP can use rapid assessment techniques to gather local information on key fish stocks, so that appropriate livelihood activities can be recommended. At BFAR, the National Stock Assessment Program (NSAP) collates data from fish landing sites, but it does not record the size and reproductive condition of the catch. Furthermore, fish biology of any

economically-important species is not a priority study area for BFAR's Research Division.

Eco-tourism was recommended as an alternative livelihood in Northern Palawan. However, establishing MPA's and no-take fishing areas mean fishers have to fish in more distance areas, work longer hours and often catch fewer fish (Fabinyi 2008). Tourism development is not the "silver bullet" solution and at best delivers only mixed results, because there are winners and losers. Tourism may also not be as reliable as fishing, being subject to the vagaries of the world economy and weather, and holiday seasons. More significantly, fishers often lose control over coastal land, when coastal development occurs.

There are however several MPAs that have gained benefits from fishing and additional income from tourism including snorkelers, swimmers and divers. The success stories of the Sumilon Island and Apo reef, and Gilutongan Island, Cebu (Green *et al.*, 2003) describes these benefits. Other MPAs' successes were not purely financial, but include marine park or sanctuary establishment with municipal government funding, implementation of a CRM plan, and stricter laws and law enforcement that deterred illegal fishing and even stopped the encroachment of commercial fishers in its municipal waters (NEDA 2005). Experiences from Port Barton, San Vicente, Palawan, Suba, Olago Island and Banate Bay, Iloilo and in other municipalities have indicated that the local community is the first and final defense in maintaining the ecological integrity of the coastline. Thus, the residents must be made aware of the basic relevant laws and best resource management practices. They must also be vigilant and established lines of communication with relevant authorities responsible for environmental protection.

For CRM or CBCRM to achieve the ideal fishery, the plan should be:

BIOLOGICALLY ACCEPTABLE – Does not affect the ability of fish stocks to reproduce;

ECONOMICALLY EFFICIENT – The amount of fish caught for a specific amount of effort is profitable to all; and,

SOCIALLY BENEFICIAL – The more needy population groups and majority of stakeholders get the biggest share, to ensure that their traditional and subsistence livelihoods are maintained (Christie and White, 2004).

From the earliest studies to reverse the downward trend in Philippine fisheries, the need to reduce fishing pressure and to ensure a sustainable fishing supply has been correlated with population size. Like poverty reduction, implementing sustainable fisheries management will be assisted if effective birth control programs are implemented. The Save the Children Project is supporting 12 fishing communities in Western Visayas to balance the demands of population growth with coastal conservation. Their projects include an “environmental midwife” who leads community-based nutrition, clean green projects and mangrove reforestation (De Souza 2004). Teenagers wear t-shirts that say “With family planning, your health is ensured, your environment is saved.” These projects incorporate reproductive health programs and services into environmental protection efforts, or the reverse, in order to harmonize the human population and coastal resources.

The mariculture park development program of BFAR under CNFIDP provides not only employment opportunities for fishers displaced from their livelihood (fishing inside the park) but also gives them opportunities as participants rather than observers or workers. Some of the cages in the mariculture parks are managed by fishers through a rent-to-own scheme. BFAR provides the complete cage set-up and funds the initial fingerlings and feeds while the fishers manage the operation. At harvest, the fishers should have enough funds to continue the next operation and pay the amortizations for the cage and operating costs. There is some ray of hope for the success of the program, but it is still the people who are the best criteria for success. Furthermore, indigenous people were also invited in this scheme not only to provide additional livelihoods to the group, but for them to also realize the delicate connection between terrestrial and marine environments.

Marine cage or pen culture can also be conducted by small-scale fishers through capture-based aquaculture, i.e. stocking and rearing wild caught fish seed. In this program, small and juvenile fish caught by fishers are sorted by species (snappers, groupers, parrotfish, trevally, pompano, etc.) which can be cultured to 500 g market size. Rather than sell these fish at very low cost, the CBA program purchases the fish and selected fishers will stock them in marine cages or pens installed at their house or near it. The CBA program provides initial funding for the purchase of juvenile fish, transport materials, and the cage or pen. Feed can be sourced from by-catch or household scrap. The CBA program provides added value to the fish in terms of size and market price, from which the fishers benefit.

The delineation of municipal waters and water use zonation is still an unresolved issue. Department Order 17 issued by the DENR provides guidelines for the delineation of municipal waters for different uses, as provided under the Fisheries Code.

The major conflict area between municipal fishers and commercial fishers is for access to and use of the resource-rich continental shelf. The policy prior to the Fisheries Code reserved the inshore 7 kilometers of municipal waters for the exclusive use of municipal fishers. With the persistent lobbying of municipal fishers and environmentalists, the Fisheries Code extended the municipal waters to 15 kilometers, primarily to cover the continental shelf. As a compromise with the commercial fishers, small and medium commercial fishing can be permitted in municipal waters from 10.1 to 15 kilometers by issue of an municipal mayor ordinance, provided that certain specific criteria are met.

Controversy arose when the DENR issued Department Administrative Order 2000-17 (DAO 17) providing guidelines for delineating and delimiting municipal waters. DAO 17 subscribes to the archipelagic principle. This stipulates that the measurement of the 15 kilometers is based on the offshore islands of a municipality/city instead of the islands proper of the municipality. This provides not only a more logical means of measuring municipal waters, but also covers a wider area for the use of municipal fishers.

Although the Philippines is geologically and constitutionally an archipelago, the commercial fishing industry and BFAR are questioning the interpretation of DENR. DAO 17 has been revoked by the DENR Secretary under pressure from Representatives in Congress who have or had vested interest in commercial fishing or canning. A new AO has been issued which tackled the issue of delineating municipal waters without offshore islands but it is still silent on the issue of offshore islands.

This will have grave implications for the 301 towns and cities with offshore islands, including the rich fishing grounds of Zamboanga provinces, and Tawi-Tawi, Basilan, Palawan, Coron and Masbate provinces. The 1987 Philippine Constitution grants subsistence fishers preferential rights over communal waters and the Fisheries Code of 1998 spells out such rights by giving municipal fishers preferential access to municipal waters. However, if municipal boundaries have not yet been delineated, encroachment and migration from other fishers are likely and that is similar to a theft.

The other issue relating to municipal fisheries pertains to the return of passive fishing gears and a move away from the “search and catch” fishing methods like seines and trawl nets. In Zamboanga Peninsula, BFAR has distributed 2,000 gill nets providing a livelihood to 3,714 municipal fishers who caught more than 3,500 metric tons of fish in 2009, with a farmgate price of Philippine pesos 180 million. In the same area, BFAR is promoting the use of fish corrals or fish-aggregating devices called “lambaklad” with fisher’s organizations as a means to collect live high-valued species including groupers, snappers and trevally to be grown on as broodstock for the high-value fish industry (Alvarez 2010). The Philippine government has also realized the potential of the live reef food fish trade in Southeast Asia and South China, but the industry is severely hampered by the availability of seeds. Other passive fishing gears has also been distributed as part of the means to promote passive fishing methods and thereby reduce high fuel costs for what have increasingly become “hit or miss fishing” expeditions.

RFLP is largely compatible with the Philippine fisheries policy and can contribute significantly to the objectives of the government plans and programs and key management measures to ensure the sustainable growth of fisheries production primarily for food security and poverty alleviation.

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Table 1. The relevance of government fishery policies, plans, programs, and key management measures to the six RFLP outputs.

Government Fisheries Policy, Government Plans & Programs, & Key Management Measures	OUTPUT					
	1	2	3	4	5	6
1987 Philippine Constitution	√√	√√	X	X	√	X
Presidential Decree 704	X	X	X	√	X	X
Fisheries Code	√√	√√	√√	√√	√√	√
Agriculture & Fisheries Modernization Act	X	√√	√√	√√	√√	√
Local Government Code	√√	√√	X	√	√	X
Indigenous Peoples Right's Act	√√	√√	X	√	√	X
National Integrated Protected Areas System	√√	√√	X	X	X	X
Community-based Forestry Management	√√	√√	X	√	√	X
Integrated Coastal Management	√√	√√	X	√	√	X
Comprehensive National Integrated Fisheries Development Plan	√√	√√	√√	X	√√	√√
Aquaculture for Rural Development	√√	√√	√√	√√	√√	√√
Habitat/Conservation Zone	√√	√√	√	√√	X	X
Temporal/Spatial Limitations	√	√√	√	√	X	X
License Control	X	√√	X	X	X	X
Catch Ceilings	X	√√	√	X	X	X
Fishing Gear Limit or Prohibition	X	√√	√	X	X	X
Biodiversity Protection	X	√	X	X	X	X
Market-based restrictions	X	√√	X	√	X	X
Community-based systems	√√	√√	X	X	X	X
Local sector representatives	X	√√	X	X	X	X
Fisheries & Agriculture Resource Management Council	√√	√√	√√	√√	√√	√√
Enforcement	√√	√√	X	X	X	X
Judicial Areas	X	√√	X	X	X	X
Fisheries Liberization	X	√	X	X	X	X
Fisherfolk settlement	X	√√	X	X	X	X
Magna Carta of Women	√√	√√	X	√	√	X

√√ - Very relevant

√ - Relevant

X - Not relevant