

Fisherfolk Participation and Local Fisheries Co-Management: Institutional Development and Governance Challenges of MFARMCs in Romblon, Philippines

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Abstract

Municipal Fisheries and Aquatic Resources Management Councils (MFARMCs) are intended to institutionalize fisherfolk participation in local fisheries governance in the Philippines. This study assessed the socio-demographic profile, perceived socio-economic contributions, institutional development, participation, sustainability, and implementation challenges of MFARMCs across all 17 coastal municipalities of Romblon Province. An explanatory sequential mixed-method design combined a survey of 170 FARMC officers and members (10 per municipality) with interviews and focus-group discussions. A researcher-developed instrument covered organization, 15 mandated performance activities, and sustainability using a five-point participation scale; expert validation yielded a mean rating of 4.60 and pilot testing produced a Cronbach's alpha of 0.81. Most respondents were male (71.76%), married (64.71%), had reached tertiary education (51.18%), and depended primarily on fishing (79.41%). Institutional development varied markedly: Looc attained Level 5, Romblon Level 4, Ferrol and San Andres Level 2, while the remaining 13 municipalities were Level 1. Participation was strongest in Looc, Odiongan, and Romblon and weakest in several less-developed councils. Qualitative accounts associated FARMC activity with fisherfolk voice in ordinance formulation, organized coastal protection, fish sanctuaries, mangrove activities, and, in Looc, ecotourism-derived benefits. Persistent constraints included inadequate financial and technical support, uneven member knowledge, political intervention, illegal fishing, and mangrove degradation. The findings indicate that formal organization alone does not ensure effective co-management; sustained local government support, distributed capacity building, financing, monitoring, and enforcement partnerships are critical to functional and durable fisherfolk participation.

Keywords: fisheries co-management; fisherfolk participation; MFARMC; local governance; small-scale fisheries; coastal resource management; Philippines

1. Introduction

Small-scale fisheries governance depends not only on regulation but also on institutions that allow resource users to participate in planning, rule-making, conservation, and enforcement. In the Philippines, Fisheries and Aquatic Resources Management Councils (FARMCs) provide a formal mechanism for

such participation. Republic Act No. 8550 and Fisheries Administrative Order No. 196, series of 2000, frame FARMCs as consultative and recommendatory bodies that bring fisherfolk and other stakeholders into fisheries management alongside local government units (LGUs).

Romblon is an archipelagic province in the MIMAROPA Region where fishing and coastal resources remain important to local livelihoods. MFARMCs had been organized in all 17 coastal municipalities covered by this study, yet their level of activity and institutional development differed. This variation raises a practical co-management question: why do formally organized councils differ in their ability to participate in fisheries governance and sustain their functions?

The study was anchored in a social-ecological systems perspective and treated FARMC performance as an interaction between organization, participation, institutional support, and local resource-management conditions. It aimed to: (1) describe FARMC officers and members; (2) examine perceived socio-economic impacts of FARMC implementation; (3) determine MFARMC development levels using BFAR criteria; (4) assess participation in mandated functions; and (5) identify implementation and management problems. The journal article focuses on the implication of these results for participatory local fisheries co-management.

2. Materials and Methods

2.1 Study design and setting

The study used an explanatory sequential mixed-method design in which quantitative results were followed by qualitative inquiry to explain implementation experiences in greater depth. It was conducted in the 17 coastal municipalities of Romblon: Alcantara, Banton, Cajidiocan, Calatrava, Concepcion, Corcuera, Ferrol, Looc, Magdiwang, Odiongan, Romblon, San Agustin, San Andres, Santa Fe, San Fernando, San Jose, and Santa Maria. Data collection was carried out during the third quarter of 2021.

2.2 Respondents and sampling

The quantitative component included 170 respondents, with a minimum of 10 FARMC officers or members from each municipality. Stratified purposeful sampling was used to select respondents who were directly involved in FARMC activities and were considered knowledgeable about the council. Municipal agriculture personnel assisted in identifying eligible participants. Qualitative information was obtained through focus-group discussions and key-informant interviews involving FARMC participants and representatives of accredited people's organizations.

2.3 Instrument and measures

The researcher-developed questionnaire had three components: socio-demographic characteristics; participation in FARMC activities and mandated functions based on Section 9 of FAO 196; and open-ended questions on perceived socio-economic effects. The participation component contained five organization items, 15 performance items, and two sustainability items rated from 1 (very low) to 5 (very high). For interpretation of item means, the dissertation used 1.00-1.49 as very low, 1.50-2.49 low, 2.50-3.49 moderate, 3.50-4.49 high, and 4.50-5.00 very high participation.

Five experts assessed content and construct validity; the reported mean validation rating was 4.60 (very satisfactory). A pilot test involving 30 respondents from an organized and accredited fisherfolk organization in Odiongan produced a Cronbach's alpha of 0.81.

2.4 Data collection and analysis

The researcher obtained permission from relevant authorities and worked with two trained enumerators. Primary data were collected through personal and online interviews, focus-group discussions, in-depth

cognitive interviews (laddering), and key-informant interviews; secondary information was obtained through desk review. Frequencies and percentages described respondent characteristics. The dissertation reports mean, mode, and standard deviation as the statistical tools for participation, while qualitative responses were transcribed and synthesized to describe perceived impacts and implementation issues.

3. Results

3.1 Respondent profile

Respondents ranged from 22 to 74 years old, with the largest age group (39-56 years) representing 44.71% of the sample. Men comprised 71.76% of respondents and 64.71% were married. More than half (51.18%) had reached tertiary education, while fishing was the primary occupation of 79.41%. The most frequently reported number of dependents was three (26.47%).

Characteristic	Category	n	%
Age	22-38	55	32.35
Age	39-56	76	44.71
Age	57-74	39	22.94
Sex	Male	122	71.76
Sex	Female	48	28.24
Civil status	Married	110	64.71
Education	Tertiary	87	51.18
Occupation	Fishing	135	79.41

Table 1. Selected socio-demographic characteristics of FARMC officers/members (n=170).

3.2 Institutional development differed sharply among municipalities

BFAR-based validation showed a highly uneven distribution of institutional development. Looc attained Level 5 and Romblon Level 4; Ferrol and San Andres were Level 2; the other 13 municipalities were Level 1. The dissertation characterized Looc as recognized by the LGU and community as a strong partner in municipal-water management and noted awards and recognitions associated with its performance.

Municipality	Development level
Alcantara	1
Banton	1
Cajidiocan	1
Calatrava	1
Concepcion	1
Corcuera	1
Ferrol	2
Looc	5
Magdiwang	1
Odiongan	1
Romblon	4

San Agustin	1
San Andres	2
San Fernando	1
San Jose	1
Santa Fe	1
Santa Maria	1

Table 2. MFARMC level of development by municipality.

3.3 Participation in organization, mandated performance, and sustainability

Participation scores reinforced the institutional-development pattern. Looc had the highest composite scores across organization, mandated performance, and sustainability. Romblon and Odiongan also recorded strong participation in many mandated functions. In contrast, Alcantara and Concepcion were among the weakest across multiple dimensions, while Corcuera was particularly low on organization and several performance activities. The composite means below are calculated directly from the item means reported in Tables 9-11 of the dissertation; they are presented here to condense the original item-level tables for journal reporting.

Municipality	Organization mean	Performance mean	Sustainability mean	Performance interpretation
Alcantara	1.28	1.31	1.80	Very low
Banton	2.44	2.83	2.60	Moderate
Cajidiocan	3.14	3.51	3.40	High
Calatrava	2.12	3.31	2.75	Moderate
Concepcion	1.18	1.45	1.60	Very low
Corcuera	1.14	1.48	3.15	Very low
Ferrol	3.62	3.64	3.85	High
Looc	4.16	4.55	4.45	Very high
Magdiwang	3.18	3.59	3.40	High
Odiongan	3.90	4.45	4.25	High
Romblon	3.88	4.47	4.35	High
San Agustin	2.96	3.75	3.05	High
San Andres	2.50	3.13	3.25	Moderate
San Fernando	2.56	3.41	3.10	Moderate
San Jose	2.54	3.34	2.70	Moderate
Santa Fe	2.66	3.48	2.75	Moderate
Santa Maria	2.38	3.03	3.05	Moderate

Table 3. Condensed municipal participation scores calculated from the dissertation's reported item means. Interpretation follows the original five-point thresholds.

3.4 Perceived socio-economic and environmental contributions

Focus-group accounts consistently described FARMCs as creating a channel through which fisherfolk could contribute to municipal fishery ordinances and organized resource-management activities.

Participants associated FARMC implementation with stronger bantay-dagat organization, fish sanctuaries, coastal clean-ups, mangrove planting, and greater awareness of fisheries rules. These are perceived contributions reported by participants and should not be interpreted as independently measured ecological effects.

Looc provided the clearest locally described example of combined conservation and livelihood benefits. Participants reported that a fish sanctuary helped sustain fishing conditions and was also developed as an ecotourism destination managed with FARMC/LGU involvement. Before the COVID-19 pandemic, revenues from the activity reportedly contributed to honoraria for members involved in sanctuary management. This example suggests a possible pathway by which conservation institutions can generate incentives for continued participation, although the study did not quantify causal effects on catch, income, or ecological condition.

3.5 Governance and implementation constraints

Across study sites, respondents repeatedly identified insufficient financial and technical support, continuing illegal fishing, and mangrove cutting or reclamation as constraints. Qualitative accounts also described political intervention, uneven treatment of beneficiaries, and perceived favoritism in enforcement. Participants noted that changes in local administration could disrupt council functioning. Knowledge was also unevenly distributed within councils: the dissertation concluded that chairpersons were often more knowledgeable because they were more frequently selected for seminars and forums, leaving some officers and members less familiar with FARMC mandates.

4. Discussion

4.1 Formal organization is not equivalent to functional co-management

The central finding is the gap between formal establishment and functional participation. All 17 municipalities had organized FARMCs, yet most were classified at the lowest development level and participation varied widely. This distinction is important for co-management: creating a council provides an institutional venue, but effectiveness depends on whether members meet, understand their mandates, prepare plans and ordinances, engage in enforcement and resource-management activities, and participate in long-term organizational development. The pattern is consistent with institutional perspectives that emphasize rules-in-use, local capacity, and relationships among actors rather than organizational existence alone (Imperial & Yandle, 2005).

4.2 Institutional support appears to enable participation

The contrast among municipalities points to the enabling role of institutional support. Looc combined the highest development level with consistently high participation, while qualitative accounts described active collaboration and a fish-sanctuary/ecotourism initiative. Conversely, lower-performing councils reported weak support and difficulty advancing fisheries concerns. Because the study was descriptive and purposively sampled, these results do not establish that LGU support caused higher participation; however, the convergence of survey and qualitative findings makes institutional support a credible implementation mechanism requiring further testing.

4.3 Capacity building should be distributed across the council

A recurring organizational vulnerability was concentration of knowledge in the chairperson. If training opportunities are repeatedly directed to a single leader, institutional memory and technical competence may not diffuse across committees and members. The study therefore supports a distributed capacity-building model: orientations for newly elected members, practical training in proposal and resolution

preparation, fisheries planning, enforcement, organizational and fiscal management, and long-term planning should reach multiple officers and selected members rather than the chairperson alone.

4.4 Financial sustainability and conservation incentives

Financial constraints were reported across many sites. The Looc case suggests that conservation-linked revenue can potentially reinforce participation when benefits support local management. The dissertation consequently recommended income-generating activities and revolving funds for operational expenses. Such mechanisms require transparent governance and should complement, rather than replace, predictable public support for a statutory participatory body.

4.5 Enforcement and political context

Illegal fishing and mangrove degradation remained prominent concerns despite the existence of fisheries rules. Participants also described political influence and favoritism as barriers to consistent enforcement. These findings indicate that participatory planning must be matched by credible enforcement institutions and clear procedures that protect council recommendations from arbitrary political interference. Strengthening coordination among FARMCs, LGUs, BFAR, and law-enforcement partners is therefore central to translating participation into resource-management outcomes.

5. Conclusions

MFARMCs in Romblon demonstrate both the promise and the fragility of participatory fisheries governance. Fisherfolk officers and members reported willingness to contribute to conservation, management, planning, ordinance development, and enforcement, but institutional performance was highly uneven. Looc emerged as the most developed council, while most municipalities remained at Level 1. The evidence suggests that durable co-management requires more than legal creation of a council: members need shared knowledge of their mandates, regular capacity building, operational resources, meaningful LGU recognition, credible enforcement support, and continuity across political administrations. Strengthening these conditions can help FARMCs function as genuine partners in municipal fisheries governance rather than nominal consultative bodies.

6. Policy and Management Implications

- Institutionalize support. Maintain a functional M/CFARMC office or designated operational mechanism, integrate FARMC participation into regular municipal fisheries planning, and provide predictable logistical and financial support.
- Distribute capacity. Orient new members and broaden access to training in fisheries law, planning, proposal and resolution preparation, organizational management, and long-term planning.
- Create accountable financing mechanisms. Explore transparent conservation-linked income-generating activities and revolving operational funds where legally and locally appropriate.
- Monitor institutional development. BFAR and partner agencies should periodically assess development levels and target technical assistance before councils become inactive.
- Strengthen enforcement partnerships. Improve coordination among FARMCs, LGUs, BFAR, bantay-dagat and other enforcement bodies, while promoting consistent application of fisheries rules.
- Replicate context-appropriate good practices. Elements of stronger-performing councils, including sustained LGU collaboration and conservation-linked local initiatives, may be adapted rather than mechanically copied across municipalities.

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