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Comparative Analysis of Two Community-Based Fishers Organizations

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Abstract There has evolved, in recent years, a strong interest in decentralized modes of governance over fisheries and other marine resources, particularly that of community-based resource management (CBRM). However, analysis of the strength of this institutional model is hindered by simplistic, typological depictions of CBRM. We use organizational theory to argue how, within the broad category of CBRM, there is a rich variation of organizational forms. We illustrate the analysis by showing how two ostensibly similar fishers organizations in Batangas, Philippines, differ in important ways and, furthermore, how these differences respond to particular challenges and opportunities found in their respective contexts. We also discuss implications of this research for how we conduct program evaluations of these programs.

Keywords: fishers organizations, community-based resource management, decentralization, program evaluation, participation

I. Introduction

There has been, for over a decade now, a literal explosion in the literature on decentralized modes of governance over fisheries and other marine resources (e.g., see [1], [2], [3], [4], [5], [6], 7]). Most interesting to the authors is the particular mode of decentralization known as community-based resource management (CBRM). The CBRM literature is a rich store of case studies from which to draw policy insights (e.g., [8], [9], [10], [11], [12], [13], [14], [15], [16]). However, analysis of these real-world experiments in governance is hindered by a sometimes overly reductionistic and typological treatment of CBRM. In other words, while the literature often treats real-world examples of CBRM as essentially belonging to a single model, this paper seeks to argue and illustrate how they are richly different. A further point we make in this paper is that it is precisely within these differences that important lessons in governance might be learned.

Certainly, there are common elements to be found in most of these case studies. Oftentimes, we find the organization of community members into so-called fishers or people's organizations which then proceed to engage in the advocacy and implementation of policies, e.g., fishing gear specifications, artificial reef construction, patrolling of near-shore fishing grounds, and alternative livelihood promotion. But, certainly, these fishers organizations are not all designed nor work the same way. When one considers how the literature typologizes CBRM with a universal set of virtues, e.g., those of being participative, bottom-up, democratic, and self-managed (see [17] for a useful overview), we do so at too broad and simplistic a level, failing to ask questions such as: "are there different modes of community-based organization, what does participation mean in each case, and why is CBRM sustained in some places but not in others?" There is a need for a deeper, more critical assessment of participative forms of governance [18]. To undo these typological treatments, we begin by stating that CBRM represents a rich universe of differing practices and modes of organization, and we need to better understand this richness of difference in order to generate new policy insights.

In the following discussion, we begin by laying out the conceptual foundations, much of which draws from organizational theory, for our analysis. We then illustrate the analysis by using it to differentiate two CBRM programs in nearby locations in Batangas, Philippines. We will show how organizational form and even seemingly identical practices, such as delineating harvest areas or patrolling against illegal fishers, differ between the two fishers organizations. We then reflect on implications for program evaluation. Certainly, some researchers have tried to better account for the variety of models of decentralization (e.g., [19], [20]). We seek to bring out the variation even within a single basic model. This article also makes a contribution by applying organizational theory to the analysis of CBRM to an extent not found in the literature.

II. Conceptual Foundations

In Figure 1, we depict the process by which an institution (e.g., a CBRM program) is formed. The top half of the diagram depicts an institution as a social construct [21], [22]. Indeed, it is often assumed that there is a ready-made model of governance, called CBRM, which can be brought into a place and implemented. The strong push to codify best practices can be seen as an attempt to institutionalize an ideal model of CBRM (e.g., [10], [6], [16], [7]).

[INSERT FIGURE 1 AROUND HERE.]

However, a model is not simply imported into a place --to some extent, it also evolves within that place. The lower half of the figure depicts the process by which the program is generated as a unique product of its context [23]. This process, which is referred to in the diagram as *improvisation*, entails taking the originally conceived program and refashioning aspects of it so as to evolve a more locally suitable design. Often, this is accomplished by local actors who tailor the program to their local needs and capacities. Especially when state resources are scarce, as is often the case under decentralization, the act of improvisation can involve using local resources to supplement the program. In other words, if decentralization is profound, then we should not simply find the same CBRM model everywhere but, instead, each instance of CBRM displays characteristics that are unique to its place, its set of local stakeholders, and the mix of resources these stakeholders bring to the program.

Often, improvisation entails not just using the material resources of a place, but also making use of the local, often informal, institutions. For example, a fishers organization may use local church faith-sharing meetings as a venue for disseminating information on reef rehabilitation programs. It is the degree to which the program carves a niche within its context, a process we will call *institutional coherence* [24], that can perhaps spell the difference whether the program is sustained over the long-term or not. For example, one fishers organization told the researchers about how they had to abandon their practice of hosting two-day seminars on sustainable fishing practices, since the increasingly marginalized, small fishers were unable to set aside two days' worth of foregone work. If programs evolve to uniquely fit their individual contexts, then we should find important insights in the ways by which these programs begin to differ from each other. In the following section, we introduce the two case studies and describe the methods employed in the comparative analysis.

III. Case Study and Methodology

Context

The last two decades have been a period of marked decentralization in the Philippines, an outgrowth of the initial movement towards local governance (as formalized in the Local Government Code) during the Aquino administration in the 1980's. As the state government reeled from the massive external debt and institutional decay inherited from the previous Marcos regime, local communities and governments were forced to carve

out their own programs in local governance. The rhetoric of decentralization also found a home in international aid agencies (e.g., the United Nations Development Programme and The World Bank) at this time, and financial assistance became available for decentralization initiatives, including CBRM. It was around the mid-1990s that two nearby communities, Calatagan and Mabini-Tingloy, in Batangas Province, Philippines (see Figure 2), each embarked on ambitious programs in CBRM. While Calatagan is situated beside the open ocean (the South China Sea), Mabini and Tingloy are adjacent towns located in the interior Balayan Bay. In each of these areas, residents (mostly small, artisanal fishers) took to self-organization as a response to serious problems with declining fish catch and conflicts over coastal zone developments that threatened corral reef habitat and fishing areas.

[INSERT FIGURE 2 AROUND HERE.]

Annual household income data for these communities are not available, since these are only collected by the National Census and Statistics Office for key cities, none of which the study sites are. However, the interviews have suggested that there is a prevailing notion that non-land owning residents of Calatagan are more marginalized than at Mabini-Tingloy. We get some corroboration of this insight by examining estimated per capita municipal expenditures for 2001, which are provided below:

Mabini:	Pesos 1,134/capita	
Tingloy:	Pesos 987/capita	
Calatagan:	Pesos 795/capita	Source: [25]

though these do not provide us any information on the distribution of income within each municipality. While marine resources are stressed all throughout this area, there are some indications that the problem has, historically, been worse in Calatagan. A recent ecological profile of the Batangas region lists the the coral fauna in east Balayan Bay (closer to Mabini) as good, while those in Calatagan and west Balayan Bay as poor to fair [26]. Moreover, the annual shortfall in fish catch (local demand versus total catch) is estimated as 213 metric tons (MT)/yr in Calatagan, and 145 MT/yr for Mabini. Tingloy, on the other hand, had a surplus catch of 249 MT/yr [26].

Though both places are dependent on fishing, they differ in their mix of livelihoods and land uses. Calatagan is primarily a fishing-centered economy supplemented by income from sugar cane. Tourism is not a strong element of the local commerce, though there still exists a large resort belonging to one of the wealthiest families in the country, the Zobels—in fact, most of the town used to be part of this family's hacienda. There is a greater mix of industries in Mabini-Tingloy, including a healthy dose of local tourism from several resorts in Mabini and dive spots in Tingloy. The housing stock is distinctly more makeshift in Calatagan, mostly being nipa huts with a lesser number of concrete structures, the latter being more common in Mabini.

Methods

Over the course of a year, the authors made a number of trips to the two sites, Calatagan and Mabini-Tingloy, and proceeded to study their respective CBRM programs. Research

activities consisted in interviews with various stakeholders in both places; collection of research artifacts such as reports, brochures, meeting minutes, and others; and a set of cognitive mapping exercises (described below) conducted with key stakeholders in each program. One-on-one interviews were conducted with a total of twelve key informants from within the Calatagan and Mabini-Tingloy programs, most of these taking place over multiple meetings with each person. In addition, statistical program data was obtained from field officers or the local municipal office.

We compare and differentiate the two CBRM programs along different scales of analysis. At the most macro level, we compare structure, form, and composition. The very first step is to understand the organizational structure of each program. At both sites, we found central community organizations that formed primarily to forge a CBRM program in each place—these two organizations are useful entities to compare. The internal structure and composition of each organization, e.g., organization charts, was available from program reports. We also wanted to obtain a sense of the overall network of groups and individuals that made up the fisheries governance regime in each place—this shows how each of the fishers organizations fit into a larger constellation of policy actors. To gain some understanding of the external, regional organization, we asked one program officer from each of the two fishers organizations to undertake a cognitive mapping exercise (see [27] for references on this method). The exercise consists of providing the respondent a sheet of paper and simply asking him/her to draw a box representing their particular organization and, then, to fill in the rest of the sheet by representing other groups and parties important to the workings of the fisheries management program in their community. The strongest linkages are to be indicated by drawing lines between collaborating groups. The purpose of the cognitive mapping exercise is twofold: first, we would like to obtain material information on the external structure of the fisheries management regime. Second, and as importantly, we recognize that there really is no formal external structure (i.e., there is no such thing as a regional "org chart") and that we are really obtaining a sketch that perhaps represents how the respondent understands their particular program. These two dimensions are important, since we recognize that institutions have both material and cognitive components—that is, programs are not just how they are physically put together, but also how the participants understand and represent their programs. In both cases, we verified the reasonableness of each chart by asking a second person from each program to prepare a similar sketch. We then compare organizational structures across groups (e.g., see methods in [28]).

We also compare basic 'policy instruments' employed by the fishers groups in their resource management activities. To perform the latter, we employed a mode of content analysis (see [29]) on a wide range of research artifacts from each organization (progress reports, grant proposals, interview transcripts, etc.).

At a more intermediate scale of analysis, we study program flows and obtain data on the inputs to and outputs from the program. Much program evaluation is done at this level, wherein program output is compared against objectives (e.g., see [30]). To obtain this type of information, we collect a large amount of research artifacts in the way of program documents. These include: monthly meeting minutes, annual budgets, grant proposals,

workplans and visioning reports, program statistics, staffing plans, and others. For this paper, we study program statistics in the form of performance of illegal fishing enforcement in each of the two programs. In this case, program officers and municipal officers provided statistics on apprehension and conviction rates of illegal fishers. Since apprehended violators are brought to the municipal government, these statistics are readily obtained from either the municipal agriculture officer who oversees fishing activities or the department of justice, which oversees court cases.

At the most micro-level scale of analysis, we observe actual program workings on a day-to-day level—that is, the level of practice (e.g., see [31]). These may involve actual observations of common program activities such as patrolling local waters. It may involve observations or analyses of transcripts of typical program meetings. At this level of analysis, we can inquire whether, despite the fact that two programs may engage in the same types of activities, do the two groups do or prioritize things differently? To illustrate this analysis, we utilize minutes of regular organizational meetings to represent the relative frequencies that certain categories of agenda items are taken up, using standard methods in content analysis (performed manually, using a previously constructed list of categories). The resulting relative frequencies are not to be understood as an index of actual program resource allocation to each category, but simply a descriptive depiction of the issues that occupy each organization's "attention span." This analysis is similar in nature to methods used in the literature to capture issue salience (e.g., see [32], [33]).

The last part of the analysis entails bringing in context and analyzing the degree to which each program is institutionally coherent with its particular context. That is, having seen how each program differs from each other, can we understand how these differences might (or might not) be related to differences in each institutional context? We employ a mode of interpretive analysis, increasingly employed in organizational theory, known as the hermeneutic circle [34], [35]. In this analytic, we begin by explaining what a text is telling us—in this case, "text" is understood as the characteristics of the program(s) we are studying. We do this when we undertake a deep description of each program, to the extent of characterizing how two programs differ and along which dimensions they differ. The second part of the analysis (i.e., the other half of the circle) entails introducing context and deepening our understanding of the CBRM programs by interpreting them in light of their context. By context, we mean the larger events and features of a particular place, including its history, culture, and, especially, socio-physical character—i.e., by analyzing institutional coherence.

IV. Analysis and Discussion

In the following discussion, we conduct a comparative analysis of two fishers organizations with the following objectives in mind:

1. to show how the two seemingly identical fishers organizations differ;
2. to show how these differences, at least in part, respond to the unique situational context found in each particular place; and
3. to reflect on the implications of these differences for program evaluation.

IV.1 Differentiation Organizational Structure

There are many similarities between the two programs. Both arose out of similar conditions, sometime in the 1990's, when illegal fishing was rife in both areas. In both cases, there arose a plan to organize community members, mostly artisanal fishers, around self-governance. This required extensive training and deputization, under the national legal framework, of local fishers and other residents as wardens. In both cases, the process of organizing led to formation of a community-based organization with the goal of joint planning and enforcement of fisheries management activities. These resulted in two new organizations: SAMMACA in Calatagan and MATINGCADC in Mabini-Tingloy. (Incidentally, SAMMACA evokes the Tagalog phrase "sama ka" which, in Tagalog, means "join us" and MATINGCADC alludes to the word "matingkad" meaning "clear.") In both cases, the organizations were assisted in community organizing by Manila-based NGOs at least initially: the group CERD (Community Extension for Research and Development) in Calatagan, and WWF (Worldwide Fund for Nature) in Mabini-Tingloy.

So being, the two programs had much in common. Both were fashioned after strong notions of community-centered governance. Both were strongly conservationist and employed essentially the same management strategies, namely:

- deputizing local fishers in the Bantay Dagat ("Ocean Watch") program against illegal fishing and other violations;
- designating areas for marine reserves;
- initiating corral reef rehabilitation programs;
- conducting information seminars on sustainable fishing practices (e.g., acceptable gill net designs);
- lobbying against encroachment of land development into mangrove and other coastal areas.

Note that in both of these cases, the organizational agendas have not yet included allocating fishing rights, but rather, the more basic mission of enforcing the ordinances reserving the marine areas designated as municipal waters (i.e., within 15 kilometers from the shore) for small-scale, locally-registered fishers and prohibiting various mass quantity fishing methods (e.g., purse seine). Both are cited for their success in establishing strong fisheries management and enforcement programs within the span of a few years. To conduct the comparative analysis, the researchers probed deeper into these practices until distinct directions of differentiation emerged. In Figures 3-5, we portray some important dimensions of differentiation, namely: organizational structure, policy instruments, degree of enforcement, and issue salience.

Figures 3 and 4 compare organizational structures between the two programs. Figures 3a and 3b (for the Mabini-Tingloy and Calatagan programs, respectively) portray the overall network of policy actors (including the fishers groups) involved in fisheries and coastal management, while Figures 4a and 4b compare their internal organizational structures.

[INSERT FIGURES 3a AND 3b AROUND HERE.]
[INSERT FIGURES 4a AND 4b AROUND HERE.]

Comparing Figures 3a and 3b, we note the greater level of complexity in the Calatagan program. The program revolves around an integrative planning body, SAMMACA, which exists as a federation involving a centralized provincial organization and, nested within or under it, a set of local councils. The Calatagan program, too, is found to have substantially more external linkages that span beyond the municipality and province. In contrast, the Mabini-Tingloy program revolves around a single integrative planning and advocacy body, MATINGCADC. The network of policy actors in Mabini-Tingloy is not as complex as in Calatagan, and the external linkages are relatively less pronounced. The degree of vertical and horizontal structuration is more pronounced in Calatagan. In Figure 3a, one sees a predominance of extra-regional (in fact, national) actors composed of NGOs participating in the Calatagan program. In contrast, we find, in Mabini-Tingloy, a more pronounced focus on the local/provincial and a simpler, less hierarchical structure, shown in Figure 3b.

In both cases, we see the federated body, MATINGCADC in Mabini-Tingloy or SAMMACA in Calatagan, being the central policy actor. In both cases, also, we find an international NGO—WWF in the case of Mabini-Tingloy and Oxfam in the case of Calatagan, financially supporting the program. However, even here there is a difference, in that one sees that, while Oxfam merely supports SAMMACA directly (mainly through funding), WWF stands in support of all the participating institutions (supplying both funding and staff). That is, structurally, the role of the policy entrepreneur (i.e., the central NGO) is different. In Calatagan, the NGO (Oxfam) plays the role of a program resource, which is seen, structurally, in the way that the NGO is linked only to SAMMACA. In contrast, in Mabini-Tingloy, the NGO (WWF) plays a central program management role, seen in the multiple linkages and the degree of nestedness of WWF in the network.

We note the distinct differences one finds when one enters into the organization of the fishers group, seen in Figures 4a and 4b. First, we compare the composition of each organization. In Calatagan, we find it to be dominated by fisherfolk and, as an aside, notably marginalized fisherfolk who do not own property or have access to private fishponds. In contrast, in Mabini-Tingloy, we see a greater cross-societal mix of policy actors, including not just fisherfolk, but resort owners, local government officials, and other organizations.

In similar fashion as the regional network's organization chart, the internal organization of Calatagan, seen in Figure 4a, is characterized by a high degree of vertical hierarchy, seen visually in the number of levels that extend out of the central unit. The degree of bureaucratization is also seen in the structural logic of the Calatagan program, which we see in the logical division of sub-levels into local community districts. This suggests a strong focus on the formal nature of the organization. In contrast, we find considerably less formal bureaucratization in the Mabini-Tingloy organization, seen in Figure 4b. Moreover, subdivision in Mabini-Tingloy is characterized not by formal, political

jurisdiction, but along functional lines. In fact, the organization seen in Figure 4b seems more geared towards program implementation rather than formal program definition. Other observations corroborate this comparative assessment—e.g., while SAMMACA is registered with the Securities and Exchange Commission and has a ratified constitution and bylaws, MATINGCADC has none of these.

Policy Instruments

We also found distinct differences in the policy instruments utilized by each group for enforcing rules against illegal fishing and others. The Calatagan program seems to be characterized by a high reliance on interpersonal relationships, while the Mabini-Tingloy program emphasizes formal instruments. These differences are perhaps evoked by the following quotations from members of the respective organizations:

SAMMACA

"...pero nararandaman ng mangingisda ang yanig ng dagat. ...alam na ng tao ang kung sinong nagdidinamita, at paglaot pa lamang ng bangka na walang (equipment na) panghuli, sinusumbong na iyan sa bantay dagat."

Translation:

"...but people can feel the pulse of the ocean. ...people naturally know who uses dynamite, and the minute the boat so much as leaves without fishing gear, people already let the ocean watch know."

With SAMMACA, patrolling against illegal fishing relies on the web of social relationships, often involving stakeholders not formally aligned with the fishers group. The same network is used to establish allowable fishing areas (which are constantly negotiated), protection of reefs against anchoring and adverse fishing practices, and other violations. The classical system of monitoring found in Mabini-Tingloy, on the other hand, utilizes more formal schemes. The following text illustrates this:

MATINGCADC

"...Ang katubigan... ay ginagawan ng guhit o plano at binahagi upang magkaroon ng ibat-ibang gamit o kapakinabangan na naaayon sa anyo nt tubig... nagtatag ng isang proyekto na maglagay at magtatag ng mga boya... Kaakibat na rin dito ang pag-iwas sa... pag-aangkla sa mga bahura...."

Translation:

"...The nearshore area... was divided into different zones corresponding to uses that are appropriate for these waters... established the placement and marking of buoys... This is part of the effort to reduce anchoring at the reefs..."

In Mabini-Tingloy, there is a focus on rational instruments involving formal rule-systems and employ modes of formal classification, such as zoning, buoys, and markers. These rational systems function by creating formal order, whereas systems of relation work by fostering strategies of vigilance. The difference is not just in the technocratic versus the human, since SAMMACA does employ some new technologies when possible (e.g., their realization that response times could be shortened through the use of a cell phone). Rather, it seems to lie in the formal versus the relational. The idea of rational systems, as

seen in MATINGCADC, characterizes much of modern-day fisheries management, with its emphasis on rules and formal authorities. In contrast, what we find more markedly in SAMMACA's practice is a framework that is relational. Curiously, in the case of Calatagan, while we saw, previously, how the formal is emphasized in the area of organizational structure, the reverse is true in their use of policy instruments (an observation we will comment on, later on).

Differences are found in other policy instruments found in each place. For a period of time, the dominant item in MATINGCADC's agenda was the establishment of a user's fee system that would allow local authorities to charge visitors to the dive resorts a fee that would then go to the organization for their activities. This, along with the focus on classification and zoning systems, reflects the group's reliance on formal instruments (i.e., rule-systems). SAMMACA, on the other hand, puts an emphasis on presence and vigilance, relying on relationships with fishers who guard their places and work with the organization on establishing circles of relationships. For example, maintaining some balance in the amount that each fisher can harvest is done partly through some rules on fish gear, but largely informally, as fishers work with each other in sharing places. MATINGCADC, on the other hand, relies on a coding system, where boats are "color-coded" in some places, such that only those with a certain color code can fish at certain times of the day. MATINGCADC has also been more active in employing formal techniques for program implementation, e.g., enlisting experts from the U.S. Coast Guard to conduct training workshops on procedures for boarding and searching violating vessels.

Practice

We then move one step closer, onto a more intermediate level of analysis, and look at program inputs and outputs—specifically, program performance in the area of policing against illegal fishing, shown in Figure 5. This presents another area of differentiation. Note that both programs basically enforced the same kinds of ordinances, using the same model for enforcement (deputized local wardens). However, we needed to probe deeper into how these programs function in order to discern differences. We find this level of detail when we focus on more specific items, such as the intensity of enforcement, as illustrated in Figure 5, and rate of enforcement. Here, we see a distinctly more vigorous or aggressive enforcement program in Calatagan, both in the frequency of apprehension and, subsequent to apprehension, in the rate of conviction of the violators. Interviews with various personnel, both within the organizations as well as outside them, point to an even more distinct discrepancy in the relative vigor of enforcement found in each program than suggested by the program statistics.

[INSERT FIGURE 5 AROUND HERE.]

Issue Salience

The differing emphasis placed on rational goal-achievement, in MATINGCADC, and on establishing and righting relational systems, in SAMMACA, is also manifested in the

salience of issues which take up each group's agendas. For example, using content analysis to describe the frequency of appearance of particular issues in monthly meetings, can be suggestive of issue salience. In this exercise, the following ordering of salience seems to be suggested (also graphically depicted in Figure 6).

MATINGCADC

1. Monitoring, Rule Enforcement
2. External Organization
3. Internal Organization
4. Planning
5. Fundraising
6. Legal: Cement Plant

SAMMACA

1. External Organization
2. Internal Organization
3. Legal: Moreno and Asturias Cases
4. Planning
5. Monitoring, Rule Enforcement
6. Fundraising

[INSERT FIGURE 6 AROUND HERE.]

For example, in SAMMACA, there is much more attention paid to, again, interpersonal relationships, namely, the Moreno and Asturias cases (dealing with development in nearshore areas). MATINGCADC, on the other hand, seems to emphasize more technical functions, such as ocean patrolling and environmental monitoring.

IV.2 Institutional Coherence: The Influence of Context

In this section, we attempt to understand how the above differences reflect ways that each program responds to its particular context. The relation of context to the form and function of these organizations is not meant to imply some sort of determinism—rather, we use the notion of coherence, which simply means that the organization and movement of these groups reflect elements of context. The danger is always that these connections are made too simplistically. At any rate, let us examine some relevant elements of context in each case and see how these help us understand (but not completely explain) some differences between the two programs.

The mix of livelihoods, land uses, and social strata in Mabini-Tingloy is greater than in Calatagan. The ecology of each place is somewhat different, also. While Calatagan Bay opens out to the China Sea, which extends all the way to the larger Asian continent and, most immediately, parts of Malaysia, Indonesia, and Taiwan, Balayan Bay lies in the more sheltered interior of the Philippine archipelago. While fishing is the main livelihood for the coastal communities in Calatagan, Mabini-Tingloy has, in addition to fishing, a healthy tourism industry owing to the presence of several important dive spots (which Calatagan does not have).

With regard to the fishers, their degree of marginalization seems to be greater in Calatagan, as borne out by some census figures but, more meaningfully, observations from the people we interviewed. The type of housing reflects this, too, as Calatagan is characterized, visually, by shanties in informal settlements, as opposed to concrete structures in government surveyed parcels in Mabini.

We can understand how this degree of marginalization, coupled with the sparser mix of social groups and livelihoods, can help foster a greater emphasis on collectivization and organization in Calatagan. Marginalization can create a deep sense of solidarity, and the legitimation of the group through organization becomes more important in this case. Perhaps the simpler social structure in Calatagan also allows a greater emphasis on the constitution of identity and its reflection in the organization. For this example, organizational structure of both internal and external network is most important to SAMMACA. This is most immediately reflected in the composition of the organization itself, as SAMMACA is composed only of fishers, while MATINGCADC is a coalition of fishers, government officials, and resort owners (though the fishers outnumber all the rest).

Marginalization in Calatagan is more deeply understood when one considers the history of this place. Unlike Mabini-Tingloy, Calatagan started out as the private property of a single family, the Zobels, a *mestizo* family, who not only represent one of the richest families in the country, but also symbolize the irrevocable legacy of the Spanish colonialist era. Calatagan was essentially a large *hacienda* or farm, and the poor were largely farmhands and sharecroppers. People who set up shanties on the more peripheral properties were encroachers. The Zobels have since then given up much of Calatagan to the municipality and sold parts to other parties, but still retain a large farm and resort, Punta Baluarte. Still, tourism is not an important part of the local economy, and whatever small numbers of tourists come to Punta Baluarte each year confine their activities and spending largely inside the estate. Marginalization is also found in the everyday existence of the fisher, as their more informal status and the greater threat from external poaching (e.g., being open to the South China Sea and large fishing trawlers from as far away as Taiwan) has led to a more degraded coastal environment and fish stock in Calatagan. Perhaps related to this marginalization, SAMMACA imparts a greater sense of value to both the threat of the external and promise of constructive engagement with the larger context. The threats and opportunities of interaction with the external are more keenly felt in Calatagan.

It is also the experience of marginalization and the level of social cohesion that helps us understand why SAMMACA would emphasize formal institution-building in the area of organizational structure, while, at the same time, relying on less formal social patterns of relationships in the area of program implementation.

Part of the effect of context is seen in the type of NGOs that helped establish each group. In the case of MATINGCADC, the group was founded and still largely sponsored by an international NGO, WWF (Worldwide Fund for Nature, whose major headquarters is found in Washington, D.C., USA). Inevitably, WWF casts its blueprint onto the organization, of which it is not formally a part. This is reflected partly in the rational-purposive language we find in this organization, with its focus on rule systems and multi-stakeholder coalition formation. The notion of consensus building, which is a large part of the model of MATINGCADC, owes much of its meaning to this western influence. In contrast, the NGO in Calatagan, CERD (Community Extension for Research and Development), phased out of Calatagan years ago, and it was left to the fishers to

maintain and build up the organization. CERD's model of organizing is still present in SAMMACA in form, but the everyday reality of the movement and the blend of activities that characterizes it is now completely determined by the fishers.

IV.3 Implications for Program Design and Effectiveness

Why is it important to analyze the particulars that make each CBRM program unique and, moreover, assessing how these fit the local context? Simply, because it is in these particulars that we find lessons for program design. We would, of course, like to directly link these differences in program design to changes in effectiveness of the resource management programs—this, however, is an elusive task. First, the ultimate indicators, e.g., species recovery and reef health, change over long periods of time and, as such, are not easy to correlate with changes in program design. Moreover, neither of the programs studied has access to or embarked on extensive, scientific data-gathering. For example, both programs have cited significant increases in fish catch, but the information for these is largely anecdotal (e.g., verbal accounts of sizes of fish being sold at the market).

However, we can measure an aspect of program effectiveness in some near-term and intermediate variables [30], e.g., the growth and strength of the organization itself. The greater emphasis of SAMMACA on organization-building is seen to directly impact the sustainability of the organization itself. As of recent account, membership in SAMMACA is steadily increasing, and its funding growing to incorporate more numerous sources of grants as well as membership fees. In contrast, MATINGCADC, having paid less attention to organization-building, has been in a dormant phase the last several years, i.e., it has simply maintained routine activities such as patrolling and has discontinued regular meetings for the project planning for the time being. In terms of program evaluation, it might be reasonable to suggest that MATINGCADC might pay greater attention, in the following years, to basic organization-strengthening activities such as community organizing and institutionalization.

The more aggressive, less conciliatory mode of action of SAMMACA has also had an effect on program function. While we have suggested that a large reason for SAMMACA's greater rate of violator apprehension has to do with the fact that Calatagan is simply exposed to more encroachers, many of the respondents we interviewed also thought that this was also due to SAMMACA's more intense level of activity.

Both programs have cited successes in increasing fish catch. Again, this is based on anecdotal, non-statistical data—but partly corroborated by triangulating these observations with several sources (i.e., program stakeholders as well as third-party observers). Of the two programs, the increases cited for MATINGCADC have been the more immediate and spectacular—in some cases, one reported increases in fish catch from 0-2 kg to 6-12 kg per four hour outing, another an increase of 2 kg to 5 kg, within two years of program commencement. In addition, there have been anecdotal reports that previously unseen species have been seen frequently in Balayan Bay. The claims made in the case of Calatagan have not been as bold, in contrast—whereas some anecdotal data indicate increased catch for hook-and-line fishing from 2 to 5 kg per outing in the eastern

part of Balayan Bay between 1992 to 2002, the increases are thought to be more in the range of 2 to 3 kg per outing in Pagapas Bay in Calatagan [36]. If there is some truth to this, then perhaps the gains of MATINGCADC have something to do with the relative efficiency of their methods, compared to SAMMACA, and employment of rational procedures and technologies. Also, interviews have suggested that part of MATINGCADC's strategy was to emphasize early, short-term successes (e.g., increases in commercial fish catch, capital improvements such as bunkhouses and boats). On the other hand, SAMMACA's approaches are rooted in the sense of a long-term stake in Calatagan, as compared to the mostly WWF-driven agenda in Mabini-Tingloy. This is seen in SAMMACA's greater attention to long-term measures (e.g., reef rehabilitation, policy change, and nearshore conservation). Indeed, it may be decades until SAMMACA's efforts at reef replenishment will be readily measurable, but it appears that their program seems to reflect long-term sustainability, more than MATINGCADC's.

V. Conclusion

In this article, we sought to move the practice of program evaluation forward by trying new ways to dig deeper into community-based fisheries management programs and inquiring into, not so much what makes them similar, but what makes each different and unique. We do this in order to move beyond the broad typology of these types of programs as belonging to one generic class, CBRM.

We employ modes of analysis from organizational theory and find that we can arrive at new insights this way. We examined two ostensibly similar programs in the province of Batangas, Philippines and searched for different dimensions along which they might differ. For example, organizational form was found to differ in profound ways.

We further illustrate the insight we gain when we link program form and function to context. In other words, we endeavor to understand how some of these differences are necessary to be able to better fit a program to its context --in part, due to our desire to gain insight into how to design better programs. We observed how the greater marginalization of the stakeholders in Calatagan, for example, is consistent with SAMMACA's greater emphasis on networking, organization-building, and other legitimizing activities. Other elements, e.g., policy instruments, are also seen to differ. The implication of this research is that there may be no "blueprint" for CBRM.

There is another immediately practical motivation for this endeavor, and that is to be able to increase our options for and the power of program evaluations. At any rate, by increasing our ability to describe and analyze CBRM programs, we hope to strengthen the CBRM community's ability to evaluate the rich store of institutional experiments that have been undertaken under decentralization.

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Figure 1 Institution-Building Processes

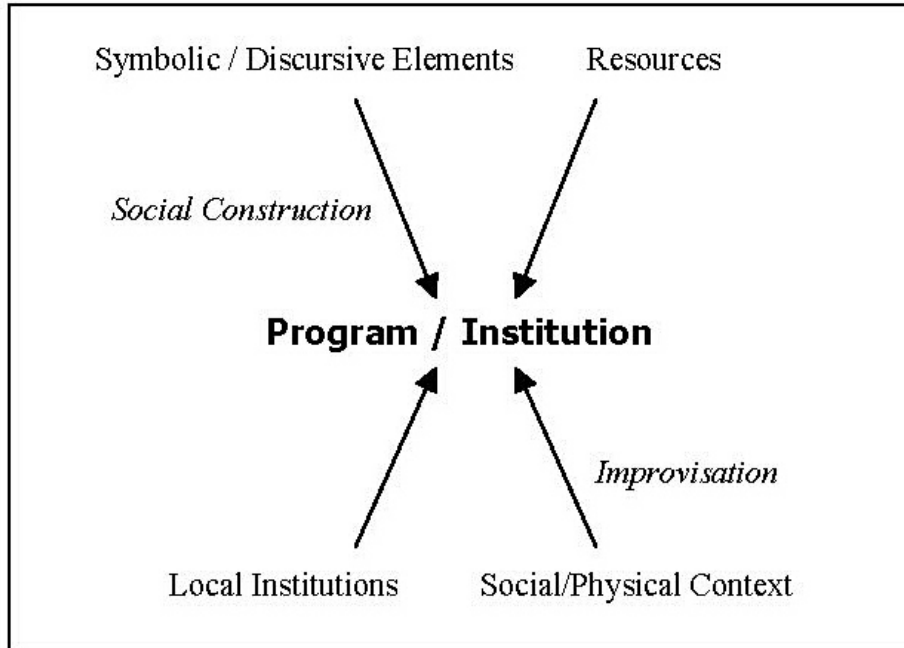


Figure 2 Two Community-Based Coastal Management Programs

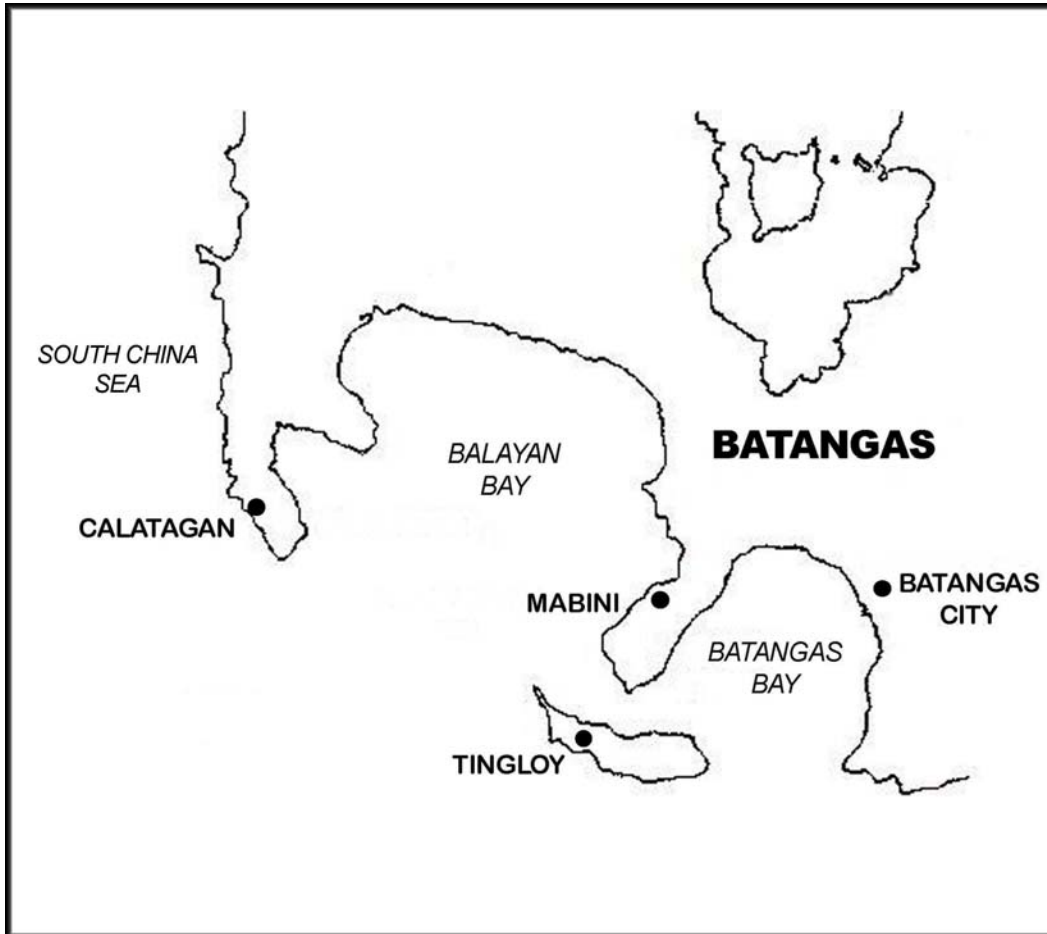


Figure 3a External Network Structure of Calatagan Program

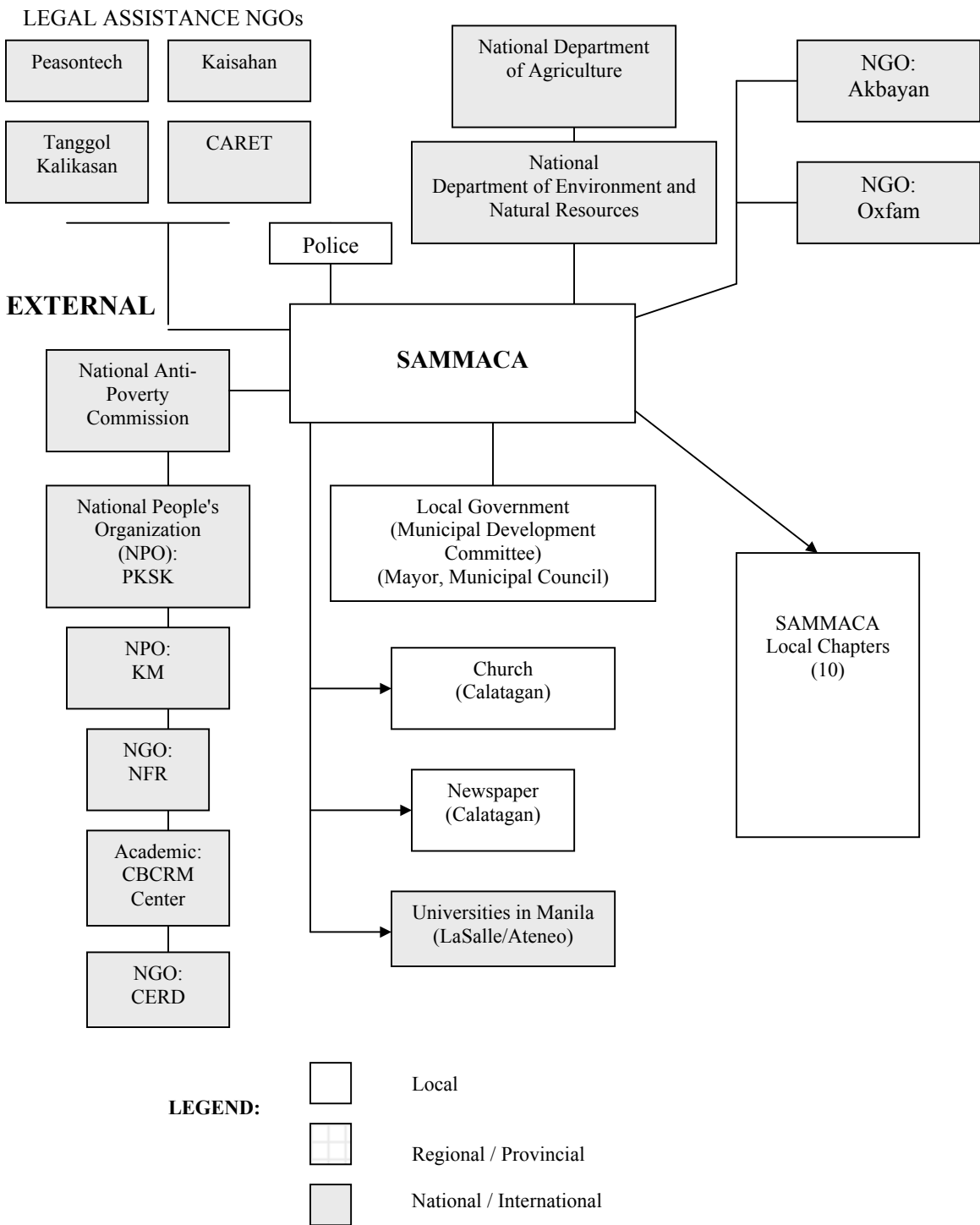


Figure 3b External Network Structure of Mabini-Tingloy Program

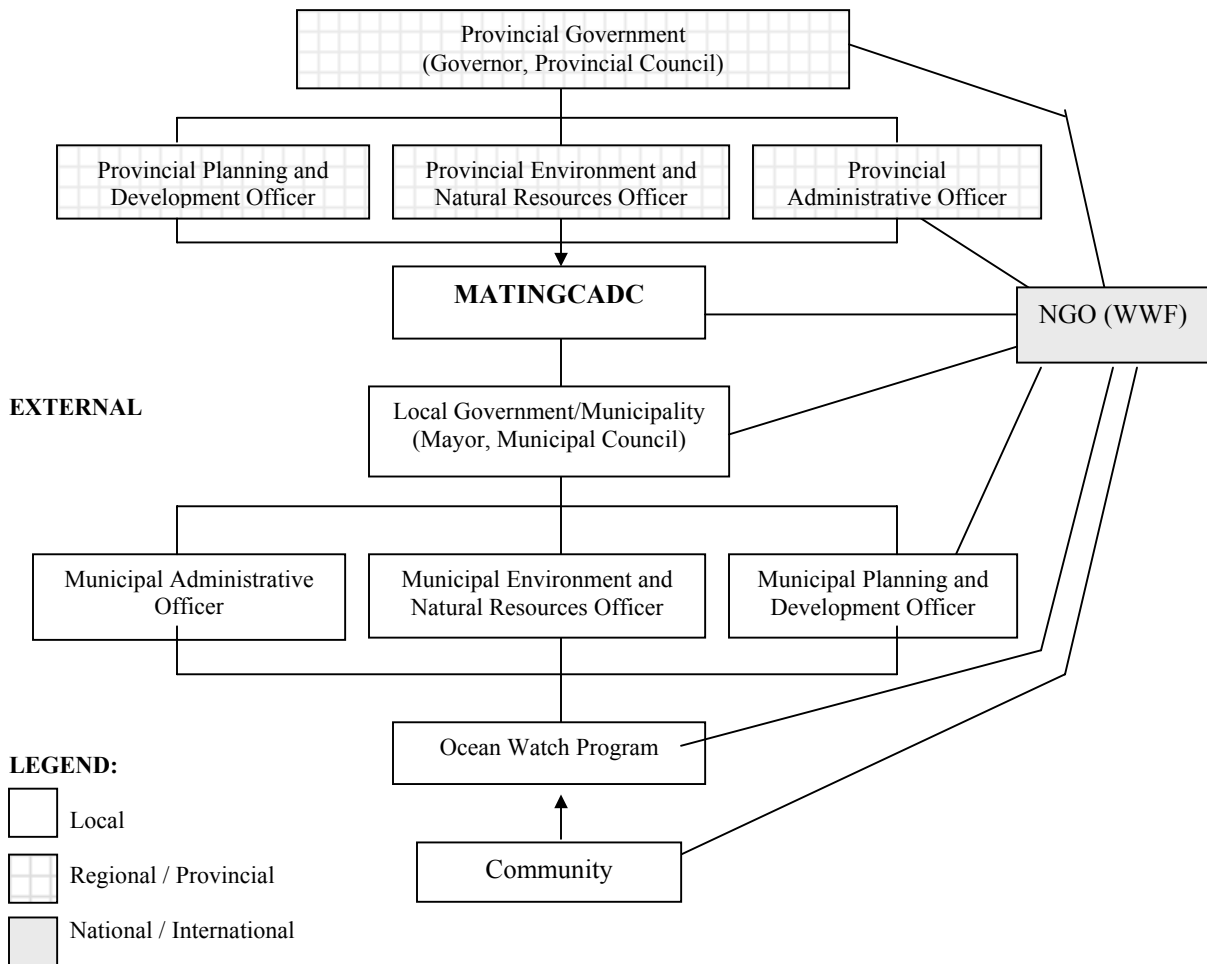


Figure 4a Internal Organizational Structure (SAMMACA)

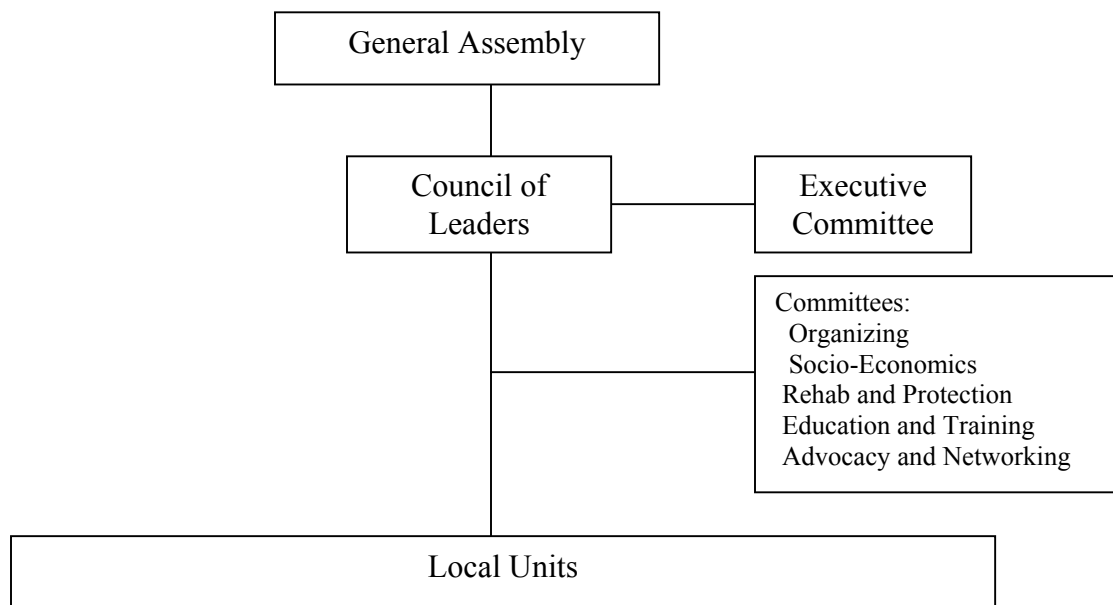


Figure 4b Internal Organizational Structure (MATINGCADC)

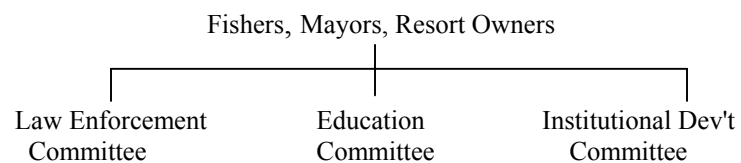


Figure 5 Rates of Apprehension and Conviction of Illegal Fishers

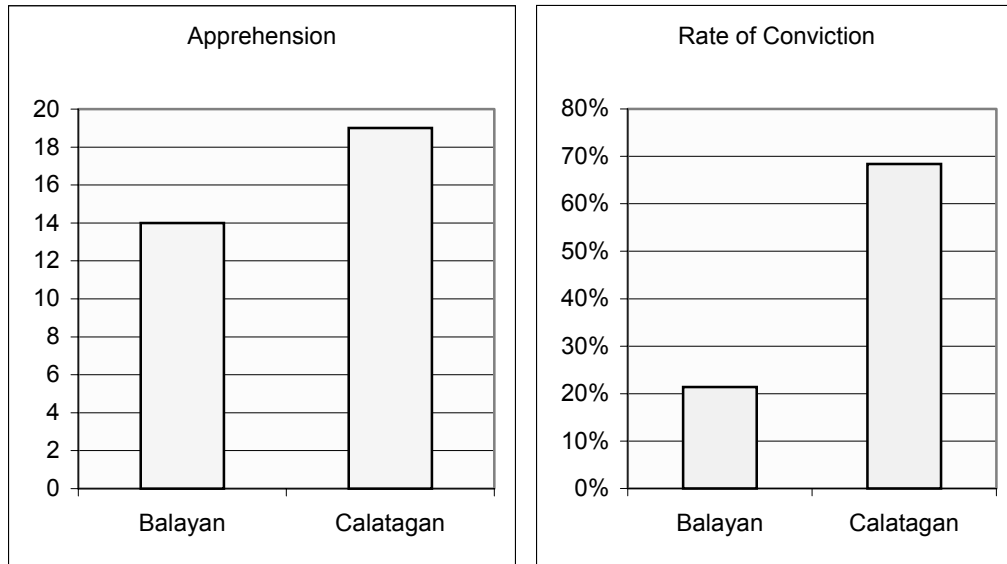


Figure 6 Salience of Organizational Agenda Items

