Philippines Integrated Coastal Management: Diverging Stakeholder Agendas and Elite Co-option in the Babuyan Islands

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Executive summary

In the Philippines, Integrated Coastal Management (ICM) represents the dominant response to narratives of coastal ecosystem decline. However, there are persistent challenges to implementation manifest in continued resource degradation, questioning of the exercise of stakeholder involvement and rising resource conflicts. This working paper examines the implementation process, in particular how the goals and assumptions of ICM meet the local reality in one group of islands in the Philippine archipelago.

The evidence derives from a conservation planning process in the Babuyan Islands, Province of Cagayan. The planning process was facilitated to bring about social learning amongst stakeholders, drawing on Critical Systems Heuristics and Soft Systems Methodology. The backbone of the planning process was a series of planning workshops in Camiguin and Calayan Islands, and in Tuguegarao City, the provincial capital, with participation of close to 100 people. In addition, individual consultations with 34 key informants explored questions which emerged from the workshops.

The results presented in this report illustrate that:

- The ICM paradigm embodies an assumption of the existence of an ideal ‘equilibrium’ state of coastal ecosystems, which can be defined through knowledge prescription of policy makers and conservation scientists;

- The definition of the ideal ecosystem state is largely specified by the state, international development banks, foreign aid agencies, and international NGOs who are promoting their respective interests into Philippine locales;

- The transformation towards recreating this supposed equilibrium state is undermined by the reality of widely diverging stakeholder agendas. Each stakeholder has a certain view on what constitutes the ‘ideal’ ecosystem state, which determines whether or not local actors agree to implement ICM policy goals;

- In the devolved governance system with significant municipal autonomy, expected actors (in particular the line agencies BFAR and DENR) are disempowered by the incoherence between the policy owners’ worldview and reality when stakeholder buy-in to the ICM regime breaks down;

- This collapse of the ICM paradigm is paving the way for unethical influence from elite alliances who capture the resource access in province, municipality, and barangays;

- In localities such as the Babuyan Islands, when assumptions of ICM collapse it has destructive consequences for fisherfolk and coastal environment, who, contrary to the intension, are further victimised and marginalised.
List of Acronyms
ADB Asian Development Bank
BFAR Bureau of Fisheries and Aquatic Resources
CBCRM Community-based Coastal Resource Management
CRM Coastal Resource management
DENR Department of Environment and Natural Resources
EEZ Exclusive Economic Zone
ICM Integrated Coastal Management
ICRM Integrated Coastal Resource Management
LGC Local Government Code
LGU Local Government Unit
MPA Marine Protected Area
MSY Maximum Sustainable Yield
NIPAS National Integrated Protected Areas System
PNP Philippine National Police
SB Sangguniang Bayan / legislative council
UNCLOS UN Convention Law of the Sea
UNDP United Nations Development Programme

Glossary of key terms
Barangay: village, lowest administrative tier in the Philippines public sector.
Co-management: Collaborative management invites stakeholders outside government into the formal management regime. Often associated with decentralization and devolution of authority.
Elites: stakeholders with a privileged access to sources of power and patronage.
Fisherfolk: the common term employed in the Philippines referring to people who to varying extent depend on fishery as a source of livelihood, including both men and women.
Near-shore fisheries: Small-scale fishery in the coastal waters, which are under municipal jurisdiction (up to 15km from shore).
Perspective: The view that a person or organization holds on a certain problem, which shapes how they interpret the situation and organize their actions.
Open access: Is applied here with its common connotation in the ICM literature. Refers to the absence of a formal management regime to regulate access to coastal resources. However, often informal regulations are in place, and whilst access may be open, the use of resources may be regulated formally by other policies.
Ontology: The ‘nature of the world’, i.e. a person’s or organization’s belief in how the world actually is.
Social learning: an alternative policy instrument that addresses environmental problems by connecting policy formulation and implementation in one systemic process. It appreciates that human knowledge emerges through people’s social interactions and multiple levels of feedback between stakeholders.
Stable state: The assumed equilibrium condition of an ecosystem. Refers to the fact that policies rely on an assumption of how the marine ecosystems system should look.
Acknowledgements

The evidence in this paper derives from a project implemented in collaboration with the Provincial Government of Cagayan, the Municipality of Calayan, and the line agencies Bureau of Fisheries and Aquatic Resources (BFAR), and Department of Environment and Natural Resources (DENR) in Philippines Region II. The project was funded by Ocean Park Conservation Foundation – Hong Kong. Financing for the writing of this report was provided by Swedish University of Agricultural Sciences (SLU) and Stockholm Environment Institute (SEI). Thanks go to Prof. Sriskandarajah Nadarajah for advice in the planning of the research, and to Dr. Neil Powell and Maria Osbeck for inspiration and suggestions throughout the process and the opportunity to be part of the joint reflection within the SEI Social Learning Project. This report has been reviewed by Dr. Wijnand Boonstra, Department of Urban and Rural Development, Swedish University of Agricultural Sciences (SLU), and Dr. Neela Matin, Stockholm Environment Institute York Office. The SEI Communications Team is thanked for their technical and financial assistance which enabled publication of this working paper.
INTRODUCTION: PHILIPPINES INTEGRATED COASTAL MANAGEMENT

The dominant national level response in the Philippines to concerns regarding ecosystem decline and degradation has been the institutionalisation of the Integrated Coastal Management (ICM) paradigm. Building on former Coastal Resource Management (CRM) programs, ICM aims to reverse ecological degradation, for instance through re-habilitation, re-forestation and re–stocking in coastal zones (Balgos, 2005; Lowry et al., 2005). The ICM regime promotes a procedural shift towards increased stakeholder participation and balanced employment by coercive and non-coercive policy instruments (DENR et al., SEAFDEC, 2007; Milne and Christie, 2005; Alcala, 1998). This ambition mirrors the global trend in environmental governance and management towards exploring a more diverse set of policy instruments, comprising a mixture of regulation, voluntary measures and economic instruments (e.g. UNEP, 2007). The 2006 Millennium Ecosystem Assessment, in the chapter on marine and coastal ecosystems, recommends both ICM and stakeholder participation in decision making as one of the response options to current resource degradation (UNEP, 2006).

Philippine ICM is part of a government trend towards decentralisation and devolution of management responsibilities. The Local Government Code (LGC) of 1991 (Republic Act 7160) is the most ambitious and complex system of law, and programme of government decentralization and democratization in the country (DENR et al., 2001). It devolves management of municipal waters to the Local Government Unit (LGU) with a consequent localization of fisheries governance and a general fiscal autonomy of the LGU. It thus represents the transition from central to local authority of management measures, where the municipality is the primary unit of government (White et al., 2006; Cruz-Trinidad, 2003). The LGC has paved the way for the formation of formal local partnerships between LGUs, NGOs (Non-Governmental Organizations) and POs, (Peoples Organizations), where the local chief executive, often the mayor, through the municipal legislative council (Sangguniang Bayan or ‘SB’) can allocate funds to NGOs and POs (Mungcal, 2007; Fisher and Ulrich, 1999). The Municipal and barangay (village) SBs are the legislative councils for the two lowest levels of government, to which representatives are elected every fourth year.

The co-management approach embedded in the ICM regime builds on popular pioneering efforts in community-based coastal resource management converting open access into co-management regimes (White et al. 2005; Lowry et al., 2005; DENR et al., 2001). Pollnac and Pomeroy (2005) describe more than 100 community based projects carried out since 1980, but there are different narratives to explain the origin of these community-based initiatives. Many are described as emerging from the tradition of social mobilization (“people power”) after years of suppression during the Marcos era (e.g. Chuenpagdee and Jentoft, 2007). The proliferation of and consequential influence of environmental NGOs after the martial law regime under Marcos may also explain the promotion of MPAs (Marine Protected Areas) by international donors. Further, it has been argued that some initiatives were inspired by efforts in upland agricultural communities and their replication in marine reserves by Siliman University and subsequently by a large number of NGOs (Rivera and Newkirk, 1997).

Community-based initiatives are frequently seen as ‘scattered’. Development banks, the Bureau of Fisheries and Aquatic Resources (BFAR) and the Department of Environment and Natural Resources (DENR) seek to integrate these activities. (World Bank, 2005). In this context they are evaluated in the light of the expectations from the ICM regime, for example through awarding municipalities ‘best practice CRM’ (LMP and DENR, 2000). This reflects that in CBCRM programs, local people are considered as ‘guardians’ and ‘stewards’ of the environment, a rationale which has also entered the national NIPAS (National Integrated Protected Areas System) regime Law in 1992 and the IPRA (Indigenous Peoples’ Rights Act) in 1997 (Snelder and Berndao, 2005).
Philippines Integrated Coastal Management

The official ICM project cycle emphasises broadened stakeholder participation, multi-sector collaboration and the leadership of local governments (White et al., 2006; DENR et al. 2001). The paradigm is often presented as a reaction to former command-and-control management, and the colonial legacy in Philippine natural resource management. Under Spanish rule and American administration, state-led centralized schemes led to dissolution of common property regimes in the provinces and de facto open access in many localities (Abinales and Amorose, 2005; Dressler, 2006; Barut et al., 2003). The ICM regime is thus interpreted as a ‘governance shift’ from regulatory and controlling measures to ‘a broader approach that recognizes fisher’s participation, local stewardship, and shared decision-making in the management of fisheries’ (Pomeroy et al., 2007, p. 655; Eisma et al., 2005).

However, despite the promotion of ICM, the Philippines has in recent years seen a significant decline in the fisheries sector of more than 25% in its contribution to GDP, and the management of declining near shore fisheries is leading to rising resource conflicts. This has spurred urgent calls for concerted action from a number of government agencies and international bodies to strengthen the approach to ICM (e.g. BFAR, 2003; World Bank, 2005). The degradation of coastal resources through mining, dynamite fishing, over-fishing, and poaching mirrors trends in the wider South East Asian region, where scientists have increasingly argued for improved action at various institutional levels to halt the decline in fish stocks (Silvestre et al., 2003).
RESEARCH APPROACH AND CASE STUDY: CONSERVATION PLANNING IN THE BABUYAN ISLANDS

With this understanding of the continued challenges faced in implementing ICM as the point of departure, this report discusses ICM through the evidence from an example of conservation action planning in Babuyan Islands, located at 121° 36’ E and 19° 18’ N, and bounded by the Balintang and Babuyan Channels in northern Philippines (Fig. 1). The waters around the Babuyan Islands, in particular Camiguin Island, were verified in 1999 as the only known breeding ground for humpback whales in the Philippines (Acebes et al., 2007; Yaptinchay, 1999) (Fig. 2). Vessel surveys conducted around the five main islands since 2000 sighted 12 other cetacean species living in these waters (Acebes and Lesaca, 2003). A number of conservation projects have consequently been implemented, including investigating and monitoring of whale stocks, monitoring biodiversity, and recommending the establishment of protected areas regulated by provincial and municipal ordinances (KKP, 2001; Broad and Oliveros, 2004). In 2000, Kabang Kalikasan ng Pilipinas (KKP: WWF-Philippines) initiated the Humpback Whale Research and Conservation Project (HWRCP) in the Babuyan Islands. As part of the HWRCP, WWF facilitated a conservation planning process which in October 2001 led to the formulation of an action plan (KKP, 2001). In 2003, motivated by the research conducted by WWF, Provincial Ordinance 09-2003 was passed declaring the humpbacks a protected species within the jurisdiction of the province of Cagayan (PGC, 2003). After WWF pulled out, the only conservation NGO present in Calayan Municipality is ISLA Conservation Foundation Inc. who from 2006 has taken the leadership in involving other stakeholders in biodiversity conservation in Calayan Island (ISLA, 2006).

The work underlying this report was originally proposed as a spin-off from the previous project initiated by KKP, and was entitled ‘Science and Community-based conservation of Humpback Whales and other cetaceans in the Babuyan Islands, Philippines’. It was funded by Ocean Park Conservation Foundation - Hong Kong (OPCF-HK) from June 2007 till May 2008. Inspired by previous efforts by WWF, the project contained four core activities: Cetacean survey with photo-identification study, rapid coral and fisheries assessments, and a stakeholder planning process. The survey and two assessments provided scientific inputs to the planning process (Belen et al., 2008). The aim of the project was to develop an adaptive conservation action plan for the Babuyan Islands, focusing on Camiguin, and on the basis of the evidence reflect on means by which stakeholder collaboration could be improved to meet the conservation challenges.

The conservation action planning process was facilitated as a stakeholder dialogue for social learning. ‘For this project ‘social learning’ was defined as an alternative policy instrument that addresses environmental problems by connecting policy formulation and implementation in one systemic process. (Ison and Watson, 2007). One motivation for facilitating social learning is a growing recognition that efforts for sustainable development under conditions of complexity and uncertainty encounter a lack of agreement on the exact resource problem (e.g. ‘conservation of humpback whales’). Environmental problems are therefore approached as resource dilemmas characterised by the existence of multiple legitimate perspectives on what constitutes the actual problem and its solutions (Steyart and Jiggins, 2007). Resource dilemmas as defined in Ison et al. (2007) are characterised by:

- ‘subtractability’ i.e. that the management utilises and draws upon a number of finite financial, social and ecological resources;
- multiple stakeholders with potentially competing claims to the resources;
The Babuyan Islands consists of the five main islands of Calayan, Camiguin, Dalupiri, Fuga and Babuyan Claro. Calayan Municipality has jurisdiction over the majority of the islands and their waters, including Camiguin Island. The Municipality is located in Cagayan Province of Region II of the Philippines.
• high levels of controversy; uncertainty and complexity with unexpected events being frequent;
• ‘interdependency’ between stakeholders’ perspectives, behaviours and actions.

As with the ICM paradigm, social learning rejects the command-and-control approach which ‘implicitly assumes that the problem is well bounded, clearly defined, relatively simple and generally linear with respect to cause and effect’ (Holling and Meffe 1996, p. 329) and argues, with Ludwig, that ‘the management paradigm fails when confronted with complex problems’ (2001, p. 758). This seeks to appreciate that human knowledge emerges through people’s social interactions and multiple levels of feedback between stakeholders (e.g. Röling and Wagemaker, 1998).

The methodology of Critical Systems Heuristics (CSH) was chosen to provide a set of instruments for enabling the reconstruction of cognitive boundaries (Ulrich, 2000). CSH comprise a set of critical questions into sources of interests, knowledge, power, and legitimation in resource governance. These questions were applied in a participatory stakeholder planning process guided by Soft Systems Methodology (Checkland, 1999) to stimulate creative thinking about how current stakes are constructed, potential conflicts of interests, scenarios for change, and collective actions (SLIM, 2004). The CSH were conceptually translated to Tagalog/Filipino and were used in conjunction with a number of communicative tools (Billard et al., 2004) (e.g. Venn diagram, mind mapping, brainstorming, force field analysis etc.) in a number of facilitated forms of interaction (e.g. workshops, working groups, open space, focus groups, semi-structured interviews, informal conversations) (see Fig. 3) (for details on the approach to the planning process see Larsen, 2010).

Planning process
The backbone of the planning process was a series of planning workshops in Camiguin and Calayan Islands, and in Tuguegarao City, the capital of Cagayan Province (Fig. 4). In addition, individual consultations with key informants explored questions which emerged from the workshops. Close to 100 people participated in these workshops. The interviews comprised 11 people from the three Camiguin villages (barangays) (Legislative Council members (Kagawads), farmers, fisher-folk, parish ministers); 4 people from the Local (Municipal) Government Unit (LGU) (Legislative Council (Sangguniang Bayan) members and administrators); 6 senior officials from the Provincial Government Unit (PGU) (from offices of environment, agriculture and tourism); 9 officials from...
the line agencies DENR and BFAR (directors, programme leaders and field staff); and 4 NGO staff (local and national). The planning process was implemented in two rounds, the first taking place 25 November – 6 December 2007 in mainland Cagayan, the second implemented 4-16 May 2008, in Camiguin and Calayan Islands, and in Tuguegarao City. In the intervening period, the marine research activities of the project took place, and the outcomes were fed into the second and final round of planning events.

One of the initial activities was to identify relevant partnerships which would enable the facilitation of a broadly owned planning process. As lead agencies for CRM planning DENR and BFAR showed particular interest in the process, its outcomes and the coastal assessment data from the project. The partnership with the PGU was coordinated from People’s Action Center, a new office within the PGU mandated to improve local governance in the province. As the local chief executives, the LGU sanctioned the planning process and a number of legislators and administrators from the local government joined the meetings.

While the interactions with mainland agencies were conducted mainly in English, the meetings in Camiguin and Calayan were held in a combination of English, Tagalog and Ilokano. The project team, composed of one international, one national, and one local team member shared the facilitation tasks between them, and with the participants. An iterative approach, where consultations were held first with individual stakeholder groups before subsequent larger joint meetings, was used to clarify expectations, needs and concerns.

The planning process was as far as possible aligned with other activities amongst participants in order to add value to ongoing work as well as navigate logistical challenges regarding travel. The Barangay and town fiestas are important annual events, and the Camiguin consultations were planned in the tail end of the Balatubat Fiesta for Saint Vincent Ferrer, the village saint, and the hosting of the Calayan workshop was held in association with the basketball league of the municipality. The final large stakeholder workshop was planned in conjunction with the PGU’s medical mission to Calayan, with the intention that participants could travel together from the mainland. A common document, ‘Stakeholder Updates’, was used to share the evolving understanding which guided the dialogue. This was also intended to establish transparency and invite new stakeholders into the process.

The scientific assessments proved valuable mutual learning opportunities for project team members, technical agencies and the provincial government who were involved. However, the formulation of assessment activities prior to the first stakeholder consultations, constrained the opportunity to conduct joint research with other stakeholders into shared problem definitions. Further, the interest of technical agencies in the data generation from the scientific assessments generated a series of expectations on the data in terms of form and quality as well as data collecting methods to comply with accepted technical standards. These expectations were not always in line with the needs expressed by the participants in the planning process.

Throughout the planning process the weather was, as typical for the islands, unpredictable with a high frequency of typhoons and storms (Fig. 5). Several of the workshop events had to be continuously rescheduled. It was originally hoped to conduct the first consultations up front in the project during the end of 2007, but typhoon ‘Mina’ prevented the project team from crossing the Babuyan Channel. Instead, the planning workshops in Camiguin and Calayan were held in 2008. Due to unforeseen weather calamities also in 2008, caused by typhoon ‘Buchoy’, the originally planned final stakeholder workshop in Calayan with representatives from all consulted stakeholders was not possible to realise, as participants from Camiguin and the mainland were unable to cross to Calayan. Due to a
short window of opportunity, it was agreed to host a replacement half day workshop in Calayan with participants only from the main island of the municipality.

These experiences show some of the practical constraints on stakeholder dialogues and the need for facilitators to commit to a long-term process, where unexpected events can be navigated. Similarly, workshop discussions highlighted communicative and physical infrastructure as key constraints in bringing about meaningful change. It emerged how the hydro-meteorological challenges to organizing joint meetings exacerbate the risk of miscommunication, low inter-agency collaboration, and feelings of exclusion by some stakeholders. Further, the bureaucratic routines in line agencies and governments leave little opportunity to the individual project officer to navigate the weather constraints, as travel orders must be prepared well in advance through formal requests to the Officer in Charge. A rapid needs assessment was subsequently submitted to the Management Information Systems office of BFAR Manila, and it was agreed that one staff would participate in the planning process to assess the options for supporting the stakeholders via Information and Communications Technology in the national wide Bantay Dagat Programme. However, the weather constraints prevented this.

Fig. 4: Planning in the Camiguin barangays
Workshops with fisherfolk and farmers in barangay Naguilian (left) and barangay Balatubat (right) (Photos by: R.K. Larsen)

Fig. 5: Sense of isolation of Babuyan Islands, seven hours from Aparri on mainland Cagayan
The crossing by bangka (outrigger boat) to Calayan, the capital island hosting the municipal government takes nine hours and the journey to Camiguin Island seven hours
FINDINGS FROM THE BABUYAN ISLANDS

The evidence from the planning process is here presented by means of the mnemonic (conceptual structuring device) soft systems tool referred to as TWOCAGES (Checkland, 1996) (see Box 1, which explains the terminology used). The purpose is to show how the transformation process embodied in the ICM regime towards re-creating balanced coastal ecosystem for the benefit of island residents is undermined due to the collapse of the policy owners’ worldview in the face of diverging stakeholder agendas and local innovation from resourceful elites.

Worldview and owners: preserving an equilibrium ecosystem state

Whilst implemented largely by NGOs, the activities in Babuyan Islands are supporting the transformation process of protection and rehabilitation of coastal biodiversity, sanctioned by the central government, most notably the DENR, and BFAR, who are the owners of this transformation. National as well as foreign organizations of international NGO families are also championing the change process of biodiversity conservation throughout the country. For instance, in the neighbouring Isabela Province, PLAN International previously implemented the Northern Sierra Madre National Park – Conservation Project (Snelder and Bernadao, 2005), and in the Sulu-Sulawesi Sea, WWF and Conservation International lead the large scale eco-region conservation programme (Mcllat et al., 2006). Further, Cagayan Province is now seeing the implementation of a six year ICRM initiative funded by the Global Environment Fund (GEF), Asian Development Bank (ADB) and Government of the Philippines (GoP), as part of the Country Strategy and Program for the Philippines in five regions which have not yet benefited from CRM programmes (ADB, 2006; Glenrose, 2007). This is the latest of a series of major international bilateral or multilateral donor assisted projects with matching funds from the national government, of which Balgos (2005) lists 10 implemented since 1980. A preceding one, the USAID and GoP sponsored Coastal Resource Management Project (CRMP), institutionalised the ICM worldview in a benchmark system for CRM planning in 2001, which was subsequently adopted by the Philippine government (DENR et al., 2001).

The underlying worldview of the larger ICM regime is defined by the aim of rehabilitating and protecting coastal ecosystems to maintain or recover a state of equilibrium in the ecosystem with optimal biodiversity and richness of biodiversity for the benefit of poor fisherfolk. ICM applies ‘coastal’ as a valid unit for organising and integrating knowledge for coastal management as perceived within the worldview of its owners. Here, it is assumed that the boundaries around what constitutes the desirable stable state of the ecosystem, including the degree of overfishing and degradation, can be determined via expert knowledge, e.g. via the prescription of findings from biological sciences (see Powell, 1998 for details regarding equilibrium based management). As such, the 1987 Constitution states the ‘right to a balanced and healthy ecology’ of the nation’s marine wealth, and the LGC stipulates the responsibility of local government units to ‘manage and maintain ecological balance within their territorial jurisdiction’ (World Bank, 2005). The Fisheries Code (Republic Act 8550) of 1997 institutionalizes the goals of maintaining a ‘sound primordial ecological balance’ and stipulates the details of autonomy and mandates of different users and management authorities (p. 162). Also the ArcDev Framework for Sustainable Philippine Archipelagic Development, developed from the National Marine Policy with assistance from UNDP, departs from the assumption that Maximum Sustainable Yield (MSY) has been exceeded and argues that the state is obligated to ensure goals of poverty alleviation and livelihoods within ‘ecological limits’ and ‘optimal utilization’ (DENR et al., 2004, p. 163). The definition of what comprises the desirable, optimal and assumed stable state of the ecosystem is frequently dependent on the economic benefits which can be derived for the government or business partners. Fishery is an economic sector of great importance for the Philippine state, corporations and the trade partners. In the ArcDev Framework this economic interest is coupled to interests of territorial integrity, national security and enforcement of UNCLOS (UN Convention Law of the Sea). The preferential use
The mainstream conservation planning frameworks applied in the Philippines draw on the international tradition of expert-led and science driven systematic conservation planning, legitimated through bio-geographical research and data. It attempts to optimise conservation efforts, e.g. representativity of species richness and species persistence over time (e.g. Pressey et al., 2007; Whittaker et al., 2005) and draws on objective indicators in marine fisheries management (e.g. Leslie, 2005; Suter, 1997; Froese, 2004). Problem definitions of ‘biological overfishing’ is thus a common starting point for management plans. Target areas for the previously mentioned ICRM project were chosen according to priority ecosystem and biodiversity corridors as identified by this kind of biodiversity science (ADB, 2006). PLAN International draws on an ecosystem approach to implement zoning through the NIPAS zoning rules for Marine Protected Areas (MPAs) (Lavieren et al., 2005). In the management of the Sulu-Sulawesi Sea, WWF is inserting and popularising the notion of ‘ecoregion’ as a biogeographic unit of management (Miclat et al., 2006). Such planning and results-based frameworks support the fundraising strategies for major conservation NGOs to attract financial support in competitive economic environments (Chapin, 2004). The ecologically defined boundaries form the basis also for the delineation of coastal areas into management zones in the national legislation (Bantongbakal, undated). This is also the case in the ArcDev Framework, which is described as being rooted in the ‘traditional society’ but have priority actions defined according to scientific ecosystem definitions (DENR et al., 2004). The Fisheries Code further overlays the ecosystem classification with a system of Exclusive Economic Zones (EEZ), which aims at distinguishing between municipal (artisanal, small

<table>
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<th>Table 1: TWOCAGES, mnemonic soft systems tool</th>
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<td>(Checkland 2006, adapted from Powell et al., 2010)</td>
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<th>T Transformation</th>
<th>Details of the proposed change (protection and rehabilitation of coastal biodiversity)</th>
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<tr>
<td>W Worldview</td>
<td>The particular view that makes change meaningful to the “owner” of the process. (rehabilitate and protect coastal ecosystems and biodiversity, incl. for the benefit of the poor fisherfolk).</td>
</tr>
<tr>
<td>O Owners</td>
<td>Have the authority to authorise the change (Ministry of Environment and Natural Resources, and Bureau of Fisheries and Aquatic Resources)</td>
</tr>
<tr>
<td>C Clients</td>
<td>These are beneficiaries or victims of the change (Fisherfolk, elite, investors, patrons).</td>
</tr>
<tr>
<td>A Actors</td>
<td>Those implementing the change (Local GU, Provincial GU, NGOs, line agencies BFAR and DENR).</td>
</tr>
<tr>
<td>G Guardians</td>
<td>Those who watch or monitor for unintended outcomes of the change (in this case the planning project itself).</td>
</tr>
<tr>
<td>E Environment</td>
<td>The operating environment in which a change is being undertaken (in this case the governance trends of devolution and co-management).</td>
</tr>
<tr>
<td>S System</td>
<td>The system of interest bounded by change related issues identified by the clients (to be discussed below).</td>
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scale, traditional) and commercial (or large scale) fishing, which is carried out with different gear, vessel sizes and in different waters. Only municipal fishing is allowed in the coastal zone, i.e. within the 15km boundary of the coastline (Cruz-Trinidad, 2003; Barut et al., 2003). Altogether, the ecosystem management paradigm is heavily articulated in the Philippines. It assumes a metaphysical ontology of nature, i.e. a belief in how the world is, which is not disputable (Purdon, 2003). This creates the risk that stakeholder involvement seek to integrate public discourse into coastal zone management through paternalistic expert decisions rather than opening coastal management to public discourse (Davos, 1998).

**Collapse of the owners’ worldview and disempowerment of expected actors**

In Babuyan Islands, the reality amongst stakeholders is characterised by a number of diverging perspectives and agendas which are not incorporated into the ICM regime. As a 4th class municipality in the national poverty ranking, the constituents depend mainly on small-scale fisheries and backyard farming for their livelihood. The municipal elite does not take interest in humpback whale issues, which formed the basis for the conservation action planning process in this project, and directs preferential attention to tourism development, a process in which conservation objectives must be aligned accordingly. The LGU has in recent years prioritized measures to increase food production and suffers from an absence of coastal resource management planning and an under-resourced planning office. Outside interventions are often met with a general apprehension from the elite who express that NGO or line agency intervention challenge the LGU autonomy under the LGC. The emphasis on whale conservation thus reflects a predetermined problem definition based on a strong conservationist perspective which excludes the municipal government. Further, previous conservation efforts in the islands have produced a contentious relationship and decreasing trust between the elite and outsiders. Some of the disputes regarding responsibilities for combating illegal resource use such as dynamite fishing, metal salvaging and its impact on whale and fish stocks have reached national media attention, further aggravating the interpersonal relations between stakeholders.

Line agencies are expected to support the LGU in the implementation of the transformation process embodied in ICM. However, mainland agencies are rarely engaged in the Babuyan Islands, a fact commonly explained by the remoteness of the islands as well as the difficulties outlined above. Most agency staff have never visited the islands, and service delivery and programme implementation is limited to brief field visits. This is further complicated by the fact that the ICM policy framework remains ambiguous and un-harmonised (Batongbakal, undated). Conflicting and overlapping policies and lack of common sanctioning of mandates are derailing coordinated action amongst government bodies (World Bank, 2005; Milne and Christie, 2005; Pollnac and Pomeroy, 2005; BFAR, 2003). This is considered to lead to jurisdictional tangles between the main implementing agencies (actors), i.e. DENR and BFAR (DENR et al., undated). Most of the coastal municipalities in Cagayan have not yet initiated the participatory resource assessment in collaboration with DENR which is the first step in the coastal resource management planning process.

The 15 km boundary which delineates municipal waters for non-commercial fisherfolk from the marine economic zone of the Philippines is, as other centralised planning measures (Dressler, 2006), experienced amongst the actors as an unrealistic boundary drawn by the policy owners to reorganize municipal resource management. As has been observed elsewhere, resources are not available for local government to enforce the coastal management regime (White et al., 2006). There is no Philippine Maritime Police representation in Camiguin Island and the Coast Guards are without basic equipment such as patrol boat or binoculars. The LGU presence in Camiguin is mainly by mobile texts messages and only in the most urgent cases are Philippine National Police (PNP) officers dispatched to the island.
National policies are in the province and municipality criticized for lack of implementing guidelines. This, in turn, shifts the responsibility to the municipal and barangay legislative process to enable local policy implementation. However, most municipal ordinances have remained unchanged for decades, and procedures enshrined in the LGC to effect local governance, e.g. public hearings and Barangay Development Planning, are rarely practiced. In the islands, law enforcement is – as elsewhere – characterized by ‘political interference and discretionary prosecution’ (Eisma et al., 2005, p. 350) and the remittances of bribes. Whilst the PNP is a national line agency/arm, in isolated localities such as Babuyan the national linkage can be broken and it is commonly perceived that the staff may in effect be under the authority of the highest bidder. Moreover, government officials have a low trust in the efficacy of public meetings citing that dialogues are held with a lack of political commitment from chief executives who delegate junior staff and rarely participate personally in the discussions.

ISLA is struggling with lacking interests from municipal and barangay officials, and the WWF-led humpback whale conservation action plan has not been implemented. Meanwhile, sustainability problems have escalated; including encroaching on prohibited protected areas, use of illegal fishing equipment such as compressor diving, cyanide and dynamite, as well as pebble and shell collection and illegal logging (kaingin) (Fig. 6). Metal salvaging from ship wrecks started initially with walls and sidings but has now moved to main frames, which requires larger amounts of explosives. In addition to the local offences, in particular Taiwanese fishing vessels are poaching in municipal waters to catch highly priced yellow fin tuna.

Unethical exerting of influence by elites
The collapse of the owner’s worldview and disempowerment of the expected actors paves the way for the formation of stakeholder coalitions through formal and informal connections between different levels of government, political parties, clans, and organizations. Their main purpose is to enhance the

Fig. 6: Coastline in barangay Balatubat in Camiguin Island
The blasting of shipwrecks to salvage metal destroys the sea bed and coral reefs and metal pieces and wreck remnants cover large parts of the shoreline (Photo by: R.K. Larsen)
access to and control over natural capital which in the absence of an effective management regime can be converted into physical and financial assets. Tuna fishing, which originated as a formal fishery in the 1960s, is one of the high income fisheries in Asia (Cruz-Trinidad, 2003), and national and international investors are important indirect actors as well as beneficiaries. Throughout the country, several examples exist where municipal elites open their waters to foreign vessels to benefit from external cash flows. Camiguin fisherfolk describe how Taiwanese vessels recruit Babuyan Islands residents to work for them as guides. Also, the growing tourism industry is an arena for competition between different alliances. A national survey ranked Cibang Cove of Calayan Island as third in terms of potential for tourism development, and the islands are publicly considered as great tourism potential, a ‘Baby-Boracay’. However, an absence of guidelines for distinguishing between support to private and public initiatives make the use of financial and technical support from government ambiguous. Also other resource exploitation is captured by the informal stakeholder coalitions, including metal salvaging, where many island residents are hired to dive through financing by a few individuals. In addition, classification of land areas has become a battleground for political strategies, as local officials use the classification to manipulate the view of the state of land management. This is further complicated by the fact that effective delineations between public and private/communal forest land is not in place.

With the Fisheries Code, the policy for the creation of Fisheries and Aquatic Resource Management Councils (FARMCs), Executive Order 241 of 1995, was one of the key priorities for fisherfolk organizations. The formalisation of local management bodies was heralded as a major victory for local resource users, institutionalizing their role in community-based planning and policy implementation, mandating representation of fisherfolk in barangay and municipal decision making (BFAR, 1999). However, scattered and often opposing forces of government and NGO efforts to organize the communities mean that many externally initiated organizations have stagnated as ‘shell organisations’ at the barangay level. The FARMCs are thus largely inactive throughout the province (see also Manalili, 1990). Several island associations and management initiatives have dissolved or discontinued following the election of new municipal administrations or as political sponsors of the associations left offices. In addition to the cash-strapped financial conditions of LGUs nationwide to implement local programmes (Balgos, 2005), isolationist strategies enforced by stakeholder alliances can effectively curb off collaboration with national arms of agencies. Elites may selectively avoid public discussions on contested resource access and management in order to maintain their status as well as relationship with parts of the constituency. Joint actions in Camiguin are frequently undermined by the infighting between the different factions of elite clans. Public frustration regarding a lack of accountability in economic management has led to the closure of several community-based organizations. Further, FARMCs have to be initiated by appropriate level of government and have only advisory functions. In the province, few LGUs allocate the funds to the FARMC as stipulated in the Fisheries Code because local chief executives do not see the value of the FARMC initiative. Elsewhere (Mungcal, 2007), it took the election of a new administration before the M-FARMCs would be endowed with the necessary financial resources to take on an active role.

Scott (1994, p. 6) has described the irony in the use of the term barangay in Philippine politics; today it is the lowest form of formal government, but the native meaning was a ‘political unit loyal to one boss’ (datu). Indeed, stakeholder alliances are still led by such datus, or strongmen, who are prominent figures in daily politics representing the larger alliance, yet not necessarily synonymous with a clearly defined political unit. These strongmen champion localised management practices which conflict with the views embodied in the national policies, e.g. through the sponsoring of logging and fishing activities. These practices can be characterised by the exertion of unethical powers and influences by the elites. Mandates and access rights are often negotiated through an unregulated and opaque system of checks and balances. Strongmen use verbal threats and insults to patronize people and carry their will through and dispose of government and parish resources. Government officials
describe how intruders from other municipalities together with international poachers reduce communities to competing factions and then employ tactics such as bribery, intimidation or threat (see also Mungcal, 2007). Having co-opted the transformation embodied in the ICM framework, strongmen and alliances are the de facto owners of the use of the coastal resources in Camiguin. Local enforcement staff are anxious for recompense in return for their partaking in official duties such as collecting dynamited fish specimen or reporting of legal offences, and barangay citizens fear punishments if disclosing information to outsiders (see also Acebes et al., 2008).

In a commentary on understanding local politics, an anonymous historian from Mindanao State University suggests that it is hardly fair ‘to judge local political leaders using Manila standards: ‘The concept of the state is not well developed…that is why people find more security in their clan or datus…Using public funds and equipment for private use may not be seen as a criminal act but as the normal exercise of authority of the datu’ (Coronel, 2000, p. 297). This patronage role is prevailing – in the words of one PGU official, when explaining this behaviour in Cagayan: ‘We are dealing with traditional…or “modernizing” politicians. The former is easier to understand, while the latter…brought physical development to their turf as a proof of service, wherever it came from, or in whatever process it came. That’s the remaining downside of governance devolution. The financial pie was not included in the downloading of political power. Thus, they are used to consider outsiders as deliverers of goods rather than partners. The term participatory governance is not crucial for a modernizing politico while a no-no to a traditional politico. What is crucial is what can be delivered to his turf”.

**Beneficiaries and victims**

The main beneficiaries of the distorted transformation process and collapse of owners’ worldview are the local elite coalitions which capture the resource access and control. However, the patronage is not limited to the island or municipality. Often local alliances are connected to other strongmen nationally and even outside national borders. Agency staff commonly experience apprehended Taiwanese fishermen claiming protection by officers in the Philippine military (known as a system of padrinos). This parallels experiences from the Philippine forestry sector, where Vitug (1993) has described how resource access has been a source of political patronage, with army officers exerting significant influence and tenuring large concessions. The notion of alliances thus captures the modern form of datu-power, which in its historical form goes back to the pre-colonial era (Albinales and Amoroso, 2005). Contrary to the 16th century Philippine society, however, today the politics has evolved from localised to a highly networked form, giving way to complex politico-corporate-family based alliances which prosper from their, in the case of Babuyan Islands, often illegitimate influence. The resource access releases monetary gains, which in a clientalist democratic system can be used to attract voters during elections, and govern their respective territories (see also Grainger and Malayang, 2006; Mungcal, 2007).

Meanwhile, Camiguin residents, who were the expected beneficiaries of the transformation embodied in ICM, become the victims of the distorted implementation process. Fisherfolk depend on a composite livelihood from forest products, back-yard farming and coastal resources but lack other income sources outside the fishing and farming seasons (see also KKP, 2001) (Fig. 7). As an isolated island community, they cannot as poor fishing communities elsewhere in the Philippines benefit from additional commercial activities geared to tourists or passer-bys to make ends meet. Further, the shortcomings in the legal system and the uncertainty associated with the actions of the stakeholder alliances undermine household economy, for instance when catches are confiscated due to suspicions of illegal fishing practices and lost in the absence of trial. Moreover, Kagawads and medical staff in all three Camiguin barangays complain of lacking social service delivery including medical supplies and basic health services. There is a lack of economic cohesion in the barangays of Camiguin with a near-zero internal tax return from, for instance, sari sari store permits and fees levied on nets within the baran-
gays. Despite the decline in fish stocks, fish prices have remained unchanged whilst fuel prices have been surging. Middle men operate a credit system which mortgage farmers through an advance payment credit system in order to procure farming equipment and fertilisers. Due to the weakness of government in the barangays and the low service delivery the role of breadwinners is important. Their strong role can also be seen as a consequence of the collapse of the management regime and the associated importance of the family and social relationships.

The vulnerability of the island residents and their natural resources is acknowledged by the PGU which is implementing training programmes on livelihoods in Camiguin. BFAR and neighbouring municipalities are similarly engaged in efforts for livelihoods development (KKP, 2001). However, whilst local and provincial government is running a number of programmes creating incentives for shifting production patterns, e.g. via free certified rice seeds or credits to farmers, executives lack capacity to conduct more radical interventions in managing the price levels. They also fear stirring protests and criticisms for favouritism from parts of the constituency.

Fig. 7: Victims of the co-opted implementation of ICM
Those most severely affected by the stalled implementation of coastal management are the fisherfolk in the Camiguin barangays, particularly the generations which will depend on the coastal resources in the coming decades (Photo by: R.K. Larsen)
CONCLUSIONS

The evidence from the Babuyan Islands suggest that the transformation process towards re-creating balanced coastal ecosystems for the benefit of poor fisherfolk is undermined by the collapse of the policy owners’ worldview in the face of diverging stakeholder agendas and local innovation from resourceful elites. The expected actors are thus disempowered by the incoherence between the underlying assumptions of ICM and the reality faced by local stakeholders, which paves the way for the dominance of unethical alliances and strongmen. The ultimate beneficiaries of the distorted transformation process are the elite alliances, with the resulting victimisation of the poor island fisherfolk as well as their coastal resources.

Balgos (2005, p. 972) argues that ‘the unabated degradation of the marine environment and its resources continue to motivate efforts to improve the existing [ICM] paradigm’. However, as evidenced above, the fundamental disagreements on plausible knowledge claims in Babuyan Islands positions ICM far from a ‘normal’ coherent and internally consistent knowledge paradigm. Thus, there is no ICM paradigm in the Kuhnian sense for CRM in Babuyan Islands (Ravetz, 1999). Babuyan Islands have not yet seen the implementation of any large scale ICM programme which could have alleviated some of the challenges encountered as has been reported from other localities. However, the disempowerment of the line agencies and government administrations experienced in this case study contribute to explain why even the large scale ICM programmes remain generally unsustainable after their termination (e.g. Eisma et al., 2005; Lowry et al., 2005).

In integrated resource management in the wider sense three mainstream categories of policy instruments have been highlighted which represent knowledge prescriptive approaches to policy implementation, namely normalisation of practices, regulation of the market and awareness raising (Steyart and Jiggins, 2007). Based on the evidence presented above, it is questionable whether the ICM regime moves beyond knowledge prescriptive awareness raising, education and information sharing to non-coercive measures which allow a collective construction of the goals of ICM. It maintains an attempt to separate the decision and policy making (‘steering’) from the implementation (‘rowing’) (e.g. Thornley and Cooper, 2008). Whilst stakeholders are invited into negotiating management arrangements through, for instance, mechanisms for community organizing and participatory planning, the ICM planning model used by the Philippine Government (White et al., 2006; DENR et al., 2001) perpetuates the underlying assumptions of ICM, including the undisputable ontology of equilibrium ecosystem states. It has been shown how ICM programmes often evoke an instrumental approach to stakeholder involvement which places undue emphasis on how coastal stakeholders can be players in formalising the implementation of already established assumptions of ICM (Chuenpagdee and Jentoft, 2007). In the case of Babuyan Islands this serves to compromise formal collaboration between people caught in divisive alliance politics and to maintaining the opaque and unethical control of the elite alliances.

The conjunction of the detrimental assumptions of ICM, which are held as non-negotiable by its owners, and extensive governance devolution means that coastal management is effectively stalled when stakeholder involvement breaks down. The lack of buy-in to the ICM regime is reflected also in increasing questioning of the exercise of stakeholder involvement. Local management authorities frequently find themselves disempowered in the messy reality of decentralization of ‘political infighting, technical errors, and ensuing misinformation’ (Dressler et al., 2006, p. 812; Lowry et al., 2005). This is also manifest in the nation wide challenges in institutionalising people’s participation in decision-making and the formal recognition of community organizations (Heijmans and Victoria, 2001; Barut et al., 2003).
Le Tissier and Hills (2006) have argued that capacity building for ICM must build more on a holistic picture of governance aiming to create mechanisms for appreciating multiple stakeholder perspectives of what constitutes good management, rather than simplistic rational scientific measures. In Cagayan Province, this principle can be seen to be enacted through the establishment of a new provincial office to support the development of local governance in barangays and municipalities. The People’s Action Center (PAC) was instituted by the Governor in May 2007 in response to the gaps exposed in implementation of the LGC. Following the Governor’s provincial agenda Municipal Development Facilitators have been recruited for 145 barangays in the Province and are mandated to enable Barangays and others on the front line in the democratisation and improvement of livelihoods (Baian et al, 2007).

In the Philippine forestry sector, which served as inspiration for the country’s ICM regime, the transition from state-controlled to community-based management has also been compromised by fragile assumptions promoted by the state to control the forests. This is manifest in reductionist conceptions of the ‘community’ as a stakeholder unit which ignores local groups’ multiple identities (e.g. Gauld, 2000). It echoes concerns from other resource management experiences regarding the hiding of persistent ‘fence-and-lines’ management strategies behind a popular narrative of ‘partnership’ (Eder, 2005; Adams and Hulme, 2001). Globally, there has over recent decades been growing awareness of how environmental policy can rely on environmental definitions created by cultural and/or scientific elites and imposed in a local setting, leading to marginalisation of local stakeholders (e.g. Gómez-Pompa and Kaus, 1992; Colchester, 2004). Within the conservation movement at large these critics, which form part of the global struggle to redefine the environmental movement (Rowell, 1996), argue that ethical values are being co-opted by a positivist scientific and economic rationality, which removes environmental action from the public realm (Jepson and Canney, 2003; Roebuck and Phifer, 1999).

The attempt to formalise and legitimise the ICM regime and its assumptions through stakeholder involvement is visible in the claims that failure of ICM programmes results from a lack of awareness of the LGC responsibilities amongst LGUs (e.g. CRMP, 2004) and that there is a need to increase social acceptance of ICM (e.g. BFAR, 2003). This problem definition is extended to arguing that due to the diversity of stakeholder agendas, effective participation must be built strategically so as not halt the overall process of the project, e.g. through alliances with supportive leaders (White et al., 2005). If this includes strategic promotion of unchallenged assumptions behind ICM it risks further deepening the dominating role of international development banks, foreign aid agencies, and NGOs in promoting the worldview embedded in the ICM regime through the inserting of investment penetration to influence the shaping of development from specific neo-liberal premises (Nicholls, 1999; Grainger and Malayang, 2006). It also risks playing into the hands of local elites whose priorities often are contrary to that of the intended beneficiaries of ICM. In sum, it is necessary to realise that in localities such as the Babuyan Islands, the assumptions perpetuated by the ICM worldview collapse with destructive consequences for the victims and the envisioned sustainable development for the Philippines coastal environment.
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