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Short communication

Conservation Narratives and Their Implications in the Coral Triangle Initiative

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Abstract

Conserving coral reefs, sustaining fisheries, and ensuring food security are multi-faceted challenges. Six nations in the Southeast Asia Coral Triangle have agreed to a region-wide framework to address these challenges through the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI). Based on a review of documentation, selected discussions and ongoing work in the region, we offer an initial assessment of narratives influencing conservation practice in the CTI. Current efforts in the CTI are framed by a crisis narrative that emphasises the importance of maintaining critical ecosystems and baseline conditions. This narrative has a strong empirical basis but it can also exacerbate a dualistic view of people and nature. However, CTI documentation and programming also reflect a recognition of linked social-ecological change and the historical co-evolution of communities and coastal-marine systems. This emerging narrative places an emphasis on building resilience to change, rather than resisting change. We do not advocate here for a single narrative with which to frame policy responses in the CTI, but rather draw attention to the ways that mainstreaming of certain narratives will have material effects on initiatives and programmes promoted in this region of globally significant marine biodiversity.

Keywords: environmental change, livelihoods, marine, governance, policy, resilience, social-ecological, sustainability, Coral Triangle

INTRODUCTION

The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI) aims to protect a global biodiversity hotspot (CTI 2009a; Burke et al. 2012). The initiative reflects a multilateral agreement among six nations (known as the CT6): Indonesia, Malaysia, the Philippines, Timor Leste, Papua New Guinea, and the Solomon Islands. Financial and technical support is provided by the international donor and conservation communities. The significance of the Coral Triangle (CT) in terms of marine biodiversity is exceptional. The region encompasses approximately 5.7 million sq. km of ocean and coastal waters, and contains 76% of all known coral species (Hoegh-Guldberg et al. 2009). Coastal ecosystems in the region also directly support the livelihoods and food security of some 100 million people, while commercial fisheries alone provide over USD 3 billion per year to the CT6 (Hoegh-Guldberg et al. 2009).

In 2007, the CTI was proposed by Susilo Bambang Yudhoyono, the then President of Indonesia in response to significant and increasing degradation of coastal and marine environments in the CT region (Hoegh-Guldberg et al. 2009; Burke et al. 2012). The initiative focuses on mitigating threats to marine resources, "…through accelerated and collaborative action, taking into consideration multi-stakeholder participation…" (CTI 2009b: 1). The CTI is guided by a living and non-legally binding Regional Plan of Action (RPoA) and complementary

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National Plans of Action (NPoA) that respect each country's jurisdiction and existing marine resource protection initiatives. Adopted in 2009, the CT RPoA is core to the CTI and outlines a vision and policy agenda for regional conservation over a 10-year period, articulated in five regional goals (Table 1). This vision suggests that biodiversity conservation, fisheries sustainability, and food security outcomes are expected from the long-term investment in CTI regional goals.

Our purpose in this short communication is to provide an initial assessment of how CTI programmes, actors, project documents, and related literature reflect particular framings of conservation policy challenges and opportunities. Our commentary does not advocate for a single narrative with which to frame policy responses in the CTI, but brings attention to the ways that mainstreaming of certain narratives will have material effects on the design and implementation of initiatives and programmes (see Roe 1991; Fairhead and Leach 1995; Campbell 2002). In making a case for the benefits and complementarity of dual policy narratives, we highlight the limitations of one and the added value of another.

We identify the prevalence of a discourse of impending crisis (i.e., a crisis narrative) that is articulated in CTI documents and corresponding literature. The roots for this narrative stem from empirical evidence of ecosystem degradation and species extinctions, however, the narrative is limiting. In contrast, we also identify through our interviews and analysis of documents the emergence in the CTI of a second narrative about people, development and conservation that reflects ideas of adaptation and resilience (i.e., a resilience narrative). This latter narrative facilitates greater recognition of the long-term interactions of people and coastal-marine resources in the CT, the knowledge of coastal communities about coastal-marine systems, and the multiple ways in which coastal communities may cope with change, adapt and support transitions that lead to the maintenance of ecosystem processes and human wellbeing. The CTI has yet to fully integrate the lessons of resilience thinking, but as discussed below, it has picked up some of the language of this narrative and elements of it are expressed in efforts to manage connectivity, broaden participation, foster systems thinking, and encourage learning (*cf.* Biggs et al. 2012).

The CTI mandate is broad and encompasses fisheries management, food security, and climate change adaptation issues. However, we focus here on conservation policy narratives given that the initiative is supported, in large part, by international conservation organisations (The Nature Conservancy, Conservation International, and World Wide Fund for Nature) and framed primarily as a conservation effort. In doing so, however, we do not mean to imply that conservation objectives are separable from the other dimensions of the CTI's mandate, or the people and institutions promoting them. Instead, we view conservation as a useful entry point to consider differing policy narratives in the CTI and their implications.

Our assessment of the role of policy narratives in the CTI takes place in the context of: 1) our continuing work in the region as part of a project on coastal-marine transformations and adaptive governance; 2) a review of CTI and CTI-related documentation; and 3) semi-formal conversations and discussions with key actors. This short communication is reflective of the researchers' firsthand experiences and knowledge, including the first author's ongoing fieldwork in the Republic of Indonesia. The collection of formal CTI documents and related literature took place between February 2011 and April 2013. One hundred and thirty-two documents were identified and gathered from the grey and peer-reviewed literatures, and sourced from a number of relevant databases, such as the Coral Triangle Knowledge Network, Coral

Table 1

Goals and targets of the CTI

Goal 1: Designation and effective management of priority seascapes
Target 1: Priority seascape designed with investments plans completed and sequenced
Target 2: Marine and coastal resources within all priority seascapes sustainably managed by 2020
Goal 2: Application of an ecosystem approach to management of fisheries and other marine resources
Target 1: Strong legislative, policy, and regulatory frameworks in place for achieving an ecosystem approach to fisheries management by 2012
Target 2: Improve income, livelihoods, and food security in an increasingly significant number of coastal communities across the region, improved through a new sustainable Coastal Fisheries and Poverty Reduction Initiative by 2020
Target 3: Effective measures in place to help ensure exploitation of shared tuna stocks is sustainable, with tuna spawning areas, and juvenile growth stages adequately protected by 2020
Target 4: A more effective management and more sustainable trade in live-reef fish and reef-based ornamentals achieved by 2020
Goal 3: Establishment and effective management of marine protected areas
Target 1: Region-wide Coral Triangle Marine Protected Areas System (CTMPAs) in place and fully functional by 2020
Goal 4: Achievement of climate change adaptation measures
Target 1: Region-wide early action plan for climate change adaptation for near-shore marine and coastal environment, and small island ecosystems developed by 2012 and implemented by 2015
Target 2: Networked national centers of excellence on Climate Change Adaptation for marine and coastal environments are established and in full operation by 2013
Goal 5: Improved status of threatened species
Target 1: Improved status of sharks, sea turtles, seabirds, marine mammals, corals, seagrass, mangroves, and other identified threatened species by 2020

Source: CTI 2009a

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Triangle Center e-library, CTI Digital Resources Centre, Arc Centre of Excellence: Coral Reef Studies, and others. This collection provides a relatively comprehensive sample of project documents and reports with which to examine policy narratives influencing conservation practice in the CT. Semi-formal conversations and discussions were held with eleven experts from academia and the wider NGO community who are engaged in the CTI. Documents and interview notes were assessed for keywords (e.g., conservation, protect, local, fisheries) and concepts (e.g., learning, pluralism, governance, adaptive capacity, equilibrium) in an effort to distil in a preliminary way patterns in communication and language.

We make no claim to have articulated all narratives influencing policy and practice in the CTI at this point. However, the CTI is at a relatively early stage, and its programmes will influence conservation practice in the region over the long-term. Our view is that reflection on the underlying narratives framing explanations of key problems and subsequent policy choices can be of benefit in ongoing policy development and implementation in this globally important conservation effort. Moreover, this initial assessment provides a touchstone for more in-depth research on the underlying meanings, motivations, and implications for governance in the CTI (see http://www.communityconservation.net/).

POLICY NARRATIVES IN CONSERVATION PRACTICE

A policy narrative, or storyline, is a simplified description of a complex situation used by practitioners, bureaucrats, and policy makers to guide decision-making (Roe 1991). It has a beginning, where the problem is recognised, a middle, where the solution is conceptualised, and an end, where the desired outcome is achieved (Roe 1991). Acting as a 'rhetorical razor' (Cronon 1992) a narrative privileges certain ways of thinking (i.e., ideologies, scientific knowledge, perceptions about problems) while potentially marginalising others. Analysis of narratives, then, is a constructivist exercise in identifying the concepts, explanations, and processes that shape our perceptions of reality. Often, narratives position different actors in particular roles (e.g., victim, villain, or savior) (Roe 1991; Fairhead and Leach 1995; Campbell 2002). Dominant narratives are typically propagated by actors with power (e.g., governments, international conservation organisations) (Roe 1994). Such narratives may function as a political device through which certain actors and institutions claim rights to stewardship over resources, or undermine the claims of others (Fairhead and Leach 1995; Armitage 2004).

In its prescriptive nature, a narrative can have significant material ramifications for relationships and interactions among peoples and the environment (Fairhead and Leach 1995; Chapin 2004). Narratives are tied to underlying assumptions about, for example, the roles for experts and for communities in conservation (Agrawal and Gibson 1999; Campbell 2002), and the roles of science and scale in framing environmental problems (Brown and Purcell 2005; Campbell 2007). In turn, these assumptions structure policy choices. For example, Sievanen et al.'s (2013) examination of 'scalar narratives' in marine resource management in Fiji demonstrates how different narratives prioritise (or not) roles for science, local participation, and local knowledge in defining problems and solutions. Elsewhere, Brechin et al. (2003) and others have used narrative analysis to discuss the ways policy narratives impact local people's livelihoods, rights to resources, and legitimacy. In this regard, narratives can both reflect and shape political and power relationships, strengthening the power and control of some while disempowering others (Fairhead and Leach 1995; Campbell 2007).

Narratives can, often unintentionally, serve as blueprints for conservation policy, and have had profound impacts on conservation practice worldwide. Hutton et al. (2005), for example, demonstrate the influential role of narratives in the advocacy of preferred conservation models, livelihood strategies, and political processes. 'Fortress conservation' is a policy narrative, for example, which encourages strategies to reserve places for nature, and to separate humans and other species. Like their terrestrial counterparts, marine protected areas (MPAs) are similarly characterised by debates over conservation narratives (Gray 2010). International Union for Conservation of Nature and Natural Resources (IUCN) defines an MPA as "a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values" (Dudley 2008: 8). Globally, MPAs are highly diverse with regards to size, goals, and governance (Jentoft et al. 2011). Some have argued that MPAs, and marine conservation more broadly, have arisen and been shaped in the context of trends toward community-based approaches to conservation (Adams and Hulme 2001; Campbell 2002). More recently, MPAs may reflect the resurgence of 'back-to-barriers' conservation approaches emphasising a privileged role for science (Hutton et al. 2005), particularly in terms of large scale, transboundary, and ecoregional planning (Brosius and Russell 2003). Table 2 highlights these and other policy narratives that have, and continue to influence coastal-marine conservation practice. The CTI (and its goals) have undoubtedly been influenced by these broader conservation debates, and consideration of such trends is critical to understanding the development and persistence of policy narratives herein.

No single narrative has been absolutely dominant or implemented completely in conservation policy (Hutton et al. 2005). Different narratives are constantly overlapping, interacting and competing. Campbell (2002), for example, shows the interplay and co-evolution of protectionist and sustainability narratives about wildlife and biodiversity conservation in Costa Rica. Others have discussed similar overlap through analysis of narratives and counter narratives (Adams and Hulme 2001; Sievanen et al. 2013). Narratives do not need to be objectively 'true' to be widely adopted—they need only to fit with stakeholders' expectations or interests and to tell a compelling, seemingly plausible story (Roe 1991; Fairhead and Leach 1995). In any case,

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Table 2

Examples of general policy narratives in coastal-marine conservation practice

Narrative	Description	Key references
Fortress conservation	Human presence is incompatible with conservation of coastal-marine biodiversity. Conservation is framed by exclusion (or severe limitation) of human activities via e.g., creation of MPAs with no-take zones and prevention of consumptive use	Hutton et al. (2005)
Community conservation	Emphasis on the role and rights of 'community' in coastal-marine decision-making and policy creation. Conservation is framed by society-centered activities such as community-based conservation or locally managed marine areas (LMMAs)	Adams and Hulme (2001); Campbell (2002)
Pro-poor conservation	Focus on conservation as a tool for poverty reduction and social justice. Initiatives seek to generate net benefits for poor people (e.g., revenue sharing schemes, pro-poor wildlife tourism)	Brechin et al. (2003)
Large seascape (or bioregional) conservation	Emphasis on connecting small-scale interventions in a larger seascape or eco-regional scale via e.g., seascape-scale priority setting, regional MPA networks and public-private collaborations	Brosius and Russell (2003); Gray (2010)

Note: This table is not intended to be an inclusive listing of all policy narratives found in coastal-marine conservation practice.

once established, policy narratives tend to be very persistent, as is the case with the 'tragedy of the commons' narrative (Hardin 1968; Ostrom et al. 1999).

Our aim here is to explore the policy narratives emerging in the CTI, and to unpack some of the assumptions about the social actors and natural systems that are the focal point of conservation efforts. Our intent is to critique and reflect on the contributions of current narratives as evidenced through policies and practices, with an emphasis on highlighting the assumptions and practices of a second narrative. Taken together, these may yield complementary insights to enhance our understanding of social-ecological challenges to help managers and other stakeholders (e.g., researchers) catalyse more effective policy (Roe 1991). Changes to rhetoric may not necessarily equate to changes in policy and action (Campbell 2002). Nevertheless, there is value in surfacing narratives to foster critical reflection of conservation practices. While we afford equal footing to both narratives in this paper (i.e., the crisis and the resilience narratives) with regards to empirical support and explanation, the crisis narrative has a comparatively lengthier tradition in contemporary coral reef management (Bichof 2010) and natural resource management more broadly (see Campbell 2002; Hutton et al. 2005; Berkes 2010).

A CRISIS NARRATIVE IN THE CTI

A crisis narrative in the CTI has provided a primary motivation for action. The narrative is supported by scientists and international conservation organisations, and points to critical biodiversity and habitats in grave danger from diverse and relatively recent anthropogenic drivers of change (Carpenter et al. 2008; CTI 2009a; Hoegh-Guldberg et al. 2009; Burke et al. 2012). For example, the notion of an 'environment in crisis' is conveyed by international conservation organisations through their use of select imagery and rhetoric, and urgent calls for action. Organisations, for example, have portrayed "a fragile web of life [that] is unraveling" (WWF 2013), and emphasise the need to *protect* and *preserve* the world's oceans and biodiversity (CI 2013; TNC 2013). In the CTI, as elsewhere, the narrative may originate in a view of ecosystems in a 'balance of nature', which positions change as temporary, or a deviation from the norm, and therefore capable of resolution (cf. Scoones 1999). In turn, this set of assumptions stresses the urgency of conservation action designed to maintain or stabilise ecosystems, and more often than not, the narrative has implied the application of technical expertise and high-level, multilateral action. Zimmerer (2000) has illustrated how proponents of such policy narratives are usually acting in good faith, and advocate their views as a means to improve environmental and social conditions they deem unsatisfactory. In this regard, a crisis narrative in the CT offers a powerful tool to gain the attention of the conservation community, attract political will and funding, and to motivate civil society to action. However, as articulated elsewhere (Chapin 2004) a crisis narrative can lead to oversimplification.

In the CT, a coral reef 'crisis' narrative (Bischof 2010) points to pristine ecosystems approaching tipping points (Carpenter et al. 2008). In this regard, the CT RPoA emphasises a need to address threats that emerge from "…rapidly expanding populations, economic growth and international trade…" (CTI 2009a: 5). However, a disproportionate focus on human impacts and disregard of benefits inevitably perpetuates a human-nature dualism, and downplays the historical co-evolution of oceans and coastal communities (Shackeroff et al. 2009). Unsurprisingly, there is a deficit of understanding about the social dimensions of resource use and conservation in the CTI (Fidelman et al. 2014). As may be expected (Lubchenco et al. 2003), policy responses under this crisis narrative aspire to protect, maintain, and restore healthy ecosystems, often by excluding (or severely limiting) human activity. Central to most marine conservation interventions in the CT is the intention to control human interaction through temporal restrictions or fisheries closures, fishing quotas, gear or vessel controls, and more commonly, no-take areas (Foale et al. 2008). MPAs under a crisis narrative often prioritise biodiversity conservation, scientific input, and exclusion of human activity (*cf.* Lubchenco et al. 2003) over strategies that adopt a historical humans-in-nature perspective. For example, a core goal of the CT RPoA is to establish a marine protected area system in which at least 20% of each major marine and

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coastal habitat type is listed in strictly protected 'no-take replenishment zones' (CTI 2009a).

A crisis narrative in the CTI has lead to the broadening of conservation efforts to regional scales. The framing of change in the CT as a 'global marine crisis', as noted by Burke et al. (2012), validates high-level, multilateral action by the CT6. The CTI is a self-proclaimed 'large tent' under which stakeholders and initiatives "…can combine and coordinate their actions to achieve shared visions for communities, large-scale seascapes, entire countries, markets, and the CTI Implementation Area as a whole" (CTI 2009a: 26). An emphasis on regional scales is consistent with increasing support for multi-level or polycentric governance approaches elsewhere (Ostrom 2010). However, the CTI's focus on coastal-marine governance at regional levels may also be problematic due to remarkably fragmented and diverse institutional settings (Fidelman and Ekstrom 2012). In practice, polycentrism in the CTI is still in a form of centralised planning that appears to be a mismatch with local-level action (Mills et al. 2010), where organisations at the sub-national and local levels have oft been left out of deliberations (Fidelman et al. 2014). For example, studies in CT nations have shown that interests of the international conservation agenda may be at odds with the consumptive use values prioritised by local resource users (Ferse et al. 2010; Clifton and Majors 2012). Likewise, CT nations are constrained in their efforts to coordinate development and environmental policies, or internal national and provincial policies (Fidelman and Ekstrom 2012; Foale et al. 2013). As such, a simplified crisis narrative driven by regional and national-level actors may be less likely to provide an adequate basis to reflect diverse social-ecological interactions at local scales, or facilitate choices about trade-offs involved in applying competing CTI objectives (Fidelman et al. 2012; Foale et al. 2013).

Generating and appealing to a crisis narrative further justifies a role for outsiders and technical 'experts' in CT policy processes (*cf.* Roe 1991) since at least some of the drivers of change are attributed to globalisation. The CTI is partnered with a number of high-level donors, multi-lateral government actors and international conservation organisations, many of whom are recognised as full partners in implementation (Green and Mous 2008). External financial support for the CTI is provided by the government of the USA in partnership with Conservation International, The Nature Conservancy, and the World Wide Fund for Nature (USD 42 million); the Global Environment Facility in collaboration with the Asian Development Bank (USD 90 million), and the Australian government (AUD 2.5 million) (Foale et al. 2013). Additionally, the CT Support Partnership—a five-year, USD 32 million dollar project funded by the United States Agency for International Development (USAID)—is a consortium of international conservation organisations closely involved with CT6 governments to offer "…technical support and strategic guidance from the world's leading conservation experts" (USCTSP 2013).

Often, conservation interventions have underplayed the role and expertise (knowledge) of indigenous and local communities in the CT region (Ferse et al. 2010; Clifton and Majors 2012; Glaser et al. 2012). The absence or inadequacy of local input is a key challenge to local acceptance and conservation effectiveness (Christie 2004; Cinner 2007). The CTI (2009a: 8) RPoA advocates 'people-centered biodiversity conservation' and calls for the involvement of indigenous and local communities. Yet, it simultaneously advocates that CTI goals and implementation activities be based on 'solid science' (RPoA guiding principle 2) (CTI 2009a: 8). This has prompted greater efforts to generate scientific information in support of CTI goals (Fernandes et al. 2012; Mustika et al. 2012) and has prioritised scientific input in the design and delineation of MPAs, ecoregions, seascapes and CT boundaries (Green and Mous 2008; Veron et al. 2009). It is therefore imperative to acknowledge inherent challenges in simultaneously meeting all CTI goals. Instead, emphasis in research and policy should be placed on reconciling competing goals (between e.g., local communities and conservation organisations, Ferse et al. 2010), and to follow through with efforts to bridge multiple knowledge systems (Foale 2006).

FROM CRISIS TO RESILIENCE IN THE CTI

We have emphasised the influential role that a crisis narrative has played in framing explanations and actions in the CTI. This policy narrative may overlook opportunities for policy reflective of social-ecological interactions and recognition of inherent uncertainty in understanding the dynamics of change through time (Scoones 1999). As we have noted, multiple narratives often co-exist, and indeed the policy documents and interventions in the CTI also reflect elements of a 'resilience' narrative. This narrative exhibits sensitivity to the presence of long-term and dynamic human-nature systems; strong linkages between people and ecosystems; development and conservation; and the value of considering conservation action through the lens of change and uncertainty (Table 3). Adopting Roe's (1991) storyline analogy, a resilience narrative points to the 'problem' of dynamic human-nature systems under stress from change and uncertainty, where the 'solution' underscores how best to build capacity to cope with unexpected change (through policies that e.g., encourage learning and flexibility, foster diversity and redundancy, etc., see Biggs et al. 2012), and where the 'desired outcome' reflects a resilient social-ecological system capable of dealing with change to meet current and future societal needs.

A resilience narrative moves us away from linear thinking and subscribes to an understanding of non-equilibrium ecosystem dynamics and linked social-ecological systems (Berkes and Folke 1998; Scoones 1999; Zimmerer 2000). Resilience thinking expresses social-ecological change by way of heuristics (e.g., adaptive cycle, panarchy) that recognise dynamic feedbacks, and the potential for surprise. In this regard, a resilience narrative in the CT frames humans as part of a coupled, co-evolving system (Berkes and Folke 1998; Berkes et al. 2003), and accepts change as integral to the system's functioning (Gunderson and Holling 2002) (i.e.,

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Table 3

Comparing two conservation policy narratives for the Coral Triangle

Characteristic	Crisis narrative	Resilience narrative
Critical concern	Biodiversity and habitats in danger from diverse anthropogenic drivers of change. Human activities disrupt a 'balance of nature'	Dynamic human-nature systems under stress from unpredictable change and uncertainty. Emphasis on enabling self-organisation and small-scale transformations
Reference point for change	Historic condition ('pristine' baselines)	Multiple potential states, rather than equilibrium. Importance of variability over space and time
Human and nature interactions	Human-nature dualism	Co-evolving human-nature view
Response emphasis and goal(s)	Aspire to protect, maintain, and restore ecosystems by controlling human activities and interactions with nature	Aspire to build adaptive capacity, and encourage learning and flexibility. Maintain diversity and redundancy in the face of uncertainty and surprise
Role of expertise	Scientists and managers as experts. A basis of 'solid science'	Emphasis on pluralism in management and knowledge. Technical expertise as one among many valid sources of knowledge

emphasis on flux rather than fixity, as described elsewhere by Zimmerer (2000)). Hence, a resilience narrative does not advocate for some ideal system state, given that in accepting change and uncertainty an idealised equilibrium state does not exist. Instead, actions that work towards building resilience to change and disturbance are advocated. Policy-relevant principles for enhancing resilience include, for example, maintaining diversity and redundancy, managing connectivity, encouraging learning, and promoting polycentric governance systems (see Biggs et al. 2012 for full list).

Policy responses framed by a resilience narrative shift away from efforts to control change and toward responses aimed at managing the capacity of a social–ecological system to cope with, adapt to, and shape change within the context of uncertainty (Berkes et al. 2003). There is a strong basis for this type of approach through adaptive management (Walker et al. 2004; Armitage et al. 2007) and ecosystem-based management (Slocombe 1993; McLeod et al. 2005). In this regard, the CT RPoA references a need for "…a flexible and adaptive approach… since all issues cannot be anticipated…" (CTI 2009a: 26). This view manifests in both the emphasis on an ecosystem approach to fisheries management (RPoA goal 2) and climate change adaptation measures (RPoA goal 4), which are designed to take into account the uncertainty of interacting biotic, abiotic, and human dimensions.

High value is placed on coalescing (ecosystem) connectivity at multiple scales in the CT (Green and Mous 2008; Fernandes et al. 2012) via, for example, large-scale ecosystem approaches such as the Sulu-Sulawesi Seascape Initiative (CI-P 2013) and the design of MPA networks such as that in Kimbe Bay, Papua New Guinea (Green et al. 2009) or the province-wide network of freshwater and MPAs in Bali, Indonesia (Nyegara Gunung 2014). Such initiatives reflect a policy narrative that may move conservation actors towards a stronger recognition of broader spatial and temporal scales, rather than over-emphasising the significance of smaller, transient events. MPAs under a resilience narrative likewise emphasise connectivity (Green et al. 2011; Walton et al. 2014), but they too advocate for integrated approaches that recognise strong linkages between people and ecosystems, and development and conservation. We find evidence of this in the CT in the application of multi-use zoning to balance multiple objectives and priorities (e.g., the Nusa Penida MPA, Weeks et al. 2014), and decentralised management via, for example, locally managed marine areas (LMMAs) (Green et al. 2009; Cohen et al. 2012).

Policy and management approaches that accept uncertainty and surprise, foster learning and flexibility (i.e., embrace change and focus on ability to adjust), and build the resilience of ecosystem services (see Berkes et al. 2003; Chapin et al. 2009; Hughes et al. 2010), can help shift expectations away from a return to static or 'normal' baseline ecosystem conditions. As such, a resilience narrative is a path to policy that will encourage recognition of the limits of technical expertise, seek to engage with coastal communities and their knowledge, and countervail the human-nature dualism encouraged by a crisis narrative. This thinking increasingly underpins practices such as marine ecosystem-based management (McLeod et al. 2005), and highlights the need to consider transformative change when existing conditions (ecological, social or economic) are untenable (Gelcich et al. 2010).

The CTI is built upon multi-national alliances and cooperation, but success ultimately rests on connecting local-level management to the higher-level conservation policy and planning (Mills et al. 2010; Fidelman et al. 2012; Rosen and Olsson 2013). CTI programmes and policies are more likely to engage with local or customary management practices and sea tenure systems (Weeks et al. 2010; Aswani 2011) where narratives do not frame the economic needs of local actors as sole drivers of the ecological crisis. A more inclusive approach to conservation policy is well recognised as crucial to either clarify synergies or legitimately debate trade-offs between conservation and livelihood objectives (Ban et al. 2013; Foale et al. 2013; Fidelman et al. 2014). Finding forms of locally meaningful participation and the inclusion of different types of knowledge remains an important challenge in the CT (Foale 2006; Ferse et al. 2010; Glaser et al. 2012). Framing a policy narrative around social-ecological resilience and co-evolutionary change is one path to conservation interventions that reflect diverse drivers in the CTI context, and this encourages a more open arena for dialogue among stakeholder groups.

As CTI actors engage more with lessons put forward by resilience thinking (or a resilience narrative) a more complete view of social-ecological interactions in the CTI will follow.

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However, barriers to its uptake are significant. Skeptics of resilience thinking point out that the emphasis on ecological systems amongst resilience scholars has often overlooked the role of human agency in shaping system dynamics (Davidson 2010). Furthermore, while a resilience narrative has advantages, it can be challenging for policy makers to fully embrace uncertainty due to the widespread desire for stability, and the propensity toward short-term planning aligned with political cycles. In general, the application of resilience thinking to marine and coastal management is regarded as a work in progress (Chapin et al. 2009; Berkes 2010).

CONCLUSIONS

Over a 10-year period following ratification of the CT RPoA, the CTI anticipates "…achieving tangible and measurable improvements in the health of our marine and coastal ecosystems, in the status of our fisheries, and in the food security and well being of the communities which depend on them" (CTI 2009a: 7). How and if these outcomes will be achieved is related to the structuring of policy choices, their underlying assumptions about coastal communities, and the roles of other actors as drivers of change. Our initial reflection on the narratives framing the CTI provides an opportunity to identify how policy approaches are situated in modes of explanation that reflect a crisis, and those approaches that reflect a more forward looking view on the role of communities and conservation interests in building social-ecological resilience. For instance, we have outlined here the limits of basing actions on understandings of ecosystem change that do not expressly recognise the two-way feedback between humans and ecosystems (Berkes et al. 2003). This initial discussion is thus an attempt to encourage an approach to conservation policy development and management that can incorporate resilience thinking as part of a narrative that is more integrative and systems-oriented (Walker and Salt 2006; Ban et al. 2013).

The evidence of substantive changes in biodiversity and habitat quality raises concern about impending ecological thresholds, and it is a strong motivator for action. However, individual narratives are not sufficient for explaining phenomena in all cases, and adopting the language of any particular narrative can constrain the identification of solutions to social-ecological challenges. This short communication is not an effort to argue for one narrative over another, but rather to emphasise the potential for more diverse and flexible interpretations of conservation action when multiple narratives are considered. A crisis narrative can be complemented with different explanations and perspectives that integrate social-ecological linkages, view change as part of long-term co-evolutionary processes, and which are sensitive to relationships of power among conservation actors (e.g., governments, international conservation organisations), and coastal communities. Identifying how different narratives and modes of explanation and action flow from those narratives contributes to integrative understanding and more carefully conceived conservation policy in the CTI.

We argue that the crisis narrative as it has emerged in the CTI is limiting, rather than wrong, with material consequences for conservation initiatives and programmes. Fidelman et al. (2012) and others have pointed to the difficulty of reconciling diverse objectives across levels of governance, and an overwhelmingly complex institutional setting (Fidelman and Ekstrom 2012; Foale et al. 2013). Teasing out the narratives—emphasising assumptions about drivers of change and consequential solutions they enable—can help bring to light the ways that particular conservation or other agendas are being promoted by certain groups, and which may not always be leading towards attainment of the CTI's goals.

Drawing attention to the different policy narratives associated with the CTI highlights the need for additional research on the underlying meanings, motivations, and implications of narratives for governance. It raises additional questions such as, how can we reconcile diverse conservation actions and practices? Whose knowledge and beliefs are drawn upon? Who gains power? Who loses it? What happens when governance is rescaled? An important but yet unexplored avenue in environmental governance concerns bridging organisations (Olsson et al. 2007), and the role they might play in perpetuating different narratives, and hence, different conservation outcomes. Our initial assessment offers preliminary evidence of the potential for translation of the resilience narrative beyond rhetoric, and into practice. The CTI has yet to fully integrate the lessons of resilience thinking, although some of the language of this narrative is increasingly reflected in CTI planning and activity reports (e.g., in seascape-level management, long-term thinking, and fostering connectivity and regional learning networks). Ultimately, the contributions of additional policy narratives in the CTI will play out over the long-term when the material outcomes of those narratives can be compared and contrasted.

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