

Outcomes and Experiences from a Small Grant Scheme in Support of Marine Resource Governance

Resultados y Experiencias de Unsistema de Pequeñas Subvenciones en Apoyo a la Gobernabilidad de los Recursos Marinos

Resultats et Expériences d'un Régime de Petites Subventions en Appui à la Gouvernance des Ressources Marines

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ABSTRACT

The *Marine Resource Governance in the Eastern Caribbean Project* (MarGov project) implemented by the Centre for Resource Management and Environmental Studies (CERMES), at the University of the West Indies, Cave Hill Campus, has been undertaking applied research to address the critical need to build capacity and network connections for adaptation and resilience into present and planned marine resource governance initiatives in the eastern Caribbean. In addition to the academic aspects of the MarGov research programme, small grants to support complementary, high quality applied research integral to the project were made available to project partners. Eight small grants were awarded and implemented by both governmental and non-governmental entities - Caribbean Natural Resources Institute (CANARI), Barbados Fisheries Advisory Committee (FAC), Grenada Fisheries Division, Sustainable Grenadines (SusGren) project, Caribbean Network of Fisher Folk Organisations (CNFO), St. Lucia Department of Fisheries and St. Kitts and Nevis Department of Marine Resources. Research focused on fisheries management planning, governance arrangements, participatory decision-making mechanisms for the sea urchin fisheries in Grenada and St. Lucia; strengthening collaboration and developing adaptive capacity of fisher folk and fisher folk organisations in the Grenadines and the region; improving governance through information exchange and demonstration, analysis of institutional frameworks and capacity in Barbados and Trinidad and Tobago; and fisheries management planning based on the ecosystem approach to fisheries (EAF) in St. Kitts and Nevis. This paper reports on the outcomes of this research and the small grant experience for the grantees and CERMES.

KEY WORDS: Grants, marine resource governance; eastern Caribbean

INTRODUCTION

In the Caribbean region, fisheries play a major role in the socio-economic, nutritional and cultural well-being of countries with multi-species small-scale fisheries (SSF) being of particular importance (Mahon 2002, Fanning et al. 2009). It is estimated that more than 200,000 people in the region are directly employed, either full-time or part-time, as fishers. Additionally, approximately 100,000 people are involved in the processing and marketing of fish with additional jobs in other supporting industries. CARSEA (2007) estimated more than 1.5 million people in the region rely on commercial fishing for their livelihood. Fishing earns approximately USD 1.2 billion per year (equivalent to about 200,000 MT of fish and fishery products) in export earnings, with the U.S. being the principal market. With the exception of the 2007 Caribbean Sea Ecosystem Assessment (CARSEA) report, there have been no recent region-wide assessments of fisheries, particularly SSF in the Caribbean region, although there have been several sub-regional assessments of fisheries and other aspects of the marine environment (Mahon and Escobar 2009).

Most Caribbean coastal and marine resources are under stress from issues including overexploitation, degradation of marine ecosystems, and limited or poor management, so they are not making an optimum contribution to sustainable socio-economic development in the region (Fanning et al. 2009, CARSEA 2007, Mahon and McConney 2004). This is especially true for the many small-scale fisheries of the eastern Caribbean which are complex adaptive social-ecological systems. Conventional fisheries models and approaches to fisheries management have not been successful in enabling or enhancing adaptive and resilient fisheries systems. Additionally, trans-boundary marine resource governance has been difficult and ineffective. Recognition of and understanding the nature of these issues outlined above are increasing and efforts are intensifying to address them, for example in the Caribbean Large Marine Ecosystem (CLME) Project. Participatory approaches such as co-management and sustainable livelihoods as well as an ecosystem approach to fisheries management are being explored, in parallel with more integrative and effective means of assessing conditions, learning and developing successful governance arrangements.

One emerging line of thinking is that the most appropriate approach is to guide SSF towards self-organisation, adaptability and resilience through a suite of enabling inputs, based on agreed principles and procedures (Folke et al. 2002, Mahon et al. 2008). If all players are engaged, informed, and empowered, then the chances for a successful, sustainable, and equitable outcome are greatest (Diamond 2005). Given the issues facing fisheries in the eastern Caribbean, there is a need for good governance in the region. Marine resource governance involves dynamic institutional and governance structures and processes that permit key management interventions at the appropriate scales and times (Anderies et al. 2006). There is

an urgent need to build capacity, and network connections for adaptation and resilience, into present and planned marine resource governance in the eastern Caribbean. To assist in addressing this need, the Centre for Resource Management and Environmental Studies (CERMES) at the University of the West Indies, Cave Hill Campus, has been undertaking applied research on marine resource governance in the eastern Caribbean through the *Marine Resource Governance in the Eastern Caribbean Project* (MarGov project). MarGov is using complex adaptive social-ecological system perspectives to understand governance related to small-scale fisheries in the eastern Caribbean. It is applying the results to an examination of how present and planned marine resource governance initiatives can be made more adaptive and resilient to the benefit of a diverse array of stakeholders at various scales in the sub-region.

The five-year project funded by a grant of nearly US\$900,000 from the International Development Research Centre (IDRC), Canada, is part of a major research programme on coastal and marine resource governance aimed at sustainable development. It will generate lessons applicable to the wider Caribbean and beyond. In addition to the academic aspects of the MarGov research programme, small grants to support complementary, high quality applied research integral to the project were made available to project partners. This small grant facility is an integral part of the project, focusing on adaptive learning; communication research; development of indicators; building capacity; scaling up; sharing and getting feedback on research outputs (especially lessons learned); and implementation or testing of recommendations in order to change attitudes, behaviour and policy under various systems of governance. The small research grants component of the project addresses the objectives of:

- i) Increasing the capacities of partners to undertake their own research and use of the results by involving them in the participatory applied research; and
- ii) Facilitating through outreach and information, the incorporation of the research results into initiatives related to marine resource governance for fisheries.

The small grant facility will provide project partners with tangible benefits and incentives to sustain the incorporation of research into conservation or development initiatives and governance reforms. This paper reports on

the process and products of the small grants, and the experiences of the grantees and CERMES.

METHODS

The small grants facility of the MarGov project was initiated six months after project implementation in the third quarter of 2007 and ended new granting in the second quarter of 2010. Project partners were first informed about the small research grants component of the project at the CERMES MarGov Project Inception Workshop held at the UWI, Cave Hill Campus, Barbados, from 15 - 16 May 2007, and it was promoted up to the Workshop on the Application of Resilience Thinking to Fisheries Governance in the Eastern Caribbean, UWI Cave Hill Campus, Barbados, 1 - 2 September 2010.

Small grant applications were open to national and regional organisations and departments (governmental and not-for-profit) that could assist with aspects of the research. The MarGov project was designed to provide up to 10 small grants, 2 - 3 grants per year, each up to US\$8,750, for the duration of the project (see Table 1). The provision for grant splitting was available. The recommended duration of the grants was ideally between 4 - 6 months. Applicants that successfully completed a grant were eligible to apply for another. The granting process began closing in August 2011, six months before project end so as to facilitate proper documentation of all outputs.

CERMES ensured that the activities funded under the small grants facility were directly linked to overall MarGov project objectives (Table 2) were innovative with learning opportunities built into the research, so that the facility was not a funding source for 'business as usual', and would preferably support ongoing research and communication. The activity selection criteria and implementation process for the small grants reflected these principles.

The application, review and disbursement processes were quite simple. Potential grantees were provided with a grant information and process package. The CERMES MarGov team assisted applicants to successfully complete the applications. A multi-stakeholder participatory monitoring and evaluation (PM&E) core group was established to select and monitor the small grants. The composition is below.

- i) Caribbean Natural Resources Institute (CANARI)
- ii) Caribbean Network of Fisherfolk Organisations (CNFO)

Table 1. Small grant facility annual budget allocations in the project proposal.

Research partner small grants	Year 1 (2 offered)	Year 2 (3 offered)	Year 3 (3 offered)	Year 4 (2 offered)	Granting was implemented by the start of the 3 rd quarter of 2007 and closed in the 2 nd quarter of 2010 calendar years. USD 8,750 was the maximum for an individual grant but provision was made for splitting grants
Grant 1	8,750	8,750	8,750	8,750	
Grant 2	8,750	8,750	8,750	8,750	
Grant 3	-	8,750	8,750	-	
Annual total	17,500	26,250	26,250	17,500	

Table 2. Goal and objectives of the MarGov project.

Goal	Objectives
To understand marine resource governance related to small-scale fisheries and coastal management in the eastern Caribbean using complex adaptive system (CAS) and social-ecological system (SES) concepts	<ul style="list-style-type: none"> • To construct a conceptual framework for applied research on marine resources governance in the Car- • Investigate governance in the context of small scale fisheries in the eastern Caribbean primarily using • Increase the capacities of partners to undertake their own research and use the results by involving • Facilitate through outreach and information, the incorporation of the research results into initiatives • Establish applied research into marine resource governance as a new demand-driven programme.

iii) Caribbean Regional Fisheries Mechanism (CRFM)

iv) Environment and Sustainable Development Unit (ESDU)

v) An independent advisor (former IDRC senior officer)

vi) Panos Caribbean (served from 2010 to 2012)

vii) The Cropper Foundation (served from 2007 to 2010)

On approval of the small grant application a one-page letter of agreement formed the contract between CERMES and the grantee. On initiation of small grant implementation, the CERMES MarGov team maintained frequent interaction with the grantees. This helped to further integrate the grant activities into the research process and outputs. Additionally, the MarGov communication assistant ensured that grant information was regularly shared with a wider audience via newsletters and policy briefs. The project manager was responsible for reporting on the small grant process with inputs mainly from the grantees and the review panel.

A brief (ten questions) survey of grant recipients was conducted via email to determine experiences with, and assist in the evaluation of, the small grant component of the MarGov project. The results are reported here and discussed next.

RESULTS

Small Grant Activities

In total, eight small grants were awarded between October 2007 and December 2010 and implemented by both governmental and non-governmental entities - Caribbean Natural Resources Institute (CANARI), Barbados Fisheries Advisory Committee (FAC), Grenada Fisheries Division, Sustainable Grenadines (SusGren) project, Caribbean Network of Fisherfolk Organisations (CNFO), St. Lucia Department of Fisheries, and St. Kitts and Nevis Department of Marine Resources. Research focused on:

i) Fisheries management planning, governance arrangements, and participatory decision-making

mechanisms for the sea urchin fisheries in Grenada and St. Lucia,

ii) Strengthening collaboration and developing adaptive capacity of fisher folk and fisher folk organisations in the Grenadines and the region,

iii) Improving governance through information exchange and demonstration, analysis of institutional frameworks and capacity in Barbados and Trinidad and Tobago, and

iv) Fisheries management planning based on the ecosystem approach to fisheries (EAF) in St. Kitts and Nevis (Table 3).

CANARI received two small grants, the second of which allowed an increase in scope of the first grant and allowed analysis of the data collected from the previous grant. The Barbados FAC and the first CANARI small grant were terminated with mutual agreement due to lack of capacity that stalled implementation and could not be overcome by the CERMES team.

As noted in the previous section, a pre-condition of the granting process was that the activities funded under the small grants scheme were directly linked to overall MarGov project objectives (Table 2). The purpose of the small grants, the specific areas of research and linkage to the MarGov project are outlined in Table 4.

The proposed and actual outputs of the small grant activities are summarised in Table 5. Small grant research has been published as CERMES Technical Reports or MarGov project documents (e.g. Haynes et al. 2009, Phillip and Isaac 2010, Department of Marine Resources 2011, Sandy et al. 2011) and may be downloaded from the CERMES website <http://cavehill.uwi.edu/cermes>.

Table 3. MarGov small grant recipients, grant title duration and grant status.

Recipient	Grant title	Actual duration
Caribbean Natural Resources Institute (CANARI)	Institutional framework and capacity for fisheries governance in Trinidad and Tobago	Oct 2007 – Oct 2008
Grenada Fisheries Division in association with the Agency for Rural Transformation	Sea urchin fishery governance in Grenada	May 2008 – Nov 2009
Barbados Fisheries Advisory Committee (FAC)	Improving governance through the Barbados Fisheries Advisory Committee (FAC)	Aug 2008 – Dec 2009
Sustainable Grenadines Project	Strengthening fisher folk collaboration in the Grenadines	Nov 2009 – Aug 2011
Caribbean Network of Fisherfolk Organisations	The adaptive capacity of the Caribbean Network of Fisherfolk Organisations	Jan 2010 – Feb 2012
Department of Fisheries, St. Lucia	Formalising a Participatory Decision-Making Mechanism for the Management of Sea Urchin Resources in St Lucia	Apr 2010 – Feb 2012
Department of Marine Resources, St. Kitts and Nevis	Preparing for fisheries governance in St Kitts and Nevis based on the ecosystem approach to fisheries (EAF)	Oct 2010 – Jun 2011
Caribbean Natural Resources Institute (CANARI)	Institutional framework and capacity for fisheries governance both at the national level and in a few selected regions	Dec 2010 – Sep 2011

Table 4. Small grant purpose and areas of research linked to MarGov objectives.

Purpose	Specific Areas of Research
Institutional framework and capacity for fisheries governance both at the national level and in a few selected regions (grants 1 and 2)	
<p>To finalise the analysis of the current institutional framework and capacity for fisheries governance both at the national level and in a few selected regions (e.g. N.E. Trinidad, S.W Tobago) in Trinidad and Tobago, with a view to contributing to a better understanding of:</p> <p>a) characteristics of networks that are relevant to resilience and adaptability of fisheries governance;</p> <p>b) the kinds of interventions and governance structures that have been effective in enhancing adaptive capacity and enabling self-organisation.</p> <p>This project will finalise the analysis of data from a previous MarGov project.</p>	<ul style="list-style-type: none"> • Build the capacity of a MarGov project partner (CANARI) • Contribute to the MarGov communications strategy through publication of the project outputs on the CANARI website and incorporation of the finding as a case study in its training workshops • Identification of governmental, private sector and non-governmental stakeholders in national fisheries governance in Trinidad and Tobago and in one or two selected local areas • Stakeholder analysis, e.g. basis and source of power, representation on formal bodies, capacity for governance, areas of conflict, gaps and roles in policy • Network analysis of key stakeholders or whole network analyses of selected institutions • Survey of objectives and outcomes of capacity building initiatives directed at selected fisher folk organisations in the past 3-5 years, and their relevance to and effectiveness in enabling self-organisation and adaptive capacity • *analysis of the role of women in marine resource governance will be a cross-cutting theme
Sea urchin fishery governance in Grenada	
<p>To develop a draft fisheries management plan and governance arrangements for the Grenada sea urchin fishery, using ecosystem-based and sustainable livelihood approaches to fisheries management.</p>	<ul style="list-style-type: none"> • Developing a fisheries management plan (FMP) for the Grenada sea urchin fishery (closed since 1995), taking into account ecological, economic, social, cultural, and political information. • Devising participatory governance arrangements that involve networks of fishers and their organisations in decision-making, with adaptive co-management as an arrangement for governance • Capacity building among fishers to improve their effectiveness in communicating and influencing policy that enables self-organisation and develops adaptive capacity for governance and livelihoods

Table 4 (continued).

Purpose	Specific areas of research
Improving governance through the Barbados Fisheries Advisory Committee (FAC)	
<p>In the contexts of the legal mandate of the 1993 Fisheries Act, as amended in 2000, and the new (2008) policy mandate of the new fisheries minister for the FAC to serve as a major link between the minister and the fishing industry, the FAC will seek to promote and facilitate the involvement of all stakeholders in the Barbados fishing industry in improving governance through information exchange and demonstration.</p>	<ul style="list-style-type: none"> • The FAC will be a research partner and the target institution in the MPhil research addressing national level policy enabling environment and self-organisation • The FAC will conduct research related to MarGov and review the FAC co-management study (McConney et al. 2003) that identified several areas of governance that needed to be addressed • The FAC will share information on networks and governance as it is developed by MarGov • The FAC will test methods of communicating with the fishing industry that should facilitate the dissemination of information and influence fisheries policy development and implementation
Strengthening fisherfolk collaboration in the Grenadines	
<p>To establish governance arrangements to strengthen fisherfolk collaboration in the Grenadines at a multi-island, transboundary scale to address shared fisheries issues.</p>	<ul style="list-style-type: none"> • Updating information on shared fisheries issues • Improving the network of fishers on each island and amongst islands • Improving collaboration among fishers of the Grenadines and existing PFOs, NFOs and the CNFO • Improving collaboration between Grenadines fisherfolk and the two governments • Building the capacity of Grenadines fisher folk to participate in any fisher folk organisation that serves the Grenadines • Establishing a network fisherfolk organisation specifically for the Grenadines if this is warranted and feasible.
The adaptive capacity of the Caribbean Network of Fisherfolk Organisations	
<p>To further develop the adaptive capacity of the CNFO through enhanced learning by addressing three specific areas in its operational plan for 2009-2010 that are not currently funded through other means.</p>	<ul style="list-style-type: none"> • Develop and disseminate simple systems for participatory monitoring and evaluation (PM&E) of CNFO-guided activities • Develop deeper understanding about what EAF is with identified linkages to fishers' perspectives and current fishing activities, and share widely with all FFOs • Develop sets of lessons learned from project experiences to share among all FFO levels in all CNFO countries
Formalising a participatory decision-making mechanism for the management of sea urchin resources in St Lucia	
<p>To mainstream a participatory mechanism that facilitates sustainable management of sea urchin resources through an approach that allows key stakeholders to be involved in resource assessment, awareness-building and decision making in terms of resource management and use. The overall objective of the initiative is to empower users of the resource and help to develop their ability to use the resource sustainably.</p>	<ul style="list-style-type: none"> • Training for sea urchin harvesters, enforcement officers and representatives of fisher cooperatives and CBOs in relevant aspects of sea urchin biology and ecology; resource dynamics; past and present resource uses within the region; key threats and opportunities; and management approaches/options • Participatory resource and fishery assessments in traditional harvest areas and other keys areas where the resource is found • Participatory GIS mapping of habitats, resource distribution and status, and other features of the resource and fishery • Participatory stakeholder analysis and situational analysis as a basis for determining the scope, membership and <i>modus operandi</i> of a participatory mechanism for managing sea urchin resources • Meetings and activities with key stakeholders to test mechanism • Creating and disseminating low-cost communication to support sustainable management
Preparing for fisheries governance in St Kitts and Nevis based on the ecosystem approach to fisheries (EAF)	
<p>To inform the introduction of inter-sectoral policy, plans and management such as via the ecosystem approach to fisheries (EAF) that is being promoted by several regional and international agencies and projects and is facilitated by the restructuring of the Department of Marine Resources in April 2010</p>	<p>General visioning for EAF in St. Kitts and Nevis Determine capacity development required to get the fisheries authority and fishing industry to the point of engaging in EAF Determine key EAF entry points for success.</p>

Table 5. Proposed and actual activities/outputs of small grants.

Grant	Activities/Outputs
CANARI	<p><i>Proposed</i></p> <ul style="list-style-type: none"> • CANARI staff trained by CERMES in network analysis through provision of mentoring support • Trinidad and Tobago (T&T) marine resource governance stakeholder identification and analysis • Network analysis of key stakeholders as ego networks or whole network analyses of selected institutions for T&T • At least two case studies of self-organisation by fisher folk and fisher folk organisations in T&T • Identification of capacity needs for self organisation and improved networking, and further research needs including those related to policy interventions <p><i>Actual</i></p> <ul style="list-style-type: none"> • Organisational capacity in network analysis built • Fisheries governance stakeholders identified • Network analysis completed on Monitoring and Advisory Committee on the Fisheries of Trinidad and Tobago (MAC) and the Trinidad and Tobago Unified Fisherfolk (TTUF) and provide valuable case studies for other fisher folk organisations • Organisations exhibit some characteristics of adaptive capacity. More research required to understand the governance networks in Trinidad and Tobago
Grenada Fisheries Division	<p><i>Proposed</i></p> <ul style="list-style-type: none"> • Ecological, socio-economic and governance situation analyses of the sea urchin fishery (initial reports) • Public consultations on options for managing and governing the sea urchin fishery for improved and shared understanding of the fishery and how it can be better managed • Draft fisheries management plan for the Grenada sea urchin fishery (draft FMP public document) • Report on lessons learned and recommendations presented at GCFI 2008 (paper and/or poster) <p><i>Actual</i></p> <ul style="list-style-type: none"> • Ecological and socio-economic surveys conducted. Socio-economic surveys to be re-visited. Analyses complemented by University of Manitoba, Canada, MSc. Research, <i>The sea urchin fishery in Grenada: A case study of social-ecological networks</i> • Three public consultations held • Sea urchin fishery management plan drafted and to be implemented and tested when the fishery is opened • Oral presentation at 62nd GCFI, 2-7 November 2009, Cumana, Venezuela
Barbados FAC	<p><i>Proposed</i></p> <ul style="list-style-type: none"> • Communication products to inform and educate the industry and general public on the role, structure and activities of the FAC • At least five minor and four major site meetings to meet directly with the fishing industry on their issues, the role of the FAC, and ways of making inputs into fisheries governance nationally and regionally • A one-day strategic planning workshop for review and revision of the strategic plan in the 2003 report and production of a communication product for sharing with stakeholders • Report on a review of progress made on the FAC agenda items identified in the 2003 study on co-management to identify successes and deficiencies in the follow-up to FAC advice • Test 1: Implementation of the sea urchin fishery community council, recommended in previous studies, as an example of innovative governance. • Test 2: Information exchange sessions with stakeholders in the fishery for large pelagics (mainly longliners) to update them on international provisions for fisheries management and national responsibilities. • Test 3: Reviving the initiative of having harvest and postharvest sub-committees of the FAC in order to obtain more industry input into the work of the committee. • Researching the most effective means of communicating with the fishing industry in order to use the outputs to guide future communication <p><i>Actual</i></p> <ul style="list-style-type: none"> • Landing site meetings held to meet directly with the fishing industry • A one-day strategic planning workshop was held • National Workshop on the Code of Conduct for Responsible Fisheries

Table 5 (continued).

Grant	Activities/Outputs
SusGren	<p><i>Proposed</i></p> <ul style="list-style-type: none"> • Report on identification of shared issues, fisherfolk network collaborative processes and content of proposed collective action for improved collaboration • Report on strengthening collaboration amongst Grenadines fisherfolk, PFOs, NFOs, CNFO and government fisheries managers • Report on implementation of improved collaboration of Grenadines fisherfolk arising from better multi-level and multi-scale networking, bi-national and regional exposure through training attachments and from attending CRFM/CNFO meetings/workshops, and possibly from the activities of establishing a Grenadines fisherfolk organisation • Report on strengthening the adaptive capacity and resilience of Grenadines fisherfolk through the above measures, considering the role of networks in the processes • Communication products translating MarGov concepts and research results to the Grenadines fisherfolk through education and outreach (e.g. via the workshop and meetings); evidence that communications on MarGov concepts and results were received and used by fisheries stakeholders <p><i>Actual</i></p> <ul style="list-style-type: none"> • First tri-partite grouping or three-part network of fisherfolk from 11 Grenadines isles formed comprising northern, central and southern fisherfolk organisations • Northern Grenadines and All Grenadines fisherfolk steering committees formed • Union Island and Bequia re-energised to form co-operatives, with exceptional progress made by Union Island • Development of a fisherfolk cell phone directory comprising over 100 fisherfolk • Facilitation of meeting between Grenadines fisherfolk and the Grenada and St. Vincent fisheries divisions
CNFO	<p><i>Proposed</i></p> <ul style="list-style-type: none"> • Report on free or low-cost web-sourced communications on EAF reviewed by CNFO-CU • Paper and electronic publications on EAF designed for resource users and disseminated to all FFOs in the network • EAF explanatory materials developed for use at FFO training course sessions and meetings • Literature on PM&E obtained and shared among FFOs for common understanding to be achieved • CNFO guidelines for multi-level PM&E developed, tested, revised and disseminated to all FFOs • Report and other communications on lessons learned from at least five FFO project experiences • Newsletter articles and other popular publications aimed at FFOs at all levels, highlighting the benefits of learning lessons to build adaptive capacity, shared throughout the CNFO <p><i>Actual</i></p> <ul style="list-style-type: none"> • Resource user-friendly communications on EAF distributed to all FFOs • EAF training materials for FFO training courses and sessions developed • Development of CNFO guidelines for PM&E • Newspaper articles and other communications for FFOs developed to share the benefits of lessons learned and build capacity • Communications strategy and plan for the CNFO created to serve beyond the project • Meetings with fishermen groups in Jamaica, Saint Lucia and Antigua and Barbuda
St. Lucia Dept. of Fisheries	<p><i>Proposed</i></p> <ul style="list-style-type: none"> • Sea urchin harvesters, enforcement officers and representatives of fish cooperatives and CBOs trained in relevant aspects of sea urchin biology, ecology and management, and level of preparation for participation in sustainable urchin management improved • Resource and fishery assessments completed and information available. The institutionalisation of participatory assessment process initiated • GIS and maps of fishery-relevant features available for decision-making on sea urchin management • Stakeholder and situation analysis for sea urchin management completed and informing the design, implementation, monitoring and evaluation of a collaborative co-management mechanism • Initial meetings and other activities of the multi-stakeholder collaborative co-management mechanism • Low-cost communication to support sustainable management such as leaflets/flyers, audio-visual presentations, cultural communications, etc., generated and being disseminated to raise public awareness of management issues and initiatives in order to promote the development of a more informed and engaged pool of stakeholders and interested parties <p><i>Actual</i></p> <ul style="list-style-type: none"> • Community consultations on sea egg status in Laborie, Anse Ger and Vieux Fort • Community focus group training (Laborie, Anse Ger and Vieux Fort) targeting sea egg biology, ecology and management with survey technique demonstration • Public awareness materials for youth and adults to help support sea urchin management • Field equipment to assist fishermen in conducting sea urchin size and abundance surveys

Table 5 (continued).

Grant	Activities/Outputs
St Kitts and Nevis Dept. of Marine Resources	<i>Proposed</i>
	<ul style="list-style-type: none"> • Visioning statement of what governmental and non-governmental fisheries stakeholders think the fishing industry in St Kitts and Nevis would look like if EAF is practised for a while (e.g. 5-7 years). • Capacity development outline of the capacity development needed to embark upon EAF in St Kitts and Nevis. • A preliminary scheme for introducing EAF that should be reviewed by the detailed FMP resulting in a more strategic design for the FMP process to test key EAF entry points for suitability
	<i>Actual</i>
	<ul style="list-style-type: none"> • Organisational capacity building through participation in 63rd GCFI, 1-5 November 2010, San Juan, Puerto Rico • Scoping interviews with fisheries stakeholders to determine perspectives on the fisheries industry in the future using EAF • EAF scoping report produced that can be used as a guide for fisheries management • Follow-up interviews with fisheries industry stakeholders in an attempt to update the fisheries act and regulations using information in the EAF scoping document

Grantee Experience with Small Grant Scheme

Six of the seven organisations that implemented small grants responded to the electronic survey on the MarGov small grant experience. In general, responses and feedback were highly positive. The majority of organisations (66%) either strongly agreed or agreed that the purpose of the small grants applied for were fully achieved. Only one organisation disagreed (33%). When asked to rate the small grant process from initial idea to approval and then from approval to end, ratings were 'okay', 'good' and 'excellent'. The idea to approval phase was rated 'excellent' by 67% of the respondents, while the approval to end phase was so rated by 17% of respondents. Overall, the latter phase was rated 'good' by 67% of the respondents.

All respondents felt that small grant implementation facilitated participation and capacity building among the research team and/or stakeholders. Explanations for this, included provision of opportunities for fisher folk to raise issues with government fisheries agencies which would not have been possible otherwise; provision of the opportunity for both the research team and stakeholders to engage in all aspects of grant activities and share information, skills and local knowledge; and development of capacities in research, analysis and presenting information.

The duration and budget of the small grant activities was sufficient for 50% and 83% of respondents respectively. The small grant's planned duration was not sufficient for the Grenada Fisheries Division, SusGren, and CANARI small grant activities given the fact that the initial timing of implementation of the grant did not take into account delays from national general elections and carnival which contributed to extended delays in achieving outputs; changing conditions and situations typical of working with fisherfolk; and insufficient time to work with stakeholders to validate and share results respectively.

All respondents indicated that small grant outputs and products have been or will be used to inform governance in various ways — meetings and discussions hosted by the

Caribbean Network of Fisherfolk Organisations; a management strategy for the Grenada sea urchin fishery; proposing changes to the Fisheries Act and Regulations using EAF scoping results in St. Kitts and Nevis; using the sea urchin assessments and consultations with stakeholders and tools produced during the small grant to guide the management approach taken by the Department of Fisheries in St. Lucia towards the sea urchin fishery; opportunities provided for new governance arrangements by the presence of a Grenadines fisherfolk organisation; and by sharing project results and information with the Fisheries Division and fisherfolk organisations involved for strengthening of their networks.

Grantees outlined the main strengths of the small grants undertaken as follows:

- i) Capacity building of recipient agencies and stakeholder empowerment.
- ii) Participatory and collaborative nature of the research and recognition of stakeholders.
- iii) Range of activities supported and funded, and flexibility adapting activities.
- iv) Easy and relatively simple format for accessing funds.
- v) Improved networking fostered during the grant activity.
- vi) Innovation and the opportunity to test and use a new tool.

Weaknesses of specific small grants were identified by only four of the respondents. They were as follows:

- i) Poor productivity of the initially selected research team, with poor communication links being a major contributor, as well as lack of confidence to do well. Reliance on one or two persons resulted in major delays, as these persons had other obligations.
- ii) The limited interest of the fisheries management authority in the outcomes of the grant and its

- reluctance to meet the expectations of the stakeholders.
- iii) No provision for continuation by some grantees. Small grant activity provided lots of information that still needs to be analysed.
 - iv) The time and budget allocated for the project was limited; this affected CANARI's ability to achieve all the objectives.

Respondents provided additional feedback on their MarGov small grants as set out below:

- i) MarGov has been exceptional in its understanding and flexibility.
- ii) The Margov small grant outputs were the only positive outcome of 10 plus years of a no-take moratorium, since no budgetary allocations were made over the years for similar activities expected by the moratorium. It is grants like these that permit the bridging of resource gaps occasioned by poor resource allocations and allow for critical governance work on the ground.
- iii) There should be follow up activities to examine the success of the recommendations being proposed and the bottlenecks if any.
- iv) This sort of mechanism is important as a way for agencies such as the Department of Fisheries to source valuable funds and technical assistance to address priority needs within the area of governance and sustainable use of resources. It is important that these mechanisms continue to be available to government and well as non- government agencies and groups.
- v) Could the results of the grants be used to develop further grants?
- vi) The small grant allowed CANARI to learn and practice a new tool that will have wide application within the organisation and our stakeholders by extension.

DISCUSSION

Managing small grants is not an easy undertaking. However, it is rewarding to obtain the generally positive feedback seen in the reported results. The CERMES team reflected on the MarGov small grant experience in the light of what the grantees reported and sought the lessons learned. These lessons included:

- i) Keep the application process short and simple,
- ii) Assist applicants as part of capacity building,
- iii) Disburse funds in small, manageable amounts,
- iv) Ensure all grant responsibilities are very clear,
- v) Adapt the grant implementation as necessary,
- vi) Assist grantee accounting and report writing,
- vii) Extend the grant in response to low capacity,
- viii) Learn from 'no-harm or low-harm' mistakes,
- ix) Provide hands-on technical assistance,

- x) Provide brief, simple reporting templates,
- xi) Terminate grants before they are liabilities,
- xii) Encourage regular communication rhythm,
- xiii) Offer mentorship to grantees where feasible,
- xiv) Encourage grantees to present/publish work,
- xv) Ensure objectives are realistic, achievable, and
- xvi) Build in early outputs for signs of successes

The essence of the lessons learned from the experience is that small grants and their recipients need to be handled gently and nurtured in order to build sustainable capacity. In many instances it would have been more efficient, but much less effective, to intervene more directly and swiftly achieve planned outputs. Little would have been learnt from this. Although grants were expected to be completed in 4 - 6 months most took up to a year to be completed. MarGov was designed to be adaptive. It absorbed these delays while still meeting the milestone deliverables of the project. Not all projects have this flexibility, but more should. However, the greatest challenge is to maintain the momentum of the project to promote new perspectives on marine resource governance among wide stakeholder audiences with limited capacity.

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LITERATURE CITED

- Anderies, J.M., M.A. Janssen, and E. Ostrom. 2004. A framework to analyse the robustness of social-ecological systems from an institutional perspective. *Ecology and Society* 9(1):18.
- CARSEA. 2007. Caribbean Sea Ecosystem Assessment (CARSEA). A sub-global component of the Millennium Ecosystem Assessment (MA), J. Agard, A. Cropper, K. Garcia, (eds.) *Caribbean Marine Studies, Special Edition, 2007*.
- Department of Marine Resources. 2011. Preparing to introduce an ecosystem approach to fisheries in St Kitts and Nevis: what people said. Report of the DMR produced under a CERMES MarGov Small Grant. 5 pp.
- Diamond, J. 2005. *Collapse: How Societies Choose to Fail or Succeed*. Viking Penguin, New York, New York USA. 575 pp.
- Fanning, L., R. Mahon, and P. McConney. 2009. Focusing on living marine resource governance: the Caribbean Large Marine Ecosystem and Adjacent Areas Project. *Coastal Management* 37:219-234.
- Folke, C., S. Carpenter, T. Elmqvist, L. Gunderson, C.S. Holling, and B. Walker. 2002. Resilience and sustainable development: Building adaptive capacity in a world of transformations. *Ambio* 31:437-440.
- Haynes, C., P. McConney, and S.Cox. 2009. Report of the Workshop on the Code of Conduct for Responsible Fisheries, Solutions Centre, UWI Cave Hill Campus, 12 October 2009. CERMES MarGov Project Document 14. 30 pp
- Mahon, R. 2002. Living aquatic resource management. Pages 143-218 in: I. Goodbody and E. Thomas-Hope (eds.) *Natural Resource Management for Sustainable Development in the Caribbean*. Canoe Press, UWI, Kingston, Jamaica.

-
- Mahon, R. and E. Escobar. 2009. The Wider Caribbean Region. Pages 231-242 in: UNEP and IOC-UNESCO (eds.) *An Assessment of Assessments, Findings of the Group of Experts. Start-up Phase of a Regular Process for Global Reporting and Assessment of the State of the Marine Environment including Socio-economic Aspects*. Progress Press Ltd., Malta.
- Mahon, R., P. McConney, and R.N. Roy. 2008. Governing fisheries as complex adaptive systems. *Marine Policy* 32:104-112.
- Mahon R., and P. McConney. 2004. Managing the managers: Improving the structure and operation of fisheries departments in SIDS. *Ocean and Coastal Management* 47:529-535.
- Mahon, R., P. McConney, and R. Roy. 2008. Governing fisheries as complex adaptive systems. *Marine Policy* 32:104-112.
- Phillip, P.E. and C. J. Isaac. 2010. Fisheries management planning for the Grenada sea urchin fishery. Marine Resource Governance in the Eastern Caribbean (MarGov) Project. CERMES Technical Report No.41. 30 pp.
- Sandy, K., N. Leotaud, S. Leid, and K. Blackman. 2011. Network analysis of two stakeholder organisations involved in the governance of the fishing industry of Trinidad and Tobago. CERMES Technical Report No. 49. 20 pp.