Regional Organisations and Climate Change Adaptation in Small Island Developing States

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1. Abstract

- Regional organisations play a central role in coordinating regional climate change adaptation responses
- across small island developing states (SIDS), 58 countries that are particularly vulnerable to climate
- change and its impacts. The effectiveness of these organisations in coordinating adaptation efforts is
- underexplored in the academic literature, and this paper helps to fill the gap. By developing the
- 15 Framework for Assessing Regional Organisations Coordinating Climate Change Adaptation, it
- qualitatively assesses the adaptation-related inputs, projects/programs and outputs of the Caribbean
- 17 Community Climate Change Centre, the Secretariat of the Pacific Community and the Secretariat of the
- 18 Pacific Regional Environment Programme. This assessment is enriched by data gathered through
- 19 interviews with national and regional climate change and development officials in the Caribbean and
- 20 Pacific. It finds that regional organisations are more effective with respect to their adaptation-related
- 21 inputs and outputs but are less effective in coordinating adaptation projects/programs. It recommends
- 22 that, in addition to differentiating organisational mandates, regional organisations should focus on
- 23 resolving the major climate-related information deficit issues, helping countries to develop ready-to-
- 24 finance investment projects, building national-level capacities to adapt, and supporting the creation of
- an enabling environment for climate change adaptation.

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2. Key Words

- 28 Caribbean Community Climate Change Centre (CCCCC); climate change adaptation; effectiveness;
- 29 regional organisations; Secretariat of the Pacific Community (SPC); Secretariat of the Pacific Regional
- 30 Environment Programme (SPREP); small island developing states (SIDS)

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3. Acronyms and Abbreviations

- 33 AIMS Atlantic, Indian Ocean, Mediterranean and South China Sea
- 34 AR5 Fifth Assessment Report of the Intergovernmental Panel on Climate Change

35	Acronyms and	l Abbreviations (cont'd)	
36	CARICOM	Caribbean Community (and Common Market)	
37	CCA	Climate change adaptation	
38	CCCCC	Caribbean Community Climate Change Centre	
39	FAROCCCA	Framework for Assessing Regional Organisations Coordinating Climate Change	
40		Adaptation	
41	GCCA:PSIS	Global Climate Change Alliance: Pacific Small Island States	
42	GEF	Global Environment Facility	
43	IMF	International Monetary Fund	
44	IPCC	Intergovernmental Panel on Climate Change	
45	NE	No evidence	
46	NGO	Non-governmental organisation	
47	PACC	Pacific Adaptation to Climate Change Programme	
48	PICTs	Pacific island countries and territories	
49	P-SIDS	Pacific Small Island Developing States	
50	SIDS	Small island developing states	
51	SMART	Specific, measurable, achievable, realistic, time-bound	
52	SOPAC	Pacific Islands Applied Geoscience Commission	
53	SPACC	Special Programme for Adaptation to Climate Change: Implementation of Adaptation	
54		Measures in Coastal Zones	
55	SPC	Secretariat of the Pacific Community (now called the Pacific Community)	
56	SPREP	Secretariat of the Pacific Regional Environment Programme	
57	UN	United Nations	
58	UNFCCC	United Nations Framework Convention on Climate Change	
59	UN-OHRLLS	United Nations Office of the High Representative for the Least Developed Countries,	
60		Landlocked Developing Countries and Small Island Developing States	
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62	4. Introdu	action	
63	Regional organisations play a key role in coordinating regional climate change adaptation (CCA)		
64	responses across small island developing states (SIDS). As an example, the Caribbean Community		
65	(CARICOM) created the Caribbean Community Climate Change Centre (CCCCC) as a specialised		
66	climate change	coordination agency in 2005 (CCCCC, 2015a). SIDS are 58 countries grouped into three	
67	main geographic regions—the Atlantic, Indian Ocean, Mediterranean and South China Sea (AIMS), the		
68	Caribbean, and the Pacific (UN-OHRLLS, 2015a). These countries are particularly vulnerable to		

current and future climate change impacts such as sea-level rise, increasing sea-surface temperatures and changing rainfall patterns (Nurse *et al.*, 2014). Failure to adapt could result in the loss of those ecosystem services and infrastructure that support livelihoods (Nurse *et al.*, 2014).

The Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) defines CCA as a "process of adjustment to actual or expected climate and its effects", which can take place in natural or human systems (IPCC, 2014, p. 1758). For SIDS, the process of CCA is complex. It is compounded by diverse vulnerabilities and a lack of resources (Nurse *et al.*, 2014). To address this, national SIDS governments are taking part in supranational and/or regional efforts aimed at reducing shared climate- and non-climate-related vulnerabilities (Hewitson *et al.*, 2014). This is a practical step for SIDS as they face broadly similar constraints to their adaptive capacities (Cherian, 2007). As a result, there is significant scope for regional organisations to expand their role and importance in coordinating regional CCA responses across SIDS. By coordinating we mean the role that these organisations play in bringing resources together to support the design, implementation, monitoring and evaluation of national-level CCA projects/programs in Member States. Despite this, the effectiveness of regional organisations in coordinating these responses across SIDS is underexplored in the academic literature. This paper helps to fill this gap, but does not seek to measure the adaptive capacity of the regional organisations.

As a first step in a cross-regional assessment of regional organisations, this paper aims to: (1) assess the effectiveness of regional SIDS-focussed organisations with respect to CCA, and (2) initiate a debate about whether the regional level is an appropriate scale for coordinating national-level CCA actions. The CCCCC, the Secretariat of the Pacific Community (SPC¹) and the Secretariat of the Pacific Regional Environment Programme (SPREP) are used as case study organisations. As no suitable assessment tool existed, an analytical framework was developed and applied to the three organisations' CCA-related inputs, projects/programs and outputs. Semi-structured interviews with senior regional-and national-level officials in the Caribbean and Pacific were used to enrich the analysis and drive the discussions and recommendations contained in this paper. This paper is, to the best of the authors' knowledge, one of the first academic cross-regional comparative studies of regional organisations coordinating CCA in SIDS; it provides the empirical evidence to support conclusions that may have otherwise only been suspected.

5. Literature Review

5.1. Regional Organisations and SIDS

 $^{^{1}}$ Despite recently changing its public name to the 'Pacific Community' to reflect its formal, legal name, the acronym 'SPC' has been retained by the organisation.

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While there is no general agreement in the literature on the definition of 'regional organisations', there is some consensus on their characteristics. Regional organisations are a subset of international organisations (IMF, 2005), which are established to address existing problems that require collaborative action, including global environmental change and widening development gaps (Haas, 1990). Beattie (2013) argued that regional organisations can facilitate burden-sharing, reduce transaction costs and assist with developing and maintaining specialised knowledge. Other characteristics of regional organisations include being (1) comprised of "supranational institutions whose members are governments", (2) "located in a specific region of the world", (3) "created for many purposes", and (4) "established by means of a [formal] intergovernmental legal arrangement (e.g. a treaty)" (IMF, 2005, p. 1). Zyck (2013) noted that the focus of regional organisations should be multi-sectoral, and that mandates should be cooperative. These characteristics imply that regional organisations are created to explicitly promote cooperative action that addresses shared problems. For the purposes of this paper, a regional organisation is understood to be a subset of an international organisation that (1) is established by a formal intergovernmental agreement, (2) is located in a specific region, (3) has national governments as members, (4) is multi-sectoral in nature and approach, and (5) seeks to address shared problems.

SIDS currently have membership in 20 regional/sub-regional organisations (UN-OHRLLS, 2015b). The remoteness of these countries, combined with their financial, technical and other constraints, means that they can benefit from the economies-of-scale that regional organisations bring to the disbursement and management of financial and knowledge-based resources (ADB and Commonwealth Secretariat, 2006, p. ix; Beattie, 2013; Dornan and Newton Cain, 2014). In addressing shared problems such as climate change, regional organisations can support national SIDS governments in designing, implementing, monitoring and evaluating CCA projects/programs as well as by providing financial, technical and other support, especially where national-level resources are insufficient or inaccessible.

Regional cooperation efforts in the Caribbean have traditionally supported collective action to address common development challenges (Byron, 2014). In 1973, CARICOM was established to support economic integration, cooperation in functional areas such as health and education, and the coordination of foreign policies (Bishop *et al.*, 2011). Following its establishment, CARICOM faced challenges such as the limited capacities of national governments to implement CARICOM decisions, low commitment of member governments to various cooperative efforts and a number of political and financial failures (see Bishop *et al.*, 2011; Girvan, 2011). These have resulted in repeated calls for either the strengthening or abandonment of the Community, and cooperation efforts since the 1990s have aimed to broaden the organisation's focus (Byron, 2014). Expanding its focus facilitated, for example,

the creation of specialised agencies such as the CCCCC, which is mandated to coordinate the region's response to climate change.

Regional cooperation efforts in the Pacific have shifted from a colonially-defined regional outlook, strongly influenced by Cold War thinking, to contemporary regional cooperation driven by regional organisations but also influenced by colonial powers such as Australia and New Zealand (Bryant-Tokalau and Frazer, 2006). The region is home to some of the earliest and most long-standing regional organisations in Asia and the Pacific, with the fore-runner of SPC established in 1947. Despite this, regional cooperation in the Pacific has not always been smooth and it "has not experienced the deepening of cooperation and integration that has been evident recently in many other regions" (ADB and Commonwealth Secretariat, 2006, p. xiii). Fry (2004) argued that there is no single consensus or vision for a Pacific regional community, and that global events and trends such as the 'war against terror' influence the debate. Supporting this, Tarte (2014) suggested that new regional groupings such as the Pacific SIDS (P-SIDS) are emerging due to SIDS' growing dissatisfaction with existing regional frameworks.

While membership in regional organisations can have benefits for CCA in SIDS, the degree to which these organisations are effective in coordinating regional CCA responses has implications for regional CCA strategies and programming. Additionally, whether or how the organisations interact or the extent to which their mandates overlap can be important determinants of success. According to Nolte (2014), overlaps among regional organisations can occur both in membership and mandate, with impacts on effectiveness. These overlaps are influenced by a variety of factors which can affect cooperation levels, however, Nolte (2014) identified membership overlaps combined with mandate differentiation as a possible key to cooperative governance.

5.2. Organisational Effectiveness

Conceptually, organisational effectiveness is the degree to which an organisation is able to realise its goals (Etzioni, 1964). Measuring it is difficult, however, and the literature includes a variety of methods to gauge effectiveness. (e.g. Iwu *et al.*, 2015; Quinn and Rohrbaugh, 1983). Sowa *et al.* (2004, p. 715) described organisational effectiveness as comprising "management effectiveness" and "program effectiveness", with two respective sub-components – capacities (processes and structures) and outcomes. Capacities relate to how an organisation operates, its resources, internal rules, standards and guidelines. Outcomes, as discussed by Mitchell (2008), are the longer-term results of an action, and are often not immediately measurable. The literature proposes many effectiveness models, including the goal-oriented, resource-oriented, process-oriented, and strategic constituency models. The goal-oriented model focusses on outputs (see e.g. Button *et al.*, 1996; Etzioni, 1960). The resource-oriented

model examines the organisation's ability to acquire necessary resources (see e.g. Wolfe and Putler, 2002). The process-oriented model focusses on effective and efficient use of resources (see e.g. Daft, 2012). The strategic constituency model examines the links between the organisation and its main stakeholders (see e.g. Connolly *et al.*, 1980). For regional organisations coordinating CCA, each of these models provide insights into aspects of their functioning and effectiveness. Based on our conceptualisation of organisational effectiveness, we seek to qualitatively examine how the goals, resources, processes and strategic constituencies of regional organisations in the Caribbean and Pacific are brought together to support CCA in SIDS.

The measures of organisational effectiveness proposed in the literature are spread across multiple disciplines, including organisation theory, public and private sector effectiveness, and international environmental regime effectiveness. Sowa et al. (2004) identified both objective and perceptual measures. Perceptual measures, in this case, would rely on data gathered through interviews with individuals who have an intimate knowledge of the organisation. In the context of CCA, perceptual measures can support assessments of whether adaptation projects are reducing on-the-ground climate change impacts and vulnerabilities. Herman and Renz (2008) argued that good board management processes help keep the organisation in touch with stakeholders' needs and perceptions. Lockwood et al. (2010) used the principles of legitimacy, transparency, accountability, inclusiveness, fairness, integration, capability and adaptability to assess the governance of natural resource management. Complementing this, Taylor et al. (2014) highlighted visionary leadership in creating purpose through the linking of effort to outcome. The World Economic Forum (2014) explored effective leadership in international organisations and highlighted seven key indicators, including talent development and retention, strategic priority setting and broad stakeholder engagement. Yukl (2008), in exploring how leaders affect organisational effectiveness, discussed three components: process efficiency, human capital and ability to adapt to circumstance, and how these can be influenced by organisational leaders. These numerous measures provide scope to combine elements suitable for assessing regional organisational effectiveness in supporting the CCA actions of SIDS.

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6. Analytical Framework

Organisational effectiveness is conceptually simple but for which there are no widely agreed measures (Iwu *et al.*, 2015). This paper is primarily shaped by modern organisation theory and elements of neofunctionalism (see further details in Appendix 1 in the electronic supplementary material). It also builds on previous research by developing and applying discipline-appropriate components and indicators of organisational effectiveness. An interdisciplinary approach is used to identify and select organisational practices that are likely to improve organisational effectiveness (Cameron *et al.*, 2011). A simple

approach to 'effectiveness' is taken here; it is both *the ability* of regional organisations to produce desirable CCA-related outputs and outcomes based on their inputs and projects/programs, as well as the degree to which they *actually accomplish* this (following Daft, 2012).

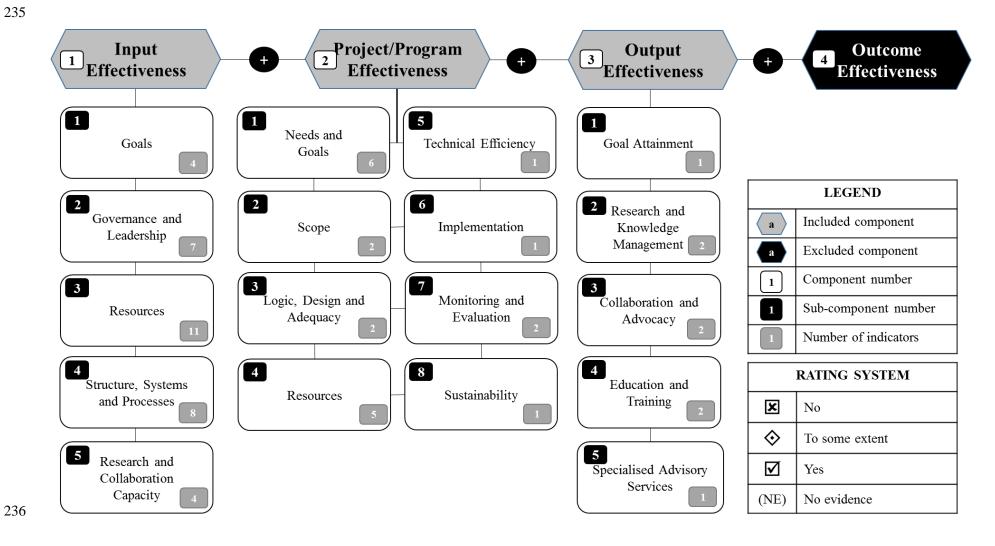
The authors developed the Framework for Assessing Regional Organisations Coordinating Climate Change Adaptation (FAROCCCA), a qualitative tool for understanding and rating the effectiveness of the regional organisations in this regard. FAROCCCA draws on multiple bodies of literature, including modern organisation theory (e.g. Daft, 2012), public and private sector effectiveness (e.g. Parhizgari and Ronald Gilbert, 2004), natural and shared resource management (e.g. Gupta *et al.*, 2010), and research design and social measurement (e.g. Miller and Salkind, 2002). It also draws on regional frameworks and strategies such as the Caribbean's Regional Framework for Achieving Development Resilient to Climate Change and The Framework for Pacific Regionalism, which replaced the Pacific Plan for Strengthening Regional Cooperation and Integration in 2014 (see CCCCC, 2012; PIF Secretariat, 2014). FAROCCCA incorporates elements of the four main models of organisational effectiveness identified in Section 5.2 above and comprises four components—input effectiveness, project/program effectiveness, output effectiveness and outcome effectiveness, the first three of which are considered in this paper. It has both objective and perceptual indicators (following Sowa *et al.*, 2004) (see Figure 1). While covering the significant aspects of organisational effectiveness, FAROCCCA does not measure the adaptive capacity of organisations.

Input effectiveness is the first FAROCCCA component and is based on work by Oberlack and Neumärker (2013), Quinn and Rohrbaugh (1983) and Young (2011), among others. This component focusses on internal capacities i.e. how an organisation "operates, the structures [it has] in place, and the operating processes that dictate and direct employee action" (Sowa *et al.*, 2004, p. 715). It is premised on the idea that an organisation that is well-managed internally is more likely to deliver high quality projects/programs and thus is more likely to produce better outputs and outcomes. The input effectiveness component has five sub-components (see Figure 1 on Page 8), comprising 34 objective and perceptual indicators (see Appendix 2 for a breakdown of FAROCCCA's components, sub-components and indicators).

Project/program effectiveness is the second FAROCCCA component, which builds upon the work of authors such as Biermann and Bauer (2004), McDavid *et al.* (2013) and Weiss (2005). This component focuses on how well the organisation implements CCA-related projects/programs. It has eight sub-components and 20 indicators.

Figure 1: FAROCCCA Diagram

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Output effectiveness is the third FAROCCCA component. Work by Sowa *et al.* (2004) and others support its inclusion. Output is understood as the direct product of an activity, and is distinct from outcome, a longer-term result or consequence of an activity that may not be immediately measurable following the activity (see e.g. Mitchell, 2008). Output effectiveness is, therefore, the degree to which the direct product of an activity achieves its related specific, measurable, achievable, realistic and time-bound (SMART) objectives, but which may not give a direct indication of whether an activity will achieve its strategic goals. In FAROCCCA, it has five sub-components and eight indicators.

Outcome effectiveness is the fourth FAROCCCA component. Given the uncertainty of future climate-related conditions, CCA outcomes are difficult to measure and in many instances, they are still unknown. Though a critical component, it is not included within the scope of this paper.

In this case, FAROCCCA is applied in a SIDS context, however, it is intended to have broader applicability to regional organisations coordinating CCA in other non-SIDS developing countries. Further, it is a framework that regional organisations can apply internally to self-assess their effectiveness. It is flexible, and with modifications, can be applied more broadly beyond CCA.

7. Methods

In this study, desk-based research and interviews are used to qualitatively assess the effectiveness of regional organisations in coordinating regional responses to climate change across SIDS.

7.1. Case Study Selection

Three of the 20 regional/sub-regional organisations in which SIDS have membership are included in this study—the CCCCC, as a specialised climate change agency of CARICOM, SPC and SPREP. Case study organisations were identified from a UN-OHRLLS list (see UN-OHRLLS, 2015b). The other 17 organisations were excluded because (1) they are sub-regional organisations (N=3), (2) they are part of the UN system (N=10), (3) their strategic goals (including those of specialised agencies) do not have a climate change adaptation focus and are not multi-sectoral in nature (N=2), and (4) SIDS do not make up at least 70% of their memberships (N=2). The Indian Ocean Commission, the main AIMS regional organisation, was eliminated at (4).

Three projects/programs are included in this study—the CCCCC's Special Programme for Adaptation to Climate Change: Implementation of Adaptation Measures in Coastal Zones (SPACC), SPC's Global Climate Change Alliance: Pacific Small Island States (GCCA:PSIS) Project, and SPREP's Pacific Adaptation to Climate Change (PACC) Programme. These projects/programs (1) were primarily focussed on adaptation, (2) targeted multiple beneficiary countries, (3) were multi-year in length, and (4) were either completed or reported as being at least 80% complete at the time of writing.

SPACC was a four-year program funded by the Global Environment Facility (GEF) through the World Bank for US\$2.1 million (CCCCC, 2015b). It began in 2007 and supported three Eastern Caribbean SIDS to "implement specific (integrated) pilot adaptation measures [...], focused on biodiversity and land degradation along coastal and near-coastal areas" (CCCCC, 2015b, online). GCCA:PSIS was funded by the European Union for €11.4 million (SPC, 2011b). It supported nine smaller Pacific SIDS towards climate change mainstreaming and the implementation of adaptation strategies and projects, in collaboration with SPREP (SPC, 2011b). It was intended to run from 2011 to 2014 (SPC, 2011b). PACC is identified as "the first major climate change adaptation initiative in the Pacific region" (SPREP, 2014a, online). Involving 14 Pacific SIDS, it aimed to demonstrate "best-practice adaptation in [...] coastal zone management, food security and food production, and water resources management" (SPREP, 2014a, online). Funded by the GEF and the Government of Australia, it began in 2009 with each participating country hosting a pilot project to demonstrate successful on-the-ground adaptation (SPREP, 2014a).

7.2. Data Collection and Analysis

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Multiple sources of data on the respective organisations and their CCA-related inputs, projects/programs and outputs were identified. These included academic and grey literature, organisational and other websites, and, where publicly available, documents such as annual and audited financial reports, project/program evaluations and strategic plans. These were systematically reviewed by each researcher who collected extensive evidence against each of FAROCCCA's indicators from the above sources, and entered it into a table. Based on joint discussions of the evidence, each indicator was rated using the 'traffic light' method (see e.g. Gupta et al., 2010). Green ratings in Table 1 are represented as \square , showing that the researchers responded 'yes' to the indicator, and yellow ratings are represented as \diamondsuit , showing that the researchers responded 'to some extent'. Red ratings are represented as **\Box**, showing that the researchers responded in the negative; indicators for which the researchers found no evidence are presented as '(NE)'. Four months after the data was originally coded, a sample of 24 of FAROCCCA's indicators was re-coded to ensure inter-coder reliability. Agreement between the original and re-coded sample was 83.3%. Indicators coloured grey were not considered within the scope of this study. The ratings given were used as a way of drawing out interesting comparisons among the organisations rather than rating the organisations individually. This is in line with standard qualitative assessment methodologies (see e.g. Gupta et al., 2010).

The document analysis was enriched by semi-structured interviews with 36 regional- and national-level climate change officials. Both face-to-face and Skype interviews were conducted between August 2014 and August 2015 with officials from CCCCC, SPC and SPREP, as well as with

national officials from two Caribbean SIDS and two Pacific SIDS. Like those from the regional organisations, national officials were selected using purposive and snowballing techniques; their selection did not relate to the countries they represented. All interviewees had an understanding of national and regional adaptation processes, were senior in their named organisations, had oversight of a climate change-related portfolio, and had a minimum of five years' experience. Interview transcripts were developed and content analysis used to identify themes. All interviews were conducted in English and ran for an average of 55 minutes.

7.3. Limitations

This study has some limitations. First, data for the three organisations was not equally available. For example, annual and audited financial reports for the CCCCC are not publicly-available (CCCCC 2015, pers. comm. November 17). Second, the study does not collect data for perceptual indicators—these are isolated from those examined within the scope of this paper and are identified with a grey rating. For reasons of confidentiality and/or sensitivity, organisations themselves may be better placed to assess internal perceptions of their effectiveness. Third, it does not measure the outcomes of adaptation actions undertaken by the organisations. While important for determining whether current actions are facilitating effective and/or sustainable adaptation in SIDS, many outcomes are not yet known and future conditions are uncertain. Fourth, CCA is a complex task that involves many levels of government and issues of equity, power and legitimacy; this paper focusses only on the role that organisations fulfil in this complicated space. It is also worth noting that the organisations studied have their own limitations. They cannot oblige Member States to act or cooperate in CCA actions, but must work to achieve consensus through dialogue and negotiation. Additionally, because they use external funding to offset CCA costs, these organisations may be constrained by conditions associated with donor support.

8. Results

Results are presented according to the three FAROCCCA components considered in this paper – the effectiveness of the organisations' CCA-related inputs, projects/programs and outputs. While there is more detailed results and references in Appendices 3-5, the write-up in this section only covers the issues for which there was data for all three organisations. A summary of our analysis is presented in Table 1 on Page 12.

Table 1: Results of the Application of FAROCCCA to CCCCC, SPC and SPREP

	RATING SYSTEM		
×	No No		
♦ To some extent			
\square	Yes		
(NE)	No evidence		
	Perceptual indicator or indicator not rated in this paper		

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SUB-COMPONENT	INDICATOR	CCCCC	SPC	SPREP
	1. Input Effectiveness			
1. Goals	1. Climate change adaptation was an initial goal of the organisation.	\square	×	×
	2. Climate change adaptation is a current goal of the organisation.	\square		\square
	3. The current strategic plan contains specific climate change adaptation objectives.	♦	♦	Ø
	4. There is no other regional organisation with similar climate change adaptation goals.		×	×
2. Governance and leadership	The Board provides visionary leadership and strategic direction.			
*	2. The organisation evaluates organisational performance at least annually.	♦	♦	\square
	3. Executive management (can also include members of the Board/Governing	$\overline{\checkmark}$	$\overline{\checkmark}$	\square
	Body) decision-making is done by consensus or majority vote.			
	4. Executive management staff (can also include members of the	$\overline{\checkmark}$	$\overline{\checkmark}$	\square
	Board/Governing Body) are qualified and/or equipped to achieve the goals			
	of the organisation.			
	5. Executive management staff disclose potential conflicts of interest.			
	6. The organisation attracts, retains and develops talent.	♦	♦	♦
7. Leaders create a dynamic organisational culture, making the organisation				
	a desirable place to work.			
3. Resources	1. There are staff members exclusively dedicated to climate change	(NE)	♦	\square
adaptation.				
	2. Staff are qualified and have experience in climate change adaptation.	$\overline{\checkmark}$	♦	\square
	3. Staff are qualified and have experience in project/program management.	$\overline{\checkmark}$	$\overline{\checkmark}$	

	4. Staff participate in ongoing training programs.	♦	$\overline{\mathbf{V}}$	V
	5. Staff performance is appraised (formally or informally) at least annually.	(NE)	Ø	Ø
	6. The organisation has untied funding.		V	♦
	7. The organisation has funds exclusively dedicated to climate change		V	$\overline{\mathbf{V}}$
	adaptation.			
	8. External funding to the organisation has increased over the past 5 years.	♦	V	V
	9. The organisation has multiple funding sources.		V	$\overline{\mathbf{V}}$
	10. The organisation has financial reserves.		V	×
	11. The organisation has sufficient technological resources (e.g. intellectual			
	property rights, patents, copyright, software licences etc.) to carry out its			
	climate change adaptation mandate.			
4. Structure, systems and	1. There is a low degree of hierarchy (i.e. few hierarchical levels).			
processes	2. The organisation has a human resource management system that supports			
	the shaping of organisational culture and staff recruitment, training,			
	development and retention.			
	3. There is a financial management system that meets International Financial	\Diamond	$\overline{\mathbf{A}}$	
	Reporting Standards (IFRS) or its equivalent.			
	4. The organisation applies risk management principles in its decision-			
	making processes.			
	5. The organisation has a centralised, user-friendly internal data management			
	system.			
	6. The organisation has a user-friendly project/program management system			
	(e.g. that supports staff to identify, schedule and track resources etc.).			
	7. There are mechanisms that support vertical and horizontal communication.			
	8. There are internal dispute resolution protocols.			
5. Research and collaboration	1. The organisation has plans and policies that support research.		V	
capacity	2. There are organisational funds allocated for research.	(NE)	V	V
	3. The organisation has equipment, expertise and/or resources (e.g. access to	\square	$\overline{\Delta}$	\square
	journal articles etc.) for research.			
	4. The organisation's current strategic plan (or a similar document) outlines	\square	$\overline{\mathbf{A}}$	\square
	plans for collaboration with multiple stakeholders on adaptation-related			
	initiatives.			

	2. Project/Program Effectiveness			
1. Needs and goals	1. The project documents contain evidence that the project/program fills an	$\overline{\checkmark}$		\square
	existing need with relation to climate change adaptation.			
	2. The project/program's adaptation components could be considered			
	'transformational' (i.e. the project/program focusses on "larger, more			
	profound system changes" and requires a "paradigm shift" in the way it is			
	framed and implemented).			
	3. Climate change adaptation is a goal of the project/program.	$\overline{\square}$	\square	
	4. The project/program's goals reflect the long-range impacts of climate	$\overline{\checkmark}$	\square	\square
	change.		_	
	5. The project/program's objectives relating to climate change adaptation are	♦	♦	♦
	specific, measurable, achievable, realistic and time-bound (SMART). 6. Member Countries were involved in developing the climate change	♦	$\overline{\mathbf{Q}}$	V
	adaptation components of the project/program.	V		V
2. Scope	1. The project/program addresses multiple climate or climate-induced	<u> </u>		V
z. Scope	vulnerabilities (e.g. vulnerability to sea-level rise, increased sea surface	<u></u>		
	and air temperature, changing rainfall patterns etc.).			
	2. The project/program addresses multiple non-climate-induced	×	$\overline{\square}$	V
	vulnerabilities (e.g. poverty, deforestation etc.).	_		_
3. Logic, design and adequacy	1. The logic/design of the project/program's climate change adaptation	♦	♦	$\overline{\checkmark}$
	components is evidence-based, in the context of SIDS.			
	2. The project documents contain evidence that the logic/design of the	♦	♦	♦
	project/program's climate change adaptation components is an effective			
	means to achieve its objectives.			
4. Resources	1. Staff members are assigned exclusively to the project/program.	×	♦	
	2. The project/program team includes staff members with qualifications and	\Diamond		\diamond
	experience in climate change adaptation.			
	3. The project/program team includes staff members with qualifications and	$\overline{\checkmark}$		\diamond
	experience in project/program management.			
	4. The project documents contain evidence that there are sufficient staff			
	members to achieve the project/program objectives.			
	5. The project documents contain evidence that there is sufficient funding for	×	♦	×
	the project/program's climate change adaptation components.			

5.	Technical efficiency	1. The project documents contain evidence that the project/program provides value for money (cost vs. outputs).	♦	×	×
6.	Implementation	1. The project/program's climate change adaptation components are implemented, as proposed.	×	♦	♦
7.	Monitoring and evaluation	1. The project/program is internally monitored and evaluated.	♦	V	V
		2. The project/program is externally monitored and evaluated.	$\overline{\checkmark}$	(NE)	V
8.	Sustainability	1. There are sustained outputs from the project/program.			
		3. Output Effectiveness			
1.	Goal attainment	1. There is evidence in the most recent annual report or evaluation that the climate change adaptation-related objectives of the organisation are being achieved.	(NE)	♦	♦
2.	Research and knowledge management	1. The organisation produces and/or publishes research that is relevant to climate change adaptation at least annually.	⋄	V	V
		2. The organisation makes climate change adaptation-relevant research publicly available.	Image: Control of the	V	V
3.	Collaboration and advocacy	1. There is evidence that the organisation collaborates with multiple stakeholders to undertake climate change adaptation-related activities.	Ø	V	V
		2. The organisation advocates for political, financial and/or other climate change support for its Member Countries in various fora at different scales.	Ø	♦	V
4.	Education and training	 The organisation undertakes climate change adaptation stakeholder and/or public awareness activities. 	Ø	V	V
		2. The organisation develops and/or implements training programs for stakeholders in issues related to climate change adaptation.	Ø	V	V
5.	Specialised advisory services	 The organisation provides specialised climate change adaptation-related advice to Member Countries and/or other stakeholders. 	Ø	♦	Ø
		4. Outcome Effectiveness			
	-	-	-	-	-

8.1. Input Effectiveness

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The three organisational mandates range from an economic and social development directive, through broader environmental protection, to a specific focus on climate change. The CCCCC was the most recently established of the three organisations, set up in 2005 to coordinate responses to climate change in the Caribbean (CARICOM Secretariat, 2011). SPC was originally established as an intergovernmental advisory body on economic and social development matters in 1947 (SPC, 1947). SPREP began more recently as a joint initiative of SPC and three other supranational organisations in the 1970s, and became an independent intergovernmental organisation in 1993 with a mandate to promote cooperation for environmental improvement and protection and to ensure sustainable development (SPREP, 2014c). The original mandates of both Pacific organisations have evolved over time; current strategic plans are focussed towards CCA. SPC's most recent strategic plan specifies "[i]ncreased resilience of Pacific island countries and territories (PICTs) to the water-related impacts of climate change and disaster" as a strategic objective (SPC, 2013, p15). SPREP's most recent strategic plan states that "[b]y 2015, all Members will have strengthened capacity to respond to climate change" through adaptation and other measures (SPREP, 2011, p. 16). This highlights that all three organisations have a current, explicit focus on CCA.

Beyond their mandates and strategic priorities, all three organisations have frameworks that support their adaptation activities. In both the Caribbean and Pacific, the organisations attract staff with CCA and project management qualifications and experience. For example, the CCCCC's current Deputy Director and Science Advisor has a PhD in organic chemistry, has worked as a project manager focussing on CCA since 1997 (CCCCC, 2015b; Trotz, n.d.), and was a review editor of the IPCC Fourth Assessment Report's chapter on small islands (see IPCC, 2007, p. 687). This adaptation and project management expertise is supported by specific funding for adaptation projects at the three organisations, which all have multiple funding sources. For example, in addition to donor funding, the CCCCC has established a reserve fund, seeded by the Government of Trinidad and Tobago (CCCCC, 2015a, online), and SPC's 2013 financial report shows funding from 34 donors and 26 Member States (SPC, 2014c). In spite of some year-to-year variations, external funding to both SPC and SPREP has increased over the last five years, their financial reporting meets International Financial Reporting Standards, and their financial reports are publicly available (SPREP, 2014b, p.56; SPC, 2011a, p. 5). The CCCCC has established a Finance and Audit Sub-Committee to strengthen financial oversight (CCCCC, 2015a, online). Additionally, all three organisations have policies and plans that support climate research, and have the expertise to undertake research. SPC and SPREP's financial accounts both show funding allocated to research activities. The CCCCC participates in a research consortium that includes the University of the West Indies; it undertakes climate and economic modelling (Colley et al., 2011), and

has a record of reporting on its scientific research activities to the UNFCCC (see CCCCC, 2008). This highlights the success of all three organisations in attracting qualified and experienced staff and funding from multiple sources, and accessing the requisite expertise to undertake scientific research, placing them in a position to effectively support regional adaptation efforts.

Despite these positive aspects of input effectiveness, there are some areas where the organisations did not rate quite so well. SPC noted in a paper presented to a Meeting of the Committee of Representatives of Governments and Administrations in 2014 that the organisational requirement for fixed-term staff contracts has had a negative impact on job security, leading to difficulties in attracting and retaining the best staff (SPC, 2014a). In 2014, SPREP spent funds from its reserve facility to cover costs associated with reviews, translations, meetings and unexpected medical fees; this resulted in its total reserve funds being in deficit by over US\$400,000 at year end (SPREP, 2015b). The CCCCC does not make its financial accounts publicly available, obscuring the state of the organisation's financial health. These less positive ratings are isolated points and are just an indication of areas where these organisations could improve their CCA-related input effectiveness.

8.2. Project/Program Effectiveness

All three organisations assessed have directly implemented adaptation projects. The projects assessed as part of this research are all pilot projects, with evidence that they were filling an adaptation need. The GCCA:PSIS project implemented by SPC acknowledged the particular development context of SIDS and, in response, worked with national government departments to choose priority sectors and projects that fitted within the allocated budgets (SPC, 2012). Like the PACC Programme implemented by SPREP, it also took into consideration a range of non-climate change-related vulnerabilities such as isolation and population growth (SPREP, 2015a; GCCA *et al.*, 2014). These projects were internally monitored and evaluated, with SPREP producing quarterly internal monitoring reports, some of which are publicly available. Filling a need, working with national governments to select focus areas, and monitoring project implementation all play an important role in running a successful project.

Despite the positive points above, there were factors that point to a lack of evidence-based project design—none of the project documents reviewed contained evidence that their designs would effectively achieve their adaptation objectives. In the case of the SPACC Programme, the Terminal Evaluation revealed that the CCCCC experienced challenges with the technical design and management of the project—two of the seven pilot interventions were dropped because of "land tenure issues"; also, significant project implementation time was taken up with design negotiations and bidding document preparation, rather than improving operations and monitoring implementation (World Bank, 2012, p. 9). There was also a lack of national-level ownership. While member country governments endorsed

the program, the same governments were not prepared for country project coordinators to speak on their behalf (World Bank, 2012). SPC faced similar issues in Nauru—there were delays in gaining government endorsement, and an eventual return to the design phase of the project (SPC, 2014b). Across all three organisations, the FAROCCCA assessment highlighted project/program effectiveness as the area requiring the most attention.

8.3. Output Effectiveness

All three organisations rated well on achieving their immediate outputs. They all run public awareness campaigns and collaborate with multiple stakeholders to undertake CCA-related activities. As examples, the CCCCC developed the '1.5° to Stay Alive' campaign (CCCCC, 2014, online), and SPC produces a television show that features climate change issues (SPC, 2015b). At its 2015 meeting, the CCCCC's Board of Governors supported moves to strengthen relationships with the private sector and to work more closely with other CARICOM specialised agencies (CCCCC, 2015a, online). All three organisations develop and/or implement CCA-related training programs for stakeholders, with the CCCCC being recognised by the UN Institute of Training and Research as a Centre of Excellence (CARICOM Secretariat, 2011). As part of a pilot project under the PACC Programme, SPREP ran coastal erosion monitoring training for staff from the Samoan Ministry of Natural Resources and Environment (SPREP, 2013b). While the output indicators for all three organisations are generally positive, only SPC and SPREP make their annual work plans and reports publicly available and provide information on the extent to which their adaptation-related objectives are being met—SPC reports annually on how expenditure compared with the budget for the year and SPREP reports on the percentage completion of targets (see e.g. SPC, 2015a).

9. Discussion

9.1. Implications of Results for Regional Climate Adaptation Strategies and Programming

Overlapping Mandates and "Turf Wars": While neither SPC nor SPREP was established with a specific mandate to address climate change issues, it is now a key component of their work (SPC, 2013; SPREP, 2011). Up to 10 years ago, however, this was not the case—SPC's 2007-2012 corporate plan, for example, included just one four-line paragraph about climate change, noting that it would support SPREP's lead in this area (SPC, 2007). At that time, SPREP's stated climate change objective was to "[i]mprove PICTs' understanding of and strengthen their capacity to respond to climate change, climate variability and sea-level rise" (SPREP, 2006, p. 23); the converging mandates of the two organisations could result in competition for scarce adaptation funding and potentially lead to what has been publicly referred to as a "turf war" (e.g. ABC, 2015, online; Maclellan, 2011, p. 24). In contrast,

the CCCCC was created specifically to coordinate and manage responses to climate change in the Caribbean (CARICOM Secretariat, 2011). While there are other organisations in the Caribbean such as the Association of Caribbean States and the University of the West Indies that administer climate change projects, they do not have a specific mandate for coordinating climate change responses across the region (see UWI, 2012; ACS, 2012). Organisational effectiveness may be impeded where two or more organisations working within the same region have overlapping mandates.

There are multiple options for resolving the overlap in organisational mandates and thus reducing the likely competition for scarce resources. The two options proposed here are based on work by Linn and Pidufala (2008) and Nolte (2014), which discuss different aspects of regional governance, including regional economic cooperation. One option would be to focus on differentiating mandates in the Pacific, as is the case in the Caribbean. Mandate differentiation would result in either (1) one organisation being wholly responsible for coordinating the regional response to climate change or (2) a fully coordinated approach across relevant organisations working at the regional level. The latter would require a clear delineation of roles within the coordinated response. An alternative to mandate differentiation is for SPREP to be incorporated into SPC as a specialised agency, similar to the CCCCC being a specialised agency of CARICOM. Likewise, Linn and Pidufala (2008) suggested the consolidation of regional organisations, and there have been recent efforts in the Pacific to reduce the number of regional organisations. For example, the Pacific Islands Applied Geoscience Commission (SOPAC) was incorporated into SPC and SPREP under the Regional Institutional Framework Reform with effect from 2011 (SPC - Geoscience Division, 2010). The extent to which these consolidation efforts in the Pacific have improved organisational effectiveness is not yet known.

Regional Organisations as Project/Program Implementers: All three regional organisations researched have implemented adaptation projects/programs. However, our results show that for all three organisations, project/program effectiveness is their weakest area. This is perhaps an issue of scale; a regional organisation directly implementing pilot projects within a community setting is operating from a supranational level through both the national and subnational levels. While this may avoid some of the cross-scale barriers discussed in the literature such as authorisation, and the availability of resources, technology and human capital (e.g. Moser and Ekstrom, 2010), it can introduce problems of its own. With a single project manager based in a regional organisation and being responsible for implementing multiple discrete projects with differing aims and objectives, the varying socio-economic, cultural, spatial and political contexts across and within recipient island countries will limit the successful implementation of the projects. This idea is partially encapsulated in a comment by the PACC Programme Manager:

"In an ideal situation, projects follow a cycle of planning, implementation and monitoring, but because of the complex nature of the PACC programme, this has not been always possible. We have had to adjust and adapt to make things work" (SPREP, 2013a, p. 39).

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But can this comment be seen as an application of 'adaptive management' i.e. the "process of iteratively planning, implementing, and modifying strategies for managing resources in the face of uncertainty and change" (IPCC, 2014, p. 1758), or as an indictment on poor project/program design? The project documents reviewed often cited the application of 'adaptive management' techniques when project scopes changed, components were dropped and/or original targets were not met. In the case of the PACC Programme, it was used to explain the program not following the 'ideal' project path. In the case of the SPACC Programme in the Caribbean, it was used to explain part of the reason for dropping two of the seven pilot interventions after project inception (see World Bank, 2012). It is possible that the term 'adaptive management' is being used to mask other project/program deficiencies. On the other hand, the PACC Programme Evaluators noted that PICT officials "had not fully identified vulnerabilities nor formulated climate adaptation strategies for a sector or the country; many had produced relatively simple lists of new project concepts", with these lists not constituting "a sound basis for identifying and developing priority actions and projects" (Hunnam et al., 2012, p. 34). This also suggests that critical assessments of "current (baseline) and future conditions, covering climatic, environmental, social, and economic factors" were not carried out (Hunnam et al., 2012, p. 34). At the design phase, proposed adaptation projects must be screened for feasibility and possible maladaptation (see Barnett and O'Neill, 2010). Failing this, project/program managers will continue to cite the application of 'adaptive management' techniques when project scopes are changed, even when the project/program design does not give full consideration to the climate and non-climate-related vulnerabilities as well as to the broader socio-economic, cultural, spatial and political implementation contexts. In addition, while implementation of pilot projects is a way of testing approaches, the variety of factors that influence the success of a project in a particular location may be markedly different in another location, potentially impacting the sustainability of the pilot project methodology.

The challenges of project design and implementation outlined above highlight the need for a debate about whether the regional scale is appropriate for direct implementation of adaptation projects/programs in SIDS. The adaptation projects/programs assessed as part of this study all consisted of multiple pilot projects. We have discussed the challenges of implementing discrete adaptation pilot projects simultaneously across a variety of SIDS. Our results suggest that if regional organisations, working supranationally, continue with direct project implementation, there will be a number of areas that require attention. These areas include (1) developing SMART indicators for ease of

project/program monitoring and evaluating, (2) strengthening project/program design, and incorporating evidence from previously-implemented projects/programs, (3) ensuring continuity of appropriately qualified project/program staff, (4) ensuring sufficient project funding, including for contingencies, and (5) ensuring projects provide value for money. Strengthening these areas is likely to lead to greater project/program effectiveness.

9.2. Recommendations for the Future Role of Regional Organisations

Further to the issues identified above, three recommendations for the future role of regional organisations are made here. These are informed by interviewee responses.

The first recommendation is that regional organisations should focus on resolving the "major information deficit issues", noted by one Caribbean official (Interviews, January 2015) (see also Dornan and Newton Cain, 2014):

"One of the things that is very important for regional organisations to lead on would be the issue of the climate models – if we are using the climate models to inform policy direction and project interventions, no single country in our region can do that, so that is something for a regional entity like the CCCCC to enact" (Interviews, January 2015).

This view was supported by one Pacific official who noted that regions "need to have access to technological resources such as early warning systems and modelling software" (Interviews, September 2014). SPC and SPREP, working supranationally, are well-placed to deploy such resources throughout the Pacific region.

The second recommendation is for regional organisations to continue to "help countries develop a portfolio of ready-to-finance investment projects" and to improve countries' access to international adaptation financing (Interviews, January 2015). This role, in the Caribbean, has been

impeded because:

"... very few countries have been agile enough to move in this direction [...]; in some respects, some are just downright slow and others seem to have little appetite to move in that direction; if we don't, then clearly it's going to come back to haunt us" (Interviews, January 2015).

The situation in the Pacific is different. Countries such as Samoa, one Pacific civil servant noted, are "swimming out" to attract financing for national adaptation projects, which is helping to relieve the burden on regional organisations to attract these resources (Interviews, October 2014). Another Pacific civil servant noted that countries such as Fiji "know how to play the game" and are able to attract more

adaptation financing than other Pacific SIDS that are not as savvy (Interviews, August 2015). These countries that are perceived by other Pacific officials as having the international financing 'know how' could play a role in assisting other less adept countries to pursue required financing. This would, however, raise additional questions regarding the role and continued relevance of regional organisations in coordinating regional responses to climate change across SIDS.

The third recommendation is that regional organisations should prioritise capacity-building for risk reduction within national governments over discrete project implementation, at least over the next few years. As one Caribbean interviewee noted, regional organisations can [and should] lead on "building capacity to reduce our [the region's] exposure to risk" (Interviews, January 2015). This suggestion is similar to a global move, including in the Pacific for the development of joint national action plans that integrate disaster risk reduction with CCA, both at national and regional levels (Nalau et al., 2015). Likewise, the Caribbean is moving towards a comprehensive disaster risk management approach, which is part of a broader sustainable development goal that aims "to strengthen regional, national and community-level capacity for mitigation, management and coordinated response to natural and technological hazards and the effects of climate change" (Collymore, 2011, p. 15). Leading on capacity-building could involve, for example, helping governments to build their skills base. This would support a higher degree of national government ownership over the adaptation process, as per the comment of another Caribbean official that, "shifts in cultural paradigms" and "government buy-in" are "the only way that we will truly adapt to climate change" (Interviews, December 2014). Additionally, the national capacity-building required does not only relate to climate change. A Caribbean official said that the state of national "policy or enabling environments" hampers the extent to which regional organisations can be effective (Interviews, January 2015). The interviewee explained that many Caribbean countries, for example, rank poorly on the World Bank's 'Doing Business Index' because of:

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"... bureaucratic structures, how long it takes to get things done, the kinds of hoops you have to go through [and that] there is no 'one-stop-shop' type of agency to facilitate the kinds of [adaptation-related] investments necessary" (Interviews, January 2015).

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Without an appropriate, functioning policy or enabling environment at the national level, there are limits to the adaptation support that regional organisations can provide.

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9.3. Opportunities for Future Research

This study is not intended as a final assessment of regional organisations coordinating CCA in SIDS; rather, it is a preliminary assessment designed to initiate a debate about what roles regional organisations can most effectively play in supporting adaptation across SIDS. As such, it opens up a number of opportunities for future research, such as:

- Re-applying FAROCCCA to the three case study organisations when more information, particularly for the CCCCC (e.g. annual and audited financial reports), becomes publicly available.
- Assessing the perceptual indicators in FAROCCCA, leading to a more nuanced understanding of regional organisational effectiveness with respect to CCA and SIDS.
 - Applying FAROCCCA to organisations working in fields other than CCA.
 - Assessing the role that external donors play in influencing regional organisations' actions and decisions around CCA, and also on the nature of adaptation responses in SIDS.
 - Exploring the demand-side of adaptation in SIDS, and the factors that drive adaptation processes and actions.
 - Determining whether there is a relationship between the size and resources of individual countries and the nature and extent of their engagement with regional organisations in relation to CCA.

10. Conclusion

This paper makes three primary contributions to the academic literature. First, it develops FAROCCCA, a qualitative tool for understanding and rating the effectiveness of the regional organisations coordinating regional responses to climate change across SIDS. FAROCCCA has four components, 18 sub-components and 62 indicators, covering areas such as the quality of human, financial and technological resources, the logic, design and adequacy of adaptation projects/programs, and collaboration and advocacy. It is a tool that can be used by regional organisations themselves as well as by independent evaluators and academics. The Framework could also be modified or expanded to suit specific circumstances, for example, to assess regional organisations working in fields other than CCA and SIDS. Second, this cross-regional study into the effectiveness of regional organisations coordinating regional responses to climate change across SIDS is among the first in the academic literature. To date, the literature has focussed on single-country and single-region examinations of adaptation practices and processes in SIDS, often zeroing in on the effectiveness of national governments and community-based organisations. This paper helps to fill the gap relating to adaptation practices and processes across SIDS regions and the effectiveness of action at the supranational level.

Third, it provides empirical evidence to show that the regional organisations studied are comparatively effective with respect to their CCA-related inputs and outputs but that they are less effective in designing, implementing, monitoring and evaluating adaptation projects/programs. The study recommends that, in addition to differentiating organisational mandates, regional organisations should focus on resolving the major climate-related information deficit issues, helping countries to develop ready-to-finance investment projects, building national-level capacities to adapt, and supporting the creation of an enabling environment for CCA.

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APPENDICES

Regional Organisations and Climate Change Adaptation in Small Island Developing StatesStacy-ann Robinson¹ and Daniel Gilfillan^{2*}

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Appendix 1: Theoretical Framework

There are many theoretical approaches that could be taken to this study, including regionalism and neoregionalism. These were excluded primarily because of their: (1) emphasis on studying how regions are formed and how they function, and (2) functional definition of regions based on economic, environmental and cultural factors (see Väyrynen, 2003).

In contrast, this study focusses on geographically-defined regions and how the regional organisations within them function, particularly with respect to climate change adaptation. As such, the research is primarily shaped by modern organisation theory with elements of neo-functionalism. Modern organisation theory recognises that individuals. processes and systems work together to achieve desired objectives (Hicks and Gullet, 1975); it interprets organisations as adaptive, descriptive and dynamic processes of interaction with many dimensions and motivations (Asopa and Beye, 1997). Aspects of the systems, contingency and socio-technical approaches to modern organisation theory are incorporated in this research. The systems approach emphasises the organisational linking mechanisms and processes (e.g. decision-making and communication), components (e.g. individuals and physical environment), as well as organisational goals (Asopa and Beye, 1997). The contingency approach encourages consideration of the political, socio-economic, cultural, legal and technical environment in which the organisation operates as well as performance optimisation through appropriate organisational relationships (Asopa and Beye, 1997). The socio-technical approach examines the techniques and knowledge that support staff to produce valuable goods and services for wider use (Asopa and Beye, 1997). Neo-functionalism recognises the independent role of organisations (Schmitter, 2003). Non-state actors, such as the secretariats of regional organisations and individuals, work together at the regional level to achieve aggregated interests (see e.g. Ludlow, 2006). From this perspective, Member States establish a regional organisation, set its initial mandate and play a role in determining its operational agenda, a role which generally diminishes over time as authority is gradually devolved to the organisation itself (Schmitter, 2003). These theoretical underpinnings are strengths of this paper. Organisation theory offers an explicit recognition of the complexities that result from having multiple organisations, processes, individuals and operating environments with differing goals and motivations working towards desired outcomes. Its neo-functional elements allow the authors to take an integrated view of each organisation. Both theories shape the authors' ontological view that transformational improvement of regional organisations and systems is possible, making an academic inquiry into regional approaches to climate change adaptation a worthwhile endeavour.

Appendix 2: FAROCCCA's Components, Sub-Components and Indicators

	LEGEND	
ercentual	indicator or indicator not rated in	this paper

1. Goals 1. Climate change adaptation was an initial goal of the organisation. 2. Climate change adaptation is a current goal of the organisation. 3. The current strategic plan contains specific climate change adaptation objectives. 4. There is no other regional organisation with similar climate change adaptation goals. 1. The Board provides visionary leadership and strategic direction. 2. The organisation evaluates organisational performance at least annually. 3. Executive management (can also include members of the Board/Governing Body) decision-making is done by consensus or majority vote. 4. Executive management staff (can also include members of the Board/Governing Body) are qualified and/or equipped to achieve the goals of the organisation. 5. Executive management staff (solose potential conflicts of interest. 6. The organisation attracts, retains and develops talent. 7. Leaders create a dynamic organisational culture, making the organisation a desirable place to work. 3. Resources 1. There are staff members exclusively dedicated to climate change adaptation. 2. The organisation and have experience in climate change and Neumärker (2013); Renz and Herman (2002); Sowa et al. (2004); Taylor et al. (2014); Wolfd and Neumärker (2013); Biermann and Bauer (2004); Daft (2012); McDavid et al. (2013); Oberlack and Neumärker (2013); Sowa et al. (2004); Wolfe and Neumärker (2013); Wolfe and Neumärker (2013); Wolfe and Neumärker (2013); Ne	SUB-COMPONENT	INDICATOR	EXAMPLE OF SUPPORT IN THE LITERATURE
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adaptation. Putler (2002)			` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
3. Staff are qualified and have experience in			
project/program management.			
4. Staff participate in ongoing training programs.			

	5. Staff performance is appraised (formally or informally)	
	at least annually.	
	6. The organisation has untied funding.	
	7. The organisation has funds exclusively dedicated to	
	climate change adaptation.	
	8. External funding to the organisation has increased over	
	the past 5 years.	
	9. The organisation has multiple funding sources.	
	10. The organisation has financial reserves.	
	11. The organisation has sufficient technological resources	
	(e.g. intellectual property rights, patents, copyright,	
	software licences etc.) to carry out its climate change	
	adaptation mandate.	
4. Structure, systems and processes	1. There is a low degree of hierarchy (i.e. few hierarchical	Biermann and Bauer (2004); Miller and Salkind
	levels).	(2002); Quinn and Rohrbaugh (1983); Sowa et al.
	2. The organisation has a human resource management	(2004)
	system that supports the shaping of organisational culture	
	and staff recruitment, training, development and	
	retention.	
	3. There is a financial management system that meets	
	International Financial Reporting Standards (IFRS) or its	
	equivalent.	
	4. The organisation applies risk management principles in	
	its decision-making processes.	
	5. The organisation has a centralised, user-friendly internal	
	data management system.	
	6. The organisation has a user-friendly project/program	
	management system (e.g. that supports staff to identify,	
	schedule and track resources etc.).	
	7. There are mechanisms that support vertical and	
	horizontal communication.	
	8. There are internal dispute resolution protocols.	
5. Research and collaboration capacity	1. The organisation has plans and policies that support	Biermann and Bauer (2004); CCCCC (2012); CHFI
	research.	(2014); Holden et al. (2012); Howes et al. (2015)
	2. There are organisational funds allocated for research.	
	3. The organisation has equipment, expertise and/or	
	resources (e.g. access to journal articles etc.) for research.	

	4. The organisation's current strategic plan (or a similar document) outlines plans for collaboration with multiple stakeholders on adaptation-related initiatives.	
	2. Project/Program Effectiveness	
1. Needs and goals	 The project documents contain evidence that the project/program fills an existing need with relation to climate change adaptation. 	McDavid <i>et al.</i> (2013); Underdal (2010); Weiss (2005)
	2. The project/program's adaptation components could be considered 'transformational' (i.e. the project/program focusses on "larger, more profound system changes" and requires a "paradigm shift" in the way it is framed and implemented).	
	3. Climate change adaptation is a goal of the project/program.	
	4. The project/program's goals reflect the long-range impacts of climate change.5. The project/program's objectives relating to climate	
	change adaptation are specific, measurable, achievable, realistic and time-bound (SMART).	
	 Member Countries were involved in developing the climate change adaptation components of the project/program. 	
2. Scope	1. The project/program addresses multiple climate or climate-induced vulnerabilities (e.g. vulnerability to sealevel rise, increased sea surface and air temperature, changing rainfall patterns etc.).	Robinson (2015); Weiss (2005)
	2. The project/program addresses multiple non-climate-induced vulnerabilities (e.g. poverty, deforestation etc.).	
3. Logic, design and adequacy	1. The logic/design of the project/program's climate change adaptation components is evidence-based, in the context of SIDS.	Biermann and Bauer (2004); Galaz et al. (2008); McDavid et al. (2013)
	2. The project documents contain evidence that the logic/design of the project/program's climate change adaptation components is an effective means to achieve its objectives.	
4. Resources	1. Staff members are assigned exclusively to the project/program.	Daft (2012); McDavid <i>et al.</i> (2013); Wolfe and Putler (2002)

	 The project/program team includes staff members with qualifications and experience in climate change adaptation. 	
	3. The project/program team includes staff members with qualifications and experience in project/program management.	
	4. The project documents contain evidence that there are sufficient staff members to achieve the project/program objectives.	
	5. The project documents contain evidence that there is sufficient funding for the project/program's climate change adaptation components.	
5. Technical efficiency	 The project documents contain evidence that the project/program provides value for money (cost vs. outputs). 	McDavid et al. (2013)
6. Implementation	1. The project/program's climate change adaptation components are implemented, as proposed.	McDavid et al. (2013)
7. Monitoring and evaluation	 The project/program is internally monitored and evaluated. The project/program is externally monitored and 	McDavid et al. (2013); Yukl (2008)
	evaluated.	
8. Sustainability	1. There are sustained outputs from the project/program.	CCCCC (2012); PIF Secretariat (2014)
	3. Output Effectiveness	
Goal attainment	1. There is evidence in the most recent annual report or evaluation that the climate change adaptation-related objectives of the organisation are being achieved.	Button et al. (1996); Etzioni (1960); Etzioni (1964); Sowa <i>et al.</i> (2004)
2. Research and knowledge management	 The organisation produces and/or publishes research that is relevant to climate change adaptation at least annually. The organisation makes climate change adaptation- 	CCCCC (2012); PIF Secretariat (2014); also based on Interviews (August 2014-August 2015)
2 0 11 1 1	relevant research publicly available.	GGGGG (2012) G II + 1 (1000) PE
3. Collaboration and advocacy	1. There is evidence that the organisation collaborates with multiple stakeholders to undertake climate change adaptation-related activities.	CCCCC (2012); Connolly et al. (1980); PIF Secretariat (2014); also based on Interviews (August 2014-August 2015)
	2. The organisation advocates for political, financial and/or other climate change support for its Member Countries in various fora at different scales.	
4. Education and training	 The organisation undertakes climate change adaptation stakeholder and/or public awareness activities. 	CCCCC (2012); also based on Interviews (August 2014-August 2015)

	2. The organisation develops and/or implements training programs for stakeholders in issues related to climate change adaptation.	
5. Specialised advisory services	1. The organisation provides specialised climate change adaptation-related advice to Member Countries and/or other stakeholders.	
	4. Outcome Effectiveness	
-	-	-

Appendix 2: FAROCCCA's Components, Sub-Components and Indicators (cont'd)

Appendix 3: Application of FAROCCCA to CCCCC

RATING SYSTEM		
×	No	
♦	To some extent	
abla	Yes	
(NE)	No evidence	
	Perceptual indicator or indicator not rated in this paper	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		1. Input Effectiveness	
1. Goals	2. Climate change adaptation was	The Agreement Establishing The Caribbean Community Climate Change Centre	
	an initial goal of the organisation.	(CCCCC) (2002) states that, "Affirming that responses to climate change should be	
		co-ordinated with social and economic development in an integrated manner with a	
		view to avoiding adverse impact on the latter, taking fully into account the legitimate	
		priority needs of developing countries for the achievement of sustained economic	
		growth and the eradication of poverty" (forward); "The objectives of the Centre shall	
		be: (a) protection of the climate system of Members of the Centre for the benefit of	
		present and future generations of their peoples" (Article 4a); "In order to achieve its	
		objectives set out in Article 4, the Centre shall perform the following functions: (f)	
		co-ordinating (and initiating) the development of regional research programmes,	
		including adaptation of global climate and impact modelling efforts and specialised	
		training focussed on effective adaptation to global climate change" (Article 5f); The	
		Agreement has 41 references to climate change; 7 references to adaptation (CARICOM Secretariat, 2011a, online).	
		(CARICOWI Secretariat, 2011a, online).	
		The CCCCC's Mission Statement is: "Through its role as a Centre of Excellence, the	
		Centre will support the people of the Caribbean as they address the impact of climate	
		variability and change on all aspects of economic development through the provision	
		of timely forecasts and analyses of potentially hazardous impacts of both natural and	
		man-induced climatic changes on the environment, and the development of special	
		programmes which create opportunities for sustainable development" (CCCCC,	
		2015f, online).	
	3. Climate change adaptation is a	The 5 strategic elements of the CCCCC/CARICOM Regional Framework (valid	\square
	current goal of the organisation.	2011-2021) include: "(a) Mainstreaming climate change adaptation strategies into the	
		sustainable development agendas of CARICOM states"; "(b) Promoting the	
		implementation of specific adaptation measures to address key vulnerabilities in the	
		region"; "(d) Encouraging action to reduce the vulnerability of natural and human	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		systems in CARICOM countries to the impacts of a changing climate" (CCCCC,	
	4 771	2012, p. 18).	♦
	The current strategic plan contains specific climate change adaptation objectives.	The objective of the Regional Implementation Plan, part of the CCCC/CARICOM Regional Framework, is "to build resilience to a changing climate and create low carbon economies" by "delivering actions in the following areas: (1) institutional and governance building blocks, (2) cross-cutting challenges, and (3) technical and physical impacts" (CCCCC, 2012, p. 50). The Plan has 8 key milestones, including (1) research component completed, (3) Regional Coordinating Mechanism established, (8) policy review completed. All milestones have target completion	*
		months and years (CCCCC, 2012, p. 116). Goals associated with relevant Strategic Elements:	
		2.1: Promote the adoption of measures and disseminate information that would make water supply systems resilient to climate-induced damage 2.2: Promote the implementation of measures to reduce climate impacts on coastal and marine infrastructure	
		2.3: Promote the adoption of measures and dissemination of information that would adapt tourism activities to climate impacts	
		2.4: Promote sound conservation practices in coastal and marine ecosystems to shelter these resources from climate-induced damage	
		2.5: Promote the adoption of sound practices and measures to prevent and/or reduce climate-induced health impacts in the community.	
	5. There is no other regional organisation with similar climate change adaptation goals.	The CARICOM website lists 34 regional organisations and institutions in the Caribbean. One of these institutions has climate change in its name—the 'Caribbean Planning for Adaptation to Global Climate Change' (CPACC) (CARICOM Secretariat, 2011d). However, elsewhere on the website, CPACC is identified as a project (CARICOM Secretariat, 2011c).	Ø
		See also (CCCCC, 2012, p. 100).	
		Two organisations have 'environment' in their name—Caribbean Environment Health Institute (CEHI) (now CARPHA) and Caribbean Environmental Reporters Network (CERN).	
		CEHI/CARPHA is a Technical Institute of CARICOM. Its mission statement does not mention climate change—"CEHI provides technical and advisory services to Member States in all areas of environmental management including:	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		 Water Resources Management, Sustainable Land Management and Integrated Watershed and Coastal Areas Management Waste Management: Solid, liquid, hazardous, biomedical and electronic waste Indoor Air Quality, Chemical Safety and Occupational Health and Safety 	
		 Sustainable Consumption and Production, Eco-Efficiency and Renewable Energy Environmental and Social Impact Assessments Environmental Management Training 	
		- Public Awareness and Outreach" (CEHI, n.d., online).	
		"CERN is a group of journalists working closely with scientists to accurately translate their data to provide responsible coverage of development and environmental issues. CERN produces a radio magazine programme which is distributed by CANA Radio and broadcast throughout the Caribbean region. The organisation works closely with The Caribbean Institute of Mass Communication (CARIMAC) - Mona Campus of the University of the West Indies and Panos Washington to provide training and the Caribbean News Agency (CANA) wire service which carries CERN's Greenwire. CERN's pool of reporters can be found at most major environmental and development conferences around the world" (ELDIS, 2015, online).	
		Based on names, six other organisations could potentially have climate change adaptation objectives—the Association of Caribbean States (ACS), Caribbean Development Bank (CDB), Caribbean Disaster Emergency Management Agency (CDEMA) (formerly CDERA), Caribbean Institute of Meteorology and Hydrology (CIMH), Organisation of Eastern Caribbean States (OECS) and University of the West Indies (UWI). Three missions of three are given below:	
		CDEMA "is a regional inter-governmental agency for disaster management" in CARICOM. "It [CDERA] transitioned to CDEMA in 2009 to fully embrace the principles and practice of Comprehensive Disaster Management (CDM). CDM is an integrated and proactive approach to disaster management and seeks to reduce the risk and loss associated with natural and technological hazards and the effects of climate change to enhance regional sustainable development" (CDEMA, n.db, online). CDEMA "received funding support from the Austrian Development Agency (ADA) to implement the Mainstreaming Climate Change into Disaster Risk Management for the Caribbean Region (CCDM) Project" (CDEMA, n.da, online). It names CCCCC as a key partner in this project (CDEMA, n.da). 'Climate Change,	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		Disaster Risk Reduction and Environment Sub-Committee' is a sub-committee of CDEMA's Technical Advisory Committee (TAC) (CDEMA, n.db).	
		"The Caribbean Institute for Meteorology and Hydrology (CIMH) is a training and research organisation formed by the amalgamation of the Caribbean Meteorological Institute (CMI) and Caribbean Operational Hydrological Institute (COHI)". "The role and mission of the CIMH is to improve the meteorological and hydrological services and to assist in promoting the awareness of the benefits of these services for the economic well-being of the CMO countries. This is achieved through training, research and investigations, and the provision of specialised services and advice" (CIMH, 2015, online).	
		UWI at Mona (Jamaica) has a Climate Studies Group (CSGM). It "was formed within the Physics Department at the University of the West Indies in 1994 under the initiative of the Honourable Professor A. Anthony Chen, O.M. The CSGM comprises faculty members, consultants, technical staff and postgraduate students - all working together to increasingly understand the workings of local, regional and global climate".	
		"The mission of the CSGM is as follows:	
		 To investigate and understand the mechanisms responsible for the mean climate and extremes in climate in both Jamaica and the wider Caribbean To use this understanding to predict climate on a seasonal and annual basis To promote awareness of global warming To determine how anthropogenic climate change will manifest itself in the Caribbean region To investigate the potential for exploiting renewable energy resources To investigate and promote the advantageous uses of climate prediction in socio-economic sectors" (UWI, 2015, online). 	
		CSGM is also engaged in CCA projects e.g. PPCR (see Williams-Raynor, 2015).	
		UWI at St Augustine (Trinidad and Tobago) has "an Office of Research Development and Knowledge Transfer (ORDKT) that supports all research and knowledge transfer activities. ORDKT links UWI experts to national and international corporations,	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		multinational organizations, governments, NGOs and funding agencies. Part of its service includes: research management and research capacity development activities; planning and implementation of strategies; policy making; seek funding for project management and execution; development and management of key stakeholder relationships for research collaboration. Recent research funded projects: incorporation of RE and energy efficiency into the academic programmes; Caribbean climate change adaptation and mitigation scenarios; geoinformatics technology for climate change monitoring, mitigation and adaptation strategies; climate change adaptation strategies for water resources and human livelihoods" (emphasis added) (UNEP-REGATTA, 2015, online).	
		Key role of CCCCC is coordinating and centralising efforts; other organisations doing aspects of the CCCCC's work	
2. Governance and leadership	8. The Board provides visionary leadership and strategic direction.		
•	9. The organisation evaluates organisational performance at least annually.	The Centre "is strengthening its capacity by establishing a Monitoring and Evaluation Unit to better prepare it to function as an implementing agency with the requisite technical capacity to institute projects on par with international organizations operating in the region. The new Unit will also advance the Centre's capacity to advise and help governments develop, monitor and evaluate programmes in accordance with its mandate as the region's key node of information and action on climate change" (CCCCC, 2015a, online).	
	10. Executive management (can also include members of the Board/Governing Body) decision-making is done by consensus or majority vote.	*This Unit has not yet been established but could do internal M&E* Article 10(5) of the Establishment Agreement states that: "The Board shall take decisions by a qualified majority of three-quarters of the votes of its membership" (CARICOM Secretariat, 2011a, online). Article 10(1) of the Agreement states that: "The Board of Governors (hereinafter called "the Board" shall consist of representatives of Members and institutions, both public and private, set out in the Annex to this Agreement" (CARICOM Secretariat, 2011a, online).	Ø
	11. Executive management staff (can also include members of the Board/Governing Body) are qualified and/or equipped to achieve the goals of the organisation.	CCCCC is "overseen by a Board of Directors [also called 'Board of Governors'] selected by the Council of Ministers designated for this purpose by the CARICOM Heads of Government" (CCCCC, 2015i, online). Dr Leonard A. Nurse chairs the current 11 member Board, representing the Government of Barbados (CCCCC, 2015i). Dr Nurse is an IPCC WGII scientist and 2007 Nobel Prize Laureate. He is "a member of the CARICOM Task Force on climate change, established by regional Heads of Government in 2009" (UPRM, n.d.,	Ø

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		p. 1). "Dr Nurse is regarded as a leading practitioner in coastal resources management regionally and internationally, and has undertaken numerous consultancies in this field for regional governments, the private sector and international organizations including UNEP, UNDP, IDB, and the World Bank. He has been a researcher with the United Nations Intergovernmental Panel on Climate Change (IPCC) since 1990, and has written and published widely on the impact of climate change on small island states. He has also served as Vice-Chair of the Intergovernmental Oceanographic Commission Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE), and from 2002-2004 was a Member of the Scientific and Technical Advisory Panel of the Global Environmental Facility of the World Bank" (UPRM, n.d., p. 1). Dr Kenrick R. Leslie is the Executive Director (CCCCC, 2015i). "Dr Leslie has considerable experience in the fields of physics and meteorology. In December 2003 he was charged with the responsibility of transforming the Centre from a concept into a viable operational Institution. The Centre became fully operational in January 2005 with recognition as a regional Executing Agency on climate Change-related projects by the World Bank, various UN agencies and the UK Department for International Development (DIFD). Prior to joining the Climate Change Centre he was a Senior Principal Scientist in the Applied Physics Laboratories of AlliedSignal now Honeywell Corporation in Morristown, New Jersey in the United States. He has also contributed much to the development of meteorology and climatology in the Caribbean. He has worked as a meteorologist in the meteorological services of Trinidad and Tobago, Jamaica and the Bahamas. Dr. Leslie established the National Meteorological Service of Belize and served as its first Director from 1972 to 1981. In addition he served on the Board of Governors of the Caribbean Institute of Meteorology and Hydrology from 1972 until 1981. During this same period he also served as Rappoteur to the Wor	
		"In recognition of his exemplary public service he was awarded the Belize Order of Distinction (BOD) by the government of Belize in 2009 which is country s highest award. In 2008 he was appointed by Queen Elizabeth the Second to be a Commander of the British Empire (CBE) and in 1974 a Member of the British Empire (MBE). At AlliedSignal he received numerous awards including the Corporation's highest award in 1991 for Technical Achievement in the development of the first solid state blue	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		laser for underwater to space communications" (Cross Strait Interflow Prospect	
		Foundation, 2010, p. 27).	
	12. Executive management staff		
	disclose potential conflicts of		
	interest.		
	13. The organisation attracts, retains	Dr Ulric Trotz is the current Deputy Director and Science Advisor (CCCCC, 2015i).	♦
	and develops talent.	"Dr Trotz is a science advisor with the Caribbean Community Climate Change Centre	
		in Belize. He has a PhD in organic chemistry and comes to us with a wide and varied	
		experience and expertise in the fields of science, government service, and academe.	
		He's published and lectured widely on climate change issues, and in his capacity as	
		review editor for the chapter on Small Island Developing States in the Fourth	
		Assessment Report of the IPCC, he was a member of a group of scientists that was	
		awarded the Nobel Prize in 2008. He's been recognized for his public service in his	
		native country of Guyana, and was recently inducted as an honorary distinguished	
		fellow at the University of the West Indies in Barbados" (Columbia University, 2010,	
		p. 10). In November 2005 (the Centre officially opened in August 2005), Dr Trotz	
		was already with the 5Cs (see Government of Belize, 2005, p. xxiv). In February	
		2006, he was the Programme Manager of the MACC Project (CARICOM and UNDP,	
		2006).	
		Mr Carlos Fuller is the current International and Regional Liaison Officer (CCCCC,	
		2015i) and joined the CCCCC at some point between 2006 and 2008. In November	
		2005, Mr Fuller was the National Focal Point for Belize for the UNFCCC. He was	
		also the Chief Meteorologist at the National Meteorological Service in the Ministry	
		of Natural Resources, Local Government and the Environment (MNRLGE), Belize	
		(see Government of Belize, 2005, p. xxiv). In February 2006, Mr Fuller was still with	
		the MNRLGE (CARICOM and UNDP, 2006). In June 2008, he participated in the	
		Fourth Meeting of the GCOS Cooperation Board as the Deputy Director of the	
		CCCCC (WMO, 2008).	
		In 2014, Ms Sharon Olive Lindo was a Policy Officer (UNFCCC Secretariat, 2014).	
		In November 2005, Ms Lindo was the Sustainable Development Officer in the	
		MNRLGE, Belize (see Government of Belize, 2005, p. xxiv).	
	14. Leaders create a dynamic		
	organisational culture, making		
	the organisation a desirable place		
	to work.		

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
3. Resources	12. There are staff members	?	(NE)
	exclusively dedicated to climate		
	change adaptation.	Mr. Codo Fullon the Control comment between time 1 and Decimal Living Officer in	$\overline{\checkmark}$
	Staff are qualified and have experience in climate change	Mr Carlos Fuller, the Centre's current International and Regional Liaison Officer, is "a long-standing Caribbean negotiator" (CCCCC, 2014, online). In a 2014 interview,	[V]
	adaptation.	Mr Fuller said, "Having been involved in the climate change negotiation process	
	adaptation.	since its inception, I look back at the past 20 years with mixed emotions. I have	
		witnessed first-hand the assimilation of vague ideas on the elements of a climate	
		change agreement which were crafted into a Convention with perhaps too rigid	
		elements that have hindered the actions required to reduce the emissions of	
		greenhouse gases instead of facilitating a process which would have produced the	
		change in productive and consumption patterns to address the causes of climate	
		change. Nevertheless, a series of decisions including the development and adoption	
		of the Kyoto Protocol provided the impetus for a small group of countries to reduce	
		their emissions and have raised the awareness among a significant segment of the	
		population that the world must take action to cope with a changing climate" (CCCCC,	
		2014, online). He served as a Regional Technical Committee collaborator for the	
		2009 ECLAC project 'The Economics of Climate Change in Central America',	
		funded by the UK Department for International Development (DFID) (ECLAC, 2010). The project aimed to "alert decision makers and key actors in the region about	
		the urgent need to address the challenge of climate change and promotes dialogue	
		regarding options for national and regional policies and actions" and also to "conduct	
		an assessment of the economic impact of climate change in Central America under	
		various development and emissions scenarios, considering the costs and benefits of	
		vulnerability reduction and adaptation and a transition toward a sustainable and low-	
		carbon economy relative to one of inaction ("business as usual")" (ECLAC, 2010, p.	
		19). Mr Fuller's name appears on the provisional list of participants for UNFCCC	
		meetings e.g. the 2015 Ad Hoc Working Group on the Durban Platform for Enhanced	
		Action in Bonn (UNFCCC Secretariat, 2015).	
		Da Mada Danasa kana Di Dina Farananian (DDMC and) Ja 2014 1	
		Dr Mark Bynoe has a PhD in Economics (DPMC, n.d.). In 2014, he was Head of the	
		Project Development and Management Unit/Senior Resource Economist, Project Development and Management Unit (PDMU)/Economic and Social Impact Unit	
		(ESIU) (UNFCCC Secretariat, 2014). From August 2008 to July 2010, he was the	
		Environmental/Resource Advisor to the 5Cs (DPMC, n.d.), per the Commonwealth	
		Fund for Technical Co-operation (CFTC) (pers comm, 2015). In this capacity, he:	
		"(i) support[ed] work at regional and national levels on costing climate change	
		impacts on the water, tourism and agriculture sectors; (ii) develop[ed] and train[ed]	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		regional personnel on costing adaptation options in these sectors and using these	
		results to inform sectoral adaptation policy and implementation plans; (iii) advice[d]	
		[sic] the organizations on the use of information derived from assessments for	
		decision making in climate change adaptation; (iv) mentor[ed] and teach [taught]	
		staff on approaches to cost benefit analyses of adaptation options including the costs	
		of delayed action; (v) prepare[d] training material on the methods utilized in carrying	
		out costing of impacts and adaptation options to include methods for assessment of	
		environmental services; (vi) liaise[d] closely with national climate change focal	
		points training institutions within the region and other regional institutions	
		conducting similar activities" (DPMC, n.d., p. 2). Between May 2008 and February	
		2009, he was Project Coordinator, Economist and Policy Analyst for the development	
		of a National Agricultural Sector Strategy and Action Plan for Guyana to Adapt to	
		Climate Change (DPMC, n.d.). In April 2000, he "prepared, in collaboration with one	
		other professional, a Coastal Vulnerability Study for Guyana due to Climate Change	
		for the Guyana Environmental Protection Agency and the Organisation of American	
	10 0, 60 1'6' 1 1 1	States" (DPMC, n.d., p. 6).	
	13. Staff are qualified and have	In 2014, Dr Mark Bynoe was Head of the Project Development and Management	$\overline{\checkmark}$
	experience in project/program	Unit/Senior Resource Economist, Project Development and Management Unit	
	management.	(PDMU)/Economic and Social Impact Unit (ESIU) (UNFCCC Secretariat, 2014). In	
		2007, while Managing Director of Development Policy and Management	
		Consultants, he gained a Certificate in Program Monitoring and Evaluation from St.	
		Georges University in Grenada (DPMC, n.d.). He has "a wealth of experience in	
		project and program planning" (DPMC, n.d., p. 1). Between 1994 and 2009, he managed, coordinated and/or implemented 45+ projects and programs e.g. coastal	
		vulnerability studies, livelihoods assessments and feasibility studies (DPMC, n.d.).	
		vulnerability studies, fivefilloods assessments and feasibility studies (DF MC, fi.d.).	
		In 2014, Mr Keith Egbert Nichols was Project Development Specialist in the Project	
		Development and Management Unit (PDMU) (UNFCCC Secretariat, 2014). In 1998,	
		Mr Nichols worked for the OECS on matters relating to the Cartagena Protocol,	
		SPAW etc. (UNEP CEP, 1998). In 2012, he was Programme Officer in the OECS	
		Environment and Sustainable Development Unit (OECS, 2012). This Unit was	
		responsible for the implementation of the OPAAL Project aimed "to contribute to the	
		conservation of biodiversity of global importance in the participating countries of the	
		OECS by removing barriers and minimizing the challenges facing the effective	
		management of protected areas (PAs). Participating countries have already identified	
		priority sites for project interventions. A major component will focus on providing	
		opportunities for enhancing livelihoods for communities that are dependent on the	
		resources in these protected areas, through arrangements that will permit users to earn	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		a living without destroying the future value of the resources. Target groups in these areas will be provided financial and other management assistance to take advantage or the new livelihood opportunities through a special developmental fund" (OECS, 2012, online).	
	14. Staff participate in ongoing training programs.	In 2009, Mr Carlos Fuller, the Centre's current International and Regional Liaison Officer, participated in a UNFCCC Technical Workshop on Increasing Economic Resilience to Climate Change and Reducing Reliance on Vulnerable Economic Sectors through Economic Diversification (IISD Reporting Services, 2009). In 2010, he participated in a UNFCCC Latin America and Caribbean Regional Workshop on Preparing Technology Transfer Projects for Financing (UNFCCC Secretariat, 2010). *Little evidence of other staff participating in training; most training sponsored by external organisations such as the UNFCCC Secretariat*	\limits
	15. Staff performance is appraised (formally or informally) at least annually.	· · ·	(NE)
	16. The organisation has untied funding.	Article 16(2) of the Establishment Agreement provides for the establishment of a reserve fund: "The resources of the Reserve Fund shall consist of the following: • grants from international donors and sponsors of the Centre; • grants from Members and Associate Members; • grants from entities, public and private, which are not sponsors of the Centre; • unspent balances from the annual budgets of the Centre; • revenues derived from the operations of the Centre; • income from investments of the Centre" (CARICOM Secretariat, 2011a, online). The Centre is "advancing efforts to set up a Trust Fund. The Fund, which has been seeded with US\$1M from the Republic of Trinidad and Tobago, will be an independent arrangement administrated by the CDB [Caribbean Development Bank] that would allow the Centre to co-finance projects and fund project priorities over the long-term" (CCCCC, 2015a, online).	Ŋ
	17. The organisation has funds exclusively dedicated to climate change adaptation.	"The Centre continued the execution of eight medium to large projects/programmes over the last twelve months [2014-2015]. The Centre's most recent programme is a €12.8 million initiative to address ecosystems-based adaptation under an agreement with the German Development Bank (KfW). The KfW supported engagement seeks to protect the region's extensive coastal resources through a combination of ecosystems-based adaptation and environmental engineering approaches that will	I

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		also embed livelihood considerations as a core element of the programme. The comprehensive investment under the initiative developed by the Centre, in conjunction with the KfW, will focus on enhancing the resilience of the region's coastal resources to the impacts of climate change and climate variability" (CCCCC, 2015a, online).	
	18. External funding to the organisation has increased over the past 5 years.	developed the capacity to successfully execute a suite of regional climate change related programmes worth between US\$40 and US\$50 million over the last five years" (CCCCC, 2015a, online).	
		"Australia Aid has committed AU\$4.19 mill for direct financial support to the CCCCC. The EC have provided €8m for the execution of a CARIFORUM programme on climate change which will significantly increase climate and coral reef monitoring and early warning systems as well as fund adaptation pilots. The Caribbean Development Bank (CDB) is also contributing USD 470,250 from its Special Development Fund to fund technical services for the development of a pipeline of C C investment projects. CDKN are supporting the development of a risk management framework for decision making in 2 - 3 states (£405,000), In total £16.27 m has been committed to the IP through CCCCC to date (DFID 's contribution being 30% of this Sum)" (CDB, 2012, p. 8).	
	19. The organisation has multiple funding sources.	The Centre "is primarily funded through grants and not government subventions" (CCCCC, 2015a, online). Based on projects identified as "current" (CCCCC, 2015b, online):	☑
		 "In December 2010, in Cancun, Mexico, SIDS DOCK was launched with four Partners: the <u>United Nations Development Programme (UNDP)</u>, the <u>World Bank, AOSIS and the Government of Denmark</u>, which announced a grant of USD14.5 million in start-up contributions" (emphasis added) (CCCCC, 2015k, online). "The Database Management System for Regional Integrated Observing 	
		Network for Environmental Change in the Wider Caribbean (DBS) is executed by the Caribbean Community Climate Change Centre (CCCCC) with the financial support of the Inter-American Development Bank (IDB) " (emphasis added) (CCCCC, 2015g, online). • The Coastal Protection for Climate Change Adaptation in the Small Island States in the Caribbean Project is funded by the German Ministry for Economic Cooperation and Development (BMZ) (CCCCC, 2015b).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		"Executive Director Dr Kenrick Leslie says the Centre, under a directive from CARICOM Heads, has been "working with national governments to put together programmes that would help them develop bankable projects that can be funded under the various mechanisms under the United Nations Framework Convention on Climate Change. The Centre is putting maximum effort to ensure CARICOM Member States get their fair share of the Green Climate Fund (GCF), Adaptation Fund (AF) and other funds to help them in their adaptation efforts. That is our primary thrust— to meet the mandate given to us by the regional Heads" (CCCCC, 2015a, online).	
	20. The organisation has financial reserves.	CCCCC is the RIE for Green Climate Fund (Jamaica Observer, 2015). The Centre is "advancing efforts to set up a Trust Fund. The Fund, which has been seeded with US\$1M from the Republic of Trinidad and Tobago, will be an	Ø
		independent arrangement administrated by the CDB [Caribbean Development Bank] that would allow the Centre to co-finance projects and fund project priorities over the long-term" (CCCCC, 2015a, online).	
	21. The organisation has sufficient technological resources (e.g. intellectual property rights, patents, copyright, software licences etc.) to carry out its climate change adaptation mandate.		
4. Structure, systems and processes	9. There is a low degree of hierarchy (i.e. few hierarchical levels).		
	10. The organisation has a human resource management system that supports the shaping of organisational culture and staff recruitment, training, development and retention.		
	11. There is a financial management system that meets International Financial Reporting Standards (IFRS) or its equivalent.	Article 11(m) of the Establishment Agreement states that that Board shall: "prepare for submission to the Council, annual financial reports regarding the investments and use of the resources of the Reserve Fund" (CARICOM Secretariat, 2011a, online). Article 15(7) of the Establishment Agreement states that: "The finances of the Reserve Fund shall be audited annually by the auditors appointed by the Centre to	♦

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		audit its accounts. The Report of the Auditors shall be submitted to the Board for	
		consideration and approval" (CARICOM Secretariat, 2011a, online).	
		"Following decisions taken at last year's Board of Governors meeting, the Board has	
		strengthened its fiduciary oversight through a Finance and Audit Sub-Committee of	
		the Board of Governors, annual internal audits" (CCCCC, 2015a, online).	
	12. The organisation applies risk		
	management principles in its		
	decision-making processes.		
	13. The organisation has a centralised, user-friendly internal		
	data management system.		
	14. The organisation has a user-		
	friendly project/program		
	management system (e.g. that		
	supports staff to identify, schedule and track resources		
	etc.).		
	15. There are mechanisms that		
	support vertical and horizontal		
	communication.		
	16. There are internal dispute resolution protocols.		
6. Research and	5. The organisation has plans and	Article 5 of the Establishment Agreement states that functions of the Centre include:	V
collaboration	policies that support research.	"(f) co-ordinating (and initiating) the development of <u>regional research programmes</u> ,	
capacity		including adaptation of global climate and impact modelling efforts and specialised training focussed on effective adaptation to global climate change" (CARICOM	
		Secretariat, 2011a, online).	
		Secretariat, 2011a, omine).	
		Article 15 of the Establishment Agreement states that functions of the Technical	
		Secretariat include: "(e) provide advice on scientific programmes, <u>international co-</u>	
		operation in research and development relating to climate change, as well as on	
		developing relevant endogenous capabilities" (emphasis added) (CARICOM Secretariat, 2011a, online).	
	6. There are organisational funds	?	(NE)
	allocated for research.		(- · -)

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	7. The organisation has equipment,	The CCCCC is part of a research consortium in the Caribbean (Colley et al., 2011).	
	expertise and/or resources (e.g.	The consortium carries out "several activities that make up the Caribbean Modelling	
	access to journal articles etc.) for	Initiatives (CMIS), which will provide outputs that can assist decision makers in the	
	research.	public and private sector understand the predicted changes in climate, their impacts	
		and socio-economic effects in the Caribbean region. The modelling initiatives are	
		divided into three sections: 1. Caribbean Climate Modelling Initiative (CCMI), 2.	
		Impact Studies Modelling, and 3. Economic Modelling" (Colley <i>et al.</i> , 2011, p. 15).	
		The Centre submitted "information regarding its efforts in climate modelling,	
		downscaling and the use of climate change scenarios []in response to SBSTA's	
		call contained in FCCC/SBSTA/2006/11 paragraph 42 inviting regional organizations to submit information on ways in which they contribute to: (a)	
		Development, availability and use of climate models, and development of, access to,	
		and use of climate change scenarios, especially those that provide subregional and	
		regional specificity, including data downscaled from general circulation models; (b)	
		Enhanced capacity and experience with the use of these different models, statistical	
		approaches and outputs, and any available training opportunities; and (c)	
		Identification and reduction of uncertainties" (CCCCC, 2008, p. 1).	
		"Japan's Asia-Pacific Network for Global Change Research and the Caribbean	
		region's CCCCC operate in a similar way" (UNFCCC Secretariat, 2009, p. 9).	
	8. The organisation's current	Article 5 of the Establishment Agreement states that functions of the Centre include:	Ø
	strategic plan (or a similar	"(a) collecting, analysing, storing, retrieving and disseminating meteorological and	
	document) outlines plans for	sea-level data relevant to the observation of climate change and facilitating, in	
	collaboration with multiple	collaboration with specialised Caribbean agencies, the collection of information	
	stakeholders on adaptation-	about the impact of climate change on the economic sectors in the Caribbean; []	
	related initiatives.	(d) in collaboration with Members and relevant agencies, developing special	
		programmes to address implications in the Region for coastal zone management,	
		disaster management, and potentially vulnerable sectors such as tourism, health, agriculture and insurance" (emphasis added) (CARICOM Secretariat, 2011a, online).	
		agriculture and insurance (emphasis added) (CARTCOM Secretariat, 2011a, omnie).	
		The Board of Directors/Governors, at its June 2015 meeting, "agreed that the Centre	
		will deepen engagement with the private sector to ensure broad utilisation of the	
		seminal Caribbean Climate Online Risk and Adaptation Tool (CCORAL), pursue	
		closer collaboration with the Caribbean Public Health Agency (CARPHA, which	
		includes the former CEHI), expand its youth focused public education work and	
		welcome at least one new beneficiary country [Martinique]" (CCCCC, 2015a,	
		online).	
	2. Pro	ject/Program Effectiveness - SPACC	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
3. Needs and goals	7. The project documents contain	"The main lessons from the implementation of CPACC/ACCC/MACC include: a)	
	evidence that the project/program	Climate adaptation is a long term process. Institutional capacity building and	
	fills an existing need with relation	facilitating an enabling environment for adaptation are processes that might require a	
	to climate change adaptation.	long period to mature and consolidate; b) Climate change impacts key economic	
		sectors in the Caribbean; c) Climate and environmental data collection and processing	
		systems are essential; and d) Public education and outreach is required. These lessons	
		has [sic] been complemented by highlighting the importance of community	
		participation in the process of adopting land use plans and protected areas	
		management plans. In this context, the SPACC project will provide information on	
		how adaptation measures can be implemented and how to deal at a local community	
		level with adaptation as demonstrated in the following scheme. It will also inform	
		the MACC on the process of adaptation, its costs and benefits and serve as test to the	
		tools it has developed." (emphasis added) (World Bank, 2006, p. 18).	
		"The project complements the goals of the Mainstreaming Adaptation to Climate	
		Change in the Caribbean (MACC) Project and applies the lessons and information	
		gathered through the Caribbean Planning for Adaptation to Climate Change	
		(CPACC) project by piloting the implementation of adaptation measures in countries	
		that have already taken mainstreaming decisions and seek to execute specific	
		measures to address the impacts of climate change on biodiversity and land	
		degradation. This will be achieved through: (i) the detailed design of pilot adaptation	
		measures to reduce expected negative impacts of climate change on marine and	
		terrestrial biodiversity and land degradation; and (ii) the implementation of pilot	
		adaptation investments. The SPAC [sic] project will also pioneer the establishment	
		of institutional and operational frameworks for addressing holistically multiple	
		convention objectives in accordance with national priorities, thereby serving as a	
		model for other regions and countries. The ultimate goal is to make efficient and	
		integrated use of the limited human and financial resources for these technical areas	
		and illustrate how adaptation measures can be effectively implemented at the national	
	0 The mainth/mannana? 1 4 4	and community levels" (World Bank, 2006, p. 6).	
	8. The project/program's adaptation components could be considered		
	'transformational' (i.e. the		
	project/program focusses on		
	"larger, more profound system		
	changes" and requires a		
	"paradigm shift" in the way it is		
	framed and implemented).		

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	9. Climate change adaptation is a goal of the project/program.	"The Global Environment Objective [GEO] [of the project] was to produce knowledge that would be of global value on how to implement adaptation measures in small island states, which could be applicable to other countries in the region, and in the world, even if they were not participating in the project" (World Bank, 2012, p. vi).	☑
		The project development objective (PDO) "was to support efforts by Dominica, Saint Lucia and St. Vincent and the Grenadines to implement specific (integrated) pilot adaptation measures addressing primarily, the impacts of climate change on their natural resources base, focused on biodiversity and land degradation along coastal and near-coastal areas. They were achieved through: (i) the detailed design of pilot adaptation measures to reduce expected negative impacts of climate change on biodiversity and land degradation; and (ii) the implementation of pilot adaptation investments. Reducing these impacts would primarily result in protection of biodiversity and prevention of land degradation but would also induce economic benefits in the tourism, fisheries, agriculture and forestry sectors. It would also help	
		maintain the resource base upon which these economic activities rely, promoting a climate resilient sustainable development" (emphasis added) (World Bank, 2012, p. vi).	
	10. The project/program's goals reflect the long-range impacts of climate change.	"Figure below [figure actually missing from document!] presents a description of the long-term adaptation process, undertaken through the Bank and emphasizing the relationship between previous work under CPACC and ACCC, the ongoing MACC Project, and the SPACC Project. It also indicates that this is a long-term and continuous effort to face what constitutes an ever-growing threat to the sustainability of the region. Together, these activities correspond to the stages of adaptation envisioned under the Conference of Parties' (COP's) guidance to the GEF. CPACC (Stage I) focused on building awareness to climate change issues among public officials and the political sector, and initiating the process of strengthening the knowledge base. MACC (Stage II) supports further capacity building, facilitates the formulation of an enabling environment for adaptation and the formulation of adaptation measures. SPACC will fund specific adaptation measures" (World Bank, 2006, p. 17).	V
		*Also see 1.1. (a) → underline "Economic analyses of proposed adaptation measures will be undertaken as part of the design process (<i>Component 1</i>). In the economic analysis consideration will be	
		given to the long term character of the expected benefits and costs. Community,	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		national and sectoral benefits will be identified and quantified as part of the analysis.	
		An incremental cost analysis and an accounting of local and global benefits will also	
		be included. A financial analysis will be conducted as part of the selection process	
		for site specific adaptation measures, which will guide the decision-making process	
		for the identification of appropriate and economic efficient interventions. During	
		project implementation data will be gathered to assess actual benefits and costs of pilot measures" (emphasis added) (World Bank, 2006, p. 23).	
		phot measures (emphasis added) (world Bank, 2000, p. 25).	
		"The governments are involved in the adaptation measures identification process, the	
		governments confirmed to provide in kind or in cash contributions. However, MACC	
		continues supporting in parallel the enabling environment process and SPAC will	
		further strengthen the sensitization process. Also, selected adaptation initiatives will	
		complement ongoing or planned government programs addressing the key sectors	
		vulnerable to climate change. The project will add on to these government activities	
		by incorporating long term climate change considerations in planning, designing and	
		implementing the specific actions. Such a design guarantees mainstreaming climate	
		change consideration in the selected sectors" (emphasis added) (World Bank, 2006,	
	11 771	p. 47).	
	11. The project/program's objectives	The project has 15 indicators (after re-structuring):	♦
	relating to climate change adaptation are specific,	Dominica	
	measurable, achievable, realistic	<u>Bonninea</u>	
	and time-bound (SMART).	Indicator 1: "At least one Park Management Plan for Morne Diablotin National Park	
	and time bound (bivirint).	(MDNP) and /or Morne Trois Pitons National Park (MTPNP) updated with climate	
		<u>change issues</u> and submitted to Cabinet after review by the Secretary of Agriculture"	
		(World Bank, 2012, p. vi).	
		Indicator 2: "The Ministry of Agriculture creates and maintains a comprehensive	
		database of key ecological variables useful for Park Management" (World Bank,	
		2012, p. vii).	
		Indicator 3: "The Ministry of Agriculture and Forestry installs at least one new	
		meteorological station in each of the two Parks and uses information from them for	
		National Park management and/or agriculture planning" (World Bank, 2012, p. vii).	
		7 () one Built, 2012, p. 41).	
		Indicator 4: "The Ministry of Agriculture gains capacity to manage water stresses	
		related to climate change through extrapolating useful lessons from an irrigation pilot	
		for the communities of Colihaut, Dublanc and Bioche" (World Bank, 2012, p. viii).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		St. Lucia	
		Indicator 5: "Results from the implementation of Vieux Fort rainwater harvesting and waste water treatment pilot documented & disseminated by the Planning Ministry through a TN and a workshop for government, private sector and nonprofit [sic] stakeholders" (World Bank, 2012, p. viii).	
		Indicator 6: "Vieux Fort rain water harvesting system reduces the consumption of 3,000 cubic meters per year of potable water from the water utility" (World Bank, 2012, p. ix).	
		Indicator 7: "The Ministry of Physical Planning and Environment submits for Cabinet approval a decree to enforce rain water harvesting on new touristic activities" (World Bank, 2012, p. ix).	
		Indicator 8: "Successful Vieux Fort waste water treatment system contributes to reduce organic load to the coastal ecosystems in the Pointe Sable Environmental Protection Area by canceling [sic] actual waste water sewerage outflow into the coast" (World Bank, 2012, p. ix).	
		Indicator 9: "Information campaign implemented by the Ministry of Physical Planning and Environment to disseminate the lessons of the Marchand building pilot" (World Bank, 2012, p. x).	
		St. Vincent and the Grenadines	
		Indicator 10: "Institutional viability of Bequia water desalination & distribution system is demonstrated by an operative, adequately staffed Central Water & Sewage Authority office for the collection of consumer fees, and operation & maintenance of the system" (World Bank, 2012, p. x).	
		Indicator 11: "Technical viability of Bequia desalination, water distribution and renewable energy pilot is demonstrated by an operative desalination plant producing 50 m3 per day and an operative renewable energy device producing an average of 10,000 kWh per month" (World Bank, 2012, p. xi).	
		Indicator 12: "Financial viability of Bequia desalination, water distribution & renewable energy pilot is demonstrated by a financing mechanism including tariffs,	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		budgetary contributions and a renewable energy source to cover maintenance & offset incremental costs" (World Bank, 2012, p. xi).	
		Indicator 13: "The Ministry of Health and Environment gains capacity to manage water stresses related to climate change through the extraction of useful lessons from Bequia pilot" (World Bank, 2012, p. xii).	
		GEO Indicators	
		Indicator 14: "Global Learning Value. Lessons learnt by the CCCCC are disseminated through technical notes" (World Bank, 2012, p. xii).	
		Indicator 15: "University of West Indies receives from the Meteorological Research Institute of Japan, useful climate modeling data to enhance its regional climate model and makes use of the results in research and teaching" (World Bank, 2012, p. xiii).	
		"The design of the M&E, as reflected in the results framework, did not always establish clear links between the objectives, outputs and indicators. Initial monitoring was hard to perform (for example, an indicator related to the number of nesting parrots in a Dominica National Park). Once the Project was restructured, the indicators became easier to measure and to report to, thus allowing the results framework to be used as the instrument to evaluate on-the-ground progress. Quantity and quality of information varies between the three participating countries, with St. Lucia undergoing a very detailed reporting discipline while St. Vincent and Dominica	
	12. Member Countries were involved in developing the climate change adaptation components of the project/program.	lagged behind" (World Bank, 2012, p. 13). Government endorsement letters state that the project was developed in close collaboration with the CCCCC and the WB. They also state that the project was developed in accordance with national development and environmental priorities e.g. the letter from the SVG GEF Focal Point stated, "The project is designed in accordance with national development environmental priorities as defined in "St. Vincent and the Grenadines' draft Climate Change Policy and Implementation Plan" and St. Vincent and the Grenadines Biodiversity Strategy and Action Plan", which has been approved by Cabinet" (GEF, 2013, online).	♦
		This process however proved to be useful as different actors in the participating countries engaged in the decision making process during the design phase, and obtained significant insights and capacities to improve the quality of interventions	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		moving forward, and be better prepared to scale up successful activities in the future" (World Bank, 2012, p. 9). "Although the Grant Agreement stipulated that participating countries should provide	
		resources for national coordination, financial shortages generated in part by the international financial crisis prevented this from happening (with the notable	
		exception of Saint Lucia). The implementing agency, however, stepped up to this challenge and with their own funds hired technical coordinators for Saint Vincent and	
		Dominica. In general terms, however, these coordinators did not have the authority to speak on behalf of government" (World Bank, 2012, p. 9).	
4. Scope	5. The project/program addresses multiple climate or climate-	Project rationale, objectives, outputs/outcomes, and activities↓	Ø
	induced vulnerabilities (e.g. vulnerability to sea-level rise, increased sea surface and air	"Climate change threatens the stability and integrity of marine and insular systems. Small Island Developing States (SIDS) have been recognized as most vulnerable to the impacts of climate change, and as requiring greater attention by the	
	temperature, changing rainfall patterns etc.).	international community at large. The Third Assessment Report (TAR) of IPCC has documented the anticipated trends in sea level rise (SLR), increases in sea surface	
		temperature, as well as changes in the precipitation cycle and patterns of extreme events, among the impacts that may severely affect the sustainable development prospects of Caribbean SIDS. The Report also highlights the severity of their expected climatic shifts, the low level of their economic development which restricts	
		their ability to cope with expected changes without great economic stress" (underlining added) (World Bank, 2006, p. 2).	
		"The Organization of Eastern Caribbean States (OECS) region to which the three participating countries belong is characterized by a rich biodiversity endowment, which, in combination with its <u>isolation from other areas</u> has resulted in relatively high rates of national and regional endemism" (World Bank, 2006, p. 2).	
		"Climate change will affect the physical and biological characteristics of the Caribbean Sea and their coastal areas, modifying their ecosystem structure and functioning" (World Bank, 2006, p. 3).	
		"Also, in near-shore marine and coastal areas, many wetlands and coastal forests will be affected by changes in sea level and storm surges" (World Bank, 2006, p. 3).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		"Climate variability and intensification of hurricanes pose a significant threat to the sustainable development of Small Island Developing Sates" (World Bank, 2006, p. 3). "The largest category of impacts is the loss of land, tourism infrastructure, housing, other buildings, and infrastructure due to sea-level rise" (World Bank, 2006, p. 4).	
	6. The project/program addresses multiple non-climate-induced vulnerabilities (e.g. poverty, deforestation etc.).	"The Report also highlights the severity of their expected climatic shifts, the low level of their economic development which restricts their ability to cope with expected changes without great economic stress" (World Bank, 2006, p. 2). "The region economic activity is very dependent on a natural resource base which is highly vulnerable to climate change impacts. The CARICOM countries are highly dependent on natural resources and are thus very vulnerable to the impacts of climate change. The potential economic impact of climate change on the CARICOM countries is estimated at between US\$1.4 and \$9.0 billion for the impacts that could be estimated assuming no adaptation to climate change. The wide range for the estimate of potential economic impacts is due more to the uncertainty relating to the values and assumptions used than to the uncertainty about climate change. In the low scenario the total impact averages about 5.6 percent of the gross domestic product (GDP), ranging from 3.5 percent in Trinidad and Tobago to 16 percent in Guyana. In the high scenario the total impact averages over 34 percent of GDP, ranging from 22 percent in Trinidad and Tobago to 103 percent in Guyana" (World Bank, 2006, pp. 3-4). *Includes a table called "Vulnerability of Ecosystem Services and	
		Implications for Economic Activity in small island states in the Caribbean" (World Bank, 2006, pp. 4-5).	
5. Logic, design and adequacy	3. The logic/design of the project/program's climate change adaptation components is evidence-based, in the context of SIDS.	Illustrations of the "lack of clear national counterparts that link responsibility with authority" include: "(i) the development of the desalination plant in Bequia, St. Vincent involing [sic] two basic elements; installing a plant to provide freshwater for the target community of Paget Farm, and the installation of a renewable power generation facility to reduce operation costs. In theory, this approach would generate revenue to support maintenance of the plant by selling power back to the national	♦

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¹ "This estimate is based on limited data and numerous assumptions and hence is only a very rough initial estimate of the potential economic impact due to climate change. This estimate of the potential economic impact of climate change should be used with great care because it does not reflect possible adaptation to climate change and because of the uncertainty in the data and assumptions. Those cautions apply with even greater force to the estimates for specific categories of impacts and for individual countries. Estimates are often based on data for a single country, which may not be correct for other countries" (World Bank, 2006, pp. 3-4).

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
SUB-COMPONENT	4. The project documents contain evidence that the logic/design of the project/program's climate change adaptation components is	grid. While in theory the idea is excellent and technically sound, missing from the design was the inclusion of a mechanism to ensure that the policies of the national power company (VINLEC) would be changed to allow the purchase of excess power. Additionally, binding arrangements with the national water authority (CWSA) for operation and maintenance of the plant were also left to the implementation phase. A positive aspect to this is that the Project served as a catalyst to start the dialogue on those issues and anticipate some of the shortcomings that will appear when the approach is scaled up to the rest of the island and/or to other islands" (emphases added) (World Bank, 2012, pp. 9-10). "Similarly, in Dominica, the Project funded the installation of a pilot irrigation system supporting farmers engaged in alternative agriculture projects, notably greenhouse agriculture. In this case, the Project design was focused on the contribution to agricultural alternatives without considering the operational requirements of a community irrigation system. As irrigation is somewhat new to Dominica, no national mechanisms exist to empower communities to get organized, operate and maintain such systems. This requires the formation of a water association and the empowerment of the association to charge user fees, contract for maintenance and manage water distribution within the user community. While the pilot is contributing to help steer the dialogue in Dominica towards the organization of water user associations, these are not yet in place due to gaps in existing regulations. These gaps have been identified, and are currently being addressed, which has been an unintended positive aspect of the activity" (World Bank, 2012, p. 10). "Project design lacked specificity. The description of the Components was general in nature and actual activities were largely determined by the result of studies and designs prepared during the Project's implementation. While this is not necessarily a problem in large projects, the funding le	RATING
	evidence that the logic/design of the project/program's climate	unintended positive aspect of the activity" (World Bank, 2012, p. 10). "Project design lacked specificity. The description of the Components was general in nature and actual activities were largely determined by the result of studies and designs prepared during the Project's implementation. While this is not necessarily a	◆

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
6. Resources	6. Staff members are assigned		×
	exclusively to the project/program.	Centre and a National Coordinator, also contracted by the Centre, but operating from the Environment Section of this Ministry [of Physical Development, Environment and Housing, St. Lucia]" (The Voice, 2008, online). But the Project Manager [Mr Winston Bennett] was managing several projects at the same time: "Prior to joining CROSQ, Mr. Bennett was employed as Project Coordinator/Technical Leader for the CARICOM Climate Change Centre (CCCCC) and the CARICOM Secretariat where he managed several projects including the Special Program for Adaptation to Climate Change (SPACC), funded by the World Bank" (emphasis added) (CROSQ, 2011, pp. 1-2). Also to note: "While technically experienced in funds management and contract execution, CCCCC encountered difficulties with the country counterparts early in Project implementation largely related to the organization and management of the Project. Weaknesses became apparent early in the process notably with the technical management team provided by CCCCC and the requirement to operate through a system of country project coordinators. These required political negotiations with the respective countries to ensure effective project coordinators were appointed. The diffusion of authority between the participating country agencies, Project	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		coordinators and CCCCC created a significant impediment to implementation as no central point of authority at the national level was available to make decisions with respect to specific interventions or implementation activities on the ground. This lack of clear decision authority was particularly problematic in St. Vincent and Dominica. In St. Lucia, the problem was no less significant but was generally overcome due to the management skills of the coordinator and the participation of government agencies not originally involved in Project design. With respect to CCCCC, as a regional agency their strengths relate to funds management and general technical assistance on a macro scale. The management team selected to oversee the Project lacked the technical support required to implement specific activities at the country level. Additionally, with much of the operational responsibility placed on the national coordinators, CCCCC's ability to directly influence implementation and decisions was limited, affecting the efficiency of Project execution' (emphasis added) (World Bank, 2012, p. 11).	
	7. The project/program team includes staff members with qualifications and experience in climate change adaptation.	Project Manager – Mr Winston Bennett: "Mr Bennett holds a Bachelor of Science (BSc) in Industrial Engineering from the University of the West Indies, St. Augustine Campus in Trinidad and Tobago and an MBA from McGill University in Canada. He also has an Associate Degree with combined Majors of Mathematics, Chemistry and Biology and has extensive experience in project management, among other areas" (CROSQ, 2011, p. 1). While at CCCCC, Mr Bennett also managed the following projects: "Capacity for Adaptation to Climate Change (ECACC, [2007-2011]), funded by the Department for International Development (DFID); and the International Hydrological Program (HIP) Adoption Measures to Climate Change Impacts on Coastal Aquifer Systems in the Caribbean project [2009-2011], funded by UNESCO. During his tenure at CCCCC, he was also responsible for providing overall financial and administrative management and technical implementation assistance for the Mainstreaming for Adaptation to Climate Change Project (MACC)" (CROSQ, 2011, p. 2). "Mr. Bennett's [employment] portfolio also includes his holding the posts of: Director of the Water and Wastewater Sector of the Public Utilities Commission in Belize; Executive Director of the Belize Social Investment Fund (BSIF)" (CROSQ, 2011, p. 2). Also to note:	♦

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		In a February 2011 procurement notice for the Procurement and Installation of Photovoltaic System for Bequia, St. Vincent and the Grenadines (SPACC-ICB-SV-03), Mr Earl Green was identified as a Project Manager (see World Bank, 2011).	
	8. The project/program team includes staff members with qualifications and experience in project/program management.	Project Manager – Mr Winston Bennett: Mr Bennett was "Financial Controller of the Water and Sewage Authority (WASA) in Belize. He also held, inter alia, positions of Manager of Customer Relations, Public Relations and Business Development, Project Development Specialist/Senior Economist, and Senior Project Officer (Industry)/Industrial Project Officer at various organizations [sic] throughout his employment" (CROSQ, 2011, p. 2). Also to note:	∑
	9. The project documents contain	"Throughout the Project life the CCCCC was staffed with a seasoned Finance Professional with no turn over" (World Bank, 2012, p. 14).	
	evidence that there are sufficient staff members to achieve the project/program objectives.		
	10. The project documents contain evidence that there is sufficient funding for the project/program's climate change adaptation components.	"Inappropriate levels of funding: The Project initially included US\$200,000 to conduct identification, evaluation, selection and design of adaptation measures (Component 1). However, these tasks required greater levels of effort, including frequent trips by CCCCC from Belize to the PCs. The Project required highly specialized studies with participation of cutting-edge institutions, such as the hurricane wind study, performed for Saint Lucia, or the preparation of specialized designs and technical specifications for the desalination plant and alternative power generation in St. Vincent. Resources allocated to these tasks were insufficient, and a restructuring had to be done to reallocate more resources from elsewhere. Regarding the actual on-the-ground pilot projects, the budget initially allocated was US\$1.5M. Unfortunately, there was no consideration for design requirements or how those resources would be distributed amongst the PCs. Seven pilot projects were supposed to be financed with those funds, but it became clear that significantly more resources were needed" (World Bank, 2012, pp. 11-12).	X
		"Financial crisis affected some programmed activities: The international financial crisis impacted some of the planned activities. The PCs, who were largely dependent on tourism, were significantly impacted, and as a result, failed to provide their expected counterpart funding. To promote continued country participation and to	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		comply with requirements for country contributions, the Project was restructured to include the provision of in-kind contributions. The IUCN, whose contribution under component 3 was essential to lead, coordinate and execute the different activities of this component, suffered some financial hardships that forced them to withdraw from the Project. This component was downscaled to a smaller but still useful number of activities. In St. Vincent, the Government's contribution was focused on financing the water distribution system at the Paget Farm community, while the Project would finance the desalination plant and the sustainable energy source. This was reflected in a memorandum of understanding between CCCCC and the Government, and at some point, cash sources were actually inscribed in the national budget for this purpose. However, this contribution never materialized and, up to date, the CCCCC has had to find additional sources of funds to cover the shortfall. With these new funds, the main pipes and connections would be financed, while household service connections are to be financed through the United States Agency for International Development (USAID) project that is currently (May 2012) being prepared" (World Bank, 2012, p. 12).	
7. Technical efficiency	2. The project documents contain evidence that the project/program provides value for money (cost vs. outputs).	"The Project was complex and ambitious given the funds available. While important on a regional scale, the Project focused on pilot activities designed to address issues on a national scale. The blending of the national and international perspectives resulted in a Project that was extremely ambitious considering the level of funding available and the complexity of implementation. Moreover, the Project's activities spanned from biodiversity protection and management of National Parks to infrastructure works for building retrofitting, renewable energy production, meteorological monitoring or climate change modeling and scenario generation. This variety of interventions would have required the participation of many different types of expertise both in-country and at the implementing agency level. These challenges were recognized and addressed by engaging experts on these different topics, but also required extra time and resources" (World Bank, 2012, p. 9).	\psi
8. Implementation	The project/program's climate change adaptation components are implemented, as proposed.	"The project was restructured on September 14, 2010. Two out of the seven pilot projects were cancelled, resulting in a reduction of the total scope of the Project. The restructuring also included some reallocation of proceeds amongst components to reflect higher costs in design (Component 1) and lower costs in Component 3, and some modifications of the financing plan to reflect shortages of funds by the participating countries, IUCN, and increased resources provided by CCCCC" (World Bank, 2012, p. 8). "The restructuring of the Project involved changes in the outcome indicators in order to more accurately reflect the Project's objectives and the nature of the interventions;	X

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		modifications to the Project activities in St. Vincent and the Grenadines (cancelation of 2 pilots); adjustment of the disbursement categories to finance workshops and operating costs; modification of the financing plan to close the financing gap created by changes in the co-financing resources; and reallocation of the proceeds of the GEF Trust Fund Grant" (World Bank, 2012, p. 8).	
Monitoring and evaluation	4. The project/program is internally monitored and evaluated.	See Paragraph 1 in 7.2 below.	♦
	5. The project/program is externally monitored and evaluated.	"Reporting, monitoring and evaluation included World Bank supervision, which was typically undertaken together with the implementing agency, CCCCC; quarterly IUFRs (Interim Unaudited Financial Reports) including financial reports and procurement plans; annual work plans and reports; a mid-term review (MTR) conducted jointly by World Bank and CCCCC teams; and the conduct of annual audits. Regular audio-conferences between CCCCC, technical coordinators and Bank team took place" (World Bank, 2012, p. 13). "The mid-term review (September 2010) included a thorough analysis of the project implementation, identifying the constraints and recommending the restructuring of the project, while leaving the philosophy of the components, their distribution and flow unchanged. The restructuring involved dropping two of seven pilot projects, reallocating project proceeds and changes in the project performance indicators to better reflect the objective of piloting adaptation measures while generating global knowledge and ground experience to be replicated in other countries and regions. Since two pilots were canceled, the overall scope of the Project was reduced. However, SPACC original objectives did not change after the restructuring" (World Bank, 2012, p. 8).	
10. Sustainability	2. There are sustained outputs from the project/program.		
3. Goal attainment	2. There is evidence in the most recent annual report or evaluation that the climate change adaptation-related objectives of the organisation are being achieved.	*Annual reports not available.	(NE)
Research and knowledge management	The organisation produces and/or publishes research that is relevant	The Centre "is repository and clearing house for regional climate change information and data" (CCCCC, 2015c, online).	♦

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	to climate change adaptation at	"The Caribbean Community Climate Change Centre's (CCCCC) Regional	
	least annually.	Clearinghouse Database is the region's premier repository of information and data on	
		climate change specific to the region. This dedicated climate change resource was	
		first explored over a decade ago during the course of the Caribbean Planning for	
		Adaptation to Climate Change (CPACC) project (1997 to 2001), but the current	
		iteration was spurred by a CDB project grant (2010) for a new CCCCC website and	
		information portal focused on gathering, disseminating and exchanging information and data on climate change. The Clearinghouse has grown steadily since its launch in	
		2010, from a few dozen documents to over 3,830 as of September 2013. The rapid	
		expansion of the database will continue as the Centre adds new documents every	
		month, including books, videos, national/regional strategy documents, project	
		reports, studies and scholarly articles, among others. The expansion of the database	
		is complemented by broad use of the facility by target audiences from across the	
		region and internationally— namely the press, the public, project teams, consultants,	
		experts, researchers, students, focal points, governments and partner organizations.	
		This wide usage is evidenced by average monthly downloads of 8,500 documents	
		between December 2012 and February 2013" (CCCCC, 2015j, online).	
	2. The organisation makes climate	The Centre's clearinghouse mechanism is publicly available at:	V
	change adaptation-relevant	http://clearinghouse.caribbeanclimate.bz/. Visitors to the site can access information	
	research publicly available.	by topic or country, and about regional climate models and strategies, programs,	
		policies and projects.	
3. Collaboration and	3. There is evidence that the	The Centre's regional and international partners, including the IPCC, have endorsed	\square
advocacy	organisation collaborates with	CCORAL (CNS, 2015). "CCORAL, which was launched by the Centre in July 2013,	
	multiple stakeholders to	is an online support tool developed to strengthen climate resilient decision-making	
	undertake climate change	processes across various sectors in the Caribbean by embedding a risk ethic" (CNS,	
	adaptation-related activities.	2015, online).	
		"The Centre has been working with the Caribbean Development Bank, its longstanding partner and a permanent member of the 11 member Board of Governors,	
		and other development partners to mobilise private sector support for the tool" (CNS,	
		2015, online).	
		2013, Ollinic).	
		"The Centre's most recent programme is a €12.8 million initiative to address	
		ecosystems-based adaptation under an agreement with the German Development	
		Bank (KfW). The KfW supported engagement seeks to protect the region's extensive	
		coastal resources through a combination of ecosystems-based adaptation and	
		environmental engineering approaches that will also embed livelihood considerations	
		as a core element of the programme" (CNS, 2015, online).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		"The Centre is currently housed in rented facilities provided by the Government of Belize. The Government of Belize has allocated 10 acres of land to the Centre, on which a custom-designed, 'green' facility will be constructed" (CNS, 2015, online).	
	4. The organisation advocates for political, financial and/or other climate change support for its Member Countries in various fora at different scales.	"Executive Director Dr. Kenrick Leslie says the Centre, under a directive from CARICOM Heads, has been "working with national governments to put together programmes that would help them develop bankable projects that can be funded under the various mechanisms under the United Nations Framework Convention on Climate Change. The Centre is putting maximum effort to ensure CARICOM Member States get their fair share of the Green Climate Fund (GCF), Adaptation Fund (AF) and other funds to help them in their adaptation efforts. That is our primary thrust—to meet the mandate given to us by the regional Heads" (CNS, 2015, online).	Ø
		"The Ministry of Sustainable Development, Energy, Science and Technology in collaboration with the Caribbean Community Climate Change Centre (CCCCC) and the High Level Support Mechanism (HLSM) will be hosting a regional meeting for climate change negotiators and ministers with responsibility for climate change from Wednesday 16th September, 2015 to Friday 18th September, 2015 in Saint Lucia. The meeting which was requested by Prime Minister, Hon. Dr. Kenny D. Anthony at the last meeting of CARICOM Heads in Barbados, is expected to achieve the following:	
		 Establish coherence among negotiators on the critical issues in the negotiations toward a new climate change agreement in Paris in December 2015; Apprise of the areas of convergence and divergence in the ongoing climate change negotiations; and Prepare Ministers for a meeting of the Alliance of Small Island States (AOSIS) in New York on Thursday 24th September, 2015 which will take place on the eve of the Post 2015 Development Agenda Summit" (Government of St. Lucia, 2015, online). 	
		"Dr. Neville Trotz, Science Adviser and Deputy Director at the Belmopan, Belize-based CARICOM Climate Change Centre delivered a well-received statement on behalf of the region at the recently concluded COP18 talks in Doha, Qatar. Dr. Trotz declared that the region continues to address Climate Change in spite of global challenges. He added that the region's home grown approach is deliberate and a matter of survival. He cited the CARICOM endorsed <i>Regional Strategic Framework for Achieving Development Resilient to Climate Change</i> and the accompanying	26

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		Implementation Plan as key policy and operational plans that are guiding the Caribbean response" (CCCCC, 2015e, online).	
		"The Caribbean Community Climate Change Centre hosted together with the South Pacific a [sic] Exhibit at the 17th Conference of the Parties (COP 17) In Durban South Africa. A video was presented on the DVD "Caricom [sic] Countries – Meeting the Challenge of Climate Change", produced by the Centre and disseminated at COP 17 held in Durban. It provides a concise, yet fascinating account of just how much the various components of the region's economies stand to lose from the threat of climate change. In addition it distinctly highlights the achievements and activities of the Centre via its numerous past and contemporary regional projects, as explained in interviews with senior staff members. More specifically, it outlines the impending threats to tourism, agriculture, public health and other sectors while also explaining, through interviews with senior staff, the extensive achievements of past and current regional projects and initiatives. The video ends on a cautionary note, pointing to the urgency of policy to commit to a reduction in emissions in order to stem the tide of	
6. Education and training	3. The organisation undertakes climate change adaptation stakeholder and/or public awareness activities.	climate related impacts" (CCCCC, 2015d, online). 1.5 to stay alive campaign "Cognizant of the threat Climate Change poses to the region's survival and continued development, the Caribbean Community Climate Change Centre launched the 1.5° to Stay Alive campaign ahead of COP15 in December 2009. The two tiered campaign sought to sensitize [sic] citizens across the Caribbean Community about the impact of Climate Change on livelihoods in the region, and make a convincing case at the global level for the reduction of GHG emissions to a level not exceeding 350 ppm (parts per million) as an effective means of stabilising global warming. Owing to the region's vulnerability to climate change and variability and its particularly youthful population, the Centre seeks to engage this significant demographic to shape a robust and appropriate range of responses to ensure climate resilience and safeguard livelihoods. In light of this, the Centre supported a Youth Forum on climate change aimed at high school students in Belize in 2010. Through this initiative, students were engaged about how their individual actions contribute to the broader challenge of climate and the ways in which they can both adapt and mitigate such amidst a changing and variable climate. The project also engaged teachers to examine ways in which climate change education may be mainstreamed into the education sector, and resulted in the creation of a climate change toolkit" (CCCCC, 2015h, online).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		"The Centre successfully piloted a network of school-based environmental clubs in	
		Belmopan, Belize this year [2015]. This initiative includes 60 to 90 minute weekly	
		meetings, experiential learning, highly interactive group exercises and discussions.	
		This comprehensive youth focused outreach initiative, which also included the first	
		Belize–Mexico Student Exchange on Climate Change, will be a key element of the	
		Centre's public engagement moving forward. The network of clubs will be rolled out	
		across Belize and in three other CARICOM countries over the next 12 months [July	
		2015-June 2016" (CNS, 2015, online).	
		In 2012, the "Belize Coastal Zone Management Authority and Institute in partnership	
		with the Natural Capital Project, World Wildlife Fund, Inter-American Development	
		Bank, Caribbean Community Climate Change Center, and The Nature Conservancy	
		is hosting a three-day Caribbean Regional Conference entitled, "Integrating Climate	
		Change Adaptation Planning into Coastal Zone Management using Ecosystem	
		Services". Presenters and participants are experts from Jamaica, Barbados, Trinidad	
		& Tobago, Columbia, Guatemala, Canada, the United States, and Belize. Participants	
		will discuss practical ways that coastal and island states can adapt to changes in our	
		environment, and how the natural resources can help" (emphasis added)	
		(PreventionWeb, 2012, online).	
		"The workshop is part of the Caribbean Weather Impacts Group (CARIWIG)'s effort	
		to initiate and sustain consultations to determine community needs for the generation	
		of quantitative climate information for climate impact assessments and the broader	
		decision-making process in the Caribbean. The stakeholder consultation will focus	
		on some of the region's economic lifelines: the water, agriculture and coastal resource	
		sectors. The discussions will shape the course of the CARIWIG Project, which seeks	
		to create tools that will enable the region to reliably access locally relevant unbiased	
		climate change information in a manner that complements their planning cycle. The	
		CARIWIG project is funded by the Climate and Development Knowledge Network	
		(CDKN) and will be carried out in partnership with the Caribbean Community	
		Climate Change Centre (Belize), University of East Anglia (UK), University of the	
		West Indies (Jamaica) and the Institute of Meteorology (Cuba)" (emphasis added)	
	4. The organisation develops and/or	(PreventionWeb, 2013, online). The Centre has "been recognised by the United Nations Institute for Training and	$\overline{\mathbf{V}}$
	implements training programs for	Research (UNITAR) as a Centre of Excellence, one of an elite few" (CARICOM)	[¥]
	stakeholders in issues related to	Secretariat, 2011b, online).	
	climate change adaptation.	Societalia, 20110, Ollille).	
	cimace change adaptation.	I I	

"The Caribbean Community Climate Change Centre (CCCCC) recently organized a training course entitled "The Use of Sector-Specific Biophysical Models in Impact Assessment in the Caribbean". This course was implemented under the European-Union (EU) funded Regional Global Climate Change Alliance (GCCA) Project in partnership with the Government of Jamaica. The main objective of the training course was to provide technicians and practitioners of the Caribbean region with an opportunity to apply existing climate change adaptation. The training course covered two modules: (1) "The Science of Climate Change" and (2) "Vulnerability and Adaptation to Climate Change". The course curriculum was based on the training manual and workbook developed by Cuba's Institute of Meteorology (INSMET) and the CCCCC, and was delivered by a team of trainers from INSMET. The training course was held at the University of the West Indies (UWI) Mona Campus in Jamaica from January 6 − 17, 2014. The target audience for the course included climate change experts, technicians and practitioners from public and private sectors as well as non-governmental organizations. Key organizations and groups represented at the course included Antigua & Barbuda's Ministry of Agriculture: the Bahamas Meteorological Service; the National Climate Change Office of the Dominican Republic; Haiti's Ministry of Environment, and post-graduate students of UWI's St. Augustine Campus. Belize was represented at the training by personnel from the National Emergency Management Organization (NEMO) as well as CZMAT's Data Analyst, Ms. Maritza Canto. According to Ms. Canto this training provided many methodologies for the application of basic climate based models that can be used to enhance climate dataper related policy advice and guidelines to the Caribbean Community (Covernment of Belize, 2014, online). 7. Specialised advisory services 2. The organisation provides gadpatation-related advice to Member Countries and/or others which the country of the Caribbean Community	SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
7. Specialised advisory services 2. The organisation provides specialised climate change adaptation-related advice to Member Countries and/or other stakeholders. 2. The organisation provides climate change-related policy advice and guidelines to the Caribbean Community (CARICOM) Member States through the CARICOM Secretariat" (CCCCC, 2015c, online). 3. The organisation provides climate change-related policy advice and guidelines to the Caribbean Community (CCCCC, 2015c, online). 4. The organisation provides climate change-related policy advice and guidelines to the Caribbean Community (CCCCC, 2015c, online). 5. The organisation provides climate change-related policy advice and guidelines to the Caribbean Community (CCCCC, 2015c, online).			"The Caribbean Community Climate Change Centre (CCCCC) recently organized a training course entitled "The Use of Sector-Specific Biophysical Models in Impact Assessment in the Caribbean". This course was implemented under the European-Union (EU) funded Regional Global Climate Change Alliance (GCCA) Project in partnership with the Government of Jamaica. The main objective of the training course was to provide technicians and practitioners of the Caribbean region with an opportunity to apply existing climate models as tools for sector-specific decision-making in the context of climate change adaptation. The training course covered two modules: (1) "The Science of Climate Change" and (2) "Vulnerability and Adaptation to Climate Change". The course curriculum was based on the training manual and workbook developed by Cuba's Institute of Meteorology (INSMET) and the CCCCC, and was delivered by a team of trainers from INSMET. The training course was held at the University of the West Indies (UWI) Mona Campus in Jamaica from January 6 – 17, 2014. The target audience for the course included climate change experts, technicians and practitioners from public and private sectors as well as nongovernmental organizations. Key organizations and groups represented at the course included Antigua & Barbuda's Ministry of Agriculture; the Bahamas Meteorological Service; the National Climate Change Office of the Dominican Republic; Haiti's Ministry of Environment, and post-graduate students of UWI's St. Augustine Campus. Belize was represented at the training by personnel from the National Emergency Management Organization (NEMO) as well as CZMAI's Data Analyst, Ms. Maritza Canto. According to Ms. Canto this training provided many methodologies for the application of basic climate based models that can be used to	
Government to produce an Implementation Plan to guide the delivery of the 'Regional Framework to Achieving Development Resilient to Climate Change'" (CCCCC, 2012).	-	specialised climate change adaptation-related advice to Member Countries and/or other	The Centre "provides climate change-related policy advice and guidelines to the Caribbean Community (CARICOM) Member States through the CARICOM Secretariat" (CCCCC, 2015c, online). "Delivering Transformational Change" was "prepared by the Caribbean Community Climate Change Centre in response to a request from the CARICOM Heads of Government to produce an Implementation Plan to guide the delivery of the 'Regional Framework to Achieving Development Resilient to Climate Change'" (CCCCC, 2012).	V
4. Outcome Effectiveness			4. Outcome Effectiveness	

Appendix 4: Application of FAROCCCA to SPC

RATING SYSTEM			
×	No		
♦	To some extent		
abla	Yes		
(NE)	No evidence		
	Perceptual indicator or indicator not rated in this paper		

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		1. Input Effectiveness	
1. Goals	Climate change adaptation was an initial goal of the organisation.	SPC was established by the Canberra Agreement, in 1947. The goal of the agreement does not include environmental considerations, but rather, is to promote the "economic and social welfare and advancement of the peoples of the South Pacific region" (SPC, 1947, p. 1).	X
		The word 'environment' appears twice in the text, as recommendations for the newly established commission to undertake studies on the "relationship between plants and their environment including soils and climate" (SPC, 1947, p. 11), and on the "human body's response to changes of climate and environment" (SPC, 1947, p. 12).	
		The Tahiti Nui Declaration is not a legal document, but presents a regularly updated description of SPC's major policies and implementation mechanisms. The declaration includes adaptation to climate change, and disaster risk reduction as cross-cutting themes (SPC, 2011e, article 19).	
		Colonial organisation; established by AUS, NZ, USA, UK, France, Holland etc before PICTs were self-governing	
	2. Climate change adaptation is a current goal of the organisation.	The SPC 2007-2012 corporate plan includes climate change (both adaptation and mitigation) as a cross-cutting programme commitment (SPC, 2007, p. 11).	Ø
		SPC's 2013-2015 Corporate Plan mentions adaptation to climate change under a number of sectoral headings, including fisheries (p. 21), Water and Sanitation (p. 15), and as an example of SPC's multi-sectoral capabilities (p. 9 & 11) (SPC, 2013).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		SPC also published an internal engagement strategy for climate change in 2011 (SPC, 2011d), which includes the word 'adaptation' 56 times, and the word 'mitigation' 15 times.	
	3. The current strategic plan contains specific climate change adaptation objectives.	The SPC Corporate Plan (2013-2015) strategic goals mentions adaptation under water and sanitation: "Number of PICTs water sectors with increased engagement and contribution to national efforts in disaster risk reduction, response, and climate change adaptation" (SPC, 2013, p. 15). The baseline for this was to be reported to the Committee of Representatives of Governments and Administrations in 2013, with 22 PICTS to have achieved the goal by 2015. There are also three goals related to climate change and DRR in the corporate	
	There is no other regional organisation with similar climate change adaptation goals.	"SPC has taken a lead role in creating a joint regional platform on climate change and disaster risk management. It has also led the development of the Strategy for Climate and Disaster Resilient Development in the Pacific (SRDP)" (SPC, 2014g, p. 35). SPREP "is the convener and coordinator of the PCCR [Pacific Climate Change Roundtable] in collaborations with CROP and key development partners"	×
		(SPREP, 2014g). "SPC acknowledges the lead role of SPREP in climate change advocacy, regional and international coordination, regional climate change policy and frameworks, and its own work in climate change mitigation and adaptation. We also acknowledge the role of PIFS in providing political leadership and in coordinating climate change financing initiatives for the region, the critical role of USP in climate change education and research, and the roles of FFA and PPA in climate change adaptation and mitigation. For its part, SPC covers the broadest range of sectors that are impacted by climate change in the region. It has in-house capacity to assist members to develop and implement climate change adaptation responses in all these sectors it works in at the national level. SPC also undertakes scientific research on the impacts of climate change on natural ecosystems, and has strong capacity to analyse the socio-cultural and economic impacts of climate change on the region. SPC is directly involved in implementing climate change adaptation work on the ground at national level in all PICTs across all the sectors it works in, as well as in undertaking advanced scientific research in agriculture, fisheries and forestry" (SPC, 2011d, p13).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
2. Governance and	1. The Board provides visionary		
leadership	leadership and strategic direction.		
	2. The organisation evaluates	SPC's 2013-15 corporate plan seeks to increase the focus on results, targeting	\Diamond
	organisational performance at least	an increase from one or two to seven "divisions with results-focused strategic	
	annually.	plans and annual reports using clear results frameworks" (SPC, 2013, p. 17).	
	3. Executive management (can also	"SPC's governing body The Conference of the Pacific Community, which is	
	include members of the	held every two years, is the governing body of SPC with each member entitled	
	Board/Governing Body) decision-	to <u>one vote</u> on decisions. However, debates are usually resolved in the <u>Pacific</u>	
	making is done by consensus or	way by consensus. The Committee of Representatives of Governments and	
	majority vote.	Administrations (CRGA) meets annually, and in the years that the conference	
		does not meet, is empowered to make decisions on the governance of SPC"	
		(emphasis added) (SPC, 2011c). The Conference is attended by heads and	
		deputy heads of state, ministers, ambassadors, high commissioners, and senior	
		officials from members states (SPC, 2010b, p. 64).	
	4. Executive management staff (can	SPC's Director-General serves a two year term, and while the details of the	V
	also include members of the	evaluation are not published, SPC's 2009 annual report notes the unanimous	
	Board/Governing Body) are	agreement to reappoint the DG under the heading "Evaluation of the Director-	
	qualified and/or equipped to achieve	General's Performance" (SPC, 2010b, p. 70).	
	the goals of the organisation.		
		"Dr Colin Tukuitonga took up the post of Director-General of SPC 23 January	
		2014. He will be based at SPC's headquarters in Noumea, New Caledonia. Dr	
		Tukuitonga, who is from Niue, has a first-hand appreciation of the development	
		challenges facing the Pacific and more than 27 years' experience working in a variety of roles, including as a clinician, academic, programme manager and	
		consultant adviser. Recent roles as Director of SPC's Public Health Division	
		since December 2012 and earlier as a member of the team that carried out an	
		independent external review of SPC in the first half of 2012 have given him a	
		sound understanding of SPC's operations. He has worked in Niue, Fiji, New	
		Zealand and Switzerland in senior roles including Chief Executive Officer of	
		the Ministry of Pacific Island Affairs of the New Zealand Government;	
		Associate Professor of Public Health and Head of Pacific and International	
		Health at the University of Auckland; Director of Public Health in the New	
		Zealand Ministry of Health; and Head of Surveillance and Prevention of Chronic	
		Diseases with the World Health Organization in Geneva" (SPC, 2014e, online).	
	5. Executive management staff		
	disclose potential conflicts of		
	interest.		

	EVIDENCE	RATING
6. The organisation attracts, retains and	As part of striving for organisational excellence, SPC carries out staff	♦
develops talent.	satisfaction surveys (SPC, 2013, p. 18).	
	Cameron Diver-Deputy D-G	
	"The Secretariat of the Pacific Community (SPC) has appointed Cameron Diver	
	•	
	anthropology from the University of New Caledonia, and bachelor degrees in	
	communication technology; and SPC's decentralised offices – the north Pacific	
	regional office in Pohnpei and the Honiara country office. The position of SPC	
	three years based on performance (emphasis added) (PINA, 2013, online).	
	Scott Pontifex, Education Database Specialist (Development Statistics)	
	• November 11-Present: "Scott is a [sic] Education Management	
	from 2000 to 2002".	
	Localia Committee (Emilionii, 2015, Omnie).	
	"Nevertheless, SPC is still experiencing structural difficulties in attracting and	
	6. The organisation attracts, retains and develops talent.	satisfaction surveys (SPC, 2013, p. 18). Cameron Diver-Deputy D-G "The Secretariat of the Pacific Community (SPC) has appointed Cameron Diver as the new Deputy Director-General, Operations and Management, on Tuesday, O1 October 2013. Diver has citizenship of both New Zealand and France and is bilingual in English and French and also fluent in Spanish. He has a master's degree in law and a diploma of advanced studies in public law and legal anthropology from the University of New Caledonia, and bachelor degrees in arts and law from the University of Auckland. Diver takes up the position previously filled by Richard Mann. This role provides leadership for SPC's corporate services comprising human resources, finance and budget and administration; programme support services comprising interpretation and translation, publication, library and information services, and information and communication technology; and SPC's decentralised offices – the north Pacific regional office in Pohnpei and the Honiara country office. The position of SPC Deputy Director-General is a three-year appointment renewable for a further three years based on performance" (emphasis added) (PINA, 2013, online). Scott Pontifex, Education Database Specialist (Development Statistics) November 11-Present: "Scott is a [sic] Education Management Information Systems (EMIS) database Specialist at the Secretariat of the Pacific Community. He worked previously as a programmer in Geographical Information Systems (GIS) also at SPC for 9 years in Noumea, New Caledonia. Prior to this he worked in the Ministry of Education, Demographic and Statistical Analysis Unit in New Zealand from 2000 to 2002". April 2002-November 2011: "Worked as a programmer in Geographical Information Systems (GIS) at the Secretariat of the Pacific Community. Developed a custom GIS software for 14 Pacific Island Countries" (LinkedIn, 2015, online).

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		three years, and for staff recruited internationally, their positions must be advertised after six years (this is known as the six-year rule)" (SPC, 2014d, p. 1).	
	7. Leaders create a dynamic organisational culture, making the organisation a desirable place to work.		
3. Resources	There are staff members exclusively dedicated to climate change adaptation.	"The climate change support team will work closely with SPC divisional managers and programme staff to help identify areas where existing programmes can be expanded to incorporate activities that will meet the climate change-related needs of members" (SPC, 2011d, p. 10). SPC has eleven staff in their "climate change unit (USAID Project and EU-GCCA Project)" (http://gsd.spc.int/staff), however none of these positions are listed as exclusively focussed on adaptation.	♦
	Staff are qualified and have experience in climate change adaptation.	SPC's climate change strategy includes having "[d]edicated internal climate change policy and advisory support services in place to meet organisational needs" (SPC, 2011d, p. 11). In August 2015, Sylvie Goyet was "appointed to the position of SPC Director, Environmental Sustainability and Climate Change based in Noumea, New Caledonia. Sylvie comes with 20-years of experience in environmental programme development and implementation, with special expertise in coastal and marine issues, and a general background in management and strategic planning. Sylvie's main duties will be coordinating the broad portfolio of projects that SPC is carrying out in the area of climate change and incorporating the concept of environmental sustainability into all of SPC's work. The position is funded by the Government of France" (SPC - Geoscience Division, 2015). "Prof. Michael Petterson has taken up his appointment as Director of the Secretariat of the Pacific Community (SPC) Applied Geoscience and Technology Division (SOPAC) succeeding Dr Russell Howorth, whose tenure with the organization officially ended on 31st January 2013. Before taking up this position with SPC, Prof. Petterson, who is from the United Kingdom, held a Professorship of Applied and Environmental Geosciences at the University of Leicester, from 2009, before which he was Director of Science, Skills and Facilities at the British Geological Survey for five years.	*

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		Holding a PhD in geology (1984) and a post graduate certificate in education (1985), Prof. Petterson is a chartered geologist, a chartered engineer, Fellow of the Geological Society of London, Member of the Institute of Materials, Mining and Metallurgy, life member of the Association of Geoscientists for International Development, Member of the Society of Economic Geologists, and he is a member of the STAR network.	
		As well as his career as a geologist, Prof. Petterson has published extensively, and brings a strong understanding of the SPC SOPAC Division to his new appointment, through his previous work in the Pacific region in the Solomon Islands and Papua New Guinea. His work has also taken him to South and Southeast Asia, the Caribbean and South America" (SPC - Geoscience Division, 2013b).	
	3. Staff are qualified and have experience in project/program management.	"SPC has a world-class contingent of fisheries development and management experts and scientists who can work in partnership with PICTs to address the impact of climate change on Pacific fisheries" (SPC, 2011d, p. 19). "Mr Amos is a citizen of Vanuatu. He has a master's degree in Biological Science from the University of Auckland and a Bachelor's Degree in Zoology from Otago University, New Zealand. Mr Amos is fluent in English, Bislama, Melanesian Pidgin and has a working knowledge of French. Mr Amos is currently the Director of the Department of Fisheries in Vanuatu, a position he has held over a period of 12 years from September 1997 to December 2006 and again from September 2010 till now. From January 2007 to March 2010 Mr Amos was Director of Fisheries Management at the Forum Fisheries Agency in Honiara. Mr Amos has worked both regionally and nationally and has a strong grasp of the economic, political and cultural dynamics of the region as well as the fisheries' regional and country policies, infrastructure and programmes. He has a strong background in the development and management of fisheries policies and their implementation at both national and regional levels. He has a very strong grasp of the key issues in fisheries in particular as seen from the perspectives of SPC's island members.	
		Mr Amos' previous role as a member of FFA's management team will augur well in further strengthening the relationship between SPC and FFA in the	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		fisheries sector which in turn will further strengthen the collective effort of both organisations to serve our mutual membership better" (Emphasis added) (SPC, 2014a).	
	4. Staff participate in ongoing training programs.	"Training and technical skills development will be provided as appropriate to ensure that staff have the most up-to-date information on how climate change will impact on their specific areas of focus" (SPC, 2011d, p. 10).	✓
		"The Teamwork and Innovation category was won by ICT Suva for introducing new initiatives alongside ongoing staff training and technical support" (SPTO, 2015).	
		"Two technical staff of SPC (Cenon and Vinesh) are currently in Vava'u, Tonga to undertake Agroforestry training. 32 participants with 50% women are in attendence. Topics covered in this training: Climate Change, Food Security, best agricultural practices, nursery development and management, Beekeeping, Aquaculture, Post-harvest and composting" (SPC Facebook post).	
		"Monday 16 September 2013, Secretariat of the Pacific Community (SPC), Suva, Fiji: Fifty-nine staff members of the Secretariat of the Pacific (SPC) staff have completed disaster risk management (DRM) and climate change training in recent months" (SPC - Geoscience Division, 2013a).	
		It is worth noting that DRM and climate change adaptation in the Pacific are becoming integrated into single policies (JNAPs). For example, in Tonga, "There were unanimous endorsements [from Cabinet Ministers, CEOs of line ministries, civil society representatives and NGOs] for a joint plan due to the close linkages of climate change impacts and disaster risk management but also to avoid duplication of efforts and maximize the use of the limited resources in Tonga" (The Kingdom of Tonga, 2010, p. 28).	
	5. Staff performance is appraised (formally or informally) at least annually.	"A new Human Resources Adviser (Remuneration and Human Resources Information System) was recruited in July. His initial priorities are <u>reviewing</u> the annual performance appraisal process, undertaking a critical review of the remuneration system for internationally recruited staff in liaison with the other agencies making up CROP (Council of Regional Organisations in the Pacific), and consolidating the HR Online information system introduced in 2014" (emphasis added) (SPC, 2014d, p. 2).	v

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	6. The organisation has untied funding.	In the SPC 2009 annual accounts, over 45% of their funding (USD\$40,565,916) was from member contributions, including from Australia, France, New Zealand and the USA (SPC, 2010a, p. 44).	Ø
		SPC's 2013-15 corporate plan notes that there is a risk of SPC not meeting its core funding target, which could "have a significant impact on the ability of SPC to meet the organisational development targets of this [2013-15] plan" (SPC, 2013, p. 12).	
	7. The organisation has funds exclusively dedicated to climate change adaptation.	SPC accounts show funds spent on coastal climate change projects, climate change mainstreaming, "Climate impact on C.F. / O.F." (SPC, 2010a), climate change science and adaptation planning, and on assessing vulnerability and adaptation (SPC, 2014f).	\
	8. External funding to the organisation has increased over the past 5 years.	"At present, one CFP unit equals 1 USD. A 'CFP unit' is simply 100 CFP (French Pacific Franc, the local currency in French Polynesia, New Caledonia, and Wallis and Futuna and the operating currency of the Secretariat)" (SPC, 2004, p. 10). Non-member contributions in:	✓
		2008: CFP Units 9,624,693 2009: CFP Units 4,417,144 (SPC, 2010a, p. 7). 2012: CFP Units 27,062,691 2013: CFP Units 51,012,811 (SPC, 2014f, p. 13).	
	9. The organisation has multiple funding sources.	In 2013 SPC received contributions from 26 members states totalling around USD\$58.5Million, and contributions from 34 non-member organisations totalling around USD\$59Million (SPC, 2014f, pp. 47-48).	Ø
	10. The organisation has financial reserves.	"The secretariat's reserves as per the approved 2014 accounts are currently 6.5 million CFP units. Taking into account the 605,000 units used to balance the 2015 revised budget, as per CRGA 43's authorisation, and the secretariat's request to use 600,000 CFP units to fund priorities and initiatives under the new Strategic Plan, the level of reserves in 2016 would be 5.3 million CFP units in total. This is well above the 4.1 million unit figure presented at CRGA 44 and the 2015 CRGA target of five million CFP units. This is due both to the contribution made by the secretariat under the 2016 budget and to surplus funds in reserves identified after a thorough review. Reserves would thus have been strengthened by 1.2 million CFP units in total over the course of FY 2015 and into FY 2016" (SPC, 2015a, p. 10).	V

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		SPC's 2013 Annual Report notes an operating surplus of CFP Units 1,959,955 (SPC, 2014f, p. 18).	
		Also, as at December 31 2013 SPC had a little over 102 Million CFP units in assets, including 70 Million in cash (SPC, 2014f, p. 11).	
		SPC has a core budget separate from its project funds, and the secretariat is proactively trying to build financial reserves (SPC, 2014f, p. 3).	
		SPC seeks to have a balanced budget each year: "The revised 2014 budget is a balanced budget, totalling 110.401 million CFP units (core funding 30.841 million CFP units, project funding 79.560 million CFP units) in income and expenditure. Overall, the 2014 revised budget reflects an increase of 15.044 million or 15.8 % compared to the original budget of 95.3574 million CFP units.	
		4. The Secretariat proposes a balanced 2015 budget of 110.951 million CFP units, comprising the core budget of 32.97 million CFP units and project funding of 77.981 million CFP units" (SPC, 2014b, p. 1).	
	11. The organisation has sufficient technological resources (e.g. intellectual property rights, patents, copyright, software licences etc.) to carry out its climate change adaptation mandate.		
4. Structure, systems and processes	1. There is a low degree of hierarchy (i.e. few hierarchical levels).		
	2. The organisation has a human resource management system that supports the shaping of organisational culture and staff recruitment, training, development and retention.		
	3. There is a financial management system that meets International Financial Reporting Standards (IFRS) or its equivalent.	"SPC policies in these areas [accounting, auditing, internal control and procurement] were benchmarked against international standards such as the 'International Standards for Auditing' and 'International Financial Reporting Standards'" (SPC, 2011a, p. 5).	Ø

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	4. The organisation applies risk		
	management principles in its		
	decision-making processes. 5. The organisation has a centralised,		
	user-friendly internal data		
	management system.		
	6. The organisation has a user-friendly		
	project/program management		
	system (e.g. that supports staff to		
	identify, schedule and track resources etc.).		
	7. There are mechanisms that support		
	vertical and horizontal		
	communication.		
	8. There are internal dispute resolution protocols.		
5. Research and	1. The organisation has plans and	SPC's 2013-15 corporate plan specifies research as one of the ways through	\square
collaboration	policies that support research.	which SPC supports development in the Pacific. Their Public Health Division	
capacity		has two programmes, one of which is "Research, Evidence and Information	
		Programme" (SPC, 2013, p. 9).	
		"Over the past 25 years, SOPAC 'The Commission' has developed the Science,	
		Technology and Resources (the SOPAC/STAR) Network (STAR); an	
		independent network to support the delivery by the international scientific	
		community of new and appropriate science and technology to the region.	
		In this, the international community of scientists and technologists provide a	
		substantial cost-free service to the region worth tens of millions of dollars	
		annually through inter-alia the costs of field surveys, including those for the	
		deployment of large research vessels, institutional laboratory and library costs	
		and salaries.	
		The establishment of SOPAC "The Division" of SPC enables the STAR to	
		associate itself with the SPC. SPC voiced 'unequivocal' commitment to	
		providing the opportunity to STAR to continue and expand its role and	
		encourages STAR to hold its regular meetings together with the Heads of	
		Applied Geoscience and Technology Meeting (the Technical Advisory Group	
		for the new SOPAC 'The Division'). STAR, being an independent, informal and	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		entirely voluntary group of scientists will be encouraged through its Chair to	
		consider the SOPAC merger with SPC as an opportunity for becoming a premier	
		scientific conference of the Pacific Basin. The expansion of the role of STAR	
		under the auspices of SPC will be pursued to extend its benefits to an expanded	
		Membership and to include other major areas within SPC's mandate, for	
		example forestry, agriculture and fisheries" (SPC and SOPAC, 2010, p. 16).	
	2. There are organisational funds	SPC's 2013 annual report includes five lines in the notes to the financial	
	allocated for research.	statements that refer to projects that include research components (SPC, 2014f, pp. 25-38).	
		The SOPAC Divisional 2013 Proposed Work Plan and Budget shows proposed	
		expenditure on fieldwork, studies and surveys for as:	
		2013: CFP Units 4,600,700	
		2014: CFP Units: 4,429,400	
		2015: CFP Units: 3,777,500	
		(SPC and SOPAC, 2012, p. 2).	
	3. The organisation has equipment,	In 2009 SPC chartered a vessel to undertake tuna tagging for research purposes.	
	expertise and/or resources (e.g.	Over two two month cruises 7,786 tuna were tagged (SPC, 2010b, p. 26).	
	access to journal articles etc.) for		
	research.	Stable isotope analysis, along with data from analysis of fish stomach contents	
		(tuna, sharks, billfish and other species) carried out at SPC, and data on fat	
		content, allows researchers to determine predator—prey relationships in the	
		oceanic ecosystem and provides a better understanding of species interactions	
		and cascading effects of fishing activities and climate variations. This information will be used in future stock assessments (SPC, 2010b, p. 27).	
		information will be used in future stock assessments (SFC, 20100, p. 27).	
		Pasha Carruthers is a Climate Change Adviser at SPC. The summary of her	
		background is, "A Conservation Professional with emphasis on global change	
		and sustainable development issues. Experienced in international negotiations,	
		participatory approaches, project proposal development, implementation and	
		management, with communities, municipal, state and national governments and	
		intergovernmental organisations. Post-graduate qualification for, and	
		implementation of, climate change vulnerability & adaptation assessments and	
		pilot activities. Trained in ecology, coastal management, archaeology, mapping	
		procedures, analysis and reporting of scientific data. Twelve years with	
		Government of the Cook Islands National Environment Service in a variety of	
		roles related to MEAs implementation, culminating with three years as Island	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		Futures Division Manager. Four years with SPC as Technical Adviser to the European Union Funded Global Climate Change Alliance Pacific Small Islands States Project, particularly water security and health activities" (Carruthers, 2015).	
	4. The organisation's current strategic plan (or a similar document) outlines plans for collaboration with multiple stakeholders on adaptation-related initiatives.	"SPC works with other CROP agencies to address the effects of climate change and reduce the risks from disasters in the Pacific Islands" (SPC, 2013, p. 11). While not focused specifically on adaptation, as part of its results framework SPC is "Fostering action-focused collaboration with worthy partners for more effective service delivery" (emphasis added) (SPC, 2013, p. 17).	\sqrt
	2. Project/P	Program Effectiveness – GCCA:PSIS	
1. Needs and goals	The project documents contain evidence that the project/program fills an existing need with relation to climate change adaptation.	The Global Climate Change Alliance is an EU funded program to support and strengthen dialogue, cooperation and exchange of experiences among Least Developed Countries (LDCs) and Small Island Developing States (SIDS). The project acknowledges the many particular development challenges faced by SIDS, which are exacerbated by climate change and climate variability (SPC, 2012, p. 1). For the fragile and exposed low lying atolls of the Cook Islands (Manihiki,	Ø
		Rakahanga, Penrhyn, Pukapuka, Palmerston) climate change is an ever present reality. Manihiki atoll is a classic example of the vulnerability of these atolls to extreme weather events. The atoll had always been considered to lie outside of the main cyclone belt. However, it was devastated by Cyclone Martin in 1997. A number of waves swept across the whole island and 19 people lost their lives" (SPC, 2011b, p. 2).	
		"Planning for adaptation to the impacts of climate change requires an ability to monitor changes at local levels within the atoll communities. This allows for planning adaptive management for pearl farming and inshore fisheries.	
		The communities on these atolls are small, and livelihood activities are a family affair, with men, women and children all participating in different aspects of the activity, be it pearl farming, fishing, or small scale agriculture. Thus the entire populations will directly benefit from an ecosystem which is more resilient to the impacts of climate change.	
		Urgent action is required to build resilience to climate change, and this project opportunity is very timely. The project will result in the remote communities on	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		these atolls being in a much better position to survive in this vulnerable environment and in the face of changes to their climate" (SPC, 2011b, p. 2).	
	2. The project/program's adaptation components could be considered 'transformational' (i.e. the project/program focusses on "larger, more profound system changes" and requires a "paradigm shift" in the	In the Cook Islands, "at least one new effective communication tool will be prepared collaboratively and used widely in the communities during the duration of the project" (SPC and Government of the Cook Islands, 2012, p. 15).	
	way it is framed and implemented). 3. Climate change adaptation is a goal of the project/program.	"SPC and the European Union have agreed to support the governments of nine small Pacific countries, namely Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Niue, Palau, Tonga and Tuvalu, in their efforts to tackle the adverse effects of climate change. This initiative is called the Global Climate Change Alliance: Pacific Small Island States" (emphasis added) (SPC, 2012, p. 1).	<u>V</u>
		The purpose of the project is to, "To promote a long term/strategic approach to adaptation planning and budgets and to pave the way towards more effective and coordinated aid delivery modalities at national and at regional level" (emphasis added) (GCCA and SPC, 2012, p. 1).	
	4. The project/program's goals reflect the long-range impacts of climate change.	The purpose of the project is to, "To promote a long term/strategic approach to adaptation planning and budgets and to pave the way towards more effective and coordinated aid delivery modalities at national and at regional level" (emphasis added) (GCCA and SPC, 2012, p. 1).	oxdet
_	5. The project/program's objectives relating to climate change adaptation are specific, measurable, achievable, realistic and time-bound (SMART).	The overall objective of the project is to provide support to the governments of nine Pacific small island developing states so they can address negative impacts of climate change. The indicators for this objective are: "1. Ten new activities that address country requests for climate change	♦
		adaptation undertaken in an effective and sustainable manner. 2. Capacity of a minimum of 40 national sector specialists for integrating climate change adaptation into at least three sectors built from minimal level to moderate level" (GCCA and SPC, 2012, p. 1).	
	6. Member Countries were involved in developing the climate change adaptation components of the project/program.	The logframe for the GCCA:PSIS project includes as an indicator that, "[t]en new activities that <u>address country requests for climate change adaptation</u> [will be] undertaken in an effective and sustainable manner" (GCCA and SPC, 2012, p. 1).	☑

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		As an example, the Government of the Cook Islands is one of the authors of the Cook Islands Project Design Document (Emphasis added) (SPC and Government of the Cook Islands, 2012).	
		"In Nauru delays were experienced with obtaining Government endorsement of the Project Design Document. This was discussed at the Fourth Steering Committee Meeting in June 2014, when Nauru decided to move the project focus from household water conservation measures to community water conservation measures" (SPC, 2014c, p. 9).	
2. Scope	1. The project/program addresses multiple climate or climate-induced vulnerabilities (e.g. vulnerability to sea-level rise, increased sea surface and air temperature, changing rainfall patterns etc.).	"The activities [in the Cook Islands] seek to strengthen existing environmental monitoring, including water quality; to provide information that will assist pearl farmers to improve their farming practices, and avoid disease outbreaks and stress to the oysters due to present environmental conditions and future projected conditions under climate change" (SPC and Government of the Cook Islands, 2012, p. 1).	Ø
	2. The project/program addresses multiple non-climate-induced vulnerabilities (e.g. poverty, deforestation etc.).	The GCCA:PSIS project in the Republic of the Marshall Islands (RMI): "Protecting atoll habitability, land and infrastructure in Ailinglaplap, Marshall Islands" recognises the vulnerabilities detailed in RMI's JNAP, including "1. Sparse and scattered nature of islands and atolls, making communication and transportation to outer islands more difficult [and,] 2. Outbreaks of disease via contamination of water is not uncommon – an issue that is exacerbated by the high population densities of the urban centres" (GCCA <i>et al.</i> , 2014, p. 6). "The government of RMI selected the Woja road and causeway project as the focus for the GCCA: PSIS project, based on an OEPPC vulnerability survey (which included consultation with the local community) indicating the area is undergoing active erosion and which could divide the islands, thereby impacting copra production, access to schools and health services for the community" (emphasis added) (GCCA <i>et al.</i> , 2014, p. 8).	
		The logical framework for the Cook Islands project includes, as a key results area, a study of livelihood activities that relate to marine resources, which includes revising the "Existing Pearl Economic Model" (SPC and Government of the Cook Islands, 2012, p. 20).	
3. Logic, design and adequacy	The logic/design of the project/program's climate change adaptation components is evidence-based, in the context of SIDS.	"Provision of training in project appraisal and management will help countries identify effective adaptation measures that can be supported by development partners. The design and implementation of climate change adaptation projects in each country is part of this initiative" (SPC, 2012, p. 3).	♦

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
SUB-COMPONENT	2. The project documents contain evidence that the logic/design of the project/program's climate change	"Marshall Islands (RMI) The following activities are being supported under the European Union funded GCCA:PSIS project in RMI. Climate change adaptation project RMI has chosen to focus its adaptation project on enhancing coastal protection. Over the long term, coastal erosion and inundation threatens many of the country's low-lying atolls, and RMI has identified the need to enhance its ability to design and implement appropriate and sustainable coastal protection measures. The adaptation project under the GCCA:PSIS project focuses on an outer atoll, Aililnglaplap, and the construction of a causeway to maintain access between two islands in an area of coastal erosion. The project is also intended as a blueprint for a best practice guideline for coastal protection projects in future. In addition, it will support national stakeholder dialogue and planning for a building code or similar that can help guide future planning decisions, to reduce risks from climate change and extreme events" (GCCA, 2012). The lessons learnt workshop that was held in September 2015 reports a number of concerns that stakeholders had relating to things such as budget overruns, poor funding allocations, weak coordination and lack of early consultation with	RATING
	evidence that the logic/design of the	measures. The adaptation project under the GCCA:PSIS project focuses on an outer atoll, Aililnglaplap, and the construction of a causeway to maintain access between two islands in an area of coastal erosion. The project is also intended as a blueprint for a best practice guideline for coastal protection projects in future. In addition, it will support national stakeholder dialogue and planning for a building code or similar that can help guide future planning decisions, to reduce risks from climate change and extreme events" (GCCA, 2012). The lessons learnt workshop that was held in September 2015 reports a number of concerns that stakeholders had relating to things such as budget overruns,	◆
	effective means to achieve its objectives.	reported positively on included that national, state and local parties worked together to achieve project aims, that there was political support for the projects and that there were tangible outputs that led to direct improvements in livelihoods (GCCA and SPC, 2015, pp. 45-47).	
		"The government of RMI selected the Woja road and causeway project as the focus for the GCCA:PSIS project, based on an OEPPC vulnerability survey (which included consultation with the local community) indicating the area is undergoing active erosion and which could divide the islands, thereby impacting copra production, access to schools and health services for the community" (emphasis added) (GCCA et al., 2014, p. 8).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		The Cook Islands project began with a review of climate change projects and programs to provide a background for identifying a focus area for this project. This was followed by discussions with country representatives about adaptation needs in the Cook Islands. Finally, prior to preparing a concept note for the project, there were discussions with ministries and line agencies and the Prime Minister's Office, to choose the marine resources sector (SPC and Government of the Cook Islands, 2012, p. 12).	
		"This project is consistent with the climate change adaptation needs and priorities for the Cook Islands as identified in the Joint National Action Plan for Climate Change Adaptation and Disaster Risk Management and supported by intensive participatory consultations" (SPC and Government of the Cook Islands, 2012, p. 1).	_
4. Resources	Staff members are assigned exclusively to the project/program.	The GCCA:PSIS projects use national staff from the implementing countries: "The project will be managed and implemented by MMR and coordinated at the national level by the Office of the Prime Minister through the Climate Change Cook Islands Office" (SPC and Government of the Cook Islands, 2012). "In RMI, the GCCA PSIS project has supported:	
		 A Climate Change Finance Assessment for the Marshall Islands. This in-depth study was conducted in 2014, and examines the extent to which RMI has already accessed resources for climate change objectives, how its domestic systems – including policies, institutional arrangements and public financial management systems – could be adjusted so as to make more effective use of available finance and also increase future access to climate finance. The GCCA: PSIS project contributed staff and funds towards this project, led by PIFS and in partnership with other regional organisations (see the Finance Assessment executive summary and final report). An assessment of the extent to which climate change has been mainstreamed into national and sectoral policies and plans (see a summary of the assessment). 	
		Training and capacity building As part of the GCCA:PSIS project, several kinds of training have been delivered in RMI:	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		 Proposal preparation and log frame analysis – July 2013 (see the workshop report, impact evaluation and learner's guide) Sub-regional North Pacific climate change and the media training-October 2012 (see the workshop report) Sub-regional North Pacific training on utilising the Pacific Climate Change Portal- February 2013 (see the workshop report) First National Climate Change Dialogue - September 2014 (see the dialogue report)" (emphasis added) (GCCA, 2012). 	
	2. The project/program team includes staff members with qualifications and experience in climate change adaptation.	One of the activities for the second key results area is to provide two qualified personnel, employed by the ministry of marine resources (SPC and Government of the Cook Islands, 2012, p. 15). Dr Graham Sem (a lead author of Chapter 16 (Small Islands) of the IPCC's Climate Change 2007: Working Group II: Impacts, Adaptation and Vulnerability, and member of the UNFCCC Secretariat (PNG)) is a member of the project oversight committee.	Ø
		Pasha Carruthers is a Climate Change Adviser in the Climate Change Unit (USAID Project and EU-GCCA Project) (SPC-SOPAC, 2015). The summary of her background is, "A Conservation Professional with emphasis on global change and sustainable development issues. Experienced in international negotiations, participatory approaches, project proposal development, implementation and management, with communities, municipal, state and national governments and intergovernmental organisations. Post-graduate qualification for, and implementation of, climate change vulnerability & adaptation assessments and pilot activities. Trained in ecology, coastal management, archaeology, mapping procedures, analysis and reporting of scientific data. Twelve years with Government of the Cook Islands National Environment Service in a variety of roles related to MEAs implementation, culminating with three years as Island Futures Division Manager. Four years with SPC as Technical Adviser to the European Union Funded Global Climate	
	3. The project/program team includes	Change Alliance Pacific Small Islands States Project, particularly water security and health activities" (emphasis added) (Carruthers, 2015). Vuki Bundromo is a Project Manager at SPC, Prior to joining SPC she worked.	\square
	staff members with qualifications	Vuki Buadromo is a Project Manager at SPC. Prior to joining SPC she worked for four years at the Pacific Islands Forum Secretariat where she "Managed the implementation an annual grant of USD500,000 which supports a regional	Ā

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	and experience in project/program	scholarship programme available to Forum island countries over four years.	
	management.	Management of the scheme involved monitoring and evaluation of the	
		programme; managing project budgets; servicing committee meetings; liaising	
		with regional stakeholders; and reporting programme outputs to the	
		development partner, Forum member countries and the management committee on an annual basis.	
		>Managed and coordinated the successful implementation of a multi-year grant (USD 300,000) from the Republic of Korea. The grant was co-implemented by two technical agencies (the Fiji School of Medicine and the Seoul National University Hospital) which supported the successful training of 25 health care workers from the region in primary health care.	
		>Managed of the Pacific Islands Development Cooperation Fund — Responsibilities included coordinating CROP project proposals and reports; developing and facilitating agreements between the government of Japan and implementing technical agencies; management/coordination of project funds; monitoring, evaluating and reporting on project implementation; and reporting to the Japan Management Committee on the status of projects and funds on an annual basis.	
		>Management of special funding facilities for Forum member countries (Smaller Islands Development Fund, Forum Secretariat Fellowship Scheme, Short Term Technical Advisory Service)" (emphasis added) (Buadromo, 2015).	
		Pasha Carruthers is a Climate Change Adviser in the Climate Change Unit (USAID Project and EU-GCCA Project) (SPC-SOPAC, 2015). The summary of her background is, "A Conservation Professional with emphasis on global change and sustainable development issues. Experienced in international negotiations, participatory approaches, project proposal development, implementation and management, with communities, municipal, state and national governments and intergovernmental organisations".	
	4. The project documents contain evidence that there are sufficient staff members to achieve the project/program objectives.		
	5. The project documents contain evidence that there is sufficient	"The Woja site was also considered most likely to be financially viable to tackle with the budget available under the GCCA:PSIS project" (GCCA, 2012, p. 8).	♦

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	funding for the project/program's climate change adaptation components.		
5. Technical efficiency	1. The project documents contain evidence that the project/program provides value for money (cost vs. outputs).	"The project was allocated €7.5 Million, for technical assistance, travel, training, national staff, small scale infrastructure, equipment, supplies, evaluations missions, regional workshops and meetings" (GCCA and SPC, 2012, p. 3). "The project documents detail 15 activities focussing on situational understanding, and coordination of efforts both nationally and regionally to address climate change impacts" (GCCA and SPC, 2012, pp. 3-4).	K
6. Implementation	The project/program's climate change adaptation components are implemented, as proposed.	As at 30th June 2014 the project components ranged from 0% to 83% complete, with one component noted as having a change of focus in July 2014 (SPC, 2014c, p. 43). Nauru – project focus adjusted 14 th July 2014 (similarity with the Caribbean project) "In Nauru delays were experienced with obtaining Government endorsement of the Project Design Document. This was discussed at the Fourth Steering Committee Meeting in June 2014, when Nauru decided to move the project focus from household water conservation measures to community water conservation measures" (SPC, 2014c, p. 9). [In the Caribbean, endorsement was received, but not the authority to implement – responsibilities weren't delegated.]	*
7. Monitoring and evaluation	The project/program is internally monitored and evaluated.	The project included a six monthly progress reporting cycle (eg. SPC, 2014c). In September 2014 the six monthly progress report for the period January to June 2014 was published (SPC, 2014c). Also, the project in the Federated States of Micronesia design includes that, "The SPC/FSM CC Coordinator and the YSRD-based Project Coordinator will be responsible for overseeing the implementation of project activities and providing quarterly progress reports to the Oversight Committee" (SPC and Government of the Federated States of Micronesia, 2013, p. 25).	₹
	The project/program is externally monitored and evaluated.	?	(NE)

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
8. Sustainability	There are sustained outputs from the project/program.		
	3	B. Output Effectiveness	
1. Goal attainment	1. There is evidence in the most recent annual report or evaluation that the climate change adaptation-related objectives of the organisation are being achieved.	SPC's 2013-14 program report concludes that their target of "Increased resilience of PICTs to the water-related impacts of climate change and disaster" (SPC, 2014g, p. 69) is on track, with the relevant PICTs having made contributions towards designing a five year water security program for atoll countries.	♦
		Other targets such as strengthening community ability to respond to climate change and disasters have been delayed.	
Research and knowledge management	4. The organisation produces and/or publishes research that is relevant to climate change adaptation at least annually.	As part of the GCCA-PSIS project, SPC has published country climate change profiles of the nine small Pacific countries (see http://www.spc.int/en/featured-publications.html).	lacktriangledown
	The organisation makes climate change adaptation-relevant research publicly available.	These publications are available on the SPC website (http://www.spc.int/en/featured-publications.html).	☑
6. Collaboration and advocacy	There is evidence that the organisation collaborates with multiple stakeholders to undertake climate change adaptation-related activities.	The GCCA:PSIS project has involvement from SPREP, and is designed to work with national governments of the target countries. As examples, the project documents for the projects in the Cook Islands and the Federated States of Micronesia are co-authored with the respective governments (SPC and Government of the Cook Islands, 2012; SPC and Government of the Federated States of Micronesia, 2013).	✓
	The organisation advocates for political, financial and/or other climate change support for its Member Countries in various fora at different scales.	The following statement from SPC's 2013-15 corporate plan gives some insight into their role advocating on behalf of member countries: "The global development meeting calendar is already set for the next few years and it is important that the Pacific engages strategically in the relevant discussions, decisions and processes. Events that will have significant impacts for PICTs during the plan period include the Joint Global Platform for Disaster Risk Reduction and Climate Change (May 2013); the Preparatory Meeting of the Small Island Developing States Conference – SIDS (2013) followed by the Third International Conference on SIDS to be hosted in the Pacific in 2014; the MDG Summit in 2015; and the Sustainable Development Goals (SDGs) agenda. All these events are central to SPC's core work and SPC will take a technical	•

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		<u>leadership role in supporting PICTs in these and other areas</u> " (emphasis added)	
		(SPC, 2013, p. 27).	
4. Education and training	The organisation undertakes climate change adaptation stakeholder	With support from a number of projects and agencies, including SPC- EU GCCA: PSIS, on "Wednesday 15 October 2014, Kiribati will be joining hands	\square
	and/or public awareness activities.	with over 200 million people in over 100 countries around the world to celebrate	
	_	Global Hand Washing Day with the theme 'Clean Hands Save Lives'. The event	
		will be held in Bairiki Square in South Tarawa from 11am to 3pm in the presence	
		of Secretaries, Diplomats, Heads of UN agencies, members of community and school students" (Office of the President of Kiribati, 2015).	
		"In a timely gesture, two more television stations in the Pacific Island region will soon be airing the Secretariat of the Pacific Community's flagship TV show, The Pacific Way	
		To view the first four episodes of the show for 2015, see The Pacific Way	
		playlist on YouTube:	
		 Episode 1: Youth at Work & 20th Anniversary Highlights 3rd SPC Conference: https://youtu.be/7UtXfJlyE2c 	
		 Episode 2: Empowering Communities in RMI, Palau & FSM: https://youtu.be/f_Ur9LDoGPE 	
		Episode 3: National Adaptation Programme of Action to Climate	
		Change (NAPA) in Tuvalu: https://youtu.be/UGtlSLXXIOs	
		• Episode 4: Building Resilient Communities in Tonga (USAID) & GCCA: PSIS Kiribati Environmental Health Surveillance:	
		https://youtu.be/AbzMAXhV8H0" (emphasis added) (SPC, 2015b).	
	2. The organisation develops and/or	There are a variety of training resources published on the SPC website. For	
	implements training programs for	example a tool for integrating gender concerns into weather and climate hazard	
	stakeholders in issues related to	assessments (see	
	climate change adaptation.	http://www.spc.int/images/publications/en/Divisions/CC/Tools.pdf).	
		From the 20 th – 22 nd June 2012 the "Secretariat of the Pacific Community (SPC)	
		held a training session on gender and climate change for Fiji officers from	
		government ministries and NGOs. It aimed at strengthening participants'	
		understanding of the gender analysis approach so that they could apply it in the	
		context of climate change. According to SPC, understanding the different roles	
		of women, men, youth and children, is critical to reducing vulnerability and	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		enhancing resilience to the impacts of climate change. The workshop aimed to enhance understanding of these differing roles, enabling participants to identify effective interventions for the improved management of limited resources in the face of a changing climate. The workshop was organized by the SPC/German International Development Cooperation (GIZ) programme, Coping with Climate Change in the Pacific" (APAN, 2012).	
		"Two members of staff from the tissue culture unit of the Crops Division of Samoa's Ministry of Agriculture and Fisheries (MAF) had a one-week attachment at the end of November at SPC's Centre for Pacific Crops and Trees (CePaCT) in Narere, Fiji. The training was mainly focused on the micropropagation protocols of taro currently developed and optimised by CePaCT" (SPC - Land and Resources Division, 2013).	
5. Specialised advisory services	The organisation provides specialised climate change adaptation-related advice to Member Countries and/or other stakeholders.	There are a variety of training resources published on the SPC website. For example a tool for integrating gender concerns into weather and climate hazard assessments (see http://www.spc.int/images/publications/en/Divisions/CC/Tools.pdf). "Director of SPC's Division of Fisheries, Aquaculture and Marine Ecosystems Mr. Mike Batty believes that the: 'SPC/GIZ programme will strength the fisheries sector in PICTs by supporting successful adaptations of strategies to protect coastal communities from the effects of climate change and provide scientific data, modeling [sic] and advice on oceanic fisheries to assist SPC member governments and regional organisations. The challenges brought about by climate change demand a coordinated response from our region, working under one overarching approach to achieve one common goal - the sustained resilience of Pacific Island communities to climate change'" (emphasis added) (Solomon Times Online, 2011).	*
-	4.	Outcome Effectiveness -	-

Appendix 4: Application of FAROCCCA to SPC (cont'd)

Appendix 5: Application of FAROCCCA to SPREP

RATING SYSTEM		
×	No	
♦	To some extent	
abla	Yes	
(NE)	No evidence	
	Perceptual indicator or indicator not rated in this paper	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		1. Input Effectiveness	
1. Goals	1. Climate change adaptation was	In the 2,400 word agreement establishing SPREP (SPREP, 1993), recognition of the	×
	an initial goal of the organisation.	overlaps between people and the environment consists of four uses of the word	
		'sustainable'. The organisation's original mission statement was "To promote	
		cooperation in the Pacific region and provide assistance in order to protect and	
		improve its environment and to ensure sustainable development for present and future	
		generations" (SPREP, 2011a).	
	2. Climate change adaptation is a	SRPEP's 2011-15 Strategic Plan lists climate change as its first strategic priority in	\square
	current goal of the organisation.	(SPREP, 2011b, p. 3), with the specified goal under this priority heading being to	
		strengthen member capacities to respond to climate change (SPREP, 2011b). "By	
		2015, all Members will have strengthened capacity to respond to climate change	
		through policy improvement, implementation of practical adaptation measures,	
		enhancing ecosystem resilience to the impacts of climate change, and implementing	
		initiatives aimed at achieving low-carbon development" (emphases added).	
	3. The current strategic plan	SPREP's 2011-15 Strategic Plan includes 15 climate change targets ranging from	✓
	contains specific climate change		
	adaptation objectives.	of their technical needs" (SPREP, 2011b, p. 19) to "At least 10 PICT Members have	
		mainstreamed climate change adaptation, including ecosystem based approaches, and	
		risk reduction considerations in their national sustainable development strategies	
		(NSDS) or equivalent and resources have been mobilised for their implementation"	
		(emphasis added) (SPREP, 2011a, p. 17).	
		Pacific interpretation of 'mainstreaming' → "Climate change adaptation, including	
		ecosystem-based approaches, is mainstreamed in national and sectoral polices,	
		strategies and plans, and implemented through coordinated institutional	
		arrangements supported by enabling environments at all levels and sectors;	
		adaptation and mitigation activities are integrated to prevent any contrary ('perverse')	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		impacts on ecosystems" (https://www.sprep.org/sprep-meeting/pacific-environment-	
	4. There is no other regional organisation with similar climate change adaptation goals.	forum). SPC medium term climate change goal: "Capacity to respond to climate change, disasters and emergencies strengthened" (SPC, 2013, p. 2). SPREP climate change goal: "By 2015, all Members will have strengthened capacity	×
		to respond to climate change through policy improvement, implementation of practical adaptation measures, enhancing ecosystem resilience to the impacts of climate change, and implementing initiatives aimed at achieving low-carbon development" (SPREP, 2011b, p. 16).	
		The Pacific Centre for Environment and Sustainable Development (PACE-SD) at the University of the South Pacific has the following mission: "To work with all other relevant sections of the university, regional and international organisations and governments to promote environmentally friendly climate change adaptation and sustainable development through innovative and cost-effective approaches" (http://www.usp.ac.fj/index.php?id=11354&type=98).	
		Overlapping missions of SPREP and SPC; SRPEP is environment-focussed—ecosystems resilience (related to original mission; SPC is more disaster-focused, probably working in a comprehensive disaster management framework	
2. Governance and leadership	1. The Board provides visionary leadership and strategic direction.		
	The organisation evaluates organisational performance at least annually.	"Progress towards the goals and outcomes of the [2011 – 2015] Strategic Plan will be evaluated against key performance indicators annually through the performance monitoring and evaluation report to SPREP Meetings: these indicators will be monitoring tool for tracking progress" (SPREP, 2011b, p. 33).	Ø
		Progress will be evaluated annually against key performance indicators through the performance monitoring and evaluation report to SPREP Meetings; these indicators will be used as a monitoring tool to measure the impact of the Secretariat's work and track progress (SPREP, 2011b, p. 6).	
		SPREP publishes annual monitoring and evaluation reports that are based on the approved work plan and budget for the year and question, with this stemming from the strategic plan. For example, the target, "At least 10 PICT Members have mainstreamed climate change adaptation, including ecosystem based approaches, and risk reduction considerations in their national sustainable development strategies	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		(NSDS) or equivalent and resources have been mobilised for their implementation" appears first in SPREP's 2011-2015 strategic plan (SPREP, 2011b, p. 17), and later in the 2014 Approved Work Programme and Budget (SPREP, 2013c, p. 11), with a budget of US\$1,022,325 attached, and finally in the 2014 Performance and Monitoring Evaluation Report for 2014 (SPREP, 2015e, p. 8) with an actual expenditure of US \$909,486 and with the target 100% complete.	
	3. Executive management (can also include members of the Board/Governing Body) decision-making is done by consensus or majority vote.	The SPREP Meeting Rules of Procedure specify that decision-making will be achieved through consensus to ensure each member has a voice (SPREP, 1995, Rule 11).	Z
	4. Executive management staff (can also include members of the Board/Governing Body) are qualified and/or equipped to achieve the goals of the organisation.	DG requires a Master's degree in management/development/environment or a related field. Also 15 years' significant and relevant experience at senior executive level. Extensive high level experience and competency negotiating with governments and donors and development partners in and outside the region (SPREP, 2015b). DG (2009-2015) education: "The Australian National University Bachelor of Science (Forestry), Forest Management, Ecology and Environmental Management 1974 – 1977 University of Canberra Post Graduate Diploma in Resource Management, Natural Resource Policy and Management 1981 – 1982 Harvard Business School Executive Education Executive Development Programme, Advanced Executive Management and Leadership 2000 – Present" DG (2009-2015) experience:	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		"Manager, Natural Resource Management Division	
		National Parks and Wildlife Service, New South Wales, Australia	
		March 1983 – October 1990 (7 years 8 months)	
		<u>Head, Programme on Protected Areas</u>	
		<u>IUCN</u>	
		May 1993 – October 2009 (16 years 6 months)	
		<u>CEO (Director General)</u>	
		Secretariat of the Pacific Regional Environment Programme	
		October 2009 – Present (6 years 2 months)"	
		Prior to SPREP, David worked with IUCN, based in Switzerland, as Head of their	
		Protected Areas Programme. His roles included leading IUCN's work on protected areas and on the UNESCO World Heritage Convention. He served as Secretary	
		General of the IVth IUCN World Parks Congress (WPC), held in Durban, South	
		Africa in 2003. David also worked at the Senior Executive level in the New South	
		Wales (Australia) National Parks and Wildlife Service, and worked with the	
		Tasmanian and New Zealand Governments in the forestry sector. David has also	
		worked as a consultant with the World Bank and Asian Development Bank and has	
		represented SPREP, IUCN and other organisations, at the highest level, on many	
		International Boards and Committees" (Sheppard, 2015).	
	5. Executive management staff		
	disclose potential conflicts of		
	interest.6. The organisation attracts, retains	"The Human Resources team take the lead on ensuring we recruit and retain the	♦
	and develops talent.	highest quality of staff at SPREP. They look after our staff from recruitment and	~
	and develops talent.	induction through to repatriation and are also in charge of HR policies, performance	
		and professional development" (SPREP, 2014a, p. 53).	
	7. Leaders create a dynamic		
	organisational culture, making		
	the organisation a desirable place		
2.0	to work.		
3. Resources	1. There are staff members	The personnel list on the SPREP website includes an adaptation adviser and an	\square
	exclusively dedicated to climate	adaptation specialist, in addition to a number of adaptation project managers and	
	change adaptation.	financial personnel (SPREP, 2014c).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		The SPREP organisational structure includes two staff and one consultant working directly in climate change adaptation, along with four consultants working on the "Pilot Programme for Climate Change Resilience Project" (SPREP, 2015c, p. 5).	
		"SPREP has a current staff of more than 90, with <u>at least 20 devoted to working full time on climate related issues</u> . SPREP is a regional center [sic] of excellence and the lead Pacific organization in climate change work. <u>It has implemented over 100 donor assisted regional projects in climate change and environmental management, in general, and in CCA and DRR mainstreaming, in particular" (emphasis added)</u>	
		(SPREP, 2015a, p. 1).	
	2. Staff are qualified and have experience in climate change adaptation.	The job description for the Pacific Ecosystem Based Adaptation Project Manager	Ø
		"Dr. Netatua Pelesikoti is the Director of SPREP's Climate Change Division. She is called Neta by those who know her, and is well known throughout the Pacific region having had over 20 years' worth of experience in climate change, coastal management and disaster risk management.	
		She began as an environmental technical officer in Tonga and then progressed to working on policy and management at the national level including monitoring and evaluation, training, and project management.	
		She was also an advisor at the Secretariat of the Pacific Applied Geoscience Commission (SOPAC). Often described as the 'Queen of Disaster Risk Management' in the Pacific region, Neta is well received and welcomed by many Pacific island communities who have spent time with her in their work field.	
		Dr. Pelesikoti is a coastal ecologist by profession. She did her first degree at the University of the South Pacific in geography and economics; she completed her Masters in Coastal Management in the Netherlands and finished her PhD in Australia in coastal monitoring focusing on the coastal water quality, coral reef and seagrass.	
		Now, Dr. Pelesikoti is staking her claim in the international region having attended the UN Climate Change Negotiations since 2010 and with her role as a Leading Author in Chapter 29 [Small Islands] of the 5th IPCC Assessment Report" (emphasis added) (SPREP, 2012b).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	3. Staff are qualified and have	The job description for the Pacific Ecosystem Based Adaptation Project Manager	
	experience in project/program management.	requires an individual with seven years' experience managing projects related to ecosystem based adaptation for climate change adaptation (SPREP, 2014d).	
	management.	ceosystem based adaptation for enmance enange adaptation (of REI , 2014d).	
		"For over 10 years, Paul Anderson has been working with communities, civil society,	
		national governments and regional organizations to build capacity in natural resource management, climate change adaption, conservation and marine resource	
		management in the Pacific Islands and the United States. He specializes in	
		environmental monitoring, capacity building (field implementation, monitoring,	
		surveying, GIS/GPS, coastal change analysis), bilateral and multilateral	
		environmental reporting, Geographical Information Systems database management,	
		data acquisition, cartography and <u>project management</u> .	
		Paul had developed prioritization products for conservation sites in Pacific Islands	
		Countries and Territories, strengthened national capacity to use of latest global	
		positioning systems (GPS) as well as capacity building and resource management facilitation. Developed the Pacific Islands mangrove monitoring manual.	
		racintation. Developed the Pacific Islands mangrove monitoring manual.	
		He has worked with the disaster management offices in Samoa and Vanuatu and Red	
		Cross to prioritize and deliver aid after the 2009 Samoa Tsunami, Cyclone Evan in	
		2012 and Cyclone Pam in 2014. Paul conducted the post disaster needs assessment for the environment sector for the world bank after all 3 disasters" (emphasis added)	
		(Anderson, 2015).	
		"Various PROJECT EXPERIENCE	
		January 2006 – Present (9 years 11 months)	
		2015-current	
		Global Environment Facility Capacity Building for MEAs Project	
		Targets 14 SPREP member countries	
		Project Manager	
		2014-2015	
		Capacity Building and Project Analysis, Civil Society Support Program, Samoa	
		Ecosystem Based Adaptation Coordinator	
		2012-2014	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		International Climate Change Adaptation Initiative, AusAid	
		Tonga, Samoa, Vanuatu, Kiribati	
		Development Coordinator	
		2013-current	
		Pacific Ocean Ecosystem Analysis Project (PACIOCIA)	
		21 Pacific Island Countries and Territories (PICTs)	
		Pacific Island Hub Project Manager	
		2012-current African Caribbean Pacific Multilateral Environmental Agreements	
		(ACPMEAs) Capacity Building Project	
		14 PICs and Timor Leste	
		SPREP Protected Areas Observatory Adviser (BIOPAMA)	
		2012-current Biodiversity and Protected Areas Management Programme	
		(BIOPAMA)	
		21 Pacific Island Countries and Territories (PICTs)	
		SPREP MESCAL Coordinator	
		2010 -2012 Mangrove Ecosystems for Climate Change Adaptation & Livelihoods	
		(MESCAL) Project	
		Fiji, Solomon Islands, Samoa, Vanuatu, Tonga	
		Marine Conservation Planning Adviser	
		2008-2010 Biodiversity and Ecosystem Management Marine Program	
		21 Pacific Island Countries and Territories (PICTs)	
		GIS User Group Coordinator	
		2006-2008 American Samoa Department of Commerce" (Anderson, 2015).	
		•	
		"Dr. Netatua Pelesikoti is the Director of SPREP's Climate Change Division. She is	
		called Neta by those who know her, and is well known throughout the Pacific region	
		having had over 20 years' worth of experience in climate change, coastal	
		management and disaster risk management.	
		She began as an environmental technical officer in Tonga and then progressed to	
		working on policy and management at the national level including monitoring and	
		evaluation, training, and project management.	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		She was also an advisor at the Secretariat of the Pacific Applied Geoscience Commission (SOPAC). Often described as the 'Queen of Disaster Risk Management' in the Pacific region, Neta is well received and welcomed by many Pacific island communities who have spent time with her in their work field.	
		Dr. Pelesikoti is a coastal ecologist by profession. She did her first degree at the University of the South Pacific in geography and economics; she completed her Masters in Coastal Management in the Netherlands and finished her PhD in Australia in coastal monitoring focusing on the coastal water quality, coral reef and seagrass.	
		Now, Dr. Pelesikoti is staking her claim in the international region having attended the UN Climate Change Negotiations since 2010 and with her role as a Leading Author in Chapter 29 [Small Islands] of the 5th IPCC Assessment Report" (emphasis added) (SPREP, 2012).	
	4. Staff participate in ongoing training programs.	"In 2014, SPREP continued to support continuous learning, professional development and growth for all staff. In February, an off-site, learning and teambuilding workshop for all staff under the broad theme of 'Learning Together, Leading Together' was facilitated by Dr Harold Hillman and colleagues from Sigmoid Curve Consulting. The programme included targeted training for senior staff and middle management" (SPREP, 2014a, p. 57).	☑
		"During the year [2013], 25 staff members were supported under the learning and development programme. This initiative is part of the Performance Development System which identifies staff training and capacity building needs" (SPREP, 2013b, p. 43).	
		"Led by SPREP, these [adaptation fund proposal writing] training activities were supported by the Asia Pacific Adaptation Network (APAN), the Ministry of Environment, Japan through their Institute for Global Environmental Strategies (IGES), SPC through their European Union Global Climate Change Alliance, PIFS, and UNEP through the CTCN. Additionally, in-kind support through the provision of resource people was provided through the Adaptation Fund and Green Climate Fund secretariats, respectively. The training helped participants to become familiar with the full Adaptation Fund proposal development cycle and to respond to each of	
	5. Staff performance is appraised (formally or informally) at least annually.	the key components of the application process" (SPREP, 2014a, p. 36). "Following completion of performance reviews in early 2014, 96% of staff had been assessed as performing at or above the expected level. Four staff members received	Ø

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		the Director General's Excellence Award in recognition of their exemplary and exceptional performance" (SPREP, 2014a, p. 57).	
		"In 2013, SPREP established the Director General's Excellence Award to recognise exemplary and exceptional performance by staff. In March, three members of staff	
		were recipients of this inaugural award" (SPREP, 2013b, p. 43).	
	6. The organisation has untied funding.	SPREP is heavily reliant on project-based funding (Hay <i>et al.</i> , 2014, p. iii). At the same time, SPREP's dependence on project-based funding has been decreasing (Hay <i>et al.</i> , 2014, p. 24)	❖
	7. The organisation has funds exclusively dedicated to climate change adaptation.	The report for the 25 th SPREP Meeting notes that SRPEP is now an accredited 'Regional Implementation Entity (RIE)' for the Adaptation Fund established under the Kyoto Protocol and that this accreditation would improve "SPREP's ability to assist countries in developing and submitting climate change adaptation proposals for funding consideration by the AF" (SPREP, 2014e, p. 6).	Ø
		SPREP's Climate Change Division assists members to develop their capacity to respond to climate change, and over the period 2011-2013 this Division is allocated 55% of SPREP's technical budget (Hay <i>et al.</i> , 2014, p. 8 & 27).	
		2012 Work Plan and Budget shows dedicated funding for "implementing adaptation measures" (SPREP, 2011d, p. 10).	
	8. External funding to the organisation has increased over	Donor contributions in 2011 totalled US\$10,647,044 (SPREP, 2012a, p. 44).	
	the past 5 years.	Donor contributions in 2014 totalled US\$15,817,618 (SPREP, 2014a, p. 58).	
		General trend is an increase but there has been fluctuations in contributions—2013 figures were higher than 2014	
	9. The organisation has multiple funding sources.	SRPEP's 2011 Annual Report details around \$880,000 in member contributions from 19 members, and around \$10,647,000 from 34 donors (SPREP, 2012a, p. 44).	\square
	10. The organisation has financial reserves.		X
		SPREP's 2014 audited annual accounts show the following:	
		(see overleaf)	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	11. The organisation has sufficient technological resources (e.g. intellectual property rights, patents, copyright, software licences etc.) to carry out its climate change adaptation mandate.	Type \$1 Dec 2014 31 Dec 2013 General Reserve \$501,425 \$501,425 Specific Funds \$244,452 \$35,133 Core Funds (\$1,238,598) (\$469,110) Total Reserves (\$492,631) \$67,448 (SPREP, 2015g, p. 7). The management comment with regard to the depletion of reserves was that for the organisation as a whole there was no deficit, that this related only to corporate services and that, "The deficit in relation to core budget services in 2014 was due mainly to the high costs of the reviews (in total over \$400k), the high costs of the translations (over \$300k), 24th SPREP Meeting costs (\$255) [sic?], and the cost of a number of unexpected medical fees in 2014. The issue of core funding has been a long running issue for SPREP and is being addressed by a Membership Working Group (which will meet again on 17th July) comprising of Members and Secretariat staff. There is also an internal working group addressing the issue of programme fees and cost recovery mechanisms as other income for the core budget apart from membership contributions" (SPREP, 2015g, p. 29).	
4. Structure, systems and processes	There is a low degree of hierarchy (i.e. few hierarchical levels).		
-	2. The organisation has a human resource management system that supports the shaping of organisational culture and staff recruitment, training, development and retention.		
_	3. There is a financial management system that meets International	"In accordance with International Financial Reporting Standards and best practice, an unqualified audit was undertaken of 2014 financial statements, a testament to our high standards of financial management" (SPREP, 2014a, p.56).	Ø

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	Financial Reporting Standards (IFRS) or its equivalent.	*There is evidence that the audit was conducted → published as part of 2014 Annual Report*	
	 The organisation applies risk management principles in its decision-making processes. 	"The Secretariat will work with Members to develop annual progress reports that will contribute to a mid-term consultative review in 2013. Such reports will be drawn on again when the Plan is updated or replaced in 2015, and a risk management framework will be applied to the Plan" (SPREP, 2011b, p. 6).	
	The organisation has a centralised, user-friendly internal data management system.		
	6. The organisation has a user- friendly project/program management system (e.g. that supports staff to identify, schedule and track resources etc.).		
	There are mechanisms that support vertical and horizontal communication.		
	8. There are internal dispute resolution protocols.		
5. Research and collaboration capacity	The organisation has plans and policies that support research.	SPREP's action plan "promoting and developing programmes, including research programmes, to protect the atmosphere and terrestrial, freshwater, coastal and marine ecosystems and species, while ensuring ecologically sustainable utilisation of resources" (SPREP, 1993, Article 2.2.c).	Ø
	2. There are organisational funds allocated for research.	The Climate Change Strategy aims to "Enhance and build capacity for conducting applied research, fostering meteorological, climatological and oceanic observation and monitoring programmes to improve understanding, awareness, and applications of targeted responses to climate change and related disaster risk reduction". \$1,104,000 has been allocated/estimated for this activity(SPREP, 2011d, pp. 12-13). SPREP's 2014 Work Programme and Approved Budget has listed as a climate change goal, "C1.2.1c: Adequate regional meteorological and oceanographic services	\(\sigma\)
		are provided to ensure access to quality and timely weather and ocean state information" (emphasis added) (SPREP, 2013c, pp. 16-17), with US\$458,596 allocated towards achieving the goal.	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		Two of the 2014 activities associated with this goal are:	
		"6. PMDP [Pacific Meteorological Desk Partnership] <u>preparing at least one regional</u> <u>pre-COP briefing paper</u> for SPREP UNFCCC preparations for PICs	
		7. PMDP assisting efforts on climate change projection work in-country" (emphasis added) (SPREP, 2013c, p. 17).	
		SPREP's 2014 Work Programme and Approved Budget includes US\$99,587 for the PI- Global Ocean Observing System Coordinator, (PI-GOOS). In the Pacific, PI-GOOS is designed "to assist sustainable development by facilitating the establishment and implementation of coastal and open ocean observing programmes, and in helping to improve uptake and use of the data, information and products being generated. Implementation of the PI-GOOS programme is primarily through capacity building at the local and regional level, and via the delivery of useful observation related products to relevant national level Government departments and other national partners" (SPREP, 2011c, p. 4).	
		"The position of Pacific Islands – Global Ocean Observing System Coordinator (PIGOOSC) addresses the following Key Result Areas:	
		 Development and management of the GOOS programme Facilitation of the PIGOOS Advisory Committee Capacity building programmes Advisory and reporting Publication" (SPREP, 2011c, p. 6). 	
		"Following the untimely passing of Mr Lui Bell in 2012, who was working at the time as SPREP's Marine Species Adviser, a scholarship fund was established by SPREP to honour his memory. Through the fund, a grant of up to USD 20,000 is awarded to assist a young person from the Pacific to undertake a course of post-graduate study that will contribute to those issues about which Lui was most passionate – the conservation of the threatened and migratory species of the Pacific islands" (SPREP, 2014a, p. 22).	
		In 2014, the Secretariat's publishing function oversaw a significant increase in the number of publications produced. In the period from January – December 2014,	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		SPREP produced 50 new publications, not including meeting reports or promotional	
	3. The organisation has equipment, expertise and/or resources (e.g. access to journal articles etc.) for research.	materials" (SPREP, 2014a, p. 55). In March 2010 four elements of SOPAC (The Pacific Islands Applied Geoscience Commission) were transferred to SPREP (SPREP and SOPAC, 2010). One of the elements transferred was The Pacific Islands Global Ocean Observing System (PI-GOOS), which monitors the Pacific Ocean using "a range of environmental sensors, from satellites which can monitor the sea surface from high in space, to teams of people who monitor coral reef health while diving and snorkelling, and even to highly sophisticated robots which sink into the ocean depth before climbing back to the surface every 10 days" (emphasis added) (SPREP, 2015f).	Ø
	4. The organisation's current strategic plan (or a similar document) outlines plans for collaboration with multiple stakeholders on adaptation-related initiatives.	"For the Secretariat it [achieving the 2015 targets and outcomes] means delivering quality service to Members by expanding the funding base of the organisation, implementing responsive change management to ensure that programmes are relevant and viable, and working in partnership with other organisations and stakeholders that support SPREP's strategic priorities" (emphasis added) (SPREP, 2011b, p. 2). PIFACC document recognises the limited technical resources and the need to collaborate.	Ø
) Pr.	Expected outcomes in Framework document. oject/Program Effectiveness - PACC	
1. Needs and goals	The project documents contain evidence that the project/program fills an existing need with relation to climate change adaptation.	"Prior to the PACC programme, efforts to try and reduce vulnerability were piecemeal and were not seen to be contributing to an overall strengthening of adaptive capacity across the region. Business-as-usual development did not integrate climate change adaptation at national (state) or community (municipal) level planning, resulting in infrastructure being easily damaged by climate variability and extreme events. The PACC programme was developed to lay the groundwork for a more coordinated and integrated approach to ensure that vulnerabilities are reduced and that development activities achieve their social, economic and ecological goals. The programme addresses Pacific island priority actions for climate change adaptation by: (1) demonstrating practical 'on the ground' measures; (2) promoting climate-sensitive national policy; (3) strengthening community or municipality coping capacity; and (4) building resilience at the level of national and state economies" (SPREP, 2013a, p. 3).	☑
	2. The project/program's adaptation components could be considered 'transformational' (i.e. the	"The MTR [PACC Mid Term Review] considers it important to understand what 'baseline assessment' means. If the current 'development baseline' is used , with adaptation funding covering 'additionality', then the implicit assumption being made	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	project/program focusses on	is that all current development activities are inherently adaptive and simply need	
	"larger, more profound system	additional input to allow for climate change. In essence this is saying that we simply	
	changes" and requires a	need to keep doing more of what we are currently doing to account for climate	
	'paradigm shift' in the way it is	change. Such an approach leaves no room for any critical evaluation of whether	
	framed and implemented).	current activities may in fact be maladaptive, under present and/or future conditions.	
		Consideration of climate change therefore needs critical assessment of current (baseline) and future conditions, covering climatic, environmental, social, and	
		economic factors. Such an approach forms the key elements of a vulnerability and	
		adaptation assessment, which at the very least should be used for screening the full	
		range of issues and potential adaptation options at the project development stage"	
		(emphasis added) (Hunnam et al., 2012, p. 34).	
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
		"Beyond sustainability, the programme is promoting replication and up-scaling of	
		best practices and innovations, within countries and across countries as appropriate.	
		Some promising adaptation solutions are already being replicated, for example the	
		solar water purifiers in Nauru which have moved beyond the pilot communities"	
		(SPREP, 2013a, p. 38).	
		"The PACC programme is the largest climate change adaptation initiative in the	
		region, with activities in 14 Pacific island countries and territories. The programme	
		is building a coordinated approach to the climate change challenge" (SPREP, 2013a,	
		p. 40).	
		"The [PACC] 3-D mapping tool is an aid to engaging communities and enabling	
		their participation in decision making – in the Vanuatu project, this has been used in	
		deciding on whether to relocate roads and villages further inland" (SPREP, 2013a, p.	
	3. Climate change adaptation is a	37). "The [PACC] programme is building an integrated and coordinated approach to the	7
	goal of the project/program.	climate change challenge through three main components: practical demonstrations	ك
	gour or the project program.	of adaptation measures, driving the mainstreaming of climate risks into national	
		development planning and activities, and sharing knowledge in order to build	
		adaptive capacity" (emphasis added) (SPREP, 2013a, p. 2).	
		Demonstration plots (significant livelihoods considerations); coastal	
		protection→FSM: 7 km or roads, culverts raised; Vanuatu→relocated roads, air strips	
	4. The project/program's goals	"Building capacity and knowledge to plan ahead and better cope with climate-related	abla
	reflect the long-range impacts of	risk will therefore have immediate benefits, as well as contributing to longer term	
	climate change.	coping strategies for climate change" (SPREP, 2013a, p. 3).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		"Mainstreaming efforts are also beginning to reap rewards, as countries move towards integrating climate into their policies and planning" (SPREP, 2013a, p. 2). "One aim of the PACC project is to lay foundations for successful adaptation in the region" (SPREP, 2013a, p. 37).	
	5. The project/program's objectives relating to climate change adaptation are specific, measurable, achievable, realistic and time-bound (SMART).	Example: "By the end of the project, the National coastal, crop production and water sector Management Plan, Sustainable Development Plan, National Risk Management Plan, and at least two (2) Provincial /Risk management Plans include climate change risk and adaptation measures for the coastal, crop production and water sector in all 13 PACC countries" (emphasis added) (UNDP and SPREP, 2008, p. 87).	♦
	6. Member Countries were involved in developing the climate change adaptation components of the project/program.	"The National Climate Change Teams or National Advisory Committee on Climate Change already exists within each of the participating countries. In the PDBB [???] Phase of PACC, the NCCCT [National Climate Change Country Team] have been used to determine the priorities for adaptation implementation within each country. However, given that PACC is focused on implementing adaptation activities in pilot sites of each country it will be important for the membership to include: • Representatives of civil society organisations and relevant NGOs, particularly working within communities where the project is set; • Representatives of island/community/village, local-level, and provincial Governments" (UNDP and SPREP, 2008, p. 112)	Ø
2. Scope	The project/program addresses multiple climate or climate-induced vulnerabilities (e.g. vulnerability to sea-level rise, increased sea surface and air temperature, changing rainfall patterns etc.).	 "The three outcomes that the project is striving to achieve are: Policy changes to deliver immediate vulnerability-reduction benefits in the context of emerging climate risks are defined in all PACC countries ('mainstreaming'). 	V

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	2. The project/program addresses multiple non-climate-induced vulnerabilities (e.g. poverty,	in climate variability in Ontong Java have been observed. Dry seasons have expanded into wet seasons, as experienced in the 2011 El Niño and La Niña events. An increase in the frequency and intensity of extreme rainfall events is likely to create flooding and waterlogging problems. Waterlogging would impact on crops, for example sweet potato tuber formation. Despite the projection that the incidence of drought will decrease, the influence of the ENSO cycle on the occurrence of severe drought must be acknowledged" (SPREP, 2015d, p. 5). "At the national and community level, the demonstration measures will contribute to building the resilience of communities to climate related risks, improving livelihoods and alleviating poverty, which is a key priority for national governments" (UNDP)	V
	deforestation etc.).	and SPREP, 2008, p. 27). Project addresses population growth, limited sources of income and low soil fertility (SPREP, 2015d, p. 5).	
3. Logic, design and adequacy	The logic/design of the project/program's climate change adaptation components is evidence-based, in the context of SIDS.	"Pacific island countries are already experiencing the impacts of climate change. The potential magnitude of the problem threatens the very existence of some Pacific island states, and the achievement of sustainable development and Millennium Development Goals. However, vulnerabilities and risks associated with climate change are not currently being addressed in any systematic way. Climate change risks and opportunities are not reflected in national and community level planning and governance processes. Individual, institutional and systemic capacity is not targeted towards strategic interventions. Demonstrations of adaptation pilots in key development sectors have not been implemented, and as a consequence few are replicated and scaled-up. The PACC Project aims to significantly improve the effectiveness of the response to climate change in the Pacific. The project will improve technical capacities to support appropriate adaptation centric policies, demonstrate cost-effective adaptation techniques in key sectors, and promote regional cooperation. It is designed to lay the framework for effective and efficient future investment on climate change adaptation in the Pacific" (UNDP and SPREP, 2008, p. 1).	Ĭ.
	2. The project documents contain evidence that the logic/design of the project/program's climate change adaptation components is an effective means to achieve its objectives.	Effectiveness ratings in PACC Demonstration Guide → Introduce new farming systems, suitable salt resistant crops=Medium; CC awareness=Low; environment and resource management training for community=Medium; relocation plan=Low → no discussion of effectiveness ratings (SPREP, 2015d, p. 14). The MTR notes that results "have been mixed; some of the individual exercises have been organised and completed thoroughly, and have produced interesting findings. The CBA work stands out in this regard. Other support exercises and training have	\$

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		not worked well; guides produced have not been useful or applicable in the PACC countries. The MTR considers that overall the regional support work has been only marginally satisfactory; it has not been efficient or cost-effective in enabling the country projects to produce better results. The support work program should have been less ambitious, which would have helped to improve the RPMU's efficiency of delivery. It is not useful for example, to be developing and introducing new guidance materials (Mainstreaming, CBA) in the fourth year of a 5-year project. Throughout the project the sequence of the support work has been poorly scheduled, and has not been provided on demand or in a useful timeframe for the country project teams. The MTR considers that the particular problem has been the lack of an overall coherent strategy for the support helped to improve the RPMU's efficiency of delivery. It is not useful for example, to be developing and introducing new guidance materials (Mainstreaming, CBA) in the fourth year of a 5 - year project. Throughout the project the sequence of the support work has been poorly scheduled, and has not been provided on demand or in a useful timeframe for the country project teams. The MTR considers that the particular problem has been the lack of an overall coherent strategy for the support work; it has not been aligned to a planning framework at country or regional levels. Tools have been applied out of sequence, without a clear understanding of what they are supposed to be achieving, and in some cases are inappropriate to the context. Underlying these issue s is a lack of focus on the core concern of climate adaptation and resilience" (Hunnam et al., 2012, pp. 10-11).	
4. Resources	Staff members are assigned exclusively to the project/program.	"A full-time Regional Project Manager (RPM) for PACC will be, funded by the project and based as a contracted staff member at SPREP" (UNDP and SPREP, 2008, p. 67). *RPM Taito Nakalevu hired; resigned in February 2014 (SPREP, 2014b).	V
	2. The project/program team includes staff members with qualifications and experience in climate change adaptation.	"The PMO will be established and located in SPREP as part of its Pacific Futures Programme will be responsible for the overall project operation and financial management Regional and international experts will be contracted to support the PMO as and when needed to undertake various project activities" (UNDP and SPREP, 2008, p. 67).	♦
		 "The RPM [Regional Project Manager] shall have the following basic required qualifications and expertise: Advanced university degree (at least MSc. or equivalent) in geography, environmental science or other field relevant to the project; 	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		 Extensive knowledge and experience with the climate change, adaptation and development issues of the PICs; Proven track record of technical and managerial experience of an adaptation implementation project;" (UNDP and SPREP, 2008, pp. 102-3). 	
		"Taito Nakalevu is the Project Manager for the Pacific Adaptation to Climate Change Project. Originally from Fiji, he obtained his Bachelor and Master of Arts Degrees from the University of the South Pacific, Fiji. Taito started his career as a high school teacher in Fiji and moved on to a European Union funded Programme called the 'Pacific Regional Agriculture Programme' (PRAP) as a Graduate Research Assistant, a project that was executed by the University of the South Pacific and later, the Secretariat of the Pacific Community (SPC). In this position, he worked very closely with the Fiji-German Forestry and Agroforestry Project carrying out agroforestry research in the hinterlands of Fiji. In 1999, he joined the Ministry of Agriculture, Land Resource Planning and ALTA as Senior Research Officer, Land Use Planning, for the Central/Eastern Division" (Nakavelu, 2015).	
		There is a gap in Taito Nakavelu's history, however in December 2005 he was working for SPREP as a climate change adaptation officer (UNEP, 2005), and appears to have worked in climate change adaptation since then.	
	3. The project/program team includes staff members with qualifications and experience in project/program management.	"Regional and international experts will be contracted to support the PMO as and when needed to undertake various project activities" (UNDP and SPREP, 2008, p. 67).	♦
	r sjaraf ag a saga	"The RPM [Regional Project Manager] shall have the following basic required qualifications and expertise:	
		 Proven track-record of management experience with GEF- and UNDP-funded projects or similar regional/multi-country projects in small island developing countries; Demonstrated experience in project leadership and management; Ability to manage the work of consultants/sub-contractors Proven ability to work as part of an interdisciplinary and/or multi-cultural team Ability to meet project deadlines; and an ability to live and work within Pacific 	
		island communities; • Minimum of 5 years of working experience in the area relevant to the project" (UNDP and SPREP, 2008, pp. 102-3).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		"Taito Nakalevu is the Project Manager for the Pacific Adaptation to Climate Change Project. Originally from Fiji, he obtained his Bachelor and Master of Arts Degrees from the University of the South Pacific, Fiji. Taito started his career as a high school teacher in Fiji and moved on to a European Union funded Programme called the 'Pacific Regional Agriculture Programme' (PRAP) as a Graduate Research Assistant, a project that was executed by the University of the South Pacific and later, the Secretariat of the Pacific Community (SPC). In this position, he worked very closely with the Fiji-German Forestry and Agroforestry Project carrying out agroforestry research in the hinterlands of Fiji. In 1999, he joined the Ministry of Agriculture, Land Resource Planning and ALTA as Senior Research Officer, Land Use Planning, for the Central/Eastern Division" (Nakavelu, 2015). There is a gap in Taito Nakavelu's history, however in December 2005 he was working for SPREP as a climate change adaptation officer (UNEP, 2005). Peniamina Leavai works "for a regional organization (SPREP) in the Pacific region, as an Adaptation Planning Officer for the Pacific Adaptation to Climate Change (PACC) Project. His expertise is on more than ten years of experience in climate change adaptation in Samoa and the pacific region. With emphasis on water resource management, integrated coastal zone management, food security & food production; and emerging issues of climate change and gender, and cc and human rights. Mr. Leavai's background is on environmental science, earth science, Pacific Island geography and geology, environmental management and sustainable development. BSc (USP, Fiji), MSc (Tongji-IESD UNEP, Shanghai China), PRINCE2 Foundation" (emphasis added) (Leavai, 2015).	
	4. The project documents contain evidence that there are sufficient staff members to achieve the project/program objectives.	Toundation (emphasis added) (Ecavai, 2013).	
	5. The project documents contain evidence that there is sufficient funding for the project/program's climate change adaptation components.	The PACC project was intended to run from 2008 to 2012, however implementation did not begin until 2009 and the end date was shifted to 2013, and then to 2014. Additional funding for the project was made available in mid-2011 (Hunnam <i>et al.</i> , 2012).	×
5. Technical efficiency	The project documents contain evidence that the project/program	"The MTR [PACC Mid Term Review] considers that overall the regional support work has been only marginally satisfactory; it has not been efficient or cost - effective	×

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	provides value for money (cost	in enabling the country projects to produce better results" (emphasis added) (Hunnam	
	vs. outputs).	et al., 2012, p. 10).	
6. Implementation	 The project/program's climate change adaptation components are implemented, as proposed. 	Project completion report not yet available. The mid-term report, (SPREP, 2013a), shows implementation of adaptation strategies as intended. Talking about some of the implementation challenges, the PACC Project Manager, Taito Nakavelu said, "We've come up against lack of expertise in various areas, for example with mainstreaming and in some technical fields. But we've worked through	♦
		on a case-by-case basis and found some good solutions. We've brought in regional partners and consultants when needed, and developed guidance materials and training processes tailored to country needs. In an ideal situation projects follow a cycle of planning, implementation and monitoring, but because of the complex nature of the PACC programme this has not been always possible. We have had to adjust and adapt to make things work. But this is part of the learning process we are all going through" (SPREP, 2013a, p. 39).	
		A year earlier than this statement, in the 2012 mid-term review of PACC, commissioned by the UNDP, independent consultants described the project in a more critical manner, "The MTR notes that results have been mixed; some of the individual exercises have been organised and completed thoroughly, and have produced interesting findings. The CBA work stands out in this regard. Other support exercises and training have not worked well; guides produced have not been useful or applicable in the PACC countries. The MTR considers that overall the regional support work has been only marginally satisfactory; it has not been efficient or cost effective in enabling the country projects to produce better results" (Hunnam <i>et al.</i> , 2012, p. 10).	
7. Monitoring and evaluation	 The project/program is internally monitored and evaluated. 	The PACC project documents include nine pages detailing the monitoring and evaluation plan and budget. This plan is to be executed by the project team with additional support (UNDP and SPREP, 2008, pp. 70-78). There are published internal progress reports (eg. GEF <i>et al.</i> , 2010).	☑
		"Project monitoring was difficult because of the remoteness of Ontong Java and limited communications. The PACC PMU initially planned to visit every three months but bad weather and changes to the shipping schedule often meant these trips had to be cancelled. Therefore the PACC team nominated the lead farmer from permaculture plot 1 to provide monitoring information to the PACC PMU in Honiara" (SPREP, 2015d, p. 21).	

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
	The project/program is externally monitored and evaluated.	The project design documents specify that the mid-term and final evaluations will be conducted by independent external evaluators (UNDP and SPREP, 2008, p. 76). Mid-term review conducted externally-89pp document (Hunnam <i>et al.</i> , 2012). Dr Gavin Kenny → "I worked as part of a team of three to complete a mid-term evaluation of the PACC project, under contract to UNDP. This was a very challenging assignment with the size, geographic extent, and many challenges with the project. My principal role was to review the project in countries that had chosen an agricultural focus for PACC, which required visits to Fiji, Papua New Guinea and Solomon Islands. I also contributed to evaluation of the coastal project in Samoa" (Earth Limited, n.d., online).	
8. Sustainability	There are sustained outputs from the project/program.	(Zami Zamota, mai, simito).	
		3. Output Effectiveness	
1. Goal attainment	There is evidence in the most recent annual report or evaluation that the climate change adaptation-related objectives of the organisation are being achieved.	SPREP publishes annual monitoring and evaluation reports that are based on the approved work plan and budget for the year and question, with this stemming from the strategic plan. For example, the target, "At least 10 PICT Members have mainstreamed climate change adaptation, including ecosystem based approaches, and risk reduction considerations in their national sustainable development strategies (NSDS) or equivalent and resources have been mobilised for their implementation" appears first in SPREP's 2011-2015 strategic plan (SPREP, 2011b, p. 17), and later in the 2014 Approved Work Programme and Budget (SPREP, 2013c, p. 11), with a budget of US\$1,022,325 attached, and finally in the 2014 Performance and Monitoring Evaluation Report for 2014 (SPREP, 2015e, p. 8) with an actual expenditure of US \$909,486 and with the target 100% complete. "CC 1.3.1 By 2015, there is a significant increase in resources for adaptation: more funding disbursed and projects implemented" (emphasis added) (SPREP, 2015e, p. 12), was 80% complete in December 2014. CC 2.1.2 By 2011 a climate change portal developed; at least five targeted awareness programmes and communication strategies developed and delivered to raise the level of awareness and facilitate information exchange for key sectors (SPREP, 2015e, p. 14), 90% complete in December 2014.	*

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
Research and knowledge management	 The organisation produces and/or publishes research that is relevant to climate change adaptation at least annually. 	"In 2014, the Secretariat's publishing function oversaw a significant increase in the number of publications produced. In the period from January – December 2014, SPREP produced 50 new publications, not including meeting reports or promotional materials" (SPREP, 2014a, p. 55). E.g. PACC Demonstration Guide: Piloting climate change adaptation in food production and food security on low-lying atolls of Solomon Islands (PTR19) (June 2015).	S
	2. The organisation makes climate change adaptation-relevant research publicly available.	"the number of publications produced is reflected in the bi-annual distribution of resources to depository libraries around the region and abroad, with hard copy distribution increasing from 7 to 32 in the twelve month period" (SPREP, 2014a, p. 55). "In the Pacific region, SPREP's Pacific Climate Change Portal (PCCP) is a key online hub for information related to climate change. The website is updated on a daily basis, ensuring that the information it houses is always relevant and up-to-date" (SPREP, 2014a, p. 35). The PCCP is publicly available.	<u>S</u>
3. Collaboration and advocacy	There is evidence that the organisation collaborates with multiple stakeholders to undertake climate change adaptation-related activities.	"The PCCR [SPREP led Pacific Climate Change Roundtable] coordinates climate change dialogue and networking in the region and facilitates links between global, regional, national and community stakeholders. This coordination role directly supports the monitoring and reporting on progress made in the Pacific Islands Framework for Action on Climate Change (PIFACC). It is also a valuable forum for sharing lessons learnt and reporting on the progress of initiatives such as the PCCP [Pacific Climate Change Portal] – an online repository of information on climate change in the Pacific region" (SPREP, 2013b, p. 22). Biannual meeting. Last held on May 12-14, 2015.	\overline{\text{\tin}\exiting{\text{\tin}}\\ \text{\tex{\tex
	 The organisation advocates for political, financial and/or other climate change support for its Member Countries in various fora at different scales. 	"In November, SPREP was accredited as a Regional Implementing Entity under the Kyoto Protocol Adaptation Fund of the United Nations Framework Convention for Climate Change (UNFCCC). This milestone accreditation, making SPREP one of only three such Regional Implementing Entities in the world, means that we will be better able to support our Pacific members to access financing from the Adaptation Fund. Critically, it enables us to provide technical support and 'lessons learned' to SPREP members who are seeking national accreditation themselves" (SPREP, 2013b, p. 22).	∑
4. Education and training	The organisation undertakes climate change adaptation stakeholder and/or public awareness activities.	One of SPREP's 2013 publications is the children's story, "Aia botumwaka ma aia kakamwakuri ataei! The Children Take Action: A Climate Change Story" (SPREP, 2013b, p. 48). Details Published on 07 October 2015	V

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		Tweet The Secretariat of the Pacific Regional Environment Programme (SPREP) joined the 'Race Against Time' competition as part of the Annual International Alo Paopao Festival, an outrigger event, in Samoa with Director-General Mr David Sheppard coming third in the celebrity event.	
		PTPP1Mr. David Sheppard, Director-General of SPREP in the 'Race Against Time'	
		"Mr. Sheppard along with Mr Peniamina Leavai of the Pacific Adaptation to Climate Change Project and Mr. David Moverley the Invasive Species Adviser of SPREP joined local celebrities in Samoa that competed in the race, paddling a traditional canoe in the Apia harbor as part of the 'Pole to Paris'. This is a public awareness campaign ahead of the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP21) in Paris, France at the end of the year. Climate Change (UNFCCC COP21) in Paris, France at the end of the year" (SPREP, 2015h, online).	
	 The organisation develops and/or implements training programs for stakeholders in issues related to climate change adaptation. 	In 2013, SPREP conducted training for the Samoan Government's "Ministry of Natural Resources and Environment (MNRE) to enable staff to undertake regular coastal erosion monitoring at Vaiula beach resort at Tafatafa, Samoa. This training is one part of the Samoa coastal ecosystem-based adaptation project, funded through the Australian Government" (SPREP, 2013b, p. 10).	Ø
5. Specialised advisory services	The organisation provides specialised climate change adaptation-related advice to Member Countries and/or other stakeholders.	The "Pacific Programme on Climate Resilience with the World Bank will enable SPREP to enhance technical support and advice to Pacific countries on climate change" (SPREP, 2013b, p. 3). "A ground-breaking Letter of Agreement has been signed between the Secretariat of the Pacific Regional Environment Programme (SPREP) and the Republic of the Marshall Islands to support the development of urgently needed climate change adaptation activities. The formal Agreement will see SPREP provide capacity development and technical advisory support to the Marshall Islands to develop concepts and project proposals for submission to the Adaptation Fund Board. In November 2013, SPREP was accredited as a Regional Implementing Entity (RIE) under the Kyoto Protocol Adaptation Fund of the United Nations Framework Convention for Climate Change (UNFCCC). This milestone accreditation has made SPREP one of only three such RIEs in the world. With the signing of this Agreement, the Marshall Islands has become the second SPREP Member country to officially engage with SPREP in its capacity as RIE" (SPREP, 2014f, online).	Ø

SUB-COMPONENT	INDICATOR	EVIDENCE	RATING
		4. Outcome Effectiveness	
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Appendix 5: Application of FAROCCCA to SPREP (cont'd)

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