

DISCUSSION PAPER / 2016.02

ISSN 2294-8651

Diagnosing Monitoring and Evaluation Systems for Climate Change Programs

Case Study of the Caribbean's
Climate Change Program

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December 2016



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TABLE OF CONTENTS

LIST OF TABLES	5
LIST OF FIGURES	5
LIST OF ACRONYMS	6
ABSTRACT	8
1. INTRODUCTION: CONTEXT AND RATIONALE	9
2. LITERATURE REVIEW	11
2.1. GLOBAL TRENDS IN M&E FOR CC: CHALLENGES AND PROGRESS	11
2.2. MONITORING AND EVALUATION ADVANCEMENT/CAPACITIES IN THE CARIBBEAN	12
2.3. A DIAGNOSTIC TOOL TO ASSESS M&E SYSTEMS OF CC PROGRAMS	14
3. METHODOLOGY	16
4. FINDINGS AND ANALYSIS	17
4.1. STRENGTHS AND WEAKNESSES OF THE MEI	17
4.1.1. INSTITUTIONAL READINESS	20
4.1.2. UNIFIED SYSTEM (SUPPLY SIDE)	22
4.1.3. RESULTS MEASUREMENT AND DATA MANAGEMENT	24
4.1.4. PLANS AND BUDGET	29
4.1.5. EVALUATION	30
4.1.6. VERIFICATION	31
4.1.7. DEMAND SIDE	33
4.2. MEI IMPROVEMENTS REQUIRED	35
5. CONCLUSIONS AND RECOMMENDATIONS	39
REFERENCES	42
APPENDIX I- RESULTS AND INDICATORS OF THE REGIONAL FRAMEWORK	46
APPENDIX II- LIST OF INTERVIEWEES	50
APPENDIX III - QUANTITATIVE ASSESSMENT OF THE MEI	51

LIST OF TABLES

TABLE 1: PERFORMANCE LEVEL PER DIMENSION	18
TABLE 2: PERFORMANCE LEVEL PER SUB-COMPONENT	19
TABLE 3: EXAMPLE OF THE REINTERPRETATION AND FOCUSING OF THE RESULTS	25
TABLE 4: QUALIFICATION CRITERIA FOR QUALITATIVE INDICATORS	27

LIST OF FIGURES

FIGURE 1: FRAMEWORKS GUIDING THE CARIBBEAN'S CC AGENDA	10
FIGURE 2: DIMENSIONS AND SUB-COMPONENTS OF THE DIAGNOSTIC TOOL	14
FIGURE 3: PROCESS FOR ROLLING-UP FROM NATIONAL TO REGIONAL LEVELS	18
FIGURE 4: BOTTOM-UP APPROACH TO RATIONALIZATION	23
FIGURE 5: LINKAGES BETWEEN THE REGIONAL INDICATORS USED BY CCCCC AND CDEMA	38

LIST OF ACRONYMS

Annual Average Loss	AAL
Business-as-usual	BAU
German Federal Ministry for Economic Cooperation and Development	BMZ
Biennial Update Reports	BUR
Caribbean Community	CARICOM
Caribbean Public Health Agency	CARPHA
Climate Change	CC
Climate Change Adaptation	CCA
Caribbean Community Climate Change Centre	CCCCC
Climate Change Mitigation	CCM
Climate Change Vulnerability Index	CCVI
Caribbean Disaster Emergency Management Agency	CDEMA
Clean Development Mechanism	CDM
Climate Investment Funds	CIF
Council for Foreign and Community Relations	COFOR
Council for Human and Social Development	COHSOD
Council for Trade and Economic Development	COTED
Caribbean Centre for Renewable Energy and Energy Efficiency	CREEE
Caribbean Regional Fisheries Mechanism	CRFM
Caribbean Tourism Organization	CTO
Global Assessment Report	GAR
Greenhouse Gases	GHG
German Technical Cooperation Agency	GTZ
Inter-American Development Bank	IADB
International Consultation and Analysis	ICA
Implementation Plan	IP
Intergovernmental Panel on Climate Change	IPCC
Latin America and the Caribbean	LAC
Monitoring and Evaluation	M&E
Monitoring and Evaluation Instrument	MEI
Management for Development Results	MfDR

Measurable, Reportable and Verifiable	MRV
Member States	MS
Nationally Appropriate Mitigation Actions	NAMA
National Communication	NC
National Climate Change Office	NCCO
Non-Governmental Organizations	NGO
Official Development Assistance	ODA
Organization for Economic Cooperation and Development/Development Assistance Committee	OECD/DAC
Project Development and Management Unit	PDMU
Project Monitoring, Review, Reporting and Evaluation	PMRRE
Pilot Program for Climate Resilience	PPCR
Public Performance Measurement and Evaluation System	PPME
Results Based Management	RBM
Regional Coordinating Committee	RCC
Reducing Emissions from Deforestation and Forest Degradation	REDD+
Strategic Elements	SE
Small Island Developing States	SIDS
Supply Side Actors	SSA
Theory of Change	ToC
United Nations Convention on Climate Change	UNFCCC
United Nations International Strategy for Disaster Reduction	UNISDR

ABSTRACT

This paper is based on a diagnostic exercise of the monitoring and evaluation instrument (MEI) for the Regional Framework for addressing climate change in the Caribbean. The MEI, which operates at the supranational level, was diagnosed to provide insights into the strengths and weaknesses of the system, understand why they exist and provide guidance on improvements required.

The diagnosis covered seven dimensions: *institutional readiness; unified system (supply side); results measurement and data management; plans, guidelines, and budgeting; evaluation; verification and demand side*. It was elucidated that some of the core requirements for an M&E system shift at various scales (local, national, supranational). For instance, target setting at the supranational level is not driven by the baseline and existing resources, but more so by the aggregation of national priorities which is a function of each country's political processes. A notable discovery is that there are almost no incentives to promote M&E of mitigation actions outside of the UNFCCC system in the Caribbean. This can result in limited evaluations to detect leakages and document best practices for mitigation programs. Further, the research strongly signaled that investing in a bottom-up approach encourages a unified supply side through the rationalization of indicators and information flows, and can secure buy-in, ownership and ultimately use.

Better mainstreaming of M&E across the Caribbean might be attainable through the establishment of a community of practice; release of a policy statement by the CARICOM Secretariat regarding the M&E roles and responsibilities for member states and regional specialized agencies; and the promotion of monitoring, reporting and verification (MRV) within the ambit of the newly established Caribbean Centre for Renewable Energy and Energy Efficiency.

1. INTRODUCTION: CONTEXT AND RATIONALE

The Intergovernmental Panel on Climate Change (IPCC) has projected that with the current levels of greenhouse gases (GHG) in the atmosphere, temperature increases over the next century could be between 2.5-10 degrees Fahrenheit (IPCC, 2007) and with no climate change mitigation actions, we can experience about 4 degrees Celsius by 2100 (World Bank, 2015). The reality is that the effects of global warming are already evident (McGray et al. in Prowse and Snilstveit, 2010; Harley et al., 2008), which has resulted in global recognition that climate variability and change is “the defining human development issue of our generation” (UNDP in Prowse and Snilstveit, 2010: 6).

For the Caribbean, the reality is that it is disproportionately affected by the effects of climate change (CC) since the island states were/are not significant emitters of GHG, but have high vulnerabilities to CC due to their small size (landmass and population), topography (low-lying coasts), being located in the hurricane belt (CCCCC, 2012; UNISDR, 2015), having open and limitedly diverse economies (popular dependence on tourism and agriculture sectors) and due to high levels of poverty and inequality that negatively impacts on their capacities to adapt (Maplecroft, 2014a). For instance, Haiti is ranked the sixth country in the world having extreme climate change vulnerability (Maplecroft, 2014b) and the highest climate change vulnerability index¹ (CCVI) for Latin America and the Caribbean (Maplecroft, 2014a). Also, the Global Assessment Report (GAR) has estimated the average annual loss (AAL²) globally, and Caribbean island states make up 10 of the top 15 SIDS with the highest multi-hazard AAL in relation to social expenditure. Further, the top 5 are all Caribbean island states (UNISDR, 2015).

The region has united to address the challenges faced by climate variability and change through the establishment of the Caribbean Community Climate Change Centre (CCCCC) in 2002, hereafter referred to as the “Centre”, and subsequently, the endorsement of the Liliendaal Declaration on Climate Change and Development in 2009. The latter provides the vision and position of the Caribbean for addressing CC (CCCCC, 2012). The Centre is mandated to collect and analyze climate data to determine impacts on key economic sectors; develop strategies that address the climate-related challenges these sectors face; coordinate the development of CARICOM’s position in international negotiations on CC, and promote research and education and awareness on CC (CCCCC, 2012). The Centre serves the 15 member states³ (MS) of the Caribbean Community (CARICOM⁴) and at the request of the MS, developed the Regional Framework for Achieving Development Resilient to Climate Change in the Caribbean 2009-2015 hereafter referred to as the “Regional Framework”, and its supporting Implementation Plan (IP) 2011-2021 (CCCCC, 2012).

The Regional Framework outlines the Caribbean’s strategy to adapt to and mitigate CC and it contains five strategic elements (SE), and twenty goals (see Appendix I). The IP (2011-2021) identifies priority actions, timeframes, resources and key partners (national and regional) required to achieve the results of the Regional Framework. Both the Regional Framework and

[1] CCVI encapsulates exposure, sensitivity and adaptive capacity indices (50%, 25% and 25% weighting, respectively). Each index comprises unique risk indices (Maplecroft, 2014a).

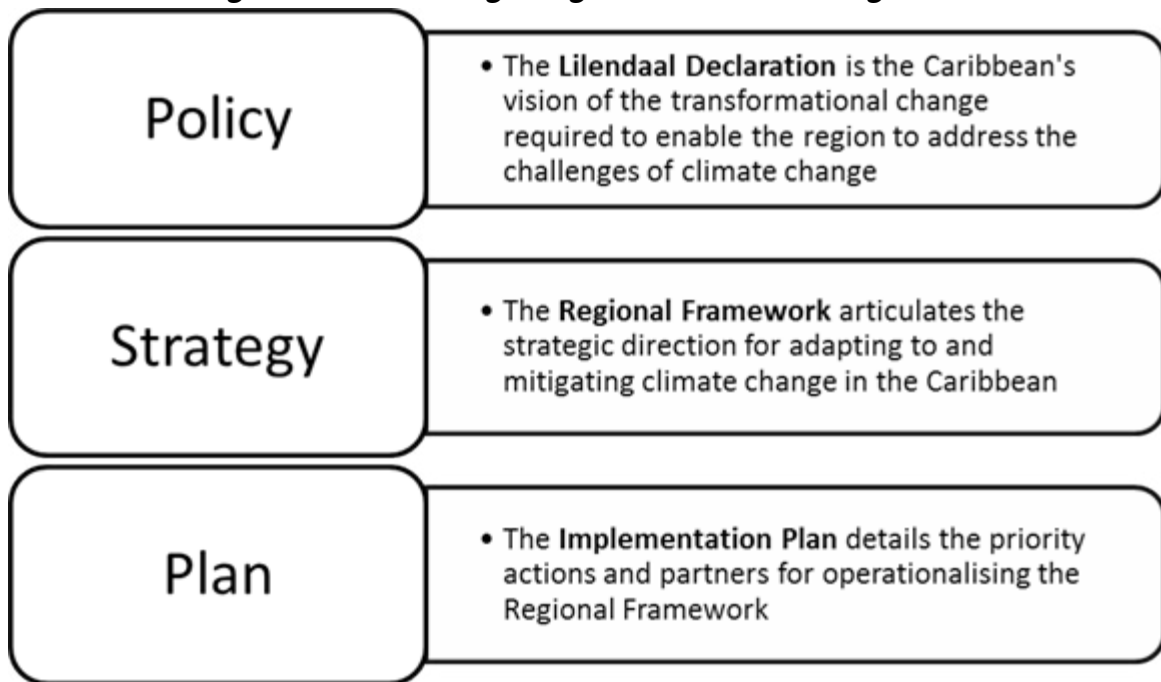
[2] “The AAL is the average expected loss annualized over a long time. It represents the amount that countries would have to set aside each year to cover the cost of future disasters in the absence of insurance or other disaster risk financing mechanisms” (UNISDR 2015: 54).

[3] Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Haiti, Jamaica, Grenada, Guyana, Montserrat, St. Lucia, Suriname, St. Kitts and Nevis, St. Vincent and the Grenadines, and Trinidad and Tobago.

[4] The Treaty of Chaguaramas established the CARICOM in 1973 to promote regional integration across the 15 member states in the Caribbean that signed this treaty (CARICOM, n.d.)

IP were developed following a highly participatory process that included representatives from other regional specialized agencies⁵, MS, non-governmental organizations (NGOs), donors, research and academic institutions (CCCCC, 2012). The Centre is responsible for coordinating the implementation of the Regional Framework and IP (CCCCC, 2012). The relationship between the Liliendaal Declaration, Regional Framework and the IP are depicted in Figure 1.

Figure 1: Frameworks guiding the Caribbean's CC agenda



Source: first author

In an effort to adequately fulfill its coordination role, the Centre in early 2013 embarked on the development of a regional Monitoring and Evaluation Instrument (MEI) to provide updates on the status of implementation of the results of the Regional Framework. The MEI is one of the first of its kind in the Caribbean and its development process is still ongoing. This paper aims at feeding into this process through a diagnosis of its strengths and weaknesses and distilling some improvements that are required to enhance the MEI's objectives of accountability and learning. The underlying rationale for a focus on MEI is multiple: firstly, it covers both climate change adaptation (CCA) and climate change mitigation (CCM) and therefore allowed the assessment of an M&E system that addresses both objectives of the climate change agenda; secondly, the host institution was fully supportive and; thirdly, the first researcher is familiar with the Caribbean region to easily grasp the nuances of the institutional setting that the M&E system operates within. The diagnosis is also timely as the Centre is putting systems in place to achieve accreditation status for the Green Climate Fund and the Adaptation Fund, which requires that a sound M&E system be in place. Direct access to these funding sources can be a game changer for the Caribbean in scaling up CC actions. In this regard, this diagnosis can be instrumental in providing remedial actions for consideration and can also be a useful input into the accreditation process. Lastly, from an international development perspective, given that the

[5] Agencies that serves the CARICOM member states and specializing in other areas such as agriculture, health, disaster management, sustainable energy etc.

Paris Agreement coming out of the twenty-first meeting of the Conference of Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC) calls for continued climate finance directed to developing countries to support adaptation and mitigation efforts, and the need to strengthen transparency and reporting on progress related to these two avenues of climate change (OECD DAC, 2016); this research is considered timely by providing recommendations for the strengthening the M&E platforms for both CCA and CCM in the Caribbean, which is a logical first step towards advancing the requirements of the Paris Agreement 2015.

The diagnosis was guided by a diagnostic checklist (see Rahat and Holvoet, 2016) and draws upon action research implemented by the first author and supervised by the second. A detailed account of the methodology and the limitations encountered are provided in section three. Section 2 synthesizes the existing literature pertaining to M&E for CC with an emphasis on capacities that exist in the Caribbean and considerations for undertaking a diagnosis of a CC M&E system. A qualitative analysis and discussion of findings is provided in section 4 while section 5 concludes and offers supporting policy recommendations.

2. LITERATURE REVIEW

2.1. Global trends in M&E for CC: challenges and progress

The M&E field is well established but is constantly evolving and the CC phenomenon is definitely one of the areas of development that provides impetus for innovation and rethinking of M&E approaches (Bours et al., 2013; Villanueva, 2011). Given that CC actions support either mitigation or adaptation objectives, the M&E approaches utilized vary across these two areas of CC, owing to their differences in M&E challenges.

CCM is aimed at reducing GHG emissions (IPCC, 2007) and therefore M&E for CCM is focused on measuring the impact of mitigation actions/policies on GHG levels. Monitoring is focused on measuring the emission levels, socioeconomic and environmental indicators, whilst evaluation compares the metrics obtained from monitoring relative to reference scenarios and includes rigorous analysis that expands beyond the boundaries of the intervention to assess ‘leakage’⁶ (Lawrence Berkeley National Laboratory, 2000). The key challenges with M&E for CCM are that there are rigorous methodologies for estimating GHG levels per sector and rigid guidelines and procedures need to be met to allow for monitoring, reporting and verification (MRV) of GHG emissions (OECD, 2015). Further, the reference scenarios must be based on business-as-usual (BAU) emission estimates, which can be highly technical exercises given the need to include existing national policies and programs and their effect on emission levels (Wörten, 2013). The latter issue is complicated by a phenomenon called ‘baseline shift’, which is the natural changes in the indicator measurements over time (Wörten, 2013). A flawed reference scenario can lead to incorrect estimation of impacts. An assessment of the MRV systems of 4 large GHG emitters (China, Italy, Germany and the United States of America) have signaled that monitoring is stronger than evaluation owing to the difficulty in attributing changes in emission to mitigation actions when the policy environment is dynamic (Falconer et al., 2012).

On the contrary, CCA relates to measures put in place to cope with on-going climate variability and projected CC (IPCC, 2007). Adaptation can be an outcome or a process (Bours et al., 2013; Villanueva, 2011; Leagnavar et. al., 2015). A key consideration in the process of adaptation is ‘adaptive capacity’, which is the “ability of a system to adapt” (IPCC in Villanueva, 2011:

[6] Unintended effects both positive and negative (Villanueva, 2011).

14) and it leads to the outcome of reduced vulnerability. Adaptive capacity and vulnerability are therefore targets of CCA actions and they are also dynamic, multi-dimensional variables, which mean they are moving targets, giving rise to complications in M&E for CCA (Villanueva, 2011; Bours et al., 2014a). Other challenges are that CC being a long-term phenomenon requires estimating the effectiveness of CCA projects several years after the intervention (Bours et al., 2014a; Dinshaw et al., 2014) and similarly to CCM, baselines for CCA interventions are not static since ecosystems undergo natural changes over time (Bours et al., 2014a; UNDP, 2007). These challenges culminate in the quality and quantity of impact evaluations conducted for CCA interventions being limited (Hedger et al., 2008; Villanueva, 2011; UNFCCC, 2010; Prowse in Sanahuja, 2011). Prowse and Snilstveit (2010) suggests that it could also be due to the high costs of evaluation and the fact that CCA interventions are still in the early stages of implementation for evaluations to be carried out. Further, it has been found that current M&E practices mostly allow for the estimation of adaptation as an outcome, for instance, through the use of static quantitative indicators. This has resulted in limited knowledge about the process of adaptation, which is important in understanding how we are ‘learning to adapt’ (Villanueva, 2011). This, coupled with the fact that most CCA interventions are specific to the local context has resulted in benchmarks or standards for successful adaptation not being established to date (Bours et al., 2014a; Dinshaw et al., 2014; Villanueva, 2011).

The extent to which M&E is undertaken in CC programs is not only attributed to the challenges noted above, it is also a function of the quality of the M&E systems and capacities that exist; therefore the next section explores the level of M&E advancement and capacities in the Caribbean.

2.2. Monitoring and evaluation advancement/capacities in the Caribbean

The extent of the M&E advancement and/or capacities in the Caribbean is not extensively researched; one of the few studies was commissioned by the Inter-American Development Bank (IADB) in 2007 to examine the M&E capacities across 25 countries in Latin America and the Caribbean (LAC) following the Management for Development Results (MfDR⁷) assessment tool. Notable is that one of the five pillars of the MfDR is M&E capacities, which received one of the lower average scores across all countries (1.6 out of a possible 5) (López and Moreno, 2011). López and Moreno (2011) revealed that LAC countries have been setting-up specialized M&E units since the 2000s, and at the time of the research (2007) majority were still in the initial stages of development due to limited institutional development of M&E functions (policies and capacities) and little or no emphasis on monitoring outcome level results. The latter indicates that the shift in the international results agenda, from an emphasis on activities and output to the bigger results (outcomes and impacts) had not taken off in LAC and could be due to the “lack of a modern culture of fact-based accountability” (Mackay, 2006: 4). Similarly, a recent review of CC M&E systems that exist in CARICOM’s MS found that there were “more output level indicators than outcome indicators perhaps reflecting the stage of development the countries are in monitoring CC” (Baastel, 2013a: 12). Further, it was found that there was heterogeneity in the level of development of M&E systems across LAC, spanning a spectrum of good results-based public sector management to systems still governed by patrimonialism and political clientelism (CLAD in López and Moreno, 2011). This dictated the notable differences between the low and high ranked countries: for high ranked countries the evaluation function was

[7] “The index, focused on a results-based public administration, examines five key parts of public policy administration: planning, budgeting, financial management, administration of programs and projects, and monitoring and evaluation” (IADB, 2015:1)

more developed with better feedback mechanisms in place to promote transparency and the use of findings (López and Moreno, 2011).

Findings also indicated that none of the Caribbean countries were ranked 'high' in the MfDR overall index (>3.0 up to 5) or in the top 10 countries for the M&E pillar. This could be explained by the fact that the pioneering countries for the Public Performance Measurement and Evaluation System (PPME), which is an instrument used to institutionalize the MfDR approach, were the non-Caribbean, Latin American countries such as Chile, Colombia and Costa Rica (Ospina and Cunilla, 2011), which are coincidentally in the top 5 countries for the MfDR index. These pioneering PPME countries benefitted from international support since the 1980s in the form of training and technical assistance that allowed significant progress to be recorded (Ospina and Cunilla, 2011; Mackay, 2006).

Interestingly, the study was repeated in 2013 and Kaufmann et al. (2015) found that even though the overall MfDR index showed an improvement by 20%, the M&E pillar showed marginal improvements from 1.6 to 1.9 (out of 5) due to no change in the conduct and use of evaluation across LAC. The marginal change was attributed to the institutionalization of M&E units through appropriate rules and policies by some governments (Kaufmann et al., 2015). Albeit the 2013 study indicates that there are still no Caribbean countries ranked as high performers, there has been a graduation from low to medium performing level, with only 2 CARICOM countries in the lowest tier (in the 2007 assessment there were 5 CARICOM countries in the lowest tier). Several multilateral donors have initiated LAC M&E capacity building programs such as IADB in 2005 (Mackay, 2007), which could have started materializing benefits by the second assessment to account for this shift.

In terms of M&E systems for CC programs in the Caribbean, there are no known comprehensive studies to provide insight on its status of development. But it can be assumed that the challenges noted in the MfDR assessment highlight systemic issues across majority sectors of government. Further, a recent study commissioned by the Centre⁸ found that apart from the low capacities for M&E of CC, majority of the existing data sets for CC M&E frameworks (baselines, indicators, targets) are related to donor funded programs (Baastel, 2013a). This could signal another issue that donors operating in the Caribbean are not using or building national M&E systems but instead creating parallel systems, which is unsurprising since the current trend in the aid effectiveness agenda confirms that donors are slow to align with national M&E systems (Holvoet et al., 2012). It can be reasoned that the existing M&E capacities in LAC revealed by the IADB studies justify why donors, in meeting their requirement to maintain accountability to their constituents, establish parallel systems: a situation that maintains the current institutional weaknesses in countries. Holvoet et al. (2012) refers to this as a 'chicken-and-egg' dilemma.

The foregoing signals that a critical step is to diagnose the quality of existing CC M&E systems so that donors and executing agencies can strategically support capacity building in M&E. However caution is required, although the underlying principles of M&E are applicable to the CC field, the challenges of M&E for CC, as noted earlier, have to be taken on board for M&E system to be effective (Sanahuja, 2011; Bours et al., 2013). Therefore, the diagnosis needs to ensure that the relevant M&E practices are promoted. The next section explores the dimensions of the diagnostic tool to highlight the nuances of M&E for CC.

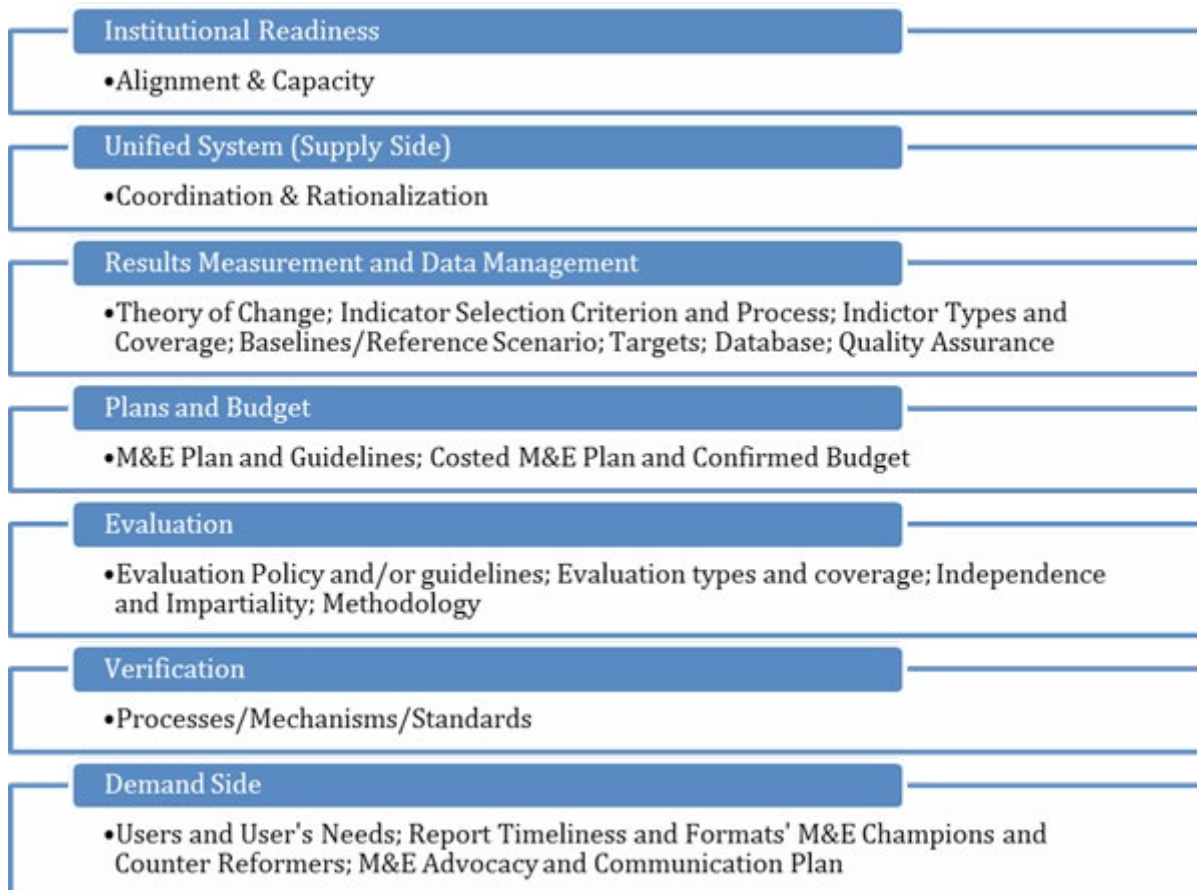
[8] Primarily examined indicators, targets and baselines in existing national CC programs to determine congruence with the regional indicators of the Regional Framework (Baastel, 2013a).

2.3. A Diagnostic Tool to Assess M&E Systems of CC Programsg

The development of the tool is premised on the fundamental requirements of a generic M&E system, which was then overlaid with the most up-to-date M&E practices used for CCA and CCM. Figure 2 presents the 7 dimensions of the diagnostic tool and Appendix III lists the final questions.

The dimension **institutional readiness** is aimed at determining whether the agency is formally mandated to undertake M&E and that it is aligning its staffing and functions, including the recognition of M&E training needs, to deliver on this mandate (Görgens and Kusek, 2009). The second dimension is promoting a **unified M&E system**, which is achieved through rationalization and coordination. Rationalizing the existing M&E activities, databases, and indicators reduce duplication of efforts (Bedi et al., 2006), whilst coordination includes mechanisms to promote inclusiveness of key stakeholders, for example, institutional arrangements such as a coordination unit, technical working group(s) and a high-level committee to provide political oversight. Relevant stakeholders such as line ministries, local government, civil society and statistics office should be engaged (Bedi et al., 2006).

Figure 2: Dimensions and Sub-Components of the Diagnostic Tool



Source: Rahat and Holvoet, 2016:26

[9] For a full account and discussion of the diagnostic tool, see **Rahat S. and Holvoet, N. (2016) "Towards a Diagnostic Tool for Assessing the Monitoring and Evaluation System of Climate Change Programs", IOB Working Paper.**

The third dimension, **results measurement and data management** requires clear articulation of the results causal chain since indicators, baselines and targets are deduced from this. M&E practitioners advocate that the theory of change (ToC) approach is most beneficial for CC programs since it is fluid and flexible to deal with uncertainties (Villanueva, 2011; Leagnavar et. al., 2015; Wörlen, 2013; Bours et al., 2014b). Key considerations for CCA are to include indicators that track adaptation actions and adaptive capacity (Pringle, 2011; Leagnavar et. al., 2015), measure process and outcome level results (Harley et al., 2008; Villanueva, 2011; Leagnavar et. al., 2015) and expand beyond the scope of the program to track maladaptation/leakage pathways (Villanueva, 2011; Leagnavar et. al., 2015). Finally, databases are required to store M&E data and adequate standards or guidelines to ensure quality assurance and reliability of data.

The fourth dimension places emphasis on having **M&E plans, guidelines, and budget** in place. M&E plans/guidelines provide guidance on data treatment (collection, analysis, reporting, quality control, dissemination and transparency) and assignment of roles and responsibilities (Kusek and Rist, 2004). M&E plans for CC programs need to promote constant monitoring that extend beyond the timeframe of programs to detect changing baselines, targets and other uncertainties (Villanueva, 2011).

Dimension five, **evaluation**, specifically promotes the need for an evaluation policy and guidelines with special emphasis on the principles of independence and impartiality to promote credibility and use of the findings. Also important is the use of various types of evaluations to inform decision-making along the program cycle (OECD/DAC, 1991); evaluating ‘maladaptation’ in the case of CCA and ‘leakage’ in the case of CCM (Villanueva, 2011; Leagnavar et. al., 2015; Wörlen, 2013), and the need to measure the effectiveness of the adaptation actions as well as the determinants of adaptive capacity (Villanueva, 2011; Pringle, 2011).

The sixth dimension, **verification**, is primarily applicable to CCM and is the need to verify that the emission reduction did take place through independent actors/mechanisms (Vine and Sathaye, 2000; Lawrence Berkeley National Laboratory, 2000). Verification has been promoted through the MRV framework for CCM, which was articulated over the period 2004 to present and is applicable in three instances: MRV for emissions, which includes GHG inventories and National Communication Preparation; MRV for Nationally Appropriate Mitigation Actions (NAMA), which is specific for developing countries and MRV of financial support which examines “financial flows/technology transfer/capacity building and their impacts” (Pang et al., 2014: 7). The key differences in the MRV systems for developing and developed countries are the verification processes, scope of the reporting requirements and their timeframes.

The final dimension, **demand side**, is equally important as having a unified supply side since the use of M&E information is the *raison d’être* of the M&E system (Görgens and Kusek, 2009; Bedi et al., 2006; Ospina and Cunill, 2011). It is important that strategies to advocate for and communicate about M&E be in place to build an M&E culture that is conducive for the M&E system to be sustained (Görgens and Kusek, 2009; Bedi et al., 2006). An important precursor activity is the identification of M&E champions and counter-reformers since strategies to leverage champions and promote buy-in from resistors must be addressed and prioritized in an advocacy and communication plan.

Finally, **gender considerations** transcend the dimensions of the tool since gender plays an important role in determining the adaptive capacities of individuals and as such, if gender is tracked by M&E systems it can support greater learning on how we are learning to adapt in the context of gender (UNDP, 2010).

3. METHODOLOGY

In order to capture the nuances of the monitoring and evaluation instrument (MEI) developed by the Centre, the application of the diagnostic tool has been premised on action research.

An underlying principle of action research is the engagement of key stakeholders in the diagnosis of problems and solutions (Bryman, 2012), and as such, this is the overarching principle guiding the research. The fieldwork involved a combination of primary and secondary data sources, which were collected and analyzed using a combination of qualitative and quantitative methods. Primary data were collected through semi-structured interviews, which garnered qualitative data that were based on the questions in the M&E diagnostic tool. The reason for using the semi-structured interviews were that they allowed retrieval of rich and deep data and they promoted standardization of the data collection since there was a list of specific questions and dimensions to cover, whilst still providing the researcher with the flexibility in the phrasing and sequencing of the questions. A disputed disadvantage of qualitative methods is that bias/subjectivity can be introduced by the interviewees and researcher (Sumner and Tribe, 2004). In this regard, the first author and main researcher verified statements from interviews with secondary data found in reports/documentation, albeit this was subject to accessibility. Grey literature on M&E for CC was also consulted to provide explanations for some findings and to aid in crafting recommendations.

For the interviews, this research draws on purposeful sampling techniques. As highlighted by Patton in Suri (2011:65), “The logic and power of purposeful sampling lie in selecting information- rich cases for study in depth [...] which one can learn a great deal about issues of central importance to the purpose of the inquiry”. Specifically, criterion¹⁰ and convenience¹¹ sampling were applied in a two-stage process to maximize their benefits. Criteria were established for demand side and supply side actors of the M&E system, whom were identified in collaboration with the key staff at the Centre. While demand side users are those stakeholders that are potential users of M&E information to inform decision- making, the supply side actors support mechanisms/processes in place to effectively provide M&E information (Bedi et al., 2006). Due to the plethora of stakeholders engaged in the implementation of the Regional Framework and IP, it was not feasible to interview all cases; therefore, invitations were sent to as many as possible with final interviews were conducted with those that were readily available and willing (convenient). The main disadvantage of this is that selection bias and sampling errors are easily introduced into the research. More specifically, while attempts were made to convene interviews with research/educational institutions and non-governmental agencies (NGO), we were not successful in accessing them. The inclusion of these actors would particularly have been useful to gain the insight from a wider spectrum of demand and supply side actors of the MEI. Additionally, the MEI is still in its early stages of development: at the time of this research, only 4 (Belize, Jamaica, St. Kitts and Nevis and Antigua and Barbuda) out of 15 of the MS were plugged into the MEI online system and were targeted for interviews since they were aware of the MEI in terms of its purpose, design, utilities and their roles and responsibilities. Not having the full complement of MS plugged into the MEI impacted on the ability of the Centre to initiate/ complete some of the key dimensions of the diagnostic tool, which constrained deeper analysis.

[10] Criterion sampling is “reviewing and studying all cases that meet some predetermined criterion of importance” (Patton in Suri, 2011: 69).

[11] Convenience sampling looks at cases and reports that are easy to access and do not necessarily meet a criterion (Suri, 2011).

The final list of interviewees is detailed at Appendix II. For reasons of political sensitivity, anonymity of interviewees is protected in the discussion of the finding.

Interview information was transcribed and all responses pertaining to a particular sub-component of the checklist were reviewed together and coded to easily identify the relevant information to inform the assignment of scores. Data gathered from secondary data sources also supplemented the information needed to assign scores. All final relevant information was entered into an excel sheet to inform a quantitative assessment that was based on a five-point ordinal scoring system ranging from: weak (0), partially satisfactory (1), satisfactory (2), good (3) to excellent (4). This ordinal scale included qualification criteria per sub-component of each dimension to define the parameters to be met for the assignment of scores between the 0-4 ordinal scales. The advantage of scoring is that it allowed comparability in performance across the key dimensions of the diagnostic tool and the prioritization of follow-up actions for the host institution. The performance level per sub-component and dimension are presented in Appendix III while the findings and analysis section focuses primarily on a qualitative assessment with little to no emphasis on scores to maintain political sensitivity.

Given that a generic checklist was used for this research, the qualification “Not Relevant” was assigned to questions not applicable to this case study and was not taken into account in the calculation of the overall score. Finally, respondent validation¹² was utilized to confirm the grading of the dimensions in the ordinal scale and findings of this diagnostic exercise.

4. FINDINGS AND ANALYSIS

This section of the paper provides a detailed analysis of the findings pertaining to the diagnosis (4.1) and the identification of necessary improvements (4.2).

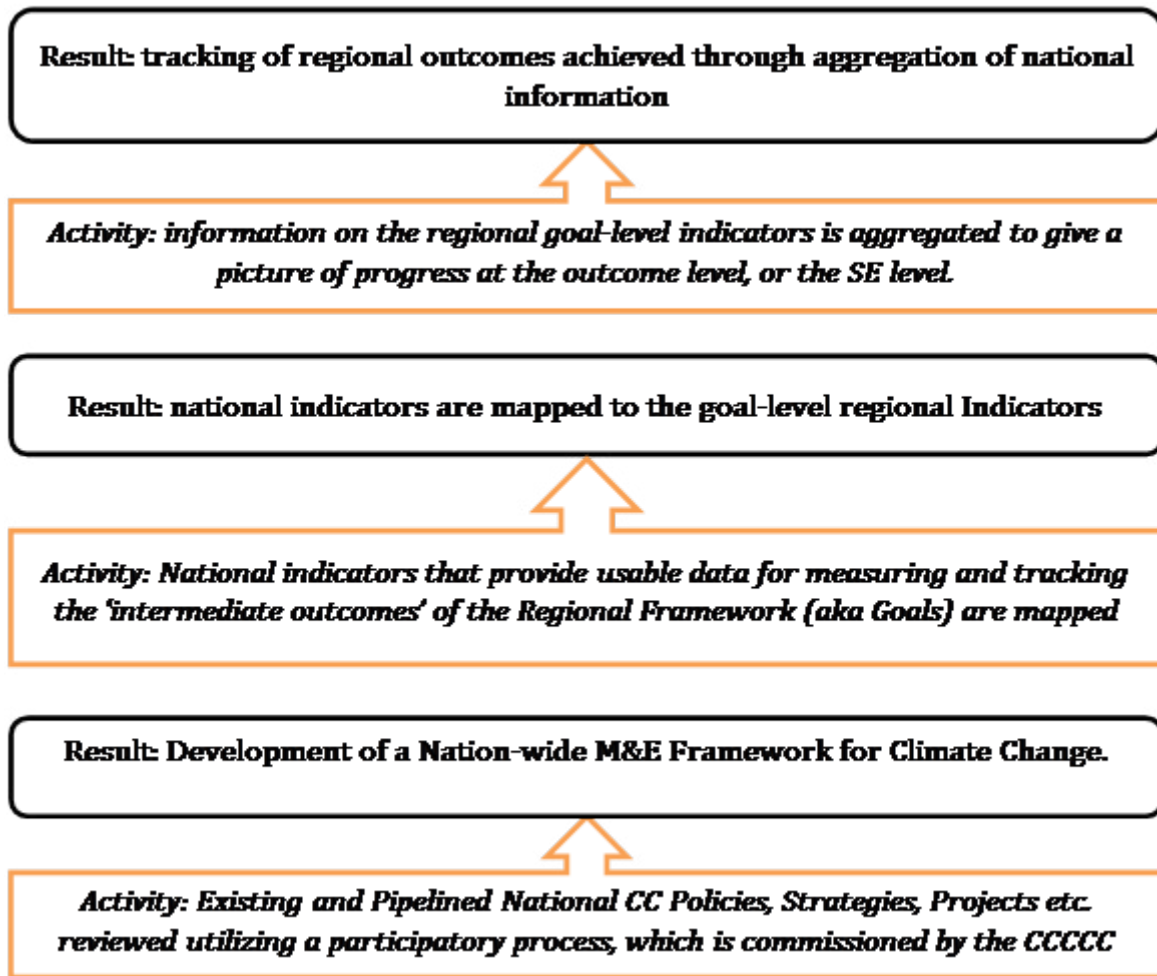
4.1. Strengths and Weaknesses of the MEI

The MEI architecture seeks to promote national ownership, use and sustainability by supporting the member countries in meeting the national reporting needs within the ambit of climate change. To achieve this, the Centre supported the development of national M&E frameworks, which are premised on existing CC projects and/or policies being rolled out in the MS. National M&E frameworks are then used to develop country specific online surveys that will facilitate their annual data collection.

The Regional Framework outlines a Regional Vision, Strategic Elements and Goals for the region. The overall regional vision or the impact level of the Regional Framework from an M&E perspective is “regional society and economy that is resilient to a changing climate” (CCCCC, 2012:10). The SEs can be considered as outcomes and the goals as intermediate outcomes. Indicators have been identified for both the SEs and the goals and are considered as the ‘regional indicators’ for monitoring and evaluating the Regional Framework. To allow aggregation of information, the finalized national indicators in the national M&E frameworks are mapped to goal-level indicators (intermediate outcomes) that they are most aligned with. The goal level indicators are then mapped to the appropriate SE level indicators to allow measurement of outcomes. This process for the ‘rolling-up’ of information is captured in Figure 3.

[12] “Sometimes called member validation, which is a process whereby a researcher provides the people on whom he or she conducted the research with an account of his or her findings” (Bryman, 2012: 391).

Figure 3: Process for rolling-up from National to Regional Levels



Source: First author

This diagnosis determined that the overall performance of the MEI is **partially satisfactory**, which signals that the minimum requirements are in place for majority of the dimensions and there are significant improvements to be made to achieve a sustainable and highly functional M&E system. This level of performance is due to the MEI's early stage of development and the requirement to have all MS plugged into the MEI to complete critical dimensions. The performance level per dimension and sub-components are detailed in Table 1 and Table 2, respectively.

Table 1: Performance Level per Dimension

Dimension	Performance Level
Institutional Readiness	Satisfactory
Unified System	Partially Satisfactory
Results Measurement and Data Management	Partially Satisfactory
Plans, Guidelines and Budget	Weak
Evaluation	Partially Satisfactory
Demand Side	Partially Satisfactory
Verification	Not Relevant
Overall Av. Performance	Partially Satisfactory

The highest performing dimension is institutional readiness since the Centre has the mandate and semblance of an institutional structure in place to support the M&E objectives of the MEI. The lowest performing dimension is plans, guidelines and budget dimension, since they are contingent on the finalization of the outstanding MS's national M&E frameworks. This is a very critical dimension to operationalize an M&E system and is a reflection of the ability of the MEI to become sustainable in the long-term. The verification dimension was not relevant to this case study given the regional nature of the MEI that absolves the Centre the responsibility of verifying emission reduction levels: this is the responsibility of sovereign states. All the other dimensions are rated as partially satisfactory for a combination of reasons.

Table 2: Performance Level per Sub-Component

Dimensions	Sub-components	Performance Level
1. Institutional Readiness	<i>Alignment</i>	<i>Satisfactory</i>
	<i>Capacities</i>	<i>Satisfactory</i>
2. Unified System (Supply Side)	<i>Coordination</i>	<i>Partially Satisfactory</i>
	<i>Rationalization</i>	<i>Partially Satisfactory</i>
3. Results Measurement & Data Management	<i>Theory of Change</i>	<i>Partially Satisfactory</i>
	<i>Indicator Selection Criterion and Process</i>	<i>Satisfactory</i>
	<i>Indicator Types and Coverage</i>	<i>Partially Satisfactory</i>
	<i>Baselines/Reference Scenario</i>	<i>Weak</i>
	<i>Targets</i>	<i>Weak</i>
	<i>Database</i>	<i>Good</i>
	<i>Quality Assurance</i>	<i>Weak</i>
4. Plans & Budget	<i>M&E Plan and Guidelines</i>	<i>Weak</i>
	<i>Costed M&E Work Plan and Confirmed Budgets</i>	<i>Weak</i>
5. Evaluation	<i>Evaluation Policy and/or Guidelines</i>	<i>Partially Satisfactory</i>
	<i>Evaluation Types and Coverage</i>	<i>Partially Satisfactory</i>
	<i>Independence and Impartiality</i>	<i>Satisfactory</i>
	<i>Methodology</i>	<i>Weak</i>
6. Verification	<i>Processes/Mechanisms/Standards</i>	-
7. Demand Side	<i>Users and Users' Needs</i>	<i>Partially Satisfactory</i>
	<i>Use</i>	<i>Weak</i>
	<i>Report Timeliness and Formats</i>	<i>Weak</i>
	<i>M&E Champions and Counter-reformers</i>	<i>Partially Satisfactory</i>

M&E Advocacy and Communication Strategy	Satisfactory
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The unified supply side is strong in the context of MS since it is grounded in the bottom-up approach as detailed in Figure 3, but there is still the need for rationalization with other regional agencies' M&E systems. A coordination mechanism is in place but is limited to a high-level committee represented by mostly demand-side actors. The results measurement and data management dimension is wide and the performance of the sub-components varies between weak to satisfactory (See Table 2). Having a 'good' database established is not sufficient if the theory of change is not well developed due to weak capacities for results based management (RBM), as it is foundational for guiding the development of monitoring (indicators, baselines, targets) and evaluation (questions, methodologies) components. The demand-side was constrained by the level of maturity of the MEI and the M&E culture at the Centre: reports have not been generated by the MEI to assess use and the Centre's communication plan is silent on the MEI including the needs of users and how it can be met. The latter is a result of M&E supporting¹³ roles and responsibilities for the MEI not mainstreamed across the Centre's departments/units, as appropriate. A cross-cutting finding is that gender considerations are not promoted in the MEI since the indicator selection criteria used is not gender sensitive and the Regional Framework and IP do not place emphasis on gender in any of the results.

The ensuing sections examine in detail the findings and analysis pertaining to each dimension. To better follow the discussions, it is recommended that the questions in the diagnostic tool be cross-referenced (see Appendix III).

4.1.1. Institutional Readiness

The researcher approached the sub-components of this dimension primarily in the context of the institutional readiness of the Centre, since they have overarching responsibility for the management of the MEI, and this is the basis of the quantitative assessment. However, a few questions were also posited to MS during interviews and are included in the qualitative discussions below.

Alignment

The Agreement establishing the Center does not explicitly articulate roles and responsibilities for M&E, but the IP, which was endorsed by the Heads of Government of CARICOM member states, explicitly states "the CCCCC will [...] monitor the progress of actions identified in the IP and provide an annual report" (CCCCC, 2012: 113). The Centre has been making gradual strikes towards the institutionalization of M&E functions: M&E responsibilities have been assigned to the Project Development and Management Unit (PDMU) and an M&E Specialist was very recently hired (interviewee). The PDMU is not engaged in the execution of projects, but more so resource mobilization to advance CC projects on behalf of its MS (CCCCC, 2014). The scope of responsibilities of the PDMU with regards to M&E is enshrined in the Centre's manual for Project Monitoring, Review, Reporting and Evaluation (PMRRE), which was also recently completed and endorsed by the Board of Directors in May 2015 (interviewee). The key disad-

[13] Supporting the sustainability of the M&E system through advocacy and public awareness (communication), management of the database (IT related) etc.

vantages of the manual, in the context of alignment, are that the objectives of M&E and the roles and responsibilities of the PDMU in the management of the MEI are not explicit. This is a result of the M&E system for the Centre's program and the MEI being developed in silo, so roles and responsibilities are not being harmonized, and also due to the development of the PMRRE manual internally prior to the hiring of the M&E Specialist. Other notable strengths and weaknesses of the manual are highlighted in section 4.1.5 (evaluation).

However, the Centre envisages that the current M&E practices will be extended to how they manage and maintain the MEI (interviewee). Therefore it is important to examine whether the objectives of the MEI is aligned with the overall M&E practices and policies of the Centre. Literature confirms that the objectives of the MEI are to support the reporting needs at the national and regional levels, and to promote accountability and learning (CCCCC, 2012; Baastel, 2013a), with the latter coinciding with the *raison d'être* of M&E. In terms of deciphering the Centre's M&E objectives, the M&E manual articulates guidelines for both M and E. Given that 100% of the financing for the work of the Centre comes from donors (interviewees), the monitoring guidelines places emphasis on tracking progress with respect to timelines, inputs and outputs for reporting to authorities to trigger approval of payments/continuation (CCCCC, 2014). Also, evaluation guidelines stipulate that evaluation reports to include details on lessons learned for dissemination to MS and regional agencies (CCCCC, 2014). Hence, it can be inferred that the Centre's current M&E guidelines is set up to promote both objectives of M&E.

The foregoing indicates that there is alignment between the MEI objectives and the M&E practices promoted at the Centre. However, caution needs to be taken on board when advancing both objectives.

“Realizing objectives of ‘feedback’ and ‘accountability’ calls for an emphasis on different principles: i.e. accountability demands independency whereas for feedback and lessons learned to be achieved there is a necessary involvement of ‘insiders’. In practice, this often implies a certain degree of trade-off among the realisation of both objectives” (Verbeke and Holvoet, 2006: 8).

Noteworthy is that the technical staff at the Centre are aware of the role of M&E in the implementation of programs, including the Regional Framework and IP due to their participation in regional consultations for the development of the IP and their exposure to donors given the project execution environment at the Centre (interviewee). However, what is absent is a clear understanding of their explicit roles in supporting the MEI since the Centre has not yet fully embraced a change management process¹⁴ that supports the institutionalization of roles and responsibilities for the MEI across the relevant units of the Centre. Issues flagged above such as the absence of roles and responsibilities for the MEI in the manual also reinforce this operational challenge.

In terms of institutional readiness of MS, the interviews confirmed that two (Antigua and Belize) of the three MS's CC units are mandated to undertaken M&E roles and responsibilities for national CC policies and programs. Kaufmann et al. (2015) noted that there is heterogeneity in the stage of development of the legal frameworks to promote M&E across LAC and according to Mackay (2006) and Ospina and Cunill (2011), this can be attributed to the varying levels of awareness, stewardship, capacities and incentives that exist within governments

[14] Change management involves managing the ‘people side’ of change with respect to introducing a new objective/result and includes an institutional readiness assessment, training programs, and resistance management through continuous communication and feedback on the process (Prosci, n.d).

to create a 'whole-of-government' M&E system. The extent of MS institutional readiness needs to be fully assessed since it is a key factor that can affect the level of commitment to supplying data to and using data from the MEI.

Capacity

The gaps in M&E capacities at the Centre are known and strides are being made to address it, for instance, the Centre outsources evaluation due to the limited capacities that currently exist within the PDMU (interviewee). Independent evaluations are beneficial for upholding the independence and impartiality principles and promoting credibility of M&E findings (Mackay, 2007). Further, the Centre has recognized the need for more M&E staff to support the demands of the Centre's internal M&E system and the MEI. Specifically, the Centre is desirous of having internal evaluation capacities to lead ex-post evaluations at timeframes that adequately capture the effects of CCA interventions and not dictated by the timeframes of projects (interviewee). The decision to have in-house evaluation capacities, when or if implemented, can possibly accelerate M&E learning and capacity building at the Centre. Adams (2007) and Lehtonen (2005) indicate that it is the evaluator that gains the most learning from evaluation exercises because they are deployed in the field and have access to all the data, which are synthesized into voluminous evaluation reports that are more than likely not fully utilized by the relevant stakeholders. However, Valadez and Bamberger (1994) caution that the need for Consultants is not completely eradicated given the complexity of CC evaluations and the need to ensure credibility for sensitive evaluation questions, but, having an in-house evaluation expert is advantageous for verifying the work of the consultants and competently interpreting the evaluation reports for promoting the use of the findings by various stakeholders.

In terms of M&E capacities existing in the MS, the recent study commissioned by the Centre confirmed that there are low levels of capacities in terms of specialist skills and funding (Baastel, 2013a). MS interviewed also corroborated this: it was highlighted that national CC offices have limited staff that simultaneously manage the implementation of several international conventions and projects. Hence, staff members have heavy workloads while it is unlikely that additional M&E specialists are hired since other technical expertise is more urgently needed to support their mandate (interviewee). Without sufficient capacities and incentives for M&E existing within MS, the sustainability of the MEI will be compromised given that the current architecture of the MEI is primarily driven by national data. The problem is compounded by the fact that the Centre does not have a concrete plan for addressing M&E training needs internally or within its MS (interviewee). This could be attributed to the fact that the Centre is now simultaneously advancing the development of both arms of their M&E functions (internal and regional), and it is now the opportune time to determine the scope, shape and requirements of these two evolving systems to adequately assess the training needs required to sustain them.

4.1.2. Unified System (Supply Side)

Consolidating the supply side (via rationalization and coordination) to achieve a 'unified M&E system' is particularly important for development programs that have multiple supply side actors (SSA) to reduce duplication of efforts, enhance information flows and promote standardization of data (Bedi et al., 2006).

Rationalization

As alluded to earlier, rationalization is being promoted through the bottom-up approach

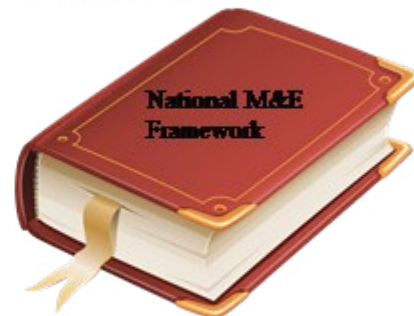
utilized for the elaboration of national M&E frameworks (See Figure 4).

Figure 4: Bottom-up Approach to Rationalization

National CC-related projects and policies currently being implemented in MS



Complete list of national indicators, targets and results being advanced over a two-year period



*Which indicators provide data for the regional indicators?
What are the data sources?
What are the targets?*

Source: first author

A concrete example of rationalization is that the Climate Investment Funds' (CIF) Pilot Program for Climate Resilience (PPCR) is being implemented in approximately six MS and is reflected in their national M&E framework. The PPCR has core indicators that MS must track and fortunately are aligned with some of the SE and goals of the Regional Framework (Baastel, 2013a). This becomes more beneficial in light of the fact that the Centre is now in the process of obtaining accreditation with the CIF and if successful there would be more opportunities for rationalization and by extension, greater relevance and utility of the MEI to MS.

The main limitations are that the scope of rationalization to date is constrained by the number of MS plugged into the MEI, and there is need to rationalize with the work being done by the Centre and other CARICOM specialized organizations working in the MS. In the former case, it is mandatory that the Centre's work be mapped to the MEI since Goal 5, of SE 1, specifically focuses on building the capacity of the Centre to support other regional institutions in the implementation and M&E of the Regional Strategy. The latter case was elucidated based on interviews with a sample of the CARICOM specialized agencies¹⁵ that are members of the Regional Coordinating Committee (RCC) and via literature reviewed, which confirmed that regional agencies have regional strategies that have linkages with the Regional Framework and IP. Notable is that CDEMA has completed a regional M&E framework for its regional strategy, which MS are plugged into, whilst the CRFM and CARPHA still need to develop the M&E system for their regional strategies (interviewees). Further, the CARICOM Secretariat itself has a new regional strategic plan that is aligned with relevant results of the Regional Framework and is now building an M&E system (CARICOM, 2014). This confirms that opportunities for rationalizing information flows/databases may exist as well as for using the MEI to influence the emerging M&E systems for those agencies now embarking on this journey (top-down approach). The available evidence suggests that rationalization with regional specialized institutions has not been advanced to date given the level of maturity of the MEI and most of the emerging M&E

[15] The Caribbean Disaster Emergency Management Agency (CDEMA), Caribbean Regional Fisheries Mechanism (CRFM), Caribbean Public Health Agency (CARPHA).

systems noted above are still being finalized.

This discussion also highlights an unfolding issue for the CARICOM system: the emergence of M&E systems across regional agencies can potentially cause ‘burn out’ for MS that have to supply data to multiple regional M&E systems, which will affect the sustainability of all the regional M&E systems. This supports the notion above that there is need for effective avenues for rationalization at the regional level to be examined.

Coordination

The RCC exists, which is a high-level committee that explicitly includes as its responsibility to “monitor progress in the execution of the Implementation Plan of the Regional Framework [...]” (CCCCC, n.d.: 3). This committee comprises executive level representatives from regional education institutions, key regional specialized institutions and MS are represented by Ministers that chair the three Ministerial Councils of CARICOM¹⁶ (CCCCC, n.d.). The RCC has reserved the right to co-opt civil society and private sector representatives as needed (CCCCC, n.d.) but representatives from Parliament and statistical offices are not included nor are they applicable since the MEI is regional level. The Centre serves as the secretariat for the meetings of this committee, including the financing of the meetings. The researcher was unable to determine how effectively the RCC promotes coordination since there has only been one meeting to date; simply convening meetings of committees do not guarantee that coordination is taking place (Bedi et al., 2006). However, it is expected that the annual meetings will continue to be convened particularly with the operationalization of the MEI (interviewee). Having a committee that includes representatives primarily from the demand side can be seen as a mechanism to maintain their buy-in and support for the MEI. Demand is a precondition for the sustainability of any M&E system and some practitioners even argue that it is more important that supply side (Mackay, 2006).

The main disadvantage is that there is currently no technical committee(s) that engages the SSA; it is important to ensure that the supply side is growing and developing to meet the expectations of the demand side (Mackay, 2006). Given that the MEI is still being developed and the Centre has secured the services of consultants and are using national consultative exercises to develop the MEI, the need for a technical committee might not be immediately apparent. However, given that the IP is dubbed as being a ‘live’ document to be reviewed and updated biennially to maintain its relevance (CCCCC, 2012), the RCC might be too high-level to be engaged in the systematic review processes, plus the national CC focal points are not included in the RCC, and they are the ones that are best placed to inform a review process.

4.1.3. Results Measurement and Data Management

This dimension underscores the core elements to guide data collection and management in an M&E system and key M&E considerations for CC programs start to emerge from this dimension.

Theory of Change (ToC)

The elaboration of the Regional Framework in 2009 and the ensuing IP, in 2011, did not follow a logic model or a clearly articulated ToC approach (interviewees; Baastel, 2013a).

[16] The Council for Trade and Economic Development (COTED), The Council for Foreign and Community Relations (COFCOR) and The Council for Human and Social Development (COHSOD).

López and Moreno (2011) noted that the RBM approach is still relatively new in LAC, and Vogel (2012) indicated that the ToC approach only gained widespread use in the international community from 2008. Therefore it is no surprise that the Regional Framework (developed in 2009) and IP (developed in 2011) did not embrace these results based planning approaches. Further, at the time of articulation of these frameworks the Centre was still in its embryonic stage (the office officially opened in 2005) and there was limited staff and certainly no M&E specialist on board to provide relevant guidance in the development of these policy and planning frameworks to meet M&E needs. As a result, the following key limitations exist that will pose challenges for M&E: there is overlap between the scope of some of the SE and the verbs used in the articulation of SE and goals are mixed in-terms of level of result to be achieved. Further the causal relationship between some of the goals and their SE could not be identified (Baastel, 2013a). These challenges are compounded by the fact that the SE and goals cannot simply be revised without a formal stakeholder review process that culminates with endorsement at the level of CARICOM Heads of Government (Baastel, 2013a).

The Consultants contracted to develop the MEI sought to reinterpret and focus the SE to reduce overlaps and ensure that the level of the result was clear (see Table 3), which proved to be a temporary fix that facilitated the development of the regional indicators and its mapping with national indicators. However, a sound results chain or causal pathway is paramount for the identification of evaluation questions (Rossi et al., 2004) and is critical for assessing the causal effects between outputs and outcomes or outcomes and impacts during evaluations (Bedi et al., 2006).

Table 3: Example of the reinterpretation and focusing of the results

Strategic Element 1, Goal 2	Interpretation and Action
SE1: Mainstream climate change adaptation strategies into national sustainable development agendas Goal 2: Reduce vulnerability to a changing climate	This Goal 2 will focus more on measuring advances in the enabling environment (i.e. plans and planning). EXAMPLE: Jamaica will report on number of policies reviewed to include/capture climate change considerations
OVERLAPS WITH:	
Strategic Element 4	Interpretation and Action
Promote actions to reduce the vulnerability of natural and human systems in CARICOM states to the impacts of a changing climate	This SE will focus more on actual measures that either promote or more immediately or directly address/reduce vulnerability such as building codes and land-use planning, early warning, shelters, infrastructure retrofitting . EXAMPLE: Jamaica will report on “evidence of building code revised” while St. Lucia will report on “number of dwellings/buildings constructed or retrofitted to established standards”

Source: Adopted from Baastel, 2013b: 20

Indicator Selection Criterion and Process

The primary criterion used in the selection of the regional indicators was SMART (specific, measurable, achievable, relevant and time-bound) and this was also found to be the most popular criterion used in the national M&E frameworks, particularly for the national CC projects that were related to donor funded projects (Baastel, 2013a). The SMART criterion is one of the most commonly used criteria in M&E that has its origins since 1981 (Leavangar et al., 2015) and is particularly popular among UN agencies/mechanisms (UNDP, GEF), which make up majority of the donors reflected in national M&E frameworks. The key limitation is that this criterion does not reinforce the importance of gender sensitivity, which is particularly important when monitoring CCA interventions as it plays an important role in determining the adaptive capacities of individuals (UNDP, 2010). As a result, none of the regional indicators have gender considerations reflected, even though a few have scope to include gender disaggregated information, for example: #/% of MS governments with increased amount of trained staff in CCA (SE1; Goal 3; Indicator 7a) and the extent of reduction in CC vulnerability of humans/human systems (SE2; Goal 5; Indicator 8).

It appears that the MS engaged through the development of the national M&E frameworks are more aware of the regional indicators, albeit not extensively, than other partners including donors and members from the RCC. Most of the interviewees, including MS, indicated that they were not aware of the process used for the development of the regional indicators and they could not recall if they were invited to review and comment on any documents. The low level of awareness of the regional indicators and its development process is a consequence of the processes used: a mix of document review of best practices and interviews were utilized (interviewee), which suggests there was limited stakeholder-wide consultation that is normally a good conduit for promoting awareness and buy-in. Further, the bottom-up approach used for rationalization placed emphasis on MS completing nationally relevant indicators to promote ownership, which are then mapped to the regional indicators by the Centre/Consultants. This process negates the need for MS to even be aware of the regional indicators. A unified supply side is dependent on coordination to be effective, which sometimes fails due to limited buy-in by stakeholders during the process of design and development of the M&E system (Bedi et al., 2006; GTZ/BMZ, 2014). Therefore the indicator selection process can affect other dimensions that the functionality of the MEI rests on.

Indicator Types and Coverage

In terms of M&E of CCA, the MEI includes indicators that support tracking of both adaptive capacity and adaptation actions. However, given the level of advancement of CCA in the Caribbean, there are more indicators focused on measuring the extent to which the building of adaptive capacity is taking place. “Building Adaptive Capacity (BAC) involves developing the institutional capacity [...]: gathering and sharing information [...]; creating a supportive institutional framework [...]; creating supportive structures” (Pringle, 2011: 11-12).

It is hard to differentiate between outcome and process indicators given that a ToC does not exist. ToC allows for the clear identification of the series of actions/steps required towards achieving a long-term goal, with assumptions and threshold clearly identified along the way (Bours et al., 2014b). Outcomes and output indicators allow tracking of achievement of targets, whilst the process indicators maintain a pulse on the important processes that support the achievement of an outcome (Leagnavar et al., 2015). With a missing ToC, it is difficult to identify

if the regional indicators relate to a critical milestone, or if it is simply an important process. This can have implications on evaluating how we are learning to adapt (Bours et al., 2013; Villanueva, 2011). Further, there are no impact level indicators, which are important for impact evaluations that are currently high in demand by development agencies to demonstrate value for money and developmental impacts (White and Barbu, n.d.; Leagnavar et al., 2015). The known challenges in undertaking impact evaluations of CC programs could have influenced the delay in setting impact indicators. Not having a clear results chain and corresponding indicators will affect the feasibility and quality of evaluations that can be undertaken (Holvoet et al., 2012; GTZ/BMZ, 2013).

Furthermore, there are qualitative and quantitative indicators present. The strengths are that the qualitative indicators include qualification criteria as illustrated in Table 4, which guides standardization in measurement across countries and reduces subjectivity, and the quantitative indicators are well developed to include an emphasis on percentage where possible to capture the extent of coverage.

Table 4: Qualification Criteria for qualitative indicators

SE#/Goal#/RI#	Criteria	Definition
SE2, Goal 4, RI5. Extent of increased awareness of persons about vulnerable ecosystems and means of protecting them in CARICOM Region	Low	Less than 50% of targeted stakeholders are knowledgeable about vulnerable ecosystems and have implemented plans to protect them.
	Medium	Between 50% and 70% of targeted stakeholders are knowledgeable about vulnerable ecosystems and have implemented plans to protect them.
	High	More than 70% of targeted stakeholders are knowledgeable about vulnerable ecosystems and have implemented plans to protect them.

Source: Adopted from Baastel, 2013c: 51

A limitation is that there is not a good balance/mix of qualitative and quantitative indicators across the goals and SE. There are many more quantitative indicators, which could be due to the rationale postulated by Pringle (2011) that quantitative indicators are easier to aggregate at the regional level than qualitative indicators that call for more detailed information and analysis. However, mixing indicators is beneficial since it is useful for triangulation and gaining deeper insight into nuances to better understand how adaptation took place (Leagnavar et al., 2015).

Finally, whether indicators are wider than the scope of the program to track leakages could not be definitively confirmed, also due to the lack of a ToC. The ToC approach focuses on the 'big picture' and milestones (with indicators) to reach it that are not necessarily outputs or outcomes of a program, thereby providing indicators that can facilitate tracking of leakages (Villanueva, 2011; Leagnavar et al., 2015).

Baselines/Reference Scenarios and Targets

These sub-dimensions are not yet available. The absence of regional baselines is attributed to the stage of development of the MEI and the sequencing of the development process: the immediate priority is to complete the development of national M&E frameworks in the remaining MS, which will provide a global picture of the extent of alignment of national

indicators with the regional indicators. This in itself also presents an opportunity to validate the relevance of the regional indicators before the baseline is completed.

In terms of establishing BAU reference scenarios for the Caribbean, this does not exist for a combination of reasons: there are limited technical capacities to complete the exercise and Small Island Developing States (SIDS) emit less than 1% of GHG (UNEP, 2014), which makes projecting emission levels a low priority. This also signals the region's priorities for MRV, which is discussed more in section 4.1.6. The absence of baselines will prohibit performance monitoring and evaluation of impacts and effectiveness (Kusek and Rist, 2004) for both CCA and CCM actions.

In terms of regional targets, they are dependent on information from all MS since national circumstances dictate which regional priorities will be advanced. Therefore, there are currently no finalized regional targets since all MS are not plugged into the MEI. Kusek and Rist (2004) highlight that target setting is generally a deductive process based on final indicators, baselines and knowledge of the resources available. However, this case study seems to suggest that for M&E at the supranational level that emphasizes a bottom-up approach, the programming decisions of the sovereign country, irrespective of the baseline, drives the target setting exercise. This supports literature from Kusek and Rist (2004) that target setting can be a political process. Finally, given that gender is not reflected in the indicators, it is not envisaged that the regional targets will be gender sensitive since they are linked to indicators.

Database

An online database exists for the MEI that is hosted on the Centre's website and it is linked to an open source database (lime survey) that holds the national surveys. Algorithms aggregate national data (from the lime survey) to the goal level, and then repeat this from the goal to the SE level. The MEI is able to generate national and regional reports: the national reports are essentially an output of the national surveys and the regional reports contain information on the goals and the SE (Baastel, 2013c). Only countries will have access to their own national report but the regional report will be accessible to the primary users including all MS, the Centre, regional organizations, members of the RCC, donors etc. (Baastel, 2013b). The national reports are a value-added of the MEI that can promote greater use and popularity of the MEI among MS and can be an incentive for securing MS as both supply and demand side actors. Ospina and Cunill (2011) demonstrated through case studies that the more functions an M&E system provides, the more it will be utilized.

The MEI database promotes rationalization primarily at the national level. Rationalization in this instance means the "reduction in the number of data platforms" (Bedi et al., 2006: 20). For instance, the Belize National CC Office (NCCO) was mandated in early 2015 to undertake M&E but there is no information technology infrastructure to support M&E needs (interviewee). Given that Belize's national M&E framework is in place, a national online survey will be hosted by the MEI database. Theoretically, Belize NCCO can use this to supplement M&E information storage related to national CC projects thereby increasing the utility, need and support for the MEI. This supports the notion of Bedi et al. (2006) that rationalization is a catalyst for promoting buy-in by SSA. The key limitation is the need for rationalization with databases of the regional institutions noted earlier. If this is advanced, it can reduce the demands of MS CC focal points to supply data since other regional institutions have different national focal points that will be required to supply data to their M&E system that can then be rationalized with the

MEI.

Quality Assurance

Standards/guidelines/procedures have not yet been comprehensively developed to promote standardization of data and quality assurance for M&E needs. Some are built into the MEI lime survey tool which controls the type and format of information that can be entered per question, but this is not enough given the complexity of the MEI. Ensuring quality assurance is linked to credibility of the data: the more credible the data is perceived, the greater the likelihood of its use by decision makers (Görgens and Kusek, 2009; Mackay, 2007). It can also give rise to another chicken-and-egg dilemma where the low quality of the data limits the use of findings, and the low use of findings results in a deterioration in quality (Mackay, 2006).

4.1.4. Plans and Budget

Plans and budget are core requirements that define how the M&E system will operate and function (Görgens and Kusek, 2009).

M&E Plan and Guidelines

A comprehensive M&E plan to manage and maintain the MEI does not currently exist since it is contingent on the finalization of the outstanding MS's national M&E frameworks. The absence of a comprehensive M&E plan will limit the ability of the Centre to have adequate oversight in the management of the MEI, to engage new partnerships in support of the MEI and for guiding future evaluations. On the positive side, it is envisaged that the bottom-up approach used in the design of the MEI will ensure clear linkages between the national M&E plans and the regional M&E plan, which is important for ensuring relevance of the regional M&E plan and as noted in the discussions above, promote buy-in of SSA.

In terms of the frequency of data collection to detect changing CC baselines and targets, whilst the M&E plan is not available to confirm details, literature reviewed indicates that MS will be required to complete their country online surveys annually (Baastel, 2013a). At the regional scale, this frequency of monitoring can be considered satisfactory since it will be unrealistic to expect MS to undertake biannual data collection and anything less. The frequency of data collection is complemented by the fact that national M&E frameworks as currently developed are at maximum 2 years in duration (interviewee), which guarantees that MS reflect on and update their results, targets and baselines, as circumstances dictate. Similarly, the fact that it is a requirement that the Regional Framework and IP be reviewed biennially to maintain the right focus, creates legitimacy for the updating of the regional results and targets as appropriate. It is notable that the MEI reports will be a critical instrument to guide the updating of the national and regional priorities. However, the extent to which the MEI reports can be effective is dependent on the level of analysis of reports, which is discussed in greater detail in section 4.1.5, and the soundness and effectiveness of the communication strategy (see section 4.1.6.). This demonstrates the inter-dependence and inter-linkages of the dimensions of the diagnostic tool.

Costed M&E Work Plan and Confirmed Budget

A costed M&E work plan with confirmed budget support (as a % of the overall costed M&E work plan) was not available to be assessed since they are tied to the completion of the M&E plan. These sub-components are beneficial for guiding the Centre in the programming of

the execution of MEI including the prioritization of actions in view of financial constraints, identification of optimal staffing/technical needs and resource mobilization needs.

4.1.5- Evaluation

Evaluation is critical towards achieving the objectives of learning and accountability (OECD/DAC, 1991), which are the objectives of the MEI.

Evaluation Guidelines

The Centre does not have a standalone evaluation policy, but recall that the Centre has a manual that provides guidance for project M&E, which is envisaged to be extended to the MEI. The manual with respect to evaluation includes definitions of key concepts, promotes the OECD/DAC five criteria for evaluations (relevance, effectiveness, efficiency, impact and sustainability), outlines reporting templates, defines parameters that trigger mid-term and ex-post evaluations, defines considerations for the management of evaluations, monitoring versus evaluation are differentiated, and principles of independence and impartiality are highlighted.

The key limitations are that objectives of M&E, modalities for dissemination of findings and standards and ethical considerations are silent in the manual. These are attributed to the same reasons noted in 4.1.1. : the manual was prepared in-house prior to the hiring of an M&E expert. Further, the extent to which the manual is enforced cannot be determined at the time of the research, since it was only endorsed in May 2015.

Evaluation Types and Coverage

The manual promotes the use of mid-term evaluation and ex-post evaluation. As noted above, the five OECD/DAC criteria are promoted, particularly for ex-post evaluations. The key limitation is that other types of evaluations exist that might be beneficial for evaluating sectors or thematic areas, which can potentially be useful given that the SE have specific areas of focus. This can be a result of the manual being designed to suit projects and not the regional program. However caution should be taken in terms of the types of evaluations that are feasible at the scale of the Regional CC program. For instance, it is not envisaged that program process evaluation would be feasible given the lack of details on how the Regional Framework should be achieved (program organization¹⁷) since it is dependent on the circumstance in the MS and how they choose to approach the achievement of the broad regional level results.

As noted earlier, the absence of a ToC for the Regional Framework will pose significant challenges in undertaking evaluations given that the ‘evaluability’ of the Regional Framework is reduced without a program theory (Holvoet et al., 2012; Rossi et al., 2004). Further, the ability to evaluate the effectiveness and impacts of the CC program in the context of gender will be difficult since the indicators do not collect gender sensitive data. Lastly, the low quality of the evaluation component will negatively impact on the achievement of the ‘learning objective’ of the MEI since evaluation and analysis is the linchpin of learning (OECD/DAC, 1991; Bedi et al., 2006).

Independence and Impartiality

It is a “requirement for impartiality and independence [to] exist at all stages of the

[17] “Assessing program organization requires comparing [...] whether its service delivery and support functions are consistent with program design specifications [...]” (Rossi et al., 2004: 171).

evaluation process, including the planning of the evaluation programme, the formulation of the terms of reference and the selection and approval of evaluation teams” (OECD/DAC, 1991:6). The Centre promotes independence and impartiality through the sub-contracting of evaluations (interviewee) and the PMRRE manual indicates that the PDMU will manage the recruitment process, the review of reports and dissemination of information to users (CCCCC, 2014). The main drawback is that the PDMU is also engaged in resource mobilization, which means they are engaged in the conceptualization and design of new programs, which according to the IEG (2007) can create grounds for bias that can undermine the impartiality objective. Whilst the PDMU is not executing the evaluations, their responsibility for the review of key documentation related to the evaluation process can be the entry points for bias. However, this organizational set-up does facilitate a seamless linkage between evaluation findings and the planning and design of new programs (feedback), and demonstrates how the trade-off and tension in advancing the two objectives of M&E can occur.

Methodology

This is the weakest sub-component of the evaluation dimension: there is no explicit mention of the types of evaluation approaches that will be used for the MEI. But it is not unusual for the details for operationalizing the evaluation dimension to be weaker than the monitoring dimension (Holvoet et al., 2012; Bedi et al., 2006; Mackay, 2007). This issue is amplified for M&E of CC, particularly for CCA, since there are limited examples of evaluation of adaptation and it is largely still in its theoretical phase (GTZ/BMZ, 2014; Hedger et al., 2008; Villanueva, 2011; UNFCCC, 2010; Prowse in Sanahuja, 2011).

4.1.6. Verification

The MEI is not designed nor is it required to execute the verification processes of mitigation actions, therefore this dimension of the checklist is “not relevant” to this case study. The sovereign MS manages verification of their emission levels, biennial update reports (BUR) or mitigation actions related to the Clean Development Mechanism (CDM) and/or Reducing Emissions from Deforestation and Forest Degradation (REDD+). The MEI is supranational in nature; therefore, it is more positioned to monitor the extent to which verification is undertaken including the capacities and incentives for promoting verification in the Caribbean, which will be explored in this section of the paper to provide value added to the research.

The Regional Framework has two strategic elements that are targeted towards mitigation: “Strategic Element 3: promote actions to reduce GHG emissions through fossil fuel reduction and conservation and switching to renewable and cleaner energy sources [and] Strategic Element 5: promote actions to derive social, economic, and environmental benefits from the prudent management of standing forests in CARICOM states” (CCCCC, 2012:48). The indicators for these SE (see Appendix I) reveals that the MEI is focused on monitoring the (i) extent of investments in forest protection, energy efficiency and renewable energy projects, (ii) technical capacities available in the region to develop the renewable energy sector (iii) rate of development and implementation of policies, legislations and regulations to advance SE 3 and SE5 and (iv) number and types of projects related to the two SE. These indicators are beneficial for informing the ranking of countries receiving investments/financial inflows and with capacities to advance mitigation actions and will also support the information needs that were noted by donors during interviews. There is one interesting indicator in the IP (SE3, Goal3, Indicator

6): “extent of MS capacity to establish institutional frameworks and national mechanisms for carbon stocks measurement and monitoring of forestry activities for measurement, reporting and verification” (Baastel, 2013b: 52), which looks specifically at national capacities in the context of the REDD+ MRV requirements. An immediate observable limitation is that national capacities to undertake the other types of MRVs are not being monitored at the regional level.

In terms of scope and incentives for developing MRVs at the national level, all the MS that were interviewed indicated that mitigation activities through the UNFCCC mechanism are still in the initial stages: no CDM projects implemented to date but REDD+ initiatives have gained more traction even though they still in the initial start-up stages with the MRV process soon to start. This is expected since the CDM mechanism has a rigorous approval mechanism in place (interviewees) and UNREDD provides direct or complementary support for the design and execution of national projects (UNREDD, 2015). On the contrary, private sector investments in mitigation projects are on the rise to enhance efficiency and effectiveness of businesses and industries (interviewees). The World Bank’s Vice President for LAC, Jorge Familiar noted:

“[E]nergy security is at the top of the agenda for Caribbean leaders [...] with the average cost of electricity four times higher than in rich nations such as the United States [resulting in energy costs being] one of the key bottlenecks for unleashing economic growth and prosperity in the region” (Familiar, 2015:1).

Further, interviewees have reported that verification (including M&E) is considered an additional expense and therefore not included in the budget for these private sector investments.

Verification also plays a key role in the issuance of carbon credits. However, the issue is compounded by the fact that the currently low costs per ton of carbon¹⁸ do not provide incentives for investment in verification of mitigation actions. Therefore M&E of the effects of mitigation activities are not undertaken frequently except when the MS is preparing the national communication (NC), which is every four years. But in this case, verification is not mandatory since NC is not subject to International Consultation and Analysis (ICA) verification in developing countries (UNFCCC, 2014). Only if the MS is preparing a BUR will the ICA be required.

The aforementioned indicates that the current environment does not create incentives for the development of MRV systems in the Caribbean, particularly for those mitigation actions not channeled through the UNFCCC mechanisms. This can raise issues in the context of M&E such as the existence of leakages not being adequately tracked, best practices not being documented through evaluation and programs cannot be adjusted based on real-time findings. These current practices will also set the Caribbean behind in fulfilling the requirements in relation to the current international dialogue taking place in the climate change arena. For instance, the recently 2015 Paris Agreement that was adopted at the twenty-first meeting of the COP specifically calls for “a common system of transparency, reporting by all countries subject to review and by which all countries agree to track progress, in particular on actions to curb emissions” (OECD DAC, 2016: 1).

[18] EU carbon credit price fell from €18 (2011) to €5 (2014) per tonne and for the CDM mechanism from €0.61 in 2013 to €0.35 in 2014 (Lang, 2014).

4.1.7. Demand Side

Use of M&E information is considered the heart or the bull's eye of the M&E system given that "low levels of demand for monitoring information also tend to impact on the supply of adequate information" (Bedi et al., 2006: xx).

Users' Needs

The following intended users of the MEI have been explicitly identified in documents: the RCC, CCCCC, MS and regional partners from NGOs, private sector and specialized agencies (Baastel, 2013a; Baastel, 2013b). Unfortunately all users' needs have not been explicitly identified to date since the communications unit at the Centre has not been engaged in strategizing information dissemination approaches. The root cause of this was mentioned early in the analysis, that is, there has not been an agency-wide mainstreaming of responsibilities in sustaining the MEI. Use is closely linked to ownership: when users' have a sense of ownership with regards to an M&E system, they will want to use it and/or recognize the importance of supplying information (Kusek and Rist, 2004; Bedi et al., 2006; Mackay, 2007). The most efficient way of creating incentives for the use of the MEI is to ensure that the needs of the various groups of stakeholders are known and that measures have been put in place to satisfy their needs (Kusek and Rist, 2004; GTZ/BMZ, 2013). However, caution needs to be taken since "different potential users of M&E information have different needs, and it is difficult for an M&E system to satisfy all of them" (Lopez-Acevedo et al., 2012).

To add value to this research, the researcher utilized the interviews as an opportunity to gain insight into the needs of users and it became very clear that the needs vary: donors are interested in the amount of resources going towards the result areas, the sources of the resources and the level of progress made to allow them to better coordinate and harmonize among themselves. For regional specialized agencies, given that they work in sectors or thematic areas, they want clear guidance on progress and gaps in achieving the results by sectors/thematic areas. MS to a larger extent are satisfied with the national reports that will be generated for reasons discussed in sections 4.1.1 (rationalization) and 4.1.3 (database). The varying stakeholders' interests can have implications on the emphasis placed on data needs, which will affect how the supply side is developed and the focus of evaluations of the MEI. This is one of the key reasons why the development of the MEI including the operational elements such as the M&E and communication plans should be a participatory process (GTZ/BMZ, 2013).

Use

The extent to which the MEI information is actually used could not be assessed at this time given that the MEI has not generated reports to date. However, inferences can be made: the national reports might be highly utilized to support other national reporting requirements, but it is less clear to what extent the regional report might be used given that there are no details on how the annual monitoring information will be analyzed (to compare with users' needs) and the source of funding for evaluations can impact on use since the needs of donors might be prioritized (Bedi et al., 2006).

The extent to which the MEI information is packaged into a format that meets the needs of users can also be inferred given that the researcher had an opportunity to view the online reporting template generated by the MEI coupled with the insights into the users' needs. Based on this combination of information, it can be inferred that there will be the need for re-

packaging of the information to meet the needs of some users, primarily for donors and specialized regional agencies.

Reporting Timeliness and Formats

No regional reports have been generated to date and no national reports were completed as well since the 4 MS currently plugged into the system are still gathering information to finalize their baselines. Reporting timelines should coincide with entry-points for decision-making and planning processes thereby promoting the use of M&E reports/information (Valadez and Bamberger, 1994; Bedi et al., 2006). Whilst no reports have been generated to confirm their timeliness and effects on use, interviews with MS highlighted that since the national M&E frameworks are based on existing national programs (nationally and donor funded), the timing for the completion of national surveys need to precede the deadlines for project reports and/or national progress reports. This would create incentives for MS to supply data to the MEI since the national reports that are generated can be used as a source of comprehensive information to supplement other national reporting needs. None of the literature reviewed stipulated concrete timeframes for national surveys to be completed; therefore the above needs to be taken into consideration when agreeing on timeframes with each MS. This suggests that timeframes for national surveys will vary from country to country, which can have implications for the time-frame for the regional report. Ideally, the regional report should be prepared when all MS have input data to have the most up-to-date regional picture on progress, but this needs to be balanced with the timeframes for the regional report e.g. meetings of the RCC, CARICOM Heads of Government, Donor Coordination Groups etc..

The extent to which gender information will be reflected in reports will be limited and is attributed to earlier discussions on the level of gender sensitivity of the indicators and targets. This oversight could also be attributed to the fact that the Liliendaal Declaration and the Regional Framework, which collectively define the scope of results to be achieved, do not place any emphasis on gender.

M&E Champions and Counter-Reformers

Identifying M&E champions and counter-reformers/resistors are critical for the strengthening of the demand side (Kusek and Rist, 2004; Mackay, 2007). Champions in high levels of government can promote relevant policies and leadership to create an enabling environment, and in the same token, counter-reformers can prevent the process from moving along (Kusek and Rist, 2004).

The Centre views the MS CC focal points as M&E champions since a bottom-up approach is being utilized for the development of the MEI. That is, there is national relevance in supporting the MEI given that it also supports national reporting on progress (interviewee). This was corroborated to some extent through interviews with MS currently plugged into the MEI, particularly Antigua and Belize, where M&E is a requirement of these offices and interviewees expressed that the national CC offices are advocates for M&E. However St. Kitts and Nevis noted that M&E is not a priority for the CC unit since annual reporting is not mandatory for their office (interviewee). This difference is credited to the fact that there is heterogeneity in the maturity of M&E systems across the Caribbean as noted earlier. M&E practitioners see government demand for M&E as another “chicken and egg problem: a lack of government demand for M&E because of lack of understanding of M&E and what it can provide; lack of understanding

because of lack of experience with it; and lack of experience because of weak demand” (Mackay, 2006:5). Studies also indicate that some LAC countries are still governed on a system of patronage rather than on merit, and will be slow to move towards performance management systems (Lacoviello and Pulido in Kaufmann et al., 2015). Therefore the assumption that all MS are advocates for M&E is not 100% reliable and the foregoing also highlights that the degree to which counter-reformers exists within MS is not fully known. The latter could be explained by the fact that most national CC office are now in the process of developing their M&E functions and their level of awareness of advocates and resisters is either not known as yet or it could also be one of the sensitive questions of the diagnostic tool since MS might not want to openly identify resisters to M&E for political reasons.

Advocacy and Communication Strategy

The Centre has a Communications Unit comprising two (2) staff members and a well-developed communication strategy that has as its goal “to foster an informed Caribbean Community that is empowered to make responsible decisions and act on them to mitigate and adapt to CC, while boosting awareness and understanding of the regional climate agenda” (CCCCC, 2015: 2). The latter part of the goal statement clearly creates a space for the inclusion of findings from the MEI system, and the Communications Unit confirmed the practicality of doing this. Notable advantages of the Centre’s communication strategy are that efforts are made to explicitly identify the different targets audiences (who), the relevant messages (what), the modality of communicating the information/messages (how) and timeframes (when). It is also remarkable to note that the communication strategies also include M&E components to assess the effectiveness and impact of the communication strategy.

The foregoing indicates that the technical capacities, good practices and mandate already exist for the sound execution of the communication strategy, but there is still need for the communications unit to have explicit mandate to promote the outputs of the MEI and build awareness of its development process to adequately advance the objectives of accountability and learning. As noted in earlier sections, it became apparent during interviews with different units at the Centre that their roles and responsibilities in the advancement of the MEI are unclear due to the development of the MEI in silo. Further, the ‘advocacy (for M&E)’ dimension of the strategy does not exist, which is highly important to ensure that resisters within the M&E system targeted for education and awareness on the value of M&E (and the MEI) to build the supply and demand sides (Mackay, 2006; Görgens and Kusek, 2009).

4.2. MEI Improvements Required

The benefits of the diagnosis materialize in this section of the paper, whereby objective suggestions for improvements are provided to keep the MEI evolution process on track towards becoming a highly functional and sustainable system. The combination of quantitative and qualitative assessment allowed for the identification of ‘quick wins’, medium and long-term initiatives. Generally, quick wins are those components for which the institutional infrastructure is already in place but there is just need for refocusing or expanding. Medium to long-term improvements are more guided by the increasing order of performance levels and what is considered a logical sequence to allow the MEI to meet its objectives of learning and accountability.

In terms of **quick wins**, the Centre needs to fully embrace a change management process that allows the mainstreaming of roles and responsibilities for the MEI across the relevant units of the agency. A good starting point is to update the PMRRE Manual to explicitly

state the objectives of M&E to be advanced. It is implied that both accountability and learning will be promoted and in this regard there will be the need to also emphasize how the potential tensions between these two objectives will be addressed (Holvoet et al., 2012). Secondly, the manual needs to be updated to include roles and responsibilities of the Centre related to the MEI and to strengthen the evaluation sections to define standards, ethical considerations and to leverage the benefits of more types of evaluation such as ex-ante evaluation, impact evaluations and outcome evaluations. The latter might be more applicable given the challenges with impact evaluations for CC programs. Different evaluation modalities should also be promoted: joint donor evaluations knowing that there will be multiple donors supporting similar sectors and synthesis evaluation or systematic reviews given that there will be independent evaluations around similar topics.

It is urgent that the Centre's communication strategy be expanded to include activities that promote awareness of the MEI as well as building awareness of M&E (advocacy). A relook at the ToC, following a participatory process is also in order and given that a review of the Regional Framework is outstanding, this should be feasible for the short-term. Further a more participatory approach in building the MEI is required, which can be achieved in a cost-effective and time efficient manner if a technical committee was established, that is supported by sub-committees, if necessary. The technical committee should comprise representation from the MS, key regional specialized agencies, relevant development partners and the importance of civil society participation cannot be understated. Civil society can play a critical role in stimulating debates that reflect a grass root lens (Bedi et al., 2006) and they are also useful conduits for the dissemination of information (Mackay, 2007). Ideally, the M&E experts from these agencies should be on the technical committee since they should be removed from implementation of programs and will reduce bias. Cognizance is given to the fact that in MS there might not be M&E specialists for reasons noted in the analysis. Therefore, a critical role for the PDMU is to ensure that objectivity and transparency are promoted when using the technical committee in support of evaluations. During interviews the lead researcher raised the issue of establishing a technical committee to test the willingness of MS and positive feedback were obtained since no other mechanism is in place to facilitate this exchange of information among MS (horizontal coordination) (interviewees). A final consideration for the short-term is to prioritize linking the work of the Centre with the regional indicators to strengthen rationalization.

With regards to *medium-term* actions, the quantitative assessment highlights that plans and budget is the weakest dimension. The M&E plan is not considered 'comprehensive' until all the MS (and regional agencies) are plugged into the MEI. However, the M&E plan (including targets and baselines), work-plan and budget can be developed in a phased approach as more MS and partners plug into the MEI. Further, once the ToC is updated, the evaluation components (questions, criteria, methodologies etc.) can be elaborated in full, with support from the newly established technical committee.

Funding is a key factor for sustainability of the MEI and since the management and oversight for the MEI is one of the core functions of the Centre, it is suggested that specific funding be mobilized to sustain the operations of the MEI. Cost sharing with projects is unsustainable given a fundamental requirement of a CC M&E system is to ensure continuous monitoring beyond the scope and timeframe of projects. The M&E plan and costed work plan provide the necessary information to guide resource mobilization efforts.

The results measurement and data management dimension was one of four dimen-

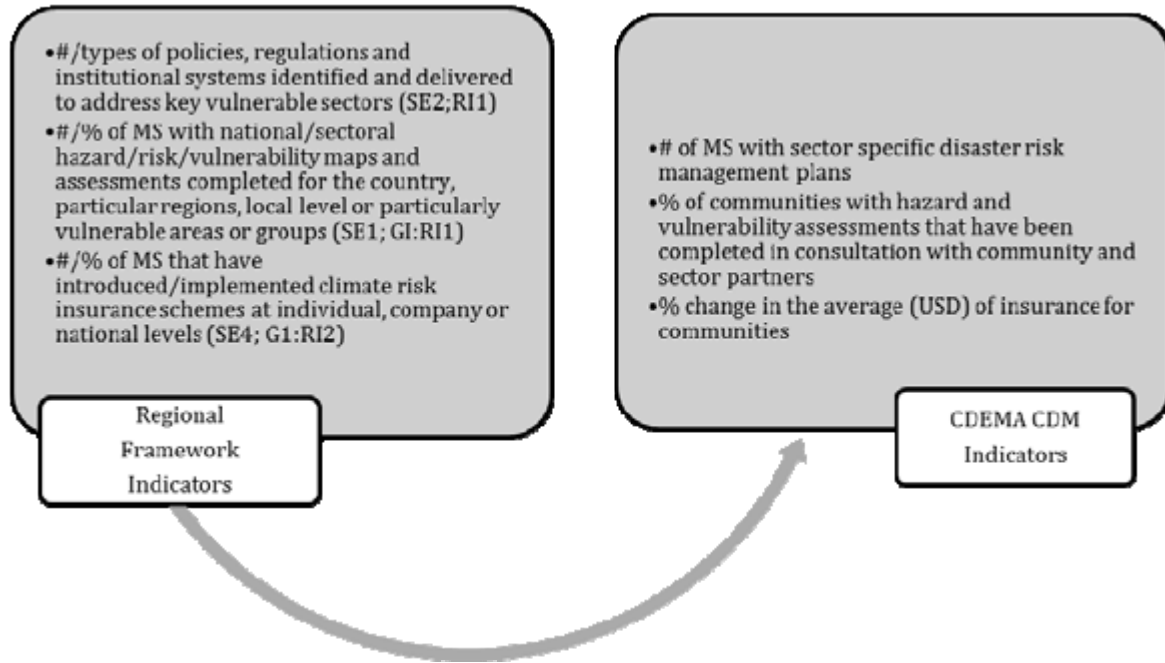
sions performing at partially satisfactory level. The sub-components of this dimension comprise the foundation for facilitating M&E and are therefore prioritized for the medium term. Once the ToC is updated, there is need to relook at all indicators either using the same indicator selection criterion (SMART) and then applying a gender lens, or a new criterion that is gender sensitive can be used all together (see Leagnavar et al., 2015 for details on indicator criteria). Impact level indicators still need to be defined and with the ToC, it might also be possible to include indicators wider than the scope of the program to track leakages. It is also important to have a more balanced composition of qualitative and quantitative indicators. Of importance for this dimension is to also complete guidelines for promoting quality assurance to ensure that the data is reliable¹⁹, for example, guidelines for verification of national data and data collection during evaluations.

In terms of **long-term** actions, as the MEI system matures and M&E roles and responsibilities become more engrained in the national CC offices, there will be the need to identify M&E champions and counter reformers. This information should be utilized in the advocacy and communication strategy. Also, a capacity development plan is needed and will be a large undertaking given the scope of the supply and demand side. Given that there is heterogeneity in the M&E capacities that exist in the LAC, there is need for an assessment of the M&E institutional capacities within MS's national CC offices so that targeted and thoughtful training can be delivered. Mackay (2007) urges that training should provide both an overview of both M and E as well as how to use the M&E information so as to sustain both supply and demand. Further, training is needed to enhance the internal capacity of the Centre, and if possible, regional agencies to strengthen partnerships and supply of information for the MEI.

Figure 5 provides a snapshot of a few potential linkages between a regional specialized agency's (CDEMA) regional indicators and the MEI to illustrate the value of rationalizing indicators with regional agencies. It is encouraged that a similar but more comprehensive exercise be undertaken with other regional agencies such as CRFM, CARICOM, Caribbean Tourism Organization (CTO) and CDEMA. Engaging more agencies in the supply of information to the MEI would (i) allow triangulation of information and increase the validity of the findings, (ii) reduce the burden on the national CC focal points and (iii) promote awareness of the MEI and possibly use/demand of the data by these regional agencies. Consequently, as more regional agencies plug into the system there will be the need for updating of the database configurations and the M&E plan.

[19] Data is, measured, collected and analyzed in a consistent manner (Görgens and Kusek, 2009).

Figure 5: Linkages between the regional indicators used by CCCCC and CDEMA



Source: first author

5. CONCLUSIONS AND RECOMMENDATIONS

This action research sought to assess the M&E system in place for the Caribbean CC Program, which, from a development and academic perspective is highly relevant given the implications of CC on development goals in the Caribbean. It is also a useful contribution to the literature given the early stage of development of M&E for CC and the limited research in the area of M&E in the Caribbean.

The overall finding is that more is in place to support monitoring than evaluation which is anticipated given that the MEI is still in its embryonic stages and the sequencing of developing M&E systems starts with an emphasis on monitoring to build the foundation for evaluation (Holvoet et al., 2012). Also, whilst the objectives of the MEI is to promote accountability and learning, the current donor driven environment in MS and at the Centre can create incentives for accountability at the expense of learning (GTZ/BMZ, 2014). Further, the MEI uses aggregate indicators and evaluations can elucidate distinctions between performance levels across MS making it more politically challenging than monitoring, creating more incentives for accountability at the expense of learning (Holvoet et al., 2012).

The diagnosis tool was able to highlight notable strengths, which can also be considered good practices for other M&E systems operating at the supranational level. Findings suggest that investing in a bottom-up approach encourages a unified supply side through the rationalization of indicators and information flows, and can secure buy-in, ownership and ultimately use. Ownership and use are also enhanced through the ability of the database to generate national and regional reports. A current practice that can undermine buy-in are the semi-transparent and semi-consultative processes used in the development of the regional indicators and the MEI at large, but perhaps once annual regional reporting commences there will be greater awareness of the MEI. Hence, a balance of rationalization, awareness and multi-utility of the MEI needs to be sustained to promote buy-in and use.

The downfall of the bottom-up approach is that it is time-intensive and given the timing of this diagnosis, resulted in key dimensions still unavailable such as the M&E plans and there was not extensive evidence to assess use (demand side). These are two of the most critical aspects that provide a proxy of the level of performance/success of an M&E system (Holvoet et al., 2012; Ospina and Cunill, 2011) and therefore it is understandable that the overall performance of the MEI is only partially satisfactory. The research also determined that there is scope for expanding rationalization with other regional agencies in the CARICOM system. Without rationalization across regional agencies there will be fatigue at the MS level that will challenge the sustainability of the MEI as well as other regional M&E systems. This case study also corroborated literature that having a theory of change in place is a linchpin to guide sound development of M&E components such as various types of indicators and evaluation questions, which proved to be an underlying limitation of the MEI.

The foregoing strengths and weaknesses emerging from the qualitative and quantitative assessment allowed for the identification of enhancements needed in the short, medium and long term, which in itself is a demonstrated utility of the diagnostic tool. Generally speaking, enhancements are needed in every dimension, with the most important starting point related to elaborating a ToC, an M&E plan and updating the Centre's M&E manual: all of which should be supported by an established technical M&E committee. It is also paramount for the Centre to initiate a change management process that supports the institutionalization of M&E roles and responsibilities for the MEI across the relevant units.

Besides identifying the MEI's strengths and weaknesses, the application of the diagnostic tool also brought to light interesting findings in terms of M&E systems operating at supranational levels. Some aspects of the tool such as the verification dimension and the role for Parliament were not relevant at the supranational level, which seems to imply that some of the core requirements for a CCM M&E and generic M&E system shift at various scales of M&E (local, national, supranational). Interestingly, the case study highlighted that target setting at the supranational level is not primarily driven by the baseline (and existing resources), but more so by the aggregation of national priorities which is a function of a political process. The research also suggests that the types of evaluations in relation to the stages of the program cycle might not be entirely applicable at the supranational level. Notable is that program process evaluation may not be feasible given the absence of a detailed and specific program organization for the Regional Framework and the unlikelihood of this as a requirement. This can have implications for the quality of impact evaluation since process evaluation provides the complementary contextual information for understanding the effects on the quality of the services executed on the impacts (Rossi et al., 2004).

A notable discovery is that although management of verification processes is not the responsibility of the MEI, the evidence suggests that there are almost no incentives to promote M&E of mitigation actions outside of the UNFCCC system in the Caribbean. This can result in limited evaluations to detect leakages and document best practices for mitigation programs, both of which culminate in the inability to adjust mitigation programs based on real-time findings. This situation is more than likely applicable to SIDS in general since the UNFCCC provisions are the same for this geographic grouping, their contribution to GHG is minimal and capacity levels are similar.

Apart from highlighting the unique variations of M&E systems operating at the supranational level, this analysis also raised some initial feedback on the M&E diagnostic tool itself. The main finding is that the tool was applicable to a large extent to supranational M&E systems, but should be able to be applied to project and national level CC programs with minor adjustments. See Rahat and Holvoet (2016) for an extensive discussion on the strengths and weaknesses of the application of the diagnostic tool to this case study, as well as recommendations.

In summary, the research was successful in answering the research questions and highlights issues requiring further action. In this regard, the following recommendations are put forward:

A top-down approach should complement the bottom-up approach to strengthen the MEI. This should involve looking to international best practices that are consistently being innovated for M&E of CC and using the MEI to influence how the other CARICOM regional agencies shape their M&E systems to strengthen opportunities for seamless rationalization. For instance, regional indicators can be adopted when it is pragmatic to do so.

It is strongly suggested to have routine diagnosis of the MEI to allow exploration of key questions: what is working well, what is not, why this is so and what is required. This will facilitate mid-course realignments of the MEI to keep it on track in achieving both of its objectives and documentation of lessons learned for sharing with other regional specialized agencies.

As the MEI matures and more stakeholders come on board it would also be interesting to gain deeper insight into the supply and demand side actors and incentives driving the system. It would be particularly beneficial to examine the extent of the role of civil society in the

supply and demand side for supranational M&E systems versus national M&E systems. The latter is well documented and deliberated in the literature.

The CARICOM Secretariat needs to issue a policy statement on the M&E objectives, roles and responsibilities within the CARICOM system (its MS and regional institutions) and the importance of harmonization and rationalization in the interest of optimizing regional and national resources. This can be supported by a study of the M&E systems existing in regional specialized agencies to identify gaps, best practices and opportunities for harmonization and rationalization. The study can also support the development of an incentive scheme comprising carrot, sticks and sermons²⁰ that promote M&E in the Caribbean Community.

Donors should utilize the findings from the periodic assessment of the MEI, the assessment of national CC offices' institutional capacities and the CARICOM regional agencies' assessment to guide a program of capacity building for M&E in the Caribbean. These are stepping stones towards reducing parallel systems and supporting the principles of the Paris Declaration on aid effectiveness.

An M&E network or community of practice is needed for the Caribbean to promote research, awareness and capacity building in M&E. Partnerships can be promoted with key regional educational institutions such as the University of the West Indies that currently has a Masters of Science in Project Management and Evaluation and M&E courses in the Faculty of Social Sciences.

Incentives for MRVs in the Caribbean need to be strongly promoted. Given that most of the private investments in mitigation are linked to the energy sector, the Caribbean Centre for Renewable Energy and Energy Efficiency (CREEE) is best poised to advance this dialogue. Whilst CREEE is now in its establishment phase and was endorsed in July 2015 by CARICOM Heads (CREEE, 2015), it is recommended that the institutionalization process includes roles and responsibilities for promoting MRVs given that the CARICOM energy policy, which will guide the mandate of CREEE, speaks to *inter alia*: the setting of regional and national targets for GHG emission, education and awareness on GHG emission reduction and mobilization of resources to advance GHG reduction strategies. These are all entry points for MRV systems.

[20] Carrots are mechanisms to encourage M&E; sticks are penalties and sermons are high-level endorsements for M&E (Mackay, 2007).

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APPENDIX I- RESULTS AND INDICATORS OF THE REGIONAL FRAMEWORK

SE1: Mainstream climate change adaptation strategies into the sustainable development agendas of the CARICOM MS

I1: Number/% of MS with climate change integrated into sustainable development policies, plans, strategies

I2: Number/% of MS with enhanced national capacity (human, institutional and/or financial) for climate change adaptation and/or to address vulnerability/risk

Goal 1: Assess the vulnerability and risks associated with a changing climate.	Goal 2: Reduce vulnerability to a changing climate.	Goal 3: Effectively access and utilise resources to reduce vulnerability to a changing climate.	Goal 4: Build a society that is more informed about and resilient to a changing climate.	Goal 5: Build the CCCCC's capacity to support the implementation of the Regional Framework Strategy	Goal 6: Reduce the Region's Carbon Footprint through the promotion of energy efficiency measures
RI1: Number/% of MS with national/sectoral hazard/risk/vulnerability maps and assessments completed for the country, particular regions, local level or particularly vulnerable areas or groups	RI4: Number/% of MS with climate change adaptation policies/plans/ strategies (national, regional, local, including vulnerable areas)	RI6: Number/% of MS accessing available international funding for climate change programming	RI11: Number/% of MS that implemented climate change impacts and/or climate change adaptation and resilience awareness raising campaigns at the national and local levels	Indicators to be confirmed	Merged with SE3
RI2: Number of MS with demonstrated monitoring, GIS and/or modeling capacity	RI5: Number/% of MS with national, sectoral or local policies, plans, strategies and/or related processes that integrate the results of HRVAs	RI7a: Number/% of MS governments with increased amount of trained staff in climate change adaptation	RI12: Number/% of MS developing/ implementing climate change impacts and/or climate change adaptation and resilience education material and programmes in schools		
RI3: Number of MS with adequate/improved data storage, sharing and use		RI7b: Number/% of MS with improved community/local level capacity for climate change adaptation			
		RI8: Number/% of MS with an established multi-sectoral National platform/mechanism for coordination on climate change planning and decision making			
		RI9: Number/% of MS including climate change in national, regional, sectoral or ministry/agency (or other) budgets			
		RI10: Number/% of MS with an established and resourced climate change unit/department.			

SE2: Promote the implementation of specific adaptation measures to address key vulnerabilities in the region

I1: Number/types of policies, regulations and institutional systems identified and delivered to address key vulnerable sectors: water supply, coastal and marine infrastructure, tourism, coastal and marine ecosystems, and human health

I2: Number/types of specific adaptation measures implemented in key vulnerable sectors (e.g. water supply, coastal and marine infrastructure, tourism, coastal and marine ecosystems, and human health) CARICOM MS

Goal 1: Promote the adoption of measures and disseminate information that would make water supply systems resilient to climate-induced damage.	Goal 2: Promote the implementation of measures to reduce climate impacts on coastal and marine infrastructure.	Goal 3: Promote the adoption of measures and dissemination of information that would adapt tourism activities to climate impacts.	Goal 4: Promote sound conservation practices in coastal and marine ecosystems to shelter these resources from climate-induced damage.	Goal 5: Promote the adoption of sound practices and measures to prevent and/or reduce climate-induced health impacts in the community.
RI1: Number of MS adopting effective systems of Integrated Water Resource Management	RI2: Number of legislative and regulatory measures adopted by MS to protect new coastal zone infrastructure from damage due to projected impacts of climate change	RI4: Number of regional tourism industry activities promoting adoption of plans for adaptation to impacts of climate change, including on sustainable use of water resources and DRM.	RI5: Extent of Increased awareness of vulnerable ecosystems and means of protecting them in CARICOM region.	RI7: Progress of CARICOM - supported research and programme development on connections between climate change and health in region.
	RI3: Number of physical measures taken by MS for direct protection of vulnerable coastal infrastructure		RI6: Extent of reduction of climate change vulnerability of terrestrial and marine natural systems (coastal and marine ecosystems - coral biome, coastal mangroves and wetlands; forests) across the region.	RI8: Extent of reduction in climate change vulnerability of humans/human systems (water supply, vector-borne diseases, heat stroke) in the region through implementing of targeted programme

SE3: Promote actions to reduce GHG emissions through fossil fuel reduction and conservation, and switching to renewable and cleaner energy sources

I1: Evidence that CARICOM MS have assessed the feasibility of the various types of renewable energy resources and are utilising them as alternatives to fossil fuels

I2: Evidence that CARICOM MS are undertaking actions at all levels towards energy efficiency and energy conservation to reduce GHG/carbon emissions

I3: Evidence that financing is assured for energy efficiency, waste-to-energy and renewable energy projects and programmes implementation

Goal 1: Promote the use of renewable energy resource	Goal 2: Support the assessment of wind potential to supply electric power in CARICOM states.	Goal 3: Support the development of innovative financing mechanisms for the deployment of solar water heaters	Goal 4: Assess the feasibility of converting waste into energy in MS	Goal 5: Assess the economic viability of environmental impact of shore base ocean thermal energy conversion plants	Goal 6 (of SE1): Reduce the region's carbon footprint through the promotion of energy efficiency measures.
RI1: Percentage of energy that comes from renewable and clean energy sources in respective CARICOM MS	RI5: Feasibility for harnessing and supplying hydro, wind, solar, other types of renewable energy resources is assessed in CARICOM MS	Linked to Goal 1. Captured by RI2.	Forms part of Goal 1	Forms part of Goal 1	RI7: Evidence that legislation and regulations, policies and plans, and institutional systems have been developed and implemented
RI2: Number of financing mechanisms, concessions, risk guarantees available and accessible for renewable energy	RI6: Evidence that a pool of technical resources is available across CARICOM MS to support the development and sustainability of the renewables sector				RI8: Number of energy efficiency projects (pilot, demonstration, ESCO and other) implemented by CARICOM MS
RI3: Total investments (\$) in renewable energy sector across CARICOM MS					RI9: Number of financing mechanisms, concessions, risk guarantees available and accessible for energy efficiency
RI4: Number of renewable energy programmes/projects implemented by CARICOM MS					RI10: Evidence of reduced or avoided GHG emissions in targeted sectors (construction/building, transportation) the CARICOM region as a result of energy efficiency and energy conservation
					RI11: Evidence that CARICOM MS have spear-headed efforts to promote and increase awareness at all levels about energy efficiency, energy conservation, reducing emissions from GHG

SE4: Promote actions to reduce the vulnerability of natural and human systems in CARICOM states to the impacts of a changing climate

I1: Number/% of MS promoting or implementing measures to address vulnerability/risk

RI1: Number/% of MS with /adequate/improved building codes, land-use planning, or regulations.	RI2: Number/% of MS that have introduced implemented climate risk insurance schemes at individual, company or national levels	RI3: Number/% of MS adopting new/improved technologies at national, sectoral, business or community/individual level for addressing climate change	RI4: Number/% of MS who have undertaken structural strengthening retrofitting for (critical) infrastructure
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SE5: Promote actions to derive social, economic, and environmental benefits from the prudent management of standing forests in CARICOM States

I1: Number and types of policies, regulations and institutional systems in place that promote comprehensive sustainable forest management at an operational scale

I2: Number and types of actions implemented to derive social, economic, environmental benefits, and/or other benefits through the prudent management of forests in MS

Goal 1: Promote the adoption of best practices for sustainable forest management	Goal 2: Engage in negotiations with international partners to mobilize resources for the protection of standing forests.	Goal 3: Undertake research aimed at improving current methodologies for estimating carbon sequestration rates in tropical forests.
RI1: Extent of capacity to devise and implement sustainable forest management plans in MS (or #/% of MS with forests under sustainable forest management plans)	RI3: Amount of new investment in MS to implement standing forests protection measures	RI5: Extent to which MS are utilizing the latest methodologies for estimating tropical forest carbon sequestration
RI2: Total forest land area in MS	RI4: Number of new investment plans and/or strategies in place to facilitate engagement with international partners on the protection of standing forests in MS	RI6: Extent of MS capacity to establish institutional frameworks and national mechanisms for carbon stocks measurement and monitoring of forestry activities for measurement, reporting and verification

APPENDIX II- LIST OF INTERVIEWEES

The table below details the list of interviewees that invitations were sent to and status of confirmation. **All of the stakeholders were considered supply and demand side users of the MEI, except donors, that saw themselves mostly as users of the MEI information.** The Staff at the Centre were interviewed on the dimensions of the tool that fit within their portfolio of work, for example: the IT unit staff were interviewed on the ins and out of the database, the Communications unit were interviewed on the advocacy and communication strategy etc.

Member States	
Antigua and Barbuda: Ms. Ruleta Camacho-Thomas, Deputy Chief Environmental Officer. Ministry of Health and the Environment	Confirmed
Belize: Ms. Ann Josephine Gordon, Climate Change Coordinator	Confirmed
Jamaica: Mr. Albert Daley, Principal Director, Climate Change Division, Ministry of Water, Land, Environment and Climate Change	Not Confirmed
St. Kitts and Nevis: Ms. June Hughes, Senior Environmental Officer, Department of Physical Planning and Environment	Confirmed
Regional Specialized Agencies/RCC Members	
Mr. Milton Haughton, Executive Director, Caribbean Regional Fisheries Mechanism, HQ in Belize	Confirmed
Dr. James Hospedales, Executive Director, Caribbean Public Health Agency, HQ in Trinidad and Tobago	Confirmed
Mr. Ronald Jackson, Executive Director, Caribbean Disaster Emergency Management Agency, HQ in Barbados	Confirmed
Dr. Leslie Simpson, Representative, Caribbean Agriculture Research Institute, HQ in Jamaica	Not Confirmed
Dr. David Farrell, Principal, Caribbean Institute for Meteorology and Hydrology, HQ in Barbados	Not Confirmed
Dr. Paulette Bynoe, Director, School of Earth and Environmental Sciences, University of Guyana	Not Confirmed
Dr. John Charlery, Lecturer, Department of Computer Science, Mathematics and Physics, University of the West Indies	Not Confirmed
Ms. Cheryl Dixon, Coordinator Environmental Sustainability, Caribbean Development Bank, HQ in Barbados	Not Confirmed
Donors	
Mr. Andrea Janoha, Programme Manager for Climate Change, Delegation of the European Union to Barbados and the Eastern Caribbean States, HQ in Barbados	Confirmed
Ms. Simone Banister, Climate Change Advisor, DFID Caribbean, HQ in Barbados	Confirmed
Staff at the Centre	
Dr. Ulric Trotz, Deputy Executive Director and Science Advisor	Confirmed
Dr. Mark Bynoe, Sr. Resource Economist/Head of PDMU	Confirmed
Mr. Keith Nichols, Project Development Specialist	Confirmed
Mr. Harrison Cooper, IT Administrator, Info & Comm. Unit	Confirmed
Mr. Albert Gilharry, It Software Developer	Confirmed
Mr. Carlos Fuller, Int'l & Regional Liaison Officer	Confirmed
Mr. Tyrone Hall, Communications Specialist	Confirmed
Ms. Sharon Lindo, Policy Advisor	Confirmed
Mr. Henrick Personn, Renewable Energy Expert	Confirmed
Ms. Ethlyn Valladares, Administrator, HR & Admin. Unit	Confirmed

APPENDIX III - QUANTITATIVE ASSESSMENT OF THE MEI

About the Tool:

The Tool comprises 7 dimensions, 23 sub-components and 45 questions for guiding an assessment of an M&E system that is specific for climate change programs. The questions will be scored against a five-point scoring system - weak (0), partially satisfactory (1), satisfactory (2), good (3) or excellent (4). This will allow comparability in performance across the key dimensions of the diagnostic tool. The sixth column of the tool provides additional guidance for scoring of subcomponents so as to reduce subjectivity in scoring. This should increase the ability of the tool to be replicated in the future to track the progress in the development of an M&E system.

Sub-Component	Questions	Findings on Performance Level	Score	Qualification Criteria for Performance	Qualification Notes
1. INSTITUTIONAL READINESS					
1.1 Alignment	1.1.1 Is the organization mandated (legally or through a formal mechanism) to monitor and evaluate climate change actions?	The IP document as endorsed by CARICOM heads of government mandates the Centre to undertake M&E functions	2	0= none of 1.1.1-1.1.4 fulfilled 1= any 1 of the 4 areas(1.1.1-1.1.4) are fulfilled 2= any 2 of the 4 areas are fulfilled 3= any 3 of the 4 areas are fulfilled 4= 1.1.1 to 1.1.4 are fulfilled	General comment: If one of the questions are not fully satisfied then it should not be considered as fulfilled; the notes should capture the level of progress for those dimensions only partially fulfilled.
	1.1.2 Are M&E roles and responsibilities explicitly assigned to staff/units?	M&E responsibilities have now been assigned to the Project Development and Management Unit (PDMU) at the Centre and an M&E Specialist was very recently hired (interviewee)			<u>Formal mechanisms</u> to include through high level committees providing policy advice to the agency
	1.1.3 Are the key technical officers clear on the relevance of M&E in the implementation of the CC program? Are they clear of their M&E supporting roles, if any?	Based on interviews with technical staff, it is apparent that they have a high level of awareness of the role of M&E in the implementation of programs, including the Regional Framework and IP. What is absent is a clear understanding of their explicit roles in supporting the MEI since a lacking ingredient is an agency-wide recognition of the need to embrace a change management process			1.1.1-1.1.4 are considered to have equal weighting therefore an increase in any combination of them results in an increase in the performance level.
	1.1.4 Is the objective of the M&E system clear/explicit and are the practices and location of the M&E unit/staff ideal to promote the M&E objectives?	Objectives of the MEI are clear: to promote accountability and learning. The PDMU is set up to support these objectives however, the role of the centre in supporting the MEI needs to be explicitly in the M&E manual that guides the M&E roles and responsibilities of the PDMU. This dimension is not considered fulfilled since the PDMU needs to confirm its roles and functions to support the objectives of the MEI.			The main objectives of M&E systems are to promote accountability and/or learning (OECD/DAC, 1991)
1.2 Capacity	1.2.1 Are the gaps in the M&E capacities of the organization known and is there a plan in place to address the gaps?	M&E capacities at the Centre are known. Efforts will be made to expand the PDMU's M&E technical capacities, including the inclusion of skills for undertaking evaluations But, besides having plans to expand the PDMU to include technical experts in M&E, there is no concrete plan for addressing M&E training needs internally or within its MS	2	0= capacity gaps not known and no plan in place 1= capacity gaps known but no plan in place 2= capacity gaps known and draft plan in place, but not implemented to date 3= capacity gaps known, final plan in place and implementation initiated 4= capacity gaps known, plan in place and implementation well underway	Specialized skill for monitoring GHG emission is also a requirement. M&E capacity building plan can include hiring specialized staff and/or, training of existing staff to supplement needs Draft plan= needs to be updated/finalized based on capacity assessments or a rapid assessment approach Final plan=designed based on assessments to reflect the true M&E needs
Dimension Av. Score			2		

2. UNIFIED SYSTEM (SUPPLY SIDE)					
2.1 Rationalization	2.1.1 Have efforts been taken to rationalize databases, indicators, information flows, roles and responsibilities and reporting requirements among the supply side actors and with other development agendas?	To guide the development of the MEI, the Centre first commissioned an in-depth review and analysis of M&E instruments existing in its MS to identify opportunities for rationalizing and harmonizing indicators, targets, baselines, information sources, flows and reporting requirements. The main limitations noted by the researcher are that rationalization of the MEI indicators with the projects being executed by the Centre and other CARICOM specialized organizations working in the MS still needs to be undertaken. Confirmed SSA = 15MS, Centre, regional specialized agencies such as CDEMA, CARPHA, CRFM, CARICOM. To date only the 4MS plugged into the systems have been able to benefit from rationalization.	1	0= no rationalization efforts 1= rationalization with <=25% of supply side actors (SSA) and development agendas (optional) 2=rationalization with 26-50% of SSA and significant development agendas 3=rationalization with 51-75% and significant development agendas 4=rationalization with 76-100% SSA and significant development agendas	“Rationalization may include the termination of activities that are not central to the implementation of the PRS, the consolidation of activities duplicated by various agencies, the adoption of common definitions for all actors in the system, a reduction in the number of data platforms used in the country, and so on” Bedi et al., 2006: 20. Rationalization of MRVs for National Communications and BURs are also important to keep an eye on. The # of SSA can be identified in M&E plans and/or documentation on the M&E system. The Likert scale assumes that more rationalization= more buy-in, commitment and sustainability of the M&E system

2.2 Coordination	2.2.1 Is there a functioning high-level M&E committee that provides political oversight?	The RCC exists, which is a high-level committee that explicitly includes as its responsibility to “monitor progress in the execution of the Implementation Plan of the Regional Framework [...]” (CCCCC, n.d. b: 3). The researcher was unable to determine how effectively the RCC promotes coordination since there has only been one meeting of this committee to date; simply convening meetings of committees do not guarantee that coordination is taking place (Bedi et al., 2006).	1	0= no coordination committees exist 1= a coordination committee exists but it is not functional 2= a coordination committee exists and is functional 3 = coordination committees at the policy and technical levels exist, are functional, have a dedicated coordination unit but only include some stakeholders 4= coordination committees at the policy and technical levels exist, are highly functional, have a dedicated coordination unit and engage a wide cross section of stakeholders	This sub-component focuses on the types of committees that exist rather than the # of committees that exist since this is context specific. The main types of committees that should exist include a high level and technical committees with a coordination unit (Bedi et al., 2006). Functional mean that meetings are taking place and their purposes are being fulfilled eg. They are promoting harmonization and coordination.
	2.2.2 Are there technical committees to support indicator development, design and standardization of data collection tools and analysis of data for CCA and CCM components of the CC program?	The main disadvantage is that there is currently no technical committee to support indicator development, design and standardization of data collection tools and analysis of data related to the MEI.			
	2.2.3 Is there a coordination unit to support the various committees?	The Centre is the coordination unit			
	2.2.4 Does the membership of existing committees include representatives from civil society, parliament, women’s and men’s groups, line ministries, and statistical office?	Representatives from Parliament and statistical offices are not included in this committee nor are they applicable for this case study since the MEI is regional level			
Dimension Av. Score			1		

3. RESULTS MEASUREMENT AND DATA MANAGEMENT					
3.1 Theory of Change	3.1.1 Is a theory of change elaborated for the CC program and was it developed using a participatory approach?	The elaboration of the Regional Framework in 2009 and the ensuing IP, in 2011, did not follow a logic model or a clearly articulated theory of change approach (interviewee; Baastel, 2013a).	1	0= no ToC exists 1= a basic resemblance of a ToC exists 2 = a ToC exists but was not developed following a participatory process 3 = a TOC exists and was based on some level of stakeholder participatory 4 = a well-articulated ToC exists with clear assumptions, thresholds and causal pathways are wide enough to allow tracking of maladaptation practices/leakages and it followed a highly participatory process	A common dimension of M&E for CCA and CCM is the importance of monitoring and evaluating ‘maladaptation’ in the case of CCA and ‘leakage’ in the case of CCM. There is growing consensus that using the theory of change (ToC) approaches is useful for framing evaluation questions that expand beyond the scope of the program to track leakages/maladaptation practices (Villanueva, 2011; Leagnarar and Bours, 20154; Wörlens, 2013)

3.2 Indicator Selection Criterion and Process	3.2.1 What criterion is used for the indicators selection process and does it promote gender sensitivity and gender-disaggregation of data (where applicable)?	The primary criterion used in the selection of the regional indicators is SMART (specific, measurable, achievable, relevant and time-bound) and this was also found to be the most popular criterion used in the national M&E frameworks, particularly for the components related to donor funded projects (Baastel, 2013a). The key limitation is that this criterion does not reinforce the importance of gender sensitivity, which is particularly important when monitoring CCA interventions. As a result, none of the regional indicators have gender considerations reflected, even though a few have scope to include gender disaggregated information	2	0= no criterion used 1= a criterion used but not consistently applied, no emphasis on gender and very limited engagement of stakeholders 2= a criterion consistently applied, but it has no emphasis on gender and only some stakeholders engaged 3= a criterion consistently applied that places emphasis on gender and stakeholders were engaged but 1 or 2 key groups were not consulted (Eg. civil society, private sector etc.) 4= a criterion consistently applied that places emphasis on gender and there was a highly participatory process with almost all stakeholder groupings represented	Criterion selected needs to actively apply a gender lens to the indicators. A listing of the key stakeholder groupings that have a role to play in the delivery of the program or are beneficiaries needs to be identified
	3.2.2 Is the indicator development a participatory process?	Reports indicate that the process used for the development of the regional indicators comprised "extensive documentation review and interviews"(Baastel, 2013b: 32). However, based on interviews undertaken for this research, it appears that the MS engaged through the development of the national M&E frameworks are more aware of the regional indicators than other partners including donors and members from the RCC.			
3.3 Indicator Types and Coverage	3.3.1 For the CCA component of the program: are indicators included that facilitate M&E of adaptive capacity and adaptation actions?	The MEI includes indicators that support tracking of both adaptive capacity and adaptation actions. However, given the level of advancement of CCA in the Caribbean, there are more indicators focused on measuring the extent to which the building of adaptive capacity is taking place.	1	0= no indicators developed 1= 1 of 4 areas fulfilled 2= 2 of 4 areas fulfilled 3= 3 of 4 areas fulfilled 4= all 4 areas fulfilled	General comment at 1.1 applies.

	3.3.2 Are the indicators wider than the scope of the program to track leakages and maladaptation practices?	Whether indicators are wider than the scope of the program to track leakages and maladaptation practices could not be definitively confirmed, which is also due to the lack of a ToC			
	3.3.3 Is there a good mix of qualitative and quantitative indicators?	There are qualitative and quantitative indicators but there is not a good balance/mix of qualitative and quantitative indicators for the SEs and across the goals that make up an SE. There are many more quantitative indicators than qualitative.			
	3.3.4 Is there process, output, outcome and impact level indicators	The regional indicators are at the goal and SE level, but it is hard to differentiate between outcome and process indicators given that a ToC does not exist. Therefore, it is difficult to identify if the regional indicator relates to a critical milestone in the ToC, or if it is simply an important process. Further, there are no impact level indicators identified			

3.4 Baselines/ Reference Scenarios	3.4.1 Do baselines exist for all indicators?	This sub-dimension is not yet available and could not be assessed. In terms of reference scenarios for BAU emission for the Caribbean, this does not exist due to a combination of reasons: there are limited technical capacities to complete the exercise and Small Island Developing States (SIDS) emit less than 1% of GHG (UNEP, 2014), which makes projecting emission levels a priority for MS.	o	0= no baselines currently documented 1= baselines exist for some indicators (>50%) but are not reviewed periodically or informed by appropriate BAU scenarios (optional) 2= baselines exist for more indicators (between 50-70%) but are not reviewed periodically or informed by appropriate BAU scenarios (optional) 3= baselines exist for majority indicators (71-90%) and are reviewed periodically or informed by appropriate BAU scenarios (optional) 4= baselines exist for all indicators and are reviewed periodically or informed by appropriate BAU scenarios	Baselines for CCA interventions are not static since ecosystems undergo natural changes over time (Bours et al., 2014; UNDP, 2007).
	3.4.2 Are baselines for CCA actions reviewed periodically in view of monitoring data?				
	3.4.3 Are reference scenarios for CCM actions established based on appropriate BAU scenarios?				

3.5 Targets	3.5.1 Do results-based (performance) targets exist for process, output and outcome level results and do they reflect gender concerns (as appropriate)?	This sub-dimension is not yet available and could not be assessed. The regional targets are dependent on information from all MS since national circumstances dictate which regional priorities will be advanced.	o	0= no targets established 1= some targets exist, but no emphasis on gender, if applicable 2= some targets exist, with emphasis on gender, if applicable 3= majority of targets exists, with emphasis on gender and they are routinely updated 4= all targets exist with emphasis on gender (as appropriate) and are routinely updated	"Most targets are set annually, but some could be set quarterly. Others could be set for longer periods. However, setting targets more than three to four years forward is not advisable. There are too many unknowns and risks with respect to resources and inputs to try to project target performance beyond three to four years. In short, be realistic when setting targets" (Kusek and Rist, 2004: 92)
	3.5.2 Are targets updated based on improved climate projects and findings from monitoring data?	Given that gender is not reflected in the indicators, it is not envisaged that the regional targets will be gender sensitive since they are linked to indicators.			
3.6 Database	3.6.1 Is there a database platform?	An online database exists for the MEI that is hosted on the Centre's website	3	0= no database exists 1= a database platform exists but it is not accessible by SSA and it does not promote rationalization 2= a database platform exists that is accessible by some SSA and it promotes rationalization 3= a database platform exists that is accessible by majority SSA and it promotes rationalization 4= a database platform exists that is accessible by all SSA and strongly promotes rationalization	Rationalization here means that the database is able to pull information from other database sources OR, the database is sufficiently comprehensive enough to supplement needs of other agencies so that they do not require an additional database
	3.6.2 Is it accessible by SSA?	The regional report will be accessible to the primary users' including all MS, the Centre, regional organizations, members of the RCC, donors etc.			
	3.6.3 Does it promote rationalization of databases/platforms?	The MEI promotes rationalization primarily at the national level. There is room and opportunity to enhance rationalization through M&E partnerships with other regional institutions			

3.7 Quality assurance	3.7.1 Do standards or guidelines exist to promote standardization of data and quality assurance?	Standards or guidelines are not explicitly developed to promote standardization of data and quality assurance, but to some extent it is built into the MEI; for instance, the lime survey tool which hosts the national surveys controls the type and format of information that can be entered per question. However, this is not enough given the complexity of the MEI managing data from suppliers.	o	0= no standards/guidelines exists 1= standards exist but they are not enforced 2= standards exist but they are enforced in an ad hoc manner 3= standards exist and are enforced but there is room for improving on the standards 4= well developed and comprehensive standards exists that are promoted/enforced	These are procedures and guidelines that maintain integrity of data from point of collection to analysis for both monitoring and evaluation needs. Emphasis in scoring should be given to the level of enforcement. E.g there can be comprehensive standards with zero enforcement = 1
Dimension Av. Score			1		

4. PLANS & BUDGET					
4.1 M&E plan	4.1.1 Is there a comprehensive M&E plan for the CC program that addresses both CCA and CCM and is M and E differentiated and promoted?	A comprehensive M&E plan, inclusive of an indicator protocol and identification of responsibilities, to manage and maintain the MEI does not currently exist. Information for the regional indicators is primarily built on national M&E frameworks and within each MS the source of information and responsibility for data collection varies. Therefore the articulation of a comprehensive M&E Plan for the MEI is contingent on the finalization of the outstanding MS's national M&E frameworks.	o	0= there is no comprehensive M&E plan 1= the details of the M&E plan are scattered across various documents and not implemented (or implemented in an ad hoc manner) 2= there is an M&E plan that addresses <u>some</u> of the components but linkages with SSA M&E plans are not explicit and monitoring is not frequent enough to detect changing baselines etc. 3= there is an M&E plan that addresses <u>majority</u> of the components and linkages with SSA M&E plans are explicit and monitoring is frequent enough to detect changing baselines etc. 4= there is an M&E plan that addresses <u>all</u> of the components and linkages with SSA M&E plans are explicit and monitoring is frequent enough to detect changing baselines etc.	The M&E plan should contain at minimum: the logical framework/ToC; M&E questions to be addressed; indicators are to be measured; how, how often, from where/data sources; baselines/reference scenarios, targets, how the data will be analyzed or interpreted (M&E methodologies); reporting timeframes and guidelines; dissemination guidance; responsibilities for all the dimensions noted above are clearly identified in the M&E Plan (Görgens and Kusek, 2009)
	4.1.2 Is the (central) agency's M&E plan linked with other supply side actor's M&E plans?	On the positive side, it is envisaged that this bottom-up approach used in the design of the MEI will ensure clear linkages between the national M&E plans and the regional M&E plan, when it is completed.			
	4.1.3 Is there continuous/frequent monitoring to detect changing baselines, targets and other CC-related uncertainties and are there mechanisms in place to allow for updating as the circumstances dictate?	National M&E frameworks as currently developed are at maximum 2 years in duration (interviewee), which guarantees that MS reflect on and update their results, targets and baselines. The Regional Framework and IP is to be reviewed biennially to maintain the right focus, which creates a mechanism for the updating of the regional results and targets as appropriate			

4.2 Costed M&E work plan and confirmed budget	4.2.1 Is there a costed work plan that exists for the M&E plan?	A costed M&E work plan with confirmed budget support (as a % of the overall costed M&E work plan) and the duration of the work plan was not available to be assessed since they are tied to the completion of the M&E plan.	o	0= no costed work plan 1= a costed work plan exists but no funding secured 2= a costed work plan exists with partial funding confirmed (up to 50%) 3= a costed work plan exists with majority funding confirmed (51-80%) and monitoring of CCA projects are extended to adequately evaluate effectiveness (optional) 4= a costed work plan exists that is fully funded and monitoring of CCA projects are extended to adequately evaluate effectiveness	"An M&E work plan is an activity-based budget showing M&E tasks, responsibilities, time frames, and costs. Put another way, the M&E work plan is a costed list of activities" (Görgens and Kusek, 2009:146).
	4.2.2 What percentage of the costed M&E work plan is funded?				
	4.2.3 Does the duration of the M&E work plan extend beyond the timeframe of CCA projects making up the program?				
Dimension Av. Score			o		

5. EVALUATION					
5.1 Evaluation policy and/or guidelines	5.1.1 Is there an evaluation policy and/or guidelines?	<p>The Centre has a manual for Project Monitoring, Review, Reporting and Evaluation with the limitation that it does not explicitly makes mention to the MEI, but it is envisaged that the parameters covered in the manual will be extended to the MEI (interviewee).</p> <p>Only 4 of the dimensions of evaluation policy is covered: iii, iv, v and viii</p> <p>No evidence to confirm if the manual is enforced since it was only endorsed by the Board of Directors in May 2015.</p>	1	0= no evaluation policy/guidelines 1= a semblance of an evaluation policy exists but it is not enforced 2= evaluation policy/guidelines exists that covers some of the dimensions (at least 5 of 8) and is enforced in an ad hoc manner 3= evaluation policy/guidelines exists that covers majority of the dimensions (at least 6 of 8) and is fully enforced 4= evaluation policy/guidelines exists that covers all the dimensions (and even more) and is fully enforced	<p>Evaluation policies/guidelines should include the following (at least): (i) rationale for the policy, (ii) objectives of the policy, (iii) principles guiding evaluation, (iv) evaluation criteria, (v) guidance on implementation of the policy, (vi) dissemination of findings, (vii) evaluation standards and ethics to be promoted, (viii) oversight and management (adapted from Kusek and Rist, 2004: 204-210).</p> <p>These 8 components of a policy are considered to have equal weighting</p>

5-2 Evaluation types and coverage	5.2.1 Are different types of evaluations promoted/undertaken for the CC program?	The manual promotes the use of various types of evaluation, specifically mid-term evaluation and ex-post evaluation	1	0= 1 type of evaluation promoted/undertaken but with little or no emphasis on 5.2.2 1= at least 2 types of evaluations promoted/undertaken but with little or no emphasis on 5.2.2 2= at least 3-4 types of evaluations promoted/undertaken but with emphasis on a few of the areas noted at 5.2.2 3= > 4 types of evaluations promoted/undertaken but with emphasis on some of the areas noted at 5.2.2 4= > 5 types of evaluations promoted/undertaken but with emphasis on all of 5.2.2	Evaluation types include performance logic chain assessment, process implementation evaluation, rapid appraisal, case study, impact evaluation and meta-evaluation (Kusek and Rist, 2004: 121-122) Note: this information should be in the M&E Plan
	5.2.2 Do evaluation objectives & questions place emphasis on examining adaptive capacity, adaptation actions, maladaptation and/or leakage, and difference in impacts due to gender?	The specificities of evaluations such as evaluation objectives & questions are not generally defined in the manual. Further, to date there has not been any evaluations of the Regional Framework and IP to confirm if the scope of the evaluations placed emphasis on examining adaptive capacity, adaptation actions, maladaptation and/or leakage, and difference in impacts due to gender			
5-3 Independence and impartiality	5.3.1 Is independence and impartiality promoted in evaluations?	The Centre promotes independence and impartiality through the sub-contracting of evaluations (interviewee) and the PMRRE manual indicates that the PDMU will manage the recruitment process, the review of reports and dissemination of information to users. The main drawback is that the PDMU is also engaged in resource mobilization, which means they are engaged in the conceptualization and design of new programs, which can create grounds for bias that can undermine the impartiality objective (IEG, 2007).	2	0= not promoted at all (policies, institutional set-up) 1= independence and impartiality noted in relevant documents (policies, manuals) but not reflected in practice (set up of institutions, evidence from how evaluations were undertaken) 2= independence and impartiality noted in relevant documents (policies, manuals) and institutional set up, but not in most of the stages of the evaluation (based on reports) 3= independence and impartiality noted in relevant documents (policies, manuals) and institutional set up, and in most of the stages of the evaluation 4= independence and impartiality fully embraced (in policy, institutional set-up eg. separate evaluation unit and safeguarded in the entire evaluation process)	Independence and impartiality is critical for evaluation processes to promote credibility of the findings and legitimacy of the process. These principles are achieved by ensuring that management and execution functions are separated from evaluation units (OECD/DAC, 1991) "requirement for impartiality and independence exists at all stages of the evaluation process, including the planning of the evaluation programme, the formulation of the terms of reference and the selection and approval of evaluation teams" (OECD/DAC, 1991:6)
5-4 Methodology	5.4.1 Is it clear which evaluation methodologies will be utilized for CCA and CCM and are they appropriate?	This is the weakest sub-component of the evaluation dimension: there is no explicit mention of the types of evaluation approaches that will be used for the MEI. Also evaluation for CCM is not a priority for the Caribbean due to limited incentives	0	0=not explicitly stated or clear which evaluation methodologies will be used 1= explicitly stated what methodology(ies) will be used but they are not appropriate 2= explicitly stated what methodology(ies) will be used for one dimension only (CCA or CCM) and some are appropriate 3= explicitly stated what methodology(ies) will be used for both dimensions (CCA or CCM) and most are appropriate 4= explicitly stated what methodology(ies) will be used for both dimensions (CCA or CCM) and they are all appropriate	For CCM need to ensure that the state-of-art methodology is being used for the particular sectors advancing mitigation actions. UNFCCC methods on GHG inventories and emission reduction measurements by sector. See IPCC 2006 guidelines for guidelines on GHG inventories by sector. See https://cdm.unfccc.int/methodologies/index.html for CDM approved methodologies for various types of CDM activities Note: this information should be in the M&E Plan
Dimension Av. Score			1		

6. VERIFICATION					
6.1 Processes/ Mechanisms/ Standards	6.1.1 Are the relevant verification experts/body/processes/standards utilized for the particular emission reduction activity (CDM, REDD+) or reporting requirement (BURs, GHG inventories, NC)?	In its current format, the regional MEI is not designed to manage verification of mitigation actions in the context of the guidelines and requirements of verification as defined by the UNFCCC, therefore this dimension of the checklist is "not relevant" to this case study.	not relevant	0= no verification process being utilized 2= some verification processes utilized for a combination of emission reduction activities and/or CCM reporting requirements (there is room for improvement) 4= all the relevant verification processes are being utilized for the ongoing emission reduction activities and/or CCM reporting requirements	Recall, for developed countries, international expert review teams (ERTs) are used to verify those elements of the GHG inventories and national communications related to the KP and an international assessment review (IAR) is used for elements of the GHG inventories and NC related to the convention. BURs from developed countries are subject to IAR (UNFCCC, n.d. b). On the contrary, for developing countries, verification of BURs and NCs is performed by international consultation analysis (ICA) (UNFCCC, n.d. c).
7. DEMAND SIDE					
7.1 Users and Users' needs	7.1.1 Are the users of the M&E information identified and their decision-making needs explicitly known?	The following intended users of the MEI have been explicitly identified in documents: the RCC, CCCCC, MS and regional partners from NGOs, private sector and specialized agencies (Baastel, 2013a; Baastel, 2013b). Unfortunately all users' needs have not been explicitly identified to date	1	0= no users explicitly identified and their needs known 1= users explicitly identified but their decision-making needs are not explicitly known 2= users explicitly identified and <u>some</u> of them, their decision-making needs are explicitly known 3= users known and <u>majority</u> of them, their decision-making needs are explicitly known 4= users known and <u>all</u> of them, their decision-making needs are explicitly known	Users should be from internal, multilateral, international, civil society organizations or a combination of these. Users could be estimated based on formal request for M&E information. Some = up to 50% Majority= up to 80%
7.2 Use	7.2.1 Is the data collected converted into information that meets the needs of users and is it presented in a suitable format?	The extent to which the MEI information is being used could not be assessed at this time given that the MEI has not generated reports to date.	0	0= none of 7.2.1 or 7.2.2 advanced 1= data collected are not presented in suitable formats for different users and there is no evidence that users are using the information 2= data collected are presented in suitable formats for some users and there is evidence that some users are using the information 3= data collected are presented in suitable formats for majority users and there is evidence that majority users are using the information 4= data collected are presented in suitable formats for all users and there is evidence that all users are using the information	Evidence of use of findings may include: informed changes in budgets, policies, programs/projects, planning, target audiences/beneficiaries, salaries, promotions, organisational design, and to a larger extent behaviour but the latter is harder to confirm and attribute to the use of information. 7.2.1 and 7.3.1 may seem to overlap. But 7.3.1 is more with donors and UNFCCC and meeting the agreed reporting formats and timeframes; whilst 7.2.1 is interested in information sharing with general public and civil society and ensuring their information needs are being met because they are also legitimate users of the M&E information.
	7.2.2 Is there evidence that the intended users are using the information?				

7.3 Report timeliness and formats	7.3.1 Are M&E reports for CCA and CCM available in a timely manner or within the established timeframes and do they meet the guidelines and formats, where stipulated?	Given that the MEI is not yet complete to generate regional reports, the sub-dimension on reporting timeliness is not available for assessment.	0	0= no M&E reports to date 1= M&E reports for CCA and CCM completed but not congruent with templates/guidelines and timeframes for submission and no emphasis on gender 2= M&E reports for CCA and CCM completed but only partially congruent with templates/guidelines and timeframes for submission and no emphasis on gender 3= M&E reports for CCA and CCM completed and mostly congruent with templates/guidelines and timeframes for submission and gender reflected 4= M&E reports for CCA and CCM completed and fully congruent with templates/guidelines and timeframes for submission and gender reflected	M&E reports can be related to CCA (eg. NAPA) and CCM (eg. NC, BUR, NAMA) See UNFCCC (2014b) "Handbook on Measurement, Reporting and Verification for Developing Country Parties" for timeframes for national reports, which varies for developed, developing and SIDS countries. See IPCC 2006 Guidelines for reporting on GHG per sector, COP 8, New Delhi (2002) provide guidelines for preparing and reporting on NCs by Non-Annex I Parties COP 17, Durban Outcome (2011) provide guidelines for BURs by Non-Annex I Parties
	7.3.2 Do reports have information presented in the context of gender?	the extent to which gender information is reflected in reports was inferred by looking at the indicators for the SEs and goals and national survey questions, neither of which were gender sensitive and promoted disaggregation of data by gender.			
7.4 M&E champions and counter-reformers	7.4.1 Are the champions and counter-reformers for the M&E system identified?	The Centre views the MS climate change focal points as M&E champions since a bottom-up approach is being utilized for the development of the MEI. However St. Kitts and Nevis noted that M&E is not a priority for the climate change unit since annual reporting is not mandatory for their office (interviewee). Therefore the assumption that all MS are advocates for M&E is not 100% reliable. Further, another key limitation is that the degree to which counter-reformers exists within MS is not fully known, which could be attributed to the fact that the Centre has not undertaken a complete assessment of the national M&E systems.	1	0= not explicitly identified 1= only champions identified, no emphasis on counter reformers 2= <u>some</u> champions and counter-reformers are identified 3 = <u>majority</u> champions and counter-reformers are identified 4= champions and counter-reformers are identified across all partner agencies that support the M&E system	"Champions in government are critical to the sustainability and success of a results-based M&E system." (Kusek and Rist, 2004: 44) agencies that support the M&E system include users and supply side. Some = up to 50% (users+SSA) Majority= up to 80% (users+SSA)
7.5 Advocacy and Communication Strategy	7.5.1 Is there a communication strategy that addresses 'who, what, how and when' regarding M&E information dissemination and is it enforced/implemented?	Advantages of the Centre's communication strategy are that efforts are made to explicitly identify the different targets audiences (who), the relevant messages (what), the modality of communicating the information/messages (how) and timeframes (when). It is also interesting to note that the communication strategies also include M&E components to assess the effectiveness and impact of the communication strategy. The limitation noted is that donors/development partners are not explicitly identified as one of the Centre's target audience, but they are expected to be primary users' of the MEI given that most of the regions' CC efforts are financed through Official Development Assistance (ODA) (Baastel, 2013a). The foregoing indicates that the technical capacities, good practices and mandate already exists for the sound execution of the communication strategy, however, there is still need to have explicit emphasis on promoting the outputs of the MEI to adequately advance the objectives of accountability and learning.	2	0= no advocacy and communication strategy (ACS) exists 1= a semblance of an ACS exists but it is not enforced 2= an ACS exists that partially addresses the 4 areas (who, what, how and when) and is enforced in an ad hoc manner 3= an ACS exists that adequately addresses the 4 areas (who, what, how and when), advocates for M&E and targets M&E counter reformers and is fully enforced 4= a communication strategy exists that comprehensively addresses the 4 areas (who, what, how and when), advocates for M&E and targets M&E counter reformers and is fully enforced	semblance= some areas might be missing partially=the areas are addressed but there is room for major improvement adequately = areas as addressed but there are some room for improvement comprehensively= cutting edge approaches and very minor to no improvements needed
	7.5.2 Does the strategy advocate for and build awareness about M&E in general?				Advocacy for M&E is essential to build a culture and enabling environment for the agency's M&E system to thrive (Görgens and Kusek, 2009)
	7.5.3 Is the treatment of counter-reformers explicit in the advocacy strategy?				
Dimension Av. Score			0.8		



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