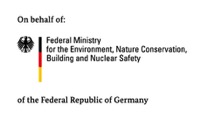


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| Monitoring and Evaluation Manual for the Community Climate Change Adaptation Fund |
| Prepared by: Ms. Saudia Rahat, M&E Specialist |



11/15/2016

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# List of Acronyms

|  |  |
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| **Acronym** | **Meaning** |
| CARICOM | Caribbean Community |
| CC | Climate Change |
| CCA | Climate Change Adaptation |
| CCCAF | Community Climate Change Adaptation Fund |
| CCCCC | Caribbean Community Climate Change Centre |
| CCM | Climate Change Mitigation |
| CDB | Caribbean Development Bank |
| CDEMA | Caribbean Disaster Emergency Management Agency |
| CDM | Comprehensive Disaster Management |
| CIF | Climate Investment Fund |
| CLOs | Community Liaison Officers |
| CSA | Climate Smart Agriculture |
| CSP | Country Strategy Paper |
| FAD | Fish Aggregating Device |
| GHG | Green House Gas |
| GIZ | Deutsche Gesellschaft für Internationale Zusammenarbeit |
| GoG | Government Of Grenada |
| GPRS | Grenada’s Growth And Poverty Reduction Strategy |
| ICCAS | Integrated Climate Change Adaptation Strategies |
| IPCC | Intergovernmental Panel On Climate Change |
| KPA | Key Priority Areas |
| LMMS | Land and Marine Management Strategy |
| M&E | Monitoring And Evaluation |
| MOALFFE | Ministry Of Agriculture, Land, Forestry, Fisheries And The Environment |
| NAWASA | National Water And Sewerage Authority |
| PMF | Performance Monitoring Framework |
| PPCR | Pilot Program For Climate Resilience |
| RBM | Results Based Management |
| SDGs | Sustainable Development Goals |
| SFDRR | Sendai Framework For Disaster Risk Reduction |
| SPCR | Strategic Program For Climate Resilience |
| TA | Thematic Areas |
| UNDP | United National Development Programme |
| UNFCCC | United Nations Framework Convention On Climate Change |
| WHO | World Health Organisation |

# Purpose and Target Audience for the Manual

This M&E manual was developed specifically for the Community Climate Change Adaptation Fund (CCCAF), which is a component of the ICCAS project[[1]](#footnote-1) and it is intended to be **a comprehensive recipe bookfor setting up the entire M&E system for the CCCAF** and keeping it functional. To achieve this, it contains background on the 29 community projects; details on the approach to be used for monitoring these community projects; the (aggregate) results chain; core indicators including their associated baseline information, targets and data collection tools to measure performance; guidance on how information will be analyzed; how reporting will be done and its templates; and roles and responsibilities and details for M&E coordination. Notable is that many of these components were developed through a participatory process with key stakeholders from the *Ministry of Agriculture, Land, Forestry, Fisheries and the Environment (MOALFFE), Carriacou Fisher Folk, Oceans Spirits, UNDP Barbados, UNDP ICCAS in Grenada, GIZ/ICCAS, Ministry of Carriacou, NAWASA, Forestry Department, and UNDP Ridge to Reef Project.*

Also notable is that the Community Liaison Officers (CLOs), which are part of the UNDP project execution unit for the CCCAF, will play a critical role on-the-ground in data collection and analysis. Given that they have limited training and experience in monitoring and evaluation and there is also a strong need for strengthening the M&E capacity at the community level and within the government agencies in Grenada; each section of this manual includes the definition of basic M&E concepts thereby allowing **the M&E manual to also serve as an education and training material**. This also enables the Consultant to achieve the key deliverable related to enhancing national capacities in M&E.

# Scope of the M&E Manual

This M&E manual is comprised of the following sections:

1. ***Background*** to the CCCAF project and its objectives within the wider ICCAS project
2. ***Overview of monitoring and evaluation*** including key definitions, objectives and benefits to set the context for non-M&E experts
3. ***General Guiding Principles*** that are in-keeping with international standards and best practices and reflects considerations that are specific for undertaking M&E of CCA programs
4. ***The M&E Approach for CCCAF*** is presented to ensure that users have an early appreciation of how aggregations of performance around outputs and outcomes will be attempted. This also sets the context for the ensuing sections on results chain and indictors.
5. ***The Results Chain*** as a critical tool for setting up M&E systems, including specific details on how the results chain for the CCCAF was developed
6. ***Indicator*** overview including definition, key considerations when crafting indicators for climate change adaptation programs and the final core indicators agreed to by stakeholders for the CCCAF
7. ***The Performance Monitoring Framework (PMF)*** as a key M&E tool and component of the M&E plan. This section includes the definition and scope of a PMF including a sample for a generic project. The aggregated PMF for the CCCAF is also detailed.
8. ***Indicator*** ***Protocol*** as another key M&E tool is fully covered including an overview of its purpose, scope and benefits. A recommended layout for an indicator protocol with details on how to complete it for any project is provided. This section also includes the indicator protocols for each of the impact, outcome and output level indicators for the CCCAF.
9. ***Linkages between the M&E Framework for CCCAF and National, Regional and International Strategies/Policies/Projects*** is detailed to ensure that the relevance and usefulness of the M&E framework for CCCAF at the national, regional and international levels is promoted
10. ***Linkages between the M&E Framework for CCCAF and National M&E Systems*** are explored to identify any possible sources of information to promote harmonization and rationalization of national M&E efforts
11. ***Data Collection Methods, Tools and Skills*** are detailed including the methodology that will be used to collect relevant data on the core indicators. The data collection tools/instruments such as questionnaires, survey forms etc. are also detailed in this section. Tips are provided on how to conduct interviews and focus groups.
12. ***Data Verification, Storage and Analysis*** which details how the data collected on core indicators is to be verified, stored, analyzed and interpreted for the preparation of technical M&E reports
13. ***Reporting and Report Writing*** was added to the M&E plan since the inception workshop highlighted the limitations in capacities to undertake results based reporting. This section also highlights the scope of the M&E technical report to be prepared by the M&E specialist and the CLOs
14. ***M&E Coordination*** details are provided to guide mechanisms that will be in place to ensure smooth management and coordination of M&E framework for the CCCAF. The definition of roles and responsibilities is also elaborated in this section.
15. ***M&E Work Plan and Budget***: this section includes the implementation schedule for the building of the M&E system for the CCCAF, including the timeframes for data collection and analysis. An estimated budget is included as it relates to training and field work
16. ***Information Products, Dissemination & Use***: this section of the M&E plan will describe the types of products and publications that should be used to share the information collected by the program.
17. ***M&E Post CCCAF Close Out*** is featured in this M&E plan in the instance funding is sourced to support M&E needs beyond the timeframe of the project

# Background of ICCAS and CCCAF

Grenada is a tristate consisting of Grenada, Carriacou and Petit Martinique and like many other Small Island Developing States, it is characterized by its relatively small size and remoteness, limited natural resource base, limited human capacity and technical capability, and fragile ecosystems. Therefore it comes to no surprise that Grenada is susceptible to natural hazards like hurricanes and other extreme weather events. For instance, Hurricane Ivan, which impacted the country in September 2004, destroyed almost 90 percent of residential buildings, tourism facilities and agricultural land. Following the recovery from Hurricane Ivan, Hurricane Emily struck the Northern part of the island, further affecting the food crop sector.

The onset of the climate change phenomenon has imposed new hazards on Grenada and exacerbated existing ones. It is projected that an increase in the sea level of half a metre would destroy up to 83 percent of the beaches. The most vital sectors susceptible to climate change in Grenada are: water resource management, coastal infrastructure, human health, agriculture and tourism, which are being adversely affected by climate related hazards such as rising sea level, longer periods of droughts, beach erosion, loss of coastal areas or flooding.

As a relatively low greenhouse gas emitter, Grenada has placed the primary emphasis of its national climate resilient agendas/programs on climate resilience, while contributing to emission reductions through the forestry sector. The Programme on Integrated Climate Change Adaptation Strategies (ICCAS), which is being co-implemented by UNDP and GIZ, is one such initiative that will support Grenada in achieving climate resilience by using an integrated adaptation approach to increase the resilience of vulnerable communities and ecosystems to climate change risks. The ICCAS targets government, including its sectorial agencies, and communities already being impacted by climate change. The overarching objective of the ICCAS Programme is ***to increase resilience of vulnerable communities and ecosystems to climate change risks in Grenada through integrated adaptation approaches.***

ICCAS has four components to achieve this goal, which include:

|  |  |
| --- | --- |
| **OUTCOME 1** | *Strengthened capacity of the Government of Grenada to mainstream adaptation considerations into national development planning (at various scales), supporting inter-sectoral mechanisms for climate change adaptation also including the private sector* |
| **OUTCOME 2** | *Improved planning, management and efficient use of the water and coastal zone resources thought the establishment of integrated water resource management approaches and the formulation of CZM policies and management plans* |
| **OUTCOME 3** | *Increased adaptive capacity of communities through the implementation of concrete community-based adaptation activities and incentives in the islands of Grenada, Carriacou and Petit Martinique* |
| **OUTCOME 4** | *Capacity to access climate finance and knowledge management:*  *4 (a) Enabled access to public (bilateral and multilateral) and private funding for climate change measures*  *4 (b) Strengthened understanding and awareness of climate change risks and adaptation measures (adaptation plan) and disseminate lessons learned and best practices at the local, national, regional and international levels.* |

Outcome 3 of the ICCAS initiative is to increase the adaptive capacity of communities through the implementation of concrete community-based adaptation activities and incentives in the islands of Grenada, Carriacou and Petit Martinique. This outcome will be realized through the institutionalization of a Community Climate Change Adaptation Fund (CCCAF) that responds to the needs of Grenada’s vulnerable communities. The grants are intended to support activities related to agriculture and land use, fisheries and marine resources, coastal protection and water resources management. Given the diversity of climate change adaptation (CCA) activities that will be supported across these sectors, it is important to adequately track and measure the results, not only for accountability purposes, but also to promote learning.

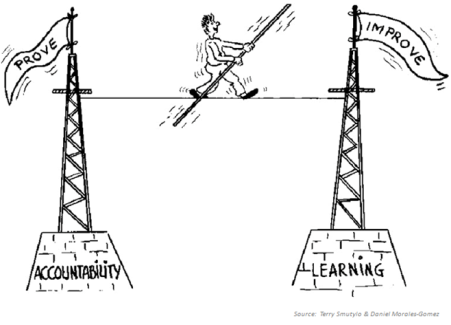
# About Monitoring and Evaluation



**Monitoring** can be defined as the ongoing process by which stakeholders obtain regular feedback on the progress being made towards achieving their goals and objectives (UNDP, 2009:8).

**Evaluation** is a rigorous and independent assessment of either completed or ongoing activities to determine the extent to which they are achieving stated objectives and contributing to decision making. Evaluations, like monitoring, can apply to many things, including an activity, project, programme, strategy, policy, topic, theme, sector or organization (UNDP, 2009:8).

The key distinction between the two is that evaluations are done independently to provide managers and staff with an objective assessment of whether or not they are on track. They are also more rigorous in their procedures, design and methodology, and generally involve more extensive analysis (UNDP, 2009:8). The combined objectives of M&E are to promote learning and accountability. However, “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). Therefore it is a “balancing act” that needs to be well thought through.



The benefits of M&E materializes after the information is collected and becomes available to project managers, policy makers, beneficiaries and other key users. The benefits that can arise from M&E and also the reasons why M&E is strongly promoted include the fact that M&E information:

* identifies shortfalls in outcomes, thereby enabling service improvement
* helps to identify lessons that can save time and resources in the future
* supports the formulation of budgets and also help to justify budget requests
* guides the allocation and prioritization of resources throughout the year, such as adjusting the assignment of work or staff to different locations or customer groups based on performance data
* provides the basis for developing multi-year strategic plans for ministries or agencies
* provides transparency on the performance of programs that can help secure future funding with aid agencies and secure buy-in from citizen’s and other key actors
* can enhance the credibility of agencies and programs, once executed in a transparent manner

To ensure that these benefits are realized, it is important that key principles are promoted throughout the design and operationalization of an M&E system. The next section highlights the key M&E principles for the CCCAF.

# Guiding Principles for Monitoring and Evaluation of CCCAF

The M&E approach to be utilized for the CCCAF component of ICCAS will be in-keeping with international standards and best practices for monitoring and evaluating development programmes. The following principles should be kept in mind by field officers and members of the UNDP team that will be collectively engaged in the M&E process. These principles are application to all stages of the M&E process.

***Stakeholder Participation***

Throughout all stages of planning, monitoring, evaluating, learning and improving, it is vital to engage stakeholders, promote buy-in and commitment, and motivate action. A strong results-management process aims to engage stakeholders in thinking as openly and creatively as possible about what they want to achieve and encourage them to organize themselves to achieve what they have agreed on, including putting in place a process to monitor and evaluate progress and use the information to improve performance (UNDP, 2009: 13).

***Focus On Results***

Planning, monitoring and evaluation processes should be geared towards ensuring that results are achieved—not towards ensuring that all activities and outputs get produced as planned (UNDP, 2009: 13).

***Promote National Ownership***

Ensure that, as appropriate, processes are led or co-led by the government and/or other national or community partners and that monitoring and evaluation efforts can support national M&E needs and not only the project’s objectives (UNDP, 2009).

***Promote National Capacity Building in M&E***

Recognizing the capacity deficits in M&E within Grenada, it would be paramount that the process for developing the M&E system for the CCCAF serves as a mechanism for building national capacities in M&E through the active engagement of national stakeholders.

***Rationalization***

All efforts will be made to use indicators that are applicable across majority of the projects supported by CCCAF and that is supportive of the ICCAS M&E framework and other national and regional M&E frameworks related to climate change adaptation

***Safeguard Data Quality***

All efforts will be made to ensure data is collected in a standardized manner and information collected is verified in the field.

# The M&E Approach for CCCAF

The M&E of the CCCAF was designed post approval of the 29 community climate change adaptation projects, all of which have M&E frameworks that are unique to their projects’ objectives. The benefit of developing the M&E framework for the CCCAF post operationalization of the fund is that the 29 projects could be reviewed together to developed indicators that are applicable across multiple projects to promote rationalization of indicators. As a result, it was agreed that the M&E framework for the CCCAF project should follow the **core indicator methodology**, which essentially agrees on a number of indicators that will be used as the basis to aggregate absolute information across the projects. Aggregation is the mechanism by which the overall performance of the CCCAF will be determined. However, **indicators that are unique to the community projects are still important** and will be maintained for use primarily by the UNDP project execution team to maintain oversight on the performance of each project to trigger payments and approval of progress reports etc. In this regard, the indicators unique to the projects will be more closely monitored by the UNDP team with support from recipients of grants and CLOs (validation in the field) whilst the core indicators will be more closely monitored by the M&E Specialist with support from the CLOs, relevant Ministries, the UNDP Team (e.g. during monitoring missions) and recipients of grants (in their progress reports).

The main disadvantage of developing the core indicators post approval of the 29 community projects and the development of their M&E frameworks is that the core indicators for the CCCAF had to be mainstreamed in each of the community project’s M&E framework, as appropriate. This is slightly inefficient but still manageable since the CCCAF has dedicated Community Liaison Officers (CLOs) that are assigned to projects within geographic areas and therefore have close relations with grantees and intimate knowledge of the workings of the projects to be able to agree on the core indicators that should be mainstreamed within each community project. The distribution of projects by parish is illustrated in Figure 1.

Figure 1: Distribution of Community Projects by Parish in Grenada

**Source: Author**

Furthermore, the review of the 29 community projects has determined that they converge around the following key **thematic areas (TA): water resources, environmental protection, forestry, food security (agriculture and fishery sectors) and education and awareness**. See Figure 2 for the distribution of these projects across TAs.

Figure 2: Distribution of Community Projects by Thematic Areas

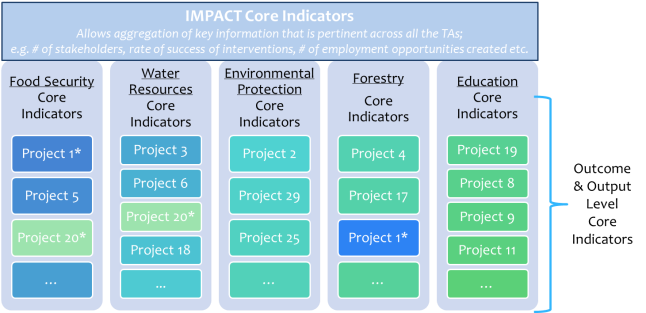
**Source: Author**

Hence, it was further agreed that **core indicators specific to thematic areas will be developed** to allow the M&E team to better track the level of the contribution of the community projects to various sectors in Grenada. This would also allow documentation of lessons and sharing of best practices in the context of thematic area of focus, which supports Component 4 of the ICCAS project. Figure 3 depicts the core indicator approach used to aggregate information by TAs and it can be seen that some projects (Project 1 and 20) will cover two or more TAs. Therefore, these projects will include core indicators pertaining to these TAs, as appropriate. Further, the impact level core indicators will be relevant to each community project and will therefore be an indicator present in the M&E plan for each of the 29 projects.

A key deliverable in the consultant’s terms of reference was to introduce suitable **participatory monitoring tools** since the fund targets community level projects and the engagement of the stakeholders in the design and implementation of the M&E framework would enhance ownership. This coupled with the fact that there are limited knowledge and capacities in M&E among the CLOs, the community actors implementing the projects and across government ministries in Grenada lead to the decision that **the design of the M&E system would maintain simplicity so that the resources and capacities available would be able to adequately support the demands of the system**. This situation also meant that the entire M&E process to be facilitated by the Consultant would be achieved through workshop sessions that target skills building in designing M&E frameworks, data collection, analysis and reporting. Participants would then have an opportunity to apply these skills to the CCCAF projects to build its M&E system. Taking the stakeholders through this entire M&E cycle is considered as a stepping stone towards building a robust and suitable M&E system for the CCCAF and M&E capacities in Grenada.

The **key limitation is the timeframe that the M&E specialist was engaged**: with only sufficient time to build the M&E framework and undertake final data collection on projects as they close out, this meant that complete baselines would not be available and some of the lessons learned in the M&E process would not be fully addressed in the next cycle, as would be the case if there was an opportunity to do data collection during the mid-term of projects. However, many of the lessons will be documented and included in the Consultant’s Final Report for consideration should there be a next phase of the CCCAF or a similar initiative.

Figure 3: Aggregation of M&E Information Based on Core Indicators



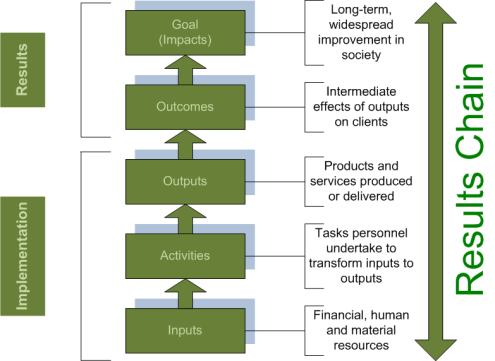
**Source: Author**

# The Results Chain

**A Result Chain** is the causal sequence for a development intervention that stipulates the necessary sequence to achieve desired objectives – beginning with inputs, moving through activities and outputs and culminating into outcomes, impacts and feedback. Having a logic model or a results chain is one of the foundational elements of monitoring and evaluation since the indicators, baselines and targets are all developed based on the results chain or if a theory of change has been identified.

Results can either be classified as an **‘output’, ‘outcome’** or **‘impact’** and can be intended or unintended, positive and/or negative due to a development intervention. Figure 4 below illustrates the relationship between the types of results that can be achieved along a result chain. As you move upward along the results chain the level of control we have over the achievement of the result becomes less. Therefore outcome and impact level results do not emerge directly because of the outputs we have invested in, as there are other factors that come into play that are political, behavior and environmental in nature. These higher results are referred to as developmental results and would require a longer timeframe spanning between the medium to long term to be realized.

Figure 4: Differentiating Results along a Results Chain



## 6.1 Deriving the Results Chain for CCCAF

One of the key observations made was that the CCCAF did not have a results chain except for its placement within the results chain for the overarching ICCAS project. Therefore, the first important M&E activity undertaken was the articulation of a results chain for CCCAF. The process towards developing the results chain for the CCCAF is discussed in this section of the M&E plan.

***Impact/Goal Statement***

As noted in the background section, the CCCAF has the outcome of “increased adaptive capacity of communities through the implementation of concrete community-based adaptation activities and incentives in the islands of Grenada, Carriacou and Petit Martinique” within the context of the wider ICCAS programme. The key output of the CCCAF (as part of the ICCAS portfolio) is to “design, establish and operationalize a “Community Climate Change Adaptation Fund” (CCCAF) that responds to the needs of vulnerable communities and that links climate risks and adaption measures with livelihoods”. However, looking at the CCCAF as a project by itself requires a shift in the results chain; that is, the outcome of CCCAF within a wider programme becomes the goal of CCCAF as a project by itself. Following this logic, the goal or impact/goal of the CCCAF is **increased adaptive capacity of communities through the implementation of concrete community-based adaptation activities and incentives in the islands of Grenada, Carriacou and Petit Martinique.**

However, given that the M&E framework will aim to assess the contribution the CCCAF has made towards thematic areas in Grenada, and in reality, many of the projects will yield benefits for ecosystem restoration and conservation, the following impact statement is proposed for the CCCAF Impact Statement:

**Increased ecosystem resilience and adaptive capacity of communities in response to climate change induced stresses through the implementation of concrete community-based adaptation activities and incentives in various sectors in the islands of Grenada, Carriacou and Petit Martinique**

***Outcome & Output Statements***

The development of the outcome statements was hinged primarily on the review of the 29 projects. Specifically, the projects were partitioned into thematic areas with a brief synopsis of the objectives and scope of each project. This detailing allowed for an appreciation of the full scope of all the projects that fall within a thematic area so that the outcome and output statements could be phrased appropriately. Thereafter, the draft outcome and output statements were reviewed by stakeholders from the Ministry of Agriculture, Land, Forestry, Fisheries and the Environment (MOALFFE), Carriacou Fisher Folk, Oceans Spirits, UNDP Barbados, UNDP ICCAS in Grenada, GIZ/ICCAS, Ministry of Carriacou, NAWASA, Forestry Department, and UNDP Ridge to Reef Project, during a M&E workshop convened July 5-7, 2016.

The final results chain for the CCCAF, as agreed to by stakeholders, is detailed in Table 1 below, which includes 16 result statements: 1 impact, 5 outcomes, and 10 outputs. As the arrows indicate, there is an upward logic in the results which means that outputs support the achievement of outcomes and the combined outcomes support the achievement of the overall impact. Therefore it can be said that the achievement of the impact is contingent on the successful completion of the outputs and the outcomes. There are however many assumptions along the results chain that need to be met for these result pathways to be realized. Factors that influence the realization of the results are social, economic and/or environmental in origin.

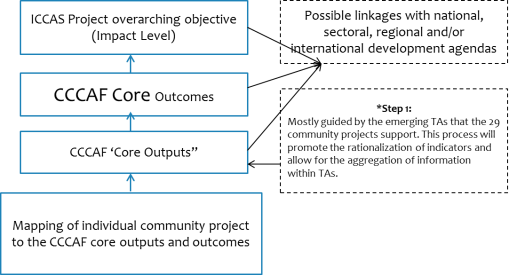
Figure 5 demonstrates the conceptual logic behind the results chain of the CCCAF. As illustrated, the community projects are mapped to outputs (which are along thematic areas). These output level results ‘feed into’ higher level results – outcomes, which are achieved towards the end of the implementation of the CCCAF. An important dimension highlighted in this figure is that the core output, and moreso, the core outcomes and impact will have linkages with other national, sectoral, regional and/or international development agendas. This means that the M&E data collected through the CCCAF project can provide useful information for reporting on national, regional or international planning frameworks. More detailed mapping between the core indicators of the CCCCAF and national, sectoral and international planning frameworks will be done in Section 10 of this M&E plan since it is an important component, particularly for promoting the principle of rationalization.

Table 1: CCCAF Result Chain

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IMPACT  Increased ecosystem resilience and adaptive capacity of communities in response to and in preparation for climate change induced stresses through the implementation of concrete community-based adaptation activities and incentives in various sectors in the islands of Grenada, Carriacou and Petit Martinique | | | | |
| OUTCOMES | | | | |
| Outcome 1  Residents, farmers and/or fishers are more knowledgeable and equipped to cope with the effects of climate change by increasing production yields and/or reduced operational costs to improve livelihoods, reduce unemployment and sustain food security for communities | **Outcome 2**  Strengthened capacities to cope with water stresses to boost health, productivity and livelihoods of individuals (farmers, senior citizens, students and/or households) | **Outcome 3**  Enhanced capacities to protect/conserve ecosystems/environment through research and actions that mitigate risks to climate change | **Outcome 4**  Reduced vulnerability of coastal settlements and ecosystems to the effects of climate change and enhanced ability to support climate change mitigation through reforestation of mangroves and other plant species | **Outcome 5**  Strengthened understanding of climate change as well as capacity building and lesson learning to cope with climate change (by sector) |
| OUTPUTS | | | | |
| *Output 1.1*  Farmers (crops or livestock) and fishers have implemented/adopted new practices and/or equipment | ***Output 2.1***  Water saving measures implemented or expanded/updated | ***Output 3.1***  Enhanced ecosystem health and environmental sanitation to adapt to climate change | ***Output 4.1***  Residents are trained in the care of seedling and nurturing of plants until they are fully matured/established. | ***Output 5.1***  Education and information materials on climate change developed |
|  | ***Output 2.2***  Flood mitigation infrastructure and measures  implemented | ***Output 3.2***  Monitoring systems and research have been conducted to better inform management of ecosystems/environment | ***Output 4.2***  Trees successfully planted in vulnerable coastal habitats and are properly maintained on an ongoing process. | ***Output 5.2***  Training/certification of stakeholders to deliver educational and informational materials on climate change |
|  |  |  |  | ***Output 5.3***  Stakeholder have benefitted from relevant training to improve their operations in the face of climate change |

**Source: Author**

Figure 5: Conceptual Logic behind the Results Chain For The CCCAF

****

**Source: Author**

It is important that an M&E framework is able to document the factors that contribute to the success or failure in the achievement of results (outputs, outcomes, or goals/impacts) so as to be able to learn lessons. To adequately track progress, the role of indicators, baselines and targets become important. The next section of the M&E plan will examine indicators for monitoring and evaluating climate change programs, with specific recommendations of indicative indicators for tracking the CCCAF logic model.

# The Core Indicators for CCCAF

## 7.1 What is an Indicator?

Indicators underpin an M&E system’s practical applicability and serve many purposes:

* They help practitioners know when outcomes or results have or have not been achieved;
* They serve as targets, providing a road map toward those outcomes;
* They inform adjustments to current interventions and decision making toward future interventions.



## 7.2 Key Considerations When Crafting CCA Indicators

Adaptation programming has traditionally emphasized the use of quantitative indicators in measuring results. This might be because they are easier to aggregate on a program or portfolio level, and provide hard data. Usually, one type of indicator is not sufficient to provide all of the information needed to review the effectiveness of a project. An indicator such as the number of community members trained in post disaster response illustrates little about a project that aimed to increase the capacity of local communities to respond to extreme flooding. The fact that people were trained says little about the training’s usefulness or relevance. The focus should then be on the type of knowledge or capacities gained, and whether those people trained will have the opportunity to apply these capacities. Hence, **a combination of both qualitative and quantitative indicators is recommended to capture project nuances**. A qualitative indicator that could serve as a good complement is one that is score based: the practical value of the training on a scale of 1–5 as derived from surveys of trainees. Another indicator could be asking participants how they would apply the knowledge and/or skills gained, or what would hinder or prevent them from applying these skills.

It is also important to note that adaptation can be viewed as either an outcome or a process (Bours et al., 2013; Villanueva, 2011; Leagnavar et al., 2015). Adaptation process indicators track the development and implementation of measures in pursuance of adaptation (*e.g. diversity of stakeholders attending adaptation meetings, number of sectoral plans that consider climate risk, etc*.). Process indicators exist at the output level and should emphasize the key adaptation activities that will yield an outcome. Whilst adaptation outcome indicators measure the change that has occurred as a result of adaptation measures (*e.g. percentage of people residing in flood-prone areas, number of households in need of food aid, etc*.). However, the current push for M&E approaches to focus on results has created preference for the estimation of adaptation as an outcome through the use of static quantitative indicators and targets, which has resulted in limited knowledge about the process of adaptation or how we are ‘learning to adapt’ (Villanueva, 2011). Further, with limited evaluations of CCA interventions to date, there has been limited consensus on the principles of successful adaptation, which would be ideal for identifying suitable outcome level indicators (Villanueva, 2011; Adger et al., 2004) to track the most desirable changes that tell the story of adaptation. Therefor it **is important to track adaptation as both a process and an outcome.**

**Gender** considerations also have a special role in examining the realities of climate change for Small Island Developing States (SIDS) like Grenada. Consideration of gender in monitoring and evaluation (M&E) of climate change related programmes makes M&E more effective in particular in:

* Determining whether the needs of women and men are met adequately
* Ensuring that resources are used effectively and both men and women participate in all aspects of the programme
* Provides recommendations that are strategic and targeted

When we consider gender, we are speaking of the socially ascribed roles, relationships and opportunities associated with being male or female (male and female describe biological sex) in a society. Gender is used to delineate what is expected, permitted and valued in a woman or a man. Gender roles and responsibilities and how people experience or express gender norms is not fixed and have changed over time. While ‘gender’ does not refer only to women, because of the way gender is constructed in many societies, women tend to be disadvantaged in accessing their rights, opportunities and freedoms as compared to men. This is why the pursuit of gender equality is so important and an important consideration when monitoring and evaluating the impacts of climate change programmes.

Therefore, it is crucial to ensure that men and women have equal access to programmes and benefits of these programmes. This means that programmes have to take into account the social, political and economic situation of women and men, and that they must target the needs of men and women, boys and girls adequately. So, while everyone is vulnerable to climate variability and change, women and men, girls and boys are differentially impacted by the same. Climate change can in fact serve to compound or increase the vulnerabilities of persons who are already made vulnerable by their gender socialisation and other variables such as their age, level of education, whether they are physically or mentally disabled, their economic status and living conditions.

Apart from considering vulnerability, we also need to consider the possible ways in which a person’s gender role may inform how they can assist in climate change mitigation and response. For example, women have a pivotal roles to play in supporting climate change given their high levels of awareness of risks, knowledge of the community and the fact that they tend to be involved in the management of natural resources (UNFCCC, 2014c; UN Human Development Report, 2007). This suggests that the design of M&E systems for climate change programs should investigate and document what roles and responsibilities women and men undertake at the household and community levels that provides an advantage or benefit in adapting to climate related risks. This can provide useful insights into how to best manage and engage men and women in the planning and roll-out of community based adaptation programmes. See **Appendix VIII** for guidance on mainstreaming gender equality into climate change programs.

Also noteworthy is that **some adaptation activities can only be evaluated after the occurrence of extreme climate events**, and the timing of these is inherently uncertain. For example, when evaluating the impact of a flood management project, it cannot be assumed that the project has successfully reduced people’s vulnerability to climate change if the area has not been flooded therefore appropriate indicators need to be established to measure effects that can be observed today.

Finally, recalling that there are limited M&E capacities within the ministries in Grenada and at the community level and noting that a participatory approach is being promoted for monitoring of progress, is was also important that the **indicators utilized are simple** so that they can be measured with the resources (technical and financial) available on the ground.

Based on the above discussion, the following is a **checklist of the key considerations for developing indicators for climate change adaptation programs**:

* Ensure a balance of qualitative and quantitative indicators to ensure adequate depth of information collected. There are also other types of indictors such as those that check for sustainability, coverage (absolute count) and impact (%) that should be included, where possible
* Ensure to capture adaptation as a process particularly in the output level indicators used
* Information should be disaggregated by adult males and females, but boys and girls and the elderly, where possible
* Indicators agreed to need to be sensitive to the timing of data collection and what can realistically be observed/measured at that time
* Maintain simplicity

The final core indicators that were agreed to by stakeholders at the July 5-7, 2016 workshop are in Tables 2-7. A **total of 34 core indicators** were agreed to: *4 impact level core indicators and each of the 5 outcome level results have six core indicators*. It should be noted that the final core indicator set do not include economic type indicators since these are harder to measure and require more household level surveys.

Table 2: IMPACT LEVEL INDICATORS

|  |  |
| --- | --- |
| Result Statement | Core Indicators |
| IMPACT: Increased ecosystem resilience and adaptive capacity of communities in response to and in preparation for climate change induced stresses through the implementation of concrete community-based adaptation activities and incentives in various sectors in the islands of Grenada, Carriacou and Petit Martinique | I1. # of stakeholders (individuals/communities/agencies) directly and indirectly benefitting from vulnerability reduction and improved adaptive capacity activities as a result of support under the CCCAF (disaggregated by sex for residents) [coverage indicator] |
| I2. Rate of success of the interventions in delivering improvement in options to cope with climate change threats [adaptive capacity indicator] |
| I3. Level of capacity of beneficiaries to maintain/sustain adaptation strategies introduced or strengthened via CCCAF [sustainability indicator] |
| I4. # of employment opportunities created (by parish, sex, thematic area) |

Table 3: FOOD SECURITY CORE INDICATORS

|  |  |
| --- | --- |
| Result Statement | Core Indicators |
| Outcome 1: Residents, farmers and/or fishers are more knowledgeable and equipped to cope with the effects of climate change by increasing production yields and/or reduced operational costs to improve livelihoods, reduce unemployment and sustain food security for communities. | 1.1 Yield/Quality of produce (by type of technique in fishery and agriculture sectors) |
| 1.2 Rate of change in food security due to the measures implemented |
| Output 1.1: Farmers (crops or livestock) and fishers have implemented/adopted new practices and/or equipment | 1.1.1 # of farmers/fishers practicing/benefiting from new techniques (specified per type of technique and sex) |
| 1.1.2 #/sq. ft. of new sea moss farms operational |
| 1.1.3 # of equipment introduced/installed and operational (by type) |
| 1.1.4 Area of land (sq. ft.) under functional irrigation system |

Table 4: WATER RESOURCES CORE INDICATORS

|  |  |
| --- | --- |
| Result Statement | Core Indicators |
| Outcome 2: Strengthened capacities to cope with water stresses to boost health, productivity and livelihoods of individuals (farmers, senior citizens, students and/or households) | 2.1 Rate of water consumption OR Storage Capacity |
| 2.2 Quality of water |
| 2.3 School attendance (disaggregated by sex) |
| Output 2.1: Water saving measures implemented or expanded/updated | 2.1.1 # of water and sanitary facilities installed (tanks, compost toilets, showers etc.) |
| Output 2.2: Flood mitigation infrastructure and measures implemented | 2.2.2 # of flood mitigation intervention erected (by type) |
| 2.2.3 Rate of success of flood mitigation intervention implemented in affected areas |

Table 5: ENVIRONMENTAL PROTECTION CORE INDICATORS

|  |  |
| --- | --- |
| Result Statement | Core Indicators |
| Outcome 3: Enhanced capacities to protect/conserve ecosystems/environment through research and actions that mitigate risks to climate change | 3.1 # natural assets monitored/researched for protection |
| 3.2 # of key lessons identified from the research and monitoring projects to inform better management and/or protection of the ecosystems |
| 3.3 Rate of implementation of recommendations from research on ecosystems |
| Output 3.1: Enhanced ecosystem health and environmental sanitation to adapt to climate change | 3.1.1 Quantity/ volume of solid waste collected at clean-ups (by area)  3.1.2 # bins (compost and garbage) installed |
| Output 3.2: Monitoring systems and research have been conducted to better inform management of ecosystems/environment | 3.2.1 # of research / monitoring protocols completed and implemented/operational (by theme) |

Table 6: FORESTRY CORE INDICATORS

|  |  |
| --- | --- |
| Result Statement | Core Indicators |
| Outcome 4: Reduced vulnerability of coastal settlements and ecosystems to the effects of climate change and enhanced ability to support climate change mitigation through reforestation of mangroves and other plant species | 4.1 Evidence that biodiversity has increased (meiofauna, invertebrates etc.) in reforested area (by site) |
| 4.2 Evidence of change in coastal profile, erosion, shoreline width  4.3 # of households that are protected by newly planted areas. |
| Output 4.1: Residents are trained in the care of seedling and nurturing of plants until they are fully matured/established. | 4.1.1 # of seedlings propagated (to transplanting stage) |
| Output 4.2: Trees successfully planted in vulnerable coastal habitats and are properly maintained on an ongoing process. | 4.2.1 Total height above ground (Avg) of Seedlings (from soil mark to the apical bud)  4.2.2 Carbon accumulation rate (by site) |

Table 7: EDUCATION AND AWARENESS CORE INDICATORS

|  |  |
| --- | --- |
| Result Statement | Core Indicators |
| Outcome 5: Strengthened understanding of climate change as well as capacity building and lesson learning to cope with climate change (by sector) | 5.1 # of lessons learned (by thematic areas) |
| Output 5.1: Education and information materials on climate change developed | 5.1.1 # of education and awareness materials/activities (by type) on the effects of climate change developed (by thematic area) |
| 5.1.2 # of stakeholders engaged with the education and awareness materials on the effects of climate change (by thematic area) |
| Output 5.2: training/certification of stakeholders to deliver educational and informational materials on climate change | 5.2.1 # of stakeholders trained/certified in the delivery of educational and educational materials on climate change |
| Output 5.3: Stakeholder have benefitted from relevant training to improve their operations in the face of climate change | 5.3.1 # Training and education programs to enhance skulls and capacities (by topic)  5.3.2 # of beneficiaries of training and education programs (by topic, sex, location) |

# Indicator Protocol

## 8.1 What is an Indicator Protocol?

The indicator protocol is a detailed definition of the indicator such as its purpose, rationale, method of measurement, data collection method and frequency, disaggregation etc. (See Table 8). An indicator protocol is developed per indicator. The advantages of having an indicator protocol are manifold:

* Facilitates deeper analysis of the suitability of each indicator for measuring what it is intended to measure
* Facilitates consensus building on the final core indicator set
* Promotes backstopping
* Promotes standardization and consistency in data collection which critical for maintaining high quality data (reliable)

Table 8: Recommended Template for an Indicator Protocol and Information Required

|  |  |
| --- | --- |
| **Type of Indicator** | *Impact/outcome/output* |
| **Name of Indicator** | *State the name of the indicator as it is in the performance measurement framework (PMF)* |
| **Unit of measurement** | *What unit/format is the information collected in?* |
| **Variable** | *What is being measured?* |
| **Rationale** | *Why was the indicator selected?* |
| **Definition of key terms** | *Include an explanation of key concepts that can be misinterpreted to ensure there is standardization in the interpretation of the indicator. Other important information pertaining to monitoring or evaluating the concepts can be noted. Links to useful information can be included.* |
| **Methodology for measuring** | *Provide a detailed enough narrative on how the data will be measured or counted and aggregated.* |
| **Data collection method /tool and source of data** | *Define what method(s) should be used to obtain the information on the indicators. This can include observation, reports (literature review), questionnaires, interviews, focus groups. The sources of the information should be listed, where possible* |
| **Frequency of data collection and who collects this information** | *Indicate how often the information should be collected and by whom. Names of persons should be explicitly identified, if possible* |
| **Disaggregation (if applicable)** | *Specify if information is to be disaggregated by: sex, age, religion, disability etc.* |
| **Qualification (for qualitative indicators ONLY)** | *For qualitative indicators there will be the need to define a ranking system, where possible*. *Terms such as level, extent to which, rate, incidence of etc. will need to have qualification criteria defined.* |
| **Questions** | *The questions to garner information pertaining to this indicator, including the why question should be listed. The why question is essentially the explanation for the change in performance (target versus the baseline)* |

**Source: Author**

An indicator protocol was developed for each core indicator of the CCCAF during the participatory M&E workshop convened July 5-7, 2016 and this was beneficial in promoting the principles in Table 9 as well as facilitating the finalization and consensus building on the core indicators. See APPENDIX I for the final core CCCAF indicators and their indicator protocols.

Table 9: Adaptation Fund Checklist for Selecting Proper Indicators for CCA Interventions

|  |  |
| --- | --- |
| **Valid** | Does the indicator measure the result? |
| **Precise** | Do stakeholders agree on exactly what the indicator measures? |
| **Practical, affordable, simple** | Is information actually available at a reasonable cost? Will it be easy to collect and analyze? |
| **Reliable** | Is it a consistent measure over time? |
| **Sensitive** | When the result changes, will the indicator be sensitive to those changes? |
| **Clear** | Are we sure whether an increase is good or bad? |
| **Useful** | Will the information be useful for decision making, accountability, and learning? |
| **Owned** | Do stakeholders agree this indicator makes sense to use? |

**Source: Adaptation Fund (2011)**

# The Performance Monitoring Framework (PMF)

## 9.1 What is the PMF?

The PMF is a Results Based Management (RBM) tool used to systematically plan the collection of relevant information for monitoring, learning and reporting. It is generally presented as a matrix that includes the result statements and their corresponding indicators. For each indicator, the associated baseline, target, source of data, frequency of data collection, and responsibility for data collection is identified. Some of this information were initially discussed and noted during the elaboration of the indicator protocol for each core indicator. However, the PMF layout allows a distillation of the critical information on each indictor. See Table 10 for an illustration of a generic PMF.

Table 10: Sample PMF

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Results** | **Performance Indicators** | **Baseline Data** | **Target** | **Source of Data** | **Method of Data Collection** | **Frequency of data collection** | **Responsible** |
| **Definition of Columns** | | | | | | | |
| ***Impact*** |  | ***Starting point*** *(year) to measure change over time.* | *What do we want to* ***achieve at the end*** *of the program*  *\*the* ***change or variance*** *is the difference between target and baseline* | *List of the individuals, organizations, documents or reports from which the* ***data on the indicator is obtained*** | *What* ***process*** *will be used to collect information on the indicator* | ***How often*** *will information be collected on the indicator* | ***Who*** |
| **Example from CCCAF** | | | | | | | |
| *Outcome 1: CLOs and relevant stakeholders are capable to implement M&E roles and responsibilities under the CCCAF project.* | *Level of capacity to implement M&E roles and responsibilities in Grenada* | *Asset base:*  *Knowledge and information:*  *Governance and management systems:* | *High Level of Capacity =*  *Asset base:*  *Knowledge and information:*  *Governance and management systems:* | *CLO progress reports on CCCAF projects* | *Interviews, inspection and observation,* | *Mid-term and End of project* | *CLOs, Ministry of Agriculture and Fishery, UNDP team* |

**Source: Author**

The PMF for the CCCAF contains aggregated information as it relates to: baseline data, targets, sources of information, methods of data collection, frequencies and responsibility for data collection. It should be noted that a baseline year of 2013 was selected since this was the inception of the CCCAF and it is also the baseline year for the Ministry of Agriculture Corporate Plan. Key elements the PMF were completed by participants at the inception M&E workshop in early July, 2016 and the CLOs in consultations with project grantees finalized the baselines and targets during mid-July to August, 2016. The **full PMF for CCCAF** is detailed in APPENDIX II.

# Linkages between the M&E Framework for CCCAF and National, Regional and International Strategies/Policies/Projects

It is important that other national development plans targeting climate change adaptation, including sector plans be reviewed to take note of possible existing linkages with national level targets and indicators that have been already been established. Important national projects on climate change were also reviewed to highlight synergies between projects. Of importance, linkages with the M&E system for the wider ICCAS project were also undertaken. Following the same logic, linkages with regional CCA-related frameworks such as the Caribbean Framework for Achieving Development Resilient to Climate Change and the Comprehensive Disaster Management Strategy 2014-2024 will also be examined to see how and if the CCCAF contributes to region-wide targets. Similarly, linkages to relevant UN indicators (the Sendai Framework for Disaster Risk Reduction, Sustainable Development Goals) will also be examined.

## 10.1 International Development Agendas

The following were reviewed:

1. *Sendai Framework for Disaster Risk Reduction (2015-2030)*
2. *Sustainable Development Goals (SDGs) 2030*
3. *RAMSAR Convention on Wetlands*

**Sendai Framework for Disaster Risk Reduction**

The Sendai Framework for Disaster Risk Reduction (SFDRR) 2015–2030 was adopted at the Third United Nations World Conference on Disaster Risk Reduction, held from 14 to 18 March 2015 in Sendai, Miyagi, Japan. The goal over the next 15 years is “the substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.” This will be realized by advancing the following 4 priorities:

* Priority 1: Understanding disaster risk.
* Priority 2: Strengthening disaster risk governance to manage disaster risk.
* Priority 3: Investing in disaster risk reduction for resilience.
* Priority 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

Whilst the global indicators for the SFDRR are not final to date, a review of them indicates that there are limited linkages with the core indicators for the CCCAF. This could be due to the fact that the SFDRR is aiming primarily to track the effects of hazards or events on the loss of lives, economic losses, and integrating DRR considerations into plans, strategies and policies. Given that the CCCAF is targeting very basic community level interventions, there is little to no emphasis on changing national policies, strategies or plans. This is wider than the scope of the community climate change adaptation fund.

**The Sustainable Development Goals 2030**

This development agenda is a plan of action for people, planet and prosperity. It recognizes that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development. There are 17 Sustainable Development Goals and 169 targets which seek to build on the Millennium Development Goals and complete what these did not achieve. They are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental. Some of the challenges noted above for establishing linkages between the CCCAF and the SFDRR also apply to the SDGs. Whilst the SDGs have a number of goals that would appear applicable to the CCCAF, when we look closer at the indicators to measure progress towards targets, there are only a few linkages as seen in Table 11.

Table 11: Linkages between the CCCAF Core Indicators and the SDGs 2030

|  |  |  |
| --- | --- | --- |
| **Goal** | **Indicator** | **Linkage with the CCCAF Core Indicators** |
| Goal 6. Ensure availability and sustainable management of water and sanitation for all | Percentage of pupils enrolled in primary schools and secondary schools providing basic drinking water,  adequate sanitation, and adequate hygiene services | School attendance (disaggregated by sex) |
| Goal 13. Take urgent action to combat climate change and its impacts | GHG emissions intensity of areas under forest management (GtCO2e / ha) | Carbon accumulation rate (by site) |

**RAMSAR Convention**

The Convention on Wetlands (Ramsar, Iran, 1971) is an intergovernmental treaty whose mission is “the conservation and wise use of all wetlands through local, regional and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world”. An initial tranche of eight effectiveness indicators, some with one or more sub-indicators, has been developed for this convention. Linkages with the CCCAF are demonstrated in Table 12.

Table 12: Linkages between the CCCAF Core Indicators and the SDGs 2030

|  |  |
| --- | --- |
| **Indicator** | **Linkage with the CCCAF Core Indicators** |
| ***Wetland sites with successfully***  ***implemented conservation or wise use***  ***management plans***  Sub-Indicator: Wetland sites with successfully implemented conservation or wise use management plans | # of natural assets monitored/researched for protection  # of key lessons identified from the research and monitoring projects to inform better management and/or protection of the ecosystems  Rate of implementation of recommendations from research on ecosystems  # of research/monitoring protocols completed (by theme) |

## 10.2 Regional Development Agendas

The following international development agendas were reviewed to establish linkages:

1. *The Comprehensive Disaster Management (CDM) Strategy 2014-2024*
2. *The Caribbean Framework for Achieving Development Resilient to Climate Change*

**The CDM Strategy 2014-2024**

The Caribbean Disaster Emergency Management Agency (CDEMA) is the region’s lead in advancing disaster risk reduction in Caricom member states. The region’s priorities are reflected in the regional strategic framework on Comprehensive Disaster Management 2014-2024, which is the third iteration of the strategy. Given that majority of the hazards impacting on Caricom States are climatic in nature, the CDM Strategy is seen as an instrument that supports the advancement of climate change adaptation in the region. A review of the M&E framework for the CDM Strategy result statements and indicators reveals that there are not significant linkages with the CCCAF since most of the indicators are focusing at building early warning systems; having policies, legislation and governance mechanisms in place; undertaking hazard and vulnerability assessments etc. Majority of these activities are very high level that would not be led by communities and therefore there are limited linkages with the CCCAF. The one linkage established with the CCCAF is depicted in Table 13.

Table 13: Linkages between the CCCAF Core Indicators and the CDM Strategy 2014-2024

|  |  |  |
| --- | --- | --- |
| **Priority Area 4 (PA 4): Strengthened and sustained community resilience** | | **Linkage with the CCCAF Core Indicators** |
| ***Regional Outcome 4.4*** | ***Indicator*** |
| Community livelihoods safeguarded and strengthened through effective risk management | None are applicable to CCCAF. The CDM Strategy speaks mainly to change in insurance coverage for communities | None provide data for the indicator.  However, many of the indicators for the CCCAF can fit within the Regional Outcome 4.4 statement. |

**The Caribbean Framework for Achieving Development Resilient to Climate Change 2009-2015**

The Regional Framework provides a roadmap for action over the period 2009-2015. The objectives of the Regional Framework are to establish direction for the continued building of resilience to the impacts of global climate change by CARICOM States. The Regional Framework is achieved through an Implementation Plan that spans the period 2011-2021. The Caribbean Community Climate Change Centre (CCCCC) is the broker of the regional framework and IP on climate change. An M&E framework has been developed to track progress in achieving the IP and the Regional Framework. Linkages with the CCCAF core indicators are detailed in Table 14.

Table 14: Linkages between the CCCAF Core Indicators and the Regional Framework on CC and IP 2011-2021

|  |  |  |
| --- | --- | --- |
| **Strategic Element 1: Mainstream climate change adaptation strategies into the sustainable development agendas of the CARICOM MS** | | **Linkage with the CCCAF Core Indicators** |
| ***Goal*** | ***Indicator*** |
| Goal 4: Build a society that is more informed about and resilient to a changing climate. | 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  RI12: Number/% of MS developing/ implementing climate change impacts and/or climate change adaptation and resilience education material and programmes in schools | # of education and awareness materials/activities (by type) on the effects of climate change developed (by thematic area)  # of stakeholders engaged with the education and awareness materials on the effects of climate change (by thematic area)  # of stakeholders trained/certified in the delivery of educational and educational materials on climate change |
| **Strategic Element 2: Promote the implementation of specific adaptation measures to address key vulnerabilities in the region.** | |
| ***Goal*** | ***Indicator*** | # of water and sanitary facilities installed (by type)  Area of land (sq. ft.) under functional irrigation system |
| Goal 1: Promote the adoption of measures and disseminate information that would make water supply systems resilient to climate-induced damage. | RI1: Number of MS adopting effective systems of Integrated Water Resource Management |
| Goal 2: Promote the implementation of measures to reduce climate impacts on coastal and marine infrastructure | RI3: Number of physical measures taken by MS for direct protection of vulnerable coastal infrastructure | Number of flood mitigation intervention erected (by type)  Rate of success of flood mitigation intervention implemented in affected areas  Evidence of change in coastal profile, erosion, shoreline width |
| **Strategic Element 5: Promote actions to derive social, economic, and environmental benefits from the prudent management of standing forests in CARICOM states.** | |  |
| ***Goal*** | ***Indicator*** |
| Goal 1: Promote the adoption of best practices for sustainable forest management | RI2: Total number forest land areas in MS | Number of seedlings propagated (to transplanting stage) |

## 10.3 National Strategies/Policies

The following national strategies were reviewed for linkages:

1. *The National Water And Sewerage Authority Strategic Plan 2016-2020*
2. *Land and Marine Management Strategy for Grenada*
3. *Grenada’s Growth and Poverty Reduction Strategy (GPRS) 2014-2018*
4. *Grenada Strategic Development Plan 2030 (not completed to date)*
5. *Grenada National Adaptation Plan (not completed to date)*
6. *Grenada National Climate Change Policy and Action Plan (not completed to date)*
7. *Ministry of Agriculture Corporate Plan (not completed to date)*

**NAWASA Strategic Plan 2016-2020**

4 key priority areas (KPA) have been identified for this strategic period. The scope of the CCCAF projects specifically support KPA 1: water quality, adequacy and service delivery. This KPA has 2 goals, whose strategic objectives and indicators would be supported by the CCCAF. See Table 15 for linkages.

Table 15: Linkages between the CCCAF Core Indicators and NAWASA Strategic Plan

|  |  |  |
| --- | --- | --- |
| **Goal 1: Improve the water quality to achieve WHO standards** | | **Linkage with the CCCAF Core Indicators** |
| ***Strategic Objective*** | ***Indicator*** |
| Establish closer collaboration with the relevant authorities to achieve water quality to meet existing WHO standards | Water quality reaches WHO Standards | Quality of water |
| **Goal 2: Ensure the provision of a consistent supply of quality water to the public while adapting strategies to offset the effects of climate change** | |
| ***Strategic Objective*** | ***Indicator*** | # of water and sanitary facilities installed (by type) |
| Examine all options to secure funding to increase treated water storage capacity by at least 3 million gallons by December 2020 | Water storage capacity increase by 3 million gallons |

**Land and Marine Management Strategy for Grenada**

The Land and Marine Management Strategy (LMMS) presents a practical framework for addressing the socioeconomic drivers and environmental pressures that combine to create varying impacts and degrees of vulnerability manifested in weak institutions and loss in environmental quality. The overall strategy goal is to achieve integrated national development that is environmentally sustainable. A review of this strategy uncovered that there is no M&E plan in place to track the progress in implementing its objectives. However, Table 16 highlights the objectives that the M&E system for the CCCAF will provide useful information towards. In this instance, the CCCAF M&E plan can be used as a possible starting point towards building an M&E system for the Land and Marine Management Strategy for Grenada.

Table 16: Linkages between the CCCAF Core Indicators and LMMS

|  |  |  |
| --- | --- | --- |
| **Goal - Outcome 3: To develop and widely utilize tools for creation of a seamless integrated system for management of Land and Marine Resources.** | | **Linkage with the CCCAF Core Indicators** |
| ***Objectives of Outcome 3*** | ***Indicator*** |
| To provide reliable data on the quantity, degradation status and availability of  natural assets to enable effective management and efficient use of limited  resources | None | # of natural assets monitored/researched for protection  # of research/monitoring protocols completed (by theme) |
| To promote awareness and understanding of the need for sustained  environmental protection, conservation and management | None | # of training and education programs (by topic – environmental protection)  # of beneficiaries of training an education programs (by topic, sex and location) |
| To provide the best practical environmental options (BPEO) for management of  limited resources cognizant of socio-economic factors, cultural values and beliefs  held on the environment | None | # of key lessons identified from the research and monitoring projects to inform better management and/or protection of the ecosystems |

**Grenada’s Growth and Poverty Reduction Strategy (GPRS) 2014-2018**

The 2013-2018 GPRS will act as the framework through which the actions and interventions of the Government and supporting development partners can design programmes within to achieve the greatest impact. Currently an M&E plan does not exist for this strategy, but strategic priorities have been agreed to in consultation with key stakeholders. Linkages between the strategies priorities of the GPRS and the CCCAF are illustrated in Table 17. As indicated above, the CCCAF M&E plan can be used as a possible starting point towards building an M&E system for the GPRS.

Table 17: Linkages between the CCCAF Core Indicators and GPRS

|  |  |  |
| --- | --- | --- |
| **Thematic Focus I Macroeconomic Stabilization - Engendering Resilience** | | **Linkage with the CCCAF Core Indicators** |
| ***Strategic Objective 2.2: Engendering And Securing Participation Of Communities In The “Pro-Poor” Growth Development Agenda*** | ***Indicators*** |
| Actions:  2.2.1k: Equip Financially-Challenged Community Persons And Groups To Become Commercial Drivers Of A Viable ‘Natural Herb’ Sub-Sector | None | # of farmers/fishers practicing new techniques (specified per type of technique e.g. FAD, mixing feed, organic agriculture, iceboxes. lionfish harvesting, irrigation systems)  Number of equipment introduced/installed and operational (by type) |
| ***Strategic Objective 3.2: Development Of Agriculture And Agribusiness Sector*** | ***Indicators*** |  |
| Actions:  3.2.6a: Support Appropriate Use Of Irrigation Techniques  3.2.6e: Implement Programs That Target Non-traditional Agri-Products  3.2.9e: Increase Plant Propagation Capacity  3.2.9f: Support The Commercial Development Of Composting Units | None | Area of land (sq. ft.) under functional irrigation system  Yields of produce (lbs?) (by type of technique in fishery and agriculture sectors)  # Training and education programs (by topic)  # bins (compost and garbage) installed (by CCCAF) |
| ***Strategic Objective 3.3: Development Of Tourism And Hospitality Sector*** | ***Indicators*** |  |
| Actions  3.3.5: Ensure Balance/ Sustainability Of Natural Environment Through Collaboration On Conservation Initiatives. | None | Evidence that biodiversity has increased (meiofauna, invertebrates etc.) in reforested area (by site)  # natural assets monitored/researched for protection |
| **Thematic Focus III: Reducing Vulnerability – Natural Disasters, Environmental Management, Regional Development** | |  |
| ***Strategic Objective 4.1: Sustainable Land Management*** | ***Indicator*** |  |
| Actions:  4.1.2b: Initiate measures towards minimizing impact of climate change  4.1.2c: Promote reforestation in key areas | None | Number of seedlings propagated (to transplanting stage)  Total height above ground (Avg) of Seedlings (from soil mark to the apical bud) |

**Other National Development Strategies**

At the time of preparation of this document, the Grenada SDP was not finalized so mapping could not be undertaken. However, it is known that the environment, climate change and disaster risk reduction would be addressed in this document in a significant way. Similarly, the Grenada National Adaptation Plan, the Grenada National Climate Change Policy and Action Plan and the Ministry of Agriculture Corporate Plan were not finalized at the time of the drafting of this M&E plan.

## 10.4 National Projects

The following CC projects/programs of national importance were reviewed:

1. *Grenada Strategic Program for Climate Resilience (SPCR)*
2. *Caribbean Development Bank’s Country Strategy Paper (CSP) for Grenada*
3. *M&E Plan for Component 2 of the ICCAS Project*

**SPCR**

The Pilot Program for Climate Resilience (PPCR) housed within the Strategic Climate Funds (SCF) established under the Climate Investment Fund (CIF) aims to help countries transform to a low-carbon climate resilient development path, consistent with poverty reduction and sustainable development goals. As a PPCR pilot country, Grenada is eligible to receive financial and technical assistance to support its efforts to build climate resilience. PPCR also provides the added value of assisting the Government of Grenada (GoG) to manage its climate change adaptation resources efficiently and comprehensively, avoiding duplication and enabling a platform for leveraging support from other international development partners and the cooperation of the private sector. Table 18 below establishes linkages between the CCCAF core indicators and the indicators established for the types of investment projects Grenada would want to advance under the PPCR mechanism.

Table 18: Linkages between the CCCAF Core Indicators and the PPCR

|  |  |  |
| --- | --- | --- |
| **Expected Key Results from the Implementation of the Investment Strategy** | | **Linkage with the CCCAF Core Indicators** |
| ***Investment Project 1: Disaster Vulnerability and Climate Change Reduction*** | ***Indicators*** |
| Key Result: Reduced vulnerability to natural hazards and the adverse impacts of climate change in Grenada. | * Improvements in flood mitigation/drainage works * Improvements in prevention of rock falls, landslides and erosion mitigation * Climate proofing of critical bridges * Increased drought resilience in water supply systems | Number of flood mitigation intervention erected (by type)  Rate of success of flood mitigation intervention implemented in affected areas  Number of water and sanitary facilities installed (tanks, compost toilets, showers etc.)  Evidence of change in coastal profile, erosion, shoreline width |
| **Goal 2: Ensure the provision of a consistent supply of quality water to the public while adapting strategies to offset the effects of climate change** | |
| ***Investment Project 2: Forest Rehabilitation*** | ***Indicator*** | Number of seedlings propagated (to transplanting stage)  Total height above ground (Avg) of Seedlings (from soil mark to the apical bud) |
| Key Result: Reduced vulnerability to climate change through the restoration and preservation of valuable forest resources through effective land use practices that also promote sustainable livelihoods, contribute to environmental sustainability and reduce poverty. | * Production and propagation of seedlings * Acreage restored or brought under forests |
| Technical Assistance 1: Water Resources Assessment and Management Study | * None | # Training and education programs (by topic)  # of beneficiaries of training and education programs (by topic, sex, location) |

Notable is that the PPCR comprises five core indicators that all partner countries are expected to track between 2013 and 2016. These are:

1. Number of people supported by PPCR to cope with CC;

2. Degree of integration of CC in national planning;

3. Extent to which vulnerable households and other groups use PPCR tools;

4. Strengthened capacity to mainstream climate resilience;

5. Quality of and extent to which PPCR models are developed and tested.

Unfortunately, not one of the PPCR cooperating countries regularly monitors the core indicators. Therefore, a limited relevance can be expected for the development of the national CCA M&E system (Eberhardt, 2013). However, in the event that the investment projects mentioned in Table 18 are operationalized and M&E information is collected; the government can combine these data with those highlighted in column 2 (linkages with the CCCAF) to get a national overview on progress related to these indicators.

**Caribbean Development Bank Country Strategy Paper for Grenada**

The Country Strategy Paper (CSP) defines the Caribbean Development Bank’s (CDB) strategic approach in Grenada over the period 2014-18. It is aligned with the country’s development and poverty reduction strategies, CDB’s strategic plan, and complements efforts of other development partners. Promoting environmental sustainability is one of the six areas of priority to be supported by CDB. The specific activities related to implementation of water adaptation measures for farmers and communities; solid waste management and water sanitation for communities are aligned to thematic areas of the CCCAF. The linkages between the indicators used in CDB’s CSP for Grenada and the M&E framework for CCCAF are detailed in Table 19.

Table 19: Linkages between the CCCAF Core Indicators and CDB CSP

|  |  |  |
| --- | --- | --- |
| **Country Development Goals** | | **Linkage with the CCCAF Core Indicators** |
| ***Enhancing Sustainability by Increasing Resilience to Climate Change*** | ***Indicators*** |
| Sector Outcome: Increased resilience of farmers and communities to climate change risks. | Percentage of farmers using water efficient technology in target areas.  Number of households with improved access to water supply in target areas. | # of farmers practicing new techniques (by type)  # of new equipment installed/operational (by type)  Area of land under functional irrigation system  Rate of water consumption  Quality of water  Number of water and sanitary facilities installed (tanks, compost toilets, showers etc.) |

**Component 2 of the ICCAS Project**

Component 2 of the ICCAS aims to achieve the following *“Improved planning, management and efficient use of the water and coastal zone resources thought the establishment of integrated water resource management approaches and the formulation of coastal zone managment policies and management plans*.” A sub-component is “showcasing adaptation measures in the water and coastal zone sector”. Therefore, GIZ started to implement three pilot projects in different communities. Although community-based, national actors are partially involved as well in order to advice, learn and be able to replicate the approach. The pilot projects are:

1. Installation of a community rain-water harvesting system (Blaize, St. Andrew, start in 2015, mainly in cooperation with the National Water and Sewerage Authority)
2. Set-up of a climate smart agriculture (CSA) demonstration plot and learning center and capacity development (Mt. Moritz, St. George, start in 2014, mainly in cooperation with a NGO and technical officers from the Ministry of Agriculture)
3. Mangrove rehabilitation through a co-management approach (Telescope, St. Andrew, start in 2014, mainly in cooperation with a co-management board consisting of community members and technical officers from Forestry, Environment and Tourism)

In order to learn from these pilot projects, to improve effectiveness, to steer implementation and to demonstrate successful adaptation a monitoring and evaluation (M&E) system was set up. Relevant linkages with the CCCAF M&E framework are depicted in Table 20. It is important to note that the GIZ component of the ICCAS project utilizes a slightly different approach for the design of the M&E system than CCCAF. For GIZ, the goals and indicators specify a desired future status as part of the change process and are, therefore, formulated with the verbs ‘is’ / ‘are’. The RBM approach designs indicators to be unbiased and neutral. That is the direction of change in the future is not specified. This is reflected in the result statements and the targets.

Table 20: Linkages between the CCCAF Core Indicators and Component 2 of ICCAS

|  |  |  |
| --- | --- | --- |
| **Pilot project 1: Installation of a community rain-water harvesting system.** | | **Linkage with the CCCAF Core Indicators** |
| ***Result/Objective*** | ***Indicators*** |
| RWH Outcome: Increase resilience of Blaize community through water supply from rain water harvesting | Reliability of water supply from reservoir is confirmed. | None |
| RWH Output: RWH system is operated successfully | Water-level in reservoir is secure above a minimum level of x.  Water quality in reservoir complies with standards | Quality of water  Number of water and sanitary facilities installed (tanks, compost toilets, showers etc.) |
| CSA Outcome: Use of CSA techniques has increased. | Application of CSA techniques increased by x during project duration. | # of farmers practicing new techniques (by type)  # of new equipment installed/operational (by type) |
| **CSA Output 1:** CSA knowledge is included into extension and other technical services. | None | None |
| **CSA Output 2:** Physical infrastructure of the CSA model farm learning centre is installed & operating | RISE assessment at end of project indicates improved water use compared to project start. | None |
| **RECCOMM project goal:** The health of the telescope mangrove forests and associated ecosystems is increased. | Mangrove quality is improved at project closure. | None |
| **RECCOMM Output 1:** Mangrove rehabilitation measures are demonstrated in practical pilots | Mangrove health in restoration sites. | Total height above ground (Avg) of Seedlings (from soil mark to the apical bud) |
| **RECCOMM Output 2:** Community members realize alternative / sustainable sources of income without damaging surrounding forests and eco-systems. | Sustainable mangrove harvesting methods have increased by x percent during project. | None |

# Linkages between the M&E Framework for CCCAF and National M&E Systems

An assessment of the existing national M&E systems that can support CCA M&E was undertaken in 2013 by Mr. Alfred Eberhardt, which was commissioned by ICCAS in support of Outcome 1: Strengthened capacity of the Government of Grenada to mainstream adaptation considerations into national development planning (at various scales), supporting inter-sectoral mechanisms for climate change adaptation also including the private sector.

In his report, Mr. Eberhardt stated that, *“there are several M&E systems in place in Grenada, which are operated within the responsibility of sector ministries and other institutions. None of them specifically focuses on adaptation. In general, they are quite sporadic and heterogeneous. As a general challenge, many M&E activities in Grenada are not digitalized, are not undertaken on a regular bases but rather project related and/or do not result in a systematic analysis and reporting but merely compile data”*(2013:2).

The main national M&E systems that were reviewed by Mr. Eberhardt in 2013 are listed in Table 21. Note the last column on the left that highlights to what extent these existing M&E systems are relevant to or serve as useful sources of information for the M&E of CCCAF. Of importance to highlight is the **Annual Agriculture Review** compiles various agricultural data (e.g. yields, irrigation intensity) but also extracts key findings such as strength and weaknesses of political relevance. SWOT analysis are also undertaken for various sub-sectors within the agriculture sector such as *fruits, vegetables and root crops, agro-processing, fisheries, forestry etc*. This type of contextual information can be very insightful towards explaining some of the trends observed for those indicators related to the food security thematic area of the CCCAF M&E system. In other words, these review reports can be a useful contribution towards answering the ‘why’ question.

Table 21: National M&E Systems and Relevance to the Needs of the CCCAF

| **M&E / data system** | **Responsible institution** | **Main goal** | **Regular operation / single application** | **Under development**  **Under operation** | **Digitalised** | **Resulting in a report / analysis** | **Relevance for CCCAF**  **(High – Medium – Low)** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Irrigation consumption | MoAFFLE  Land Use Division | Database on water consumption for irrigation | Regular | Under  Development | Yes | No | High  There are specific core indicators on irrigation |
| Annual Agricultural Review | MoAFFLEPlanning Unit | Annual performance report of all sectors of agriculture | Regular | Operational | No | Yes | High  Useful contextual information for answering the  “why” question |
| Coastal Monitoring | MoAFFLE  Environmental Unit | Monitoring of the quality of coastal areas | Regular | Under Development | Not clear yet | Not clear yet | High  There is a core indicator that is keen to track changes in the coastal profile |
| Reporting by agricultural extension service | MoAFFLE  Extension Unit | Feedback by extension officers on key agricultural developments | Regular | Operational | No | No | High  NB: But given that reporting is low, this will not be a viable source of information |
| Meteorological Data | Met Office | Regular Met. Monitoring  Warning functions (hurricane, heavy rainfall, tsunami) | Regular | Operational | Yes | Very limited | High  NB: But given that reporting is low, this will not be a viable source of information |
| Disaster Damage Assessment Monitoring | NaDMA | Damage assessment after disasters for compensation claims, reconstruction needs etc. | After each disaster | Operational | No | No | High  NB: But will only be useful if an event occurs that tests the resilience of some of the infrastructure supported by CCCAF (mangrove reforestation, flood mitigation, soil stabilization) |
| Sector-wide performance monitoring | Cabinet Office  Policy Monitoring and Evaluation Unit | Accountability of sectors towards PM for accomplishing main government goals | Regular | Operational | No | No | Low |
| Water Information System (WIS) / GIS including agricultural land-use, weather and water management data | MoAFFLE  Land use Division | Planning tools for government, researchers, consultants etc. on the likely impacts and hazards arising from climate change | Regular | Operational | Yes | No  Only rainfall | Low |
| Land degradation assessment | MoAFFLE  Land Use Division | Land degradation assessment within project framework | Single | Under  Development | Partly | Yes | Low |
| Drinking Water Production Monitoring | NAWASA | Operational accounting and reporting | Regular | Operational | No | Very limited (annual report) | Low |

Other notable outputs fromMr. Eberhardt in his 2013 report were:

1. An analysis of the framework conditions for the development of an adaptation M&E system;
2. Recommendations for approaches and key elements for the M&E system development;
3. Recommendations regarding supportive interventions by the ICCAS Project.

The recommendations for promoting an adequate CCA M&E system (output #2) for Grenada are summarized in the left column in Table 22. Key activities undertaken in the development of the M&E Framework for the CCCAF that support these recommendations are highlighted in the right column of Table 22.

Table 22: How the recommendations of an adequate CCA M&E system were addressed in the CCCAF M&E Approach

|  |  |
| --- | --- |
| Recommendations for an adequate CCA M&E System for Grenada  (by Mr. Eberhardth, 2013) | How does the M&E for CCCAF support these recommendations |
| 1. Objectives of the M&E system should include steering of the adaptation process, learning and accountability. | These are the overarching goals of the M&E system as detailed in Section 3. |
| 1. Users will comprise a large group from government, politics, stakeholders and the general public. | A participatory M&E approach is being utilized to develop and sustain the M&E system for the CCCAF. The inception workshop which took place July 5-7 2016 included representation from the Ministry of Agriculture, Land, Forestry, Fisheries and the Environment (MOALFFE), Carriacou Fisher Folk, Oceans Spirits, UNDP Barbados, UNDP ICCAS in Grenada, GIZ/ICCAS, Ministry of Carriacou, NAWASA, Forestry Department, and UNDP Ridge to Reef Project |
| 1. At least during the initial stage, the M&E system should focus on selected key sectors. | As mentioned above, the M&E system for the CCCAF will include **core indicators specific to thematic areas** to allow the M&E team to better track the level of the contribution of the community projects to the following sectors in Grenada: ***water resources, environmental protection, forestry, food security (agriculture and fishery sectors) and education and awareness*** |
| 1. Link M&E system development with the NAP planning through result chains. | The Grenada NAP is still being developed. Upon its finalization linkages with the core indicators of the CCCAF will be made and included in Section 10.3 |
| 1. Operationalize the M&E system through an implementation plan and through indicator fact sheets. | Appendix I of this report details the ‘indicator protocol’ for each core indicator. This is similar to the indicator fact sheet. Further, Section 16 details the implementation schedule and costs for sustaining the M&E processes required for the CCCAF |
| 1. Provide sufficient resources and clarify responsibilities for implementation. | This is clearly identified in the indicator protocol (Appendix I) and the Performance Monitoring Framework (Appendix II). |
| 1. Make use of existing data and M&E systems as much as possible (inventory of M&E systems). | To the best extent possible, existing databases managed by various Ministries working in the thematic areas listed above, will be utilized. See Sections 10.4 and 11. |
| 1. Indicators should reflect adaptation results, processes and CC impacts. | This is done with the establishment of core indicators at the output, outcome and impact levels. Further, the articulation of the results chain for the CCCAF allowed for the development of outputs and key process related indicators for CCA. |
| 1. Limit the number of indicators to reduce complexity. | This is fully embraced particularly given the limited human capacities within Grenada and particularly within the CCCAF project to undertaken M&E data collection, analysis and reporting. |
| 1. Ensure good-quality indicators (apply ‘SMART Rule’). | The development of the indicator protocol allowed for the setting of high quality core indicators that meet the Adaptation Fund Checklist for Selecting Proper Indicators for CCA Interventions. It is envisaged that the SMART criteria would also be met for the final core indicators, particularly given the critical thinking and rigorous information that were required to complete the indicator protocol |
| 1. Link the M&E system to regional / international processes. | To the best extent possible, the M&E framework for the CCCAF was linked to national, sectoral, regional and international development agendas that address CCA. See Sections 10 and 11. |

# 12. Data Collection Methods, Tools and Skills for CCCAF

## 12.1 Methodology

The methods utilized to collect data can generally be classified as either qualitative or quantitative approaches. The qualitative approach puts the expertise and opinion of the stakeholders (grantees, beneficiaries, donors, etc.) at the center of the research. The quantitative approach aims at quantifying or measuring a phenomenon to establish linkage between variables. In recent times, the use of mixed methods is highly supported as *“not everything that can be counted counts, and not everything that counts can be counted” – Albert Einstein.*

Data collection for measuring performance of the CCCAF will involve a combination of the following methods:

1. *Observation*
2. *Interviews*
3. *Literature review*
4. *Focus groups*
5. *Key informants*

**Observation** is a qualitative method and it is a useful method because the team can learn first-hand information about complex activities and it is the best way to confirm whether products and services are being produced or delivered. For instance, observation will be the main method to confirm that equipment and technologies introduced are installed and operational. Field observation should be recorded through photos and/or videos to portray the information to readers.

**Interviews** will be the main methods used to collect information for the surveys that have been developed to collect data on the core indicators. Both qualitative and quantitative information will be collected from the target audience, which includes project grantees, beneficiaries and sometimes indirect beneficiaries[[2]](#footnote-2). In instances where there are several individuals responsible for project implementation (multiple grantees), focus groups would have been a useful method to obtain information from them collectively. However, focus groups do have the disadvantage that they should contain between eight (ideal) to twelve questions maximum to allow sufficient time for the rich discussions. It is envisaged that the final individual project questionnaires will contain more than twelve questions, which reduces the chances of using the focus group approach.



**Tips for planning interviews and focus groups:**

* Participation must be voluntary; and ensure that the interviewee knows that his/her identity will be anonymous and responses will be confidential
* Choose a meeting place that is a neutral setting, not very noisy and will allow participants to isolate themselves and not be distracted by work or family
* Use a semi-circular seating arrangement for focus groups
* For focus groups; a two-man team is desirable – a facilitator and a note taker. The facilitator conducts the interview, facilitates the discussion and manages the time. The note taker records the discussion on tape as well as takes notes throughout the discussion. The note taker should also take notes on the environmental elements that could influence the course of the discussion and dynamics observed among the group: how they interact, silent participants etc.
* For focus groups it might also be important to set up from ground rules for instance: all ideas are equally important, all contributions are anonymous, everyone is encouraged to participate

*\*\*Guidance on undertaking interviews are provided in Section 12.3: Probing and Prompting.*

**Literature review** of secondary sources such as reports and records from Ministries and NGOs undertaking work within the thematic areas of the CCCAF will be undertaken. Secondary sources will be largely useful in verifying information collected during interviews. Secondary data sources were also very helpful in setting the baselines for some of the core indicators.

**Key informants** are individuals who, because of their position, experience and/or knowledge can provide insight and information into the larger population and/or a particular group. They should be targeted to complete some of the baseline information, particularly in those instances where documentation as not available for 2013 (baseline year)

## 12.2 Tools

The primary tools developed to collect information on the 29 community projects include:

1. *A Master Survey*
2. *Standardized Forms*

A **Master Survey** has been developed that contains both open and close ended questions, which is translated into qualitative and quantitative data, respectively. The qualitative questions in the survey will help us to explore the “why”, “how”, “when”, “what” and “who” questions. The Master Survey is detailed in APPENDIX III, and it can be seen that each question is specific to a core indicator and the source of the information are grantees, beneficiaries, or relevant ministries. The Master Survey forms the backbone for the development of project specific surveys, which will only contain questions specific to the core indicators relevant to that community project.



**CLOS should note the following when developing project specific questionnaires:**

* Two surveys should be prepared per project – one for the grantees and the other for beneficiaries (more than likely the direct beneficiaries only). The rationale is that majority of the questions will be directed towards the project grantees whilst the questions assessing the performance and quality of the interventions would need to be collected from a sample of beneficiaries. However, there will be overlap with some of the questions posed to the grantee and beneficiaries; but many of the questions directed to the grantee will not be applicable to the beneficiaries. Hence, two separate surveys per project will reduce confusion when in the field. APPENDIX III indicates those questions that are relevant to the grantee or the beneficiary, or neither of them. This should be used as the guide when preparing the two surveys for each project.
* A unique identifier must be assigned to each questionnaire. The unique identifier should comprise the letter of the Parish that the community project is being executed in, the last few digits of the project #s assigned followed by incremental ID numbers such as **001, 002, 003** etc. For example, a questionnaire from a project in St. John that has the project number 2014-175 should be labelled **J175\_01**. This number must be written on each page of that questionnaire, so in the event a page becomes loose, it can be easily re-joined to the correct questionnaire. In the excel form, this number should be written in the column “ID#” and that entire row must contain information pertaining to that single questionnaire only. This process will be repeated for each questionnaire from that project.
* The question numbers in the questionnaire must mirror the number in the Master Survey so that when the data in being entered into the excel database, the right information is entered into the right column. This is particularly important for the quantitative questions that will be stored in the excel database. Note that the qualitative data will be analyzed using a methodology called qualitative content analysis and this will be done in MS Word.

**Standardized forms** for data collection have also been developed to collect quantitative data on:

1. Crop yields,
2. Fish yield and quality,
3. School attendance (by sex),
4. Participants’ registered for training sessions
5. Number seedlings grown and sold,
6. Amount of animal feed produced from waste
7. Amount of organic compost

This information will be collected primarily by the grantees over time and must be entered into the excel database by the CLO assigned to the project so that trends can be analyzed. APPENDIX IV details the seven (7) standardized forms noted above.

## 12.3 Skills: Probing and Prompting

Probing is important to ensure that the qualitative interviews (open-ended questions) are successful. The master survey for the CCCAF includes approximately 26 qualitative questions, which are listed in Table 23.

Table 23: Qualitative Questions in the Master Survey

|  |
| --- |
| Question # |
| 6. If unable to work, please state reasons why this is so |
| 7. If employed, what is your job title or what do you do? |
| 11. How did you find out about this project and became involved? (e.g. involved in training, adaptation infrastructure/technology introduced etc.) |
| 12. Do you think there are barriers or things that prevented and will continue to prevent others from accessing the benefits provided by this project? If yes, what are the barriers? How do you think we can reduce the barriers? |
| 14. List what were the reasons for the rate of success reported in improving options to cope with climate change threats – that is, what worked well and what could be improved? |
| 15. Do you think there are other factors outside of this project that could have contributed (positive or negative) to the level of success you think was achieved? |
| 16. Were you invited to design or develop this project from the beginning? |
| 17. Did you notice a change within your household and or the wider community as a result of this project? If yes, please describe the changes and who was affected. |
| 18. Do you think there are any vulnerable groups that were excluded or forgotten from this project? How can we strengthen their inclusion? |
| 20. What do you recommend is needed to promote sustainability of this project? That is, when the project funding is completely utilized, what is needed to ensure the benefits of the project do not end? |
| 24. For agriculture projects, is there a noticeable increase in the availability of crops, particularly during the dry season? Describe |
| 28. If equipment was installed but not operational, please provide reason why it has not been operational to date. |
| 30. Do you think there are other factors outside of the support provided by the project that could have contributed to the change (positive or negative) observed in the average attendance rates recorded by the school? |
| 37. What were the reasons for the rate of implementation of the recommendations – what factors supported implementation and what factors slowed implementation? |
| 38. What do you think would increase the rate of implementation of the recommendations of the research? |
| 40. What are the factors that contribute to the success/failure of solid waste cleanup campaigns?  Success:  Failure: |
| 42. What is the change observed from installing compost/ garbage bins? |
| 43. How many research studies have been completed and what were the topics? |
| 44. Do you think the findings from the research and the information in the monitoring protocols are relevant to support better management of the ecosystems? Explain |
| 45. Has there been an observed changed in the biodiversity since the reforestation of the area? What types of plant and animal life are being observed? |
| 54. List what worked well and could be improved in the execution of the training and/or education programs to build awareness of climate change |
| 55. How did you find out about and became involved in the education and awareness programmes offered by this project? |
| 59. How did you find out about and became involved in the training of trainer programmes offered by this project? |
| 60. List what topics were covered in the training and education programs provided to residents/farmers/fishers to enhance their capacities to achieve the objectives of the project? |
| 62. How did you find out about and became involved in the training offered by this project? |
| 63. List what worked well and what could be improved in the execution of the training and education programs to build capacities within this sector? |

A good qualitative interviewer is someone who listens extremely well, knows the topic and questions by heart, but above all, has great probing and prompting skills. Probing allows interviewees to talk freely and openly but simultaneously keeping them on track towards providing the answers to the questions. Very often a distinction is made between two types of probes: directive and non-directive probing. For directive probing, you give the interviewee direction: I want you to talk more about this very specific element. And very often you do this because the information is incomplete and you as an interviewer want to know more about it. In a non-directive probe you don't do that. You give the floor, the opportunity, to the interviewee to wander about, wander around, to give his or her own answer. Like posing the question, can you explain that?



**The following probing tips are provided for CLOs when undertaking interviews or focus groups in the field:**

* Ensure to greet the interviewee(s) and inform them of the purpose of the interview or focus group. Highlight the approximate timeframe it should take to complete the exercise
* Repeat the last thing an interviewee said and ask them to continue, OR continually say “uh huh” or other affirmative noises to encourage them to continue speaking on a topic, OR remain silent and wait for the interviewee to continue
* Do not use emotional, biased or loaded language – try to be neutral
* Keep a neutral reaction to interviewees’ responses to questions
* Be prepared to reframe questions if the interviewee appears confused or unclear after a question has been posed. This is why it is important to fully understand the context for each question, which is detailed in the indicator protocol. Once an interviewer is clear on the purpose of a question it will be easier to reframe the question without losing focus of the information that is required
* Avoid leading questions: Leading questions are phrased to suggest a particular answer or to imply that one answer is expected or more correct. The examples in the left hand column of Table 24 are phrased to elicit answers related to fears, actions and treatments, respectively; which will bias the findings. Allow people to answer in their own terms voicing their own views, values and experiences. This can be promoted by reframing the leading questions into non-leading questions as illustrated in the right column in Table 24.

Table 24: Avoiding Leading Questions

|  |  |
| --- | --- |
| Examples of leading questions | Examples of non-leading questions |
| “What fears do you have when your baby’s diarrhoea does not stop?” | “How do you feel when your baby’s diarrhoea does not stop?” |
| “What actions do you take to stop his/her diarrhoea?” | “What do you do when his/her diarrhoea does not stop?” |
| “How good was the treatment your baby got at the health centre?” | “How do you feel about the treatment your baby got at the health centre?” |

## 12.4 Sampling

Identifying interviewees during fieldwork will draw 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, **criterion and convenience sampling** will be applied in a two-stage process to maximize their benefits. Criteria were established for grantees and direct beneficiaries, as follows:

* Grantees are the recipients of funds that have overall responsibility for the roll out of the initiative
* Direct stakeholders are those that receive direct support and are aware they are receiving support. For instance, individuals/agencies attending workshops/training or other forms of capacity building provided through the community projects that are funded by CCCAF. Residents/agencies directly benefitting from infrastructure build such as drip irrigation, water harvesting, slope/soil stabilization efforts.

Due to the plethora of stakeholders engaged across the 29 projects, it is not feasible to interview all cases; therefore, invitations will be sent to as many as possible with final interviews to be 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.

### 12.4.1 Sample Size

In research the sampling method and sample size are questioned particularly when the external validity and the ability to generalize findings to the wider population, are raised. For sample size, the arguments are different for qualitative versus quantitative research: “quantitative researchers usually have an idea of how many cases they will need in order to test their hypotheses at the beginning of a project. In contrast because qualitative research is exploratory by nature, qualitative researchers may not know how much data to gather in advance” (Baker and Edwards, n.d.: 4-5). Generally, in qualitative research you stop interviews when you have met “theoretical saturation”, which is the point where the researcher is no longer learning new information on the topic.

The M&E of the CCCAF is participatory in nature; hence, qualitative research techniques such as interviews are being utilized. Also, given that convenient sampling will be done, it is difficult to establish an appropriate sample size in advance, since it is largely driven by the availability of the participants.



**However, the following should be kept in mind by CLOs and other field officers when conducting interviews:**

* It is important to ensure that a mix of males and females are represented in the final sample to ensure that the views of both are reflected.
* Whilst it is impossible to say, in advance, when the saturation point will be reached, a cross-section of the beneficiaries should be targeted. For instance, single headed households, a wide age range of beneficiaries etc. This will allow the opinions and perspectives of a diverse audience to input into the research

# Data Verification, Storage and Analysis for CCCAF

## 13.1 Verification

All data collected from the communities should be subject to basic validation procedures to ensure that data are complete and internally consistent.



**To ensure data is verified and accurate the following should be noted:**

1. CLOs have been assigned to parishes and thematic areas. This means that for majority of the community projects, there will be 2 CLOs having oversight at any time – one CLO will lead and the other will shadow. The CLO assigned to the parish for a project will take the lead in preparing data collection tools, collecting data in the field and cleaning and entering the data into the excel database or undertaking qualitative analysis. The ‘shadow’ CLO will perform a review and verification function to ensure that data collection tools are comprehensive and data entry is accurate. See Appendix V for the distribution of projects by parish and TA, the leads and shadow per project and the roles and responsibilities for leads and shadows
2. When collecting information in the field, audio recordings of interviews should be done, as long as the interviewee is comfortable with this. Interviewees should also be reassured that questionnaires are anonymous. Audios should be replayed after returning from the field to verify the notes recorded for the open-ended questions;
3. Answers recorded for open-ended questions should be repeated to interviewees so that they confirm it reflects their views;
4. Whilst the master survey form is extensive; the individual project surveys will be significantly less since most projects only have between 7-15 indicators out of the 34 core indicators. The CLOs assigned to lead and shadow a project will be responsible for going through each paper survey and comparing it with the data in the excel database to make sure the two versions represent the same information. Checking each question is a best case scenario for verifying if the information was entered correctly;
5. Answers for close-ended questions will be pre-defined in the excel database to limit errors during data entry;
6. Frequencies on data using the pivot table function will also be executed in excel to pick up any discrepancies in the dataset.

## 13.2 Data Storage

Microsoft Excel and Word will be utilized to store the data collected in the field from the standardized forms and the surveys. For the most part, the close-ended questions will be stored in excel whilst the open-ended questions would need to undergo qualitative data analysis using Microsoft Word.

## Data Analysis

### 13.3.1 Qualitative Data Analysis



**Guide to Qualitative Content Coding (adapted from Gorgens and Kusek, 2009, Hsieh and Shannon, 2005 and O’Connor and Gibson, n.d.):**

***Step 1***: Arrange the data for qualitative content analysis by listening to the tapes and reviewing the notes and combining this information to prepare a comprehensive narrative of each interview or focus group. Ensure to type up the information verbatim, as best as possible. Once the information is in digital format, move onto the next interview recording and notes and repeat the process. When all the interviews and focus groups sessions have been converted into comprehensive individual digital files, you are ready to move onto the next step.

***Step 2***: Decide on the unit of analysis – for our purpose it is desirous to analyze the information first based on the project level, then the parish level and the thematic area. Once the project level unit of analysis is completed, this information will be the basis for grouping information into parish level and thematic areas for further analysis. CLOs have been assigned to parish and thematic areas and will therefore be responsible for aggregating the information and qualitative content coding the information along these areas. See APPENDIX V for the distribution of community projects by TA and Parish level.

***Step 3***: Read through all the qualitative data from the various interviews and focus groups for the unit of analysis selected. Let’s say you start with the parish level as the unit of analysis: identify categories or themes in the qualitative data, e.g., concerns, suggestions, strengths, weaknesses, recommendations, etc. It is also important to identify patterns in the data such as similar responses, similar issues, or describing similar situations and use these patterns to develop categories. Underline the main text from the interview. The best way to be able to do the categorization is to organize the data in a way that is easy to look at and that allows you to go through each question and all the responses from the various interviewees. The table below is the recommended format for coding and categorizing ideas from qualitative interviews from multiple sources.

Table 25: Matrix for deriving codes and categories for qualitative data

|  |  |  |  |
| --- | --- | --- | --- |
| Question # | ID# | Responses | Emerging categories/themes |
| 8. What were the reasons for the rate of success reported in improving options to cope with climate change threats – that is, what worked well and what did not work well to cope with climate change threats? | J001 | *The priority hazard was the focus and this provided us with immediate relief.* | **Strengths for success**  ***Sub-theme: hazard*** |
| J002 | *The right people from the community were involved so this made the project a success* | **Strengths for success**  ***Sub-theme: people centered*** |
| J003 | *All the community members were fully aware and engaged in the project so the collective community effort help with the success rate* | **Strengths for success**  ***Sub-theme: awareness and people centered*** |
| J004 | *None of the communities were engaged so it could not succeed since no one attended the training and other activities that were planned* | **Limitations to success**  ***Sub-theme: people centered*** |

***Step 4***: once the information has been categorized/coded, it is important to synthesize the information and draw conclusions as it relates to the emerging categories. Again, organizing the information in a way that is easy to look at will assist with this process. Table 26 below is recommended for further analyzing the qualitative information by grouping it into categories/themes.

Table 26: Matrix to support analysis and drawing conclusions from the qualitative information

|  |  |  |  |
| --- | --- | --- | --- |
| Theme/Category | Findings | Conclusions | Sources of information (ID#) |
| Strengths for success  Sub-themes: hazard, people centered, | * Focus on the priority hazard * Engaging the right people in the community * Promoting awareness of the project * Engaging all the community members | Success of projects is based on the focus of the activity as well as the level of engagement of the community members. The cases demonstrate that there is a positive relationship between engagement of community members and the rate of success. It is also important to engage the ‘right’ people in the community to ensure that the project succeeds. | J001, J002, J003 |
| Limitations to success  Sub-theme: people centered |  |  | J004 |

***Step 5***: is focused on finding the possible and plausible explanation for the findings. To do this you need to ask yourself the following key questions – *are these results what you were expecting? Were there any major surprises in the findings? How are the findings different or similar to what is stated in other literature from other studies?*

### 13.3.2 Quantitative Data Analysis

Once the quantitative data is entered into the excel form, it can be easily analyzed and presented using tables or graphs. It is important to think about who will use the data, what they want to know and what the easiest way to portray the information is.



**Tips for presenting quantitative data:**

* Frequencies and percentages can be used;
  + Frequency tells you how many times something occurred and is normally presented in a frequency table as a count or percentage.
  + Tables are good for presenting exact numerical values and preferable to graphics for small data sets. Tables also work well when you want to display localized comparisons or when you want to compare data sets
* Graphics should stimulate thinking and highlight patterns in the data that may not be immediately obvious by displaying the data in a table format or describing it narratively. Use a graphic if it shows the patterns that you think are important in the data more clearly than the table.
* Ensure the graphic has a descriptive heading
* Label the components of your graphic such as the axes, add a legend, and make sure that data can be easily read from the graphic
* Use the right type of graph to portray your message. Example, use pie charts to show percentages or proportional share; bar charts to show comparisons across categorical data; line graphs for trends in data at equal intervals; scatter plot to illustrate the relationship between two variables

## 13.4 Ensuring Reliability and Validity

**Validity:** “The accuracy with which a method measures what it is intended to measure (Schopper et al., 1993) and yields data that really represents “reality” (Goodwin et al., 1987)” (O’Connor and Gibson, n.d.: 72).

**Reliability:** “The consistency of the research findings (Kvale, 1996). Ensuring reliability requires diligent efforts and commitment to consistency throughout interviewing, transcribing and analyzing the findings” (O’Connor and Gibson, n.d.: 72).



**Tips for ensuring reliability and validity in the data analysis and in the findings (O’Connor and Gibson, n.d.: 73-74):**

* In the case where the research is being carried out by an entire team, a systematic approach and maintaining consistency throughout the process is essential to having “good data”. Hence, all CLOs need to be familiar with the M&E plan and follow the guidelines.
* As themes and patterns emerge from the data, it is important to go through the data, carefully searching for negative instances of the patterns. These are sometimes called “outliers” (Miles and Huberman, 1994). It is often too easy to discard these since they don’t fit into the patterns and themes of the data, however it is just as important that these are carefully examined and that possible explanations for these outliers are thought out
* Belonging to the same cultural community helps to reduce researcher effects, since the interviewer is seen as being less of an outsider. It is anticipated that the long standing relationship of the CLOs with project grantees and the fact that CLOs reside in some of the parishes they are assigned to will help in achieving the right cultural sensitivity during interviews
* Findings are more dependable when they can be confirmed from several independent sources. Their validity is enhanced when they are confirmed by more than one “instrument” measuring the same thing. As such, documents will be collected from grantees and other ministries, where possible, to verify information obtained from interviews. Also, experts will be engaged from government agencies, departments and ministries to review and verify findings. Assigning 2 CLOs (a lead and a shadow) to each project will also support the data validation process.

# Report and Writing

The purpose of the M&E technical report is to convey the key findings, lessons, conclusions and recommendations coming out of the CCCAF in a clear and impactful manner to stakeholders. The specific objectives of the technical M&E report will be to:

1. *Assess the performance of the CCCAF in the context of the targets that have been established (versus the established baseline) and to the best extent possible, provide reasons for the level of performance documented. Performance information will be disaggregated by TA and parishes.*
2. *Document lessons learned as it pertains to the various thematic areas that were supported by the fund*
3. *Document lessons in undertaking a participatory monitoring and evaluation exercise for the community climate change adaptation*
4. *To the best extent possible, and for those areas that will allow, determine the contribution the CCCAF on key economic indicators such as income and social indicators such as adaptive capacity, awareness and understanding*

The preparation of the final technical M&E report for the CCCAF is undoubtedly a big undertaking that will require a collaborative effort to adequately capture the progress made across 29 project spanning five thematic areas and parishes. A well written report goes a far way in ensuring that the readers of the report understand and even use the information presented in the various sections noted above.



**The following tips are provided for CLOs to consider when preparing M&E reports for the assigned parish and thematic areas:**

1. The report should be written in an active voice using the third person in most instances;
2. Use font Times New Roman, font size 12 and single spacing for the main text. Use different font sizes, bold, italic and underline where appropriate but not to excess;
3. Use heading and sub-headings to break up the text and to guide the reader;
4. Proof read the document once or twice before submitting;
5. All diagrams and tables must be labelled;
6. Will preparing the analysis of the findings:
   1. First state the finding, use photos, graphs and/or tables to support statements as appropriate
   2. Identify theories or reasons why this (finding) might be occurring. This can be supported by comments made by interviewees or based on findings from research on similar topics.
   3. Finally, you should state the implications of the findings

**EXAMPLE OF SENTENCE STRUCTURE FOR ANALYSIS:**

**“The finding”:** The elaboration of the Regional Framework on Development Resilient to Climate Change in 2009 and the ensuing Implementation Plan, in 2011, did not follow a logic model or a clearly articulated Results Chain (interviewees; Baastel, 2013a).

**“The possible reason why”:** López and Moreno (2011) noted that the Results Based Management approach is still relatively new in Latin America and the Caribbean. 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.

**“The possible effect of this finding”:** 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.

## 14.1 Report Layout

The key to a well‐written report is organization. A report that is divided into several sections, occurring in a logical sequence, makes it easy for the reader to quickly obtain an overview of the contents as well as locate specific information.



**The following structure is recommended for the reports on the analysis of findings by parish and thematic area:**

1. Executive summary
2. Table of contents
3. List of acronyms
4. Introduction
   1. Background on the parish or thematic area
   2. A summary of the projects undertaken in parish or thematic area
   3. Limitations to the research
5. Analysis of Results
   1. Findings by Parish or Thematic Area
      1. Performance by core indicator applicable to the projects in the parish or thematic area.
6. Lessons Learned
   1. By parish or TA level
7. Conclusions
8. Recommendations
9. Appendix – raw data, photos etc.

## 14.2 Documenting Lessons Learned

Outcome 4 (b) of the ICCAS project is “strengthened understanding and awareness of climate change risks and adaptation measures (adaptation plan) and disseminate lessons learned and best practices at the local, national, regional and international level”. Identifying lessons is a critical aspect of the project management process. It should be done during the course of the project, so that corrective measures can be detected early and addressed in a timely manner. Documenting lessons learned should not just focus on the mistakes that were made; they should also document the good things that happened in the project

To satisfy this project objective, the UNDP Team, CLOs and the M&E Specialist will be collectively documenting lessons learned across various aspects of the implementation of the CCCAF component of the ICCAS, including identifying lessons as it relates to:

1. Project management (UNDP team and CLOs to identify);
2. Setting up and management of a community focused fund (UNDP team and CLOs to identify);
3. Executing a participatory M&E process at the community level (M&E Specialist to lead); and
4. Grouping lessons by the main thematic areas of the CCCAF (CLOs and M&E Specialist to lead).

The assessment of CCCAF’s performance is a useful entry point for documenting lessons since there will be interaction with many of the project beneficiaries to gain their insights and perspectives on what worked well and what did not at the grass root level, which are essentially what lessons are (CDC, 2006). As such, questions such as “what were the reasons for the rate of success reported”, “what worked well”, “what didn’t work well”, “what factors contributed to the rate of change observed” etc. are some of the questions used in the survey instrument (see Appendix IV) for the CCCAF M&E framework.



Key questions to ask to allow lessons to be identified include (White and Cohan, n.d.):

* What went well?
* What didn't go well or had unintended consequences?
* If you had it all to do over again, what would you do differently?
* What recommendations would you make to others doing similar projects?
* Were the project goals attained? If not, what changes need to be made to meet goals in the future?
* What surprises did the team have to deal with?
* What project circumstances were not anticipated?
* Did you develop any useful workarounds or solutions to problems that cropped up during the project? Document the details in a way that will make sense later.
* For any problems that went unresolved what preventative measures can you invent now that can help things go more smoothly next time?
* Are there any new “best practices” you can derive from this project? Note anything that went so well – and now seems to be so thoroughly “road tested” – that you would want to repeat the positive experience next time.

In concretizing lessons pertaining to CCCAF, all efforts should be made to include the following general elements (CDC, 2006):

1. State a clear and concise statement of the lesson;
2. Provide contextual information on the lesson – *a summary of how this lesson was learned;*
3. Identify benefits of using the lesson and how it should be applied in the future.

# M&E Coordination for CCCAF

## 15.1 Key Stakeholders to Support the M&E System

The Community Liaison Officers, Community Liaison Coordinator, key government agencies and the UNDP team will be the main stakeholders that will support routine collection of relevant M&E information given that they are based in Grenada. As such, these stakeholders were targeted as the core group to receive training in M&E. See Appendix VI for the list of participants that attended the inception M&E workshop.

The CLOs are considered as the primary target audience or stakeholders that will support the M&E system given that they are (i) hired to work solely on the ICCAS project, (ii) assigned to geographic areas that are serviced by the CCCAF, and (iii) based within the Ministry of Agriculture, which is collectively ideal for the following reasons:

1. It places them within government agencies and therefore has access to technical resources and other databases of information.
2. Their time will be dedicated to the roll out and management of the CCCAF

## 15.2 Capacity Building in M&E

M&E capacity building was extended to CLOs and officials from government agencies aligned to the main thematic areas that the community projects are focused on such as the ministry of agriculture, fishery, environment and education. Capacity building in M&E for both CLOs and government officials is a critical output of the M&E Specialist’s contribution since it was reiterated several times at the negotiation meeting that there is a strong need for strengthening M&E capacity at the community level and within the government agencies in Grenada. The logical framework, indicator protocol and PMF for enhancing M&E capacity on the CCCAF are detailed at Appendix VII.

It is strongly recommended that members of the UNDP team benefit from the M&E training since they will be responsible for monitoring those indicators that are unique to each community project.

## 15.3 Coordination and Communication

Currently there is a reporting structure that existing among the UNDP team and the CLOs, which is illustrated in Figure 6. The arrows indicate the direction of communication.

Figure 6: Coordination and Communication Channels for the CCCAF

UNDP Management Team

CLO Coordinator

CLOs

Communities/Grantees

Other Government Agencies and Departments

M&E Specialist

**Source: Author**

## 15.4 Roles and Responsibilities

To ensure that the CLOs, government agencies, UNDO team and the M&E specialist are communicating and coordinating seamlessly to support the roll out of the M&E component of the CCCAF project, there will be need to establish clear roles and responsibilities.



M&E Specialist Key Roles and Responsibilities:

1. Lead the design and operationalization of the M&E framework for the CCCAF projects
2. Provide capacity building and coaching to the relevant team members, particularly those individuals that will play a key role in the information flow to routinely monitor key indicators such as the Community Liaison Officers (CLOs) and relevant representatives from the Ministries and other government agencies
3. Coordinate with the CCAF project team, CLOs and relevant representatives from the Ministries to produce results-oriented M&E reports

One of the main tasks (#6 of TOR) of the M&E specialist is to “Training of CLOs and other Ministry staff to collect and analyze data including, handling and storage of data and information”. Expanding on this, **the main roles and responsibilities of the CLOs and other officers that will be supporting the M&E data collection and analysis will include the following**:

1. Prepare interview guides for each project, as assigned. The CLO will only be required to extract those questions from the master survey in Appendix III that is applicable to the core indicators identified for their community projects;
2. Confirm the target population to administer the survey and send out invitations. This should be done in consultation with the project Grantee;
3. Administer survey questions in communities at a timeframe that will be decided by the UNDP team;
4. Enter information from field work into the excel database;
5. Code the qualitative information from interviews and submit this information in both hard and soft copies to the CLO Coordinator
6. Support the validation of information, as required
7. Prepare the technical reports for the parish and thematic areas, as assigned

# M&E Work Plan & Budget for CCCAF

An implementation schedule and indicative budget was developed for the M&E process to allow prudent management of the process by responsible parties. It also provides the M&E specialist with better insight into what can be realistically undertaken to deliver the final technical M&E report.

## 16.1 Implementation Schedule

Table 27: Implementation Schedule for the M&E of CCCAF

| **Activities** | **Timeframe (Months)** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **May** | **June** | **July** | **August** | **September** | **October** | **November** | **December** | **January** | **February** | **March** | **April** |
|
|  |
| **Deliverable 1: Inception Report** |  |  |  |  |  |  |  |  |  |  |  |  |
| Inception Report preparation as guided by the inception meeting on 10 May 2016 |  |  |  |  |  |  |  |  |  |  |  |  |
| **Deliverable 2: Inception Training and Report** |  |  |  |  |  |  |  |  |  |  |  |  |
| Finalize the list of thematic areas of the CCCAF to ensure there are the most appropriate and cover the full scope of the 29 projects that are being funded |  |  |  |  |  |  |  |  |  |  |  |  |
| Propose the results chain for the CCCAF (outputs, outcome and impact statements) based on a review of the wider ICCAS project’s goal, outcomes and outputs and the TAs the CCCAF is supporting. |  |  |  |  |  |  |  |  |  |  |  |  |
| Undertake a more detailed review of best practices used in other international climate change adaptation funds for indicator development to guide the refinement of the draft core indicators (for each TA and across TAs), as appropriate |  |  |  |  |  |  |  |  |  |  |  |  |
| Elaborate the detailed agenda for the workshop and prepare power point presentations |  |  |  |  |  |  |  |  |  |  |  |  |
| Recommendations for enhancements in the reporting requirements of grantees to provide a useful source of monitoring information |  |  |  |  |  |  |  |  |  |  |  |  |
| Facilitate M&E workshop and prepare workshop report |  |  |  |  |  |  |  |  |  |  |  |  |
| **Deliverable 3: Draft M&E Plan** |  |  |  |  |  |  |  |  |  |  |  |  |
| Work with the UNDP Team, CLOs and the 29 grantees to finalize the targets for each project as it relates to the core indicators so that it can be aggregated to have an overall estimation of the summative targets to be realized by the CCCA |  |  |  |  |  |  |  |  |  |  |  |  |
| Draft other sections of the M&E plan (principles, PMF, indicator protocol, data collection tools, data analysis, costed M&E work plan etc.) |  |  |  |  |  |  |  |  |  |  |  |  |
| Draft M&E plan will be shared with the UNDP team and relevant stakeholders for commenting and feedback |  |  |  |  |  |  |  |  |  |  |  |  |
| Update M&E plan based on comments received |  |  |  |  |  |  |  |  |  |  |  |  |
| **Deliverable 4&5: Mission Report and Baseline Assessment** |  |  |  |  |  |  |  |  |  |  |  |  |
| Prepare powerpoint and training materials |  |  |  |  |  |  |  |  |  |  |  |  |
| Facilitate training and support baseline information collection |  |  |  |  |  |  |  |  |  |  |  |  |
| Prepare mission report and baseline assessment report |  |  |  |  |  |  |  |  |  |  |  |  |
| Finalise M&E plan with baseline information |  |  |  |  |  |  |  |  |  |  |  |  |
| **Deliverable 6&7: Final Mission Report and Final Technical M&E Report** |  |  |  |  |  |  |  |  |  |  |  |  |
| Collaborate with M&E teams to plan for mission to collect information |  |  |  |  |  |  |  |  |  |  |  |  |
| Lead one of the team in the field to collect performance monitoring information |  |  |  |  |  |  |  |  |  |  |  |  |
| Compile Mission report and M&E technical report |  |  |  |  |  |  |  |  |  |  |  |  |
| Submit M&E technical report to UNDP and relevant stakeholders for commenting and feedback |  |  |  |  |  |  |  |  |  |  |  |  |
| Update report based on comments received |  |  |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |  |  |  |  |  |  |  |

## 16.2 Indicative Budget

Table 28: Indicative Budget for the M&E of CCCAF

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item/Activity** | **Unit** | **Amount** | **Unit cost** | **Sub-total** |
| M&E Inception Training | days | 3 | 1500 | **4500** |
| Second Training | days | 3 | 500 | **1500** |
| Site Visit for Second Training | days | 2 | 1000 | **2000** |
| Third mission on analysis and reporting | days | 5 | 800 | **4000** |
| Hiring of Field Officers | person | 2 | 500 | **1000** |
| **Grand Total (USD)** |  |  |  | **13000** |

# CCCAF M&E Information Products, Dissemination & Use

**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. If the results of monitoring are not sought out and used by policy makers and public sector managers, then monitoring comes to be seen merely as a bureaucratic burden, and compliance with monitoring procedures deteriorates” (Bedi et al., 2006). Therefore, getting the M&E information out to the relevant stakeholders will be promoted as best as possible by the UNDP Team. Participants at the M&E workshop in July 2016 identified the following target audience for dissemination of the M&E report:

* + Carriacou and Petite Martinique Water taxi Association
  + GFC,
  + Ministry of Agriculture
  + Ministry of Health
  + NAWASA,
  + NCCC
  + Ocean Spirits,
  + St. George’s University
  + T.A Marryshow Community College
  + TNC

Following from this, the primary audience for the M&E information is captured in Figure 7.

Figure 7: Primary Audience for the CCCAF M&E Information



**Source: Author**

Table 29 outlines the recommended target audience, what is the desirable action from the target audience and what type of information products best suit this audience and for the uses identified.

Table 29: Information Products for Target Audience

| **Audience** | **Desired Action by Audience** | **Information products** | **Responsibility** |
| --- | --- | --- | --- |
| ***Community Based Organisations (CBOs)*** | -Increased awareness of the types of work being done in advancing climate change adaptation at the community level in Grenada  -Incorporation of the lessons learned by these projects into their programming | **Newsletter** highlighting the following:  - Summary of activities by Parish  - Summary of lessons learned by Thematic Area | UNDP TEAM  ICCAS COMMS SPECIALIST |
| ***Non-governmental Organisations (NGOs)*** | -Increased awareness of the types of work being done in advancing climate change adaptation at the community level in Grenada  -Incorporation of the lessons learned by these projects into their programming  - Support communities in expanding or upscaling interventions supported by CCCAF  - Replicate success stores documented under the CCCAF in new communities facing similar challenges | **Newsletter** | UNDP TEAM  ICCAS COMMS SPECIALIST |
| ***Universities and Schools*** | -adapt some of the education and awareness materials on climate change  - become more aware of the findings of the research projects supported by the CCCAF  - note the lessons for future projects or research topics | **M&E technical report**  **Information package** on the climate change education and awareness programmes promoted by projects | M&E SPECIALIST &  CLOS  ICCAS COMMS SPECIALIST |
| ***Government Offices*** | -Increased awareness of the types of work being done in advancing climate change adaptation at the community level in Grenada  -Incorporation of the lessons learned by these projects into their programming  - Support communities in expanding or upscaling interventions supported by CCCAF  - Replicate success stores documented under the CCCAF in new communities facing similar challenges | **M&E technical report**  **Newsletters**  **Power-point presentation** | M&E SPECIALIST  CLOS  ICCAS COMMS SPECIALIST  UNDP TEAM |
| ***Private Sector Officials*** | -Increased awareness of the types of work being done in advancing climate change adaptation at the community level in Grenada  -Incorporation of the lessons learned by these projects into their investments  - Consider business plans that include joint-ventures in communities that leads to the expansion of interventions initiated under CCCAF  - Replicate success stores documented under the CCCAF in new communities facing similar challenges | **M&E technical report**  **Newsletters** | M&E SPECIALIST  CLOS  ICCAS COMMS SPECIALIST |

# M&E Post CCCAF Close Out

Whilst discussions are underway in terms of funding a next phase of the CCCAF, there are no confirmations at this time. However, it would be ideal if data collection on the indicators listed in Table 30 is prioritized post close out of the CCCAF. The advantages of continual monitoring are that:

1. The longer term impacts and effects (outcome and impact levels ) of the community supported projects, both positive and negative, can be better documented;
2. Interesting and new lessons that emerge can be documented;
3. National capacities in M&E will be further strengthened through iteration and practice;
4. An M&E system takes time to mature and is the result of an iterative process. Given that the M&E system is being built within the final year of the CCCAF, it would be ideal to continue a manageable level of M&E processes to allow the system to be improved as lessons are learned

As seen in Table 30, a total of **15 core indicators are recommended to be monitored post close out** of the ICCAS project. Majority are outcome and impact level core indicators of the CCCAF because these results are attained in the medium to long term, respectively, and therefore warrant a longer time horizon for monitoring. A few selected output level indicators are included mainly because they collect information that could change over time that will affect the achievement of the intended outcomes. The final decision with regards to the collection of information would need to be made by the UNDP team and MoAFFLE since it will require dedicated resources.

Table 30: Priority Core Indicators to Monitor Post Close Out of CCCAF

|  |  |  |
| --- | --- | --- |
| Result Statement | Core Indicator | Comments |
| IMPACT: Increased ecosystem resilience and adaptive capacity of communities in response to and in preparation for climate change induced stresses through the implementation of concrete community-based adaptation activities and incentives in various sectors in the islands of Grenada, Carriacou and Petit Martinique | I1. # of stakeholders (individuals/communities/agencies) directly and indirectly benefitting from vulnerability reduction and improved adaptive capacity activities as a result of support under the CCCAF (disaggregated by sex for residents) [coverage indicator] | These impact indicators are intended to measure long term developmental changes and hence should be monitored as long as is feasible |
| I2. Rate of success of the interventions in delivering improvement in options to cope with climate change threats [adaptive capacity indicator] |
| I3. Level of capacity of beneficiaries to maintain/sustain adaptation strategies introduced or strengthened via CCCAF [sustainability indicator] |
| I4. # of employment opportunities created (by parish, thematic area) |
| Outcome 1: Residents, farmers and/or fishers are more knowledgeable and equipped to cope with the effects of climate change by increasing production yields and/or reduced operational costs to improve livelihoods, reduce unemployment and sustain food security for communities. | 1.1 Yield/Quality of produce (by type of technique in fishery and agriculture sectors) | It is important to track the long term sustainability of the techniques introduced/expanded in the fishery or agriculture sectors. |
| 1.2 Rate of change in food security due to the measures implemented |  |
| Output 1.1: Farmers (crops or livestock) and fishers have implemented/adopted new practices and/or equipment | 1.1.1 # of farmers/fishers practicing new techniques (by type) | This core indicator is important since it tracks the relevance of the techniques introduced/expanded in the fishery or agriculture sectors to the target audience |
| Outcome 2: Strengthened capacities to cope with water stresses to boost health, productivity and livelihoods of individuals (farmers, senior citizens, students and/or households) | 2.1 Rate of water consumption | These are all outcome level indicators that will provide critical information on the long term sustainability and success of the community funded projects. |
| 2.2 Quality of water |
| 2.3 School attendance (disaggregated by sex) |
| Outcome 3: Enhanced capacities to protect/conserve ecosystems/environment through research and actions that mitigate risks to climate change | 3.3 Rate of implementation of recommendations from research on ecosystems |
| Outcome 4: Reduced vulnerability of coastal settlements and ecosystems to the effects of climate change and enhanced ability to support climate change mitigation through reforestation of mangroves and other plant species | 4.1 Evidence of change in coastal profile, erosion, shoreline width |
| Output 4.2: Trees successfully planted in vulnerable coastal habitats and are properly maintained on an ongoing process. | 4.2.1 Total height above ground (Avg) of Seedlings (from soil mark to the apical bud) |
| 4.2.2 Carbon accumulation rate (by site) |

# APPENDIX I- INDICATOR PROTOCOLS

## IMPACT LEVEL INDICATORS

|  |  |
| --- | --- |
| Type of Indicator | *Impact* |
| Name of Indicator | Number of stakeholders (individuals/communities/agencies) directly and indirectly benefitting from vulnerability reduction and improved adaptive capacity activities as a result of support under the CCCAF (disaggregated by sex for individuals) |
| Unit of measurement | Number (count) |
| Variable | individuals/communities/agencies directly and indirectly benefitting from vulnerability reduction and improved adaptive capacity activities as a result of support under the CCCAF |
| Rationale | This indicator seeks to measure the number of stakeholders that have received support from the CCCAF to support increasing adaptive capacity to respond to the impacts of climate change. It does not seek to measure the output of whether this support was successful in reducing the impacts of climate change events or effects on these people, or the outcome of increasing their resilience or reducing their vulnerability to climate change. This indicator and its associated questions will be applicable to each project. |
| Definition of key terms | This indicator defines **stakeholders** to include those individuals/ communities/ agencies that benefit directly or indirectly from the CCCAF funded intervention. Individuals include farmers, students, residents, fishers, etc. Agencies include schools or other forms of government institutions.  **Direct stakeholders** are those that receive direct support and are aware they are receiving support. For instance, individuals/agencies attending workshops/training or other forms of capacity building provided through the community projects that are funded by CCCAF. Residents/agencies directly benefitting from infrastructure build such as drip irrigation, water harvesting, slope/soil stabilization efforts.  **Indirect stakeholders** are those that are within the coverage area or catchment area for infrastructure projects, people living in a community where other members have been trained in skill that can reduce the risks for the wider community by having someone with that training in the community.  **Adaptive capacity** is the “ability of a system to adapt” (IPCC in Villanueva, 2011: 14). There is general consensus that investments in adaptation actions will facilitate the building of our abilities to adapt; signaling that adaptation leads to enhanced adaptive capacity (Hedger et al., 2008).  **Vulnerability** is “the degree to which a system is susceptible to or unable to cope with, adverse effects of climate change […]” (IPCC, 2001: 995). Thence, strengthening adaptive capacity allows for the reduction of vulnerability (Adger et al., 2004; Villanueva, 2011). |
| Methodology for measuring | The indicator is expressed in absolute numbers disaggregated by 3 broad categories: individuals, agencies, communities and for each of these, the sub-categories direct and indirect. This will allow for the estimation of the individuals, agencies and communities that are direct and indirect stakeholders of the CCCAF funded initiatives. |
| Data collection method /tool and source of data | The count of stakeholders should be obtained from interviews with project executers, progress reports or training reports/registration forms. All information should be validated through field visits. |
| Frequency of data collection and who collects this information | Information should be completed at the beginning and end of the project. Grantees, CLOs and the UNDP team will be responsible for the collection and verification of this information. |
| Disaggregation (if applicable) | The category individuals will be sub-classified into *residents, farmers, students and fishers*. A real effort should be made to disaggregate the individuals that were direct beneficiaries by sex. This level of disaggregation will not be done for indirect beneficiaries since these details will more than likely be unknown for majority of the community projects. |
| Qualification (for qualitative indicators ONLY) | NA |
| Questions | How many stakeholders (categorized by individuals, agencies and communities) directly and indirectly benefitted from the community project?   |  |  |  |  | | --- | --- | --- | --- | |  | Individuals | Agencies | Communities | | ***Direct*** |  |  |  | | ***Indirect*** |  |  |  |     For those direct beneficiaries classified as “individuals”, how many were men, women, youths and vulnerable groups (disabled, elderly)?   |  |  |  |  | | --- | --- | --- | --- | | ***Female distribution*** | | | | | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | | ***Male distribution*** | | | | | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | |  |  |  |  |     How did you find out about this project and became involved? (e.g. involved in training, adaptation infrastructure/technology introduced etc.)  Do you think there are barriers or things that prevented and will continue to prevent others from accessing the benefits provided by this project? If yes, what are the barriers? How do you think we can reduce the barriers? Answer in the space provided below:  What are the barriers –  What can be done - |

|  |  |
| --- | --- |
| Type of Indicator | *Impact* |
| Name of Indicator | Rate of success of the interventions in delivering improvements in options to cope with climate change threats |
| Unit of measurement | Rate of success |
| Variable | Of intervention in delivering improvements in options to cope with climate change threats |
| Rationale | This indicator explores how options to cope with climate change have improved among the beneficiaries of the various interventions. It is based on the ranking provided by direct beneficiaries since they are aware of the project and the scope of the intervention and will be best positioned and knowledgeable to speak to the change that has occurred. |
| Definition of key terms | **Cope** means coping capacity or adaptive capacity, which is the “ability of a system to adapt” (IPCC in Villanueva, 2011: 14). However, ranking the coping capacity of a system is heavily debated and although extensively researched, there is still no consensus on the standards or benchmarks of adaptive capacity. This is largely driven by the fact that adaptation is very context specific and complex: for instance, each community or household has different circumstances driven by income, health, age, sex, family size, environment, location, and politics etc., all of which influence their ability to adapt.  Hence, this indicator places more emphasis on the rate of success of the interventions in providing options to cope with the climate change threats being experienced in that community. The rate of success is largely tied to the opinion of the direct beneficiaries. Whilst this may seem very subjective, it is important to gain the perspectives of people since their perception of an intervention can have implications on the sustainability of that intervention. In essence, if they are of the view that a program is successful, they will support it.  **Direct stakeholders** are those that receive direct support and are aware they are receiving support. For instance, individuals/agencies attending workshops/training or other forms of capacity building provided through the community projects that are funded by CCCAF. Residents/agencies directly benefitting from infrastructure build such as drip irrigation, water harvesting, slope/soil stabilization efforts. |
| Methodology for measuring | This indicator and its associated questions will be applicable to each project. The data will be obtained through survey questions (see below) which will be administered to direct stakeholders. The qualitative data on the rate of success (high, medium or low) will be translated into quantitative data by assigning the rates high, medium and low as 1, 2 and 3, respectively. Data will be an aggregated by location and thematic areas to have an overall estimation of the rate of success of the CCCAF interventions in advancing climate change adaptation at both the community and sector levels. |
| Data collection method /tool and source | Interviews will be the main mechanism to collect information. This will be largely led by the CLOs assigned to the geographic and thematic areas. |
| Frequency of data collection and who collects this information | Information should be completed at the end of the project. |
| Disaggregation (if applicable) | No disaggregation of information required |
| Qualification (for qualitative indicators ONLY) | Rate of success (of the interventions in delivering improvements in options to cope with climate change threats):   |  | | --- | | **High** – the interventions funded by the project addressed the priority hazards and have **significantly** increased and/or improved options to cope with climate change threats in the community. | | **Medium** – the interventions funded by the project have only addressed some of the priority hazards and have **moderately** increased and/or improved options to cope with climate change threats in the community. | | **Low** - the interventions funded by the project did not address any of the priority hazards and have **minimally** increased and/or improved options to cope with climate change threats in the community. | |
| Questions | Would you say that the initiative achieved a high, medium or low level of success in improving options for coping with climate change threats in your community?  High – the interventions funded by the CCCAF addressed the priority activities pertaining to (focus area of project) and have significantly increased and/or improved options to cope with climate change threats in the community.  Medium – the interventions funded by the CCCAF have only addressed some of the priority activities pertaining to (focus area of project) and have moderately increased and/or improved options to cope with climate change threats in the community.  Low - the interventions funded by the CCCAF did not address any of the priority activities pertaining to (focus area of project) and have minimally increased and/or improved options to cope with climate change threats in the community.    List what were the reasons for the rate of success reported in improving options to cope with climate change threats – that is, what worked well and what could be improved?  What worked well under this project to help you to better cope with climate hazards (e.g. drought, rainfall, flooding) in your community:  What could have been done better under this project to help you to better cope with climate hazards in your community:  Do you think there are other factors outside of this project that could have contributed (positive or negative) to the level of success you think was achieved?  Were you invited to design or develop this project from the beginning?  Did you notice a change within your household and/ or the wider community as a result of this project? If yes, please describe the changes and who was affected.  \*\* Note: change can be related to behaviour/practices, well-being (health, income) etc., positive or negative  Do you think there are any vulnerable groups that were excluded or forgotten from this project? How can we strengthen their inclusion? |

|  |  |
| --- | --- |
| Type of Indicator | *Impact* |
| Name of Indicator | Level of capacity of beneficiaries to maintain/sustain adaptation strategies introduced or strengthened via CCCAF |
| Unit of measurement | Level |
| Variable | Capacity of beneficiaries to maintain/sustain adaptation strategies introduced or strengthened via CCCAF |
| Rationale | This indicator seeks to investigate whether beneficiaries can sustain the adaptation strategies that have been introduced/enhanced within their community/sector. It therefore assesses sustainability of interventions.  The target audience would be the direct beneficiaries of interventions since they were exposed to the training and/or benefitted directly from the infrastructure implemented and are therefore motivated to sustain it. ‘Motivation’ is therefore an eligibility criterion for the interviewees and it is assumed that all direct beneficiaries will meet this criteria. However, there are many requirements that need to be met for them to be able to have the capacity to sustain the adaptation strategies, which is what will be closely monitored by this indicator. |
| Definition of key terms | **Capacity** can be understood as ‘the ability of people, organisations and society as a whole to manage their affairs successfully’ (OECD 2006: p8). Organisational capacity can be defined as ‘the capability of an organisation to achieve effectively what it sets out to do’ (Fowler et al 1999: p4). The capacity of an individual, an organisation or a society is not static. It changes over time, and is subject to both internal and external influences, which changes at any given time. Hence it needs to be measured frequently.  There are various dimensions of capacity that should be met for an individual, household, community, organization, parish or country to be able to sustain their affairs. Based on literature reviewed, the following emerge as the most reoccurring dimensions of importance (ACCRA Adaptive Capacity Framework , n.d[[3]](#footnote-3))   1. Asset base – human, social, financial, physical, natural capital 2. Knowledge and information – the system has the ability to collect, analyze and disseminate information to inform decision making and planning 3. Governance and management systems – strategy, people, policy, technical skills.   If we examine this in the context of capacity to sustain adaptation strategies; the dimensions can be stated as:   1. ***Asset base*** *– skills, money, community infrastructure and ecosystems exist within the community/sector that can support the longevity of the intervention* 2. ***Knowledge and information*** *– systems are in place to collect relevant information that will assist in the management and maintenance of the intervention.* 3. ***Governance and management systems*** *–community network, leadership and communication mechanisms exist to coordinate management and sustainability of the interventions*   **Direct stakeholders** are those that receive direct support and are aware they are receiving support. For instance, individuals/agencies attending workshops/training or other forms of capacity building provided through the community projects that are funded by CCCAF. Residents/agencies directly benefitting from infrastructure build such as drip irrigation, water harvesting, slope/soil stabilization efforts. |
| Methodology for measuring | This indicator and its associated questions will be applicable to each project. The data will be obtained through survey questions (see below) which will be administered to direct stakeholders. The qualitative data on the level of capacity (high, medium or low) will be translated into quantitative data by assigning the rates high, medium and low as 1, 2 and 3, respectively. Data will be an aggregated by location and thematic areas to have an overall estimation of the level of capacity to sustain the CCCAF interventions in advancing climate change adaptation at both the community and sector levels. |
| Data collection method /tool and source | Interviews will be the main mechanism to collect information. This will be largely led by the CLOs assigned to the geographic and thematic areas. |
| Frequency of data collection and who collects this information | Information should be completed at the beginning and end of the project. Depending on funding availability, this indicator should be monitored post close out of the CCCAF to determine communities and sectors’ limitations in sustaining interventions over time. Follow-up work can be guided by these findings. |
| Disaggregation (if applicable) | No disaggregation of information required |
| Qualification (for qualitative indicators ONLY) | Level of capacity (of beneficiaries to maintain/sustain adaptation strategies introduced or strengthened via CCCAF):  Recalling that;   1. ***Asset base*** *includes skills, money, community infrastructure and ecosystems exist within the community/sector that can support the longevity of the intervention* 2. ***Knowledge and information*** *includes systems are in place to collect relevant information that will assist in the management and maintenance of the intervention.* 3. ***Governance and management systems*** *includes community network, leadership and communication mechanisms exist to coordinate management and sustainability of the interventions*  |  | | --- | | **High** –all of the requirements as it relates to asset base, knowledge and information and governance and management arrangements are in place to sustain the intervention | | **Medium** – some of the requirements as it relates to asset base, knowledge and information and governance and management arrangements are in place to sustain the intervention | | **Low** - little to none of the requirements as it relates to asset base, knowledge and information and governance and management arrangements are in place to sustain the intervention | |
| Questions | What is the level of capacity that exists to maintain /sustain the adaptation strategies introduced or strengthened through this initiative?  *\*\*Notes: Capacities include:*  *Asset base – skills, money, community infrastructure and ecosystems exist within the community/sector that can support the longevity of the intervention*  *Knowledge and information – systems are in place to collect relevant information that will assist in the management and maintenance of the intervention.*  *Governance and management systems –community network, leadership and communication mechanisms exist to coordinate management and sustainability of the interventions*   * High –**all of the requirements** as it relates to asset base, knowledge and information and governance and management arrangements are in place to sustain the intervention * Medium –**some of the requirements** as it relates to asset base, knowledge and information and governance and management arrangements are in place to sustain the intervention * Low - **little to none of the requirements** as it relates to asset base, knowledge and information and governance and management arrangements are in place to sustain the intervention   What do you recommend is needed to promote sustainability of this project? That is, when the project funding is completely utilized, what is needed to ensure the benefits of the project do not end? |

|  |  |
| --- | --- |
| Type of Indicator | *Impact* |
| Name of Indicator | # of employment opportunities created (by parish, sex, thematic area) |
| Unit of measurement | Number (count) |
| Variable | Employment created |
| Rationale | This indicator seeks to measure the number of individuals that have received employment opportunities with support from the CCCAF. This will capture jobs created directly and even those that are short term in nature. For instance, the hire of contractors to build an infrastructure or cleaning of drains. |
| Definition of key terms | **Employment:** an act or instance of employing someone or something[[4]](#footnote-4). It refers to all persons that are employed (directly and indirectly) throughout the life of the project  **Direct stakeholders** are those that receive direct support and are aware they are receiving support. For instance, individuals/agencies attending workshops/training or other forms of capacity building provided through the community projects that are funded by CCCAF. Residents/agencies directly benefitting from infrastructure build such as drip irrigation, water harvesting, slope/soil stabilization efforts. |
| Methodology for measuring | The indicator is expressed in absolute numbers by headcount |
| Data collection method /tool and source of data | The count of employment opportunities created should be obtained from interviews with project grantees and progress reports. |
| Frequency of data collection and who collects this information | Information should be completed at the end of the project. Grantees, Community Groups, CLOs and the UNDP team will be responsible for the collection and verification of this information. |
| Disaggregation (if applicable) | Direct beneficiaries should be disaggregated by sex.  The type of work provided will be disaggregated to gain a sense of the type of employment created. |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | How many individuals gained employment, both short-term and long-term, as a result of this intervention?   |  |  | | --- | --- | | Sex | Direct Beneficiaries | | Male |  | | Female |  |   What type of work did they perform?   * Construction/Labourer * Teaching/instructing * Project manager/Coordinator * Accounting * Design/architecture/engineering * Other |

## FOOD SECURITY INDICATORS

|  |  |
| --- | --- |
| Type of Indicator | Outcome |
| Name of Indicator | Yield/Quality of produce (by type of technique in fishery and agriculture sectors) |
| Unit of measurement | Lbs (Yields) |
| Variable | Produce (by type of technique in fishery and agriculture sectors) |
| Rationale | This indicator seeks to measure the change in yield of produce from those projects in the agriculture and fishery sectors that have been supported by the CCCAF. The yields in these sectors have reduced due to the effects climate change. |
| Definition of key terms | **Produce:** To bring forth, give rise to, or yield a good through a natural process, as opposed to make or manufacture[[5]](#footnote-5)  **Yield:** refers to measures of output[[6]](#footnote-6) |
| Methodology for measuring | The indicator is expressed in pounds disaggregated by type of technique; for instance: drip irrigation, rainwater harvesting, FAD fishing, sea moss mariculture |
| Data collection method /tool and source of data | This measure will be obtained from reviewing records that are kept by the various community groups. |
| Frequency of data collection and who collects this information | Information should be completed monthly and submitted to the CLOs assigned to that project. Grantees, Community groups and CLOs will be responsible for the collection and verification of this information |
| Disaggregation (if applicable) | By technique (rainwater harvesting, seamoss mariculture, drip irrigation, FAD Fishing) |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | There will be no question on this for the survey tool. **Form 3 (Yield of Produce), Form 4 (Fish Yield and Quality), Form 5 (# of seedlings), Form 6 (Yield of organic compost) or Form 7 (Yield of protein from waste)** will be utilized for the analysis of trends |

|  |  |
| --- | --- |
| Type of Indicator | Outcome |
| Name of Indicator | Rate of change in food security due to the measures implemented |
| Unit of measurement | Rate of change |
| Variable | Food security due to the measures implemented |
| Rationale | The indicator seeks to measure the rate of change in food security due to the intervention/measures implemented by the CCCAF project. It will be targeted to direct beneficiaries since they are knowledgeable of the scope of the CCCAF support. |
| Definition of key terms | **Food Security**: affordability, accessibility and availability to food at all times  Food security means access by all people at all times to enough food for an active, healthy life[[7]](#footnote-7).  **Affordability**: measured by its cost relative to the amount that the purchaser is able to pay[[8]](#footnote-8).  **Accessibility:** able to be used or obtained  **Availability:** ready for use |
| Methodology for measuring | The qualitative data obtained from interviews with direct beneficiaries on the rate of change in food security will be translated into quantitative data by assigning rates of high, medium or low as 1, 2 and 3, respectively. |
| Data collection method /tool and source of data | Interviews will be the main mechanism to collect information. This will be largely led by the CLOs assigned to the geographic and thematic areas. All information will be validated through field visits. |
| Frequency of data collection and who collects this information | Information should be completed at the end of the project. All information will be collected and verified by the CLO |
| Disaggregation (if applicable) | No disaggregation needed |
| Qualification (for qualitative indicators ONLY) | Rate of change (in food security due to the measures implemented):   |  | | --- | | **High** – the interventions funded by the CCCAF has significantly improved the affordability, accessibility and availability of (list product e.g. fish/seamoss/organic agriculture/other) in this community. | | **Medium** – the interventions funded by the CCCAF has moderately improved the affordability, accessibility and availability of (list product e.g. fish/seamoss/organic agriculture/other) in this community. | | **Low** - the interventions funded by the CCCAF has not improved the affordability, accessibility and availability of (list product e.g. fish/seamoss/organic agriculture/other) in this community. | |
| Questions | How would you rate the change in food security as a result of the support provided by CCCAF in (community x)?   1. High … 2. Medium … 3. Low …   For agriculture projects, is there a noticeable increase in the availability of crops, particularly during the dry season? Describe |

|  |  |
| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | # of farmers/fishers practicing/benefiting from new techniques (specified per type of technique e.g. FAD, mixing feed, organic agriculture, iceboxes. lionfish harvesting, irrigation systems) |
| Unit of measurement | Number (count) |
| Variable | Farmers/ fishers practicing new techniques |
| Rationale | This indicator sets out to determine the amount of farmers/fishers that are practicing new techniques introduced through support from the CCCAF. This will be targeted to direct and indirect beneficiaries. Capturing the indirect beneficiaries will be important to ensure that the full reach of the intervention is captured. |
| Definition of key terms | **Adaptive capacity** is the “ability of a system to adapt” (IPCC in Villanueva, 2011: 14). There is general consensus that investments in adaptation actions will facilitate the building of our abilities to adapt; signaling that adaptation leads to enhanced adaptive capacity (Hedger et al., 2008).  Beneficiaries: refers to a person or group who derives benefits[[9]](#footnote-9)  **Direct stakeholders** are those that receive direct support and are aware they are receiving support. For instance, individuals/agencies attending workshops/training or other forms of capacity building provided through the community projects that are funded by CCCAF. Residents/agencies directly benefitting from infrastructure build such as drip irrigation, water harvesting, slope/soil stabilization efforts.  **Indirect stakeholders** are those that are within the coverage area or catchment area for infrastructure projects, people living in a community where other members have been trained in skill that can reduce the risks for the wider community by having someone with that training in the community. |
| Methodology for measuring | This measure will be expressed in absolute numbers and will be disaggregated based on the type of technique practiced (e.g. FAD fishing, mixing feed, ice box installation, irrigation system, organic agriculture) |
| Data collection method /tool and source of data | This data will be collected by conducting interviews with beneficiaries from the projects. All information will be validated through field visits. All efforts will be made to identify the true indirect beneficiaries that are also utilizing this technique. |
| Frequency of data collection and who collects this information | Information should be completed at the end of the project. Grantees, CLOs and the UNDP team will be responsible for the collection and verification of this information. |
| Disaggregation (if applicable) | This indicator will be disaggregated according to sex to the best extent possible |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | How many farmers/fishers are practicing/ benefiting from the new techniques introduced and what is the sex distribution?   |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | Protein from Waste | FAD  Fishing | Organic Agriculture | Ice Box | Irrigation System | Water  Harvesting | Seamoss | Lionfish | Vermaculture | Greenhouse | | Male |  |  |  |  |  |  |  |  |  |  | | Female |  |  |  |  |  |  |  |  |  |  | |

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| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | #/sq. ft. of new sea moss farms operational |
| Unit of measurement | Number (count) |
| Variable | new sea moss farms operational |
| Rationale | This indicator seeks to measure the number of individual that have received support from the CCCAF to support the creation of new sea moss farms. |
| Definition of key terms | **Operational** - actively generating income  **New** – started as part of the CCCAF project  **Direct stakeholders** – are those that receive direct support and are aware they are receiving support. |
| Methodology for measuring | The indicator is expressed in absolute numbers |
| Data collection method /tool and source of data | The count of seamoss farms should be obtained from interviews with project executers, progress reports or training reports/registration forms. All information should be validated through field visits. |
| Frequency of data collection and who collects this information | Information should be completed at the beginning and end of the project. Grantees, CLOs and the UNDP team will be responsible for the collection and verification of this information. |
| Disaggregation (if applicable) | N/A |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | How many sq. feet of land is being cultivated for sea moss farms? |

|  |  |
| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | Number of equipment introduced and operational (by type) |
| Unit of measurement | Number (count) |
| Variable | equipment introduced and operational (by type) |
| Rationale | This indicator seeks to measure the number of equipment that have been installed and they can include: solar pumps, drip irrigation, FADs, ICE Box. |
| Definition of key terms | This indicator defines **equipment introduced** asthe material or equipment build or install but not necessarily being used or operational. **Equipment Operationalized** are those that are working and functional as part of the CCCAF to support increasing adaptive capacity to respond to the impacts of climate change.  **Direct beneficiaries** are those that receive direct support and are aware they are receiving support. For instance, individuals/groups receiving equipment through the community projects that are funded by CCCAF. |
| Methodology for measuring | The indicator is expressed in absolute numbers disaggregated by 4 broad categories: solar pumps, drip irrigation, FADs, ICE Box. This will allow for the estimation of the equipment that individual/groups received from the CCCAF funded initiatives. |
| Data collection method /tool and source of data | The count of equipment should be obtained from interviews with project executers, project document and UNDP ICCAS staff. All information should be validated through field visits. |
| Frequency of data collection and who collects this information | Information should be completed at end of the project. Grantees, CLOs and the UNDP team will be responsible for the collection and verification of this information. |
| Disaggregation (if applicable) | The category - solar pumps, drip irrigation, FADs, ICE Box. |
| Qualification (for qualitative indicators ONLY) | NA |
| Questions | List the number/amount and type(s) of equipment installed under this project?  If equipment was installed but not operational, please provide reason why it has not been operational to date. |

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| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | Area of land (sq. ft.) under functional irrigation system |
| Unit of measurement | Area (sq. ft.) |
| Variable | Land under functional irrigation system |
| Rationale | This indicator seeks to measure the amount of land (sq ft) being cultivated under functional irrigation with support from the CCCAF to reduce the threats of climate change. |
| Definition of key terms | **Irrigation:** is the method in which water is supplied to plants at regular intervals for agriculture. It is used to assist in the growing of agricultural crops, maintenance of landscapes, and revegetation of disturbed soils in dry areas and during periods of inadequate rainfall |
| Methodology for measuring | The indicator will be measured in sq. ft |
| Data collection method /tool and source of data | This data will be collected by conducting field visits that measure the spread of land serviced by the irrigation system. |
| Frequency of data collection and who collects this information | Information should be completed at the end of the project. Community groups, CLOs and the UNDP team will be responsible for the collection and verification of this information. |
| Disaggregation (if applicable) | N/A |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | How many sq. feet of land is being cultivated using a functional irrigation system? |

## WATER RESOURCES INDICATORS

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| --- | --- |
| Type of Indicator | Outcome |
| Name of Indicator | Rate of water consumption OR Storage capacity |
| Unit of measurement | Rate |
| Variable | water consumption |
| Rationale | During the dry season, consumption of water is known to be at low levels due to low availability. This indicator seeks to measure the relative change in the amount of water consumed after the intervention of the CCCAF to support activities of the project. This indicator and its associated questions will be applicable to each project. |
| Definition of key terms | **Consumption** – this refers to the amount of water that has exited the storage tank via the meter |
| Methodology for measuring | A meter sponsored by NAWASA will be installed to measure the amount of water consumed. |
| Data collection method /tool and source of data | Data on the gallons of water consumed will be collected by periodic meter checks. This will be documented on assessment forms measuring the volume at each visit. Interviews with project executers, progress reports or training reports/registration forms. All information should be validated through field visits. |
| Frequency of data collection and who collects this information | Information will be collected weekly on Friday evenings at 1:00pm. Grantees and CLOs will be responsible for the collection and verification of this information. |
| Disaggregation (if applicable) | NA |
| Qualification (for qualitative indicators ONLY) | NA |
| Questions | No questions for interviews are required since the readings obtained from the meters over time would be used to assess the changes in water consumption particularly during the various seasons of the year. |

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| --- | --- |
| Type of Indicator | Outcome |
| Name of Indicator | Quality of Water |
| Unit of measurement | Quality |
| Variable | Water Change |
| Rationale | This indicator will focus on the concentration of bacteria in water to be consumed. It is based on the ranking provided by DREL Complete Water Quality Lab w/meter which relays the level of bacterial concentration based on the color scale during testing. This indicator will help to explain the changes in the incidence of illnesses and attendance rates particularly at schools that have installed water tanks/cisterns with funding received from CCCAF. |
| Definition of key terms | **Water Quality –** It is a measure of the condition of water relative to the requirements of one or more biotic species and/or to any human need or purpose. |
| Methodology for measuring | Water quality will be measured based on bacterial concentration (*Nephelometric Turbidity Units - NTU*). The data will be obtained through water testing kits, which will be administered to respective project leads. The water quality, identified by color, will be translated into quantitative data by the corresponding ranges from the water testing kits. |
| Data collection method /tool and source | Site visits would be used to facilitate water quality tests. |
| Frequency of data collection and who collects this information | Information should be collected every Friday at 1:00 pm by CLOs and Grantees. |
| Disaggregation (if applicable) | No disaggregation of information required |
| Qualification (for qualitative indicators ONLY) | Dependent on Kits used |
| Questions | No questions required for the survey form as the results from testing would be accumulated over time to track changes. This information would be compared with international standards to determine the level of quality of the water (high, medium or low). NAWASA to support water testing. TBC |

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| --- | --- |
| Type of Indicator | Outcome |
| Name of Indicator | School Attendance (disaggregated by sex) |
| Unit of measurement | Number |
| Variable | Students |
| Rationale | This indicator seeks to determine how school attendance was affected before and after the CCCAF intervention. Several interventions aimed to enhance water accessibility and availability to ensure that toilet facilities are in working order, there is water to ensure hand washing is taking place and also to ensure the school provides adequate facilities for female students during menstrual cycles. |
| Definition of key terms | **Sex –** the state of being male or female.  **Attendance** – the action or state of being present |
| Methodology for measuring | This indicator will be applicable to specific projects. The data will be obtained through attendance records form school, where applicable. Data will be reflected as the average attendance rates of male and female over the timeframe the data was collected. Data on attendance rates before and after the intervention will be compared to determine the change that took place. The monthly data collected after the intervention will also be compared with the rainfall by months to note if there are changes in the attendance rates due to the rainfall amount. This can determine if the water storage capacities are adequate to meet the needs of the students, particularly during the drier months. |
| Data collection method /tool and source | Data will be provided by examining the attendance records from respective schools before and after the intervention supported by CCCAF |
| Frequency of data collection and who collects this information | Information will be compiled at the end of each month by teachers and submitted to the CLO assigned to that project. |
| Disaggregation (if applicable) | Information will be disaggregated by sex. |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | Do you think there are other factors outside of the support provided by the project that could have contributed to the change (positive or negative) observed in the average attendance rates recorded by the school?  **Note well:** The actual change in attendance rates would be calculated based on the attendance registration (**Form 2**) provided by the Principals of relevant schools |

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| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | Number of water and sanitary facilities installed |
| Unit of measurement | Number |
| Variable | Water and sanitary facilities installed |
| Rationale | This indicator seeks to determine the number of water and sanitary facilities installed in communities and schools. They range from water tanks, to compost toilets, flush toilets and showers. |
| Definition of key terms | **Sanitary Facilities –** for this project it refers specifically tocompost toilets |
| Methodology for measuring | Photo verification and counting |
| Data collection method /tool and source | Data on this indicator will be collected by site visits and photo verification on the installation of equipment such as water tanks, compost toilets etc. |
| Frequency of data collection and who collects this information | Information can be collected at the end of the project |
| Disaggregation (if applicable) | N/A |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | How many water and/or sanitary facilities were installed/renovated?   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | Water tanks | Compost toilets | Flush toilets | Shower | Sinks | Cistern | | Amount |  |  |  |  |  |  | |

|  |  |
| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | Number of flood mitigation intervention erected (by type, length) |
| Unit of measurement | Number (Count) |
| Variable | flood mitigation infrastructure erected |
| Rationale | This indicator seeks to find out number of flood mitigation infrastructure erected to reduce the incidence of flash floods, soil erosion, and disruption to school operations resulting in school closures |
| Definition of key terms | Flood mitigation refers to any structural or non-structural measures undertaken to limit the adverse impact of flooding.[[10]](#footnote-10) |
| Methodology for measuring | The indicator is expressed in absolute numbers disaggregated by type of infrastructure, which include: control over the river (bridge) and control over the land (two drains, BC and Clozier) |
| Data collection method /tool and source of data | The count of infrastructure should be obtained from field visits to project sites and documentation should include photographs |
| Frequency of data collection and who collects this information | Site visits should be done at the end of the project. The CLOs and the UNDP team will collect the data. |
| Disaggregation (if applicable) | The category type would be subdivided into control of river and control over land |
| Qualification (for qualitative indicators ONLY) | NA |
| Questions | How many flood mitigation intervention was implemented, by type?   |  |  |  |  | | --- | --- | --- | --- | |  | Drainage widening | Clearing of drainage | Tree planting on slopes/rivers | | Amount |  |  |  | | Length |  |  |  | |

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| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | Rate of success of flood mitigation intervention implemented in affected areas. |
| Unit of measurement | Rate of success |
| Variable | Flood mitigation intervention implemented in affected areas |
| Rationale | This indicator explores how the infrastructure has improved the mitigation of flooding and the effects of climate rated hazards in identified areas. |
| Definition of key terms | **Flood mitigation** refers to any structural or non-structural measures undertaken to limit the adverse impact of flooding on land.[[11]](#footnote-11)  **Direct stakeholders** are those who would be affected flood mitigation |
| Methodology for measuring | The surveys and questionnaires will be conducted within schools and communities that received interventions. That is, the direct beneficiaries should be targeted for interviews.  The qualitative data on the rate of success (high, medium or low) will be translated into quantitative data by assigning the rates high, medium and low as 1, 2 and 3, respectively. |
| Data collection method /tool and source of data | Interviews will be the main mechanism to collect information. This will be largely led by the CLOs assigned to the geographic and thematic areas. |
| Frequency of data collection and who collects this information | After the completion of the project, Information should be obtained during the raining season and after extreme weather. The CLOs and the UNDP team will collect the data. |
| Disaggregation (if applicable) |  |
| Qualification (for qualitative indicators ONLY) | Rate of success (of infrastructure improving flood control to cope with heavy rains):   |  | | --- | | **High** – the infrastructure funded by the project addressed majority to all of the priority activities pertaining to flood mitigation and have significantly reduced the incidence of flash floods and/or disruption to school operations resulting in school closures and damage. | | **Medium** – the infrastructure funded by the project addressed some the priority activities pertaining to flood mitigation and have moderately reduced the incidence of flash floods and/or disruption to school operations resulting in school closures and damage. | | **Low** - the infrastructure funded by the project addressed little to none of the priority activities pertaining to flood mitigation and have minimally reduced the incidence of flash floods and/or disruption to school operations resulting in school closures and damage. | |
| Questions | How would rate the success of the infrastructure provided in the reduction of flash floods and/or interruptions to school operations, closure and damage?   1. High 2. Medium 3. Low |

## ENVIRONMENTAL PROTECTION INDICATORS

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| --- | --- |
| Type of Indicator | Outcome |
| Name of Indicator | # natural assets monitored/researched for protection |
| Unit of measurement | Number |
| Variable | Natural assets protected/monitored/researched |
| Rationale |  |
| Definition of key terms | **Natural assets’** are assets of the natural environment. They consist of biological assets (produced or wild), land, and water areas with their ecosystems, subsoil assets, and air.  Natural assets or ecosystems can be protected or rehabilitated. For example: rehabilitation of degraded land, reduced deforestation, improved biodiversity, restored mangroves, enhanced integrity of ecosystem. Natural assets can also be researched for learning or monitoring purposes |
| Methodology for measuring | Count natural assets or ecosystems based on the boundary of the community. The data will be obtained by direct stakeholders |
| Data collection method /tool and source of data | Interviews will be the main mechanism to collect the information. This will be largely led by the CLOs assigned to the geographic and thematic area |
| Frequency of data collection and who collects this information | Completed at the end of the project |
| Disaggregation (if applicable) | N/A |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | How many natural assets/ecosystems were researched to promote monitoring and protection in your community? *\*\*Note: Count natural assets or ecosystems based on the boundary of the community.* |

|  |  |
| --- | --- |
| Type of Indicator | Outcome |
| Name of Indicator | # of key lessons identified from the research and monitoring projects to inform better management and/or protection of the ecosystems |
| Unit of measurement | Number |
| Variable | key lessons identified from the research and monitoring projects to inform better management and/or protection of the ecosystems |
| Rationale | This indicator aims to track the number of key lessons identified from the research and monitoring projects to inform better management and/or protection of the ecosystems. This indicator is also relevant for the CCCAF since the project intends to track lessons learned for dissemination to stakeholders. |
| Definition of key terms | A **Lesson Learned** is knowledge or understanding gained by experience that has a significant impact for an organisation. The experience may be either positive or negative. Successes are also sources of Lessons Learned. Read more: <http://www.nickmilton.com/2009/05/what-is-lesson-learned.html#ixzz4DfwS4mAk> |
| Methodology for measuring | The absolute number of key lessons identified in reports |
| Data collection method /tool and source of data | The team would need to review the reports of research papers and monitoring protocol reports to count the number of lessons documented. If none were documented in these reports, then the grantee can be contacted as a follow up activity to determine if any lessons learned were documented. |
| Frequency of data collection and who collects this information | At the end of the project |
| Disaggregation (if applicable) | N/A |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | How many lessons were identified from the research and monitoring protocols? |

|  |  |
| --- | --- |
| Type of Indicator | Outcome |
| Name of Indicator | Rate of implementation of recommendations from research on ecosystems |
| Unit of measurement | Rate of implementation |
| Variable | recommendations from research on ecosystems |
| Rationale | The indicator seeks to measure the extent to which recommendations are being implemented as a signal that people are aware of the findings of research and grasp the importance or urgency to address gaps. This urgency is reflected into the “rate of implementation” |
| Definition of key terms | NA |
| Methodology for measuring | The indicator will rank the rate of implementation as: high, medium or low  Information will be conducted via interviews with the grantees that commissioned the research for monitoring or conservation purposes. |
| Data collection method /tool and source of data | Interviews will be the main mechanism to collect information this will be largely led by the CLOs. |
| Frequency of data collection and who collects this information | Information will be collected at the end of the project cycle. |
| Disaggregation (if applicable) | N/A |
| Qualification (for qualitative indicators ONLY) | Rate of implementation:  High: >75% of recommendations from CCCAF research based projects are implemented  Medium: 26%-75% of recommendations from CCCAF research based projects are implemented  Low: <25% of recommendations from CCCAF research based projects are implemented |
| Questions | What is the rate of implementation of recommendations provided?   |  | | --- | | High: ≥75% of recommendations from CCCAF research based projects are implemented | | Medium: 26%-74% of recommendations from CCCAF research based projects are implemented | | Low: ≤25% of recommendations from CCCAF research based projects are implemented |   What were the reasons for the rate of implementation recommended– what factors supported implementation and what factors slowed implementation?  What do you think would increase the rate of implementation of the recommendations of the research? |

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| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | Quantity/ volume of solid waste collected at clean-ups (by area) |
| Unit of measurement | Number of bags or weight (kg) |
| Variable | Solid waste collected at cleanup campaigns |
| Rationale | This indicator explores the amount of solid waste collected at ecosystem cleanups |
| Definition of key terms | **Solid Waste**: Any solid or semi solid material (garbage, refuse) consisting of everyday items that are discarded by the individual |
| Methodology for measuring | Quantity/Number of bags or weight (kg) will be accepted as the units of measurement for this indicator  It is expected that the organizers for clean up campaigns will capture this information. Therefore no specific methodology for measuring will be required since information will be obtained mostly from literature review. |
| Data collection method /tool and source of data | Please refer to International Coastal Cleanup (ICC) data protocol/cards. |
| Frequency of data collection and who collects this information | Data should be collected at the end of each cleanup by the organizers and reported to CLOs assigned to that Parish. |
| Disaggregation (if applicable) | Data should be broken down into categories (see data card) |
| Qualification (for qualitative indicators ONLY) | NA |
| Questions | How many bags or what weight (kg) of solid waste are collected during clean ups?  What are the factors that contribute to the success/failure of solid waste clean up campaigns? |

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| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | # bins (compost and garbage) installed |
| Unit of measurement | Number |
| Variable | Bins (compost and garbage bins) |
| Rationale | To determine the availability of garbage bins for proper disposal of waste  To determine the number of compost bins installed by CCCAF |
| Definition of key terms | **Garbage bin:** a container for household refuse  **Compost bin**: an outdoor container in which garden refuse and other organic waste is deposited in order to produce compost |
| Methodology for measuring | Counting of bins. Only those bins that are being actively used should be recorded. |
| Data collection method /tool and source of data | Observation in the target communities  Surveys for farmers for compost bins |
| Frequency of data collection and who collects this information | At the end of project  Community members and CLO |
| Disaggregation (if applicable) | Bins will be disaggregated by type: garbage or compost |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | How many bins have been installed by type?   |  |  |  | | --- | --- | --- | |  | Garbage bins | Compost bins | | Number/ Amount |  |  |   What is the changed observed from installing compost/ Garbage Bins? |

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| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | # of research / monitoring protocols completed (by theme) |
| Unit of measurement | Number |
| Variable | Research/Monitoring protocols |
| Rationale | This indicator seeks to determine the number of monitoring protocols and research systems conducted that can better inform decision making with respect to ecosystem management |
| Definition of key terms | **Monitoring Protocol**: a system of rules that explain the correct conduct and procedures to be followed for observations or gathering specific data or information  **Research**: systematic investigation or search to prove a hypothesis or discover new information |
| Methodology for measuring | Each research topic is counted as 1  Each ecosystem with monitoring protocols developed is counted as 1 |
| Data collection method /tool and source of data | Questionnaires, interviews, literature review (reports of research, monitoring protocols) |
| Frequency of data collection and who collects this information | At end of the Project  Community members and CLO |
| Disaggregation (if applicable) | Research and monitoring protocols is to be disaggregated by topic and ecosystem, respectively |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | How many research studies have been completed and what were the topics?  Do you think the findings from the research and the information in the monitoring protocols are relevant to support better management of the ecosystems? Explain |

## FORESTRY INDICATORS

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| --- | --- |
| Type of Indicator | Outcome |
| Name of Indicator | Evidence that the biodiversity has increased (meiofauna, invertebrates etc.) in reforested area (by site). |
| Unit of measurement | Evidence |
| Variable | biodiversity has increased in reforested areas |
| Rationale | This indicator seeks to measure the changes in the biodiversity due to the reforestation of sites through funding received from CCCAF. The main plant species to be introduced is mangroves. Given that the final M&E data will be collected close after the planting of mangroves, it will not be realistic to observe and measure significant changes in an ecosystem. Therefore, this indicator will focus on measuring the existence of species associated with the early days in the establishment of a mangrove ecosystem e.g. crazy ant (*Nylanderia/ Paratrechina spp*.), wasp, red mangrove crab (callinectus). |
| Definition of key terms | **Biological diversity/biodiversity**: is the term given to the variety of life on Earth. It is the variety within and between all species of plants, animals and micro-organisms and the ecosystems within which they live and interact. [[12]](#footnote-12) |
| Methodology for measuring | For identified species, 1 m (?) quadrants are randomly sampled (stratified) and number of individuals within quadrants counted. Then estimate of total number of individuals counted for entire site.  Infauna methodology – 1 m (?) quadrants are randomly sampled (stratified) (see above) use sediment sampling within a randomly selected subsection of the 1m quadrants. Use of sieves (size?) to separate organisms. Use of a stereoscope to identify individuals of different species in order to gauge diversity of sample. Surber sampling. |
| Data collection method /tool and source of data | Transects, Quadrants, Random Number tables, Microscope/stereoscope, field guide to common species, meiofauna species guide, plankton counter, G.P.S. |
| Frequency of data collection and who collects this information | Information should be collected at the beginning, half way through the project and end of the project. The Ministry of Forestry and Environment division will be required to support the collection and verification of the data. |
| Disaggregation (if applicable) | N/A |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | Has there been an observed changed in the biodiversity since the reforestation of the area? What types of plant and animal life are being observed?  Area of land (sq.ft) under tree cover? \_\_\_\_\_ |

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| --- | --- |
| Type of Indicator | Outcome |
| Name of Indicator | Evidence of change in coastal profile, erosion, shoreline width (cross section graph of selected location). |
| Unit of measurement | Evidence of change |
| Variable | Coastal profile, erosion, shoreline width (cross section graph of selected location). |
| Rationale | This indicator seeks to generate a coastal (embayment/ beach) profile or a riparian zone profile and capture how tree planting contributes to a reduction in vulnerability and to improved adaptive capacity of communities (both human and non human) as a result of support under the CCCAF. |
| Definition of key terms |  |
| Methodology for measuring | Beach profiles will be collected at permanent benchmarks located in the back beach/ riverine areas along the selected bay which the tree planting occurred, every 100 ft. Measurement of the slope/ gradient and other morphology characteristics of a coastline or riparian zone will be undertaken at selected time intervals to provide empirical evidence of changes in the coastal profile |
| Data collection method /tool and source of data | Auto level, measuring tape, GPS, measuring rod, data sheets |
| Frequency of data collection and who collects this information | The Ministry of Forestry and Environment division will be required to support the collection and verification of the data. Profiles will be collected quarterly including before and after the project. |
| Disaggregation (if applicable) | NA |
| Qualification (for qualitative indicators ONLY) | This qualitative indicator will be validated through empirical findings (changes in gradient). No further qualification will be used |
| Questions | No questions needed since data collection will be an extensive field exercise with reports prepared. |

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| Type of Indicator | Outcome |
| Name of Indicator | # No of households (individuals present in the ‘house’) that are protected by newly planted areas. |
| Unit of measurement | Whole Numbers |
| Variable | protected by newly planted areas. |
| Rationale | This indicator seeks to measure the number of individuals living in the region that will benefit from reduction in vulnerability to climate change by the proposed replanting efforts along the shoreline or riverside. |
| Definition of key terms |  |
| Methodology for measuring | The indicator will be measured by conducting household surveys to assess the number of individuals in each dwelling and expressed in absolute numbers.  This will allow for the estimation of the individuals that are beneficiaries of the CCCAF funded initiatives. |
| Data collection method /tool and source of data | House to house surveys in areas surrounding the replantation projects. |
| Frequency of data collection and who collects this information | Grantees, CLOs and the UNDP with support from the Environment team will be responsible for the collection and verification of this information. This will be done before and after the project. |
| Disaggregation (if applicable) | The category individuals will be sub-classified by age (<18, 18-25, 25+, >60), sex, |
| Qualification (for qualitative indicators ONLY) | NA |
| Questions | Field observation and mapping will determine the count of households protected |

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| Type of Indicator | Output |
| Name of Indicator | Number of seedlings propagated (to transplanting stage) |
| Unit of measurement | Number |
| Variable | Seedlings successfully propagated due to the interventions under the CCCAF project |
| Rationale | This indicator seeks to measure the absolute number of seedlings successfully propagated, demonstrating the capacity of stakeholders that have received training and support from the CCCAF to support increasing adaptive capacity to respond to the impacts of climate change. |
| Definition of key terms | **Seedlings:** A seedling is a young plant sporophyte developing out of a plant embryo from a seed. Seedling development starts with germination of the seed.[[13]](#footnote-13)  **Propagated:** to cause (an organism) to multiply by any process of natural reproduction from the parent stock. |
| Methodology for measuring | The indicator is expressed in absolute numbers but can also be reported as a percentage of the total number of seedlings that was initially propagated. Percentage survival can be determined. Surveys will be taken at the nursery established to grow mangrove seedlings. |
| Data collection method /tool and source of data | Visual surveys and counts. |
| Frequency of data collection and who collects this information | Information should be collected as new bathes of seedlings are propagated. Initial seedling count should be taken after the collection stage and at the end of the propagation stage (4 months) and final numbers determined.  Grantees, CLOs and the UNDP team will be responsible for the collection and verification of this information. |
| Disaggregation (if applicable) | N/A |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | What was the total number of seedlings propagated?  How many survived and were transplanted at the reforestation site? |

|  |  |
| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | Total height above ground (avg.) of seedlings (from soil mark to the apical bud) |
| Unit of measurement | Average total height above ground (in cm) |
| Variable | Of the intervention in demonstrating successful care and maintenance of trees in order to reduce vulnerability of the community under the CCCAF project. |
| Rationale | This indicator seeks to demonstrate success of the replantation efforts by the community. |
| Definition of key terms | An **apical bud** is the primary growing point located at the top of the plant. It is the main growth area in most plants. It exhibits apical dominance, inhibiting the growth of lateral buds so that the plant may grow vertically.[[14]](#footnote-14) |
| Methodology for measuring | 10% of the total number of mangroves/trees translated at the site will be randomly selected. The area of the reforestation programme will be mapped and then a numbered grid will be placed over the map. A (computer generated) random number table is then used to select which squares to sample from. Trees selected within the selected grids will be marked/tagged and measurements will be taken of these specific indicator plants monthly (from soil mark to the apical bud). The average height will be estimated and recorded over time. |
| Data collection method /tool and source of data | Rulers, transect tape, map of site, tags for trees |
| Frequency of data collection and who collects this information | Grantees, CLOs and the UNDP with support from the Environment team will be responsible for the collection and verification of this information. Monthly. |
| Disaggregation (if applicable) | NA |
| Qualification (for qualitative indicators ONLY) | NA |
| Questions | No questions needed since data collection will be an extensive field exercise with reports prepared. |

|  |  |
| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | Carbon accumulation rate (by site) |
| Unit of measurement | Rate |
| Variable | Carbon accumulation (by site) |
| Rationale | This indicator seeks to demonstrate the contribution of the CCCAF projects in advancing climate change mitigation agenda |
| Definition of key terms | **Carbon sequestration or accumulation** describes long-term storage of carbon dioxide or other forms of carbon to either mitigate or defer global warming and avoid dangerous climate change. It has been proposed as a way to slow the atmospheric and marine accumulation of greenhouse gases, which are released by burning fossil fuels.[[15]](#footnote-15) |
| Methodology for measuring | The size of the land under reforestation would need to be measured. The general rule of thumb for **carbon sequestration by mangrove trees is approximately 15 tonnes of carbon per hectare of trees.** |
| Data collection method /tool and source of data | Measuring tape, maps |
| Frequency of data collection and who collects this information | Grantees, CLOs and the UNDP with support from the Environment team will be responsible for the collection and verification of this information. Data should be collected at the end of the project. |
| Disaggregation (if applicable) | NA |
| Qualification (for qualitative indicators ONLY) | NA |
| Questions | No questions needed since data collection will be an extensive field exercise with reports prepared. |

## EDUCATION AND AWARENESS INDICATORS

|  |  |
| --- | --- |
| Type of Indicator | Outcome |
| Name of Indicator | # of lessons learned (by thematic areas) |
| Unit of measurement | # (Count) |
| Variable | Lessons learned (by thematic areas) |
| Rationale | This indicator seeks to measure the number of lessons learned via the community projects supported by CCCAF. Given that the CCCAF projects are grouped into thematic areas, it is expected that lessons will be documented by thematic areas. It is also envisaged the lessons pertaining to project management and monitoring and evaluation would be documented. |
| Definition of key terms | **Thematic areas** refers to the thematic areas featured in the CCCAF project: water resources, environmental protection, food security (fisheries and agriculture), forestry  A **Lesson Learned** is knowledge or understanding gained by experience that has a significant impact for an organisation. The experience may be either positive or negative. Successes are also sources of Lessons Learned. Read more: <http://www.nickmilton.com/2009/05/what-is-lesson-learned.html#ixzz4DfwS4mAk> |
| Methodology for measuring | This indicator is expressed in absolute numbers disaggregated by 4 broad categories as indicated below |
| Data collection method /tool and source of data | The count of lessons learnt should be obtained from interview scripts with individuals in the community involved in the different thematic areas. Progress reports prepared by the UNDP staff and the M&E specialist will also be useful. |
| Frequency of data collection and who collects this information | Information should be collected during and at the end of the activity. Grantees, CLO’s and the UNDP team will be responsible for the collection and verification of the information. |
| Disaggregation (if applicable) | The categories of lessons learnt will be sub divided into 4 thematic areas: water resources, environmental protection, food security and forestry |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | How many lessons were learned from the various thematic areas?   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Food security | Water resources | Environmental protection | Forestry | Education and Awareness | | Amount |  |  |  |  |  | |

|  |  |
| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | # of education and awareness materials (by type) on the effects of climate change developed (by thematic areas) |
| Unit of measurement | Number (count) |
| Variable | Education and awareness materials (by type) on the effects of climate change developed (by thematic areas) |
| Rationale | This indicator seeks to measure the number of educational and awareness materials that have been developed with support from CCCAF. It looks specifically at measuring education and awareness programmes on general climate change or the effects of climate change on a particular thematic area/sector. However, training and education materials/programmes related to a particular sectors’ trade would not be measured through this indicator since they are being tracked with relevant indicators specific to the thematic areas. |
| Definition of key terms | “Type” refers to- visual (television, plays);aural (radio); print (fliers, booklets, bill boards)  “Thematic areas” refers to the thematic areas featured in the CCCAF project: water resources, environmental protection, food security (fisheries and agriculture), forestry |
| Methodology for measuring | The indicator is expressed in absolute number disaggregated by 3 broad categories: visual, aural, print |
| Data collection method /tool and source of data | The count of educational and awareness materials should be obtained from progress reports and field visits. |
| Frequency of data collection and who collects this information | Information should be collected at the beginning and end of the project. Grantees, CLO’s and the UNDP team will be responsible for the collection and verification of the information. |
| Disaggregation (if applicable) | The material will be classified into (i) Type = visual, print and aural and (ii) TA |
| Qualification (for qualitative indicators ONLY) | NA |
| Questions | What type of and how many education and awareness materials specific to climate change were developed with support from the project?   |  |  |  |  | | --- | --- | --- | --- | | Categories | Visual | Print | Aural | | Amount |  |  |  |   What type of and how many education and awareness materials on climate change that are specific to the following thematic areas were developed with support from the project?   |  |  |  |  | | --- | --- | --- | --- | |  | Visual | Print | Aural | | Food Security |  |  |  | | Water resources |  |  |  | | Environmental protection |  |  |  | | Forestry |  |  |  | |

|  |  |
| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | # of stakeholders engaged with the educational and awareness materials on the effects of climate change (by thematic area) |
| Unit of measurement | Number (count) |
| Variable | Stakeholders engaged with the educational and awareness materials on the effects of climate change (by thematic area) |
| Rationale | This indicator seeks to measure the number of stakeholders that have been reached with the educational and awareness materials on the effects of Climate Change. |
| Definition of key terms | **Stakeholders** include those individuals, communities and agencies that were exposed to the materials directly.  Individuals include: students, teachers, community members, fisher folk, farmers and other. Agencies include schools and other government departments.  **Engaged** also means those stakeholders that were reached or exposed to the education and awareness materials and should definitely include the direct stakeholders. For audio and televised programs, it would be assumed that there is nation wide coverage. |
| Methodology for measuring | This indicator is expressed in absolute numbers disaggregated by 3 broad categories: individual, communities and agencies |
| Data collection method /tool and source of data | The count of stakeholders should be obtained from interviews with project leads, progress reports. |
| Frequency of data collection and who collects this information | Information should be collected at the end of the activity. Grantees, CLO’s and the UNDP team will be responsible for the collection and verification of the information. |
| Disaggregation (if applicable) | The category individuals will be classified into students, teachers; communities- residents  All efforts would be made to track the sex of individuals exposed to the education and awareness materials |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | How many stakeholders were directly exposed with the education and awareness materials on climate change, including materials on the effects of climate change on a particular thematic area?   |  |  |  |  | | --- | --- | --- | --- | |  | Individuals | Communities | Agencies | | Climate Change |  |  |  | | Food Security |  |  |  | | Water resources |  |  |  | | Environmental protection |  |  |  | | Forestry |  |  |  |   For those direct beneficiaries classified as “individuals”, how many were men, women, youths and vulnerable groups (disabled, elderly)?  Thematic area:   |  |  |  |  | | --- | --- | --- | --- | | ***Female distribution*** | | | | | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | | ***Male distribution*** | | | | | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | |  |  |  |  |   List what worked well and could be improved in the execution of the training and education programs to build awareness of climate change?  What worked well:  What could be improved:  How did you find out about and became involved in the education and awareness programmes offered by this project?  How well do you understand the term ‘climate change’?   * 0 – you do not understand any of the information or materials * 1 – you understand some (basics) of the information or materials covered * 2 - you understand most (basics + advanced) of the information or materials covered * 3 - you understand all of the information or materials covered |

|  |  |
| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | # of stakeholders trained/certified in the delivery of educational and awareness materials on climate change |
| Unit of measurement | Number (count) |
| Variable | Stakeholders trained/ certified in the delivery of educational and awareness materials on climate change |
| Rationale | This indicator seeks to measure the number of stakeholders that have received training/certification in the delivery of educational and awareness materials on climate change. It looks specifically at ‘training of trainers’ for the education and awareness programmes as it relates to climate change ONLY. Other training and education related to a particular sector trade or area will not be measured through this result area and the associated indicators. |
| Definition of key terms | This indicator defines **stakeholders** to include individuals/communities/agencies that benefit directly.  **Direct stakeholders** are those that receive direct support and are aware they are receiving support. |
| Methodology for measuring | This indicator is expressed in absolute numbers disaggregated by 3 broad categories: individual, communities and agencies |
| Data collection method /tool and source of data | The count of stakeholders should be obtained from interviews with project leads, training reports. |
| Frequency of data collection and who collects this information | Information should be collected at the end of the activity. Grantees, CLO’s and the UNDP team will be responsible for the collection and verification of the information. |
| Disaggregation (if applicable) | The category individuals should be disaggregated by sex |
| Qualification (for qualitative indicators ONLY) | NA |
| Questions | How many stakeholders (categorized by individuals, agencies and communities) received training/certification to administer training on climate change (training-of-trainers)?   |  |  |  | | --- | --- | --- | | Individuals | Communities | Agencies | |  |  |  |   For those direct beneficiaries classified as “individuals”, how many were men, women, youths and vulnerable groups (disabled, elderly)   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | | Male |  |  |  |  | | Female |  |  |  |  |   How did you find out about and became involved in the training of trainer programmes offered by this project? |

|  |  |
| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | # Training and education programs to enhance skills and capacities (by topic) |
| Unit of measurement | Number (count) |
| Variable | Training and education programs |
| Rationale | This indicator will determine the number of training and education programs executed under CCCAF. It refers to those training and education programmes that would improve the skills of individuals to perform tasks pertinent to the thematic area of environmental protection. It is not related to education and awareness programmes on climate change. |
| Definition of key terms | **Training**: The action of teaching a person a particular skill  **Education**: The process of facilitating learning or the acquisition of knowledge |
| Methodology for measuring | The indicator will be measured by absolute number of training and education programs conducted/completed |
| Data collection method /tool and source of data | The count of education and training programs should be obtained by CLOs through interviews with project leaders and training repotrs. All information should be validated through attendance by CLOs |
| Frequency of data collection and who collects this information | Information should be gathered at the end of the project. |
| Disaggregation (if applicable) | Training and education programmes will be disaggregated by type/topic |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | List what topics were covered in the training and education programs provided to residents/farmers/fishers to enhance their capacities to achieve the objectives of the project? |

|  |  |
| --- | --- |
| Type of Indicator | Output |
| Name of Indicator | # of beneficiaries of training and education programs (by topic, sex, location) |
| Unit of measurement | Number/ count |
| Variable | Beneficiaries of training and education programs |
| Rationale | This indicator seeks to measure the number of beneficiaries that have received training from education programs that have been implemented. Hence it is focused on measuring direct beneficiaries. It refers to those individuals that benefitted from training and education programmes that would improve their skills to perform tasks pertinent to environmental protection. It is not related to education and awareness programmes on climate change.  It does not seek to measure the output of whether the training and education programs were successful in influencing individuals in reducing their impact on climate change. |
| Definition of key terms | **Direct beneficiaries**: Participants of training and education programs  **Training**: The action of teaching a person a particular skill  **Education**: The process of facilitating learning or the acquisition of knowledge |
| Methodology for measuring | The indicator is expressed in absolute numbers of individuals that are direct beneficiaries of the training and education programs |
| Data collection method /tool and source of data | A count of individuals should be obtained from interviews with project executors and registration at training and education programs. All information should be validated by CLOs through attendance. |
| Frequency of data collection and who collects this information | Information should be completed at the end of each training and education program by the grantees and shared with the CLOs. The CLOs and the UNDP team will be responsible for verification of this information |
| Disaggregation (if applicable) | Individual will be sub-classified into age, sex and location |
| Qualification (for qualitative indicators ONLY) | N/A |
| Questions | How many individuals benefited from training and education programs to enhance their capacities to achieve the objectives of this project, by topic and how many were men, women, youths and vulnerable groups (disabled, elderly)?  Topic 1: \_\_\_\_\_\_\_\_\_\_\_   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | | Male |  |  |  |  | | Female |  |  |  |  |   How did you find out about and became involved in the training offered by this project?  List what **worked well and what could be improved** in the execution of the training and education programs to build capacities within this sector?  How well do you understand the material you were taught in the training?   * 0 – you do not understand any of the information or materials * 1 – you understand some (basics) of the information or materials covered * 2 - you understand most (basics + advanced) of the information or materials covered * 3 - you understand all of the information or materials covered |

# APPENDIX II – PERFORMANCE MONITORING FRAMEWORK

| **Results** | **Core Indicators** | **Aggregate Baseline Data Year:2013** | | **Aggregate Targets Year:2017** | | **Sources of Data** | **Methods of Data Collection** | **Frequency** | **Responsible** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Item** | **#/Amt** | **Item** | **#/Amt** |
| **IMPACT: Increased ecosystem resilience and adaptive capacity of communities in response to and in preparation for climate change induced stresses through the implementation of concrete community-based adaptation activities and incentives in various sectors in the islands of Grenada, Carriacou and Petit Martinique** | I1. # of stakeholders (individuals/communities/agencies) directly and indirectly benefitting from vulnerability reduction and improved adaptive capacity activities as a result of support under the CCCAF (disaggregated by sex for residents) [coverage indicator] | Individuals | 0 | Individuals(1st) | 5247 | progress reports or training reports/registration forms (Form 1) | interviews with project executers/beneficiaries; literature review | beginning and end of the project | CLOs+Grantees |
| Communities | 0 | Communities(2nd) | a few nationwide projects and the community specific ones target over **36 communities.** Some communities benefit from more than 1 project |
| Agencies | 0 | Agencies(3rd) | > **32 agencies** (NGOs, schools, government and private institutions) |
| I2. Rate of success of the interventions in delivering improvement in options to cope with climate change threats [adaptive capacity indicator] |  |  | High(1)= | 20 | (opinions of) grantees and direct beneficiaries | interviews with project executers and direct beneficiaries | end of project | CLOs |
| Medium(2)= | 3 |
| Low(3)= | 0 |
| I3. Level of capacity of beneficiaries to maintain/sustain adaptation strategies introduced or strengthened via CCCAF [sustainability indicator] | High(1)= | 0 | High(1)= | 18 | (opinions of) grantees and direct beneficiaries | interviews with project executers and direct beneficiaries | end of project | CLOs |
| Medium(2)= | 0 | Medium(2)= | 5 |
| Low(3)= | 1 | Low(3)= | 0 |
| I4. # of employment opportunities created (by parish, thematic area) |  |  | Employment= | 303 | project grantees and progress reports | interviews and literature review | end of project | CLOs+Grantees |
|  |  | Male= | 214 |
|  |  | Female= | 71 |
|  |  | Unknown= | 18 |
| **Outcome 1: Residents, farmers and/or fishers are more knowledgeable and equipped to cope with the effects of climate change by increasing production yields and/or reduced operational costs to improve livelihoods, reduce unemployment and sustain food security for communities.** | 1.1 Yields of produce (avg lbs/mth) (by type of technique in fishery and agriculture sectors) | Fisher(F) avg lb/mth | unknown | Fisher(F) avg lb/mth | 600lbs (seamoss), 16550 lbs (FAD) | Form 3 (Yield of Produce), Form 4 (Fish Yield and Quality), Form 5 (# of seedlings), Form 6 (Yield of organic compost) or Form 7 (Yield of protein from waste) | literature review of forms submitted | monthly data collection by grantees | Grantees |
| Agri(A) avg lb/mth | 695lbs (waterharvest) | Agri(A) avg lb/mth | 2876lbs (waterharvest), 88000lbs (PFW), 1500 (ogranic) |
| 1.2 Rate/Level of change in food security due to the measures implemented | High (1) | 0 | High(1) | 10 | (opinions of) project grantees and direct beneficiaries | interviews with direct beneficiaries and site visit to validate information | end of project | CLOs |
| Medium (2) | 0 | Medium(2) | 2 |
| Low (3) | 2 | Low(3) | 0 |
| **Output 1.1: Farmers (crops or livestock) and fishers have implemented/adopted new practices and/or equipment** | 1.1.1 # of farmers/fishers practicing/benefiting from new techniques (specified per type of technique e.g. FAD, mixing feed, organic agriculture, iceboxes. lionfish harvesting, irrigation systems, water harvesting\*) | PFW |  | PFW | 200 | project grantees, Form 1, Form 4 | interviews and literature review | end of project | CLOs+Grantees |
| FAD |  | FAD | 40 |
| OrganicAgri | 2 | OrganicAgri (inc compost) | 54 |
| Icebox |  | Icebox | 30 |
| Irrigation |  | Irrigation | 76 + 1 school |
| Waterharvesting | 2 | Waterharvesting | 272 |
| Seamoss |  | Seamoss | 21 |
| Lionfish |  | Lionfish | 800 |
| Vermaculture | 2 | Vermaculture | 4 |
| Green house | unknown | Green house | unknown |
| **TotalAgri(A)** | **6** | **TotalAgri(A)** | **627 farmers and 1 school** |
| **TotalFishing(F)** | **0** | **TotalFishing(F)** | **870 fishers** |
| 1.1.2 #/ sq ft of new sea moss farms operational | Total | 0 | Total | 10 (farms, sqft unknown) | Grantees | observation, photographs, interviews | end of project | CLOs+Grantees |
| 1.1.3 # of equipment introduced/installed and operational (by type; ice boxes FADs, solar systems, irrigation system) | PFW | 0 | PFW | 1 art's roller mill | Grantees, direct beneficiaries | observation, photographs, interviews | end of project | CLOs+Grantees |
| FAD | 0 | FAD | 10 units |
| OrganicAgri | 0 | OrganicAgri (inc compost) | 4 bins (unknown composting) |
| Icebox | 0 | Icebox | 30 |
| Irrigation | 0 | Irrigation | 3 solar pumps, 3 dripirrigation sys |
| Seamoss | 0 | Seamoss | 1 drying house, 10 drying tables, 5 solar driers |
| Lionfish | 0 | Lionfish | 50 units |
| Vermaculture | 0 | Vermaculture | 4 units |
| Greenhouse | 0 | Greenhouse | 1 |
| **TotalAgri(A)** | **0** | **TotalAgri(A)** | **1 roller mill PFW, 4 compost bins, 3 solar pumps, 3 drip irrigation sys, 1 drying house, 10 drying tables, 5 solar driers, 4 vermaculture units, 1 greenhouse** |
| **TotalFishing(F)** | **0** | **TotalFishing(F)** | **10 FAD units, 30 icebox, 50 lionfish harvest units** |
| 1.1.4 Area of land (sq. ft.) under functional irrigation system | Total Sqft= | 0 | Total Sqft= | 94820 | Grantees, direct beneficiaries | observation, photographs, interviews | end of project | CLOs+Grantees |
| **Outcome 2: Strengthened capacities to cope with water stresses to boost health, productivity and livelihoods of individuals (farmers, senior citizens, students and/or households)** | 2.1 Rate of water consumption OR Storage Capacity | Total gallons | 12100 | Total gallons | 211488.63 | meter reading, records from NAWASA | literature review | monthly data collected by NAWASA | NAWASA |
| 2.2 Quality of water | High(1)= | unknown | High(1)= | 5 | water test results from NAWASA | observation, interviews | monthly data collected by NAWASA |  |
| Medium(2)= | unknown | Medium(2)= | 0 |
| Low(3)= | unknown | Low(3)= | 0 |
| 2.3 School attendance (disaggregated by sex) | Male(m) | 284 | Male(m) | 318 | Form 2 | summary of daily attendance register | monthly by school principals | Grantees |
| Female(f) | 281 | Female(f) | 305 |
| **Total** | **565** | **Total** | **623** |
| **Output 2.1: Water saving measures implemented or expanded/updated** | 2.1.1 Number of water and sanitary facilities installed (tanks, compost toilets, showers etc.) | water tanks | 72 | water tanks | 26 | Grantees, direct beneficiaries, sites | observation, photographs, interviews | end of project | CLOs+Grantees |
| compost toilets | 0 | compost toilets | 0 |
| flush toilets | 0 | flush toilets | 0 |
| shower | 0 | shower | 0 |
| cistern | 2 | cistern | 2 |
| sinks | 0 | sinks | 0 |
| **Total** | **74** | **Total** | **28** |
| **Output 2.2: Flood mitigation infrastructure and measures implemented** | 2.2.1 Number of flood mitigation intervention erected (by type) | Drainage widen |  | Drainage widen | 284ft | Grantees, direct beneficiaries, sites | Grantees, direct beneficiaries, sites | Grantees, direct beneficiaries, sites | CLOs+Grantees |
| Clean drainage |  | Clean drainage | 500ft |
| Treeplant |  | Treeplant |  |
| **Total** |  | **Total** | **784ft of drains extended or widened** |
| 2.2.2 Rate of success of flood mitigation intervention implemented in affected areas |  |  | High(1) | 1 | (opinions of) grantees, direct beneficiaries | interviews | end of project | CLOs |
| Medium(2) | 1 |
| Low (3) | 0 |
| **Outcome 3: Enhanced capacities to protect/conserve ecosystems/environment through research and actions that mitigate risks to climate change** | 3.1 # natural assets monitored/researched for protection | natural assets= | 1 | natural assets= | 6 | granntees and reports of research/studies | interviews and literature reviews | end of project | Grantees |
| 3.2 # of key lessons identified from the research and monitoring projects to inform better management and/or protection of the ecosystems |  |  | lessons= | 5 | reports of research papers and monitoring protocol reports grantee can be contacted as a follow up activity to determine if any lessons learned were documented | interviews and literature reviews | end of project | Grantees |
| 3.3 Rate of implementation of recommendations from research on ecosystems |  |  | High(1) | 0 | (opinions of) grantees that commissioned the research for monitoring or conservation purposes | interviews and literature reviews | end of project | Grantees |
| Medium(2) | 1 |
| Low(3) | 0 |
| **Output 3.1: Enhanced ecosystem health and environmental sanitation to adapt to climate change** | 3.1.1 Quantity/ volume of solid waste collected at clean-ups (by area) | Bags | unknown | Bags | unknown | records from clean up campaigns | literature review and interviews | end of each clean up campaign | Grantees |
| Kg | unknown | Kg | unknown |
| 3.1.2 # bins (compost and garbage) installed (by CCCAF) | Garbage bins | 0 | Garbage bins |  | grantees, direct beneficiaries | field visit/observation, interviews | end of project | CLOs+Grantees |
| Compost bins | 0 | Compost bins | 4 |
| **Total binns** | **0** | **Total bins** | **4** |
| **Output 3.2: Monitoring systems and research have been conducted to better inform management of ecosystems/environment** | 3.2.1 # of research / monitoring protocols completed and implemented/operational (by theme) | Total | 3 | Total | 10 | grantees | Questionnaires, interviews, literature review (reports of research, monitoring protocols) | end of project | Grantees |
| **Outcome 4: Reduced vulnerability of coastal settlements and ecosystems to the effects of climate change and enhanced ability to support climate change mitigation through reforestation of mangroves and other plant species** | 4.1 Evidence that biodiversity has increased (meiofauna, invertebrates etc.) in reforested area (by site) | 0 |  |  | unknown | field reports | Transects, Quadrants, Random Number tables, observation | end of project | Forestry |
| 4.2 Evidence of change in coastal profile, erosion, shoreline width | 0 |  |  | unknown | field reports | field visits to estimate beach profiles | quarterly to track the changes in the beach profile | Environment |
| 4.3 # No of houses that are protected by newly planted areas. | 0 |  | Total | unknown | field reports | observation, photographs | end of project | Environment |
| **Output 4.1: Residents are trained in the care of seedling and nurturing of plants until they are fully matured/established.** | 4.1.1 Number of seedlings propagated (to transplanting stage) | 0 |  | Total | 520 | Form 5 | count | monthly | Grantees |
| **Output 4.2: Trees successfully planted in vulnerable coastal habitats and are properly maintained on an ongoing process.** | 4.2.1 Total height above ground (Avg) of Seedlings (from soil mark to the apical bud) | 0 |  | Total average height (ft) | 3.666666667 | field reports | random sampling, quadrants, field visits to estimate total average height above ground | end of project | Forestry |
| 4.2.2 Amount of plant biomass from trees (grams per unit area of carbon) | 0 |  |  | unknown. To be estimated | field reports | formula for the estimation of plant biomass | end of project | Forestry |
| **Outcome 5: Strengthened understanding and awareness of climate change impacts and adaptation measures and dissemination of lessons learned and best practices (by sector)** | 5.1 # of lessons learned (by thematic areas) | 0 |  | Education and Awareness | 2 | project final progress reports | literature review | end of project | M&E Consultant |
| Environmental Protection | 2 |
| Food Security | 3 |
| Forestry | 1 |
| Water Resources | 2 |
| **Total** | **10** |
| **Output 5.1: Education and information materials on climate change developed** | 5.1.1 # of education and awareness materials/activities (by type) on the effects of climate change developed (by thematic area) | Visual |  | Visual | 12 billboards, 12 presentations, 1 workshop, 1 training session, 8 multimedia recording | Form 1, trainng reports | literature review,photographs | end of project | Grantees |
| Print |  | Print | 3 brochures (> 1000 prints), 8 transcripts, 1 manual, 5 handouts, 1 leaflet (approx 500 prints), 1 posters (approx 100 prints), 1 banner, |
| Aural |  | Aural | I jingle, 8 performance pieces, |
| Mixed | 2 educations sessions and 2 summer camps | Mixed | 6 afterschool classes, 1 school tree planting |
| **Total** | **4 activities** | **Total** | **70 activities** |
| 5.1.2 # of stakeholders engaged with the education and awareness materials on the effects of climate change (by thematic area) | Climate Change |  | Climate Change | 556 | Form 1, training reports | literature review, interviews | end of project | Grantees |
| Environmental Protection |  | Environmental Protection |  |
| Food Security |  | Food Security |  |
| Forestry |  | Forestry |  |
| Water Resources |  | Water Resources |  |
| **Total** |  | **Total** | **approximately 556 +1 nationwide project** |
| **Output 5.2: training/certification of stakeholders to deliver educational and informational materials on climate change** | 5.2.1 # of stakeholders trained/certified in the delivery of educational and educational materials on climate change |  |  | Individuals | 15 females | Form 1, training reports | literature review, interviews | end of project | CLOs+Grantees |
| Communities | nationwide |
| Agencies | 1 |
| **Output 5.3: Stakeholder have benefitted from relevant training to improve their operations in the face of climate change** | 5.3.1 # Training and education programs (by topic) | Topics | 0 | Topics | **approximately 39 topics covered:** icebox care, icebox construction, sea moss plot set up, seamoss mariculture, soil protection, feed mixing and calibration, composting and its use, compost tea and its benefits, cultural practices for successful organic farming, establishment and mngt of vermaculture, organic seedling production, crop nutrition and site management, lionfish handling, lionfish harvesting, school awareness on lionfish, lionfish derby, nursery mng't, germination of seedlings, propagating plants, science and technology of FAD, construction of FAD, handling and processing of fish, monitoring of FAD, solar pump and irrigation management; reduce, reduce and recycle; Quality in the farm enterprise;  Harvesting and Post Harvest handling of fresh produce;  Fresh Produce Marketing & Production planning;  Value Chain and markets;  Agriculture Value Chain;  Ploughing and land preparation; Types of adaptation options (green, grey, soft, combined);  Adaptation plan for the area;  Adaptive capacity and factors affecting same; socmon training, health assessment, debate training, soil and water conservation, crop management, effects of deforestation, bamboo furniture and crafts training | Form 1, training reports | literature review, interviews | end of project | Grantees |
| Total # of programs | 0 | Total # of programs | 92 |
| 5.3.2 # of beneficiaries of training and education programs (by topic, sex, location) | Male(m) |  | Male(m) | 495 | Form 1, training reports | literature review, interviews | end of project | CLOs+Grantees |
| Female(f) |  | Female(f) | 188 |
| **Total** |  | **Total** | **1652 (1009 unknown sex distribution)** |

# APPENDIX III – MASTER SURVEY

**INTRODUCTORY NOTE:**

You’ll be asked to answer thirteen questions and your participation will take

approximately fourteen minutes.

You will receive no payment for your participation.

If you decide to participate in this survey, your participation is voluntary

and you have the right to discontinue at any time. You have the right to

refuse to answer particular questions. Your answers will be con/dential and

known only to the UNDP Team members. The summary results of this

research study may be presented at a community meeting, but your

individual responses will remain con/dential.

If you have any questions, concerns or complaints about this research, its

procedures, risks or bene/ts, please call Nicole Cambridge at 419 0756.

You’ll be asked to answer thirteen questions and your participation will take

approximately fourteen minutes.

You will receive no payment for your participation.

If you decide to participate in this survey, your participation is voluntary

and you have the right to discontinue at any time. You have the right to

refuse to answer particular questions. Your answers will be con/dential and

known only to the UNDP Team members. The summary results of this

research study may be presented at a community meeting, but your

individual responses will remain con/dential.

If you have any questions, concerns or complaints about this research, its

procedures, risks or bene/ts, please call Nicole Cambridge at 419 0756.

You’ll be asked to answer thirteen questions and your participation will take

approximately fourteen minutes.

You will receive no payment for your participation.

If you decide to participate in this survey, your participation is voluntary

and you have the right to discontinue at any time. You have the right to

refuse to answer particular questions. Your answers will be con/dential and

known only to the UNDP Team members. The summary results of this

research study may be presented at a community meeting, but your

individual responses will remain con/dential.

If you have any questions, concerns or complaints about this research, its

procedures, risks or bene/ts, please call Nicole Cambridge at 419 0756.

You are kindly being requested to participate in this interview to assist the Environmental Unit of the Ministry of Education to monitor the performance of the “name of project”. You are being engaged because you were identified as a direct beneficiary (or grantee) for this project. You’ll be asked to answer several questions and your participation will take approximately twenty-five minutes or less. You will receive no payment for your participation as your participation is considered as voluntary. You have the right to discontinue at any time or to refuse to answer a particular question. Your individual responses will remain confidential and your identity will remain anonymous. If you have any questions, concerns or complaints about this research, its procedures, or benefits, please call Mr. Martin Barriteau, Project Coordinator for the UNDP ICCAS project, at (473) 440-2708, extension 3027.

**TO BE COMPLETED BY THE INTERVIEWER:**

What Parish is this project being implemented in?

* Carriacou
* Petite Martinique
* St. Andrew
* St. George
* St. John
* St. Patrick
* St. David
* St. Mark
* Nationwide

What Thematic Area does this project address?

* Education and Awareness (EA)
* Environmental Protection (EP)
* Food Security (FS)
* Forestry (F)
* Water resources (WR)

What is the project number? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**PRELIMINARY QUESTIONS (Applicable to ALL projects)**

1. The interviewee belongs to which category?

* Grantee
* Direct Beneficiary
* Indirect Beneficiary

1. Sex of interviewee

* Male
* Female

1. Age range

* Under 18 years
* 18 to 24 years
* 25 to 34 years
* 35 to 44 years
* 45 to 54 years
* 55 to 64 years
* Age 65 or older

1. Highest education level completed (**certificate obtained**)

* No schooling
* Primary
* Secondary
* Tertiary

1. Employment status

* Employed – including self-employed (Part-time)
* Employed – including self-employed (Full-time)
* Unemployed
* Retired
* Unable to work
* Student
* Stay at home parent

1. If unable to work, please state reasons why this is so.
2. If employed, what is your job title or what do you do?
3. Type of household?

* Nuclear
* Extended
* Single-headed
* Other

**IMPACT LEVEL INDICATORS (Questions applicable to ALL projects)**

| **Result Statement** | **Indicators** | **Survey questions** | **Target Audience/**  **Source of Data** | | |
| --- | --- | --- | --- | --- | --- |
| Grantee | Beneficiary | Observation/Specific Data Form |
| **IMPACT: Increased ecosystem resilience and adaptive capacity of communities in response to and in preparation for climate change induced stresses through the implementation of concrete community-based adaptation activities and incentives in various sectors in the islands of Grenada, Carriacou and Petit Martinique** | I1. # of stakeholders (individuals/communities/agencies) directly and indirectly benefitting from vulnerability reduction and improved adaptive capacity activities as a result of support under the CCCAF (disaggregated by sex for individuals.  [coverage indicator] | 1. How many stakeholders (categorized by individuals, agencies and communities) directly and indirectly benefitted from the community project?  |  |  |  |  | | --- | --- | --- | --- | |  | Individuals | Agencies | Communities | | ***Direct*** |  |  |  | | ***Indirect*** |  |  |  | |  |  |  |
| 1. For those direct beneficiaries classified as “**individuals**”, how many were men, women, child, adult and vulnerable groups (disabled, elderly)?  |  |  |  |  | | --- | --- | --- | --- | | ***Female distribution*** | | | | | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | | ***Male distribution*** | | | | | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | |  |  |  |  | |  |  |  |
|  | 1. How did you **find out** about this project and became involved? (e.g. involved in training, adaptation infrastructure/technology introduced etc.) |  |  |  |
|  | 1. Do you think there are barriers or things that prevented and will continue to prevent others from accessing the benefits provided by this project? If yes, what are the barriers? How do you think we can reduce the barriers? *Answer in the space provided below:*   What are the barriers –  What can be done - |  |  |  |
| I2. Rate of Success of the interventions in delivering improvement in options to cope with climate change threats  [adaptive capacity indicator] | 1. Would you say that the initiative achieved a high, medium or low level of success in **improving options for coping with climate change threats** in your community?  * High – the interventions funded by the project addressed the priority hazards and have **significantly** increased and/or improved options to cope with climate change threats in the community. * Medium – the interventions funded by the project have only addressed some of the priority hazards and have **moderately** increased and/or improved options to cope with climate change threats in the community. * Low - the interventions funded by the project did not address any of the priority hazards and have **minimally** increased and/or improved options to cope with climate change threats in the community. |  |  |  |
| 1. List what were the reasons for the rate of success reported in improving options to cope with climate change threats – that is, what worked well and what could be improved?   What **worked well** under this project to help you to better cope with climate hazards (e.g. drought, rainfall, flooding) in your community:  What **could have been done better** under this project to help you to better cope with climate hazards in your community: |  |  |  |
| 1. Do you think there are other factors outside of this project that could have contributed (positive or negative) to the level of success you think was achieved? |  |  |  |
| 1. Were you invited to design or develop this project from the beginning? |  |  |  |
| 1. Did you notice a change within your household and/ or the wider community as a result of this project? If yes, please describe the changes and who was affected.   \*\* Note: change can be related to behaviour/practices, well-being (health, income) etc., positive or negative |  |  |  |
|  | 1. Do you think there are any vulnerable groups that were excluded or forgotten from this project? How can we strengthen their inclusion? |  |  |  |
| I3. Level of capacity of beneficiaries to maintain/sustain adaptation strategies introduced or strengthened via CCCAF  [sustainability indicator] | 1. What is the level of capacity that exists to maintain /sustain the adaptation strategies introduced or strengthened through this initiative?   \*\*Notes: Capacities include:   1. ***Asset base*** *– skills, money, community infrastructure and ecosystems exist within the community/sector that can support the longevity of the intervention* 2. ***Knowledge and information*** *– systems are in place to collect relevant information that will assist in the management and maintenance of the intervention.* 3. ***Governance and management systems*** *–community network, leadership and communication mechanisms exist to coordinate management and sustainability of the interventions*  * High –**all of the requirements** as it relates to asset base, knowledge and information and governance and management arrangements are in place to sustain the intervention * Medium –**some of the requirements** as it relates to asset base, knowledge and information and governance and management arrangements are in place to sustain the intervention * Low - **little to none of the requirements** as it relates to asset base, knowledge and information and governance and management arrangements are in place to sustain the intervention |  |  |  |
| 1. What do you recommend is needed to promote sustainability of this project? That is, when the project funding is completely utilized, what is needed to ensure the benefits of the project do not end? |  |  |  |
| I4. # of employment opportunities created (by parish, sex, thematic area) | 1. How many individuals gained employment, both short-term and long-term, as a result of this intervention?  |  |  | | --- | --- | | Sex: | # Direct Beneficiaries | | Male |  | | Female |  | |  |  |  |
| 1. What type of work did they perform?  * Construction/Laborer * Teaching/instructing * Project manager/Coordinator * Accounting * Design/architecture/engineering * Other |  |  |  |

**FOOD SECURITY CORE INDICATORS**

| **Result Statement** | **Indicators** | **Survey questions** | **Target Audience/ Source of Data** | | |
| --- | --- | --- | --- | --- | --- |
| Grantee | Beneficiary | Observation/ Specific Data Form |
| **Outcome 1: Residents, farmers and/or fishers are more knowledgeable and equipped to cope with the effects of climate change by increasing production yields and/or reduced operational costs to improve livelihoods, reduce unemployment and sustain food security for communities.** | 1.1 Yield/Quality of produce (by type of technique in fishery and agriculture sectors) | There will be no question on this for the survey tool.  **Form 3 (Yield of Produce), Form 4 (Fish Yield and Quality), Form 5 (# of seedlings), Form 6 (Yield of organic compost) or Form 7 (Yield of protein from waste)** will be utilized for the analysis of trends |  |  |  |
| 1.2 Rate of change in food security due to the measures implemented | 1. How would you rate the change in food security as a result of the support provided by the project in this community?  * High – the intervention has significantly improved the affordability, accessibility and availability of (list product e.g. fish/seamoss/organic agriculture/other) in this community. * Medium – the intervention has moderately improved the affordability, accessibility and availability of (list product e.g. fish/seamoss/organic agriculture/other) in this community. * Low - the intervention has not improved the affordability, accessibility and availability of (list product e.g. fish/seamoss/organic agriculture/other) in this community. |  |  |  |
| 1. For agriculture projects, is there a noticeable increase in the availability of crops, particularly during the dry season? Describe |  |  |  |
| **Output 1.1: Farmers (crops or livestock) and fishers have implemented/adopted new practices and/or equipment** | 1.1.1 # of farmers/fishers practicing/benefiting from new techniques (specified per type of technique and sex) | 1. How many farmers/fishers are practicing/ benefiting from the new technique(s) introduced and what is the sex distribution? *Fill out the box relevant to the project.*  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | Protein from Waste | FAD | Organic Agriculture | Ice Box | Irrigation System | Water  Harvesting | Seamoss agri | Lionfish | Vermaculture | Greenhouse | | Male |  |  |  |  |  |  |  |  |  |  | | Female |  |  |  |  |  |  |  |  |  |  | |  |  |  |
| 1.1.2 #/sq. ft. of new sea moss farms operational | 1. How many sq. feet of land is being cultivated for sea moss farms? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |  |
| 1.1.3 # of equipment introduced/installed and operational (by type) | 1. List the **number/amount and type(s)** of equipment installed under this project? |  |  |  |
| 1. If equipment was installed but not operational, please provide reason why it has not been operational to date. |  |  |  |
| 1.1.4 Area of land (sq. ft.) under functional irrigation system | 1. How many sq. feet of land is being cultivated using a functional irrigation system? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |  |

**WATER RESOURCES CORE INDICATORS**

| **Result Statement** | **Indicators** | **Survey questions** | **Target Audience/Source of Data** | | |
| --- | --- | --- | --- | --- | --- |
| Grantee | Beneficiary | Observation/ Specific Field Survey |
| **Outcome 2: Strengthened capacities to cope with water stresses to boost health, productivity and livelihoods of individuals (farmers, senior citizens, students and/or households)** | 2.1 Rate of water consumption OR Storage Capacity | No questions for interviews are required since the readings obtained from the meters (to be installed by NAWASA - TBC) over time would be used to assess the changes in water consumption particularly during the various seasons of the year. |  |  |  |
| 2.2 Quality of water | No questions required for the survey form as the results from testing would be accumulated over time to track changes. This information would be compared with international standards to determine the level of quality of the water (high, medium or low). NAWASA to support water testing. TBC |  |  |  |
| 2.3 School attendance (disaggregated by sex) | The actual change in attendance rates would be calculated based on the attendance registration (**Form 2**) provided by the Principals of relevant schools |  |  |  |
| 1. Do you think there are other factors outside of the support provided by the project that could have contributed to the change (positive or negative) observed in the average attendance rates recorded by the school? |  |  |  |
| **Output 2.1: Water saving measures implemented or expanded/updated (e.g. rainwater harvesting, water conservation campaigns)** | 2.1.1 # of water and sanitary facilities installed (tanks, compost toilets, showers etc.) | 1. How many water and/or sanitary facilities were installed/renovated? *Fill out the box that is relevant to the project*  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | Water tanks | Compost toilets | Flush toilets | Shower | Sinks | Cistern | | Amount |  |  |  |  |  |  | |  |  |  |
| **Output 2.2: Flood mitigation infrastructure and measures (widen streams, reinforce dams, drainage, sloping, soil protection measures) implemented** | 2.1.2 # of flood mitigation intervention erected (by type, length) | 1. How many flood mitigation intervention was implemented, by type? *Fill out the box that is relevant to the project*  |  |  |  |  | | --- | --- | --- | --- | |  | Drainage widening | Clearing of drainage | Tree planting on slopes/rivers | | Amount |  |  |  | | Length |  |  |  | |  |  |  |
| 2.1.3 Rate of success of flood mitigation intervention implemented in affected areas | 1. How would rate the success of the infrastructure provided in the reduction of flash floods and/or interruptions to school operations, closure and damage?  * High – the infrastructure funded by the project addressed majority to all of the priority activities pertaining to flood mitigation and have significantly reduced the incidence of flash floods and/or disruption to school operations resulting in school closures and damage. * Medium – the infrastructure funded by the project addressed some the priority activities pertaining to flood mitigation and have moderately reduced the incidence of flash floods and/or disruption to school operations resulting in school closures and damage. * Low - the infrastructure funded by the project addressed little to none of the priority activities pertaining to flood mitigation and have minimally reduced the incidence of flash floods and/or disruption to school operations resulting in school closures and damage. |  |  |  |

**ENVIRONMENTAL PROTECTION CORE INDICATORS**

| **Result Statement** | **Indicators** | **Survey questions** | **Target Audience/**  **Source of Data** | | |
| --- | --- | --- | --- | --- | --- |
| Grantee | Beneficiary | Observation/ Specific Field Survey |
| **Outcome 3: Enhanced capacities to protect/conserve ecosystems/environment through research and actions that mitigate risks to climate change** | 3.1 # natural assets monitored/researched for protection | 1. How many natural assets/ecosystems were researched to promote monitoring and protection? \_\_\_\_\_\_\_\_\_\_   *\*\*Note: Count natural assets or ecosystems based on the boundary of the community.* |  |  |  |
| 3.2 # of key lessons identified from the research and monitoring projects to inform better management and/or protection of the ecosystems | 1. How many lessons were identified from the research and monitoring protocols? \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |  |
| 3.3 Rate of implementation of recommendations from research on ecosystems | 1. What is the rate of implementation of recommendations from studies?  * High: ≥75% of recommendations from project research based projects are implemented * Medium: 26%-74% of recommendations from the project research based projects are implemented * Low: ≤25% of recommendations from the project research based projects are implemented |  |  |  |
| 1. What were the reasons for the rate of implementation of the recommendations – what factors supported implementation and what factors slowed implementation? |  |  |  |
| 1. What do you think would increase the rate of implementation of the recommendations of the research? |  |  |  |
| **Output 3.1: Enhanced ecosystem health and environmental sanitation to adapt to climate change** | 3.1.1 Quantity/ volume of solid waste collected at clean-ups (by area) | 1. How **many bags or what weight (kg)** of solid waste were collected during clean ups activities? \_\_\_\_\_\_\_\_\_\_ |  |  |  |
| 1. What are the factors that contribute to the success/failure of solid waste cleanup campaigns?   Success:  Failure: |  |  |  |
| 3.1.2 # bins (compost and garbage) installed | 1. How many bins have been installed by type? *Fill the box that is relevant to the project*      |  |  |  | | --- | --- | --- | |  | Garbage bins | Compost bins | | Number/ Amount |  |  | |  |  |  |
| 1. What is the change observed from installing compost/ garbage bins? |  |  |  |
| **Output 3.2: Monitoring systems and research have been conducted to better inform management of ecosystems/environment** | 3.2.1 # of research / monitoring protocols completed and implemented/operational (by theme) | 1. How many research studies have been completed and what were the topics? |  |  |  |
| 1. Do you think the findings from the research and the information in the monitoring protocols are relevant to support better management of the ecosystems? Explain |  |  |  |

**FORESTRY CORE INDICATORS**

| **Result Statement** | **Indicators** | **Survey questions** | **Target Audience/Source of Data** | | |
| --- | --- | --- | --- | --- | --- |
| Grantee | Beneficiary | Observation/Specific Field Survey |
| **Outcome 4: Reduced vulnerability of coastal settlements and ecosystems to the effects of climate change and enhanced ability to support climate change mitigation through reforestation of mangroves and other plant species** | 4.1 Evidence that biodiversity has increased (meiofauna, invertebrates etc.) in reforested area (by site) | 1. Has there been an observed changed in the biodiversity since the reforestation of the area? What types of plant and animal life are being observed? |  |  |  |
| 1. Area of land (sq.ft) under tree cover? \_\_\_\_\_ |  |  |  |
| 4.2 Evidence of change in coastal profile, erosion, shoreline width | No questions needed since data collection will be an extensive field exercise with reports prepared. |  |  |  |
| 4.3 # of households that are protected by newly planted areas. | No questions needed. Field observation and mapping will determine the count of households protected |  |  |  |
| **Output 4.1: Residents are trained in the care of seedling and nurturing of plants until they are fully matured/established.** | 4.1.1 # of seedlings propagated (to transplanting stage) | 1. What was the total number of seedlings propagated? \_\_\_\_\_\_ |  |  |  |
| 1. How many survived and were transplanted at the reforestation site?\_\_\_\_\_\_\_\_ |  |  |  |
| **Output 4.2: Trees successfully planted in vulnerable coastal habitats and are properly maintained on an ongoing process.** | 4.2.1 Total height above ground (Avg) of Seedlings (from soil mark to the apical bud) | No questions needed. Data collection will be an extensive field exercise with reports prepared. |  |  |  |
| 4.2.2 Carbon accumulation rate (by site) | No questions needed. Data collection will be an extensive field exercise with reports prepared. |  |  |  |

**EDUCATION AND AWARENESS CORE INDICATORS**

| **Result Statement** | **Indicators** | **Survey questions** | **Target Audience/Source of Data** | | |
| --- | --- | --- | --- | --- | --- |
| Grantee | Beneficiary | Observation/Specific Field Survey |
| **Outcome 5: Strengthened understanding of climate change as well as capacity building and lesson learning to cope with climate change (by sector)** | 5.1 # of lessons learned (by thematic areas) | 1. How many lessons were learned from the various thematic areas?  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Food security | Water resources | Environmental protection | Forestry | Education and Awareness | | Amount |  |  |  |  |  | |  |  |  |
| **Output 5.1: Education and information materials on climate change developed** | 5.1.1 # of education and awareness materials/activities (by type) on the effects of climate change developed (by thematic area) | 1. What type of and how many education and awareness materials specific to climate change were developed with support from the project?  |  |  |  |  | | --- | --- | --- | --- | | Categories | Visual | Print | Aural | | Amount |  |  |  | |  |  |  |
| 1. What type of and how many education and awareness materials on climate change that is specific to the following thematic areas were developed with support from the project?  |  |  |  |  | | --- | --- | --- | --- | |  | Visual | Print | Aural | | Food Security |  |  |  | | Water resources |  |  |  | | Environmental protection |  |  |  | | Forestry |  |  |  | |  |  |  |
| 5.1.2 # of stakeholders engaged with the education and awareness materials on the effects of climate change (by thematic area) | 1. How many stakeholders were directly exposed to the education and awareness materials on climate change, including materials on the effects of climate change on a particular thematic area?  |  |  |  |  | | --- | --- | --- | --- | |  | Individuals | Communities | Agencies | | Climate Change |  |  |  | | Food Security |  |  |  | | Water resources |  |  |  | | Environmental protection |  |  |  | | Forestry |  |  |  | |  |  |  |
| 1. For those direct beneficiaries classified as “individuals”, how many were men, women, children, adults and vulnerable groups (disabled, elderly)?   Thematic area: \_\_\_\_\_\_\_\_\_   |  |  |  |  | | --- | --- | --- | --- | | ***Female distribution*** | | | | | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | | ***Male distribution*** | | | | | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | |  |  |  |  | |  |  |  |
|  |  | 1. List what **worked well and could be improved** in the execution of the training and/or education programs to build awareness of climate change   What worked well:  What could be improved: |  |  |  |
|  |  | 1. How did you find out about and became involved in the education and awareness programmes offered by this project? |  |  |  |
|  |  | 1. How well do you understand the term ‘climate change’?  * 0 – you do not understand any of the information or materials * 1 – you understand some (basics) of the information or materials covered * 2 - you understand most (basics + advanced) of the information or materials covered * 3 - you understand all of the information or materials covered |  |  |  |
| **Output 5.2: training/certification of stakeholders to deliver educational and informational materials on climate change** | 5.2.1 # of stakeholders trained/certified in the delivery of educational and educational materials on climate change | 1. How many stakeholders (categorized by individuals, agencies and communities) received training/certification to administer training on climate change (training-of-trainers)?  |  |  |  | | --- | --- | --- | | Individuals | Communities | Agencies | |  |  |  | |  |  |  |
|  |  | 1. For those direct beneficiaries classified as “individuals”, how many were men, women, child, adult and vulnerable groups (disabled, elderly)?  |  |  |  |  | | --- | --- | --- | --- | | ***Female distribution*** | | | | | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | | ***Male distribution*** | | | | | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | |  |  |  |  | |  |  |  |
|  |  | 1. How did you find out about and became involved in the training of trainer programmes offered by this project? |  |  |  |
| **Output 5.3: Stakeholders have benefitted from relevant training to improve their operations in the face of climate change** | 5.3.1 # training and education programs to enhance skills and capacities (by topic) | 1. List what topics were covered in the training and education programs provided to residents/farmers/fishers to enhance their capacities to achieve the objectives of the project? |  |  |  |
| 5.3.2 # of beneficiaries of training and education programs (by topic, sex, location, age) | 1. How many individuals benefited from training and education programs to enhance their capacities to achieve the objectives of this project, by topic and how many were men, women, youths and vulnerable groups (disabled, elderly)?   Topic 1: \_\_\_\_\_\_\_\_\_\_\_   |  |  |  |  | | --- | --- | --- | --- | | ***Female distribution*** | | | | | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | | ***Male distribution*** | | | | | Child  <18 yrs | Adult  18 yrs or older | Disabled | Elderly | |  |  |  |  | |  |  |  |
| 1. How did you find out about and became involved in the training offered by this project? |  |  |  |
| 1. List what **worked well and what could be improved** in the execution of the training and education programs to build capacities within this sector?   What worked well:  What could be improved: |  |  |  |
|  |  | 1. How well do you understand the material you were taught in the training?  * 0 – you do not understand any of the information or materials * 1 – you understand some (basics) of the information or materials covered * 2 - you understand most (basics + advanced) of the information or materials covered * 3 - you understand all of the information or materials covered |  |  |  |

# APPENDIX IV- STANDARDIZED SURVEY FORMS

## FORM 1: Attendance Register for Education and Awareness Activities

Note well:

This registration form is to be completed for all education and awareness activities undertaken by a project. The following key definitions should be noted.

1. **Training is defined as**: The action of teaching a person a particular skill in informal settings such as workshops etc.
2. **Education is defined as**: The process of facilitating learning or the acquisition of knowledge through formal processes such as school curriculum
3. **“Type”** includes workshops, seminars, open air discussions, focus groups, community clean ups, community walks, skits, plays or other forms of edutainments.
4. **“Topic”** is the focus of the training or education activity.
5. **“Age range” include:** under 18, 18-24, 25-44, 45-64, >64 years old

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **TOPIC:** | | | | | | | |
| **DATE:** | | | | | | | |
| **LOCATION (PARISH):** | | | | | | | |
| **TYPE (workshop, seminar etc.)** | | | | | | | |
| **NO.** | **NAME** | **ORGANISATION** | **POSITION** | **TELEPHONE** | **EMAIL** | **SEX**  **(M/F)** | **AGE**  **RANGE** |
| **1** |  |  |  |  |  |  |  |
| **2** |  |  |  |  |  |  |  |
| **3** |  |  |  |  |  |  |  |
| **4** |  |  |  |  |  |  |  |
| **5** |  |  |  |  |  |  |  |
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| **7** |  |  |  |  |  |  |  |
| **8** |  |  |  |  |  |  |  |
| **9** |  |  |  |  |  |  |  |
| **10** |  |  |  |  |  |  |  |

\*\*ADD MORE ROWS AS REQUIRED

**Form completed by (grantee representative):**

**Name of project:**

**Project #:**

**Date of submission:**

## FORM 2: Attendance Register

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name of School:** | | | | | |
| **Total # of pupils in the school:** | | | | | |
| **Month** | **Average # of boys present per month** | **Average # of girls present per month** | **Total average pupils present** | **Date of data entry** | **Name of person entering data** |
| Data should be reported for the calendar year 2013 to establish the baseline and then from the month of installation of the intervention supported by CCCAF (water tank etc.). If possible, complete up to 12 months of yields recorded post implementation of the intervention | [add male attendance each day/# of days in that month] | [add female attendance each day/# of days in that month] | Add the averages of boys + girls present |
| January, 2013 |  |  |  |  |  |
| February, 2013 |  |  |  |  |  |
| March, 2013 |  |  |  |  |  |
| April, 2013 |  |  |  |  |  |
| May, 2013 |  |  |  |  |  |
| June, 2013 |  |  |  |  |  |
| July, 2013 |  |  |  |  |  |
| August, 2013 |  |  |  |  |  |
| September, 2013 |  |  |  |  |  |
| October, 2013 |  |  |  |  |  |
| November, 2013 |  |  |  |  |  |
| December, 2013 |  |  |  |  |  |
|  |  |  |  |  |  |
| \*list first month from installation of water tank  [Month, year] |  |  |  |  |  |
| [Next month, year] |  |  |  |  |  |
|  |  |  |  |  |  |
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**Form completed by:**

**Name of project:**

**Project #:**

**Date of submission:**

## FORM 3: Yields of Produce

Note well:

1. This form is to be completed by grantees that are implementing techniques to increase the yield of crops in the agriculture sector.
2. The **unit** of measurement is pounds (lbs)
3. **“Technique”** includes: seamoss mariculture, drip irrigation, organic farming
4. Data should be reported for the calendar year 2013 to establish the baseline and then from the month of installation of the intervention supported by CCCAF (drip irrigation, seamoss mariculture, compost etc.).
5. If possible, complete up to 12 months of yields recorded post implementation of the intervention

|  |  |  |
| --- | --- | --- |
| **Type of Technique:** | | |
| **Types of produce/crops grown:** | | |
| **Month** | **Average Yield (lbs) per month** | **Name of person entering data** |
| **Baseline:** | [add yield each day/# of days in month] |
| January, 2013 |  |  |
| February, 2013 |  |  |
| March, 2013 |  |  |
| April, 2013 |  |  |
| May, 2013 |  |  |
| June, 2013 |  |  |
| July, 2013 |  |  |
| August, 2013 |  |  |
| September, 2013 |  |  |
| October, 2013 |  |  |
| November, 2013 |  |  |
| December, 2013 |  |  |
| **Post Intervention:** |  |  |
| \*list first month from installation of technique  [Month, year] |  |  |
| [Next month, year] |  |  |
|  |  |  |
|  |  |  |
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|  |  |  |

**Form completed by (grantee representative):**

**Name of project:**

**Project #:**

**Date of submission:**

## FORM 4: Fish Yield & Quality

Note well:

1. This form is to be completed by grantees that are implementing techniques to increase the yield of fish.
2. The **unit** of measurement is pounds (lbs)
3. **“Technique”** includes: FAD, ice box, lionfish
4. Data should be reported for the calendar year 2013 to establish the baseline and then from the month of installation of the intervention supported by CCCAF (FAD, ice box etc.).
5. If possible, complete up to 12 months of yields recorded post implementation of the intervention

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Type of Technique:** | | | | | |
| **Month** | **Average Yield (lbs) per month** | **Quality of Fish[[16]](#footnote-16)** | **Name of Fisherman** | **Date of data entry** | **Name of person entering data** |
| **Baseline:** | [add yield each day/# of fishing days in that month] | [Grade 1, 2, other] | [surname, first name] |
| January, 2013 |  |  |  |  |  |
| February, 2013 |  |  |  |  |  |
| March, 2013 |  |  |  |  |  |
| April, 2013 |  |  |  |  |  |
| May, 2013 |  |  |  |  |  |
| June, 2013 |  |  |  |  |  |
| July, 2013 |  |  |  |  |  |
| August, 2013 |  |  |  |  |  |
| September, 2013 |  |  |  |  |  |
| October, 2013 |  |  |  |  |  |
| November, 2013 |  |  |  |  |  |
| December, 2013 |  |  |  |  |  |
| **Post Intervention:** |  |  |  |  |  |
| \*list first month from installation of technique  [Month, year] |  |  |  |  |  |
| [Next month, year] |  |  |  |  |  |
|  |  |  |  |  |  |
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**Form completed by:**

**Name of project:**

**Project #:**

**Date of submission:**

## FORM 5: Seedlings

Note well:

1. This form is to be completed by grantees that are implementing techniques to increase the yield of crops in the agriculture sector.
2. The **unit** of measurement is count
3. **“Technique”** includes: green house to propagate seedlings
4. Data should be reported for the calendar year 2013 to establish the baseline and then from the month of installation of the intervention supported by CCCAF.
5. If possible, record up to 12 months of information post implementation of the intervention

|  |  |  |
| --- | --- | --- |
| **Month** | **Total # of seedlings grown** | **Types of plants/crops grown for resale** |
| **Baseline:** |  |
| January, 2013 |  |  |
| February, 2013 |  |  |
| March, 2013 |  |  |
| April, 2013 |  |  |
| May, 2013 |  |  |
| June, 2013 |  |  |
| July, 2013 |  |  |
| August, 2013 |  |  |
| September, 2013 |  |  |
| October, 2013 |  |  |
| November, 2013 |  |  |
| December, 2013 |  |  |
| **Post Intervention:** |  |  |
| \*list first month from installation of technique  [Month, year] |  |  |
| [Next month, year] |  |  |
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**Form completed by (grantee representative):**

**Name of project:**

**Project #:**

**Date of submission:**

## FORM 6:Yield\_Organic/Compost

Note well:

1. This form is to be completed by grantees that are implementing techniques to generate animal feed from protein waste.
2. The **unit** of measurement is lbs
3. **“Technique”** includes: organic compost/organic farming
4. Data should be reported for the calendar year 2013 to establish the baseline (if available) and then from the month of installation of the intervention supported by CCCAF.
5. If possible, record up to 12 months of information post implementation of the intervention

|  |  |  |
| --- | --- | --- |
| **Month** | **Total amount of waste collected (lbs)** | **Total amount of organic compost generated (lbs)** |
| **Post Intervention:** |
| \*list first month from installation of technique  [Month, year] |  |  |
| [Next month, year] |  |  |
|  |  |  |
|  |  |  |
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**Form completed by (grantee representative):**

**Name of project:**

**Project #:**

**Date of submission:**

## FORM 7: Yield\_Protein from Waste

Note well:

1. This form is to be completed by grantees that are implementing techniques to generate animal feed from protein waste.
2. The **unit** of measurement is lbs
3. **“Technique”** includes: protein from waste
4. Data should be reported for the calendar year 2013 to establish the baseline and then from the month of installation of the intervention supported by CCCAF.
5. If possible, record up to 12 months of information post implementation of the intervention

|  |  |  |
| --- | --- | --- |
| **Month** | **Total amount of waste collected** | **Total amount of animal feed generated** |
| **Baseline:** |
| January, 2013 |  |  |
| February, 2013 |  |  |
| March, 2013 |  |  |
| April, 2013 |  |  |
| May, 2013 |  |  |
| June, 2013 |  |  |
| July, 2013 |  |  |
| August, 2013 |  |  |
| September, 2013 |  |  |
| October, 2013 |  |  |
| November, 2013 |  |  |
| December, 2013 |  |  |
| **Post Intervention:** |  |  |
| \*list first month from installation of technique  [Month, year] |  |  |
| [Next month, year] |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
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|  |  |  |

**Form completed by (grantee representative):**

**Name of project:**

**Project #:**

**Date of submission:**

# APPENDIX V – PROJECT DISTRIBUTION BY TA & PARISH; LEADS AND SHADOWS PER PROJECT & ROLES AND RESPONSIBILITIES

|  |  |
| --- | --- |
| Project Numbers By Thematic Area | Project Numbers By Parish |
| Food Security  Leads: Curllan and Nazaria | Carriacou and Petite Martinique  Lead: Sheena and Andris |
| 2014-19;  2014-71;  2014-51;  2014-35;  2014-40;  2014-41;  2014-72;  2014-144;  2014-08;  2014-101 | 2014-11  2014-19  2014-71  2014-82  2014-94  2014-101  2014-05 |
| Water Resources  Lead: Sheena | St. George  Lead: Nicole |
| 2014-11;  2014-82;  2014-94;  2014-03;  2014-45;  2014-145 | 2014-03  2014-122  2014-102  2014-43 |
| Environmental Protection  Leads: Amanda and Andris | St. Andrew  Lead: Nazaria |
| 2014-73,  2014-128,  2014-75,  2014-151,  2014-102,  2014-100 | 2014-40  2014-145  2014-41  2014-72  2014-150  2014-151 |
| Forestry  Leads: Amanda | St. John  Lead: Amanda |
| 2014-150;  2014-79 | 2014-75  2014-73  2014-51  2014-35  2014-144 |
| Education and Awareness  Lead: Nicole | St. Patrick  Lead: Curllan |
| 2014-46;  2014-122;  2014-43 | 2014-08  2014-45  2014-128  2014-79  2014-100 |

|  |  |  |
| --- | --- | --- |
| **Project #** | **LEAD**  **Lead for Parish** | **SHADOW**  **Lead for TA** |
| 2014-03; | Nicole | Sheena |
| 2014-05 | Andris, Dexter | Amanda |
| 2014-08; | Curllan | Nazaria |
| 2014-11; | Sheena | Dawne |
| 2014-19; | Sheena, Bryan | Curllan |
| 2014-35; | Amanda | Curllan |
| 2014-40; | Nazaria | Kadijah |
| 2014-41; | Nazaria | Curllan |
| 2014-43 | Nicole | Nazaria |
| 2014-45; | Curllan | Sheena |
| 2014-46; | Nicole  (Not yet started) | Nazaria |
| 2014-51; | Amanda | Curllan |
| 2014-71; | Andris | Kadijah |
| 2014-72; | Nazaria | Dawne |
| 2014-73, | Amanda | Andris |
| 2014-75, | Amanda | Valdon |
| 2014-79 | Curllan | Amanda |
| 2014-82; | Sheena | Dawne |
| 2014-94; | Sheena | Nicole |
| 2014-100 | Curllan | Amanda |
| 2014-101 | Sheena | Andris |
| 2014-102, | Nicole | Amanda |
| 2014-122; | Nicole | Dawne |
| 2014-128, | Curllan | Andris |
| 2014-144; | Amanda | Nazaria |
| 2014-145 | Nazaria | Sheena |
| 2014-150; | Nazaria | Amanda |
| 2014-151, | Nazaria | Amanda |

|  |  |
| --- | --- |
| **Planning for field work:** | |
| **Key Activities** | **Responsibility** |
| Prepare survey forms per site | Lead to draft survey; shadow to review |
| Identify suitable location to conduct interviews | Lead and Grantee |
| Invite direct beneficiaries and grantees | Lead and Grantees |
| Agree on date and time for field work | Lead, Grantee, Dawne and Kadijah |
| Organize logistics and transportation | Lead, with support from Kadijah and Dawne, if needed |
| Identify team to support data collection | Lead, Dawne and Kadijah |
|  |  |
| **Data Collection and analysis:** | |
| **Key Activities** | **Responsibility** |
| Interviews, observation, photographs, literature review | Lead, Shadow and other officers assigned |
| Collection of data forms (e.g. registration forms from training, yields etc.). | Lead to collect from the grantee |
| Preparing transcripts | Lead, Shadow and other officers assigned |
| Entry of quantitative data | Lead to enter all the quantitative data into the excel form; shadow to review |
| Qualitative content analysis | Lead to analyze all the qualitative data; shadow to review |
|  |  |
| **Data Storage:** | |
| **Key Activities** | **Responsibility** |
| Backup and save all information from field work by project – photos, transcripts, quantitative data in the excel sheet, qualitative data analysis | Lead |
|  |  |
| **Final Review:** |  |
| **Key Activities** | **Responsibility** |
| Review of the final data by project: excel sheet with all the quantitative data and the Microsoft word document of the qualitative content analysis | M&E specialist |

# APPENDIX VI – INCEPTION WORKSHOP PARTICIPANTS’ LIST

| **NO** | **NAME** | **ORGANISATION** | **POSITION** | **TELE** | **EMAIL** | **THEMATIC AREA** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Amanda Boldeau | UNDP/ICCAS | CLO | 410-9338 | [aboldeau.iccas@gmail.com](mailto:aboldeau.iccas@gmail.com) | Forestry |
| 2 | Andris Douglas | UNDP/ICCAS | CLO | 403-3580 | [adouglas.iccas@gmail.com](mailto:Adouglas.iccas@gmail.com) | Environmental Protection |
| 3 | Anna Abraham | MOA | 4-H Officer | 405-4917 | [sweetama45@hotmail.com](mailto:Sweetama45@hotmail.com) | Food Security |
| 4 | Aria St. Louis | MOA | Head of Department | 440-2708 | [ariastlouis@gmail.com](mailto:ariastlouis@gmail.com) | Forestry |
| 5 | Brian Whyte | Carriacou Fisher Folk | Secretary | 415-1503 | [cffcarriacou@gmail.com](mailto:cffcarriacou@gmail.com) | Food Security |
| 6 | Celia Edwards | MOA | Irrigation Technician | 406-4451 | [181celia@gmail.com](mailto:181celia@gmail.com) | Food Security |
| 7 | Curllan Bhola | UNDP/ICCAS | CLO | 407-4426 | [cbhola.iccas@gmail.com](mailto:Cbhola.iccas@gmail.com) | Food Security |
| 8 | Dawne Mark | UNDP/ICCAS | CLO Coordinator | 407-5817 | [dmark.iccas@gmail.com](mailto:Dmark.iccas@gmail.com) | Water resources |
| 9 | Dexter Miller | Petite Martinique |  |  |  | Food Security |
| 10 | Kadijah Edwards | UNDP/ICCAS | Project Officer |  | [kadijah.edwards@undp.org](mailto:Kadijah.edwards@undp.org) | Water resources |
| 11 | Kate Charles | OCEAN SPIRITS | Project Manager | 537-2512 | [kate@oceanspirits.org](mailto:kate@oceanspirits.org) | Environmental protection |
| 12 | Leyanna Romain | UNEP/MOA | Technical Officer | 449-4762 | [leyannaromain@gmail.com](mailto:leyannaromain@gmail.com) | Environmental protection |
| 13 | Loenzo Harewood | UNDP BARBADOS | Technical/Admin Officer |  | [lorenzo.harewood@undp.org](mailto:Lorenzo.harewood@undp.org) | Water resources |
| 14 | Martina Duncan | MOA | CC Focal Point | 440-2708 | [martinacduncan@gmail.com](mailto:martinacduncan@gmail.com) | Environmental protection |
| 15 | Martin Barriteau | UNDP/ICCAS | Project Coordinator | 418-8980 | [martin.barriteau@undp.org](mailto:Martin.barriteau@undp.org) | Food Security |
| 16 | Nazaria Alexander Williams | UNDP/ICCAS | CLO | 442-8975 | [nwilliams.iccas@gmail.com](mailto:Nwilliams.iccas@gmail.com) | Food Security |
| 17 | Nicole Cambridge | UNDP/ICCAS | CLO | 419-0756 | [ncambridge.iccas@gmail.com](mailto:Ncambridge.iccas@gmail.com) | Education |
| 18 | Petra Fraser | GIZ/ICCAS | Admin Officer | 420-2902 | [petra.fraser@giz.de](mailto:Petra.fraser@giz.de) | Environmental Protection |
| 19 | Rhesa John | ICCAS | Communication Specialist | 538-2445 | [john.rhesa@gmail.com](mailto:John.rhesa@gmail.com) | Education |
| 20 | Richie Stewart | Ministry of Carriacou |  | 443-6026 | [richiestewart@gmail.com](mailto:richiestewart@gmail.com) | Environmental Protection |
| 21 | Saudia Rahat | UNDP Barbados | M&E Specialist | 1-246-825-4577 | [saudia\_rahat@yahoo.com](mailto:saudia_rahat@yahoo.com) | Technical support to all groups |
| 22 | Valdon Charles | UNDP | Driver | 420-0947 | [vcharles.iccas@gmail.com](mailto:Vcharles.iccas@gmail.com) | Water resources |
| 23 | Damani Bruno | NAWASA | Engineer | 403-2394 | [damani\_bruno@yahoo.com](mailto:Damani_bruno@yahoo.com) | Water resources |
| 24 | Dillon Palmer | Forestry Department | Forestry Officer | 440-2934 | [dillonpalmer7@gmail.com](mailto:Dillonpalmer7@gmail.com) | Forestry |
| 25 | Nicole Welch | UNDP Ridge to Reef Project | Project Assistant | 533-5409 | [nicole.welsh@undp.org](mailto:Nicole.welsh@undp.org) | Education |
| 26 | Michael Church | MOA | Planning Officer | 421-9500 | [makanac23@yahoo.com](mailto:Makanac23@yahoo.com) | Education |
| 27 | Andre Joseph Witzig | MOA | Environment Officer | 534-0001 | [asjw@hotmail.com](mailto:asjw@hotmail.com) | Forestry |

# APPENDIX VII – M&E FRAMEWORK FOR CAPACITY BUILDING IN M&E FOR CCCAF

This document seeks to measure the progress made in enhancing national capacities within Grenada to undertake M&E roles and responsibilities. The target audience is the Community Liaison Officers (CLOs) for the CCCAF component of the ICCAS project. The ensuing sections contain an abbreviated logical framework, indicator protocols for the impact and outcome indicator and the PMF. It is expected at the end of the project, the results will be compared with the targets established for the core indicators so that a results based progress report can be provided to UNDP team. Key recommendations for next steps will also be provided by the M&E Specialists so that the journey towards building national M&E capacities can be deepened and expanded.

**Logical Framework**

|  |  |  |
| --- | --- | --- |
| **Result Type** | **Result Statement** | **Indicator** |
| **Impact** | An M&E system for the CCCAF is in place and functional | Quality of the M&E plan/manual |
| **Outcome 1** | CLOs and relevant stakeholders are capable to implement M&E roles and responsibilities under the CCCAF project | Level of capacity to implement M&E roles and responsibilities |
| **Outputs** | * 6 CLOS + 5 representatives from ministries related to the 5 key thematic areas of the CCCAF are trained in basic M&E skills * 6 CLOS + 5 representatives from ministries aware of the M&E plan * M&E training convened * Training on M&E plan convened * M&E baseline and targets completed for CCCAF * M&E data on core indicators collected * (1) M&E technical report completed * M&E technical report disseminated to relevant target audience | # of M&E training convened  # of CLOs trained and supporting the M&E system  # of representatives from Ministries trained and supporting the M&E system  Existence of aggregated baseline and targets  # of M&E reports completed and disseminated |
| **Activities** | * Assess current status of M&E knowledge and skills among CLOs and other relevant stakeholders whom will be playing a key a role in the roll out of the CCCAF M&E system * Organise inception training in core M&E concepts and engage wider stakeholders in the development of a participatory M&E system. * Undertake remote technical support and guidance sessions with the CLOs and other relevant stakeholders to ensure there is clarity in roles and responsibilities and challenges are addressed * Undertake mission #2 to provide training and capacity building in the roll out of the M&E plan for the CCCAF * Maintain remote oversight and management of the M&E system through frequent dialogue and communication with CLOs and relevant stakeholders * Support CLOs and relevant stakeholders in a M&E data collection process and preparation of M&E reports * Disseminate M&E report to the relevant demand side stakeholders | None |
| **Assumptions:**   * CLOs are available and committed to support the roll out of the M&E system * Stakeholders from relevant ministries are available and committed to support the roll out of the M&E system * Adequate funding is available to support the needs of the M&E system | |  |

**Indicator Protocol**

|  |  |
| --- | --- |
| Type of Indicator | Impact |
| Name of Indicator | Quality of the M&E plan |
| Unit of measurement | Quality |
| Variable | M&E plan |
| Rationale | This indicator seeks to track the quality of the M&E plan developed for the CCCAF. This plan is the blue print of the scope of work as it pertains to the M&E system. It is assumed that a well-developed M&E plan coupled with adequate training (measured via a separate indicator) would allow for strong monitoring and evaluation of the CCCAF project. |
| Definition of key terms | **The M&E** plan is the heart of an M&E system; it describes the purpose of the system, the data the system will collect, and how the system will operate. It includes the list of indicators to be measured but is much more than this. The M&E plan is a comprehensive recipe book for setting up the entire M&E system and keeping it functioning.  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). |
| Methodology for measuring | The M&E plan will be reviewed against the checklist of items listed above by Görgens and Kusek, 2009. |
| Data collection method /tool and source of data | Data will be collected through observation and literature review. In terms of the latter, the actual M&E plan and emerging data collection tools will be reviewed. |
| Frequency of data collection and who collects this information | Ideally, information will be collected at end of the project |
| Disaggregation (if applicable) | NA |
| Qualification (for qualitative indicators ONLY) | Quality (of M&E plan):   |  |  | | --- | --- | | High | there is an M&E plan that addresses all of the components outlined by Görgens and Kusek, 2009 | | Medium | there is an M&E plan that addresses some of the components Görgens and Kusek, 2009 | | Low | there is no comprehensive M&E plan or the details of the M&E plan are scattered across various documents and not implemented (or implemented in an ad hoc manner) | |
| Questions | What is the quality of the M&E plan?  a. High …  b. Medium …  c. Low …  What are the reasons that this quality exist?  What could be done differently that would increase the quality of the M&E plan? |

|  |  |
| --- | --- |
| Type of Indicator | Outcome |
| Name of Indicator | Level of capacity to implement M&E roles and responsibilities in Grenada |
| Unit of measurement | Level |
| Variable | capacity to implement M&E roles and responsibilities in Grenada |
| Rationale | This indicator seeks to track the change in the M&E skills and capacity particularly of those individuals that will support the roll out of the M&E system for the CCCAF. These include the Community Liaison Officers (CLOs) and other relevant stakeholders such as representatives from ministries that are aligned to the 5 thematic areas that the CCCAF projects support (water, environmental protection, food security, forestry and education and awareness).  **The intention is to track their capacities and key lessons learned in setting up and managing a participatory M&E system. It is anticipated that these lessons can support the Government of Grenada in replicating M&E systems at the community level.** |
| Definition of key terms | **Capacity** can be understood as ‘the ability of people, organisations and society as a whole to manage their affairs successfully’ (OECD 2006: p8). Organisational capacity can be defined as ‘the capability of an organisation to achieve effectively what it sets out to do’ (Fowler et al 199: p4). The capacity of an individual, an organisation or a society is not static. It changes over time, and is subject to both internal and external influences, which changes at any given time. Hence it needs to be measured frequently.  There are various dimensions of capacity that should be met for an individual, household, community, organization, parish or country to be able to sustain their affairs. Based on literature reviewed, the following emerge as the most reoccurring dimensions of importance (ACCRA Adaptive Capacity Framework , n.d[[17]](#footnote-17))   1. Asset base – human, social, financial, physical, natural capital 2. Knowledge and information – the system has the ability to collect, analyze and disseminate information to inform decision making and planning 3. Governance and management systems – strategy, people, policy, technical skills.   If we examine this in the context of capacity to undertake M&E roles and responsibilities; the dimensions can be stated as:   1. ***Asset base*** *–number of trained individuals available to support the needs of the M&E system. Funding is available to support field work for data collection, analysis and dissemination* 2. ***Knowledge and information*** *– systems are in place to collect, analyze and disseminate the relevant M&E information. Systems include relevant tools (M&E plan, questionnaires, data storage), templates for reporting and plans for dissemination of information to relevant stakeholders.* 3. ***Governance and management systems*** *– a network, including leadership and communication mechanisms exist to coordinate the management and sustainability of the M&E system. This includes a lead M&E specialist, 7CLOs, specialists from Ministries aligned to the TA.* |
| Methodology for measuring | CLOs and key stakeholders from ministries supporting the roll out of the M&E system for the CCCAF will be targeted for information collection through the methods discussed in the next row. |
| Data collection method /tool and source of data | Data will be collected through interviews, observation and literature review. In terms of the latter, the reports from field work missions and M&E reports submitted by the CLOs and other key players would be utilized to measure capacities to collect and synthesize M&E data |
| Frequency of data collection and who collects this information | Ideally, information will be collected at the beginning, during and end of the project |
| Disaggregation (if applicable) | Information will be disaggregated by gender to the best extent possible |
| Qualification (for qualitative indicators ONLY) | Level of capacity (to implement M&E roles and responsibilities in Grenada):   |  |  | | --- | --- | | High | All the requirements (asset base, knowledge and information and governance and management systems) are in place to sustain the roll out of the M&E system of the CCCAF | | Medium | Only some of the requirements (asset base, knowledge and information and governance and management systems) are in place to sustain the roll out of the M&E system of the CCCAF | | Low | Little to none of the requirements (asset base, knowledge and information and governance and management systems) are in place to sustain the roll out of the M&E system of the CCCAF | |
| Questions | What is the level of capacity that exists to implement M&E roles and responsibilities in Grenada?  a. High …  b. Medium …  c. Low …  What are the reasons that this level of capacity exist?  What do you recommend is needed to promote sustainability of M&E system? |

**Performance Monitoring Framework for M&E Capacity Building**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Expected Results** | **Indicators** | **Baseline Data**  **Year: 2016** | **Target**  **Year: 2017** | **Sources of Data** | **Methods of Data Collection** | **Frequency** | **Responsible** |
| **Impact:**  Capacity enhanced to independently design, implement and manage a basic M&E system at the community level and within key ministries in Grenada | Quality of the M&E plan | None exists | High quality M&E plan | M&E plan | File review | End of project | M&E consultant, UNDP team |
| **Outcome:**  1. CLOs and relevant stakeholders are capable to implement M&E roles and responsibilities under the CCCAF project | Level of capacity to implement M&E roles and responsibilities in Grenada | Low level of capacity exists: funding for M&E exists, 1 CLO exposed to training, a governance framework exists, draft M&E plans exist per project. No data collection tools, storage capacities, 5 CLOs need to be trained, processes for M&E to be elaborated. | High Level of Capacity achieved | M&E reports from CLOs, raw data collected from field, M&E plan, database with information | Interviews,  File reviews | End of project | M&E consultant, UNDP team |
| **Outputs:**   * 1. M&E training on core principles and a second training on the M&E plan convened | # of M&E training convened | 1 M&E training was done in 2013 | 2 additional M&E training on basic M&E concepts, data collection techniques and report writing | Training reports, attendance registers | Literature review | End of project | M&E consultant, UNDP team |
| * 1. 6 CLOS + 5 representatives from ministries related to the 5 key thematic areas of the CCCAF are trained in basic M&E skills and are fully aware of the M&E plan to be used for the CCCAF project | # of CLOs trained and supporting the M&E system  # of representatives from Ministries trained and supporting the M&E system | 1 exposed to M&E training in the past | 7 CLOs  5 government officials | Training reports, attendance registers | Literature review | End of project | M&E consultant, UNDP team |
| * 1. M&E baseline and targets completed | Existence of aggregated baseline and targets | No comprehensive PMF exists for the CCCAF | PMF with aggregate information for core indicators completed | PMF report, M&E plan | Literature review | End of project | M&E consultant, UNDP team |
| * 1. M&E data collected and M&E report completed and disseminated | # of M&E reports completed and disseminated | No results based performance measurement report prepared to date. Most reports are narrative focused on activities. | 1 final M&E technical report | The M&E final report | Literature review | End of project | M&E consultant, UNDP team |

# APPENDIX VIII – GUIDANCE FOR MAINSTREAMING GENDER EQUALITY INTO CLIMATE CHANGE PROJECTS

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This is to provide some general guidance for mainstreaming gender equality analysis into climate change and related programmes and projects with a focus on monitoring and evaluation (M&E). It is well known that females and males are socialised according to gender roles and that they tend to take on specific roles in society based on this. It is well understood that based on gender socialisation women are often more vulnerable than men to climate change because of their roles and responsibilities in their families and communities. Gender refers to the socially constructed behaviours, roles and responsibilities ascribed to males and females in a society. Gender is not fixed however, and does change over time and across circumstances.

**Gender and Climate Change[[18]](#footnote-18)**

The roles and responsibilities of women and men in a society determine the resources they have but also may expose them to different types of risks. Gender is an important analytical framework because it highlights the different ways that women and men manage risks and access opportunities and the implications of this differential access for reducing vulnerability to climate change. A gender smart climate change management focuses on how climate change impacts differently on women and men. It examines how women and men use their different resources, knowledge and experiences to respond to climate change impacts as well as how societal norms, institution and processes hinder or foster capacity to deal with climate change impacts and how this can be remedied.

Important Note[[19]](#footnote-19):

When conducting a gender analysis it is important to distinguish between sex-disaggregated statistics, which gives the straightforward numbers of males and females in a given population, and gender statistics, which can reveal the relationships between women and men that underlie the numbers. Sex statistics can indicate the need for a policy intervention, but not what that intervention should be. Gender statistics provide factual information about the status of women, for example a change in their status over time.

**Some Key Gender Concepts[[20]](#footnote-20):**

* What is gender? Gender refers to the specific roles and responsibilities adopted by women and men in any society. It is related to how we are perceived and expected to think. Roles are socially determined. They are learned and can change over time.
* What is sex? Sex: defines the biological variables that differentiates male from female; in humans, men and women.
* Gender analysis: Study of the traditionally determined differences between men and women in terms of the conditions, needs, participation indices, access to resources, development and policy, etc. as a result of the roles ascribed to them. The gender approach provides the theoretical and methodological instrument to analyse gender relations, to understand their dynamics in specific contexts, such as climate change, and to build proposals to promote equity.
* Gender Balance: Have the same number of men and women. This equal presence in numbers does not always solve the gender related problems. As such it is always advisable for an intervener to address the Equity issues before fighting for the equal representation.
* Gender equality: A policy concept which supposes that women and men will benefit in equal measure from goods, opportunities, resources and rewards recognised by the society. Being equal does not mean being identical, it means having equal access to these goods, opportunities, resources and rewards. Equality can be attained by changing institutional practices and social relations that reinforce and maintain disparities between men and women.
* Gender-disaggregated data: Collection of data and analysis of results by gender (e.g.: data on the social status and socio-economic roles of different groups of women and men).
* Gender-differentiated work: social system where the two sexes each play a series of gender-based roles. This division is not based on ability but on gender. Gendered division of work is the central determinant of social relationships between the sexes and seeks to legitimise hierarchical relations between men and women.
* Gender insensitivity: inability to recognise differences in the roles and responsibilities of men and women resulting in inability to recognise that policies, programmes and projects can impact differently on men and women.
* Gender mainstreaming: It is the process of identifying, incorporating and integrating the needs and interests of women and men in every programme, policy, strategy, administrative or financial activities.
* Gender-specific indicators: Gender-based indicators make it possible to measure inequalities between women and men, for example as regards poverty, violence, education, HIV/AIDS and political representation.
* Gender planning is an approach that recognizes the different roles that women and men play in society and the fact that they often have different needs.
* Gender relations is a term that emphasizes the relationship between men and women as demonstrated by their respective roles in power sharing, decision making, the division of labor, returns to labor, both within the household and in the society at large.
* Gender training: Theoretical and practical training designed to increase the possibility that gender analysis will be conducted to build awareness on gender issues and recognise their relevance and the need to integrate them in the programming process.
* Empowerment is about people, both women and men, taking control over their lives: setting their own agendas, gaining skills, building self-confidence, solving problems and developing self-reliance. No one can empower another: only the individual can empower herself or himself to make choices or to speak out.
* Women empowerment concerns women gaining power and control over their own lives. It involves awareness-raising, building self-confidence, expansion of choices, increased access to and control over resources and actions to transform the structures and institutions which reinforce and perpetuate gender discrimination and inequality.

**General Checklist for Mainstreaming Gender Throughout the Project Cycle[[21]](#footnote-21)**

***Planning***

 Objectives, results and strategies address the gender issues identified in the situation analysis;

 Representation and active participation of women and men from diverse and marginalised

groups in the planning process is ensured, and their gendered interests are reflected in decisions

made; and

 Resources are aligned with objectives.

***Implementation***

 Appropriate participation of both sexes in project implementation and in decision-making is

ensured;

 Measures are being implemented to allow women and men to take advantage of equal

opportunities; and

 It is ensured that all stakeholders, including men, understand the reason for these measures

and support them.

***M&E***

 Gender-sensitive qualitative and quantitative indicators are identified;

 Use and analysis of sex-disaggregated data is ensured;

 Achievement of gender related objectives, results and different impact the project may have

had on women and men, and on the power relations between them is evaluated;

 Gender balance of staff on evaluation team is ensured; and

 Evaluating impact on gender equality is included in evaluation terms of reference.

***Stakeholder Participation***

 Ensure inclusion of gender related stakeholders into each stage of the project cycle. Possible

stakeholders are:

 Women CSOs/CBOs;

 Government and other national/regional institutions;

 Universities; and

 Private sector.

**Specifically when outlining an M&E Framework the following can be considered[[22]](#footnote-22)**

1. Does the evaluation’s terms of reference specify gender issues and questions to be addressed in the evaluation?

2. What was the proportion of women and men’s participation in the project activities (as beneficiaries, decision-makers or change agents) during the reporting period?

3. Were specific activities or components targeted at women? What was the objective and was this achieved? Specifically, how did the activities impact on women’s empowerment (self-esteem, capacity for leadership and self-organization)

4. Do project reports identify gender gaps and gender-related project success? Are indicators of success clearly defined and applied? How can negative impacts be mitigated or eliminated (lessons learned) and positive impacts increased?

For example:

 Increased work load;

 Incidents of violence or other forms of backlash;

 Statement/declaration in support of women/women’s rights; and

 Change in gender stereotypes and discriminatory attitudes toward women and girls, and commitment of men to support women’s empowerment.

5. What is the perception of men and women about the impact of the activity on gender relations?

6. Are there any internal and/or external factors contributing to the success/failure of gender mainstreaming within the project?

Other issues to consider include:

7. How women and men have different needs, access and control over resources;

8. How women and men face different constraints and opportunities in participating in economic, political and community life; and

9. How women and men face different forms of stereotypes and discrimination and the impact this has on project results.

M&E Checklist[[23]](#footnote-23)

A gender responsive monitoring and evaluation ensures that the different climate change concerns of men and women are being addressed and progress is being made towards achieving the set objectives. At the analysis level, the project has already collected and disaggregated data and information on gender; and gender indicators developed at the planning phase. These form the baseline to help monitor progress and impacts/changes of the interventions.

Checklist;

* Ensure that the monitoring/evaluation mechanism includes gender sensitive results and indicators linked to climate change
* M & E system should explicitly measure the project’s effect on both women, men, youths and vulnerable groups. Check how women, men in different categories have effectively participated in the implementation, benefited from opportunities such as training, employment, accessed financial resources for adaptation, mitigation, and in decision making at all levels.
* Measure the effects of the project on and analyze the results for both women and men ;
* Document lessons learnt, experiences and mechanism for learning, adapting and policy.
* Check targets for female participation in activities and if the project challenged stereotyped perceptions or gendered norms in the community (against the baseline)
* Using the data collected at the beginning (during analysis), assess changes in participation of different stakeholders and capacities for gender mainstreaming
* Evaluate the strengths and weaknesses of the project in mainstreaming gender in actions taken to mitigate and adapt to climate change,
* Verify that the instruments and tools used in monitoring/evaluation are gender-sensitive.
* Ensure that gender is incorporated in the result indicators and data and information are disaggregated by sex and gender.
* Check the budgetary allocations to the gender equality action plans.

**Resources:**

UNDP (2013) .Integrating Gender in Disaster Management in Small Island Developing States: A Guide

<http://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/integrating-gender-in-disaster-management-in-small-island-develo.html>

UNDP (n.d.). Guidelines for Mainstreaming Gender in Climate Change Management: A Guide for Practitioners

<https://www.undp-aap.org/sites/undp-aap.org/files/Guidelines%20for%20Mainstreaming%20Gender%20in%20Climate%20Change.pdf>

1. For more information on ICCAS: <http://www.bb.undp.org/content/barbados/en/home/operations/projects/environment_and_energy/integrated-climate-change-adaptation-strategies--iccas-.html> [↑](#footnote-ref-1)
2. Different indicators have different target audiences as defined in the indicator protocol and PMF. Notable is that the indicator protocol that was developed for each core indicator includes the definition of key terms, which are more than likely utilized in the survey questions as well. Hence it is imperative that all the interviewers are knowledgeable of the details in the indicator protocols. This will promote standardization in the interpretation of questions across the team of enumerators, which will reduce errors in data collection. [↑](#footnote-ref-2)
3. <http://www.reachingresilience.org/IMG/pdf/consultative_document_-_the_accra_local_adaptative_capacity_framework.pdf> [↑](#footnote-ref-3)
4. www.dictionary.com/browse/**employment** [↑](#footnote-ref-4)
5. www.businessdictionary.com/definition/**produce**.htm [↑](#footnote-ref-5)
6. https://en.wikipedia.org/wiki/**Yield** [↑](#footnote-ref-6)
7. www.ers.usda.gov/topics/food.../food-security-in-the-us.aspx [↑](#footnote-ref-7)
8. Read more at http://www.yourdictionary.com/affordability#xzFsdmYdHBBCeypV.99 [↑](#footnote-ref-8)
9. www.dictionary.com/browse/beneficiary [↑](#footnote-ref-9)
10. <http://weready.org/flood/index.php?option=com_content&view=article&id=28&Itemid=29> [↑](#footnote-ref-10)
11. <http://weready.org/flood/index.php?option=com_content&view=article&id=28&Itemid=29> [↑](#footnote-ref-11)
12. <http://www.wwf.org.au/our_work/saving_the_natural_world/what_is_biodiversity/> [↑](#footnote-ref-12)
13. https://en.wikipedia.org/wiki/Seedling [↑](#footnote-ref-13)
14. https://www.reference.com/science/function-apical-bud-289599d2b52cd250 [↑](#footnote-ref-14)
15. https://en.wikipedia.org/wiki/Carbon\_sequestration [↑](#footnote-ref-15)
16. Grade 1 = temperature range from 32ₒto 36ₒ Fahrenheit and Grade 2 fish = temperature higher than 36ₒ [↑](#footnote-ref-16)
17. <http://www.reachingresilience.org/IMG/pdf/consultative_document_-_the_accra_local_adaptative_capacity_framework.pdf> [↑](#footnote-ref-17)
18. Excerpted from Gender and Climate change: Guidelines for Gender Mainstreaming in Climate change Management - A guide for Practitioners [↑](#footnote-ref-18)
19. Ibid [↑](#footnote-ref-19)
20. Ibid [↑](#footnote-ref-20)
21. Excerpted from UNDPs ‘Gender Mainstreaming Made Easy: Handbook for Programme Staff [↑](#footnote-ref-21)
22. Ibid [↑](#footnote-ref-22)
23. Excerpted from Gender and Climate change: Guidelines for Gender Mainstreaming in Climate change Management - A guide for Practitioners [↑](#footnote-ref-23)