Second set of basic National Methodology(ies) For Agriculture and Tourism in the Dominican Republic

Initiative for Climate Action Transparency - ICAT

SECOND SET OF BASIC NATIONAL METHODOLOGY(S) FOR AGRICULTURE AND TOURISM IN THE DOMINICAN REPUBLIC

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DELIVERABLE 1.1.1

SECOND SET OF BASIC NATIONAL METHODOLOGY(S) FOR AGRICULTURE AND TOURISM IN THE DOMINICAN REPUBLIC.

"Climate Transparency of the Dominican Republic, Second Phase" under the Initiative for the Transparency of Climate Action Adaptation component, ICAT-Adaptation, led by the National Council for Climate Change and Clean Development Mechanism (CNCCMDL)

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EXECUTIVE SUMMARY

During the first phase of the ICAT-Adaptation project, implemented between April 2019 and January 2020, the project worked with the agricultural sector, the banana subsector, since this sector constitutes an important part of the national economy, as a promoter of employment, food security and its high impact within macroeconomic indicators and is also particularly vulnerable to the impacts of climate change. In the second phase of the ICAT-Adaptation project, the tourism sector has been integrated, a prioritized sector for adaptation to climate change at the national level, due to its importance in terms of contributions to the Gross Domestic Product (GDP), social development and the impacts to coastal-marine ecosystems, which represent the first line of defense against some of the identified impacts caused by climate change.

With the development of this report, the project seeks to support the identification of a set of elements as basic and methodological tools adapted to national circumstances that will serve as the basis for the definition and establishment of a methodological proposal for Monitoring and Evaluation (M&E) of the adaptation measures developed in the agriculture and tourism sectors. Taking into account the basic work carried out in the first phase of the project regarding the sub sector within the agricultural sector, bananas, this time focused on the development of the M&E framework of the Agriculture sector. And starting from starting to work this set of methodologies for the M&E of the Tourism sector in the country for the framework of climate transparency of adaptation. The report was developed with a national scope.

The methodological approach used for this report included public consultations framed in the recommendations specified in the Guide for the Development of National Adaptation Monitoring and Evaluation Systems (GIZ, 2014)[1]; Decision 18/CMA.3 on “Modalities, procedures and guidelines for the transparency framework for measures and support referred to in Article 13 of the Paris Agreement”[2]; and the guide for the use and dissemination of the methodology for the prioritization of adaptation measures against climate change (National Commission of Protected Areas of Mexico, 2020)[3].

In order to facilitate the understanding of the proposed methodology for the establishment of the National System for Monitoring and Evaluation of the agriculture and tourism sectors, an analysis and focus of the different elements that are interrelated for its composition was required. The methodology used highlights four main elements to define a monitoring and evaluation system for adaptation to climate change at the national level, these are: context, content, instrumentation, and products and reports. The establishment of these elements was carried out through technical surveys, interviews and the surveys typical of the preparation of other project products such as: the first draft of the methodology for the M&E of adaptation, the mapping of actors for both sectors, the analysis of capacities for the M&E of both sectors and the report of indicators.

As a result, this report addresses four macro sections, the first being the context for the M&E system, in which the context in which it will be developed is expressed, as well as the management tools available for its operation. This section details the

adaptation M&E policy framework, the purpose of the M&E system, its level of application and aggregation, as well as its current condition. The second section is the content, where the content of the reports to be developed in the system is defined. It recognizes the different M&E approaches to adaptation that the system is intended to address, the data and information needed for analysis, and the information outputs and products associated with the system. During the first phase, we worked with a bottom-up approach, content technically focused on producers in the agricultural sector, specifically the banana subsector. For this second phase of the ICAT-Adaptation project, content with a top-down approach has been outlined. below that responds to the national reality of the agriculture and tourism sectors based on the prioritized needs in the public policy instruments identified in the survey of the context, which work on the adaptation to climate change of these sectors.

The third section developed in the document is that of instrumentation, this seeks to facilitate the understanding of the monitoring and evaluation system of adaptation to climate change. This establishes the processes and actors that make up and will supervise the system. This section contemplates the hierarchization of the actors and the identification of their functions to outline the M&E system and the steps.

SECOND SET OF BASIC NATIONAL METHODOLOGY(S) FOR AGRICULTURE AND TOURISM IN THE DOMINICAN REPUBLIC

1. Introduction

The Dominican Republic, through its National Constitution[1], recognizes the national need to adapt to the impacts of climate change. In turn, through the National Development Strategy 2030 (END) - [2]Law 01-12 has been considered as a national strategic axis to seek an Environmentally Sustainable Production and Consumption Society that is Adapted to Climate Change. All these efforts, along with many others, are included in the National Plan for Adaptation to Climate Change (PNACC), [3]a public policy instrument that establishes the base strategy for 2030 of the Dominican Republic to improve its adaptation and resilience capacities to climate change and variability, reducing vulnerability, improving the quality of life of people and the health of ecosystems and contributing to the stabilization of greenhouse gases. greenhouse effect without compromising efforts to fight poverty and its sustainable development by promoting the transition to low-carbon growth. The PNACC identifies six strategic axes of approach that correspond to the priority sectors of adaptation:

a) Strategic Axis 1: Improving water security and food security
b) Strategic Axis 2: Fostering the built environment and climate-proof infrastructure
c) Strategic Axis 3: Promoting Healthy and Resilient Communities
d) Strategic Axis 4: Increasing the resilience of ecosystems, biodiversity and forests
e) Strategic Axis 5: Enabling business competitiveness (productive sectors such as tourism) through environmental sustainability and climate resilience
f) Strategic Axis 6: Conserving and sustainably using coastal-marine resources, increasing resilience to climate change and variability.

The Paris Agreement (PA) of the[4] United Nations Framework Convention on Climate Change (UNFCCC) defines for the first time a global goal on adaptation, thus

[1] https://poderjudicial.gob.do/documentos/PDF/constitucion/Constitucion.pdf

[2]http://www.inabima.gob.do/transparencia/Descarga/OAI/Leyes/2018/Ley%201-12%20sobre%20la%20Estrategia%20Nacional%20de%20Desarrollo,%20de%20fecha%2012%20de%20enero%20de%202012.pdf

[3]https://ambiente.gob.do/wp-content/uploads/2018/03/Plan-Nacional-de-Adaptaci%C3%B3n-para-el-Cambio-Clim%C3%A1tico-en-la-Rep%C3%BAblica-Dominicana-2015-2030-PNACC.pdf

[4] https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_spanish_.pdf

contemplating increasing adaptive capacity, strengthening resilience, and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response within the framework of the global temperature increase target. As a signatory to the PA, the Dominican Republic has its Updated and Improved Nationally Determined Contribution (NDC) (2020), [5]where it reaffirms the commitment to adaptation to climate change, established constitutionally, for the sectors indicated in the National Plan for Adaptation to Climate Change (PNACC) and in sectoral plans for adaptation to climate change.

The PA establishes a transparency framework in order to build mutual trust, and to promote the effective implementation of climate action. This through the Enhanced Transparency Framework (MTR) element of the PDB whose purpose is to foster transparency and mutual trust between the parties, "for measures and support". The MTR is based on "the transparency agreements established under the United Nations Framework Convention on Climate Change (UNFCCC). In this sense, the Government of the Dominican Republic promulgated Decree 541-20, [6]which creates the National System of Measurement, Reporting and Verification (MRV) of Greenhouse Gases of the Dominican Republic, where within its article 1 paragraph III opens an adaptation system:

"All national, regional or sectoral information systems that contain information relevant to climate change, vulnerability and risk management studies can operate together and enrich the National MRV System."

This transparency framework will provide a clear picture of measures taken to address climate change in the light of the objective of the Convention, increasing clarity and facilitating monitoring of progress made on each Party's Nationally Determined Contributions and adaptation measures taken by Parties, including good practices, priorities, needs and gaps.

The National MRV System is composed of three subsystems that report different aspects of national action for the accounting and mitigation of greenhouse gases, as established in Decree 541-20

a) National greenhouse gas inventory system (INGEI).
b) System for recording actions to mitigate greenhouse gas emissions.
c) Support and financing registry system, available, and implemented, whose purpose is to mitigate greenhouse gases and adapt to climate change.

The Climate Action Transparency Initiative (ICAT) under the leadership of the National Council for Climate Change and Clean Development Mechanism (CNCCMDL), implements the request set out in the Paris Agreement to strengthen national institutions and lay the groundwork for enhanced transparency

[5]https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Dominican%20Republic%20First/Dominican%20Republic%20First%20NDC%20(Updated%20Submission).pdf

[6] https://cambioclimatico.gob.do/transparencia/phocadownload/Decreto%20541-20%20-%20Que%20crea%20el%20Sistema%20Nacional%20de%20Medicion%20de%20Gases%20Efecto%20Invernadero.pdf

requirements under the Paris Agreement. ICAT's mission is *"[...] Help countries assess the impacts of their climate policies and actions and comply with their transparency provisions. To this end, it increases countries' overall transparency capacity, including the ability to assess the contribution of climate policies and actions to countries' development goals, and provides methodological information and appropriate tools to support evidence-based policymaking. ICAT's innovative approach is to integrate these two aspects. [...] "*

The ICAT Adaptation component project works on the inclusion and expansion of support for national transparency agreements focused on adaptation, based on the needs and priorities defined by partner countries, and to support the implementation of the Paris Agreement under the UNFCCC and the Sustainable Development Goals (SDGs)[7] of the United Nations (UN). As a consequence, the government has supported ICAT-Adaptation phase I and II efforts to create the basis for a national Monitoring and Evaluation (M&E) system for the agriculture and tourism sectors. All these efforts under the direction of a strategic committee composed of the National Council for Climate Change and Clean Development Mechanism, the Ministry of Environment and Natural Resources, Ministry of Economy, Planning and Development, Ministry of Agriculture and the Ministry of Tourism.

Phase I of the ICAT-Adaptation project, implemented during the period from April 2019 to January 2020, focused on the agricultural sector. This is an important piece for the national economy, as a promoter of employment, food security and its high impact within macroeconomic indicators and is also particularly vulnerable to the impacts of climate change. As a continuity, in the second phase of the ICAT-Adaptation project, the tourism sector has been integrated. This sector is prioritized for adaptation to climate change at the national level, due to its importance in terms of contributions to the Gross Domestic Product (GDP), social development and impacts on coastal-marine ecosystems. These coastal marine ecosystems represent the first line of defense against some of the identified impacts that are caused by climate change.

[7] https://www.un.org/sustainabledevelopment/es/objetivos-de-desarrollo-sostenible/

2. Objective

Support in the identification of a set of elements as basic and methodological tools adapted to national circumstances that will serve as a basis for the definition and establishment of a basic methodology proposal for Monitoring and Evaluation (M&E) of adaptation measures developed in the agriculture and tourism sectors. Taking into account the basic work carried out in phase one of the project regarding the banana subsector, this time focused on the development of the M&E adaptation framework system for the Agriculture sector. At the same time, initiating efforts for the set of methodologies for the development of a framework system of M&E adaptation for the Tourism sector.

3. Scope of work

The level of application of the work carried out by this consultancy is *national in scope*. The reason is to improve the capacity to track and measure gaps and progress in adaptation at the national level of the tourism and agriculture sectors, increasing the transparency ofnational adaptation efforts and then being able to report at the international level under the commitments of the Paris Agreement.

4. Product Description

Within the framework of activity one (1) "Development of tools and methodologies to increase the transparency of monitoring and evaluating adaptation policies and measures in the agriculture and tourism sectors.", task 1.1 is developed. "Development of a second set of basic methodologies to address gaps in the sectors identified in the Dominican Republic", for the delivery of the update of product 1.1 *"A second set of tools and basic methodologies for the Dominican Republic"*.

5. Methodology

To achieve the objective described above, the following is a series of steps and guidelines, proposed by the government and the consulting team, to be followed for the preparation of the proposed methodology of the monitoring system and the evaluation of the tourism and agriculture sectors.

1. Documentation review of the first phase of the ICAT-Adaptation project, which touches only the agricultural sector, with a bottom-up approach within the banana subsector.
2. Review of documents of national relevance such as sectoral and national plans, laws, regulations, previous studies among others. (END, NDC, PNACC, Decree MRV)
3. Discussion, review and improvement to establish a new scope and objectives of the monitoring and evaluation system of the agriculture and tourism sectors.
4. Meetings with projects in the sectors in execution of relevance and possible synergies of the activities.
5. Identification and selection of the methodological approach for the elaboration of the methodology proposal of the M&E system.
6. Presentation of the methodological proposal (methodology of the monitoring and evaluation system) presented in this deliverable to the CNCCMDL and the Strategic Committee of the Project.
7. Preparation of the methodology proposal document of the monitoring and evaluation system for subsequent referral and approval of the methodology proposal.
8. This proposal will be reviewed and improved in the course of the project based on the development of other deliverables such as the construction of indicators, gap analysis for the application of an M&E system for a strengthening and sectoral validation of this methodological proposal.

For the identification and selection of how to proceed for the elaboration of the proposed methodology of the M&E system, it was mainly based on the review of the literature and consultation with experts, based on the experience of the Dominican Republic. A filtering of the stakeholder mappings for both sectors was carried out, and taking into account what was raised during the consultations, an M&E system that meets the following criteria is proposed:

1) Obtain information on the coverage of the adaptation actions developed.
2) To evaluate the effectiveness of measures to reduce vulnerability or increase adaptive capacity.
3) It has a mixed approach to both "bottom-up" and "top-down" monitoring and evaluation.
4) Respond to the adaptation objective defined in the National Adaptation Plan of the Dominican Republic 2015-2030 and the adaptation component of the Nationally Determined Contribution Improvement and Updated (2020).
5) Provide support and be compatible with other systems (National Development Strategy, sectoral adaptation plans, Sustainable Development Goals, mitigation objectives, among others)
6) Support decision-making with timely information
7) Have feedback processes on lessons learned
8) Feasible implementation at the macro level of the aforementioned sectors.

For the elaboration of this methodology after the review of multiple documents, the technical guidelines and suggestions proposed in the Guide for the Development of National Adaptation Monitoring and Evaluation Systems (GIZ, 2014) were mainly taken into account[8]; Decision 18/CMA.3 on "Modalities, procedures and guidelines for the transparency framework for measures and support referred to in Article 13 of the Paris Agreement"[9] ; and the guide for the use and dissemination methodology for the prioritization of adaptation measures against climate change (National Commission of Protected Areas of Mexico, 2020).[10]

During the first delivery of this product, inputs specified in the terms of reference were developed and processed, which are also refined in this delivery:

- Descriptive of the database model of parameters and monitoring indicators with improvement proposal for parameters and indicators.
- M&E system capture and report card model.

8 https://www.adaptationcommunity.net/wp-content/uploads/2017/04/Desarrollo-de-Sistemas-Nacinales-de-Monitoreo-y-Evaluacion-de-la-Adaptaci%C3%B3n-una-Guia.pdf

9 https://unfccc.int/sites/default/files/resource/cma2018_3_add2_new_advance.pdf

10 https://www.gob.mx/cms/uploads/attachment/file/223039/metodologia-priorizacion_guia-uso-difusion.pdf

6. Results

Below are the results of the survey carried out based on the elements required in the terms of reference developed from the aforementioned methodologies:

As set out in the Development Guide for National Adaptation Monitoring and Evaluation Systems (GIZ, 2014[11]); facilitating the understanding of a National Monitoring and Evaluation system requires an analysis and approach of the different elements that are interrelated for its composition. This methodology highlights four main elements to define a monitoring and evaluation system of adaptation to climate change at the national level, these are:

I. **Context:** Component comprised of the adaptation M&E policy framework, the purpose of the M&E system, its level of implementation and aggregation, and its current condition.
II. **Content:** Component comprised of the different M&E approaches to adaptation, data and information needed for analysis, results and information products associated with each system.
III. **Instrumentation:** A component that deals with the identification of institutions responsible for monitoring adaptation M&E, the process of how the M&E system has been established, and the steps involved in adaptation monitoring and evaluation.
IV. **Products and reports: Component of the system** which addresses the packaging and dissemination of M&E results, that is, the information generated by the M&E system for presentation.

One of these elements within the proposed M&E system of climate change adaptation will be explained below.

11 https://www.adaptationcommunity.net/wp-content/uploads/2017/04/Desarrollo-de-Sistemas-Nacinales-de-Monitoreo-y-Evaluacion-de-la-Adaptaci%C3%B3n-una-Guia.pdf

6.1 Background

To establish a monitoring and evaluation system for adaptation to climate change, it is necessary to establish the national context or circumstances in which it will be developed, as well as the management tools available for its operation. It is essential to know the framework of the M&E policy of adaptation, the purpose of the M&E system, its level of application and aggregation, as well as its current condition. The national context or circumstances of the M&E of adaptation in the agriculture and tourism sectors raised by the ICAT-Adaptation project in its second phase is presented below.

For the establishment of the monitoring and evaluation system of adaptation to climate change in the agriculture and tourism sectors, it is essential to establish the management context in which it is developed. The Dominican Republic has multiple public policy instruments and institutional arrangements that frame national climate action, specifically adaptation to climate change, to define the national context for monitoring and evaluation of adaptation in the sectors prioritized for the project, the following stand out:

- Constitution of the Dominican Republic - Article 194
- Law No. 1-12 National Development Strategy 2030 of the Dominican Republic (Axis 4th is focused on adaptation to Climate Change)
- General Law No. 64-00 on Environment and Natural Resources
- Law No. 147-02. on Risk Management
- Sectoral Law No. 202-04 on Protected Areas
- Sectoral Law No. 333-15 on Biodiversity
- Law No. 158-01 on the Promotion of Tourism Development
- Law No. 08 Agricultural Law
- Sectoral Law No. 57-18 Forestry of the Dominican Republic
- Decree 601-08 creating the National Council for Climate Change and Clean Development Mechanism
- (CNCCMDL)
- - Decree 269-15 establishing the National Climate Change Policy (PNCC)
- Decree 23-16 creating the High-Level Inter-institutional Commission for Sustainable Development
- Decree 541-20 creating the National System for the Measurement of Greenhouse Gases (Article I - Paragraph III)
- Other strategic documents for implementation and reporting of adaptation actions:
    - Strategic Plan for Climate Change (PECC) 2011-2030 in the Dominican Republic
    - National Plan for Adaptation to Climate Change in the Dominican Republic (PNACC-RD) 2015-2030
    - Third National Communication on Climate Change of the Dominican Republic (TCNCC) 2017

- National Plan for Food and Nutrition Sovereignty and Security 2019-2022
- National Strategy for Adaptation to Climate Change in the Agricultural Sector of the Dominican Republic 2014-2020
- Roadmap for a low-carbon, resource-efficient hotel sector in the Dominican Republic
- The Nationally Determined Contribution of the Dominican Republic
- Strategic and Institutional Operational Plans.
- Institutional reports.

Other enabling conditions necessary and in process for the achievement and implementation of adaptation measures, quite relevant to establish the context of the M&E of the agriculture and tourism sectors, are the water bill, territorial planning bill and the implementation of the recently approved Law 225-20 -General Law of integral management and processing of waste of the Dominican Republic.

To contextualize part of the purpose of the M&E system, it is important to highlight that the Dominican Republic is a member country of the United Nations Framework Convention on Climate Change (UNFCCC) and a signatory of the Paris Agreement. Agreement establishing the enhanced transparency framework in order to build mutual trust, and to promote the effective implementation of climate action. Monitoring and Assessment of Climate Change Adaptation is a fundamental component of the climate transparency framework. It responds to the evaluation of the impacts of climate policies and actions and to make transparent the efforts in adaptation to climate change. In the case of the Dominican Republic, the national adaptation M&E system is expected to feed into the national transparency framework and fulfill the general purposes of M&E[12] systems:

- learning: produce knowledge about the evolution of the adaptation context, needs and experiences;
- accountability: reporting to stakeholders on progress and/or results;
- Adaptation management: reviewing whether a policy, plan, or intervention is on track and adjusting the course of action appropriately.

Through consultations with the Strategic Committee of the ICAT Adaptation project in its second phase, it has been defined during multiple consultations that the objectives of accountability and management of adaptation are essential components for the establishment of this system. Specifically for accountability at the local and international levels, the system is expected to respond to adaptation measures prioritized in the following public policy instruments:

- Law No. 1-12 National Development Strategy 2030 of the Dominican Republic (Axis 4th is focused on adaptation to Climate Change)

12 https://www.adaptationcommunity.net/wp-content/uploads/2017/04/Desarrollo-de-Sistemas-Nacinales-de-Monitoreo-y-Evaluacion-de-la-Adaptaci%C3%B3n-una-Guia.pdf

- National Plan for Adaptation to Climate Change in the Dominican Republic (PNACC-RD) 2015-2030
- Institutional Strategic and Operational Plans of the sectors worked by the project.
- The Nationally Determined Contribution of the Dominican Republic

Generating in this way a report that responds to national needs in terms of adaptation, as well as to the commitments and goals established before the UNFCCC. In this sense, with the promulgation of Decree 541-20, which creates the National MRV System, composed of three subsystems, which report different aspects of national action for the accounting and mitigation of greenhouse gases, it is opened to report on adaptation efforts. Framed in the third subsystem " *System of the registry of support and financing, available, and executed, whose purpose is to mitigate greenhouse gases and adaptation to climate change*" it is intended to operationalize the M&E of national adaptation for the prioritized sectors.

Part of the process of contextualization of national monitoring and evaluation systems is necessary to demonstrate their level of application. This refers to the level at which the results are expected to be reflected, for example, national, sub-national or local level, in turn, national adaptation M&E systems frequently collect data from a variety of units, i.e. sectors and more local levels, these are the levels of aggregation, either: horizontally, across thematic areas and sectors; or vertically, across geographical scales (GIZ 2014).

To conclude with the context, the scope of the proposed Adaptation M&E system for the agriculture and tourism sectors of the Dominican Republic as specified in the scope of work and in response to the proposal of the indicators to be used, will be national. Another element to consider is system aggregation, i.e. classification. It considers the development of an M&E system with mixed aggregation, which will be worked taking into account the focus areas (sectors) described in the National Plan for Adaptation to Climate Change and the Nationally Determined Contribution, as well as the development approaches foreseen by the MEPyD and the sectoral ones: regional scale, watershed approach, municipalities and it is recommended to integrate a life zone (ecosystem) approach in the future.

6.2 Content

To establish a monitoring and evaluation system for adaptation to climate change, it is necessary to define the content of the reports to be developed in the system. It is essential to know the different M&E approaches to adaptation that aims to address the system, the data and information needed for analysis, and the results and information products associated with the system. During the first phase, a technically focused content was worked on for producers in the agricultural sector, for this second phase of the ICAT-Adaptation project, a content that responds to the national reality of the agriculture and tourism sectors has been outlined based on the needs prioritized in the public policy instruments that work on adaptation to climate change in these sectors.

Through the different consultations carried out with the institutions that make up the Strategic Committee of the ICAT Adaptation Project, the needs for monitoring and evaluation of adaptation to climate change for the agriculture and tourism sectors have been defined. In essence, it is intended to monitor and evaluate the adaptation measures prioritized in the Nationally Determined Contribution Updated and Improved in the year 2020 of the Dominican Republic. This instrument, achieved with the consensus of the main actors of the national framework for climate action, business and civil society, rescues a prioritization of adaptation measures embodied in the different plans and strategies for adaptation to climate change, serving as a reference basis for the content of the system.

The main focus for proposed national and sectoral adaptation monitoring and evaluation for the agriculture and tourism sectors is follow-up to national institutional strategic and operational planning. Where the different institutions and actors of the prioritized sectors would be feeding the prioritized measures mentioned above. These measures are framed in national strategic planning, a situation that makes it easier to observe compliance with nationally prioritized adaptation measures and associate financing with them. With regard to monitoring the adaptation process of the agriculture and tourism sectors, it is expected to follow up on the prioritized measures through compliance indicators, while the results of the adaptation process will be reviewed through response indicators. For this, qualitative and quantitative information will be collected, proposing indicators for each of the prioritized measures. It is important to note that, during the first phase of the project, which focused exclusively on the banana subsector, some of the experiences that served as a basis were the execution of the GEO-Dominican Republic report, which follows the Global Environmental Outlook (GEO) methodology that analyzes environmental trends considering a wide set of social variables. economic and environmental based on the "Pressure-State-Response" (PER) Model, in addition to various methodological applications for the analysis and evaluation of sustainability as a model for monitoring and monitoring resource sustainability indicators.

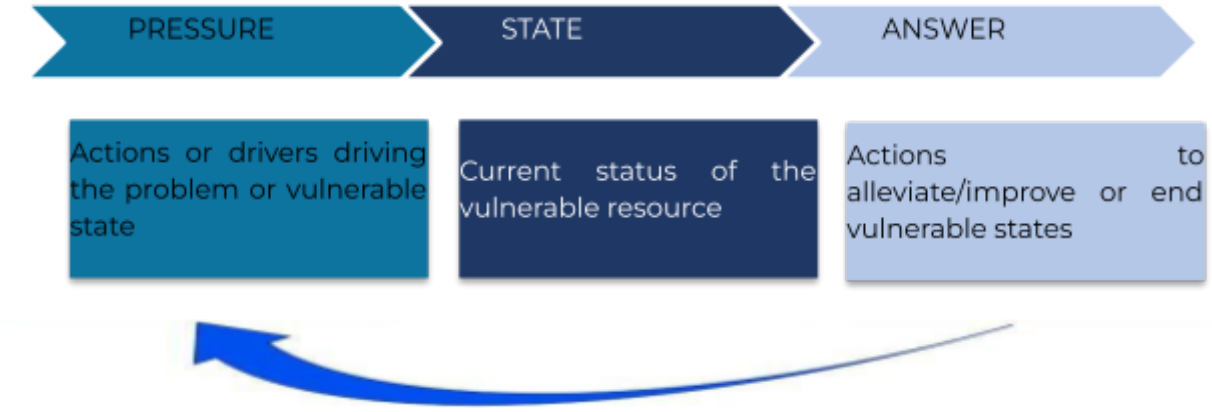

Figure 1. PER model, used in ICAT Phase I Source: ICAT Phase 1

The PER model uses the following indicators:

- *Pressure indicators:* They try to describe the pressures exerted by different human activities and the influence of climatic parameters on resources. These are classified in turn into two groups: the first considers direct pressures on the environment, often caused by human activities, the second takes into account variations in climatic parameters that modify the conditions of the resources or activities under analysis.
- *Health indicators*: try to respond to vulnerable states that are affected, in variable quality and quantity of resources. These should provide information on the situation of vulnerable states and their changes over time.
- *Response indicators*: Present the efforts made by society, institutions or governments aimed at reducing vulnerable states or increasing resilience. In general, response actions are oriented towards two objectives: i) pressure agents and ii) state variables.

An example of indicators developed based on this system during phase one, focused on water resources, can be seen in Figure 2:

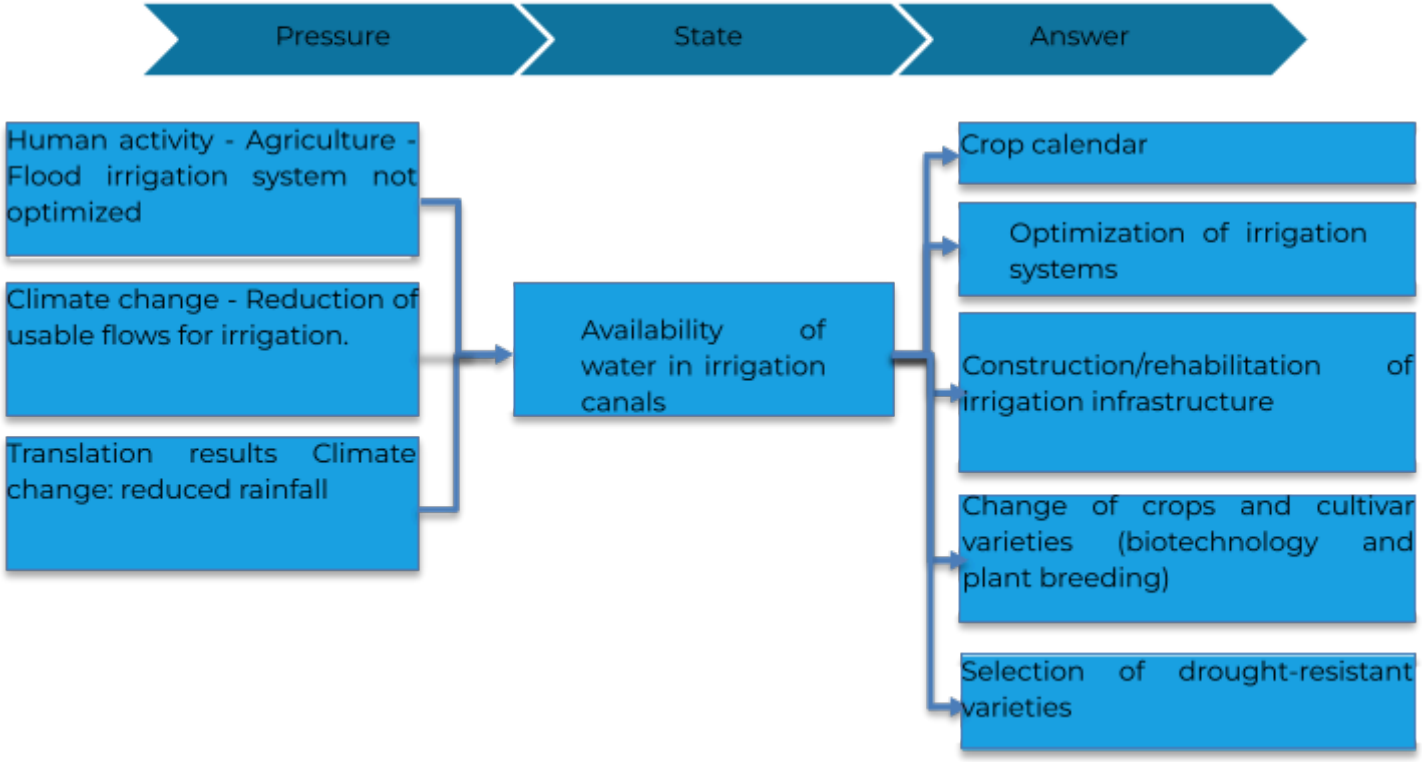

Figure 2 Example indicators of the PER model, used in ICAT Phase I

In the methodological model of the M&E system proposed during the first phase, it maintains a bottom-up approach, since it aims to generate information from producers in the banana subsector, through the levels of consolidation of information / data, data analysis and construction of indicators, sectoral coordination and strategic coordination, from where it is intended to return with the necessary adjustments, from all levels of the information chain. This model serves the purposes of learning and accountability, but does not sufficiently support good adaptation management. In this sense, the indicators proposed during the first phase for the banana sector serve to improve on-farm practices, but do not fully cover the monitoring needs of public policies for adaptation to climate change.

To fill this gap and to be able to demonstrate content that responds to the context of the M&E system, in the second phase it is proposed that the adaptation M&E system respond to reviewing the progress of adaptation implementation to report on regular updates, serving to monitor the Nationally Determined Contribution and the process of National Adaptation Plans (NAPs). as suggested in the technical guidelines for the NAP process. Therefore, for the second phase, a mixed approach is being worked on, where the "top-down" approach is integrated for an M&E of adaptation at the national level that responds to national and sectoral strategies and policies for adaptation to climate change.

It is proposed to use indicators for the agriculture and tourism sectors, which allow monitoring and evaluating the implementation of the national priorities on adaptation proposed in the NDC of the Dominican Republic (2020) (see table 1) to be

called status indicators; which in its component of on adaptation contemplates the prioritization of the goals established in the National Plan for Adaptation to Climate Change 2015-2030; the National Development Strategy 2030 (Law 01-12); other sectoral adaptation plans and the Sustainable Development Goals. Response indicators are also proposed for these measures. Pressure indicators are discarded due to the nature of the measures evaluated, which respond to a process of raising vulnerabilities and priorities previously identified before their prioritization.

During this phase of the project, a capture and report sheet model has been developed (see table 1) based on the considerations defined during the technical consultations carried out with the different members of the Strategic Committee:

- The use of data sheets for reporting and data feeding is considered, as they are an input that facilitates the participation of the different actors, at the different levels and areas that make up national climate action.
- It is considered that the fact sheets provide detailed information on adaptation measures, can be easily fed, improved and transported to other media and/or data platforms, such as digitization and subsequent analysis.
- The sheets facilitate the aggregation of information according to the different elements that compose it, enabling the joint analysis of adaptation measures, as well as the prioritization of these in case they are identified measures and approval process.
- The report sheets will be aligned to the future feeding and review of the measures proposed in the national adaptation plans and the Adaptation reports before the Convention such as the National Adaptation Communications and the Biennial Transparency Reports (BTR).

This sheet will serve as a guide to collect basic information necessary for the monitoring of new projects that will feed the prioritized measures for the prioritized sectors. Decision 18/CMA.3 on "Modalities, procedures and guidelines for the transparency framework for the measures and support referred to in Article 13 of the Fisheries and Tourism Agreement" was taken into account for the proposal for a capture and report sheet for the M&E in Adaptation for the Dominican Republic. Paris", chapter IV. Information on the impacts of climate change and adaptation work under Article 7 of the Paris Agreement. As well as section F. on Monitoring and evaluation of adaptation processes and measures cited:

112. To improve its adaptation actions and facilitate reporting, as appropriate, each Party should report on the establishment or use of national systems to monitor and evaluate the implementation of adaptation actions. Parties should report on monitoring and evaluation approaches and systems, including existing or developing.

113. Each Party should provide the following information, as appropriate, related to monitoring and evaluation:

(a) Achievements, impacts, resilience, review, effectiveness and results;

(b) Approaches and systems used, and their results;

(c) Assessment and indicators for:

(i) How adaptation increased resilience and reduced impacts;

(ii) When adaptation is not sufficient to avoid impacts;

(iii) How effective are the adaptation measures implemented;

(d) Implementation, in particular in:

(i) Transparency of planning and execution;

(ii) How support programs address specific vulnerabilities and adaptation needs;

(iii) How adaptation actions influence other development objectives;

(iv) Good practices, experience and lessons learned from regulatory and normative changes, actions and coordination mechanisms.

114. Each Party should provide information related to the effectiveness and sustainability of adaptation actions, as appropriate, including on:

(a) Ownership, stakeholder engagement, alignment of adaptation actions with national and subnational policies and replicability;

(b) The results of adaptation actions and the sustainability of those results.

These recommendations, together with the survey carried out in the consultations, result in the following file (see table 1) with base fields for collecting information for adaptation projects and measures:

Table 1 ● M&E System Capture and Report Tab Model

Name of the measure/project:					
Adaptation Focus Area (NDC and PNACC)					
Lines of action of impacted sectoral plans					
Brief description					
Objectives					
Responsible Entity (Institution/s	Type of Measure (Initiative	Status (In planning,	Geographical area of impact	Financial information	Achievements, impacts and results

implementing the measure/project)	, project, measure, study, characterization, intervention)	approved, running)	(Country, Region, Municipality, Cuenca, Coordinates)	(costs, budget, execution period, type of financing, entity)			
					Impacts Indicators	NDT indicator	SDG targets
Methodological approach and/or methods for follow-up							
Adaptive analysis (Description of whether or not resilience increased)							
Co-benefits with mitigation							
Other information							

As can be seen in the fact sheet, although the projects propose and contemplate indicators for the different prioritized measures, other indicators are also included that would serve as a basis for strengthening the system of adaptation indicators for sectors linked to other frameworks such as the SDGs, Sendai Framework, among others.

Table 2 shows below the measures prioritized in the Nationally Determined Contribution of the Dominican Republic for the water and food security sectors and those of tourism and marine coastal resources, which respond to the agriculture and tourism sectors prioritized for the ICAT-Adaptation project, with the status indicators proposed by the sectoral sectors. The response indicators are in the process of refinement and development due to greater complexity.

Table 2 Prioritized adaptation measures for the Agriculture and Tourism sectors, Built from NDC-RD 2020

Sector ICAT	Sector NDC	Measure	Status/compliance indicators
Agriculture	Water Security	Contribute to ensuring the supply and availability of drinking water sources, implementing replenishment projects and reducing leaks.	No. of housing with added drinking water supply. Built-in drinking water production capacity." Volume of drinking water supplied inside homes. Number of sampling points relocated according to territory. Optimized the health control program of the institution. Number of Service Outages. No. of rehabilitated production systems and distribution components. Number of meters and micro flow meters installed."
		Improve the quality of water-producing ecosystems that serve as sources of supply to supply systems; including improving the conditions of sanitation services.	Number of training given in water resource management. Number of monitoring equipment obtained. " Quantity of water and sediment quality monitoring performed. Reforested areas (Hectares) Linear meters of sanitary infrastructure renovated. Volume of treated water incorporated into the system. Construction No. of wetlands. Volume of water in treated wetlands. Volume of treated water. No. of constructed wetlands.

Sector ICAT	Sector NDC	Measure	Status/compliance indicators
			Number of hectares preserved and restored. Number of hectares intervened for conservation. No. of programs developed. No. of analysis equipment acquired. Accredited laboratory. No. of samples processed. No. of dams with physicochemical and bacteriological evaluation carried out. Study of analysis on problems of Blooms carried out. No. of rehabilitated infrastructures. No. of ideas of developed projects. Number of projects designed. Number of projects implemented. Number of projects registered in the SNIP. No. of designs of sewer systems and drinking water. No. of water producer systems identified and protected. No. of prioritized water production ecosystems. No. of water producer system management plans developed."
		Manage the risk of floods and control of water floods through the control of riverbanks, thus protecting the coastal-marine zone.	Linear kilometers of canals and banks intervened. Linear kilometers of restored margins." Linear kilometers of drains cleaned.

Sector ICAT	Sector NDC	Measure	Status/compliance indicators
		Strengthen (at least two) public-private partnerships and/or mechanisms for water sector management.	Analysis of public-private partnerships in the water sector. At least one program to strengthen established public-private partnerships. At least two water resource management mechanisms through established PPPs Diagnosis made. Survey of PPPs and management mechanisms carried out. Established organizational structure. Number of dialogue events performed. Percentage of socioeconomic data collected.
		Facilitate access to an insurance system for damages linked to climatic events.	No. of Sensitized People. Number of Trained Persons. No. of climate insurance contracts. Number of hectares insured. Reduction rate in the average IVACC by region.
	Food safety	To make the use of water for food production more efficient, measures of crop changes and planting schedule are included here. (Irrigation Sector)	Number of Sensitized People. Number of Trained Persons.
		Integrated Productive Landscape Project through Land Use Planning, Restoration and Sustainable Intensification of Rice, in the Yaque del Norte and Yuna basins.	Intervention at national level in rice production systems on 4 000 ha. Implement sustainable rice production systems to improve productivity, their implementation through the application of similar technology. No. of trainings given to strengthen governance for territorial planning and sustainable use of natural resources.

Sector ICAT	Sector NDC	Measure	Status/compliance indicators
			Number of demonstration plots enabled with measurement and monitoring of installed water consumption. Reduction of emissions estimated at 699 Gg CO2eq accumulated in the period. "
		Manage the water supply by improving and building infrastructure and hydraulic equipment. (Irrigation Sector)	National instrument for irrigation technification. Technical survey carried out. Instrument for cost evaluation. No. of Producers and/or Trained Clusters . Technification of the irrigation system in 1250 Ha. No. of rehabilitated and improved hydraulic works. No. of training carried out for dam operators. No.de feasibility studies carried out. Percentage of progress of study and project design. Percentage of progress in the execution of the project.
		Promote climate-smart livestock management in the Dominican Republic.	Updated 100% of the Program of extension, awareness and technical assistance to milk and meat producers (MEGALECHE). Intervention in 15,625 hectares worked under the programs. 8,000 aggregate producers benefited by gender, seeking replication in 47 thousand farms. No. of cattle adapted to changes in climate.
		Promote the adoption of Silvopastoral Systems on	No. of trained people.

Sector ICAT	Sector NDC	Measure	Status/compliance indicators
		livestock farms and other improved practices for Demonstrations of Environmentally Friendly Farms	No. of awareness programs carried out. No. of trained guilds.
Tourism	Tourism	Determine and establish the carrying capacity of coastal-marine ecosystems or their acceptable limit of change for recreational uses according to their adaptation to climate change.	Physical Load Capacity (CCF): is the relationship between the available space and the capacity of people who can visit it in a day. Real Load Capacity (CCR): in this case factors that have to do with the physical characteristics of the destination come into play. The social factor, soil vulnerability, accessibility, solar brightness, rainfall, temporary closures, the propensity to flood that the land has, among others, come into play. Effective Load Capacity (ECC): is the maximum limit of people who can visit a place without damaging it. Percentage of coastal-marine territory as a protected area Established baseline. Percentage of coastal marine protected areas that have carrying capacity analysis.
		Maintenance and restoration of coastal marine ecosystems (mangroves, reefs, dunes).	Percentage of surface area of restored coastal marine ecosystems. Proportion of coastal area intervened with restoration and regulation actions (km2)
		Order the tourist territory with a focus on adaptation to climate change: well-connected streets, pedestrian walkways, well-maintained trails and bicycle paths, tree planting with native species, among other measures.	Number of areas evaluated. Characterized coastal area. Vulnerability Study carried out. Number of areas evaluated per year.
		Define the tourism activity of the low country within the framework of environmental,	Number of routes and circuits created. At least 400 people trained annually disaggregated by gender.

Sector ICAT	Sector NDC	Measure	Status/compliance indicators
		sociocultural and economic sustainability, with a focus on adaptation to climate change.	No. of empowered communities. Number of productive units created. At least 23 protected areas with resilient infrastructure visitation facilities.
		Promote resilient tourist destinations: diversify the sun and beach tourism offer towards other segments such as adventure tourism, nature tourism, ecotourism and health tourism.	No. of campaigns or programs of the Ministry of Tourism for the diversification of destinations; Variation of the sustainable tourist offer compared to the traditional one (Sun and Beach).
	Coastal - marine resources	Zoning and planning of coastal-marine systems taking into account adaptation and resilience to climate change.	Percentage of tourism poles with strategic tourism development plans in which the framework of environmental sustainability and adaptation to climate change have been integrated. No. of awareness events for the mainstreaming of CC in tourism pole plans. No. of Land Use Plans Number of cartographic surveys carried out. At least three comprehensive tourism plans prepared per year. Resolution of regulations of established tourist destination.
		Promote resilient coastal infrastructure, favouring green infrastructure as appropriate taking into account an ecosystem approach.	Vulnerability studies carried out. No. of built infrastructures."
		Facilitate access to an insurance system linked to climatic events for coastal infrastructures.	No of awareness events Elaborate Insurance Design Validated coastal infrastructure insurance.
		Establishment of institutional structures that	No. of strengthened existing funds.

Sector ICAT	Sector NDC	Measure	Status/compliance indicators
		strengthen research, management and monitoring (tidal, climatic and marine observation stations) of coastal-marine species and ecosystems and their vulnerability to climate change and variability.	At least 15 investigations conducted. Tidal station designed and installed. Climate Change Unit created. Number of trainings given. Volume of algae collected. Volume of algae used as raw material."
		Prevention, mitigation and remediation of pollution of coasts and beaches with special attention to compliance and control to reduce vulnerability and increase the resilience of coastal-marine systems.	Proportion of infrastructure projects in coastal marine areas for climate risk prevention, mitigation and reduction. No. of estuary ecosystems assessed. Number of beaches monitored and evaluated
		Manage a fund for the recovery of mangroves, estuaries and coral reefs and other coastal-marine ecosystems and species, which contributes to increasing resilience to the effects of climate change and variability.	Funds managed for the restoration of coastal marine ecosystems, coverage of mangroves, estuaries and reefs recovered."
		Promote the production of marine data, products and metadata to make it more available to public and private users who depend on marine data, standardized and harmonized with quality assurance.	Proportion of climate portals open to the public and decision makers that include marine and tourism sector data. Amount of area characterized in bathymetry studies.

6.3 Instrumentation

To understand a monitoring and evaluation system of adaptation to climate change, it is necessary to understand its instrumentation. This means the processes and actors that compose it. The ICAT-A project has carried out a series of surveys that allow us to understand the institutions that make up and supervise the M&E of adaptation under the context defined for this project, as well as a hierarchy and identification of the functions of these actors to outline the M&E system and the steps involved in the monitoring and evaluation of adaptation.

The first step in defining the implementation of a national adaptation monitoring and evaluation system is to know who is part of the machinery for the implementation and monitoring of adaptation measures. With the development of the mapping of actors for the monitoring and evaluation of adaptation for the agriculture and tourism sectors, the key actors that participate or could participate in the adaptation monitoring and evaluation process at the national level were identified (see General List of Actors for both sectors in ANNEXES). Once the key actors were identified, their area of influence was established, their importance for the system (high, medium or low) was identified, it was categorized by the type of institution (government, private sector, academia, civil society and donors). Also, a brief description of their functions with respect to M&E was developed and the role of the actors with respect to M&E was identified. Based on this mapping of actors, the following levels of action were classified during the analysis of capacities for monitoring and evaluation of adaptation.

- **Strategic level:** The strategic level constitutes the **direction of the system**. It is responsible for establishing the objectives, strategies and goals of the system, to respond to the defined commitments. It influences the decision-making process in the long-medium term.
- **Tactical level:** This level constitutes the **coordination of the system**. It is responsible for programming, coordinating and controlling specific activities, integrating efforts to meet the defined commitments. It has an influence on the decision-making process in the medium to short term.
- **Operational level:** This level is responsible for the **execution of system processes**. Define specific actions (routine tasks). It influences the short-term decision-making process.

These levels are not exclusive, understanding that the higher levels can perform functions of the underlying levels.

The results of the classification of actors in the Agriculture sector are summarized in Figure 3, grouping a total of 5 institutions at the strategic level, 7 for the tactical level and 10 for the operational level. It should be noted that the operational level has a considerably higher amount than that mentioned, agglomerating multiple actors in certain organizations (e.g. "Exporting Companies").

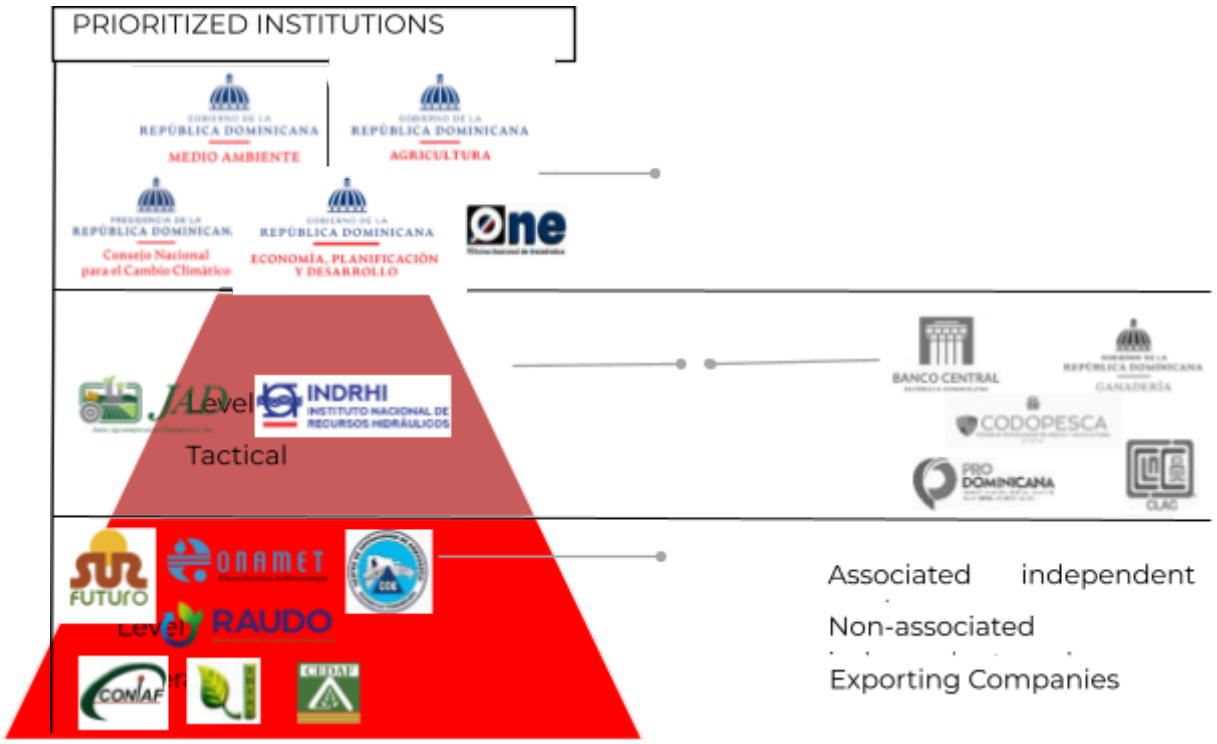

Figure 3. Classification of institutions in the Agriculture sector

Table 3. Classification of institutions in the Agriculture sector

INSTITUTION	LEVEL	INSTITUTION	LEVEL
Central Bank of the Dominican Republic	Tactical	Dominican Institute of Agricultural and Forestry Research (IDIAF)	Operative
Export and Investment Center (CEI-RD)	Tactical	National Institute of Water Resources (INDRHI)	Tactical
Emergency Operations Center (EOC)	Tactical	Dominican Agribusiness Board (JAD)	Tactical
Center for Agricultural and Forestry Development (CEDAF)	Operative	Ministry of Agriculture	Strategic
Exporting Companies	Operative	Ministry of Economy, Planning and Development (MEPyD)	Strategic
National Council for Agricultural and Forestry Research (CONIAF)	Operative	Ministry of Environment and Natural Resources	Strategic
National Council of Fisheries and Agriculture (CODOPESCA)	Tactical	National Statistical Office (NSO)	Strategic
National Council for Climate Change and Clean Development Mechanisms (CNCCMDL)	Strategic	National Meteorological Office (ONAMET)	Operative
Latin American Coordinator of Small Producers and Fair Trade Workers (CLAC)	Tactical	Associate Independent Producers	Operative
Directorate-General for Livestock	Tactical	Non-associated independent producers (local market)	Operative
Sur Futuro Foundation	Operative	Environmental Network of Dominican Universities (RAUDO) **	Operative

Note: ** Represented by the Climate Change and Resilience Observatory (INTEC)

The results of the classification of actors in the Tourism sector are summarized in Figure 4, grouping a total of 5 institutions at the strategic level, 12 for the tactical level and 13 for the operational level. It should be noted that the same exception made for the operational level of the Agriculture sector applies to the Tourism sector.

Table 4. Classification of institutions in the tourism sector

INSTITUTION	LEVEL	INSTITUTION	LEVEL
Dominican Association of Health Tourism (ADTS)	Tactical	Hotel	Operative

INSTITUTION	LEVEL	INSTITUTION	LEVEL
National Association of Hotels and Tourism of the Dominican Republic (ASONAHORES)	Tactical	National Geographic Institute "José Joaquín Hungría Morell"	Operative
City Councils (D.N, Terrenas, Miches, Puerto Plata and Punta Cana.	Operative	Dominican Municipal League (LMD)	Tactical
National Authority for Maritime Affairs (ANAMAR)	Tactical	Ministry of Agriculture	Tactical
Central Bank of the Dominican Republic	Tactical	Ministry of Economy, Planning and Development (MEPyD)	Strategic
Marine Biology Research Center (CIBIMA-UASD)	Operative	Ministry of Environment and Natural Resources	Strategic
Emergency Operations Center (EOC)	Tactical	Ministry of Tourism (MITUR)	Strategic
National Council for Climate Change and Clean Development Mechanisms (CNCCMDL)	Strategic	National Statistical Office (NSO)	Strategic
Dominican Federation of Municipal Districts (FEDODIM)	Tactical	National Meteorological Office (ONAMET)	Operative
Dominican Federation of Municipalities (FEDOMU)	Tactical	Environmental Network of Dominican Universities (RAUDO) **	Operative
Dominican Foundation for Maritime Affairs (FUNDEMAR)	Operative	Eastern Reef Network (RAD)	Tactical
Punta Cana Group Foundation	Operative	National Network of Business Support for Environmental Protection (ECORED)	Tactical
Reef Check Foundation	Operative	National Geological Survey (SGN)	Operative
Sur Futuro Foundation	Operative	Single System of Beneficiaries (SIUBEN)	Tactical
Jaragua Group	Operative	The Nature Conservancy (TNC)	Tactical

Note:** Represented by the Observatory of Climate Change and Resilience (INTEC)

Table 5 has been rescued from the stakeholder mappings carried out by the project. It shows the strategic level actors, which make up the Strategic Committee (EC) of the project. This table contains a brief description of the members of the EC and it lists the main dependencies of these institutions which are proposed to be those that lead the work of establishing and implementing the national system for

Monitoring and Evaluation of Adaptation to Climate Change for the prioritized sectors.

Table 3. Analysis of actors according to interest for the development of an M&E Process

ICAT-ADAPTATION PROJECT STRATEGIC COMMITTEE		
Institution	Sector	Brief description / Relevant Dependencies and/or Departments
National Council for Climate Change and Clean Development Mechanism (CNCCMDL)	Public	Body dependent on the Presidency, collegiate with several public institutions that aims to articulate and join efforts from the different institutions that make up the country's development sectors to combat the problem of climate change. Relevant dependencies and/or departments • Technical Directorate: Department of Adaptation • Department of Transparency
Ministry of Economy, Planning and Development (MEPyD)	Public	Governing Body of the National System of Planning and Public Investment and Territorial Planning in charge of conducting and coordinating the process of formulation, management, monitoring and evaluation of macroeconomic and sustainable development policies and monitoring of the Development Strategy. Relevant dependencies and/or departments • National Statistical Office (ONE): Entity in charge of production and dissemination of official statistical information, with the functions of collecting, reviewing, preparing and publishing national statistics in relation to economic, agricultural, commercial, industrial, financial, environmental and social activities. • High-level Inter-Agency Commission for Sustainable Development. • General Directorate of Planning and Territorial Development (DGODT) • Directorate-General for Economic and Social Development (DGDES): Department for Monitoring and Evaluation of Economic and Social Development Policies and Plans
Ministry of Environment and Natural Resources	Public	Agency responsible for developing, implementing and supervising national policies on the environment and natural resources, promoting and stimulating activities for the preservation, protection, restoration and sustainable use thereof. Relevant dependencies and/or departments • Vice-Ministry of International Cooperation: Directorate of Climate Change Adaptation and

		Mitigation; Department of Vulnerability and Adaptation to Climate Change ● Vice-Ministry of Environmental Management: Directorate of Environmental Quality ● Vice-Ministry of Marine Coastal Resources ● Directorate of Ecotourism
Ministry of Agriculture	Public	Ministry in charge of Agricultural Policy (Agriculture, Livestock and Fisheries) in accordance with the general development plans. ● Vice-Ministry of Planning: Directorate of Climate Change
Ministry of Tourism	Public	Ministry in charge of planning, programming, organization, direction, promotion, coordination and evaluation of the activities of the country's tourism industry, in accordance with the objectives, goals and national policies determined by the Executive Power. ● Technical Vice-Ministry ● Planning and Projects Department

It is essential for the instrumentation of the M&E system to know the initial collection of information and the flow of this for the collaborative construction of the database and information of the system. With the realization of the mapping of actors, it was identified how all actors contribute to the information base, with specific roles identified for the management levels, establishing basic mechanisms of quality control of the information to guarantee the integrity of the system. This responds both to the needs of the actors and to the national adaptation targets set before the UNFCCC. The functions identified for the different actors within the system to comply with the information cycle for adaptation monitoring and evaluation are defined below:

- **Data and information collection:** function within the M&E system to provide data and information relevant to adaptation implementation measures in a direct or indirect manner
- **Data and information consolidation:** function within the M&E system of concentrating data relevant to the implementation of adaptation measures
- **Construction of indicators/indices:** function within the M&E system responsible for the process of developing indicators related to adaptation measures
- **Validation of data and information:** function within the M&E system related to data validation, information and quality control of measures relevant to adaptation.

- **Reporting and decision-making:** reporting function with synthesized information relevant to adaptation either at national or international level for efficient decision-making by national authorities.

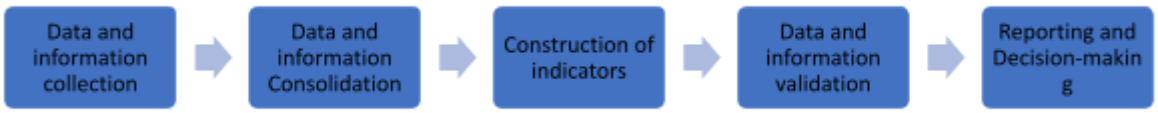

Figure 5. Nature of management levels

Figure 5 graphically shows the flow of information. Figure 6 seeks to demonstrate how the levels of classification for institutions are hierarchical, but not exclusive, in their functions by the nature of the institutions. In this regard, institutions at the strategic level can perform functions at the tactical and operational levels. Similarly, institutions at the tactical level can perform functions at the operational level. However, it does not work the same in reverse. That is, the institutions at the operational level do not perform functions of the hierarchical or tactical levels.

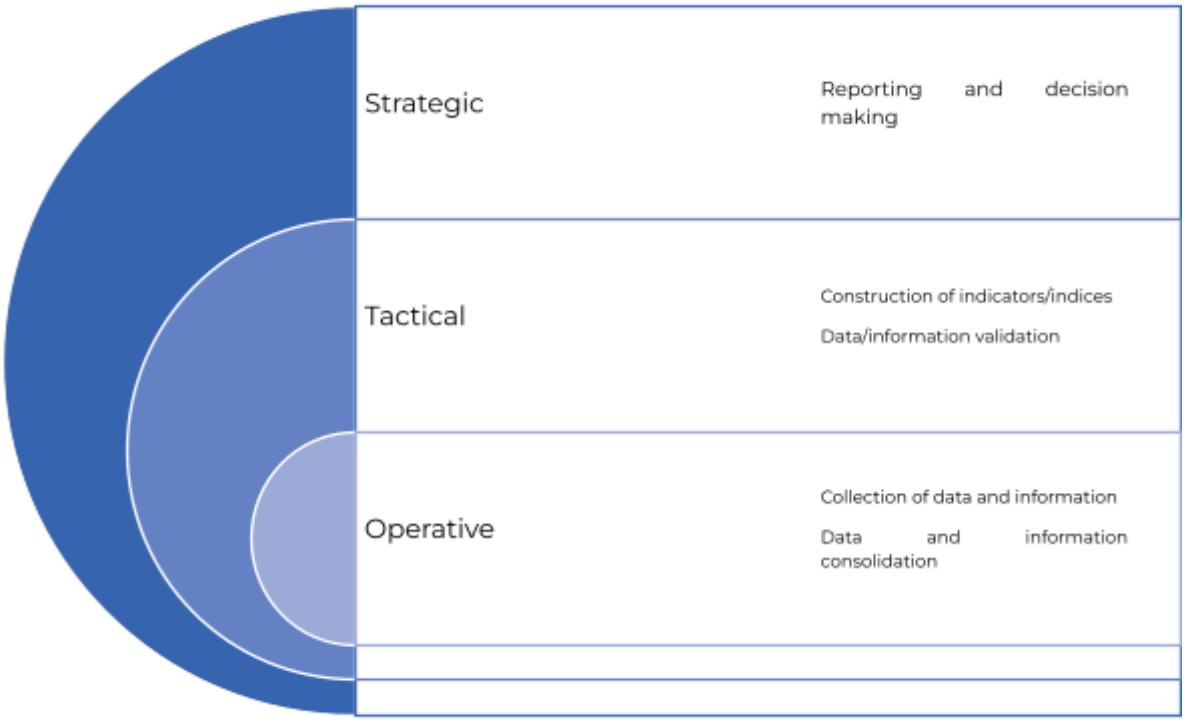

Figure 6. Nature of management levels

In view of the roles and categories of the actors, in order to better understand the implementation of the M&E system for the agriculture and tourism sectors, the current institutional capacity and existing gaps for monitoring and evaluation of adaptation to climate change in the agriculture and tourism sectors in the Dominican Republic were evaluated. for this, the Capacity Assessment Tool (CAT4CAT) methodology was applied to the two adaptation sectors of the project. This methodology addresses four domains) and their twenty corresponding subdomains:

1. Objectives/Strategies
   - 1.1. Mission/Mandate
   - 1.2. Strategic Planning
   - 1.3. Quality of Leadership
   - 1.4. Financing Model
   - 1.5. Gender and Social Inclusion

2. Systems and Infrastructure
   - 2.1. Organizational Structure

Overall, the gap analysis carried out showed the current capacity and needs of the institutions involved in the monitoring and evaluation of adaptation measures for the agriculture and tourism sectors. For the first domain on **Objectives/Strategies**, the Mission/Mandate and Quality of Leadership sub-domains showed a reduced need for intervention compared to the other three sub-domains (Strategic Planning, Funding Model and Gender and Social Inclusion).

The second domain analyzed on **Systems and Infrastructure**, was the domain with the greatest need for intervention in its different subdomains. This is the domain that contemplates the establishment of the monitoring and evaluation system of adaptation in the organizational structure and the functioning of the elements for the reporting of adaptation measures. The subdomains of Organizational Structure, Cross-functional Coordination, Monitoring and Evaluation, Knowledge Management, External Communication and Financial Operations Management. In the case of the Information and Communication Technology (ICT) subdomain, the greatest need identified was for technological resources.

The third domain evaluated on **Human** Resources presented a medium need for intervention. For the Staffing Levels (Quantity) and Access to Capacity Building subdomains. The sub-domains Knowledge and Experience on Climate Change and Technical Skills in M&E were proposed presented medium and high intervention needs at different levels.

Finally, the fourth domain evaluated on **Organizational Assets** was evidenced as the domain with the least need for intervention, presenting intervention needs for all its subdomains.

It is expected that once the identified needs are met, the data collection under the following information flow schemes for the agriculture (Figure 7) and tourism (Figure 8) sectors will serve to complete the product reports of the system.

Figure 7 Analysis of the relationship of actors in the agricultural sector

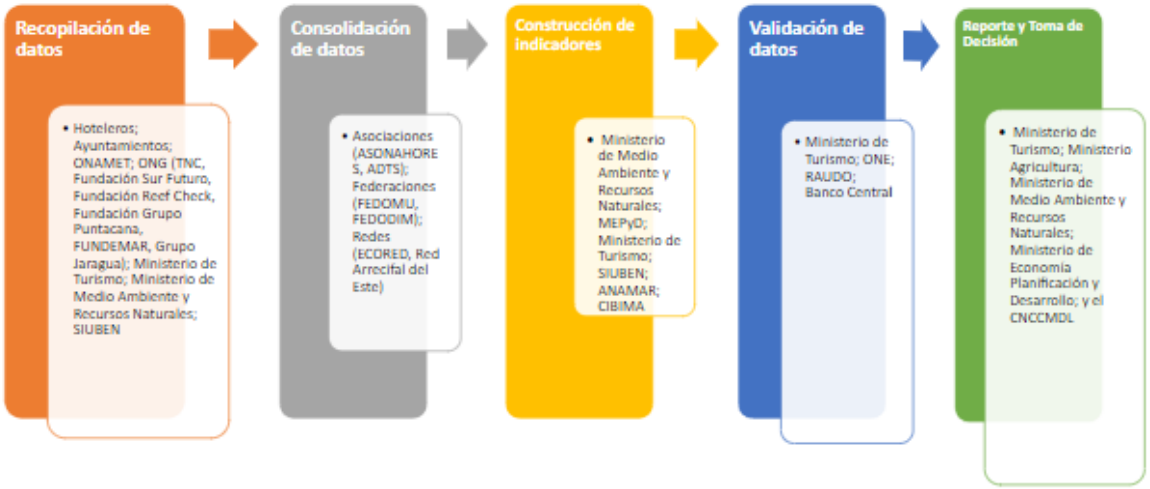

Figure 8. Analysis of the relationship of tourism sector actors

Based on the information identified in the content section, it is expected that the information to be provided by the different actors complies with these base fields in the case of new initiatives identified by strategic actors and that survey processes will be initiated for existing initiatives in case of not having this data. It is expected that the information will be synthesized through the different public institutions through their annual reports/reports, which respond to the operational and strategic planning of the public sector. For the other actors, including the private sector and

civil society, the voluntary contribution of the information that feeds the measures prioritized by the country is expected.

The Department of Transparency of the National Council for Climate Change, through its Adaptation Monitoring and Evaluation unit, together with the counterpart departments of the institutions that make up the Strategic Committee (see table 3), would be playing a fundamental role in the implementation of the M&E of adaptation for the agriculture and tourism sectors. These departments will be responsible for agglomerating data from the different sectors and developing the climate change adaptation report for the prioritized sectors. As evidenced in Figure 9, with the rescue of the work developed during the first phase of the ICAT-Adaptation project in terms of indicators and the proposed M&E system, together with the new approach proposed in this second phase for both sectors, two levels of feedback from the M&E system and its users are foreseen.

- The level of national feedback (national report) in which the consolidation of information, the feeding of databases and the generation of reports will allow the determination of achievements, impacts, resilience building and measurement of the effectiveness of adaptive approaches used in the implementation of measures prioritized by sectoral measures in national adaptation plans.
- The level of international reporting is achieved a greater degree of transparency in the planning and implementation of adaptation measures; Evidence on how the vulnerabilities of the sectors are covered, such as adaptive measures contribute to other segments of development and will allow sharing good practices, experiences and lessons learned, contemplating actions, projects, regulations and coordination mechanisms.

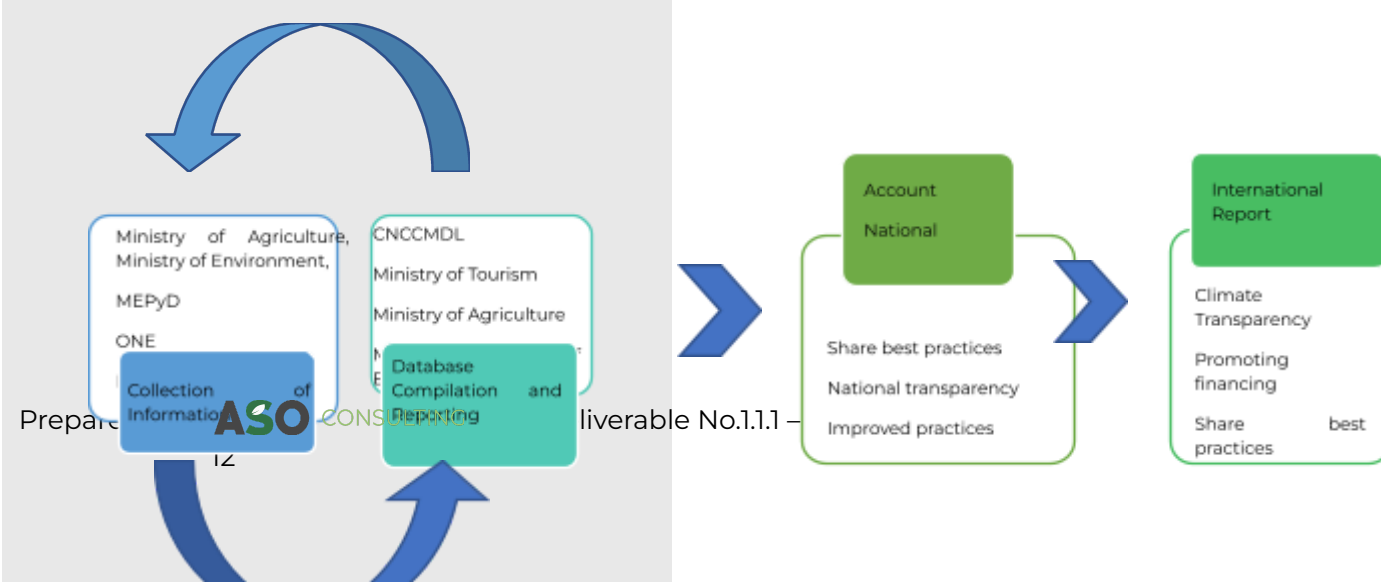

Figure 9. Flow of information and reports

6.4 Products and reports

The final expression of a monitoring and evaluation system of adaptation to climate change are the products and reports developed by the system. The products and reports component comprises the packaging and dissemination of M&E results, at all levels required and expected by the system coordination. During the first phase of the ICAT project, a server was acquired to host the reporting data to be generated by the sectoral sectors. This second phase of the ICAT-Adaptation project has been working on the consensus for the report, identifying the different reporting instruments before the Convention, as well as the proposal for general reporting of the system.

Currently, the UNFCCC has three instruments for adaptation reporting. These vary slightly in their function and frequency, these are:

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- **National communication**, which provides an overview of the adaptation being adopted by the country. Every 4 years (with the exception of least developed countries (LDCs) and small island developing states (SIDS) which may submit at their discretion).
- **Adaptation communication,** which provides a snapshot of a country's national adaptation process, including its vulnerabilities, support and capacity needs. Its frequency responds to the frequency of the instrument to which the adaptation communication is presented (National Adaptation Plan).
- **Biennial Transparency Report (BTR),** in which you can report on the adaptation that the country is carrying out. This will be every 2 years, starting in 2024. The guidance for the adaptation section of the BTR is more detailed than the national communication, its de facto predecessor, and, inter alia, includes extensive guidance on reporting on the results of monitoring and evaluation (M&E) processes applied to adaptation.

ICAT proposes the submission of a national communication combined with the BTR report as an adaptation reporting tool to the UNFCCC, since when submission deadlines overlap it is allowed under decision 1/CP .24, agreed at COP24. The decision stipulates that countries that choose to submit a combined national communication – BTR report should use the guidance provided for the BTR for all sections common to both reports. It is important to stress that the complementary chapters of the national communication, namely "research and systematic observation" and "education, training and public awareness", the content of which is not covered by the RBB guidelines, should be included in the report following the national communications guidelines.

Given this and understanding that the Dominican State will select the reporting instrument that accommodates the deadlines and financial resources with the best margins of profitability and operability, it is also recommended that this report will present the results of the M&E system responding to the sections mentioned in the contents section. The frequency must be delimited by the Dominican State by virtue

of the deadlines established by the UNFCCC. The consulting team recommends starting the M&E report with the submission of the next National Communication and updating content by establishing a new recurrence from the presentation of the first BTR.

7. Conclusion and recommendations

In this delivery of the second set of basic national methodologies for the agriculture and tourism sectors in the Dominican Republic, the M&E System is presented, the inputs of the first delivery are rescued and the national framework of climate transparency is enriched through the clarification of the components of the M&E system of adaptation. The national context in which the monitoring and evaluation system of adaptation to climate change is established and developed was identified in detail. This establishes the national circumstances in which it will be developed, as well as the management tools available for its operation. This information is based on the framework of the M&E policy of adaptation, prioritized by the institutions that make up the Strategic Committee of the project. The purpose of the M&E system, its level of application and its form of aggregation of the measures to be monitored, as well as its current condition, were also defined.

In this second set of methodologies, the content of the reports to be developed in the system has been defined. In this sense, the different M&E approaches to adaptation that aim to address the system, the data and information necessary for analysis, and the results and information products associated with the system were identified. During the first phase, a technically focused content was worked on for producers in the agricultural sector, for this second phase of the ICAT-Adaptation project, a content that responds to the national reality of the agriculture and tourism sectors has been outlined based on the needs prioritized in the public policy instruments that work on adaptation to climate change in these sectors. It is this section where the main indicators identified to date are rescued. This section of the document will be enriched once the indicator report is updated.

In order to develop the implementation of the proposed M&E system, the processes and actors that make it up the system were analyzed and proposed. In this document, a series of surveys have been presented that allow us to understand the institutions that compose and supervise under the context defined for this project the M&E of adaptation, as well as, a hierarchy and identification of the functions of these actors has been carried out to outline the M&E system and the steps involved in the monitoring and evaluation of adaptation. . All this information describes the responsibilities and information flows for the generation of system reports.

Finally, this document includes recommendations for the final expression of the monitoring and evaluation system of adaptation to climate change in the agriculture and tourism sectors. Defining the inputs for the packaging and dissemination of M&E results, at all levels required and expected by the coordination of the system.

Once the indicator report is completed, the document will be enriched and will serve as input for the training modules proposed in the results of the capacity analysis developed by the project.

Finally, after choosing a combined methodological approach to develop a methodology proposal for the M&E system of the agriculture and tourism sectors,

this deliverable second *set of basic national methodology (s) for agriculture and tourism in the Dominican Republic* is developed.

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5. 8. Annex

Table 4. Update of the Summary of the Key Actors according to Jurisdiction, and Interest in M&E Tourism

ORGANIZATION / SECTOR	AREA OF INFLUENCE	IMPORTANCE / DESCRIPTION	STAKEHOLDER PRIORITIES (CRITERION)
Ministry of Agriculture	National	High Governing institution of the national agricultural system.	Adaptation Measures Validation of data and information, Reporting and decision making.
National Council for Climate Change and Clean Development Mechanism (CNCCMDL)	National	High Council of relevant organizations in charge of the Design and Implementation of the Climate Change Policy in conjunction with the Ministry of Economy, Planning and Development and the Ministry of Environment and Natural Resources	Reporting and decision making.
Ministry of Environment and Natural Resources	National	High Governing institution of environmental and natural resources policies.	Adaptation Measures Collection of data and information, Construction of indicators/indices, Reporting and decision making.
Ministry of Economy, Planning and Development	National	High Leading institution for economic development policies and national sectoral planning.	Adaptation Measures Collection of data and information, Construction of indicators/indices, Consolidation of data and information, Reporting and decision making.
Ministry of Tourism	National	High Institution in charge of planning, programming, organization, direction, promotion, coordination and evaluation of the	Consolidation of data and information, Construction of indicators/indices, Validation of data and information, Reporting and decision making.

		activities of the country's Tourism Industry.	
Central Bank of the Dominican Republic	National	High Responsible for regulating the country's banking and monetary system	Consolidation of data and information Reporting and decision making
Hotel 	Local	High	Collection of data and information, Adaptation Measures
National Association of Hotels and Tourism Dominican Republic (Asonahores)  	National	High dome entity in the Dominican Republic of the tourism industry, for the representation of the different actors of the tourism sector before local and international instances; promote the development of the tourism industry; and seek cohesive action between the Government and the private sector.	Collection of data and information, Consolidation of data and information,
Dominican Association Health Tourism (ADTS) 	National	Casualty Private entity dedicated to strengthening the positioning of the Dominican Republic as a Health Tourism destination.	Collection of data and information, Consolidation of data and information,
National Network of Business Support for Environmental Protection (ECORED)  	National	Middle Business association whose objective is to facilitate the incorporation of a culture of social responsibility and sustainable development in the company.	Collection of data and information, Consolidation of data and information,

The Nature Conservancy (TNC) 	National	High International non-profit organization, dedicated to the conservation of biodiversity and the natural environment.	Collection of data and information, Construction of indicators/indices, Adaptation Measures
City councils	Local	High Local governments.	Collection of data and information, Reporting and decision making. Adaptation Measures
Dominican Federation of Municipalities (FEDOMU) 	National	High Associates and represents the Municipalities and Municipal Districts of the Dominican Republic, for the promotion of development and municipal democracy.	Collection of data and information, Consolidation of data and information,
Dominican Federation of Municipal Districts (FEDODIM) 	National	High Associative, non-profit entity that brings together the 235 local governments of municipal districts that represent 60% of the Dominican municipalities and govern 56% of the national territory	Collection of data and information, Consolidation of data and information,
Reef Check Foundation 	Local	Middle It offers sustainable solutions to coral reef users from the coral reef crisis to the global community.	Collection of data and information, Construction of indicators/indices,
Grupo Puntacana Foundation 	Local	Middle Non-profit organization leading various sustainable development initiatives in the eastern region of the country (important tourist pole).	Collection of data and information, Construction of indicators/indices, Adaptation Measures

Dominican Foundation for Marine Studies INC. (FUNDEMAR) 	Local	Casualty Organization dedicated to promoting the sustainable use of marine ecosystems and coastal resources through research, education, and support for the development of conservation projects.	Collection of data and information,
Eastern Reef Network (RAD) 	Regional	Low It brings together organizations dedicated to the protection of marine-coastal ecosystems.	Consolidation of data and information,
Jaragua Group 	Regional	Middle They carry out biological and social information collection, for the management and conservation of species and ecosystems, such as inventories of terrestrial, coastal and marine biodiversity; Population situation of wild species.	Collection of data and information, Adaptation Measures
Dominican Municipal League 	National	High Entity of advice in technical matters and planning for the municipalities, which seeks the integral development of the territory and the quality of life of its populations.	Collection of data and information, Consolidation of data and information, Validation of data and information, Reporting and decision making.
Single System of Beneficiaries (SIUBEN) 	National	High Institution responsible for searching for and categorizing needy persons in order to ensure their access	Collection of data and information, Consolidation of data and information, Construction of indicators/indices,

		to social programs and monetary subsidies according to their degree of deprivation.	
National Authority for Maritime Affairs (ANAMAR) 	National	Stocking Institution responsible for providing the State with technical, scientific and legal tools necessary for research, conservation and sustainable use of living and non-living resources of the sea.	Collection of data and information, Consolidation of data and information, Construction of indicators/indices,
National Geological Survey (SGN) 	National	Casualty Entity responsible for producing updated information on the basic geological characteristics of the national territory,	Collection of data and information,
National Bureau of Statistics (NSO) 	National	Loud It collects and produces statistics on the agricultural and environmental sectors.	Consolidation of data and information, Validation of data and information,
Universities–Environmental Network of Dominican Universities (RAUDO) 	Local	Stocking It brings together the high houses of study that investigate different topics with the perspectives of environment, climate change and sustainable development.	Validation of data and information,
Marine Biology Research Center. (CIBIMA) of the Autonomous University of Santo Domingo (UASD)	Local	Casualty Research center dedicated to the study and knowledge of the biodiversity of tropical coastal, marine and aquatic ecosystems on the island of Hispaniola	Collection of data and information, Construction of indicators/indices,

		and the Caribbean region.	
Sur Futuro Foundation	Regional	Stocking Sur Futuro works on various development issues in the South region.	Adaptation Measures Collection of data and information,
National Geographic Institute "José Joaquín Hungría Morell"	National	Stocking Organ of the Dominican State responsible for the formulation of policies and public actions in the areas of geography, cartography and geodesy.	Collection of data and information,
National Meteorological Office (ONAMET)	National	Loud It is the technical-scientific body and regulatory body of meteorological information throughout the country.	Collection of data and information
Emergency Operations Center (EOC)	National	Loud It plans and directs all coordination actions between the institutions of the National System for Disaster Prevention, Mitigation and Response.	Climate shock response Adaptation Measures Reporting and decision making.

Source: Update on the development of researchers in the first phase based on primary and secondary information.

Legend:

GOVERNMENT	PRIVATE SECTOR	ACADEMY	CIVIL SOCIETY	NGOS AND DONORS

Table 5. Update of the Summary of Key Actors according to Jurisdiction, Level of Power, and Interest in M&E agriculture.

Organization or Sector	Area of Influence	Importance/Description	Stakeholder priorities (criterion)
Ministry of Agriculture 	National	High Governing institution of the national agricultural system.	Adaptation Measures Consolidation of data and information, Reporting and decision making.
Central Bank of the Dominican  Republic	National	High Responsible for regulating the country's banking and monetary system	Consolidation of data and information Reporting and decision making.
Export and Investment Center of the Dominican Republic (ProDominicana) 	National	Stocking ProDominicana is closely linked to the export sector, to whom it provides support through institutional strengthening and business fairs.	Collection of data and information, Consolidation of data and information, Construction of indicators/indices,
Emergency Operations Center (EOC) 	National	Loud It plans and directs all coordination actions between the institutions of the National System for Disaster Prevention, Mitigation and Response.	Climate shock response Adaptation Measures Construction of indicators/indices, Reporting and decision making.
Center for Agricultural and Forestry Development (CEDAF) 	National	Middle CEDAF promotes the sustainable development of the agricultural and forestry sector, through training, information, institutional innovation and analysis of sectoral policies and strategies	Adaptation Measures Reporting and decision making.
Exporting companies 	Provincial	Middle These companies contemplate regulations and quality standards for export that are closely linked to good agricultural practices.	Collection of data and information,

Dominican Council of Fisheries and Aquaculture (CODOPESCA) Ministry of Agriculture	National	Loud In charge of regulating, developing, promoting and supervising the exploitation and fishing and aquaculture research and / or extraction of biotic resources of the Dominican Republic. Cr	Collection of data and information, Construction of indicators/indices, Validation of data and information,
National Council for Agricultural and Forestry Research (CONIAF) 	National	Middle The National Council for Agricultural and Forestry Research provides technical services to the agricultural sector.	Construction of indicators/indices,
National Council for Climate Change and Clean Development Mechanism (CNCCMDL) 	National	High Council of relevant organizations in charge of the Design and Implementation of the Climate Change Policy in conjunction with the Ministry of Economy, Planning and Development and the Ministry of Environment and Natural Resources	Adaptation Measures Reporting and decision making.
Latin Coordinator of Small Producers and Fair Trade Workers (CLAC) 	Regional	High It is the co-owner organization of the Fairtrade International system and the network representing all Faitrade certified organizations in Latin America and the Caribbean. In the country, they support plantation workers and small producer organizations.	Adaptation Measures Collection of data and information, Consolidation of data and information, Construction of indicators/indices,
Directorate-General for Livestock 	National	Loud Responsible for drawing up and executing the Government's livestock policy and promoting the development of the country's livestock sector.	Collection of data and information, Construction of indicators/indices, Validation of data and information,
Sur Futuro Foundation 	Regional	Stocking Sur Futuro works on various development issues in the South region.	Adaptation Measures Collection of data and information,

Dominican Institute of Agricultural and Forestry Research (IDIAF) 	National	Loud Dominican Institute of Agricultural and Forestry Research provides technical services to the agricultural sector.	Collection of data and information,
National Institute of Hydraulic Resources (INDRHI) 	National	Loud It is the highest authority of the waters and control of the rivers.	Collection of data and information, Construction of indicators/indices, Validation of data and information,
Dominican Agribusiness Board 	National	Loud The JAD represents an actor with high influence in the agricultural sector by bringing together the main entrepreneurs of the subsectors.	Consolidation of data and information,
Ministry of Economy, Planning and Development 	National	High Leading institution for economic development policies and national sectoral planning.	Adaptation Measures Construction of indicators/indices, Reporting and decision making.
Ministry of Environment and Natural Resources 	National	High Governing institution of environmental and natural resources policies.	Adaptation Measures Construction of indicators/indices, Reporting and decision making.
National Bureau of Statistics (NSO) 	National	Loud It collects and produces statistics on the agricultural and environmental sectors.	Consolidation of data and information, Validation of data and information, Reporting and decision making.
National Meteorological Office (ONAMET) 	National	Loud It is the technical-scientific body and regulatory body of meteorological information throughout the country.	Collection of data and information,

Associated Independent Producers	Local	High They produce information independently. They are usually large producers, and produce for export.	Collection of data and information,
Non-associated independent producers (local market)	Local	Low They are banana producers for the local market. They tend not to meet minimum requirements for export and good agricultural practices.	Collection of data and information
Universities–Environmental Network of Dominican Universities (RAUDO)	Local	Stocking It brings together the high houses of study that investigate different topics with the perspectives of environment, climate change and sustainable development.	Collection of data and information, Construction of indicators/indices, Validation of data and information,

Source: Update on the development of researchers in the first phase based on primary and secondary information.

Legend:

Government	Private sector	Academy	Civil society	NGOs and donors