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Agenda 4b)

## PROJECT LEVEL RESULTS FRAMEWORK AND BASELINE GUIDANCE DOCUMENT

## **Project Level Result Frameworks and Baseline Guidance Document**

## Introduction and Background

At its tenth, the Adaptation Fund Board adopted the approach to implementing results based management (RBM), contained in Annex IV of the report of the 10<sup>th</sup> meeting of the Adaptation Fund Board. The Board also adopted *the Strategic Results Framework* for the Adaptation Fund and the *Adaptation Fund Level Effectiveness and Efficiency Results Framework* of the RBM document.

As part of the Board decision on moving forward with RBM, the Board requested the secretariat "to develop a practical guide or manual on how project baselines and project results frameworks may be prepared." The secretariat has engaged a consultant to help develop a guidance document. The document is meant to be a "how to" guide targeting project proponents at the country level.

The draft document was presented at the at the twelfth AFB meeting in December 2010. After reviewing the document, The *Project Level Results Framework and Baseline Guidance* the Adaptation Fund Board <u>decided</u> to:

- (a) Invite technical comments on the guidance, which should be sent to the secretariat and taken into consideration by February 14, 2011;
- (b) Request the secretariat to move forward and pilot the document by national accredited entities by February 14, 2011;
- (c) Instruct the secretariat to have the document finalized by the thirteenth Board meeting (March 2011); and
- (d) Ensure the completion of a professionally edited, formatted web-based version by the fourteenth Board meeting (June 2011).

The secretariat did not receive any comments from national accredited entities. Technical guidance from one Board member titled, *Introduction of impact indicators and ideas for their further utilization* (attached here as Annex A) was provided as well as a suggestion from another Board member to add a list of acronyms. The acronym list will be included in the professionally edited version.

The comments contained in the annex provide several suggestions for the Board to consider including a proposed approach for estimating and monitoring three impact indicators for assessment of impacts of the AF projects and programmes.

The Ethics and Finance Committee should consider discussing the specific elements of the proposal and present recommendations on the proposal to the Board.

The following version of the guidance document contains the changes approved at the twelfth Board meeting. Annex I of the guidance document is not included here but can be found in document AFB/EFC.3 (http://www.adaptation-

fund.org/system/files/AFB.EFC\_.3.3%20Project%20level%20Results%20Framework.pdf).

## **GUIDANCE DOCUMENT<sup>1</sup>**

## INTRODUCTION

## Adaptation Fund:

The Adaptation Fund (AF), established by the Parties to the UN Framework Convention on Climate Change (UNFCCC), provides direct access to funds for concrete adaptation projects and programs in developing countries that are Parties to the Kyoto Protocol. The total amount available for eligible developing-country Parties depends on the market-based monetization of Certified Emission Reductions (CERs), which are the AF's main source of revenue.

Eligible developing-country Parties seeking AF resources should adhere to the AF's Operational Policies and Guidelines<sup>2</sup>, including the following:

- Obtain the endorsement of a designated authority, chosen by the relevant Government;
- Include a baseline and a results framework/log frame with each submission [which will also be needed for the Results-Based Management (RBM) implementation plan].<sup>3</sup>

#### This document:

- Briefly explains the Adaptation Fund's RBM framework
- Clarifies AF core indicators, and suggests ways to measure them.
- Suggests how to report outputs and outcomes.

#### This document is not:

- A prescriptive guidebook of steps on the development and analysis of RBM frameworks.
- A tool for selecting project specific indicators and how they are measured.
- A guide to the setting up or management of project monitoring and evaluation (M&E) activities.
- Submit proposals through an accredited National Implementing Entity (NIE) or through Multilateral Implementing Entities (MIEs).

Each project/programme submission must include a baseline and a results framework/log frame. This requirement is also part of the Results Based Management (RBM) implementation plan.<sup>4</sup>

## Purpose of this document:

The purpose of this manual is to assist project and programme proponents understand the AF results based management framework and core indicators, and guide them in developing project or program baselines and results frameworks (including data collection, analysis, and reporting on Adaptation Fund indicators). The guide also lays out how to align project level results frameworks/logframes with the AF's Strategic Results Framework.

<sup>&</sup>lt;sup>1</sup> The present guidance document has been developed extracting and adapting information from other guidance documents and documents from different International Organizations and Co-operation Agencies (OECD, UNDP, IFAD, DANIDA, World Bank, USAID, IADB), in addition to other sources included as References (e.g., Measures of Success and How is your MPA doing guidebooks).

<sup>&</sup>lt;sup>2</sup> http://adaptation-fund.org/system/files/AFB.Operational\_Policies\_and\_Guidelines.pdf

<sup>&</sup>lt;sup>3</sup> http://adaptation-fund.org/system/files/AFB.EFC\_.1.3.An%20Approach%20to%20Implementing %20RBM.pdf

<sup>&</sup>lt;sup>4</sup> http://adaptation-fund.org/system/files/AFB.EFC\_.1.3.An%20Approach%20to%20Implementing %20RBM.pdf

#### How is this guidance document structured?

This document is structured in three sections and two annexes. Following this introduction, Section 1 provides an overview of results-based management and details the AF's strategic results framework. Section 2 presents information on the compilation and assessment of contextual and baseline data. Section 3 provides basic concepts on what knowledge management is, and how it is integrated within the Adaptation Fund's RBM framework; it also includes a short overview on how to develop a KM strategy. Annex 1 presents and describes the standard Adaptation Fund indicators that would be measured and provides guidance on how to define, measure, and collect data.

## SECTION 1. THE ADAPTATION FUND and RESULTS BASED MANAGEMENT

1.

## Chapter 1: Guiding Principles

Results based management provides a sound framework for strategic planning and management by improving learning and accountability.<sup>5</sup>

RBM is a management strategy and tool based on performance and achievement of outputs, outcomes, and impacts.<sup>6</sup>

In the context of Adaptation Fund projects, the concept of a results chain is at the core of RBM. The result chain shows the casual relationship between activities, outputs, outcomes, and impact over time.

The central questions of the RBM framework include: How do project interventions and other activities contribute to the outcomes and other results sought after? Why should meaningful performance and result expectations be set? How should results be measured and analyzed? How can learning from evidence help adjust

#### Key RBM Terms

The RBM terms used in this section are the harmonized terms of the United Nations Development Group (UNDG), and are in line with the Organization for Economic Cooperation and Development-Development Assistance Committee (OECD-DAC) definitions.

Results: Changes in a state or condition which derive from a cause-and- effect relationship. There are three types of such changes which can be set in motion by a development intervention - its output, outcome and impact. *Goal:* The higher-order objective to which a development intervention is intended to contribute. Impact: Positive and negative long-term effects on identifiable population groups produced by a development intervention. These effects can be economic, socio-cultural, institutional, environmental, technological or of other types. Outcome: The intended or achieved short-term and mediumterm effects of an intervention's outputs, usually requiring the collective effort of partners. Outcomes represent changes in development conditions which occur between the completion of outputs and the achievement of impact. **Outputs:** The products and services which result from the completion of activities within a development intervention. Assumptions (external factors or risks): Expectations about external factors (or risks) which could affect the progress or success of a development intervention, but over which the management has no direct control.

delivery and modify or confirm project and program design? How to report actual performance and results achieved compare to planned and expected results?

A monitoring and evaluation (M&E) system must therefore be in place that can assess how the project is performing with respect to expected outputs, outcomes, and impact.<sup>7</sup>

## Adaptation Fund Strategic Results Framework

The Adaptation Fund Strategic Results Framework includes the long-term goal, outcomes, outputs and a small set of indicators for the Fund as a whole. The Adaptation Fund has committed itself to work towards the achievement of the overall goal and outcomes. Any project or programme funded

<sup>&</sup>lt;sup>5</sup> OECD 2001

<sup>&</sup>lt;sup>6</sup> OECD 2010

<sup>&</sup>lt;sup>7</sup> IFAD 2007

through the AF must therefore align with the Fund's results framework and directly contribute to the overall objective and outcomes outlined. The results architecture for the Fund is framed as follows:<sup>8</sup>

Objective: Reduce vulnerability and increase adaptive capacity to respond to the impacts of climate change, including variability at local and national levels.

EXPECTED RESULTS	INDICATORS
Goal: Assist developing country Parties to the Kyoto	
Protocol that are particularly vulnerable to the adverse	
effects of climate change in meeting the costs of	
concrete adaptation projects and programs, in order to	
implement climate resilient measures.	
Impact: Increased resiliency at the community,	
national, and regional levels to climate variability and	
change.	
Outcome 1: Reduced exposure at national level to	1. Relevant threat and hazard information generated
climate related hazards and threats	and disseminated to stakeholders on a timely basis
Output 1: Risk and vulnerability assessments	1.1. No. and type of projects that conduct and
conducted and updated at a national level	update risk and vulnerability assessments
	1.2 Quality of relevant risk and vulnerability
	assessments
	1.3 Early warning systems developed
<b>Outcome 2:</b> Strengthened institutional capacity to	2.1 No. of targeted institutions with increased
reduce risks associated with climate-induced	capacity to minimize exposure to climate variability
socioeconomic and environmental losses	risks
	2.2 Number of people with reduced risk to extreme
	weather events
<b>Output 2.1</b> : Strengthened capacity of national and	2.1.1. No. of staff trained to respond to and mitigate
regional centers and networks to rapidly respond to	impacts of climate related events
	2.1.2. Capacity increase of staff from targeted
	institutions trained to respond to and mitigate
	impacts of climate related events
<b>Output 2.2:</b> Targeted population groups covered by	2.2.1. Percentage of population covered by
adequate risk reduction systems	adequate risk reduction systems
	2.2.2. No. of people affected by climate variability
Outcome 3: Strengthened awareness and ownership	3.1. Percentage of targeted population aware of
of adaptation and climate risk reduction processes at	predicted adverse impacts of climate change, and of
local level	appropriate responses
	3.2. Modification in targeted population behaviour
Output 3: Targeted population groups participating in	3.1.1 No. and type of risk reduction actions or
adaptation and risk reduction awareness activities	strategies introduced at local level
	3.1.2 No. of news outlets in the local press and
	media that have covered the topic
Outcome 4: Increased adaptive capacity within	4.1. Development sectors' services responsive to
relevant development and natural resource sectors	evolving needs from changing and variable climate
	4.2. Physical infrastructure improved to withstand
	climate change and variability-induced stress
Output 4: Vulnerable physical, natural and social	4.1.1. No. and type of health or social infrastructure
assets strengthened in response to climate change	developed or modified to respond to new conditions
impacts, including variability	resulting from climate variability and change (by
	(type)

<sup>&</sup>lt;sup>8</sup> AFB/EFC.1/3/rev.1 June 16, 2010

	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)
Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress	<ol> <li>Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress</li> </ol>
<b>Output 5:</b> Vulnerable physical, natural and social assets strengthened in response to climate change impacts, including variability	5.1. No. and type of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets)
<b>Outcome 6:</b> Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	6.1 Percentage of households and communities having more secure (increased) access to livelihood assets
	6.2. Percentage of targeted population with sustained climate-resilient livelihoods
<b>Output 6:</b> Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1.No. and type of adaptation assets (physical as well as in terms of knowledge) created in support of individual or community livelihood strategies
	6.1.2. Type of income sources for households generated under climate change scenario
<b>Outcome 7:</b> Improved policies and regulations that promote and enforce resilience measures	<ol> <li>Climate change priorities are integrated into national development strategy</li> </ol>
<b>Output 7:</b> Improved integration of climate resilience strategies into country development plans	7.1. No. , type, and sector of policies introduced or adjusted to address climate change risks
	7.2. No. or targeted development strategies with incorporated climate change priorities enforced

## ADDITIONAL ASPECTS TO CONSIDER

The Adaptation Fund Strategic Framework should not be used as a blueprint from which the project/programme is developed.

- The AF Framework will enable the AF Board to translate its mandate into tangible results, to support ongoing planning, management and results monitoring, and measurement. Further, it lays out objectives and priorities, supports the measurement of results, and helps demonstrate contributions to higher-level goals, for example the CMP goals. It serves to measure results at the AF level, not project/programme level.
- However, project/programmes would need to ensure that their objective(s) are aligned with Adaptation Fund Strategic Outcome(s) (review chapter 2, step 3 below).

## Chapter 2: How to Develop a Results Framework for an Adaptation Project<sup>9</sup>

Project design and performance assessment can be divided into seven phases or steps, as presented below. These steps should be seen as a guide for strategic planning and specifically for the development of results frameworks. Even though the steps are presented in a specific order for explanation purposes, their implementation may require the iteration<sup>10</sup> of previous steps.<sup>11</sup>

## Step 1. Define the intended effect and scale of interventions

Adaptation Projects are designed to address, through a set of interventions, the adverse impacts of, exposure, and risks posed, by climate change (see diagram below).

<sup>&</sup>lt;sup>9</sup> This guidance document assumes there is already a formed project core team to follow the steps.

<sup>&</sup>lt;sup>10</sup> Repeatedly going through a series of steps in a process (Measures of Success)

<sup>&</sup>lt;sup>11</sup> Adaptive management



To define the intended effects and scale interventions, project proponents would need to:

- Decide the project's goal;
- Be cognizant of the Adaptation Fund fund-level Goal, Impact, and Outcomes described above, to ensure that the selected project goal and intervention parameters are broadly aligned with those.
- Define the level and timeframe of the intervention (adaptation projects can be implemented at the community, national, and transboundary level).

## Tools identified for completing Step 1:

- Stakeholder analysis:<sup>12</sup> define adaptation partners, actors, donors, communities, etc.
- Problem analysis or problem tree: understand the problem at all levels and specifically at the
  intervention level defined. This is a participatory brainstorming technique in which project
  planners and stakeholders employ graphic tree diagrams to identify the causes and effects of
  problems (problem tree) and then structure project objectives or alternative trees to resolve
  those problems. Problems that the project cannot directly address then become
  risks/assumptions to the project's success in the absence of actions.
- Overall contextual assessment: some knowledge of current and future (scenario) situations need to be identified while defining the draft goal and the level of intervention. Specifically, contextual data is the data regarding external "risk" factors that may affect the achievement of outcomes and especially impacts, but over which the project has no direct control. These factors for example other partners' activities, international price changes, armed conflicts or the weather may significantly affect the achievement or non-achievement of a project's outcome and goal.

## **OVERALL RECOMMENDATION:**

- Understand uncertainties and work with "no regrets." Low-regret and no-regret approaches to adaptation, in the context of uncertain climate scenarios.

*Uncertainty* is "an expression of the degree to which a value (e.g., the future state of the climate system) is unknown. Uncertainty can result from lack of information or from disagreement about what is known or even knowable. It may have many types of sources, from quantifiable errors in the data to ambiguously defined concepts or terminology, or uncertain projections of human behaviour. Uncertainty can therefore be represented by quantitative measures (e.g., a range of values calculated by various models) or by qualitative statements (e.g., reflecting the judgment of a team of experts)."<sup>13</sup>

<sup>&</sup>lt;sup>12</sup> How to develop stakeholder analysis, problem and alternative trees, as well as logical framework can be found at Margoluis R. and N. Salafsky. 1998. Measures of Success: Designing, Managing, and Monitoring Conservation and Development Projects.

<sup>&</sup>lt;sup>13</sup> IPCC 2007

TYPE:	INDICATIVE EXAMPLES OF	TYPICAL APPROACHES OR
	SOURCES:	CONSIDERATIONS:
Unpredictability	Projections of human behaviour not	Use of scenarios spanning a plausible
	easily amenable to prediction (e.g.	range, clearly stating assumptions, limits
	evolution of political systems).	considered, and subjective judgments.
	Chaotic components of complex systems.	Ranges from ensembles of model runs.
Structural	Inadequate models, incomplete or	Specify assumptions and system definitions
uncertainty	competing conceptual frameworks, lack	clearly, compare models with observations
	of agreement on model structure,	for a range of conditions, and assess
	ambiguous system boundaries or	maturity of the underlying science and
	definitions, significant processes or	degree to which understanding is based on
	relationships wrongly specified or not	fundamental concepts tested in other areas.
	considered.	
Value	Missing, inaccurate or non-representative	Analysis of statistical properties of sets of
uncertainty	data, inappropriate spatial or temporal	values (observations, model ensemble
	resolution, poorly known or changing	results, etc); bootstrap and hierarchical
	model parameters.	statistical tests; comparison of models with
		observations.

Typology of uncertainties:<sup>14</sup>

For example: "how can one deal with the uncertainties associated with climate projections? In view of the uncertainties associated with climate change projections, it is important to identify the range of short- to long-term climate scenarios that may occur in a project's geographical area. The project team should design the project/intervention to address the impacts of current climate variability, while at the same time preparing communities to effectively deal with medium to longer-term climate impacts. Given that climatic conditions might change in ways that cannot be accurately predicted at this time, the team should develop contingency plans that would enable them to adapt the project to other climate scenarios. For example, a project in a drought prone area that could get wetter with climate change could put in place contingency plans to deal with increased rainfall and possible flooding. In this example, the contingency plans should clearly outline activities that the project would implement to take advantage of increased rainfall and deal with floods. In addition, the plans should identify resources that would be required, indicate what resources are currently available, as well as potential sources of additional support that could be leveraged in the event of increased rain and floods."<sup>15</sup>

In spite of the existence of significant uncertainty on climate change predictions (specifically at the local level), adaptation should focus on "no regrets" activities that will increase people's capacity to deal with *a range of likely climate change scenarios*.<sup>16</sup> **"No regrets"** policy or interventions: A policy [or intervention] that would generate net social and/or economic benefits irrespective of whether or not anthropogenic climate change occurs.<sup>17</sup>

## Step 2: Analyze and formulate project objectives and analyze alternatives

As part of project planning, the adaptation project's objectives should be clarified by defining precise and measurable statements concerning the achievable results (first goal, second impact, third outcomes-secondary and primary outcomes<sup>18</sup>- and then outputs) and then identifying the strategies or means (activities and corresponding inputs) to meet those objectives. The diagram

<sup>&</sup>lt;sup>14</sup> http://www.ipcc.ch/pdf/supporting-material/uncertainty-guidance-note.pdf

<sup>&</sup>lt;sup>15</sup> CARE 2010

<sup>&</sup>lt;sup>16</sup> CARE 2010

<sup>&</sup>lt;sup>17</sup> IPCC 2007

<sup>&</sup>lt;sup>18</sup> Also known as medium- and short –term outcomes.

below illustrates the direction that should be followed when developing results. Conceptual maps as shown in the diagram are helpful to visualize linkages among results.



Blue arrows show how the different elements contribute to each other and black arrows show the order in which objectives are defined during project design.

## EXAMPLE 1:

For example, referring to an adaptation project whose goal is "sustained improvement of population health in Country X," and impact is "reduced population mortality by extreme weather events", project output and outcomes could include the following:

- Project output: "Staff from Health Care Clinics trained and certified on climate change impacts on health and adaptation responses to extreme weather events," and/or "Procedures from Health Care Clinics include extreme weather event aspects."
- Project outcome (first level) could include: "Improved capacity of Health Care Clinics on response to extreme weather events."
- Project outcome (second level) or secondary outcome: "Quality of health services for population improved and sustained."

Notice the higher level of the secondary outcome (another clear step towards the impact).

#### Tool identified for completing Step 2:

- The project logical framework can be used for conceptualizing a project's strategies and objectives. The Log frame matrix should be adapted during project implementation.

## The project log frame

The Project Logical Framework is an analytical tool (logic model) used for strategic planning, which graphically conceptualizes the hypothesized cause-and-effect relationships of how project resources and activities will contribute to the achievement of objectives or results. The logic is as follows: *inputs* are used to undertake project *activities* that lead to the delivery of *outputs* (goods/services), that lead to the achievement of the *project outcomes* (first level or primary outcomes, second level or secondary outcomes, and so on) that contribute to a *project impact and* goal. It is then possible to configure indicators, targets, identify data sources and techniques, and assess assumptions for monitoring implementation and results around this structure.<sup>19</sup>

The log frame should be prepared using a collaborative process that includes different management levels and project stakeholders.<sup>20</sup> The Adaptation Fund encourages broad participation in log frame development.

NARRATIVE SUMMARY	INDICATORS	MEANS OF VERIFICATION <sup>21</sup>	ASSUMPTIONS (external factors or risks) <sup>22</sup>	
Goal:				
Impact:				
Secondary Outcome <sup>23</sup> :				8
Outcome:				

#### Table 1: Project Design Logical Framework Matrix

ADDITIONAL ASPECTS TO CONSIDER: Limitations of the Project Log frame Approach<sup>24</sup>

- The preparation of the log frame should not be seen as a mere formality before project design submission. Its development should involve stakeholders and partners in the process to generate agreement on objectives, outcomes, outputs and activities, as well as other log frame elements.
- The analysis of risks and assumptions should include a proper assessment of the context and actors (contextual data), since this will also influence achievement of results (see below).
- The resulting log frame and its elements should not be used as a permanent map of interventions and results, but rather a flexible tool for adaptive management.

Table 2. Flograffi L	esign Logical Framewo		
PROGRAM	PROJECT A	PROJECT B	PROJECT C
Goal:			
Impact:			
Secondary	Goal of project	Goal of project	Goal of project
Outcome <sup>20</sup> :			
Projects	Sacandary outcome	Secondary Outcome or	Secondary outcome or
comprising the	or outcome		
Program:		Outcome	outcome
	Outputs/components	Outputs/components	Outputs/components
	Activities	Activities	Activities
	Activities	Activities	Acuvilles

 Table 2: Program Design Logical Framework Matrix<sup>25</sup>

Program Log frames:

- The Program has specific outcomes overall
- The Program consists of projects instead of Outputs/components
- The Program's outcome(s) is the Goal of each of its projects.

## Step 3. Ensure that project objective(s) are aligned with Adaptation Fund Strategic Outcome(s)

To ensure the integration of Adaptation Fund Strategic Outcomes in the project or programme level, M&E system and its contribution to RBM, project objective(s) should be aligned with Adaptation Fund Strategic framework.

<sup>&</sup>lt;sup>21</sup> Described in depth in Step 6 of this Chapter

<sup>&</sup>lt;sup>22</sup> Described in Step 6 of this Chapter

<sup>&</sup>lt;sup>23</sup> If needed

<sup>&</sup>lt;sup>24</sup> OECD 2001

<sup>&</sup>lt;sup>25</sup> Extracted from IADB

<sup>&</sup>lt;sup>26</sup> If needed

How to align project outcomes with AF Strategic Outcomes?

- Review the Adaptation Fund Strategic Framework (See Section 1, Chapter 1 of this guidance document).
- Start aligning outcomes. The main question guiding this step includes: Is there a project outcome that would support or contribute towards the achievement of any Adaptation Fund Strategic outcome(s)? Include all that apply.
- Assess how Adaptation Fund Strategic Outcome(s) align(s) with Project Outcome(s).

## EXAMPLE 2:

For Example 1 above, the alignment could result in the following chart (other visual aids could be used):

ADAPTATION FUND STRATEGIC OUTCOMES	PROJECT OUTCOMES	ALIGNMENT ASSESSMENT
Outcome 2: Strengthened institutional capacity to reduce risks associated with climate- induced socioeconomic and environmental losses	"Improved capacity of Health Care Clinics on response to extreme weather events."	Health care clinics are institutions for which capacity can be strengthened to reduce risks associated with climate change.
Outcome 4: Increased adaptive capacity within relevant development and natural resource sectors	"Improved capacity of Health Care Clinics on response to extreme weather events." And "quality of health services improved and sustained."	Health centres are part of relevant development sectors.

#### RECOMMENDATION

Through a similar exercise, align project outcomes with other national, regional and/or local strategic framework elements (for example, NAPAs) therefore connecting the project to other identified priorities. Example questions include: Is the project being designed in line with the national sectoral and development priorities and plans of the country or of participating countries in the case of multicountry projects/ programmes? Will planned project outcomes contribute to national development priorities and plans?

## Step 4. Include project indicators and select core Adaptation Fund indicators:

Next, indicators are developed for measuring implementation progress and achievement of results.

How to measure whether progress is being made towards implementing activities and achieving objectives?

The log frame supplies a structure around which the indicators are usually built. Indicators detail what to measure along a range or dimension (e.g., numbers of workshops held or publications produced, percent of producers adopting new technology, ratio of female to male students, etc.).

## Process of selecting indicators

When selecting/identifying indicators, remember the following steps:

 Follow a participatory approach: involve representatives from implementing agencies, government, beneficiaries, and other stakeholders (ensure the inclusion of stakeholders and direct actors that were identified during the stakeholder analysis). This participatory selection of indicators helps, not only by drawing on their experience and knowledge, but their participation can help obtain their consensus and ownership.

- 2. Brainstorm and develop a general list of possible indicators for each objective and result (activities, outputs, outcomes and so on). This initial list can be inclusive, taking into consideration all stakeholders perspectives, and not considering restrictions for achieving their measurement.
- 3. Assess each indicator on the general/initial list against a checklist of criteria for judging (see Table 2 below) its suitability and effectiveness.
- 4. Select the "best" indicators, forming an optimum group that will meet the need for management -- useful information at an affordable cost. The number of indicators selected to track achievement of each objective or result should be limited to just a few -- the minimum needed to characterize the most basic and important measures.

CRITERIA/ATTRIBUTES <sup>27</sup>	CONSIDER
Validity	Does the indicator measure the result (and not another factor that
	influences the indicator)?
Precise meaning	Do stakeholders agree on exactly what the indicator measures?
Practical, affordable, and	Is data actually available at reasonable cost and effort? Will it be
simple	easy to collect and analyze the information?
Reliability	Is it a consistent measure over time?
Sensitivity	When the result changes, will it be susceptible to those changes?
Clear direction	Are we sure whether an increase is good or bad?
Utility	Will the information be useful for decision-making, accountability, and
	learning?
Owned	Do stakeholders agree that this indicator makes sense to use?

## Table 2. Checklist for selecting proper indicators

## RECOMMENDATIONS

- There is probably no such thing as an ideal indicator, and no perfect technique for developing them.
- Trade-offs among indicator selection criteria exist and harmonizing pros and cons of any particular indicator should be made. For example, the optimal indicator may not be feasible to collect therefore a more realistic indicator should be accepted; being comprehensive in covering all relevant aspects or dimensions of a result may conflict with the need to limit the number of indicators.
- Both quantitative and qualitative indicators may be useful, and selecting one or the other should depend on the characteristic of the result.

## EXAMPLE 3.

For Example 1 above, one possible indicator at the output and outcome level respectively could include:

- Project output: "Staff from Health Care Clinics trained and certified on climate change impacts on health and adaptation responses to extreme weather events."

Output indicator: Number of staff trained and certified (by the X certification program) from each Clinic on climate change impacts on health and adaptation responses to extreme weather events for the population in an area of intervention.

This indicator is practical, affordable and simple as the roster of employees of Health Care Clinics is usually kept and is accessible to project staff (if certain formal procedures to collect the information are followed). The indicator is reliable if baseline and context information to track progress exist. The indicator can be expressed in percentages to understand trends. An

<sup>&</sup>lt;sup>27</sup> Adaptated from CIDA's checklist of good indicators.

increase is beneficial as it is assumed that the more staff trained on responses to extreme weather events, the higher the chances the body of personnel in Clinics to have knowledge of responses. Quality of training could also be included as an indicator in order to have a more complete view of training aspects; specifically to understand if trained staff is applying what was taught.

- Secondary or medium-term outcome: "Quality of health services for population improved and sustained."

Secondary outcome indicator: Percentage of population in the area of intervention that indicates a high degree of satisfaction with the health services provided after extreme weather events by the end of the project (and after an extreme weather event). A survey would be necessary to measure this indicator. The indicator is reliable if context and baseline information are present. Degree of satisfaction in a population could change also by other factors: how extreme the weather event is, economic crises in country/area of intervention, etc. Therefore, surveys would need to take context information in mind when collecting and analyzing data, as well as to understand estimated frequency of extreme weather events.

## Selecting indicators from the Adaptation Fund set of indicators

The Adaptation Fund Board developed a menu of standard indicators to use in measuring and reporting on Fund level outputs, outcomes and impacts.<sup>28</sup> The menu identifies standard performance indicators (mostly at the project output and outcome levels) that will enable comparable data to be aggregated across similar types of projects to the Fund-wide level.

Selecting indicators from the set:

- 1. Review the menu of core/standard indicators in Annex 1 of this guidance document. The list of indicators is not comprehensive to all outputs that may be used by projects.
- 2. From the menu, identify at least two of the output and outcome indicators that better adjust to the project's outcome and outputs. Choose only output and outcome indicators that are relevant to the project characteristics and what is set to be achieved.
- 3. In addition, project specific indicators would also be selected to reflect country specific objectives and reporting requirements. The Board would not aggregate these indicators, but rather track progress on achieving the project targets. Because each project operates in a specific context, there will be other elements of monitoring and evaluation that are important to the project, but that are not included in Fund's Performance and Reporting System. Therefore, each project will need to develop its own set of output and outcome indicators that link directly to the Fund level objectives.
- 4. Include selected indicators into the project logical framework (and monitoring plan)

## RECOMMENDATIONS

- Try not to choose too many indicators to avoid over -burdening monitoring systems.
- The project design (steps 1 and 2) should not be guided with the AF set of indicators in mind.
- Select these few standard indicators through a collaborative process similarly to selecting other project indicators.

## EXAMPLE 3.

For Example 1 and 2 above, the alignment would result in the following chart:

## ADAPTATION FUND STRATEGIC

**PROJECT INDICATORS** 

<sup>&</sup>lt;sup>28</sup> Similar as to those provided by the *World Bank's Performance Monitoring Indicators* (1996), DANIDA's *First Guidelines for an Output and Outcome Indicator System*, 1998.

INDICATORS	
2.1 No. of targeted institutions with increased	No. of Health Care Clinics with increased capacity to
capacity to minimize exposure to climate variability	minimize exposure in intervention area
risks	
2.1.1No. of staff trained to respond to and mitigate	No. of staff from Health Care Clinics trained
impacts of climate related events	
2.1.3. No. of people affected by climate variability	No. of people affected by climate variability in the
	area of intervention / or No. of death after extreme
	weather events.
4.1. Development sectors' services (health and	"Quality of health services for population improved
social services) responsive to evolving needs from	and sustained in the area of intervention."
changing and variable climate	

## Step 5. Set targets

Once indicators have been developed, actual baseline values and targets should<sup>29</sup> be collected for each indicator, ideally just before the project gets underway (see Section 2 on Baseline data to collect baseline values). This will be important for estimating whether progress is being made later.

Targets help clarify what needs to be achieved and by when. It is a commitment and can assist to

direct project staff and mangers to the impending tasks. Final targets are values or conditions to be achieved by the end of the project, while medium term or interim targets are anticipated values at various points-in-time over project implementation. Baseline values, which measure conditions at the beginning of a project, are needed to set realistic targets for accomplishment within the constraints of resources and time available.<sup>30</sup>

Targets may be useful in numerous respects:

- They help bring the objectives of a project into focus.
- They can help to validate a project by describing in concrete terms what the intervention will produce.
- Targets orient project managers and staff to the desired tasks.
- They may be the foundation that clarifies the results for which managers will be held responsible.
- They serve as guideposts for judging whether progress is being made on schedule and at the level originally envisioned. In other words, targets tell stakeholders how well a project is progressing.<sup>31</sup>

Remember to first understand baseline information before defining realistic targets.



BASELINE DATA TARGETS

*Target:* A variable that allows the verification of changes in the development intervention or shows results relative to what was planned. A target specifies a particular value for an indicator to be accomplished within a given time frame. (For example, producers rate of adaptation to new technologies increased to 60 percent by 2013).

<sup>&</sup>lt;sup>29</sup> Project level targets should also be included in the project log frame (AFB 2010)

<sup>&</sup>lt;sup>30</sup> OECD 2001

<sup>&</sup>lt;sup>31</sup> Margoluis R. and N. Salafsky 1998

Secondary Outcome:	Quality of service of Health Care Centres in area of intervention.	See below	Target (if baseline is known): At least 80% of the population in the area of intervention that indicates a high degree of satisfaction with the health services provided after extreme weather events by end of project (and after an extreme weather event). Target (if baseline is unknown): An increase by at least 50% from the baseline level of population in the area of intervention that indicates a high degree of satisfaction with the health services provided after extreme weather events by end of project (and after an extreme weather event).
Outputs:	Number of staff trained and certified (by the X certification program) from each Clinic addressed on climate change impacts on health and adaptation responses to extreme weather events for population in intervention area.	See below	Target: At least 40 staff trained and certified from each Clinic where project intervenes by end of project.

## ADDITIONAL ASPECTS TO CONSIDER

A common disincentive for fostering an evaluative culture<sup>32</sup> is the level at which targets are set. If targets are unrealistically high and therefore unachievable, integrity and confidence will suffer, and could generate perverse incentives to conceal or alter data. If targets are set low and easily achievable, confidence will also suffer as project managers and staff may ask themselves what they could have accomplished if they had set targets a little higher. Therefore, seek attainable targets that are just out of reach.

## Step 6. Monitor (collect) data.

Once indicators and targets are identified, actual data for each indicator is collected at regular periods (monitoring).

Project implementation monitoring requires constant documentation of data on project activities and operations - for example, tracking funds and other inputs, and processes. It includes keeping high-guality financial accounts and field records of interventions as well as recurrent checks to assess fulfilment of work plans and budgets. Results monitoring involves the periodic collection of data on the project's actual accomplishment of results (outputs, outcomes, and impacts). Results monitoring measures whether a project is completing its objectives and responds to the question: what results have been accomplished relative to what was planned (targeted)?

Data on project outputs are frequently generated by project staff and are central to reporting systems. Data on outcomes are typically compiled from inexpensive consultations with project beneficiaries, short surveys or rapid appraisal methods. Data on impacts involves performing expensive surveys or using existing data sources such as national surveys, censuses, etc.

## Data collection approaches and techniques<sup>33</sup>

<sup>&</sup>lt;sup>32</sup> http://ageconsearch.umn.edu/bitstream/52535/2/ILAC\_WorkingPaper\_No8\_EvaluativeCulture\_Mayne.pdf
<sup>33</sup> OECD 2001

Monitoring project performance at the different levels of the log frame hierarchy typically involves different data sources and methods, frequencies of collection, and assignment of responsibility. Good practices entail the development of *performance monitoring plans* at the beginning of the project that explain how, when, and who will collect data.

EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS	DATA SOURCES	COLLECTION METHODS	FREQUENCY	RESPONSIBILITY
Goal:							
Impact:							
Secondary Outcome:							
Outcome:							
Outputs:							
Activities:							

Table 3 presents a matrix framework tool to record summary information about monitoring plans.

The last four columns are the focus of this section, as the first columns were described above and/or further described in Section 2 of this document.

Activities Data: Used for analysis of performance issues such as economy and efficiency.

- Data Source: Typically comes from project financial accounts and management reports from field sites.
- Data Collection Methods: A good financial accounting system is needed to keep track of expenditures and provide cost data. The higher the level in the log frame hierarchy the more likely it is for data collection efforts to become more expensive and data sources more difficult to find.
- Frequency: Used primarily for day-to-day operations and short-term decisions
- Responsibility: Project staff with frequent inspection to assess fulfilment of work plans and budget. Place data collection responsibility closer to those using the data.

**Output Data:** Used for short-to-medium term management decisions designed to improve output quality, equitable distribution to beneficiaries, productivity, and efficiency, etc.

- Data Source: Tends to originate from project field reports maintained by project staff
- Data Collection Methods: Project management systems.
- Frequency: The data are combined and reported to higher project management levels at regular periods (for example, bi-annually or annually).
- Responsibility: Project field staff.

**Outcome Data:** Useful for medium-term management decisions aimed at improving beneficiary satisfaction or changes in behaviour and to evaluate effectiveness in achieving intermediate results.

- Data source: Follow-up surveys with project beneficiaries

- Data Collection Methods: These tend to be affordable surveys, which assemble information on beneficiaries' responses to, and satisfaction with, project outputs as well as changes in their knowledge<sup>34</sup> and behaviours. These methods include informal consultations or mini surveys, market research, rapid appraisal or participatory methods. Data should be divided by beneficiaries' socio-economic characteristics to assist later analysis of equitable distribution of benefits, etc. These methods do involve data collection and social science research skills or training beyond regular record keeping and thus should be planned and budgeted for in project desian.
- Frequency: Annually or when feedback is needed.
- Responsibility: Project staff

**Impact data:** Recording data (baseline and targets) up to the secondary outcome level, which falls within project mangers responsibility, should give solid insight on progress/linkages towards impacts, and the ability of measuring impact data later down the line - usually during final evaluation or an ex- post evaluation.

## Criteria for selecting data collection methods and sources

The choice of a data collection technique and source can be central for data's quality aspects – for example, how valid and reliable it is, but also on practicality or feasibility aspects when cost and time limitations exist. For example, if information is required on a producer's use of new technologies, this could come from extension agents' reports or from a production survey. Selecting the survey may result in greater statistical validity and reliability of data, however employing the extension agents' report may result in more practical and affordable data collection.

#### RECOMMENDATION

The selection process should balance the quality of the data (how reliable it is among users) and the cost and time to collect it or retrieve it.

<b>CRITERIA/ATTRIBUTES</b>	CONSIDER
Validity:	Does the data mean what we think they mean? Do the measurement
	techniques indeed measure what they declare to measure?
Reliability:	Is it a consistent measure over time? Does the measure, after applied
	repeatedly to a given situation, consistently yield the same results if the
	circumstances remained unchanged between applications?
Timeliness:	Can the data be collected routinely enough and is up-to-date to inform
	management's decision making processes? Some methods can be
	implemented more quickly and are therefore better when needed at
	recurrent intervals or immediately.
Costs:	Is there any budget constraint that would need to be considered before
	selecting methods? Some complex surveys are expensive.
Formal versus informal	Informal methods include casual conversations or unstructured site
methods:	visits, which tend to be inexpensive and quick to implement, but
	sometimes compromise credibility. Formal methods consist of
	censuses and sample surveys, which have high reliability and validity,
	but higher cost (including extensive technical skills) and are time
	consuming. In between the formal and informal methods one can find
	the rapid appraisal methods, which include focus groups, community

When selecting data collection methods review the following criteria.<sup>35</sup>

 <sup>&</sup>lt;sup>34</sup> See Section 3 of this guidance.
 <sup>35</sup> Extracted and Adapted from OECD 2001

interviews, key informant interviews, direct observation, etc.

*Quantitative versus Qualitative Methods of Collecting Data:* The utility of both types of information should be taken into account and it is necessary to balance both.

- Quantitative methods: Measures that involve continual, equal-interval scales with true zero points (such as GNP per capita, infant mortality rates, school enrolment rates, etc).
- Qualitative methods: Data that can be captured only by descriptive narrative.
- Combination: Data for which the frequency of various events can be counted and categorized, and perhaps even rank-ordered. For example, much of the performance data being collected on policy reform, institutional strengthening, and beneficiaries feedback are measured on some type of ranked (ordinal) scale. Such scales, when clearly operationalized, provide an example of how more subjective information can be usefully and effectively quantified.<sup>36</sup>

## Risks/Assumptions at different hierarchy levels -- implication for accountability and sustainability

The higher on the project log frame ladder, the more external influences and risks exist and there is less management control of such risks. Project/programme proponents should address the likelihood of sustainability of planned outcomes. Sustainability is understood as the likelihood of the achieved outcomes continuing after the funding from the Fund ends. The outcomes, according to the chain of results and logical framework of the project, will contribute to achieve the desire impacts.

Addressing the sustainability of outcomes includes reviewing at least four dimensions of risks and assumptions to sustainability and how these risks comprise linkages/progress from outcomes to impacts:

*Financial and economic risks and assumptions.* Are there any financial or economic risks that may jeopardize sustainability of planned project/programme outcomes? What is the likelihood of financial and economic resources being available once the AF grant ends?

*Socio-political risks and assumptions.* Are there any social or political risks that may jeopardize sustainability of planned project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that project/programme benefits continue to flow? Is there sufficient public/ stakeholder awareness in support of the project's long-term objectives?

*Institutional framework and governance risks and assumptions.* Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize sustainability of planned project benefits? Are requisite systems for accountability and transparency, and required technical know-how, being designed?

*Environmental risks and assumptions.* Are there any environmental risks that may jeopardize sustainability of project/programme outcomes?

Uncertainties on climate change Impacts - baselines (including reference and adaptation scenarios). (Discussed above).

<sup>&</sup>lt;sup>36</sup> OECD 2001

**Contextual Data:** As presented before, for analyzing performance, it is also important to collect data on the project's context, which will also give light to risks and assumptions at the different hierarchy levels and baseline information. Contextual data can be very useful for explaining project accomplishment or failure, and for attributing performance to various causes. Project proponents should compile contextual information.

## Step 7. Review and report data

Monitoring can track the progress toward a set of benchmarks, and measure it towards outcomes, while evaluation validates results and can make overall judgments about why and to what extent the intended and unintended results were achieved (e.g., increased resilience, decreased vulnerability, improved cost-effectiveness). Reporting captures progress and results, and is an important accountability tool.

The Adaptation Fund requires project proponents to conduct annual reviews assessing and reporting project<sup>37</sup> performance monitoring data.<sup>38</sup> In addition to the reporting through the performance template, project proponents responsibility includes the development of an M&E plan and reporting system at the project level. Review of project performance monitoring data most typically involves simple analysis comparing actual results achieved against planned results or targets (i.e., following information set on the monitoring plan matrix).

A means of capturing project level results is through an annual project performance report (PPR). Each project would submit a PPR on an annual basis, once the project is approved and the first funds are allocated to the project. The PPR would capture progress toward achieving objectives and implementation efficiency and effectiveness.

MIEs/NIEs are directly responsible for project/programme level monitoring, reporting and evaluation, even though Executing Entities may participate in monitoring and reporting under Implementing Entity's supervision. Monitoring will be carried out on an ongoing basis and results will be reported to the Board through the PPR on an annual basis. A final evaluation will be completed for all projects. In addition, the Board reserves the right to carry out independent and external reviews or evaluations of projects/programmes whenever it deems these necessary. The costs of these reviews will be covered by the Board itself.<sup>39</sup>

## SECTION 2. PROJECT LEVEL BASELINES INFORMATION: GUIDING PRINCIPLES

The establishment of baselines is a critical component of the RBM framework. Every project will prepare a baseline and submit it with the project document. Baselines will draw on the information and data captured from the vulnerability assessment and used to design the project. The baseline would be a streamlined document, incorporating information from vulnerability and needs assessments, and existing secondary sources. The information would be strictly aligned with each selected indicator that the project would be responsible for tracking. It is important that the baseline is completed by the start of the project in order to be able to accurately measure any change and the contribution to that change during the life of the project.<sup>40</sup>

Baseline data: Information describing the situation prior to a development intervention, against which progress can be assessed or comparisons made.<sup>41</sup> approved through Decision B.7/2 at the

 <sup>&</sup>lt;sup>37</sup> Annual project performance report (PPR).
 <sup>38</sup> See AFB/EFC.1/3/rev.1 June 16, 2010

<sup>&</sup>lt;sup>39</sup> Operational Guidelines and Policies of the Adaptation Fund Board,

<sup>7&</sup>lt;sup>th</sup> meeting of the Adaptation Fund Board. September 2009. <sup>40</sup> AFB 2010

Why is baseline data and information necessary?

Baseline information is important for<sup>42</sup>:

- Characterizing the prevailing conditions under which an intervention functions;
- Describing average conditions, spatial and temporal variability and anomalous events, some of which can cause significant impacts to the intervention;
- Identifying possible ongoing trends or cycles.
- Specifying the reference situation with which to compare future changes.

## Chapter 1: An introduction to Climate Change Adaptation and Vulnerability Baseline information

Every adaptation project or programme should include a presentation of baselines, in terms of climate, development, vulnerability and adaptive capacity. Projects should explicitly lay out the climate change scenarios they are employing and adaptation targets they are pursuing as well as the linkages between the two. Climate variability should be monitored during the project and adaptation measures tested if scenario–like conditions occur during project implementation.<sup>43</sup>

In adaptation projects, baselines could take two primary forms:

First, there is the *project baseline*. Project baselines are generally focused on the priority system, and are therefore site specific and limited to the duration of the project. Depending on the approach used in an adaptation project, a project baseline could be described by a set of quantitative or qualitative indicators (see above), and may take the form of, for example, a vulnerability baseline<sup>44</sup>, a climate risk baseline, an adaptive capacity baseline, or an adaptation baseline. The project baseline answers the questions: where is the project starting from? Who is vulnerable? What is vulnerable? And what is currently being done to reduce that vulnerability in the absence of the project?

Since reducing vulnerability is the foundation of adaptation, it calls for a detailed understanding of who is vulnerable and why. This involves both analysis of current exposure to climate shocks and stresses, and model-based analysis of future climate impacts. With this information, appropriate adaptation strategies can be designed and implemented. Monitoring and evaluating the effectiveness of activities and outputs, as well as sharing knowledge<sup>45</sup> and lessons learnt, are also critical components of the adaptation process.<sup>46</sup>

Project baselines can later be used in the monitoring and evaluation process to measure change (in, for example, vulnerability, adaptive capacity, climate risk) in the priority system, and the effectiveness of adaptation strategies, policies and measures.<sup>47</sup>

Second, depending on project needs and design, project proponents may choose to develop *reference scenarios* that represent future conditions in the priority system in the absence of climate adaptation. Scenarios may also be developed in which various adaptation measures are applied.

<sup>&</sup>lt;sup>41</sup> OECD 2001

<sup>&</sup>lt;sup>42</sup> Extracted and adapted from Ebi et al. 2005

<sup>&</sup>lt;sup>43</sup> Valencia 2009

<sup>&</sup>lt;sup>44</sup> For example, vulnerability baseline describes information on vulnerability aspects in the area of intervention.

<sup>&</sup>lt;sup>45</sup> See Section 3 of this guidance.

<sup>&</sup>lt;sup>46</sup> CARE 2010

<sup>&</sup>lt;sup>47</sup> Ebi, K.L., B. Lim, and Y. Aguilar

Both reference scenarios and adaptation scenarios may be compared with baselines to evaluate the implications of various adaptation strategies, policies and measures. Scenarios differ from project baselines in that they deal with the longer term and are used for informing policy decisions concerned with various development pathways at the strategic planning level.<sup>48</sup>

## Chapter 2: Assessment tools to establish baseline information<sup>49</sup>

How to start collecting baseline data?

- 1. Review and synthesize existing information on current vulnerability, exposure, climate risk, and current adaptation measurements based on previous studies, expert opinion, and policy context.
- 2. Describe adaptation policies and measures in place that influence the ability to successfully cope with climate variability.
- 3. Develop baseline indicators of vulnerability and adaptive capacity. As important as establishing a single baseline value is, understanding the underlying historical trend in the indicator value over time is critical. Is there a pattern of change -- a trend upward or downward -- over the last five or ten years that can be drawn from existing records or statistics?

## Data sources

- Baselines may be established using existing secondary data sources or may require a primary data collection effort.
  - Government statistics;
  - Context section of current sectoral, regional, and/or national plans and strategies;
  - Specialized journals;
  - Monitoring programmes, GIS data, aerial photos;
  - Current and historical maps;
  - Context and results of other projects;
  - Interviews with relevant officials; and
  - Information from experts and/or the public; etc.
- Baseline data currently available on the Intergovernmental Panel on Climate Change Data Distribution Centre (IPCC-DDC) website, as well as other sources.
- Historic / baseline data: current vulnerabilities (trend analysis, vulnerability mapping) current adaptation measures (consultations, field interviews, literature review).
- Scenarios: future impacts and vulnerabilities (impact assessment, vulnerability mapping), adaptation to future impacts (multicriteria analysis, cost –benefit analysis, consultations, etc.).

## Some data collection methods:

- Trend analysis, vulnerability mapping (food insecurity, poverty mapping, natural disaster losses), multicriteria analysis.
- Cost benefit analysis, vulnerability reduction assessment.

## Frequency and Responsibility:

As discussed in the previous section, baseline data needs to be compiled before project or programme start. If however, major baseline data are not identified, the project or programme proposal should include a component for determining how that will be addressed within one year of implementation. Collection and maintenance of project baseline data is the responsibility of project proponents.

## EXAMPLE 5.

<sup>&</sup>lt;sup>48</sup> Ebi, K.L., B. Lim, and Y. Aguilar

<sup>&</sup>lt;sup>49</sup> Based on Ebi, K.L., B. Lim, and Y. Aguilar, Ivan Dario, presentation Jose A. Marengo CCST/INPE, Sao Paulo Brazil

#### For previous examples:

EXPECTED RESULTS	INDICATORS	BASELINE DATA	TARGETS
Secondary Outcome:	Quality of service of Health Care Centres in area of intervention.	<ul> <li>10% of the population in the area of intervention that indicates a high degree of satisfaction with the health services provided after last extreme weather event (hurricane X).</li> <li>(Secondary data: Survey applied by Project Team or Institution in 2009 after extreme weather event).</li> </ul>	Target (if baseline is known): At least 80% of the population in the area of intervention that indicates a high degree of satisfaction with the health services provided after extreme weather events by end of project (and after an extreme weather event). Target (if baseline is unknown): An increase by at least 50% from the baseline level of population in the area of intervention that indicates a high degree of satisfaction with the health services provided after extreme weather events by end of project (and after an extreme weather event).
Outputs:	Number of staff trained and certified.	Baseline information: 0 staff trained and certified in all Health Centres addressed by project.	Target: At least 40 staff trained and certified from each Clinic (5) where project intervenes by end of project.

**RECOMMENDATIONS** when baseline is unidentified<sup>50</sup> at project inception:

- Baseline must be collected immediately once the project starts. -
- Baseline should be completed before any results for project/programme activity(ies) are obtained in order to be able to accurately measure any change and the contribution to that change during the life of the project.<sup>51</sup>

## **SECTION 3: KNOWLEDGE MANAGEMENT**

 $<sup>^{\</sup>rm 50}$  Because of cost to obtain baseline data, lack of secondary sources or specific information, etc.  $^{\rm 51}$  AFB 2010

Provides basic concepts on what knowledge management is and how it is integrated in the Adaptation Fund's RBM framework; it also includes a short overview on how to develop a KM strategy at the project or program level and describe standard indicators broadly used to measure the impact of KM activities and processes.

## Knowledge Management in the Adaptation Fund

The Adaptation Fund has included knowledge management as part of its Results Based Management Framework at the fund level. While Knowledge Management is critical for any organization, it is even more so for the Adaptation Fund, not only because Adaptation projects and programs are still relatively new but also because the Fund is piloting direct access to countries. The experiences gained from the Fund must therefore be kept track of in a systematic way and

analyzed on a periodic basis in order to enrich the global knowledge on climate change adaptation and to accelerate the process of understanding what works in terms of adaptation interventions.

## **BASIC CONCEPTS**

Knowledge is the understanding of the reality based on people's experience, analysis and exchange. In order to be transmitted knowledge needs to be captured and systematized. For this reason, Knowledge Management (KM) can be defined as the set of actions developed (gathering data, analyzing processes, results and personal experiences, creating lessons learned, disseminating them, etc.) so that the knowledge of an individual or an institution reaches, in a timely manner, the largest number of people able to benefit from it. **EXAMPLE:** Communication campaigns backed-up by effective knowledge management efforts have been critical to develop and improve pandemic preparedness plans worldwide. The increasing number of national response strategies that include KM and communications as a core element evidences the important role played by these two elements

KM activities can be carried out in a variety of ways that can differ based on the environment and the resources

available. However there are two key concepts that should be considered no matter which KM path is followed.

- Strategy: A KM component of projects is effective if it follows a strategy. A KM strategy sets the long-term direction, the scope and the objectives (short and long-term) which are knowingly and systematically pursued and eventually achieved through proper planning of resources. It also includes a plan of actions to achieve the goal of learning from their own experience and share that knowledge with all stakeholders and with the global community as reference for future projects.
- 2. **Change Management:** To be effective KM activities need the support of the project management and to be carried out with "willing" actors. If the working environment is unprepared to implement KM activities, a change in the "culture", the work mentality of the project team members and key stakeholders, is desirable before starting the design of the strategy. It is essential to build consensus among project team members and key stakeholders on why and how KM can improve the project itself, and raise awareness on the importance of capturing lessons learned to be shared at a local, regional and global level.

## KM STRATEGY EXPECTED BENEFITS

- 1. Project impact increased through learning and access to information.
- 2. Synergy\_between local and global knowledge on the subject and the region where the project takes place.
- 3. Knowledge generated from the project is effectively captured to facilitate its dissemination at a local, regional and global level.
- 4. The project and its achievements are well positioned among development interventions at a regional, local and country level and towards the AF.
- 5. Policies and agendas of local, regional, and international institutions are modified to include the project lessons learned based on inputs and evidence from the experience.
- 6. Stakeholders and users networks are strengthened and/or created so that further generation and dissemination of knowledge can be guaranteed after the completion of the project.
- 7. The use of resources devoted to knowledge management (and communication) in the project is coordinated to maximize efficiency and effectiveness.

## HOW TO DEVELOP A KM STRATEGY FOR AN ADAPTATION PROJECT?

There are a few principals that should be taken into account when developing a KM strategy.

- **Synergy:** The actions taken together by different stakeholders can lead to a multiplication of the expected results and impact;
- **Transparency:** KM contributes to make the management of the project and its evaluation more transparent by facilitating access to data and information on the processes and results obtained;
- **Participation and Inclusion:** Inputs from all stakeholders will help the overall success of the project and contribute to enrich local and global knowledge;
- **Flexibility:** The KM strategy, as any strategy, is a live document that should adapt to the changes and unforeseen events that may occur during the implementation of the project.

Keep in mind that KM and communication are complementary activities; they often use similar instruments an processes and involve the same actors. Both contribute synergistically to increase the effectiveness and impact of projects. The integration of the knowledge management with communication allows a substantial reduction in costs an generates more consistent products, avoiding duplication of efforts and enhancing the effectiveness of both.

- Relevance: The KM strategy has to take into account what type of knowledge is relevant and useful for the different stakeholders. The focus should be on capturing and systematizing that experiences and knowledge that can improve the project itself as well as future interventions, processes, projects and policies;
- **Cost-effectiveness:** While creating the action plan, the cost-benefit of each KM activity and product should be evaluated in order to identify a realistic plan of action, prioritizing the activities that could generate the greatest impact for each dollar invested.

To develop a KM Strategy the following step should be followed<sup>52</sup>:

Step 1. Analyze existing knowledge, data and communication products and media

<sup>2</sup> For their similarities, some of the KM steps can be undertaken while developing the RBM framework.

Each country has a unique situation when it comes to creating a capacity and knowledge baseline and for this reason most projects will include preparation work aimed at improving knowledge management, collect and processing missing data, and assessing communication needs and tools.

This stage is crucial for the success of the project and the quality of the assessment has a direct impact on results.

## Actions identified for completing Step 1

- Human Resources Assessment
- Financial and Infrastructure Resources Assessment
- Stakeholders Analysis
- Overall Context Assessment
- Knowledge Map

#### Step 2. Design the KM strategy

The strategy is the framework that regulates the production, management, discussion, dissemination of knowledge and information and its design should involve the entire project team and key stakeholders.

Developing a strategy entails adopting a long-term vision, setting KM goals to be achieved by the end of the project, and identifying annual work plans to operationalize the strategy and help monitor its implementation.

A KM strategy should answer the following questions:

- Who to share knowledge with?
- What type of knowledge to share?
- How to share knowledge (means and actions)?
- What are the expected results?

Trying to answer these questions can help the project team determine what actions are the most effective and what KM results are consistent with the overall objective of the project itself. A KM strategy should be tailored to the project, considering the size, requirements and the overall objectives, while also recognizing its beneficiaries, the government, the Adaptation Fund and other institutions related to the project, as well as the profile of the implementing team, the context, and the resources available.

## Actions identified for completing Step 2

- 1. Define KM and create a consensus about its use in the project
- 2. Set implementation goals and the scope of the KM strategy
- 3. Identify and profile target audience
- 4. Establish strategic alliances
- 5. Define monitor and evaluation indicators (also see page 7 on this issue)
- 6. Establish the budget and identify source of financing
- 7. Identify human resources required and assign responsibilities
- 8. Develop an action plan
- 9. Develop a timeline for activities and products

## Step 3. KM Strategy Implementation and Monitoring

The implementation and monitoring of the KM strategy should begin in conjunction with the start of project implementation. The task of designing the strategy is complex but its implementation represents even greater challenges, since many obstacles that could not be expected require quick adjustments and alternative solutions. For this reason it is important that the implementation is periodically monitored and evaluated.

## Results to be expected during the implementation of the KM strategy

- Knowledge demands are met in a timely and effective manner
- Local knowledge is enhanced and steps to ensure sustainability are taken
- Knowledge generated by the project activities collected and codified
- Project management receives useful information that helps the monitoring of the project progress

#### Actions identified for completing Step 3

- 1. Develop Internal KM activities focused on internal capacity building and change management
- 2. Undertake External KM activities aimed at facilitating access to information and dialogue between stakeholders.

#### Step 4. Evaluate, generate lessons learned and disseminate

At project completion, the KM strategy and activities are evaluated along with the rest of the project. During this period the generation of lessons learned and their dissemination should take place.

The process of generating lessons learned should begin with the selection of local development experiences that have been most important and represent valuable lessons for other projects.

The legacy of the KM in a project should include the creation of knowledge products (lessons learned, data and information on the processes) that are publicly accessible and widely disseminated, as well as an increased capacity/knowledge among all stakeholders.

#### Actions identified for completing Step 4

- 1. KM Evaluation
- 2. Systematization and dissemination of lessons learned

## Core KM indicator for the Adaptation Fund

<b>Outcome 3:</b> Strengthened awareness and	<b>Output 3:</b> targeted population groups
ownership of adaptation and climate risk reduction	participating in adaptation risk reduction
processes at local level	awareness activities
Indicator 3.1: Percentage of targeted population aware of predicted adverse impacts of climate	Indicator 3.1: No. and type of risk reduction actions or strategies introduced at local level

change, and of appropriate responses	
<b>Indicator 3.2:</b> Modification in targeted population behaviour (survey)	<b>Indicator 3.2:</b> No. of news outlets in the local press and media that have covered the topic

#### REFERENCES

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## **ANNEX A: Introduction of Impact Indicators**

# Comments on the guidance document on project level results frameworks and baselines (AFB/EFC.3/3)

#### Introduction of impact indicators and ideas for their further utilization

February 14, 2011, Anton Hilber, Alternate Member, WEOG

To enable the AF Board to translate its mandate into tangible results and to address its core objective (to reduce vulnerability and increase adaptive capacity to respond to the impacts of climate change, including variability at local and national levels) this document includes suggestions on the chapter *Adaptation Fund and Results Based Management* <sup>53</sup> referring to development of indicators for measuring implementation progress and achievement of results.

Taking into consideration all stakeholders perspectives and in order to ensure access to the fund in a balanced and equitable manner<sup>54</sup> (by improving learning and accountability) this is to propose an approach for pre-estimating and monitoring *three impact indicators* for assessment of impacts of the AF projects and programmes.

#### Introducing a set of impact indicators

A set of indicators (a proposal for a set of indicators is elaborated in more details below) will both help to pre-estimating and monitoring progress towards implementing activities and achieving objectives of the AF. The purposes of developing and implementing the suggested approach are to provide an objective method of determining impact effectiveness of adaptation actions proposed by implementing entities. The means by which this might be achieved is by operationalizing a set of objective indicators to assess effectiveness in addressing the critical objectives of the AF in the proposed adaptation actions. The optimum group of indicators selected to track achievement of each objective results should be limited to just a few to characterise and allow address the most important measures. The proposed indicators should also help identify potential weaknesses of proposals and help the Secretariat and the Accreditation Panel define recommendations for improvements in the project proposal cycle.

The following *three impact indicators* are proposed to be used as a set to assess the impacts of adaptation projects:

Saved Wealth (SW)
 Saved Health (SH)
 Environmental Benefits (EB)

<sup>53</sup> Document AFB/EFC.3/3

<sup>54</sup> The criterion c) Ensuring access to the fund in a balanced and equitable manner' forms an integrated part of set of seven AF allocation criteria under paragraph 16 Operational Policies and Guidelines for Parties to Access Resources from the Adaptation Fund

The first indicator, *Saved Wealth* (SW) is measured by a mixed index of absolute and relative wealth savings due to the prevention or reduction of climate change impacts during the lifetime of the adaptation project. The index approach is chosen in order to both include economic value and vulnerability.

The second indicator, *Saved Health* (SH) applies to reduction of direct climate change impacts on people's health by the adaptation project and is estimated using an established method from the health sector, the Disability Adjusted Life Years saved (DALYs). The Saved Health indicator uses a non-monetary parameter to achieve an equitable assessment of adaptation benefits to human health regardless of the wealth status.

The third indicator, *Environmental Benefits* (EB) addresses those environmental benefits and services generated by the adaptation project that are not economically quantified in the SW indicator. Its purpose is to prevent environmental degradation due to adaptation projects. For the calculation and a more detailed description of the indicators, see Annex I.

In the project proposals to the AF, the standard project outcome indicators proposed in Annex I of document AFB/EFC.3/3 (p:30) and selected according to the participatory approach described in step 4 of the document AFB/EFC.3/3 should be *complemented by estimates of the three global impact indicators* outlined in the earlier part of this document. The estimates, (which should cover the entire duration of the project), should be done on a quantitative basis and on the basis of project type-specific baseline methodologies that lead to consistent reporting across proposals. The methodologies should also include links between project-specific outcome indicators as well as global impact indicators. Such baseline methodologies could be developed by the AFB Secretariat, Implementing Agencies or project developers. The methodologies, once developed, would require an approval of the AFB. The impact indicators and their links to project outcomes should be monitored at specific times during their project duration, e.g. every two or three years.

## Further utilisation of indicators, e.g. for project selection procedures and payments

The following ideas are not a comment on the "guidance document on project level results frameworks and baselines" but rather an illustration of how impact indicators may be used in the future.

In the face of funding deficiencies, the use of impact efficiency as a criterion for the selection of Adaptation Fund project proposals is warranted. A first come – first serve approach is neither in line with the set of criteria provided in the Operational Policies and Guidelines for Parties to Access Resources from the Adaptation Fund<sup>55</sup> nor with the Strategic Priorities set by the CMP<sup>56</sup>.

After impact indicators have been established, and enough evidence for reasonable pre-estimation of project impacts is given, the Adaptation Fund Board may use the pre-estimation of impacts (according to the indicators) as a criterion for selecting project proposals for funding. The

<sup>&</sup>lt;sup>55</sup> Decision B.7/2

<sup>&</sup>lt;sup>56</sup> Operational Policies and Guidelines for Parties to Access Resources from the Adaptation Fund: Paragraph 16 clearly refers to decisions on the allocation of resources of the Fund by saying that 'the AF shall take into account the criteria outlined in the Strategic Priorities adopted by the CMP'

illustrative example of the approach to project selection is introduced in the Annex II of this document. The selection procedure could be as following:

- 1. **AF Budget:** In regular intervals (6 or 12 months), the AFB specifies a budget tranche available for disbursement.
- 2. **Call for Proposals:** The AF issues a call for projects with a deadline, notifying the available budget.
- 3. **Project Proposals Ranking**: The project proposals received are ranked as per their contribution to the impact indicators per \$ of funding requested, with the indicators Saved Wealth and Saved Health weighted 50% each on the basis of the averages achieved for the entire project sample. Projects that have negative environmental benefits would have to provide compensation.
- 4. **Short-listing Project Proposals:** are selected for funding starting from the most highly ranked, until sufficient projects have been selected to disburse the available budget tranche.
- 5. In case a country cap for budget allocation<sup>57</sup> is reached during the ranking process, the projects that would lead to an exceedance of the budget will be declared ineligible for funding and the next highest ranked projects below the disbursement threshold be substituted for the ineligible ones, until sufficient projects have been selected to disburse the available budget. The ineligible projects should be forwarded to other funders.

Apart from being a criterion for project selection, impact indicators may also be used to disburse part of the funding only after successful monitoring.

<sup>&</sup>lt;sup>57</sup> As required per Article 25 of the Operational Policies and Guidelines and reiterated in Paragraph 6 of AFB/B.12/5.

## Annex I: Explanation of the indicators with illustrative examples

## Saved Wealth

Wealth can measured in economic assets, made comparable in Purchasing Power Parity terms. To take into account vulnerability, a Mixed Index for Saved Wealth is proposed that takes into account both the absolute level of wealth saved and the percentage of wealth saved.

## Example of Mixed Index of Saved Wealth calculation

Consider two low-lying cities with 1 million inhabitants each. City One, which has a moderate level of wealth (10 billion \$), is able to save 2 billion \$ through a sea wall, whereas City Two is only able to save 1 billion \$ with the same kind of sea wall due to very low overall wealth (2 billion \$). The relative wealth saved would be 20% for City One, but 50% for City Two. The Mixed Index would thus be 0.4 billion \$ for City One, but 0.5 billion \$ for City Two.

A key parameter for calculation of Saved Wealth is the projection of the autonomous development of the wealth of the relevant region during the duration of the adaptation project. On its basis, and on the basis of a frequency distribution of climate-change induced events the wealth that would be lost due to climate change in the absence of the adaptation project can be calculated. Finally, regional discount rates should be used to calculate the net present value of Saved Wealth.

## Example of Saved Wealth calculation for a river embankment

A region in a river basin, populated by 0.5 million people, historically has not been touched by floods. Recently, rainfall patterns in the country have changed and much more heavy rainfall is observed in spring and fall whose runoff exceeds the capacities of the river bed, but so far no embankments have been established to protect human life and wealth. Climate change is expected to significantly worsen the situation and independent studies project a strong increase in frequency and power of flood events. The expected damage-frequency function is summarized below.

Type of wealth	Loss	from	Loss	from	Loss	from	Total	wealth	in
	floods	<2%	floods	2-5%	floods	5-15%	region	(\$)	
	probability		probability	/	probabil	ity	-		
Infrastructure	20%		5%		19	%	0.5	billion	
Private property	30%		10%		2%		2.5	billion	
Total	28.3%	)	9.2%	/ 0	1.8	3%	3	billion	

From the damage function, the average annual damage can be calculated

Type of wealth	Loss	from	Loss	from	Loss	from	Total annual loss
	floods	<2%	floods	2-5%	floods	5-15%	(% and million \$)
	probability		probability	у	probabil	ity	
Infrastructure	0.2%		0.18%		0.1	%	0.48% = 2.4
Private property	0.3%		0.35%		0.2%		0.86% = 21.4
Total	0.28%	, D	0.329	%	0.1	8%	0.78% = 23.8

Assuming a project lifetime of 50 years for an embankment, Saved Wealth is calculated as follows:

Absolute Saved Wealth: 23.8 million \$ \*50 years = 1019 million \$ Relative Saved Wealth: 23.8 million \$ / 3 billion \$\*0.5 million\*50 years = 19.8%

Mixed Index of Saved Wealth: 201.8 million

## Saved Health

Valuation of human life is fraught with ethical challenges and thus should be avoided. Therefore, the concept of Disability Adjusted Life Years Saved (DALYs) provides an indicator to compare health benefits. It consists of the number of years of life lost due to premature mortality and the number of years lived with disability. The basis for comparison is standard life expectancy, and different types of disability / illness get different weights. Calculation of Saved Health requires an estimate of the population in the project area throughout the project duration and of the health impacts of climatic-change induced events.

## Example of Saved Health calculation for a river embankment

Using the same example again, we estimate health loss from flooding.

Type of health	Loss from floods	Loss from floods 2-5%	Loss from floods 5-15%	
loss	<2% probability	probability	probability	
Deaths	0.1%	0.05%	0.01%	
Fractures	2%	1%	0.1%	
Diarrhoea	20%	5%	1%	

The numbers of cases accruing over 50 years are:

Type of health	Loss from floods	Loss from floods 2-5%	Loss from floods 5-15%
loss	<2% probability	probability	probability
Deaths	250	438	250
Fractures	5000	8750	2500
Diarrhoea	50,000	43,752	25,000

We use the following disability weights DW for the health loss categories: death = 1, fractures = 0.27, diarrhoea = 0.11. Besides this, we assume that the average duration of fractures is two months, and the one of diarrhoea is 1 month. The average life expectancy is 70 years, the average age of people is 40 years. Total DALYs achieved by the embankment thus reach the following value

DALY = YLL + YLD where:

YLL (years of life lost due to premature mortality) = N (number of deaths) \* L (standard life expectancy at age of death (in years)).

YLL = 938 \* (70-40) = 28,140 DALYs

YLD (Years lived with disability) = I (number of incident cases) \* DW (disability weight) \* L (average duration of disability (years)).

YLD Fractures = 16,250 \* 0.27 \* 0.167 = 733 YLD Diarrhoea = 118,752 \* 0.11 \* 0.083 = 1084

Total DALYs of the project amount to 29,957.

## **Environmental benefit**

Ecosystem benefits of adaptation cannot be monetized in a generally accepted way. A possible indicator for such environmental benefits is the protection of natural habitat of endangered species, expressed in qualitative terms.

## Annex II: Project selection process –illustrative example

The AFB announces a selection round for a budget of 40 million \$. Before the deadline, 10 project proposals are submitted with the following characteristics:

Project	Country	Funding requested	Saved Wealth	Saved	Environmental
no.		(million \$)	(million \$)	Health	Benefit
				(DALYs)	
1	Guatemala	5	10	500	Positive
2	Comoros	8	4	200	Neutral
3	Kiribati	3	6	100	Positive
4	Jamaica	9	12	500	Positive
5	Egypt	14	20	300	Negative
6	China	20	35	1000	Positive
7	Fiji	1	0.5	200	Positive
8	Bolivia	4	5	300	Positive
9	Chad	4	6	100	Positive
10	China	10	15	400	Neutral
Ø	NA	7.8	11.3	360	

Table AII-1: Project pipeline

The ranking of projects gives the following sequence, due to the calculation of the combined impact indicator which is weighted according to the average performance of the projects taken from the last line in:

Table AII-2: Ranking of project pipeline

Project	Country	Saved	Saved Health/funding	Combined impact
no.		wealth/funding	(DALYs/million \$)	indicator
7	Fiji	0.50	200	0.17 + 2.16 = 2.33
1	Guatemala	2.00	100	0.69 + 1.08 = 1.77
8	Bolivia	1.25	75	0.43 + 0.81 = 1.24
6	China	1.75	50	0.61 + 0.54 = 1.15
4	Jamaica	1.33	56	0.46 + 0.61 = 1.07
3	Kiribati	2.00	33	0.69 + 0.36 = 1.05
10	China	1.50	40	0.52 + 0.43 = 0.93
9	Chad	1.50	25	0.52 + 0.27 = 0.79
5	Egypt	1.43	21	0.50 + 0.23 = 0.73
2	Comoros	0.50	25	0.17 + 0.27 = 0.44
Ø	NA	1.44	46.2	1

Now the allocation of the budget to the projects is done.

Project no.	Country	Funding requested	Cumulative budget
		(million \$)	spent
7	Fiji	1	1
1	Guatemala	5	6
8	Bolivia	4	10
6	China	20	30
4	Jamaica	9	39
3	Kiribati	3	42
10	China	10	52
9	Chad	4	56
5	Egypt	14	68
2	Comoros	8	76
Ø	NA	7.8	7.8

Table A II-3: Budget allocation

Given the availability of 40 million \$, 6 projects including #4 from Jamaica are selected. The check of the country-specific AFB budget cap shows that China has already exhausted its quota. Thus, the Chinese project #6 will be excluded and all projects down to #9 from Chad will receive funding.