AFB/EFC.2/3
August 31, 2010

Adaptation Fund Board
Ethics and Finance Committee
Second Meeting
Bonn, September 15, 2010

Agenda item 3

PROJECT LEVEL RESULT FRAMEWORKS AND BASELINE GUIDANCE DOCUMENT

NOTE BY THE SECRETARIAT

1. At its tenth meeting, the Adaptation Fund Board adopted the approach to implementing results based management (RBM), outlined in the document AFB/EFC.1/3/Rev.2. 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.

2. 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 targeted to project proponents at the country level.

3. The document presented here is the first draft of a practical guide for the Board to review and provide feedback on. Feedback from the Board will be used to develop the final version of the document to be presented at the twelfth AFB meeting in December 2010.

4. The Board may wish to approve the direction of the draft practical guide and to request the secretariat to move forward to finalize the document. The Board may also recommend that the final draft document be piloted by select project proponents for comments to ensure the guide provides relevant and useful information to the target audience.

GUIDANCE DOCUMENT[1]

INTRODUCTION

Adaptation Fund:

1. The Adaptation Fund, established by the Parties to the UN Framework Convention on Climate Change (UNFCCC), is mandated to finance concrete adaptation projects and programmes in developing countries that are Parties to the Kyoto Protocol and to allow direct access to the Fund by those Parties. The total amount of funds to be made available for eligible developing country Parties will depend on the market-based monetization of Certified Emission Reductions (CERs) which are the AF's main source of revenue.

2. As outlined in Adaptation Fund's Operational Policies and Guidelines (link), eligible developing country Parties seeking financial resources from the Adaptation Fund, must submit proposals either directly through their accredited National Implementing Entity (NIE) or using the services of Multilateral Implementing Entities (MIEs). All project proposals require the endorsement of the authority which has been designated by the relevant Government to make such endorsements.

3. 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 (link).

What this document is
- A guidance document that briefly explains the Adaptation Fund's RBM framework, its development and analysis for AF projects and programs - Clarifies the definitions of AF core indicators, and suggests approaches for their measurement. - Provides methodological and operational suggestions on how to report outputs and outcomes.
What the document is not
- It does not aim at being a prescriptive guidebook of every step on the development and analysis of RBM frameworks. - It does not aim at selecting project specific indicators and how to measure them. - It does not aim to guide the setting up or management of project monitoring and evaluation (M&E) activities.

Purpose of document*:*

4. The purpose of this manual is to guide Adaptation Fund (AF) project proponents on how to develop 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.

How to use this guidance document?

5. This document is structured in three sections. 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

[1] 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).

baseline data. Section 3 presents and describes the standard Adaptation Fund indicators that would be measured and provides guidance as to how to define, measure, and collect data.

SECTION 1. THE ADAPTATION FUND and RESULT BASE MANAGEMENT

Chapter 1: Guiding Principles

6. Results based management provides a sound framework for strategic planning and management by improving learning and accountability.[2]

7. RBM is based on the idea that a commitment to accomplish planned results should direct management's strategy and the implementation of activities.[3]

8. 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 among activities, outputs, outcomes and impact over time.

9. The central questions for the RBM framework include: Why and what projects interventions and other activities contribute to the outcomes sought? Why should meaningful performance expectations be set? How should results be measured and analyzed? How can learning from evidence help adjust delivery and modify or confirm project and program design? How should performance achieved against expectations be reported?

1. **Key RBM Terms**

The RBM terms used in this section are the harmonized terms of the UNDG, and are in line with the Organization for Economic Co-operation 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 medium-term 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.

10. 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.[4]

Adaptation Fund Strategic Results Framework

11. 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 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:[5]

[2] OECD 2001
[3] IFAD 2007
[4] IFAD 2007
[5] AFB/EFC.1/3/rev.1 June 16, 2010

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 climate related hazards and threats	1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis
Output 1: Risk and vulnerability assessments conducted and updated at a national level	1.1. No. and type of projects that conduct and update risk and vulnerability assessments
	1.2 Early warning systems developed
Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced economic losses	2.1 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks
	2.2Reduced number of people suffering losses from extreme weather events
Output 2.1: Strengthened capacity of national and regional centers and networks to rapidly respond to extreme weather events	2.1.1No. of staff trained to respond to and mitigate impacts of climate related events
Output 2.2: Targeted population groups covered by adequate risk reduction systems	2.1.2. Percentage of population covered by adequate risk reduction systems
	2.1.3. No. of people affected by climate variability
Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses
Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities	3.1 No. and type of risk reduction actions or strategies introduced at local level
Outcome 4: Increased adaptive capacity within relevant development and natural resource sectors	4.1. Development sectors' services (health and social services) responsive to evolving needs from changing and variable climate
	4.2. Physical infrastructure improved under climate change and variability-induced stress
Output 4: Vulnerable physical, natural and social assets strengthened in response to climate change impacts, including variability	4.1.1. No. and type of health or social infrastructure developed or modified to respond to new conditions resulting from climate variability and change (by type)
	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	5. Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress
Output 5: 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)
Outcome 6: 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
Output 6: 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. No. of households with more secure access to livelihood assets
Outcome 7: Improved policies and regulations that promote and enforce resilience measures	7. Climate change priorities are integrated into national development strategy
Output 7: Improved integration of climate resilience strategies into country development plans	7.1. Number of policies introduced to address climate change risks or adjusted to incorporate climate change risks

A Word of Caution

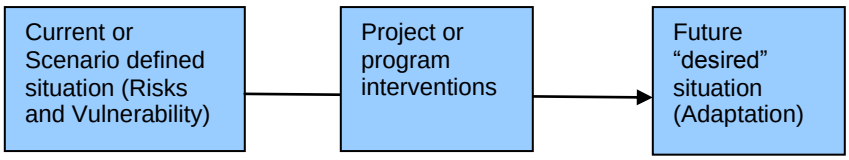
- The Adaptation Fund Strategic Framework should not be used as a blueprint from which the project is developed.
- The AF Framework will enable the AF Board to translate its mandate into tangible results to support ongoing planning, management and results monitoring and measurement. Further, it lays 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 level of the AF, not project level results (alignment between AF level Framework and Project Logical Frameworks should be sought, chapter 2, Step 3 provides detail).

Chapter 2: How to Develop a Results Framework for an Adaptation Project?[6]

12. Project design and measuring its performance can be divided into seven phases or steps, as presented below. These steps should be considered as guidance 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[7] of previous steps.[8]

Step 1. Define the intended effect and scale of interventions

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



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

- Draft the project's goal, and
- 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:

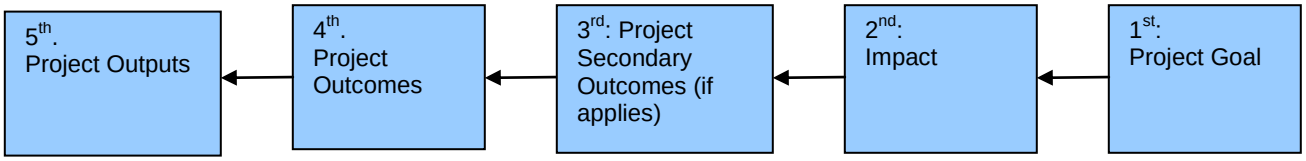
- *Stakeholder analysis*: define adaptation partners, actors, donors, communities, etc.

[6] This guidance document assumes there is already a formed project core team to follow the steps.
[7] Repeatedly going through a series of steps in a process (Measures of Success)
[8] Adaptive management

- 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 objective or alternative trees to resolve those problems. Problems that the project cannot address directly then become risks to the project's success in the absence of actions.
- *Overall contextual assessment*: some knowledge of current and future (scenario) situation needs to be known while defining the draft goal and the level of intervention. Specifically, ***contextual data*** is the data on external "risk" factors that may affect 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.

Step 2: Analyze and formulate project objectives and analyze alternatives

15. As part of project planning, the adaptation project's objectives should be clarified by defining precise and measurable statements concerning the results to be achieved (first goal, second impact, third outcomes-secondary and primary outcomes- and then outputs) and then identifying the strategies or means (activities and corresponding inputs) for meeting those objectives. The diagram below illustrates the direction that should be followed when developing results. Conceptual maps as shown in the diagram are of great help to visualize linkages among results.



EXAMPLE:

TBD: Including clear difference between first level or primary outcomes and second or other level outcomes)

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

16. 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 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 assessing assumptions for monitoring implementation and results around this structure.[9]

[9] IADB, OECD 2001

17. The log frame should be prepared using a collaborative process that includes different management levels and project stakeholders.[10] The Adaptation Fund encourages broad participation in log frame development.

Table 1: Project Design Logical Framework Matrix

NARRATIVE SUMMARY	INDICATORS	MEANS OF VERIFICATION[11]	ASSUMPTIONS (external factors or risks)[12]
Goal:			
Impact:			
Secondary Outcome[13]:			
Outcome:			
Outputs:			
Activities:			

A WORD OF CAUTION: Limitations of the Project Log frame Approach[14]

- 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 achieve agreement on objectives, outcomes, outputs and activities, as well as other log frame elements.
- The analysis of risks or 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.

Step 3. Align project objective(s) with Adaptation Fund Strategic outcome(s)

- 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 any project outcome that would support or contribute towards achievement of any Adaptation Fund Strategic outcome(s)? Include all that apply.

EXAMPLE: TBDeveloped

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

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

[10] OECD 2001
[11] Described in depth in Step 6 of this Chapter
[12] Described in Step 6 of this Chapter
[13] If needed
[14] OECD 2001

19. What is to be measured to determine whether progress is being made towards implementing activities and achieving objectives?

20. 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

21. When selecting/identifying indicators, remember the following steps:

1. Follow a participatory approach: involve representatives from implementing agency, government, beneficiaries, and other stakeholders (ensure the inclusion of stakeholders and direct actors identified during the stakeholder analysis). This participatory selection of indicators helps not only on drawing from 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.

Table 2. Checklist for selecting good indicators

Criteria/attributes[15]	**Consider**
Validity	Does the indicator measure the result?
Precise meaning	Do stakeholders agree on exactly what the indicator measures?
Practical, affordable, and simple	Are data actually available at reasonable cost and effort? Will it be 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?

RECOMMENDATIONS

- There is probably no such thing as an ideal indicator, and no perfect technique for developing them.
- Tradeoffs 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 so 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.

[15] Adaptated from CIDA's checklist of good indicators.

EXAMPLE: TBD

Selecting indicators from the Adaptation Fund set of indicators

22. The Adaptation Fund developed a menu of standard indicators to use in measuring and reporting on Fund level outputs, outcomes and impacts.[16] 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.

23. Selecting indicators from the set:

1. Review the menu of standard indicators in Section 3 of this guidance document. The list of output indicators cannot be comprehensive of all outputs of all and every project.
2. From the menu, identify those indicators that better adjust to your project's outcome and outputs. Choose only output and outcome indicators that are relevant to the project characteristics and what is set to achieve.
3. Include selected indicators into your project logical framework (and monitoring plan)

RECOMMENDATIONS

- Try not to choose too many indicators and over -burden 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 collaboratively process as when selecting other project indicators.

Step 5. Set targets

24. Once indicators have been developed, actual baseline values and targets should 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.

25. 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.[17]

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).

26. 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 tasks to be achieved.
- They may be the foundation clarifying the results for which managers will be held responsible.

[16] 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.
[17] OECD 2001

- They serve as guideposts for judging whether progress is being made on schedule and at levels originally envisioned. In other words, targets tell stakeholders how well a project is progressing.[18]

EXAMPLE: TBD

A WORD OF CAUTION

If targets are unrealistically high and therefore unachievable, integrity and confidence will suffer, and could generate perverse incentives to conceal or alter data.

Step 6. Monitor (collect) data.

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

28. 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-quality financial accounts and field records of interventions as well as recurrent checks to assess fulfillment 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 achieving its objectives and response to the question: what results have been accomplished relative to what was planned (targeted)?

29. Data on project outputs is generated frequently by project staff and are central to reporting systems. Data on outcomes is 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[19]

30. 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.

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

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

[18] Margoluis R. and N. Salafsky. 1998
[19] OECD 2001

Outputs:							
Activities							

31. 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 tendency 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 fulfillment of work plans and budget. Place data collection responsibility closer to those using the data.

Outputs Data: Used for short-to-medium term management decisions designed at improving 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:
- 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 behavior 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 and behaviors. 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 design.
- Frequency: Annually or when feedback is needed.
- Responsibility: Project staff

Impact data: is not covered in this guidance document since the responsibility tends to fall outside project managers. Recording data up to the secondary outcome level, which falls within project mangers responsibility, should give solid insight and linkages towards impacts.

Criteria for selecting data collection methods and sources

32. 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 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

33. 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.

34. When selecting data collection methods revise the following criteria.[20]

Criteria/attributes	Consider
Validity:	Do 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? Is the measure, after applied repeatedly to a given situation, consistently yields 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 more quickly implemented and 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 methods:	Informal methods include casual conversations or unstructured site visits, which tend to be inexpensive and quick to implement, sometimes compromising its credibility. Formal methods comprise 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 interviews, key informant interviews, direct observation, etc.

Quantitative versus Qualitative Methods of Collecting Data

35. The utility of both types of information should be taken into account and the need 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.[21]

Risks/Assumptions at different hierarchy levels -- implication for accountability

36. The higher in the project log frame ladder, the more external influences and risks exist and less management control of such risks.

[20] Extracted and Adapted from OECD 2001
[21] OECD 2001

37. *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. 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

38. 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.

39. The Adaptation Fund requires project management to conduct annual reviews assessing and reporting project[22] performance monitoring data.[23] 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).

SECTION 2. PROJECT LEVEL BASELINES INFORMATION: GUIDING PRINCIPLES

40. Why is baseline data and information necessary?
Baseline information is important for[25]:

- 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.

Baseline data: An analysis describing the situation prior to a development intervention, against which progress can be assessed or comparisons made.[24]

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

41. Every adaptation project 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.[26]

42. In adaptation projects, baselines have two primary uses:
First, there is the project baseline: where is the project starting from? Who is vulnerable? What is vulnerable? And what is currently being done to reduce that vulnerability?

43. 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

[22] Annual project performance report (PPR).
[23] See AFB/EFC.1/3/rev.1 June 16, 2010
[24] OECD 2001
[25] Extracted and adapted from Ebi et al. 2005
[26] Valencia 2009

indicators (see above), and may take the form of, for example, a vulnerability baseline, a climate risk baseline, an adaptive capacity baseline, or an adaptation baseline.

44. 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.[27]

45. 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. Both reference scenarios and 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.[28]

Chapter 2: Assessment tools to establish baseline information[29]

46. How to start about collecting baseline data?

1. Review and synthesize existing information on current vulnerability, climate risk, and current adaptation measures 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 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.
- Baseline data currently available on the IPCC; DDC website
- 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.).

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:

47. As discussed in the previous section, baseline data needs to be compiled at project start and completion. Collection and maintenance of project baseline data is responsibility of project proponents.

[27] EBI, K.L., B. LIM, AND Y. AGUILAR
[28] EBI, K.L., B. LIM, AND Y. AGUILAR
[29] Based on KRISTIE L. EBI, BO LIM, AND YVETTE AGUILAR, Ivan Dario, presentation Jose A. Marengo CCST/INPE, Sao Paulo Brazil

SECTION 3: ADAPTATION FUND INDICATORS

Chapter 1: An introduction of the Adaptation Fund standard indicators

INDICATORS
1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis
1.1. No. and type of projects that conduct and update risk and vulnerability assessments
1.2 Early warning systems developed
2.1 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks
2.2Reduced number of people suffering losses from extreme weather events
2.1.1No. of staff trained to respond to and mitigate impacts of climate related events
2.1.2. Percentage of population covered by adequate risk reduction systems
2.1.3. No. of people affected by climate variability
3. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses
3.1 No. and type of risk reduction actions or strategies introduced at local level
4.1. Development sectors' services (health and social services) responsive to evolving needs from changing and variable climate
4.2. Physical infrastructure improved under climate change and variability-induced stress
4.1.1. No. and type of health or social infrastructure developed or modified to respond to new conditions resulting from climate variability and change (by type)
4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)
5.1. Ecosystem services maintained or improved under climate change and variability-induced stress
5.2. No. and type of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets)
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
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. No. of households with more secure access to livelihood assets
7. Climate change priorities are integrated into national development strategy
7.1. Number of policies introduced to address climate change risks or adjusted to incorporate climate change risks

48. The list of output indicators cannot be comprehensive of all activities and outputs of all projects. Choose only output and outcome indicators that are relevant to the project characteristics and set results.

Chapter 2: Outlines of Adaptation Fund Indicators

1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis	
Relationship of the indicator to outcomes and outputs:	Relates to Outcome 1(Reduced exposure at national level to climate related hazards and threats) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it (metrics)?	Yes / No

Why measure it?	
When to measure it?	
How to collect the data?	
What its required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

1.1. Number and type (sector) of projects that conduct and update risk and vulnerability assessments	
Relationship of the indicator to outcomes and outputs:	Relates to Output 1(Risk and vulnerability assessments conducted and updated at a national level) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it?	Number and Sector in separate fields of monitoring plan
Why measure it?	
When to measure it?	
How to collect the data?	
What it required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

1.2. Early warning systems developed	
Relationship of the indicator to outcomes and outputs:	Relates to Output 1(Risk and vulnerability assessments conducted and updated at a national level) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it?	Yes/No
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

2.1. Number of targeted institutions with increased capacity to minimize exposure to climate variability risks	
Relationship of the indicator to outcomes and outputs:	Relates to Outcome 2 (Strengthened institutional capacity to reduce risks associated with climate-induced economic losses) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it?	Number
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

2.2. Reduced number of people suffering losses from extreme weather events	
Relationship of the indicator to outcomes and outputs:	Relates to Outcome 2 (Strengthened institutional capacity to reduce risks associated with climate-induced economic losses) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it?	Number (men and women and other vulnerable groups[30])
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

2.1.1. Number of staff trained to respond to and mitigate impacts of climate related events	
Relationship of the indicator to outcomes and outputs:	Relates to Output 2.1 (Strengthened capacity of national and regional centers and networks to rapidly respond to extreme weather events) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	

[30] Vulnerable groups: indigenous groups, women, youth (including children) and elderly, physically impaired, etc. Specific vulnerable groups should be identified during project design.

How to measure it?	Percentage (by total and by beneficiaries (men and women and other vulnerable groups)
Why measure it?	
When to measure it?	
How to collect the data?	
What its required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

2.1.2. Percentage of population covered by adequate risk reduction systems	
Relationship of the indicator to outcomes and outputs:	Relates to Output 2.2 (Targeted population groups covered by adequate risk reduction systems) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it (metrics)?	Percentage
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

2.1.3. Number of people affected by climate variability	
Relationship of the indicator to outcomes and outputs:	Relates to Output 2.2 (Targeted population groups covered by adequate risk reduction systems) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it?	Number
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses	
Relationship of the indicator to outcomes and outputs:	Relates to Outcome 3 (Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it?	Scale (1-5): from 1: no awareness level to 5: very good awareness level
Why measure it?	
When to measure it?	
How to collect the data?	Household perception survey would be carried out. Sample results would be broken down according to this 1-5 scale.
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

3.1 Number and type of risk reduction actions or strategies introduced at local level	
Relationship of the indicator to outcomes and outputs:	Relates to Output 3 (Targeted population groups participating in adaptation and risk reduction awareness activities) of the Strategic Results Framework
Definition of indicator:	Types of risk reduction actions or strategies at the local level are defined as: Monitoring/Forecasting capacity (EWS, vulnerability mapping system); Policy/regulatory reform; Capacity development; Sustainable forest management; Strengthening infrastructure; Supporting livelihoods; Mangrove reforestation; Coastal drainage and infrastructure; Irrigation system; Community based adaptation; Erosion control; Soil water conservation; Microfinance; Special programs for women; Livelihoods; Water storage; ICT and information dissemination.
Difficulty on measuring the indicator:	
How to measure it?	Number and type (in separate columns)
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	

Example from the field:	
References:	

4.1. Development sectors' services (health and social services) responsive to evolving needs from changing and variable climate	
Relationship of the indicator to outcomes and outputs:	Relates to Outcome 4 (Increased adaptive capacity within relevant development sectors) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it?	Score (1-5) disaggregated by gender
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

4.2. Physical infrastructure improved under climate change and variability-induced stress	
Relationship of the indicator to outcomes and outputs:	Relates to Outcome 4 (Increased adaptive capacity within relevant development sectors) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it?	Score (1-5) disaggregated by gender: from 1: non responsive to 5: highly responsive.
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

4.1.1. Number and type of health or social infrastructure developed or modified to respond to new conditions resulting from climate variability and change (by type)	
Relationship of the indicator to outcomes and outputs:	Relates to Output 4 (Vulnerable physical and social assets strengthened in response to climate change impacts, including variability) of the Strategic Results Framework
Definition of indicator:	Type of health infrastructure: Bed net; Health Clinic; Public Health Activities
Difficulty on measuring the indicator:	

How to measure it?	Number and type (entered in separate columns of monitoring plan)
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

4.1.2. Number of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)	
Relationship of the indicator to outcomes and outputs:	Relates to Output 4 (Vulnerable physical and social assets strengthened in response to climate change impacts, including variability) of the Strategic Results Framework
Definition of indicator:	Types of physical assets: Roads; Government Buildings; Causeways; Airports; Schools; Training Centers; Hospitals
Difficulty on measuring the indicator:	
How to measure it?	Number and type (entered in separate columns)
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

4.1.3. Number and type of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets)	
Relationship of the indicator to outcomes and outputs:	Relates to Output 4 (Vulnerable physical, natural and social assets strengthened in response to climate change impacts, including variability) of the Strategic Results Framework
Definition of indicator:	Types of natural assets[31]: These consist of biological assets (produced or wild), land and water areas with their ecosystems, subsoil assets and air.
Difficulty on measuring the indicator:	
How to measure it?	Number and type (entered in separate columns)
Why measure it?	
When to measure it?	

[31] As defined by the OECD: http://stats.oecd.org/glossary/detail.asp?ID=1729

How to collect the data? What is required to collect the data? How to analyze and interpret the results? Strength and limitations of indicator Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community. Example from the field: References:	

5.1 Ecosystem services maintained or improved under climate change and variablity-induced stress	
Relationship of the indicator to outcomes and outputs:	Relates to Outcome 5 (Increased adaptive capacity within relevant natural resource sectors) of the Strategic Results Framework
Definition of indicator: Difficulty on measuring the indicator: How to measure it? Why measure it? When to measure it? How to collect the data? What is required to collect the data? How to analyze and interpret the results? Strength and limitations of indicator Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community. Example from the field: References:	

5.2. Number and type of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets)	
Relationship of the indicator to outcomes and outputs:	Relates to Outcome 5 (Increased adaptive capacity within relevant natural resource sectors) of the Strategic Results Framework
Definition of indicator: Difficulty on measuring the indicator: How to measure it?	Types of natural assets[32]: These consist of biological assets (produced or wild), land and water areas with their ecosystems, subsoil assets and air.
Why measure it? When to measure it? How to collect the data? What you require to collect the data? How to analyze and interpret the results? Strength and limitations of indicator Outputs of measuring activities: e.g., narrative report, or age class structure	

[32] As defined by the OECD: http://stats.oecd.org/glossary/detail.asp?ID=1729

across populations within the community. Example from the field: References:	

6.1 Percentage of households and communities having more secure (increased) access to livelihood assets	
Relationship of the indicator to outcomes and outputs:	Relates to Outcome 6 (Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas) of the Strategic Results Framework
Definition of indicator: Difficulty on measuring the indicator: How to measure it?	Score (1-5) from 1: no access to 5: very secure access
Why measure it? When to measure it? How to collect the data? What is required to collect the data? How to analyze and interpret the results? Strength and limitations of indicator Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community. Example from the field: References:	

6.2. Percentage of targeted population with sustained climate-resilient livelihoods	
Relationship of the indicator to outcomes and outputs:	Relates to Outcome 6 (Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas) of the Strategic Results Framework
Definition of indicator: Difficulty on measuring the indicator: How to measure it?	Household income in project area (USD)
Why measure it? When to measure it? How to collect the data? What is required to collect the data? How to analyze and interpret the results? Strength and limitations of indicator Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community. Example from the field: References:	

6.1.1.Number and type of adaptation assets (physical as well as in terms of knowledge) created in support of individual or community livelihood strategies	
Relationship of the indicator to outcomes and outputs:	Relates to Output 6 (Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability) of the Strategic Results Framework

Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it?	Number and type (in separate columns of monitoring plan)
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

6.1.2. Number of households with more secure access to livelihood assets	
Relationship of the indicator to outcomes and outputs:	Relates to Output 6 (Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it?	Score (1-5) from 1: no access to 5: very secure access
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community.	
Example from the field:	
References:	

7. Climate change priorities are integrated into national development strategy	
Relationship of the indicator to outcomes and outputs:	Relates to Outcome 7 (Improved policies and regulations that promote and enforce resilience's measures) of the Strategic Results Framework
Definition of indicator:	
Difficulty on measuring the indicator:	
How to measure it?	Yes/No
Why measure it?	
When to measure it?	
How to collect the data?	
What is required to collect the data?	
How to analyze and interpret the results?	
Strength and limitations of indicator	
Outputs of measuring activities: e.g., narrative report, or age class structure	

across populations within the community. Example from the field: References:	

7.1. Number of policies introduced to address climate change risks or adjusted to incorporate climate change risks	
Relationship of the indicator to outcomes and outputs:	Relates to Output 7 (Improved integration of climate resilience strategies into country development plans) of the Strategic Results Framework
Definition of indicator: Difficulty on measuring the indicator: How to measure it? Why measure it? When to measure it? How to collect the data? What is required to collect the data? How to analyze and interpret the results? Strength and limitations of indicator Outputs of measuring activities: e.g., narrative report, or age class structure across populations within the community. Example from the field: References:	Number

REFERENCES

Adaptation Fund. 2010. An Approach to Implementing Results Based Management – RBM. AFB/EFC.1/3/rev.1 June 16, 2010

Danida's LFA handbook on: http://amg.um.dk/en/menu/TechnicalGuidelines/LogicalFramework Approach/LogicalFrameworkApproach.htm

Ebi, K.L., B. Lim and Y. Aguilar, 2005: Scoping and designing an adaptation process. Adaptation Policy Frameworks for Climate Change, B. Lim, E. Spanger-Siegfried, I. Burton, E.L. Malone and S. Huq, Eds., Cambridge University Press, New York, 33-46.

GEF Evaluation Office and Conservation Development Centre. 2009. Towards Enhancing the Impacts of Environmental Projects: The ROtI Handbook- August 2009-09-29

IADB. Online course on Logical Frameworks and M&E. (accessed in 2001)

IFAD. 2007. Results and Impact Management System: RIMS First and Second Level Results Handbook.

Marengo, Jose A. 2010. Presentation: Baseline data for climate change impacts and vulnerability assessments, and adaptation planning. CCST/INPE, Sao Paulo Brazil. Co-chair IPCC TGICA. SãoPaulo, Brazil. UNFCCC Technical Workshop under the Nairobi Work Programme on Impacts, Vulnerability and Adaptation to Climate Change Collaboration among Regional Centres and Networks2-5 March 2010Apia, Samoa.

Margoluis R. and N. Salafsky. 1998. Measures of Success: Designing, Managing, and Monitoring Conservation and Development Projects.

Mosse. R. and L.E. Sontheimer. 1996. Performance Monitoring Indicators Handbook. World Bank Technical Paper 334

NOAA/National Ocean Service/IUCN WCPA Marine, WWF. How is your MPA doing?

OECD. Development Co-operation Directorate. Development Assistance Committee Working Party on Aid Evaluation. 2000. Glossary of Evaluation and Results Based Management (RBM) Terms.

OECD. 2001. Results Based Management in the Development Co-Operation Agencies: A Review of Experiences Background Report. Written by Ms. Annette Binnendijk, consultant to the DAC WP-EV. http://www.oecd.org/dataoecd/17/1/1886527.pdf

UNDP. Monitoring and Evaluation Framework for Adaptation to Climate Change. Draft for Comments July 2007.

UNDP. 2007. Evaluation of Result-Based Management: Achieving Results.

UNFPA. Division for Oversight Services. 2004. Programme Manager's Planning Monitoring & Evaluation Toolkit. Tool Number 6: Programme Indicators. Part I: Identifying Output Indicators - The Basic Concepts.

Valencia, I.D. Lessons on M&E from GEF Climate Change Adaptation Projects. IN Van den Berg, R. D., and O. Feinstein (Eds.). 2009. Evaluating Climate Change and Development. World Bank Series on Development, Volume 8.