

Towards an Integrated Evaluation Framework of Climate Change Adaptation Projects

Stelios Grafakos s.grafakos@ihs.nl

Veronica Olivotto olivotto@ihs.nl





Presentation Outline

- 1. What is UNCDF LoCAL Program?
- 2. Monitoring and Evaluation (M&E) for adaptation activities
- 3. Proposed Methodology
- 4. Proposed M&E Criteria and their use
- 5. Lessons learnt and Next Steps
- 6. Concluding remarks





UN Capital Development Fund - LoCAL

- LoCAL is the UN Capital Development Fund's facility for investment in local level climate resilience
- It connects to existing national intergovernmental fiscal transfer systems and supplements transfers to local governments with Performance-Based Climate Resilience Grants (PBCRGs)

http://www.uncdf.org/en/local



LoCAL's Geographical spread



Two pilot projects completed so far In two local districts of Bhutan and 2 Provinces in Cambodia

UNCDF Annual Report, 2010

Three levels of M&E in LoCAL

- Planning and budgeting: overall programme's outcome
- Performance-Based Climate Resilience Grants (PBCRG) Assessment
- Outcome of CCA projects: M&E of outputs and outcomes of each project



M&E for adaptation

- OECD (2012)
- GEF (2008, 2011)
- GIZ (2011)
- IIED (2011)
- UNFCCC (2010)
- UNDP (2007)



Proposed Methodology





M&E Criteria

- ✓ Relevance (relevant to climate adaptation objectives)
- Implementation (compliance)
- Effectiveness (achievement of project objectives)
- ✓ Efficiency (costs)
- ✓ Equity (beneficiaries)



Proposed Methodology





Logical Framework of Indicators





Proposed Methodology





Propose Adaptation Indicators

Process Indicators	Outcome Indicators	
Relevance, Implementation,	Effectiveness, Efficiency and	
Efficiency Criteria	Equity Criteria	

Indicators directly related to project objectives	Indicators indirectly related to project objectives
Exposure related Indicators Capacity Building related Indicators Sensitivity related Indicators	Sensitivity related Indicators Capacity Building related Indicators



Example 1

CCA PROJECT

OUTCOMES

INDICATORS



Quantification and scoring of M&E Criteria

- A quantification system with different
 levels of data intensity according to
 data availability is applied
- -Use of **qualitative and quantitative** data
- –Each project is scored from 0 to 1 against each evaluation criterion



Relevance

To what extent were the project objectives relevant to climate change adaptation?

Qualitative assessment:

1. **Not relevant:** the project objectives are not related to climate change adaptation (0 point)

2. **Indirectly relevant:** the project objectives are indirectly related to climate change adaptation (0.5 points)

3. **Directly relevant:** the project objectives are directly related to climate change adaptation (1 point)

Implementation

To what extent were the project outputs delivered within the planned time frame?

Low data intensity (Qualitative assessment and based on community's perception):

- Not delivered: the project outputs have not been delivered (0 point)

- Partly delivered: the project outputs have been partly delivered (0.5 point)

- **Delivered**: the project outputs have been delivered (1 point)

High data intensity (Quantitative assessment by project consultants): -**Low level of implementation:** the project outputs have been delivered by up to 25% (0 point)

-Moderate level of implementation: the project outputs have been delivered by more than 25% and up to 75% (0.5 point)

- **High level of implementation:** the project outputs have been delivered by more than 75% (1 point)

Effectiveness

To what extent were project's objectives achieved within the planned time frame?

Low data intensity (Qualitative and based on community's perception):

- Not achieved: the project objectives have not been achieved (0 point)
- Partly achieved: the project objectives have been partly achieved (0.5 point)
- Achieved: the project objectives have been achieved (1 point)

Effectiveness

Medium data intensity (Quantitative assessment by project consultants)

- Low effectiveness: the project objectives achieved by up to 25% (0 point)

-Moderate effectiveness: the project objectives achieved by more than 25% and up to 75% (0.5 point)

- High effectiveness: the project objectives achieved by more than 75% (1 point)

High data intensity (Quantitative assessment and monetization)

-Low effectiveness: the project has reduced value at risk by up to 25% (0 point)

-Moderate effectiveness: the project has reduced value at risk by more than 25% and up to 75% (0.5 point)

- **High effectiveness:** the project has reduced value at risk by more than 75% (1 point)

Efficiency

To what extent was the CCA intervention costefficient?

Low data intensity (Internal budget):

- **Negative budget variances**: the actual project cost is higher than the budgeted cost (0 point)

- **Positive budget variances:** the actual project cost is equal to or lower than the baseline budgeted cost (1 point)

Equity

To what extent did the project benefit the target local population?

Quantitative assessment (by project consultants)

- **Low level of equity**: the proportion of project beneficiaries is up to 25% of the total affected population (0 point)

- **Medium level of equity:** the proportion of project beneficiaries is more than 25% and up to 75% of the total affected population (1 point)

- **High level of equity:** the proportion of project beneficiaries is more than 75% of the total affected population

Example: IMPLEMENTATION

Project activity: Restore canal to improve drainage for relief of floodwaters.

Project Rationale: Intense wet seasons will be a challenge for traditional agriculture. Improving community water management is a key CCA response.

Expected outputs: 100m of storm water drains are connected to the canal system

MEDIUM DATA INTENSITY						
OUTPUTS	INDICATOR	MEASUREMENT	LEVEL of Implementation	SCORING		
ENGINEERING WORKS	Length of storm water drains connected with the canal system	100m out of 100m	High level of implementation: the project outputs have been delivered by more than 75%	1		

Example: EFFECTIVENESS

Expected outcome: to reduce the water logged area in Thnout Commune from 50 Ha to 30 Ha

OBJECTIVES	INDICATORS	MEASUREMENT	LEVEL of effectiveness	SCORING
Improved water drainage system	Size of water logged areas during wet seasons	10 out of 20 Ha - 50% of the target reduction (in water logged areas during rainy season)	Moderate effectiveness: the project has achieved its objective by more than 25% and up to 75%	0,5



Combined RESULTS

Restoring canal in Thnout Commune





Combined RESULTS

Restoring rural laterite road (Increasing height of road) - Borei Chulsar





Lessons Learned and next steps

• The M&E should reflect LoCAL's programme time frame less than 5 years

– Impact indicators were not considered

- Evaluation criteria reflect specific local needs and will be subject to adjustment
- M&E components should be embedded in Vulnerability Assessment (VA)
 - Baselines and targets (indicators) should be identified during the VA and prioritization/selection of projects
 - have a common participatory VA approach flexible enough to be adjusted in different local circumstances but nevertheless standardized across country interventions

M&E system embedded in CCA planning



Lessons Learned and next steps

- Identification of **indicators for measuring progress** with **participation** from the local community
 - local communities will be aware of indicators measuring progress from the beginning of the process in order to establish downwards accountability
- Engage communities in the M&E process
 - Self reporting on the progress and the level of achievement of expected outcomes of the selected CCA activities
 - Sustainability of M&E

Concluding Remarks

- M&E framework in progress
- It considers different levels of data availability and increasing complexity
- It examines a mix of soft and hard adaptation interventions, classifying proposed indicators accordingly
- It builds towards an integrated assessment of CCA





Towards an integrated Evaluation framework of Climate Change Adaptation projects

Thank you

Stelios Grafakos grafakos@ihs.nl

Veronica Olivotto olivotto@ihs.nl





Bibliography

Agrawal, A., M. Kononen, and N. Perrin. (2009) The Role of Local Institutions in Adaptation to Climate Change. Social Development Department Working Paper 118 (June) Washington, DC: The World Bank

AFB (2009) Results Based Management Framework

AFB (2011) Project Level Result Frameworks and Baseline Guidance Document, Adaptation Fund Board, Ethics and Finance Committee

Brooks, N., Anderson, S., Ayers, J., Burton, I., and Tellam, I., (2011) .Tracking and measuring development. IIED Climate Change working paper No.1

Downing, T.E., Patwardhan, A. (2005) Vulnerability Assessment for Climate Adaptation. Adaptation Planning Framework Technical Paper 3 in Bo Lim, Erika Spanger-Siegfried, Ian Burton, Elizabeth Malone and Saleemul Huq, eds. *Adaptation Policy Frameworks for Climate Change*. Cambridge: Cambridge University Press, pp. 67-89.

Economics of Climate Adaptation Working Group (2009) Shaping Climate Resilient Development: A Framework for Decision Making

Fazey, I, Kesby, M,. Evely, A., Latham, I, Watagora, D., Hagasua, J.E., Reed, M.S., Christie, M. (2010) A three-tiered approach to participatory vulnerability assessment in the Solomon Islands. Global Environmental Change 20 (2010) 713–728

Glick, P., Stein, B.A., Edelson, N.A. (2011). Scanning the Conservation Horizon: A Guide to Climate Change Vulnerability Assessment. National Wildlife Federation, Washington, D.C.

Islam, Faisal; Hove, Hilary; Parry, Jo-Ellen (2011) Review of Current and Planned Adaptation Action: South Asia. Adaptation Patnership/International Institute for Sustainable Development, pp.119-136

GEF (2008) Background and Elements for a GEF Monitoring and Evaluation Framework on Adaptation

GEF (2011) A Framework for Monitoring and Evaluating Adaptation to Climate Change

GIZ (2011) Making Adaptation Count - Concepts and Options for Monitoring and Evaluation of Climate Change Adaptation

Hammill, A. and T. Tanner (2011) Harmonising Climate Risk Management: Adaptation Screening and Assessment Tools for Development Cooperation. *OECD Environment Working Papers*, No. 36, OECD Publishing.

Institute of Development Studies (2008) Evaluation of Adaptation to Climate Change from a Development Perspective

IPCC (2007) Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson (eds) Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

ISET (2008) Pinning down vulnerability: from Narratives to Numbers. In From Risk to Resilience Working Paper No. 2

OECD (1991) DAC Principles for the Evaluation of Development Assistance.

OECD (2000) Glossary of Evaluation and Results Based Management (RBM) Terms.

OECD (2011) Monitoring and Evaluation for Adaptation: Lessons from Development Cooperation Agencies" OECD Environment Working Papers No. 38

Oxfam (2002) Participatory Capacity and Vulnerability Assessment (PCVA). Oxfam Great Britain – Philippines Program

McKinsey & Company (2011). Get adept at adaptation. McKinsey on Society, Available at http://publicpolicy.anu.edu.au/public_policy_community/workshops/climate_change_adaptation_in_australia/Get%20adept%20at%20adapt ation%20McKinsey.pdf

NONIE (2009) Impact Evaluations and Development" NONIE Guidance on Impact Evaluation

McKay, S. K., B. A. Pruitt, M. Harberg, A. P. Covich, M. A. Kenney, and J. C. Fischenich (2010) Metric development for environmental benefits analysis. EBA Technical Notes Collection. ERDC TN-EMRRP-EBA-4. Vicksburg, MS: U.S. Army Engineer Research and Development Center http://cwenvironment.usace.army.mil/eba/

Mehdi, B., C. Mrena, and A. Douglas (2006) Adapting to Climate Change: An Introduction for Canadian Municipalities. Canadian Climate Impacts and Adaptation Research Network (C-CIARN)

Prabhakar, S and Srinivasan, A (2008) Metrics for measuring Adaptation to Climate Change in the Agriculture Sector. Institute for Global Environmental Strategies (IGES), Available at <u>http://www.wamis.org/agm/meetings/rsama08/S608-Prabhakar-Metrics-Adaptation.pdf</u>

Shaw, R. (2009). Climate Disaster Resilience: Focus on coastal urban cities in Asia. Part of the GCOE (Global Center of Excellency) Program Human Security Engineering for Asian Megacity of Kyoto University

World Bank (2010) Economic Evaluation of Climate Change Adaptation Projects.

Skinner, E (2011). Gender and climate change. BRIDGE Cutting Edge Packs Institute of Development Studies, UK

Smit B., and J. Wandel (2006) Adaptation, adaptive capacity and vulnerability. In Global Environmental Change 16:282–292

Snover, A.K., L. Whitely Binder, J. Lopez, E. Willmott , J. Kay, D. Howell and J. Simmonds. 2007. Preparing for Climate Change: A Guidebook for Local, Regional and State Governments. In association with and published by ICLEI - Local Governments for Sustainability, Oakland, CA

Szlafsztein, C (2008). Adaptation to climate change and variability metrics: the Index of Usefulness of Practices for Adaptation (IUPA). A presentation for the Expert Consultation on Adaptation Metrics, Tokyo, 17-18 April, Available at http://www.iges.or.jp/en/cp/pdf/activity20/5 Szlafsztein.pdf

Turner, B.L., Kasperson R.E., Matson, P.A., McCarthy, J.J., Corell, R.W., Christensen, L., Eckley, N., Kasperson, J.X., Luers, A., Martello, M.L., Polsky, C., Pulsipher, A., Schiller, A. (2003) A framework for Vulnerability Analysis in Sustainable Science. PNAS Vol. 100(14) 8074-8079

UNDP (2007) Monitoring and Evaluation Framework for Adaptation to Climate Change. Draft

UNDP (2008) Proposed Framework for Monitoring Adaptation to Climate Change. Draft

UNDP (2009) Handbook on Planning, Monitoring and Evaluating for Development Results.

UNDP (2010) A toolkit for Designing Climate Change Adaptation Initiatives. Bureau of Development Policy Environment and Energy Group, New York

UNFCCC (2010) Synthesis report on efforts undertaken to monitor and evaluate the implementation of adaptation projects, policies and programmes and the costs and effectiveness of completed projects, policies and programmes, and views on lessons learned, good practices, gaps and needs

UKCIP (2011) AdaptME toolkit - Adaptation Monitoring and Evaluation.

Van Vliet, N. (2010) Participatory Vulnerability Assessment in the Context of Conservation and Development Projects: A Case Study of Local Communities in Southwest Cameroon. Ecology and Society 15(2): 6

Word Bank (2009) Mainstreaming Adaptation to Climate Change in Agriculture and Natural Resources Management Projects. Guidance Note 8