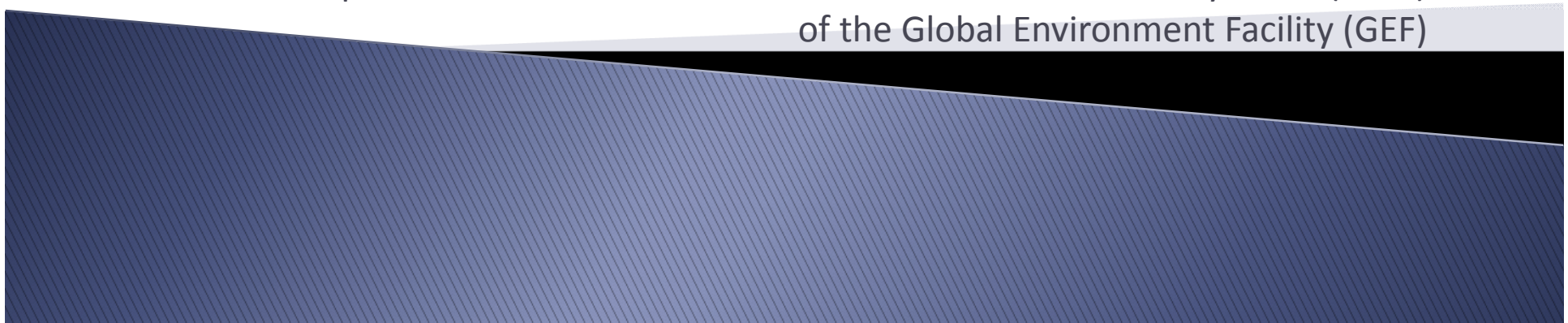


Strengthening Scientific Knowledge Base for Measuring, Monitoring & Evaluating Climate Change Adaptation

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Background and rationale

- M&E of adaptation is needed to identify effective measures and allocate scarce resources to those actions most likely to increase resilience to climate risks
- The evidence base is growing, but there is actually not well reflected in the scientific literature. For example, a number of projects will be complete in the next 2 – 3 years from both the GEF and Adaptation Fund. What can we learn from them? Is this on the agenda of the research community?
- Increased attention on mainstreaming and medium to long term adaptation, as reflected in the growing importance of the National Adaptation Plan (NAP) related activities
- Most existing M&E frameworks for adaptation have been developed from the project level perspective. Focus is shifting from mostly project level activities to programmatic, institutional and systemic interventions, emphasizing the creation of policy frameworks and enabling environments
- Take further the body of recent work to strengthen scientific inputs for measuring, monitoring & evaluation

Improving the scientific basis for measuring, monitoring and evaluating of climate change adaptation

Joint activity of the GEF Scientific and Technical Advisory Panel (**STAP**) and UNEP's Programme of Research on Climate Change Vulnerability, Impacts and Adaptation (**PROVIA**)



Paper # 1 - Approaches for measuring, monitoring and evaluating adaptation interventions that support mainstreaming and institutional response and long term adaptation

Authors – Dr. Jon Colvin, and Prof. Tom Downing, Global Climate Adaptation Partnership (GCAP)

- How to develop theories of change for different types and levels of adaptation, including programmatic interventions and national-level adaptation planning and strategies?
- Explore potential output/indicators that could be used to track the progress of projects and programmes that build institutional responses such as policies, finance and capacity
- Potential proxy indicators that could be used to measure outcomes associated with long term processes, as opposed to shorter term project-based outputs
- Starting to see NAP projects that help to create enabling conditions for an institutional response to adaptation. These are more challenging to evaluate, as results take place over much longer time frames

Paper # 2 - Linking M&E across scale – establishing the two-way linkages between institutional and national level actions and local impacts and benefits

Author – Prof. Kris Ebi, Department of Global Health, University of Washington

- With adaptation funding becoming more inclusive of projects that build institutional capacity → need to reflect on how systemic changes are influencing or impacting the adaptive capacity and vulnerability of populations at the local level
- Similarly, there is a need to better understand how project level interventions, which often have local outputs/indicators, can be linked to activities developed at the national level
- Connecting project-level indicators and monitoring to macro-scale socio-economic observational systems.
- Draw implications for results-based management frameworks

Paper # 3 - Lessons from M&E approaches in key development sectors for climate change adaptation

Author – Ms. Anna Williams, Perspectiō

- Draw lessons from M&E activities for social and developmental programs in climate-sensitive sectors (public health, sanitation, watershed development etc.)
- To what extent is adaptation monitoring and evaluation integrated into monitoring and evaluation of other social and development programs?
- To what extent is a clear scope (or definition) of “climate adaptation monitoring and evaluation” needed for projects where climate adaptation is a co-benefit, or where other social or environmental improvements are considered “co benefits”?
- Is it clear what is and is not considered “climate adaptation” in a multi-sector, multi-benefit context?

Paper # 4 - Data and information systems to support Monitoring and Evaluation for Climate Change Adaptation: Connecting with existing national socio-economic observational systems

Author – Prof. Marc Levy, Columbia University

- How can M&E of climate change adaptation leverage and utilize existing observational systems for socio-economic indicators?
- Explore existing systems and their potential inadequacies in terms of what is being measured and excluded – for example, in the developing world insured losses are the tip of the iceberg, and yet that is what is typically reported and used in assessments
- Ways to overcome poor data availability, including the use of appropriate proxy data

M&E Technical Workshop – Jan 22-24, 2015

- Held in Mumbai, India and hosted by the All-India Institute for Local Self-Government
- **Objective:** to discuss the early, Zero-Order Drafts of commissioned papers; get stakeholder input
- **Participation:** Paper authors, technical experts, representatives from various GEF implementing agencies, the UNFCCC, GEF, Adaptation Fund, GCF (remotely), and local organizations implementing adaptation projects.

Where are we now – 1?

1. Cross-sectoral integration at programming and M&E levels is slowly taking hold
2. M&E from other sectors miss opportunities when they do not explicitly have climate change adaptation in their scope
3. The long-term and uncertain nature of climate change poses a challenge for drawing lessons from other sectors that relate directly to M&E of climate change adaptation
4. Climate change adaptation M&E poses methodological challenges consistent with complex and adaptive systems;
 - Baselines, counterfactuals, attribution, replicability, scalability
 - Even basics like definition and scope of 'adaptation' is challenge
5. Stakeholder engagement and participation throughout the M&E process is essential
 - Stakeholder groups are often heterogeneous



Where are we now – 2?

6. Mixed method approaches recommended
7. Situation-appropriate indicators requires tailoring
8. Synergies from a programming perspective and from an M&E perspective show promise for strengthening adaptation and other development outcomes
9. Learning – we know a lot, but often that remains tacit knowledge – needs to be systematized and reflected in the broader literature

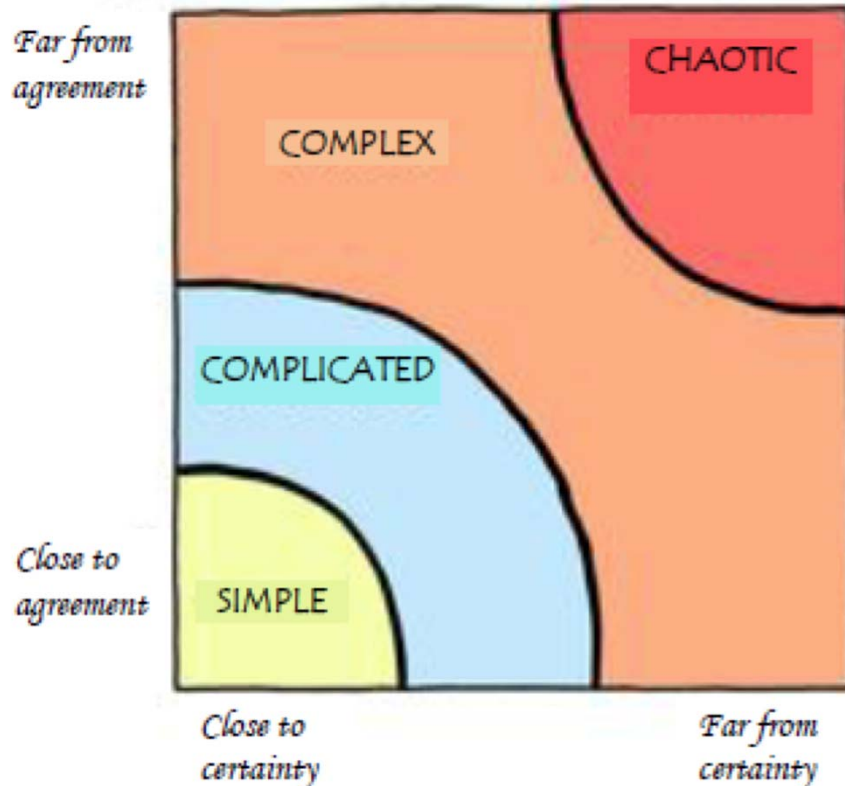


Some ideas from paper #1: Theory of change as a basis for CCA programming

- CCA programming is inherently complex, multifaceted and long-term in scope:
 - The emphasis on contextual analysis lends itself to programme design and evaluation research that is tailored to local conditions.
- ToC can tie together diverse projects and programmes into a coherent and strategic portfolio that enhances linkages across CCA sectors and scales.
- ToC processes are inherently iterative and flexible. Periodic reflection exercises allow stakeholders to respond to changes in the social, political, or natural environment. This is crucial for M&E of adaptation programmes, which need to accommodate dynamic and emerging conditions.
- ToC evaluations highlight an agency's contribution and impact towards long-term change in a way that clearly acknowledges the work of other agencies as well as the evolving adaptation context.

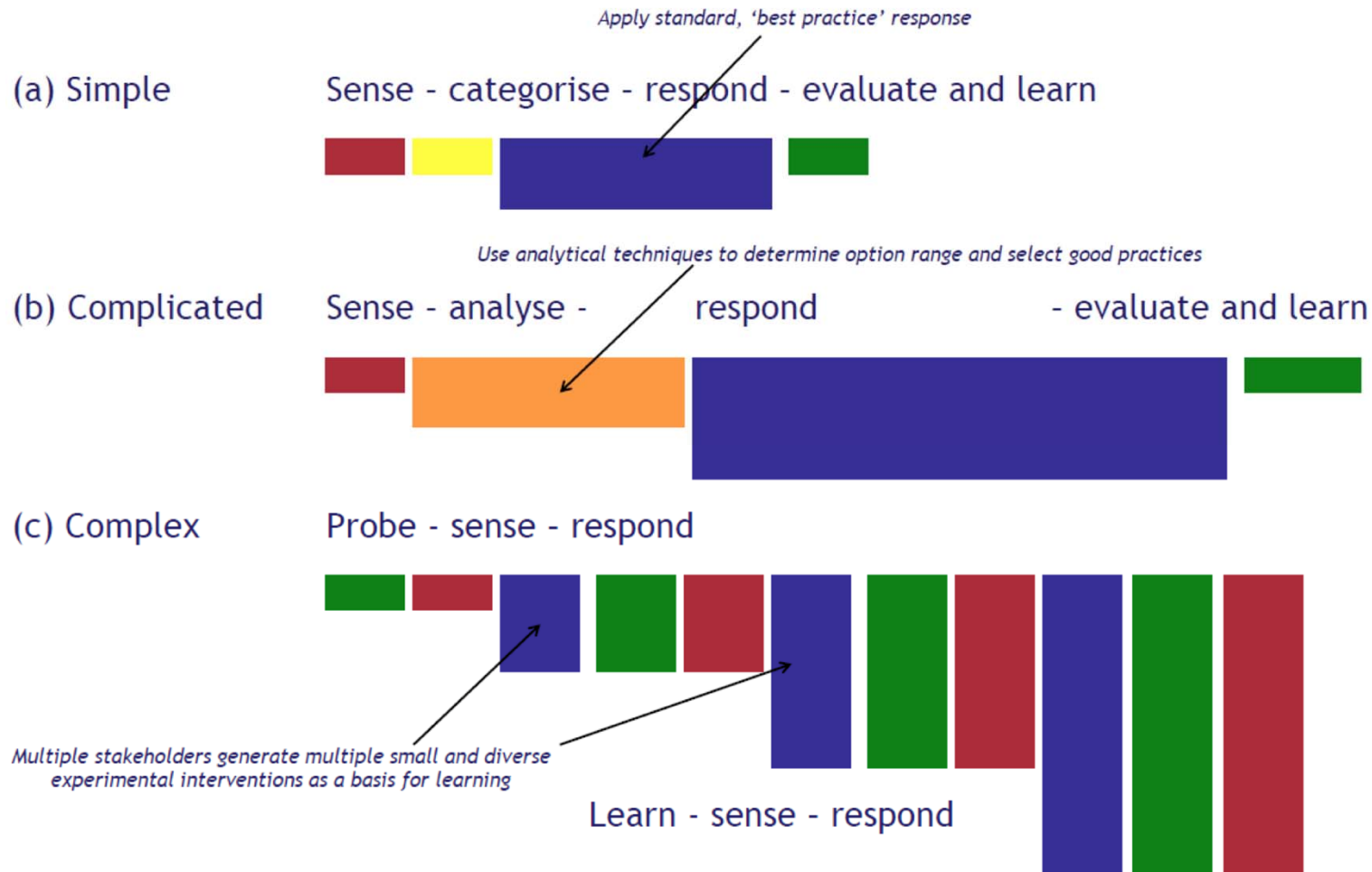
Bours et al (2014)

Developing theories of change that are sensitive to context

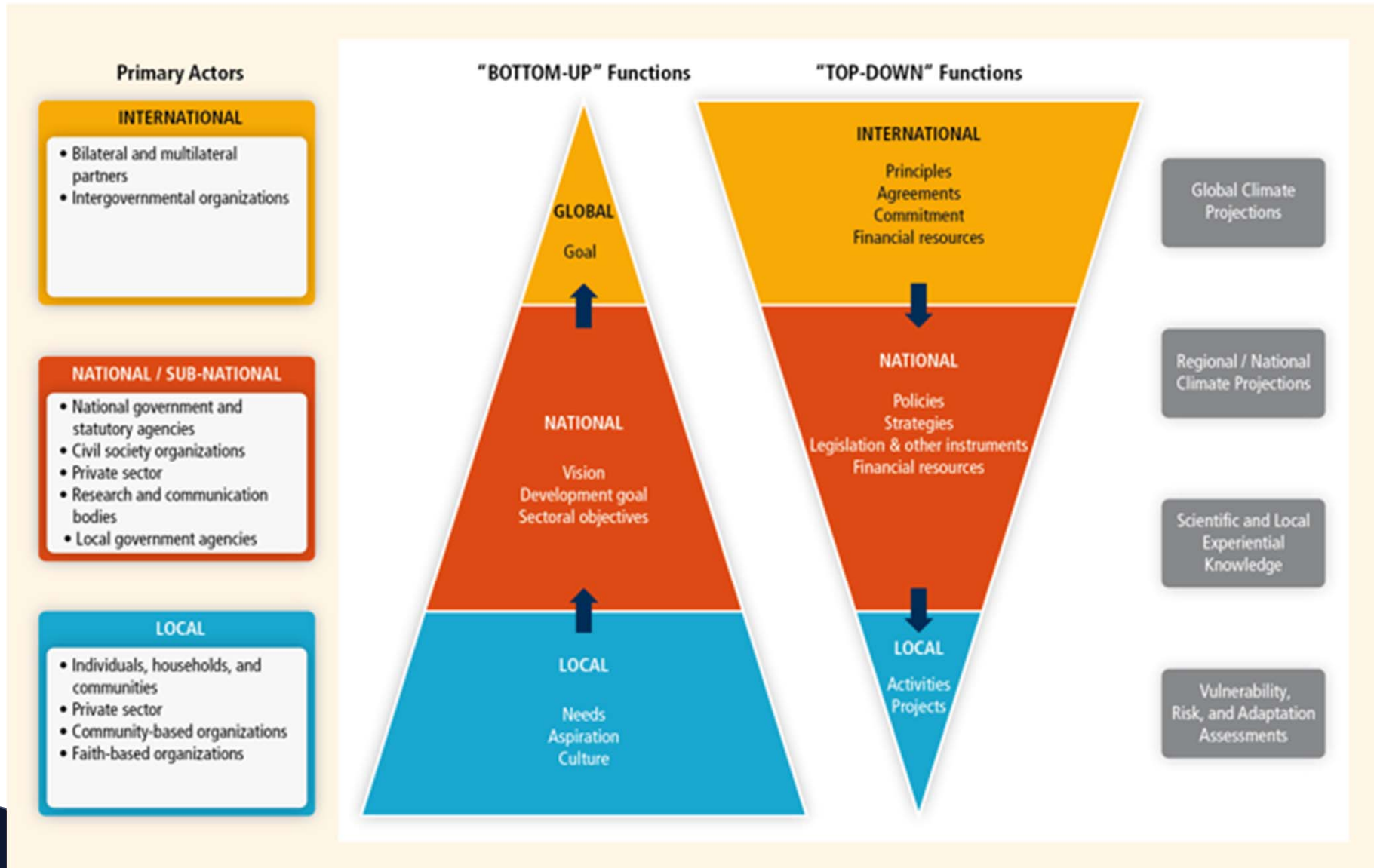


- Chaotic: no cause and effect relationships → **Novel practice**
- Complex: Cause and effect are unpredictable due to non-linear feedbacks → **Emergent practice**
- Complicated: Cause and effect separated over time and space but can be analyzed with standard impact tools → **Good practice**
- Simple: Cause and effect relations are repeatable and predictable; consequences are easily known → **Best practice**

Moving from complicated to complex situations/ framings requires a 'design turn'



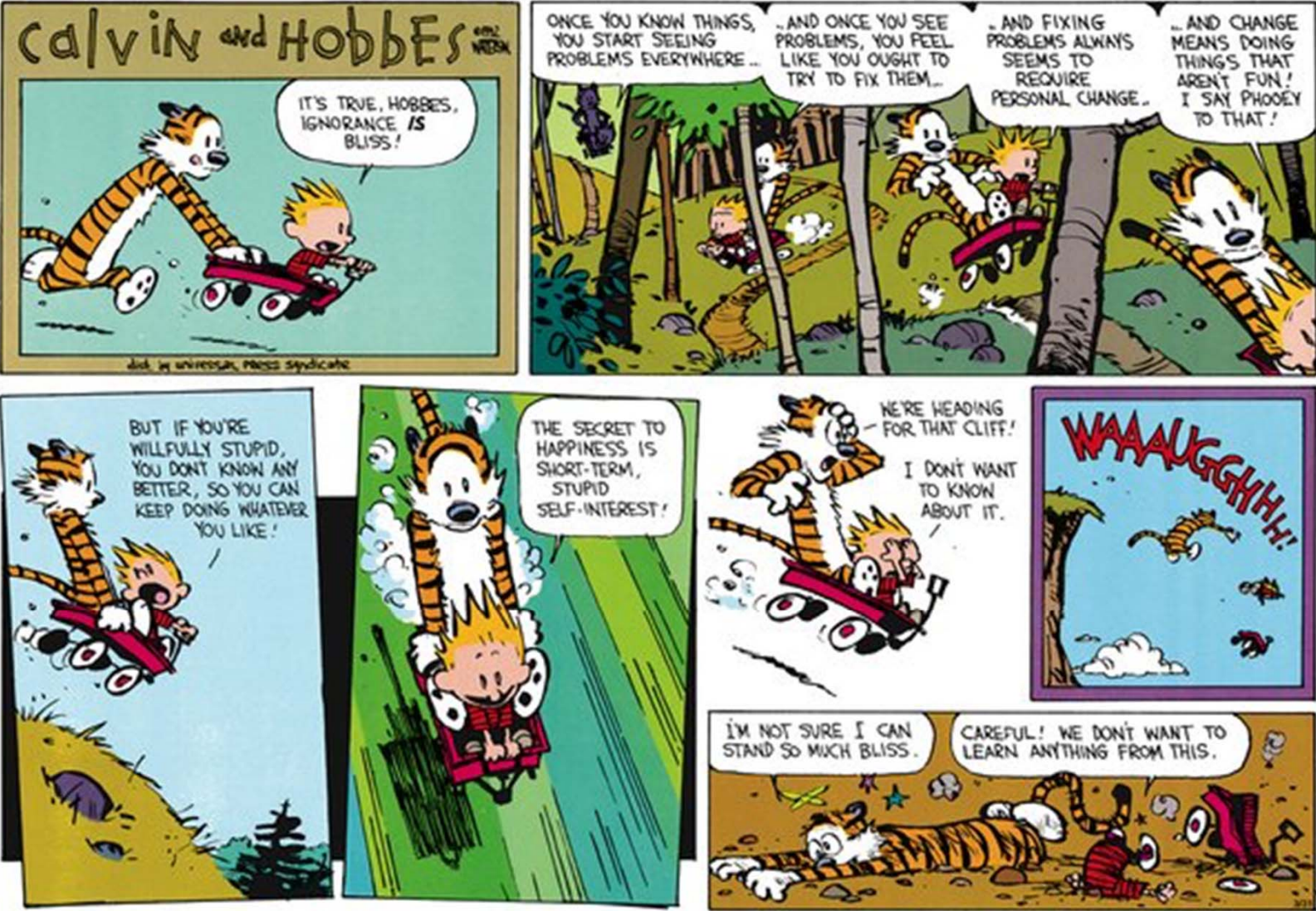
Paper 2: Example of building linkages across scales



Key Messages from M&E workshop

- M&E is important because it is a means to invest now to save in the future
- It is difficult because it does not happen automatically, and is not cost-less, existing incentives are often aligned against it
- Traditional emphasis of M&E on accountability should move towards supporting learning
- Moving from donor driven and project based M&E to country based M&E systems
- Indicators: new indicators and getting the right portfolio of indicators

M&E for learning



M&E for learning – some specific ideas

- Accountability, Performance, **Learning**... which is most important, do existing frameworks allow us to draw lessons?
- “Intelligent failure” – need to differentiate between procedural failure and design failure, and recognize that some failure is actually important for learning. Learning can be an important outcome of itself
- Pressure to show results may lead us to define “success” very narrowly – and that may be counter-productive and could create disincentives to not talk about “mistakes”
- Experiment with complexity – projects (and funding agencies) should take risks with complex situations: from “best” practice to “emergent” practice

Indicators and metrics

- Balance between the need for aggregation and comparability vs the need to preserve contextual detail
 - Qualitative (participatory) approaches vs quantitative methods
 - Avoid false precision of quantification
 - Existing RBM systems of the GEF and Adaptation Fund may have missed reporting on significant advances in building institutional capacity through NAPAs and stakeholder engagement with projects implemented directly with national agencies
- How to combine reductionist metrics with descriptive narratives?
- A focus on what can be measured can lead to a “looking under the lamp-post” problem
- Measuring capability
 - Process indicators
 - Interim outcome indicators

M&E of Projects to M&E Systems



- Mainstreaming of M&E – have to leverage existing systems for development activities
- What infrastructure currently exists in countries for collecting socio-economic and climate data?
- Non-traditional (informal) sources of data?
- M&E systems as a building block for the institutional arrangements at the national level for adaptation (NAP process)
- Can we track aggregate adaptation / resilience outcomes just as we track progress on development goals?
 - Are aggregate economy-wide measures feasible? Like value of infrastructure at risk, or aggregate economic losses or an “adaptation GDP”?

Looking ahead

- There are some new, interesting and relevant ideas coming out of this work (M&E systems, M&E for learning, process / capability indicators)
- The papers and the technical report is the first step – we would need to do more to develop these ideas further
- We believe there is a broad audience for this work – not just funding agencies like the GEF or GCF; but also countries and project developers
- STAP & PROVIA (and the team as a whole) would welcome the opportunity to collaborate with key stakeholders – like the Adaptation Committee