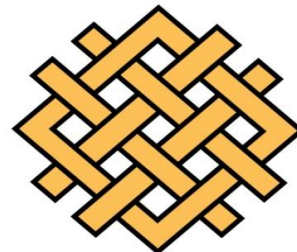# Making Adaptation Count:
Concepts & Options for
Monitoring & Evaluation of Adaptation

Meg Spearman, on behalf of WRI
Africa Biodiversity Collaborative Group Meeting
Washington DC
July 20, 2011

Contents

- Introduction

- Concepts

- Steps & Options

- Conclusions

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Introduction

What <u>questions</u> did we seek to answer in the guide?
- What are the needs and uses of M&E for CCA?
- What is the effectiveness criteria for CCA?
- State of the art – who's doing what in CCA?

Introduction

Who is this for?

- Development practitioners
- Adaptation specialists
- Funders of adaptation interventions
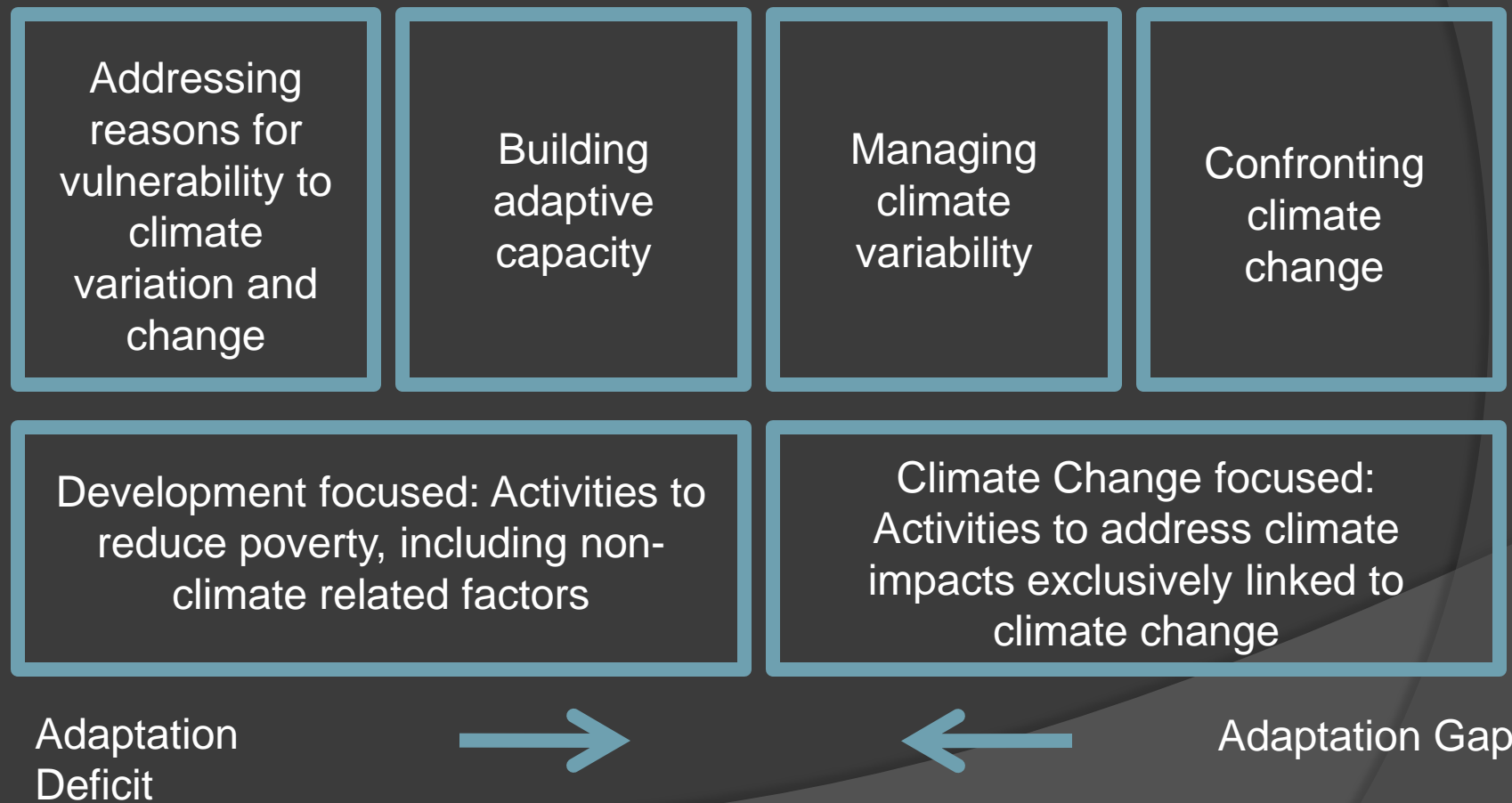
Challenges to M&E of Adaptation

The past is not a guide to the future

Uncertainty (scientific, political, financial)

Complex and cross-sectoral

M&E for adaptation needs to:

- **Foster learning**
- **Ensure broad ownership**
- **Support RBM (results-based management)**
- **Be relevant and flexible**

Defining Adaptation Depends on the Implementation Context

Addressing reasons for vulnerability to climate variation and change	Building adaptive capacity	Managing climate variability	Confronting climate change

Development focused: Activities to reduce poverty, including non-climate related factors	Climate Change focused: Activities to address climate impacts exclusively linked to climate change

Adaptation Deficit → ← Adaptation Gap

Tensions in shaping M&E systems for Adaptation

The Purpose of M&E:
Learning vs. Accountability

Definition of Effectiveness:
Process vs. Outcome

Basis for M&E System Design:
Practical vs. Conceptual

Ownership of M&E:
Bottom-up vs. Top-down

Types of Adaptation Efforts

Community Based

National Policy

Program & project

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Early Lessons on Adaptation M&E
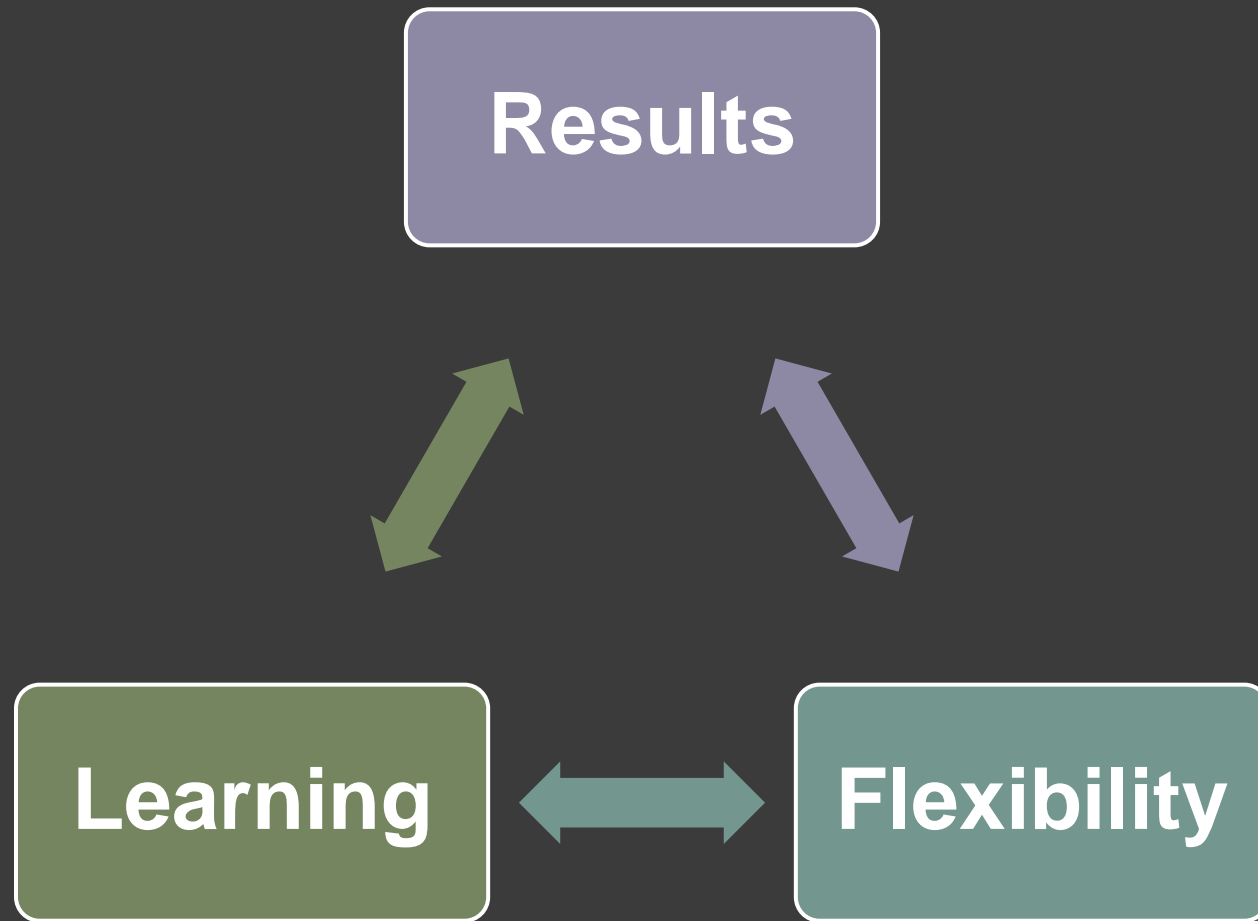
Adaptation depends heavily on context

Diversity contributes to adaptation-relevant M&E systems

Assumptions matter under uncertainty

Principles of Adaptation M&E

Steps to form an Adaptation-relevant M&E System

1. Describe the Adaptation Context

2. Identify the Contribution to Adaptation

3. Form an Adaptation Hypothesis

4. Create an Adaptation Theory of Change

5. Choose Indicators & Set Baseline

6. Use the Adaptation M&E System

Step 1: Describe the Adaptation Context

- What is the planning area or sector of interest?
- Who is vulnerable, and why?
- What climate risks are projected?
- What are the likely consequences?

Step 2: Identify the Contribution to Adaptation

3. Sustained Development

Adaptation Dimensions

LEARNING

M&E

M&E

M&E

1. Adaptive Capacity

2. Adaptation Actions
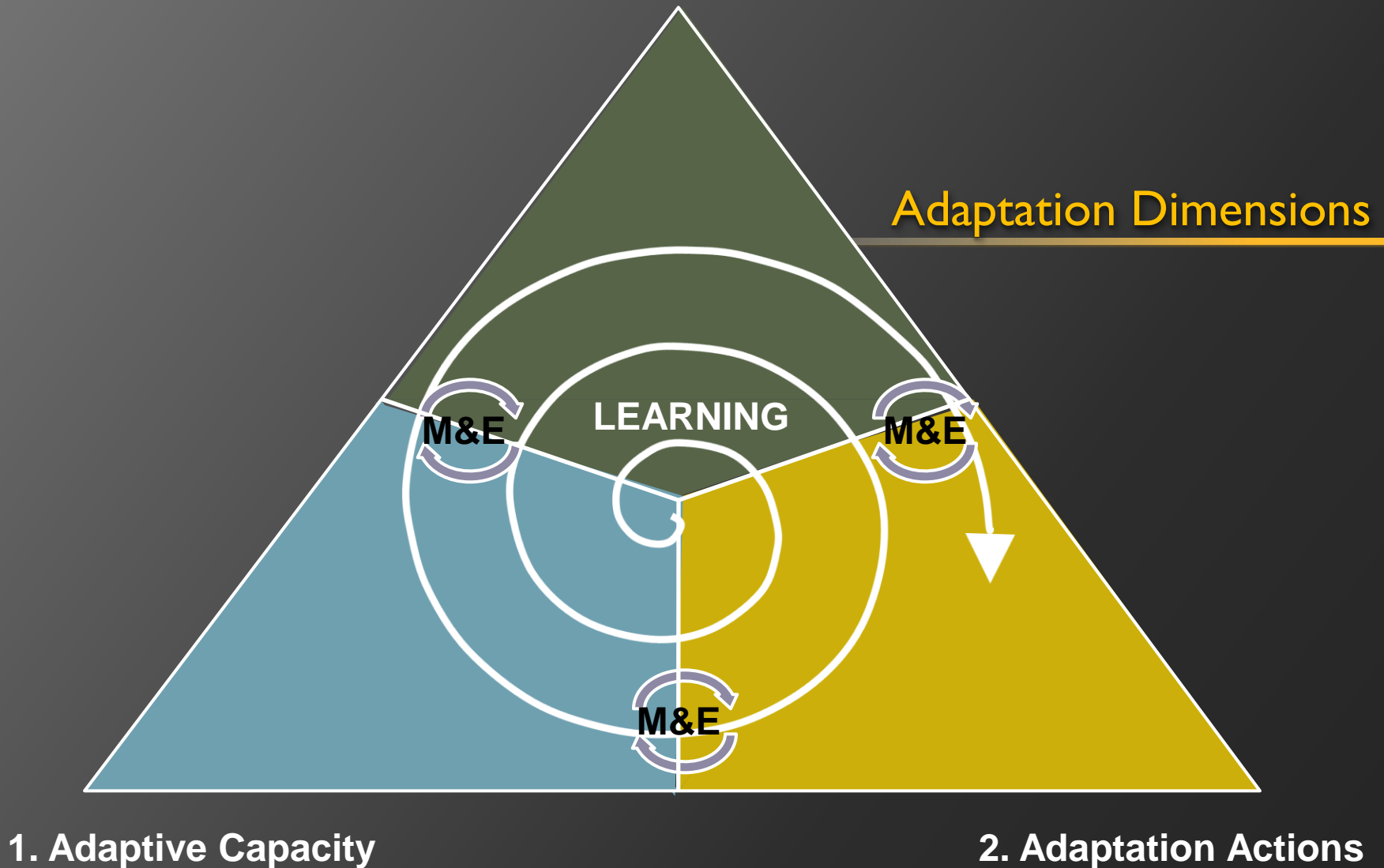
Step 3: Form an Adaptation Hypothesis*

GOAL:

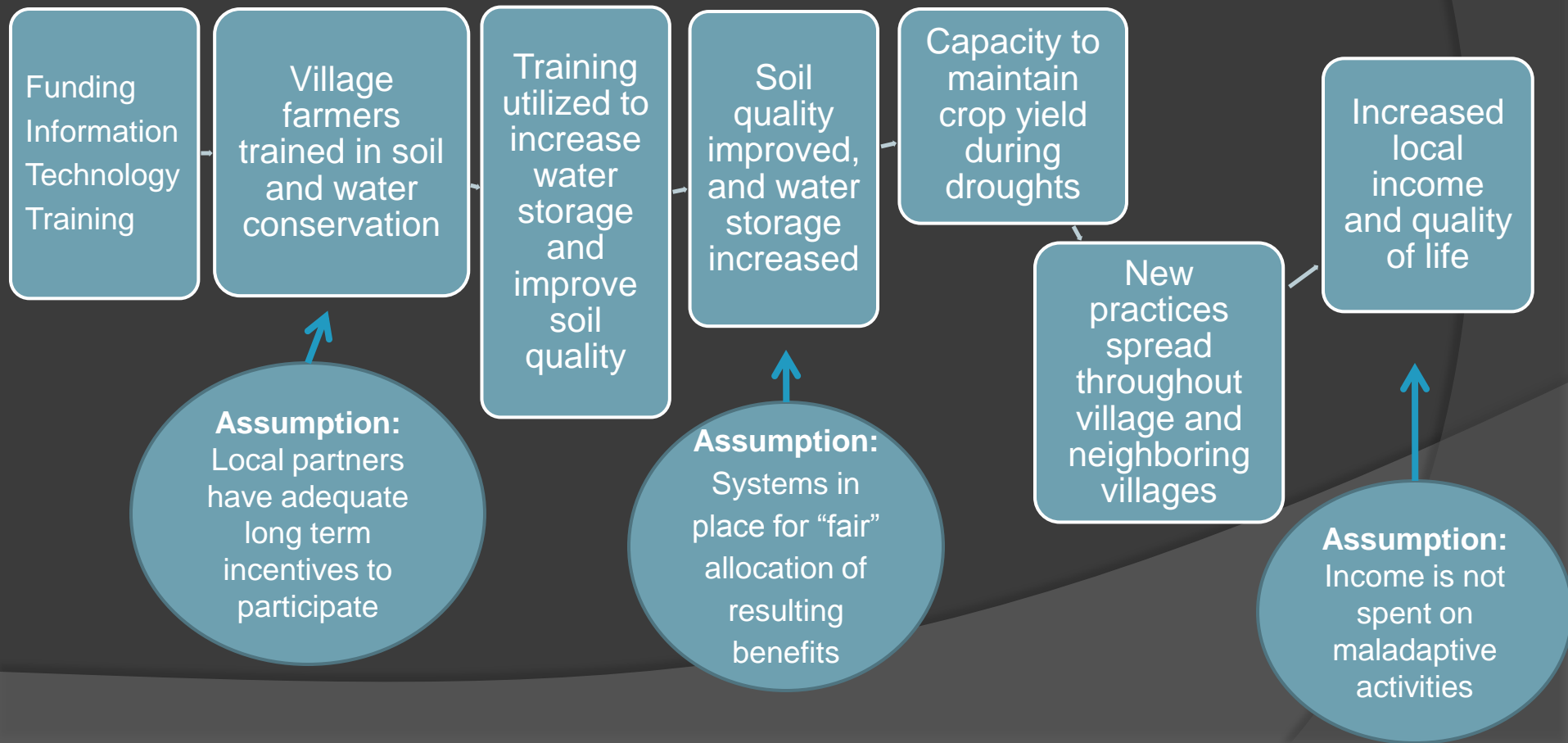Enhance the adaptive capacity of communities in semi-arid areas

Adaptation Hypothesis

Livestock rearing is an important livelihood strategy but is threatened by climate variability. Buffer stocks of fodder and new breeds of livestock can help families maintain and build valuable assets.

* Special thanks to A. Nambi, Ilona Porche, and Nana Kuenkel

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Step 4: Create an Adaptation Theory of Change

Inputs	Activities	Outputs		Primary Outcome	Secondary Outcome	Impact / Final Outcome

Funding Information Technology Training

Village farmers trained in soil and water conservation

Training utilized to increase water storage and improve soil quality

Soil quality improved, and water storage increased

Capacity to maintain crop yield during droughts

New practices spread throughout village and neighboring villages

Increased local income and quality of life

Assumption: Local partners have adequate long term incentives to participate

Assumption: Systems in place for "fair" allocation of resulting benefits

Assumption: Income is not spent on maladaptive activities

Step 5: Choose Indicators and Set Baseline

3. Sustained Development

Adaptation Dimensions with Indicators

- Livelihoods
- Ecosystem Services

- Assets
- Institutional Functions

- Climate Hazards
- Drivers of vulnerability
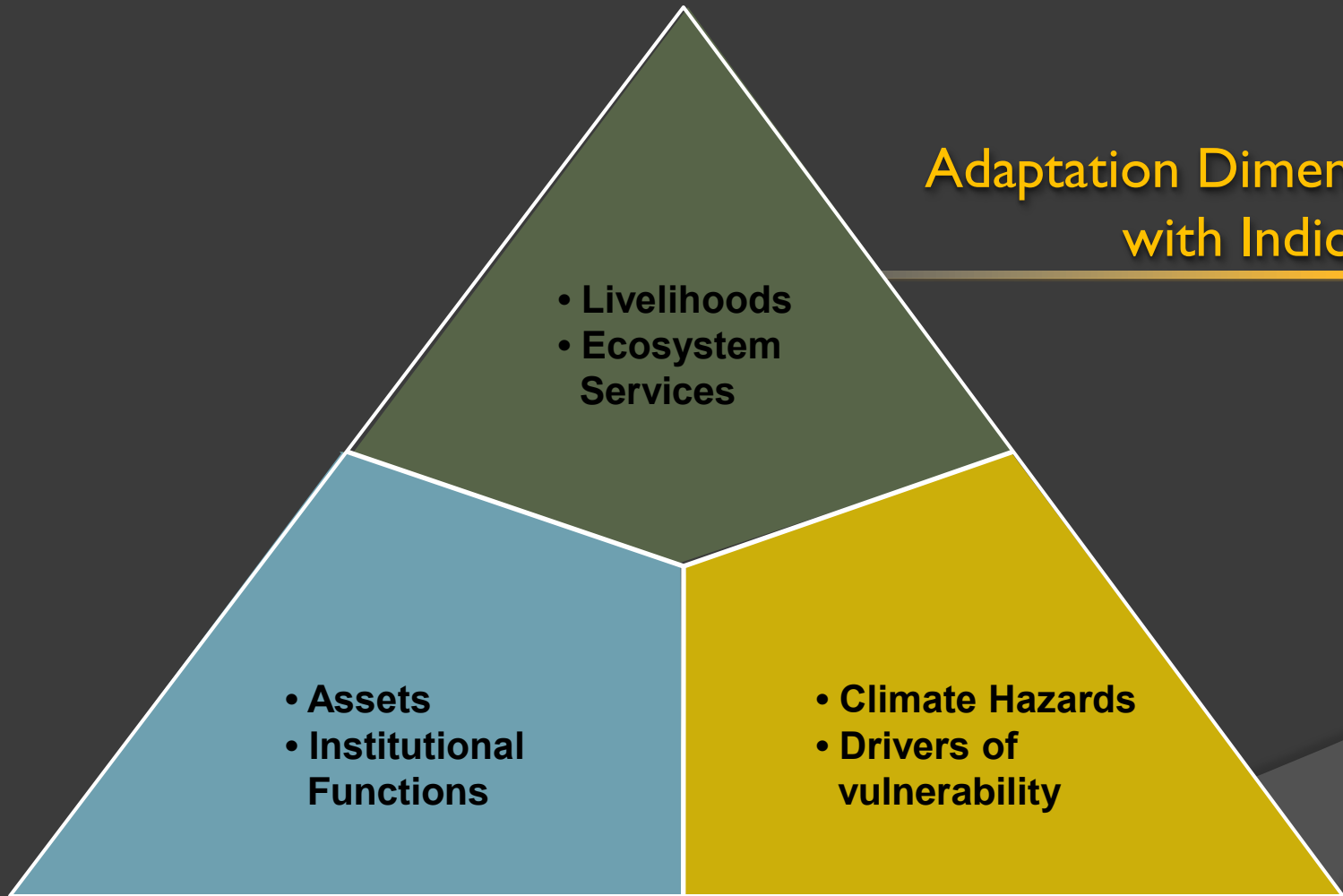
1. Adaptive Capacity

2. Adaptation Actions

Step 6: Use the Adaptation M&E System

GIZ Draft Monitoring Matrix

Possible structure of an adaptation monitoring matrix

		Enhancing Adaptive Capacity	Adaptation Activities	Safeguarding Achievement of Overarching Development Objectives		
				Economic	Social	Ecological
	Area of adaptation contributions/ results	Monitoring the development of problem-solving capacity needed to prepare for climate change (e.g. early warning capacity)	Monitoring the reduction of or preparation for key climate change risks (e.g. expansion of water storage capacity)	Monitoring changes at the level of overarching development objectives that are put at risk by climate change (e.g. income, health, ecosystem conservation etc.)		
	Adaptation hypothesis					
	Overarching objective of intervention					
Results chain / Indicators	Direct result					
	Use of output					
	Output					

Conclusions for Learning by Doing

- Think outside the project box;

- Explore options for overcoming barriers to participation;

- Link existing M&E systems;

- Promote experimentation; and

- Face tensions and trade-offs openly.

Thank you!

World Resources Institute
http://www.wri.org/

Gesellschaft für Internationale Zusammenarbeit
http://giz.de/

- Here onward are bonus material / detailed slides expanding on those above

Adaptive Capacity Indicators

- **Assets example**

Asset	Example indicator
Rangeland	Area with improved collective rangeland management practices

- **Institutional functions example**

Institutional Function	Example indicator
Evaluation	Methodologies and guidelines available to assist local planners to integrate climate risks

Adaptation Actions Indicators

- **Climate hazards example**

Hazard	Example indicator
Flooding	Flood protection for strategic and priority flood-prone areas

- **Driver of vulnerability example**

Vulnerability Driver	Example indicator
Crop Homogeneity	Climate change adaptation measures of rural communities in agricultural production piloted and tested.

Sustained Development Indicators

- **Ecosystem services example**

Ecosystem Service	Example indicator
Regulating, Provisional	Protection of eco-systems that buffer the community from climate change risks made more economically sustainable.

- **Livelihoods example**

Livelihood	Example indicator
Equity of social capital	Participation in the decision-making process, and access of marginal groups to same

Step 5: Choose Indicators and Set Baseline

Adaptation Dimensions	Example outcome indicator	Example process indicator
Enhancing Adaptive Capacity	Percent of new urban development complying with new climate-compatible urban planning policy	Communicationmechanism on climate change between ministry of urban development and relevant professional associations
Taking Adaptation Actions	Annual value of crop loss due to flooding (over 10 year average)	Coverage of nonstructural flood management systems (at risk households and property included)
Sustaining development in a changing climate	Change in total income of (targeted) women from non-climate sensitive sectors	Number of (targeted) women with access to credit to start businesses in non-climate sensitive sectors

Step 5: Choose Indicators and Set Baseline

- Setting baselines
  - Review and synthesize existing information
  - Describe existing adaptation policies and measures
  - Develop baseline indicators which take into account underlying historical trend
  - Identify which adaptive dimension the baseline indicators address

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Step 6: Use the Adaptation M&E System

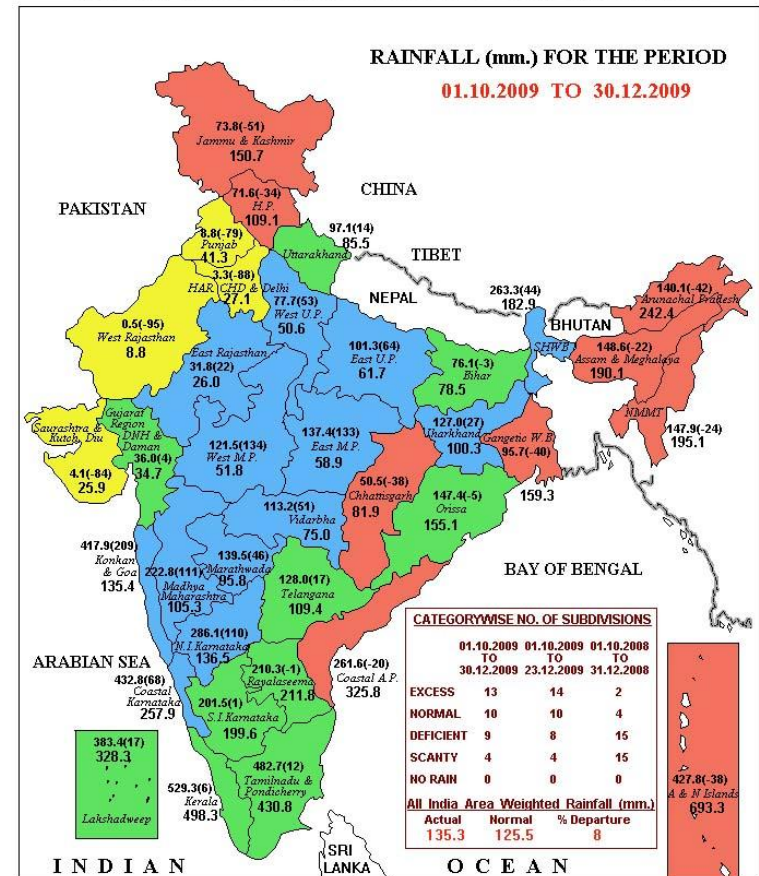| Indicators	Baseline value	Data collection method	Responsibilities	Resources	Assumptions
•From results framework/ theory of change •Should also account for key areas to monitor (e.g. related to risks)	•From vulnerability / risk assessment	•Survey? Meeting? Workshop?	•Who does what to monitor? Who verifies reported data & from where?	•Estimation of resources required and committed	•What risks or assumptions are there about the M&E plan? How might they affect the M&E collection and quality of data?

Inter-cooperation Monitoring Diagram
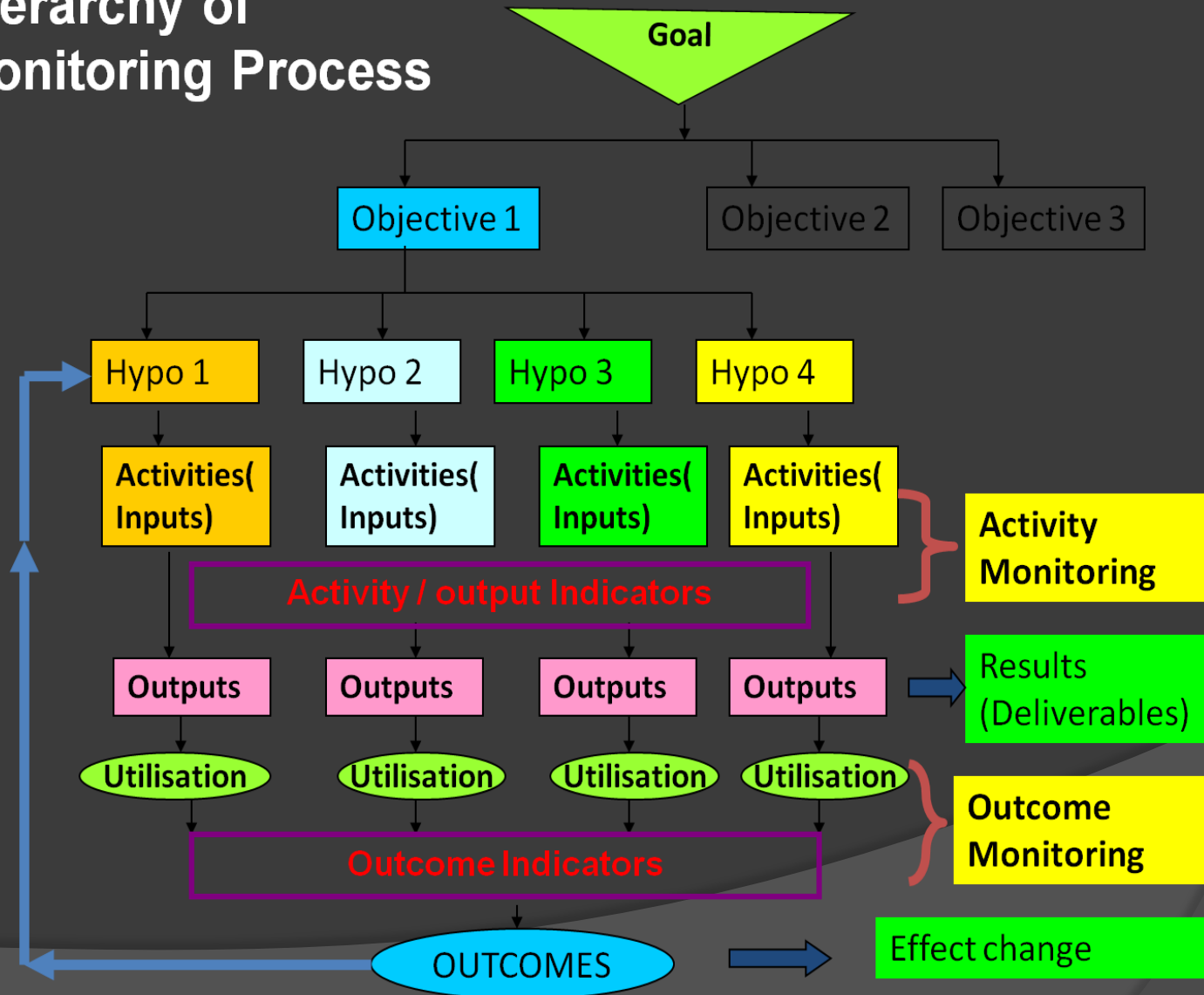
India Case Study

- Conducted over 2.5 weeks
- Interactions with the following organizations: MoEF, IIT Delhi, PACT Asia, NABARD, SDC, IISc, WOTR, WFP, ANTRIX/ISRO, TERI (tbd), MoUD, BASIX/CTRAN
- 3 WOTR (1 also SDC) watershed management projects visited
- 3 GIZ (rural livelihoods, watershed self-help, adaptation in rural areas "RAI"); 2 KfW (desertification, VA in NE India) projects considered (documentation)