



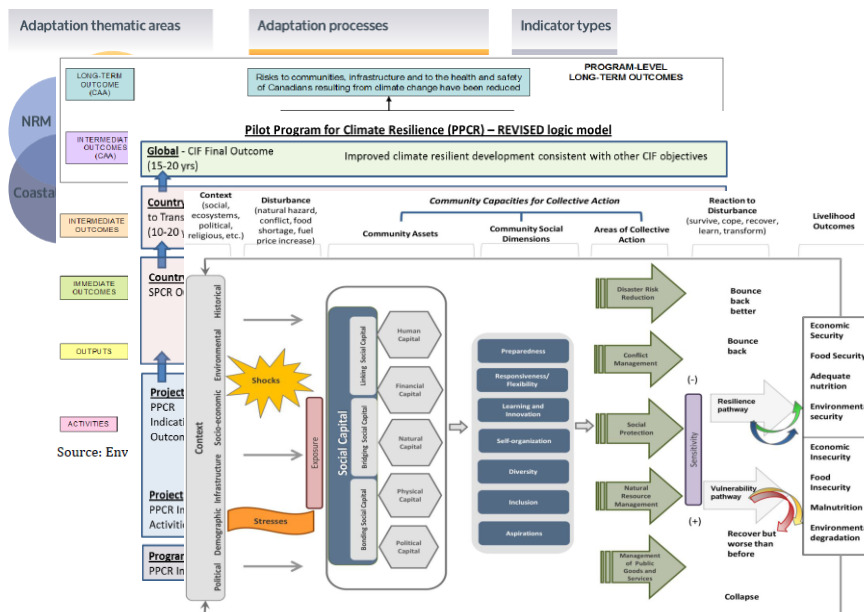
## Context

- Global investments in adapting to climate change and disaster risks are increasing
- Demand for understanding progress
- Understand the interventions that work (or not) and the lessons that can be shared

LEVEL / topic (shorthand)	Institution/Effort						
TRANSFORMATION / PARADIGM SHIFT	AF	DFID	GCF	GFDRR	LDCF/SCCF	PPCR	TAMID
Transformational impact		✓					
Climate-resilient sustainable development			✓			✓	
IMPACT	AF	DFID	GCF	GFDRR	LDCF/SCCF	PPCR	TAMID
Human resilience		✓	✓	✓			✓
Livelihoods (Jobs and Income)	✓	✓	✓		✓	✓	
Physical/Assets/Economic Losses and Damages	✓		✓	✓	✓	✓	
Water access			✓			✓	
Health measures			✓				
Food Security			✓				
Social, environmental, economic co-benefits			✓				
OUTCOME	AF	DFID	GCF	GFDRR	LDCF/SCCF	PPCR	TAMID
Beneficiaries	✓	✓	✓		✓	✓	
Policies, Regulations, & Planning		✓	✓	✓	✓	✓	✓
Institutional Coordination & Systems					✓	✓	✓
Finance & Investments leveraged		✓		✓		✓	
Risk Identification & Risk Reduction Mechanisms				✓	✓		
Institutional Capacity and Knowledge		✓		✓	✓		✓
Technologies & Innovative Solutions			✓		✓		
Preparedness / Early Warning Systems	✓		✓	✓	✓		
Risk Financing & Insurance				✓			
Monitoring and Reporting Systems					✓		
Awareness & Decision-Making			✓	✓	✓	✓	✓
Development & Use of Tools and Products			✓			✓	
Ecosystems & Habitats	✓	✓	✓				
Financial Support				✓		✓	✓
OUTPUT	AF	DFID	GCF	GFDRR	LDCF/SCCF	PPCR	TAMID
Training					✓		✓
Supported Entities				✓			
Stakeholder Participation							✓

## Challenges for Resilience M&E

- Wicked problems – creative, adaptive solutions needed
  - ✓ Context-dependent; transferability of one solution may be limited
  - ✓ Linear cause-and-effect relationships may not exist
  - ✓ Incomplete information requires evolving solutions
- Methodological challenges for M&E
  - ✓ Resilience is latent, unobservable
  - ✓ Affected by multiple stressors and solutions
  - ✓ Long time-frames
  - ✓ Large scale and cross-sectoral interventions needed
- Young field, but evolving quickly
  - ✓ Early applications have often been overly ambitious
  - ✓ Replication is difficult
  - ✓ Learn from challenges and innovation of others and build a body of evidence



## World Bank Approach

World Bank effort on *Results monitoring and impact evaluation for climate and disaster resilience-building operations ("ReM&E")*

- Part of a programmatic effort to enhance climate and disaster resilience of sustainable development operations
- Objectives:
  1. Improve results monitoring and reporting of resilience-building operations through theories-of-change, indicators, and measurement methodologies
  2. Increase application of evaluation studies in resilience-building operations through technical toolkits, guidance notes, and targeted technical support
  3. Enhance harmonization of existing M&E frameworks of climate- and disaster-related funds and initiatives and alignment of WB work streams

# World Bank Approach

## ReM&E Activities Overview

1. Completed in 2015:
  - i. Scoping study
  - ii. International technical workshop
2. Started/ongoing in 2016:
  - i. Review of existing results frameworks and indicators in World Bank operations with resilience objectives
  - ii. Sector-specific guidance on resilience results monitoring
  - iii. Study to identify evaluation options
  - iv. Technical support to operational project teams
3. Planned for 2017
  - i. Technical workshop
  - ii. Best practice examples and lessons learned from WB operations and international experiences
  - iii. Toolkits to apply results monitoring and impact evaluation

## Resilience-Building Concepts

- **Preparedness** to manage and cope with change/shocks
- **Adaptive capacity** of a system to change
- **Robustness/protection** to withstand change/shocks
- **Diversity/redundancy** of a system
- **Integration/connectedness** of a system
- **Flexibility** of a system to respond to uncertainty
- **Learning and understanding** of change/shocks
- **Recovery** from change/shocks
- **Transformation** of a current system to a better system

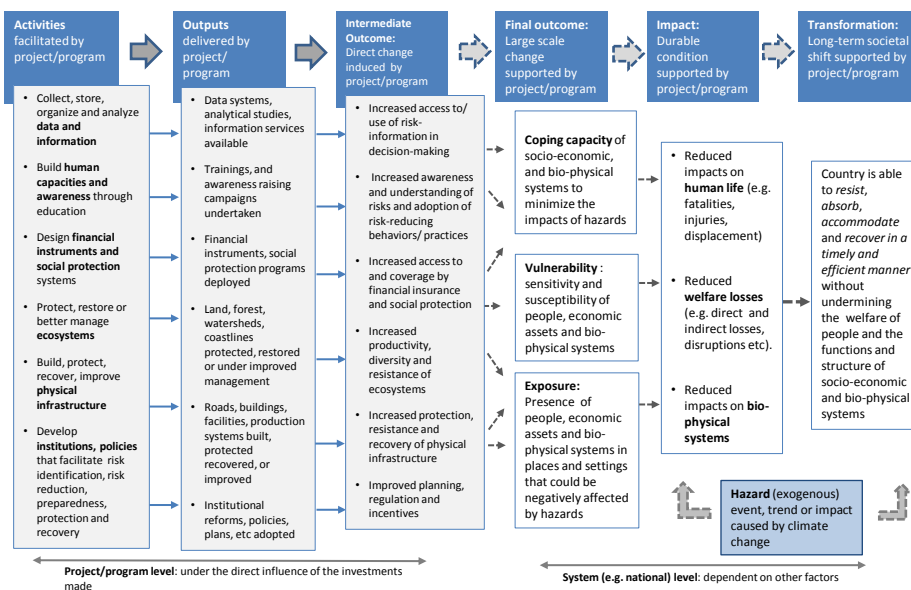
But how to operationalize?

## Sector-Focused Process

- Working groups to systematize (where possible) the variety of approaches to resilience M&E within (and across) sectors
  - Already a variety of applications of M&E in resilience-building projects across the World Bank operational sectors – identify what works, what doesn't
  - Tailor resilience M&E approaches to the demands of the sectors – identify what we really need
- Sector-specific guidance to integrate resilience considerations into project-level M&E designs, including through:
  - Simple, illustrative, theory-of-change based results chains
  - Indicator menus
  - Indicator definitions and measurement methodologies
- Showcase best practice examples and lessons learned from existing resilience-focused M&E applications

## Sector-Focused Process

1. Agriculture and rural livelihoods
2. Energy and mining
3. Environment and natural resources
4. Social (and community) development
5. Transportation
6. Urban development and housing
7. Water supply and sanitation
8. Water, flood and drought management
9. Cross-cutting themes (e.g. information systems) and other sectors with SD relevance (e.g. social protection)



Indicators	Sector
- Number of agricultural households that received support to deal with disaster/climate shocks	Agriculture & Rural Development
- Agricultural area under climate/disaster resilient production practices	Agriculture & Rural Development
- Number of power supplies restored to pre-climate/disaster emergency levels	Energy & Mining
- Area of beach front restored/improved/protected	Environment & Natural resources
- Number of tree species in replanted/rehabilitated forests	Environment & Natural resources
- % communities which demonstrate capacity to implement community-based CCA/DRM plans	Social Development
- Number of days of interrupted traffic due to disaster/climate related events	Transportation
- Kilometers of roads constructed/rehabilitated under resiliency standards	Transportation
- Number of officials/stakeholders/experts trained in the use of urban CCA/DRM planning tools	Urban Development
- Number of people/households/communities benefitting from improved flood protection	Water, Flood and Drought Management
- Area of protected/restored wetlands in climate/disaster risk areas	Water, Flood and Drought Management
- Number of climate/disaster resilient drinking water sources rehabilitated/developed	Water Supply and Sanitation
- Number of households with uninterrupted water service in during climate/disaster events	Water Supply and Sanitation
- Number of people/households/communities benefitting from CCA/DRM project activities	Cross-cutting
- Average income from climate/disaster insensitive activities	Cross-cutting
- Number of people/households with access to climate/disaster information and data	Cross-cutting

## Next Steps

- Carry out the sector resilience results frameworks and indicators work
- Finalize study on evaluation options for assessing resilience impacts
- Support to operational project teams
- Ensure linkages with overlapping areas
- Take temperature and link with external processes and institutions

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