Going beyond what works in climate: Science and data for decision-making and being future-fit.

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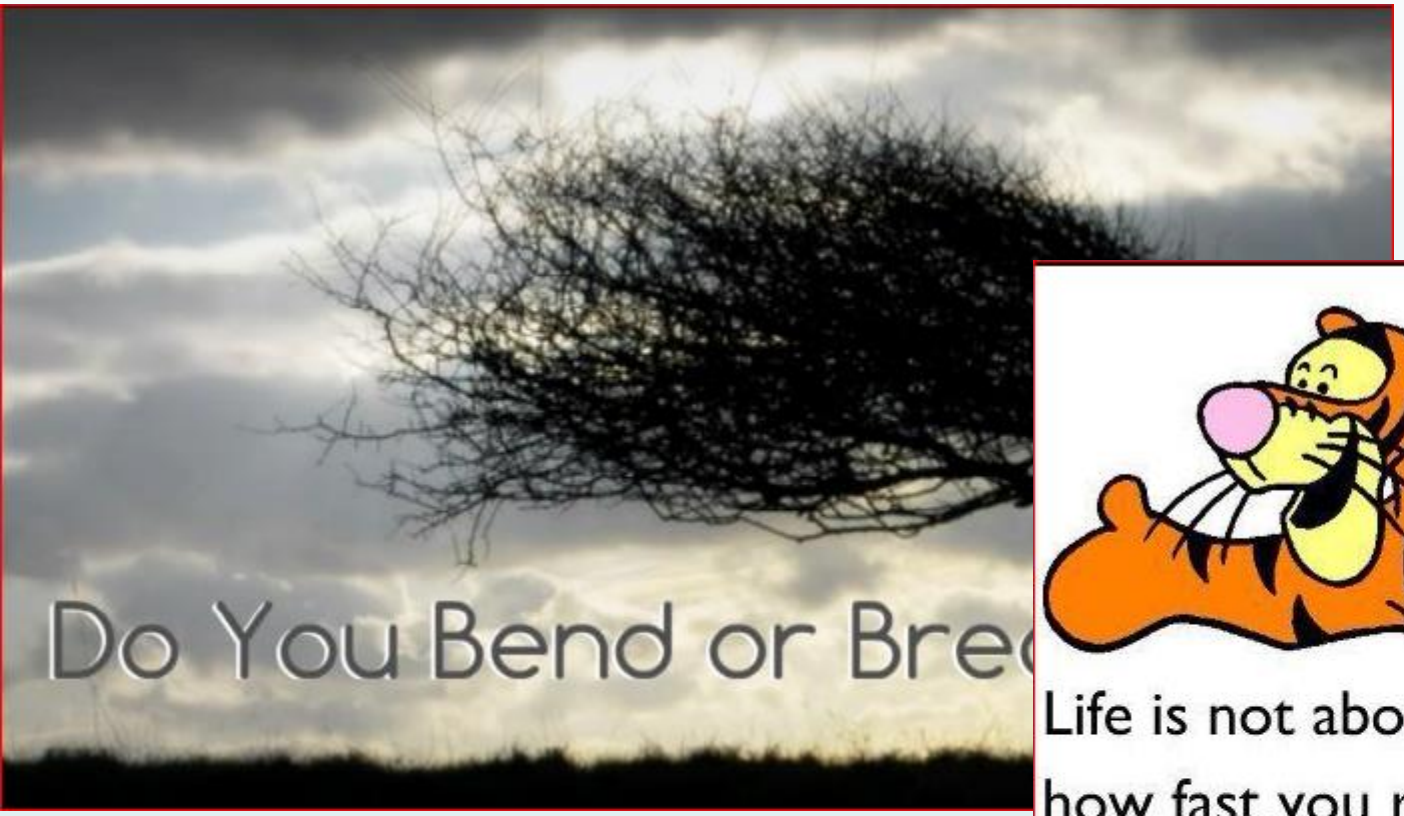
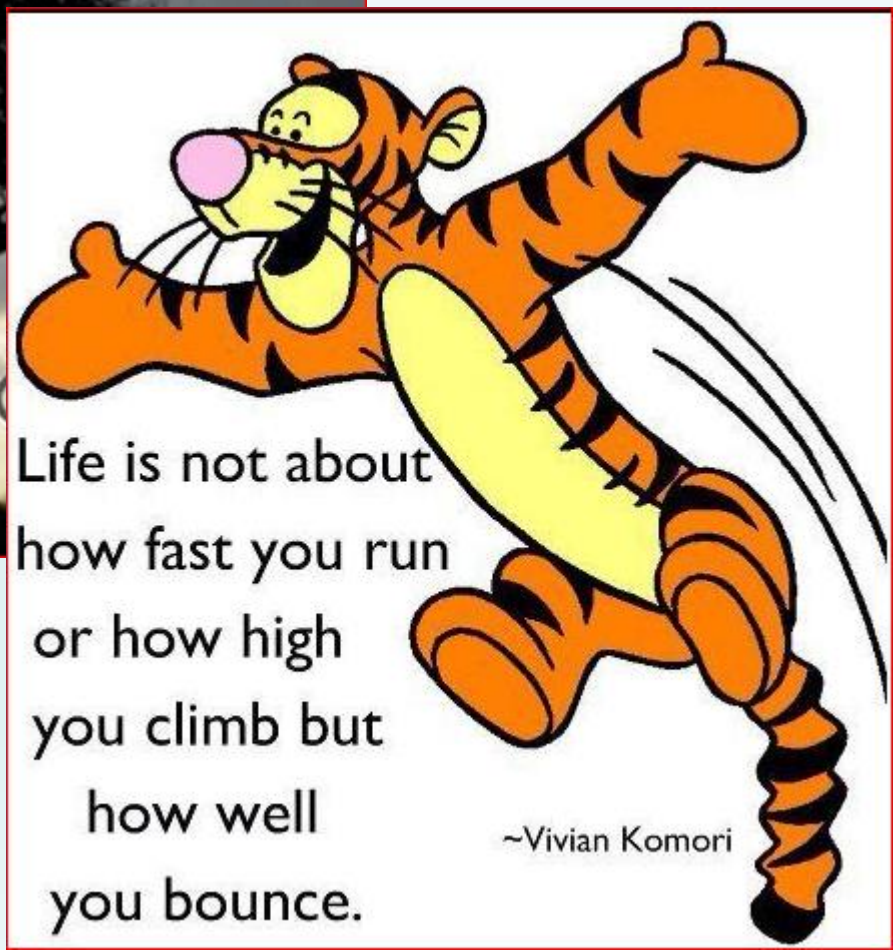
IFAD
Investing in rural people

What is resilience?

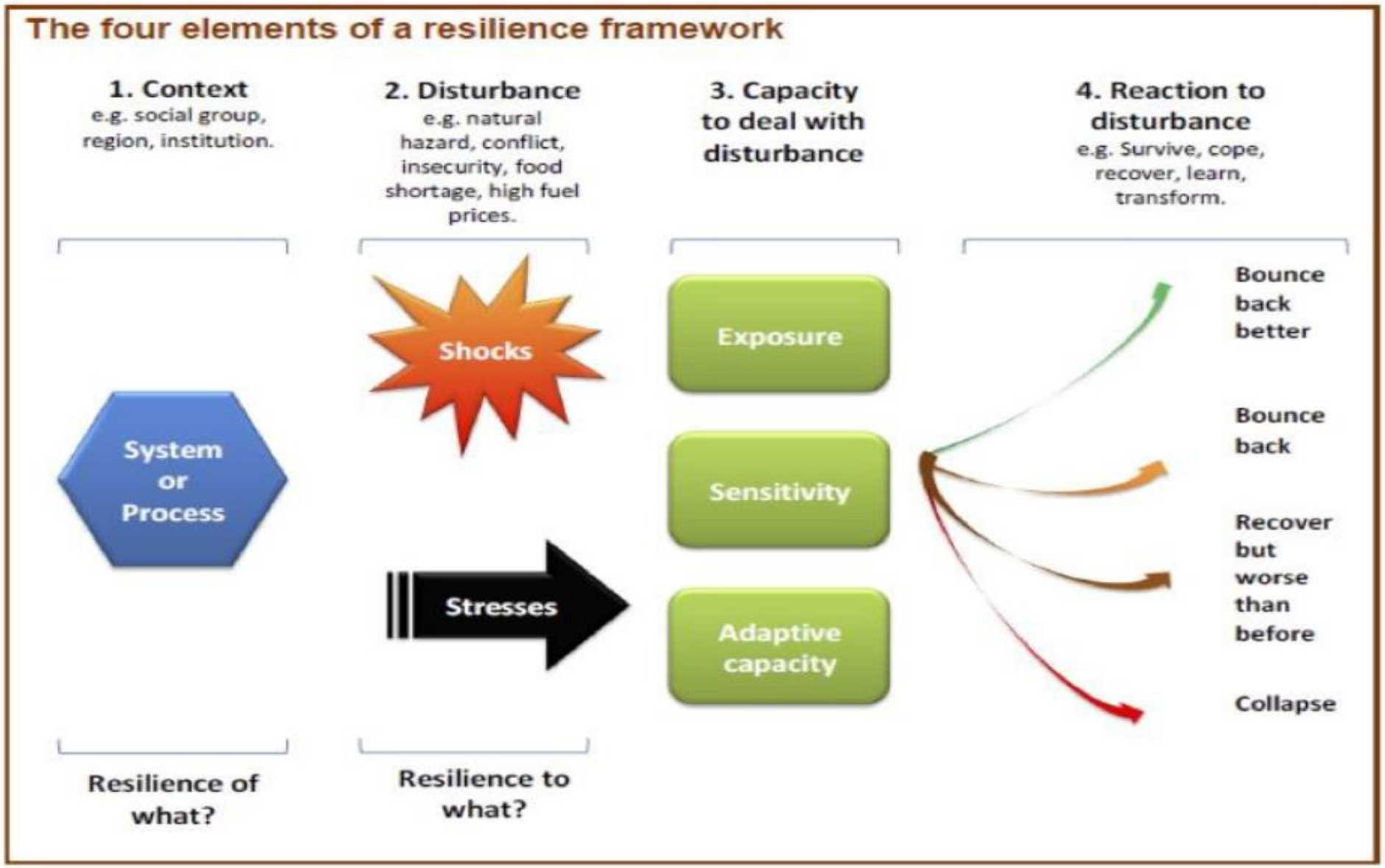




Resilience is the ability of a system or person to cope with (absorb) changes and shocks, recover, learn and adapt/transform

"We … that it's a … that we should pla… that in the 80 years that he has been a farmer, he has never seen better plants, despite the very bad soil and the climatic conditions this year."

Resilience framework

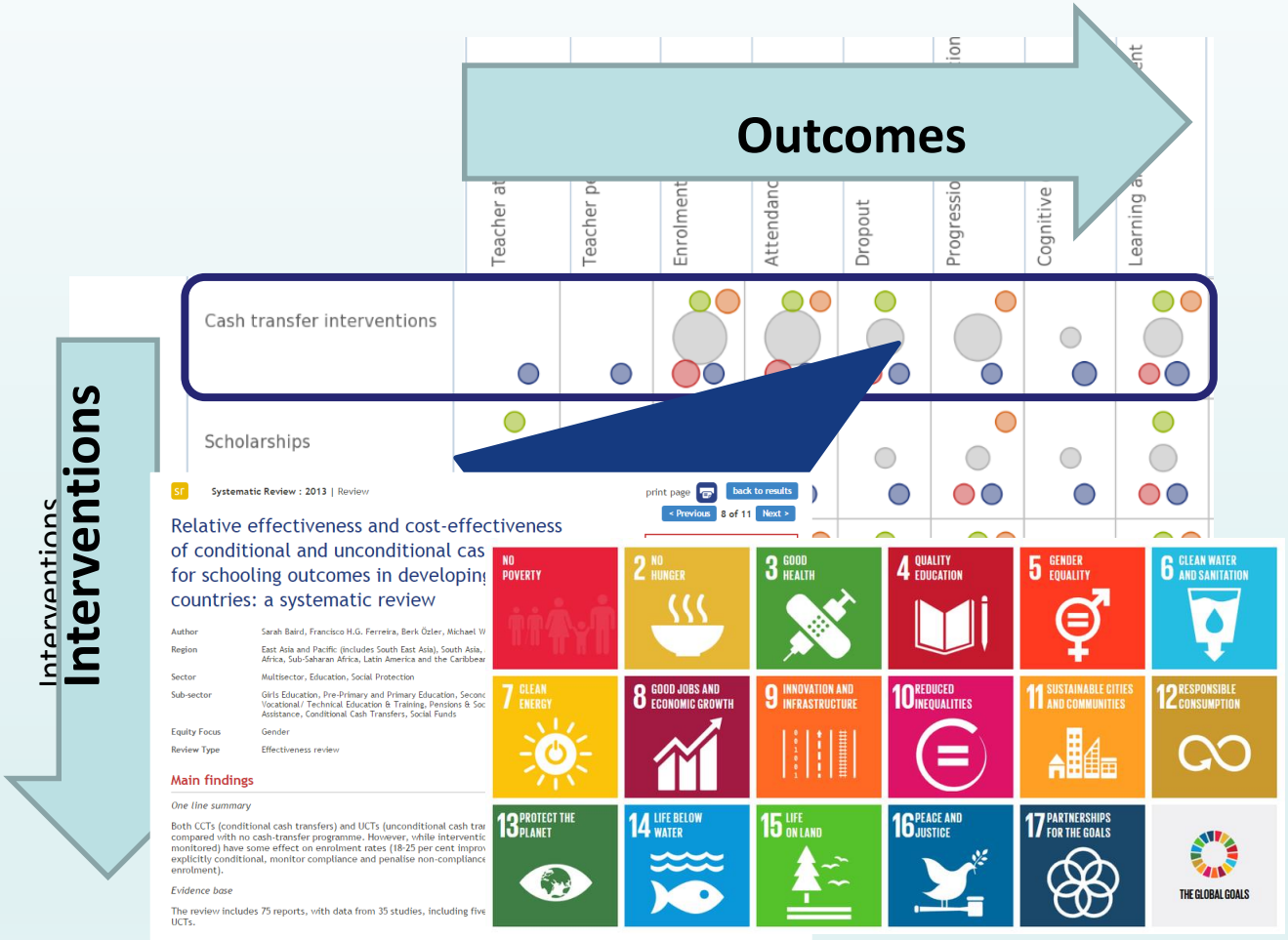


What do we know? And how can we do better with science?

1. Know what you know (and what you don’t)
2. Set up measurement systems and test.
3. Scale (and test again).

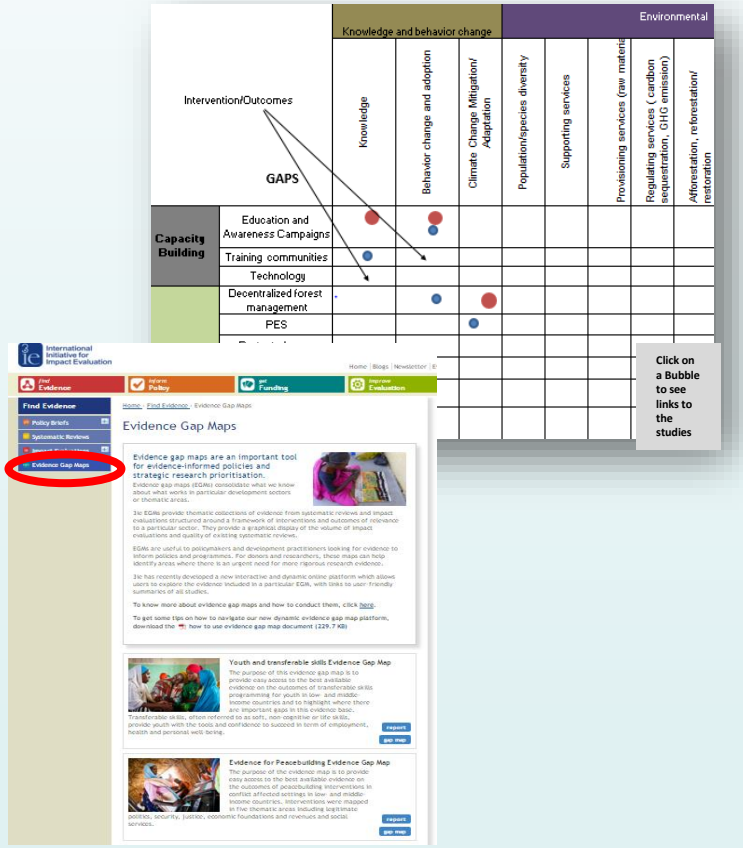
1.Know what you know (and what you don’t.)

EGMs: Supporting evidence-informed policy making



Evidence gap maps – Knowing what we know

- Develop Scope
- Set Inclusion Criteria
- Search for Relevant Studies
- Assess for Inclusion
- Data Extraction and Critical Appraisal
- Presentation and Analysis



Question of the Evidence Gap Map

What is the state of the evidence base regarding the ability of adaptation interventions to help people in low to middle income countries adapt to the impacts of climate change?

POPULATION	INTERVENTION	COMPARATOR	OUTCOME
Human individuals, groups, communities, institutions, systems and economic sectors (water, transport, infrastructure, agriculture, forestry, etc…) in low to middle income countries.	Those that aim to adjust, reduce, stop or make use of the benefits of an impact from a direct change in climate or a climatic hazard.	No adaptation intervention, different levels of intervention or comparison of different interventions.	Human adaptation to climate change, variability, extremes or other natural hazards that could be linked to climate.

Study type and Filters

Study type

- *Studies supported on quantitative or mixed-methods evidence* : systematic review, Correlation analyses and impact evaluations.

Filters

- Countries: *low to middle income based on OECD*
- Languages: *english, french, spanish and german*
- Publication years: *2007-2018*
- Publication type*: only peer-review articles & grey literature*

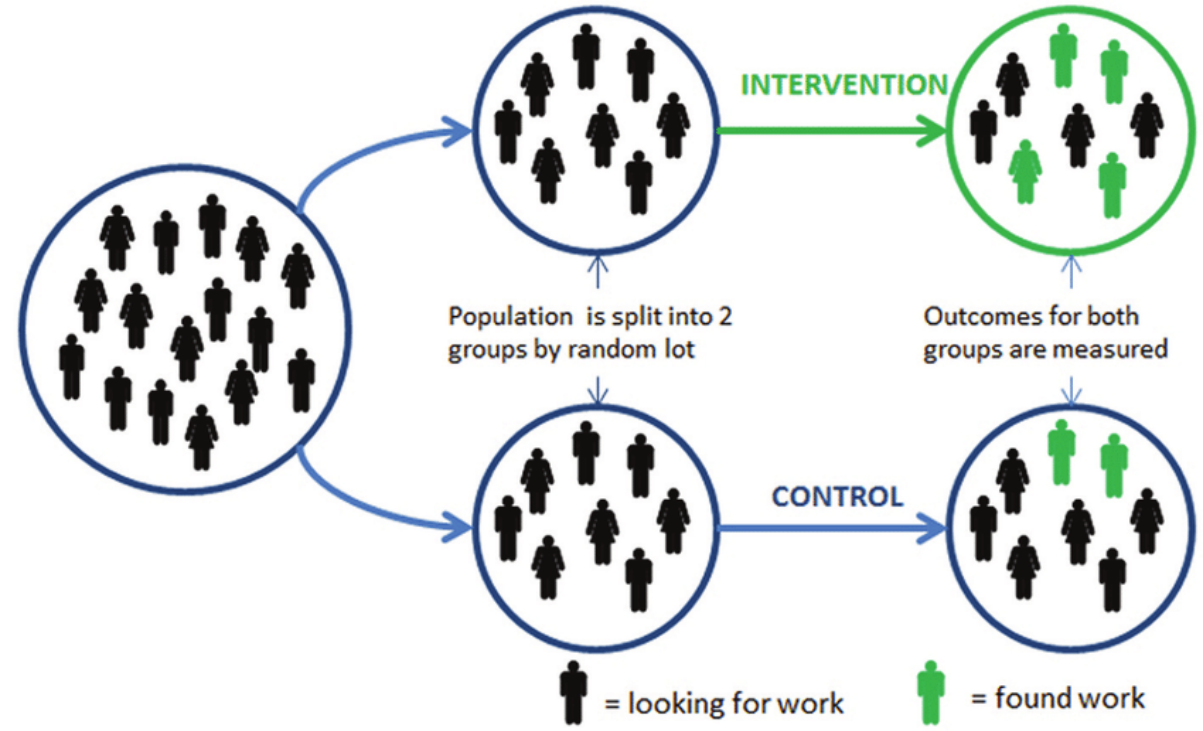
Gapmap

Climate change adaptation		Uptake	Shocks and stressors		Adaptive capacity		Enabling environment		
SECTORS	**INTERVENTION/OUTCOMES**	Adoption	Decreased Exposure	Decreased Impacts/Risks	Social benefits	Economic benefits		Socioeconomic systems	Institutional systems
	Example specific outcomes indicators		Population affected by extreme weather events	Proactive and reactive risk management; climate related illness; deaths; food security	Skills acquired, access, awareness	Livelihood diversification, productivitiy gains, access	Environmental systems	Social capital enhanced, overall poverty measurements	Policy changes, regulations approved, institutional reform
Water	Nature-Based Options				1	3	3		
	Built Infrastructure / Structural	1	1	11	2	9	3	2	
	Technological Options			1		1	1		
	Informational/ Educational	2		3		1	1		
	Institutional/ Planning/ Policy/ Laws/ Regulations	1		3	1	2			
	Financial/ Market Mechanisms	1		1			2		
	Social/Behavioural	1		1	1	1	1		
Land-use and Built Environment	Nature-Based Options	1	14	4	1	3	2	1	
	Built Infrastructure / Structural	3	4	4		5	3	1	
	Technological Options			1			3		
	Informational/ Educational	3		4	1		3		
	Institutional/ Planning/ Policy/ Laws/ Regulations	2	3	2	1	4	4	2	2
	Financial/ Market Mechanisms	2		2	1		2		
	Social/Behavioural	1	1	5	3	2	2	1	
Forestry, Fishing and Agriculture	Nature-Based Options	3	2	29	2	105	34	8	
	Built Infrastructure / Structural	]		5	1	9	1		
	Technological Options	7	2	19	2	101	16	6	
	Informational/ Educational	77	1	8	9	19	5	5	
	Institutional/ Planning/ Policy/ Laws/ Regulations	14		3	1	5		3	
	Financial/ Market Mechanisms	44	2	6	4	15	4	6	
	Social/Behavioural	36		5	3	19	4	3	
Society, Economy and Health	Nature-Based Options	1		3	1				
	Built Infrastructure / Structural	1		9		3			
	Technological Options			8				1	
	Informational/ Educational	9	3	11	8	2		1	
	Institutional/ Planning/ Policy/ Laws/ Regulations	2	1	14		4		2	2
	Financial/ Market Mechanisms	5	1	26	1	14	1	5	1
	Social/Behavioural	13	2	25	5	17	1	6	3

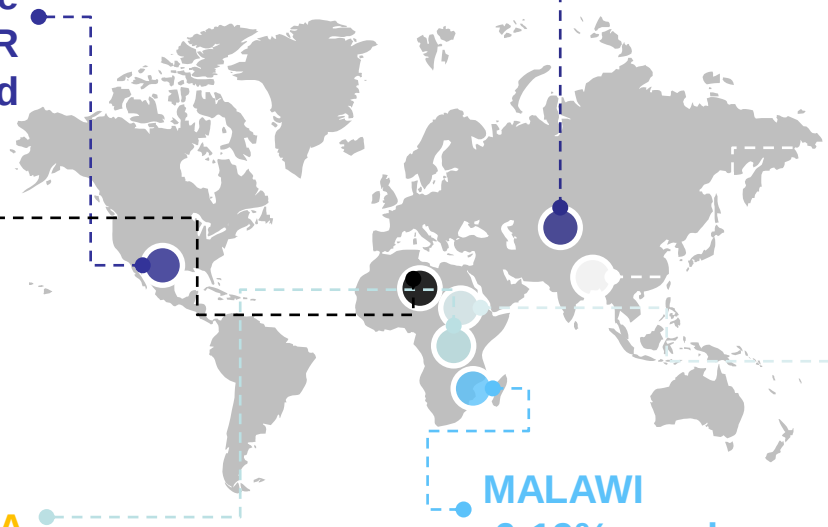
2. For what you don’t know, set up measurement systems. Then test.

Assessing resilience interventions

- Being a ‘’plumber’’: How should resilience interventions be delivered?
  - Implementation and
  - Behavioral science.



Zooming into impact assessments



MEXICO
↑ 17% resilience
↑ 37% use of NR from common land

CHAD
↑ 17% livestock assets
No change in resilience

RWANDA
↑26% drought resilient
93% hhlds recover from climate shocks

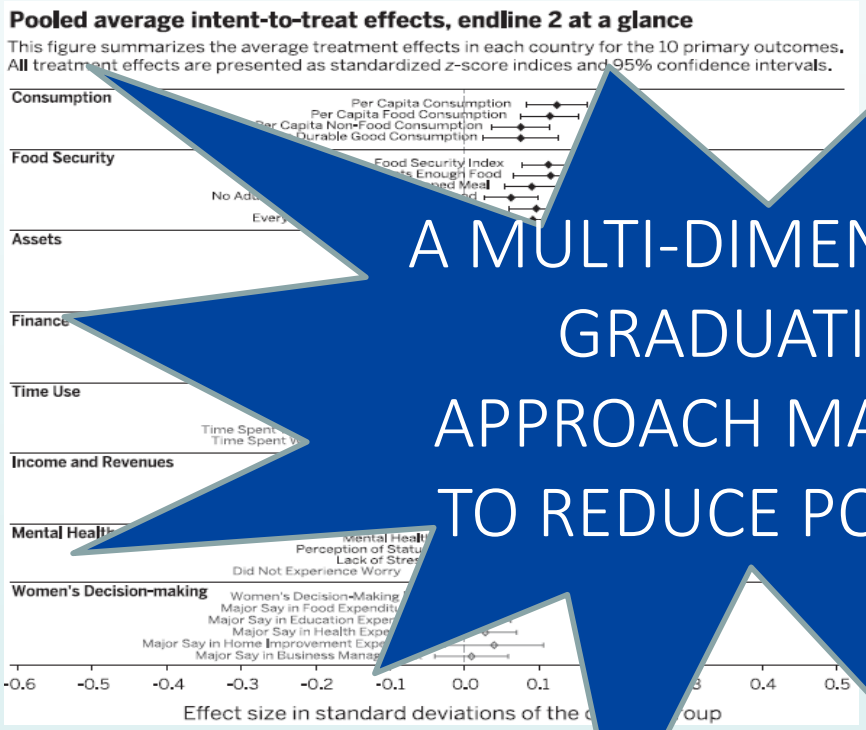
TAJIKSITAN
↑ 13% income in drought-affected hhlds

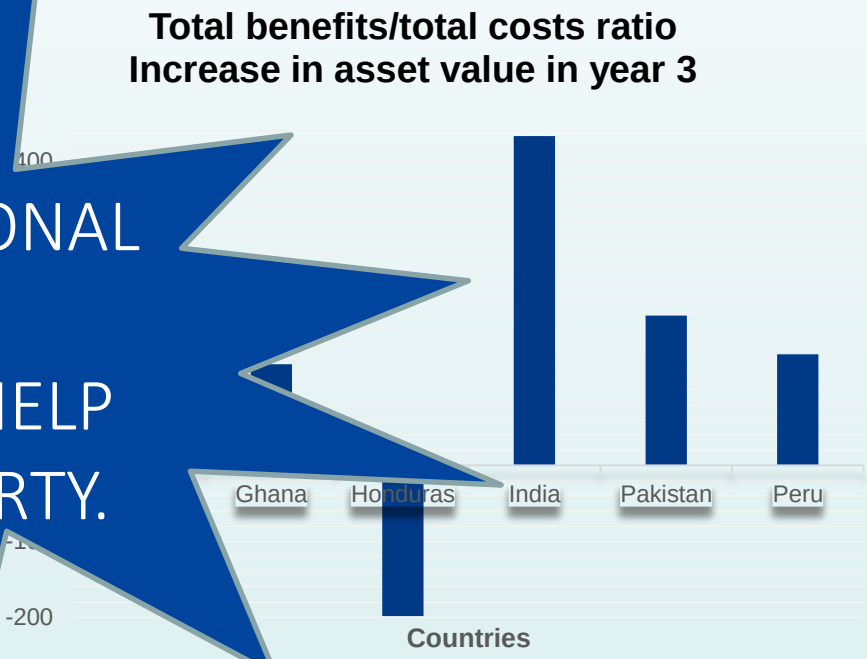
ETHIOPIA
↑ resilience and
↓ negative coping strategies

MALAWI
6-19% good ag practices

3. Scale (and test again).

Graduating from ultra-poverty.





A MULTI-DIMENSIONAL GRADUATION APPROACH MAY HELP TO REDUCE POVERTY.

Conclusions

1. Know what you know (and what you don’t)
2. Set up measurement systems and test.
3. Scale (and test again).

Importantly,

- We know less than we think about what works.
- We know even lesser about HOW and LAST MILES.
- This is where science should go.

Thank you