Reflections on monitoring and evaluating climate adaptation

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CIFOR-ICRAF

Learning session on climate change adaptation metrics for smallholder agriculture
The Nature Conservancy | Bill & Melinda Gates Foundation
June 8, 2021

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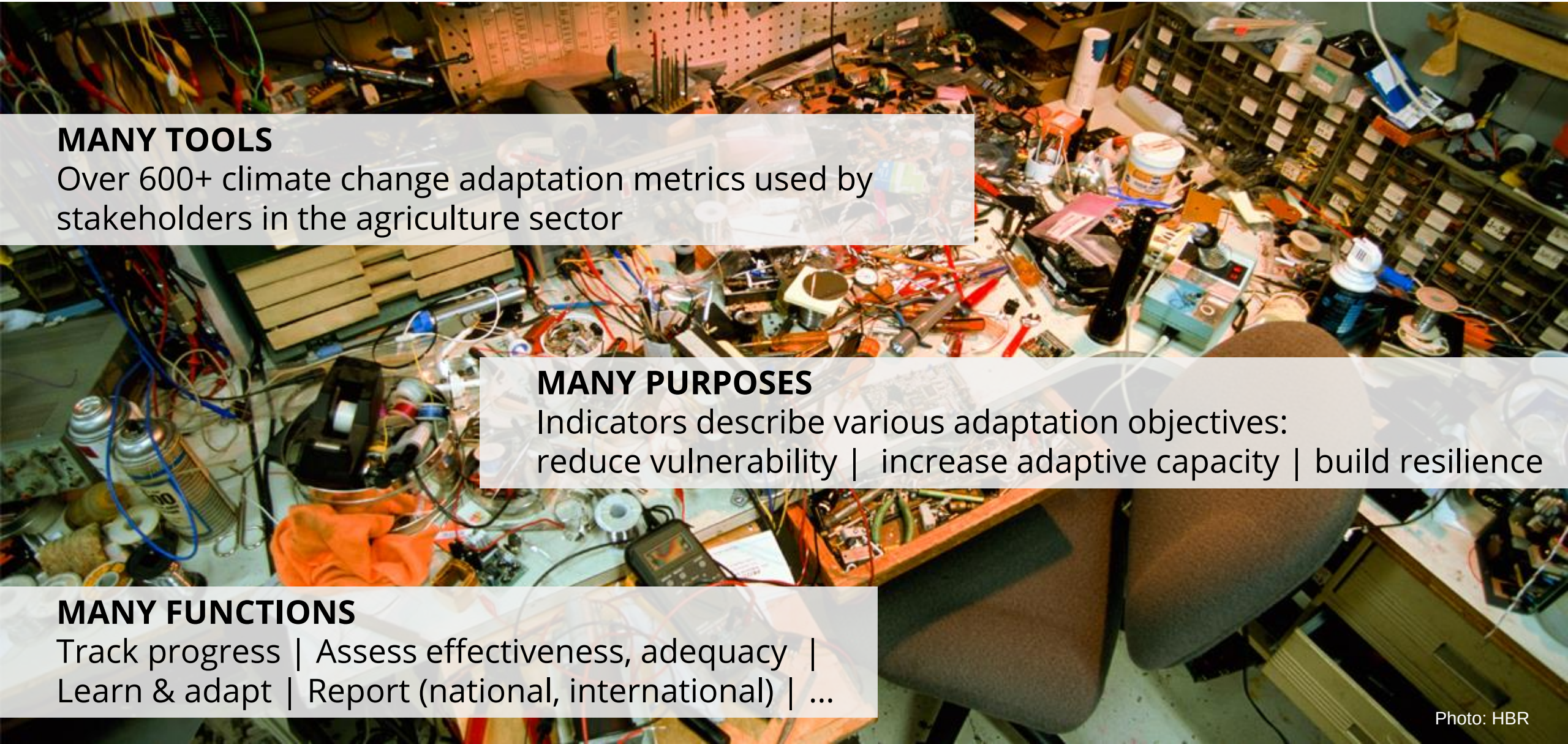
Climate adaptation (metrics) is a very cluttered space



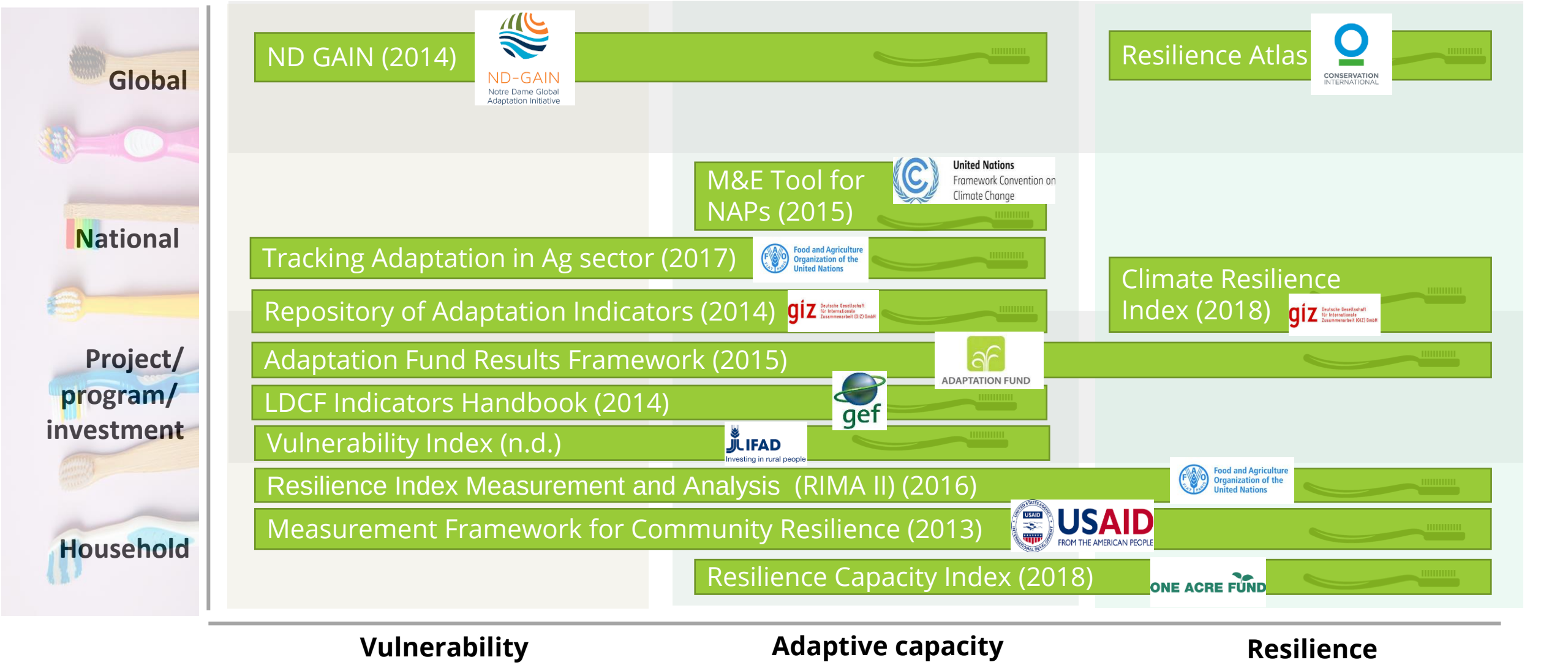
MANY TOOLS
Over 600+ climate change adaptation metrics used by stakeholders in the agriculture sector

MANY PURPOSES
Indicators describe various adaptation objectives:
reduce vulnerability | increase adaptive capacity | build resilience

MANY FUNCTIONS
Track progress | Assess effectiveness, adequacy |
Learn & adapt | Report (national, international) | ...

Photo: HBR

1 A review of 20+ adaptation frameworks reveals diverse approaches and asymmetries to adaptation metrics



Exploratory review of 20+ existing adaptation frameworks for select planning and programming processes. Based on Nowak and Rosenstock (2020). https://hdl.handle.net/10568/109718

2 Assessment of 37 M&E systems and capacities in 5 SSA countries highlights opportunities for aligning adaptation data

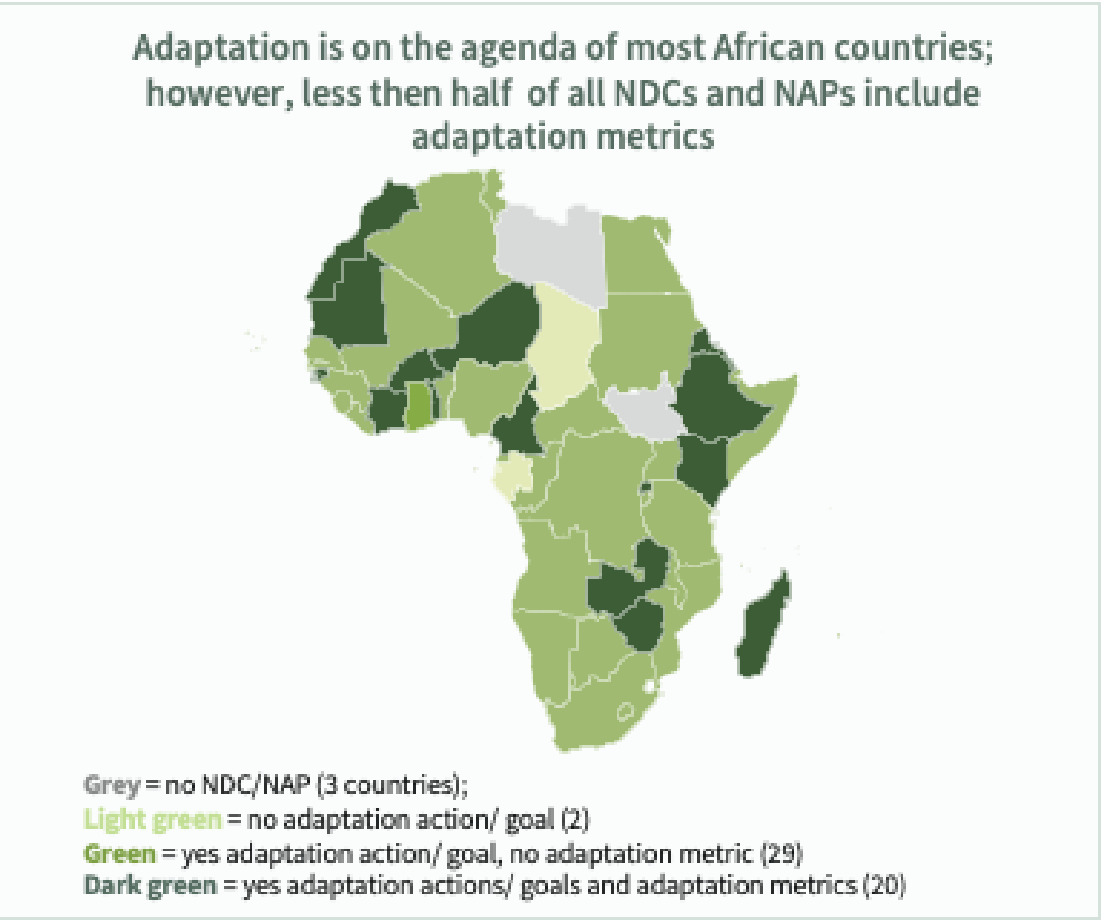
Extent of adaptation information needs covered by existing M&E systems. Insights from Tanzania

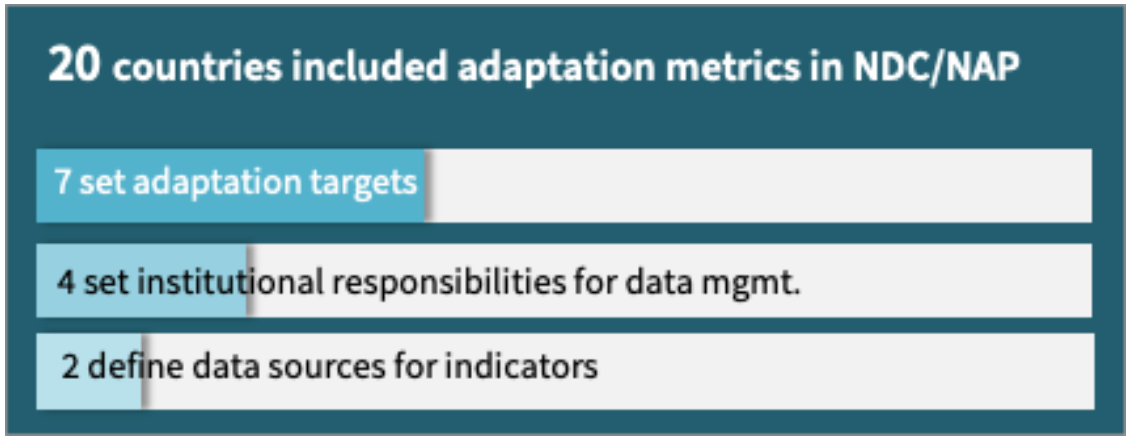
	International reporting			National M&E systems			Project M&E systems		
Information need (indicator)	CAADP RF	AU Scorecard	UN SDGs	ADSP II	ASDS II	CSA Guide	USAID FtF	IFAD RIMS	FAO RIMA II
Households resilient to climate and weather shocks, %									
Prevalence of undernourishment									
Agriculture land under sustainable land management, %									
Farmers having access to agricultural advisory services, %									

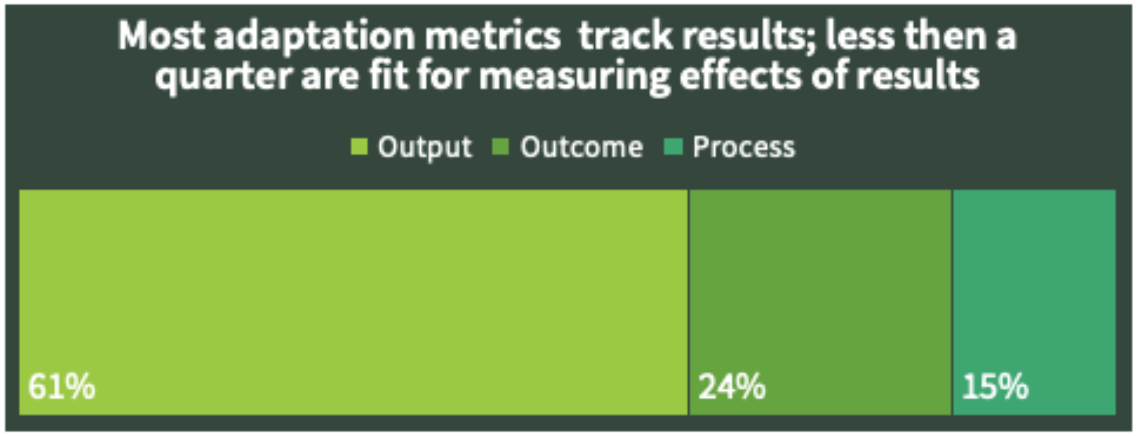
Dark blue, perfect information: instances where indicators included in M&E system matches with what needs to be reported
Light blue, imperfect information: instances where indicators match partially with reporting needs (distant proxy, different metrics, etc.)
Grey, information gaps: information not covered by the national/project M&E system

Assessing capacities and opportunities for integrated M&E systems for CSA in Tanzania, Malawi, Mozambique, Zambia, Zimbabwe. ICRAF & Unique (2019). https://bit.ly/2T9VUKM

3 500+ adaptation metrics are included in NDCs and NAPs of African countries and they mainly focus on tracking outputs



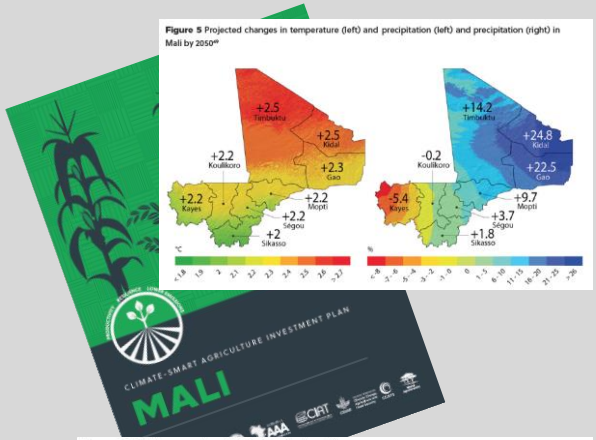


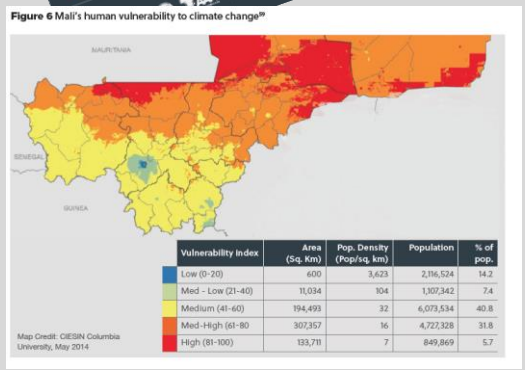


Based on a review of 500+ adaptation metrics in NDCs and NAPs submitted by African countries (Nowak et al, forthcoming)

4 Adaptation metrics alone are meaningless for long-term planning; Impact pathways address uncertain, dynamic contexts.

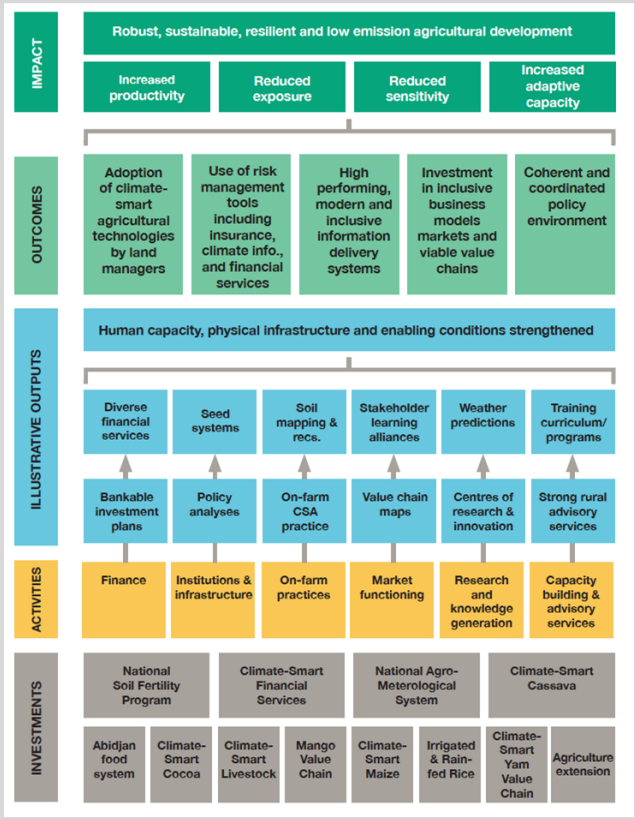
Understand the context, set the vision & goals





Mali Climate Smart Agriculture Investment Plan: https://hdl.handle.net/10568/106808

Describe how the solutions lead to change, under which conditions

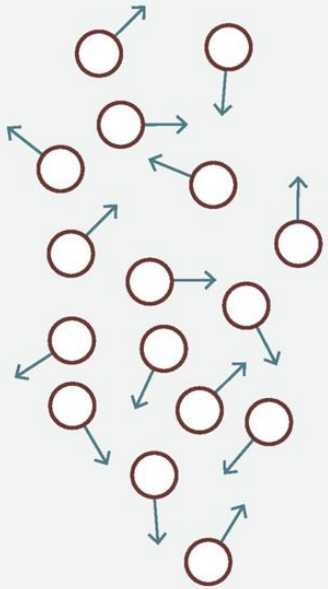


Describe how you measure and evaluate change

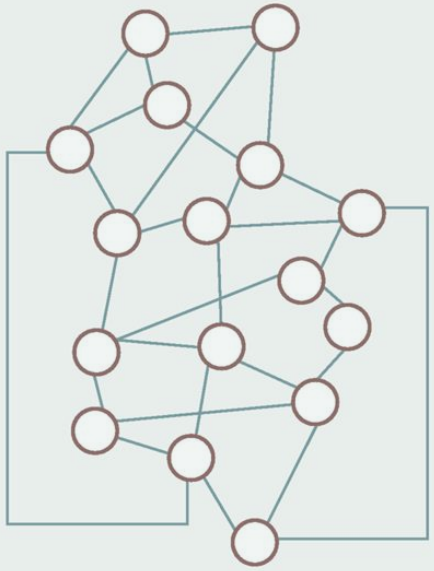
RESULTS FRAMEWORK COMPONENT	INDICATOR	MEASURE	CSA OBJECTIVE	RELEVANT INVESTMENT
Outcome indicators (examples by action area)				
Adoption of climate-smart agricultural (CSA) technologies	o1.1 Increased rate of producers/land managers adopting CSA technologies	% of total producers/land managers	Triple-win	Crop and livestock CSA investments
	o1.2 Increased area under CSA practices and technologies	% of total agricultural land	Triple-win	Crop and livestock CSA investments
	o1.3 Increased rate of producers using integrated soil fertility management (ISFM) strategies	% of total producers	Triple-win	National soil fertility program; Crop CSA investments
	o1.4 Increased territory covered by forests	% of total land in the country	Mitigation	Crop and livestock CSA investments
Use of risk management tools (e.g., insurance, climate, financial service)	o2.1 Targeted beneficiaries' satisfaction with risk management tools available (disaggregated by gender and tool type; referring to timeliness, usefulness and relevance of tool)	Likert scale (very unsatisfied, unsatisfied, neutral, satisfied, very satisfied)	Resilience, Productivity	National CSA investments (soil, finance agrometeorological, extension);
High-performing, modern and inclusive information delivery systems	o3.1 Targeted beneficiaries' satisfaction with information services provided (disaggregated by gender and service type; referring to timeliness, usefulness, relevance and frequency of services)	Likert scale (very unsatisfied, unsatisfied, neutral, satisfied, very satisfied)	Resilience, Productivity	National CSA investments (soil, finance agrometeorological, extension);
	o3.2 Improved capacity of advisory officers to deliver relevant, timely information to farmers (by information type)	qualitative scale	Resilience, Productivity	
	o3.3 Improved capacity of farmers to use information (climate, soil, etc.) in farm decision-making (by information type)	qualitative scale	Resilience, Productivity	
Investment in inclusive business models, markets and viable value chains	o4.1 Increased number and amount of investments in inclusive business models, markets and value chains (by type of investment)	#, amount (CFA)	Triple-win	CSA finance services and products; CSA crop and livestock investments
Coherent and coordinated policy environment	o5.1 Establishment of institutional arrangements bringing together climate information providers, agricultural research and extension, national policymakers, and farmer representatives	# of institutional arrangements	Triple-win	National agrometeo. system for CSA
	o5.2 Increased number and type of policies and plans incorporating climate information and predictions	# of policies, type of policies and plans	Triple-win	National agrometeo. system for CSA
Outputs/results indicators (examples)				
Diverse financial services	r1.1 Number of national CSA financial services systems (FSS) to provide savings, credit and insurance products for agricultural producers seeking to adopt CSA practices and manage climate-related risks	# of CSA FSS in place	Resilience, Productivity	CSA finance services and products
	r1.2 Number and type of financial services available to producers (credit and financing, insurance and risk instruments, savings and payment services)	#, type of financial service	Resilience, Productivity	CSA finance services and products
	r1.3 Number of beneficiaries of available financial services (by service type)	#	Resilience, Productivity	CSA Finance services and products

Monitor, evaluate, report, learn & adapt

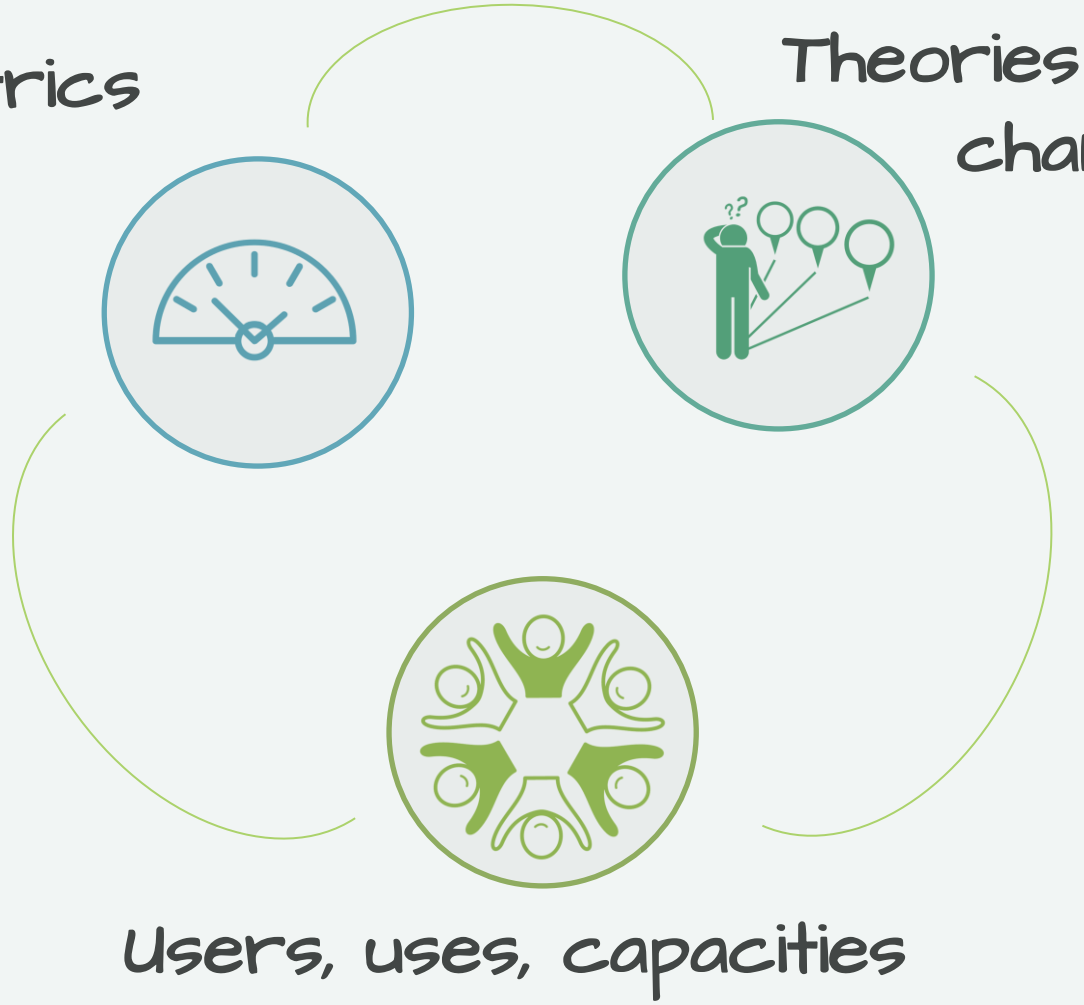
An emergent (demand-driven) approach to adaptation metrics



Disorganized Complexity



Organized Complexity



3 recommendations for moving forward together

coordination body taking the lead in organizing the space

a reference system to guide our walk through the adaptation M&E space

investment in building capacity (financial, human, technical)

Photo: Axel Fassio (CIFOR)

Thank you

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