



AICCRA

Accelerating the Impact of CGIAR
Climate Research for Africa



Is adaptation tracking on track?

Lessons from 53 African countries

Andreea Nowak | 02 December 2022

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Monitoring and evaluating adaptation under AICCRA



KS

Knowledge Generation and Sharing Development of Climate-informed Agricultural Advisory Services and Decision-Making Tools (DMTs)

- IPI 1.1** Climate-relevant knowledge products, decision-making tools and advisory services created or enhanced including a proportion targeting gender and social inclusion dimension.
- IPI 1.2** AICCRA Project-funded, peer-reviewed research papers made available in open access format.
- IPI 1.3** Satisfaction with the quality and usefulness of climate-relevant knowledge products, decision-making tools and services received under the AICCRA Project expressed by surveyed partners and stakeholders.



PD

Strengthening Partnerships for Delivery of Climate-Smart Innovations in Agriculture

- IPI 2.1** Climate advisory platforms/hubs launched or strengthened, including their focus on gender and social inclusion.
- IPI 2.2** Partnerships launched or strengthened between the AICCRA Project-funded CGIAR and National Agricultural Research System (NARS) scientists, universities, public sector stakeholders, farmer organisations, non-governmental organisations (NGOs) and the private sector.
- IPI 2.3** People engaged in the AICCRA Project-funded capacity development activities.
- IPI 2.4** Satisfaction with the effectiveness of the partnerships under the AICCRA Project expressed by surveyed partners and stakeholders.



CSA

Validating Climate-Smart Agriculture Innovations through Piloting

- IPI 3.1** CIS and CSA technology packages developed or enhanced and validated including testing for gender responsiveness.
- IPI 3.2** Validated CIS and CSA technology packages disseminated/ made accessible.
- IPI 3.3** Use or adaptation of AICCRA Project-funded climate-relevant knowledge products, decision-making tools and services stated and confirmed by surveyed partners and stakeholders.
- IPI 3.4** Discussions in Africa-wide and regional events informed by AICCRA Project-funded outputs.
- IPI 3.5** Policy and investment decisions influenced by engagement and information dissemination by AICCRA Project-funded partnerships and capacity building activities.

1.1.3. Support planning and monitoring of investments in agricultural adaptation to climate change

Tools and approaches for monitoring, evaluation, and reporting of policies and investment

Africa-wide: review and assessment of metrics used to assess adaptation in African agriculture sector



Regional: M&E strategies for CSAIPs (impact pathways, results frameworks – Ethiopia, Kenya, Senegal)



National: measuring CSA performance of SMEs through impact pathways and metrics (Zambia Accelerator)



The Paris Agreement launches a global call to report on adaptation progress

Paris Agreement (COP 21)

The Parties to this Agreement,

Being Parties to the United Nations Framework Convention on Climate

Article 7

1. Parties hereby establish the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal referred to in Article 2.

urgent threat of climate change on the basis of the best available scientific knowledge,

Article 14

1. The Conference of the Parties serving as the meeting of the Parties to this Agreement shall periodically take stock of the implementation of this Agreement to assess the collective progress towards achieving the purpose of this Agreement and its long-term goals (referred to as the "global stocktake"). It shall do so in a comprehensive and facilitative manner, considering mitigation, adaptation and the

responses and impacts have with equitable access to sustainable development and eradication of poverty,

Recognizing the fundamental priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the adverse impacts of climate change,

Glasgow-Sharm El-Sheikh Work Programme (COP 27)

CMA agenda item 6(c)
Glasgow-Sharm el-Sheikh work programme on the global goal on adaptation referred to in decision 7/CMA.3

Version **17/11/2022 23:00**

The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement,

Recalling Article 7, paragraph 1, of the Paris Agreement and decision 7/CMA.3,

Emphasizing that efforts to achieve the global goal on adaptation must go beyond incremental action and 'business as usual' and take a transformational approach to enhancing adaptive capacity, strengthening resilience and reducing the impacts and risks of and vulnerability to climate change by integrating adaptation into policies, programmes and

Establishing a framework

9. *Decides* to initiate the development of a framework for the global goal on adaptation, which will be informed by a structured approach to the Glasgow-Sharm el-Sheikh work programme in 2023, with a view to the framework being considered and adopted at the fifth session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (November 2023);

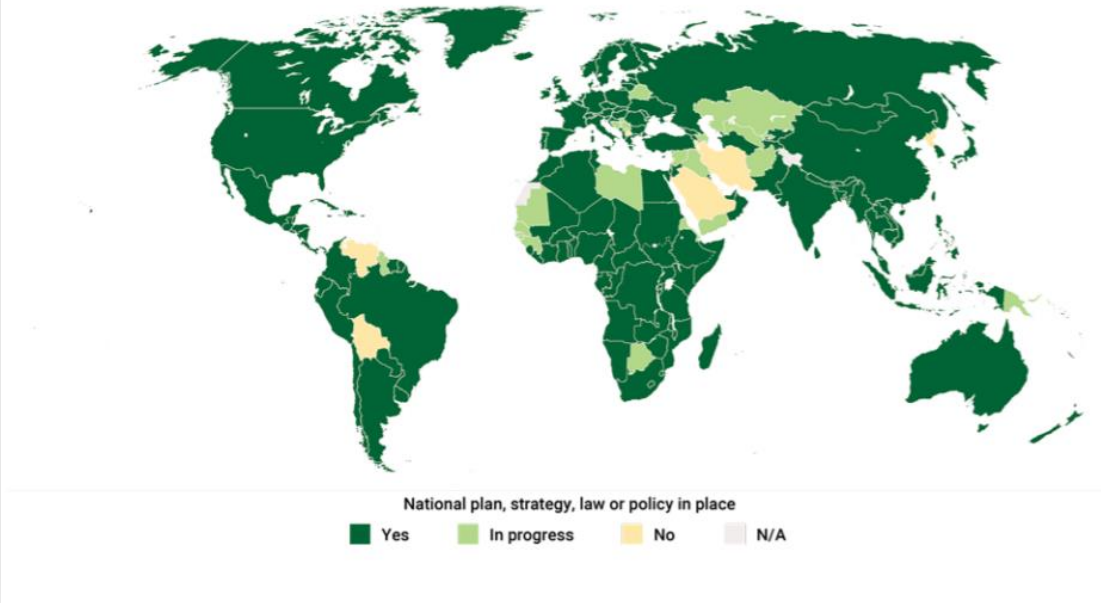
4. *Note* that the single annual report on the workshops referred to in paragraph 16 of decision 7/CMA.3 and the summaries of each workshop therein will serve as input to Parties' further considerations under the Glasgow-Sharm el-Sheikh work programme.

5. *Notes with appreciation* the compilation and synthesis of indicators, approaches, targets and metrics that could be relevant for reviewing overall progress in achieving the global goal on adaptation,^{3,4} building on the 2021 technical report by the Adaptation Committee.

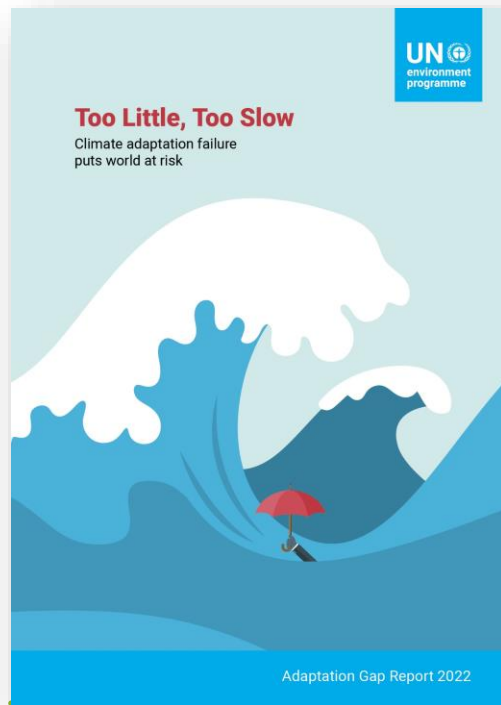
6. *Note* the challenges associated with holding the 2022 workshops under the Glasgow-Sharm el-Sheikh work programme virtually, with preparing for those workshops in a timely manner and with having produced the single annual report on those workshops⁵ in time for consideration at this session:

There is incremental progress on planning for adaptation

Figure ES.2 Status of adaptation planning worldwide, as at 31 August 2022



But planning is inadequate in many ways



Insufficient focus on climate risks: retrofitting development activities as adaptation actions

Untested long-term viability and effectiveness of solutions

Narrow definitions of adaptation “success”: insufficient attention to who benefits and how

Inadequate metrics: not fit-for-purpose, not validated

No one wants to get adaptation tracking wrong, but no one agrees on how to make it right

Science

communications
earth & environment

COMMENT

<https://doi.org/10.1038/s41558-021-02196-5> OPEN

Research for climate adaptation

Bruce Currie-Alder¹, Cynthia Rosenzweig², Minpeng Chen¹, Johanna Nalau³, Anand Patwardhan³ & Ying Wang⁴

Adaptation to climate change must be ramped up urgently. We propose three avenues to transform ambition to action: improve tracking of actions and progress, upscale investment especially in critical areas, and accelerate learning through practice.

Ongoing climate impact assessments: Panel on frequency, intensity, or range experienced in 11 results, adaptation need. Reference of the Parties Change in Climate.

nature
climate change

ANALYSIS

<https://doi.org/10.1038/s41558-021-01170-y>

Check for updates

A systematic global stocktake of evidence on human adaptation to climate change

One Earth

Gold Standard
1 ton of CO₂ offset

CellPress

Primer

Maladaptation: When Adaptation to Climate Change Goes Very Wrong

E. Lisa F. Schipper¹
¹Environmental Change Institute, University of Oxford, Oxford, UK
²Correspondence: lisa.schipper@ouce.ox.ac.uk
<https://doi.org/10.1016/j.oneear.2020.08.014>

Adapting to climate change is necessary to ensure that the impacts will not overwhelm societies and ecosystems around the world. But planning adaptation is an exercise in uncertainty, and built on imperfect information, many adaptation strategies fail. Some go even further, creating conditions that actually worsen the situation; this is called maladaptation. Aside from wasting time and money, maladaptation is a process through which people become even more vulnerable to climate change. Poor planning is the primary cause of maladaptation, yet the diverse manifestations are complex, and identifying maladaptation in advance with certainty is difficult. Nevertheless, there is now sufficient experience to give an indication of how maladaptation can take place, the contexts that may be more prone to such an outcome, and the design flaws in strategies that need to be avoided. Until adaptation projects directly address the drivers of vulnerability, however, maladaptation will continue to be a risk.

Adaptation interventions and their effect on vulnerability in developing countries: Help, hindrance or irrelevance?

Siri Eriksen^{1,2}, E. Lisa F. Schipper³, Morgan Scoville-Simonds^{4,5}, Katharine Vincent^{6,7}, Hans Nicolai Adam⁸, Nick Brooks⁹, Brian Harding¹⁰, Dil Khatri¹¹, Lutgart Lenaerts¹², Dhana Liverman¹³, Megan Mills-Novoa¹⁴, Marianne Mosberg¹⁵, Synne Monk¹⁶, Bernard Muuk¹⁷, Andrea Nightingale¹⁸, Hernan Ojha¹⁹, Linda Oyler²⁰, Marianne Trankler²¹, Fabrice Vasson²² & Ingrid Isak Mazze²³

gh the literature on adaptation n. We systematically screened r synthesis of the resulting in adaptation to climate evidence of transformational global adaptation research: ation, enable individuals sector responses, improve nature thresholds, and improve

ity based interventions aimed at climate how some interventions inadvertently may in maladaptation drive their maladaptive nature (3) Ineligible stakeholders participate ation into existing development agendas; correct is difficult. Emerging literature shows that interventions to reduce vulnerability practitioners and the local populations part the understanding of 'local' vulnerability (4) Important lessons from past adaptive require guidelines, tangible forms of all the multi-scale processes driving either being progress to change the practices of

Practice

Global



ND-GAIN
Notre Dame Global
Adaptation Initiative

ND GAIN (2014)



Resilience Atlas (2015)

National



United Nations
Framework Convention on
Climate Change

M&E Tool for NAPs (2015)



Tracking Adaptation in Ag sector (2017)

Climate Resilience Index (2018)



Repository of Adaptation Indicators (2014)



Adaptation Fund Results Framework (2015)



LDCF Indicators Handbook (2014)

Vulnerability Index (n.d.)



Investing in rural people

Household

Resilience Index Measurement and Analysis (RIMA II) (2016)

Measurement Framework for Community Resilience (2013)



USAID
FROM THE AMERICAN PEOPLE



Resilience Capacity Index (2018)

Vulnerability

Adaptive capacity

Resilience

*Source: 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>

Adaptation tracking means more than counting actions and finance or finding “the perfect indicator”

Count actions

(what are we doing to adapt?)

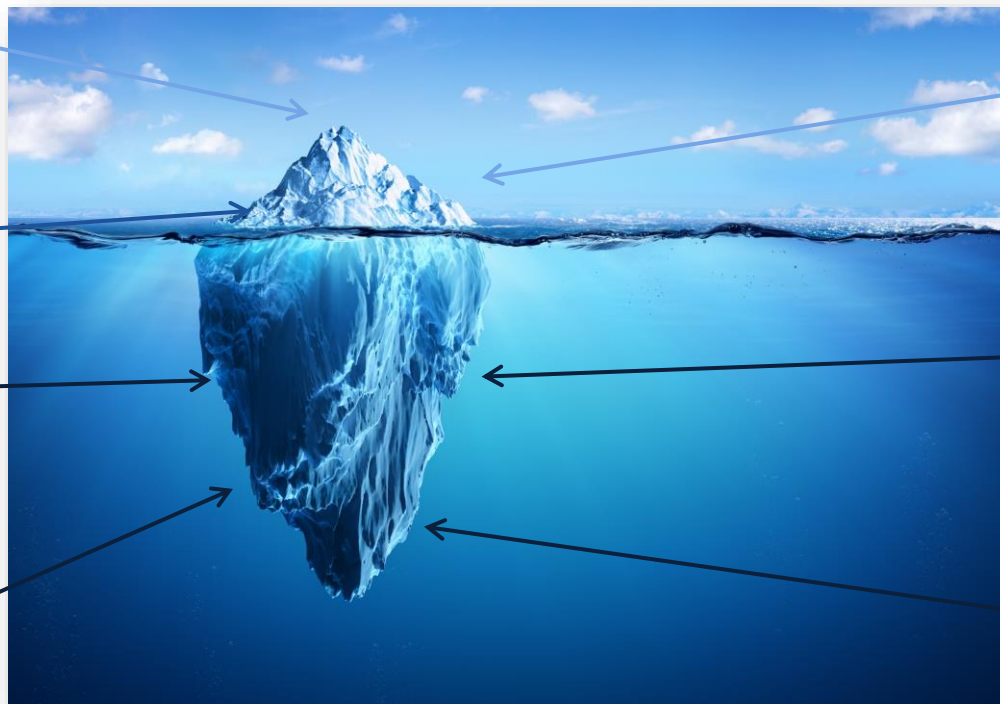
Identify the “best” indicator (proxy)

Understand the climate context

(why adapt?)

Develop coherent impact pathways

(what does a well-adapted system look like?)



Counting finance

(how much \$ is being invested in adaptation?)

Develop data systems

(clear data roles and responsibilities)

Allocate finance

(to sustain monitoring and evaluation efforts in time)

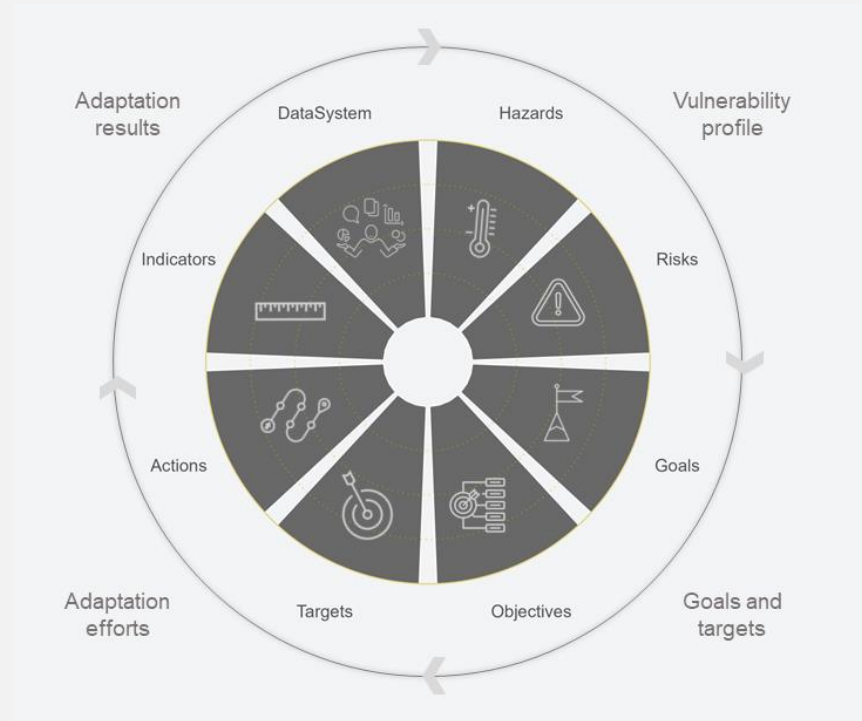
A framework for tracking adaptation

Is adaptation occurring?

Operational indicators and systems

How to adapt?

Actions, processes to address risks and achieve the vision



Adaptation to what?

Hazards and systems at risks

What kind of adaptation?

Goals, objectives and targets to address risks

Figure: adapted from (Berrang-Ford et al., 2019).

Is national adaptation tracking on track?

Preliminary results from 53 NDCs

Disclaimer: results are not peer-reviewed.
Please do not cite or use the information

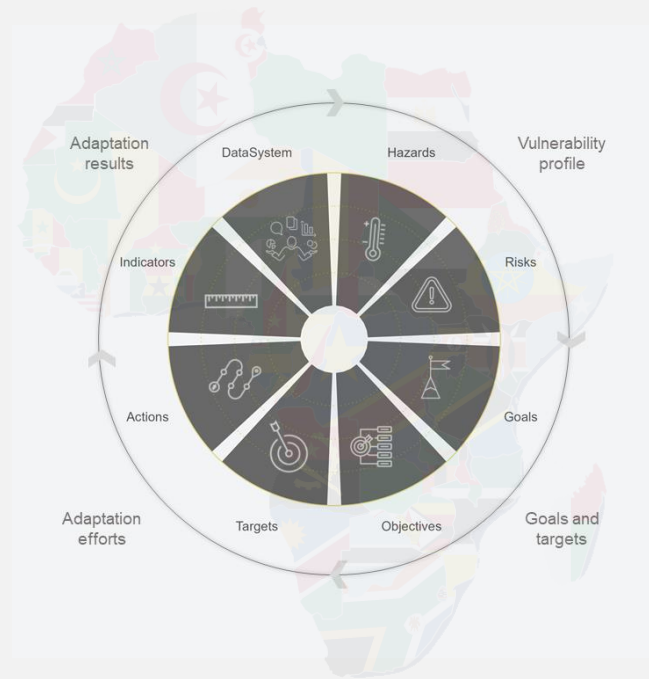


AICCRA

Accelerating the Impact of CGIAR
Climate Research for Africa



Research question: how is climate adaptation tracked across the African continent?



Objectives

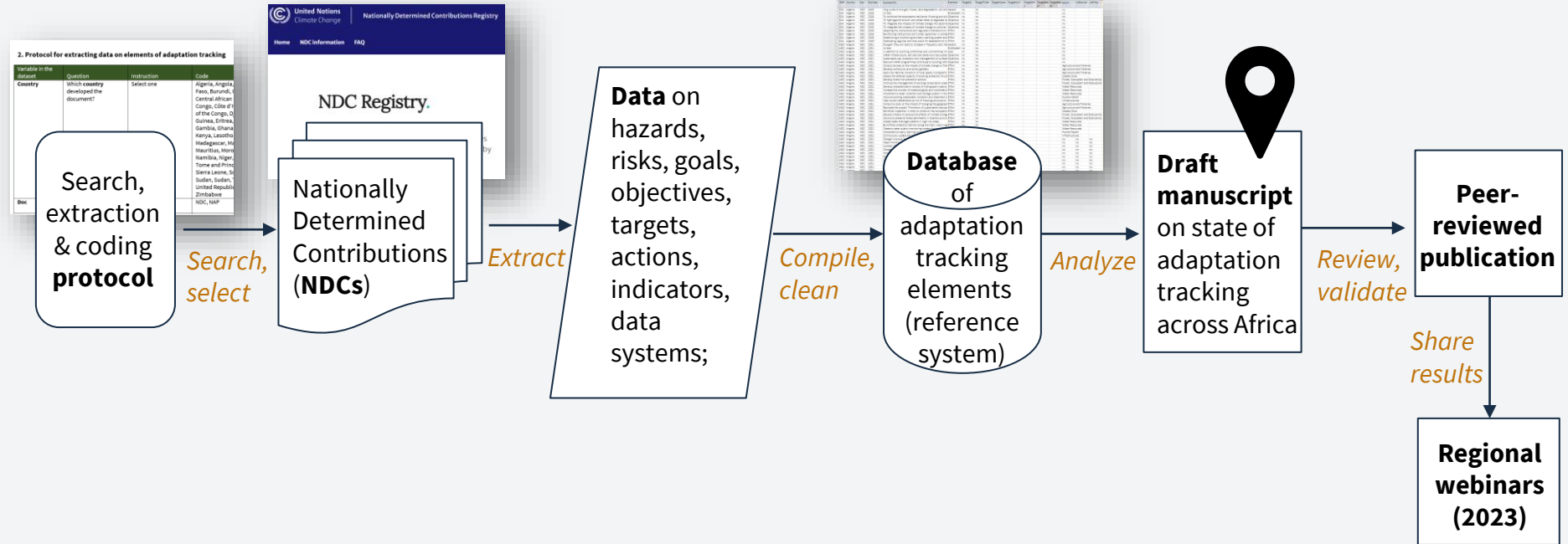
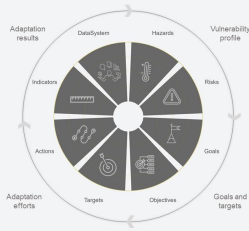
Review the state of adaptation tracking across the continent to:

- identify **on-going national monitoring efforts** that could contribute to the global stocktake
- assess **entry-points for improvement** of existing systems

Focus

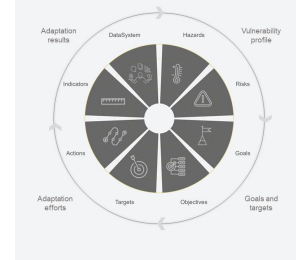
- **Adaptation components of Nationally Determined Contributions (NDCs)**: the main adaptation reporting vehicle used by developing countries to date

Methodology: a systematic protocol for data collection & analysis



* Document inclusion criteria: NDCs with Adaptation components (or sections); NDCs submitted by African governments by September 1, 2022; NDCs published on the UNFCCC repository. Data extraction and coding protocol based on Berrang-Ford et al (2021), doi 10.1038/s41558-021-01170-y

Scope and limitations: key remarks on results highlighted in this presentation



Consider NDCs published on the NDC Registry by **1 Sep 2022**

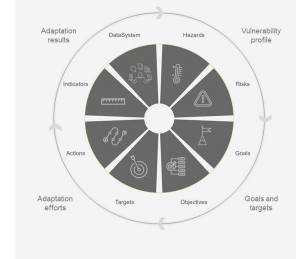
- Any NDC or update submitted by this date was excluded.
- In total, we analysed 53 NDCs. One country (Libya) had not submitted an NDC by the time of the analysis.

Not reflecting countries' adaptation planning instruments, such as **National Adaptation Plans**

- We are working on including information from existing NAPs in the database, to acknowledge countries' progress on long-term adaptation planning and recognize the integration of adaptation tracking elements in NAPs rather than NDCs. As a temporary solution, figures in this presentation highlight where NAPs are available.



Scope and limitations: key remarks on results highlighted in this presentation (2)



Refer to **agriculture and cross-cutting sectors**

- The NDC review & database also identifies additional datapoints related to other sectors (e.g., water, infrastructure, urban planning, etc.) not included here. The open-access database will include all this data.

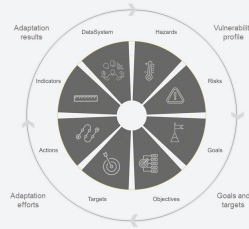
Analysis and interpretation of results

- Details on extraction and coding decisions are provided in the protocol, which will be available open access and will accompany the peer-reviewed publication.

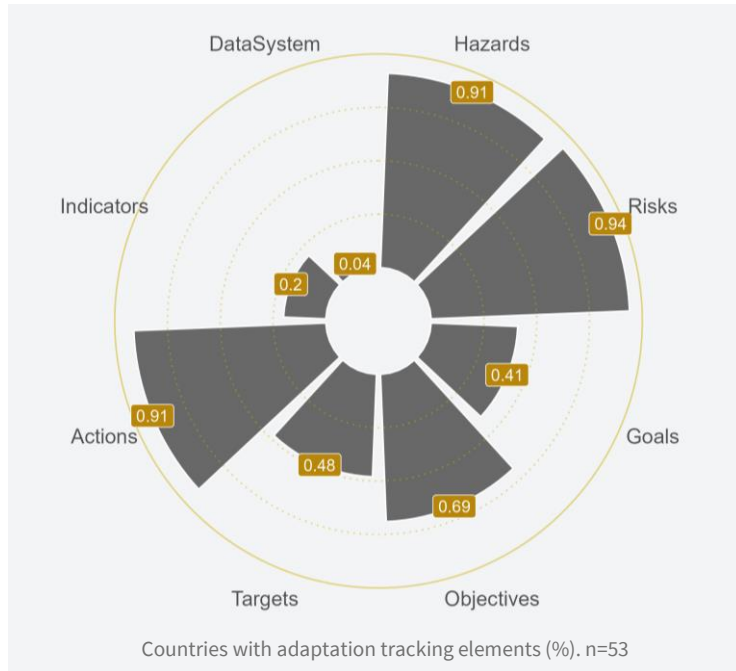
Results are **not peer-reviewed**

- We will initiate the peer review process in Q1 2023
-

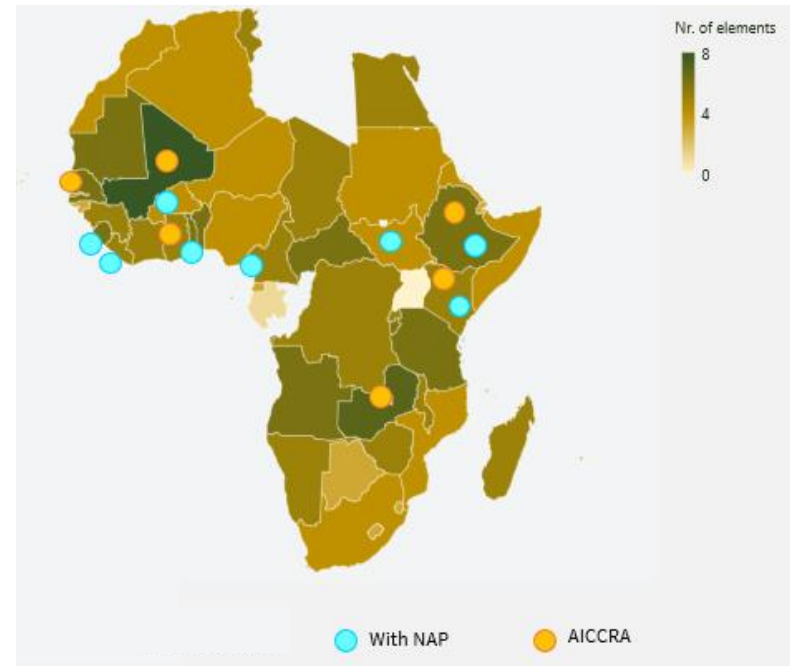
Progress in defining adaptation tracking elements is not uniform across the continent



All sectors*



All sectors*

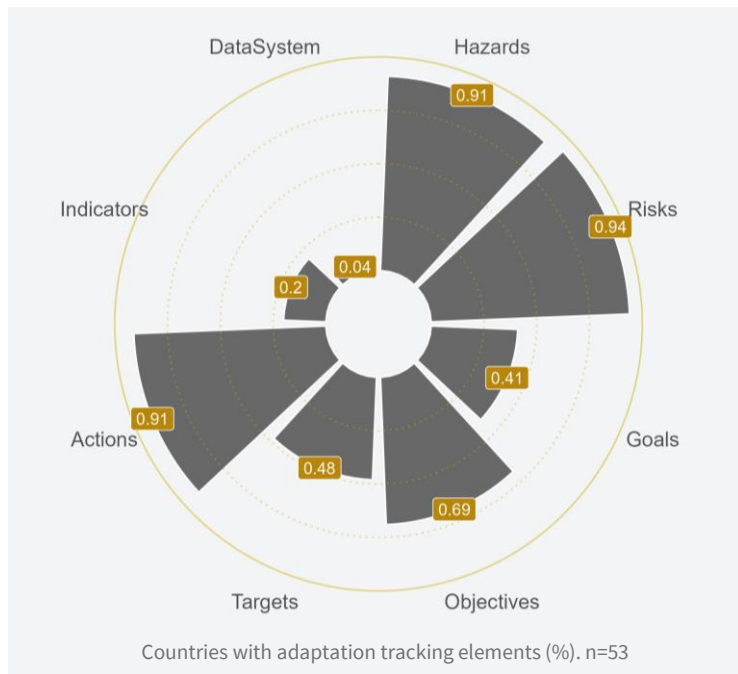


Sector categorization based on Berrang-Ford et al (2021) and IPCC AR6 (2022)

In the **agriculture sectors**, adaptation tracking is a work in progress

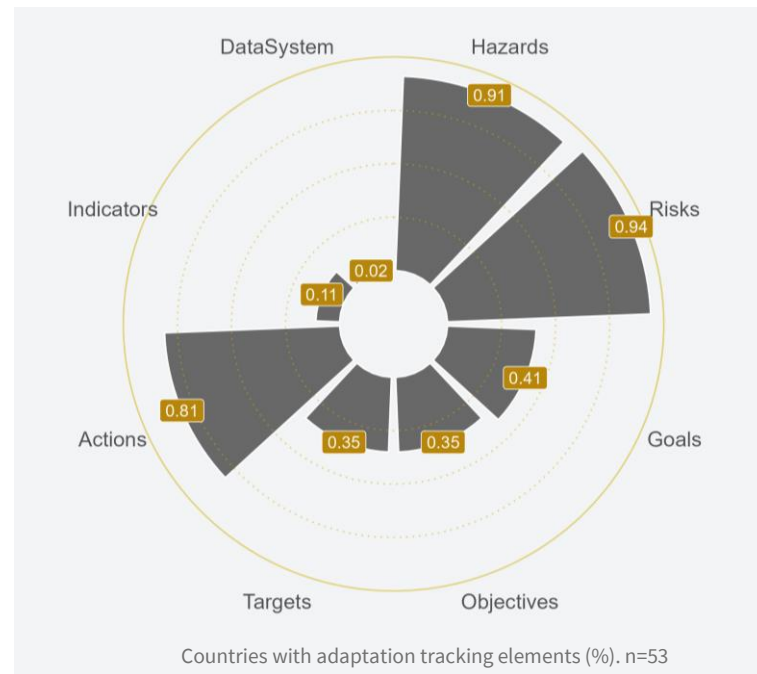


All sectors*



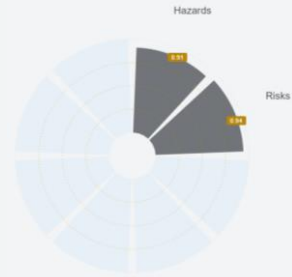
Sector categorization based on Berrang-Ford et al (2021) and IPCC AR6 (2022)

Agriculture & cross-cutting**

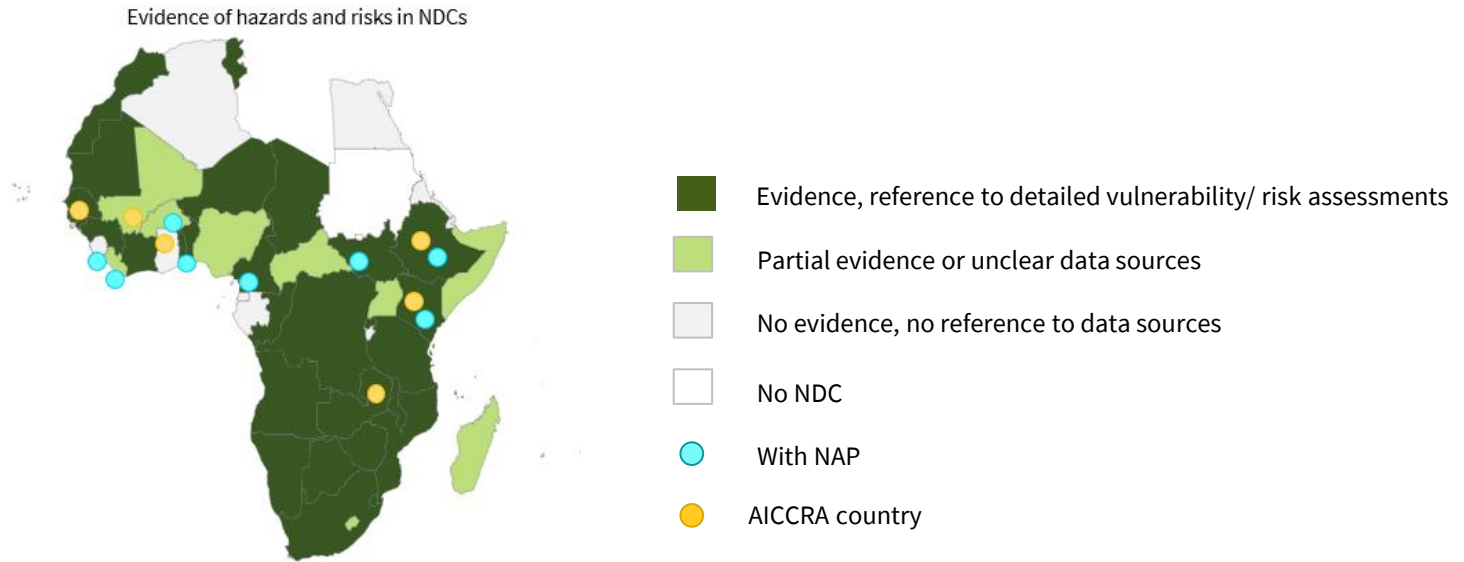


**Cross-cutting: gender and social inclusion, risk management, early warning, governance

Most countries identify hazards and risks; the robustness of the evidence varies



49 countries make explicit reference to **climate hazards**, 51 report different **systems at risk**



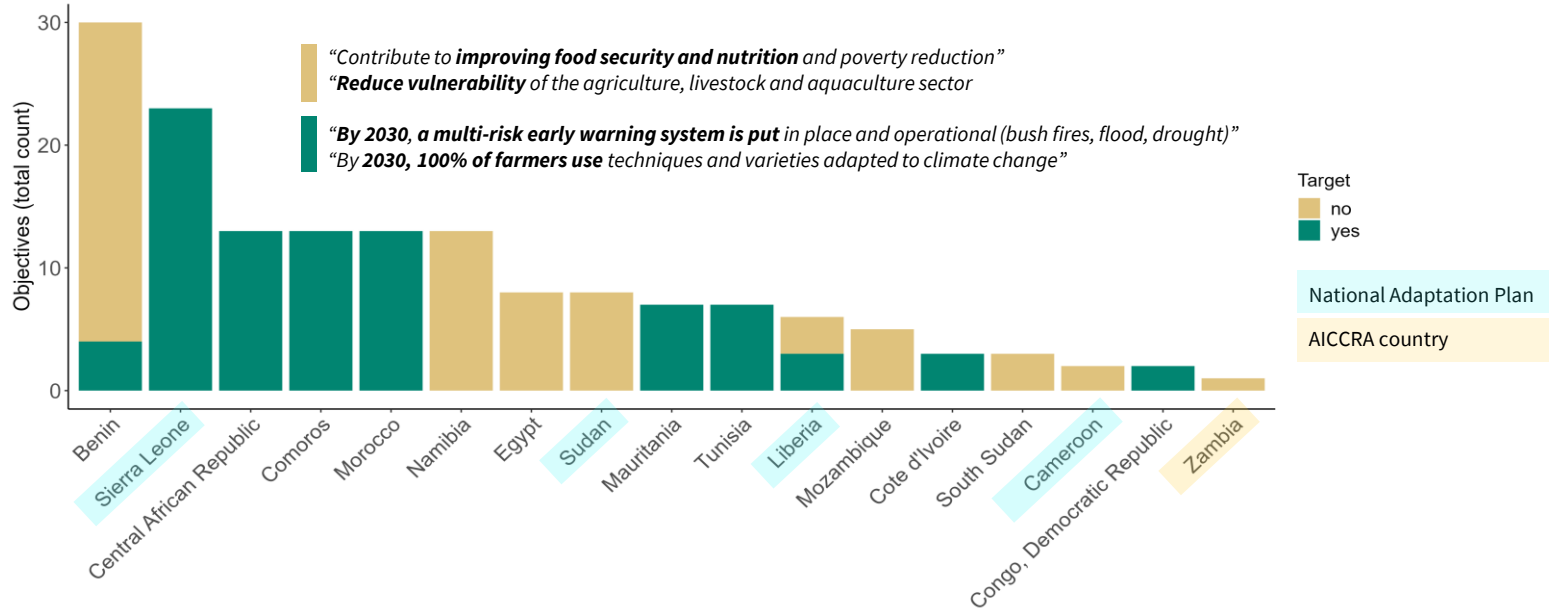
Hazards: explicit reference to a physical event or trend or physical impact (IPCC AR6)
Risks: explicit reference to systems vulnerable or at risk from a climate impact

Disclaimer: Findings in this figure are only aimed to provide a general idea of how climate hazards and risks were identified. We did not check the evidences, the sources, or the quality of the vulnerability/risk assessments mentioned in the NDCs. Therefore, progress might be overestimated or underestimated.

17 countries include adaptation objectives for agriculture; many have no targets



Targets Objectives



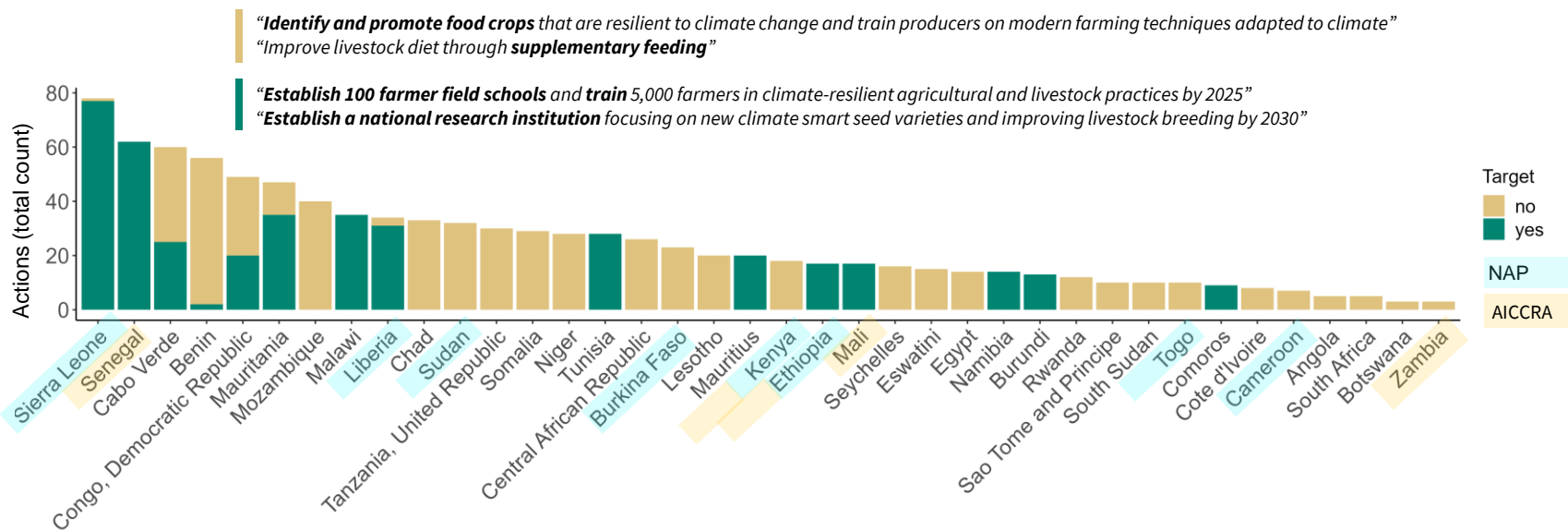
Goals: explicit reference to long-term adaptation vision

Objective: statement describing a desired change (also labelled as “impact”, “outcome”, “priority”)

Target: benchmarks for adaptation objectives or actions, suggesting the desired state. They are essential to set a clear direction for adaptation.

38 countries include **adaptation actions** for agriculture; few have associated targets

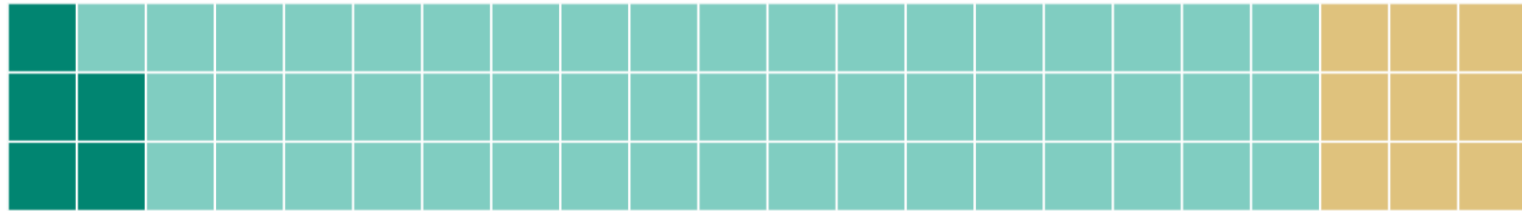
Actions



Actions: statements describing the strategy to respond to climate impacts and achieve objectives and goals (includes on-the-ground measures, projects and programs). We identified more than 2400 adaptation actions across agriculture and cross-cutting sectors.

6 countries include **indicators**; the large majority measure activity implementation

Indicators



1 square = 1 indicator

input output outcome

“Number of **development plans** taking integrating climate change adaptation”

“Cumulative volume of **finance** [USD millions] mobilized for climate and environmental purposes”

“Number of **plans** developed for the implementation of an early warning system for women in food crops agriculture”

“Rate of women having **benefited from technical and financial support** measures for adapting to climate constraints”

“Number of **new varieties** introduced/zone”

“Number of **meteorological stations** built “

“**Productivity** of rainfed cropland (based on average for teff, wheat, barley and corn) (quintals/ha) “

“Proportion of increase in **climate service data reliability** (0.85)”

“Percentage **reduction of crop and animal disease cases** (30% reduction from 2022/2023 baseline)”

Only one NDC includes evidence of a data system for indicators

Indicators

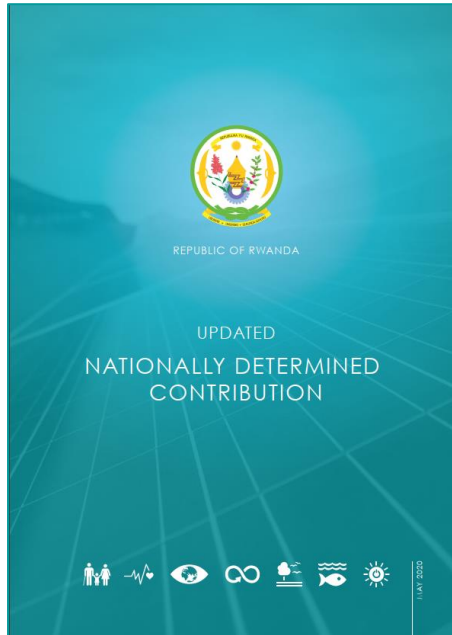


Table A.1 High level indicators, data sources (metadata) for the proposed reporting

RBME code	Indicator	Source (Metadata)
International and regional good practices (Selected for National communication to UNFCCC)		
07 ECCO1	Percentage change in national climate change vulnerability index	Source: Vulnerability Index study report
01 ECCO2	Number and Percentage of districts at high risk of suffering major climate change effect	
National framework: (i) NSTI; (ii) Sector strategic Plans (SSPs) and District Development Plans (DDs); and (iii) Programs and Projects		
02 ECCO4	Percentage of the rural population living in Green Villages	Source: Green Assessment tool
05 MET06	Average level of satisfaction of major Weather and Climate information institutional users with METEO RWANDA Weather and Climate information	Source: Weather and Climate information Users Survey
LAM20	Percentage of compliance of land use development plans to the NLU DMP	Source: Department of Surveying, land use plans and Mapping, (RLMUA)
GEM23	Number and % of a) Mines, and b) Processors/ Exporters, using appropriate technologies to ensure industry standard recovery rates	Source: Adapted Inspections Process or Mining Sites and Processors Survey/Assessment
WRM05	Water storage per capita	Source: IWRM, Water Monitoring and Development Unit
WRM06	Number (%) of (a) Households, and (b) Institutions with a Rain Water Harvesting (RWH) system installed.	NISR, EICV
FNC10	Proportion of land surface covered by forest [Forest cover]. This excludes agro-forestry area.	RWFA, Forestry department-GIS Report (FMES : INDD005)
MET11	Percentage of extreme weather events for which advance warning was provided at least 30 min in advance	Rwanda Meteo, Quarterly high impact weather report
FON07	Total amount of finance mobilized for Green Investments (by major category – Climate Change mitigation; Green Energy production etc.)	MOUs and MINECOFIN Reports
-	Soil erosion and soil loss (To be further elaborated and confirmed)	RWFA/IWRM
-	Ha of crops under insurance (To be further elaborated and confirmed)	MINAGRI

However, ~ a fifth of the NDCs mention plans for developing an adaptation-focused M&E system

What does it take to close the gap?

How should AICCRA continue to support?



AICCRA

Accelerating the Impact of CGIAR
Climate Research for Africa



Build capacities through tailored support

High momentum: NDC revisions

AICCRA value: technical capacity, partnership models

**Impact pathways,
fit-for-purpose
metrics**

DataSystem

Hazards

**Climate risk
decision-
support tools**

Indicators

Risks



Actions

Goals

Targets

Objectives

**Assessments of practices/
bundles, prioritization
tools and analyses**

**Policy consistency
analyses, scenario
planning, models**

Co-design a roadmap for scaling support

High momentum: Global Stocktake, continental processes (AU-CCRDSAP, AAAP)

AICCRA value: convening power, engagement in existing global discussions (IPAM, ABM, BMGF, TNC, CARE), large partner network on the ground



Generate evidence on adaptation & resilience

High momentum: high demand for data
AICCRA value: robust testbed (diverse contexts, partners, CSA practices), assessment tools, national and local partners



Thank you!

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