ActivityInfo

Monitoring and Evaluation for Conservation

Orientation for Practitioners and Program Managers

Starting shortly, please wait!

BeDataDriven Mission

Provide the UN and NGOs with a standard, easy-to-use and comprehensive data management platform so that as many organizations as possible can become data-driven to achieve better outcomes for rights holders worldwide.

BeDataDriven pursues this mission by building and helping organizations implement ActivityInfo.

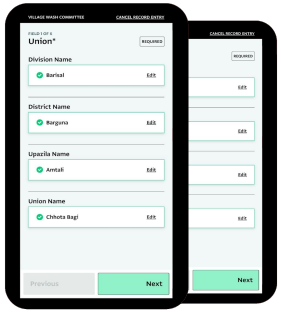
ActivityInfo

ActivityInfo

An end-to-end solution for M&E data management

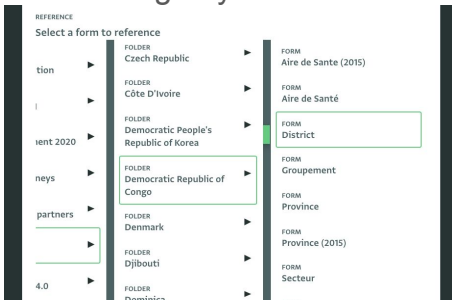
Data collection

Easily collect the data you need from anywhere



Data management

Organize your information according to your workflow



Data analysis

Generate actionable insights in real-time

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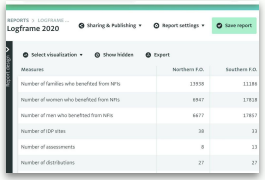
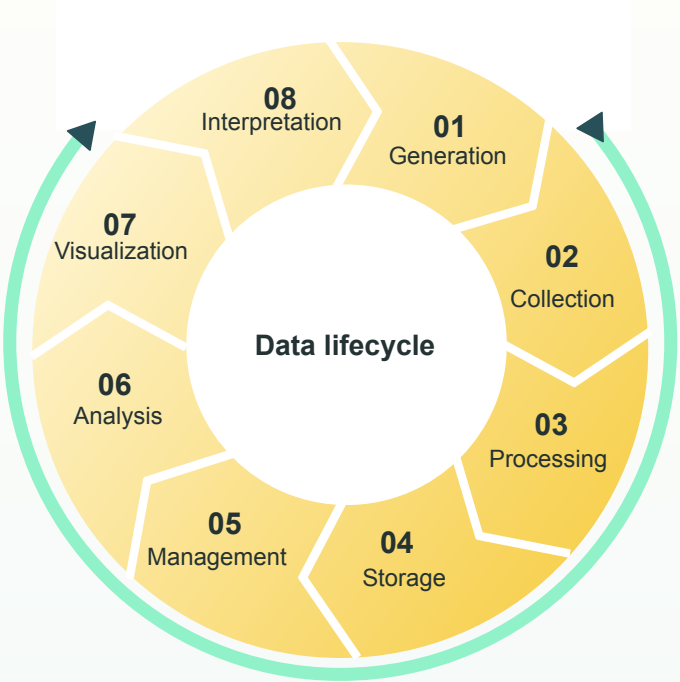
....built on a relational data model

ActivityInfo is your **integrated** solution for managing your data across the data lifecycle.





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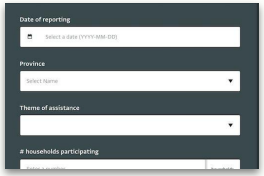

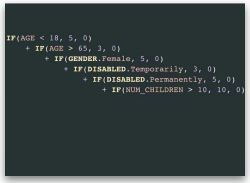

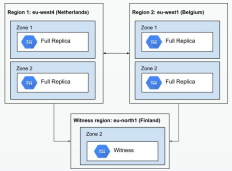

Diagram adapted from Harvard Business Review

ActivityInfo Users

Aga Khan Agency for Habitat

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Meet your presenter

Firas El Kurdi

M&E Implementation Specialist

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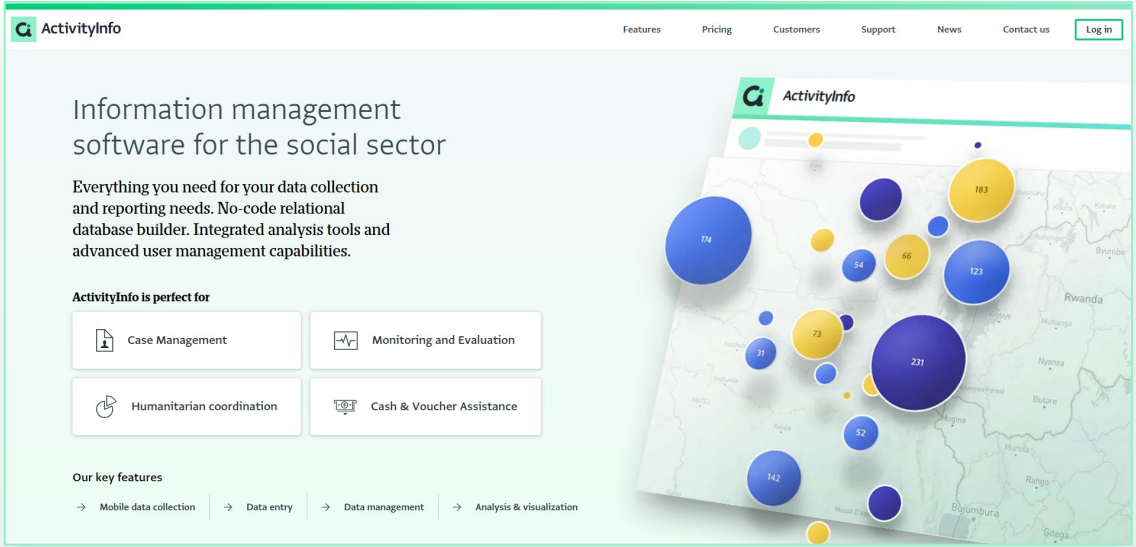
Presented by the ActivityInfo Team

All in one information management software for humanitarian and development operations.

- Track activities, outcomes
- Beneficiary management
- Surveys
- Work offline/online



Outline

- Conservation and its M&E context
- Core frameworks guiding conservation M&E
- From concepts to indicators
- Q&A

PART ONE

Conservation and its M&E context

What we mean by M&E

Monitoring

The routine, ongoing collection of data to track whether activities are happening as planned and whether progress is being made.

Key Question: "Are we doing what we said we would, and is it on track?"

Example: Logging every ranger patrol and tracking replanted hectares.

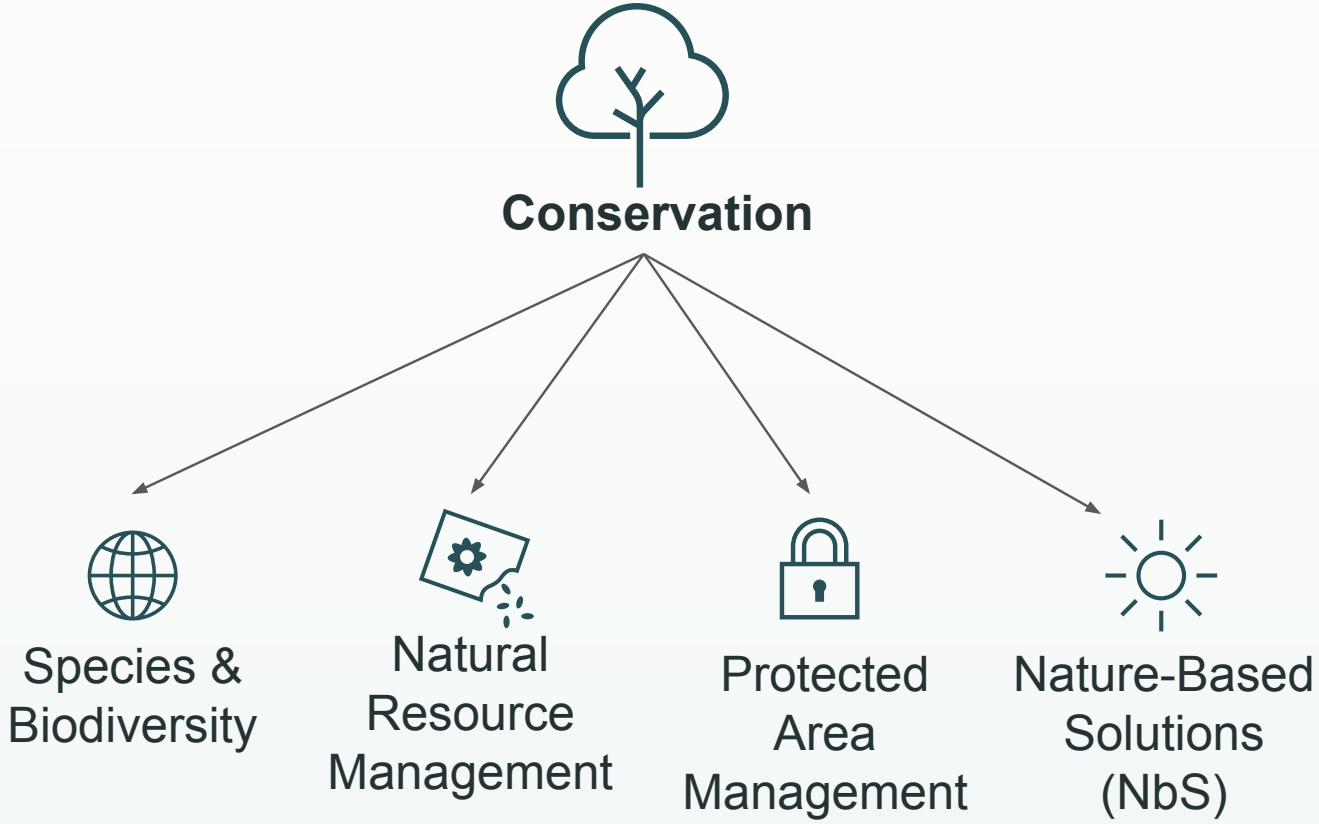
Evaluation

The periodic, systematic assessment of a program's design, results, and overall worth to capture deeper structural patterns.

Key Question: "Did the project actually work, and was it worth doing?"

Example: A midterm review assessing if co-management reduced fishing pressure.

The scope of conservation work



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The scope of conservation work

Species & Biodiversity*:* Focused programs targeting specific species or direct threats

Natural Resource Management: Sustainable land, forestry, and fisheries management for communities.

Protected Area Management: High-security parks, community conservancies, and transboundary corridors.

Nature-Based Solutions (NbS): Actions addressing climate, water, and food security through ecosystem restoration.

Who works in conservation?

Implementers

On the ground
International NGOs, National governments and parks authorities, local communities

Funders

Who funds it
Bilateral donors, the global environment facility and large foundations

Enablers

Support role
Research institutions and, increasingly, the private sector through carbon markets and sustainable supply chains

Four reasons conservation M&E is different

01 Long time horizons 

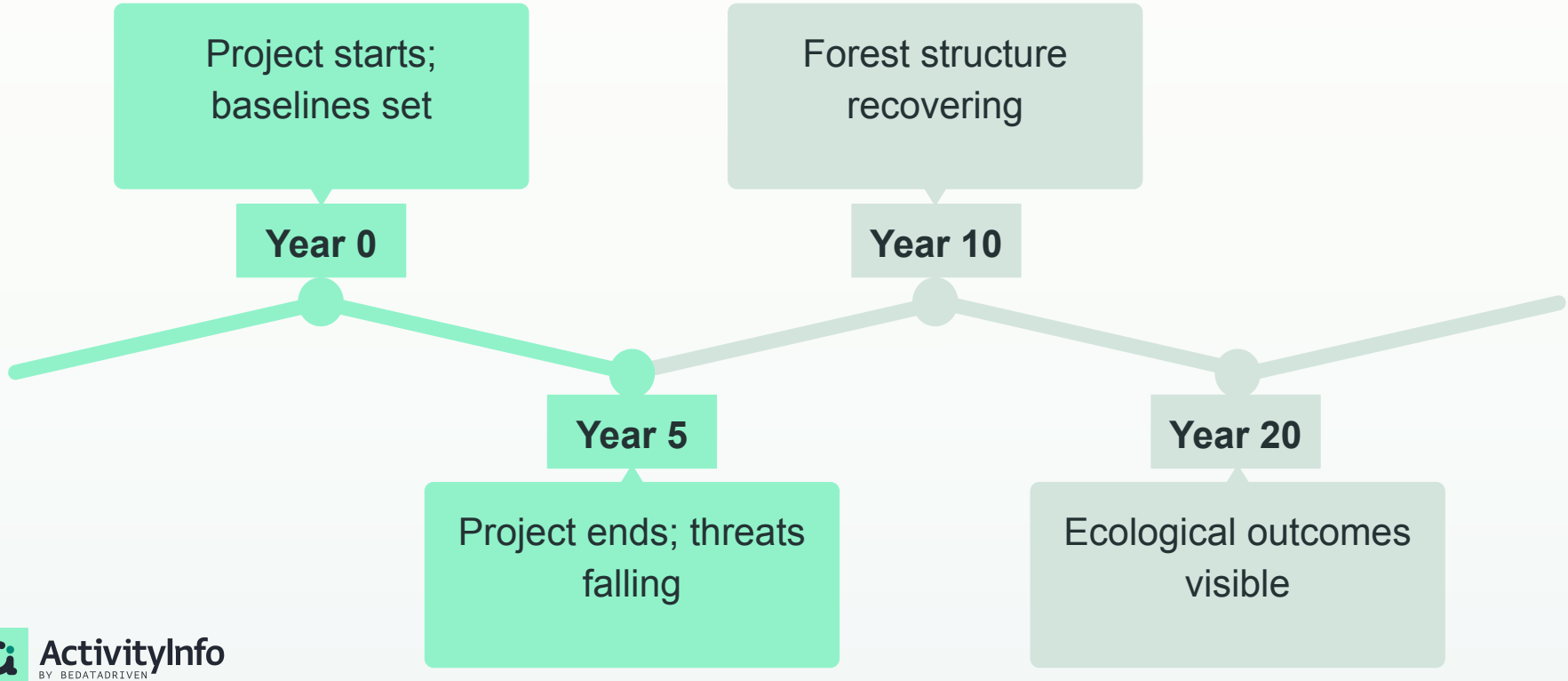
02 Non-linear ecological change 

03 Dual targets: nature and people 

04 Complex attribution 

1. Long time horizons 

1. Long time horizons



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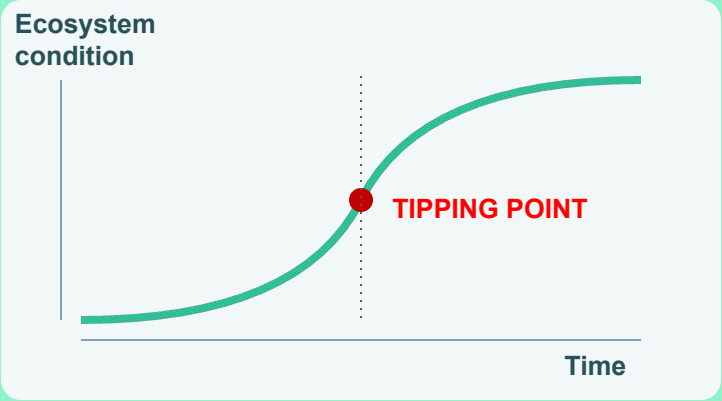
2. Non-linear ecological change 

2.1 Non-linearity: Tipping points

Why this breaks simple M&E



Ecosystems absorb pressure for long periods before shifting abruptly once threshold boundaries are crossed

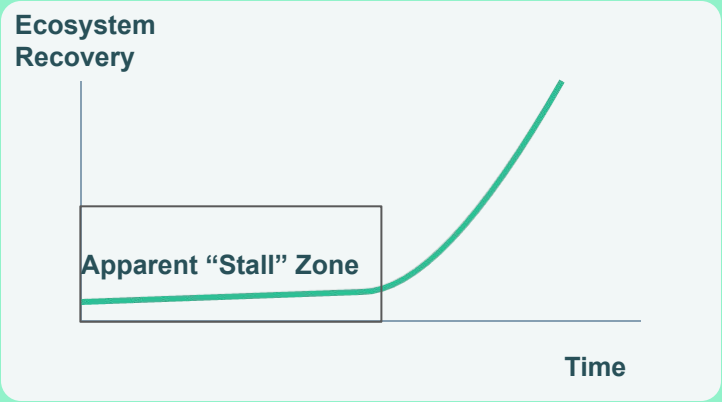
Threshold Dynamics

Indicators look completely stable until the sudden collapse. Reversing the damage afterward is far harder.

- **Fishery crash:** A fish stock looks steady, then collapses suddenly once breeding adults fall too low
- **Seagrass loss:** Clear water turns murky and seagrass dies off once sediment and nutrients build past a point.

2.2 Non-linearity: Lag effects

Why this breaks simple M&E



Efforts are applied, pressures fall, but the system shows no apparent response for years before suddenly shifting upward.

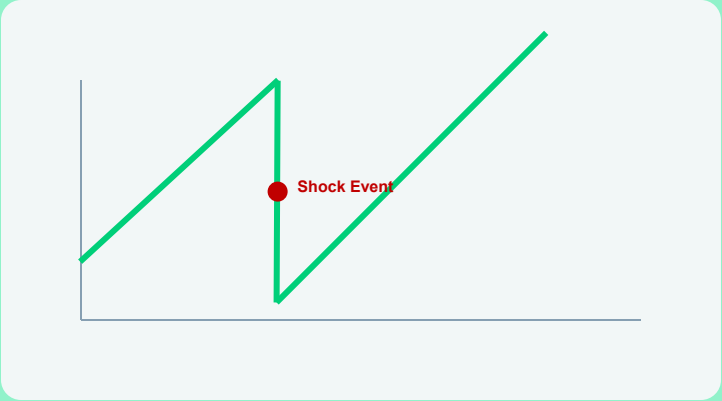
Delayed Response Risk

M&E systems must warn stakeholders that early flat trends do not equal program failure.

- **Soil recovery:** Degraded farmland looks bare for seasons, then yields rise once soil organic matter rebuilds.
- **Predator Recovery:** Wolves or otters show stagnant numbers, then expand dynamically once density clusters are met.

2.3 Non-linearity: External shocks

When a shock hits



A single climatic event or natural disaster can completely set back years of conservation progress in a single season.

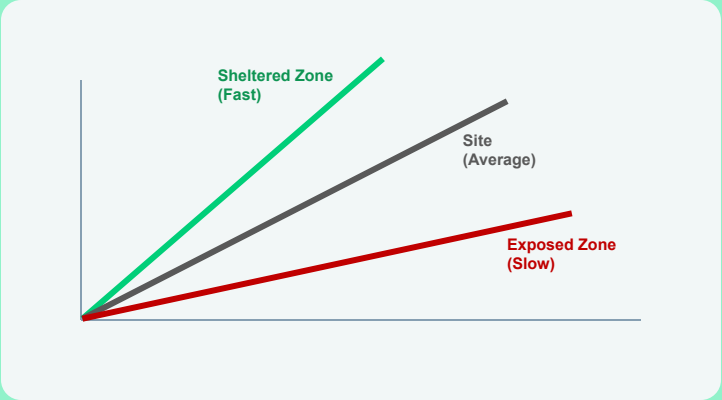
Climatic Volatility

M&E databases must explicitly document context changes, preventing false attribution of environmental failure to project performance.

- **Regenerating Woodlands:** Years of strict grazing exclusion undone by a single fire season.
- **Coral reef:** A reef rebuilding under protection is bleached again by an unexpected marine heatwave.

2.4 Non-linearity: Uneven recovery

One site, many speeds



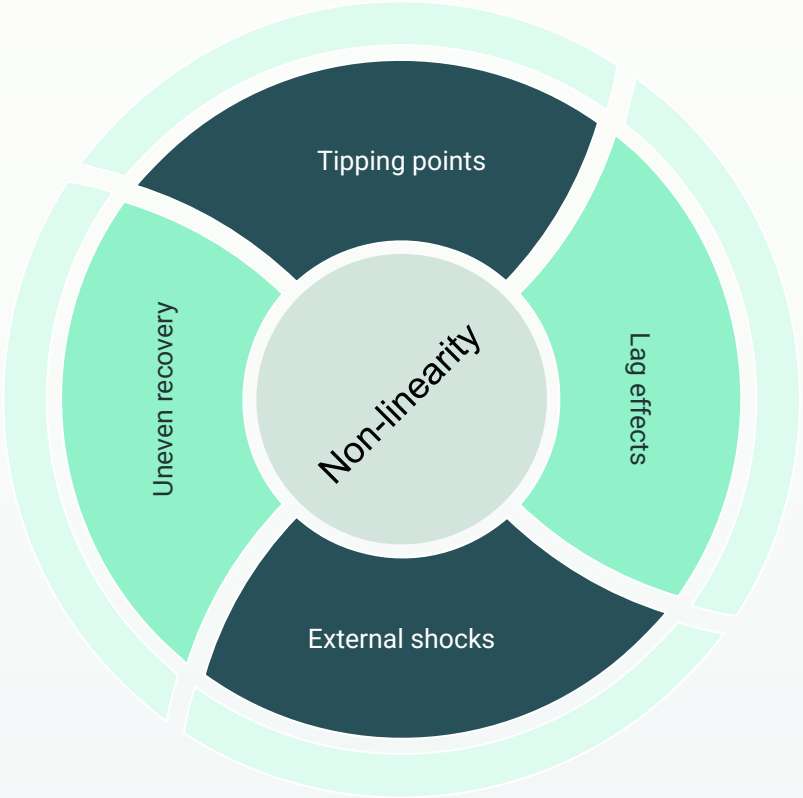
Recovery is rarely uniform across complex landscapes. A single program average can conceal local successes or failures.

Spatial Variance

M&E architectures need to track each zone, not just the site average.

- **Forest patches:** Valley-bottom plots green up quickly, whilst dry ridge-top plots lag far behind.
- **Reef zones:** Sheltered lagoon corals recover fast, whilst exposed outer-reef sections stay degraded.

2. Non-linearity



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3. Dual targets: nature and people 

3. Two targets at once, always

Nature

Biodiversity
Species, habitats, and ecosystem health: the reason the program exists.

People

Human
Livelihoods, rights, and wellbeing of the people who live with and depend on it.

Together

Why it matters
The two are intertwined; you track progress on both, never trading one away.

4. The attribution problem

4. The attribution problem

A fisheries example:

- Fish biomass rises in Year 4.
- What actually caused the increase?

- Your co-management agreements?
- A run of unusually good monsoon seasons?
- A polluting factory that closed two years ago?
- Quite possibly all three at once
- Claiming sole credit is rarely justified

Where logframes hold, and where they strain

01	Where logframes work well	• Short, clear causal chains • Outcomes within the project cycle • Familiar to most donors
02	Where they strain in conservation	• Ecological change takes decades • Non-linear, with tipping points • Threats stay invisible
03	What to do about it	• Pair logframes with results chains • Let the results chain drive learning • Let the logframe flow from it

PART TWO

Core frameworks

The CMP Open Standards

The CMP Open Standards: what and why

The CMP Open Standards is an adaptive management framework utilized by conservation organizations, NGOs, and governments worldwide to collaboratively design, implement, and measure the impact of biodiversity projects

Standards

THE FRAMEWORK

A shared, step-by-step approach to planning, monitoring, and learning in conservation.

CMP

THE PARTNERSHIP

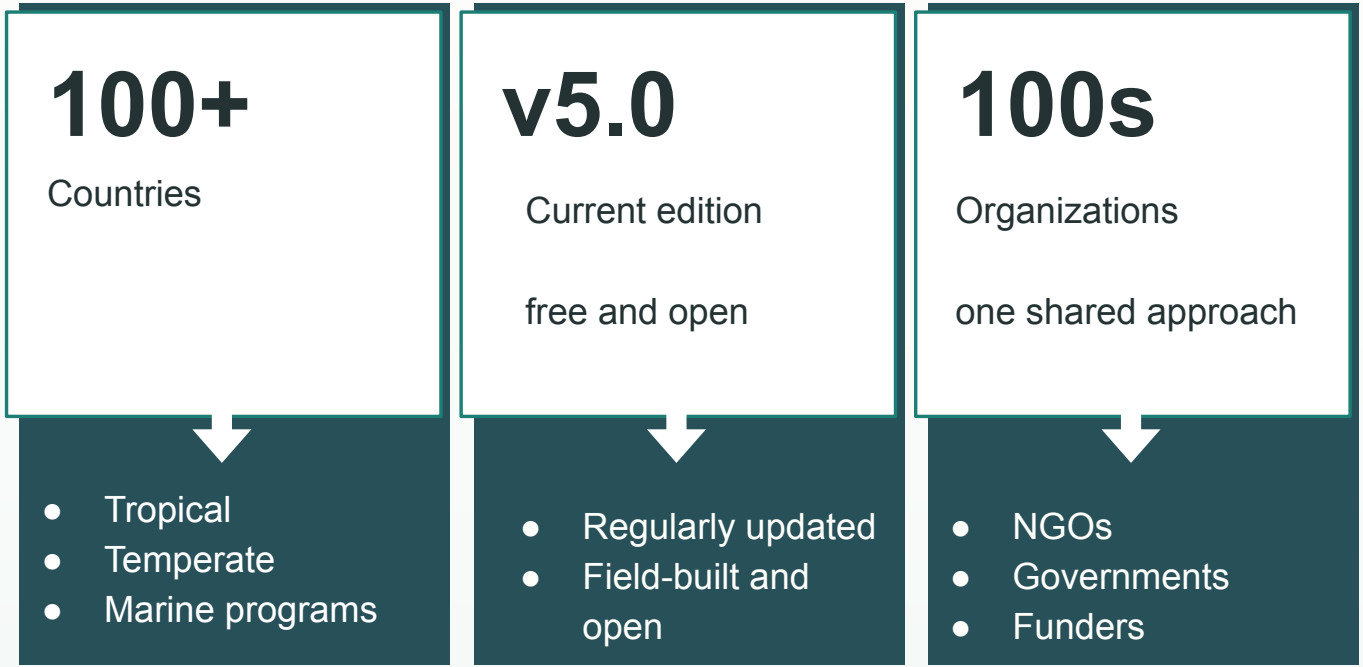
Built by the Conservation Measures Partnership: WWF, TNC, WCS, CI and many more.

Learning

THE CORE IDEA

Conservation works under deep uncertainty, so it is built to learn and adapt.

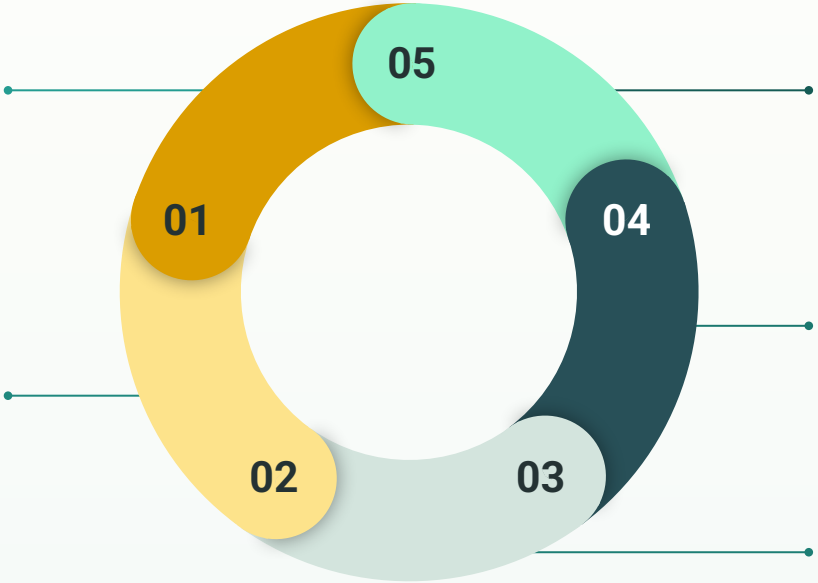
The Open Standards, in numbers



The adaptive management cycle

01.Assess
Define scope, vision, and conservation targets

02.Plan
Develop strategies, results chains, and the monitoring plan



05.Share
Capture and share learning with stakeholders

04.Analyze and Adapt
Analyze data, learn, and adapt

03.Implement
Execute actions and monitoring plans

Adaptive management cycle

Community Forest

1. **Assess:** Map forest targets, timber threats, & agricultural clearings.
2. **Plan:** Set target of <0.5% annual loss; draft results chain.
3. **Implement:** Train community forest wardens.
4. **Analyze:** Find fuelwood is true degradation driver. Shift to efficient stoves.
5. **Share:** Publish forest density trends globally.

Adaptive management cycle

Coastal Fishery

1. **Assess:** Map coral habitat and key commercial species.
2. **Plan:** Select target biomass; design co-management zones.
3. **Implement:** Roll out patrol logs and visual biomass censuses.
4. **Analyze:** Women fishers excluded from co-management. Rebuild governance.
5. **Share:** Show recovery results to landing sites.

Adaptive management cycle

Cheetah Range

1. **Assess:** Map cheetah range & retaliatory farming conflicts.
2. **Plan:** Define population metrics & guarding-dog strategy.
3. **Implement:** Put out guard dogs, deploy camera-trap baselines.
4. **Analyze:** Attacks on livestock fall, but cheetah numbers stay flat, so the team adds habitat connectivity work
5. **Share:** Inject local findings into carnivore networks.

Results chains vs. logframes

Logframe	
Goal (Impact)	Reef ecosystem health restored
Outcome (Purpose)	Local commercial overfishing reduced
Output	Community co-management and alternative livelihoods established
Activities	Community engagement; alternative-livelihood training; patrol support

Results Chain

Strategy: Community Engagement & alternative livelihoods

Direct Threat Reduced: Lower local commercial overfishing

Target Outcome: Reef Ecosystem Recovery

Results chains vs logframes

	Results chain	Logframe
Structure	Branches and loops	Linear ladder
Threats	Made explicit	Usually absent
Assumptions	Every arrow is testable	Often left implicit
Timeframe	Long and ecological	The project cycle
Strength	Learning and strategy	Accountability
Best used to	Design and adapt	Report to donors

What a results chain adds

01

Target at the centre

02

Threats made visible

03

Non-linear by design

Result chain example

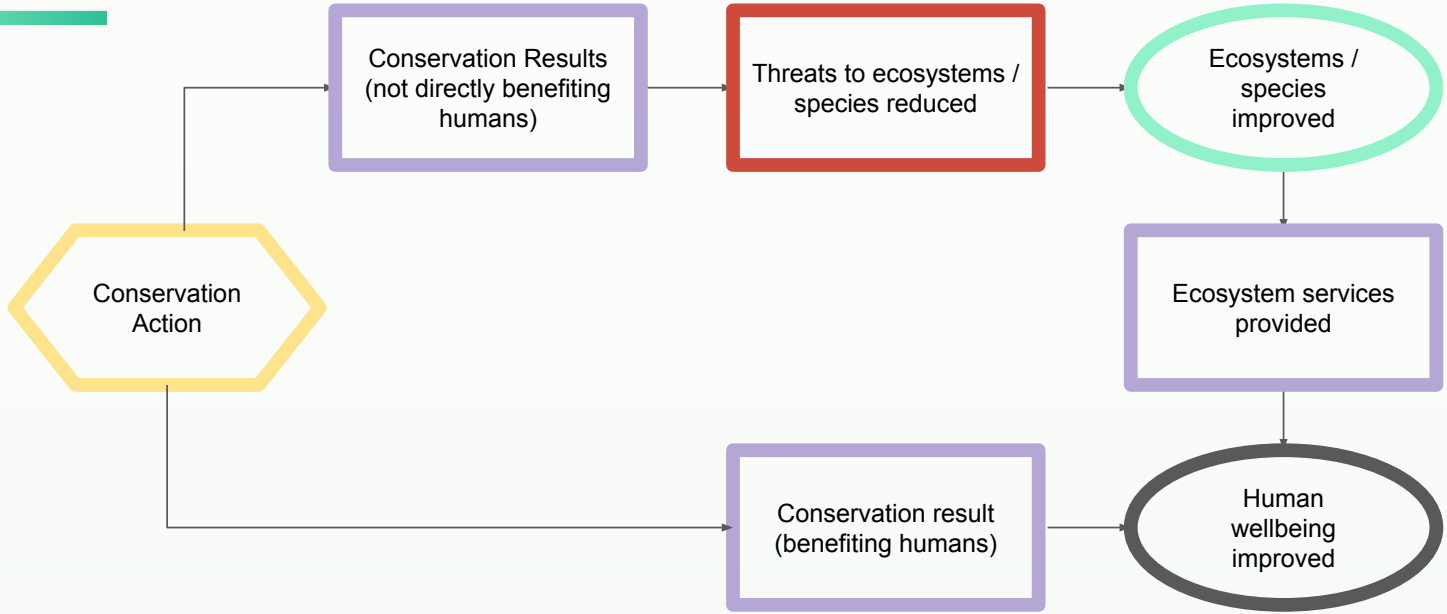


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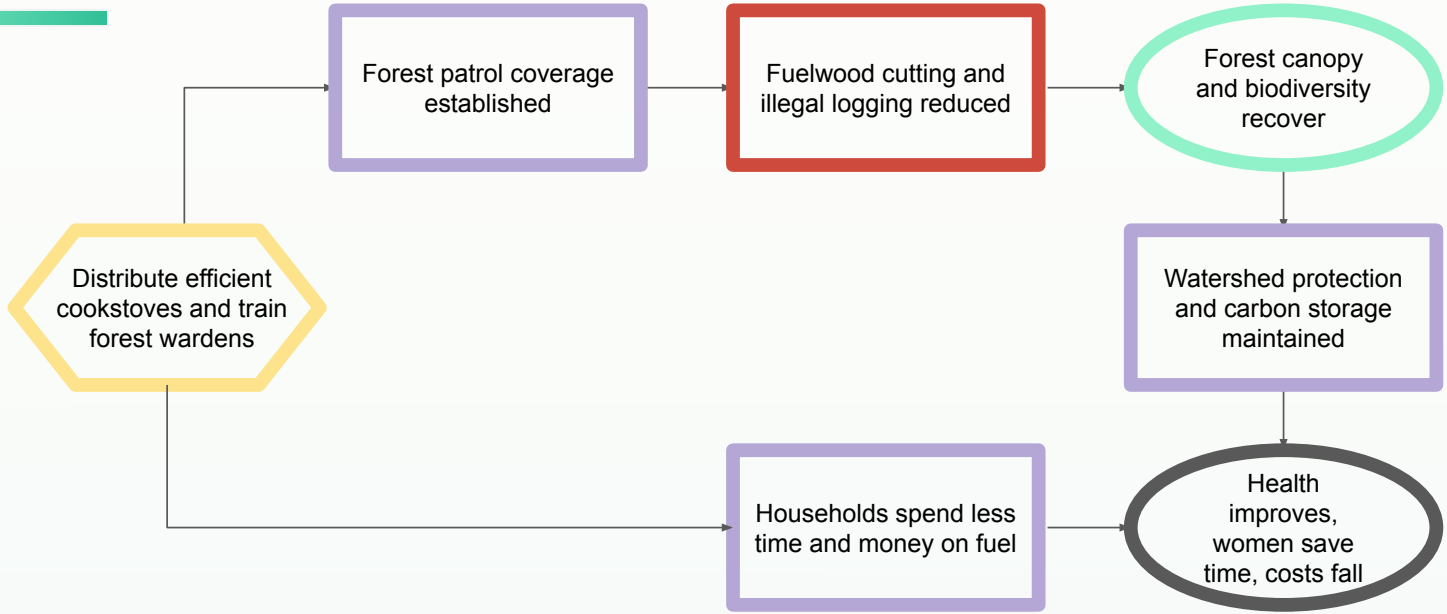
Diagram adapted from Open Standards v5.0

RC: Community forest with clean cookstoves



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PART THREE

From concepts to indicators

Targets, threats, KEAs

Conservation Targets

Defining the Target
A Conservation Target is the specific biological entity, species guild, ecological community, or habitat type of interest that an initiative seeks to conserve.

The Ecocentric Shift
These are defined by ecological boundaries, not administrative projects. They outlive standard grant or project cycles.

Conservation Targets in Practice

What makes a good target?

- **Ecocentric Foundations:** Defined by ecology, not by the project.
- **Measurable:** Specific enough to track.
- **Representative:** Reflects the wider ecosystem's health.
- **Enduring:** Outlives the funding and project cycle.
- **Focused:** Three to eight targets per landscape, no more.

Program Type	Conservation Target Example
Species & Biodiversity	Cheetah population in the southern African dryland landscape
Forest & Terrestrial	Tropical rainforest block in the Congo Basin
Marine & Coastal	Coral reef ecosystem of the Coral Triangle
Nature-based Solutions	Floodplain wetland buffering downstream floods

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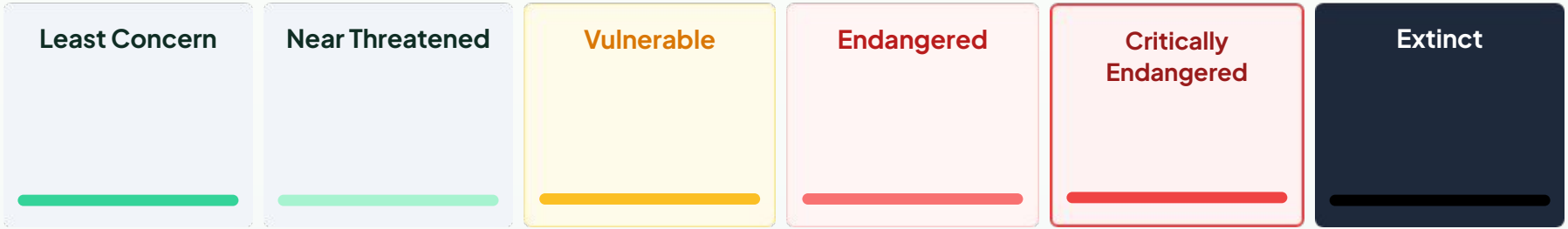
The IUCN Red List Categories

Standardized global classification of extinction risk informing targets and strategic priorities.



M&E Impact: Red List updates run on 5–10 year timescales. Do not use them as short-term monitoring metrics; rely instead on project-level Key Ecological Attributes (KEAs).

Direct threat, driver, root cause

Direct Threats
Human activities or processes that directly cause the destruction, degradation, or functional impairment of a conservation target's health
Example: Illegal logging

Driver
Socioeconomic conditions or local legal parameters permitting the threat.
Example: Poverty, weak enforcement.

Underlying root cause
Deep systemic institutional, political, or global economic setups.
Example: Inequitable land tenure policy.

Threats: Marine fishery example

1 Direct threat

1. # illegal fishing vessels per patrol day
2. catch per unit effort trend

2 Driver

1. # households dependent on fishing
2. # with an alternative income
3. market price of the target species

3 Underlying root cause

1. Area under formal co-management (km2 or %)
2. fishing access rights formalised

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Key Ecological Attributes

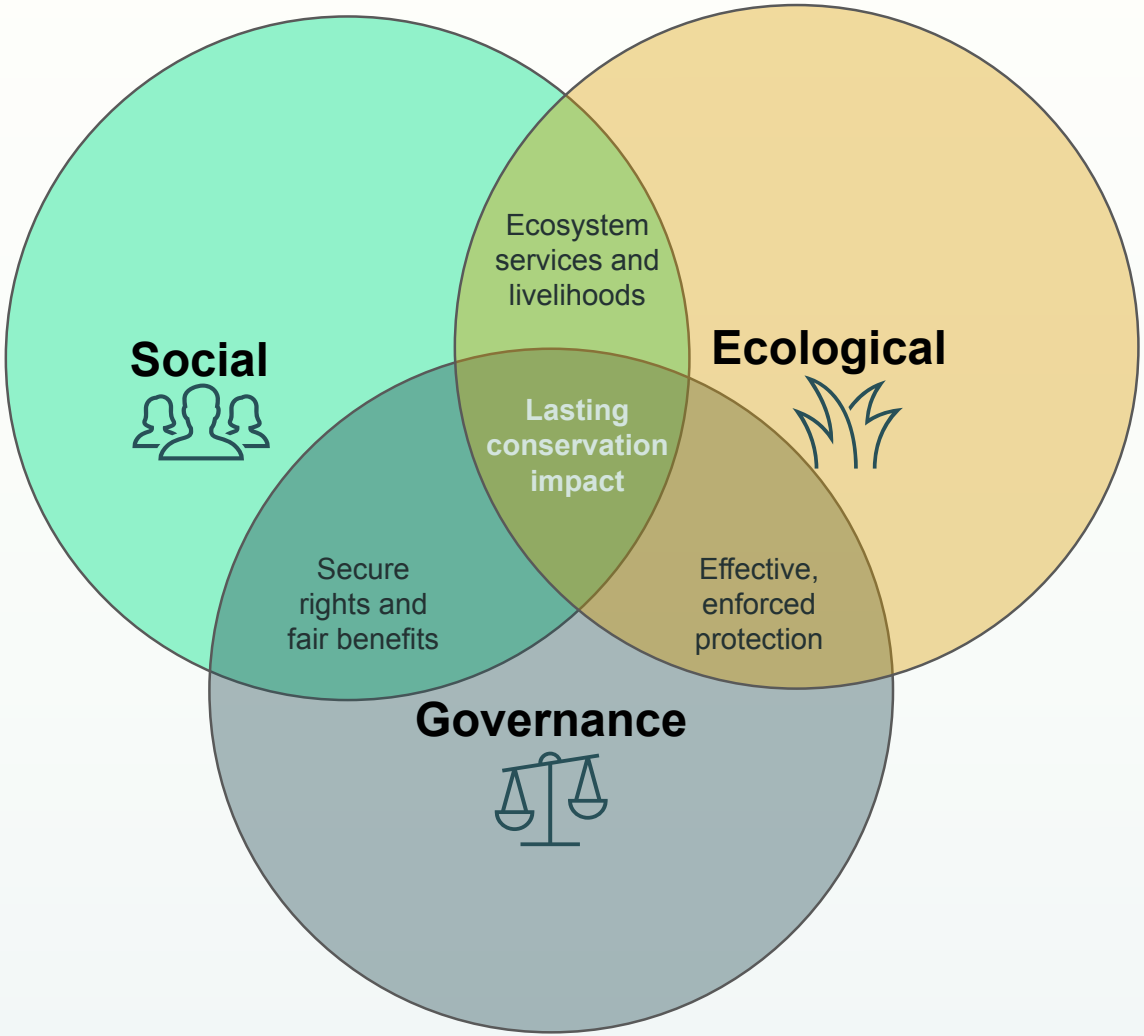
Defining the KEA
Aspects of a target's biology or ecology that, if altered, would lead to the loss of the target over time. They define the structural, compositional, and functional health of the ecosystem.

The Diagnostic Value
These function as the vital medical signs (blood pressure, temperature) of the species or habitat of concern.

From KEA to Indicator: Worked Examples

Target	KEA	Threat	Measurable Indicator
Lowland Moist Forest	Forest Canopy Cover	Illegal Logging	Annual % change in canopy cover density
African elephant	Population size	Ivory poaching	Number of elephants from aerial counts

Balancing indicators across domains


Social
Ecological
Governance
Ecosystem services and livelihoods
Lasting conservation impact
Secure rights and fair benefits
Effective, enforced protection

Threat reduction vs. outcome indicators

Threats vs. Outcomes

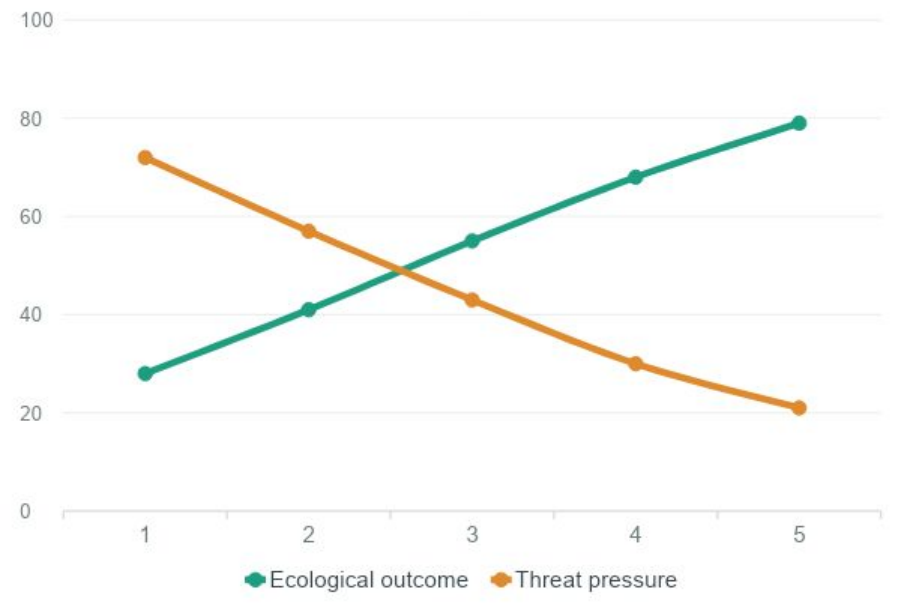
Evaluation Metric	Threat Reduction Indicators	Ecological Outcome Indicators
What it Measures	Pressure on the target (activities/behaviors of humans)	The state of the biological target itself (ecological health)
Marine Example	# active illegal fishing vessels per patrol day	Total fish biomass volume (kg) per reef hectare
Forest Example	Hectares of forest cleared annually from satellite alerts	Forest canopy cover closure % across targeted zones
Species Example	# of snaring lines deactivated per quarter	Adult cheetah population size from camera-traps
Response Horizon	Short to Medium Term (1 to 3 year cycles)	Long Term (5 to 15+ years of biological recovery)
Program Attribution	High; easily connected to project activity levels	Low; strongly affected by external ecological and climatic forces
Practical Signal	Early warning (Are we shielding the target?)	Proof of impact (Is nature actually recovering?)

READING BOTH LAYERS TOGETHER

Target improving and threats down

SCENARIO A
Strategy working

Threat pressure vs ecological outcome, project years 1 to 5



WHAT THIS MEANS

Your logic model holds. Human pressure has decreased, and the biological system is showing positive recovery, just as the strategy predicted. This is the picture you are designing for.

M&E ACTION

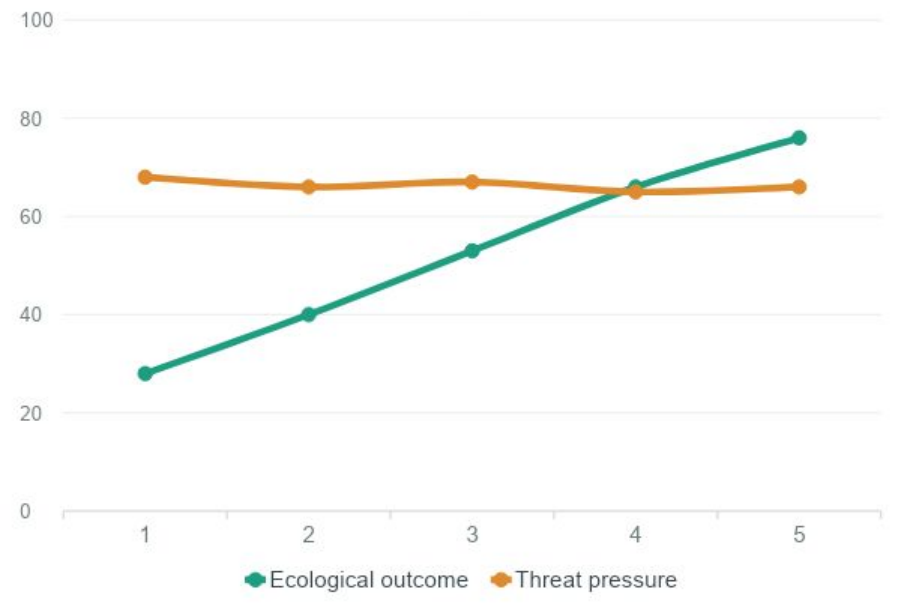
Maintain the current strategy, document the success story, and share the lessons with peers.

READING BOTH LAYERS TOGETHER

Target improving but threats flat

SCENARIO B
External attribution

Threat pressure vs ecological outcome, project years 1 to 5



WHAT THIS MEANS

Nature is recovering even though the pressure has not come down. That gap is a warning: an outside driver may be carrying the impact, not your strategy, and it could reverse next year.

M&E ACTION

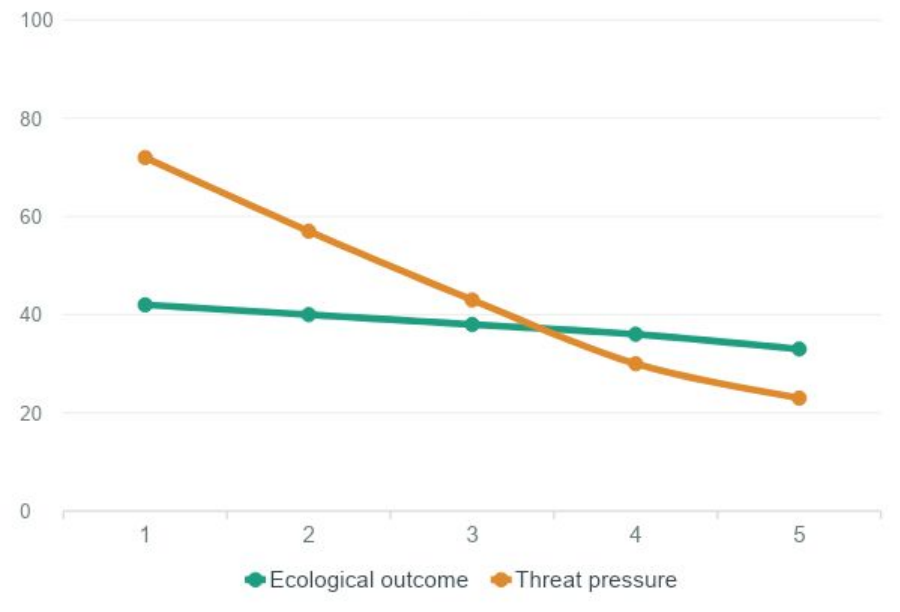
Investigate before claiming credit, for example look for weather cycles or animal migrations.

READING BOTH LAYERS TOGETHER

Target flat or declining, threats down

SCENARIO C
Broken logic model

Threat pressure vs ecological outcome, project years 1 to 5



WHAT THIS MEANS

You genuinely reduced the threat, yet the ecosystem keeps failing. That strongly suggests the threat you targeted was not the main driver of decline, and the real one is still unaddressed.

M&E ACTION

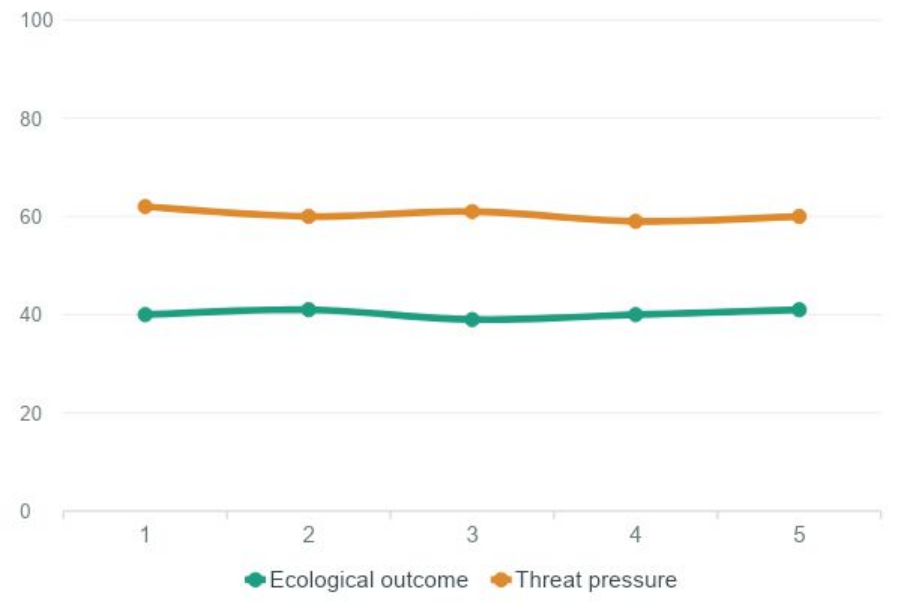
Revisit your theory of change. Look for unmapped or cascading threats you may have missed.

READING BOTH LAYERS TOGETHER

Target flat or declining, threats flat

SCENARIO D
Execution failure

Threat pressure vs ecological outcome, project years 1 to 5



WHAT THIS MEANS

Neither layer is moving. Pressure is unchanged and the target is unchanged, which means the activities are either not really happening on the ground, or they are aimed at the wrong problem.

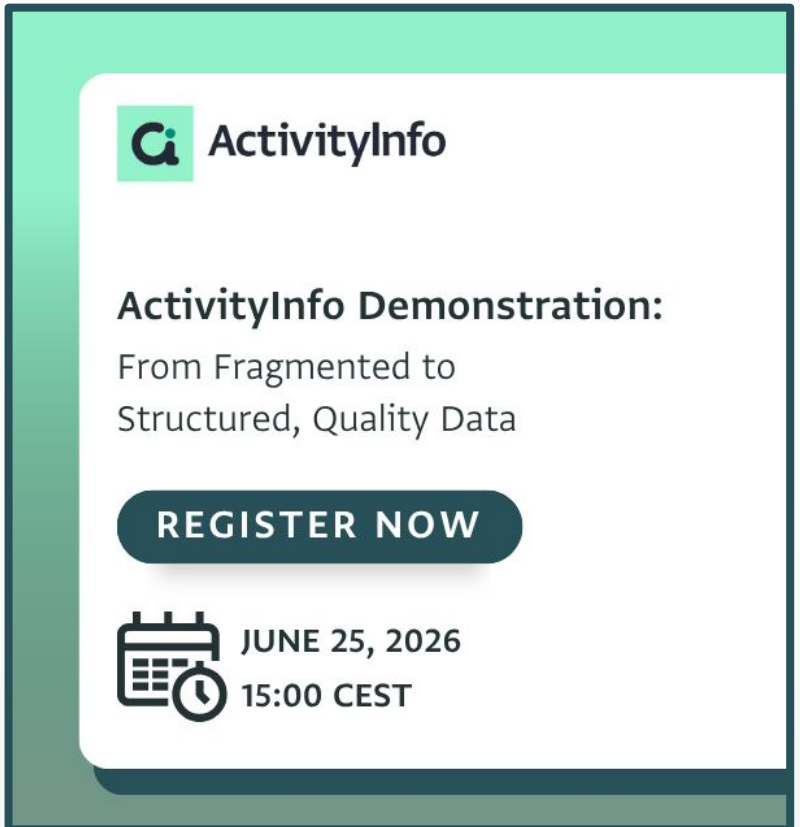
M&E ACTION

Diagnose implementation gaps on site, or rewrite the threat identification profile.

Key Takeaways

- Conservation runs on ecological time, and ecological change is non-linear.
- Every program carries dual targets: nature and people, tracked together.
- Logframes alone are not enough for conservation work.
- Results chains turn every assumption into something you can test.
- Read threat reduction and ecological outcome indicators together, never alone.

Upcoming Webinars



Questions?

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