

Monitoring distance to limits – to inform when to change course

Monitoring for Pathway Transitions in National Adaptation Plans

We monitor for many good reasons

M&E systems in climate adaptation serve several important functions — all of them valuable.



Track progress

Measure whether national adaptation goals and targets are being met over time.



Evaluate projects

Assess whether specific interventions achieved their intended objectives and outputs.



Learn from experience

Build an evidence base on what works, what doesn't, and under what conditions.



Accountability

Demonstrate to governments, communities, and funders how resources have been used.

But there is something we often miss

WHAT MOST M&E SYSTEMS DO WELL

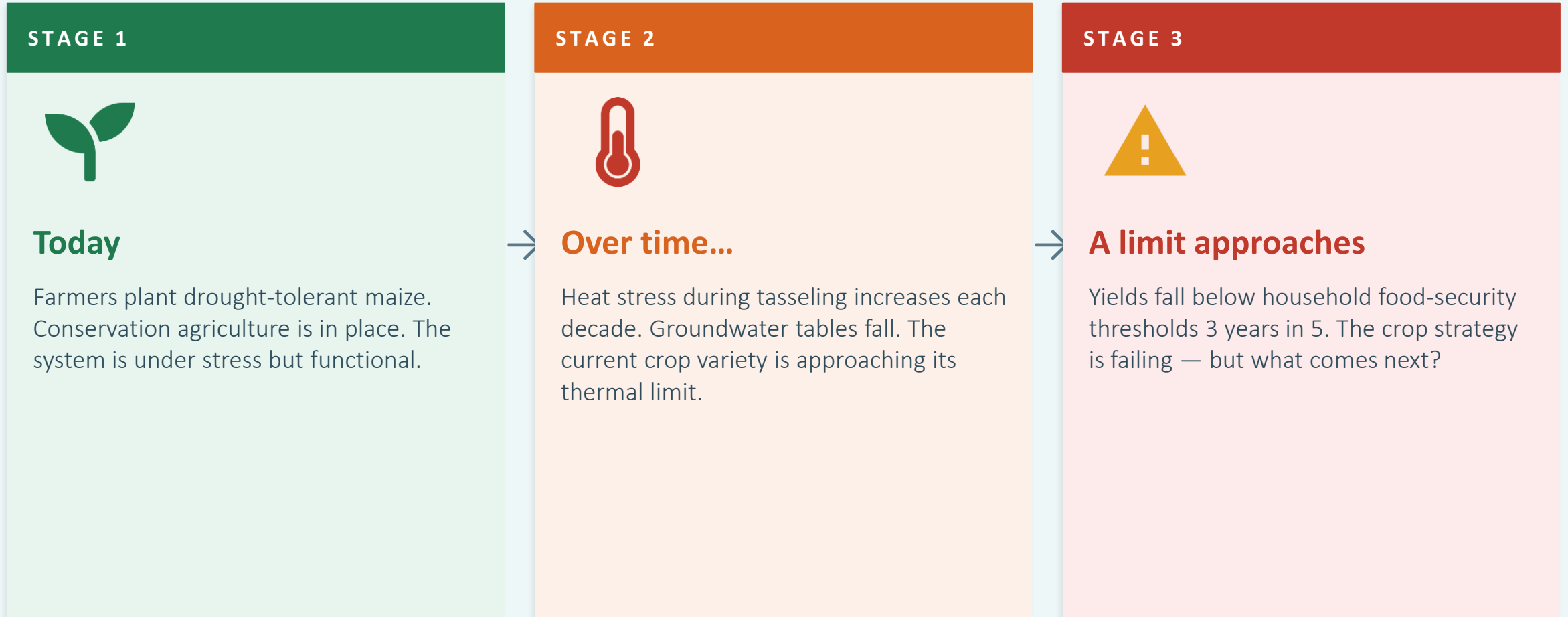
- Record what climate impacts occurred
- Track whether planned actions were implemented
- Measure changes in outcomes over time

WHAT IS OFTEN MISSING

- Monitor whether a system is approaching its limits
- Signal when the current strategy is running out of room
- Prompt preparation for a fundamentally different approach

Most M&E tells us what has already happened. We also need to know how much time we have left before something needs to fundamentally change.

Consider what is happening to crops



The key question: *When is the right time to switch to a different crop — and what does that switch actually require?*

Switching to a different crop is not simple

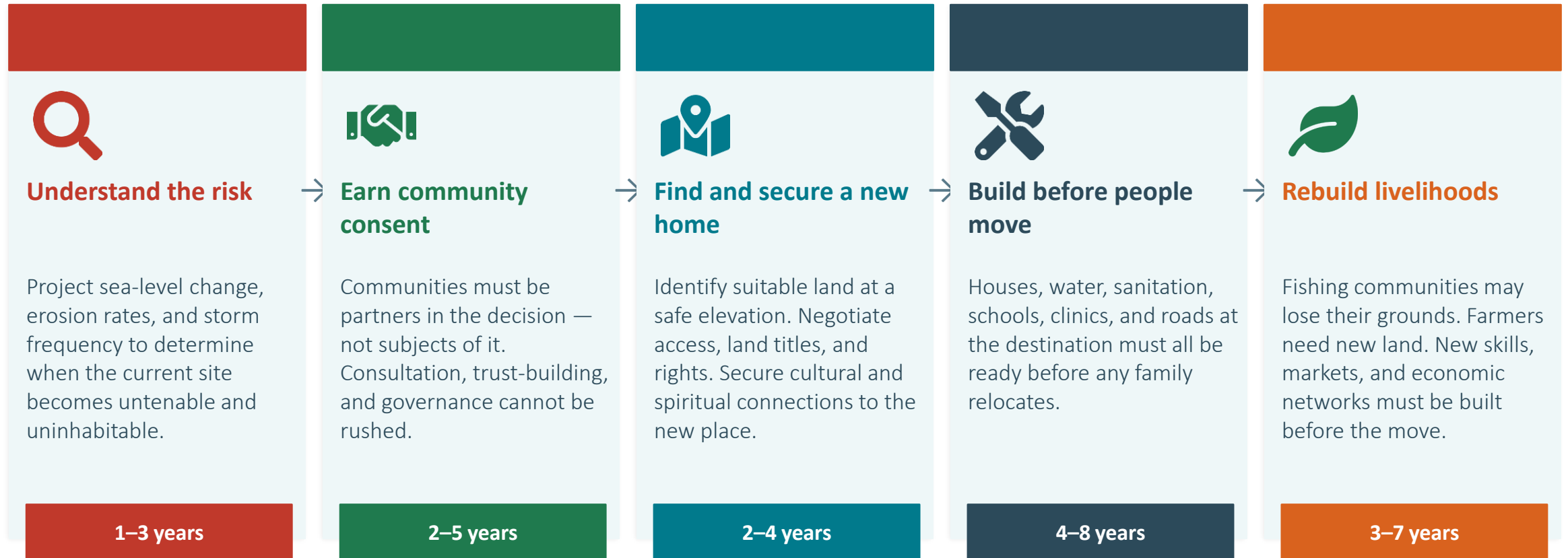
A successful crop transition requires years of preparation across multiple areas — long before farmers need to change what they plant.



If the crop fails next season, **it is already too late** to start these preparations. The window to act closes **years before the crisis becomes visible**.

When communities must move

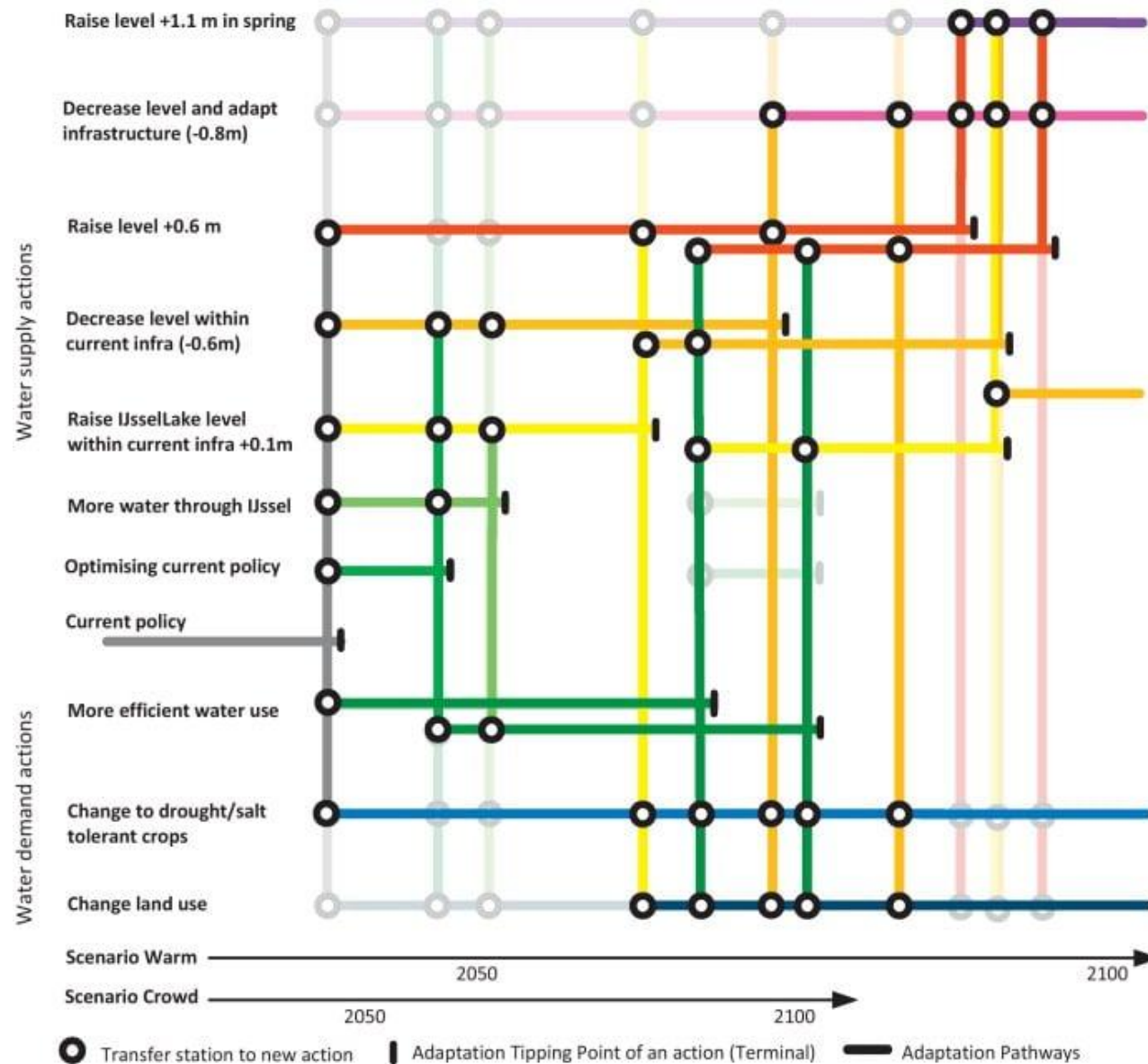
Sea level rise, coastal erosion, and intensifying storms are making some settlements unviable. Planned, dignified relocation takes 10–20 years of preparation — far longer than most people assume.



TOTAL LEAD TIME: minimum 10–20 years from decision to completed relocation

In Fiji and across the Pacific, communities that successfully relocated spent **10–15 years in preparation** before the first family moved. Waiting until the sea is at the doorstep leaves no dignified option.

We have all seen diagrams like the following showing when a change in adaptation pathway is warranted over time



Source: Haasnoot, M., et al., Dynamic adaptive policy pathways: A method for crafting robust decisions for a deeply uncertain world. *Global Environ. Change* (2013), <http://dx.doi.org/10.1016/j.gloenvcha.2012.12.006>

These challenges appear across all systems



City water supplies

Reservoirs that reliably supplied cities for decades are running dry faster than they refill. Cape Town almost ran out of water entirely in 2018. When should a city begin building the next water source — and how long does that take?



Places becoming unlivable

Rising seas, intensifying heat, and repeated flooding are making some areas increasingly uninhabitable. Planned, dignified relocation of communities takes a decade or more of preparation. Waiting until people must leave is already too late.



Ecosystems and livelihoods

Fisheries, forests, and grazing systems are being pushed beyond their productive limits. The transition to new livelihoods — aquaculture, alternative species, different land uses — requires new infrastructure, skills, and markets well in advance.

In every case, the question is the same: how much time do we have, and when must we start preparing for what comes next?

This is the challenge of adaptation pathways

Adaptation is not a single action taken once.

It is a sequence of strategies, each suited to the conditions of its time — and each requiring preparation before the previous one reaches its limit.

Current pathway

Working now, but approaching its limit

Transition pathway

Scope now · Prepare · Commit before limit

Next pathway

Ready to activate when current fails

The M&E question: are we still safe within our current pathway, or is it time to prepare the next one?



PEG M&E PATHWAYS

A new tool from the LEG

The LEG is developing a new monitoring and evaluation tool — the PEG M&E Pathways Tool — specifically designed to help countries answer this question.

- Monitor whether a system is approaching its limit
- Signal when preparation for a transition must begin
- Inform NAP reviews with forward-looking evidence
- Link M&E to adaptation pathways and finance needs

**Draft supplements for comments:
The PEG M&E Pathways and also on Applying the GGA
framework in the NAP Process**



*Please scan the QR code to draft supplements to
send comments to leghelp@unfccc.int*