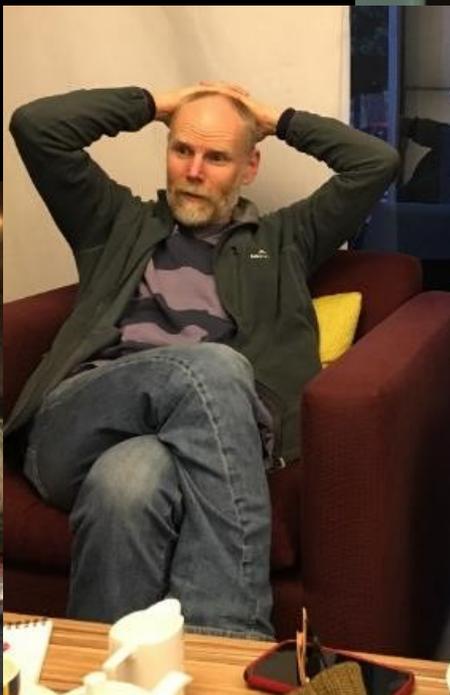


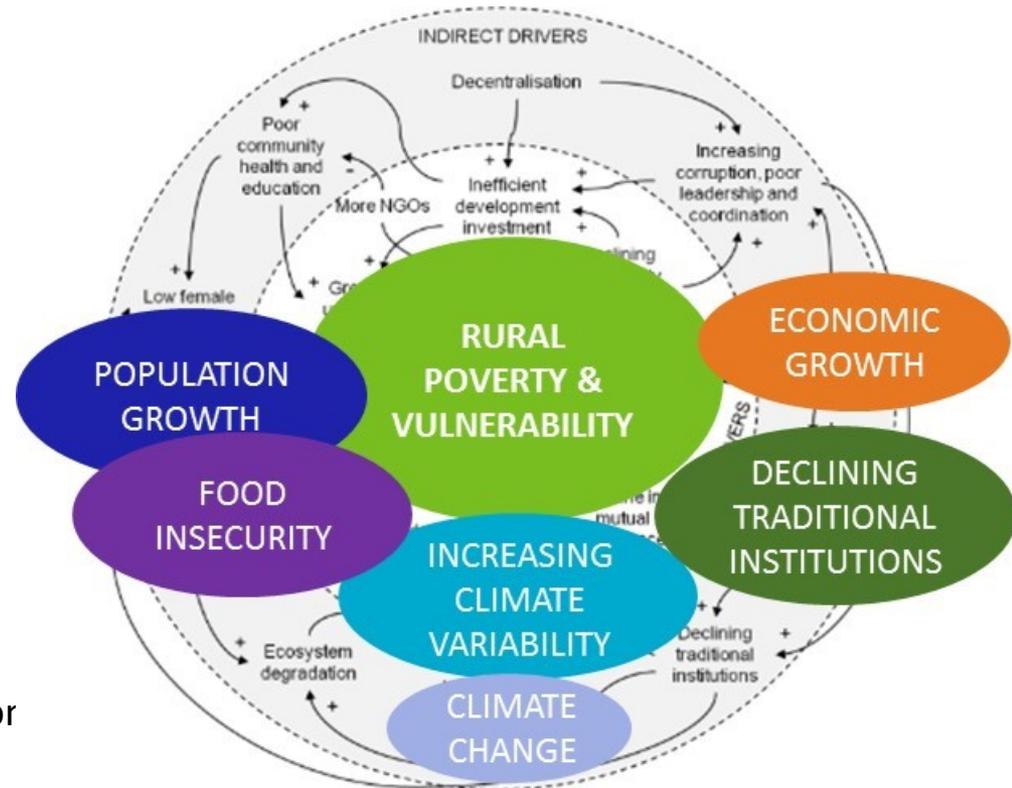
Navigating the future: the Resilience, Adaptation Pathways and Transformation (RAPT) Approach

Deborah O'Connell, Yiheyis Maru, Nicky Grigg, Nick Abel, Brian Walker and many fabulous colleagues
 Adaptive Governance Forum, 6 Sept 2018, Wellington, New Zealand



International development work

- 836 million people still live in extreme poverty
- About one in five persons in developing regions lives on less than \$1.25 per day
- The overwhelming majority of people living on less than \$1.25 a day belong to two regions: Southern Asia and sub-Saharan Africa
- High poverty rates are often found in small, fragile and conflict-affected countries
- One in four children under age five in the world has inadequate height for his or her age
- Every day in 2014, 42,000 people had to abandon their homes to seek protection due to conflict



How do we move towards SDGs
(especially those focussed on environment)
within this context?

Using science in complex problems to make a difference...?

Define problem

Define knowledge gaps

Do some science and produce new knowledge

Deliver outputs (papers, reports, workshops)



Magic happens etc

Better decisions are made based on knowledge produced

Reviews showed...

Define problem – environmental degradation



Define implementation gaps – environmental protection and restoration



[No new science] but implement actions (eg replant trees)

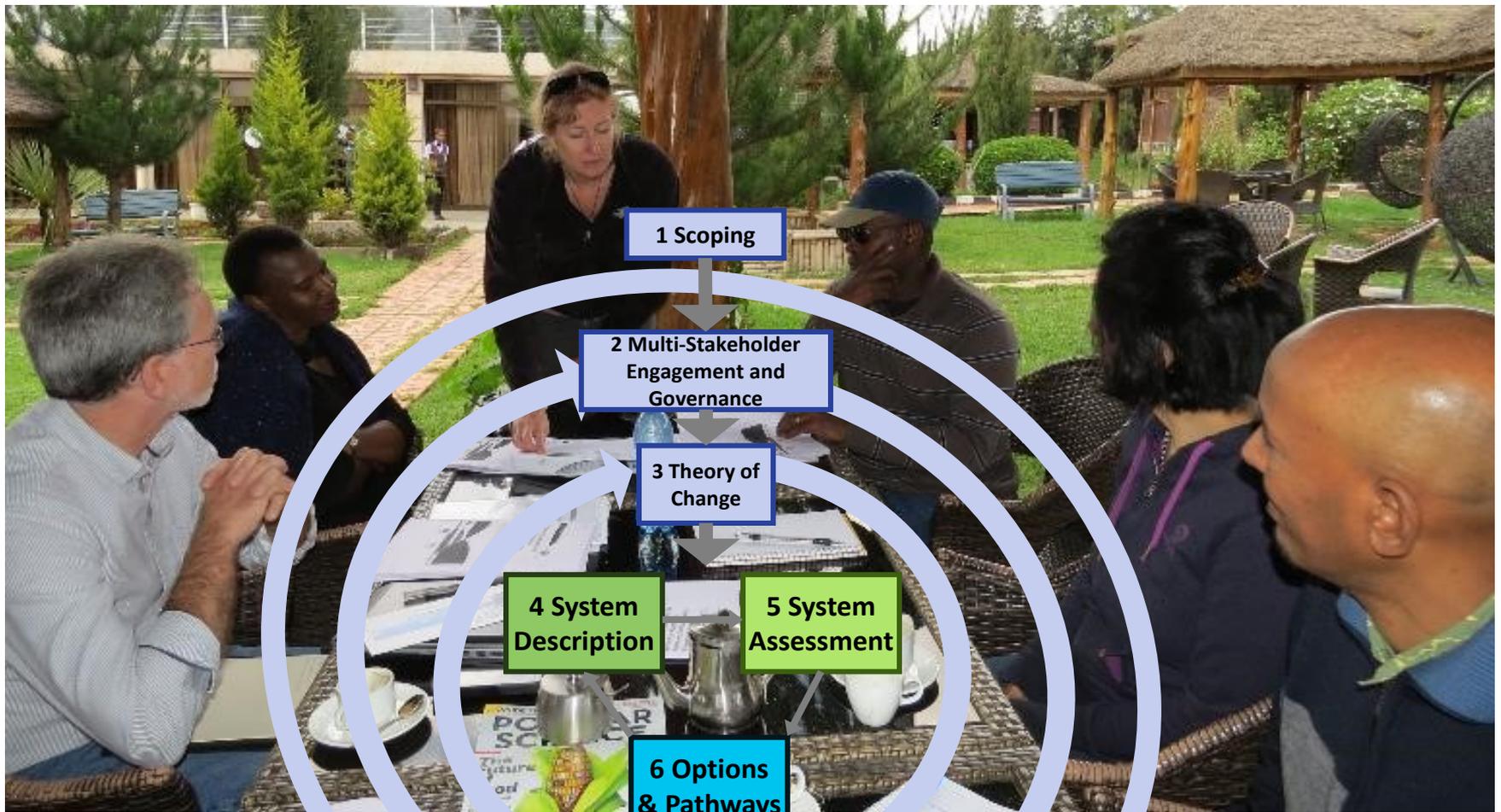


Review of multi-year investment shows no magic happened...



Environmental benefits obtained





1 Scoping

2 Multi-Stakeholder
Engagement and
Governance

3 Theory of
Change

4 System
Description

5 System
Assessment

6 Options
& Pathways

7
Learning



Empowered lives.
Resilient nations.



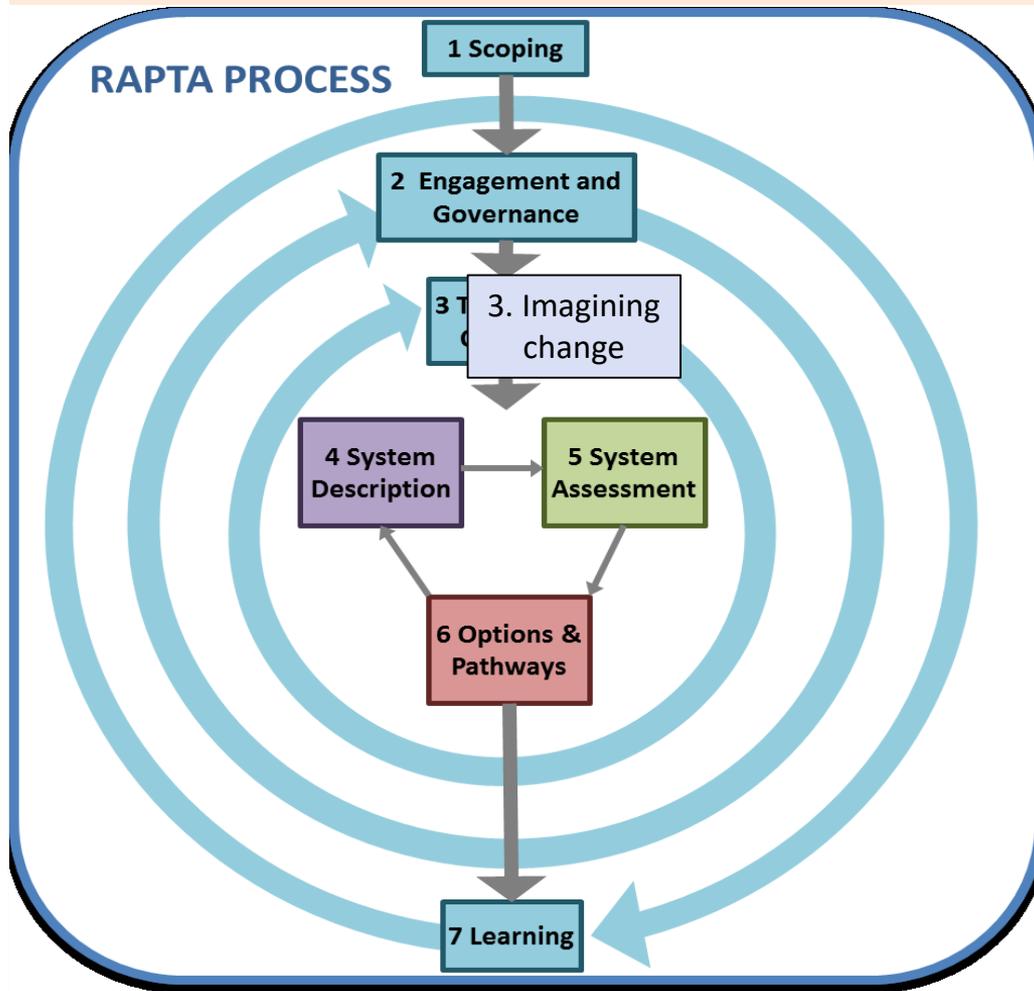
MEICA - Ethiopia

GRAID

At Stockholm Resilience Centre



What is the RAPTA Approach?



Inputs

May include

- **Data, models, evidence** from range of sources
 - **Existing indicators** reported to Conventions, GEF, national processes, or from literature
- May need to develop new indicators or models or collect new data to fill identified knowledge gaps

Outputs and outcomes

Will include

- Project planning documents
- Options and pathways, learning frameworks to take to next phase of project cycle
- Identified key knowledge gaps
- Improved capacity of stakeholders to understand system and manage adaptively

Our use of terms...

- about how to make key interventions in the system...
- informed by the concepts of resilience, adaptation, and transformation...
- applied in an intentional way...
- in order to move towards sustainability goals.



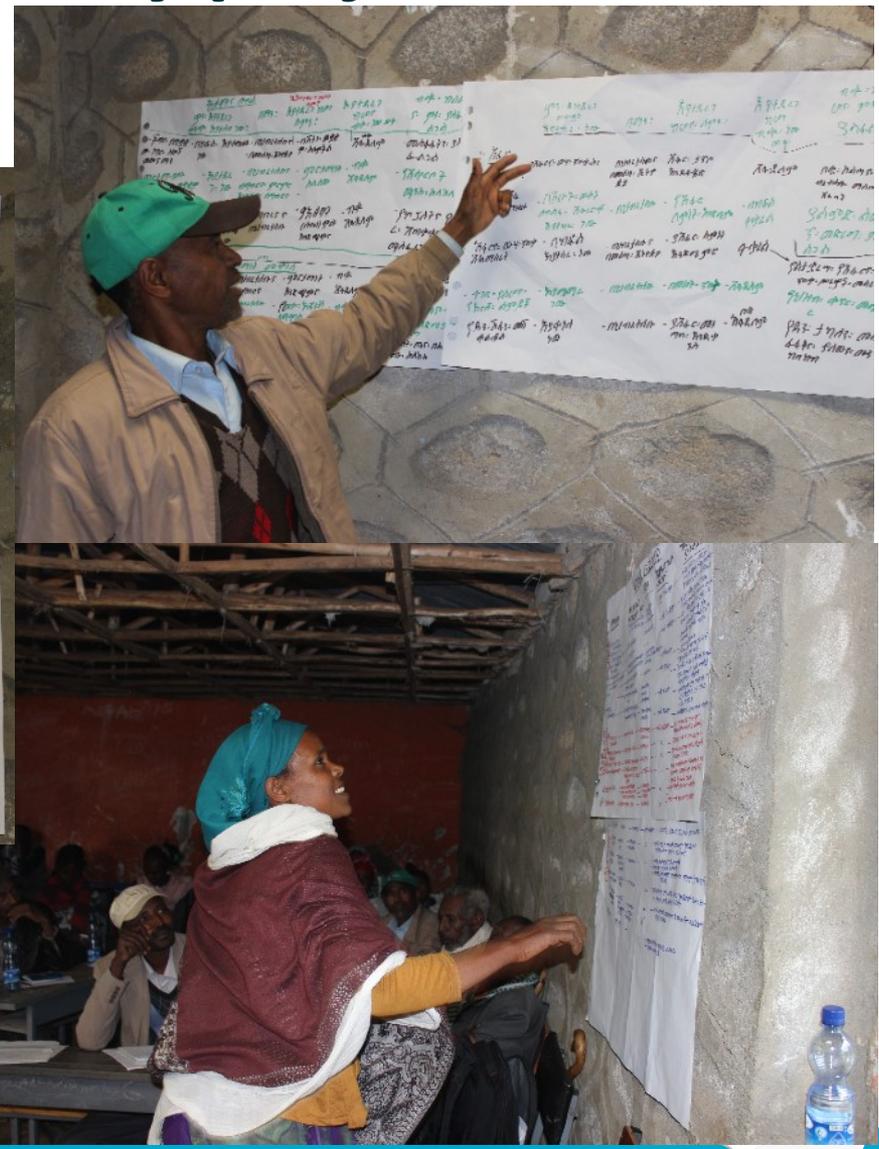
3 examples of using some of this co-designed, adaptive approach

1. Design of large investment projects for food security in Ethiopia
2. Training course for disaster resilience in Tonga
3. Disaster resilience in Australia

1. Design of food security projects in Ethiopia

WOMEN GROUP

ግንዛቤ	ግንዛቤ ለምን ማድረግ ነው?	ገንዘብ	አገልግሎት ለምን ማድረግ ነው?	ገንዘብ ለምን ማድረግ ነው?
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The Resilience, Adaptation Pathways and Transformation (RAPT) Approach – Ethiopia pilot



“Top down” GEF/UNDP:

International stakeholders, NGOs, government departments, consultants and other professionals

“Bottom-up” Telecho:

Community (youth, women, men), farmers, experts, district officials

RAPT Approach Ethiopia - Theory of Change

“... I have learnt how problems are causally linked and how we can bring effective solutions if we understand the root causes of the interconnected problems...” {Stakeholder feedback}



Ethiopian example – Options and Pathways

Implementation Pathways

- Intervention options

Enhance Resilience

- Index insurance,
- improved NRM

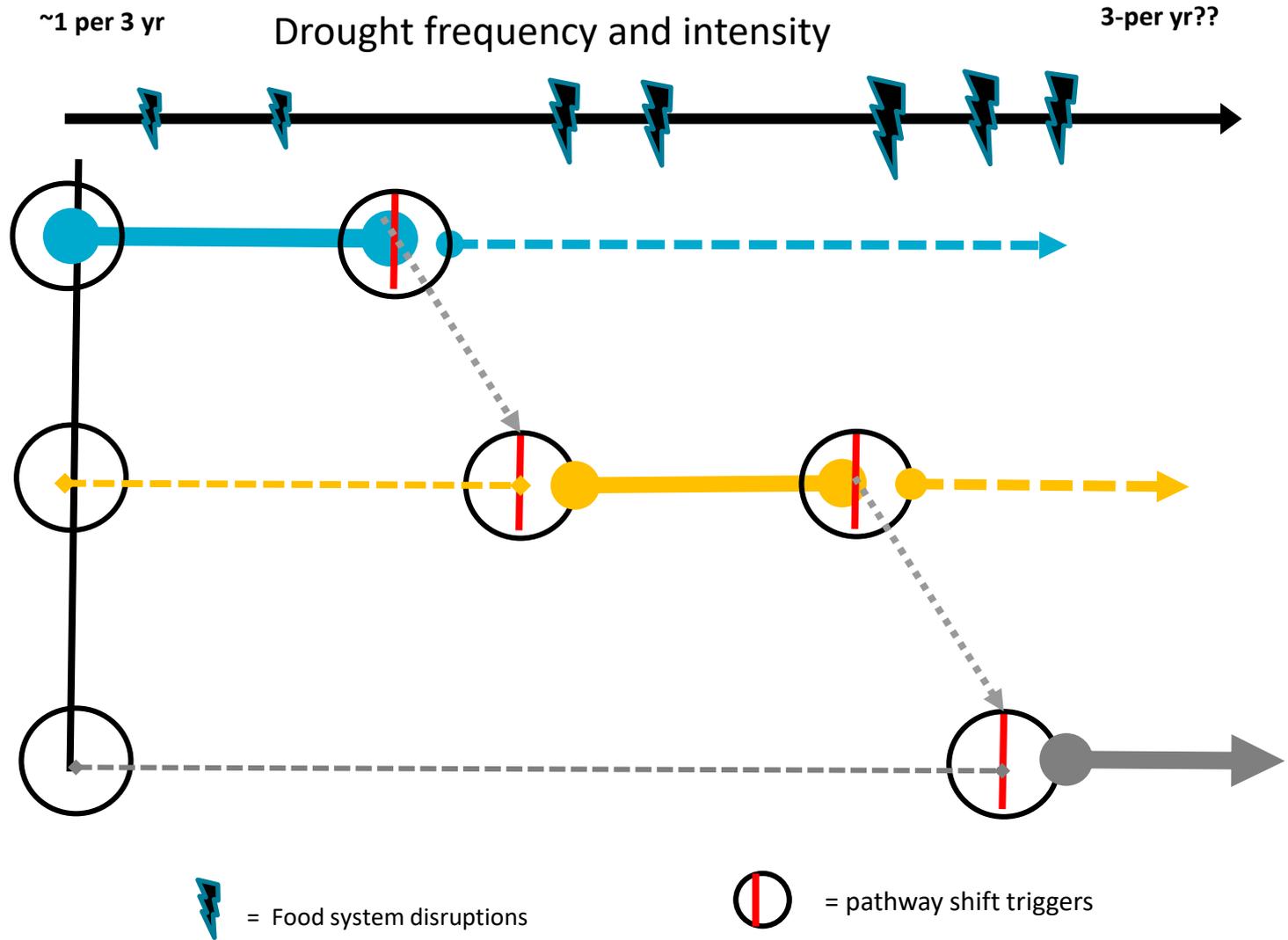


Adaptation to agro pastoralism

- irrigated agr
- Off farm activities

Transformation to New livelihood system

- tourism



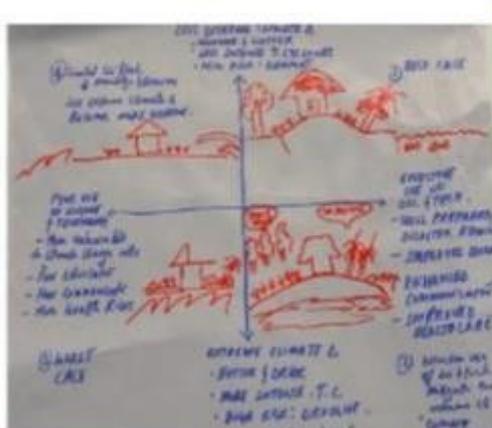
2. Livelihoods and disaster resilience in the Pacific



Sustainably...
social sustainability in action

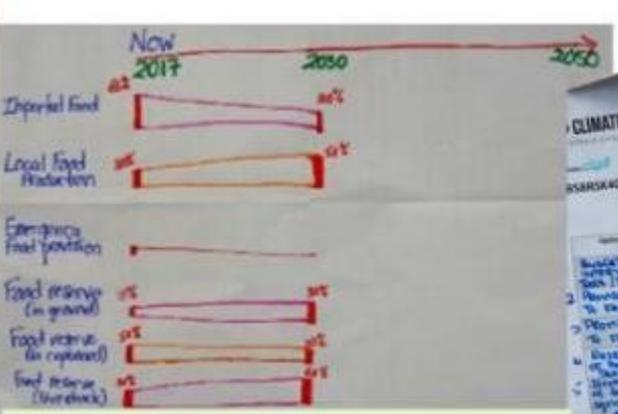
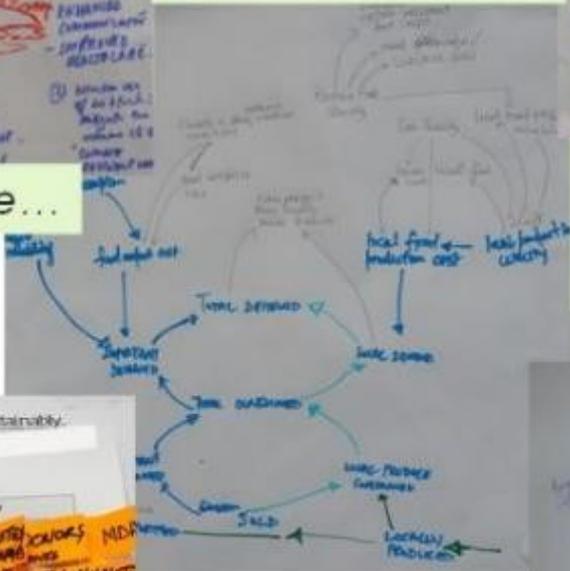


Example of outputs from the RAPT Approach



Imagining change ...

System description and resilience assessment under climate change projections



Planning options and pathways for changing food production systems

CLIMATE RESILIENT TONGA
ASRSKALEA Task 4: Options and Pathways Worksheet

Options and Pathways	Estimated Investment (USD)	Estimated Savings (USD)
1. Increase in agricultural productivity	1(3,345)	2(3,345)
2. Increase in agricultural productivity	3(3,345)	4(3,345)
3. Increase in agricultural productivity	5(3,345)	6(3,345)

CLIMATE RESILIENT TONGA
ASRSKALEA Task 1: Stakeholder Engagement and Governance

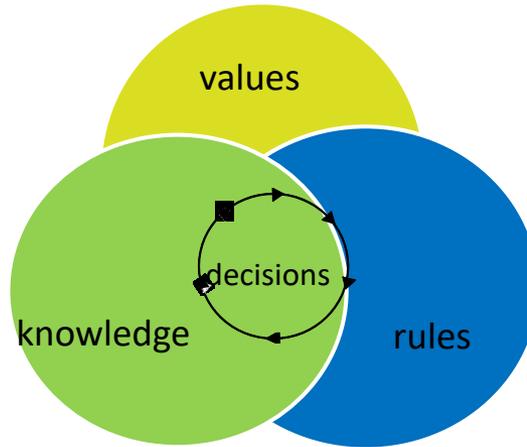
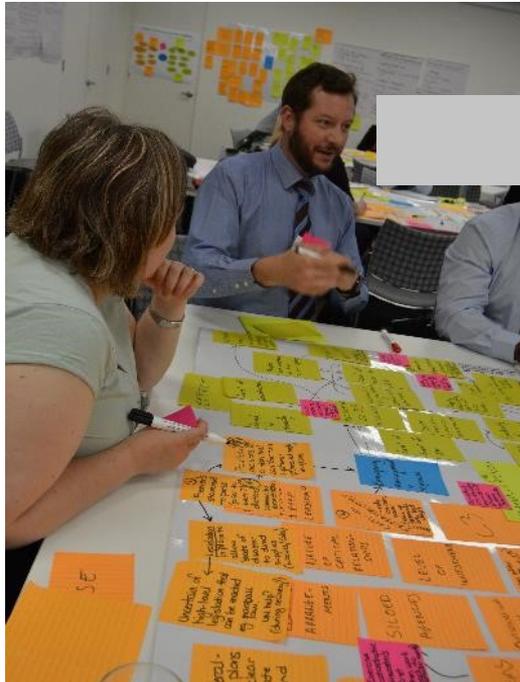
Stakeholder	Power	Interest	Influence
Ministry of Agriculture	H	H	H
Ministry of Health	H	H	H
Ministry of Education	L	H	H
Ministry of Labour	H	H	H

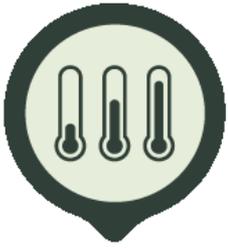
A detailed understanding of stakeholder engagement and governance



Embedded within an evolving Theory of Change

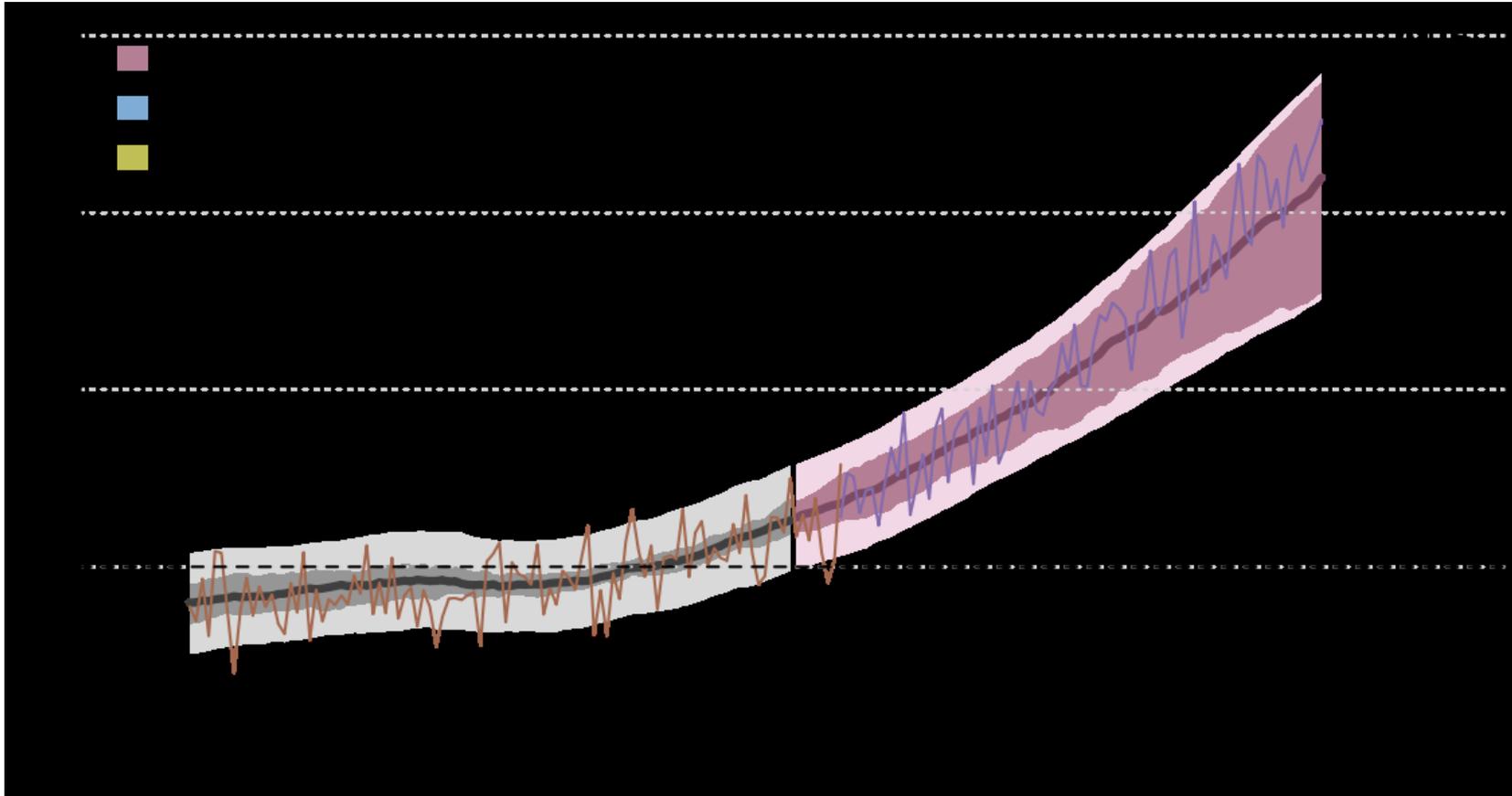
3. Disasters, vulnerability, resilience in Australia



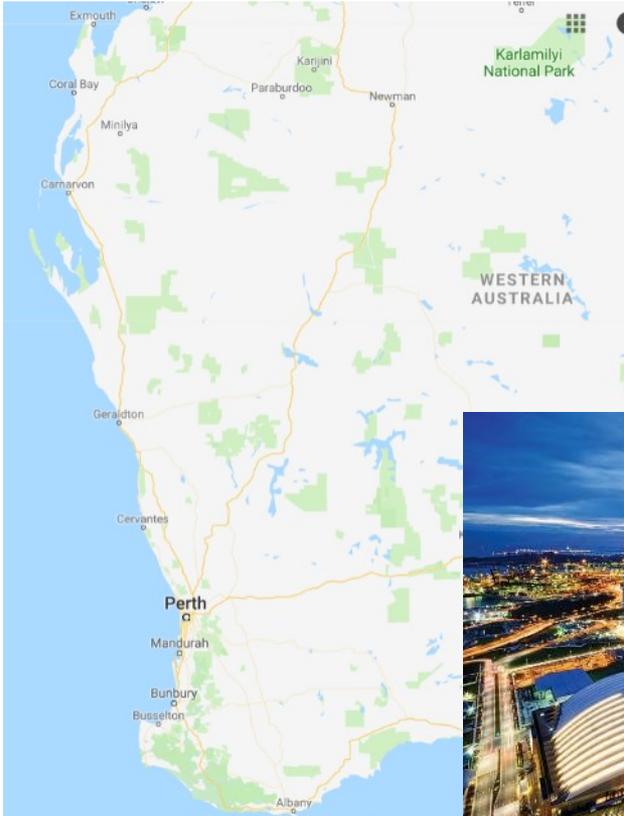


AUSTRALIA WILL WARM SUBSTANTIALLY DURING THE 21ST CENTURY

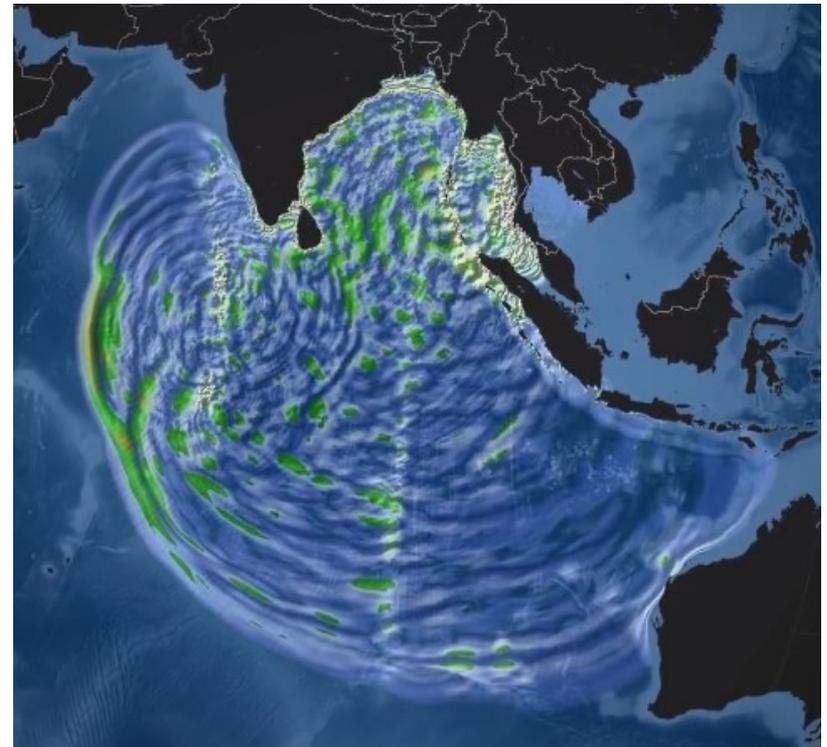
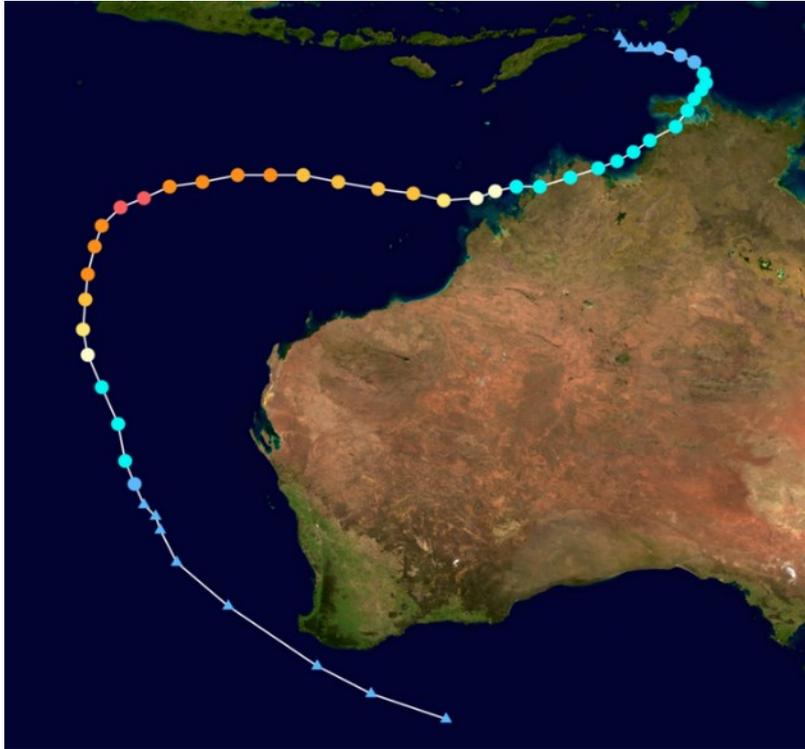
Temperature anomalies from 1950-2005



Imagining the unimaginable – catastrophic disaster



These already happened...



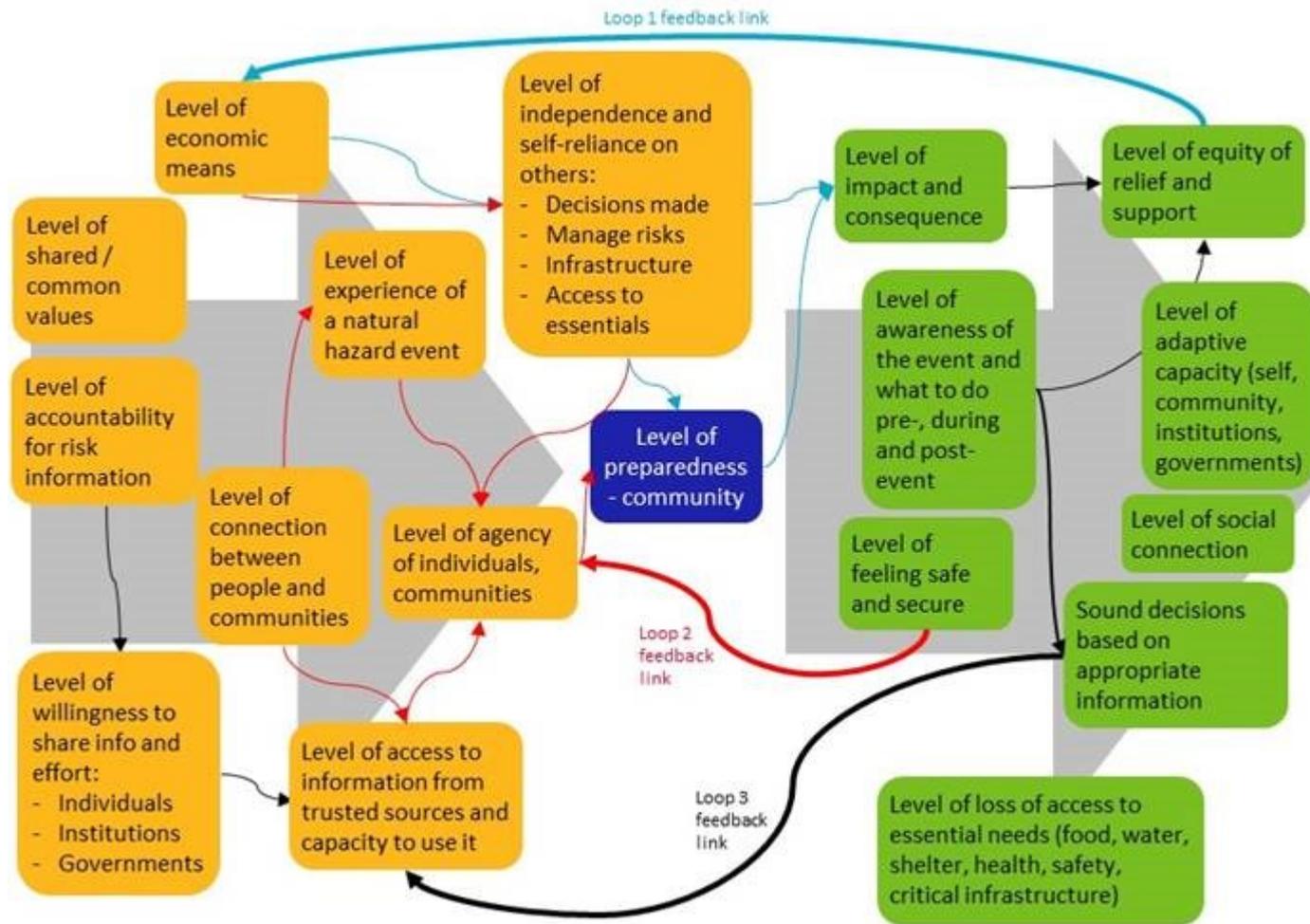
<http://www.abc.net.au/news/2014-12-24/boxing-day-tsunami-how-the-disaster-unfolded/5977568>

Track map of **Severe Tropical Cyclone Marcus** of the 2017-18 Australian region cyclone season. The points show the location of the storm at 6-hour intervals. The colour represents the storm's maximum sustained wind speeds as classified in the Saffir-Simpson scale (see below), and the shape of the data points represent the nature of the storm.

Keith Edkins - Created by Keith Edkins using WikiProject Tropical cyclones/Tracks. The background image is from NASA. Tracking data is from NOAA.



Causes, effects, key points of intervention



Vicious cycle

Low level preparedness (‘vicious cycle’)

When disaster strikes, low preparedness affects the ability of individuals and communities to gain access to information and maintain awareness, which in turn impact on the ability of individuals and communities to contribute to their own wellbeing through adaptation, ensuring equity of relief and support, and maintaining social connections and feelings of safety and security. These in turn contribute to further eroding preparedness for the next event by contributing to more systemic loss of social cohesion, agency and self-sufficiency, connection to trusted information, and equitable distribution of economic means to be prepared and self-reliant.

Values

- ‘She’ll be right’
- Paid work prioritised over community participation
- Individual consumption

Rules

- Reliance on centralised systems which are organised into silos
- Top-down decision making

Knowledge

- Education primarily desk-top based in formal institutions
- Popular news or social media content
- Knowledge organised and taught in silos

Virtuous cycle

<p>High-level preparedness ('virtuous cycle')</p>	<p>When disaster strikes, high levels of preparedness reduce the overall impacts on individuals and communities. Attributes include that access to information that supports maintaining awareness and supporting people to maintain high levels of wellbeing through ongoing adaptation, equity of relief and support. High levels of social connection promote feelings of safety and security, enhance preparedness for future shocks in building even greater social cohesion, agency and self-sufficiency, connection to trusted information, and equitable distribution of economic means to be prepared and self-reliant.</p>		
	<p>Values</p> <ul style="list-style-type: none">• Primacy of life• Do no harm• Care for others• Community participation• Live and adapt with nature• Learning• Open information sharing• Others' perspectives	<p>Rules</p> <ul style="list-style-type: none">• Rules for fair group decision making• Social norms around conducting preparedness activities• Groups routinely self-organise around a common cause	<p>Knowledge</p> <ul style="list-style-type: none">• Survival knowledge• How to work in groups to solve problems• How to imagine anticipate and prepare for extremes• Local knowledge and networks• Cross-sectoral and cross-scale connections• How to cope with extreme emotions

Proposed interventions

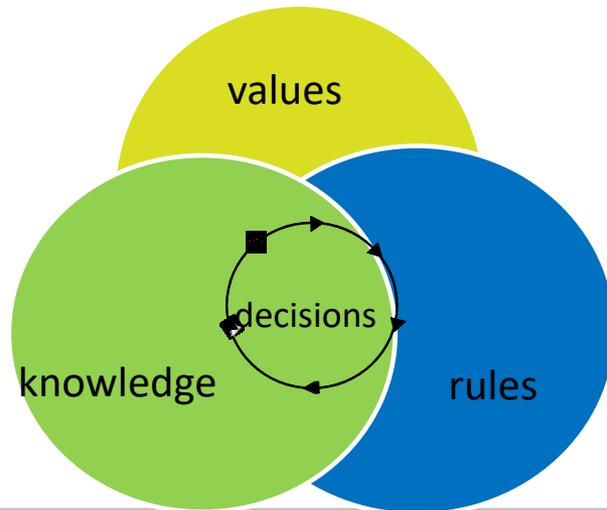
Feedback loop	Proposed intervention
Level of equity in relief and support AND level of economic means	Target preparation and relief programs to disadvantaged people so they have greater ability to prepare, manage risks, actively make decisions about disasters, and contribute to the community.
Level of feeling safe and secure AND level of agency and self-sufficiency: individuals, communities, decisions	Prioritise security and assurance of individuals and whole community in relief to give them agency, help them maintain/regain control, learn from the experience and translate that into preparedness and community contribution.
Level of access to information from trusted sources (POST-DISASTER) and level of access to information from trusted sources (PRE-DISASTER)	Review the information provided during/after the event, assess how it was used and its effectiveness. Ensure information provided pre-disaster and post-disaster is integrated and consistent and actually effective at reinforcing community agency and ability to prepare.

How do we move past doom, helplessness, paralysis?

“Utilise storytelling in education. Think differently.”

“Improve storytelling. Continue developing broader partnerships and protocols to support inclusion of emerging groups/leaders”

“Learned how to break down issues and steps to take toward an end result”



“...explore the causes and effects related to some key issues, and potential pathways to visions of society living/coping well with disasters”

“Sowed the seeds for values-based, ethical leadership (making it more explicit)”

3 take home messages

1. Systems approach

=> start with full system not only mandated/sectoral => reduce partial solutions

⇒ multiple perspectives, causal logic, feedbacks, irreversible changes, interdependencies, key points of intervention, vicious/virtuous cycles

=> build partnerships across whole system – nobody is ‘in charge’



3 take home messages

2. Invite emotions, use narrative, heart and mind to influence behaviour change

=> not just a 'knowledge deficit'

⇒ critical role of emotions and imagination as well as logic. Emotions are not simple levers

⇒ ethics, humanities, arts and social science expertise, AND stakeholder involvement are ESSENTIAL



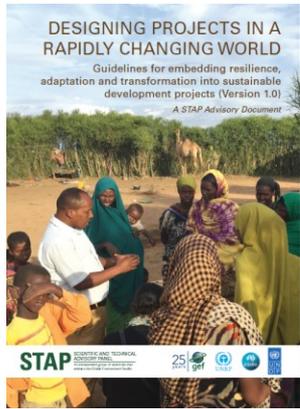
3 take home messages

3. Rapid structured anticipatory, reflective and reflexive learning essential

- ⇒ No 'off the shelf' solutions
- ⇒ Try things that have a causal logic and evidence AND...
- ⇒ Monitoring, rapid learning and adjusting (triple loop learning)
- ⇒ Across research, policy, practice



Thanks to



The RAPT Approach

Funders: STAP, CSIRO for Guidelines; SIDA through the SRC GRAID program, CSIRO, UNDP for piloting in Ethiopia

Authors: Deborah O'Connell, Nick Abel, Nicky Grigg, Yiheyis Maru, James Butler, Annette Cowie, Samantha Stone-Jovicich, Brian Walker, Russ Wise, Alice Ruhweza, Leonie Pearson, Mark Stafford Smith, Million Belay

Piloting RAPT for design of GEF food security project in Ethiopia: Wubua Mekonnen (UNDP), Alan Nicol (IWMI), Fassil Kebebew (consultant), Alice Ruhweza (CI Vital Signs), Yiheyis Maru, Deb O'Connell, and the many workshop participants

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Funders: Emergency Management Australia, CSIRO

Agencies: Emergency Management Australia, CSIRO, Geoscience Australia, Bureau of Meteorology, Geoscience Australia, Dept of Environment and Energy, Dept of Defence, multiple State and Territory government agencies

Thanks for your time, folks!

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