RESPUESTA EN CLIMA Y AMBIENTE PARA LA SALUD EN LAS AMÉRICAS

Managing Transdisciplinary Teamwork

18 de octubre, 2022

Lily House Peters, Gabriela Alonso Yáñez, Marshalee Valentine, Martin Garcia Cartagena

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Learning Objectives

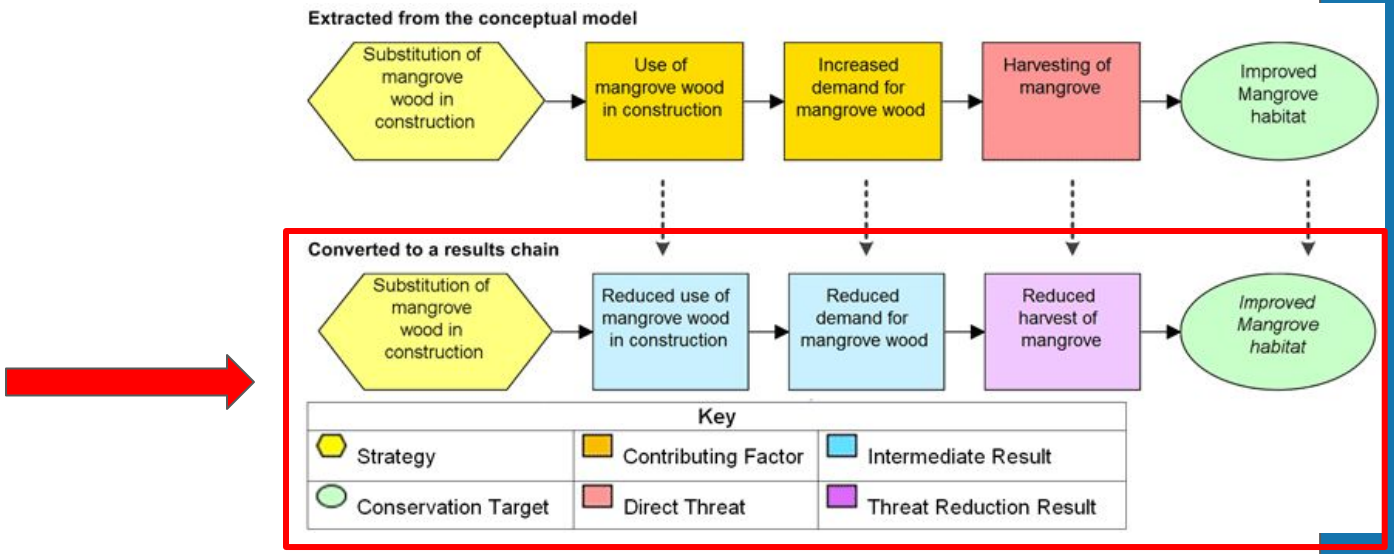
- Identify common pitfalls in transdisciplinary teamwork and strategies for ethically and equitably managing transdisciplinary teams
- Describe how to mitigate common conflicts in transdisciplinary teams
- Explain the importance of including diverse actors in research with an emphasis on equity, diversity, and inclusion (EDI) including gender equity, racial and ethnic diversity, and intergenerational inclusion
- Explain and apply a ‘results chain’ model to a specific research problem

Focal Areas:

- Best practices for managing conflicts that arise in transdisciplinary teams, including actor equity and social learning to strengthen teamwork
- Politics and ethics of transdisciplinary research in teams composed of diverse scientific disciplines, policy-makers, and stakeholders
- Best practices to implement and pitfalls to avoid in stakeholder engagement processes, including with youth and children, using an EDI-focused lens
- Knowledge mobilization for effective policy-making at the CEH nexus

An Important Logic Model: Results Chain

- Guides project implementation ***and*** is essential for monitoring and evaluation of project outcomes
- In general, a "result" is something that happens or exists **because of something else** that has happened
- In research, development and governance, the ***results chain*** is a more *nuanced* understanding of different types of 'results'
- The ***results chain*** distinguishes between five logically connected elements:
  - **inputs**
  - **activities**
  - **outputs**
  - **outcomes**
  - **impact**

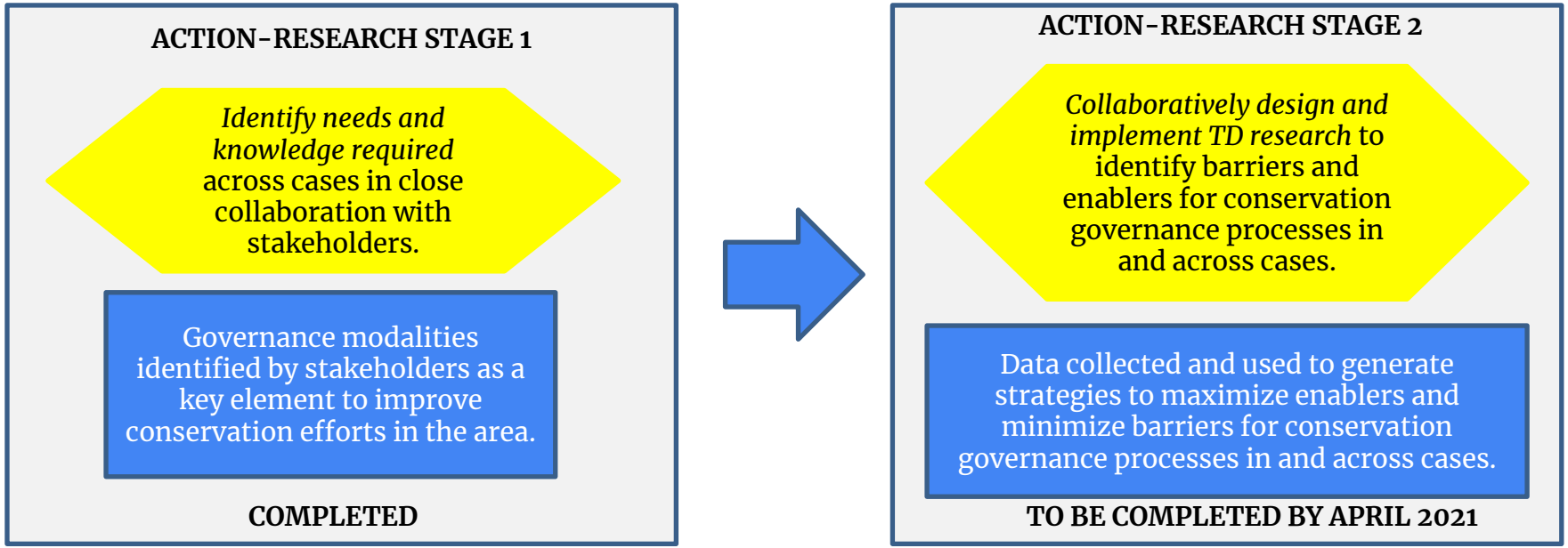


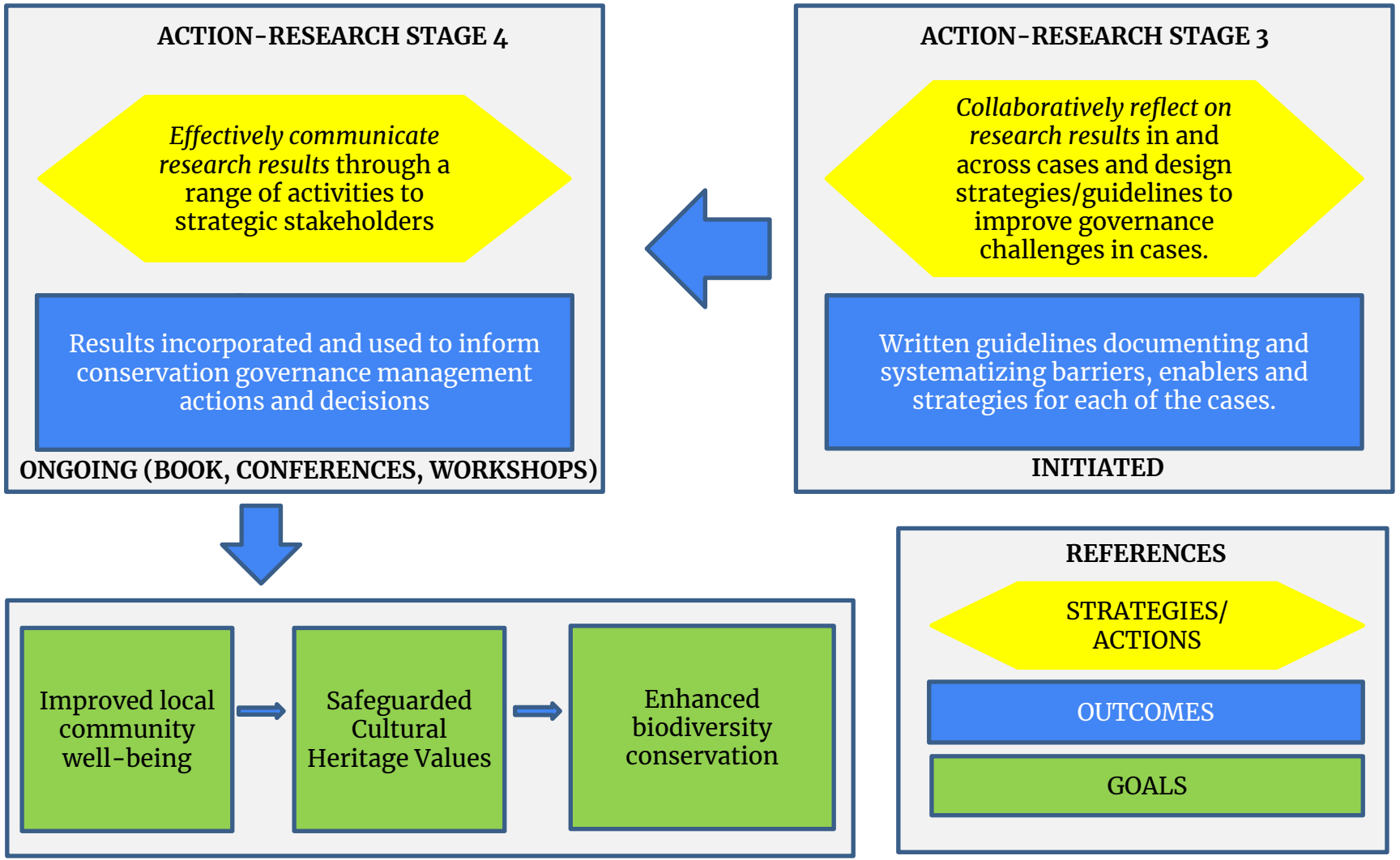
Simple Example: Results Chain

EVERYDAY EXAMPLE: I want to do something about living a **healthier life**. This is the desired **impact**. To do that, I want to reduce my weight. This is my planned **outcome**. To reduce my overall weight, I plan on eating more **vegetables** and **exercise** regularly. These are my planned **outputs**. Eating healthier requires more conscious **shopping** habits. More exercise requires me to go running or join a gym. These are some of my planned **activities**. These activities require some extra **time** and **money**. These are the **inputs**.

Grounded Example: TD Project Results Chain

- IAI-funded Small Grants Program (SGP) project (2018-2022), "*Incorporating Local and Traditional Knowledge Systems: New Insights for Ecosystem Services and Transdisciplinary Collaborations*"
- Central research question: ***Which governance modalities are best suited to navigate divergent interests, incorporate local and traditional knowledge, and achieve local-scale biodiversity conservation implementation?***
- 4 case study locations: Colombia, Uruguay, Chile, Canada




ACTION-RESEARCH STAGE 4
Effectively communicate research results through a range of activities to strategic stakeholders
Results incorporated and used to inform conservation governance management actions and decisions
ONGOING (BOOK, CONFERENCES, WORKSHOPS)
ACTION-RESEARCH STAGE 3
Collaboratively reflect on research results in and across cases and design strategies/guidelines to improve governance challenges in cases.
Written guidelines documenting and systematizing barriers, enablers and strategies for each of the cases.
INITIATED
Improved local community well-being
Safeguarded Cultural Heritage Values
Enhanced biodiversity conservation
REFERENCES
STRATEGIES/ ACTIONS
OUTCOMES
GOALS

Votación en Zoom

¿Cuál es el propósito de desarrollar cadenas de resultados en un proyecto de investigación de TD?

1. Participar en actividades de manera disciplinada.
2. Co-diseñar con todos los actores involucrados las actividades que lograrán los productos
3. Para guiar la evaluación cuando se completa el proyecto.
4. Todas las anteriores

What is the purpose of developing results chains in a TD research project?

1. To engage in activities in a disciplined way
2. To co-design with all actors involved the activities that will achieve outputs
3. To guide the assessment when the project is completed
4. All of the above

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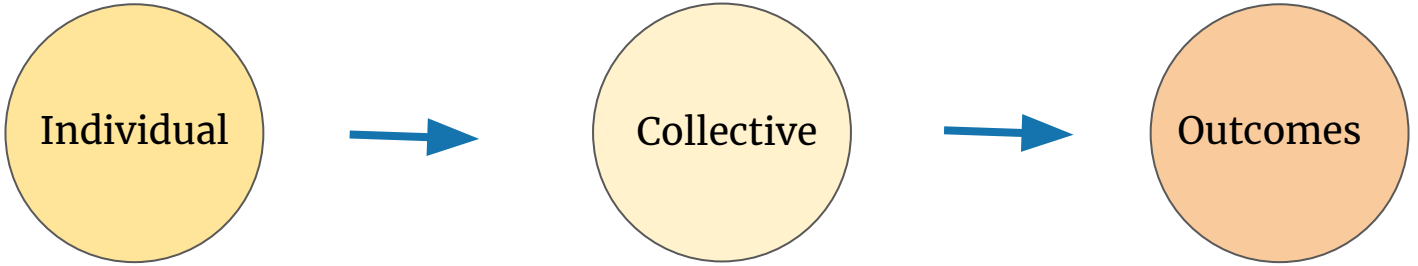
Teams in Socioecological Research

Which team member attributes/characteristics lead to ID and TD team research outcomes that successfully bridge the knowledge-action gap?

22 ID & TD Projects

- Ongoing and Completed
- Seed Grants, Small Grants, Collaborative Research Networks
- 17 countries

Teams in Socioecological Research (Analysis)



Dimension	Attributes	Item example
Cognitive	Mental models, *learning*	Learning: I know the tools materials, resources that other team members require for conducting their work.
Conative	Incentive, *motivations*	Motivation: I prioritize team meetings of this project over other commitments.
Affective	Affect-based trust, *backup behavior*	Backup Behavior: Team work continues if a member is sick or absent.

Team Structure: Scenarios and Diagrams

Knowledge application (resource management impact, SES solutions)

Knowledge extension (technical meetings, policy briefs

Teams in Socioecological Research (Results)

Knowledge Extension Outcomes more likely achieved by teams that:

- *Top-down leadership*
- *Team diversity*
- *Shared cognition (F2F, joint training)*
- *Trust (Trust, previous experience)*

Knowledge Application Outcomes more likely achieved by teams that:

- *Team diversity and membership diversity (two hats)*
- *Distributed leadership*
- *Shared cognition (F2F, joint training)*
- *Trust (Trust, previous experience)*

1) Curiosity, intellectual challenge, and friendships are important incentives for teamwork

1) Institutional pressure to publish overrides scientists' interest and motivation to conduct ID &TD teamwork,

10 Tips for a Positive TD Team Dynamic

Trust

Trust provides the foundation for a team; positive team dynamic; successful conflict management

Vision

Provides an anchor for the team; common foundation for achieving team goals

Self-Awareness

Self-reflection, learning and inquiry improves quality of team interactions; helps build and nurture strong relationships

Leadership

Collaborative leadership recognizes & facilitates strengths and capabilities of every team member

Mentoring

Provide training and learning opportunities; Identify areas for team members to grow and succeed

Team Dynamics

Navigate critical stages of team evolution; develop positive team dynamic; includes conflict "storming"

Communication

Vital to team function; Requires trust, respect, and safe environment to have candid/difficult conversations & disagreements

Share Success

Recognize and reward team members' contributions and achievements; builds a positive team dynamic

Disagreement

Conflict can be a resource; Disagreement can expand thinking and stimulate new directions for research

Network

Relationships are key; Collaborative teams transcend organizational boundaries; Expand knowledge mobilization

Key Source: Bennett, L. M., Gadlin, H., and Marchand, C. (2018). *Collaboration and Team Science Field Guide*. 2nd edn., National Institutes of Health Publication, No. 18-7660, National Cancer Institute: Bethesda, Unites States of America. Online: https://www.cancer.gov/about-nci/organization/crs/research-initiatives/team-science-field-guide/collaboration-team-science-guide.pdf (850KB PDF).

Navigating Team Evolution Dynamics

(Tuckman, 1965)

5 Phases of Team Evolution:

1. Forming
   - Early stage; high excitement; polite; little disagreement; positive expectations
2. Storming
   - Difficult, but key stage for later team cohesion & success; plurality of knowledge systems; resistance
3. Norming
   - Agreement on shared purpose & goals; team cohesion improves; collective vision
4. Performing
   - High motivation, trust, and empathy; effective team performance; balancing interdependence and self-management
5. Adjourning/Mourning

Conflict Management Strategies

- The “storming” stage is recognized as a key step in team development
  - Conflict can be productive (resource) or destructive (curse) depending on how it is managed
- Create opportunities for “learning together” as a team, understand the different epistemologies, conceptual frameworks and methodological tools that each member brings to the team
  - Methods workshops
  - Theory presentations
  - Co-create shared vision, goals, and agreed upon rules/norms
- Self reflection & group reflections to understand ***plurality*** within the team
  - *What are my own assumptions, beliefs, training and experience?*
  - *What are my own biases and preferences?*
  - *What theoretical or conceptual framing is appropriate for the research problem?*
  - *What tools or methods are appropriate for the research problem?*
- Do not ignore tensions, this is likely to create adversarial relationships and resentments

Votación en Zoom

¿Con qué estrategias de gestión de conflictos se ha comprometido en entornos de equipo? (Elija hasta 2)

1. Aprendiendo juntos
2. Autorreflexión
3. Compartir metodologías o marcos conceptuales entre disciplinas
4. Ejercicios para generar confianza
5. Ninguna

Which conflict management strategies have you engaged with in team settings? (Choose up to 2)

1. Learning together
2. Self-reflection
3. Sharing methodologies or conceptual frameworks across disciplines
4. Trust-building exercises
5. None of the above

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TD Policy Analysis (Case Study Example)

Análisis de políticas y TD

MASSEY UNIVERSITY

Dr. Martin Garcia Cartagena

School of People Environment and Planning

Massey University

M.cartagena@massey.ac.nz

Temas de hoy:

- Que es la política publica?
- Como se desarrolla la política pública?
- Análisis racional de políticas publicas
- Políticas publicas, problemas sencillos, y problemas complejos
- Modelos de desarrollo de politicas publicas y distintos roles del analista/asesor
- Ejemplo practico: Whanganui East/Proceso de construcción de una estrategia de resiliencia comunitaria