

The Agroecology TPP DIALOGUES



**DOING SCIENCE
DIFFERENTLY**

ON ZOOM



Doing science differently Agroecology TPP Dialogue #1

11 July 2024

Workshop Report

Table of Content

Table of Content	2
Introduction	3
Keynote: Transdisciplinary Science - What Is It and How to Facilitate It	4
What is Transdisciplinary Science?	4
Framework for Transdisciplinary Research	5
Panel: Reflections on the keynote presentation and transdisciplinary framework	6
Audience Feedback: Poll on keynote presentation	7
Panel: Best practices on doing science differently	8
Group discussion: Reflection and analysis on best practices, challenges and reources for supporting transdisciplinary approaches	10
Strategies to enhance transdisciplinary approaches to science and research	10
Barriers to transdisciplinary science, research and practice	12
Resources and the role of Agroecology TPP to support transdisciplinary approaches	13
Gaps/New questions that need to be addressed	13
Way Forward	14
References	15
Annex 1 : Agenda	16
Annex 2 : Ex-ante survey results	17
Annex 3 : Poll results	21
Annex 4 : Additional resources on transdisciplinary science/research	24
Annex 5 : Presentations	25
a. Keynote presentation	25
b. CGIAR Agroecology Initiative presentation	27
c. Foresight presentation	30
d. Agrofor presentation.....	33
e. ABCD-VIPPT presentation	36

Introduction

The Agroecology TPP Dialogue is an initiative driven by explicit requests from Agroecology TPP (AE-TPP) members to enhance interaction across constituencies, partners, and project members, and effectively disseminate evidence on agroecological transitions. The inaugural topic, "Doing Science Differently," seeks to foster the co-creation of knowledge, amplify diverse voices, support capacity building, and strengthen networking and collaboration among stakeholders. These objectives underscore AE-TPP's commitment to raising awareness and deepening engagement within the community.

The workshop opened with welcome remarks from Dr. Bernard Triomphe, Co-Convenor of AE-TPP and System Agronomist at CIRAD. He emphasized the importance of exploring alternative approaches to research in response to societal demands and the need for impactful change in agroecology. Highlighting the challenges in translating knowledge into actionable outcomes, he underscored the relevance of transdisciplinary approaches. Bernard positioned agroecology within a broader historical context anchored in social movements and farmer innovations globally. He also stressed the humility researchers must embrace to effectively tackle complex issues.



Figure 1 – Bernard Triomphe, Co-Convenor of AE-TPP and System Agronomist at CIRAD, welcome remarks

Keynote: Transdisciplinary Science - What Is It and How to Facilitate It

Dr. Michael Hauser, Senior Associate at CIFOR-ICRAF, systems scientist, and Associate Professor at BOKU University, began his keynote presentation by defining transdisciplinary research as crucial for tackling today's complex challenges. Leveraging his extensive experience in systems thinking and agroecology, he explained how effective transdisciplinary research transcends traditional disciplinary boundaries, integrating diverse knowledge systems and perspectives.

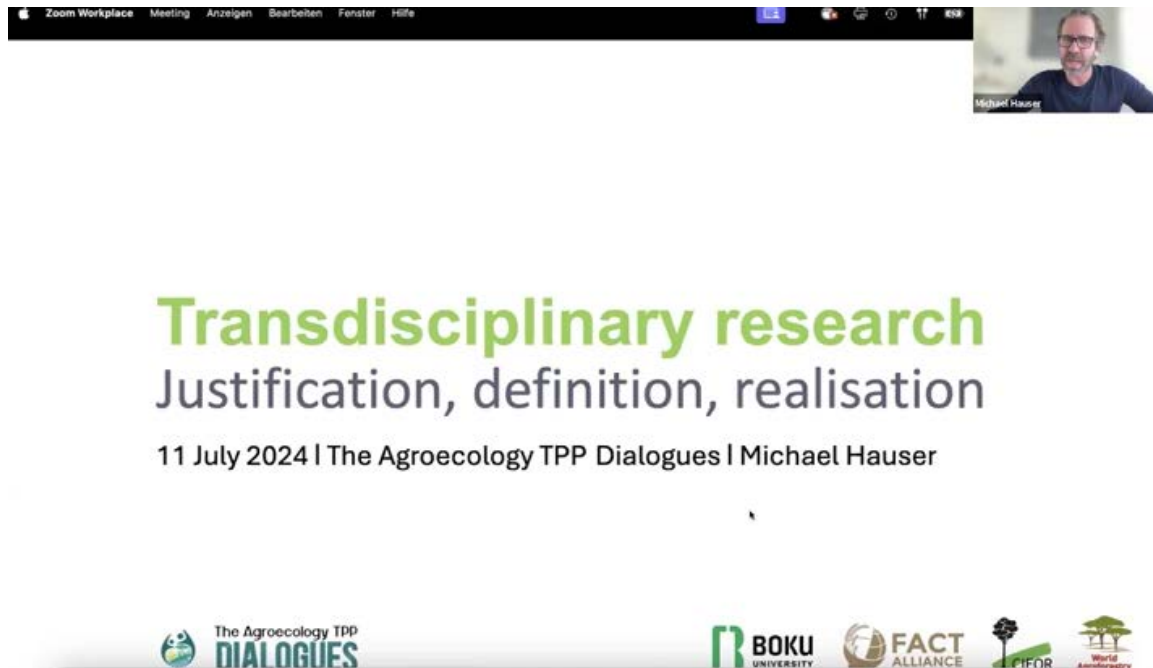


Figure 2 – Dr. Michael Hauser, keynote presentation

What is Transdisciplinary Science?

Transdisciplinary science integrates diverse knowledge systems and disciplines to collaboratively address complex real-world problems. It transcends traditional disciplinary boundaries by involving stakeholders in co-creating and evaluating solutions. This approach emphasizes holistic understanding, innovative methodologies, and transformative impact, ensuring research is practical, inclusive, and aligned with societal needs (Reed et al., 2023). Central to transdisciplinarity is the genuine interest, capacity, and capability of all participants to engage in meaningful, long-term collaboration.

In agroecology, transdisciplinary science fosters collaboration among researchers, farmers, and multiple stakeholders, integrating practical and scientific insights for sustainable solutions (Schwarz et al., 2022). This approach ensures agroecological research is inclusive, innovative, and impactful to address real-world needs effectively.



Figure 3 – The essence of transdisciplinary research from keynote presentation

Framework for Transdisciplinary Research

The keynote proposed a holistic framework for understanding transdisciplinary research using five core characteristics:

- a) Integration of knowledge: Effective collaboration across disciplines and knowledge systems.
- b) Collaboration: Deep and meaningful partnerships throughout the research process.
- c) Problem-solving Orientation: Focus on addressing real-world challenges with transformative potential.
- d) Innovation: Methodological innovation to transcend traditional disciplinary norms.
- e) Impact: Intentional and measurable outcomes that drive societal and environmental change.

Characteristics	Indicators	Rating*
1. Integration of knowledge	Diversity of knowledge contributions Depth of interdisciplinary engagement Cross-disciplinary methodologies used	High Average Low
2. Collaboration level	Actor diversity Quality of interactions/power balance Frequency/consistency of collaborative activities	Low High high
3. Problem-solving orientation	Relevance to real-world problems Practical solutions proposed Adaptability of research findings	Average Low high
4. Innovation	Novelty of research Pioneering approaches, goods and services New ways of redistributing value	High Low high
5. Application and impact	Transformative potential Policy influence Societal impact	Low High average

* Examples only

Figure 4 – Proposed framework for transdisciplinary research from keynote presentation

Dr. Hauser concluded by emphasizing the pressing need for a behavioral transformation within organizations to effectively implement transdisciplinary research. This transformation should highlight the critical importance of fostering genuine interest, building capacity, and developing the requisite skills for transdisciplinary approaches. Cultivating genuine interest and stimulating a shift in core values must precede the allocation of resources and acquisition of skills for effective implementation of transdisciplinary methodologies.

Panel: Reflections on the keynote presentation and transdisciplinary framework

Panelists

- **Brigid Letty, Prolinnova and Principle Scientist, Institute of Natural Resources, KwaZulu-Natal, South Africa**
- **Francisco Rosado-May, Professor, Universidad Intercultural Maya de Quintana Roo**
- **Jane Maland Cady, Program Director, Global Collaboration for Resilient Food Systems, McKnight Foundation**
- **Lauren Baker, Deputy Director, Global Alliance for the Future of Food**
- **Lilian Beck, Agroecology Extension Specialist, Institute for Social Sciences of Agriculture - University of Hohenheim**

In reflecting on Michael Hauser's keynote on transdisciplinary science, Brigid Letty emphasized the importance of genuine collaboration and knowledge co-creation across sectors, starting from proposal development. She highlighted that mutual respect for diverse stakeholder needs, including those of the private sector and farmers, is crucial. Brigid also noted the alignment of transdisciplinary principles with Prolinnova's participatory innovation approaches, underscoring the framework's broad applicability and potential for meaningful impact.

She asked the panelists: *How does this framework differ from earlier or current thinking on transdisciplinarity?*

- **Framework's novelty and utility**
Lilian Beck commended the framework for its comprehensive approach, noting that it extends beyond normative definitions and paradigm shifts. Beck commended its ability to facilitate thorough analysis and reflection on the quality of transdisciplinary research. This holistic approach, she suggested, allows for a deeper understanding of how transdisciplinary methods can be effectively integrated and assessed.
- **Intercultural co-creation**
Another crucial point raised by Francisco Rosado-May is the significance of intercultural co-creation in transdisciplinary research. He stressed that understanding different ways of knowing and learning, shaped by cultural contexts, is vital for developing robust and inclusive knowledge systems. This intercultural approach ensures that diverse perspectives are not only acknowledged but actively integrated into the research process.
- **Scientific transformation and innovation**
The need for innovative methodologies to effectively incorporate diverse knowledge systems was a recurring theme. The panel highlighted that transforming scientific practices is essential for addressing complex, real-world issues. Such a transformation ensures that research remains relevant and actionable, directly contributing to tangible societal and environmental benefits.

The second panel question explored the potential benefits of carrying out a diagnosis or assessment using Michael's proposed framework, asking *in what instances this framework could be useful within the panelists' own contexts and the types of work they are involved in?* This discussion emphasized the importance of the framework and the challenges associated with its implementation.

Jane Maland Cady highlighted the value of aligning the framework with participatory approaches, particularly through farmer-led joint experimentation, integrating diverse forms of knowledge, including indigenous and local insights, to foster meaningful collaboration and effectively address real-world problems, which resonates with their decades-long approach via the Global Collaboration for Resilient Food Systems program. She noted that despite the rise in multidisciplinary projects, there remains a frequent disconnect in truly collaborative research, highlighting the need for deeper integration and mutual respect among researchers from various sectors.

Lauren Baker added that shifting mindsets and transforming institutional structures to support transdisciplinary research is crucial, advocating for the promotion of knowledge diversity, addressing power dynamics, and incorporating historical contexts into research practices. She stressed the decolonization of methodologies and the need to acknowledge power relations, integrating Indigenous sovereignty and land acknowledgment into research. These steps align with the broader goal of fostering a more equitable and inclusive research paradigm.

The discussion concluded with reflections on how the framework can help reshape institutions and methodologies to support true transdisciplinarity. The panelists called for continued collaboration and refinement of the framework to ensure it effectively guides transformative research practices.

Audience Feedback: Poll on keynote presentation

Following the keynote presentation, two polls were conducted to gather insights and feedback on the content and impact of the keynote. The first asked: ***What are to you the most important elements of the keynote presentation?*** Among the 53 responses from the virtual participants, the most resonant elements were innovation, closely followed by transdisciplinary approaches, co-creation of knowledge, capacity building, and mindset change. The discussions highlighted a collective recognition of these elements as pivotal for advancing research and fostering interconnectedness across disciplines, reflecting a shared commitment to integrating cutting-edge methodologies with adaptable, forward-thinking practices essential for impactful outcomes.



Figure 5 – Poll results on most important elements of the keynote presentation

The second audience poll asked: “Having heard the panel discussion, what is your advice for improving the analysis that was presented on transdisciplinary science?” Responses highlighted the need for enhanced stakeholder collaboration and dialogue among diverse cultural backgrounds to enrich transdisciplinary approaches. There was a strong call to prioritize environmental impacts and community-centric perspectives, such as integrating women's farming practices into research on child development and elder care. Participants also pointed out the importance of capacity building across organizations and refining engagement processes to ensure inclusive participation and practical outcomes. The feedback underscores a commitment to holistic, impactful research methodologies that bridge scientific rigor with societal relevance and inclusivity.

Panel: Best practices on doing science differently

Panelists:

- **CGIAR Agroecology Initiative: Bernard Triomphe, AE-TPP Co-convenor and System Agronomist, CIRAD**
- **Foresight: Marie de Lattre-Gasquet, Researcher, CIRAD**
- **Agrofor: Valentina Robiglio, Senior Land Use Systems Scientist, CIFOR-ICRAF**
- **ABCD-VIPPT: Lisa Fuchs, Scientist – Multifunctional Landscapes, Alliance of Biodiversity International - CIAT**

The [CGIAR Initiative](#) on 'Transformational Agroecology across Food, Land and Water Systems' collaborates with small-scale farmers in Africa, Asia, and Latin America to tailor agroecological solutions to specific local contexts. Prioritizing participation and co-creation, the initiative aims to catalyze innovations and behavioral change while safeguarding social equity. It works through five interrelated work packages, forming an international network to scale and accelerate agroecological transitions, supported by a robust partnership of CGIAR entities and key collaborators.

Bernard Triomphe outlined the project's pioneering approach in his presentation. The initiative, active in diverse socio-ecological contexts across countries like Tunisia, Burkina Faso, and India, fosters agroecological innovations through transdisciplinary collaboration with farmers, researchers, and local stakeholders. Emphasizing co-creation and holistic assessment, Bernard highlighted the project's adaptive methods, inclusive business models, and a shared vision for sustainable futures. This systemic approach not only addresses local challenges but also aims to influence policy and behavioral changes, promoting social equity and broad-based engagement across the food system.

The [Foresight](#) to Support Sustainable Food Systems Transformation through **Agroecology** project addresses urgent global agricultural challenges by employing biodiverse approaches, including agroecology, to guide sustainable food system transitions. This project seeks to advance foresight methodologies by fostering robust stakeholder engagement and shaping effective policy development. Supported by FAO, CIRAD, GIZ, and national partners in Senegal and Andhra Pradesh, it aims to generate both global guidelines and country-specific policy recommendations to facilitate agroecological transformations.

Marie de Lattre-Gasquet emphasized the project's focus on transforming agri-food systems via agroecology. The project involves a comprehensive global review of past foresight exercises and participatory activities in India and Senegal. Marie highlighted that policymakers require diverse, innovative scenarios for transformative decisions, demonstrating how foresight extends beyond modeling to craft multiple desirable futures. The project underscores the importance of interdisciplinary collaboration, integrating qualitative and quantitative methods, and engaging various stakeholders, including farmers and policymakers. Key findings identified the need for new models and metrics tailored to agroecology, addressing the entire agri-food system, including processing and distribution, while managing trade-offs and balancing diverse stakeholder interests. Data and metrics are insufficient for modeling agroecological futures, necessitating new models that align with agroecological principles. This project exemplifies how foresight can anticipate long-term impacts, foster sustainable agricultural practices, and cultivate compelling narratives to drive the transition.

The [AgroFor project](#) in Peru, initiated under the 2011 Forest and Wildlife Law, aims to scale the Agroforestry Concessions (AC) scheme, a pioneering policy to formalize land use for smallholders, promoting sustainable practices. By partnering with the Peruvian government, AgroFor addresses institutional, technical, and financial challenges to reduce deforestation and GHG emissions by 20%, improving livelihoods for over 100,000 smallholder families managing 1.2 million hectares sustainably. Key collaborators include GGGI, SPDA, and World Agroforestry, supported by NORAD and NICFI.

Valentina Robiglio's presentation on the project highlighted the critical role of interdisciplinary approaches in addressing the complex issue of tropical deforestation driven by smallholder activities. She emphasized the project's three-pronged strategy: conducting integrated research across diverse pilot regions, engaging with institutions to inform regulatory and funding frameworks, and implementing sustainable agroforestry practices. By fostering close collaboration among researchers, policymakers, and local communities, AgroFor has made significant strides in reducing deforestation, enhancing livelihoods, and promoting social inclusion. Valentina underscored the importance of

continuous co-learning, adaptive management, and the integration of diverse knowledge systems to navigate trade-offs and achieve long-term sustainability.

The [ABCD in Regreening project](#), funded by Biovision, is an innovative initiative aimed at enhancing sustainable land restoration in Kenya's Homa Bay County. Leveraging the asset-based community-driven development (ABCD) approach, it empowers communities to identify and utilize their existing assets—human, social, natural, physical, and financial—to formulate and execute community action plans. This participatory methodology fosters sustainable behavior change and aligns with the Regreening Africa programme's goals, promoting efficient resource use and holistic agroecological transitions. Key partners include CIFOR-ICRAF and Biovision Foundation.

Lisa Fuchs presented her insights on the ABCD-VIPPT project, emphasizing the importance of structured co-design processes in mobilizing community assets for sustainable and equitable outcomes. She traced the evolution of the ABCD approach from traditional top-down service models to innovative community-driven solutions, demonstrating its effectiveness in diverse international agricultural contexts. Lisa emphasized the crucial role of continuous participatory evaluation, ethical engagement, and adaptive management, underscoring the need for active partner involvement and reflexive practices. Her narrative reinforced the significance of collaborative and inclusive methodologies in fostering effective transdisciplinary research and development.

Group discussion: Reflection and analysis on best practices, challenges and resources for supporting transdisciplinary approaches

Break out Facilitators

- **Lisa Fuchs, Scientist – Multifunctional Landscapes, Alliance of Bioversity International - CIAT**
- **Swati Renduchintala - Systems Change Associate Scientist - CIFOR-ICRAF**
- **Lilian Beck, Agroecology Extension Specialist, Institute for Social Sciences of Agriculture - University of Hohenheim**
- **Sandhya Kumar - Social Systems Scientist - CIFOR-ICRAF**

Strategies to enhance transdisciplinary approaches to science and research

In reflecting on the project presentations and participant experiences with transdisciplinary science, the following feedback was gathered in response to the first question: *'Do you have any strategies or examples of what can enable or nudge towards more transdisciplinary approaches?'*

A. Transdisciplinary proposal development

Lisa Fuchs emphasized that embedding transdisciplinary approaches from the outset is essential for effective proposal development. Proposals should clearly outline how various disciplines and stakeholders will collaborate and be engaged; who defines the problem, and how impacts will be measured. This can be achieved through a two-step approach: initial idea generation with diverse actor meetings and a transdisciplinary evaluation committee. Ensuring accountability, particularly towards the communities involved, is crucial. Donors should enforce mechanisms that ensure genuine transdisciplinary practices without reducing them to box-ticking exercises. Monetary power should be partially transferred to non-research participants, reflecting the inclusiveness and fairness in financial compensation.

B. Inclusion and empowerment of diverse stakeholders

True transdisciplinary research necessitates the inclusion of a broad range of stakeholders, including market players, farmers, and indigenous communities, ensuring they have a significant voice and agency in the research process. This involves co-designing projects and possibly reversing traditional roles (e.g., farmers as teachers). Tools to recognize indigenous knowledge and good facilitation skills are essential to ensure all stakeholders are valued and empowered. Donors play a critical role in setting up systems that promote this inclusiveness, avoiding superficial inclusion practices.

C. Importance of common language and cultural sensitivity

Swati Renduchintala emphasized that developing a common language and understanding among diverse research teams and stakeholders is pivotal for successful transdisciplinary work. Promising approaches include adapting to local conditions, fostering educational initiatives, and integrating policy measures. Historical methods and existing multi-stakeholder innovation platforms offer valuable insights. Embracing humility, respecting different cultures, and understanding motivational factors are essential. Exercises that underscore the relevance of varied perspectives can help achieve a unified approach. This commitment to cultural sensitivity and shared understanding is fundamental for integrating diverse knowledge systems effectively.

D. Long-Term commitment and flexibility

Lilian Beck noted that transdisciplinary projects demand long-term commitment and adequate timeframes to drive meaningful transformation and sustainability. Such projects should prioritize enduring impacts over short-term results. Funding schemes must align with this by supporting extended project durations, ideally through a series of interconnected initiatives. The project framework should offer flexibility to adapt to evolving participant needs and interests. Educational approaches, including farmer-to-farmer knowledge exchange and participatory problem identification, are essential for sustaining this long-term, adaptable strategy.

E. Building trust and simplifying complex concepts

Sandhya Kumar highlighted that trust-building among stakeholders is fundamental for successful transdisciplinary research. Referencing Lisa Fuchs's presentation on Asset-Based Community-Driven Development, Sandhya stressed the need to move beyond viewing people merely as data sources, advocating instead for a regenerative approach that values their contributions. It is essential to minimize extractive data collection practices and leverage the agency of those affected by the research. Projects must account for the long-term impact on local communities, ensuring their active involvement in decision-making. Simplifying complex concepts for accessibility, such as differentiating between interdisciplinary and transdisciplinary collaboration, further builds trust by integrating diverse knowledge systems and fostering holistic processes.

The discussion also highlighted the value of tangible, practical actions, such as physically bringing together diverse stakeholders to foster holistic and integrative processes. This approach, combined with a clear distinction between interdisciplinary and transdisciplinary methodologies, was seen as crucial for effective scaling and adaptation of these projects across different contexts.

Feedback on the next question, 'Which of the transdisciplinary approaches from the project presented do you think may be more promising for scaling up or adapting to different contexts?' revealed that, among the discussed approaches, participants identified the structured co-design processes of the ABCD (Asset-Based Community-Driven Development) model as the most promising for scaling and adaptation. This model shifts focus from top-down deliverables to locally-driven “discoverables,” fostering genuine community ownership and engagement. It empowers stakeholders—from researchers to local farmers—to co-create solutions tailored to specific socio-ecological contexts, enhancing both relevance and sustainability. The model’s emphasis on leveraging local assets and fostering collaborative innovation aligns well with the iterative, flexible nature of foresight methodologies and adaptive management. Additionally, the multi-level, nested structures in the Agrofor project support comprehensive understanding and management of complex dynamics across governance levels. Together, these approaches provide robust avenues for scaling and adapting agroecological innovations in diverse contexts.

Barriers to transdisciplinary science, research and practice

Participants were then prompted to reflect on the challenges in the projects presented and their own experiences in integrating or implementing transdisciplinary approaches in their work. Several key barriers were discussed and shared.

First, a fundamental challenge was the lack of conceptual clarity with stakeholders often confusing transdisciplinary research with inter-, multi-, and pluri-disciplinary approaches. Second, skepticism prevails as many recognize the aspiration to be inclusive and participatory in large donor-driven programs and initiatives, however there can remain substantial gaps in achieving genuine inclusivity. Third, power dynamics and equity in participation pose significant challenges, as power imbalances frequently hinder effective collaboration and innovation, giving more influence to researchers and dominant stakeholders. Fourth, scalability and contextual variability are problematic; the diverse socio-ecological contexts across regions make it difficult to scale agroecological practices, requiring tailored solutions which while desirable, demand considerably more effort and resources. Fifth, sustaining long-term engagement is challenging due to varying interests and priorities, which complicates the transition to agroecology, requiring ongoing commitment amidst competing demands and limited resources.

Integrating diverse knowledge systems and balancing scientific rigor with local realities is also challenging, requiring continuous adjustment and alignment of scientific research, local expertise, and policy frameworks. Resource and connectivity constraints further impact the execution of co-design processes.

In practice, the applicability of transdisciplinary methods, especially in biophysical sciences, is questioned due to the lack of structured processes and traditional hierarchical frameworks. For example, one participant from Portugal working in agroforestry described how despite being in academia, a traditional siloed mindset prevails and resource scarcity limits willingness to experiment or innovate despite potential benefits from collaborative research. Effective community engagement, such as in the Brightspot project in Mexico and India, highlights challenges like integrating small-scale projects and overcoming rigid academic structures. Similarly, in Senegal, the need for strategic visioning and participatory research emphasizes the importance of civil society activities and communication. Long-term commitment, innovative methodologies, and the integration of indigenous knowledge are crucial, as seen in Mozambique’s agroecology efforts.

Overcoming the fear of failure and risk aversion, which often favor conventional methods such as agrochemicals, is necessary to foster innovation. Finally, creating incentives and aligning policies to support transdisciplinary goals can drive collective action and demonstrate the value of integrated approaches across sectors. For example, addressing water management issues that fall outside the agriculture ministry's purview requires cooperative incentives and performance evidence to illustrate the benefits of collaboration.

In assessing the most challenging characteristics of the transdisciplinary framework to achieve, the recurring theme was the complexity of operationalizing agroecological frameworks, emphasizing the need for adaptable guidelines that respect local contexts while ensuring effective funds allocation. This complexity is compounded by the need to counteract the interests of international lobbies, which often have competing agendas. Additionally, time limitations of project lifecycles present a significant challenge, as long-term engagement and iterative processes are essential for meaningful collaboration and integration. Another point stressed was the necessity of clear communication and a robust theory of change to identify and include relevant stakeholders, recognizing the impracticality of involving all parties. It is crucial to creatively include mechanisms that allow for diverse stakeholder engagement without overextending resources or diluting focus.

Resources and the role of Agroecology TPP to support transdisciplinary approaches

The key points from the breakout sessions, addressing the final question on supporting greater integration of transdisciplinary approaches, highlight the critical role of the Agroecology TPP in fostering institutional support and rigorous evaluation of transdisciplinary frameworks, ensuring their effective adoption and practical relevance. Emphasizing community engagement and capacity building, the TPP should facilitate targeted training and foster robust links between research and local stakeholders to validate and apply knowledge effectively. Innovation tailored to diverse needs is essential, with initiatives like youth hubs serving as catalysts for hands-on learning and engagement. Additionally, a dual focus on both individual skill development and collective capacity is crucial to equip researchers and practitioners for complex, integrative projects. By addressing these areas, the Agroecology TPP can enhance the impact and effectiveness of transdisciplinary approaches in agroecology, ensuring that research translates into meaningful, real-world outcomes.

Gaps/New questions that need to be addressed

The breakout session also uncovered several critical gaps in advancing agroecological practices. Firstly, integrating traditional and indigenous knowledge systems into the co-creation process promises to enhance the relevance and sustainability of agroecological innovations. Equally important is the need for metrics beyond mere yield to capture the broader social, economic, and environmental impacts of these practices. Long-term institutional support and the development of supportive policies are essential for sustaining and scaling agroecological initiatives after the end of a project. Furthermore, enhancing the participation of Global South institutions in foresight exercises can ensure more balanced, locally relevant outcomes. Comprehensive agri-food system models that include processing, storage, and distribution are needed, alongside robust, ethical impact assessment frameworks that blend qualitative and quantitative approaches. Addressing these gaps requires strategic planning, ethical deliberation, and ongoing engagement to ensure the lasting institutionalization and effectiveness of agroecological innovations.

Way Forward

Conclusions from the breakout session feedback and final reflection by Michael Hauser, emphasize a strategic path forward for enhancing agroecological research and practice. Key actions include:

- Integrating traditional and indigenous knowledge into co-creation processes to enhance the relevance and sustainability of innovations.
- Developing comprehensive evaluation frameworks that capture broader social, economic, and environmental impacts of agroecological practices beyond yield is essential.
- Extending long-term institutional support and supportive policies to sustain and scale these initiatives beyond project timelines.
- Strengthening stakeholder networks is crucial, involving formalized platforms for ongoing collaboration among farmers, researchers, and policymakers.
- Comprehensive agri-food system models should encompass processing, storage, and distribution, supported by robust ethical impact assessment frameworks that combine qualitative and quantitative methods.
- Policy advocacy to support agroecological transitions and create supportive environments for broader adoption.
- Building capacity in the Global South is essential for equitable global collaboration, alongside fostering narrative-based foresight to enrich stakeholder engagement.
- Developing standardized guidelines and toolkits will streamline co-design and transdisciplinary approaches, while establishing learning networks and
- Securing funding for pilot projects to support scaling innovative methodologies and collaborative research efforts.

References

Reed, M. G., Robson, J. P., Campos Rivera, M., Chapela, F., Davidson-Hunt, I., Friedrichsen, P., Haine, E., Johnston, A. B. D., Lichtenstein, G., Lynes, L. S., Oloko, M., Sánchez Luja, M., Shackleton, S., Soriano, M., Sosa Pérez, F., & Vasseur, L. (2023). Guiding principles for transdisciplinary sustainability research and practice. *People and Nature*, 5, 1094–1109. <https://doi.org/10.1002/pan3.10496>

Schwarz, G., Vanni, F., Miller, D., Helin, J., Pražan, J., Albanito, F., Fratila, M., Galioto, F., Gava, O., Irvine, K., Landert, J., Quero, A.L., Mayer, A., Monteleone, D., Muller, A., Röö, E., Smyrniotopoulou, A., Vincent, A., Vlahos, G. and Zilāns, A. (2022), Exploring Sustainability Implications of Transitions to Agroecology: a Transdisciplinary Perspective. *EuroChoices*, 21: 37-47. <https://doi.org/10.1111/1746-692X.12377>

Annex 1: Agenda

Introduction

14h00-14h05 | **Opening remarks** (5 minutes)

- Bernard Triomphe, AE-TPP Co-convenor and System Agronomist, CIRAD

14h05-14h20 | **Keynote speech • Transdisciplinary science: what is it and how to facilitate it?** (15 minutes)

- Michael Hauser, Senior Associate, CIFOR-ICRAF and BOKU University

14h20-14h40 | **Reflection on the keynote speech** (20 minutes)

- Brigid Letty, Prolinnova and Principle Scientist, Institute of Natural Resources (INR) in KwaZulu-Natal, South Africa
- Francisco Rosado-May, Professor, Universidad Intercultural Maya de Quintana Roo
- Jane Maland Cady, Program Director, Global Collaboration for Resilient Food Systems, McKnight Foundation
- Lauren Baker, Deputy Director, Global Alliance for the Future of Food
- Lilian Beck, Agroecology Extension Specialist, Institute for Social Sciences of Agriculture - University of Hohenheim

14h40-14h45 | **Interaction with audience**

- Presentation of results from the ex-ante framing survey
- Poll on challenges, learning and expected change

Best practices on doing science differently: examples from projects

14h45-15h25 | Project presentations with a focus on innovation, methodology, results and co-creation

- CGIAR Agroecology Initiative: Bernard Triomphe, AE-TPP Co-convenor and System Agronomist (10 minutes)
- Foresight: Marie de Lattre-Gasquet, Researcher, CIRAD (10 minutes)
- Agrofor: Valentina Robiglio, Senior Land Use Systems Scientist, CIFOR-ICRAF (10 minutes)
- ABCD-VIPPT: Lisa Fuchs, Scientist – Multifunctional Landscapes, Alliance of Bioversity International - CIAT (10 minutes)

15:25-15:35 | Break (10 minutes)

Collective and interactive analysis of the best practices presented

15h35-16h25 | Group discussion with a focus on successful practices, possible improvements to innovations, missed opportunities and way forward (50 minutes)

Final reflection

16h25-16h45 | Reporting back and Q&A session (20 minutes)

16h45-17h00 | Group poll and closure (15 minutes)

Annex 2: Ex-ante survey results

[No Title]

1 What are your expectations for this Dialogue on 'Doing science differently'?

- Learning about agroecology transdisciplinary approaches
- Co-creation of knowledge together
- Networking and collaboration opportunities
- Learning about practical implementation opportunities and the way research can have policy impact
- Analyzing how inclusive these approaches are and their societal impact
- Learning about challenges in transdisciplinary research
- Discussing solutions and new tools



The Agroecology TPP
DIALOGUES

10

2 What, in your opinion, is the most important element of transdisciplinary science?

- Collaboration and integration of diverse disciplines
- Systems thinking to embrace complexity
- Inclusivity and respect for all forms of knowledge
- Practical application and sustainability
- Communication and dialogue to achieve common goals
- Equity and fairness for wider benefits
- Continuous learning, openness to new ideas and perspectives and adaptation



The Agroecology TPP
DIALOGUES

11

3 What, in your opinion, are some of the critical gaps in agroecological research? / 1

- Lack of proper Integration of Indigenous Knowledge and Traditional Practices in the research
- Lack of Holistic Approaches and Systems Thinking in the design of agroecological research methods
- Lack of robust methodologies and repeated data deficiencies in agroecological research
- Missing proper policies that support agroecological transitions and integrate diverse stakeholder perspectives
- Concerns about scalability and upscaling of successful agroecological practices persist due to the diverse socio-economic conditions and policy environments
- Need for increased funding and institutional support for research, training, and implementation



3 What, in your opinion, are some of the critical gaps in agroecological research? / 2

- Lack of education on participatory methods, inadequate knowledge dissemination, and limited training opportunities for researchers and farmers
- Gender mainstreaming, local community engagement, and addressing social inequalities in agricultural practices
- More research on agroecology's role in climate change mitigation and adaptation is needed to demonstrate environmental sustainability and resilience
- Better integration of modern technology with agroecological practices, exploiting the potential for innovation in sustainable agriculture, such as precision farming techniques compatible with agroecology.
- Improving communication between researchers, policymakers, and farmers
- Gaps in research related to economic models, market analysis, and the economic benefits of agroecology, including understanding consumer preferences and market dynamics for agroecological products



4 What, in your opinion, are some of the critical gaps in implementing agroecological practices? / 1

Financial Constraints

- Limited access to funding and investment capital for transitioning to agroecological practices.
- High upfront costs for inputs, training, and infrastructure upgrades.
- Lack of financial incentives or subsidies compared to conventional agriculture.

Policy and Institutional Support

- Inadequate policy frameworks that favor conventional agriculture.
- Lack of supportive regulations and incentives for agroecology.
- Insufficient integration of agroecology into national agricultural policies.



4 What, in your opinion, are some of the critical gaps in implementing agroecological practices? / 2

Market Access and Input Availability

Limited availability of agroecological inputs such as seeds, organic fertilizers, and pest management tools.

Challenges in accessing markets that value agroecologically produced goods.

Price premiums not adequately compensating for increased production costs.

Technology Transfer and Knowledge Dissemination

Lack of effective extension services to disseminate agroecological knowledge to farmers.

Limited training programs and educational resources on agroecological practices.

Insufficient technology transfer mechanisms to translate research findings into practical applications.



4 What, in your opinion, are some of the critical gaps in implementing agroecological practices? / 3

Interdisciplinary Collaboration and Holistic Approaches

- Need for better integration across scientific, social, and economic disciplines.
- Lack of collaborative platforms between researchers, farmers, and policymakers.
- Holistic approaches to agroecology not fully realized in practice or policy.

Resistance to Change and Cultural Barriers

- Farmer reluctance to adopt new practices due to cultural norms and existing farming traditions.
- Perceived risks and uncertainties associated with transitioning to agroecology.
- Lack of awareness and understanding among farmers and policymakers about agroecological benefits.

Long-term Sustainability and Scalability

- Challenges in scaling up agroecological practices beyond pilot projects.
- Ensuring economic viability and productivity gains over the long term.
- Monitoring and adaptive management strategies to address diverse agroecological contexts and climate variability.



Annex 3: Poll results

What are to you the most important elements of the keynote presentation?

0 5 3



Open text poll

Having heard the panel discussion, what is your advice for improving the analysis that was presented on transdisciplinary science?

0 4 3

(1/5)

- Integration methodology
- Have mindset check as part of the tool --- assess - openness, curiosity, adaptivity AND reflections on personal assumptions, biases and triggers and capacity to navigate them,
- Link to the result Awareness of what we will after adoption the transition
- multifactor approach
- Stakeholder collaboration
- More conversation opportunities between people of different knowledge/cultural backgrounds on this transdisciplinary topic
- Community and planet are the center and the key stakeholders. How do we account for this? For example, women farming practices impact breastfeeding, child development, elder care, etc. Environmental impacts must be primary at this juncture.
- know the diversity of farmers to be able to provide situated approaches
- There is a need to collaborate our

Having heard the panel discussion, what is your advice for improving the analysis that was presented on transdisciplinary science?

0 4 3

(2/5)

- learnings and adapt a lot quicker inclusively
- costs and benefits of transd. research
- what about implementation?
- Open mindset
- Borrowing methods and learning new research methods from other disciplines.
- Capacity building
- when and where is the value of Transdisci research, vs. other forms of research
- Could be broader and
- more specific; not sure about the 'novelty' part under innovation; where is space for niche insights if we push for quick societal impact
- Adapt tool for other stakeholders - right now academy focused
- trade offs
- Make explicit reference to justice into the elements of transdisciplinary research
- update the collaboration references and theories
- Allow art to have its say

Having heard the panel discussion, what is your advice for improving the analysis that was presented on transdisciplinary science?

0 4 3

(3/5)

- in communicating and co-creating knowledge
- Sharing the same terms of the knowldege
- Refine 'co création ' process in terms of engagement
- Go beyond the research: mobilize funds to share knowledge and ensure adoptiion
- Capacity building in organisations
- Bio physical sciences marries Social sciences
- Adapt research questions and solutions to local culture
- More study in the field, bringing more peasants and indigenous people into the discussions.
- the understanding of the purpose for it and what it can generate, what is needed and why is needed
- Practical applications and key examples
- Work on tools, practical but grounded in system sciene
- Focus on principle values required for good research
- Reinvent the role and the

Open text poll

Having heard the panel discussion, what is your advice for improving the analysis that was presented on transdisciplinary science?

0 4 3

(4/5)

-
- agency of the scientific researcher
 - Need for mindset change by all stakeholders i.e mutual respect of perspectives
 - how to favor collective learning
 - Applications and Impacts
 - Provide more practical results, do not use only slogans
 - Integrate and not isolate
 - be clear on who decides - include power analysis as part of process
 - Integrating science and indigestion knowledge
 - Knowledge Sharing
 - integrating food sovereignty
 - Develop appropriate skills
 - apply the framework within different research levels / contexts
 - acknowledge the creative power of unknowing
 - Capacity building
 - Capacity building
 - specify roles of various types of disciplines, and of various non-research stakeholder groups
 - Time Financial
 - Trad off

Open text poll

Having heard the panel discussion, what is your advice for improving the analysis that was presented on transdisciplinary science?

0 4 3

(5/5)

-
- Considering traditional knowledge
 - Be pragmatic
 - does not go beyond science...where are the borders?
 - Develop proper methodology
 - Practical examples
 - let farmers judge
 - In depth...Decolonizing methodologies

Annex 4: Additional resources on transdisciplinary science/research

HLPE (2019). Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome. <http://www.fao.org/3/ca5602en/ca5602en.pdf>

Maughan C and Anderson CR (2023). A shared human endeavor”: farmer participation and knowledge co-production in agroecological research. *Frontiers in Sustainable Food Systems*, Vol 7. <https://doi.org/10.3389/fsufs.2023.1162658>

Sinclair, F and Coe R (2019). The options by context approach: a paradigm shift in agronomy. *Experimental Agriculture* 55 (S1): 1–13. <https://doi.org/10.1017/S0014479719000139>

Brock, S., Baker, L., Jekums, A. et al. Knowledge democratization approaches for food systems transformation. *Nat Food* 5, 342–345 (2024). <https://doi.org/10.1038/s43016-024-00966-3>

University of Utrecht (n.d.) Transdisciplinary field guide. Available at <https://www.uu.nl/en/research/transdisciplinary-field-guide> (Accessed: 8 July 2024).

Norström, A.V., Cvitanovic, C., Löf, M.F. et al. Principles for knowledge co-production in sustainability research. *Nat Sustain* 3, 182–190 (2020). <https://doi.org/10.1038/s41893-019-0448-2>

Annex 5: Presentations

a. Keynote presentation

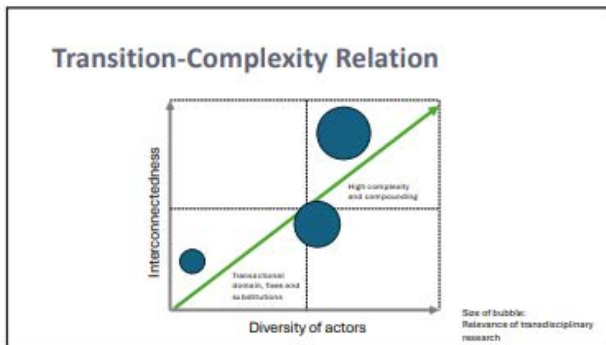
Transdisciplinary research
Justification, definition, realisation
11 July 2024 | The Agroecology TPP Dialogues | Michael Hauser



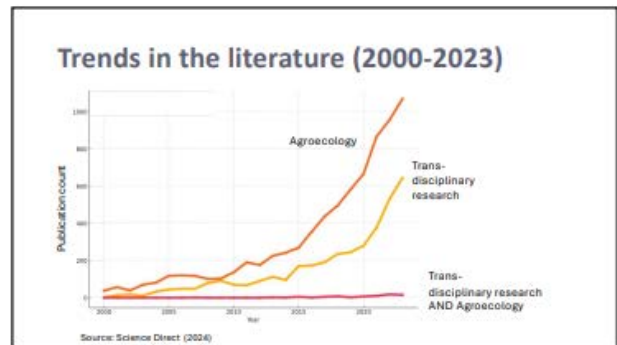
1

Solutions must match the complexity of the system.

2



4



5

Transdisciplinary research must be assessed holistically.

6

The essence of transdisciplinary research



Transdisciplinarity goes **beyond disciplinary confines**, aiming for **transformative results** with a focus on **real-world issues**, an adaptable **methodology** involving iterative and reflective processes tailored to specific contexts, questions, and research groups, and **fostering collaboration** among transdisciplinary and disciplinary researchers along with external stakeholders.

7

1. Integration of knowledge

Assesses the degree to which various academic disciplines and knowledge systems are effectively integrated within agroecological research. Understand how different epistemological, theoretical and methodological approaches from distinct fields are combined to provide a more comprehensive understanding of the research problem and potential solutions.

8

2. Collaboration

Focuses on the depth and breadth of collaboration among actors from different sectors during agroecology research. Assess how academics, practitioners, policymakers, and community members work together, their level of engagement, power and influence, and the quality of interactions in the research process.

9

3. Problem-solving orientation

Assesses the extent to which research is oriented towards addressing real-world problems and developing practical, applicable solutions, i.e. going beyond confirmative research. Assesses the relevance of research to real-life issues and its potential to contribute to problem-solving in practical contexts rather than confirming the known.

10

4. Innovation

Assesses the novelty of the research methods and approaches, especially those that go beyond the norms of traditional disciplines. Assesses the degree research offers new perspectives, techniques, or methodologies to address the research questions in view of the solutions needed.

11

5. Application and impact

Examines the tangible outcomes of agroecology research leading to impact on policy, practice, and societal change. Assesses how research findings have been applied or have the potential to be applied in real-world settings and the extent to which the research has influenced or could influence the transformation of policy-making, food industry practices, or societal norms.

12

Framework for reality check

Characteristics	Indicators	Rating*
1. Integration of knowledge	Diversity of knowledge contributions	High
	Depth of interdisciplinary engagement Cross-disciplinary methodologies used	Average Low
2. Collaboration level	Actor diversity	Low
	Quality of interactions/power balance	High
	Frequency/consistency of collaborative activities	high
3. Problem-solving orientation	Relevance to real-world problems	Average
	Practical solutions proposed Adaptability of research findings	Low high
4. Innovation	Novelty of research	High
	Pioneering approaches, goods and services	Low
	New ways of redistributing value	high
5. Application and impact	Transformative potential	Low
	Policy influence	High
	Societal impact	average

* Examples only

13

New behaviours require change of interest, capacity, capability

14



Interest

Personal values and beliefs, perceived benefits and risks, social/cultural influences all shape interest in transdisciplinary sciences, thus willingness to engage.

Capacity

Financial resources, access to information, and supportive institutions/networks are key to building the capacity for transdisciplinary sciences.

Capability

Skills, practical experience, and methodologies all influence the capabilities of individuals and teams to engage in transdisciplinary sciences.

16

To conduct research differently at scale we need a broad societal conversation about transdisciplinary research.

17




Thank you





18

b. CGIAR Agroecology Initiative presentation



The Agroecology TPP DIALOGUES

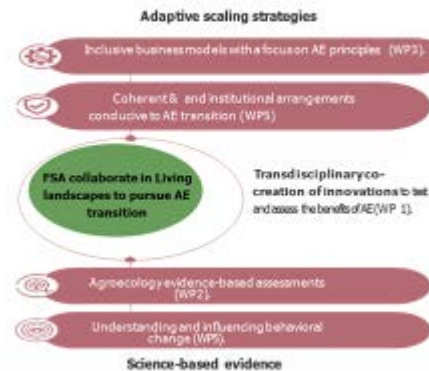
Experiences of the Agroecology Initiative with Doing research Differently

Bernard Triomphe, CIRAD, WP1 co-lead, on behalf of the AEI team

The Agroecology Initiative in a nutshell

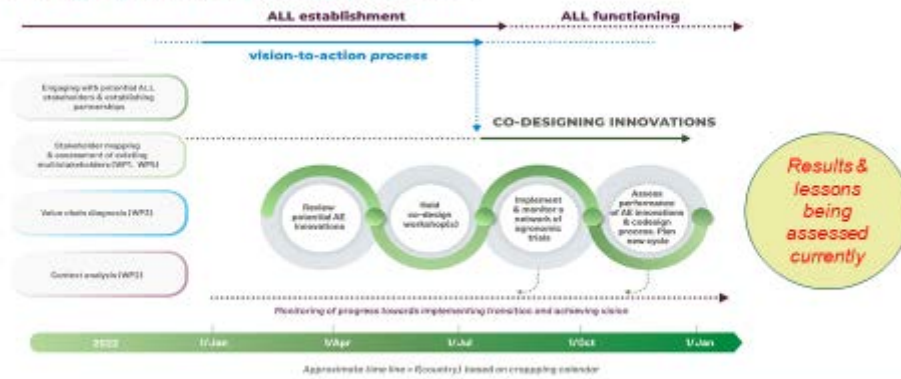
- Objective
 - *Develop and scale agroecological innovations with small-scale farmers and other agricultural and food system actors across different socio-ecological contexts*
- 8 highly diverse contexts:
 - Tunisia
 - Burkina, Senegal, Kenya, Zimbabwe
 - India (Madya Pradesh, Andra Pradesh), Laos
 - Peru
- CGIAR Centers, CIRAD, national and local partners
- 2022-2024



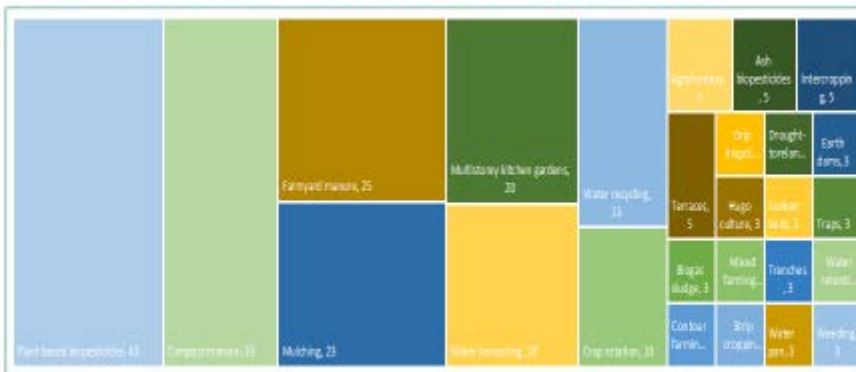
How we try to do research differently in the AEI

- **Partnerships: the Agroecological Living Landscapes (ALLs)**
 - Following engagement principles
 - highly diverse and context-specific
 - (local governance)
- **Collective / shared vision about a desirable future**, identifying transition pathways, behavior changes and agreeing on work plans (‘vision-to-action’)
- **Codesigning (technical) innovations & practices**
 - identifying existing / local innovation (==> Lisa Fuchs)
 - agreeing on priority issues & technologies
 - co-designing protocols
 - MEL
- **Assessing performance of agroecology with a generic, holistic yet locally adapted framework (HOLPA)**

A highly participatory process



An inventory of existing innovative practices identified in the two Kenya ALLs. (Fuchs et al. 2023)



Diversity of codesign experiments in 7 countries

Country →	Zim	Sen	Paru	Laos
Approx. number of AE technologies being tested				
Number of on-farm experiments installed in 2023				
Types of on-farm experiments 2023 (1)				
Importance of training of farmers and others as part of the codesign process				

Specific "technologies" being tested in codesign mode

- Push-pull (PP)
- Conservation agriculture (CA) (dead & live mulch)
- Intercropping
- **Biointputs**: pesticides, compost and animal manure, biofertilizers, biochar (types: doses, frequency of application)
- Hay making, feed formulation, mechanization
- Water terraces (farm ponds)
- Forage mixtures
- Covered manure pits
- Valorization of olive by-products
- whole farm advisory tool for choosing animal feeding strategies
- Solar pumping of groundwater
- Rice-fish systems
- Organic red rice growing (Wetlands management)



Overall reflections

- AE, contributing to AET, requires deploying and inventing **systemic approaches, methods and tools** that favor **dialogue and codesign at various scales**
- **Context specificity & adaptation** key to success
- **Process-based vs. output-based research**
- **Willingness** to do research differently is key
- Contributing to the **emergence / consolidation of a new culture** for researchers & their organizations
- Individual & collective **learning, sharing, education & capacity building**
- **Continuous negotiations & adaptation**: goals & objectives, objects, pace, sharing of funding, credits, values and attitudes, etc. **Who? Power dynamics?**
- Developing and effectively using an **adapted MEL approach & process** to periodically assess (*critically*) & adjust the way to work together and achieve change
- Shared ownership of knowledge, results, success




<https://www.cqiir.org/initiative/agroecology/?section=about>

Comments:

bernard.trionphe@cirad.fr

c. Foresight presentation




The Agroecology TPP DIALOGUES

FORESIGHT FOR THE TRANSFORMATION OF AGRIFOOD SYSTEMS THROUGH AGROECOLOGY

Key insights from a global stocktaking
and 2 participatory foresight exercises in India and Senegal

July 11, 2024

Marie de Lattre-Gasquet and Fatma Rostom, Bruno Dorin and Remi Prudhomme (Cirad),
Jimena Gomez and Anne-Sophie Poisot (FAO)



Food and Agriculture
Organization of the
United Nations



cirad
AGRICULTURAL RESEARCH
FOR DEVELOPMENT



giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

Background

Can policy makers make real
transformative decisions if
they are presented the usual
options?



**Foresight to anticipate and invent one or
several futures :**

- Interdisciplinarity
- Collaborative and participatory
- Problem-solving orientation :
- Innovation
- Impact and application



Two components

Output 1. A global review on the use of foresight tools to support policies for food systems transformation through agroecology.

Output 2.
Andhra Pradesh: Foresight with AgroEco2050 → translating results into policy recommendations.
Senegal: Foresight of AgroEco2050 + other participatory tools.

OBJECTIVE

Strengthen the role of foresight to support transitions to sustainable agrifood systems through agroecology

Agroecology Transformative Partnership Platform

How science was done differently in the project? THE PROCESS


Interdisciplinarity, collaboration, attention to expectations and commitments of all project partners, innovation, impact

For the global guidance process

- Corpus of 16 foresight exercises. Thorough interdisciplinary and rigorous analysis (March – Sept 2022).
- Intense and participatory debates of results and report in workshops (2023-2024)
- Bringing together the agroecology and foresight communities.

In Andhra Pradesh and Senegal

- Models shifted from “truth machines” to “learning machines” :
 1. Scenarios built by multi-stakeholder group with debates on values and political choices;
 2. Modelling dedicated to the analysis of plausibility and consistency of the desired (and undesired) futures.
- Stakeholders intellectually and emotionally involved, in order to crystallize into effective action.



The Agroecology TPP
DIALOGUES

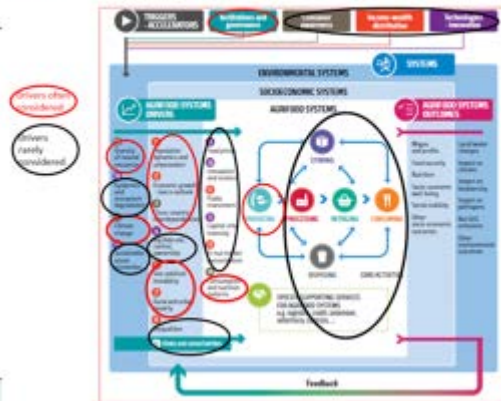
How science was done differently in the project? THE CONTENT

All 5 levels of AE should be included

Several scenarios with AE and powerful and imaginative representations of the future

Key stocktaking learnings

- Insufficient information by commissioners and funders about foresight and AE.
- Mainly from the Global North.
- Too much attention to availability
- Not enough attention to whole agrifood system as well as employment, stability, food prices, GHG emissions, pathogens, water use, territorial balance equity.
- Not enough attention to scales' interactions
- Rapidity but also inertia
- Need more articulation of qualitative and quantitative methods



How science was done differently in the project? THE CONTENT

New metrics, more and better quality data, and lens are needed for agroecology!
Also ethics of participation and deliberation.

	Agroindustrial lens → BaU models	Agroecology lens → Agribiom model
Economic	Enlarging farm size drives profit in industrial agriculture <i>Substitution of labour by machineries, economies of scale through specialisation</i>	Enlarging farm size cannot be a driver in most developing countries <i>Population growth, land constraints, lower opportunity to emigrate, "jobless growth"...</i>
Social	Towards a world without agriculture/farmers <i>In the long run, people do not work but are fed and entertained by robots/AI</i>	Towards a world with many but wealthy small farmers. <i>Cultivating and harvesting nature with many environmental & health services</i>
Technology	Uniform systems <i>Maximizing yields of few monocultures with industrial inputs (irrigation, seeds, fertilizers, pesticides, AI...)</i>	Highly-diversified systems <i>Maximizing overall productivity with dense polycropping and local technologies/inputs/brains</i>

Integration of Transdisciplinary Framework

Characteristics	Results in projects
Integration of disciplines	High level in 2 components of project as well as in foresight processes studied. Foresight is interdisciplinary by nature
Collaboration	High level in project : interactions with foresight projects managers, workshops, webinars Varied in foresight projects but high level in some projects : with farmers and policy makers
Problem solving orientation	High in project → preparation of guidance document, new scenario and model Varied in foresight projects but high in some (e.g. AgroEco2050 India, Afterres, Agrimonde-Terra Tunisia, TYFA, Fatick, Niayes)
Innovation	Good in project : corpus, comparison, interactions, Agribiom Growing interactions between qualitative and quantitative methods → foresight as a learning machine
Impact and application	Future with "conventional" / "input-intensive" / "industrial" food systems is not desirable. Future with AE is desirable but not without tensions.



Thank you

Visit our website bit.ly/AgEc_TPP



d. Agrofor presentation



The Agroecology TPP DIALOGUES

AgroFor

cultivating forest stewardship with agroecology in tropical forest landscapes in Peru

11-07-2024

Valentina Robiglio, Land Use System Scientist CIFOR-ICRAF

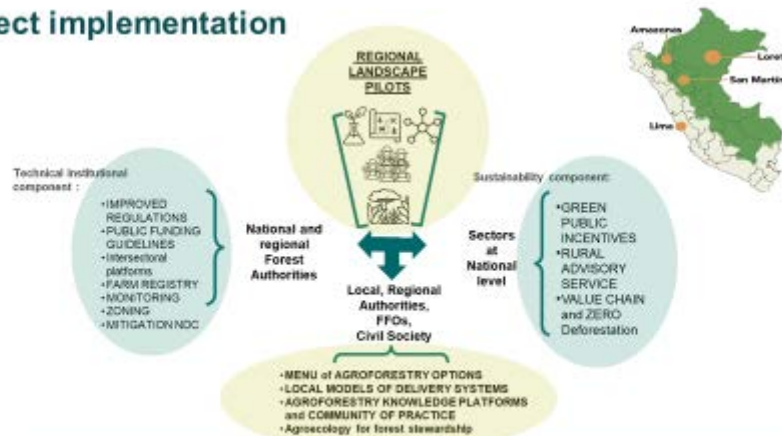


Support to Agroforestry Concessions (AC)

- 40 years land title granted to formalize access to land and trees management rights of untitled settlers on forest land (2011 Forest Law L. 29763)
- 120 K beneficiary households managing 1.5 M hectares of forest landscape mosaics
- Enabling socio technical and institutional conditions for AC to be attractive and successful in engaging farmers, communities and authorities to achieve land restoration deforestation and social inclusion outcomes
- 2019-2023



Project implementation



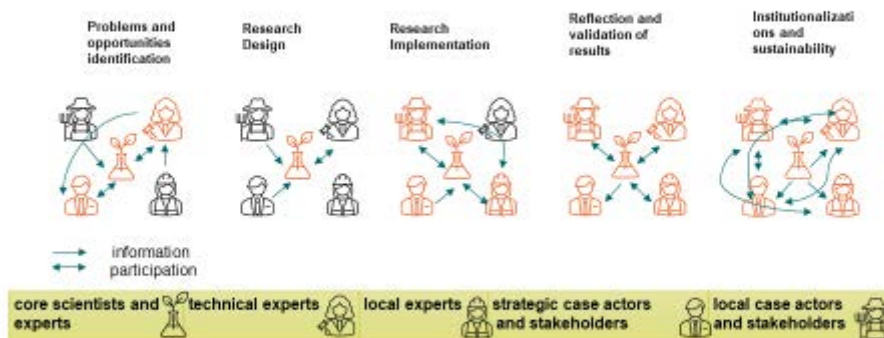
Actors and disciplinary integration



core research and experts	technical experts	local experts	strategic case actors and stakeholders	local case actors and stakeholders
Land Use Systems, Mitigation, PES economist, Livelihoods Economist, Rural Advisory Systems, Geography and Spatial Analysis, Value Chain, Forester, Agroecology, Gender	Environmental Lawyers, Forester, Policy and Public Finance experts, Topographers, Communication	Advisors to regional government, technical assistance and extensionists, Foresters and Lawyers, Gender	functionaries of national forest authority (policy, knowledge management, monitoring and supervision, zoning), functionaries of ministry of environment (climate change)	regional functionaries of the forester and environmental authorities, members of technical agricultural roundtables, NGOs and organizations, local communities and farmers



Collaboration levels on course of project cycle



Conclusions: embedding research into action

- Problem solving orientation as a starting point, strongly connected to impact and application
- Multi level and nested structure to capture the interplay within components and across levels, aware of governance levels
- Project structure allow continuous co-learning through effective communication and interactions
- Investment on engagement and knowledge and partnership brokering
- Innovative research methods to support full integration across knowledge and values systems, frame trade-offs
- Attitude for continuous negotiation of concepts across themes and with stakeholders (personal and organizational culture)
- Capacity for adaptive management and flexibility
- Adequate implementation frameworks and sequencing
- Adequate impact assessment frameworks and Metrics
- TIME! Needs time and transformation through programs





THANK YOU !

Visit our website bit.ly/AgEc_TPP



e. ABCD-VIPPT presentation



The Agroecology TPP DIALOGUES

Experiences from ABCD

How structured co-design engagement processes allow mobilizing assets and agency for efficient, equitable, and sustainable outcomes

11 July 2023

Lisa Elena Fuchs; Scientist Alliance Bioersity-CIAT

Background: Asset-based community-driven development (ABCD)

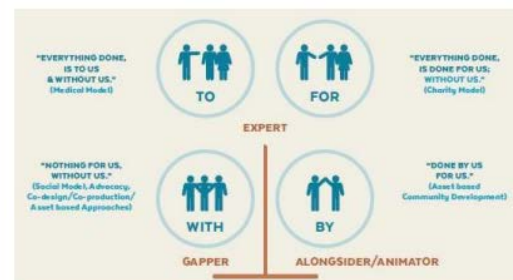


Origins

- Kretzmann & McKnight (1993): *Building communities from the inside out*
- Vast global community of practice – incl. ABCD Institute (US), Coady Institute (CA), etc.

Change in perspective

- From external assessment to appreciative self-realization;
- from 'deliverables' to 'discoverables';
- from top-down 'services' to locally driven, community-wide, socio-political solutions.



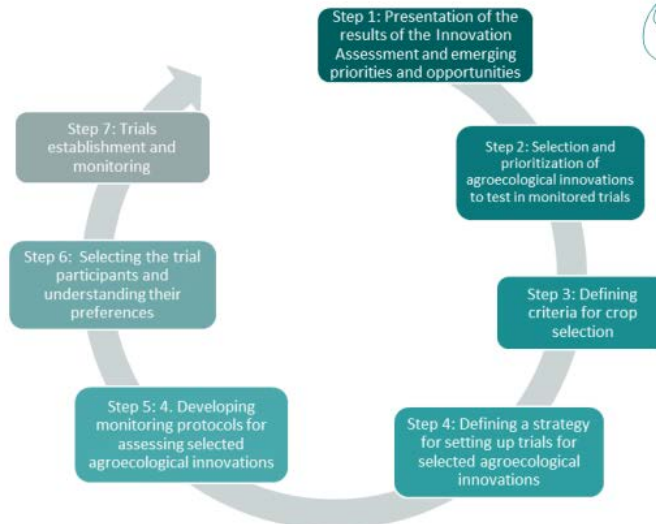
Source: <https://transform-integratedcommunitycare.com/>

Doing science differently: Approaches and insights

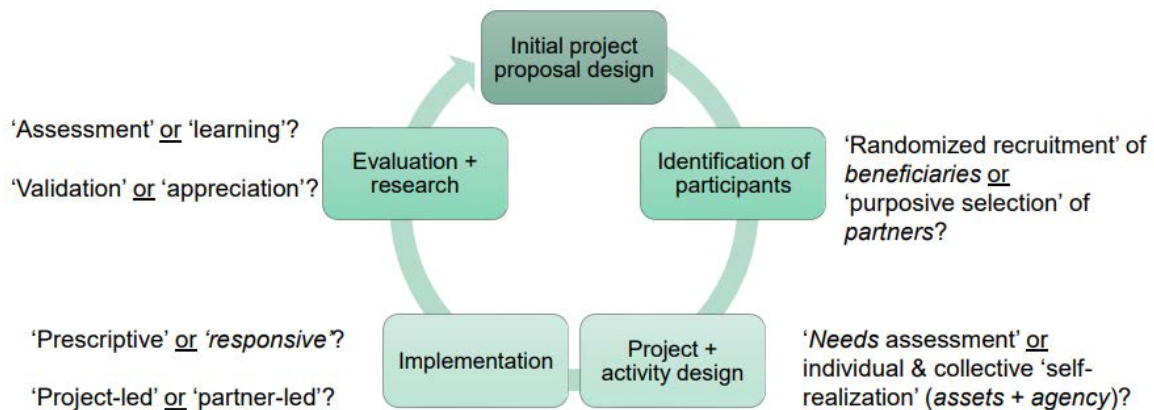


What is co-design... in R'n'D focused on-farm innovation?

Source: Kuria et al., 2024.



When and how else does co-design happen?



Conceptual reflections - opportunities



In research-in-development context, co-creation/co-design have (at least) 2 sides:

- Outcome-focused processes: **What to do and how to structure activities** to convey ownership and agency to achieve desired outcomes → **Agency focus:** Co-design & co-creation tools, methods etc.
- Self-reflexive attitude: **How to be a partner** by adopting relevant attitudes and practices as an external actor → **Structural focus:** Critical self-awareness & reflexivity → typically under-discussed!





'Transdisciplinary approaches'
(HLPE, 2019; Sinclair, 2021):

- Problem-focused
- Solution-oriented
- Inclusive
- Reflexive.

'Transdisciplinary research'
(Hauser et al., 2024):

- Integration of disciplines
- Collaboration
- Problem-solving orientation
- Innovation
- Impact and application.

Contextualization

'Ethical co-design and engagement' (Fuchs, 2024):

- Purposive partner selection across scales
- Embed all action in strong and continuous engagement framework that fosters responsive external action alongside community-driven action
- Adopt framing that is responsive to partners' interests
- 'Activate' partners to self-assess, self-actualize, and self-mobilize – attitude change as precondition to behavior change
- In-build continuous and participatory self-evaluation and adaptive management cycles
- Co-design self-evaluation and other metrics
- Give back the data
- Regularly train and capacity build implementing teams in research and development ethics
- Take responsibility for how structure influences contents and outcomes



“Most projects fail because you don’t get the people right (...). If you address what is not felt, you will not succeed”.

Nicholas Syano (CEO, DNRC)





Supplementary material and references



Some insights on 'ownership'



Partners' 'ownership' – an important ingredient for sustainability - depends on partners

Seeing a problem and/or opportunity

Feeling concerned by the problem and/or opportunity

Realising they are able to do something about it ('sense of agency')

Being included in identifying and defining solutions

Steering implementation of proposed solutions

→ As 'external' partners, we need to be mindful of and very deliberate in how we *enter* and *maintain* relationships that foster partners' ownership.



... and a few quick wins



- Some things are systemic and complex – and require strategic planning, transdisciplinary capacity and building, and institutional and personal will...
- ... and others are fairly easy:
 - **Remember** who we are (and what we can do) – an outsider who hopes to contribute positively to the lives and systems of people *who are at home* (so, at best, an 'ally')
 - **Listen** deeply: Before 'collaborating', get to know each other and seek a mutual 'match' through appreciative conversations and complete transparency
 - **Relate**: Prioritise relationship building at the beginning of an interaction, be reachable and accessible, explicitly request and valorise critical reflection
 - **Respond**: Rather than define and prescribe 'solutions', be *responsive* in our actions and words + make an effort to *frame* your actions in a language that valorises people and their capacities and skills, and that resonates with their priorities
 - **Share insights**: Share our results for fair learning opportunities



Most recent publications



- **Fuchs, L.E., Orero, L., Kipkorir, L., Apondi, V., Owili, S.** Sustainable scaling models for Regreening Africa: Focusing on smallholders' assets and agency to increase agroecological integration in Kenya. [[submitted for publication](#)]
- **Fuchs, L.E., Orero, L., van Dien, L.C., Apondi, V., Kipkorir, L., Kamau, A., Muia, D., Michuki, G. and Njiru, R.** Evidencing that process matters: Conceptualising and evaluating the contribution of an asset-based and agency-focused engagement approach to strengthening Regreening Africa outcomes in Kenya. [[forthcoming](#)]
- **Orero, L., Fuchs, L.E., Kipkorir, L., Apondi, V., van Dien, L.C.** Giving smallholder farmers back the power over their data: Lessons from western Kenya. [[submitted for publication](#)]



Other publications



Fuchs, L. "Start with what you have and where you are": ABCD, *World Agroforestry Blog*, 4 May 2022, <https://worldagroforestry.org/blog/2022/05/04/start-what-you-have-and-where-you-are-abcd>

Fuchs, LE, Orero, L, Ngoima, S., Kuyah, S., Neufeldt, H. Asset-Based Adaptation Project Promotes Tree and Shrub Diversity and Above-Ground Carbon Stocks in Smallholder Agroforestry Systems in Western Kenya. *Frontiers in Forests and Global Change*, 2022, 4: 773170, 14 pp. <https://doi.org/10.3389/ffgc.2021.773170>

Fuchs, LE, Orero, L, Apondi, VA, Kipkorir, L. How to stop wasting money in international development: Using a structured group selection approach to counter procedural inefficiency. *World Development Perspectives*, 2021. <https://doi.org/10.1016/j.wdp.2021.100364>

Fuchs, LE., Bourne, M., Achieng, W., Neely, C. Sustainability planning with community and local stakeholders: Guidance Note, World Agroforestry (ICRAF), Nairobi: Kenya, 2021, 26 pp. https://regreeningafrica.org/wp-content/uploads/2022/01/Sustainability_Guidance_Note_Final.pdf

Fuchs, LE, Kipkorir, L, Apondi, V, Orero, L. Facilitating an Asset-Based Community-Driven (ABCD) Approach for Holistic Community Development: A Manual for Community Organising, World Agroforestry (ICRAF), Nairobi: Kenya, 2020, 36 pp. <http://www.worldagroforestry.org/publication/facilitating-asset-based-community-driven-abcd-approach-holistic-community-development>

Fuchs LE, Peters B, Neufeldt H. Identities, interests, and preferences matter: Fostering sustainable community development by building assets and agency in western Kenya. *Sustainable Development*. 2019; 1–9. <https://doi.org/10.1002/sd.1934>

Fuchs, LE, Orero, L, Namoi, N, Neufeldt, H. How to Effectively Enhance Sustainable Livelihoods in Smallholder Systems: A Comparative Study from Western Kenya. *Sustainability*. 2019, 11 (Special Issue Sustainable Development of Tropical Agriculture), 1564. <https://doi.org/10.3390/su11061564>

Fuchs, LE. Bridging the divide in community development: The importance of process in linking community demands and responsive external support. *Coady Innovation Series*, (8), 2018, 11 pp., <https://coady.stfx.ca/wp-content/uploads/2019/02/IS8.pdf>

Cunningham, G., Fuchs, LE, Orero, L, Apondi, VA, Kipkorir, L. The Integrated Household Leaky Bucket. Building financial and economic literacy by doing: A simple guide to help smallholder farmers separate their farm and household revenues and expenses. *Coady Innovation Series*, (14), 2018. <https://coady.stfx.ca/wp-content/uploads/2018/12/IS14.pdf>

ABCD website (<https://cifor-icraf.org/abcd>)



Learn more about the work of the ABCD team by visiting the ABCD website:

Get an overview of the core concepts, the engagement processes, and the various tools that have been co-developed and implemented by the ABCD team since 2011.

Explore the team's latest [publications](#) on ABCD to gain a more comprehensive understanding of what it is all about.

Watch [videos](#) that feature stories and testimonials from communities about the ABCD process, tools and outcomes.

Learn more about the various ABCD projects.

[Making Agroforestry Work for Smallholder Farmers](#) (2011–2014) that aimed to improve agroforestry knowledge and land-management practices in selected watersheds in Nyando River Basin while focusing on climate change.

[Triple A Project: Accelerating Adoption of Agroforestry in Western Kenya](#) (2015–2019) that used an ABCD approach to scale sustainable adoption of best practices in agroforestry and agriculture.

[ABCD in Regreening](#) (2021–2023), a strategic collaboration with the Regreening Africa project to support the adoption of promoted land-restoration practices alongside a more widely framed efficient, sustainable and circular resource use at individual and communal levels based on the 'start where you are, use what you have' principles.

[Farmer-led Tools, Dashboard Development, and the Future of Farming](#) (2020–2022) that identifies participatory ways of collecting farm-level data, and pilots personalized data reports and feedback sessions to test how data can be made accessible to smallholders, especially women and girls, to improve their farming practices.

[Regreening Africa Sustainability Planning](#) (2021–2023) draws on the work of ICRAF's ABCD and SHARED teams. Their guidance note outlines six key steps to encourage and support sustained land restoration after project transition.



Lisa Elena Fuchs
Scientist II, Multifunctional Landscapes
Alliance Bioversity International and CIAT
Nairobi, Kenya
L.Fuchs@cgiar.org



ASSET
BASED
COMMUNITY
DEVELOPMENT

Include, Engage, Inspire

Visit our website bit.ly/AgEc_TPP