



Bridging Indigenous Peoples' and Western worldviews

A methodological reflection on the use of participatory storytelling alongside FAO's TAPE instrument to advance thinking on agroecological transitions

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1

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1. Introduction

In 2022, The Indigenous Partnership for Agrobiodiversity and Food Sovereignty (TIP) undertook a project titled, *Demonstrating that People and Landscapes Thrive under Indigenous Peoples' Food Systems*. Working with the Yucatec Maya Peoples of Mexico, the Ogiek Peoples of Kenya, the Karen Peoples Thailand, and Khasi, Karbi and Garo Peoples of Northeast India, TIP worked with field partners¹ to generate evidence on the agroecological performance of Indigenous Peoples' food systems. The project was responding to growing calls for a more robust evidence base on the contributions of Indigenous Peoples' food systems to sustainable food system transitions.

To generate evidence on agroecological performance, the project used the FAO's **Tool for Agroecology Performance Evaluation (TAPE)** in combination with **participatory storytelling**. As an instrument that has been informed by multiple frameworks for agroecology in consultation with hundreds of global participants from academic, private sector and non-governmental sectors (FAO, 2019; Mottet et al., 2020) and endorsed by the Committee on World Food Security, it was considered an independent and authoritative basis from which to assess the performance of Indigenous Peoples' food systems. At the same time, it was acknowledged that TAPE was an instrument derived within Western modernity and some modifications to indicators were suggested and accepted by FAO to fit an Indigenous Peoples' context. For example, the diversity element was extended to include a seasonal dependency matrix which could capture how Indigenous Peoples' food systems differ according to time of the year and inter-annually (e.g., forest-fallow cycles). TAPE also had to be adapted to encompass communal systems of management, where multiple-household owned systems steward a landscape approach to food cultivation. For further examples see [Agroecology Assessment of Indigenous Peoples' Food systems Report](#), Section 1.1.3 (TIP, forthcoming).

However, even with these adaptations a perceived limitation of TAPE was depth. At a point in time where the food systems designed by Western modernity are causing loss of biodiversity, climate change, soil erosion and desertification, inequity, malnutrition and conflict, it is not sufficient to identify that Indigenous Peoples' food systems help people and landscapes to thrive. It is necessary to also understand why Indigenous Peoples' food systems perform. As custodians of the majority of the world's biodiversity, Indigenous Peoples feed 35% of the world with less than 12% of the total area of land under production (Lowder et al, 2021). Can deep learning about Indigenous Peoples' food systems also help us to identify how we address mounting global challenges for more sustainable and harmonious futures?

¹ Glocal Bej and Universidad Intercultural Maya de Quintana Roo in Mexico, Pgakenyaw Association for Sustainable Development in Thailand, Ogiek Peoples' Development Programme in Kenya and Northeast Society for Agroecology Support in India.

1.1 Combining TAPE with storytelling

In a separate report that outlines the methodological approach ([Agroecology Assessment of Indigenous Peoples' food systems Report](#), Section 1.2, TIP, forthcoming), the project used the iceberg model as a conceptual rationale for combining use of the TAPE instrument with storytelling (see Figure 1).

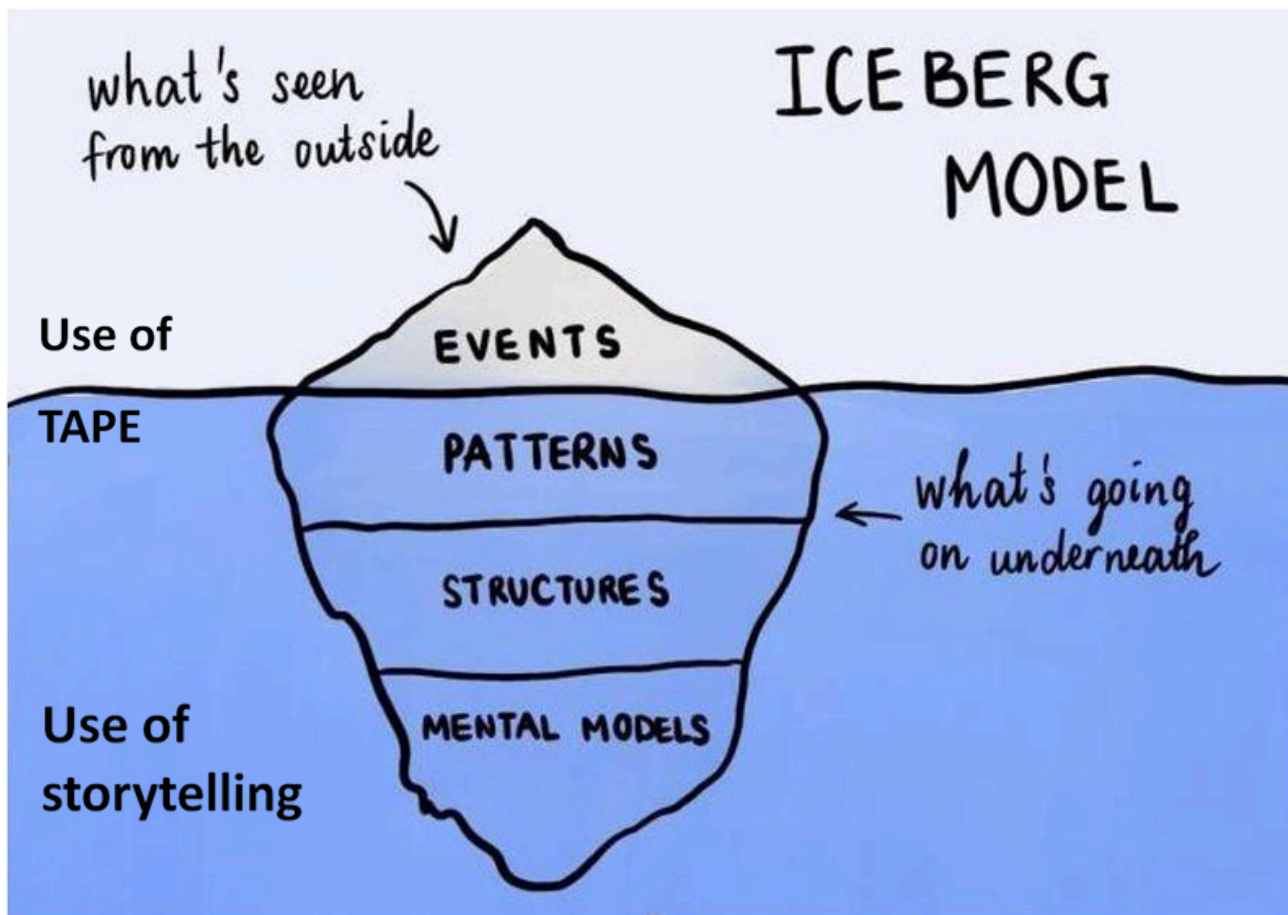


Figure 1: Adapted Iceberg model from World Economic Forum (2021) to show how the use of TAPE reveals the observed events of food systems and some of the patterns that influence outcomes while storytelling uncovers the paradigms of thought that shape the agroecology system well below the water. Both TAPE and storytelling overlap in their ability to identify structures (e.g., governance systems, traditions) that influence patterns of behaviour in Indigenous Peoples' territories.

By conceptualising reality as layers of observable and underlying factors, the iceberg model emphasises the importance of understanding the underlying dynamics of visible outcomes. It allows one to gain a deeper understanding of why certain events/behaviours occur in certain contexts, and how they may be influenced. And it encourages engagement with mental models, paradigms of thought and worldviews to make sense of systems.

Figure 1. shows how TAPE's strengths are in identifying the observed events of food systems and some of the patterns that influence agroecological performance and desirable outcomes. Storytelling overlaps somewhat with TAPE on the structures that we don't see, but it takes us deeper below the water into the values, beliefs, worldviews that shape the food systems under observation.

1.2 Why participatory storytelling?

Although TAPE is a well researched instrument, it is an instrument of a certain epoch of time in humanity's presence on Earth, bioculturally constructed out of the dominant values, beliefs and worldviews of Western modernity. To learn from Indigenous Peoples we needed a methodological approach that would allow the project to travel freely, unencumbered, into the knowledge systems of highly diverse biocultural regions, with connections to ancestral wisdom stretching back beyond Western modernity's years.

The method of storytelling seemed a good fit. As a practice, storytelling is as old as humanity itself, allowing knowledge to be produced and reproduced for learning purposes. By making the storytelling participatory, the project did not lead from Western modernity in its approach to storytelling. It created the space for an approach to be co-designed with field partners working closely with Indigenous Peoples. This revealed a plurality of story types, storytellers, story purposes and ways of telling stories. The way that the project collectively designed an approach that balanced consistency with contextual particularities is detailed in another report, so the process is recoverable for future use (TIP, forthcoming). For the purposes of this report it is worth noting that participatory storytelling has the following features that complement the methodology of TAPE:

- **Deepening the inquiry space:** Participatory story collection is an open-ended invitation, which deepens the evidence-generation space beyond a predetermined framework or category of elements / elements.
- **Privileging lived experience:** People tell stories about what is most important to them, eliciting new knowledge derived from lived experience.
- **Uncovering causal dynamics:** Storytellers, people in their community, field partners and international research teams collectively analyse the stories for causal patterns and directions of causality between outcomes, practices and worldviews.

These features of participatory storytelling are particularly well suited to identifying points of intervention in a food system that could change outcomes, much more precisely than the correlational analyses used in TAPE. Correlational analyses tell a story about the linear strength and direction of a relationship between variables, but cannot describe multidirectional and multi-causal pathways between multiple factors deeply rooted in context.

Correlational analysis processes are also typically non-collective, so that interpretations cannot be contested and deep understanding about what needs to change in one context compared to another is less likely to emerge. This is antithetical to the ways of learning of many Indigenous Peoples, where the accumulation of practices and knowledge is what leads to a noticeable change in the use of a crop variety or a medicinal plant in a particular locality (Rosado-May et al, 2020). This is where the lived experience privileged through participatory storytelling adds significant value to TAPE assessments of performance. In the storytelling process it is the Indigenous Peoples who are the research leaders, privileged as embedded observers of change processes (McLean et al., 2022). From the stories they choose to tell we learn the order of things and the potential pathways from one situation to another.

By intentionally bringing the TAPE assessment into conversation with participatory storytelling the project intentionally brought into conversation outsider perspectives with insider perspectives, conceptual frameworks with experiential knowledge, and the correlation with the causal. The hope was that by doing so, the project would build a more detailed picture of Indigenous Peoples' food systems and their underlying dynamics. It's also the case that the stories added colour and vibrancy to the data generated through the TAPE instrument, enlivening our understanding of what good food practices look like and how they can be taught. We encourage readers to explore the [stories](#) on TIP's website.

1.3 About this report

The focus of this report is to reflect on how participatory storytelling added value to the TAPE instrument in building an evidence base about how, when, why and in what ways Indigenous Peoples' food systems support people and landscapes to thrive. It reflects on what the project learned from collecting and analysing 30 stories Karen, Ogiek, Khasi, Karbi and Garo Peoples chose to tell about their food systems. The specific findings from the stories have been integrated into TAPE assessment reports for each country and in a synthesis report of findings from all 30 stories (TIP, 2024). This report reflects on two additional types of knowledge participatory storytelling added to TAPE assessments of agroecological performance:

- knowledge about Indigenous Peoples' worldviews that underpin practices and outcomes
- knowledge about important interrelationships and interplays between FAO's elements of agroecology

In conclusion, the report reflects on the implications for future evaluations of food systems and frontiers in agroecology.

2. What participatory storytelling revealed about Indigenous Peoples' worldviews

2.1 FAO elements of agroecology are part of Indigenous Peoples' food systems

As part of our participatory analysis of Indigenous Peoples' stories, country research teams mapped story collections to FAO's ten elements of agroecology - diversity, synergies, efficiency, recycling, resilience, culture and food traditions, human and social values, co-creation and sharing of knowledge, circular and solidarity economy and responsible governance. The research teams leading this analysis are mostly Indigenous themselves, work directly with the storytellers and are familiar with the stories in question, including how they are told and interpreted in different villages and communities. Where one of the FAO elements is clearly demonstrated or articulated in a story told by Indigenous People, it received a "tick". This allowed us to see how agroecology elements show up in the story collection.

Tables 1-3 in the Appendix to this report show that many stories touched multiple elements of agroecology, and as an entire collection all elements of agroecology are represented. This suggests there are points of convergence in Western and Indigenous Peoples' science about the features, attributes and qualities of successful agroecological food systems. On this basis, the stories show there is alignment between how FAO measures agroecological performance and the design intentions of Indigenous Peoples' food systems. This should bring confidence to FAO and its partners that Indigenous Peoples' food systems are an important contributor to agroecological food transitions.

The TAPE assessment captured numerous examples where Indigenous Peoples' designs were being disrupted by policies and market forces, revealing opportunities to support Indigenous Peoples to look after their territories according to local designs, customs and practices. While the approaches to agroecology in the stories were as diverse as the biocultural regions under study, the TAPE instrument allowed field partners and Indigenous Peoples to see what they also had in common. It showed how Indigenous sovereignty over food system design does not mean a dilution of agroecology; in fact, pluralism and diversity of approaches may be an important driver of agroecological transitions. The positioning of TAPE as a tool for learning and reflecting, rather than as a unifier of approaches, would retain and amplify the contribution of Indigenous science in agroecological transitions.

2.2 Indigenous Peoples' food systems are nurtured by different ways of being, seeing and doing

It is also the case that stories revealed different ways of being, seeing and doing common to the diverse Indigenous Peoples' food systems, but distinct from worldviews underpinning FAO's elements of agroecology. Some of these ways of being, seeing and doing influenced how Indigenous Peoples' related to FAO's elements of agroecology.

Working through Table 1 with some illustrated examples, the stories illuminated how Indigenous Peoples' food systems informed by bio-centric, pluricentric and cosmocentric worldviews. A bio/eco-centric worldview organises around nature and Mother Earth first and a pluricentric worldview focuses on the relationships between humans and other-than-humans. A cosmocentric worldview can be understood as bridging bio/ecocentric and pluricentric worldviews, emphasising the aliveness and interconnectedness of all forms of existence via reciprocal and interdependent relationships (IPBES, 2022). This is a distinct departure point from an anthropocentric worldview which regards humankind as the most central element of existence. These different worldviews have very real implications for how food systems are designed and evaluated for success.

Worldviews informing FAO elements of agroecology	Worldviews informing Indigenous Peoples' food systems	Implications for how Indigenous Peoples relate to FAO elements of agroecological food systems
Anthropocentric	Bio-centric Eco- centric Pluricentric Cosmocentric	Humans cannot be centred in assessments of whether a food system is working. The health of all beings need to be considered because biodiversity and harmonious interrelationships are the foundation of security and resilience.
Instrumental	Sacred Spiritual Relational	Food is an expression of love and inter-being, integral rather than incidental to culture, identity and spiritual connection. Sacred connections structure the design of food systems, which is a different departure point from Western economics.
Scarcity	Sufficiency	When no person or being takes more than they need, space is created for nature to regenerate itself, meaning that less is more when measuring agroecological inputs. Smaller, more diverse yields are valued over larger, less diverse yields. Social components of resilience are more highly valued than economic components of resilience.

Table 1. Articulating the worldviews informing FAO elements of agroecology in comparison with worldviews informing indigenous food systems, and the implications of these differing worldviews for how Indigenous Peoples relate to FAO elements of agroecological food systems.

For example, diversity is a treasured element of food systems in both FAO frameworks and in Indigenous Peoples' stories. In the TAPE instrument, diversity is measured by crop, tree, animal, product and services diversity as indicators of performance. In the Indigenous Peoples' stories the focus shifts slightly, so that the purpose of integrating diverse crops, trees and livestock is to create mutually beneficial relationships between a complex and diverse web of living things. As such the intention is not just to cultivate food for human health, but for the health of the whole. A shift in intention is subtle but significant because it is the purpose that animates systems and becomes the point around which structures, activities and resources are organised (Leadbeater and Winhall, 2020).

The subtle but significant effects of purpose in systems design are perhaps more clearly illustrated in another example of applying Indigenous worldviews to Regen 10², a global multi-stakeholder initiative working to support an inclusive, regenerative and equitable food systems transition. If we were to examine Regen10 principles for agroecology through the lens of a cosmocentric worldview, element 1 on farmer-centricity and 7 on Collaboration and Partnership would not fully express how Indigenous Peoples' work in reciprocal relationship with nature, and how their collectives and collaborations are inter-species. This approach to food production requires a different set of capacities to listen and learn from nature and natural processes. Indigenous science calls for a deep reflection on how nature is asking to take part in current challenges. It changes how we value different ways of knowing in expert and practitioner networks advocating for agroecological transitions.

Reflecting on row two of Table 1, the sacred and spiritual were repetitive and central elements of Indigenous Peoples' stories about their food systems, even though these elements are not captured by FAO's TAPE assessment. Sacred elements (e.g., fire, water), sacred spirits, sacred land, sacred forests, sacred gardens, sacred ingredients, sacred dialogues with seeds all emphasise the reverence and respect that Indigenous Peoples experience towards the wisdom of nature and natural processes. Some of the Khasi stories express the sacred in religious terms. In other stories, the sacred is expressed as the fullness of human experience. Harvest rituals and ceremonies in stories including [Seed Dialogue](#) and [Relationship of Fire with Man and the Use of Fire](#) create the space in food systems for people to connect deeply to our shared humanity and to something bigger than ourselves, and to access intuitive faculties and unseen wisdom. Through this deep and intimate biocultural knowledge of a locality, human capacities to govern responsibly are enhanced.

Attention to the sacred and spiritual changes how Indigenous Peoples relate to the design of their food systems and how they relate to themselves - as humble participants of an interconnected whole. The Ogiek Peoples stories teach that biodiversity flows from an appreciation and respect of nature's abundance, reciprocal relations between humans and environment in agroecological practices and awareness of the interconnectedness of subsystems (e.g., soil; forests, water, carbon sequestration), food systems (e.g., crop cultivation, hunting) and ecosystem services (e.g., shelter, habitat). This relationality and entanglement with the web of life does not just constrain the role that humans play shaping the land for food production; it means that an over-sized or central role for humans does not make sense. This outlook may explain why exploitation of ecosystems by Indigenous Peoples is much rarer than people socialised into an anthropocentric worldview would expect.

²<https://regen10.org/>

Reflecting on row three of Table 1, the scarcity mindset prevalent in an anthropocentric worldview is linked to a culture where exploitation is permissible. Seeing everything (food, natural resources, money, time) as a scarce commodity shapes how food systems are designed to encourage participation in markets, competitiveness, overconsumption and accumulation of wealth. A scarcity mindset was never prevalent in Indigenous Peoples' stories, even when they recounted periods of drought and food insecurity. Instead the stories repeatedly taught the value of a sufficiency mindset - if we each only take what we need, then there is plenty to go round, and nature gets the space and time to regenerate itself. Sufficiency is considered important for self-reliance and future resilience because it means food systems are designed to encourage caring, sharing and reciprocity. The Karen People's stories cautioned against the generation of surpluses and the commodification of food, with protagonists getting into trouble when deriving monetary savings from food production at the expense of harmony. Rather than seeing a sufficiency mindset as inefficient, as it might be depicted by a capitalist economy, a sufficiency mindset was depicted as giving life and animacy to natural and social processes that current and future stability rely upon.

A separate report that synthesises the findings from all 30 stories shows how participatory storytelling showed linkages between food systems practices and outcomes and a different set of elements and worldviews to those in the TAPE instrument (TIP, 2024). The stories suggest measuring success of Indigenous Peoples' food systems against a different set of qualities and criteria, including:

- rootedness in the locality and people
- biocentricity
- collectivity with species and living entities
- co-evolution of traditional and new
- sufficiency, caring and self-reliance
- reciprocal governance systems
- respect for the wisdom of nature and natural processes

Importantly, Indigenous qualities appear conducive and complementary to common elements of agroecology. They are perhaps pointing more towards cultural transformations than technical ones, but overall they present as helpful in on-going learning and guidance about agroecological transitions, particularly in non-Indigenous systems.

3. What participatory storytelling revealed about interrelationships between FAO's elements of agroecology

Participatory causal analysis of the stories, which involved mapping pathways between outcomes, practices, events, values, elements and worldviews and turning points in stories, produced new insights about how different FAO elements of agroecology interrelate in Indigenous Peoples' food systems. These causal pathways suggest that complex systems dynamics are at play within Indigenous Peoples' food systems, and thus determine scores on TAPE. This suggests that it could be the quality of the interaction between elements that is as important a determinant of overall performance as the performance of particular elements. This is articulated in a diagram articulating key interactions between FAO elements (see Figure 2).

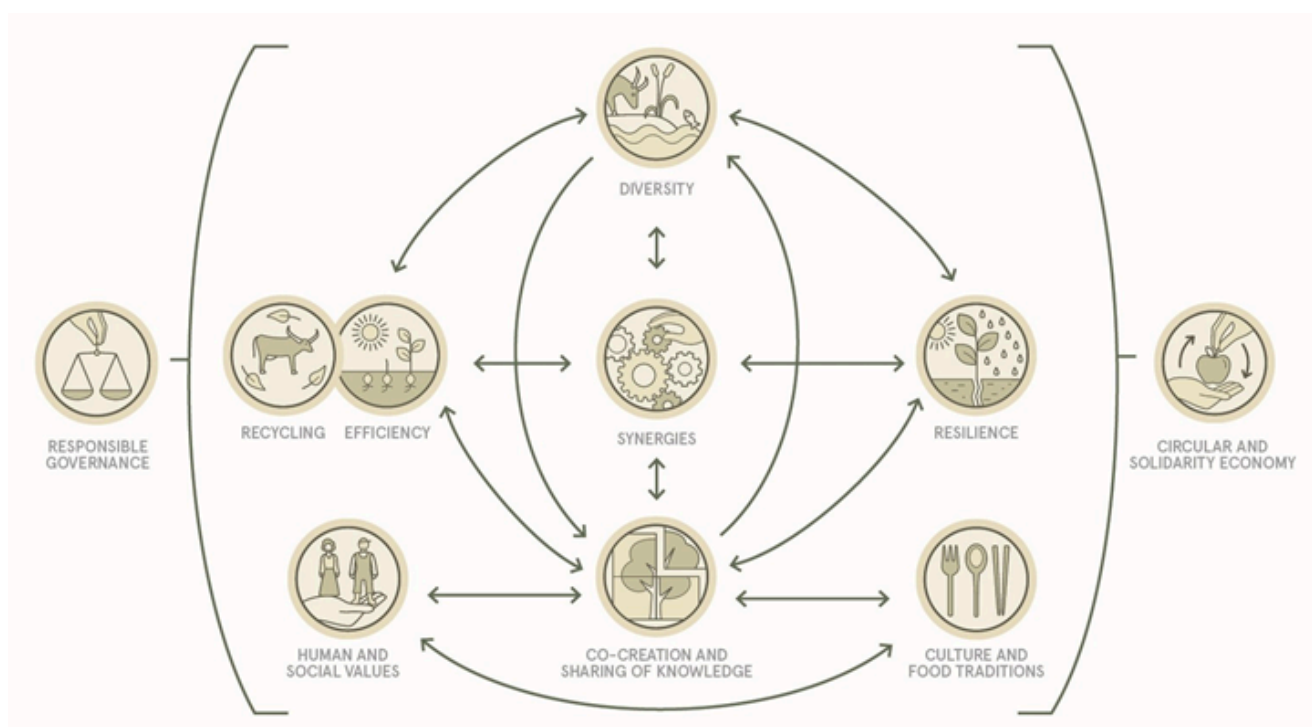


Figure 2: Mapping key interactions between agroecology elements. Source: FAO (2018).

For example, Indigenous Peoples' stories captured some important interrelationships between participation, collaboration and efficiency in food systems, linking the TAPE element of responsible governance with the element of efficiency. When everyone - young people, women, men, other species - is contributing and learning, efficiencies are generated in agroecological practices and knowledge generation. This is why systems of labour change are so plentiful and contextually varied in Indigenous Peoples' stories of their food systems. And the sharing of knowledge is such an important turning point in Khasi Peoples' stories. But Ogiek Peoples' stories go further to teach that the relationship between responsible governance and efficiency is strengthened by environmental stewardship of nature and natural resources. Without the emphasis on environmental stewardship, the bidirectional relationship between governance and efficiency could result

in dis-harmony with the natural world and natural processes. This is why Karen Peoples' stories extend the concept of responsible governance beyond the human sphere into natural and spiritual spheres of being. In the story [The Orphan and the Pond](#) the water-bailing system to catch fish has the ability to naturally recover itself provided no more water resources are taken than are necessary for subsistence. The humans are required to exercise restraint and this respectful gesture creates the space for the water to sustain its own health. Human restraint, humility, diligence, patience, forgiveness and love are values continually represented and rewarded in stories that show human beings as responsible contributors to the health of the whole. These qualities are not unfamiliar to Western modernity, but they are also not qualities guiding the way we design food systems.

Knowledge sharing between individuals within a locality was often a turning point in Indigenous Peoples' stories of food systems, highlighting the importance of sharing knowledge for lots of outcomes, including soil health, land regeneration, increasing nutritional value of food, preservation and storage, and ecosystem services interplays. Indigenous Peoples' stories taught about the importance of incorporating new knowledge into Traditional Practices carefully, paying attention to the effects of new practices, and being wary of outside knowledge devoid of deep appreciation and understanding of the interconnectedness of the local ecosystems in which food systems are embedded. Cultural traditions and identities have important roles to play in innovation processes in stories that make a clear distinction between knowledge and wisdom. In the Karen story [Kaw Kle Klaw Noh \(The Beast Wedding\)](#) which teaches the difference about knowledge, insight and wisdom, it is a young girl who trusts in the old practices to escape the peril of the Beast, often interpreted as modern fertilisers. Stories caution that it is difficult to make wise choices if the cultural, ecological and spiritual are not integrated into decision-making. They gesture towards the power of combining different ways of knowing in the design of food systems, ways of knowing that extend way beyond the epistemological field Western science has confined itself to.

The stories also suggest some important bidirectionality and causality in the relationships between elements of agroecology that influence overall performance. For example, diversity could be seen as an outcome of agroecological performance. This was definitely the case in many of the causal maps of Indigenous Peoples' stories, especially when diversity of food systems led to diversity of diets and resilience during drought. But the maintenance of diversity was also depicted as an input of food systems that are resilient (see for example lessons from Ogiek People's stories in [Agroecology Assessment of Indigenous Peoples' food systems Report](#), Section 4.3.4, TIP, forthcoming). This understanding of biodiversity - as a foundational element as well as a desirable outcome - may go some way to explain why the 20-25% of Earth's land surface managed by Indigenous Peoples' coincides with areas that hold 80% of the planet's biodiversity (UN/DESA, 2021). It also suggests that a low TAPE score on resilience may be best improved by looking at enhancing diversity, including seasonal and inter-annual diversity. This is a different starting place from interventions seeking to directly improve scores on resilience.

4. Conclusion

The project's idea to bring together Indigenous Peoples' science with FAO's elements of agroecology was never about seeking coherence. It is neither possible, nor desirable, to collapse one into the other, to flatten out the diversity of human experience and the richness of wisdom flowing from distinct biocultural regions. Instead, the project was about going deep enough into diverse and distinct knowledge systems to surface worldviews informing what we know, how we know and what we value knowing. By bringing different worldviews side by side, we get to look anew at our own knowledge systems.

Through the TAPE exercise, the project created an opportunity for Indigenous Peoples' to reflect on some key elements of their food systems, seeing new opportunities to enhance recycling or efficiencies, for example (for more details see country reports in [Agroecology Assessment of Indigenous Peoples Food System Report](#), TIP, forthcoming). Through the participatory storytelling exercise, the project has created an opportunity for different actors to reflect on why they do things the way they do. For Indigenous Peoples, stories were a way of reconnecting to their cultural identity and integrity, creating new opportunities to reproduce cultural knowledge, especially intergenerationally between elders and young people. As our field partner, NESFAS, reflected about their work with Khasi, Karbi and Garo Peoples:

“There was an overwhelming positive response from the community. It was like a community bonding finding commonalities in the stories. The analysis of the stories provided a platform for discussing collective identity. Reflecting on the value, it was evident the story analysis session was an important community empowerment exercise especially because the stories are not commonplace among young people. So marginalised voices came out and helped cultural preservation”.

For actors working with FAO, and other related agencies and NGOs, the collection of Indigenous Peoples' stories generated another layer of evidence that Indigenous Peoples' food systems incorporate elements of agroecology. To see examples of recycling, synergies and resilience embedded in folk tales, descriptive accounts of hunting, planting and water management practices underlined the embeddedness of agroecology elements in the ways Indigenous Peoples approach the design of their food systems.

Participatory storytelling went a little further than TAPE in revealing the entangled nature of successful food systems. Firstly, agroecology elements co-exist and co-influence one another, revealing interactions and interdependencies that indicator-led measurement approaches and correlational analyses are not designed to unpick. Secondly, and perhaps more fundamentally, the stories revealed how outcomes cannot be separated from practices which cannot be separated from worldviews. This entanglement has implications. In the bringing together of Indigenous Science with FAO's elements of agroecology, new questions emerge about how western modernity relates to food cultivation and production.

For example, could the mindset of sufficiency be adopted by Western modernity in its expression of agroecology? Is it possible to rekindle a sacred connection to food and locality in Western cultures? What capacities for humility, collaboration with natural processes and reciprocity might we need to develop for agroecological transitions? How could these capacities co-exist with other elements of human success Western modernity values? It is by co-living a different set of questions that new frontiers of agroecology emerge. Frontiers that are less colonised by Western thought and more deeply immersed in the richness of human-nature interactions spanning distinct bioregions, cultures, economies, spiritualities and epochs of time.

In conclusion, participatory storytelling led us to a different place in our assessment of food systems. It took participants on a more self-reflexive journey, which added a deeper layer of learning about why food systems have been designed as they have. This exercise combining storytelling with TAPE gestures towards futures where different methodologies and ways of knowing are purposefully brought into conversation with one another to respond to the challenges of our times.

Contributors

Researcher positionalities:

The core project team for this paper was comprised of Indigenous leaders and / or representatives, and researchers and NGO staff wishing to use their skills to generate evidence about Indigenous Peoples food systems.

Jody Aked has provided technical expertise on participatory research approaches to The Indigenous Partnership for Agrobiodiversity and Food Sovereignty for over a decade. She has worked closely with Indigenous leaders in the Philippines on terrestrial and marine ecosystem management and is committed to exploring different ways of knowing. Her current focus is on the limits of western science and the co-creation of new frontiers of understanding.

Gratia E. Dkhar is a Senior Associate at NESFAS and a TIP fellow from the Indigenous Peoples of Northeast India. She collaborates closely with Indigenous communities to manage agroecosystems, drawing on both traditional wisdom and modern approaches to promote sustainable food production practices. Her passion lies in engaging with these communities, blending their deep-rooted knowledge with contemporary insights to help preserve the rich biodiversity of their landscapes.

Dhrupad Choudhury is an Independent Consultant who spent nearly 20 years working for ICIMOD, an Intergovernmental organisation working for mountains and people of the #HinduKushHimalaya region. He is currently the senior Advisor to TIP. He is an advocate for revitalising the practice of shifting cultivation and has written resource books to guide practitioners and policy makers.

Prasert Trakansuphakon is the Director of the Pgakenyaw Association for Sustainable Development (PASD) and a member of the Karen Indigenous People. He has dedicated over 30 years passionately championing for advancing the well-being of Indigenous communities. With a deep expertise in Indigenous Knowledge, he specialises in traditional agricultural practices like rotational or swidden farming and is a strong advocate for food security and sovereignty for Indigenous Peoples. His work is driven by a commitment to preserving and revitalising cultural heritage and sustainable practice of his community.

Kwanchewan Buadaeng, an Associate Professor with a PhD from the University of Sydney, is deeply engaged with the Karen Peoples in Northern Thailand. She currently serves as a lecturer in the Department of Sociology and Anthropology at the Faculty of Social Sciences, Chiang Mai University. Her expertise spans ethnic groups, religious movements, migrant workers, and national policies affecting minorities.

Boonsong Thansritong is the Agriculture Program Manager at ECHO Asia Foundation and a member of the Karen Peoples of Northern Thailand. With a strong foundation in both traditional and modern agriculture, Thansritong grew up in a community that practiced rotational farming, which inspired his lifelong commitment to sustainable agriculture. He pursued higher education in agricultural production and social sciences,

Contributors

earning his Ph.D. from Chiang Mai University. Boonsong has worked with Mckean Rehabilitation (MRC), Shoklo Malaria Research Unit, and Partners Relief and Development on natural farming, sustainable development, and humanitarian initiatives. Since 2012, he has been with ECHO Asia Impact Center, where he leads efforts in sustainable agriculture and community development.

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APPENDIX

Table 1. Mapping stories from Khasi, Krabi and Garo Peoples to FAO's elements of agroecology. A tick (✓) represents demonstrable evidence of the element in the story.

Title	Diversity	Synergies	Efficiency	Recycling	Resilience	Culture and food traditions	Human and social values	Co-creation and sharing of knowledge	Circular and solidarity economy	Responsible governance
TYPES OF LABOUR EXCHANGE			✓		✓	✓	✓	✓		
WEEDING IN JHUM FIELDS	✓	✓	✓	✓			✓	✓		
SEED DIALOGUE	✓	✓	✓	✓	✓	✓	✓			
PLACENTA AND UMBILICAL CORD CEREMONY	✓	✓				✓	✓	✓		
RELATIONSHIP OF FIRE WITH MAN AND THE USE OF FIRE	✓		✓	✓	✓		✓			✓
FOLK HUNTING TRADITIONS	✓	✓				✓	✓			✓
GARDEN OF GOD AND THE "DOMAHI" DANCE	✓	✓	✓	✓		✓	✓	✓		✓
NATURAL CUES FOR TIME KEEPING AND WEATHER FORECASTING	✓		✓		✓	✓				
ORIGIN OF THE KHASI SEVEN CLANS	✓	✓	✓	✓	✓	✓	✓	✓	✓	
DISCOVERY OF WANCHI-TRADITIONAL YEAST	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Table 2. Mapping stories from Ogiek Peoples to FAO's elements of agroecology. A tick (✓) represents demonstrable evidence of the element in the story.

Title	Diversity	Synergies	Efficiency	Recycling	Resilience	Culture and food tradition	Human and social values	Co-creation and sharing of knowledge	Circular and solidarity economy	Responsible governance
INTRODUCTION OF PUMPKIN IN OGIEK TERRITORY				✓	✓	✓	✓	✓		
LIFE IN TREES	✓	✓				✓	✓	✓		
HARMONY OF NATURE: THE OGIEK JOURNEY THROUGH PREGNANCY AND BIRTH					✓	✓	✓	✓		✓
DISCOVERY OF HONEY		✓	✓	✓	✓	✓	✓	✓	✓	✓
TUROT: THE OGIEK HUNTING PRACTICES	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
OGIEK ECOLOGICAL ZONES	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SACRIFICE FOR THE RAIN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
THE HARE AND THE ELEPHANT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
THE BRAVE MAN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BRIBE FOR THE MONKEY				✓			✓	✓		
THE GIANT AND MAIYA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HUNTING IN THE FOREST	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Table 3. Mapping stories from Karen Peoples to FAO's elements of agroecology. A tick (✓) represents demonstrable evidence of the element in the story.

Title	Diversity	Synergies	Efficiency	Recycling	Resilience	Culture and food traditions	Human and social values	Co-creation and sharing of knowledge	Circular and solidarity economy	Responsible governance
THE MOTHER FISH	✓	✓			✓			✓	✓	
PHU MAW TAW	✓	✓			✓	✓	✓	✓	✓	✓
NAW PHA DO				✓			✓	✓		
MISS RED EYE FROG AND MISS DEER	✓	✓					✓	✓	✓	✓
THE RICE-SPIRIT BIRD		✓			✓	✓	✓	✓	✓	✓
BANANA BLOSSOM		✓					✓			
RICE AND MONEY		✓				✓	✓	✓		
THE ORPHAN AND THE POND	✓						✓	✓	✓	
THE ORPHAN AND THE , LITTLE BIRD, SHAW SHAY		✓					✓	✓		
THE BEAST WEDDING	✓	✓	✓	✓	✓	✓	✓	✓		✓

