REFOOTURE

from sustainability towards regenerative thinking

Collaborate to Regenerate

A guide for teams to start mobilising people
towards regenerative and inclusive food systems

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"Collaborate to Regenerate" provides practical as well as conceptual guidance for facilitators, practitioners and supporters of regenerative development to work towards a win-win-win situation for disadvantaged groups, power holders and nature in a specific geographic area.

Cover picture: Graziers, farmers, firewood collectors and beekeepers envisioning how they see the future in the Menengai area, Nakuru County, Kenya (Picture by Bram de Groote)

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Abstract

REFOOTURE is an initiative by Wageningen University & Research with knowledge institutes and food system innovators in Kenya, Uganda and Ethiopia to explore pathways towards Regenerative and Inclusive Food Systems (RIFS). Food System Innovation Platforms (FSIP) in the three countries provide the institutional structure for transdisciplinary collaboration, experimentation, facilitation and learning. "Collaborate to regenerate" is a guide for practitioners, facilitators and supporters who are exploring such pathways, to contribute to operationalising concepts and ideas about RIFS. It brings together experiences from the *Nakuru Living Lab* (the Food System Innovation Platform in Kenya that is part of REFOOTURE) with emerging literature about Regenerative Development, the facilitation of Multi-Stakeholder Partnerships (MSP), and Participatory Learning and Action (PLA).

In the first chapter, the guide explains background concepts that help to understand RIFS. **Food systems thinking** means embracing the complexity of all the linkages between food production and utilisation and how it is shaped by the people, socio-economic and environmental drivers and activities involved. Practicing **Regenerative Development** means "drawing inspiration from the self-healing and self-organising capacities of nature and works to restore these capabilities when they are missing or disrupted, whether in ecological or human living systems". **Inclusion** is understood as a process of improving the terms of participation in society, particularly for people who are disadvantaged, through enhancing opportunities, access to resources, voice and respect for rights.

The second chapter provides a **bigger picture** of building regenerative capacities towards ensuring healthy ecosystems, which support livelihood resilience, food and nutritional security and social justice for all. This involves the starting point or "ground"; the higher-level goals of changing the Food System, the innovation platforms working towards these goals with guidance from RIFS principles that provide direction.

The third and fourth chapters describes the first phase "planting seeds" of **how collaboration towards RIFS can be facilitated**, based on a pilot in the Nakuru Living Lab in Kenya. It argues that people shape the place and natural environment where they live and this in turn shapes them. Together they are a living system. Five stages are described - illustrated with examples from the Nakuru Living Lab in Kenya - aiming at three goals.

Firstly, to mobilise local communities of disadvantaged people who depend on the location for their survival and livelihood, to empower them to come up with pathways towards the futures they envision. The brains, energies and commitments of all involved are needed to shift mindsets and behaviour towards a regenerative and inclusive development paradigm. Power disparities and other challenges that cause exclusionary practices need to be addressed. Secondly, to create an open and safe learning environment where academic, local and indigenous knowledge and practical experiences are valued equally. Thirdly, to establish a baseline understanding of where the community is at in terms of extractive and regenerative practices and mindsets.

In the fifth chapter, the overarching **lessons** from the pilot process and the review of sources is provided. Some of these lessons can be directly connected to the development of food system innovation platforms, while some lessons are at the level of the transformation or transition process towards RIFS.

List of Abbreviations

FMA	Forest Management Agreement
FSIP	Food System Innovation Platform
GAIN	Global Alliance for Improved Nutrition
GALS	Gender Action Learn System
HLPE	High Level Panel of Experts
KFS	Kenyan Forest Service
LNOB	Leaving No One Behind
MCFA	Menengai Community Forest Association
MSP	Multi-Stakeholder Partnership
NLL	Nakuru Living Lab
P1-5	Regenerative and Inclusive Food System Principles 1 to 5
PFMP	Participatory Forestry Management Plan
PLA	Participatory Learning and Action
RIFS	Regenerative and Inclusive Food Systems
SDG	Sustainable Development Goals
SoP	Story of Place
SWR	Stichting Wageningen Research (based in Ethiopia)
UN	United Nations
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
WUR	Wageningen University and Research

Preface

Transforming systems is complex, and always require changes in mindsets to foster collaboration as energies, ideas and support are needed from all layers and corners of society. This guide aims to show how complex concepts such a "Regenerative Development", "Inclusion" and "Food System transformation" or "transition" could be applied in practice. The process that is explained in this guide aims at empowering disadvantaged stakeholders to (re-)connect with nature and each other in the place where they depend on, and constructively engage with power holders. The guide is meant to inspire practitioners, supporters and facilitators working in the field of regenerative and inclusive development: how to change mindsets for collaboration in a way that it results in win-win-win situations for disadvantaged stakeholders, power holders and nature.

Part of this is a mindset of regarding the place – in this case the Menengai Forest in Nakuru county in Kenya – as a living being, that influences a larger area – in this case Nakuru county and beyond. Mindset change can also involve a shift from a 'transfer of technology' approach[1] to impose solutions on local communities, to the facilitation of a change process and reflective monitoring aiming at 'change from within' the communities involved.

The guide shows a possible way to "plant seeds" for a change process towards a Regenerative and Inclusive Food System. A first step is to recognise and amplify voices of groups, communities and individuals who are normally not heard or represented, but whose lives are directly affected by the transition or transformation process (see Coninx et al., forthcoming. Tribaldos, 2022). By actively engaging the less powerful and disadvantaged individuals and groups and enabling them to articulate and communicate their aspirations, a foundation is provided for an inclusive change process that is owned by local stakeholders. To make transition just, this "recognitional justice" is the first step (Coninx et al., forthcoming), and can be repeated throughout.

Next to the justice element, the emerging discourse of Regenerative Development is a source of inspiration that this guide taps into, to nudge the process and everyone involved towards this new way of looking at development in a particular place. Through the process of collaborating with stakeholders, observing behaviour and reflecting on and monitoring the process, a baseline can be set to foster further learning and transformation towards a regenerative and inclusive food system.

A wider use of this guide should therefore open up the dominant technical discourse of food system transformation to become more holistic by including socio-ecological, cultural, environmental and good governance aspects. It includes guiding principles, process steps with practical examples and links to tools, and an example of how observations can be structured as a baseline for the first phase of planting the seeds of regenerative and inclusive transformation.

Disclaimer: this guide is work in progress, providing examples that have been carried out in the context of Nakuru, Kenya. Therefore, it is good to be aware that steps of this guide may differ based on the context in which this is implemented, as this is a place-based approach, which is central for a regenerative transformation.

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[1] "transfer of technology" is a common model in agricultural research and development that is associated with top-down delivery of information to farmers, while ignoring local and indigenous needs and knowledge.

Project Background

The REFOOTURE initiative, supported by the IKEA foundation, aims to support, enhance and advance the regenerative capacities, as well as the willingness of innovators, communities and relevant stakeholders involved in the food systems in three East African countries to transition towards regenerative and inclusive food systems (RIFS). The REFOOTURE Team consists, currently, of Wageningen University and Research (WUR), Egerton University in Kenya, Stichting Wageningen Research (SWR Ethiopia office) with knowledge institutes in Ethiopia, and Muni University and ABI Zardi in Uganda. The REFOOTURE family consist of a more diverse network of partners on the ground, mobilising the regenerative thinking, enhancing the innovation capacities and strengthen the enabling environment to work towards RIFS through the establishment of "Food System Innovation platforms" (FSIP) in the three countries. Local teams are spearheading these FSIPs to mobilise stakeholders to join a change process. Evidence gathering is vital for understanding what roles people play and need to play in regenerating their local and regional food systems. It also helps to track if the participatory processes, as part of the RIFS approach, are bringing about the desired system changes with regards to food and nutritional security, livelihood resilience, ecosystem health, equality & caring community.

In Kenya, Egerton University spearheaded the establishment of the Nakuru Living Lab, A Food System Innovation Platform for collaboration towards regenerative and inclusive food systems. Ten "innovation cases" were identified, brought together and supported in multiple ways in the Nakuru Living Lab, ranging from small businesses, cooperatives and associations. One of these is the Menengai Community Forest Association (MCFA). This is an umbrella body for sustainable (co-)management of the Menengai Forest[2], bringing together representatives of stakeholder groups that live in the five kilometres wide corridor around the Menengai area. The Kenya Forest Service (KFS) manages the forest in collaboration with the association as the main linking mechanism with communities surrounding the forest who are using its resources. Egerton University and MCFA together with local facilitators and WUR colleagues piloted a process in Kenya to mobilise stakeholders to work together towards a common vision of win-win-win situations between marginalised stakeholders, power holders and nature, by:

- Engaging local stakeholders with a high stake in the area on the one hand, and low levels of organisation & voice on the other hand;

- Mapping connections between people and forest, identifying local aspirations for change and bringing visions of stakeholders together;

- Analysing challenges and opportunities and developing roadmaps towards the visions;

- Addressing power disparities, governance issues, conflicts and co-creating solutions.

This guide is based on the outcomes and lessons from the pilot process, as well as various sources on Regenerative Development, Multi-Stakeholder Partnerships[3] and Participatory Development[4].

The **intended audience** of this guide include: facilitators, practitioners and project designers who use Food System Innovation Platforms or other types of multi-stakeholder partnerships for contributing to regenerative and inclusive food systems.

The guide starts with an explanation of the concepts used (chapter 1), followed by a generic explanation of the RIFS development approach, including the key principles that have been developed to guide the transformation processes towards regenerative and inclusive food systems. The piloted stages for facilitation towards win-win-win situations are given in chapter 3, followed by lessons learned[5].

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[2] http://www.kenyaforestservice.org/index.php/menengai-forest/

[3] Facilitating multi-stakeholder collaboration, or Multi-Stakeholder Partnerships, is one of the value propositions of Wageningen Centre for Development Innovation (WCDI). See www.mspguide.org

[4] Participatory Development is a movement within the development sector that seeks to engage local populations in development projects in a process of empowering marginalised populations (Sen, 2002).

[5] This facilitators guide will be improved continuously based on new insights and the next stages after piloting.

1. Background Concepts explained

1.1. What is a food system?

Food systems comprise of all the processes associated with food production and food utilisation: growing, harvesting, packaging, processing, transporting, marketing, consuming and disposing of food. They are shaped by the people, drivers and activities in the system and make food available in diverse ways that influence and shape how, when and what we eat. A food system operates in and is influenced by social, political, cultural, technological, economic and natural environments. They are complex, interconnected and constantly changing. Figure 1 & Figure 2 are two ways of visualising a food system. Whilst the Van Berkum framework (Van Berkum et al., 2018) is often used to grasp and understand the different components of the food system, making it easier to do an analysis, the ShiftN (2016) visualisation is used to show the complexity and interconnectedness of elements of the food system.
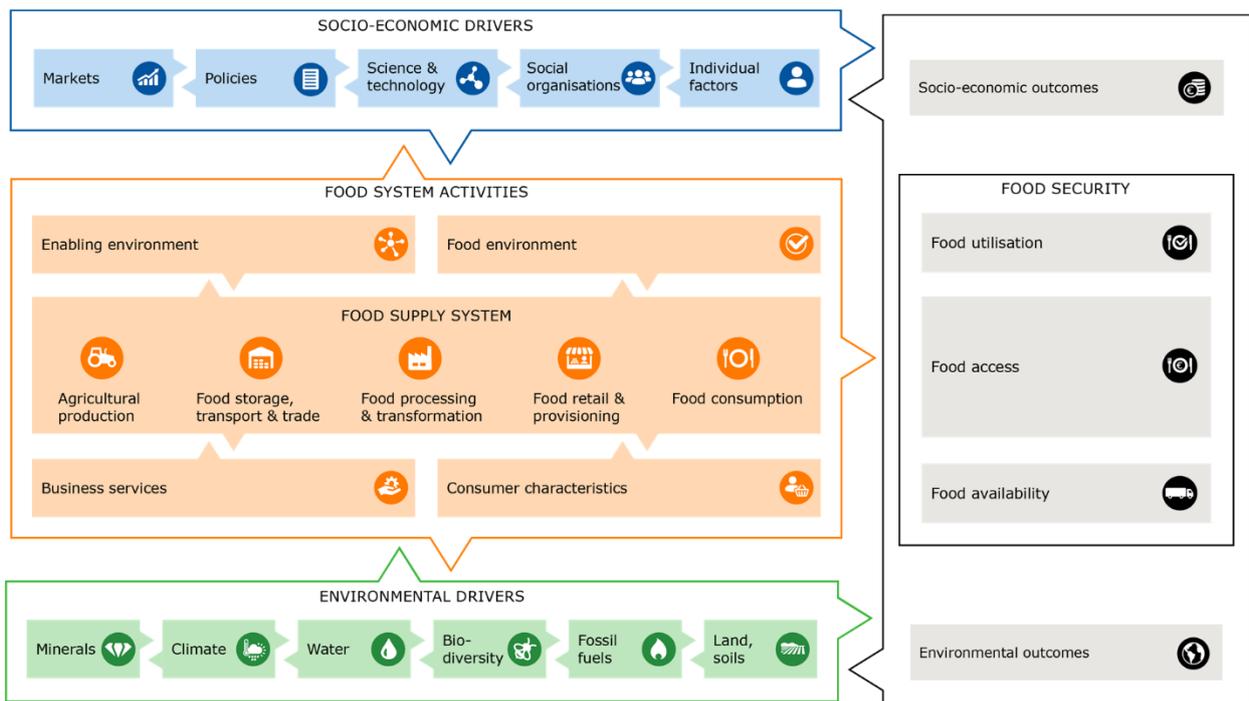
Figure 1: Van Berkum Framework (Van Berkum et al., 2018)

Complexity refers to the behaviour of a system or model whose components interact in multiple ways, leading to non-linearity, randomness, collective dynamics, hierarchy and emergence. Systems thinking is a way of making sense of this complexity of the food system by looking at it in terms of wholes and relationships rather than splitting it down into its parts. It is used as a way of exploring and developing effective action in complex food system contexts.

The food system approach describes the different elements in our food system and the relationships between them: (1) the activities relating to the production, processing, distribution and utilisation of food, (2) the socio-economic and environmental drivers of the food system (3) the outcomes of these activities in terms of food security (including nutrition), socioeconomics (e.g., income, employment) and the environment (e.g., biodiversity, climate) (Van Berkum et al., 2018).

Food System transformation refers to how to change the system, transformation is a radical idea. It is not a tweak, but a complete rethink of the attributes of a food system, including its purpose, rules and power structures. It is about reshaping the so-called 'normal'. The concept of transformation has two semantic distinctions: transformation as employed until recently in the literature to describe the scale of the changes that have characterised food systems over the last three decades, and the more normative interpretation proposed more recently to refer not just to 'drastic changes' but to 'changes that lead to an improved system' (transformative change) (Béné, 2022). In Refooture, the term transformation refers to the last definition. Where participatory learning is stimulated through the establishment of Food System Innovation Platforms where innovations are shared, and collaboration is promoted.

The terms transformation and transition are often used interchangeably in the literature depending on the scientific branch. While both concepts refer to change in complex adaptive systems, they are often employed to different system foci. This has implications on what elements of change are analysed. Transition has been mainly employed to analyse changes in societal sub-systems (e.g., energy, mobility, cities), focusing on social, technological and institutional interactions. Transformation is more commonly applied to refer to large-scale, radical changes in whole societies, which can be global, national or local, and involve interacting human and biophysical system components (Hölscher et al., 2018).
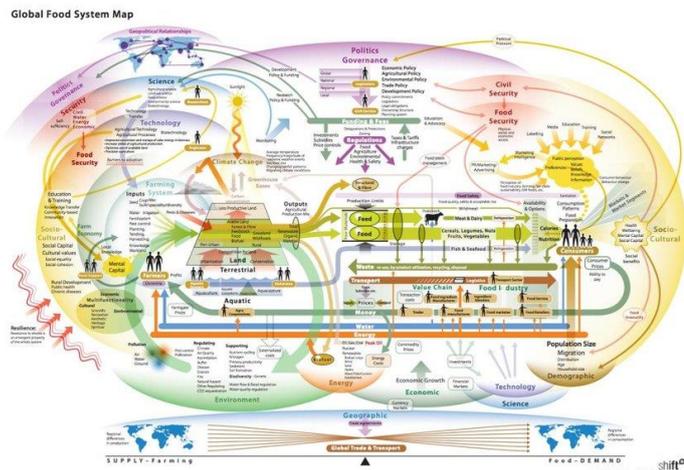
Figure 2: Global food system visualisation (ShiftN, 2016)

To transform a food system to become more inclusive and sustainable, multi-stakeholder collaboration between different stakeholder groups (e.g., government, private sector, civil society & academia) is needed to tackle the complexity of the issue. Multi-Stakeholder Partnerships (MSP) are often used to promote such collaborations. It is an overarching concept which highlights the idea that different stakeholder groups can share a common problem or aspiration, while nonetheless having different interests or 'stakes'. It is a way in which groups of people can make decisions and take action for the collective good, be it at local, national, or international scale. A common start in a multi-stakeholder partnership is to create a common vision for the partnership, to align the different stakeholders and create understanding of each other's perspective around an issue.

1.2. What is Regenerative Development?

Regenerative development takes sustainability to the next level. It is a whole-systems approach that brings people and their places together, working to make both people *and* nature stronger, more vibrant, and more resilient. Place shapes communities, and communities in turn have shaped nature and the places in which they live and often depend on for their livelihood. Keeping this in mind, regenerative development seeks to harmonise human activities with that of the living system of which they are part. It is also seeking to understand the role humans play or the potential role humans can play in the bigger picture. Practicing regenerative development is to:

"draw inspiration from the self-healing and self-organising capacities of nature and works to restore these capabilities when they are missing or disrupted, whether in ecological or human living systems... it is to determine which aspects of a living system to work on in order to realise the greatest systemic potential, to create fields of caring and commitment among stakeholders and stewards". (Mang et al., 2016)

Regenerative development is a placed based approach (Mang & Reed, 2020).

1.3. What does Inclusiveness mean?

To unpack the concept of inclusion, it is helpful to first understand exclusion. All UN Member States pledged to "*eradicate poverty in all its forms, end discrimination and exclusion, and reduce the inequalities and vulnerabilities that leave people behind and undermine the potential of individuals and of humanity as a whole*" (UNSDG, 2019). In one phrase: **Leaving No One Behind** (LNOB). The UNSDG – in its guidance how to operationalise LNOB - provides definitions and frameworks that have been translated in plans and policies for contributing to the SDGs worldwide. Five "**factors of LNOB**" are identified by the UN (see Figure 3):
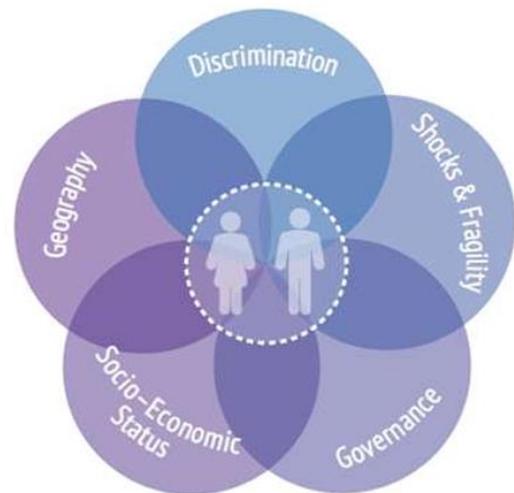

- **Discrimination** on the basis of assumed or ascribed identity or status: such as gender, ethnicity, age, sexual orientation, class, education levels, disability and religion or belief systems;

- **Geography**: such as isolation due to location (or spatial exclusion);

Figure 3: The five factors of Leaving No one Behind (LNOB), UNDP (2018).

- **Vulnerability to shocks**: populations that are vulnerable to natural disasters, crime, violence and economic, climatic or other shocks;

- **Socio-economic status**: multi-dimensional poverty, household composition

- **Governance**: Laws, policies, taxes, budgets, civic space;

In practice, most people face more than one kind of deprivation, disadvantage or discrimination leading to exclusion and marginalisation. Exclusion can take different forms. Kabeer (2000) shows us three types, which are helpful for identifying strategies to address exclusion:

- It can take place in a **conscious or unconscious** manner. Unwritten rules of the game can cause exclusion of people or groups who might threaten the status quo. Whether it happens consciously or unconsciously can make a big difference when trying to address exclusion.

- **Intended or unintended** strategies can be at play to exclude individuals or groups. For example: people who lack assets (as collateral) are often excluded deliberately from saving and credit groups.

- **Explicit or informal** strategies can be used. For example: an explicit diversity policy can help to recruit new colleagues with different cultural backgrounds or from different age groups. Informal organisational culture however can operate to exclude them.

In this guide the term "**disadvantaged stakeholders**" is frequently used. Reasoning from the five factors of LNOB, "disadvantaged" means stakeholders who are disadvantaged in terms of their access to resources and opportunities; inequities in the sharing of benefits and burdens of development in the area; and the limited level of control and power they have on decisions affecting the direct living environment they depend upon for their survival and livelihood.

Social inclusion is defined as the "*process of improving the terms of participation in society, particularly for people who are disadvantaged, through enhancing opportunities, access to resources, voice and respect for rights*" (UNDESA, 2016). It aims to ensure that people and groups who are more vulnerable can:

- Improve their abilities to fulfil their potential as economic, social and political actors;
- Have equality of opportunity and outcomes in the food system transition process;
- Be treated equitably in the distribution of costs and benefits in food systems.

Lessons from the women's rights movement (Oxfam International, 2018) help to identify three practical levels of inclusion in decision spaces for changing food systems:

- **Presence**: individuals and groups who are discriminated or who live in situations of poverty and marginalisation need to have equal opportunity to be part of decision making about the transitions in the food system.

- **Participation**: these individuals and groups need to be enabled to participate in a meaningful way in these decision spaces.

- **Influence**: these individuals and groups need to have influence on the decisions that affect their lives.

1.4. Understanding Regenerative and Inclusive Food Systems (RIFS)

The above background concepts are brought together in the vision of Regenerative and Inclusive Food Systems of the REFOOTURE initiative. Food is what connects us with each other and with nature. Regenerative and inclusive food systems are about re-establishing or revitalising these connections with each other and with nature. We define regenerative and inclusive food systems as socio-ecological food systems that are working innovatively with nature to ensure vibrant and healthy ecosystems which enable resilient livelihoods and food and nutritional security for all. In this fair and just transition, no being is left behind.

Figure 4: Cattle and livestock graziers, farmers, firewood collectors and beekeepers articulating and discussion their aspirations in the Menengai area, Nakuru County, Kenya

2. Building Regenerative capacities: The RIFS development approach explained

Regenerative development is still emerging as a concept, and food systems thinking is complex. This makes it challenging for teams to practically facilitate change processes towards the broad vision of regenerative and inclusive food systems. This chapter gives an overview of the overall approach and how the different parts come together. The approach is explained using an adapted Tetrad[6] from the Regenesis group (**Error! Reference source not found.**) to bring together the four sources of an activity (ground, instrument, direction and goals). These need to be brought into alignment in order to enable the transformation we are seeking to achieve

For regenerative approaches the initial starting point (the ***ground***) is from a place-based approach (Mang et al., 2016, 2020).

"what makes a place unique....what is the inherent potential of this place".

The goals are to build regenerative capability of the living systems of which we are part to ensure healthy ecosystems which support livelihood resilience and food and nutritional security for all. How these RIFS evolve in different places will be specific to a particular place and the people living there. The motivation to reach these goal triggers innovation across the thinkers, doers and enablers of a community. The means or ***instrument*** which can be used to build such regenerative capabilities are through Food System Innovation Platforms or other MSP processes, as these can create the space that enables co-creation processes and innovations sourced from place. Principles can be used to provide ***direction*** towards the ***goals*** of RIFS. They can serve as a "rudder to navigate the uncertainties, turbulence, and emergent challenges of complex dynamic" systems, particularly " overarching principles can provide the big-picture and general guidance" .
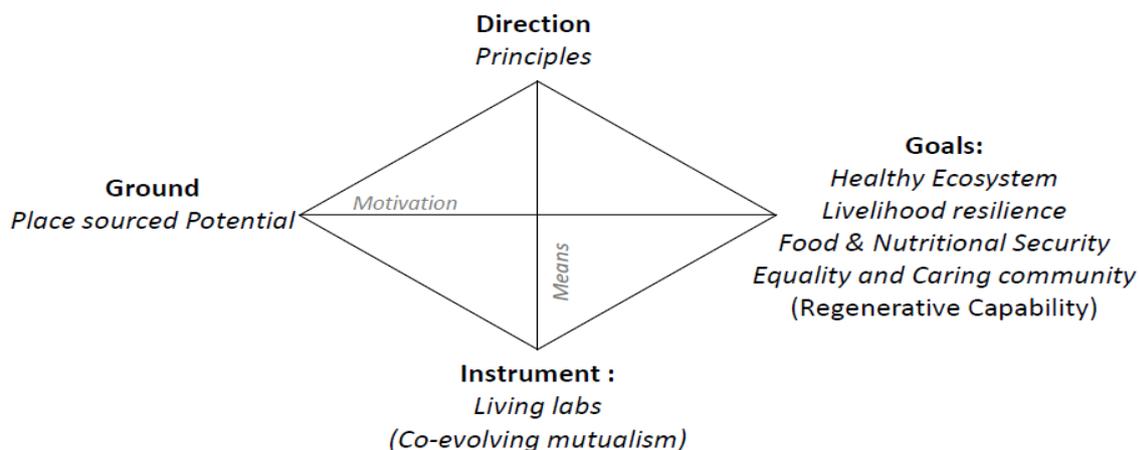
Figure 5: Regenerative Tetrad©, adapted from Mang & Reed (2020) (Regenesis Institute)

2.1. The starting point ("*ground*")

The ground is not only the place, (both mental and physical) where you find people, it is the starting point to begin the journey and it also refers to understanding the concept of place. It is important to develop an understanding of what role does a place and the communities living there, play in the bigger picture (e.g., river catchment, forest ecosystem, region). In regenerative development "we tap into *place-sourced potential*— the potential of our project's proximate whole and its significance to its greater whole. This allows us to re-

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[6] "Dynamic systems frameworks are ways to make one's thinking explicit, to manage it, and to improve the effectiveness of collaborative work. Together with developmental processes, they are instruments for understanding the complex, dynamic wholes within which we live, so that we can be conscious participants. Frameworks shape what we pay attention to and how we act. They enable our minds to give form to information", the Tetrad is such a tool that can help us to ask ourselves , how should I be thinking about this work" - from TRP training programme Regenesis (Mang and Reed, 2020),

conceptualise the project in terms of the regenerative role it could play within its place" (Regenesis Institute, 2022) (see Figure 12 to understand this concept better).

2.2. Food System Innovation Platforms to facilitate change ("*instrument*")

For a Food System Innovation Platform to work towards a joint vision of RIFS, multistakeholder processes are key. Effective multi-stakeholder collaboration does not just happen. It needs to be designed and planned, and then fostered (Brouwer et al., 2018). Six major stages can be identified in the development of an MSP process (see table below). How the process is practically shaped depends a lot on the purpose of the MSP, the local context and the situation. Power dynamics play a central role in any MSP and manifest themselves differently in every context. In the Refooture working areas there are very large differences in the levels of organisation between stakeholders. Power disparities between them are equally large. For example, around the Menengai forest there are many people who depend on the area, extract resources and connect to the forest in many ways. Yet, many of these groups do not have a voice in the planning for and the management of the area despite their large numbers. Their specific situations, their identities and values are not recognised at decision making levels. As argued by Young (1990), *recognitional justice* is the first step in a just transition and to be repeated throughout.

When trying to mobilise stakeholders towards a common vision for change in the food system, you may find that power differences and gender inequalities stand in the way. Influencing powerful holders to shift in the right direction may be a prerequisite for change. Equally, empowering particular stakeholder groups – helping them get into a position where they can use power constructively – can be key to developing equitable multi-

Table 1. The six stages of MSP development	
Stages	**Interpretation for Food System Innovation Platforms towards RIFS**
1. Connection	Localising the Regenerative development concept and inclusiveness in food systems. Becoming a group around the idea of RIFS
2. Shared language	Deepening the understanding about what RIFS means locally, and how it is viewed by different stakeholder groups and what interests are involved
3. Divergence	Creating a safe environment for stakeholders to refine and express their asks and offers to each other for collaborating towards RIFS
4. Co-creation	Developing multi-stakeholder visions for RIFS, multi-stakeholder win-win strategies with new local business cases and pathways towards these visions
5. Convergence	Prioritising actions and including a workplan in the pathway, support each other to think through the strategies.
6. Commitment	Stakeholders commit to actions in the pathway, plan how and when to do it, keep track of progress and monitor one another.

stakeholder change processes. It is not just differences in power between stakeholder groups that need to be considered, but also power differences within them. Representative structures also need to be questioned.

Participatory Learning and Action comes in here: a wide range of participatory methodologies. The Gender Action Learning System (GALS: see Mayoux and Oxfam Novib, 2014) developed by Linda Mayoux with partners, is part of this family. It is an empowerment methodology that aims at gender justice and improved livelihoods. A guide for integrating GALS into value chain development (see Reemer and Makanza, 2015), provides processes and tools to address power and gender disparities at multiple levels. Anyone can use it to gain more control of his/her life and livelihood, no matter the education levels, literacy levels, employment status, age, social or gender identity. It works to envision the future, plan life and livelihood, improve relationships with others and expand the social network. In a group or an organisation, it can help to relate meaningfully with others across perceived differences in status and power. The methodology consists of:

- Visual diagramming tools for individual and collective change planning, analysis, awareness raising and actual behaviour change, group strengthening, advocacy, review and reflection;
- Specific universal principles on gender justice, empowerment and participation;
- Peer learning mechanisms and structures for ongoing action learning in communities;
- Ways to integrate gender action learning into projects, interventions and different themes.

This guide draws from some of the elements, particularly the visual diagramming tools[7] (vision journeys, relationship maps, action trees and the diamond tool), and the principles that help to shape the process (such

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[7] See https://gamechangenetwork.org/empowerment-methodology/thinking-with-diagrams/

as *starting with visions*, *starting from the individual*, *inclusion and equity*, *respecting differences*, *action from day 1*).

2.3. RIFS Guiding Principles ("*direction*")

Within the REFOOTURE initiative, five key principles have been developed to guide the work towards Regenerative and Inclusive Food Systems. These principles are not static: they are adapted based on experiences and insights from Kenya, Uganda and Ethiopia, as well as from emerging literature on Regenerative Development. While the principles are numbered, to make it easy to reference them, in reality these principles can happen simultaneously in any stakeholder process.

Examples of how the principles can be seen in practice are provided in **Annex I,** please read these to gain better practical insights**.** These examples are to provide some insights into what is meant, what to look for and to also provide inspiration for another example which you have personally experienced. Furthermore, the potential facilitator choices and tools where you could see these principles in practice are also provided in section 3.4. In the text sometimes **reference is made to the principles for example "(P1)"** means a reference to Principle 1.

Principle 1- Sense of Place and Purpose

Regenerative and Inclusive Food Systems start with people, and with our unique experience of the place where we live and through caring for our neighbours, each other and for nature in the places where we live, we can nourish ourselves and feel part of a community and of a place.

Principle 2 - Socio-Ecological design for Innovation

In RIFS innovations are triggered by the needs of a community, where farmers or other thinkers and doers in the food system, are inspired to find solutions and opportunities in using the available resources and indigenous knowledge in more effective and creative ways, while working with nature for the collective well-being of all.

Principle 3: Building Connections

Building connections with each other and with nature makes us stronger, together we are stronger and better able to cope and adapt with system changes.

Principle 4: Understanding Just, Fair and Inclusive Transitions

In a regenerative and inclusive food system, justice, fairness and inclusivity are the foundations for promoting responsibility, accountability and giving a voice to all those involved in the production and consumption of food, while at the same time respecting and nurturing the natural environment that supports such food systems.

Principle 5: Understanding Design for Renewal - It's a living Process

Transitioning towards regenerative and inclusive food systems is a living process , it is a process of learning by doing, building the capabilities to regenerate the parts of the food systems to make them work for us and for nature.
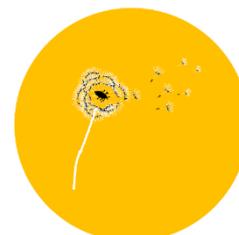
2.3.1.   What does this work ask of me? – Mode of working

Regenerative development derives much of its power from understanding how life and living systems work and evolve. Nested and interdependent relationships are fundamental to the way that all life organises and sustains itself (e.g. valve, heart, body).

In REFOOTURE we aim to work using the Three Lines of Work Framework developed by the Regenesis Institute (Mang & Reed, 2020).   Third-line work has to do with working to improve the health and value of some larger system. In second-line work, we work to grow the capability of our work communities or teams to serve shared the third line aims. In first-line work has to do with working on your own growth that is required to really make a difference at these other two levels.
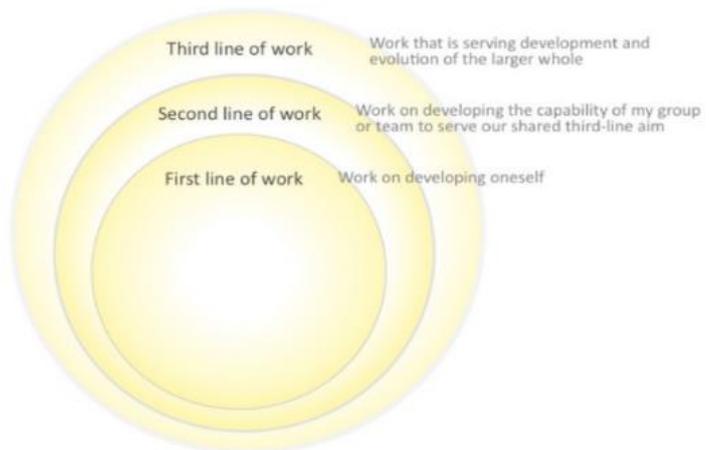
Figure 6: Visualisation of the Three lines of work © (Regenesis Institute, 2018)

This framework is an instrument for integrating developmental work at all three levels. It also enables us to align our personal and professional development with our values and the work we do in the world. The premise behind the framework is that if *"we are to be agents of our own evolution, we must pursue all three lines of developmental work together and simultaneously. If we drop away any one line of work, eventually the others also collapse and we become increasingly mechanical in how we think and work"* (e.g. not seeing the whole system or its nestedness) (Mang & Reed, 2020).

2.4. What we are striving for? (RIFS *goals)*

There are 4 major outcomes that define it and hence what we are hoping to achieve, which are nested and interdependent on one another. These are to support: 1) Resilient livelihoods 2) Food security and nutrition, 3) Healthy Ecosystems and 4) Equality and Caring community (no one left behind). The RIFS approach starts with people and works out. In this way acknowledging that both people and nature sit at the same table and have the same voice and for this to happen both need to be healthy so they can help one another[8].

Livelihood resilience "thus refers to the capacity of livelihoods to cushion stresses and disturbances while maintaining or improving essential properties and functions.... A livelihood is thus resilient if it can maintain its key functions (food, income, insurance, poverty reduction, etc.) and absorb the impacts of disturbances without causing major declines in production and wellbeing. Livelihood resilience thus depends on how well a livelihood functions, on actors' capacity and agency, and on the social, institutional and natural conditions" (Ifejika Speranza; 2014).

Food security and nutrition "is a situation that exists when all people at all times have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" HLPE"

Ecosystem health "an ecosystem is often called healthy if it is stable (respectively resilient) and sustainable

in the provision of goods and services used by human societies (ecosystem services). This implies that it has the ability to maintain its structure (organisation) and function (vigor) over time under external stress (resilience)" (Burkhard et al., 2008).

Equality and Caring community " People get left behind when they lack the choices and opportunities to participate in and have a proportionate share in the benefit and burdens from development progress. All persons living in extreme poverty can thus be considered 'left behind', as can those who endure disadvantages or deprivations (see the factors of Leaving No One Behind in section 1.3) that limit their choices and opportunities relative to others in society" (UNDP, 2018). In a caring community people see and treat each other as equals, take responsibility for themselves (their own development process and how their actions affect others as well as the natural environment), and they look out and care for one another and for nature.

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[8] The definitions here are considered working definitions , in that through action research and learning we may modify and adapt based on our own experiences of what needs to be included in the scope of the definitions

The goal is to have healthy ecosystems, resilient livelihoods, food and nutrition security, equality and a caring community for all. It starts from the place-sourced potential (Ground), the story of place, with the RIFS principles as direction and the Food System Innovation Platform as support and place of experimentation, moving towards the goal. During this process, participatory learning, multi-stakeholder collaboration and mindset changes are needed to move forward, step by step. In this process, there are changes happening on three levels, the first line (oneself), the second line (the community) and the third line (the larger whole, region).

Figure 7: entrance to one of the caves in the Menengai Forest that people use as a spiritual place of worship.

3. Facilitating collaboration towards regenerative and inclusive food systems

3.1. Process overview, team roles and evidence collection

RIFS principles 1-5 in the previous chapter provide the direction of a change process towards healthy eco-systems, livelihood resilience, food and nutrition security, and equality and caring community. Food system transformation involves multi-stakeholder collaboration, in REFOOTURE through Food System Innovation Platforms (FSIP). In a regenerative approach it also requires a greater understanding of the story of place - creating a deeper knowledge of how people shape the places where they live and how this in turn shapes them. Together they are a living system. Place-sourced potential – as indicated in the previous chapter – is the starting point for facilitating a change process.

The brains, creative ideas, energies and commitments of all stakeholders are needed to shift mindsets radically and change people's behaviour in such a way that the food system shifts towards a regenerative and inclusive development paradigm. However, simply putting stakeholders together in a room may deepen power differences and lead to more critical situations of marginalised individuals and groups, and will not lead to truly shared visions or motivations for changing the food system. Also, differences *within* stakeholder groups need to be addressed (see KIT 2012): inequalities and discrimination related to socially ascribed identities (such gender, age, ethnicity and many others). A deliberate process is needed to create the conditions for multi-stakeholder collaboration towards RIFS. Such collaborations aim at win-win-win situations. This means a win for nature, a win for dependent communities (including marginalised stakeholders), and a win for power holders (e.g. government agencies, companies, landowners with high level of influence on decisions regarding the place).

Understanding the essence of a place – who a place is, is a crucial starting point in a regenerative process. Story of Place (SOP), involves gathering information about the place of interest, such as physical geography (e.g. hydrology, climate, topography) and human geography (e.g. socio-historical, political, cultural). This is done usually as an accompanying desk study and iteratively combined with discussions with the communities living in place. Thus, enriching the knowledge base to support a more wholistic understanding of the living system that the team is working with.

Refooture one piloted such an approach in Nakuru, Kenya. This was seen as the first phase "Planting seeds of change". We summarise the main stages carried out in the succeeding paragraphs.
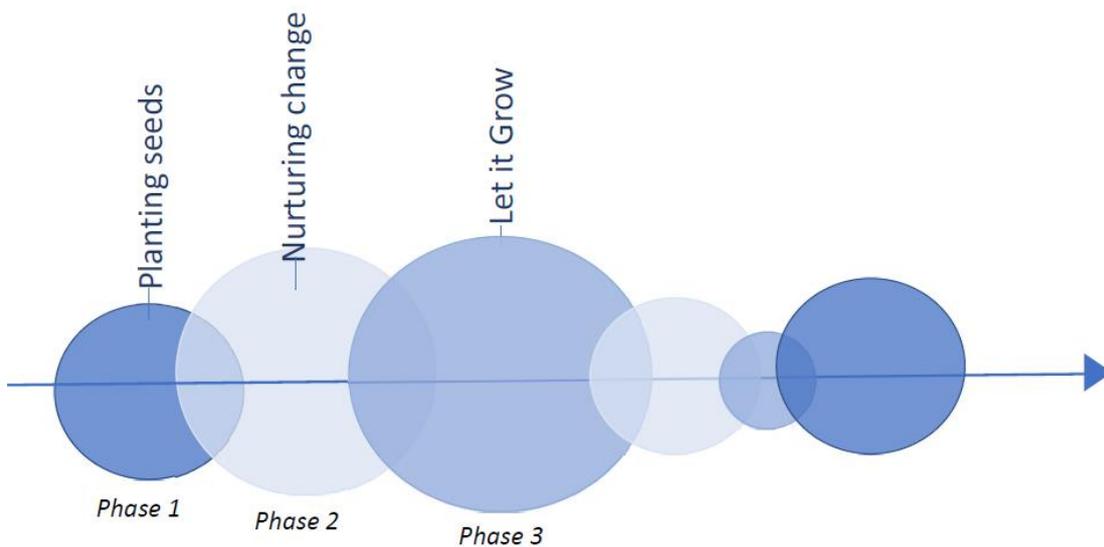
Figure 8: Graphical overview of the phases envisioned as part of the RIFS approach. In the first phase the seeds of change are planted, encouraging people to think about their mindsets and to have a vision that incorporates regenerative thinking and doing. It is the phase where the key leverage points have been nudged. In the second phase, the nurturing phase, is where the transformation process continues and needs further nurturing and support (potential interventions from the team) where ripples start to spread and it moves over to phase three, a mature regenerative development process, where it can further grow.

3.1.1. Overview of Phase 1 *Planting seeds*

There are three major goals for the first phase of this approach:

- The first goal is to **mobilise local communities of disadvantaged people** who depend on the place for their livelihood, to empower them to come up with their pathways towards the future.
- The second goal is to create an **open and safe learning environment** with a life-long learning mindset both for the coordinating team and especially for the communities. Creating a place where academic, local knowledge and practical experiences are valued equally and a common understanding is established.
- The third goal is to establish a **baseline understanding** of where the community is at in terms of extractive/regenerative practices and mindsets and how this relates to the four major outcomes that define RIFS (food and nutritional security, Livelihood resilience, Ecosystem health and Equality and caring community). An example of how these baseline results can look like and how to structure and formulate them are provided in ***Annex IV***.

Story of Place (as described above in chapter 3.1 and accompanying document for the example in Menengai, Kenya) is a continuous companion in this process and feeds into the discussion and selection of tools. It helps for continuously zooming in and outof the system. Zooming out to have a birds-eye view and see the regional drivers and their effects on the issue and finding entry points for change. Zooming in to experiment with and make use of out leverage points for systemic change. However, it is important to note this is an *on the ground process* -supported with background research, with efforts across all activities striking a balance to support one another. Tools are chosen based on the context of the implementation and process stage. Based on the results from thorough observation and reflection of workshops and tools, follow-up workshops and tools can be adapted or changed. The coordination team should remain flexible in their approach based on changing factors and circumstances that may arise during the process. This is referred to as "adaptive planning" (see Figure 9).
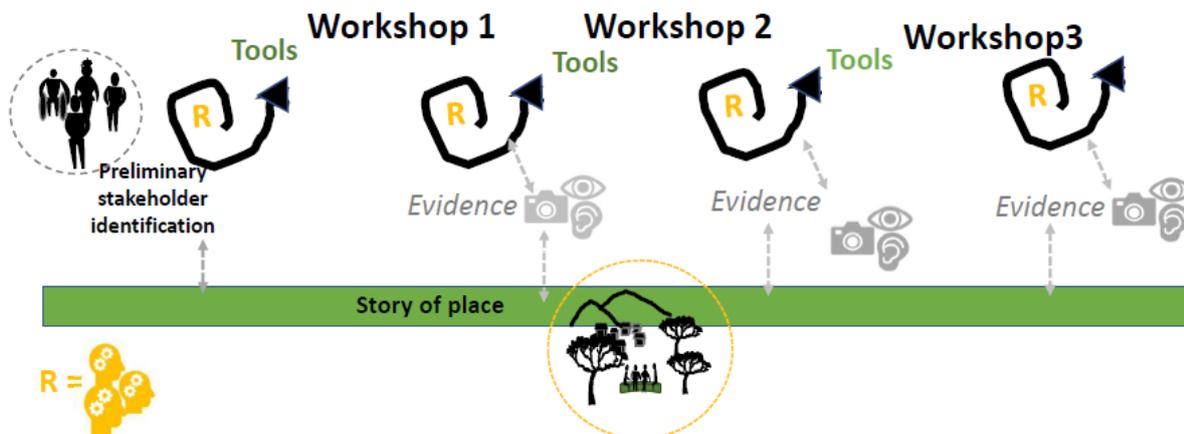
Figure 9: Graphical representation of the core elements required for adaptive planning and carrying out the RIFS development approach. The Story of Place is an accompanying process to the activities with the stakeholders, it should provide the backbone knowledge reservoir to be tapped into when needed. Before each step in the facilitation process Reflections (R) need to be carried out by the team in order to determine the needs for the process, what tools to support it and how and what evidence can be harvested during this step. This is continuous and dynamic approach.

3.1.2.   Roles in the team

Ideally the team that will undertake this work will consist of between four to six people that can work dynamically, sometimes slipping into the role of the other where needs be. However, there needs to be clearly defined roles for each stage, meaning that team members will be assigned a particular responsibility and they need to ensure that this part of the facilitation process is completed after each stage. From the pilot in Kenya four major roles were identified that need to be fulfilled:

> ➤ Facilitator(s) of sessions and workshops – the energy giver (a resource to ask the right questions)
> ➤ Process facilitator – supporting design of activities, overseeing the process and facilitating reflection and adaptation, helping in the background
> ➤ At least one observer, listener and evidence gatherer – they observe and listen to what people are saying documenting what's happening in the room (collecting qualitative information, ethnographical evidence, taking photos, etc.)
> ➤ Connector to place and people – bringing a sense of purpose for change and facilitating connections with local communities and other stakeholders.

An additional role/activity that needs to come in between MSP processes:

> ➤ Auditor (s) – one or two team members will need to audit the sites for the biophysical aspects, gathering (mostly) qualitative evidence of the place[9].

For such an exercise specific auditing sheets would be needed depending on the different ecosystem contexts. For some contexts the focus of the audit could be on management of a farm and the role that plays for the surrounding habitats and communities. For another site the audit could be focusing on a forest ecosystem and particular aspects which help to understand the state of health the forest is in. For all audits certain key aspects will be recorded to understand the health of the area and how activities might be helping or hindering its health. These aspects relate to soil, water, biota and clean air/greenhouse gases. The results of these audits combined with the workshop evidence will help to understand where potentially more detailed scientific work needs to be carried out or what kinds of tailored experimentation needs to be conducted. It will assist communities or disadvantaged groups to complement their own analysis and to sharpen their aspirations for change, and to identify which digital tools maybe of relevance to track their own progress. Furthermore, it can be used as input for discussions in phase two "Nurturing change" combining these insights with the types of measurements and evidence the communities or stakeholder groups use to track their own progress.

3.1.3.   How to collect evidence

As shown in Figure 9, it is imperative that after each workshop all pieces of evidence can be brought together through a discussion and reflection step, where each team member reflects on their experience, their observations and their learning. In this way the team can identify if the participatory tools and facilitation practices[10] have helped to: 1) support the community (elevate energy and motivation), 2) retrieve the information necessary to understand the baseline situation and the potential aspects that might need to be tracked to show how the intervention of the FSIP has been a catalyst for RIFS. One very important factor for the evidence collection is to know at what scales the information is being collected (10) and how this relates to the "bigger picture" (see next section -proximate and greater wholes). The likelihood is in phase one, on the ground evidence will be collected between the following scales: person family/stakeholder groups in their place– which will be either at site/location– to habitat scale. However, this can also be complimented with information or evidence derived from the study on story of place.

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[9] This may depend on time, resources and experience, an experienced team may already begin taking quantitative measurements e.g. soil or water samples, botanical assessments.

[10] Such as drawing diagrams, songs, role plays, facilitation 'from the back', empowering enquiry.

Additionally, the study of place is another indirect method for identifying potential knowledge agents or stakeholders (thinkers), that can help better understand the potential of place and how to build the regenerative capacities of the ecosystems found there (both people and nature).

To put in practice the *observer* role in the coordination team, information needs to be organised. For this, a table is proposed for each of the **four major outcomes** which are used to define RIFS: Food and Nutritional Security, Livelihood resilience , Ecosystem health and Equality and caring community (see example below and Annex IV).
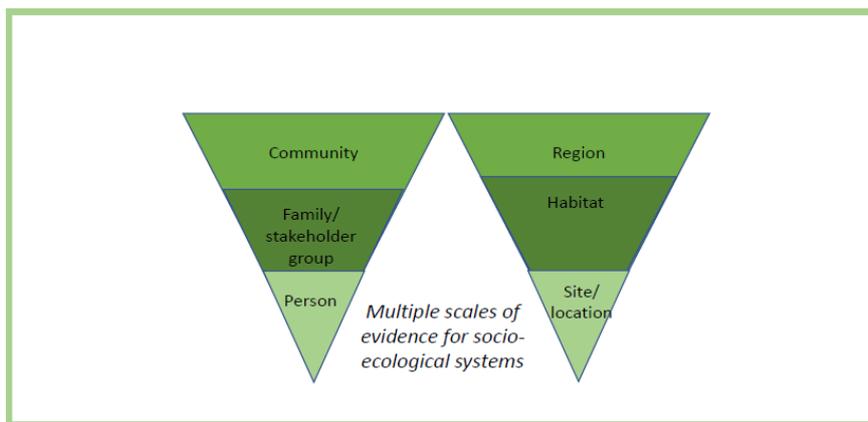
Figure 10: Graphical representation (draft) of scales that might need to be considered for generating a meaningful evidence portfolio. In most cases the work conducted in phase one, is a ground truthing

Table 2. Major outcome domain (f.e. Food and nutritional security dimension)			
Aspects	**Descriptions[1]**	**Example characteristics**	**Observed/Recorded in case study**
Aspect 1	*Narrative description of the aspect*	• Bullet points of characteristics	➤ Bullet points describing observations. *(Coding of source)*
Aspect 2		•	➤
Aspect 3		•	➤
etc			
1. footnotes			

These are then divided into key ***aspects***, each with a narrative description, which have been outlined in the reference studies. Exemplary lists of ***characteristics*** for each aspect help the observer to look for the right things when visiting different locations and meetings. The column on the right is the space for the observer to note down the ***observations***. For each observation, the source can and should be stated using a list of codes to indicate where the observation or evidence is coming from (from observations, visual inspections, from the Vison Journey tool, from the social mapping tool etc.).

An example from the pilot case location is given in Annex IV.

3.2. Introduction to the pilot case: Menengai Community Forest Association

The Menengai Community Forest Association (MCFA) is one of ten Innovation Cases identified by the Nakuru Living Lab (NLL) to accelerate the transformation towards regenerative and inclusive food systems. The MCFA Innovation Case was chosen to pilot the multi-stakeholder partnership (MSP) learning trajectory to strengthen the association and identify their strengths, weaknesses and role within the Nakuru Living Lab and Nakuru county. MCFA was chosen because of its uniqueness of already being an MSP in itself, that expressed the need for strengthening collaboration between internal stakeholders and with external stakeholders. This mimics the Nakuru Living Lab, working with ten innovation cases, Egerton University and a few other stakeholders that in time needs to

Figure 11: View on the Menengai Crater, Nakuru Country, Kenya

work with other external stakeholders such as government agencies, private sector companies, civil society and other to reach its goal to transform Nakuru county towards a regenerative and inclusive food system. Lessons learned in this pilot could thus be useful for the Nakuru Living Lab and the other East African Food System Innovation Platforms involved in the REFOOTURE project.

Another reason for selection is that this innovation case represents a key socio-ecological issue that Nakuru is facing - deforestation within the water towers which support the hydrology of the volcanic valley basin in which it is situated (see SOP). Such deforestation will have detrimental impacts on the Nakuru regions, particularly on the hydrology of the Nakuru basin which in turn will affect the food systems and people living there. Thus, becoming more vulnerable to impacts of a changing climate. We used the approach of the Regenesis institute (see Figure 12) to zoom out and to help us understand the bigger picture and the role that this project (MSP in Menengai) can play in the food system of Nakuru (proximate whole – Nakuru food systems) and on the Water Towers of Kenya and beyond (Greater whole).
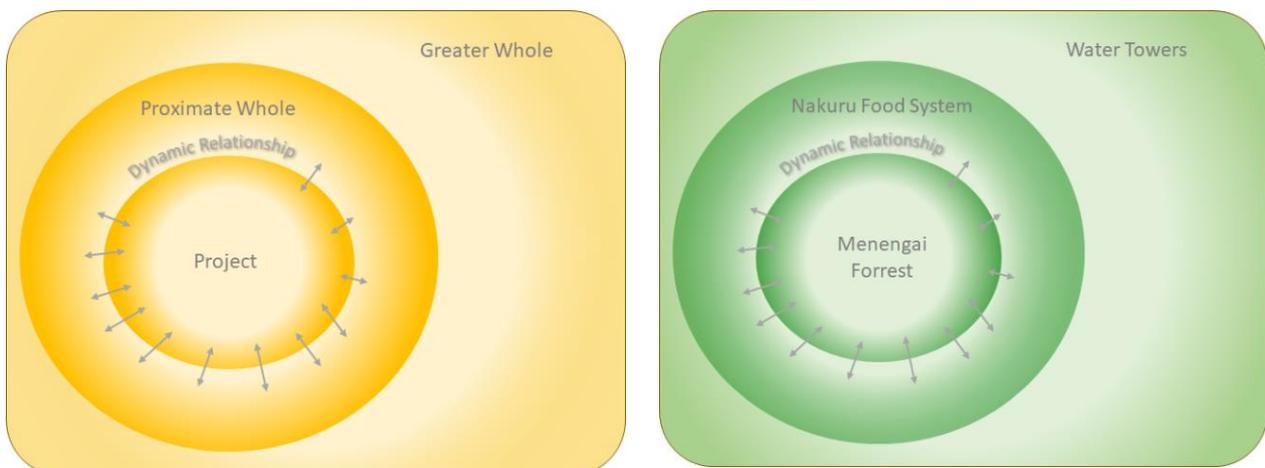

Figure 12: The first box (yellow), shows the tool from the Regenesis group to explain how project relates to a place and to a larger area, adapted from the TRP training guide 2022, Regenesis Institute (Mang and Reed (2020))

3.3. Facilitation choices

Participatory tools, techniques and workshop processes for Phase 1 need to be selected and adapted to actually apply the RIFS principles in practice (section 2.3 and Annex I). Before and during the pilot process described in Chapter 4, facilitation choices were made as summarised in the table blow. The facilitation choices were mostly inspired by tools and techniques from different sources and participatory methodologies as indicated in the table, and were adjusted after reflections. The tools provided in Table 2 are the initial list of tools based on a current case study. Many other tools could apply. The overview below shows the reasoning of linking tools to principles, and this may also help for the identification of further useful tools.

Table 3. Overview of potential tools for facilitating MSP and encouraging the RIFS principles			
Facilitation choices	**RIFS principle**	**Reasoning**	**Possible tools (insert links)**
Individual to multi-stakeholder visioning: Starting the visioning process at the individual level, as a basis for identifying unrecognised stakeholder groups and as a starting point for collective and multi-stakeholder visioning.	1	P1: Individual visioning strengthens the **sense of place and purpose** at the individual level, prepares individuals for meaningful participation in collective visioning and helps individuals to feel ownership of collective plans.	• Individual vision road journey to articulate aspirations for the future • Collective vision road journey to bring together individuals visions See page 34 First visions and page 44 Vision Journeys GALS phase 1 manual Page 102 MSP Tool Guide • Vision diamond – identifying likes and dislikes at the individual level as a basis for setting collective priorities for change
Diagramming and visual communication: Using drawing diagrams rather than writing for the visioning, mapping, analysis and planning	2, 4	P2 **Socio-ecological design for innovation**: Diagramming and drawing encourages creative thinking for innovation, and helps to bring local and indigenous knowledge on the table. Drawing uses a different part of the brain compared to verbal language and writing, and is linked to development of spatial intelligence and memory. P4 **Fair, Just and Inclusive transitions**: Communicating visually provides conceptual clarity and is more inclusive: it is widely accessible across education levels and other backgrounds than written text or verbal expression. Drawing can help give a voice to individuals and groups that are otherwise easily left out.	Drawing diagrams from GALS, PALS, PRA: MSP tool guide Empower@scale resource centre Gamechangenetwork
Creative expression: Using songs, role plays and poems for people to express themselves and to present their situation, visions and strategies to other stakeholders.	3, 1	P3 **Building connections**: songs, role plays and poems help to (re)connect with nature and with other people beyond rational logic. P1 **Sense of place and purpose**: through songs, poems and role plays people can (re)discover how they are part of a place and its people, and clarify their sense of purpose.	Songs and theatre for group meetings and peer sharing: Page 31 GALS phase 1 manual GALS Fun with a serious purpose – Facilitation guide by Linda Mayoux
Giving nature a voice: Introducing "mother Menengai" to include the voice of nature in multi-stakeholder meetings, and include mother Menengai	1, 2, 5	P1 **Sense of place and purpose**: having someone (or multiple persons) act as "mother Menengai" during workshops and meetings helps people to start seeing the place they depend on as a living	Area mapping for participants to identify their connections to the place they depend upon. • PRA Resource Mapping, or Community Mapping adding how

as a stakeholder in MSP tools		being and a stakeholder with its own agenda. P2 **Socio-ecological design for innovation**: having participants act as mother Menengai helps others to tap into their local knowledge about the place and to include nature in their new ideas / innovations for progress. P5 Design for renewal/ Living process: Once you can name something, it can become more real. Having participants imagine what "mother Menengai" would say or do", or having someone act as mother Menengai, helps participants to reconnect to nature to see themselves as part of it.	people connect to nature (beyond access to resources) Reconnection tree: see Annex.
Facilitating from the back: techniques for creating a sense of ownership of the process in participants.	3,4	P3 **Building connections**: the facilitation technique "from the back" puts participants in the driving seat to connect with each other, while the facilitator can focus on the process, inclusion and trust building. P4 **Just, fair and inclusive transitions**: By being at the back, it gives others the chance to raise their voice, or be emboldened to say something	Facilitators physically stand back, observe closely, ensures inclusion and prevent holding the marker, no classroom set up but circles, half circles, small groups, pairs See also GALS [Fun with a serious purpose](#) – Facilitation guide by Linda Mayoux
Targeting non- or poorly organised and disadvantaged stakeholders who depend on the place for their livelihood first, before engaging with power holders. See also the next section "how to target people".	4,3	P4 **Just, fair and inclusive transitions**: a deliberate targeting strategy is essential to reach stakeholders who highly depend on the place but who are poorly or non-organised, lack a voice in area planning and who are marginalised in terms of development opportunities and benefits. P3 **Building connections**: it is important to connect to the disadvantaged people and that they connect to the process and see the value in it	Social mapping. Stakeholder mapping and power analysis. Available tools can be adapted to reach marginalised people through local community groups, identifying those who are not organised through social mapping. See for example: • Page 66 [GALS phase 1 manual](#) • Stakeholder analysis and Netmapping in the [MSP Tool Guide](#) • [Relationship Maps](#) in Gamechangenetwork • PRA [social map](#)
Adaptive management: Reflective monitoring at the centre of the multi-stakeholder process.	5	P5 **Design for renewal**: adaptive management requires learning by doing. It assumes uncertainty: for situations it is not possible to predict exactly what will happen. This requires capacities and a culture of reflection, learning and changing plans.	Facilitator team reflection meetings after every activity day, to adjust the next steps [MSP Guide](#), Perspective 3 Adaptive Management, page 54 Managing for Impact: https://managingforimpact.org
Facilitating ***agenda setting*** by different stakeholders and negotiating "***offers and asks***"	3, 4	P3 **Building connections:** articulating change agenda's in each stakeholder group – before multi-stakeholder workshops – helps to build connections and mutual understanding. P4 **Just, fair and inclusive transitions**: facilitating disadvantaged stakeholder groups to clearly articulate and prepare their "offers and asks" levels the playing field with power holders.	Chapter 4 in [GALS value chain guide](#) Also see the win-win tree in the [GENVAD guide](#) by Linda Mayoux and Oxfam Novib

3.4. How to target people

Targeting, in a rural development context, is associated with poverty reduction and correcting inequalities (IFAD, 2019; GIZ, 2017; FAO; 2019). Linking policies, programs and project interventions with the right participants is however also critically important for efficiency, impact, and sustainability reasons.

There are many different types of stakeholders and stakeholder groups that can be identified in phase 1 *Planting seeds*, each with their own potential. In this process of bringing together disadvantaged groups, power holders and nature, targeting and outreach planning requires an ongoing effort. Target groups cannot be fully determined during the design of the activities or the project. A deliberate commitment and strategy are needed in order to reach "the right" people.

In the first stages "right" means ***disadvantaged individuals and groups*** who have little or no influence on planning and management of the area and yet live there and are highly dependent on the physical place for their livelihood. These individuals and groups often lack formal organisations and are not or barely represented, or only in name. Often they are not used to participate in setting priorities and strategies for change, planning and decision making, while they are actually very directly affected by these. How to reach and engage these people in the spirit of the RIFS principles? In setting targeting strategies, *levels* and *mechanisms* can be considered (see boxes).

> **Box: Targeting levels**
> - Geographic
> - Group
> - Household
> - Intra-household

In stages 4 and 5 (Table 1) the identification and engagement with ***power holders*** starts. Targeting these should be led by the participants from disadvantaged groups and facilitated by the coordination team to ensure that power holders are brought in at the right moments.

Each project or intervention may have its own entry points. In Refooture in Kenya, the entry points were 10 innovation cases, including the Menengai Community Forest Association. These were identified based on their potential contribution to the changes in the wider food system. Once such innovation cases have been selected due to their importance in the food system, the different types of targeting can start to ensure the "right" people can be found.

P1: Sense of place and purpose requires a place-based approach. ***Geographic targeting*** is therefore the starting point: the population in a specific place. In the case of Menengai, this includes the 5 km radius around the Menengai Forest since many people who live their depend on the forest for their livelihood.

> **Box: Targeting mechanisms**
> - Self-Targeting
> - Categorical targeting
> - Community-based targeting
> - Market based targeting

P4: just, fair and inclusive transition requires assuming that households are <u>not</u> cohesive units sharing goals and rights. There are gender inequalities at stake and other differences: involving one member doesn't mean the whole household is involved. Women for example are often discriminated based on their social identity and are therefore intentionally or unintentionally excluded from services, information and meetings. ***Intra-household targeting*** is therefore needed to ensure that women have a voice.

Practically this means:

- setting targets for reaching individuals (women and men, disaggregated in age groups, stakeholder groups or other characteristics such as asset ownership);
- opening the various sessions for multiple members of the same household
- being flexible in the beginning for participants to introduce others who they think are relevant (based on social mapping exercises, see Chapter 4).

Common **targeting mechanisms** include Self-Targeting, Categorical targeting, Community-based targeting and Market based targeting. Each of these have advantages and disadvantages, and a combination of mechanisms is needed:

Targeting mechanism	Short description	In practice
Categorical targeting	Choosing eligibility criteria and indicators that are objective (as far as possible) and measurable.	In practicing this mechanism, RIFS Principle 4 can be recognised in practice. To reach individuals and groups who are likely to be excluded due to the various factors of LNOB (see section 1.3) such as discrimination based on socially ascribed identities, household composition and socio-economic status. Criteria such as gender and age are likely to be a must. Clear indicators and criteria however are not the full answer for reaching – for example – the most disadvantaged groups. Practical entry points are needed to get them around the table. Finding the right connections for reaching those groups is essential for the success in this phase (RIFS principle 3). For example by first engaging people saving groups, social groups or registered community-based organisations, and identifying the people who depend on them through social mapping (see stages 2 and 3 in Chapter 4).
Self-targeting	Self-targeting puts the responsibility in the hands of the people who have access to information about the initiative or project to choose if they want to participate.	In the process described in Chapter 4, one cannot be rigid with targeting. A certain level of flexibility is essential for building connections (RIFS Principle 3), strengthening local ownership for the change process and for cost effectiveness. Self-targeting therefore needs to be a conscious complementary mechanism: to allow participants to bring their peers, relatives, family members and others with whom collective action is more likely to emerge.
Community-based targeting	Community-based targeting leaves the decision who to include in the hands of local leaders. This can be done with or without participatory process.	This mechanism only works when local leaders are well engaged and share the same goals as the coordination team. If this is not the case, the selection is likely to be biased and dominated by elites (see also GIZ, 2017). Combining this mechanism for example with poverty ranking or vulnerability analysis with baselines and monitoring, the targeting accuracy can be greatly enhanced (see Coady et al., 2004).
Market based targeting	Market based targeting – by introducing incentives and disincentives through market mechanisms.	Once disadvantaged stakeholders are fully engaged, they can employ market based targeting to engage power holders. The offers and asks described in section 4.5 are a way to put this in practice. By articulating what they can offer to power holders - as well as what they want to ask from them – they can propose incentives to power holders to convince them to join their cause.

4. People and place starting to shape their future

As part of the "Planting seeds" phase one, several stages were identified that form the backbone of the RIFS approach, which are explained in this chapter. The stages are graphically represented in Figure 13. The use of the Tetrad (**Error! Reference source not found.**) will be a vital tool to help keep the dynamic aspects of the regenerative process in the thinking and planning. This will be of most use when experiencing, observing or finding the RIFS Principles (P1-5) in action, as they will appear in different stages and in different combinations during the various stages. It is important to be conscious of them in your observation journals.

| Stage 1 | Stage 2 | Stage 3 | Stage 4 | Stage 5 |
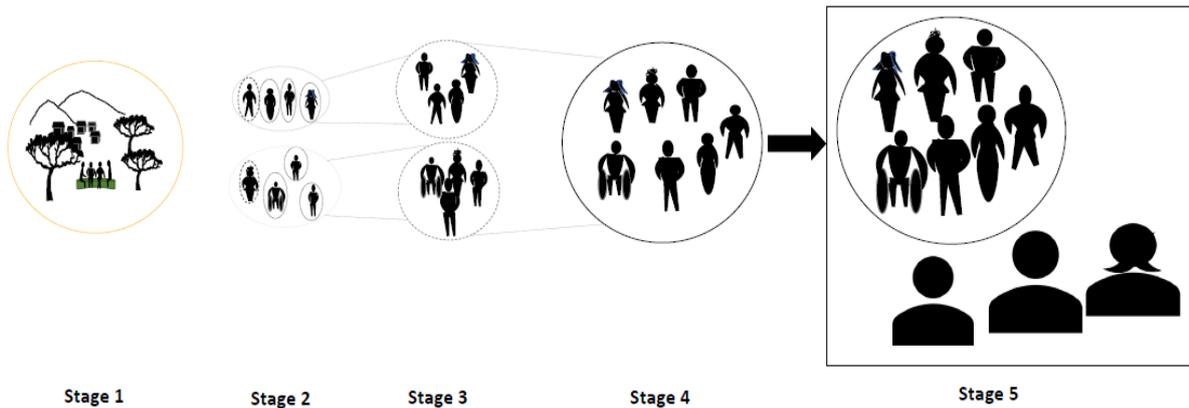
Figure 13: Graphical representation of the process. Starting from disadvantaged stakeholder groups, well organised or not, to forming cohesive and unified groups, to building a multi stakeholder group that, although having different agendas and requirements can unify through their strong sense of purpose to change things for the good. This leads to the last stage where as a group they can level the playing field (some bit) with those in the seats of power.

Figure 14: impression of one of the workshops in Menengai in Stage 3.

4.1. Stage 1: Defining Place and preliminary stakeholder identification

The process starts with *Preliminary stakeholder identification* by a pioneer group of people who share a common goal of RIFS. Usually people from the implementing organisation of a project. They identify motivated local voluntary leaders who have a strong sense of purpose towards RIFS, and who have a strong connection to the place and the community. Often, these are not leaders by title but informal leaders. After the voluntary leader is identified and contacted, a coordination team is set up consisting of the implementing organisation, the voluntary leader and an experienced participatory facilitator, who is engaged to guide the workshops and tools used in further steps. This is the coordination team.

In this initial phase of development, be that in relation to a Food System Innovation Platform level (i.e., assumed to be working on regional food systems) or on an innovation case level (i.e., assumed to be working on part of the regional food systems), a clear understanding of the *context of place and of the people living there* needs to be developed. Two big questions can help with this action step:

- What are the boundaries of the place?
- What is the character of the place (who is the place)?

At this stage, the "who" question helps the coordination team to start seeing the place as a living being, a stakeholder. For setting boundaries, it is helpful to consider 3 levels:

- The project or initiative
- The role that the project plays in a bigger proximity or sphere of influence (geographically) (the proximate whole)
- The wider environment that is influenced by the place and vice versa (the "greater whole") – see Figure 12

Purpose: forming a coordination team, defining place, and identifying issues and stakeholders

With whom: voluntary leaders with strong sense of purpose and connection to the place, and staff of the implementing organisation

Procedure

- Identify voluntary leaders with a strong connection to place/purpose and community

- Establish a core/reference group = <u>coordination team</u> in this document

- Identify the unorganised and voiceless stakeholders (Principle: inclusion)

- Discussion about observation and reflections of coordination team

- Start researching story of place

Outputs: coordination team in place, assessment of the place, rich picture, draft of Story of Place.

An additional activity to support these questions is an *integral assessment: the story of place (SoP)*. The aim of this assessment is to try and gather as much information, if feasible on the people and place in relation to, for example, the geological, hydrological, ecological cultural and social history, as well as climatic aspects. The assessment integrates information from a wide range of sources and disciplines, including reports and maps, scientific articles, site visits, existing data, and interviews. It seeks to discern patterns or unusual features that are present, to better understand how the place and the people have evolved together and how they have influenced one another. This helps the coordination team to understand better the essence of the place and potential aspects and people that are important to include in the succeeding stages.

To identify current stakeholders and core issues, the coordination team starts with a "rich picture[11]" of the situation in and around the place or topic at stake. A rich picture is a drawing of a situation that illustrates the main elements, stakeholders and relationships that need to be considered when trying to intervene to create some improvement. This is done by drawing, pictures, texts, symbols and icons and helps the team to understand the complexity of the entire situation. The rich picture includes a preliminary stakeholder mapping to identify individuals and groups who may have a high interest in the place but currently no representation or voice in planning and decision making[12]. Based on the rich picture, a first *targeting strategy* can be drafted.

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[11] https://mspguide.org/2022/03/18/rich-picture/

[12] The 5 factors of LNOB from the UNDP framework (see section 1.3) can help the coordination team to recognise exclusion: discrimination based on socially ascribed/assumed identity; location; socio-economic status; governance or vulnerability to shocks.

In the Menengai forest, the process of preliminary stakeholder identification started by Egerton University through the Nakuru Living Lab. Several "user groups" living in communities around the forest were identified through the MCFA. A strongly motivated **informal leader** from amongst them became the contact person. Egerton University together with the informal leader and the participatory facilitator formed the coordination team. A first step for the coordination team was to create a rich picture of the Menengai forest[13], drawing the stakeholders, activities, challenges and opportunities and the linkages between them (see Figure 15 below).
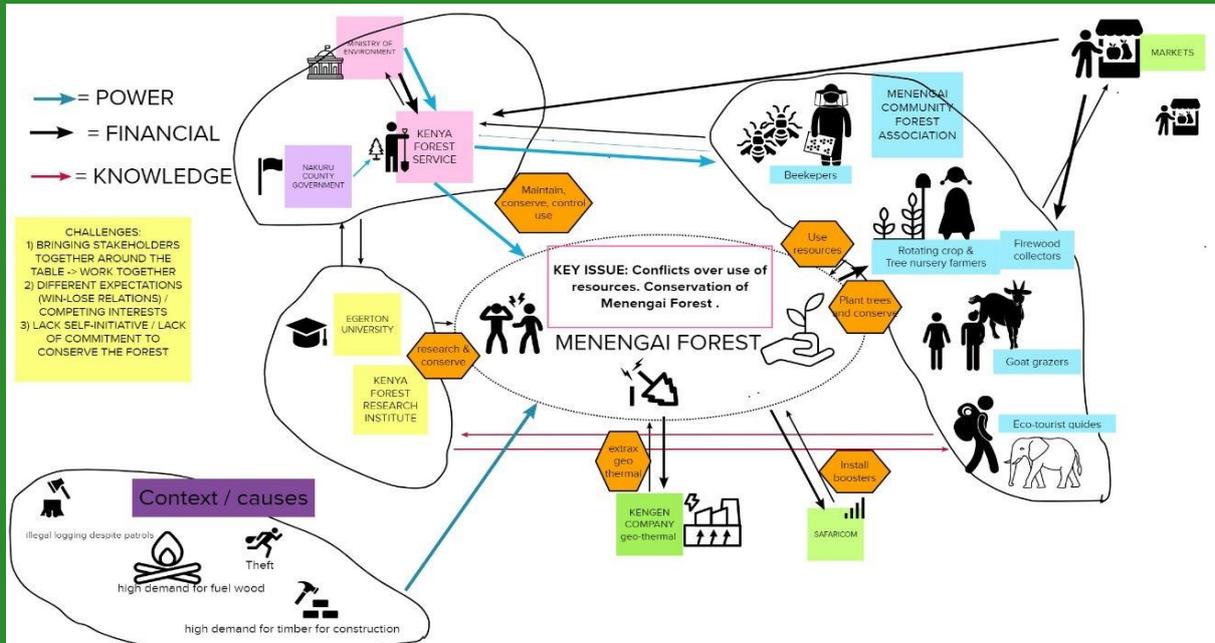

Figure 15: "rich picture" of the Menengai forest area by the coordination team

Through the rich picture they identified six different user groups in the community who live within a 5 km radius surrounding the forest. These included people who farm in the forest (including landless), beekeepers, grazers, firewood collectors, tree nursery farmers and ecotourism guides. With help from the voluntary leader the six groups were contacted and representatives of each group were invited in a first workshop to explain what the coordination team is trying to achieve together with them in the MSP learning journey and to explore the challenges, opportunities and relationships between the different user groups. From these first engagements with the user groups it became clear that only two out of the six user groups were organised and registered with the municipality (tree nursery and ecotourism groups). A first step for the coordination team was thus to reach out to these groups and to enable them to start seeing the possible strengths of working together.

Notes for facilitators: Defining Place and preliminary stakeholder identification

- *Role of voluntary leaders*: A very important part of the RIFS approach is to identify the people that have already been "triggered" to innovate in relation to the potential they see for their place that could improve the livelihoods of people, a food system issue or for helping nature. They are the voluntary leaders trying to build collective purpose towards a common goal. Another important aspect of this approach is to link to the RIFS principles (P) to understand direction. For example, the voluntary leader(s) have a very strong sense of place and purpose (P1), they have a deep drive to make life better for themselves and their community and improve the nature around them. They are, for the most part , innovating in a socio-ecological way (P2). However, their strong motivation to innovate and improve may not always be known, easily accepted or adopted by the community at large, as the community cannot connect to the vision of the innovator (s) (P3). Another example where this principle might be seen is

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[13] Due to Covid-19 this was done online, normally it is hand-drawn

where the community is connected to the vision of the voluntary leader, but they cannot go further with it because they are not unified and do not have a collective bargaining power with different government institutes to bring about meaningful change for them (P4).

- ***Trust building***: At this stage and the next stages, trust building is key to success. Lack of trust is the most cited reason for breakdown in an MSP (Brouwer & Woodhill, 2019). This also means being transparent about your agenda. In the example of Menengai, the agenda behind setting up the coordination team follows the Nakuru Living Lab: to contribute to regenerative and inclusive food system.

- The purpose of the ***integral assessment*** is not to come up with a report <u>for</u> stakeholders, as this could undermine shared stakeholder ownership over the process. It serves as a knowledge source and foundation for the coordination team members to be able to identify key socio-ecological conditions and stakeholders (including nature) who are disadvantaged and who may not be recognised as formal stakeholders. This knowledge bank can be used to identify relevant questions; and dig up issues that need further probing. It accompanies the process (Figure 13).

4.2. Stage 2: Agency of disadvantaged stakeholder groups

This stage follows to engage the stakeholder groups that are disadvantaged and through them, identify any other stakeholders who have not yet been recognised. They can be contacted either through individuals, informal, semi-formal channels or registered groups.

A series of meetings and workshops focus entirely on the action learning skills of disadvantaged groups to enable them to set aspirations for changes they want to see in their lives, and to identify connections and relationships with both people and place.

This is necessary for disadvantaged, marginalised or otherwise excluded individuals and groups to start identifying themselves with a *stakeholder group*, which lays the ground for mobilisation and organisation.

"Innovate and create by yourself"
Peter Ndambiri (Facilitator)

The exact steps in this stage are context-specific (as in any following stages) as the aspects of "agency" that need to be strengthened differ per context depending on levels of inequality and deprivation. "Having aspirations in life" is one of the things to focus on as a precondition for individuals to start recognising that they share goals with others and that they too have potential. During the first workshop, an effort is made to have representatives of different groups to explain the process, the goal

Purpose: identify and engage disadvantaged stakeholders and strengthen their sense of unity and collective purpose in relation to their place.

With whom: disadvantaged stakeholders with limited or no voice, focusing at their individual and group levels.

Procedure

- Visioning exercises at individual level, using the vision journey tool. First steps of connecting / grouping based on visions, followed by songs or acting about the place. Homework: discuss your vision with family members.
- Area mapping: drawing their group draws their understanding of the place and its boundaries, where how and why to access certain places, and how do people connect to nature.
- Advantages of working together (principle: inclusion)
- Groups formed based on common individual visions create collective visions.
- Identify likes and dislikes of their relationship with the place and its people (diamond tool)
- Discuss observations and reflections

Outputs: disadvantaged groups have individual aspirations for change, area maps, likes and dislikes, and collective vision journeys *within* stakeholder group. Baseline evidence.
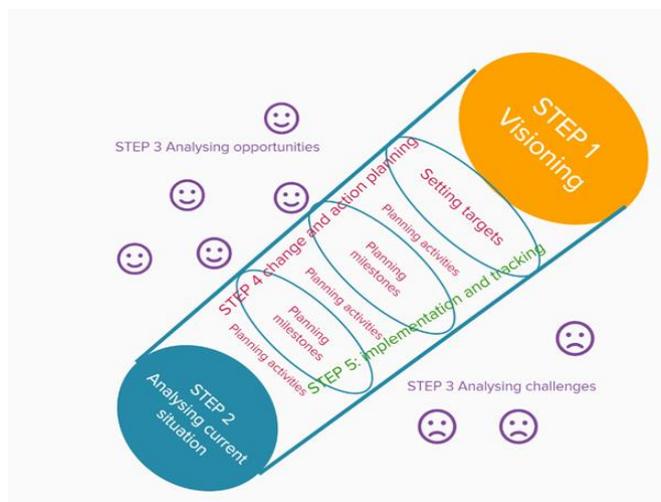
Figure 16: The basic logic of the vision road journey (adapted from GALS tools, Mayoux 2014)

and their role in the MSP learning journey. The agenda of the coordination team must be open and transparent to create trust. Tools and exercises used at this stage are for:

- strengthening individual aspirations: visioning exercises, vision journey tool, songs.
- clarifying how they connect with nature / the place: area mapping, songs, acting.
- identifying with a stakeholder group: collective visioning and collective vision journeys, songs.
- Identifying their best- and worst-case scenarios as stakeholder in a specific place: diamond tool, acting.

The central logic that is offered to stakeholders to structure their action learning process is the vision road journey (see Figure 16 and see Mayoux 2014): all action learning activities feed into a vision for the future (step 1), an analysis of the current situation (step 2), opportunities and challenges that help or block progress towards these visions (step 3), and change and action planning in the form of milestones and activities (step 4), implementing these and tracking progress (step 5). This logic is reinforced by facilitators in every learning event and is applied at every level, starting from the individual, to group, to multi-stakeholder levels, to shape, plan and track change.

The first workshops were held in a communal field bordering the Menengai forest. This made it easy for non-organised stakeholder groups to join. Firewood collectors, beekeepers and people who are allowed to farm and graze animals in the forest were mobilised through the tree nursery and eco-tourism groups. Through drawing symbols that represent them and their relation to the forest, they grouped in order to give life meaning to this through collective drawings and composing songs.

The relationships between grazers, farmers, beekeepers, firewood collectors, eco-tourism and tree nursery groups, with the Menengai forest and the corridor area as the natural environment. This was

Figure 17: People from communities surrounding the Menengai forest meeting at the forest edge

done by drawing their first ideas for their individual vision road journeys[14], composing songs and through area mapping[15]. It led them to see the interests they share within their stakeholder group, and with the natural environment. In a second workshop participants – growing in numbers – focused on imagining and drawing their visions for the

Figure 19: One of the area maps of Menengai Forest

future, using the vision journey tool.

Figure 18: Example of an initial vision road journey by one of the participants

Notes for facilitators: from individual to stakeholder group

- For place-based development, it is critical to engage stakeholders at all levels to join the change movement since all the energy, hearts and minds of people in the area are needed for transformation to happen.

- Tapping into sense of place and purpose (peoples will and motivation) is one of the most critical RIFS principles. This combined with building connections (P3), makes the potential of this approach very powerful. There could be the experience that in the initial phases of the vision journeys there is more a focus on extractive types of futures. If this is the case, then further intervention steps will be required to reconnect people to what makes their home place unique and why it is important to care for the nature there. See Appendix X to understand what kinds of tools that might be important to use in the workshops during this phase in order to make sure that the community or stakeholder groups are all coming from a common ground.

- Power disparities and differences in level of organisation are obstacles for inclusive, fair and just multi-stakeholder partnership (P4). To address these gaps, the process starts with action learning at individual to group levels (facilitated in groups) to:

    o enable individuals to develop their own vision for the future, their current situation, opportunities and challenges and pathways towards their visions using visual diagrams.

    o this lays the ground for action learning at the level of stakeholder groups

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[14] The Vision Road Journey tool was taken from the Gender Action Learning System
https://empoweratscale.org/resource-centre/gals-phase-1-manual/ from the family of Participatory Learning and Action that the MSP guide refers to.

[15] Inspired by mapping tools from PRA such as the community map and the village resource map.

4.3. Stage 3: Championing the stakeholder groups

After understanding their peers within the group, in this stage people join together to set out collective visions. The focus is still on stakeholder groups that comprise of the disadvantaged or those that are least organised and who are very dependent on the place (i.e., natural resources) and face many challenges.

"Visitors come and go ... you live with your neighbour so enrich yourselves"

Peter Ndambiri (Facilitator)

The biggest step forward in the first phase of RIFS development is **building connections** (P3), bringing people together with each other and with the place[16] where they live. What needs to be done to promote regenerative inclusive food systems and how this will be done and facilitated depends on the unique situation of the Food System Innovation Platform and the innovation cases. It is the moment to start establishing the baseline identification of people's relationship to place and to each other. This can be done through:

1. Sharing visions between groups to understand each other's' perspective and create mutual and empathetic understanding
2. Groups asking and giving feedback on the visions

Purpose: create unity and common understanding <u>within</u> the stakeholder groups.

With whom: exercises with disadvantaged stakeholder groups. Focus: collective level within single stakeholder groups.

Procedure:

➢ "Within group" visioning
➢ Sharing visions between groups to create mutual understanding
➢ Social mapping: individually and collectively per stakeholder group Experimental

Outputs: mutual feedback between disadvantaged groups; additional stakeholder groups identified, assessment of social capital or baseline of relationships, gender issues identified, plus other forms of baseline evidence (See Appendix IV).

When participants have a sense of belonging to a specific stakeholder group, participants can reflect on the **things they like and dislike** as stakeholder in the place (e.g., as beekeepers in Menengai) using the Diamond Tool (Oxfam Novib, 2014), and use this to sharpen their visions for change. Groups then present these to each other in the form of songs, visual diagrams. This creates some understanding of different perspectives and brings the tensions and common interests to the table.

The next step is for each stakeholder group to identify who is helping them to move towards their vision and who is blocking them, and prioritising relationships that they want to change. "**Social mapping**[17]" helps individuals to see what relationships they have, and what relationships they have in common as stakeholder group. At this stage, participatory tools need to be brought in to:

- Assist people to see the place and natural environment around them as a living being (a stakeholder!) that also has its own interests and its own aims. This helps to go beyond resource extraction and identify ideas for mutual benefit practices by people and nature.
- Identify more disadvantaged individuals that need to be engaged, by including dependency relationships in the mapping (for example friends or relatives who always need financial support).

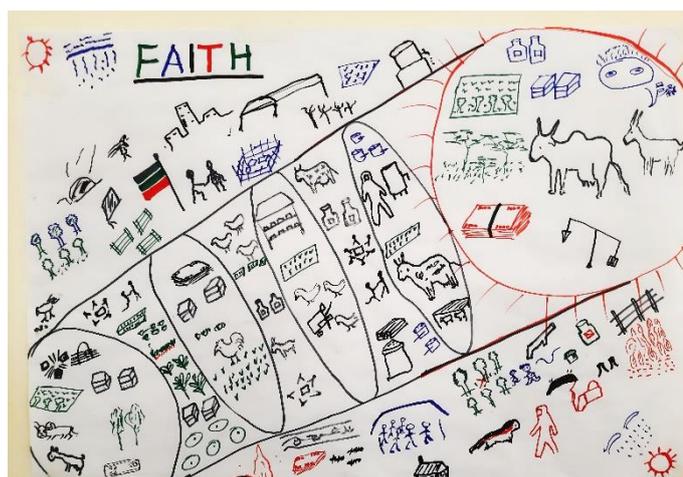*Figure 20: Vision Road Journey combining aspirations of different disadvantaged stakeholder groups, Nakuru, Kenya*

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[16] Place as described above

[17] Adapted from the Social Empowerment Map from the Gender Action Learning System (Oxfam Novib, 2014) https://empoweratscale.org/resource-centre/gals-phase-1-manual/ from the family of Participatory Learning and Action that the MSP guide refers to.

Menengai example: Stage 3 steps and outcomes

In Kenya participants from communities surrounding the Menengai forest grouped themselves into firewood collectors, grazers, beekeepers and PELIS (people allowed to farm in the forest). In Figure 22 the Grazers group is shown presenting their vision journey to the firewood collectors. The issue of **bushfires** emerged: grazers somewhat indirectly accused firewood collectors, suggesting they benefit from bushfires. They learned to view it from the collectors' perspective. The burden of illegally **collecting firewood** turned out to be exclusively on women due to **gender norms**. Women faced the risk of being caught while they had no

Figure 22: Creating mutual understanding between grazers and firewood collectors

alternative sources. They drew symbols of biogas and fuel-efficient stoves in the vision. Grazers demonstrated the issue of theft and generally low benefits from the livestock and cattle compared to the workload. They started imagining zero-grazing systems with better breeds. Questions arose on the apparent **cultural value attached to cattle** vis-a-vis the unknown effects of grazing on the forest. Together with the PELIS and beekeeper groups, the issue of **roads** came up. While most saw benefits of good roads, the firewood collectors feared it would make the illegal collection of firewood even more difficult. Theft of crops and livestock was seen as a lack of joint responsibility to watch over one another. Also, the issue of livestock

Figure 21: Example of the output of a social mapping exercise

and **cattle encroaching** on PELIS farmland was discussed as grazers feared their animals to get in touch with agro-chemicals, and farmers argued that the animals should not be grazing in PELIS land.

The social mapping (Figure 21) took participants through individual and group reflection on:

- Who are important in my life? (circles around the central figure)
- Why are they important (arrows for power, financial and knowledge relationships)?
- What do you want to change?
- Who or what do I need for this change?

The maps revealed a very **low social cohesion** within the community, pointing at high levels of distrust, which puts the communities surrounding the forest in a very weak negotiation position towards the government organisations managing the forest and the companies who use the resources. It also points to a lower potential for livelihood resilience (see Appendix X)

Notes for facilitators: Championing the stakeholder groups

- Before stakeholder groups can negotiate with other stakeholder groups, they need to develop their own collective vision, their offer to others and their asks to others.
- Marginalised and vulnerable stakeholder groups need to be supported to articulate their own individual and collective agenda for change, before they start interacting with other stakeholder groups (who already know and promote their agenda)
- Stakeholder groups can then connect with each other based on a localised idea of RIFS (P3)
- They co-create shared language, common visions for change and possible win-win strategies using visual diagrams.

4.4. Stage 4: Joint agenda for change

Before discussing with those in the seats of power (such as the Kenya Forest Service, the County Government, the companies identified in the rich picture), disadvantaged stakeholders need to come to a common understanding and a joint agenda for change, to strengthen their bargaining position. It is the start of the multi-stakeholder process as different disadvantaged / voiceless stakeholder groups mingle together to discover where their interests align, where there are tensions and how they can address these. This can be done by presenting their collective vision diagrams to each other, with the songs or plays they created. Based on this, they can identify their common areas of interest and draw a combined vision journey. This again requires gender sensitive and participatory facilitation techniques to manage the still existing inequalities and differences of interest and power within and between these groups. The process of **"merging" the vision journeys** of the different groups also prepares the members to be able to represent their peer later in stage five when they meet the power holders.

In order to further level the playing field before engaging with power holders, clear **offers and asks** need to be developed and rehearsed. Visual information needs to be prepared and roles need to be divided before meeting power holders.

Stakeholder mapping

> **Purpose**: disadvantaged stakeholders come up with a joint agenda for change.
>
> **With whom**: multi-stakeholder but disadvantaged groups only
>
> **Procedure**
>
> 1. Joint agenda for change
> 2. Offers and asks prepared / visualised
> 3. Multi-stakeholder meeting to present and negotiate
> 4. Stakeholders commit to win-win-win strategies
> 5. Create a changer plan
> 6. Tracking
>
> **Outputs:** Visual agenda for change representing disadvantaged groups; visualised offers and asks , baseline evidence.

The tool used to visualise and create the offers and asks map is called 'stakeholder mapping'. There are five steps in this tool:

1. Ask the participants to draw or write down stakeholders that they find important for their cause/livelihood/change. Here it is important to mention a wide variety of stakeholders that could possibly have an influence or are being influenced by them. Each stakeholder on a different sticky note.
2. The next step when all sticky notes are collected and doubles are taken out, is to map the stakeholders in relation to the group. A circle is drawn in the middle that represents the group that does the exercise. For each stakeholder the group decides its importance/influence/power towards their vision and the change they want to achieve (both negative and positive influence). The more influence a stakeholder has, the closer you put it to the circle. Note: when there is disagreement on the power of a stakeholder, go to the stakeholders that everyone agrees upon, to practice the exercise and create a first feeling of the map, afterwards the difficult stakeholders are discussed and mapped on the paper.
3. To make the next steps comprehensible and an MSP workshop doable, it is important to not focus the wants and asks exercise on all relevant stakeholders. In this step, the group is asked to make a ranking of the most important stakeholders. This should be easily visibly based on the proximity of the stakeholder towards the circle. Together with the group, decide on the most important stakeholders to invite to the MSP workshop. This should be limit to a maximum of 10 stakeholders.
4. When the selection of important stakeholders is made, take a new paper where you redraw the circle and evenly draw the most important stakeholder around the circle towards the far ends of the paper (see example MCFA). Draw an arrow to and an arrow from each stakeholder starting from the circle. The arrows represent the asks (coming from the stakeholder) and the offers (going to the stakeholder).
5. In the final step, you discuss in the group what you can offer to the stakeholder, these offers are drawn or visualised by the group on the outside of the arrow going to the stakeholder. Afterwards you discuss the wants from the stakeholder and visualise it out the outside of the arrow coming from the stakeholder (see example MCFA).

After using this tool, a clear overview is created of the most important stakeholders towards your goal, what you can offer them and what you ask from them. This is a crucial part in empowering the less powerful to come prepared to an MSP workshop with a clear agenda of what they can offer and what they need (i.e., their strengths and weaknesses). To prepare for the next stage of presenting your vision and your offers and asks, it is important that the group elects representatives that are good in presenting and public speaking. Two persons to present the vision and 2 or more (depending on the number of external stakeholders invited in the next stage) persons to present the offers and asks. They also become responsible to lead the finalisation of the vision and offers and asks map (copying the clean final versions on a larger piece of paper).

Figure 23: Stakeholder mapping, Peter Ndambiri (Facilitator)

Menengai example: Stage 4 steps and outcomes

In Kenya tensions around bushfires emerged at this stage. Firewood collectors turned out to see (short term) benefits in fires, while this negatively affected grazers, farmers and beekeepers. Theft of crops and livestock was seen as a lack of joint responsibility to watch over one another. The use of chemicals on crops and ideas about having better roads created some tensions. They found commonalities in their visions for alternative sources of energy for cooking to replace firewood and charcoal burning, fencing selected areas of the forest with entry gates, changing the grazing system to higher value zero grazing system. The issue of lack of land – especially for women – needed more attention (P5). They finally came up with a joint vision road journey (see picture) merging aspirations of – so far – voiceless stakeholders (firewood collectors, grazers, farmers, beekeepers) and those with some voice (tree nursery and eco-guides groups). The "voiceless" stakeholders at that point decided to register themselves formally as groups. This was a very important step towards achieving their visions.

Figure 24: A snapshot from the process of merging stakeholder visions

Figure 25: Final consolidated vision road journey by disadvantaged stakeholders, ready for presentation to power holders.

Notes for facilitators: Joint agenda for change

- "Merging" visions from groups who have different interests and power levels is a tricky process, even when differences are small. The time and skills required for facilitating this process should not be underestimated.
- During the process facilitators need to continue addressing differences: for example, asking the most vulnerable groups to respond first or present first before others join in. The use of visual drawings help the group to continue to recognise their own symbols in the aggregated vision. Visions circles can also be divided into stakeholder groups to ensure all voices are represented in the vision.
- When consensus is reached it is great. However, facilitators do not need to push or force consensus. On the contrary: what matters is facilitating a process for people to find common visions, and to be clear about the points of difference and conflict. Realising that a way forward is possible on the common points.

4.5. Stage 5: Multi-stakeholder negotiation and ideas for win-win-win strategies

"If you are not united you can't do it" –Peter Ndambiri (Facilitator)

For ***multi-stakeholder negotiation and co-creation of pathways for change* to happen successfully,** meetings and workshops are needed to get to know and understand each other's perspective and create trust among all stakeholders. Well-prepared participants from disadvantaged and less powerful groups need to be in the majority initially, to balance power differences. They should be "running the show" showing that they have a collective voice with many things to offer and asks, showcasing their strengths, but also some of their weaknesses.

The next step is for the coordination team to facilitate a workshop where the identified and prioritised stakeholders are invited. The arrangement of chairs and tables at the venue should create a space where everyone is equal and where the organising group can present their vision and offers and asks in the front (a circle or half-circle). Energisers – especially when linked to the subject matter – help to release possible tensions and stress out of the room and creates some laughs and connection. What energiser works well is dependent on the context. tools like the "Reconnection Tree" can help people to analyse the situation for themselves

> **Purpose**: disadvantaged stakeholders engage with power holder to negotiate for their vision, their offers and asks.
>
> **With whom**: multi-stakeholder (disadvantaged and power holders)
>
> **Procedure**
>
> - Multi-stakeholder meeting to present and negotiate
> - Stakeholders commit to win-win-win strategies
> - Create a changer plan
> - Tracking
>
> **Outputs:** leverage points including low hanging fruits for immediate collaboration, baseline evidence.
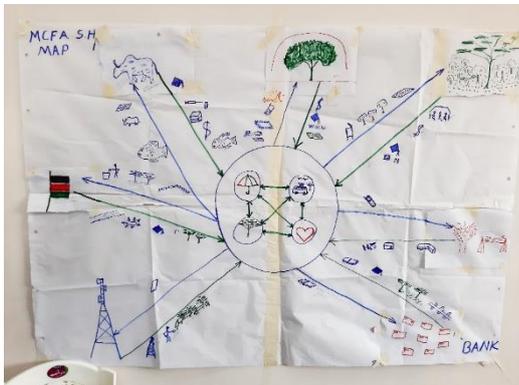

Figure 26: Offers and asks presented on a stakeholder map

To come to a shared understanding, the disadvantaged stakeholders first present their vision of the future. After which external stakeholders can ask clarifying questions, tips or other remarks around the vision to create a shared language. Now that the external stakeholders have a better idea where the disadvantaged stakeholders want to collaborate towards, the organising group can present their offers to each stakeholder, and their asks from each stakeholder. After the presentation, the workshop splits up in different groups, one around each power holder. Participants from disadvantaged groups now go into dialogue with the power holders, answering and asking questions to each other and coming to an understanding of what is possible in the near and far future. When possibilities are explored, and ideas are shared, it is important to try to get commitments from all involved stakeholders in the workshop, or at least have a follow-up workshop or meeting set up to further discuss arrangements.

Powerful stakeholders are facilitated to respond to disadvantaged stakeholders' offers and asks, and this sets the basis for next steps. Stakeholder responses and commitments are documented for follow up. When win-win-win strategies are followed up, power holders need to be encouraged and motivated to *identify their self-interest in empowerment of disadvantaged groups and a thriving natural environment*. Once this is clear and there is a more level playing ground, *multi-stakeholder visioning* towards RIFS can effectively start. Having multi-stakeholder visions for the future based on mutual respect, understanding and mutual benefit is regarded as a pre-condition for powerful and disadvantaged groups to "collaborate to regenerate".

Menengai example: Stage 5 steps and outcomes

In Kenya, four out of six identified important stakeholders where available on the proposed date: Kenyan Forest Service (KFS), Ministry of Agriculture, Livestock and Fisheries, Equity Bank and Egerton University. In addition, there was a sales representative for a company that sells biogas units as well as representatives of 9 other innovation cases of the Nakuru Living Lab. MCFA shared their vision (see Figure 25 and Annex III for the reflection of the external stakeholders) and their offers and asks (see Figure 28). They presented offers such as protecting seedlings and trees planted by government organisations, help to collect waste and raise awareness in the communities about waste management, fire prevention and alertness, and increased revenues by registering more community members with the Kenya Forest Service (KFS). Some examples of their asks were to support alternatives for firewood collection, to be able to sell more seedlings, train more scouts and organise waste dump places.

During group dialogues with the power holders, certain arrangements were discussed such as KFS agreeing to plan a meeting to review the Forest Management Agreement (FMA) with MCFA and discuss revenue distribution. Equity bank is considering buying all their seedlings for their reforestation

Figure 27: Workshop banner

Figure 28: Presentation of the offers and asks

programme from MCFA, they shared more information about loans and their prerequisites and shared more about their 'wings to fly scholarship' programme paying full student tuition for high school. The Ministry representative informed them about the advantages of registering with the municipality such as, subsidised support for installing and building jiko stoves, capacity building for cooking (including fuel use), free avocado seedlings and free training by government extension officers. The biogas installations company explained how biogas could be used in their homes and what would be needed to fuel them and proposed to give a free training on biogas production in their community. Other members of the Nakuru Living Labs also made offers to the MCFA, (e.g., Griincom offered to sell them fertiliser with a reduction). Although the issue was raised, proposals relating to carbon credits were completely absent in the discussion, while this could be a way to support local communities to reduce extraction of resources from the forest.

Notes for facilitators:

- Once there is a shared language and a safe environment for stakeholders to refine and express their asks and offers to each other for collaborating towards RIFS, negotiation can fully start
- The Vision Road Journey tool can also be used for a joint vision between disadvantaged stakeholders and powerholders. The "road" from present to future can be sub-divided for each stakeholder, to show the actions that are needed. This is a participatory way of documenting the commitments of each participant, which makes it easier to hold people accountable later.
- The vision road journey tool can also be used for participatory tracking of progress. Of course, it can be used also by the coordination team for tracking, but for all relevant stakeholders to increase their feeling of ownership for the process, period tracking is recommended in multi-stakeholder meetings/workshops. The opportunities and challenges drawn above and below the road can be used to evaluate:
  - What opportunities have we been able to use and why?
  - What opportunities are within and outside of our reach?
  - What challenges have we been able to address and how/why?
  - What challenges are within/outside of our control?
  - How can we improve our actions based on the insights?
- Win-win-win strategies are sometimes assumptions. For example, strategies related to the grazing issue in Menengai are not really based on research of the effects of grazing on the natural environment. These strategies need to be tried out and further investigation may be needed.

4.6. What's next?

Stage 5 "multi-stakeholder negotiation and ideas for win-win-win strategies" leads into the next phase of "Nurturing change". Phase one lays the foundation for equitable and inclusive multi-stakeholder negotiation and co-creation of pathways for change. Recognising the place – mother Menengai in this case – as a living being does not happen overnight, this requires continued and concerted efforts in the next steps.

After some of the power holders had responded to the offers and asks by the community groups, the coordination team in Kenya concluded that energy is created for a multi-stakeholder change process. However, it is essential to have a follow up to see that stakeholders really commit to put the ideas into practice. If they have not, then it is imperative to find out why and to determine what or if intervention might be needed.

There are several ways to make that happen, such as a series of follow up visits, workshops to engage powerholders to add or join the visions of disadvantaged stakeholders, develop multi-stakeholder vision road journeys and the creation of a regular platform for stakeholders to track progress on the journeys. The MSP principles are helpful to guide the way forward. In phase 1 all principles were applied, however the main focus was on "Work with power" and "foster participatory learning". In phase 2, the principles of "Deal with conflicts" and "Promote Collaborative Leadership" potentially deserve more attention as disadvantaged stakeholders and power holders will be practically working together. The mindset changes that have been initiated in the first phase need to be triggered and other institutions will need to be transformed as well.

Reflections after the workshops and meetings remain important for a number of reasons:

- to identify where there are further needs to nudge the participants to think outside the status quo
- to share insights that might not have been captured by others
- to determine the robustness of the evidence gathered during the workshops – to provide credibility

The process can be assessed across three lines:

1. if the RIFS principles are present or can be observed,
2. what type of results we see in relation to: Food and Nutritional security of the participants /community; Livelihood resilience; the health of the supporting ecosystem (in this case the forest); and Equality & caring community,
3. if the participants have an extractive mindset (only taking without giving back) or a regenerative one (gives and takes) and if this is reflected in their actions and activities and is this changing?

The question "what next" triggers thoughts of replication and scaling. What works in Nakuru county may not work in West Nile, Uganda, or Tepi and Achefer in Ethiopia. Some processes and tools however are expected to be universal. Adapting the process piloted in Nakuru County in these other contexts will be key to identify what is universal, and what is context specific. To mobilise large number of people towards visions of RIFS, scaling mechanisms will be need for behaviour change. These mechanisms will need to be tested and studied as part of the following phases.

5. Lessons learned from Phase 1

During the pilot process, reflections were held in the coordination team. These led to the adaptations of the next activities, observations (as shown in the Annex IV) and the overarching lessons that are provided in this chapter. Some of these lessons are relevant for the development or strengthening of Food System Innovation Platforms such as in REFOOTURE, or similar platforms, other are more relevant for the facilitation of a change process towards regenerative and inclusive food systems.

Thinkers "in charge" of innovation?

In the Refooture project, stakeholders are often referred to as "thinkers, doers and enablers". This is easily interpreted as knowledge institutes being the thinkers (and therefore "in charge of innovation"), farmers and entrepreneurs are the doers (adopting and implementing the innovations) and Government and financial organisations the enablers (making it possible). The process in Kenya however, shows that innovative solutions come from the people labelled as doers. The lesson is that we have to be careful not to pre-empt and assume the roles people will play, as this may lead to blindness for emerging innovations. It is also worthy to note that life is not black and white and people may also simultaneously be all three, depending on the situation.

Socio-ecological innovation needs to be the starting point

The coordination team reflected that in Refooture the word "innovation" generally refers to a technical innovation (e.g., waste management, composting, black soldier fly for animal feeds, fish farming) and less about social or institutional innovations. The Menengai case shows that the management of the forest is all about people: their realities, their aspirations, their inter-relationships. The lesson is that socio-ecological innovation needs to be the starting point, with a successive order of exploration as follows:
a) people and nature – what is happening and what is needed to nurture nature and people
b) what can they do (behavioural change)
c) what technologies can help that (technological innovation).

We need to invest in mindset change – three lines of work for all involved (see section 2.3.6)

> ## We did not hear "I want this" but they could say "now I can help myself"
>
> Pauline Murage, Egerton University, Kenya

- Starting to see Menengai (the place) as a living being and a stakeholder requires a major mindset change, also within the Menengai Community Forest Association. The members are organised in "user groups", implying that they are "users" of the forest. Nevertheless, the local spiritual expressions, songs and poems (see for example the box below) about the forest indicated other perceptions of and feelings for the forest. When facilitating a process like the one described in this guide, space should be made to spot these non-written connections between people and nature so that these can be used as starting points for behaviour change towards regenerative and inclusive practices.

- Another area that touched upon mindsets was the power relations between stakeholders. The common practice for multi-stakeholder meetings is to invite the formally organised and usually the most powerful stakeholders. Starting the process instead with disadvantaged stakeholders, who are poorly or not represented in the Forest Management Planning, had an effect of surprise on the power holders who came to the multi-stakeholder workshop. Also, within the MCFA this showed when the executive members interacted with the firewood collectors, grazers, beekeepers and PELIS groups. The surprised reactions – especially from those in the seats of power – indicated that their mindsets were challenged.
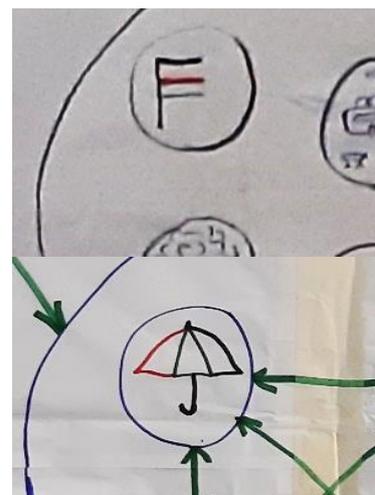

Figure 29: Symbol of the MCFA executive members changed from a flag (authority) to an umbrella (bringing voices together)

- Where the MCFA executives first symbolised themselves with a flag after observing the process they changed it into an umbrella. The flag symbolised the common mindset of linking a formal position (MCFA chair, treasurer etc) with exercising top-down authority, while the umbrella symbolised the role of the executive members of uniting people from different walks of life so they can have a collective voice. The daily reflections by the coordination team helped to spot changes like these.

- Further in the process, participants from disadvantaged groups added more and more actions they could undertake individually or as a group. This could be an indication of a "we can help ourselves" mindset emerging through the process.

The role of poverty versus mindsets

Based on the COM-B model for behaviour change, one could argue that for some individuals and groups, poverty – rather than mindset – could be the major driver for extractive behaviour: not having or seeing the opportunities to change it. This needs further exploring.

Maintaining our forest

Tears of pain run down my face as I observe our forest. The secret to getting full.

Every time a tree is cut, the tree cries some even bleed.

When together, we should plant trees in order to preserve our forest. My fellow brothers let us help each other out.

When we preserve our forest, we get good health due to the clean air around

We should preserve our forest, to enjoy clean air, we will also live longer on earth.

Thank you.

(Translated by Nicole Knorr, intern MCFA, Egerton University)

Figure 30: Poem (translated) from the firewood collectors firewood in one of the homes

We need to work transdisciplinary

- Transdisciplinary work is also necessary in order to spot inequalities that are rooted in social and cultural norms (and therefore considered "normal" and not mentioned). The coordination team reflected that this showed in the tensions around firewood in which firewood collectors were accused of:
  - destroying trees,
  - stealing – since firewood collection was actually banned according to KFS,
  - bushfires – since firewood collectors were said to benefit from this

  Firewood collectors turned out to be all women. Local norms dictate that it is the role of women to feed and care for family. The burden of cooking and the risk of being caught collecting firewood is on women. The vision of the firewood collectors to shift to biogas sounded good, however for some women there are major hurdles such as lack land. According to norms, assets such as land are owned and controlled by men. Without a gender lens, the issues of firewood and charcoal would not have emerged as sources of conflict. Fuel-saving stoves (Jikos) entered the vision as a more realistic first step.

- During the "social mapping", mainly family members and relatives were drawn. The coordination team concluded from this that social capital was low and reflected on their role of observing and questioning this, and concluded that it is a role of the team to enable people to zoom out to see the bigger picture.

People need to own the process

- After stage 5 the non-organised stakeholders (firewood collectors, beekeepers, PELIS and grazers) registered themselves as formal groups, enabling them to access government services. The coordination team reflected that this showed the importance of investing in the motivations, capacities and opportunities for people to self-organise. This means starting the process where people are (practically: with their aspirations and their own analysis of their situation) and enabled participants to own the process. Their motivation or behaviour driver is intrinsic and not from external pressures. This is fundamental for change.

- The coordination team and staff of Egerton University reflected on this in the light of the entire Nakuru Living Lab, and planned to reach out to other innovation cases to try and replicate the process with them. It helped to clarify some **roles of the Nakuru Living Lab** to facilitate multi-stakeholder collaboration in a way that it empowers disadvantaged groups to engage with powerholders.

Adaptive planning needed for workshops and activities

While the RIFS principles can universally be used to support the process, the sequence of workshops, activities and tools used always needs to be adapted to the context. For example, in stage 2 the coordination team observed that the first individual vision drawings by disadvantaged stakeholders

Figure 31: Example of an individual vision (top right circle) of a beekeeper, showing mainly assets (beehives, smoker, scale, suit etc.)

mainly focused on assets they would like to have. The coordination team reflected that this could be caused by strong local social norms and customs, and a lack of awareness that social relations and inequalities can change over time. Participants could reflect on what they like and dislike about their identity (using a diamond tool) before they start the visioning process.
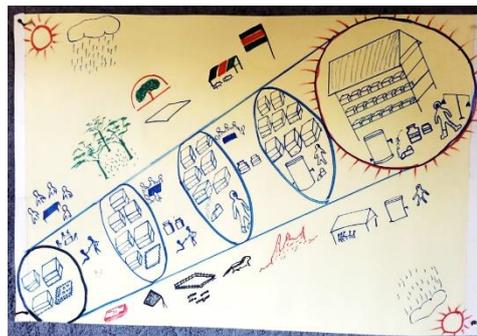
References

Bray R. De Laat M., Godinot X. Ugarte A., Walker R. The hidden dimensions of poverty. International Movement ATD Fourth world, Pierrelaye

Brouwer, H. and Woodhill, J. (2019). The MSP guide: how to design and facilitate multi-stakeholder partnerships. Wageningen UR, Centre for Development Innovation. 3rd edition

Béné, C., (2022). "Why the Great Food Transformation May Not Happen – A Deep-Dive into Our Food Systems' Political Economy, Controversies and Politics of Evidence." World Development 154: 105881. doi:10.1016/j.worlddev.2022.105881.

Burkhard, B., F. Müller and A. Lill (2008). Ecosystem Health Indicators. Encyclopedia of Ecology. S. E. Jørgensen and B. D. Fath. Oxford, Academic Press**:** 1132-1138.

Coninx Ingrid, De Rooij Bertram, Dijkshoorn-Dekker Marijke, Eunice Likoko, Eweg Annemiek, Harding Tossa, Koopmanschap Esther, Mekonnen Daniel, Reemer Thies, Van Alphen Monica, Zeinstra Thamar. (alphabethical order), (2022) Forthcoming. *Just transition: Towards an operational framework: evidence from science to work towards operational guidance,* Wageningen, Wageningen Environmental Research, Reportde Steenhuijsen Piters, B., Termeer, E., Bakker, D., Fonteijn, H. and Brouwer, H. (2021). "Food system resilience. Towards a joint understanding and implications for policy." Wageningen Economic Research. https://edepot.wur.nl/549246

GIZ. 2017. Poverty Targeting premier: Concepts, Methods and Tools. Bonn, 2007.

FAO (2019). TAPE Tool for Agroecology Performance Evaluation 2019 – Process of development and guidelines for application. Test version. Rome

FAO- ITPS (2020). "Intergovernmental Technical Panel on Soils. Towards a definition of soil health. Soil Letters no. 1. Available at: https://www.fao.org/global-soil-partnership/itps/itps-soils-letter/en/

HLPE (2020). "Food security and nutrition: building a global narrative towards 2030. A report by the High-Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome."

Hölscher, K., Wittmayer, J., Loorbach, D., (2018). Transition versus transformation: What's the difference? Environmental Innovation and Societal Transitions, Volume 27, Pages 1-3, https://doi.org/10.1016/j.eist.2017.10.007.

IFAD. 2019. Revised Operational Guidelines on Targeting. EB 2019/127/R.6/Rev.1. Rome, 10-12 September 2019

Ifejika Speranza, C., Wiesmann, U. and Rist, S. (2014). "An indicator framework for assessing livelihood resilience in the context of social–ecological dynamics." Global Environmental Change 28: 109-119.

Jacobi, J., S. Mukhovi, A. Llanque, H. Augstburger, F. Käser, C. Pozo, M. Ngutu Peter, J. M. F. Delgado, B. P. Kiteme, S. Rist and C. Ifejika Speranza (2018). "Operationalizing food system resilience: An indicator-based assessment in agroindustrial, smallholder farming, and agroecological contexts in Bolivia and Kenya." Land Use Policy 79: 433-446

Kabeer, N. (2000). Social Exclusion, Poverty and Discrimination: Towards an Analytical Framework. IDS Bulletin, 31(4).

KIT, Agri-ProFocus and IIRR. 2012. Challenging chains to change: Gender equity in agricultural value chain development. KIT Publishers, Royal Tropical Institute, Amsterdam.

Mang, P., B. Haggard and Regensis (2016). Regenerative Development: A Framework for Evolving Sustainability, John Wiley & Sons, Ltd.

Mang, P. and B. Reed (2020). Regenerative Development and Design. Sustainable Built Environments. V. Loftness. New York, NY, Springer US: 115-141

Mayoux, L. and Oikocredit (2018). Bridging the gender gap in responsible finance. Tools 3 Happy Family Tree. Facilitation Notes. https://gamechangenetwork.org/wp-content/uploads/2018/03/Oikocredit_2_HappyFamilyTree_FacilitationNotes.pdf

Mayoux, L. and Oxfam Novib (2014). Rocky Road to Diamond Dreams: GA:S Phase 1 Visioning and catalysing a gender justice movement. Implementation manual, v1.0 March 2014. Oxfam Novib.

Narasimhan, T. N. (2009). Hydrological Cycle and Water Budgets. Encyclopedia of Inland Waters. G. E. Likens. Oxford, Academic Press: 714-720.

Oxfam International (2018). Transformative Leadership for Women's Rights, lessons and recommendations from Oxfam's experience. Oxfam research reports.

Oxfam Novib (2014). Gender Action Learning System: Practical guide for transforming gender and unequal power relations in value chains, Phase 1.

Reemer, T. and Makanza, M., (2015). Gender Action Learning System: Practical guide for transforming gender and unequal power relations in value chain, Phase 2. Oxfam Novib.

Regenesis Institute TRP (Practitioner series) 2022, https://regenesisgroup.com/TRP-Registration

Robertson, D. M., H. A. Perlman and T. N. Narisimhan (2022). Hydrological Cycle and Water Budgets. Encyclopedia of Inland Waters (Second Edition). T. Mehner and K. Tockner. Oxford, Elsevier: 19-27.

Schulte, R. P. O., R. E. Creamer, T. Donnellan, N. Farrelly, R. Fealy, C. O'Donoghue and D. O'hUallachain (2014). "Functional land management: A framework for managing soil-based ecosystem services for the sustainable intensification of agriculture." Environmental Science & Policy 38: 45-58.

Sen, A. (2002). Rationality and Freedom, Harvard, Harvard Belknap Press; and Sen, Amartya (1999) Development as freedom, Oxford, Oxford University Press

Secco, L., et al. (2020). "Evaluation Manual. Innovative methods to assess social innovation and its impacts in marginalised rural areas. SIMRA Project, available at www.simra-h2020.eu."

ShiftN. (2016). Global food system map [slide] retrieved from https://www.slideshare.net/pvandenbroeck/global-food-system-map-57053271

Shu-Yang, F., Freedman, B. and Cote, R. (2004). "Principles and practice of ecological design." Environmental Reviews 12(2): 97-112.

Sundkvist, Å., Milestad, R. and Jansson, A. (2005). "On the importance of tightening feedback loops for sustainable development of food systems." Food Policy 30(2): 224-239.

Tribaldos, T. and Kortetmaki, T., (2022). Just transition principles and criteria for food systems and beyond. Elsevier Environmental Innovation and Societal Transitions 43 (2022) 244-256

UNDESA (2016). Leaving No One Behind: the imperative of inclusive development. Report on the World Social Situation 2016. UN Department of Economic and Social Affairs. ST/ESA/362

UNDP (2018). What does it mean to leave no one behind? A UNPD discussion paper and framework for implementation.

UNSDG, (2019). Operationalizing Leaving No One Behind: Good practice note for UN country teams. United Nations Sustainable Development Group

Whitehead, J. (2009). "Generating living theory and understanding in action research studies." Action Research 7(1): 85-99.

Young, I. M. (1990). Justice and the Politics of Difference. Princeton: Princeton University Press.

Annex I: RIFS Principles - Examples

Principle 1- Sense of Place and Purpose

As an example from Mang et al., 2016 (this is to inspire you to think of your own or more relevant example)

"Knowing and loving your village [can help in] interpreting its collective dream" – Jamie Lerner
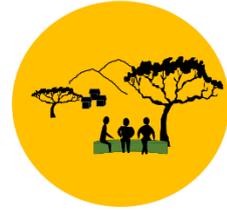
The city of Curitiba in Brazil, is an example of how sense of place and purpose can come together. As a young architect Lerner used to meet every morning with his associates in the architecture and planning departments to discuss about the city they grew up in and loved. Through these discussions the great potential for the city was identified. When he was elected Mayor in the 1970s Lerner and his associates understood the power of a collective vocation. In other words, getting people to come together and dedicate themselves to helping a place, live up to its true potential and in doing so making a better quality of life for all involved including nature. So instead of building concrete canals to reduce flooding they built a series of interconnected parks to make the city more liveable and to support nature and peoples connection to nature. It also helped to try and keep the temperatures within the city cooler. It is one of the most forested cities in the world. Cars were prohibited from the city centre, to make it a space for people, not cars and they built a cheap and clean transport system to help people move easily around the city. They also encouraged a culture of recycling. These are a few examples of what was developed, but more importantly the people there developed a deep sense of pride and an increased civic spirit. Understanding the place where we live and imagining what the potential of this place[18] and our role in this can give us a sense of purpose to care for this vision and to support its growth.

Principle 2 - Socio-Ecological design for Innovation

As an example...(this is to inspire you to think of your own, or more relevant example)"

We are alive because nature is alive. And if we look after it, it looks after us just the same. So, nature is what we have. We are living it, but it's accommodating us"-
Susan Nakacwa[19]

Designing with socio-ecological[20] aspects in mind can lead to many innovative ways of doing things. For example, a simple building can be transformed into a living system. Take a simple primary school which can harvest rain from its roof, generates energy from solar panels and a small mini digester fed with wastes from the school. These digested wastes are used as fertilisers in the school garden which is designed to provide lunch to the school children. The school children are shown how to be responsible and care for the soil and the garden and in turn learn how to cultivate and grow their own food. Any surplus fertilisers or food produced by the school can be sold to the local market, helping to raise some money for necessary school supplies. The children are taught how to be innovative while respecting nature and see also how innovations, either simple or more complex, can be used to enhance their quality of life and that of the surrounding community. The school has such a lovely garden that the local community now come there to hold meetings and gatherings. Such a school is no longer simply a building where children go to learn simple lessons, it has become a living system of learning, it has become a centre for the community and a living system with potential for evolving and developing further. Principle 3: Building connections

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[18] "In all of our projects, we begin by developing a Story of Place: a research-based understanding of how a place works and what it strives to contribute to the world. The process that we bring to this work derives its power from our ability to discern the ecological patterns–the stories of geology and hydrology, flora and fauna–that gave rise to the cultural patterns that those that live in the place know deeply, live with daily, and joke about with each other. In scientific data, historical records, ancient legends, regional arts, and kitchen-table. conversations, Regenesis finds those patterns that reveal the timeless essence of a place and its whole living community. When a place's essence is articulated clearly and concretely, it becomes possible to design, develop, and plan for the future at an entirely new level. (Mang, Haggard et al. 2016)

[19] Susan **–** A journalist by training, her passion lies in researching, documenting and making the case for smallholder farming in Africa, which she believes is the best way forward. Susan joined GRAIN in 2017, after working with several regional civil society organisations in Africa. Based in Kampala, Susan works with GRAIN partners across the continent, especially on issues like seeds, land grabs and trade policy. Source[https://www.bilaterals.org/?fighting-for-food-sovereignty-in]

[20] This means that people are part of nature, so you are designing with both in mind. Nature is a stakeholder sitting at the table. Example is taken from the TRP training guide 2022, Regenesis Institute

Principle 3: Building Connections

As an example...(this is to inspire you to think of your own, or more relevant example)

The word "companion" comes from the Latin *"Com panis"* , meaning with bread" – with the power of food or sharing food, this can create links with people to share stories and build trust, something that may not happen otherwise – (G. Monbiot). In one particular youth club in England, the volunteers noticed that many of the children that came to the club were in bad moods and appeared to be hungry. So the volunteers grouped together and fund raised to start supplying the children with a solid meal every day. This gave them the opportunity to also talk with the children to find out what was happening in their lives. They found that while eating dinner the kids would open up and talk, the volunteers could connect with the children and build trust in ways that would otherwise not be built. This also helped them to also understand better, many of the challenging underlying social issues the children were facing. It is perhaps something small, but the connections built in and around that youth centre was a lifeline for many.
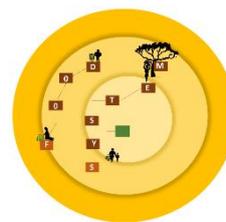
Principle 4: Understanding Just, Fair and Inclusive Transitions

As an example...(this is to inspire you to think of your own, or more relevant example)

There is an "unparalleled social power of food " – George Monbiot

The question posted by Leonida Odongo[21] is " How many Kenyan women can export their food to other countries" . Leonida works with small holder farmers , many of whom are women and are the backbone of African agriculture . In many cases it is the men that buy the inputs for the farm, such as seed, because they control the money. The jobs that are done in between the harvesting, planting, seeds storage, weeding, all of those are done by women, which are thankless jobs, and which are not recognised. When trade agreements are being signed, they say the voices of women are not being heard , as many of the women Leonida works with do not know of such agreements or are not consulted. This is a good aspect of lack of voice and marginalisation of some of the most important workers within these supply chains. There needs to be an understanding of the different layers and the different communities and the different contexts that are involved in food systems. It cannot be assumed that because there is maize in that garden that I am food secure. No, I'm not. Because what I define as food is very different from what somebody else defines as food[22].

Principle 5: Understanding Design for Renewal - It's a living Process
As an example...(this is to inspire you to think of your own, or more relevant example)

Susan Nakacwa, recognises the resilience of indigenous seeds, as they are context specific, they regenerate or evolve based on the difficulties they are facing. If a farmer sees that a seed didn't do well you can exchange with a neighbour or next village and they can be tried elsewhere, this is the idea of a seed exchange, people working with nature to find what can work, observing, doing, trying and adapting. Learning by doing and sharing that knowledge with each other in different ways, building communities through sharing and building regenerative properties into the food system. It builds hope and renewal and starts from a place of potential, not problems. Action Learning – is a living process (Whitehead, 2009).

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[21] "Leonida is an activist and educator working on agroecology, feminism, human rights and social justice, based in Kenya. Next to engaging in technical, legal and political education with rural communities and grassroots organisations, she also plays an active role in the Alliance for Food Sovereignty in Africa (AFSA), the World March of Women Kenya and Africa and the Civil Society Mechanism of the Committee on World Food Security. Leonida currently coordinates the activities of Haki Nawiri Afrika, an initiative advancing social justice among university students, smallholder farmers and communities negatively impacted by climate change" – description of activist found on Podcase website: https://www.bilaterals.org/?fighting-for-food-sovereignty-in

[22] Partial transcript of podcast "Fighting for food sovereignty in Kenya and Uganda, available at: https://www.bilaterals.org/?fighting-for-food-sovereignty-in

Annex II: Reconnection Tree

During the pilot process with the Nakuru Living Lab and MCFA in particular, a tool was tested with representatives of stakeholder groups who live around Menengai and who make use of its resources. The tool is a visual diagram of a tree, which participants construct with drawings. It was inspired by the Gender Balance Tree (see Mayoux and Oxfam Novib, 2014 or Mayoux, 2018) that looks at the balance between women and men in a household.

Purpose: to support people in reconnecting to the place and nature around them – the places where they live. It is to raise awareness that we are all part of a living system and our closest connection to this, is the place where we live. It is in the place where we live that we can start taking responsibility for our actions and care for the nature around us - to reconnect. This is one of the most powerful tools for collecting evidence for the baseline.

Steps of the ReConnection Tree

2) **Draw the trunk** of the tree: Symbolise your connections with the place: natural environment and people around you. (think of role play, asking for traditional songs of the place etc)

3) **Draw the roots** of the tree:
- Left root: what are activities you do to bring food to you and your family? (colour code activities by women and men)
- Right root: what are the activities you think Menengai (the natural place around you) does?
- What are activities you and Menengai do? (people and place)

4) **Draw the branches**: reflecting on the activities by people and place, what are the impacts of these activities?
- impacts on people: left branch.
- impacts on Menengai: right branch
- impacts on people and place: middle branch.

5) **Review the impacts** compare the impacts in relation to the activities and indicate disbalance. If there is a disbalance, what is pushing the tree to bend? Draw structural issues next to the trunk.

6) **What do you / we want to change?** Draw smiley faces of activities and impacts we want more of. Cross out activities that are harmful and you want to stop.

Figure 32: individual drawing before discussion

7) Discuss **conclusions and action steps** and insert these in the vision journey.

The figure below shows the output from the session. Step 4 to 6 were only discussed briefly, not drawn on the diagram, due to lack of time.

Impacts to FOREST

-Motorbike tracks in forest cause erosion
-Pestices
-Cows destroy soil with hooves
-Cows and goats eat everything even new plants
-People remove wood
-People cause forest fires
+Through PELIS we take care of trees

Impacts to BOTH

+get compost
+cows prevent too much grass and forest fires
+People fight fires
-Cows get stolen in forest

Impacts to PEOPLE

-Wild animals eat our maize
+get grass/maize to feed cows and get milk/meat / hides
+ earn money from farming
+find self-employment, reduce crime, pay school fees
-rising accidents motorbikes
+can carry firewood on motorbikes and get away fast
+get food
+MCFA/KFS get $ for grazing -> social fund for school kids.

Step 3: draw branches showing impact of activities on people, forest and both

Step 4: Review activities vs impact: disbalance ? Draw what is pushing the tree to be out of balance.

Step 5: indicate ☺ for things to increase and ☹ for things to stop or reduce.

Step 1: symbolise the connections between people and place (Menengai Forest)

Step 2: draw roots showing activities by people(blue=♀ , green = ♂), forest and both

MENENGAI (Forest):
-Attracting rain
- Storing water underground during dry season
- Holds the soil
-Protect soil with leaves on ground from getting hot
-Eat from decaying leaves and animals
-Take carbon, release oxygen
-break the wind
-attract wildlife
-drainage

PEOPLE:
-Charcoal production and selling
-Small businesses
-Farming in the forest
-Grazing animals in forest
-Get grass from forest and sell as hay
-Wage labour
-Poultry rearing
-Sell seedlings

FOREST: activities the Menengai forest does to get food

BOTH:
-Forest keeps water, people use it
-Produce seedlings
-Forest gives O2, people give CO2
-Protect soils in forest and farm
-Give home to animals
-Forest bring peace, attract people

BOTH: What the forest and the people do together to get food?

PEOPLE: activities we do as humans to get food

45

Roots: activities by people, forest and both

As shown in the figure above, the three roots show the "Activities we do as humans to get food", "Activities the forest does to get food" and "What the forest and the people do together to get food?". Participants first drew individually on cards and then copied the drawing to the flip chart during the discussion. Some statements from community members present (live translation - Nicole Knorr during the process):

" the forest looks for water to feed itself"

"Sometimes the forest sheds leaves, they become manure which the trees can eat"

" Tree gets carbon from air and makes its own food"

" the tree is able to hold the soil and then it can eat from the soil "

The following was captured with direct translation by Nicole Knorr:

Activities of forest (left)	Both (middle)	Activities of people (right)
• Trees attract rain • Huge canopy of trees water stored underground by taking up the water during dry season keeping it alive • Keeps the soil in place, deep roots • Leaves fall on the ground and can prevent the soil from drying out (stop getting hot) • Trees taking in carbon and releasing oxygen (fresh air) • Leaves become compost, then they become food • Branches of wind act as wind breakers • Attract wildlife, home for many animals, animals die and they become fertiliser • Animals go back to tree and they enrich each other • Drainage of huge puddles	• Rain helps the forest and with us it helps the crops • More trees helps the forest and us • Trees provide seedlings and this helps us the income in tree nursery • Collect water and store it and can use it when the crops need it and as a human person we give it to the ground • Trees give out O2 then as human beings we give the tree CO2 • Humans are protecting it and at the same time earning a living • Just as the trees protect the soils in the forest, the farmer protects the soils in their farm[1] • Forests make people feel good In 1994 they used to say that there were devils in the forest and an artist wrote a song about it. The reason was the Echo, there were so many trees their voices use to echo down the Caldera**	• Farming maize, potatoes, vegetables (including PELIS) • Sell labour (construction work, washing clothes, Transport, (motorbikes), Painting , MC at wedding • Fetching firewood • Produce / sell charcoal • Other small business (keeping chickens, selling clothes, cooking mandazis, Selling milk, Selling bottled water, Barber shop • Tree nursery and fruit farming • Building wood • Buy grass from forest and sell as Hay • Landscaping (circular economy)*
* Good farmers put terraces in their farm – they live on a slope – the side of a mountain **Amos told us that " the devils were chased away by the capacity of the people, but they used to believe that the devils came out of the forest and entered people		

For the activities the cards were divided into blue and green for men. The cards were 15 blue and 26 green. Facilitator Peter asked: "Why was much of the work done by men?"

" Men are stronger than ladies"

"In African culture women are in the kitchen, if it had not been for the culture it would have been the same- we are catching up" (reply of one woman)

" what men can do, women can do better"

"Men are envious when women get a job because a woman can do a job much better"

" it's women's responsibility to bring up children and make sure they are breast fed"

"Women are generally weak and there are some things men can do that women can't do"

The road construction work happening at the entrance to the forest – 60% of the workers there are women (*we (the team) visually saw that a large share of the women working there were indeed women*)

MCFA member*: "Culture has influenced the way women are treated, things are changing...for my training on environmental climate change , the trainers were women. The way we have been brought up to treat our mothers and sisters. It is common to regard a woman as having the same status as children... practices of how we look at our women needs to change. If there is a financial crisis at my house culture says a man needs to earn money. We understand in terms of body strength , how women can carry a bag of cement on their backs"...*

Why is firewood not collected by men? – *"if women get caught, they have a better chance of getting away with it"*

Branches: impacts to people, forest and both

The logic used is that the activities by people affect the forest and vice versa and this can be (perceived as) positive or negative. The following was captured with direct translation by Nicole Knorr:

Impacts to forest	Impacts to both people /forest	Impacts to people
(-) motorbike tracks cause erosion (+) growing potatoes – look after trees (+) planting potatoes – they loosen the soil (-) they need to use pesticides (-) cows eat everything, even new plants (+) more seeds for planting (+) waste from maize, helps the trees (+) maize they can't see they give to cows and this means less grazing in forest (+) maize on farm – bees come for nectar and go back to the forest again (-) storms - flooding	(+) grazing- male and female cows - calves (+) milk ($) (+) manure (-) sick cows ($) (+) Hides (+) meat (-) cows destroy the soil with their hooves (+) cows prevent too much grass and reduce fire risk (-) cows will get stolen in the forest	(-) maize in the forest wild animals eat the maize (+) maize feed it to cows -> milk (+) get Maize , sell , get money , get school fees (+) motor bike business- can help them improve the living standard (+) employment they are less likely to do crime (+) motorcycle business makes life easier (-) rising cases of bike accidents – takes a lot of money (health care, missing work) (+) can carry firewood on bikes – and get away fast (+) fight fires in the forest, can get there faster with motorbikes (-) motorbikes are making tracks in the forest – nothing grows there – soil erosion (+) MCFA /KFS get money for grazing-> social fund for school children

Discussion: balancing people and forest

What can they stop – what can they keep ?

- reduce the motorbikes in the forest
- stop grazing in forest -> cows that are zero grazed
- they want to learn how to make Jikos – they know someone in the community who is making them
- they were thankful for the intervention –

" do it for the children"

" care for forest, it will care for me"

" the forest is living and I am living"

We needed to harvest information about their food and nutritional security , their livelihood resilience as well as to start making them aware of Mother Menengai – that the forest is a living thing – that they are part of and have a role to play in coexisting with it and caring for it, so that the forest can care for them too (ecosystem services) , as well as fulfil its role of within the bigger system (Nakuru food system/region).

Peter, the facilitator, kept repeating: **" I am living, and the forest is ...."** (people had to reply – **living**)
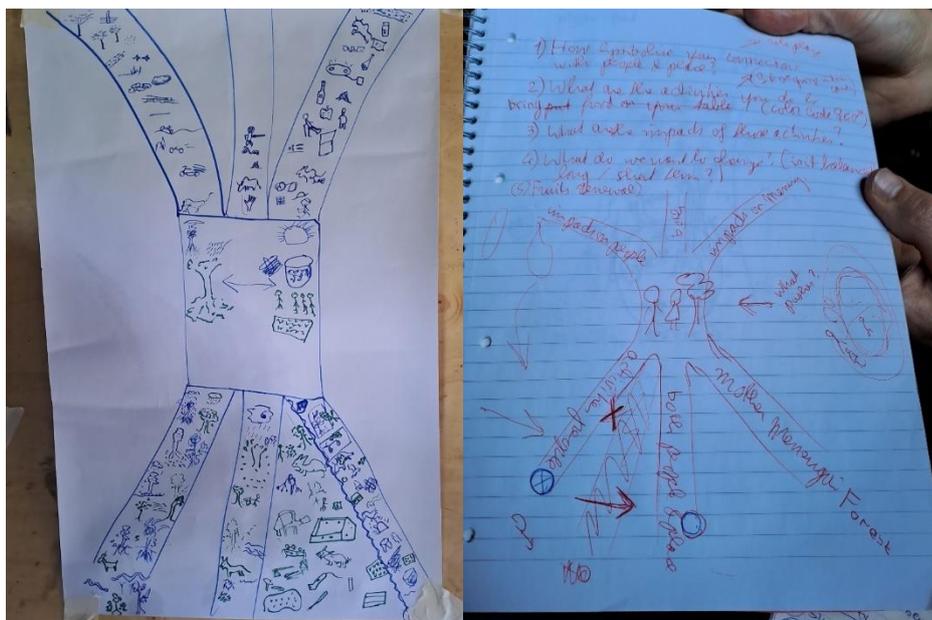

Figure 33: the draft of the tool during reflection session in coordination team the night before (right) and the result of the try-out with a community group until step 3 (left)

Annex III: Results MSP workshop offers and asks

Many stakeholders participated. Prior to the meeting, 6 powerful stakeholders were targeted with offers and asks. Out of these 6, 3 were present in the workshop. The Table below shows the offers and asks prepared by MCFA for the discussion, and the outcomes of the discussion.

Offers by MCFA	Asks to External Stakeholders	Outcomes
Kenya Forest Service		
Firefighting: we keep watch against theft and help fight fires	Review the Forest Management Agreement (FMA) for a more fair share in the revenue distribution	KFS agreed to plan a meeting to further discuss the distribution of revenues with MCFA and to review terms of the Forest Management Agreement
We contribute to pay the scouts and we hep protect the forest	Train more scouts	KFS acknowledged the issue and will consider actions possible
	Update your website about the entrance fee to the forest	KFS agreed to do this, and within a few weeks after the event it was done.
	Prioritise us when you need seedling (buy from our tree nurseries)	KFS indicated that this is only possible when the seedlings are meant to be planted in the Menengai area (not for other forest areas)
	Back up firewood collectors with receipts to prevent them from being arrested	KFS indicated this is not possible since firewood collection is only tolerated sometimes while it is officially banned. Opportunity: carbon credits for people to benefit so they can reduce extracting firewood? Currently no Carbon Credit trade.
Equity bank		
We can make our deposits at Equity Bank	Buy our seedlings to plant	They can arrange to buy all their seedlings from MCFA in their plan to conserve the environment by planting trees. Equity bank will let them know how many seedlings they will need in April so MCFA can prepare for it. MCFA can help Equity Bank by conserving the forest and protecting newly plant seedlings.
	Please provide capacity building	A training on financial literacy can be organised by Equity Bank. Wings to fly Scholarship programme helps to finance student loans to go to high school. The winning students get free secondary school education paid by Equity Bank.
	Upgraded guardrails and the viewpoint	
	(soft) loans	They can offer individual loans or group loans over 1 to 3 years with an interest rate of 11%. Equity Bank will assess the ability to repay. Even with a group loan, every member of the group needs an individual account as well.
	Grants	Grants could be given to MCFA through asset financing (requires 20% self-input) to help with infrastructure (e.g., for beehives or seedling production) after financial literacy training.
County Level Ministry of Agriculture, Livestock and Fisheries & Egerton University, Apiculture		
We will organise ourselves so we are easy to reach, and we will come to you	We need capacity building (cooking programmes, jikos construction)	Capacity building (cooking programmes, jikos construction, organic farming methods)
Exotic cows & Semen for invitro fertilisation	Provide us vaccinations for the cows	
	Provide us modern beehives	Modern beehives
	Financial support?	Subsidized Jikos
	Organise branding of MCFA honey for us	Branding of MCFA honey
		Food tree saplings (avocadoes)
County level Ministry of Environment		(County MoE not present in the meeting)
We provide seedlings of good quality	Please provide capacity building	

We offer labour to plant trees	Small payment for labour	
We offer to collect garbage / waste	Garbage collection equipment and organise where to dump waste	
Geothermal Development Company (GDC)		(GDC not present in the meeting)
Information	Water tanks	
Partnering in conservation	Hospital	
	Electricity	
Media (Safaricom)		(Safaricom not present in the meeting)
We buy credit from Safaricom	Employment	
We will be good customers	Better network/signal in the Menengai area	
We help to protect your seedlings/ trees	Help with planting indigenous trees	
	Buy seedlings from MCFA	
	Construction of modems	
National Government		(not present in the meeting)
Voting for them	Accessible roads	
Conserving nature by planting trees	Markets without interference	
Security in the forest and of trees	Help in capacity building and advise	
	Help in planting more trees in the forest and on the farms (agroforestry)	

Annex IV: Baseline Evidence Results – example from Menengai

In Menengai an exercise was piloted to understand how the observer role of the facilitator team could harvest, collect and collate the information and evidence produced during the multistakeholder process. We wanted to see what was possible and to learn how to do such in combination with the MSP process. The idea was to be a non-intrusive observer and to keep eyes and ears open, all the time gathering information along the concepts and frameworks outlined in the tables below. Furthermore, the information gathering also helped to inform the reflection process and the decision making in which tools to use for the follow up workshops.

The information is organised in the following way.

A table is provided for each of the four major outcome domain which are used to define RIFS: FNS, Livelihood resilience , Ecosystem health and Equality and caring community. These are then divided into key aspects, which have been outlined in the reference studies. The results of the evidence harvesting provided for each of these key aspects. Also provided is a very short exemplary list of characteristics to look for when in the MSP or when visiting different locations.

Long side the observation or recorded evidence the symbols for the associated tool are shown to indicate where the observation or evidence is coming from. These are as follows:

> ➢ *From observations (O)*
> ➢ *Visual inspections (Vi)*
> ➢ *From discussions in Workshops (D) (not directly related to tool)*
> ➢ *Reflections (R),*
> ➢ *Story of Place (SoP)*
> ➢ *Vision journey (vj),*
> ➢ *social mapping (sm),*
> ➢ *offers and asks (OA),*
> ➢ *Reconnection Tree (RT) ,*
> ➢ *PFMP participatory Forestry Management Plan*

It must be noted that at this stage in the process, what will be harvested is qualitative information. However, depending on time, needs of the process and potential skill set of the facilitator team , there is the potential in some cases to look for more quantitative evidence. However, the results of this first phase should also be used as an entry point to help focus energy on what needs more attention from more quantitative scientific research approaches. In this way helping to save time, energy and money. Open questions or answers we did not successfully observe or find out are highlighted in blue.

There were also many lessons learned as part of this pilot and many open questions to follow up on.

Lessons learned:

- Sufficient time needs to be provided for auditing of different locations i.e., visual inspections with a check list
- Auditing tools (e.g., checklist, easy to use in field testing equipment) need to be developed and used to help the facilitator team to capture the biophysical state or condition of the place/community who is involved in the MSP.
- Reflection is an essential part of the process, to bring all the strands of facilitator and evidence collection together. It also helps to remove potential for subjectivity in observations and interpretations of findings.

Open questions

- Grazing and forest: what are the cows going in the forest? What are they grazing on? What is their impact, is it good or bad? What is the nutritional value of the plants they are feeding on? Is there a potential to cross breed this breed with another better cow? Are they contributing to soil erosion?
- Forest condition: What is the condition of the forest – how much is native ? what is the forest structure? Is there a proper planting plan?
- Cropping practices: The cropping practices of Pelis – what kinds of pesticides are they using, how are they applying them and where are they being stored. Is there an opportunity for them to convert to organic ? What kind of cropping system are they implementing – can the yields be improved?

- Land rights and ownership – this is not clear , have they land (those outside of Pelis).
- Energy options and health –how is this affecting their health and the health of their children (what are the average emissions coming from such a stove)?
- Waste management – what kinds of waste are the community producing – is this an option for biogas also – could an energy potential study be carried out for the community?
- Water management – how do they get water ? Are their teeth showing signs of fluorosis ? What do they do when it is too dry /too wet? On the site where we were, there was quite some pieces of litter, Also we provided water for the field – but we found the cardboard boxes thrown across the street in the picture below. So, there is possibly a culture of throwing away. The children in the community helped us to collect the waste and bits of litter.
- Soil erosion The structure of the roads and the sides of the roads – the soil profiles are left exposed – people's fields are probably being washed away. The roads in the forest – they look like the potential to be gullies.

Table 1. Food and nutritional security dimension derived from HLPE, 2020			
Aspects	**Descriptions[1]**	**Example characteristics**	**Observed/Recorded in case study**
Availability	*Having a quantity and quality of food sufficient to satisfy the dietary needs of individuals, free from adverse substances and acceptable within a given culture, supplied through domestic production or imports.*	• Production (producing themselves, produced locally) • People eating a diversity of food for balanced diet (protein, fat, carbohydrates) • Culturally relevant food • Food loss or waste	➢ There seemed to be food available, the community provided the food for the workshops. The food was a "common diet for the community" consisted of sweet potato, Irish potatoes, boiled eggs, bananas, sweet bread and Ugali (from maize). Very carbohydrate rich. *(O)* ➢ People spoke about growing spinach, maize, beans, and about rearing chickens, ➢ but the other kinds of non-starch vegetables or meat that they could have in their diet was not clear *(RT, VJ, PFMP)*
Access	*Having personal or household financial means to acquire food for an adequate diet at a level to ensure that satisfaction of other basic needs are not threatened or compromised; and that adequate food is accessible to everyone, including vulnerable individuals and groups.*	• Physical access to food – that there is food available (e.g., they can grow or get food) – proximity to markets or produce • Affordability of food- people can afford to buy food • Social access to food – even vulnerable people can get food	➢ Most people involved in discussions were small holder farmers – many grew their own food, either on their own land (small plots) or they grew it in the forest under the PELIS scheme *(RT, VJ)* ➢ **It is unclear if financial constraints limited their access to food**
Utilisation	*Having an adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met.*	• People have the means to cook (e.g., energy, facilities) • People have access to fresh water to prepare, cook food • People can store food properly • People prepare food safely	➢ The biggest issue around food utilisation – which links to the forest – is the energy required to cook food. They needed to cut timber or make charcoal – both causing deforestation *(VJ, RT,O)* ➢ Access to fresh water is through water harvesting from their rooves and in one location there is piped water – but what this means for water quality is not clear *(PFMP)* ➢ There could be issues regarding high Fluoride levels in the water? There were signs on the teeth of the people (brown flecks) *(SoP, O)*
Stability	*Having the ability to ensure food security in the event of sudden shocks (e.g., an economic, health, conflict or climatic crisis) or cyclical events (e.g., seasonal food insecurity).*	• Issues relating to climate change (crop losses) • Lack of supply due to other reasons (e.g., conflict, economic crises) • Income variability, loss in earnings for a time • Enough storage/reserves	➢ One issue which might be relevant here is Soil Erosion from the agricultural land and Pelis. There was a situation where there was a mudslide due to Pelis on a steep slope *(SoP, D)* ➢ It is visible to see from the road that farmers are losing their land due to massive erosion losses *(O)*(refer to photo)* ➢ This was not clear the stability of supply and needs to be followed up on.
Agency	*Individuals or groups having the capacity to act independently to make choices about what they eat, the foods they produce, how that*	• Factors limiting choice preference for food • Gender inequalities in the household	➢ Gender balance was an issue which came up, but whether it limited the choices of women or children's food and nutrition in the household was not clear *(RT, VJ)*

	food is produced, processed, and distributed, and to engage in policy processes that shape food systems.	• Lack of knowledge – that people have their own agency (in relation to food) • Bias in government policy, trade deals that affect people on the ground	➢People are very knowledgeable on food and knowledgeable about getting food, but they lacked knowledge on the resources available to help them to improve their FNS (related to the other aspects-energy) *(OA,VJ)* ➢Pelis group were at the Mercy of the KFS for land *(VJ,OA)*
Regenerative practices	People are conscious of where their food comes from, they are conscious that their activities can enhance nature and this is what they try to do, to diversify rather than intensify or to be extractive instead– they also give back.	• Regenerative food production (agro-ecological, organic, no-till methods, etc.) • Use of organic fertilisers and pesticides • Awareness about safe food processing, storage and transport	➢Their relationship with the forest was extractive , they saw the forest as a resource to be mined. However, they did not feel good about this *(VJ-Poem fire collectors)*
1. Definitions derived from HLPE, 2020			

Table 2 Livelihood resilience dimension: Buffer capacity[1] (Adapted from: Ifejika Speranza, Wiesmann et al. 2014 and Jacobi, Mukhovi et al. 2018)			
Aspects	**Definitions[2]**	**Example Characteristics [2]**	**Observed/Recorded in case study**
Diversity *(of crops and breeds, diversity in operations and activities)*	The diversity of crops and breeds on farms, and/or in markets, and/or consumed…. Resilient systems are diverse systems and diversity means that a loss of one resource may be compensated by another	• More than 3 crops of • different varieties adapted to local conditions • Multi-, poly- or inter-cropping. • Different animal breeds adapted to local and changing climate conditions • Farming considering other non-productive species (co-growing with nature) • Have different revenue streams from a diversity of activities	➢ The people seemed to have a diverse set of income *(RT, PMFP)* ➢ Cow species although local , was not a very good breed, as it has very low milk yields , but it seems to be resistant against dieses brought in by the cows of the Maasai *(RT,D -VJ)* ➢ People grew a diversity of crops on their parcels of land, potatoes, maize, spinach, tomatoes, sweet potato…*(RT,PMFP)* ➢ People worked many different types of jobs *(RT)*
Natural capital *(here we look at in the perspective of local scale delivery of resources – extractive*	Natural capital can be defined as the world's stocks of natural assets which include geology, soil, air, water and all living things. Key characteristics : Water, soil, ecosystems, forests, pastures, energy, geology and land.	• Land ownership; soil fertility; • access to drinking water; • access to • irrigation water. • Relationship to natural resources being used, extractive or regenerative • Animals being farmed	➢ Many groups own small plots of land, others are landless (Pelis), it is mostly men who own the land *(VJ, PMFP, R)* ➢ They have access to water for their homesteads, but they don't have water (per se) for irrigating their crops within the forest *(VJ,OA)*[23] ➢ They have an extractive relationship with the forest

[23] Check PFMP

			➢ Many in the workshops seemed to have at least one cow " *where there is a cow there is tea*" – but the actual number of cows we don't know *(RT,VJ)*
processes , below we look more at the systemic level)			
Human capital	The knowledge, information, experience, ideas, skills, and health of individuals. Recently, the definition has assumed a more collective oriented meaning (i.e., the collective skills, knowledge, or other intangible assets of individuals that can be used to create economic value for the individuals, their employers, or their community).	• Family involvement/work in the respective food system activities; • years of experience in the food system activity; education: years of schooling; • skills and capabilities regarding the food system activity; • state of health in the family and • access to healthcare	➢ They were very informed and had a lot of knowledge about the forest and understanding of the trees *(RT)* ➢ They knew about better options for cooking their food, but were limited financially *(RT,VJ, D)* ➢ The worked more manual jobs, washing clothes, building sites (men and women- many women working on the road to forest) *(RT, D)*

Table 2 (continued) Livelihood resilience dimension: Buffer capacity[1] (Adapted from: Ifejika Speranza, Wiesmann et al. 2014 and Jacobi, Mukhovi et al. 2018)			
Aspects	**Definitions[2]**	• **Example Characteristics [2]**	➢ **Observed/Recorded in case study**
Financial capital	Any economic resource measured in terms of money used by entrepreneurs and businesses to buy what they need to make their products or to provide their services to the sector of the economy upon which their operation is based, i.e., retail, corporate, investment banking, etc.	• Income sources related to the food system; • Earning enough to cover their costs • Can they save money • Is it possible for them to get a loan or other financial support	➢ They do " Table banking" , all looking for children's school fees, work many jobs *(VJ, D)* ➢ They were not eligible for bank loans as individuals *(OA)* ➢ It is unclear if they have the opportunity to save money, in most of the visions they had saving in their milestones *(R,VJ)* ➢
Social capital *(this describes the configuration of the connections)*	Networks together with shared norms, values and understanding that facilitates cooperation within or amongst groups. May have "bonding" or "bridging" functions.	• Membership or participation in groups, social networks community/reciprocity mechanisms; • decision-making autonomy and related bargaining power	➢ Low social capital– they had their families all very close and neighbours, community far away *(SM, R)* ➢ As the week progressed there was an increase in social capital , people started to engage more with one another , share information with one another *(O,R)* ➢ They also (2 weeks after workshop) registered in their formal user groups and are intending to hold meetings once a month to try and reach their vision
Physical capital	This can also be seen as human constructed resources (built) or Infrastructural Capital. This refers to the basic physical and organisational structures and facilities (e.g., buildings, roads, power supplies)	• Housing and other installations; • access to inputs, machinery and tools necessary for the system to function; • access to transport, transport networks	➢ Use charcoal stoves for food, electricity(?), Roads very poor , *(VJ,PFMP)* ➢ Toilets are holes into cesspits – how often emptied, issues ?? *(O)* ➢ People were also carrying large water containers –Was source nearby town near football pitch? *(O)*

	needed for the operation of a society, enterprise or area.	• sanitary services: water, electricity, gas, waste manage. • Schools and health facilities	➤ Some had motorbikes and this provided them with a lifeline to earn more money (although it brought health issues along with it -lungs due to bad air quality) *(RT,D)*
Cultural Capital	"Shared attitudes and mores, which shape the way we view the world and what we value. Some aspects are closely related to human and social capitals".	• Cultural events • Minority local languages • Customs /traditions of the location	➤ They expressed themselves in their mother tongue (Kikuyu) when they wanted to really make a point *(all workshops)* ➤ They shared songs with one another, and it was a way for them to communicate effectively to one another *(VJ)* ➤ They spoke about the songs written about the " devils" in the forest [3] ➤ " *Where there's cows there's tea"*- statement during the RT process , having and sharing of milky tea was a way that the community bonded, but it also shows the cultural relevance of cows too in their community.

2. Buffer capacity refers to: Buffering capacity here refers to the capacity of the food system to absorb disturbances (e.g., climate change, policy changes) and cushion change that in a way that can use (Ifejika Speranza, Wiesmann et al. 2014, Jacobi, Mukhovi et al. 2018, de Steenhuijsen Piters, Termeer et al. 2021) "the emerging opportunities to achieve better livelihood outcomes such as reduced poverty"(Ifejika Speranza, Wiesmann et al. 2014)
3. Most definitions and characteristics for the various aspects are taken from (Secco 2020), diversity is taken from the Tool for Agroecological Performance Evaluation (TAPE)
4. Song about the forest: Sammy Muraya – Kia Menengai: https://www.youtube.com/watch?v=zr6nyYbQoyw

Table 3. Livelihood resilience dimension: Self- Organisation[1] (Adapted from: Ifejika Speranza, Wiesmann et al. 2014 and Jacobi, Mukhovi et al. 2018)			
Aspects	**Definitions [2]**	**Example characteristics**	**Observed/Recorded in case study**
Institutions Role	Enforcement of rules and regulations governing land and water use (e.g., applied sanctions for non-compliance?); government encourages collective action (e.g., government support to/partnerships with farmer organisations)	• policies, rules, local norms; • existing rules and regulations governing land and water use • relationships with institutions • Power dynamics	➢ The KFS played a very important role for the people using the forest, particularly firewood collectors *(VJ,OA)* ➢ The Community association was also in a position of power, although it was to represent the people *" we are your parents" (VJ)* . Their symbol was originally a flag and during the week it switched to an umbrella *(O,R)*
Cooperation, Reciprocity and trust *(this describes the relationship of the connections)*	Refer to interactions between actors in the SES resulting in the creation of own rules, norms and values (institutions), building trust and decreasing dependence on external actors for information, innovation and capital	• people recognise themselves as part of a group, are in a group with the other members present • People talking openly – is there a general sense of trust, is there laughter • Number and type of associations, groups, communities where people are members (networks) • Characteristics of the networks people are part of: size, proximity to location,	➢ There were potential points of conflict between certain user groups: Pelis vs Grazers, as cows eat their crops and Grazer vs Pelis as they used pesticides which made their cows sick, Pelis vs Bees – pesticides again , Firewood collectors vs all *(PGtPG)* ➢ People were responsive to one another friendly, if not very open at the start. As the week passed (after Intervention of workshop) they began to trust one another more and open up *(PGtPG,VI)* ➢
Ability to be "Circular" *(reliance on own resources)*	One of the core premises of ecological design is the need to transition our social systems to a greater reliance on renewable resources through recycling, reusing and reducing. We need to be able to mimic the fundamental designs, networks and structures of nature, while at the same time enhance those diverse natural systems in which we will become more dependent on and becoming more aware of ecological feedback (REF)	• Reliance on local resources, short supply chains • Reduced dependency on input and commodity markets • includes indigenous knowledge, biomimicry and more nature-based solutions	➢ The Pelis group were using chemical fertilisers and pesticides for their crops *(VJ, PGtPG)* ➢ Rubbish was visible on the streets and after a workshop we found the packaging thrown into the bush across the road (O) what is the culture of waste management in the community ?- respect for forest**?**

1. Self -organisation refers to how food system actors are capable of having certain levels of autonomy , are free to act (agency), are free to instigate collective action, are independent and decentralised, are self-reliant and are capable of controlling certain food system process and self-regulate themselves in order to ensure the food system is functioning properly. Thus, helping to foster trust and contribute to the empowerment of food system actors (Ifejika Speranza, Wiesmann et al. 2014, Jacobi, Mukhovi et al. 2018). "Self-organisation highlights how human agency, adaptive capacities, power and social interactions shape social resilience" .(Ifejika Speranza, Wiesmann et al. 2014),
2. Definitions come from: (Ifejika Speranza, Wiesmann et al. 2014), " Except ability to be circular" this is derived from the follow sources: 1(Shu-Yang, Freedman et al. 2004, Sundkvist, Milestad et al. 2005, Mang, Haggard et al. 2016),

Table 4. Livelihood resilience dimension: Capacity to learn and be adaptive[1] –(Adapted from: Ifejika Speranza, Wiesmann et al. 2014 and Jacobi, Mukhovi et al. 2018)

Aspects	Definitions	Example Characteristics	Observed/Recorded in case study
Knowledge of threats and opportunities	Ability to perceive and be aware of and analyse, risks, threats/potential opportunities	• Show examples of awareness of potential risks and perceive these risks to be important for them. • Scale at which the risks are perceived (day-to-day risks, local, somewhere else) • Perceived risks/threats are factually also a risk /threat • Can see opportunities from potential changes in their situation	➢ Very aware of the forest degrading *(VJ,RT)* ➢ Aware of the risk of fires – and the opportunities cows present to restrict fires - they say the cows as an opportunity to reduce threat of fire *(VJ)* ➢ See the potential opportunities for changing how they cook their food (changing to jikos stoves) *(VJ)*
Reflective and shared learning	Access to and quality of learning activities; Food system actors proactively create desirable futures based on experience rather than simply react to present conditions	• participation in courses such as farmer field schools; • participation in community development activities (e.g., caring for local area, helping neighbours) and using these skills/learning to help further • commitment to learning • Actively reflect on what they have learned	➢ The MCFA steering committee started the week with a symbol of a flag to represent them, during the week this changed to an umbrella (see above) (O,A) ➢ " *From what I have learned, community is so important, without community there is no forest and without the forest no community. I will be more active in my conservation"-Grazer (VJ)* ➢ " *My people perished from lack of knowledge (bible quote), if we can learn yes we can also adopt it so that the whole community is aware" – Beekeeper (VJ)*
Functioning knowledge networks	Relevant knowledge is being passed along to the right people, knowledge is shared and transparent, the knowledge being shared is helping to create opportunities, build trust and confidence between the various members of the network and it is creating a solid foundation for mutualistic relationships	• Are people sharing information about meetings and opportunities with each other • Are they connected through modes of telecommunications or social media? • Is information being passed on to people not present at meetings	Info gaps
Existence and use of local traditional knowledge	Biological and cultural memory, identity and knowledge embodied in a system and its components. An important factor used here as a proxy is: (1) existence and (2) use of local traditional knowledge.	• Recipes for local dishes • Songs, stories handed down • maintenance of heirloom • combining traditional forms of cultivation with adaptations with new technologies that are beneficial	Info gaps

		• Combining new knowledge sources with more local traditional ones, • consultation and involvement of elders	
Shared vision	All actors /participants have a shared vision in the potential they see for the place they live, for their livelihoods and for the role they can play in achieving their join vision	• Are there differences between social groups in their ability to have and communicate individual aspirations?	"Energy of the community can bring people together -MCFA member"

1. Capacity for learning refers to an adaptive style of management, where previous experiences are reflected upon in context and incorporated into current actions and planning. The capacity to act on can be at the individual level, to multi-actor level (e.g., user groups) or at the system level (Ifejika Speranza, Wiesmann et al. 2014, Jacobi, Mukhovi et al. 2018, de Steenhuijsen Piters, Termeer et al. 2021). Capacity for learning and adaptation is crucial for long term food system resilience and livelihood resilience , as it enables people to also be able to anticipate and buffer against certain shocks. To date many of the discussions on food system resilience have been at system level , with limited attention been given to understanding better the role of the human capacity for learning and adaption " which is at the heart of a resilient food system" (de Steenhuijsen Piters, Termeer et al. 2021)
2. Definitions and characteristics have been derived from the studies of : Ifejika Speranza, Wiesmann et al. 2014 and Jacobi, Mukhovi et al. 2018

Table 5. Ecosystem Health Dimension[1]

Aspects	Definitions[2]	Example Characteristics	➤ Observed/Recorded in case study
Soils /paedology (soil Health)	"The ability of the soil to sustain the productivity, diversity, and environmental services of terrestrial ecosystems" FAO-ITPS (2020). . Schulte et al. (2014), refers to these soil services (ecosystem services) as soil functions, of which they identified five soil functions as being important for agricultural land use. These are: (1)Primary production; (2)Water purification and regulation;(3)Carbon cycling and storage;(4)Functional and intrinsic biodiversity, and (5) Nutrient cycling and provision	• Visible signs of erosion (rills or gullies) • Visible signs of Puddling • Landscape design or activities to reduce erosion (e.g., terraces, cover crop) • Use of compost, manure , organic materials on soil • Soil colour (relative to what it should be) • Reports of soil erosion being a problem • Awareness of how to manage soils	➤ Due to the steep slope of the area, the biggest issue readily visible is soil erosion *(O)** ➤ Crops in local farms – looked very healthy and not too dried out like lower down in valley *(O)** ➤ It is difficult to know about the quality of the soils the people are using or the quality of the soils in the forest. There is a proposal to conduct an EIA – this could be very valuable to provide more biophysical evidence *(PMFP)*
Clean Water/ natural Hydrological systems*	Clean and healthy water is essentially "water that will not harm you if you come in contact with it"[24] The hydrological system refers to a continuous exchange of water among the lithosphere, the atmosphere, and the biosphere.(Narasimhan 2009) . "The concept of the hydrological cycle is quite simple. But its importance to life on earth is profound. The hydrological cycle plays an overarching role in the cycling of solar energy, sediments, and chemical elements vital for life....life is simultaneously a product of the hydrological cycle and a factor causing changes in the cycle". (Robertson, Perlman et al. 2022) "	• Colour and transparency of water body is appropriate (e.g., it is not brown, there is no pearlescent sheen) • Smell in and around the water body is appropriate (e.g., it does not smell of stagnancy) • No visible sign of algae overgrowth in water body • People sick , or reports of people being sick after drinking water • Issues raised about water during discourse • People aware of where their water comes from • Aware of the hydrology of the place	➤ During wet season difficult to use forest *(VJ, wood collectors)* ➤ Difficult to use the roads too (lots of water running down)- mud roads *(D)* ➤ In the sacred caves, there is a source of water (a drip from roof of cave)- this is considered to be holy *(O)* ➤ The issue of fluoride health in the water is also unclear or other potential elements due to the volcanic location ➤ We didn't determine if people understood the hydrological system of their location – we never asked and our SoP was not deep enough to support a more in-depth discussion.
Clean Air/atmosphere	Air pollution is contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere (WHO definition)	• Is it difficult/uncomfortable to breath (e.g., air heavy with exhaust emissions from vehicles, fuel burning) • There are people burning fire or rubbish in the area • There is odour pollution (e.g., strong smells of animal wastes, faeces, rotting wastes, rotten egg smell) • People mention the smells, difficulty	➤ Air quality in Menengai community area was clean relative to the city. The fumes from cars and burning *(O,RT)* timber/charcoal was really strong *(O)* ➤ People wanted to plant more trees, because they knew that trees improve the air quality and they use CO2 *(RT,OA)*

		• They have a knowledge of carbon emissions	
Biota and habitats (Flora and Fauna of a given place)	The plants, animals species and their communities that make up a particular habitat or ecosystem	• The habitat looks degraded (e.g., patchiness in a forest, bald patches in a grassland, poor species diversity then expected) • Few species or evidence of species present (that should normally be present) • People talk about or have observed changes in wildlife	➢ Saw the waste pit of Rock hyrax *(O- sacred caves)* ➢ Many grazing animals inside the forest *(VJ/O)* ➢ Deforestation of native, indigenous tree species *(VJ, OA,O)* ➢ Plantation trees – Eucalyptus *(O,R, PFMP)* ➢ In some places, particularly near the plantations the forest appeared patchy and disturbed *(O)*
1. For definition of ecosystem health see section *2.4* 2. Definitions are derived from different sources and provided in text . WHO definition reported here: https://www.afro.who.int/node/5526.			

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[24] https://healingwaters.org/how-to-define-clean-water/ "Freshwater health" is defined here as the ability of freshwater ecosystems to deliver ecosystem services and benefits, sustainably and equitably, through effectivemanagement and governance. (Vollmer et al. 2018)

Table 6. Equality and caring community Dimension

Aspects	Definitions [1]	Characteristics	Observed/Recorded in case study
Discrimination	What biases, exclusion or mistreatment do people face based on one or more aspect of their identity (ascribed or assumed), including prominently gender as well as ethnicity, age, class, disability, sexual orientation, religion, nationality, indigenous, migratory status etc.?	• People with disabilities, young people or elderly being left out (e.g., left at the back of the group) • People being in the group always being designated the tougher or less appealing jobs • Caring for elderly • People being vocal against others • Bias in the group towards men • Info gap	➢ Some of the women told us about their children, one woman had a disabled child. The government has started programmes to include such children and because of this her child can now go to school and is cared for properly- this made her very happy *(D)*` ➢ Firewood collectors were all women. Caring for the family, including cooking and organising how to cook / collect firewood is considered a women's task. *(O, D, R)* ➢ The firewood collectors were treated with a little condescension from the other user groups (this reduced over the week) *(O)* ➢ Some of the women spoke about applying for jobs in construction and being discriminated against because they were women . One woman told a story about being given a job, but the men had to mix the concrete- that was a man's job *(RT,D)*
Geography:	Who endures isolation, vulnerability, missing or inferior public services, transportation, internet or other infrastructure gaps due to their place of residence?	• Investment in infrastructure (e.g., poor roads, no schools, waste collections) • Investment in education supplies (e.g., school materials)	➢ The community feel that their bad roads, lack of signposts are discriminating them from potential tourist markets, customer markets for their vegetables *(VJ, OA)* ➢ Transport connections could play a role in exclusion of members in MCFA ➢ Waste collection and recycling facilities , other utilities being managed by the local government ➢ Medical centres
Governance:	Where do people face disadvantage due to ineffective, unjust, unaccountable or unresponsive global, national and/or sub-national institutions? Who is affected by inequitable, inadequate or unjust laws, policies, processes or budgets? Who is less or unable to gain influence or participate meaningfully in the decisions that impact them?	• What are the " Rules" , in place – are they fair and just? • Are there forms of conflict resolution? • Have they formal or informal rules that people abide by? • How do socially ascribed identities determine decision making power? • What factors weaken or reinforce social status?	➢ MCFA on paper represents 6 "user groups". At the start only the Tree Nursery and the Eco-Tourism groups were formally registered and held meetings, the others only did so as a result of the process. *(O, D, R)* ➢ Although women are overrepresented in the MCFA membership, they are underrepresented in the MCFA management committee. *(D, O, R)* ➢ During the social and stakeholder mapping, MCFA executive members (chairperson, treasurer and vice, secretary and vice) were indicated as a separate group. The symbol they drew for themselves was a flag, representing authority and government. *(sm, R)* ➢ Firewood collectors are not represented in the MCFA management while they are the most vulnerable group. *(O).* The MCFA members are all from the Nakuru side of

			the Menengai area, while there are other communities on the other side of the caldera and also wealthy landowners who are not involved. It is unclear why. *(O,R)*
			➤ KFS Forester seemed unaware that women are still collecting firewood, while his staff were fully aware and sometimes tolerating. This showed some disconnect between decision makers at higher levels and the people working on the ground. *(O, R)*
Socio-economic status:	Who faces deprivation or disadvantages in terms of income, life expectancy and educational attainment? Who has less chances to stay healthy, be nourished and educated? Compete in the labour market? Acquire wealth and/or benefit from quality health care, clean water, sanitation, energy, social protection and financial services?	• How are poverty and wealth perceived by in the local area? • What aspects determine one's social status? • What	➤ Women are considered "the weaker sex" and discriminated and find it more difficult to participate in the paid economy *(RT)* ➤ Social norms dictate that women bear the burden of collecting firewood amongst many other tasks. Biogas became prominent in the collective vision. Questions remain whether this was pushed by a few, since many women do not own land and animals which are needed for biogas. *(O, D, RT)* ➤ Single women (widows, single mothers) seemed to be less vocal in setting the collective vision than married women. *(O)* ➤ People living with disabilities do not seem to be hidden, however their issues were hardly articulated. It is unclear why *(O)*
Shocks and fragility:	Who is more exposed and/or vulnerable to setbacks due to the impacts of climate change, natural hazards, violence, conflict, displacement, health emergencies, economic downturns, price or other shocks?	• Are there hazardous elements known to be present in the are (e.g. water with high toxicity levels, nitrates) • Is there a potential for extreme climate evens to happen in the area? • Are the community vulnerable to these hazards (i.e. do they have no choice but to drink water, or they do not have adequate dwellings)	➤ The community is vulnerable to heavy rains – making the roads impassable, eroding their farms ➤ They are also vulnerable to crime – due to the low employment rate (they mentioned their concern) ➤ Their cows could be vulnerable to diseases brought in by the Maasai since their cows are not vaccinated ➤ There are no main health facilities near the community – even though visitors to the Caldera sometimes have accidents and need rescuing
1. Definitions taken from : **Leaving No One Behind** (LNOB). The UNSDG – in its guidance how to operationalise LNOB			

Examples of picture evidence

Examples of a) soil erosion observed from the road. The roots of the plants could be clearly seen , as the soil has been washed away b) how the community were managing to divert flood water away from the road by building gullies along the side. It also shows the condition of the road way to the Menengai community. It was a dirt road. (Own photo (big), small photos provided by one of the community members)

Examples of people grazing their animals in the forest. The herder collected them before evening. Goats were also observed within the livestock – although they are forbidden. (Own photos)

Examples of the town where some community members are living. Basic small houses made mostly from iron sheets , stone, mud blocks. Some also had a concrete floor (the PFMP also provided insight into the building materials) (Own photos)

Photographs provided by one of the community members, showing fires in the Menengai forest and Caldera