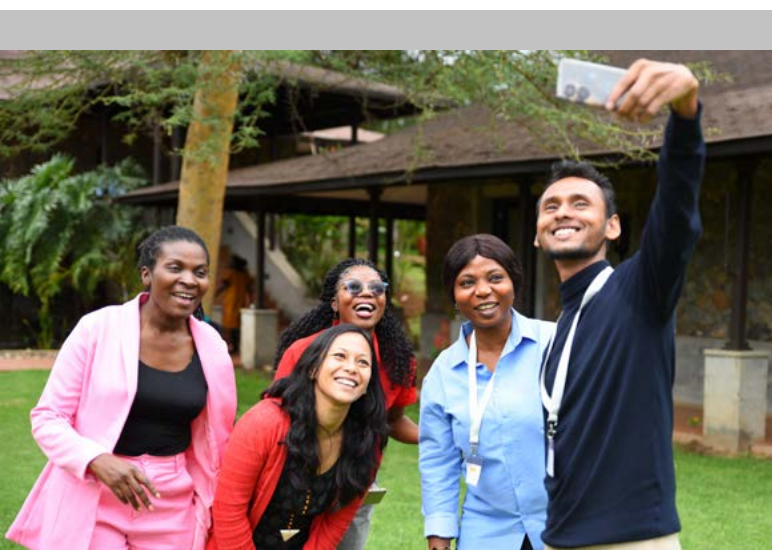




# Facilitating Foresight for Agri-Food Systems Change in Africa

A Leaders Capacity Development Workshop –  
Summary and Lessons Learnt

13<sup>TH</sup> - 17<sup>TH</sup> NOVEMBER 2023, NAIVASHA, KENYA



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# Acronyms

<b>AFCFTA</b>	African Continental Free Trade Area
<b>AFF</b>	African Food Fellowship Programme
<b>CLD</b>	Casual Loop Diagrams
<b>FAO</b>	Food and Agriculture Organization
<b>FARA</b>	Forum for Agricultural Research in Africa
<b>FoSTr</b>	Foresight for Food Systems Transformation
<b>ICCCAD</b>	International Centre for Climate Change and Development
<b>IFAD</b>	International Fund for Agricultural Development
<b>LLA</b>	Locally Led Adaption
<b>MOOC</b>	Massive Open Online Course
<b>MSP</b>	Multi-stakeholder Partnership
<b>SME</b>	Small and Medium Enterprises
<b>SID</b>	Society for International Development
<b>SSA</b>	Sub-Saharan Africa
<b>UN</b>	United Nations

# Acknowledgements

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The initiative was made possible through support from the Mastercard Foundation, as part of a broader initiative on to help foster foresight and systems thinking capabilities in its partner organisations and African institutions.

Insights and messages in this report come from the group of 56 early and mid-career food systems leaders, who participated in the capacity development workshop. (A list of participants is provided at the end of the report.)

Systemic Link Consulting, led by Dr Jim Woodhill, was contracted by the Mastercard Foundation to organise the workshop, and produce the report.

The foresight workshop was facilitated by Jim Woodhill, Marie Parramon-Gurney, Abdulrazak Ibrahim, Bram Peters, Joost Guijt, Riti Herman-Mostert, Wangeci Gitata-Kiriga, and Kristin Muthui. Ayo Ojebode, Carine Uwineza, Chizoba Imoka and Vanessa Bart-Plange from the Mastercard Foundation Research Team have guided and supported the initiative.

This summary report was produced by Jim Woodhill and Kristin Muthui based on the outcomes of the leaders capacity development workshop and background research.

Gosia McFarlane (Butterfly PA) managed the logistics of the workshop. Workshop photography and video recording was provided by Asudi Gitira and his team at Satira Studios. The layout and production of this report was done by Sabrina Trautman and her team at KANDS Collective: [hello@kandscollective.com](mailto:hello@kandscollective.com).

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The information and messages in the document do not necessarily reflect the specific views, policies, or positions of the Mastercard Foundation, Foresight4Food, FARA, AFF or IFAD, nor of the individuals or organisations who participated in the foresight process.

# 01

## Foresight and Leading Change in Food Systems

Africa and the world need to transform food systems to deliver healthy diets in an environmentally sustainable and socially equitable way. A key part of the transformation must also be to create resilience to cope with the increasing pressures and shocks of climate change. Food systems are complex and dynamic with many different stakeholders, each with their own interests and aspirations, so changing them is no simple matter. New and creative ways of thinking and collaborating are necessary to identify and bring about the system-wide changes that are so necessary, and so urgent.

Foresight for food systems change is one approach for helping food systems stakeholders and policymakers to engage in the challenging task of transforming how food is produced and consumed. This requires integrating technical, institutional, and political innovation with a futures outlook, systems thinking, and effective engagement of stakeholders to open up dialogue, shift mindsets, and generate collective action. Leaders, and particularly young leaders, across business, government, civil society, and research, who can inspire and guide systemic change will be vital.

In this context, Foresight4Food, the Forum for Agricultural Research in Africa (FARA), the African Food Fellowship Programme (AFF) and the International Fund for Agricultural Development (IFAD), with support from the Mastercard Foundation, collaborated to host the **Leaders Capacity Development Workshop on Foresight for Food Systems Change**. The workshop was held from 13-17 November 2023 in Naivasha, Kenya. The aim was to develop a cohort and network of young leaders who can apply the foresight for systems change approach in their own working context, to help bring about the transformative changes needed for equitable and sustainable food systems. The workshop sought to equip participants with the understanding, skills, and practical experience to guide and facilitate participatory foresight processes in their own contexts. It brought together 56 young and emerging leaders (aged 18-40), interested in using foresight, scenario analysis and systems thinking in their organisations and fields of work. They came from across government, research, business, and civil society (a list of participants can be found in annex 1).

The workshop was based around the framework of foresight developed by Foresight4Food, and oriented to the specific context of African agri-food systems and associated development issues. The initiative contributes to the Mastercard Foundation’s strategic shifts towards intentional investment in system-wide transformational change processes to better help “economically disadvantaged young people in Africa to find opportunities to move themselves, their families, and their communities out of poverty to a better life.”



## Leaders Workshop Objectives

1. Expand the cohort of young African leaders who can apply foresight to the challenge of transforming food systems.
2. Deepen the understanding of how to lead systems change.
3. Support and inspire participants to apply the foresight for system changes framework in their own work.
4. Expand the African network of foresight for systems change practitioners.
5. Identify options for strengthening the use of foresight in Africa.



## Overview

This report summarises the workshop process and captures the wealth of contributions, insights and experiences that participants shared during the 5 days of the event.

**Overview of the foresight process:** Foresight is a key tool that stakeholders in a system can jointly use to better understand future risks and opportunities, and to accelerate adaptation and learning to be more resilient. It involves anticipating future trends, uncertainties, and risks, exploring solutions and innovations, and creating foresight-backed scenarios to guide transformation processes.



**Foresight application on the Kenyan horticulture sector:** Using the Kenyan horticulture sector as a launch point, participants had the opportunity to reflect on food system trends, challenges and uncertainties that are critical to the future of food systems in Africa and the rest of the world, learning from a diversity of perspectives and experiences of other participants and facilitators, as well as field visits to horticulture companies, farms and markets in Naivasha.

**How people can apply foresight in their own context:** Participants used the workshop as an opportunity to develop their own foresight initiatives, reflecting on how they would apply tools and processes they learnt about in their own context after the workshop.

**Moving the agenda forward:** Participants were able to begin forming networks, groups, and other channels to maintain communication and foster collaboration into the future, expanding a network of foresight for systems change practitioners across three continents.





## A Rich Diversity of Participants

**Geographic diversity:** The young leaders came from 14 different countries across Africa, and were joined by colleagues from Bangladesh, Jordan, and Nepal (who are involved in the Foresight for Food Systems Transformation (FoSTr) Programme in those countries). This enabled rich discussions about the diversity of food systems and the unique challenges faced in different local contexts.

**A mix of experience and expertise in foresight:** The workshop included highly experienced foresight and systems change practitioners, along with those who had more recently started applying the approach and others just starting to explore the value of foresight. With this mix there was lots of sharing and learning as well as deeper discussion about the theory and practicalities of applying foresight for systems change.

**Representation from across the food system:** Participants came from a wide range of sectors, including young entrepreneurs, farmers, input suppliers, academics, policy makers and development practitioners from NGOs. This allowed for wide reaching conversations on the future of food systems from diverse perspectives, and good insights into the future challenges opportunities facing different actors.

**Training the world's future researchers:** The workshop also had a strong representation of academic researchers and university lecturers, who were particularly interested in understanding how they could integrate foresight and systems change thinking into their research methodology, and educational curricula.

This diversity of participants led to enriching and insightful conversations and reinforced the value of networking and the learning potential of bringing together people from different geographic, cultural, and professional backgrounds.







## WORKSHOP CASE STUDY

### The Horticulture Sector in Kenya

To ensure the workshop sessions were practical and grounded in reality, the Kenyan horticulture sector was used as a case study. Given the growing calls for healthier diets based on greater consumption of fresh fruit and vegetables, a focus on this sector was seen as highly relevant to the wider challenges of transforming food systems.

The Kenyan horticulture sector is one of the most dynamic in Africa, contributing 26 percent to Kenyan agricultural GDP and ranking second in forex earnings after tea. Concentrated in the Rift Valley and around Kenya's capital, the sector directly employs 6 million and benefits 3.5 million indirectly, with small-scale farmers contributing 50 -60 percent of production (Mitullah et al., 2016). As a critical sector for both income and employment, the horticulture sector is emblematic of many trends, challenges, and uncertainties facing African food system actors.

Rooted in pre-world War-II, the sector rapidly expanded in the 1970s thanks to foreign investments and favourable export markets, experiencing a golden decade from 2000 to 2010. However, due to a confluence of external factors such as the global financial crisis, competition, rising transport costs, and unfavourable domestic policy, it is becoming clear to stakeholders that creative solutions are needed to spark new growth and weather increasingly volatile global markets.

Like other food systems, the horticulture sector consists of a multitude of stakeholders, including small-scale farmers, large-scale, vertically integrated farms using cutting-edge technology and research, a wide variety of agro-processing firms that employ millions of Kenyans, national and county level policy makers, and regulators, often with conflicting policy and revenue objectives. Revitalising the sector requires creative thinking, collaboration, and critical thought on food system outcomes – especially considering changing consumer demands, with increasingly exacting requirements on healthy, sustainable, and ethically produced food, and the necessity of transforming production systems to ensure that they are more environmentally sustainable and resilient. Opportunities exist, such as a growing domestic population that remains an untapped market

for their products (95 percent of output is exported) and increasing collaboration with Small and Medium Enterprises (SMEs) and smallholder farmers to overcome land shortages. However, serious headwinds, such as ensuring competitiveness in a global market increasingly crowded with new entrants, as well as enhancing resilience to climate change to manage costs and ensure the long-term viability of the sector need to be addressed as well (Heher & Steenberg, 2021; KNBS, 2022).

# QUESTIONS

Many of these dynamics are familiar to food systems actors across Africa and other parts of the world, and thus the horticulture sector provided a familiar but interesting case study for the participants, allowing them to reflect critically on African food systems trends, challenges, and uncertainties. The case study was also used to spark conversation and reflection on key directions for change in food systems, in particular:

- How can food system actors promote healthier consumption?
- What would it take to increase equitable opportunities for SMEs and smallholder farmers?
- How can firms, farmers, and regulators work together to ensure competitiveness in the global market?
- What does environmentally and socially responsible horticulture production look like in practice?



# 02

## The Challenges and Opportunities for Transforming Africa's Food Systems

Food systems have usually been conceptualised as a value chain, or a set of activities ranging from production through to consumption (Posthumus et al., 2018). However, a food system approach looks beyond the food value chain and considers the outcomes of all activities in the food system, including poverty reduction, dignified, and fulfilling work, social welfare, and food security, which is critical to meeting the United Nations (UN) Sustainable Development Goals (FAO, 2022). Understanding the complexities and dynamics of food systems is essential to activate sustainable change to “outsmart” vested interests, hidden agendas, and conflicting objectives, and trade off short-term unsustainable achievements for longer-term sustainability, resilience, and inclusivity (FAO, 2020).

Africa's agri-food system has been growing and transforming rapidly over the past three decades in Sub-Saharan Africa. This transformation is driven by rapid urbanisation and the emergence of regional and secondary towns, a growing population with more income to spend on food, rapid technology changes transforming how we live, work,

and communicate, evolving institutions, an increasingly uncertain geopolitical context, and climate change (Muthui & Woodhill, 2023). In response, the food system is increasingly characterised by:

- An emerging duality within the producing sector, with a majority of farmers operating very small farms for their own consumption, and a smaller proportion of medium to large firms that are increasingly positioned to feed the continent's booming population (Lowder et al., 2016; Woodhill et al., 2022)
- An increasingly robust and dynamic wholesale and distribution sector, with the growing importance of small and medium regional towns that act as important nodes in the agri-food supply chain, moving growing food from rural producers to urban consumers (Reardon et al., 2015).
- A dynamic and diffused processing sector, as both people in rural and urban areas increase their consumption of purchased food. This has resulted in the growth of largely informal food processing, preparation,

and retailing enterprises, particularly in urban areas, with many young people and women making their livelihoods in this sector (Diao et al., 2018; Reardon et al., 2021).

- A supermarket revolution yet to emerge, with enduring dependence on informal retail outlets and markets, despite the rapid emergence of domestic supermarkets in urban areas in recent decades (Barret et al., 2022).
- Widespread and entrenched dietary transformation, with a growing reliance on prepared food at all income levels, both in rural and urban areas. However, despite significant dietary diversification away from basic starches and higher consumption of vegetables, fruits and animal protein, hunger, undernutrition, and micronutrient deficiencies remain prevalent, particularly in rural areas (Popkin et al., 2020).
- Growing density of intra-African trade, with informal cross-border trade playing an increasingly important role in ensuring food security, particularly in times of crisis and uncertainty, such as during the COVID-19 pandemic (Liverpool-Tasie et al., 2021).
- Informality as a defining feature of the agri-food system, with a significant proportion of micro, small, and medium food processors, distributors, and retailers operating as unregistered enterprises (Vorley, 2023).

For a detailed analysis of Africa's agri-food system, please refer to the [Optimising Opportunities for Youth Employment in Africa's Agri-Food System](#) discussion paper.



## Some Key Facts and Figures on Africa's Food System

- The agri-food sector is critical to low-income countries in Africa, contributing 40 -50 percent of GDP (AGRA, 2019).
- The agri-food sector is dominated by SMEs, which account for up to 90 percent of businesses in the agri-food sector, supplying over 60 percent of all food consumed in Sub-Saharan Africa (Reardon et al., 2019).
- Food supply chains are expanding rapidly in Africa, with volumes increasing six to eightfold over 1970-2010, with most of the increase occurring in the past 20 years (Reardon et al., 2015).
- Healthy diets are unaffordable for an estimated three billion people around the world – there is a wide gap between the price of a sustainable, healthy diet and existing ones (Herforth et al., 2022).
- 20 percent of small-scale farmers with 1-2 hectares of land produce the bulk of commercially available food in low- and middle-income countries, with the remaining 80 percent producing for their own consumption or sale in local markets (Woodhill et al., 2023).
- Food supply is largely domestic, and import dependence is limited to a few important commodities – although 60 percent of rice and most of wheat are imported, they account for only 2.5 percent of all food consumption in tonnage terms (Liverpool-Taise et al., 2020).

# 03 The Foresight for Systems Change Framework

The workshop was based around the framework of foresight for systems change (Figure 1) developed by Foresight4Food, and oriented to the specific context of African agri-food systems and associated development issues.

The framework links a participatory process of stakeholder engagement with a strong scientific evidence base, including the use of computer-based modelling and data visualisation. The approach translates into a process of seven key steps. Each step integrates tools, such as stakeholder analysis, brainstorming, developing rich pictures,

systems mapping and modelling, causal loop diagrams, scenario development, visioning, or theory of change analysis.

Central is understanding how different stakeholders “see” the system they seek to transform. The approach starts by understanding the actors in the system – their actions, values, and interests – and their motivation for engaging in foresight. It maps out and examines how social, technical, economic, environmental, and political (STEEP) factors interact within a defined system, and how the system is influenced by the power dynamics between different actors.



Figure 1: The Foresight4Food Foresight for Systems Change Framework

To guide the understanding of food systems, the foresight framework makes use of the conceptual model of a food system illustrated in Figure 2. This illustrates the key activities of a food system which give rise to food system outcomes and that food systems are changing in response to set of drivers. The model also illustrates how food system activities, and the behaviour of food system actors, are shaped by the institutional environment and supporting services.

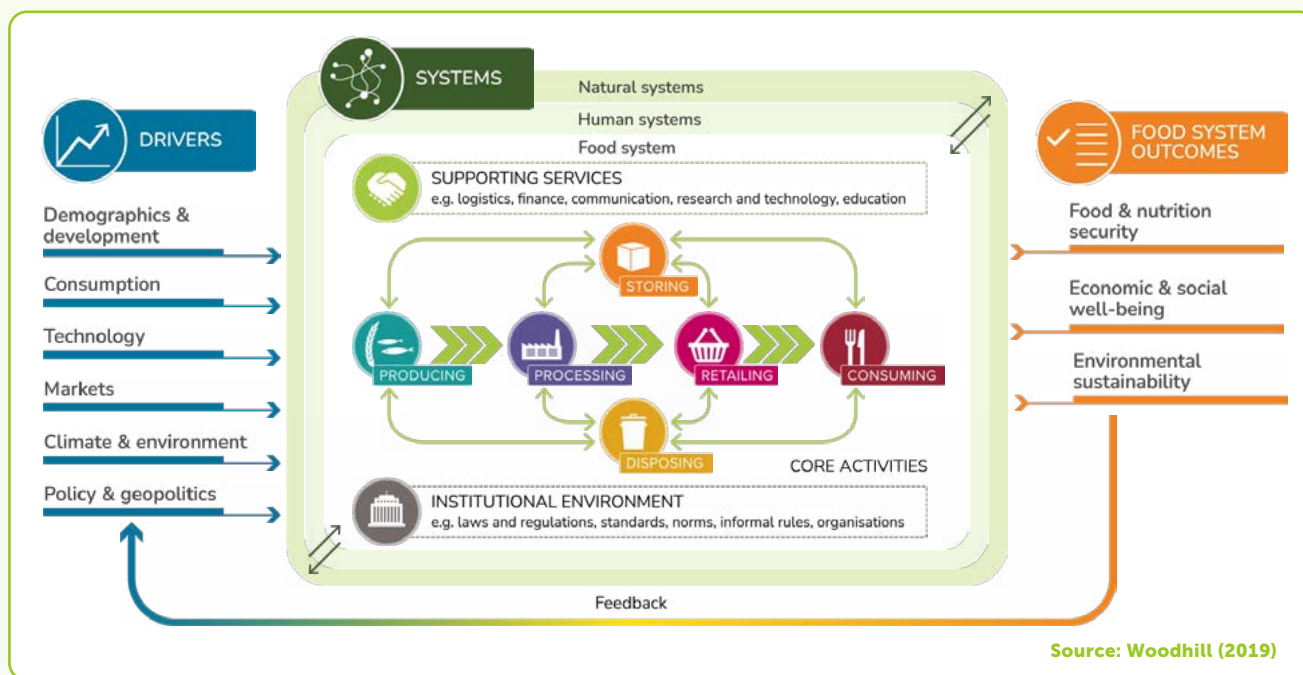


Figure 2: Conceptual model agri-food systems.

The systems framing guides participants through identifying and assessing the key drivers, trends, and uncertainties which will influence how the system may evolve in the future. This analysis provides the basis for developing alternative future scenarios for the food system. The approach generates much dialogue between stakeholders about their assumptions on how the future may unfold and what this implies for their visions and aspirations. The scenario development provides foundation for exploring what directions for systems change would be in the collective interest and how trade-offs or synergies between the specific interests of different groups can be best managed.

The Foresight4Food framework integrates four elements:

- A futures orientation that invites stakeholders to develop a longer-term perspective on how the future may unfold and what this means for the decisions needed today to avoid future risks and build resilience into our systems.
- Ways of thinking about how change happens and how complex systems can be nudged in desirable directions – by linking theories and schools of thought on systems, complexity, socio-technical transitions, wicked problems, anticipatory governance, cognition, and human bias.

- Practical methods from strategic foresight, scenario planning, multi-stakeholder processes, soft systems analysis, and theory of change.
- Participatory tools for analysis and group facilitation, which enable participants to collectively analyse situations and data, create scenarios, engage in dialogue and critical conversations, build trust, and generate pathways of action.

The framework offers a flexible template of steps into which a range of foresight, scenario, and systems thinking methodologies and tools can be integrated. In reality, any foresight for system change process will be iterative, moving backwards and forwards between steps and at times going through multiple iterations. Ideally foresight is not a one-off process but rather something that organisations and policy makers are doing constantly as part of a learning and adaptive approach to decision-making.

The table below illustrates some of the key participatory tools which participants used during the workshop.

## Step in process



### SCOPING THE PROCESS



Stakeholder analysis

**Description** A stakeholder analysis identifies key actors in the system, and assesses their interests, concerns, power, influence, and relationships with each other.

**Outcome** A list of stakeholders with an understanding of who is benefiting or not by how the system functions, who to work with to bring change, and who might block change. This is the start of unpacking the political economy of a food system. It will inform the design of a stakeholder engagement plan.



### MAPPING THE SYSTEM



Rich pictures

**Description** A drawing of the system that illustrates the main elements and relationships that need to be considered in trying to intervene to create some improvement.

**Outcome** A shared understanding from those who create the rich picture of how the system is functioning, the key relationships that will need to be considered, and how different stakeholders engage with each other. The process brings multiple perspectives 'to the table' and helps to develop holistic view.

## Step in process



### MAPPING THE SYSTEM



#### Data walk

**Description** A visual display of quantitative data on key trends (current and projected) related to food system outcomes, activities, and drivers, using graphs, tables, and maps. The data is grouped in relation to the elements of the food systems model.

**Outcome** Participants in a foresight process become aware of the available data and evidence, can challenge assumptions using the evidence, and can explore key relationships between different trends.



#### Stakeholder interviews

**Description** Semi-structured interviews with key stakeholders to understand their perspectives, concerns, and ambitions, and how they see food systems change.

**Outcome** A broad appreciation of how a wide diversity of stakeholders understand the food system, and the changes they would like to see. This qualitative information complements the quantitative data and enables input from those who do not participate in the foresight process itself.



### ASSESSING TRENDS AND UNCERTAINTIES



#### Driver identification, clustering, and prioritisation

**Description** From the data and stakeholder perspectives, workshop participants brainstorm key drivers, cluster these into common key trends and critical uncertainties and then prioritise.

**Outcome** Consensus on the most important trends and critical uncertainties which will then be used to develop different scenarios.



## Step in process



### CONSTRUCTING SCENARIOS



2x2 scenario planning matrix

**Description** Two critical uncertainties are used to create a 2x2 matrix of four different plausible future scenarios. These map out story lines about the different ways in which the future could possibly unfold.

**Outcome** An understanding by stakeholders that different futures are possible and can be shaped by multiple different factors.



Backcasting by imagining newspaper headlines

**Description** Workshop participants work backwards from the imagined future in one scenario, describing key actions and events that could lead to this particular future. The actions or events are summarised in the form of possible newspaper headlines on a timeline.

**Outcome** Stakeholders understand what might lead to different futures and start developing insight into options for how systems change could be influenced.



### ASSESSING IMPLICATIONS



Implications matrix

**Description** A matrix table is created with a list of stakeholders and the scenarios, in each cell the implications of the scenario for the stakeholder group are outlined in terms of risks and opportunities. Implications for society overall are also discussed.

**Outcome** Clarity that differing stakeholders will have differing interests and preferences across the scenarios highlighting where there are common or conflicting interests for directions of change.

## Step in process



### EXPLORING SYSTEMS CHANGE



Desired future / Strategic Vision  
Rich Pictures

**Description** Using insights from the scenarios, a second rich picture is created illustrating key features of a desired future (ideal vision) for a particular group of stakeholders.

**Outcome** Clarity, for stakeholders on what sort of future would be in their interests and what a transformed system could be like.



### GENERATING PATHWAYS OF CHANGE



Causal loop diagram

**Description** A key issue in food systems is identified, such as how to change diets for improved health and sustainability, all the factors influencing this issue are then identified and linked using causal relations. The causal loop diagram enables points for intervening to bring about systems change to be identified.

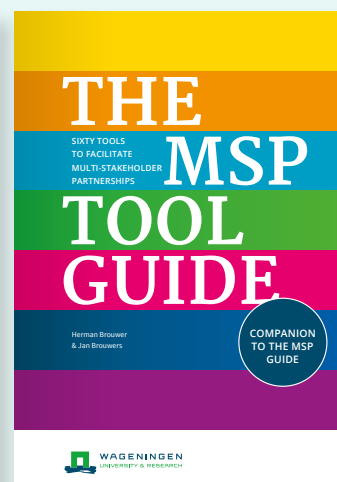
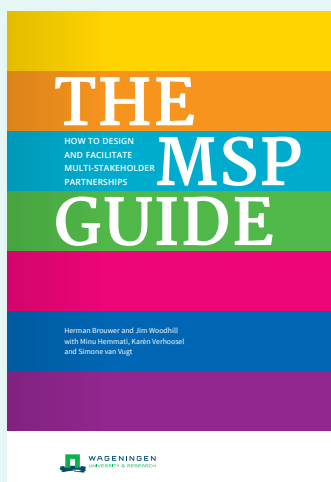
**Outcome** A deeper understanding of the critical relations and underlying political-economic structures influencing the dynamics of food systems.

The foresight for food systems approach makes use of a wide range of theories, methodologies and tools related to the wider fields of systems thinking, facilitation of multi-stakeholder partnerships, and participatory learning and action. An overview of such ideas and tools can be found in the Multi-stakeholder Partnership (MSP) Guide and the associated Tool Kit.



## Multi-stakeholder Partnership (MSP) Processes and Tools: Resources

- Brouwer, H., Woodhill, J., Hemmati, M., Verhoosel, K., & van Vugt, S. (2019) *The MSP Guide: How to design and facilitate multi-stakeholder partnerships*. Practical Action Publishing. London
- Brouwer, Herman and Brouwers, Jan. (2017) *The MSP Tool Guide: Sixty tools to facilitate multi-stakeholder partnerships*. Companion to The MSP Guide. Wageningen: Wageningen University and Research, WCDI.



# 04 Workshop Approach and Process

The leaders workshop focused on providing participants with the understanding, skills, and confidence to be able to facilitate foresight for systems change processes in their own working context. To achieve this the workshop was highly interactive, giving participants the opportunity to practice facilitation and discuss in detail how the process could be applied in a real-world context.

Prior to the workshop in Naivasha, all participants engaged in online orientation sessions, and identified how they would like to apply their learning after the workshop. They also had access to a set of Massive Open Online Course (MOOC) modules on foresight for food systems change. The process during the week following the steps in the Foresight4Food Foresight Framework as shown in Table 2.

DAY	THEME	FORESIGHT FRAMEWORK STEPS COVERED	DESCRIPTION
Monday	Introduction, scoping and seeing the system	<ul style="list-style-type: none"> <li>Scoping the process</li> <li>Mapping the food system</li> </ul>	Understanding stakeholders' interests and concerns, identifying key questions, and outlining the foresight process. Mapping the key elements and relationships of the food system.
Tuesday	Field trip		Field visit to interact with stakeholders and gain their perspective on the future of food systems.
Wednesday	Thinking about the future	<ul style="list-style-type: none"> <li>Assessing trends and uncertainties</li> <li>Constructing scenarios</li> <li>Assessing implication</li> </ul>	Identifying and assessing key drivers, trends, and critical uncertainties of food systems change. Using scenarios to identify plausible food system futures given different uncertainties. Assessing implications of scenarios on food systems and for stakeholder interests.
Thursday	Facilitating food systems change	<ul style="list-style-type: none"> <li>Exploring systems change</li> <li>Generating pathways of change</li> </ul>	Exploring directions to improve food systems given stakeholders' visions and scenario implications. Developing strategies for change that are desirable and feasible.
Friday	Making use of foresight for systems change		Brainstorming and planning on individual initiatives using foresight tools and processes. Reflection and evaluation of the week.

Table 1: Overview of the workshop programme.

The workshop approach was designed to ensure that participants could learn how to apply and facilitate foresight for systems change in their own context. It was structured around the following learning goals:

**Introduction to the Foresight4Food framework:** Using the Kenyan horticulture sector as a case study, participants were introduced to the seven steps of the Foresight4Food framework and the tools and which can be used to facilitate the process with stakeholders.

**Thinking deeply about systems change:** Much of the week was devoted to looking at the barriers and levers for food systems change. This involved discussions about the political economy and how the interests and power of different actors in the system can either block or open opportunities for change.

**Developing facilitation skills:** At each step of the process, participants were introduced to key tools and skills to facilitate a foresight for food systems change process, and cofacilitated sessions to gain hands-on experience.

**Exploring how to design effective and flexible stakeholder processes:** Throughout the workshop, participants were guided in reflecting in how to apply the tools learnt in designing their own foresight processes, for implementation back home.

**Collectively stepping into the unknown:** The workshop allowed for networking and discussion of participants' challenges, ideas, and visions for the future and how they can gain the support needed to be effective leaders of change.

## DAY ONE



### Introduction, scoping and seeing the system

Getting to know each other was the starting point. To bring reality to the workshop participants shared their backgrounds and discussed how they would like to apply the foresight process in their own work. Then it was time to provide an overview of the entire foresight for food systems change process (see section 3 above). Most of the day was then given over to Step Two – Mapping the Food System, which involved developing rich pictures, stakeholder analysis, and a data walk. Finally, after what was a very intense first day, participants were introduced the Kenyan horticulture sector in preparation for the Day Two field visits.



### Rich pictures

For systems thinking, rich pictures are classic, but powerful tool. Done in small groups of about 5-10 people, participants quickly develop a drawing of the system they are studying. As they say, a picture tells a thousand words, and this process enables a shared understanding of the system, and differing perspectives to be rapidly developed.

To help understand the complexity of food systems, different groups worked on food systems at different scales, exploring the global and African context, Kenya, and then the Kenyan horticulture sector. As well as identifying the physical elements of food systems, rich pictures also illustrate key stakeholders, flows of information, sources of conflict and power, and differing interest and values to help establish a political economy perspective of the system. The generic food systems model (figure 2) helped to trigger ideas about what to include in the rich picture.



Photo: Presentation of a group’s rich picture during plenary.

Rich pictures are also fun, and a group of people trying to illustrate their ideas and thoughts using stick figures often brings a lot of laughter into the room. But more seriously, when done well, they break tension and foster a safe space for a holistic discussion as participants build on each other’s ideas to illustrate the whole system.



It was my first time using rich pictures. I found it fascinating because it allowed people to be themselves, use their residual knowledge and their imagination, to really think about why things are the way they are and be aware of what is around them, considering different stakeholders. I think the most interesting part is the creativity, as opposed to using words to express themselves now they are using pictures and getting creative...using rich pictures allows everyone to contribute to the discussion, and it’s not just done in isolation where everyone takes a back seat and it’s just one or two members of the group writing.”

Fisayo Oyewale  
Rural futures hub focal point  
Next Generation Foresight Practitioners  
Nigeria



Rich pictures give you a broader understanding of a particular topic, they open up the mind for better understanding of the particular topic that is being discussed. It brings out a broader perspective from different stakeholders."

Fatawu Koniamu Bakari  
Advocate and public relations officer  
Disabled Farmers Union  
Ghana



### FACILITATING RICH PICTURE ANALYSIS LIKE A PRO

- One person should facilitate the process, encouraging everyone to contribute and not worry about their drawing skills.
- It is essential that the participants start drawing and can explain their ideas and discuss them as they put them down on the flipchart.
- The drawing should include both facts and subjective information.
- Do not use too many words and use a legend if necessary.
- Draw the relations of the stakeholders to each other.
- Draw the context, cause and effect, as well as relevant social, economic, political and environmental issues.

For more tips and suggestions, see the [MSP guide](#).

Rich pictures get participants to think about complex systems in a relaxed and engaging way





## Stakeholder analysis

Understanding who are the actors in the food system, and their concerns, interests and values is a critical starting point for the overall foresight process. Stakeholder analysis can be done before or after rich pictures. In this case, the rich pictures were used to help identify the key stakeholders in the Kenyan Horticulture sector.

Stakeholder analysis can inform the identification of leverage points, potential allies, adversaries, and therefore the design of an effective engagement plan. There are many ways to do stakeholder analysis.

For this exercise, we simply had a table listing the key stakeholders, and they identified their likely current concerns and longer-term interests. Good stakeholder analysis needs to be quite specific, for example, different farmers (larger scale or small-scale), women or men, young or old, may all have very different concerns, interests, and levels of power.



*Photo: A group of participants doing their stakeholder analysis*



**It is a systematic analysis to understand who the stakeholders are, what they are doing, who is working together, and whether they have the same future interests. [The importance/influence matrix] is a tool that helps people understand who is influencing who, and to have a common understanding of their own system."**

Sokhna Rokhaya Gaye Ep Mbodj  
Gender Expert Tanager



## FACILITATING STAKEHOLDER ANALYSES LIKE A PRO

The stakeholder and influence matrix can be used with groups, or for research teams synthesising findings. The analysis helps clarify which stakeholders have both a strong influence over and high interests in the issue at hand. Useful questions to guide the discussion include:

- Who are stakeholders involved in or influenced by the systems we are looking at?

- What are the key concerns, values, and interests of a stakeholder group?
- What is the power and influence of different stakeholders?
- Where are there common or conflicting interests between different stakeholders?

For more information, tips, and tools, see the [MSP guide](#).



## Data walk

Systems and foresight analysis needs to be based on good data and information. Putting data “on the table” helps stakeholders to check and challenge the assumptions they or others might be making.

As part of the foresight process, the concept of a ‘data walk’ was developed. This involves putting up on walls lots of different graphs, charts, tables, and infographics showing information and trends illustrating different dimensions of a food system. For example, charts showing urbanisation changing food consumption patterns, level of food insecurity, changes in health status, water in agriculture or the impacts of climate change on yields. Data walks are great for getting participants to examine their own beliefs and assumptions in relation to available data, as well as to gain a birds’ eye perspective on how trends are influencing food systems and driving towards desirable or undesirable outcomes.



The great thing about a data walk is that it lets people look at the data by themselves and discuss in small groups why this data is important. It helps generate clarity on why we talk about trends such as population growth or consumption when thinking about food systems. It helps challenge peoples’ assumptions and gets them thinking about why a specific trend is important, as well as the opportunities and challenges that will arise because of this trend, and in so doing start thinking about how to respond to that.”

Kristin Muthui  
Facilitator  
Kenya





## FACILITATING DATA WALKS LIKE A PRO

Data walks require some preparation beforehand:

- Identify major trends that are important for your foresight analysis.
- Collect graphs, charts, and tables from reputable sources that clearly communicate the trends.
- Ensure that your graphs, charts, and tables are simple, easy to understand by using bright colours and strong contrasts.
- Label all your charts, tables, and graphs clearly and cite sources.
- Add a key message to a data slide to help quick understanding.
- Before the exercise, organise your data thematically in a spacious area.
- Invite workshop participants to go and look at all the data in pairs or threes to identify things that surprise them or concern them, and to identify what are some of the key relationships between different trends.

Remember, it is essential that all your data is simple and easy to understand!



Participants spent time in small groups looking at historic data on food system drivers, such as climate change, population growth and consumption patterns. They discussed among themselves the implication of the data, sharing their perspectives on which drivers are important for the Kenyan horticulture sector.

## DAY TWO



### Field trips and stakeholder engagement

Day two saw participants out in the field talking to local stakeholders about the horticulture sector. This was also a great opportunity to anchor discussions on foresight and food systems change in a practical context, with opportunities to interact with actors involved in operations across the value chain, including producing, packaging and processing, as well as wholesale and retail marketing. Away from meeting rooms, the field trip also provided opportunities for participants to interact with each other, with observations from the field trip sparking discussions on food systems trends and challenges, as well as their roles and aspirations as leaders in the food system.



**It makes a difference when you read something and then connect with the actual person who goes through that issue day to day. Engagement with the actual stakeholders gives you the insight about the actual stakeholder who is in it, so they get to share as they feel it, you get to empathise with them by putting yourself into their shoes."**

Sera Rose Gondwe  
Senior Lecturer and Centre Leader  
Lilongwe University of Agriculture and Natural Resources  
Malawi



#### MEETING FOOD SYSTEM PLAYERS IN THE FIELD

The following organisations were gracious enough to welcome our participants to observe their operations and discuss the horticulture sector's dynamics with them:

**VegPro:** VegPro Kenya is a horticulture export company that was established in 1979. The company grows, packs, and exports vegetables, fruits, and flowers from Kenya to both UK and

European retailers. They employ over 4000 permanent employees in Kenya, with a land bank of 2500 hectares across 6 vegetable farms in Kenya. The company strategy is based on vertical integration, as well as investment in technology and innovation to maintain competitiveness. The company also works with smallholder farmers, supporting them to develop consistent supply, quality, and food safety.

**Sunripe packhouse:** Sunripe is a processing site owned by Vertical Agro, a horticulture company established in 1965. The company processes and markets fresh and frozen fruits and vegetables to over 20 countries. A young, dynamic team ensures strict compliance to food safety and standards at the farms and processing sites.

**Naivasha wholesale market:** The Naivasha market is a recently constructed market that comprises three floors in four blocks with usable space measuring 6773 square metres that will eventually accommodate more than 600 traders. The market aggregates produce from other parts of Kenya and East Africa, providing jobs and supporting the local economy,

as well as ensuring food availability and accessibility for residents within Nakuru county and beyond. Urban food markets offer the largest and fastest growing commercial opportunity available to Africa’s 60 million farms.

**Enzo Farm:** Enzo farm is a 240 acre farm that cultivates fine beans, herbs, and vegetables to serve both the export and local market. With a staff of more than 100 people, they practice both organic farming as well as conventional farming. Enzo farms ensures competitiveness by investing in innovative practices, constantly testing new farming practices and varieties, as well as drawing on expertise to ensure quality and affordability.



Participants appreciating the scale of vegetable production at Enzo farm.



Top: Participants interacting with vendors at the Naivasha Wholesale market.



Left: Participants trying their hand at harvesting and storage at the Enzo farm.



Participants with their host at the Sunripe Packhouse.

Discussions with stakeholders was critical to gain an understanding of their long-term perspectives, risks, and opportunities. During the visits, local stakeholders were asked about their ambitions for the future, the opportunities they see, and “what keeps them awake at night” when they think about the future. Interesting reflections came from workshop participants who observed that based on their position in the system, stakeholders are often focused on the shorter-term issues that directly affect their enterprises and are not always aware of some of the bigger longer-term issues affecting the whole system. However, globally connected stakeholders are often in a better position to spot longer-term trends and challenges, investing considerable resources in innovation and technology to maintain market share. Participants also observed that food systems actors frequently make trade-offs between food systems outcomes, and may prioritise profitability and competitiveness over other outcomes, such as environmental sustainability, health, or equitable livelihoods.



Participants examining packaged vegetables for export at the Sunripe Packhouse.

## DAY THREE



### Constructing scenarios

Having mapped food systems, completed the stakeholder analysis, and developed a deeper understanding of the local horticulture sector, it was now time to tackle the scenario building part of the process. Scenarios explore how the future might be different depending on the influence of a set of critical uncertainties. Exploring different future scenarios enables stakeholders in a food system to identify possible future risks and opportunities, examine their underlying assumptions and beliefs, and to develop a shared perspective on what might be more desirable futures. Exploring futures scenarios is an effective way of engaging stakeholders in a discussion about systems change. The scenario-building process entailed an assessment of key trends and critical uncertainties, the construction of scenarios, and the assessment of implications arising from these scenarios, as outlined in the next sections.

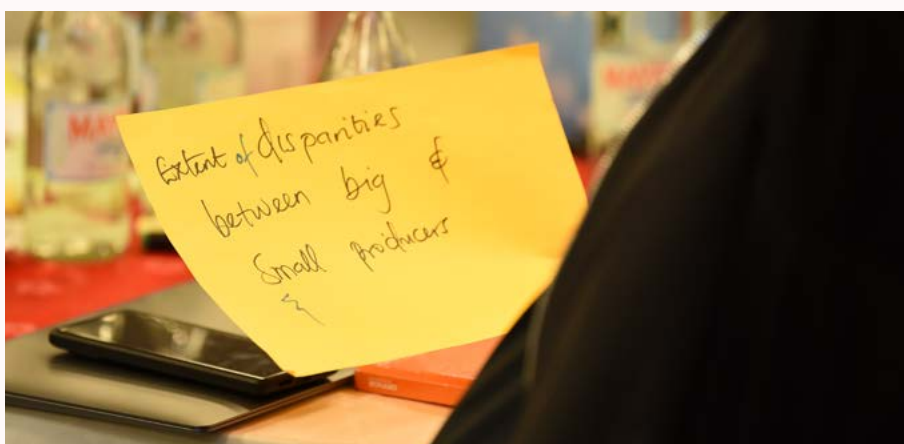


### Assessing key trends and critical uncertainties

To develop future scenarios, it is first necessary to identify the key trends and critical uncertainties which may shape the future. Workshop participants did this by drawing insights from the systems mapping, the data walk, and the interviews with horticulture sector stakeholders.

There are many factors or drivers that influence the future of the food systems, related to driving forces, such as demographic changes, technology, food consumption patterns, geopolitics,

economics, markets, culture, environment, and climate change (see Figure 2). These food system drivers are highly interrelated and interact with each other, influencing food related activities and outcomes. Drivers of change can be classified as either key trends or critical uncertainties. Key trends are clear and easily identifiable changes that will certainly shape the future, while critical uncertainties are rare or unpredictable events or changes that could have a big impact and lead to very different futures for the food system.



Brainstorming on key trends and critical uncertainties



After brainstorming on food systems drivers in small groups, participants came together in plenary to identify the ten most critical drivers and categorise them as key trends or critical uncertainties.

In pairs and then in groups, participants first identified the 10 most critical drivers of change for the horticulture system, based on their data analysis during the data walk, observations from the field visits, sector specific expertise and their previous scoping and mapping exercises. These drivers were then grouped as either key trends or critical uncertainties. Then, two critical uncertainties were prioritised as being most important to be used for the scenario development. It is important that the two selected uncertainties are relatively independent variables.

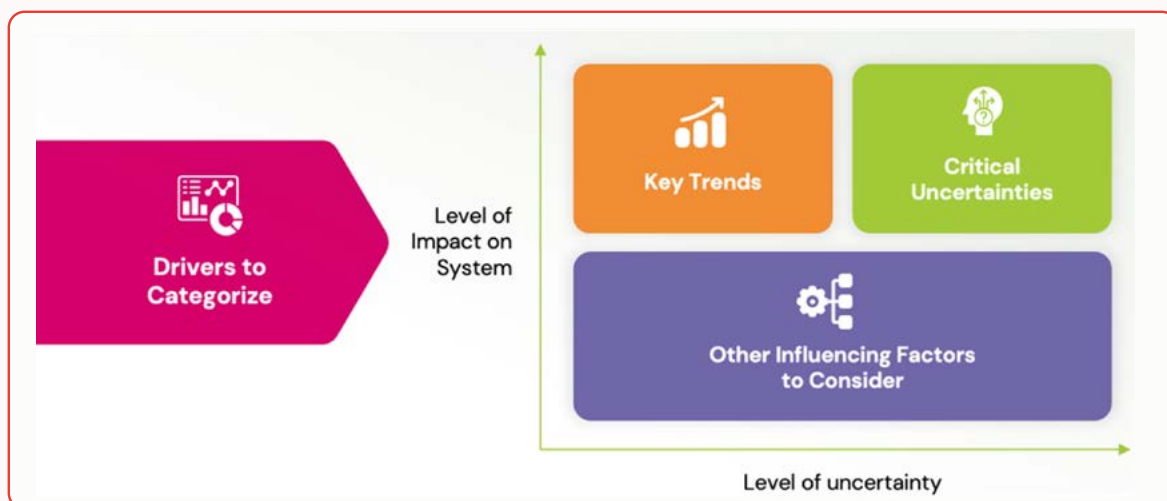


Figure 3: Identifying key trends and critical uncertainties.

KEY TRENDS	CRITICAL UNCERTAINTIES
Unpredictable rainfall patterns	Resilience against climate change
Rising food production costs	Enabling environment for SMEs and small-scale farmers
Population growth and urbanisation	Degree to which small-scale farmers have access to technology
Changing social and gender roles	Geopolitical patterns influencing trade
Rising land pressures	Changing food consumption patterns
Income inequality	Domestic regulatory and policy framework
Gap between large-scale and smallholder farmers	African trade market integration
Emerging technology such as AI and robotics in agriculture production	Global market price stability
Consumption of unhealthy diets	Pandemics and disease outbreaks

*Table 2: Examples of key trends and critical uncertainties affecting the future of the horticulture sector in Kenya.*



## REAL WORLD APPLICATIONS OF SCENARIO CONSTRUCTION AND SYSTEMS CHANGE

Scenario construction can be used in a wide range of contexts and is especially useful in getting a diverse array of stakeholders to think critically about the future. To give a better idea of the value of scenario construction and their use in exploring systems change, two participants presented scenario analysis exercises that they had been previously involved in:

### Energy for whom? Scenarios for Eastern Africa

Presented by Passy Amayo Ogolla, “Energy for whom? Scenario planning for Eastern Africa” is a set of scenarios that imagine practical future scenarios for energy and how these would affect energy poverty in Kenya, Ethiopia, Uganda, and Tanzania. The scenarios were produced by the Society for International Development (SID) with the support of Heinrich Böll Stiftung.



### Transformative scenario planning in Koutiala, Mali

Alcade Christel Segnon shared his experience working with stakeholders in the district of Koutiala in Mali, who are facing many pressing climatic and non-climatic challenges for agriculture, natural resources, and food security, using transformative scenario planning to imagine what might happen to Koutiala’s agriculture, natural resources, and food security from now until the year 2035.



### Constructing scenarios

Scenarios are constructed by using combinations of the critical uncertainties assessed as having the biggest structural influence on the system. There are different ways of doing this and the simplest, used in this workshop, is to identify the two most significant critical uncertainties and from these create a 2x2 matrix of four scenarios.

Eight different scenarios for the future of the Kenyan horticulture sector were developed, looking at factors such as how diets might change in the future, regional and global trading relations, severity of climate change, and the enabling policy environment for small-scale producers and the SME sector. The scenarios help to identify future risks and opportunities for different stakeholder groups and society at large. They also help to unlock creative thinking about how to “nudge” systems towards more desirable futures and away from less desirable ones.

To bring the scenarios to life, story lines are developed describing what this future situation would be like and elaborated on what this situation would mean for different stakeholders. To do this, groups discussed what the future would look like in this scenario for the Kenyan horticulture sector and outlined the main defining features. These story lines are summarised in the two sets of scenarios given in Figure 4 and Figure 5.



**To a great extent, the great thing about foresight is the forward thinking, it’s bringing the future to the now... it’s really important that even as we move forward that we make it (foresight) an integral part of our day-to-day activities to really give clarity in terms of where we want to go.”**

Kate Awuor Ojungo  
Country Representative  
Kenya Seed Company  
Rwanda





## SCENARIO SET 1: WHAT WILL WE EAT IN A CLIMATE CONSTRAINED WORLD?

The first set of scenarios were constructed based on two critical uncertainties – climate resilience in a turbulent world, and food consumption patterns in the future. Although it is certain that the impacts of climate change will intensify, the resilience of our food systems remains uncertain. Similarly, although food consumption patterns are transforming due to rising incomes and urbanisation, whether those consumption patterns will be healthy is unclear. This set of scenarios examined the interplay between these two critical uncertainties, as described below:

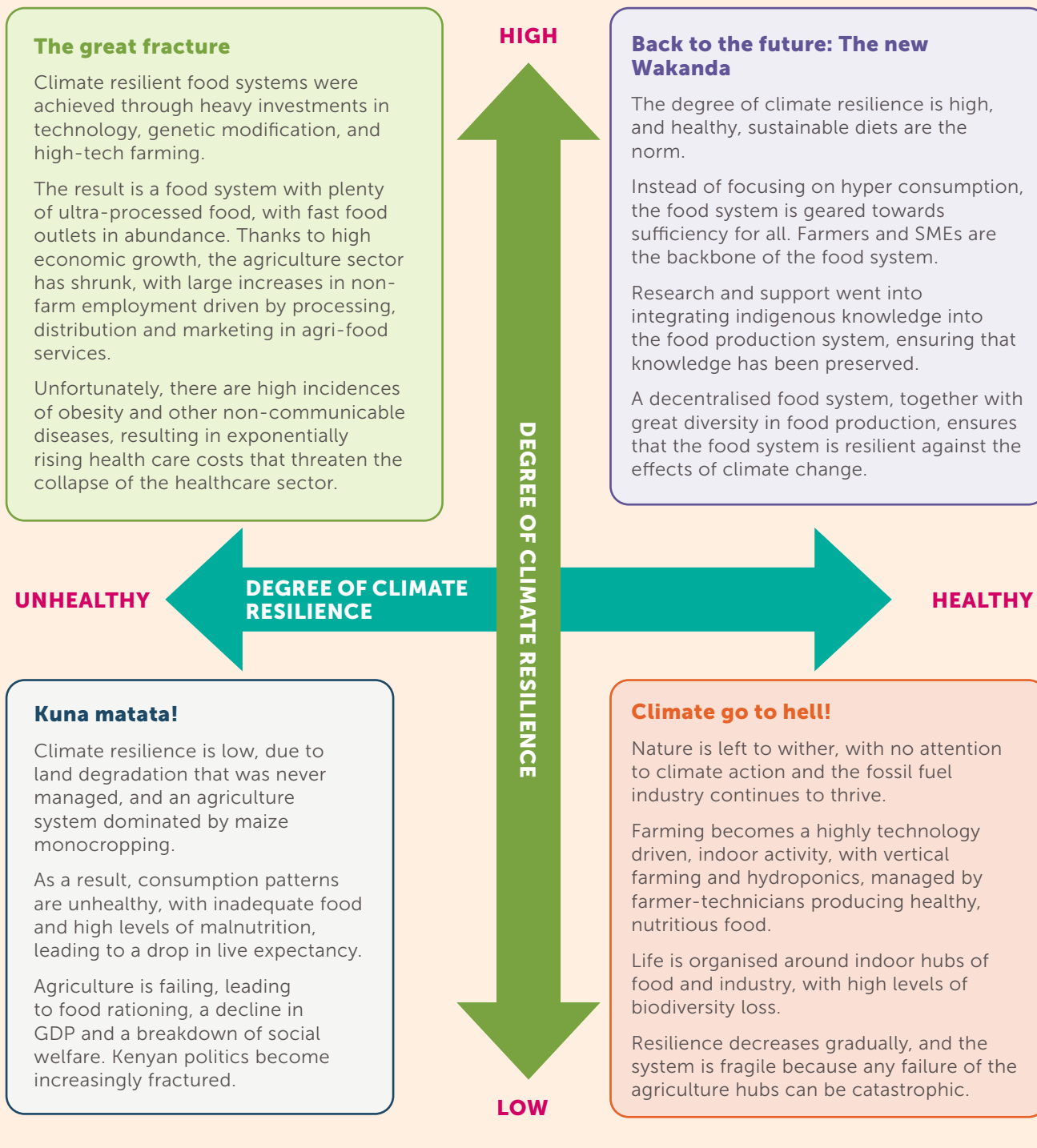


Figure 4: Scenarios based on climate resilience and food consumption patterns.



## SCENARIO SET 2: FOOD SYSTEMS BY WHO AND FOR WHO?

The second set of scenarios were constructed based on the following critical uncertainties – market concentration and trade, and their implications for the African food system. Food systems are increasingly dominated by large agri-food companies and large-scale farms, raising uncertainties about the future operating environment of small and medium farmers and firms. Secondly, as developing countries seek economic growth and prosperity, what are the trade-offs between a food system geared towards export markets and one that favours regional integration? This set of scenarios examined the interplay between these two critical uncertainties, as described below:

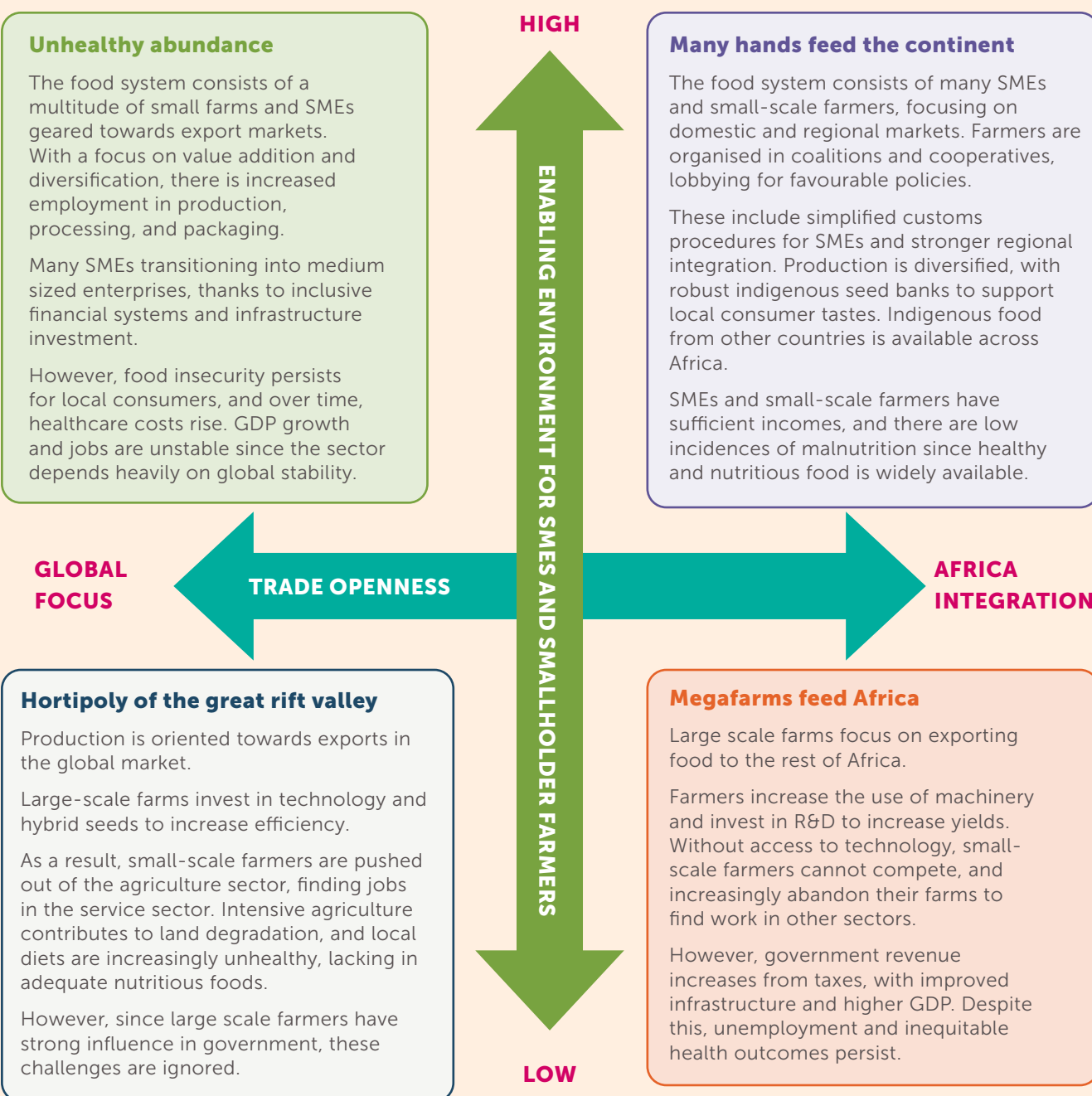


Figure 5: Scenarios based on trade openness and enabling environment for SMEs and small-scale farmers.



## BACKCASTING

Part of the scenario story line is a backcast, which outlines what might have occurred over time for this scenario situation to evolve. A set of key events, political actions, crises, technical innovations, and cultural changes are all imagined and connected in a coherent and plausible historical timeline leading to the scenario. At the workshop, participants were asked to come up with a series of 'breaking news' headlines, to highlight the key actions and events that led to their future scenarios.



In groups, participants came up with newspaper headlines leading up to different scenarios. Newspaper headlines is an engaging way to get participants to think about key actions and events that lead up to particular outcomes



## Assessing the implications of the scenarios

With the scenarios developed, the next step is to explore the implications of the possible scenarios for the interests of different stakeholder groups and for society at large. Each future has different implications for stakeholders, depending on their position, interests, and power within the food system.

Discussion on scenario implications generated lively debate, with participants being asked to imagine themselves as different stakeholders (such as wholesaler, politician, farmer) and choose their preferred future. Overall, however, there was consensus that large, powerful actors in the system would benefit from futures that allow for consolidation of power, which would

allow them to lobby for favourable laws, increase market share, and profits. On the other hand, food producers and SMEs would benefit from futures that increase their access to high quality inputs, reduce market uncertainty and allow for greater operational flexibility. Interestingly, participants felt that politicians would not be too concerned about the overall structure of the food system, but rather how they could directly benefit from it. Lastly, most participants felt that consumers would benefit from a wider, more affordable array of healthy food choices, with a focus on indigenous and locally produced food.



### FACILITATING SCENARIO ASSESSMENTS LIKE A PRO

The purpose of scenarios is to get people to think about the implications of these scenarios for stakeholders in the system. An interactive and engaging way to do this is by laying out scenario matrixes on the ground and asking participants to imagine themselves as different stakeholders (such as farmer, exporter, policy maker) and place themselves in the scenario that they would find most beneficial. This can lead to engaging discussions that bring out underlying assumptions about food systems, and a shared understanding of different scenarios.

## DAY FOUR



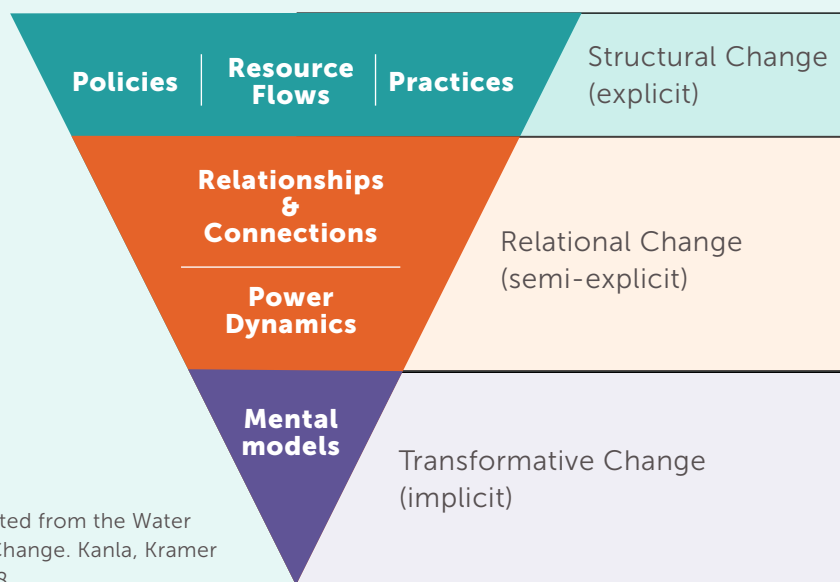
### Exploring systems change

By day four it was time to look at what might be desirable changes in the horticulture sector and how these changes could be brought about. There are no easy blueprints for bringing about change in a complex system with a multitude of stakeholders with differing and sometimes conflicting interests, but identifying directions for change is a first and crucial step in the process. Participants went through the final two steps of the foresight process, which involve using the scenarios and stakeholder interests to develop a shared vision for the future, identify desirable directions for systems change, and assess how such change could be triggered.



#### DIGGING DEEP INTO SYSTEMIC CHANGE

As the figure shows, systems change needs to occur at multiple levels, including structural changes in policy, practice, and resource flows, relational changes in power dynamics, relationships, and connections, and at the most profound level, in our mental models, or the assumptions and beliefs that we use to interpret the world around us.



**Source:** Adapted from the Water for Systems Change. Kanla, Kramer & Senge, 2018

Being a systems leader therefore entails the ability to be adaptive, to create alliances for disrupting existing power relations, understanding the importance of building relations between diverse stakeholders, and patience. Systems change often requires taking time to build the foundations for change without being able to know when circumstances might suddenly unlock opportunities for big steps forward. It is therefore important to remember that there are no silver bullets – rather, a system of sometimes imperceptible shifts that build up and work together to eventually disrupt the status quo and bring about a shift in power structures and create systemwide change.



## Imagining a desired future and developing a shared vision

Using scenarios and insights from the stakeholder analysis, participants were asked to develop rich pictures illustrating a shared “desired future” for Kenya’s horticulture sector. Constructing shared visions for a desired future is a critical step, as it entails coming up with a vision that accommodates differing interests,

and is responsive to future trends, uncertainties, risks, and opportunities. Strategic vision rich pictures provide clarity, direction and understanding, creating a shared understanding of what transformative systems change should lead to.



In groups, participants drew rich picture visions for the Kenyan horticulture sector. Common themes that emerged included trade integration with Africa, the use of technology to enhance resilience against climate change, a focus on indigenous foods and healthy diets, and economic growth and decent jobs for workers in the agriculture sector.



## Identifying directions for systems change using causal loop analysis

In groups, participants used causal loop diagrams to create a “snapshot of all relationships that matter” in the Kenyan horticulture sector, to identify opportunities for intervention that could help drive systems change in the horticulture sector, in ways that could improve health, livelihoods, and environment. A causal loop diagram is a visual representation of key variables (i.e., factors, issues, processes) and how they are interconnected. Causal loop analysis can help in identifying opportunities for intervening which could help to drive systems change in desired directions. Bringing change will often require an integrated approach to technological, institutional, and political innovation.



Photo: Participants working on their Causal Loop Diagram

Participants used causal loop analysis to explore issues such as inclusive and equitable participation in the horticulture sector, the consumption of indigenous foods, intra-African trade, infrastructure development and SME engagement in the horticulture sector. Going beyond structural changes needed in policy, practice, and resource flows, they explored other avenues to influence systems change, including mental models and the relationships and alliances that could be built to influence change in the system.



**This is a tool that helps dive into specific factors that affect what you want to influence... so it makes it easier to brainstorm and look at different factors and variables. When you use it with all stakeholders involved in that issue, it helps to give a clear picture of what you are going to face going forward, which helps you make clear and informed decisions.”**

Richard Makuza  
 Program Officer  
 Mennonite Central Committee  
 Rwanda



## FACILITATING CAUSAL LOOP LIKE A PRO

Causal loop diagrams (CLD) can be used to create stories about complex issues, making the interrelationships within a system’s structure more explicit. Facilitating the CLD requires:

- Define the problem: Specify the main issue that you want to address, including the main outcome of interest, key stakeholders, assumptions, and objectives of your project.
- Identify the variables: Identify variables that affect or are affected by your main variable. Select only variables that are quantifiable and use nouns to describe them, so that arrows can be used to show what happens if the variable changes for better or worse.
- Draw the causal links: Use causal links to show how variables are related, including the consequences when a variable increases or declines. Use + or – signs to denote relationships.
- Identify the feedback loops: Feedback loops are closed chains of causal links, which show how your variables reinforce or dampen each other.
- Label loops and variables: Use descriptive names to label loops and variables.
- Talk through the loops: Talk through the loops and “tell the story,” to be sure the loops capture the behaviour being described.

For more information on causal loop construction, see the [Systems thinker guide](#).



In groups, participants illustrated causal loop diagrams, examining themes such as SME engagement in the horticulture sector, gender inclusivity, infrastructure investment, and sustainable diets. The CLDs helped participants think about how elements in the food system interact and identify entry points for systems change.



## DAY FIVE



### Making use of foresight for systems change and follow up

After an intense four days, and it starting to feel like the group had known each other forever, it was already time to wrap-up. The last day of the workshop provided a space for participants to work on how they would make use of the foresight process in their respective contexts, get feedback on their ideas from others, and explored what sort of follow-up support they would like to see developed.



### Putting foresight into practice?

The young leaders at the workshop came from a wide variety of backgrounds and consequently presented a fascinating diversity of ideas about how they would like to apply their learnings from the week. Some examples are given below grouped into three categories of applications, higher education and research, working with value chains, and climate and environment.

The Leaders Workshop was an opportunity for participants to reflect on how they could integrate foresight into their work and ongoing projects. Participants took advantage of the fact that they had the opportunity to discuss their work with people from other countries and other sectors, and many developed plans to put foresight in practice in the following areas:



#### FORESIGHT IN HIGHER EDUCATION AND RESEARCH

Tomorrow's professionals and researchers will have to navigate in an increasingly complex turbulent world. This will require different sorts of skills and capabilities. Foresight approaches and systems thinking will need to become part of university curricula and a key plank in research agendas.

A significant group of the workshop participants were university researchers and faculty members, with a keen interest in integrating foresight tools and practices in their courses and research methodology. There was much interest in using the participatory foresight approach to engage stakeholders in research activities and to strength research, policy, and practice linkages. There was also much interest in running workshops to introduce other faculty members to what they had learned from the week in Naivasha.

### Examples of foresight initiatives in academia and research



My foresight initiative aims to integrate foresight into the educational curriculum at the African Leadership university. My goal is to equip students to anticipate the future and make informed decisions in their mission development and capstone projects. I hope to develop a curriculum that will impart critical thinking, strategic planning, and decision-making skills, preparing my students for future leadership roles in Africa.”

Brian Nicholas Neza  
Mission Curator (Agriculture)  
African Leadership University, Rwanda



I intend to incorporate foresight principles into a research methods course to encourage my students to think broadly. I also plan to apply foresight in a small project focused on manufacturing innovative food products with high nutritional value for a diversified diet in South Kivu. I will use foresight to create scenarios during project development and to propose directives for improvement.”

Rehema Matendo Esther  
Junior Lecturer  
Mawazo Institute, Kenya



I plan on incorporating foresight concepts in my courses on research methodology and settlement geography. I also plan on using foresight tools in my research project that is investigating how to empower urban youth for sustainable agriculture in Nigeria. I will use foresight tools to assess potential risks and opportunities in sustainable agriculture, to get deeper insights into the drivers of food security in urban Nigeria.”

Onyinyechi Ossai  
Lecturer  
University of Nigeria





I will enhance my economics curriculum by integrating Health Economics and foresight tools to address future food system challenges. I also plan to organise seminars on foresight for research collaborators, focusing on mitigating factors in food systems. Additionally, I aim to engage and educate communities, leaders, NGOs, and farmers on preparing for food system changes for a sustainable future.”

Olagunju, Opeyemi Eunice  
Lecturer Bowen University, Nigeria



## FORESIGHT FOR VALUE CHAINS

Another group of participants at the workshop were directly involved in food systems, as farmers, input suppliers and community organisers, with a keen interest in integrating foresight tools and practices into their community work, value chains, and farming. The group was interested in how they can apply foresight in simple and practical ways to empower communities, farmers, and food system entrepreneurs to bring about food systems change.

### Examples of foresight initiatives for value chains



My foresight initiative is within the framework of a disabled farmers union, where we are tackling the unique challenges faced by disabled individuals in the agricultural sector, to create a more accessible and supportive environment. Through inclusive workshops, discussions, and partnerships, I’m striving to co-create an authentic vision for the future of agri-food systems that represents the needs and aspirations of disabled farmers within the union. My goal is to champion diversity and ensure that every worker, regardless of ability, can thrive in a sustainable agricultural sector

Bakari Konaimu Fatawu  
Advocate and Public Relations officer  
Disabled Farmers Union, Ghana



I Support a project in sustainable market system development for the pyrethrum and cereals and pulses value chains in Kenya.

I will use foresight tools and methods to create scenarios around farming systems, future trends and sustainable pathways for the pyrethrum, cereals, and pulses value chains in Kenya.”

Joseph Maina Ndung'u  
Agri-finance Fellow  
African Food Fellowship, Kenya



As the Senior Nutrition and Gender Mainstreaming specialist for the Catholic Relief Services Rwanda, I am currently involved in a project titled 'Africa Food Fellowship: Access to Nutritious Food Organization'. Foresight scenario development will become the engine and driver of our respective planning assignments where foresight will be used in exploring the evidence, pathways by setting clear assumption then challenge the traditional approaches like theory of change within programming.”

Jean De La Croix IMBABAZI  
Senior Nutrition and Gender Mainstreaming specialist  
Catholic Relief Services, Rwanda



## FORESIGHT IN CLIMATE ADAPTATION AND NATURAL RESOURCE MANAGEMENT

A third group of participants are working on issues related to climate resilience and creating more environmentally friendly food systems. Understanding longer-term trends and the uncertainties created by climate change resource degradation is fundamental to their work, and especially valuable in engaging with stakeholders and the communities they work with.

### Examples of foresight initiatives in climate change adaptation and natural resource management.



In Rwanda, the Mennonite Central Committee and other organisations formed a coalition to institutionalise conservation agriculture as a farming approach that increases productivity, adapts to climate change, and mitigates environmental damage.

However, the pathway to a climate-resilient food system is unclear. I plan to organise workshops to introduce foresight and develop a foresight analysis for the future of smallholder farmers in Rwanda's food system. The project aims to identify key stakeholders, conduct a foresight analysis, and develop a plan towards a common goal to inform decision-makers."

Richard Makuza  
Program Officer  
Mennonite Central Committee, Rwanda



In Bangladesh, to effectively establish Locally Led Adaptation (LLA) on the ground, I will use foresight analysis and tools, such as stakeholder mapping, scenario analysis and the causal loop diagram. This will enable communities to envision potential future scenarios, identify key stakeholders, and address structural inequalities to ensure adaptation efforts are equitable."

Ranon Jahan  
Research Officer, Locally Led Adaptation (LLA)  
International Center for Climate Change and Development (ICCCAD), Bangladesh





## Follow-up support

After an exciting week of learning about foresight and facilitation for food systems change, participants were inspired to carry the work forward, but recognised they could benefit greatly from ongoing support and peer engagement. Motivated by the workshop, they suggested the following ideas to take the energy from the workshop forward and support their future work:

**Mechanism for mentorship and peer support:** To connect practitioners with varying levels of expertise to share knowledge, experiences, and help each other solve problems and improve their facilitation practice.

**Ongoing platform for collaboration:** Establishing a post-workshop platform for continued networking between participants, enabling the evolution of a community of practice.

**Integration of foresight in higher education and research:** Which would include support for integration of foresight approaches into curricula, a peer network on integrating foresight tools and methods in academic

research, and workshops and seminars to train researchers and academics on foresight tools.

**Support with funding to move things forward:** To allow foresight practitioners to come together for workshops, support webinars and networking events, and help fund the implementation of specific foresight for systems change initiatives.

**Follow-up training and refresher workshops:** To develop more in-depth capacities on facilitating foresight and systems change process, learn from experiences in other countries, and gain a deeper understanding of application in specific thematic areas.

**Establishment of foresight country chapters:** Creating country alliances that could act as connection points for foresight practitioners and help grow communities of practice.

**Learning and support tools:** Developing a multilingual facilitator guide on foresight tools and practices accompanied by practical case studies and other reading material.

As part of the Mastercard Foundation initiative to support foresight capabilities in African institutions, Foresight4Food is developing a MOOC on foresight tools and processes, which will be made available in 2024.



### MESSAGE OF HOPE FOR FOOD SYSTEMS LEADERS



On the final day, participants wrote anonymous messages of hope and encouragement to each other and exchanged them, as a reminder of the inspiration and motivation that they felt during the workshop. Leading food systems transformation is a challenging, but ultimately worthy endeavour.

# 05

## Insights and lessons

The workshop was clearly very beneficial for all participants and the extraordinary level of energy in the room, despite long days, illustrated well the high level of interest and engagement. Feedback at the end of the workshop emphasised how much participants had appreciated the highly interactive approach to the workshop.

From the 29 participants who completed the anonymous evaluation survey the average satisfaction with each day of the workshop was 4.5/5 and the level of satisfaction with the facilitation of the workshop was 4.8/5.

An important observation from the event is how important basic facilitation and systems thinking skills are for leading food systems change. Yet, as evidenced by how new most of the participants found many of the tools and approaches, along with the high demand for follow up support, it appears that not enough investment is going into building up these capacities with young leaders.

While overall the workshop was seen as a big success by all there are always opportunities for improvement and lessons to be learned.



**(This week) was fantastic, it was exciting, there was so much knowledge sharing. I've learned so much..., I have had the opportunity to network with other people. The two words I would use to describe it are insightful and impactful."**

Anele Simon

Acting Secretary General

Independent Continental Youth Advisory Council on AfCFTA (ICOYACA)



The facilitation team gained many ideas for how processes and materials could be improved for future events. In particular, there is a need to develop more structured approaches to the facilitation of the final two steps of the foresight framework. Reflections from participants for improvement included:

- The workshop packed an enormous amount of content and information over a space of five days, so there was not always enough time to fully digest the material or to relax.
- More practical examples and case studies could help with some parts of the workshop, particularly around scenario development.
- The workshop brought together a diverse group of people with varying levels of understanding in foresight and systems change terminology, as well as from non-English speaking countries, so more care could be taken to ensure everybody can keep up and fully understand the terminology and concepts.
- More time is needed to fully develop the understanding and capacities needed to facilitate a foresight process.
- Sometimes, an overload of concepts with not enough time to fully understand the practical application.
- With five facilitators supporting the event, sometimes cohesion and flow could have been improved.
- Time is needed to practice the tools, and the workshop could have been longer.
- It would be helpful to have a more comprehensive pack of training materials beforehand.



## FINAL WORDS

These are comments left by participants in the anonymous workshop evaluation form:

- The whole thing was very practical.
- I loved the facilitation, the people, the diversity, the food, and the ambiance.
- The workshop sessions were amazing and quite insightful.
- I liked the collaborative activities; rich picture and scenario building most.
- The enthusiasm of the facilitation team, foresight is really complex and difficult, but they just make it to be easy and comprehensive.
- I liked how friendly and approachable the facilitation team was. They never looked down on anyone, irrespective of their gender or background. This gave me confidence and raised my self-esteem from day one.



- I am so impressed with the facilitating and the effort they all took to know people's names by heart.
- I really liked the idea of visiting the horticulture field that took place before the scenario analysis, which gave an understanding beforehand and made the scenario analysis process way more effective.
- The facilitation was wonderful.
- Involvement of participants to facilitate group assignments, it created confidence within members and opened opportunities for networking.
- I loved every aspect of the workshop, but I especially loved the fact that it was practical with a hands-on approach.
- I liked the participatory approach very much.
- The practical involvement in the exercises is fruitful.
- I found the diverse perspectives brought by practitioners from different African countries to be exceptionally enriching.

- The practical knowledge shared during the workshop, especially on facilitation techniques, was invaluable.
- The representation in diversity of individuals created an elaborate platform of positive engagements and scenarios for in-depth understanding of similar cases that face us all irrespective of where we are from.
- I learnt a lot; I am most grateful to get a deep appreciation of how to use scenarios.
- Overall, the workshop was superb, and I loved every bit of it. I would attend another workshop by the organizers.
- I recommend that such workshops be organised in Nigeria.
- I really loved the workshop; I learned a lot and am inspired and motivated to take the foresight analysis to the next level.
- Great forum. Amazing facilitators. Brilliant crowd. Such positive hope for Africa's future.
- It was amazing, we really thank all the organizers for making this happen.
- At the beginning of the workshop, I was confused because I had never used foresight - now I am confident that I can facilitate participatory processes anywhere in the world!
- It was such an informative training and I suggest that you continue supporting us, as we plan to cascade this information in our places of work.



## Workshop pictures



Participants during the official workshop dinner on day 4



Intense discussions during group work sessions





Networking and getting to know each other



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# Annexes

## LIST OF RESOURCES ON FORESIGHT

- **Discussion paper on youth employment in African agri-food systems:** [Optimising Opportunities for Youth Employment in Africa's Agri-Food System: A Foresight for Systems Change Initiative](#)
- **Using data to explore agri-food system dynamics and implications for youth:** [Explore data on African Agri-food systems](#)
- **Massive Open Online Course on foresight for food systems transformation:** coming soon

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