



Environmental Change Institute



# Criteria to Assess High-Quality Food Systems Foresight in Africa

A practitioner's guide for facilitating, commissioning, and evaluating foresight



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## Preface

**Africa's food systems are entering a decisive era.** This era is shaped by accelerating climate risks, demographic transitions, technological change, geopolitical uncertainty, and persistent structural inequalities. These realities demand that African institutions move beyond reactive planning toward anticipatory, evidence-driven, and systems-oriented decision-making, capable of managing risk, strengthening resilience, and guiding long-term transformation.

This imperative was reaffirmed during the recent African Union-led Continental Foresight Consultation, which emphasised the need to strengthen Africa's capacity to anticipate emerging risks, align research and innovation with future priorities, integrate foresight into policy and planning processes, enhance institutional responsiveness, and ensure inclusive and gender-responsive governance of futures work. These priorities are closely aligned with the ambitions of the Comprehensive Africa Agriculture Development Programme (CAADP), the Kampala Declaration, and the African Union's Post-Malabo Agenda, all of which call for more resilient, inclusive, knowledge-driven, and transformation-oriented food systems.

Within this continental momentum, the Forum for Agricultural Research in Africa (FARA) presents this guide on 'Criteria to Assess High Quality Food Systems Foresight in Africa'. This publication represents a FARA-led effort, developed in partnership with University of Oxford – Environmental Change Institute and Foresight4Food Initiative, supported by the International Development Research Centre (IDRC). It draws on African experience, practitioner knowledge, and global foresight practice to articulate what high-quality foresight should look like in African food systems contexts.

Rather than serving as a technical manual, this guide focuses on defining quality standards. It introduces nine interlinked criteria designed to ensure that foresight processes are contextually grounded, inclusive, ethically sound, methodologically robust, strategically communicated, adequately resourced, institutionally embedded, and capable of influencing policy, shifting mindsets, and shaping long-term decision-making. The guide provides practical orientation for those who commission, design, facilitate, and evaluate foresight, helping ensure that foresight moves beyond scenario production toward real-world policy relevance and systemic impact.

**A distinctive strength of this guide is its emphasis on African contexts and realities.** It recognises the importance of indigenous knowledge systems, political economy dynamics, power relations, and informal institutions, while promoting participatory approaches that elevate diverse voices and strengthen local ownership. The guide also advances Monitoring, Evaluation and Learning (MEL) approaches tailored to complex systems—prioritising learning, adaptation, contribution to change, and institutional influence over predictive accuracy.

By strengthening the quality and credibility of foresight practice, this guide contributes to Africa's broader ambition to institutionalise foresight within governments, regional economic communities, national research systems, universities, and continental platforms. In doing so, it supports efforts to embed foresight into CAADP implementation cycles, national development planning, investment frameworks, and policy reform processes, strengthening Africa's capacity to govern with the future in mind.

FARA extends sincere appreciation to University of Oxford – Environmental Change Institute and Foresight4Food for its intellectual partnership, to IDRC for its catalytic support to African-anchored foresight learning and innovation, and to the many African practitioners, policymakers, and researchers whose insights shaped this work. We invite governments, development partners, civil society, the private sector, and research institutions to use this guide as a reference point for designing, commissioning, and evaluating foresight that genuinely advances Africa's food systems transformation.

This guide stands as both a practical resource and a strategic statement—a contribution to ensuring that Africa's food systems futures are imagined, owned, and shaped by Africans, in service of resilient, inclusive, and sustainable development for present and future generations.

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# Executive Summary

## *Why Read This Guide?*

**The world is in a state of turbulence and uncertainty.** Food insecurity is on the rise, geopolitical fragmentation is increasing, while the impact of climate change is becoming more and more serious. Many challenges and dynamics are connected. In the midst of this, food systems play a central role – linking agriculture, environment, social networks, economic value chains and consumption patterns. Food systems are essential to achieving human health, economic stability, and environmental preservation. However, in many ways, food systems around the world are also contributing to negative societal outcomes, such as climate change through greenhouse gas emissions, pollution and socio-economic inequality.

**A transformed African food system in the future, for the better, would greatly support addressing the globally connected challenges we now see.** Transforming African food systems requires a long-term and holistic view. We need to not only know the past and present: we must also explore what the future may bring: not only to prepare for future shocks and risks but also develop visions to aspire to.

**Central to this guide is the challenge to enhance strategic use of foresight and scenario planning to this shifting, complex context.** Foresight and scenario analysis help us prepare for uncertain futures by asking “what if?”. In essence, foresight is a conscious approach to exploring what different situations might occur in the future, fostering dialogue about the future, and weighing the options and strategies available to us now. Using foresight effectively helps to open up space for anticipatory governance, enabling proactive, robust and more timely decision making.

## *What This Guide Offers*

This guide is a practical tool for anyone involved in foresight for food systems change in Africa. It is designed to help readers to *commission, facilitate, guide and evaluate* foresight exercises effectively.

Read this guide if you want to:

**Build a shared vision of a successful, impactful foresight process:** It provides a roadmap for inclusive and participatory processes that bring together different voices to co-create a sustainable future for food systems in Africa

**Ensure quality:** It provides a framework and nine key criteria for ensuring that foresight for food systems work is relevant, effective, and ethical.

**Navigate complexity:** It helps you understand and manage the unique challenges of foresight in African food systems, such as diverse stakeholder interests, informality, diverse notions of time, and power dynamics.

**Achieve impact:** The guide shows you ways of moving beyond conducting mechanical foresight exercises and foresight reports, creating processes that enable conditions for real impactful processes that result in systemic change.



## How To Read This Guide

The document is structured into several core sections designed to guide you through the foresight process. [Chapter 1 and 2](#) help you understand foresight for food systems transformation by providing the necessary context, development history, and basic concepts of systems thinking. [Chapter 3](#) is focused on enhancing quality, which elaborates on nine essential criteria for inclusive and meaningful foresight. [Chapter 4](#) is focused on monitoring, evaluation and learning, detailing different approaches and indicators for tracking the impact of foresight processes. [Chapter 5](#) is the action agenda, which outlines recommendations for African leaders and food systems stakeholders to cultivate learning communities and move the agenda forward. Finally, the [annexes](#) provide references and recommended reading to support your specific interests and continued journey in food systems change.

### Chapter 1

**Provides the introduction and context in which this work was done.**

It also provides more information on the process of how the guide was developed, which background information and conversations inspired its content, what specific audiences this guide is for, and what these groups can take out of the Guide.

### Chapter 2

**Focuses on the key concepts of food systems, systems thinking and foresight**

connecting these and exploring why it is so important to practice foresight for food systems change. It gives the basics for shaping a foresight for food systems process, helping readers to unpack what they are trying to achieve and the elements to think about when starting such a process.

### Chapter 3

**Is the core body of this guide, elaborating on nine important quality criteria**

that are essential for an effective, inclusive and meaningful foresight for food systems process. These criteria are unpacked in detail, each with suggestions on how to apply these, and with cases and examples integrated throughout.

### Chapter 4

**Details considerations when focusing on monitoring, learning and evaluation** of foresight for food systems change processes. This section highlights why this is important, why it is difficult and what different approaches and methods you can consider depending on your purpose. This section concludes with an overview table linking MEL purpose, questions, promising indicators and approaches.

### Chapter 5

**Outlines the need for further action in African food systems**

to take this agenda and approach further, especially focusing on how to drive an African food systems foresight knowledge agenda, cultivate communities of practice and continued (online) learning, and finally, offering recommendations for African leaders, food systems stakeholders and future generations.

### Annexes

**The annexes and references.**

These provide the references and further recommended reading to support you in your journey applying foresight for food systems change.



## The Aim Of This Guide

This guide aims to be a catalyst for deeper practice and learning for systemic improvement of foresight processes. This guide offers practical directions for implementing foresight processes that are tailored to unique political, social, and cultural realities, to support transformational change in food systems. However, it should not be seen as a foresight instruction manual or step-by-step guide on how to conduct foresight. Guides available for this are for instance the *'Strategic Foresight: A Primer'* by Wilkinson (2017) which can be found [here](#).

The guide provides suggestions on how to think about designing a Monitoring, Evaluation and Learning (MEL) approach that is appropriate for foresight in complex settings. This is recognizing that the exploratory, iterative, and systems-oriented nature of this work does not always align well with conventional results-framework evaluations. The aim is to help practitioners design effective foresight processes grounded in clear quality criteria, and to develop MEL approaches that reflect those same principles. In doing so, the guide supports the creation of foresight processes that are robust, inclusive, and fit for purpose, without attempting to evaluate the broader impacts of multi-component food systems programmes in which foresight may be only one part. The guide is not a resource on how to conduct Monitoring, Learning and Evaluation – for more information on such an approach related to complex systems, see for instance *'Managing for Sustainable Development Impact'* by Kusters et al., (2017), which can be found [here](#).

This guide strongly advocates for participatory approaches and strong integration of inclusion principles. Throughout this guide you will find many links between participation and quality foresight, and key aspects of participation to look for. This includes genuine co-creation, inclusion of marginalised voices, and capacity building for local actors. It sets the standards for participation within foresight, rather than providing the how-to instructions for implementing them. For more in-depth resources and approaches for facilitating participatory processes you can also have a look at *'The MSP Guide, How to design and facilitate multi-stakeholder partnerships'* by Brouwer et al., (2016) which can be found [here](#).



This guide complements a wide range of resources developed by Foresight4Food and various partners on Foresight for Food Systems Transformation processes. See for instance the *'Using Foresight for Food Systems Transformation: A guide for policy makers, practitioners and researchers'* by Foresight4Food in collaboration with the United Nations Food Systems Coordination Hub – which can be found [here](#). This guide outlines in greater detail the Foresight4Food guiding framework on how foresight and food systems change processes can be facilitated.

The *'Foresight for Food Systems Change Process Guide & Toolkit'*, developed by Foresight4Food and Wageningen University and Research, specifically shows which tools and methods fit well in different stages of implementing the Foresight4Food guiding framework. This toolkit can be found [here](#). Finally, the Foresight4Food website hosts a database of relevant foresight and food systems literature, tool guides and case studies. Find the website [here](#).

## Key Insights And Takeaways

- 1 Foresight is increasingly brought in to help navigate complex challenges and identify pathways for food systems transformation. In order to realise that promise it becomes important to understand how to apply foresight effectively, what outcomes it can give, and to learn from the process.
- 2 Foresight and futures thinking involves a pluralism of different approaches, methods and tools. Each can be tailored to different contexts, purpose and systems of interest.
- 3 The guide emphasises that foresight is not a linear process but a combination of different connected tasks that relate to one another for success. If one part is weak, the whole process is affected.
- 4 This guide tailors to different audiences: foresight orchestrators and facilitators, commissioners, advocacy groups and evaluators of foresight. Each group has a role to play in contextually defining quality and impact and guiding the process towards meaningful and transformative outcomes.
- 5 This guide gives a brief introduction on food systems, systems thinking and foresight – highlighting the importance of embracing the complexity of food systems, the importance of multi-stakeholder processes and highlighting the importance of holistic perspectives and transdisciplinary action.
- 6 Consciously thinking through the steps of the foresight process is important: facilitators and evaluators must be aware that foresight for food systems processes must integrate foresight activities, mechanisms of change, outcomes on different levels and timeframes, and ongoing review of assumptions and actions.
- 7 Nine distinct quality criteria have been identified as essential to the foresight process. While individually defined, these benchmarks are inherently interrelated and function as a cohesive framework:
  - The pre-requisites that make foresight transformative
  - Contextual and socially relevant
  - Inclusivity and empowerment
  - Transparency, accountability, and ethics
  - Sound theoretical underpinning and methodological foundations
  - Adequately resourced and planned
  - Strategic communication
  - Institutionally embedded
  - Shift patterns of thought and behaviour
- 8 Evaluation should never focus on predictive accuracy because the future is unknowable. What matters is how foresight supports decision-making, strategic reflection, shifting mindsets and assumptions, resilience, systems transformation, and capacity for long-term thinking in complex settings.
- 9 Evaluating foresight is essential for policy and strategy because it:
  - Ensures accountability
  - Justifies continued investment
  - Enables strategic learning and adaptation
- 10 High-quality MEL foresight for food systems change prioritises:
  - Integrating evaluation considerations from the outset
  - Stakeholder engagement at the core of the MEL process
  - Assessing both process quality and the influence of outputs
  - Using systems thinking to understand how change happens
  - Unpacking and capturing contributions to systemic change (structural, relational, transformational)
  - Learning over evaluation for accountability

## Acknowledgements

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The guide was written by Dr Katindi Sivi, Dr. Kristin Muthui and Bram Peters. The authors are thankful to Dr. Julius Gatune, Dr. Marlene Roefs, Dr. Jim Woodhill, Fraser Reilly-King and Amy Etherington for the in-depth suggestions and comments. Further on the contents and structure along with helpful editing comments were provided by Jim Woodhill, Monika Zurek, Abdulrazak Ibrahim and Roger Sykes.

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# 1. Introduction

## 1.1 Why Do We Need Quality Foresight Criteria

In a context of frequent, recurring and deeply interconnected crises across the world, there is a growing need for systemic-change facilitation, transformation anticipatory-thinking and policy. Foresight and futures thinking offers a diverse set of approaches to engage with uncertainty and turbulence. The field of foresight in food systems, climate action and socio-environmental systems is rapidly expanding. That expansion is buttressed by a growing interest by governments, civil society organisations and institutions to use foresight as a way to support systemic change initiatives and for navigation of complex situations.

**Comprehensive foundations are needed to build the case for wider, inclusive application of foresight for transformation in African food systems.** The vast majority of current African foresight work is funded by international development institutions and research organisations. Only limited work has been led or funded by African governments, local civil society, or the private sector. This asymmetry limits ownership and integration into national policy cycles. Additionally, foresight initiatives frequently prioritise incremental strategic planning rather than mobilising coalitions for transformative change. As a result, imagined futures frequently end up being translated into technical and value-neutral outcomes unlikely to lead to the required systemic transformation (Muiderman et al., 2022).

**There is currently a lack of compiled and accessible practical guidance to ensure and assess quality, effectiveness, and impact of foresight and scenario analysis processes in complex non-Western multi-stakeholder settings.** Despite the growing recognition of foresight as a valuable tool for driving food systems transformation, this gap limits the ability of users and providers of foresight work to effectively commission, manage, and evaluate foresight initiatives in these contexts. As a result, foresight exercises often vary in quality, they become good to do exercises that lack action-oriented outcomes, and often fail to influence decision-making or policy formulation in meaningful ways.

**Practitioners involved in foresight processes frequently operate without a shared set of principles, learning questions, or evaluative frameworks tailored to the complexities of food systems transformation.** This contributes to inconsistent practices and undermines the potential of foresight to serve as a strategic tool for guiding long-term, inclusive, sustainable food systems change.

## 1.2 Background: How This Guide Was Created

The goal is to support regional African multi-actor food system transformation efforts through the development of, and dialogue around, a practical guide. This document should not be seen as a final product but rather a starting point for exchange, dialogue and methodological improvement to further develop impact in this field. **The insights collected here build on many previous and ongoing experiences, initiatives and projects** undertaken across the African continent. Lessons have been learned from:



The 'Foresight for the Future of Youth in Africa's Agri-food Systems Workshop', implemented by Foresight4Food, FARA, AGRA supported by MasterCard Foundation, held in Mombasa in 2023.

The 'Facilitating Foresight for Agri-Food Systems Change in Africa - A Leaders Capacity Development Workshop, implemented by Foresight4Food, FARA, AGRA and African Food Fellowship (AFF), supported by MasterCard Foundation, held in Naivasha in 2023.

The African Foresight Academy, a network of young food systems and foresight learners and practitioners in different regions across Africa, hosted by FARA.

The Foresight for Food Systems Transformation (FoSTr) programme, implemented by University of Oxford and Wageningen University and Research together with many research partners in Bangladesh, Jordan, Kenya and Uganda, throughout 2023-2025

Experiences facilitating the Foresight for Food Systems Transformation Massive Open Online Course, which was developed initially for the African Foresight Academy under FARA.

**We recognize that many foresight experts and initiatives in the food systems space are working to support African Food Systems transformation.** These include, among many others, United Nations such as FAO and WFP, but also the CGIAR, African Food Fellowship, Society for International Development, School of International Futures (SOIF), Foresight for Development, Agricultural Model Intercomparison Improvement Project, and the African Foresight Academy.

**A thorough background review and informant interviews were undertaken,** drawing lessons from:

- MEL experts from the African Evaluation Association (AfrEA)
- Foresight and food systems experts connected through the network of Foresight4Food
- Insights generated from the Association of Professional Futurists Evaluation Initiative
- Special Issue Bridging Foresight and Evaluation, in *New Directions for Evaluation: Volume 2024*, The new 'Foresight evaluation' webpage on the Better Evaluation platform

**Throughout 2025, various phases of interaction with experts took place,** focusing on co-creation and validation of key components of this guide. Experts were consulted in various stages:

- A writeshop took place in Oxford in November 2024, which gathered the initial outlines of the quality criteria and table of content for this guide
- Various online consultations held throughout March and May 2025, which gathered Africa-based experts in the field to collect insights, experiences and other key suggestions
- A workshop took place in Addis Ababa on the margins of the UN Food Systems Summit +4 Stocktaking Moment offered the opportunity to present draft quality criteria and co-create content.
- A presentation and discussion during the Foresight4Food Hybrid Foresight workshop in Oxford, 22-23 September 2025.
- A presentation during the African Union gathering 21st CAADP Partnership Platform & 16th Africa Day for Food and Nutrition Security (ADFNS) gathered additional views and comments, taking place 29-31 October 2025 in Kigali.

### *1.3 Who This Guide Is For*

**This guide on quality criteria for foresight work in food systems is designed for a diverse range of stakeholders who engage with foresight in various capacities.** The shared goal is that foresight initiatives are robust, impactful, and genuinely contribute to resilient and equitable food futures. It aims to empower individuals and organisations to not only understand what constitutes high-quality foresight but also to actively shape and participate in its execution and utilisation. This guide is for:

#### 1. Initiators and Orchestrators of Foresight

**The primary audience of this guide comprises individuals and teams directly involved in conceptualizing, setting up, and managing foresight processes.** They are the driving force behind getting foresight work done effectively. This includes organisations, institutions, or individuals who identify the need for foresight and seek to initiate a foresight project. They are responsible for defining the overall scope and expected outcomes. It can also mean people leading the design, practical implementation and facilitation of a foresight process. Finally, it can also mean members of Steering Groups, people who oversee the strategic direction of a foresight initiative, providing guidance, making key decisions, and ensuring alignment with broader organisational or community goals. This guide will help this group to guide the quality and effectiveness of the foresight process.

#### 2. Funders and Commissioners

**This group represents the entities that provide the financial resources and often set the policy landscape within which foresight operates.** These groups can also initiate foresight projects but are often less involved in the facilitation of these. Their interest lies in ensuring that their investments yield meaningful and actionable results. This includes especially funders (e.g., governments, philanthropic organisations, development agencies, private sector foundations) who hope it will generate valuable insights that inform strategic investments and interventions in food systems. They will use this guide to assess proposals, monitor progress, and evaluate impact. Another key group here are policy makers within governments (e.g., ministries of agriculture, planning, environment, regional bodies), who would like to use foresight as a tool for national and regional policy development, strategic planning for food security, climate resilience, and sustainable development. This guide will help commission relevant foresight, integrate its findings into policy frameworks, and ensure that publicly funded initiatives meet high standards of quality and relevance.

### 3. Advocacy Groups and Interested Stakeholders

The third audience includes the actors keenly interested in foresight being conducted ethically, inclusively and effectively, as its outcomes can directly impact their advocacy efforts and the communities they represent. This may include advocacy and local interest groups (e.g., NGOs working on food justice, environmental conservation, farmers' rights) who may use this guide to critically assess quality and integrity of foresight processes that could influence policies and practices affecting their constituencies. This guide empowers them to understand what quality foresight entails, articulate their expectations, and demand more inclusive and relevant processes that address their specific concerns and knowledge systems. Finally, this might also include researchers seeking to incorporate future-oriented thinking into their studies, a business leader looking to anticipate market shifts in the food sector, or an academic developing curriculum. The guide will help this group in understanding the core principles of quality foresight to better engage with, interpret, and apply foresight insights in their respective domains.

### 4. Independent Evaluators and Quality Assessors

This group consists of professionals and organisations tasked with objectively assessing the effectiveness, impact, and rigor of foresight initiatives, either mid-stream or upon completion. They require a clear, structured set of quality criteria to ensure that foresight work is not only methodologically sound but also delivers genuine value and actionable outcomes. This includes independent consultants, internal audit teams, and academic researchers specializing in impact evaluation and governance. This guide provides the necessary guidance to systematically review foresight for systems change programmes, offering a flexible yet comprehensive framework through which performance and compliance can be explored, thereby reinforcing learning and accountability, and promoting good practice across the field.

In essence, this guide serves as a common language and a shared standard for all those involved in or affected by foresight work in food systems, fostering a more collaborative, equitable, and impactful approach to anticipating and shaping our collective future.



# 2. Foresight and Food Systems Change

## 2.1 Foundations: Concepts and Models

This chapter provides a general overview on the concepts and models used to think about food systems and foresight, how to work with levers of systems change. This section also introduces the Foresight4Food Guiding framework, which is a useful way to guide foresight for food systems processes and ensure key elements are in place.

There are more guides that unpack this further, see for example, 'Using Foresight for Food System Transformation: A Practical Guide for Policy Makers, Practitioners & Researchers' by Foresight4Food and the United Nations Food Systems Coordination Hub (2025) or Woodhill and Millican (2023). To frame how this Guide approaches foresight for food systems change, it is important to understand the core concepts.

### 2.1.1 The Food Systems: Framing

Food systems involve an interconnected set of value chains, from production to consumption. These value chains involve many different food system activities carried out by various food system actors – consumers, farmers, traders, processors, retailers, and so on. For these activities to be carried out, a set of supporting services are needed such as transport, financing, research, and input supply. The way the entire system functions and how actors behave is shaped by the institutional environment of formal and informal norms and rules, mindsets, and power relations. How food systems evolve over time is influenced by a set of drivers and feedback loops, both internal and external to the system. These drivers are also embedded in and coupled with wider social and environmental systems. To capture the dynamics of food systems, Foresight4Food uses the model shown in Figure 1 below.

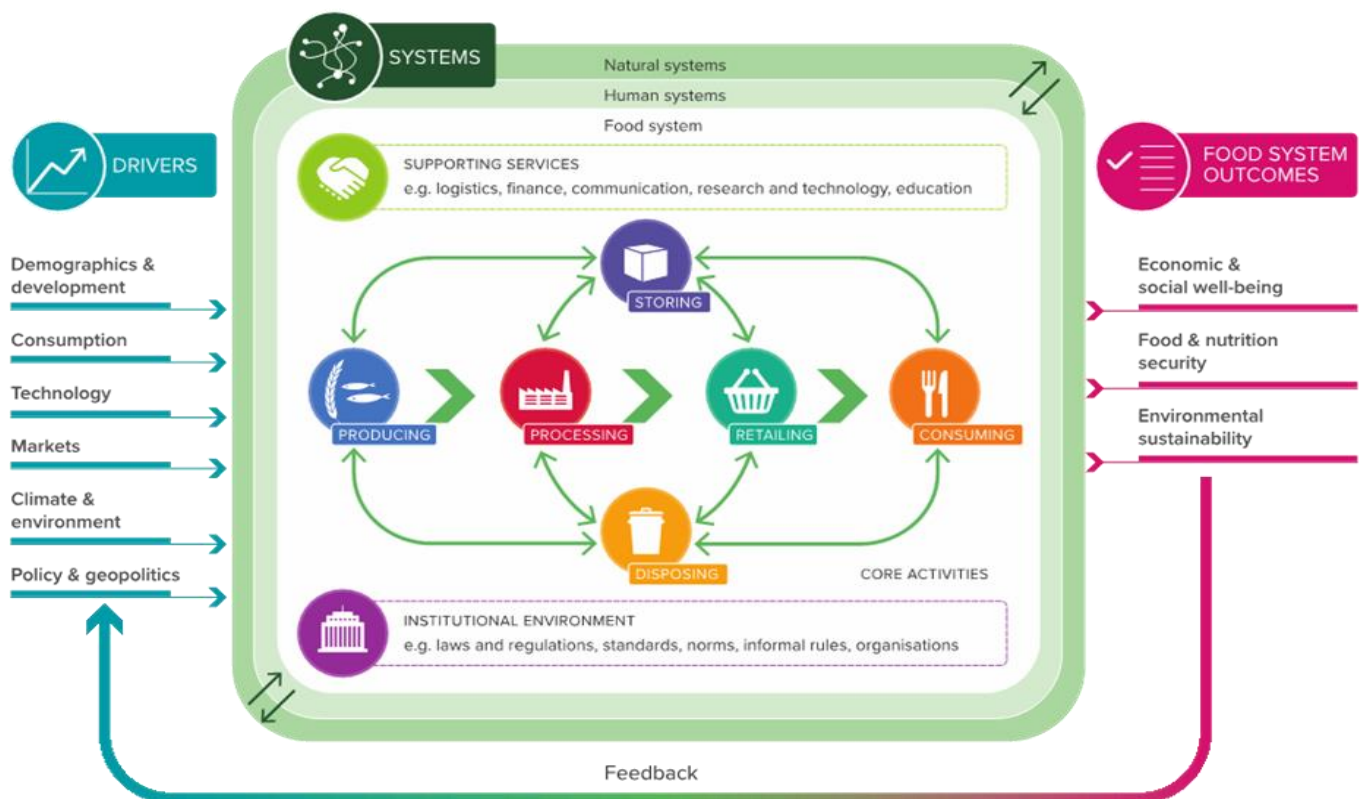


Figure 1: A simplified food systems framework. Source: Foresight4Food

The food systems approach provides new framing for a more integrated approach to the issues of food security and nutrition, agriculture, climate change, environment and poverty. Food systems encompass various interconnected activities, including primary production, processing, retail, consumption, storage, and waste disposal, all carried out by diverse actors. Food systems outcomes, including food and nutrition security, economic and social wellbeing and environmental sustainability are thus influenced by a combination of environmental, economic and social drivers.

The way our food systems work is complex and, in many ways, does not deliver the food and nutrition, socio-economic benefits and sustainable environmental outcomes we need. The process of food production, distribution and consumption is increasingly unsustainable, resulting in negative consequences for health, the environment, and equitable economic development. There is increasing recognition that tackling these challenges through fragmented, single-sector approaches is insufficient, and that issues linked to food can only be effectively dealt with through a cross-sectoral and systems-oriented approach.

**Food systems are more than a linear set of activities from food production to consumption, but instead are complex, adaptive systems.** Their behaviour and evolution are shaped by the wider context of human and natural systems, with multiple interactions and feedback loops, creating a set of external drivers and trends, such as population growth and technological change. Like other complex systems, food systems are dynamic, often changing in unpredictable ways. They are self-organizing, with actors in the food system maintaining, defending or improving existing systems according to their own interests. As a result, they are also path dependent, as different components evolve together over time, becoming mutually supportive and maintaining current consumption and production patterns in place.

**A food systems framework is useful for understanding trade-offs and synergies constantly taking place in the system.** This entails interactions between outcomes or activities that intentionally or unintentionally lead to emerging spin-off effects in the food system. This understanding is crucial for connecting the dots and finding the interventions for transforming the food system at scale.



The evolution of food systems is constrained by the existing institutional and business environment and may be influenced by powerful actors with vested interests. However, food system actors also have agency, and can coordinate with each other to shape the system – moving towards sustainable outcomes in the face of resistance to change. Food systems transformation, therefore, is largely about how to 'outsmart' vested interests, hidden agendas and conflicting objectives, how to get food systems actors united behind a shared purpose identify and how to negotiate inevitable trade-offs and synergies, which bring with them the potential for both conflict and collaboration between different interest groups.

**Transforming food systems requires deep thinking about how change happens.** For people to engage in collaborative and cooperative processes of change they need to understand why change is needed, what to do, and how to do it. While there is plenty of discussion around the problems facing food systems, there is often too little discussion on how to change that, as well as what an improved food system would look like. This requires difficult discussions about changing economic incentives, politics, power relations, and who does or does not benefit from change.

**Systemic approaches to change are needed that recognise the complexity and uncertainty of food systems.** Systemic change involves shifting underlying incentives structures and signals that shape how individuals and organisation behave. This requires varying degrees of collective consensus on taking new directions and some sense of a collective vision for the future. Processes of systemic change can be strengthened by:

- Creating a shared understanding of the whole system
- Taking a long-term outlook and imagining alternative futures
- Integrating creative approaches to change that engage people emotionally with good science and a strong evidence base
- Establishing effective processes of stakeholder engagement and learning across government, business, civil society and research



**Food systems transformation requires thinking about the long-term future.** Achieving desirable food systems outcomes can be achieved through a variety of scenarios and pathways, each with their own trade-offs and synergies, as well as winners and losers.

At the same time, increasing turbulence and uncertainty due to future stresses, shocks and extreme events call for enhancing the resilience of food systems. Identifying and recognizing these is key to developing effective policies that can deal with the consequences of short-term vested interests and open opportunities for change.

## 2.1.2 Foresight And Futures

Quite simply, foresight is thinking about the future to improve today's decision making. It supports taking a long-term and systems perspective to examine factors that may shape the future. This includes assessing current and emerging trends and exploring areas of uncertainty. Foresight and scenario approaches are increasingly important tools for guiding food systems transformation. They enable governments, the private sector, and civil society to jointly explore how the future might unfold, understand the implications of emerging trends and uncertainties, and identify risks, vulnerabilities, and opportunities for systemic change. By providing a structured way for a diversity of stakeholders to engage with uncertainty, navigate complex trade-offs, foresight supports institutional innovation, particularly in redesigning incentives to address harmful externalities related to health and the environment.

**Foresight processes help society agree on what they want from food systems of the future.** By exploring how food systems may change in the future and understanding the implications of these changes, stakeholders can gain a deeper understanding of what they want from the food system (Woodhill et al., 2025). However, futures thinking and food systems transformation are not just technical tasks, but a deep political and value-laden process, challenging existing power structures and vested interests, and likely to meet resistance (Béné & Abdulai, 2024; Vervoort & Gupta, 2018).

**Foresight can support food systems transformation in a multitude of ways.** Mapping food systems at various scales through collection and organisation of food systems data can facilitate decision-making by government, business, consumers and producers. Scenario development can illustrate the long-term economic, social and political consequences of various policy choices, helping to create urgency, political will and societal understanding needed for change. Foresight can also enable governments and other actors in the food system to better prepare for future risks and opportunities, as well as explore opportunities for change from new markets, innovative technologies, disruptive business models and shifting attitudes. Embedding foresight within planning processes can help create insights needed for anticipatory and adaptive policy development in the face of increasing uncertainty. Finally, the foresight processes engage all stakeholders in using scenarios to visualize the most desirable future and what strategies and actions would be needed to move towards that direction (Woodhill et al., 2025).



**Participatory, evidence-based foresight processes generate indirect benefits that help create an enabling environment for transformation.** By convening diverse actors from across the food system, foresight cultivates shared awareness and understanding, fosters meaningful dialogue, and strengthens trust. It also helps shift mindsets and mobilize alliances. While these outcomes are often intangible, they form the critical foundations that make collaborative action and systemic change possible (Woodhill et al., 2025).

## 2.1.2 Foresight And Futures

**Foresight is increasingly used to navigate accelerated change.** African countries are especially vulnerable to accelerating change – including climate change, demographic pressures, geopolitical upheavals and technological shifts that are deepening uncertainty about the future. Global crises, such as COVID-19, the Russia-Ukraine war and weakening international institutions have heightened political instability worldwide. A wide variety of foresight and scenario planning tools are now used to bring together food systems actors to understand and grapple with persistent challenges such as food insecurity, dependence, inequality, poverty and a growing youth population increasingly demanding change.



**Mainstreaming foresight through building agency and context-appropriate tools and methods is crucial.** Foresight is continually evolving to better suit non-Western contexts, with growing emphasis on decolonising futures and strengthening futures literacy to equip citizens and institutions with the skills to imagine and co-create alternative futures in the face of increasing uncertainty (Futuribles, UNESCO). New approaches seek to embed local knowledge, culture, and ways of being, while challenging the colonial and patriarchal assumptions that restrict imagination and limit transformative pathways (Bourgeois et al., 2024; Nassiri-Ansari et al., 2025). At the same time, foresight operates in a highly competitive policy environment where quick fixes are favoured, resources are limited, and external actors often dominate agenda-setting. Although its value is increasingly recognised, foresight remains underused and frequently led from outside the continent – making the task of mainstreaming context-rooted, locally owned approaches more urgent than ever.

### Introducing the Foresight4Food Initiative

Foresight4Food is an international initiative and global network that supports the use of foresight for food system transformation. It assists organisations and practitioners access foresight and scenario expertise, synthesises foresight work in the agri-food sector, undertakes methodology development, and provides an online food systems foresight resource portal.

The work of Foresight4Food has been enabled by the Foresight for Food Systems Transformation (FoSTr) Programme. FoSTr provides a country support facility for food systems foresight and scenario analysis. The country-led and multi-actor foresight process aims to assist national food systems transformation. The Programme was implemented in four focus countries, Bangladesh, Jordan, Kenya and Uganda, and was supported by the Kingdom of the Netherlands through IFAD.



### 2.1.3 Working With Levers Of Systems Change

Levers of systems change are the strategic entry points through which deeper, lasting change can be catalysed. These levers include policy and regulatory reform to align incentives with sustainability and health goals; shifts in financial flows to de-risk and scale investment in climate-resilient and equitable food systems; innovation and technology development that is accessible and appropriate for diverse contexts; changes in consumer behaviour driven by education, pricing, and labelling; and inclusive governance mechanisms that amplify the voices of marginalized groups, including smallholder farmers, women, and Indigenous communities. Acting on these levers in an integrated and coordinated manner can help disrupt entrenched power dynamics, rebalance incentives, and accelerate progress toward food systems that are equitable, resilient, and regenerative.

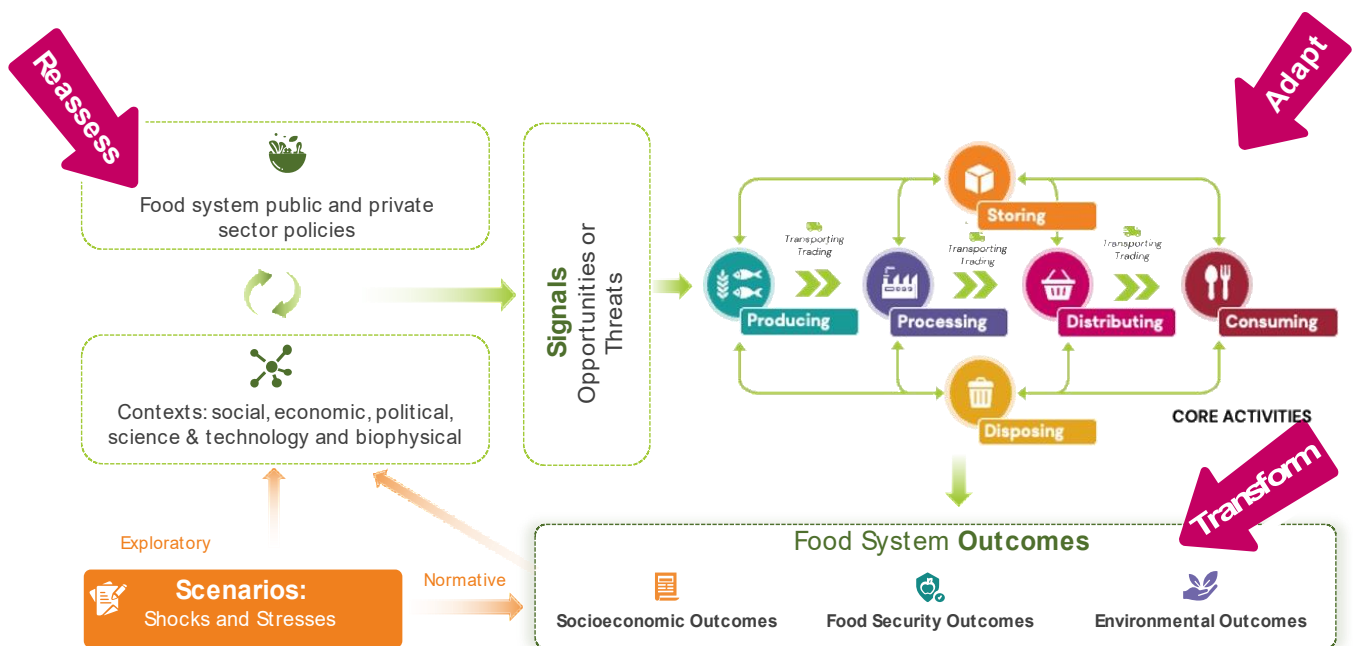


Figure 2: Transforming the outcomes of food systems requires adapting actors' behaviours, through the signals they receive, and reassessing policies. Source: Foresight4Food based on Ingram (2010)

A transformed food system means it will be delivering more desirable outcomes in terms of food security and health, the economy and the environment. To transform the outcomes of the food system means that the behaviours of actors in the system must change (see figure 2 above). For that reason, incentives must also change, with actors getting new signals about opportunities or threats that will motivate them to do things differently. In turn, the incentives and signals are influenced by the policies and strategies of government and of private sector actors. These need to be reassessed and reformed to drive change.



The way individual humans, organisations and businesses behave is due to a very complex set of **interacting incentives**. These incentives can be soft, cultural, economic, regulatory or coercive. For example, what a child eats will be influenced by social and family norms, the cost of food, regulations such as for food safety or additives, and possibly parental threats around eating or not eating certain foods. Incentives often become institutionalised and are hard to change. For example, cultural food preferences, or government policies and subsidies that benefit a particular sector. Existing power structures often try to hold these existing incentives in places as they maintain the status quo. Social and political change is generally needed to shift incentive structures and may involve creating new alliances, mobilising civic action, bringing different groups into dialogue and shifting narratives about the food system.

**Exploiting synergies for transformation while managing and overcoming trade-offs is key to leveraging change.** The foresight process can help to develop a much deeper understanding of where synergies and trade-offs lie. Bringing change will not always be a win-win for all stakeholders. Thus, to leverage change when a particular group of stakeholders do not see the change as being in their interests requires careful analysis. Sometimes a stakeholder group may just not have thought about how a different situation could be in their interest. Other times, it may be necessary to find ways of offering different incentives, compensation or transition pathways. For the wider public good there will also be times where government needs to make policies and decisions for the collective benefit of all.

**Transforming food systems requires tackling the deeper enablers and barriers to systems change.** Often this will require changing mindsets, mental models and paradigms, as well as influencing power dynamics and shifting relations and connections between different food system actors. The conditions for systems change framework is a useful model for engaging food system stakeholders in exploring how to bring about transformation, see Figure 3 below.

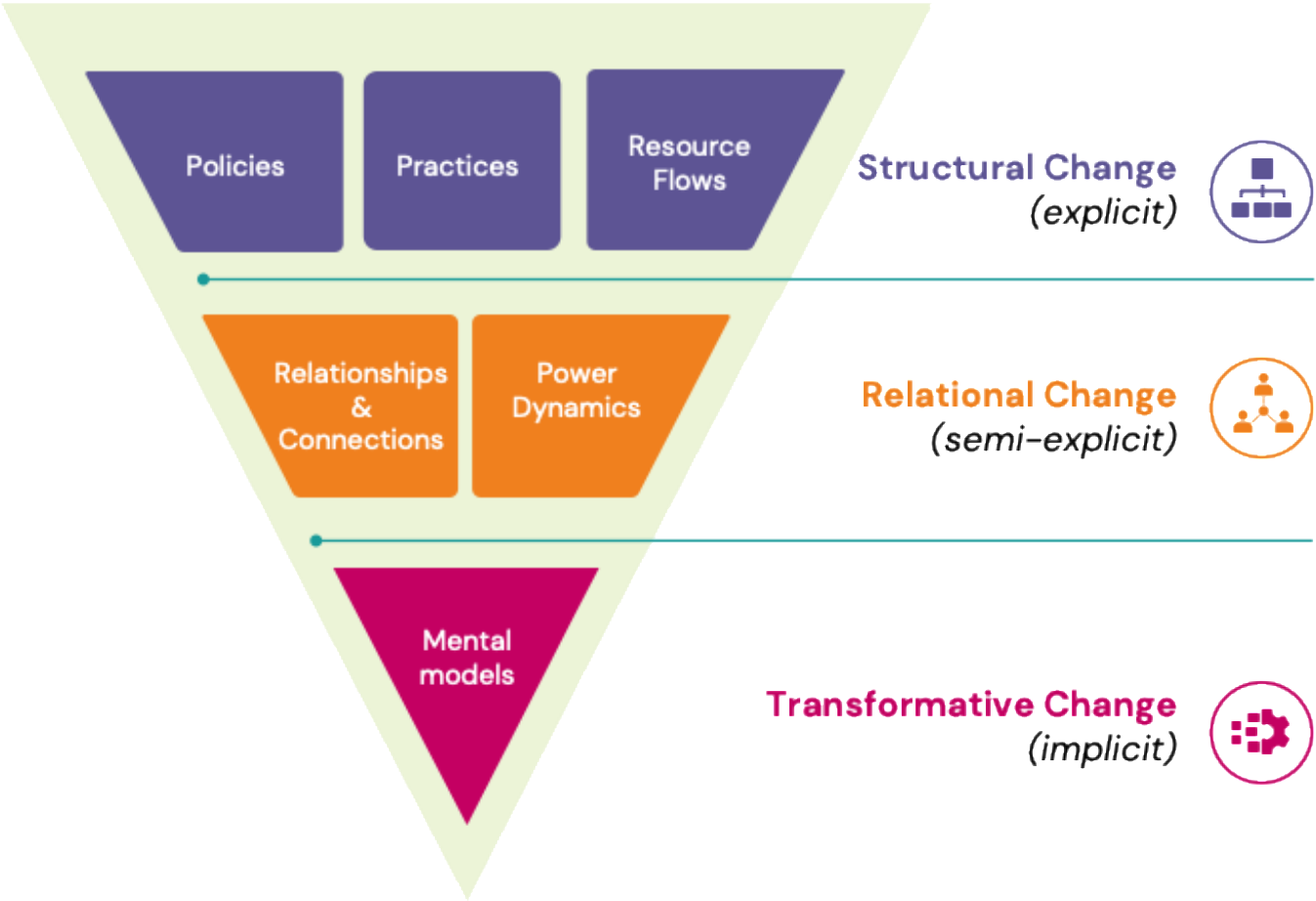


Figure 3: Conditions for systems change model. Source: *Water of Systems Change*

There are three levels of conditions for systems change. These are: structural, relational and transformative change.

**Structural change:** These are the tangible and observable factors, consisting of:

- **Policies:** government, institutional and organisational rules, regulations and priorities that guide the entity's own and others' actions;
- **Practices:** Espoused activities of institutions, coalitions, networks and other entities targeted to improving social and environmental progress. Within the entity, the procedures, guidelines or informal shared habits that comprise their work;
- **Resource flows:** How money, people, knowledge, information, and other assets such as infrastructure are allocated and distributed.

**Relational change:** this is semi-explicit, meaning that while people and power structures within the system can sometimes be identified, it is not always clear who holds influence or how decisions are being made. Addressing these conditions requires a deep understanding of the social and political dynamics at play within the sector and a commitment to promoting equity and inclusion. They consist of:

- **Relationships & Connections:** Quality of connections and communication occurring among actors in the system, especially among those with differing histories and viewpoints.
- **Power Dynamics:** The distribution of decision-making power, authority, and both formal and informal influence among individuals and organisations.

**Transformative change:** considered the most transformational, as shifting people's mental models can lead to significant changes in behaviour and outcomes. This consists of:

- **Mental models and paradigms:** deeply held beliefs and assumptions that influence one's actions.

**While these conditions can be independently targeted, they are intertwined in mutually reinforcing or counteracting ways.** These conditions exist within varying degrees of visibility to players in the system, largely due to how explicit or tangible they are made to people. In foresight and food systems, structural change, through the development of future-informed policies and strategies, institutional embedment of foresight units within policy, planning, research and teaching facilities and the shifting of resource flows towards desirable food system outcomes are the most sought-after outcomes of foresight interventions.

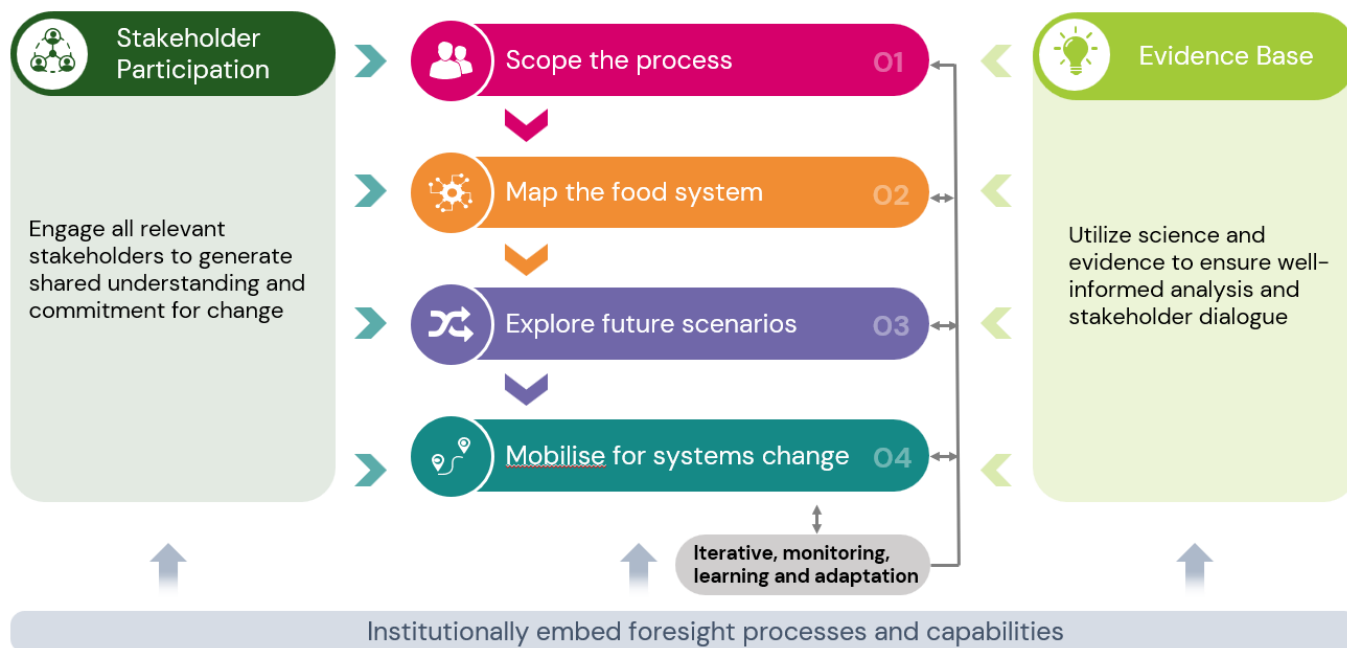
**Relationships, power dynamics and mental models, while less explicit, can have profound influence on systems change.** These are often harder to see but are no less important. Foresight plays an important role in this space by building networks, communities of practice, and 'temporary transformative spaces' where actors can experiment with new social-ecological configurations (Pereira et al., 2020). It also strengthens anticipatory capacities, including anticipation - a forward-looking attitude that informs action (Poli, 2017); futures literacy - the ability to "use the future" in different ways (Miller, 2018); and futures consciousness - the capacity to consider long-term consequences, act with agency, and envision a better collective future (Ahvenharju et al., 2018).

**Systems change must occur within the individual, the organisation and community/society dimensions simultaneously.** The individual/organisation/community's own ability to create change externally is influenced by their own internal policies, practices and resources, relationships and power imbalances and tacit paradigms and values. Hence, learning within these dimensions must be an ongoing process to support transformative change.



## 2.2 The Foresight4food Guiding Framework

To use foresight for food systems transformation, the Foresight4Food Initiative has developed a **Guiding Framework**. Illustrated below, the framework outlines four main phases to guide facilitators and users through setting up a foresight exercise, mapping the food system that is their focus, exploring factors that will shape the future of the food system, and understanding the types of interventions that could leverage positive change. For each phase, there is a series of guiding tasks and a set of participatory and analytical tools. This section will only briefly touch upon this – more details can be found in the ‘Using Foresight for Food System Transformation: A Practical Guide for Policy Makers, Practitioners & Researchers’ by Foresight4Food and the United Nations Food Systems Coordination Hub (2025), accessible [here](#).



*Figure 4: The Foresight4Food Framework of foresight for food systems change*

**The framework emphasises integrating the use of evidence with participatory processes of stakeholder engagement.** A core assumption of the Foresight4Food framework is the value of stakeholder dialogue that engages all actors in the food system including government, business, civil society, researchers, consumers, producers, and marginalized groups. For this engagement and dialogue to be effective and lead to positive change, it needs to be well informed by good data and the latest science. Information should be presented in visual ways that can be easily understood by all stakeholders. Computer modelling can also be used to help better understand the longer-term implications of business as usual and alternative pathways of food systems change.

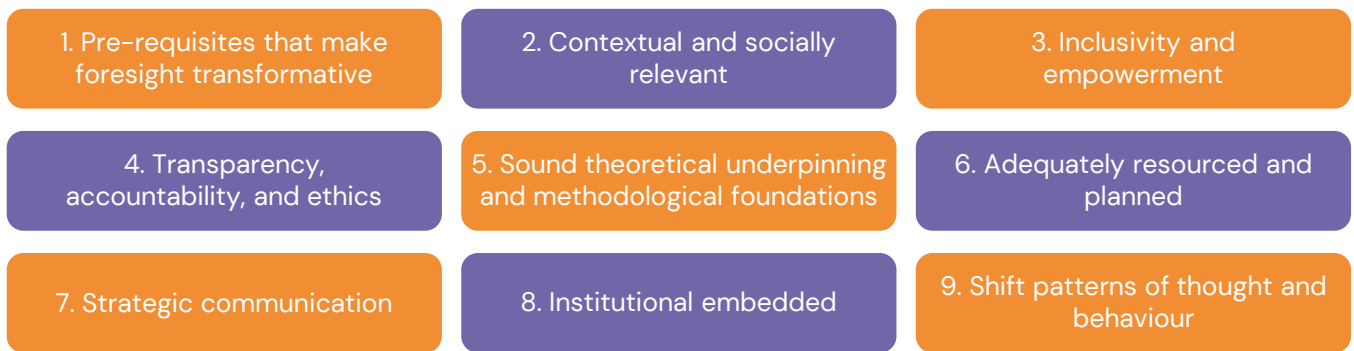
**The foresight framework links scenario methods with system mapping and systemic theory of change to provide a holistic approach to food systems transformation.** Futures thinking and scenario analysis are very valuable, but on its own is not enough to understand the whole system and drive change. For this reason, the framework has a detailed phase on understanding and mapping the food system, and a phase on mobilizing for systems change. This last phase of the process looks at how to bring about change in complex and adaptive (food) systems. This includes understanding power dynamics, mindsets and incentives structures that shape how actors in the food system behave. This requires a good understanding of the political economy of food systems and how power relations can enable or constrain opportunities for change.

Taken together – an understanding of food systems, foresight and systemic change, with a process guided by the Foresight4Food Guiding Framework – can help food systems foresight orchestrators, commissioners and evaluators to weigh purpose, approaches and tools fitting to their scope and goals. With such a backbone, we can now explore how to ensure the quality of this work.

# 3. Foresight Quality Criteria

Ensuring foresight is suitable and effective to complex food systems means following a principled process guided by quality criteria. These criteria are not a matter of ticking boxes. Rather, they are meant as guiding standards that are contextualised and given substance through multi-stakeholder engagement in specific contexts. It is the responsibility of foresight orchestrators, commissioner and advocacy groups to articulate and give meaning to these criteria. In the following chapter, we will outline nine important, interconnected quality principles and criteria, which, if applied, should underpin foresight for food systems change processes. These criteria are based on multiple rounds of co-creation and validation, supported by literature and past experiences.

Effective and impactful foresight for food systems change must emphasise the following:



Each quality criterium is supported by concepts, tips and implications for foresight. Reference is also made to examples and further resources to review.

## 3.1 The Pre-requisites That Make Foresight Transformative



**Foresight – the systematic capacity to look into the future to inform decisions today – is sometimes heralded as a magic bullet to navigate complex, systemic challenges.** This perception treats it as a simple, high-impact technical tool capable of yielding clear predictions and effortless solutions. However, it is impossible to predict the future. To view foresight merely as a mechanistic tool is to fundamentally misunderstand its nature and limit its potential. Transformative foresight, particularly within high-stakes sectors like food systems, demands more than just methodology; it requires a profound shift in mindset, culture, and engagement from all participants. Before any stakeholder embarks on a foresight process, they must recognise that its true value lies not in generating a document, but in driving fundamental systemic action. This section highlights the necessity of approaching foresight with utmost care and the right preconditions, ensuring the process is robust, actionable and genuinely capable of challenging and reshaping the status quo with the future in mind, rather than simply validating it. Effective transformation hinges on:

**Genuine and honest engagement of stakeholders, which is far more demanding than simple attendance.** It requires participants to move beyond surface-level contributions and be willing to engage in difficult conversations, confront uncomfortable truths, and challenge topics that are often considered ‘undiscussable’ or ‘taboo’ within the system. This commitment is essential for exposing systemic flaws, hidden drivers of change, and deeply ingrained biases. When participants, especially in hierarchical organisations or in ‘cultures of shame’ (Cozens, 2018) are engaged in a process that is not truly open about their fears, biases and interests, the foresight process often yields only a polished version of the status quo, failing to uncover the systemic weaknesses that truly need addressing.

**This level of honesty can only flourish within a strong culture of psychological safety.** This environment of trust is paramount, allowing participants to feel secure enough to share 'stupid' or unconventional ideas, challenge the assumptions or statements of high-ranking leaders, and admit what they don't know without fearing professional or social reprisal. Without this safety net, the risk of challenging dominant narratives becomes too high, leading to self-censorship and the production of conservative, non-transformative strategies. It is through this fearless, open inquiry that truly novel, unconventional, and ultimately necessary ideas are generated, providing the leverage points required for systemic change rather than incremental adjustments.

**The boldness to confront the unthinkable.** Ultimately, true transformation demands more than just a passive acceptance of change; it requires the boldness to explore uncomfortable, non-conventional futures. This means moving beyond a simple critique of the present to actively seek out scenarios that feel 'wrong', 'radical' or 'impossible'. Practitioners must have the courage to stare directly into futures that threaten the group's core identity, disrupt internal power hierarchies or suggest the collapse of long-held projects. To achieve this, foresight must be designed as a provocative exercise. It must intentionally shatter cognitive biases i.e., those deep-seated mental safety nets that lead us to downplay or deny the scale of coming shifts (UNDP, 2018). By daring to venture into these 'taboo' or unsettling possibilities, we move past superficial fixes. This collective bravery to face harsh, non-negotiable realities is exactly what allows a group to move beyond survival and toward building truly robust, future-proof strategies.

**Finally, the capabilities to engage in the learning journey.** Whether the engagement is in foresight research or applying foresight to strategic decision-making processes, assessing proficiency levels in foresight and the related competencies help guide the ongoing learning journey. According to Policy Horizon Canada's [Competences Framework for Foresight Practice](#), there are two types of learners in foresight exercises – foresight users and foresight producers. Good foresight practice brings together both groups, for the exercise to deliver effectively on its value.

*Foresight users* include members of policy, innovation and program communities who may not be actively involved in the foresight development process, but who use its insights to inform policy, program and service delivery decision making. Given that their efforts will be focused on using what they have learned about what the future might bring to make decisions, their learning journey places greater emphasis on developing the acumen to navigate systems and processes successfully, effectively communicating the value of foresight to the intended entities e.g., government. As their work also relies heavily on the ability to collaborate effectively with different stakeholders, collaboration and facilitation skills are also of importance.

*Foresight producers* include members of policy, innovation and program communities who are actively involved in conducting foresight research and/or in designing and managing the foresight development process. Given their work focuses on conducting research into change taking place in the present and exploring the factors that may shape alternative futures, their learning journeys focus more heavily on research, communication and thinking competencies. As experts in foresight processes or in the lived experiences of the issue at hand, they also rely on the ability to design engagements that enable effective collaboration with, and between, stakeholders across multiple sectors to provide timely and relevant insights and advice to support strategic decision making. An understanding of how the systems they will engage with work such as government is beneficial to designing and conducting foresight.

Diverse groups of participants will have differing levels of proficiencies. Beyond lived experiences of participants and foresight knowledge, the following skills, tools, and behaviours are critical to leverage on to achieve successful foresight exercises.

## 1. Research Competencies

Research in foresight is a systematic investigation used to gather and process information about change.

- **Information Collection & Analysis:** This involves gathering data on trends, weak signals, and "black swans" to identify drivers of change. Analysis helps break down topics to understand relationships between parts and identify information gaps.
- **Synthesis & Sensemaking:** Synthesis integrates multiple information sources to create a holistic view of the policy landscape and surface underlying assumptions. Sensemaking focuses on interpreting ambiguous data to build a shared understanding of how the future might unfold.

## 2. Communication Competencies

These skills bridge the gap between foresight producers and decision-makers.

- **Storytelling:** Used to make complex analytical insights relatable and tangible. It helps explore plausible chains of events and builds empathy for the experiences of others in potential future states.
- **Design:** Involves visualizing data and abstract ideas to make them accessible. Design allows practitioners to prototype and test policies within different future environments.

## 3. Engagement Competencies

These rely on active listening and open communication to drive collective action.

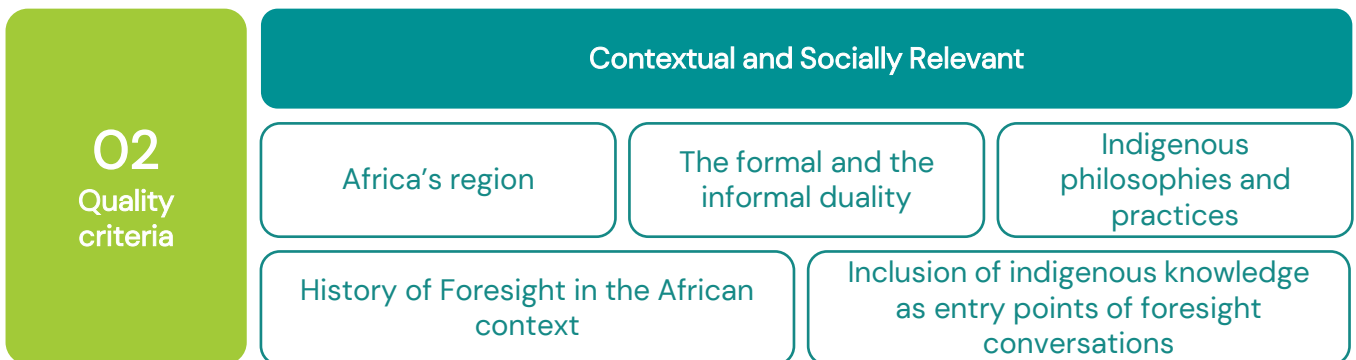
- **Facilitation:** The art of guiding groups toward shared objectives. It creates a safe space for diverse perspectives and ensures that exploratory conversations lead to innovative problem-solving.
- **Collaboration:** Combines diverse skills and expertise to break down silos. This collective approach makes it easier to explore controversial or difficult ideas.

## 4. Thinking Competencies

Foresight is built on rigorous and reflexive mental processes.

- **Futures Thinking:** A mindset that recognizes the future cannot be predicted but can be shaped. It applies specific methods to navigate uncertainty and understand the implications of change.
- **Systems Thinking:** A holistic approach that views challenges as parts of an interconnected whole. It focuses on patterns of behavior and underlying structures to identify where small changes can lead to significant impacts.
- **Meta-cognitive Awareness:** The ability to reflect on one's own thought processes and biases. This awareness prompts practitioners to question their mental models and seek out unconventional information sources

## 3.2 Contextual And Socially Relevant



### 3.2.1 Africa: Challenging The Monolithic Perspective, A Bioregional Perspective

Africa is a continent of immense diversity, far from the monolithic portrayal it often receives. The vast differences in geography, culture, history, and economy across its five major regions i.e., North, West, Central, East, and Southern Africa, make for a complex and vibrant whole.



**North Africa** serves as a bridge between Africa and the Middle East, characterized by its arid climate, dominated by the Sahara Desert. The region possesses a strong Arab and Berber identity, with Islam as the dominant religion and Arabic and French as primary languages. Economically, the region is heavily dependent on oil, gas and tourism.



**West Africa** is defined by its rich history of powerful empires, diverse ethnic groups, and vibrant cultural traditions (music, art, storytelling). The climate varies from arid savannah to tropical rainforests. Its economies are diversified, with major exports including cocoa, oil, and minerals. The linguistic landscape is complex, featuring languages like Yoruba, Igbo, and Hausa alongside English and French.



**Central Africa** is characterized by lush rainforests and major rivers. Central Africa is home to the Congo Basin. The region is incredibly rich in biodiversity and natural resources, including timber, oil, and diamonds, but has often faced political instability. It features an incredibly diverse cultural landscape with hundreds of ethnic groups and languages.



**Eastern Africa** is known for its iconic landscapes (e.g., the Great Rift Valley, Serengeti) and is considered the cradle of humanity. The economy is a mix of agriculture, tourism and a growing tech sector (e.g., in Kenya and Rwanda). Kiswahili is a major lingua franca, and English complements a multitude of local languages. The region boasts vast cultural diversity (i.e., the Bantu, Nilotic and Cushitic clusters).



**Southern Africa** features diverse geography (from deserts to coasts) and a history marked by colonialism and the struggle against apartheid. Today, it hosts some of the continent's most developed economies, notably South Africa, which is a major player in mining, agriculture and finance. The culture is a rich blend of Bantu-speaking peoples, Khoisan groups, and descendants of European and Asian settlers.

### 3.2.2. History Of Foresight In The African Context

**Foresight as a formalised practice has a long history in Africa.** Over decades, it has evolved, shaped by context, culture, needs, available tools and the political economy of the time, often reflecting broader economic and development policy trends. Initially dominated by expert-led forecasting and trend extrapolation, foresight practice is gradually becoming more inclusive and participatory as policymakers grapple with contemporary challenges and citizens' aspirations. Although many exercises were commissioned and implemented by external actors, insights from foresight have nonetheless influenced African policy development, such as in the Mont Fleur scenarios, which played a critical role in the negotiation of South Africa's post-apartheid future.

**Foresight has been used to promote inclusive planning and development.** Institutionalisation of foresight took root in the 1990s, with the launch of the UNDP National Long-Term Perspectives Studies (NLTPS), or African Futures, in 1992. This was in response to calls for development that expands beyond economic reform to include social, cultural and political change, anchored in a shared vision of the future. The initiative supported over 25 national studies with 25 to 30-year horizons, using participatory approaches to support countries to articulate alternative futures and mobilize resources to pursue them (Sall, 2002). As a result, many countries have now formally embedded long-term development visions and planning frameworks with ambitious growth and social development objectives (Kayizzi-Mugerwa, 2013; Futuribles).

**Foresight is championed by civil society and domestic leadership.** The dawn of the new millennium saw a boom in foresight, shifting towards participatory methods and continuous learning, emphasising co-creation of desirable futures. National and regional initiatives, such as Kenya (1999–2000), Tanzania (2001–2003; 2022–2023), Nigeria (2007–2008), and East Africa (2008), were convened by domestic organisations like the Institute of Economic Affairs, the Society for International Development and Twaweza. These processes were led largely by African actors, embedding foresight in local contexts and broadening participation in envisioning the future. Kenya at cross-roads (see Case study 1) is a particularly instructive case study on how foresight can act as an early warning system, helping to predict both opportunities and challenges before they become critical, particularly in highly constrained political environments.



## Case study 1: Kenya At The Crossroads: Scenarios For Our Future Case Study

Launched in 1998 by the Society for International Development (SID) and the Institute of Economic Affairs (IEA), this participatory foresight exercise involved diverse Kenyans to reflect on the country's social, political, and economic challenges. The purpose was to create four plausible, provocative scenarios for the next 10 to 20 years to stimulate debate and inform strategic policy decision-making, after twenty years of political dictatorship. The core message was: Kenya reached the limits of its models and foundations at the time, necessitating fundamental, radical reform; and that a successful, prosperous outcome was still possible, but required a difficult, comprehensive reorganisation and sacrifice.

The four scenarios were anchored on two critical areas – the economy and politics/institutions:

- **El Niño** – a scenario of no transformation in either economic models or politics/institutions. The scenario leads to the status quo being maintained, heightened tension, and a fracturing of Kenya into regional and ethnic enclaves (decline and disintegration).
- **Maendeleo** – Transformation concentrated on reordering the economy alone, while postponing necessary political and institutional reforms. The scenario results in initial rapid economic gains but is ultimately full of inequalities and instability, as political tensions eventually resurface.
- **Katiba** – Institutional reorganisation (focus on constitutional and political reforms) is achieved without parallel economic reform. The scenario leads to responsive, accountable institutions but fails to achieve far-reaching economic transformation, potentially increasing poverty and instability.
- **Flying Geese** – Simultaneous and inclusive reforms of both the economy and major institutions. The scenario achieves an outcome of inclusive democracy and growth, the successful, prosperous future envisioned by the participants.

The scenarios, unfortunately, were not adopted. In 2002, the Maendeleo scenario played out with the adoption of Economic Recovery Strategy and Wealth Creation policy framework governing the country for the next 10 years. Kenya registered the highest economic growth but also acute inequalities. In 2005, the Katiba scenario played out when Kenya failed to agree on a political reform process that called for the amendment of the Constitution, due to vested interests and a political class bent on preserving the status quo to protect the political elite. In 2007, a contested election spiralled into political violence, espoused in the El Niño scenario. This led to a mediation process that brought about a coalition government. This coalition drafted a vision for Kenya that initially sought to build and economic vision for Kenya but with input from the "Kenya at the Crossroads" project, it was expanded to include political and social pillars, essentially attempting to create a vision informed by the flying Geese scenario.

**Relevance:** These scenarios were designed to inform long-term policy and help stakeholders navigate political transitions and development pathways, particularly in the lead-up to critical elections. It demonstrates how foresight can be used as a tool for **policy-making** in highly constrained political environments but also to **stress test** the future fitness of strategies as was the case with vision 2030.

### Lessons:

- Foresight in Africa is not new. There is a deep, often under-told, history. Practitioners must resist treating the continent as a blank slate, ensuring that every exercise is grounded in this rich legacy. To ignore this history is to miss vital lessons in both triumph and caution. The "Kenya at the Crossroads" project serves as a sobering reminder of the foresight-policy gap. Despite a seven-year early warning, the failure to act in time highlights the dangers of ignoring strategic intelligence. Referencing these milestones is critical for more than just context; it anchors the foresight process in reality, ensuring that strategies are built on the hard-won wisdom of the past.
- Foresight narratives tend to be challenging and raise difficult issues that require substantial rethinking. For foresight to have impact, leaders and decision-makers must be intimately engaged and foresight practitioners must be empathetic to the constrained systems of public governance.
- Foresight can be used for early warning, but the information has to be utilised for it to actually prevent the challenges. Security agencies use foresight for horizon scanning to identify potential threats to develop more resilient strategies. Foresight fosters adaptive management by providing a continuous cycle of learning, where emerging trends are monitored and strategies are adjusted in real time. Quality foresight must stress-test current policies against systemic shocks and geopolitical risks to identify "no-regrets" policies and ensure robustness across alternative futures (OECD, 2025; GO Science, 2022).
- Foresight is crucial for long-term national planning, helping governments and organisations make informed decisions about resource allocation. It improves strategic decision-making by challenging assumptions and allowing leaders to stress test existing policies against a range of plausible future scenarios.

### 3.2.3 The 'Formal' And The 'Informal' Duality

Africa's economic landscape is a dynamic interplay between the formal and informal sectors. The latter often serves as the primary engine of employment and a crucial safety net for millions. Understanding this duality is essential for any foresight exercise, particularly when considering key sectors like agriculture, food systems, and trade. The informal sector in Africa is not a marginal or temporary phenomenon; it is, for all intents and purposes, the "real economy" for most of the population. It is characterized by activities that are not officially registered, regulated, or taxed, and it provides a vital source of income for a vast workforce. Its characteristics include:

- **Employment:** The informal economy accounts for a staggering 80–90% of employment in most African countries, particularly for women and youth. It is a dominant source of livelihood for those who cannot find jobs in the formal sector.
- **Flexibility and resilience:** Informal businesses are highly adaptable and resilient, able to respond quickly to market changes and economic shocks. They operate with low overhead, minimal bureaucracy, and often rely on social networks and trust-based systems.
- **Lack of protection:** Workers in the informal sector lack social protections like health insurance, pensions, and formal contracts. They are vulnerable to exploitation and unstable incomes.
- **Contribution to GDP:** While often unmeasured, the informal sector is a significant contributor to GDP, with some estimates suggesting it accounts for 40–65% of the total in many countries.

The informal sector is deeply embedded in Africa's agricultural and food systems, operating through a parallel supply chain that often bypasses formal regulations and infrastructure. This system is crucial to food security, acting as the backbone for both urban and rural populations through a vast network of small-scale farmers, open-air markets, and street vendors, supplying affordable and accessible food, with over 70% of households in low-income urban areas relying on these informal vendors. Furthermore, the informal sector is a major economic force in trade, with Informal Cross-Border Trade (ICBT) estimated to account for 10–60% of total regional trade. However, this vital economic activity is challenged by harassment, unofficial taxes, and a lack of formal recognition, which ultimately restricts its growth potential.

The formal sector is the part of the economy that is officially recognised, regulated, and taxed. It includes large corporations, government institutions, and formally registered small and medium-sized enterprises (SMEs).

- **Regulation and taxation:** Formal businesses operate under a clear legal and regulatory framework. They pay taxes, comply with labour laws, and have access to formal financial services and credit.
- **Job creation:** The formal sector is the source of "decent work," offering employment with stable wages, social protection, and long-term career prospects. However, it has been unable to keep pace with Africa's rapid population growth, particularly the youth bulge.
- **Contribution to GDP:** The formal sector represents a smaller share of employment (about 15–20 percent in most African countries), but contributes significantly to GDP and is the primary source of government tax revenue, which is crucial for funding public services and infrastructure.
- **Limited reach:** The formal sector's reach is often limited to major urban centres and key economic hubs, leaving large parts of the population and many rural areas



The formal sector in Africa's agriculture, food systems, and trade is distinct, typically operating with structured supply chains, regulations, and official documentation, but often remains disconnected from the informal sphere. In food systems, it is characterized by emphasis on large-scale commercial farming, supermarkets, supported by finance and technology service providers. These primarily cater to middle- and high-income consumers and dominate import/export activities, providing, high-quality food, yet struggling to reach the urban poor and local markets. The formal sector handles all properly documented and regulated goods, contracts, and taxes, playing an essential role in a country's global economic integration and attracting foreign direct investment, but it is often hampered by customs delays, high tariffs, and lack of regional integration, which can make it less competitive than its informal counterpart

## Box 1: Implementing Foresight With An Eye For Informality

A foresight exercise in a context where formal and informal economies coexist is a participatory, evidence-based, and systemic process that bridges the two worlds rather than treating them as separate entities. It moves beyond predicting a singular future and instead creates space for a shared, action-oriented vision.

**A hybrid mindset:** Before the exercise begins, it must be framed with a hybrid mindset. This means acknowledging that the informal economy is a permanent, resilient, and vital part of the system, not a temporary aberration to be eliminated. It requires:

- **Valuing informal knowledge:** The exercise must actively seek out and value the knowledge, wisdom, and practices of actors in the informal sector. Their insights on market dynamics, trade networks, community resilience are invisible yet invaluable data points.
- **Empathy and trust-building:** Many informal workers are distrustful of formal processes due to past harassment or a lack of legal protection. A successful exercise builds trust through genuine engagement, demonstrating that the process is designed to empower, not to exploit.
- **The process:** A successful foresight exercise unfolds in a series of interconnected phases that integrate both formal and informal perspectives.

### *Systemic Scanning*

This is the first step. Instead of just analysing official statistics which sometimes mirror political rhetoric more than statistical objectivity (GDP, employment rates), the exercise will use a holistic approach. It will scan for both formal signals (e.g., government policy changes, new technology adoption) and informal signals (e.g., the emergence of new informal markets, shifts in cross-border trade routes, or the rise of new digital tools for informal transactions like mobile money).

### *Scenario Co-Creation*

The core of the exercise is the co-creation of scenarios that reflect the lived realities of both formal and informal actors. Instead of a single "best-case" and "worst-case" scenario, the scenarios would explore hybrid futures.

### *Action and Integration*

The exercise must have a clear path to decision-making and implementation. Foresight is useless if its insights are not translated into action. Finally, create actionable roadmaps that bridge the formal and informal divide. These roadmaps would outline:

- **Hybrid policy:** Policies that don't seek to criminalize the informal sector but rather create an enabling environment for its growth and a pathway to voluntary formalization.
- **Inclusive innovation:** Initiatives that leverage informal trade networks and skills for innovation, rather than seeking to replace them with formal models.

### *Monitoring and Evaluation (M&E)*

An integrated M&E framework should track progress in both the formal and informal spheres, using a mix of qualitative and quantitative data to measure success.

**The outcomes and impact of a successful foresight exercise** are not just a report or a set of scenarios, but a combination of:

- **Shared vision:** The primary outcome is a shared understanding of the future that is owned by both formal and informal actors. This shared vision reduces friction and creates a foundation for collective action.
- **Systemic resilience:** By anticipating how both sectors will respond to shocks, the exercise builds systemic resilience. The result is a more robust economy that can withstand disruptions because its formal and informal parts are working together.
- **Influence on policy:** The ultimate impact is the influence on policy. It moves policymaking from a reactive, top-down approach to an anticipatory, bottom-up collaborative process, that ensures policies are relevant and effective for the entire economy, not just the formal part.

### 3.2.4 Indigenous Philosophies And Practices

African cultures and traditions are rich in foresight and futuristic practices, often embedded in their philosophies, social structures and relationships with the environment. These practices emphasise collective well-being, intergenerational responsibility and a cyclical understanding of time. They differ significantly from Western foresight, which often focuses on linear progression and technological advancement. These differences in worldview, religion and spirituality implicitly impact the understanding of the future, linear progression, the role of the individual and therefore foresight.

The concept of time differs fundamentally across cultures. The linear notion of time views it as a straight, uninterrupted progression from a distinct past through the present to a singular, inevitable future, often tied to a worldview of continuous progress and improvement (e.g., through technology or economic growth). This linear mindset, which relies on strict, clock-based measurement to maximize efficiency, is flawed in a foresight context in as far as it encourages focusing on incremental change rather than preparing for transformative, non-linear disruptions like sudden geopolitical shifts or emerging technologies. In contrast, many indigenous and traditional cultures hold a **cyclical view of time**, perceiving it through repeating natural cycles (such as seasons, life and death), where the past is foundational to the present and the future. In this cyclical conceptualization, the past (ancestral realm) is visible and considered to be 'in front', while the future (unseen and unpredictable) is 'behind', shifting focus from planning a distant future to acting wisely in the present to honour the past and influence the immediate future. Consequently, long-term thinking is viewed as more spiritual than physical. Measurement in this view is event-based, prioritizing the nurturing of relationships over strict, rigid schedules.

These contrasting notions of time represent fundamental differences in how individuals and communities perceive, prepare for, and ultimately shape the future, as shown in Table 1 below.

**Table 1: Differing Conceptualizations Of Time – A Contrast Between Linear And Cyclical Time Frames**

Implication of a linear time framework	Implication of a circular time framework	Foresight application in a circular time framework / Area of leverage
Distinct past, present and future time gives the impression that these are disconnected. The future is therefore processed as a destination, the past as a fixed, non-revisable history and the future as a sole focus on forward momentum.	Past, present and future time is a tripartite structure. All are interconnected and with an ongoing, repeating pattern of a previous state or a new iteration of a familiar cycle that never ends.	Focus on the past as present:  Foresight in this context should spend time unpacking the multiplicity of histories and framing the present as a factor that was once a future. Unpacking instances where history repeated itself to unearth patterns and lessons is vital because the past is an important psychological reference point.  Use the past to also demonstrate how the past was not a rigid blueprint for the future to enhance understanding that the future is an open, dynamic space, with new things emerging and not necessarily a repetition of the past. This shows that there can be agency and it demystifies the practice/understanding that the future is a set phenomenon that cannot be changed. It emphasises that the future is a product of conscious decisions made and deliberate actions done in the present.
The past is distinctly behind you and the future is in front of you gives the mental frame that by studying the past and present, we can accurately project future trends. The future is therefore seen as a solvable problem (the driver mentality)	The past is visible, and knowable hence it is in front of you, while the future is an invisible, unpredictable and an unknowable realm behind you. The future is therefore seen as mysterious and therefore an unfolding beyond our control (the mystical perspective).	Emphasise that the present is as a result of past decisions and actions. Spend time unpacking how the present has been shaped by past actions as an entry point of how the present (which is tomorrow's past) will also shape the future. This enables groups to internalize the fact that the future is a product of conscious decisions and actions and therefore humans /groups have the power to shape the future through rational thought and deliberate action. This is done without discounting the fact that there are unknowable elements / mysteries that have to be approached with the humility to learn, and which cannot be a controlled. This approach embraces both a driver and a student of the future mentality.

Implication of a linear time framework	Implication of a circular time framework	Foresight application in a circular time framework / Area of leverage
<b>Clock-based (linear) time frames – the future is an outcome of meticulously planned and executed steps.</b>	Event-based time frames – the future as a relational experience with negotiated gives and takes.	Process over product: Since time is often event based, foresight processes must be structured to keep a flexible agenda and prioritize meaningful dialogue, community building, and the nurturing of relationships. This allows for emergence, and trust building. It also makes foresight more inclusive and communally owned, to foster collective action by the time the process is completed.
<b>Focus on progression: This perspective encourages a focus on incremental change and continuous improvement. The assumption is that the future will be "better" and more advanced than the present because of human innovation and societal advancement.</b>	Focus on good old days: This perspective encourages a focus on the return to the known which is perceived as non-threatening because it is familiar. It may also come from the place of helplessness about the present conditions of deprivation or the lack of agency to change the future.	Balance between shifting the focus from "planning for a distant future" to "acting wisely in the present to honour the past and influence the immediate future." This serves as a powerful metaphor for this alternative notion of time.



The assumption that everyone holds the same view of the future as important is a significant flaw in foresight work. This belief overlooks several deep-seated psychological, social, and cultural barriers that create a lack of urgency about the future, making long-term planning feel irrelevant or even impossible for many people.

For a large portion of the population, particularly in developing or unstable contexts, the future is not a distant horizon to be planned for but a series of immediate challenges to be survived. When people's daily life is consumed by meeting basic needs, long-term thinking becomes a luxury. Foresight, in this context, is not just difficult, it is a distraction from the more pressing matters of survival.

**Other psychological and social barriers exist thus, shaping an individual's view of the future:**

- *Youthhood and certain mentalities like 'Get Rich Quick':* A large youth population, particularly one facing high unemployment, can be more focused on immediate gratification than on long-term process. The 'get rich quick' mentality, often fuelled by the promise of easy money from betting, forex trading, or get-rich-quick schemes, rejects the slow, patient work of systems building and sustainable development. This mindset views process as an obstacle to wealth and by extension the future, not the foundation of it.
- *Powerlessness and fear:* When individuals feel they have no control over their lives due to daunting recurring events like political instability, corruption, or economic hardship, it makes them develop a sense of powerlessness and in some cases fear. This feeling makes long-term planning seem futile or even threatening.
- *Variance in Exposure and opportunities:* Extreme inequalities have created such varying access to opportunities. Inclusion means navigating very fragmented experiences and understandings on issues.
- *Spirituality:* Strong spiritual beliefs can inadvertently dampen the urgency for future-oriented action. The belief that one's life and the future are predetermined by a higher power, fosters a passive approach to the future, where challenges are viewed as being outside of human control. It inadvertently discourages proactive engagement with real-world issues. On the other hand, spiritual perspectives can also be a source of resilience to survive very tough situations and create alternative futures.

The process must never assume that the long-term future is a universal desire for all. It means that it is a concept that has to be discussed with groups to determine their outlook. Acknowledging these and other barriers and providing a framework that is both empathetic and empowering is key. Foresight exercises can help participants gain agency, address immediate needs, and navigate daily challenges. In this case, the focus has to shift from planning for a distant, abstract future to using foresight to make better decisions in the present, thereby demonstrating its practical value in resolving immediate challenges to participants. Demonstrating that the present challenges are factors of systemic dynamics that will continue to recur if not addressed from a systems' perspective can motivate people to engage. However, a clear pathway of transformation is necessary otherwise heightened possibilities could turn into disappointment and false hope. Looking at cultural frameworks such as individualism vs. collectivism, power hierarchy, and religious tradition to show how these underlying structures influence attitudes toward the future, might be important entry points.

### 3.2.5 Include Indigenous Knowledge As Entry Points Of Foresight Conversations

Indigenous knowledge systems (IKSs) refer to the collective wisdom, philosophies, and skills that have emerged from generations of interaction between communities and their surrounding environments. Rooted in cultural traditions and natural heritage, this knowledge has been preserved and transmitted through time, shaping the way societies understand and respond to their world. However, cultural erosion and lack of institutional safeguards to document, adapt, and support these systems, has jeopardised their transmission to younger generations, thus risking their getting lost or replaced. Foresight must engage with local cultural understandings of the future and draw on Indigenous systems and worldviews (Rutting et al., 2023) to enhance food systems work particularly because it is predominantly rural and therefore rooted in these knowledge systems. For example, knowledge that sustains communities through droughts and shocks such as examining natural indicators for weather forecasts, offers an accessible entry point for a foresight facilitator. By drawing upon these traditional ecological knowledge, long-term cycles, and deep-seated cultural narratives, indigenous perspectives can transform the abstract into modern data and scenario planning entry points.

The table below shows foresight entry points using some indigenous practices on the continent.

Table 2: Foresight Entry Points Using Some Indigenous Practices

IKS Knowledge Story	Modern Foresight Practice
<p><b>Examining Goat Intestines and Bird Behaviour</b></p> <p>Communities like the Ilchamus, Pokot, and Tugen examine goat intestines to predict rainfall. Similarly, communities in the Rwenzori region observe birds, insects, and plants to forecast weather.</p>	<p><b>Scenario Planning &amp; Early Warning Systems</b></p> <p>This is a form of scenario planning where a community interprets data (signs) to create plausible futures (e.g., "rain is coming," "drought is likely"). It also serves as an early warning system, providing a signal for timely action (e.g., planting crops, moving livestock). Modern foresight uses tools like climate models and statistical analysis to create and analyse future scenarios and develop alerts.</p>
<p><b>Communal Practices and Sacred Rituals</b></p> <p>Rainmakers and community elders in Africa observe natural signs and perform rituals to forecast rainfall. These practices bring the community together to interpret signs and plan.</p>	<p><b>Participatory Foresight &amp; Collective Sense-Making</b></p> <p>This is a classic example of participatory foresight. It involves a group of stakeholders - in this case, the community, coming together to make sense of the future collectively. The rituals function as a structured process for gathering, interpreting, and agreeing on a shared path forward, much like a modern foresight workshop.</p>
<p><b>Community Granaries and Food Preservation</b></p> <p>In Mali, Burkina Faso, and Ethiopia, community granaries are used to store surplus harvests, acting as a safety net during poor harvest years. Traditional food preservation techniques like sun-drying and fermentation ensure food security during dry spells. They also preserve seeds for the next planting seasons.</p>	<p><b>Resilience Planning &amp; Strategic Stockpiling</b></p> <p>This practice directly aligns with resilience planning. The community granaries represent a strategic stockpile designed to mitigate the impact of shocks and ensure the long-term viability of the food system. Modern foresight emphasises building such resilience through policy, infrastructure, and supply chain management.</p>

### Zai Planting Pits

The Zai technique, used in the Sahel, involves digging planting pits to trap water and increase soil fertility, leading to a significant increase in crop yields in dry lands.

### Adaptive Strategy & Sustainable Innovation

This is an adaptive strategy born from long-term observation and experimentation. The Zai system is a form of sustainable innovation that uses a low-tech solution to address a systemic problem (soil degradation and water scarcity). Modern foresight seeks to identify and promote similar scalable, sustainable innovations to address future challenges.

### Oral Traditions and Traditional Wisdom

Oral traditions like stories and songs are used to preserve and transmit knowledge about food production, preparation, and consumption across generations.

### Knowledge Management & Intergenerational Dialogue

This practice is a form of knowledge management. Modern foresight recognizes the value of capturing and sharing knowledge to prevent its loss. By engaging both elders and youth, a foresight exercise can serve as a platform for intergenerational dialogue, ensuring that traditional knowledge is preserved while also being adapted for future contexts.

These ancestral insights provide a rich, lived context that can anchor the foresight process, making it more relevant, relatable, and actionable for participants. This approach also builds trust, and bridges the gap between traditional wisdom and modern analytical tools.



## Box 2: How To Leverage Indigenous Knowledge During Foresight Exercises

**Start with shared stories and observations:** Instead of beginning with abstract data or global trends, start the conversation by asking participants to share their traditional stories, songs, and observations related to food, weather, or natural indicators. For example, a facilitator could ask: "What are the signs you look for to know when to plant?" or "What stories have you been told about surviving past droughts?" This approach validates their knowledge and encourages genuine connection from the start. It ensures that the foresight process is not just about planning for the future but also about honouring and adapting the past.

**Connect traditional indicators to modern data:** The indigenous practice of observing birds or goat intestines for weather forecasts can be used as a tangible entry point to discuss modern meteorological data. A facilitator can present scientific forecasts and ask the community to compare them to their traditional signs. For instance, "the weather forecast predicts rain next week. Does this align with what the behaviour of the swallows is telling you?" This creates a dialogue where traditional and modern knowledge systems can inform and validate each other.

**Frame scenarios around indigenous concepts:** Traditional foresight practices often involve preparing for specific, localized scenarios, such as a prolonged drought or a good harvest. These concepts can be used as a foundation for building more detailed scenarios. A facilitator could pose a question like, "Given the signs we are seeing, what if the 'bad' harvest comes early? What would be the community's plan, and what are the new factors we need to consider today?" This helps make the foresight exercise feel relevant and actionable.

**Use visual tools based on IKS:** The practice of examining patterns in goat intestines or the landscape can inspire the use of visual tools in foresight exercises. Facilitators can use participatory mapping – a method where communities combine local knowledge with modern cartography – to visualize their food systems, water sources, and traditional migration routes. This makes the exercise highly visual and easy for everyone to understand, moving beyond just oral conversation.

### 3.3 Inclusivity And Empowerment



**Inclusive and empowering foresight** makes a process that is a deliberate effort to confront power dynamics and ensure that the future is co-created by everyone, not just a select few. This is particularly crucial in contexts like African food systems, where disparities in power, knowledge, and resources are stark.

#### 3.3.1 Social Norms And Power Distance Dynamics In Food Systems

In the context of food systems and foresight, social norms and power-distance dynamics are critical, often subtle, drivers of change that determine the success or failure of any transformation agenda. Social norms, i.e., the unwritten rules and collective expectations surrounding food production, preparation, and consumption as well as dictating who gets to speak, who gets to decide, and whose knowledge is considered valid, deeply influences everything. Foresight processes must therefore contend with significant power imbalances (high power distance) within the food system, where politically and economically influential actors (e.g., large processors, high-level policy-makers) hold disproportionate control over resources, market access, and policy decisions, often marginalising the perspectives of smallholder farmers and informal vendors.

These dynamics create a powerful status quo bias, making it challenging for foresight to facilitate a truly transformative dialogue. Entrenched interests resist changes that would disrupt existing power structures, demanding that foresight actively surface these 'undiscussable' realities to ensure equity and systemic resilience. Key manifestations of power distance include gender discrimination and the rural-urban divide. An inclusive process must deliberately seek out these voices. This requires separate, culturally-appropriate engagements that create a safe space for marginalised groups to share their perspectives without being dominated (ThinkPlace, n.d.).

#### Box 3: Leverage Feminist Futures Principles In Foresight Exercises

**Feminist Futures** is an approach to foresight that intentionally centres on gender equity, social justice, and intersectionality in the exploration of possible futures for food systems. It critically examines how current power structures and societal norms perpetuate inequalities, and then envisions futures where these are dismantled, leading to more inclusive, equitable, and sustainable food systems for all genders and marginalised groups (Abdullah, 2025; Milojević, n.d). A list of principles aligned with the focus on power, inclusion, and challenging the dominant experience includes:

- **Centre marginalised epistemologies:** A truly inclusive and transformative foresight process must actively seek the 'unknown box' of knowledge – critical insights and experiences that are not only excluded but often unrecognized by dominant stakeholders. This requires prioritizing and legitimizing the knowledge of marginalised groups (such as women, indigenous populations, the rural poor, and youth), as their experiences often hold the most vital, hidden information, such as a pastoralist's deep understanding of local weather or a youth's innovative approaches to informal trade. Moving beyond the "known unknowns" to uncover this invisible knowledge demands genuine humility and deep listening from practitioners, as designing foresight around only the dominant experience risks reinforcing existing exclusion and failing to anticipate systemic change.
- **Deconstruct power dynamics:** Intentionally design the process to challenge power imbalances and structural inequalities in the present. This goes beyond mere representation to ensure that the knowledge of the local farmer is given the same weight and respect as the data from an academic expert. This is foundational to making the process gender sensitive and power aware.

- **Focus on relational change:** Emphasise shifting the relationships and values within the system, not just the policies and structures. For food systems, this means examining how gender norms and power dynamics dictate who gets to speak and whose knowledge is considered valid.
- **Unpack intersecting inequalities (intersectionality):** Do not treat gender in isolation; examine how it intersects with other dimensions of marginalisation, such as race, ethnicity, class, geographical location (rural/urban divide), and ability. This ensures that the solutions envisioned are truly inclusive and not just tailored to a privileged few.
- **Stakeholder mapping:** When conducting stakeholder mapping, it is crucial to go beyond listing titles and to include all those in the ecosystem from grassroots organizers to formal policymakers. The mapping should also include an analysis of the power dynamics and the individual cultures and practices that keep groups in silos, allowing the foresight process to address these barriers directly.
- **Envision systemic transformation:** Insist on challenging the underlying dominant mental models (e.g., capitalist assumptions, growth-at-all-costs) that drive current food system challenges. The goal is to envision futures where existing power structures are dismantled, rather than merely seeking incremental change.
- **Prioritize care and sustainability:** Embed an ethical and moral compass into the process that prioritizes the public good, equity, and the well-being of the planet and future generations. Ethical foresight resists being co-opted to justify extractive or exploitative futures.

### 3.3.2 Democratising Foresight

**Democratising foresight is the process of making futures thinking accessible and actionable for all.** For foresight to be genuinely impactful, it must overcome the challenge of false inclusion, where work done with dominant groups is mistakenly labelled as participatory. Inclusion demands a shift in resources and methodology to ensure the process is truly representative and empowering.

**True inclusion means actively seeking out and engaging with marginalised groups on their own terms, moving beyond simply inviting a token representative.** This can include conducting separate foresight sessions (e.g., with farmer-led organisations or youth groups) to prevent their voices from being drowned out by more powerful stakeholders. Crucially, diversity remains symbolic unless additional time and resources are explicitly set aside to facilitate the participation of underrepresented groups, such as fisherfolk, disabled people, and pastoral communities. Inclusive foresight is therefore a substantial investment in time and cost – and is not a quick fix.

**The ultimate goal is to move from a one-off project design to a continuous process.** This involves a culture of foresight, where the community is constantly monitoring shifts, sharing insights, and adapting together. This is the essence of democratising foresight, making futures thinking accessible and actionable for all.

**Policy and governance level:** Democratisation at the policy level moves beyond expert-led scenario planning to create a formal framework for citizen participation in strategic national planning. For example, a national planning commission can host regional foresight workshops in local languages, directly engaging youth, women's groups, and farmer organisations. The goal is to make the foresight process a continuous, living dialogue that informs policy, rather than an inaccessible, one-time report.

**Involving policymakers early:** Being more aware of the realities and constraints under which policymakers operate, involving them early helps ensure that scenarios and roadmaps reflect the political and institutional realities they face, increasing the likelihood of uptake and implementation (Adesida et al., 2024).

**Beyond Sectoral Silos:** A truly democratic foresight process must also be a cross-sectoral initiative, recognizing that the future of complex issues like food systems is inextricably linked to public health, education, and national security. By convening diverse stakeholders across these sectors, the process explores the systemic interactions that shape their shared future.

**Participatory and democratic governance processes:** Foresight is inherently political, since talking about the future is never neutral, as it involves competing values, visions, and trade-offs over who benefits and who bears the costs. Foresight's political nature, as well as its lack of epistemic authority of traditional evidence-based approaches, makes it harder to integrate into policymaking. However, many countries in Africa and around the world are introducing laws that require participatory processes in policy, planning, and budgeting. This is a potential entry point for foresight, allowing a diversity of stakeholders to engage with long-term thinking and uncertainty (Galvin, 2025).

## Box 4: Leveraging Democratising Foresight

Democratising foresight is a principle that focuses on transforming the practice of futures thinking from an exclusive domain of external experts into a **collaborative and sustained process** involving the public and local actors (Adesida, Gatune, & Eyakuze, 2024).

The key aspects of this principle are:

- **Shift in ownership and legitimacy:** The primary goal is to break the habit of exclusively relying on technical experts and invite citizens to participate. This collaboration imparts legitimacy to the process and ensures that the future is co-created by everyone, not just a select few.
- **Building local capacity for sustainability:** It requires equipping individuals and organisations with the skills and tools to conduct and utilize foresight themselves, ensuring that capabilities are sustained internally and are not reliant on external consultants. This directly builds futures literacy.
- **Accessibility and tools:** Foresight must be made accessible through the use of simplified and accessible sensitization tools, utilizing non-specialist language, visual tools, and local storytelling to foster broad participation.
- **Policy and systemic integration:** Democratisation must happen at the policy level by creating a formal framework for citizen participation in strategic national planning. Furthermore, it requires moving beyond sector-specific silos (e.g., agriculture) to become a cross-sectoral initiative that addresses the systemic interactions shaping the shared future.
- **Continuous Practice:** The process should be a continuous, living dialogue that informs policy, rather than a one-time project resulting in an inaccessible report.

### 3.3.3 Building Capacity and Ownership

For inclusive foresight to work, it must create a sense of ownership. This is achieved by building capacity and demonstrating the value of the process.

- **Fostering futures literacy:** Quality foresight must build futures literacy – the capacity to recognize the role of the future in what people see and do, helping participants see the future as plural and open (UNDP, 2018).
- **Showing value:** Foresight must show its value by providing tangible benefits to participants. For a farmer, this could be a simple tool for anticipating market-price shifts. For a community leader, it could be a shared vision that helps them secure resources. By demonstrating how foresight can help people solve their immediate problems, it becomes a valuable practice that is worth embracing.
- **Building communities of practice:** Foresight can help individuals and communities regain a sense of agency in the face of unpredictable global forces. Structured exercises allow participants to counteract passivity and resignation and reflect on their roles and perspectives in the system, often catalysing innovative action (Adesida et al., 2024; Drimie et al., 2018). This also requires enabling conditions for dialogue and effective collaboration. While this may give rise to resistance and setbacks as power imbalances are identified, it should be understood as a step towards finding solutions to address deep-seated structural dimension of food systems (Drimie et al., 2018).
- **Building anticipatory capacities in research and development:** For a critical mass of foresight thinkers to emerge in Africa, academic and research institutions should be actively engaged in foresight activities, with dedicated educational programs to embed futures thinking (Adesida et al., 2024). Additionally, agricultural research and development systems should integrate foresight to support uncertainty-informed planning, including through using foresight as a tool for exploring transformative pathways, particularly under climate stress (Barrett et al., 2021).
- **Extended learning – individual workshops are insufficient for deep learning.** Practitioners should facilitate continuous dialogue and exchange through cross-sectoral reflexive groups and communities of practice (Dernat et al., 2022). These would create space for food systems actors to continuously reflect on their work, discuss design solutions and engage in more systemic forms of assessment of their work, allowing new structures and activities that encourage critical behaviours and impact results (Dernat et al., 2022).



## Case Study 2: Transformative Scenario Planning (TSP) in Koutiala, Mali

The Adaptation at Scale in Semi-Arid Regions (ASSAR) project conducted a deep, local-level foresight exercise in the Koutiala district of Mali to address critical challenges in agriculture, natural resources, and food security. This process utilized Transformative Scenario Planning (TSP), a framework designed to bring together diverse stakeholders including village leaders, farmers, researchers, and government officials to transform their thinking on complex, often conflicting issues. To move beyond traditional, linear planning, the workshops employed creative and inclusive methods to facilitate dialogue and co-creation:

- **Visual Storytelling:** Participants used **drawings** to imagine and communicate possible futures.
- **Media Projections:** The formulation of **newspaper headlines** helped groups ground their scenarios in a relatable, public context.
- **Interactive Small Groups:** **Small group work** and plenary feedback sessions ensured that every voice, from local farmers to district officials, contributed to the framework.

Through these methods, the group identified **access to land** and **access to water** as the primary drivers of their future. They developed four distinct scenarios, ranging from the "Village of Happiness" (*Hèrèboukou*) to the "Village in Distress" (*Geleya Dugu*), which served as the foundation for "**Vision 2035**". This shared vision prioritized strategic actions like climate-smart water infrastructure, soil improvements, and the use of improved seeds to ensure regional food security.

### Foresight lesson on radical inclusion and empowerment

The primary lesson from the Mali TSP process is that true inclusion demands the use of accessible, non-technical, and culturally appropriate methods. This means:

- **Transcending barriers:** By using visual tools like drawings and locally-relevant scenario names, the process transcended literacy and language barriers that often exclude grassroots stakeholders from high-level strategic planning.
- **Genuine co-creation:** These creative tools shifted the dynamic from "top-down" information gathering to "bottom-up" co-creation. This ensured that the resulting "Vision 2035" was not an external imposition but a product of local ownership.
- **Interdependence for success:** The success of the process relied on building relationships and cross-sectoral understanding. This reinforces the idea that the quality of the "interconnected processes" and the empowerment of all participants are what determine the robustness of the final strategy.

**Source:** Sidibe, A., Totin, E., Segnon, A., Thompson-Hall, M., & Hoffman, T. (2017) and the full project information can be found [here](#).



### 3.4 Transparency, Accountability And Ethics

04

Quality  
criteria

Transparency, accountability, and ethics

Transparency

Accountability

Ethics

An accountable, transparent, and ethical foresight process is one that goes beyond producing a report. It is a process built on trust, integrity, and a commitment to justice and human dignity when addressing complex, high-stakes issues like food systems. While general project management or research practices follow the same principles, this focus emphasises the long-term inherent uncertainty of the future, and the shifting of responsibility from immediate outputs to future impacts. Foresight transparency requires documenting why specific data points were chosen and how scenarios were constructed. Accountability in this context is active rather than passive, requiring the identification of harm signposts, to stress-test scenarios, and build redress mechanisms directly into the co-created vision, for example land-redress for displaced farmers. Ethically, it moves beyond the present to prioritise intergenerational well-being, considering the health of the environment and the lives of future generations through a long-term time horizon. Ultimately, foresight is defined by its resistance to exploitative co-optation, ensuring that the process is purpose-driven to build just futures and a sustainable world rather than being used to commodify the future for a select few. This type of foresight is particularly critical when dealing with complex, high-stakes issues like food systems, where the future has profound implications for livelihoods, equity, and human dignity. The idea is to remove the assumption that everyone doing foresight, is doing so to get equitable outcomes.

#### 3.4.1 Transparency

**Transparency in foresight means making the entire process open to scrutiny.** It is not just about sharing the final report, but it is about being explicit about the journey taken to get there. Before the process, it is also important to fully disclose the project to the stakeholders and the full intention of the work.

**Open methodology:** The methods used should be clearly documented and available to all participants and stakeholders. This includes explaining why certain data points were chosen, how scenarios were constructed, and what assumptions were made.

**Clear documentation and full acknowledgement of all contributions:** All inputs, from expert interviews and literature reviews to workshop outputs, should be meticulously documented and, where appropriate, made publicly accessible. This allows others to verify the findings and builds a shared institutional memory. Everyone who was consulted in the process or involved in any way should be fully acknowledged in the work for their contribution.

**Communication of uncertainty:** A transparent process is honest about the limitations of foresight or the particular project. It avoids presenting the work as predictions or as a panacea to all the community problems and instead communicates the inherent uncertainty of the future. The use of language that highlights plausibility rather than probability is a key part of this.

**Revealing biases:** A transparent foresight process explicitly identifies and addresses the biases of the practitioners and the stakeholders involved. This includes acknowledging who is funding the project, who is participating, and what vested interests might influence the outcomes. By making these biases and interests visible, it allows for a more critical and honest engagement with the results.



### 3.4.2 Accountability

Accountability in foresight means taking responsibility for the process and its outcomes. It moves the responsibility from a vague amorphous group to a clear "we" because the team is explicitly identified.

**Design and process:** Practitioners are accountable for the design of the process itself. This includes ensuring it is inclusive, ethical, and fit for purpose. If the process leads to a flawed or biased outcome, the practitioners must be accountable for a critical review and correction.

**Stakeholder responsibilities:** Accountability extends to all participants. Stakeholders must be accountable for their contributions, their willingness to engage with diverse perspectives, and their commitment to using the foresight insights responsibly. This can be formalized through charters or agreements at the outset of the process.

**Post-foresight follow-up:** The foresight team is accountable for ensuring that the insights generated are used as indicated at the onset. This can involve creating a follow-up plan, monitoring how the foresight work is being used in decision-making, and providing ongoing support to champions within the organisation. This turns a one-off report into a long-term, living, and useful tool.

**Redress for Harm:** In the event that a foresight exercise leads to an outcome that causes unintended harm, there must be a clear mechanism for redress. This is a critical but often overlooked aspect of accountability, especially when dealing with vulnerable populations whose futures are at stake. In this case it is imperative to define what "harm" looks like (e.g., marginalized groups or lost livelihoods) and clearly **assign a chain of responsibility** between funders, governments, and practitioners.

- Implement accessible, culturally appropriate reporting tools (like local ombudspersons or hotlines) and ensure **independent oversight** to investigate claims fairly.
- Shift from passive to active accountability using a **systematic tracking system**. Identify "harm signposts" and, where possible, secure contingency funding or insurance for compensation.
- Conduct a **pre-mortem for harm** to stress-test scenarios. If a strategy poses high risks to vulnerable groups, build the redress plan directly into the "Vision" (e.g., land-redress for displaced farmers).

**Closing the feedback loop:** The single most critical and often neglected part of ethical engagement is closing the feedback loop. Communities and stakeholders have the right to know what was learned from the information they provided and what will be done with it. Closing the loop reinforces their sense of ownership and can be done through community meetings, visual summaries, or trusted intermediaries, prioritizing relevance, clarity, and mutual respect (ThinkPlace, n.d.).



### 3.4.3 Ethics

An ethical foresight process is one that is guided by a strong moral compass. It is about ensuring that the pursuit of a better future does not inadvertently harm any group or perpetuate existing injustices. It therefore does not assume that all foresight processes will inherently produce good outcomes for all but the process is deliberately designed to do so.

**Do no harm:** The foundational ethical principle of foresight is "do no harm". This means intentionally designing the process to avoid reinforcing existing power imbalances, excluding marginalised voices, or creating futures that could be used to justify exploitation.

**Inclusivity and equity:** Ethical foresight prioritizes inclusivity as a moral imperative, not just a procedural step. This means going beyond simple participation to actively seek out and empower the voices of the most vulnerable. It also means ensuring that the benefits of the preferred future are distributed equitably across all groups.

**Future generations and environmental stewardship:** An ethical foresight process is not just concerned with the present generation. It explicitly considers the well-being of future generations and the health of the environment. This means using a long-term time horizon and ensuring that scenarios reflect the interconnectedness of human and ecological systems.

**Purpose-driven vs. exploitative:** A key ethical distinction is between purpose-driven foresight and exploitative foresight. Ethical foresight is driven by a desire to build a more just and sustainable world. It stands in contrast to the kind of foresight that is used to privatize resources, commodify the future, or create futures that serve the interests of a select few. The process must be designed to resist such co-optation.

#### Case Study 3: Food Systems Transformation In Southern Africa For One Health

The **Food Systems Transformation in Southern Africa for One Health (FoSTA-Health)** project demonstrates a committed approach to stakeholder accountability across its multi-level transformation pathways.

- **Systematic monitoring:** The project's structure included the development of a stakeholder-engagement tracking-system to ensure systematic monitoring of all consultation efforts.
- **Formalized feedback loops:** By reviewing and maintaining a project stakeholder database, such as with district-level stakeholders in Malawi, the project formalized its commitment to maintain contact and facilitate follow-up.
- **Closing the loop:** This organized tracking ensures that the feedback loop is closed, moving beyond one-off interactions to sustained, meaningful engagement with approximately 267 stakeholder organisations and 20 government departments.
- **Empowerment through participation:** The use of participatory research methodologies was designed to advance a sense of empowerment among citizens by ensuring they are active contributors to the research process rather than passive subjects.

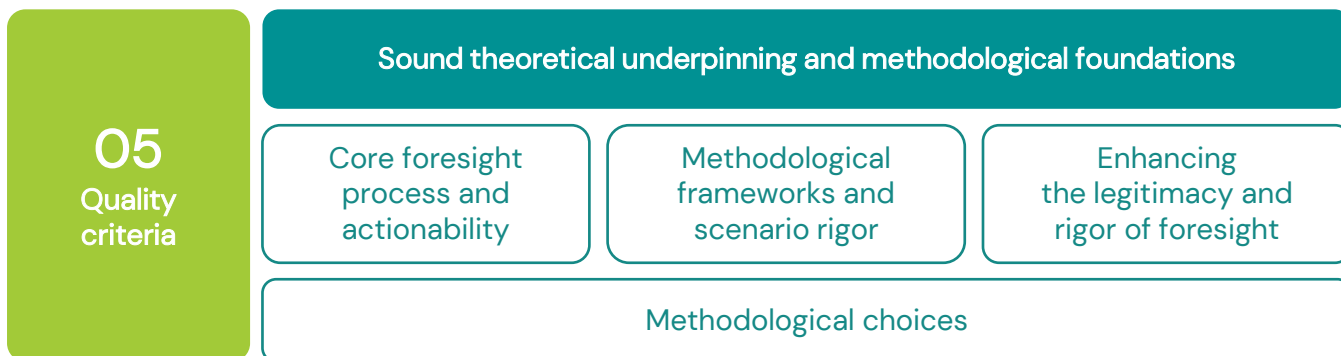
#### Foresight lesson: Institutionalizing accountability

The FoSTA-Health project illustrates that accountability is not passive. It must be institutionalized through dedicated mechanisms. A core component of an ethical and effective foresight project is the creation of a systematic tracking and monitoring system. This ensures that the process remains transparent and that participants are kept informed of how their contributions influenced the final "Representative Transformation Pathways" or policy recommendations. Other key issues:

- **Systematic inclusion:** Accountability requires knowing exactly who has been engaged to ensure no critical voices are missing. For example, the project utilized around 24 mapping sessions with local, national, and regional stakeholders to build its interactive food systems map.
- **Sustainable engagement:** To be truly accountable, foresight practitioners must move from "consultation" to "sustained engagement," ensuring that the co-created visions lead to tangible outcomes, such as providing direct inputs to national health ministries during crises

**Source:** The full project information can be found [here](#)

### 3.5 Sound Theoretical Underpinning And Methodological Foundations



A sound methodological foundation ensures foresight is rigorous, transformative, and action oriented. This rigor is built through a structured process, the application of relevant frameworks, and strict quality control for scenarios. The core process involves three key phases: **Framing** (defining the decision context, time horizon, thematic scope, and non-changing boundary conditions (Monteiro & Dal Borgo, 2023)); **Horizon/Environmental Scanning** (a systematic, continuous function to map futures, distinguish trends from uncertainties, and identify emerging issues and weak signals (GO Science, 2022; Conway, n.d.)); and **Sensemaking** (the collective process of assigning meaning to data and scenarios to produce shared narratives and actionable implications (Monteiro & Dal Borgo, 2023)).

To ensure a holistic approach, foresight, especially for food systems, should adopt established frameworks. These may include the four-phased Foresight4Food Framework (Woodhill et al., 2025), which involves: **Scoping** the process; **Mapping** the food system (clarifying boundaries and assessing political economy/power); **Exploring future scenarios** (using tools like STEEPLE to identify drivers and critical uncertainties); and **Mobilizing for systems change** (generating shared visions and pathways). Scenarios themselves must be scientifically rigorous, challenging, and relevant, necessitating a focus on systemic shocks that have little historical precedence (e.g., pandemics, major trade wars) rather than just linear megatrends (Barrett et al., 2021). Quality scenarios must actively incorporate alternative imaginaries (Feola et al., 2021), resist limiting narratives (dystopian, utopian, business-as-usual), and specifically integrate African or Indigenous perspectives (Rutting et al., 2022; Feola et al., 2021). Tools such as the Futures Triangle to expose the 'weight of history' (barriers/biases) that prevent change (UNDP, 2018) can be considered.

Enhancing the legitimacy and rigor of foresight requires the use of mixed methods, often by combining participatory approaches with quantitative modelling to deepen reflection on policy consequences, trade-offs, and strategic responses (Pereira et al., 2021). Furthermore, quality foresight is inextricably linked to participatory governance and requires reclaiming and distributing facilitation skills so that the stakeholder group can collectively self-facilitate positive change, moving beyond reliance on external experts. Systems practitioners must master two modes: the "jungle floor to canopy" mode for active, goal-setting tasks, and the ability to drop back into the "jungle" to navigate power, complexity, and resource flows for course correction (Guijt & Woodhill, 2023).



The choice of foresight methods fundamentally shapes the futures that can be imagined, determining the resulting partnerships, mobilized knowledge systems, and institutional mandates (Vervoort et al., 2021). To ensure policy relevance and actionability, methodologies must explicitly map and utilize the levers of systems change, such as policy and regulatory reform, shifts in financial flows, innovation and technology development, and inclusive governance mechanisms (Woodhill et al., 2025, p. 19). Furthermore, enhancing legitimacy requires combining bottom-up participatory approaches with quantitative modelling. The use of semi-quantitative models, when comprehensively integrated into stakeholder discussions, can stimulate concrete debate on trade-offs and policy consequences, moving the focus beyond general aspirations.

## Case Study 4: Climate Change, Agriculture and Food Security in West Africa

The **CCAFS (Climate Change, Agriculture and Food Security)** West Africa project serves as a landmark example of methodological rigor in foresight by bridging the gap between local lived experiences and global economic trends.

- **Integrated approach:** The project combined participatory scenario development (qualitative narratives co-created by stakeholders in three regional workshops) with quantitative economic modelling using the GLOBIOM and IMPACT models.
- **Regional-global linkages:** A defining feature of this study was its alignment with the Shared Socioeconomic Pathways (SSPs). By "nesting" regional West African scenarios within these global frameworks, the project ensured that local narratives remained consistent with broader global drivers like population growth, technological change, and trade policies.
- **Quantifying narratives:** Stakeholder driven stories were translated into specific model parameters (such as crop-yield growth, land-use change, and livestock productivity), allowing the research team to provide concrete data on food security and climate impacts for each envisioned future.

### Foresight lesson: The power of methodological blending

The primary lesson from this study is that methodological "hybrids" are essential for policy influence.

- **Credibility through quantification:** For scenarios to be truly influential in high-level policy, qualitative, participatory narratives must be rigorously linked with quantitative modelling and global frameworks (like SSPs). While stories engage the imagination, data provides the technical "proof" required by ministries and international donors.
- **Relevance through participation:** Quantitative models alone often lack local nuance. This process ensures scenarios are relevant to local contexts (stakeholder-driven) because they are built on the values and concerns of those on the ground.
- **Global coherence:** By linking to established frameworks like the SSPs, the results become globally coherent. This allows regional policymakers to see how their local decisions play out against international trends, making the foresight exercise a powerful tool for strategic planning in an interconnected world.
- **Closing the logic gap:** The rigorous translation of "storyboard" elements into "model inputs" forces practitioners to be precise about their assumptions, reducing the risk of producing vague or unrealistic "wish-list" scenarios.

**Source:** Palazzo, A., Vervoort, J. M., Mason-D'Croz, D., Rutting, L., Havlík, P., Islam, S., ... & Zougmore, R. (2017). The full project information can be found [here](#)

## 3.6 Adequately Resourced And Planned



An adequately resourced and planned foresight process is one that is proactive, strategic, and sustainable. It moves beyond a one-off project and becomes an embedded, continuous practice. This requires a commitment of time, money, and human capital, ensuring that the foresight work has the necessary tools and support to be effective and transformative.

### 3.6.1 Financial Resourcing

A well-resourced foresight process has a dedicated budget that covers all phases of the work. This is crucial for ensuring the quality and depth of the analysis.

**Funding for expertise:** A sufficient budget allows for the engagement of a diverse range of experts, including foresight practitioners, subject matter specialists, and data scientists. This moves the process beyond a single viewpoint and provides a more robust, multi-faceted analysis.

**Technology and tools:** Financial resources are needed to acquire and maintain the right tools. This includes subscriptions to scanning platforms, advanced data analysis software, and visualization tools that can handle complex data sets. These tools are essential for making sense of vast amounts of information and communicating findings effectively.

**Compensation for participation:** An ethical and inclusive process recognizes that participants' time is valuable. This includes providing compensation for community members, farmers, and other stakeholders who contribute their time and expertise. This is particularly important for ensuring the participation of marginalised groups who cannot afford to take time away from their livelihoods.

**Funding the 'safe-fail' approach:** Quality financial planning must support distributed experimentation and safe-fail experiments (spreading resources across multiple initiatives), and KPIs must value the knowledge gained from failure, not just successful outputs (Guijt & Woodhill, 2023).

### 3.6.2 Human Resourcing

Adequate human resourcing is the engine of a successful foresight process. This involves more than just a single foresight lead. It requires a dedicated, cross-functional team.

**Dedicated team:** A successful foresight process has a dedicated team or a clear allocation of staff time. This team should include not only a foresight practitioner but also subject matter specialists, a local mobilizer and/or project manager, a communications specialist, and a data analyst. A dedicated team ensures that the work is not side-lined by other priorities and that all aspects of the process, from data collection to stakeholder engagement, are managed effectively.

**Knowledge and skills:** The team must possess a diverse range of skills, including strategic thinking, facilitation, systemic analysis, data analytics, and communication. They should also be skilled in building and maintaining relationships with a wide range of stakeholders, from senior leaders to grassroots communities.

### 3.6.3 Planned for Sustainability

A well-planned foresight process is designed for continuity, not as a one-time event. This ensures that the insights and the practice itself endure over the long term.

**Institutionalisation:** Foresight should be planned for **intra-institutionalisation**. This means it should be formally embedded within an organisation's existing structures and workflows, for example, by creating a permanent foresight unit or making it a required step in annual planning cycles (see section 3.8.1).

**Planning for emergence and long-term success:** Foresight planning must anticipate that sustained systemic change requires **ongoing investment** for long-term success, as strategies are often **emergent** and evolve over a **multi-year timeframe** (Guijt & Woodhill, 2023, p. 11, 14).

**Capacity building:** The plan should include a clear component for **capacity building**. This involves training internal staff and stakeholders to understand and use foresight methodologies. The goal is to create a culture of long-term thinking so that the organisation can continue to adapt and learn even after the initial project is complete.

**Regular review and updates:** The foresight process should be planned to be **dynamic**. It must include regular reviews to update scenarios, monitor emerging trends, and assess the impact of past recommendations. A rigid, one-off report quickly becomes irrelevant; a living process remains a valuable tool for decision-making.



### 3.6.4 Strategically Planned for Impact

Beyond resources, a successful foresight process is strategically planned for impact.

- Clear objectives:** The process must have clear and well-defined objectives from the start. What specific questions is the foresight exercise trying to answer? What decisions will it inform?
- Mandate for timing with policy cycles:** The results of foresight have a higher chance of being taken onboard if they are fully in step with the policy-making process. This requires a thorough analysis of the political context and alignment with existing planning timelines (Galvin, 2025; Hebinck et al., 2018a) as well as government priorities.
- Planning for sequencing:** The process should be strategically planned for sequencing, where success is viewed as a series of dominos, with one success (e.g., advocacy, legislation) inviting the next scale or step (e.g., implementation infrastructure) (Guijt & Woodhill, 2023).
- Policy design from the "future present":** Planning should utilize the two-stage framework to overcome the policy "time-lag," defining the "Future - Present" (policy launch) and the "Future - Future" (15+ years out). This requires backcasting from desired outcomes to ensure policies are designed for the future context (UNDP, 2018).
- Backcasting and road-mapping:** Planning must mandate backcasting from a desired future goal to identify the causal sequence of actions (Krishnan et al., 2022). The resulting roadmap must identify inflection points and critical obstacles along with the resources and alliances needed to overcome them (Krishnan et al., 2022). Part of the process includes wind-tunnelling to check for unintended consequences of the chosen paths in policy.
- Stakeholder engagement strategy:** A successful foresight process (especially at the implementation stage) has a deliberate and thoughtful stakeholder engagement strategy that maps all key actors and outlines how they will be involved in the process. This plan ensures that the process is inclusive and that the insights are relevant to all. Care has to be taken to distinguish between real power holders (who may not have a position but have very strong influence) and those with only positional power.

#### Case Study 5: Strategic Foresight to Inform Investment for Food Security in Sub-Saharan Africa

The 'Strategic foresight to inform investment for food security in Sub-Saharan Africa' project was designed with a specific, high-level strategic mandate. Its core objective was to provide the Australian Centre for International Agricultural Research (ACIAR) and the Australian International Food Security Centre (AIFSC) with a deeper understanding of agricultural futures, uncertainties, and opportunities. Unlike open-ended foresight, this project had a defined purpose: to directly inform research and investment priorities for food security in Africa. The process focused on identifying critical drivers of change – such as climate variability, population growth, and technological shifts – specifically to determine where capital and research efforts would be most effective. By analysing these futures, the project provided the necessary mandate for decision-makers to move beyond "business as usual" and align investments with long-term regional needs.

The following key priorities and recommendations were articulated:

- **Systematizing priority-setting via foresight**

The primary recommendation is for AIFSC to adopt a **systematic priority-setting framework** that utilizes foresight and forward-looking assessments. This is intended to: use foresight to test existing beliefs about future research needs; explore the implications of different resource allocations across various research program areas; and isolate key uncertainties in different farming systems to find the most promising "entry-points" for interventions where the centre's efforts can exert the most influence.

- **Building in-house foresight capacity**

The report highlights the need for AIFSC to establish dedicated internal capacity to manage and interpret foresight data. More specifically: This team would be responsible for distilling critical implications from various foresight studies to inform AIFSC's specific research programs; internal experts would commission new studies focused on specific future uncertainties that align with the centre's programmatic goals; this capacity would also serve to mobilize African stakeholders around new research efforts to improve the understanding of transformation drivers in target regions.

- **Strengthening strategic partnership**

The report identifies specific institutions for potential short-term partnerships to accelerate the integration of foresight into AIFSC’s work, collaborating with ABARES and CSIRO, as well as other centres of excellence within the Australian university system; and establishing partnerships with expert groups in the Asia-Pacific region and elsewhere to leverage existing foresight capabilities.

- **Bridging Knowledge gaps for investment**

To improve the quality of investment decisions, the report recommends future research focus on: integrating biophysical "farming systems" perspectives with socio-economic growth typologies to create a more complete map of where technologies or policies can be most effective; and moving beyond treating Africa as a single block by investing in foresight that explores the unique development pathways of various African sub-regions.

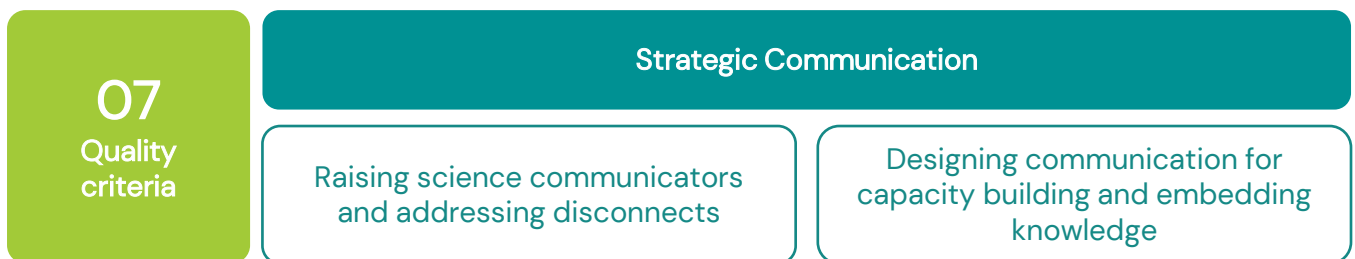
**Foresight lesson: The necessity of a strategic mandate**

The primary lesson from this project is that **foresight must have a clearly articulated strategic mandate to succeed.**

- **Purpose over theory:** To prevent foresight from becoming a purely academic or "blue-sky" exercise, it must be anchored in a specific goal, such as informing investment or guiding policy.
- **Methodological alignment:** Clarity of purpose ensures the **correct methodological integration.** When the goal is strategic investment, practitioners are compelled to link expert consultation with rigorous economic models (like GLOBIO and IMPACT). This creates a bridge between imaginative scenarios and the technical data required for financial and policy commitments.
- **Actionable outcomes:** A strong mandate ensures that the final "outputs" (reports and scenarios) are translated into "outcomes" (changed investment strategies). It forces the process to answer the "so what?" question for stakeholders who are responsible for budgets and long-term planning.

**Source:** Palazzo, A., Vervoort, J. M., Mason-D’Croz, D., Rutting, L., Havlík, P., Islam, S., ... & Zougmore, R. (2017). The full project information can be found [here](#)

### 3.7 Strategic Communication



**Communication plan:** The process needs a communication plan that outlines how findings will be shared with different audiences. This ensures that the insights reach the right people in a format they can understand and use, thereby increasing the likelihood that they will be acted upon.

**Foresight communication is the crucial bridge between analysis and action.** It's not just about sharing information but about translating complex, long-term insights into actionable, understandable, and inspiring messages that resonate with diverse audiences. Partnerships with organizations like [Alliance for Science](#) to bridge the gap between science and communication, who believe that an impactful outcome hinges on a communication strategy that is designed for engagement and behaviour change.

**Communication is essential for policy uptake and reaching stakeholders across the food system.** Communication is not an annex but a strategic tool (GO Science, 2022). The output must be compiled into an easy-to-use, easy-to-digest report (Krishnan et al., 2022) and must clearly articulate how the long-term thinking impacts the immediate short-term decision cycle (GO Science, 2022).

#### 3.7.1 Raising Science Communicators and Addressing Disconnects

**The first step in impactful foresight communication is to develop effective knowledge communicators.** These are not just scientists or foresight experts; they are individuals who can take complex, technical information and simplify it without losing its core meaning. This is essential for addressing the disconnects between experts, policymakers, and the public.

**Simplifying complexity (without generalising):** Foresight reports often contain jargon, complex models, and abstract scenarios. A good communicator translates these into effective language, using analogies and metaphors that relate to people's lived experiences. For example, instead of talking about "climatic tipping points," a communicator might explain it in terms of a familiar event like the unpredictable start of the rainy season.

**Building a bridge:** The goal is to build a bridge between the scientific community and society. This involves moving beyond one-way information dissemination and creating a dialogue. A successful communication strategy will address common disconnects, such as the public's focus on short-term needs versus the long-term focus of foresight, or the emotional nature of human decision-making versus the rational, data-driven nature of scientific analysis.

**Multimodal mandate:** Strategic communication must utilize diverse media, including **texts, animations, simulations, and visuals**, to convey the key decisions and steps identified as necessary to achieve the policy goal (Krishnan et al., 2022).

### 3.7.2 Designing Communication for Capacity Building and Embedding Knowledge

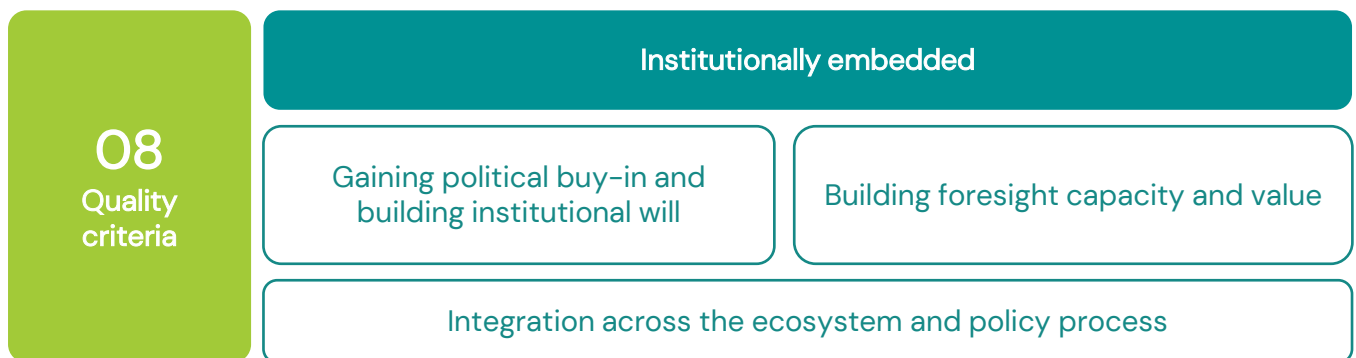
Impactful foresight communication is not just about conveying a message; it is about building capacity for people to think and act differently. It aims to embed future-oriented knowledge into daily practices and cultural norms.

**From information to knowledge:** This involves a shift from simply providing information to fostering a deeper understanding. For example, instead of just telling a community that drought is a future risk, communication could be designed to show them how to preserve food by demonstrating a new, low-cost method of grain storage. This makes the information tangible and directly useful.

**Engaging different generations:** To get generations to embed future knowledge, communication must be tailored to their specific needs and channels. For youth, this might mean creating engaging content on social media platforms that shows how foresight can lead to job opportunities or solve environmental problems. For elders, it might involve storytelling and oral traditions that connect future challenges to historical wisdom.

**A continuous process:** Communication should not be a one-off event. It should be a continuous process that reinforces key messages and provides ongoing support for behavioural change. This means following up with communities, celebrating small wins, and creating feedback loops that allow the foresight process to adapt based on what works and what doesn't. This transforms foresight from a fleeting project into a lasting culture of future-oriented thinking.

## 3.8 Institutionally Embedded



**Foresight must be institutionally embedded rather than existing as a one-off project.** This transition transforms foresight into a core, permanent function of how an organisation, especially a government, thinks and operates. Achieving this requires a fundamental shift in political will, policy-making culture, and operational structure to ensure insights lead to action and enduring impact.

### 3.8.1 Gaining Political Buy-in And Building Institutional Will

The most critical precondition for embedding foresight is gaining political buy-in from senior leadership, from the executive, legislative and judicial bodies. Foresight is inherently political because it deals with competing visions of the future and the allocation of resources. The challenge is moving from political will in the executive to a more permanent, institutionalised practice with technocrats.

A crucial element is 'championing the vision'. This process often requires high-level political sponsorship and the presence of a 'foresight champion' – an individual with political and social capital who can advocate for, protect, and ensure the findings of the foresight work are integrated into the core decision-making apparatus (Monteiro & Dal Borgo, 2023). The sponsor must clearly align the initiative with objectives such as input generation, strategy/policy design, organisational culture shift, or network mobilization (Monteiro & Dal Borgo, 2023).

#### Case study 6: The Case of Political Championing in Kenya

The Kenya Senate Futures Caucus is a bipartisan group of Kenyan senators dedicated to institutionalising strategic foresight and anticipatory governance within the country's law-making and policy processes. The champion is Senator Ledama Olekina, who serves as the Chairperson of the Senate Futures Caucus and a Senator for Narok County (as of 2026). The establishment of the Caucus is a major step toward embedding long-term thinking in Kenyan governance, moving beyond short electoral cycles, and keeping future generations in mind when designing policies. Senator Ledama's role as a champion has been fourfold:



- To lend authority to the work, while also acting as the central figure advocating for the urgency of rethinking governance through a generational lens. His efforts extend to global advocacy, participating in forums like the Third World Summit of the Committees of the Future to bring external legitimacy and best practices.
- Locally, the senator has been lobbying other members of the Senate to institutionalise the Caucus through the development of a Strategic Plan (2025–2028) and through the push for it to attain the status of a standing Committee. This includes working to secure resources to guarantee long-term legislative impact. He also supported the creation of a core delivery team housed under the Senate Liaison Office, to serve as the essential support mechanism for translating political intent into a concrete institutionalisation plan.
- He has been working to translate the intent into actionable legislative change by defining the core aim of the Caucus as equipping lawmakers to anticipate long-term challenges and craft responsive, evidence-based legislation. A key emphasis is placed on promoting intergenerational responsibility (following practices of his native Maasai roots), urging the need to safeguard the livelihoods and interests of future generations against immediate political challenges and unsustainable policies. To this end, he has been actively exploring mechanisms, such as the integration of foresight into fiscal planning and generation of future proof legislation.
- He has been driving a fundamental shift in the approach to governance. Through partnerships, he has organized high level trainings for fellow legislators to build their capacity in anticipatory governance while emphasising their constitutional duty to focus on building resilient, equitable, and sustainable futures for all.

**Source:** Sivi, K., Ogembo B., (2025). Unpublished by Kenya Senate Liaison Office

To ensure continuity, foresight must move from ad-hoc projects to a permanent function by establishing dedicated structures (like Singapore's Centre for Strategic Futures), creating clear mandates, and putting in place procedures that require foresight principles (e.g., scenario analysis) to be systematically integrated into existing policy cycles and budgeting processes (Woodhill et al., 2025). The Kenya senate is now pushing for the Futures Caucus to become a standing committee of Parliament.

### 3.8.2 Building Foresight Capacity And Value

**Successful institutionalisation requires building the necessary organisational capacity and demonstrating the clear value proposition of foresight to decision-makers.** Institutional embedding requires establishing four core functional blocks (Monteiro & Dal Borgo, 2023):

- Human Capital: Staff must have the necessary foresight skills (not just subject matter expertise).
- Tools: Providing the required platforms, databases, and collaboration tools.
- Network of Experts: Developing a formal, multidisciplinary network (internal and external).
- Governance Structure: Establishing clear roles, responsibilities, and mechanisms for embedding results.

**Shifting Policy Mindsets:** Foresight must challenge the prevailing linear policy mindset in governments by introducing systems thinking and complexity. This forces policymakers to consider the ripple effects of decisions across interconnected social, economic, and environmental systems, moving them from a reactive, market-driven approach to a proactive, purpose-driven one.

**Making Foresight Attractive:** Policymakers, sceptical of "future evidence," are incentivized by the "future currency" of foresight: risk management and opportunity identification. Foresight helps them anticipate threats, identify opportunities for competitive advantage, and stress-test policies against a range of possible futures to prove their robustness.

### 3.8.3 Integration Across The Ecosystem And Policy Process

For true impact, institutionalisation must occur across the entire governance ecosystem and must be seamlessly integrated into the policy process itself.

**Ecosystem-Wide Embedding:** Foresight needs to be embedded in different parts of the system for specific purposes i.e., in the executive for vision, legislative bodies for resilient laws, the judiciary for future-proof enforcement, and engaging CSOs and the private sector to provide policy pressure and diverse perspectives. The chosen mandate for institutional structure (centralized or decentralized) must fit the government's context (Monteiro & Dal Borgo, 2023).

**Seamless Integration and Ethics:** To ensure utility, foresight must become a natural part of the strategic planning and policy workflow, rather than a burdensome add-on. Recognizing the inherent cross-sectoral nature of foresight is also critical. Furthermore, all processes must be guided by a strong ethical and moral compass to ensure the future being created is not only plausible but also just, equitable, and sustainable.

**Mandate for Continuous Practice:** Ultimately, institutionalisation requires a mandate for collective and frequent practice (UN Futures Lab, 2023; Saritas, 2018), adopting the Three P's of Quality (Prospective, Policy-Related, and Participative). The continuous impact depends on closing gaps in the policy process by conducting regular past foresight evaluations and using the insights to create a continuous learning and adaptation cycle that builds adaptive capacity and creates a shared, long-term vision.



## Case study 7: Integration across the policy processes in Africa

The UNDP Global Centre for Public Service Excellence (GCPSE) project focused on moving foresight from a niche activity to a core function of the state. Its primary objective was to foster **anticipatory governance** – the ability of a state to sense, act, and adapt to change – to support the **African Union's Agenda 2063** and the **2030 Sustainable Development Goals (SDGs)**.

- **Integration into Core Policy:** Rather than creating standalone "future reports," the project emphasised the integration of foresight into **existing government policy-making processes**. This involved tailoring methods to the specific issues, constraints, and capacities of developing nations.
- **Capacity Building:** Through the "ForesightXChange" and the "Empowered Futures Initiative (EFI)," the project worked with over 15 governments (including Rwanda, Ghana, and Mauritius) to mainstream foresight into national development planning.
- **Mainstreaming the Long-Term:** By aligning foresight with Agenda 2063 ("The Africa We Want"), the project ensured that long-term aspirations were connected to immediate planning cycles, making the future a tangible part of current governance.

### Foresight Lesson: Achieving True Institutional Embedding

The UNDP document highlights that for foresight to be effective, it must move beyond isolated workshops and become part of a nation's "governance DNA."

Source: Van de Pol, P. (2017). The full project information can be found [here](#)

## Case study 8: Brookings Foresight Africa Report

The Brookings "Foresight Africa" report and associated UNDP initiatives highlight a strategic shift toward **anticipatory governance**—the proactive ability of a state to sense, act upon, and adapt to emerging changes. This approach is designed to ensure that long-term policy planning is resilient enough to support the **African Union's Agenda 2063** and the **2030 Sustainable Development Goals (SDGs)**.

- **Integration into Core Policy:** A key method involves moving beyond standalone "future reports" to the **systematic integration of foresight into existing government policy-making processes**.
- **Targeting Transformation:** The objective is to bridge the "implementation gap"—the space between policy intentions and real-world outcomes—by using foresight to identify drivers of change in critical areas like trade, governance, and technology.
- **Operationalizing High-Level Goals:** By aligning foresight with **Agenda 2063** (the African Union's strategic framework for the continent's transformation), practitioners ensure that forward-looking insights are directly tethered to the continent's official developmental roadmap.

### Foresight Lesson: Achieving True Institutional Embedding

- **The path to sustainable foresight in African governance relies on moving from isolated workshops to institutionalized ecosystems.**
- **Systematic Framework Integration:** True institutionalization is achieved when foresight is no longer a peripheral activity but is systematically integrated into core national and regional development frameworks like Agenda 2063.
- **Building Foresight Ecosystems:** The ultimate goal is to build networks and ecosystems involving think tanks, government agencies, and civil society. These networks enable governments to share intelligence, anticipate challenges collectively, and manage shifts in the global landscape.
- **Resilience Against Fragility:** Embedding foresight provides a buffer against fragility by allowing leaders to move from "fire-fighting" immediate crises (like currency fluctuations or debt shocks) to long-term structural reform.
- **Closing the Feedback Loop:** Effective institutional embedding requires robust **monitoring and evaluation frameworks** to ensure that data-driven insights from foresight exercises actually lead to changes in policy and investment.

Source: Mbaye, A. A. (2020). The full project information can be found [here](#)

### 3.9 Shift Patterns Of Thought And Behaviour

Shift patterns of thought and behaviour

09

Quality criteria

The four orientations to the future

Using the futures triangle

Engaging the private sector and market actors

Quality foresight is fundamentally a learning process that seeks to uncover the organisation’s dominant mental model and provide alternative models for future strategy (Conway, n.d.). The challenge is to overcome the limits of dominant mental models and assumptions in scenario building. Scenarios are widely used in foresight to help stakeholders explore possible futures in a structured way, challenge assumptions, and imagine transformative pathways for food systems. However, these processes are not neutral, and are shaped by dominant mental models, values, and power structures.

Research shows that futures thinking is often limited to dystopian, utopian, or business-as-usual narratives grounded in simplified worldviews (Bennett et al., 2016), with little space for alternative imaginaries such as African or Indigenous perspectives (Rutting et al., 2022; Feola et al., 2021). As a result, scenarios rarely question the underlying capitalist assumptions driving food system challenges or imagine decolonial alternatives.

**Mandates for Shifting Minds and Behaviour**

- **The Four Orientations to the Future:** Practitioners must understand and work with the four mindsets that shape participation: Reactive, Inactive, Pre-active (predict-and-prepare), and Interactive (actively creating the future) (UNDP, 2018).

**FUTURES TRIANGLE**

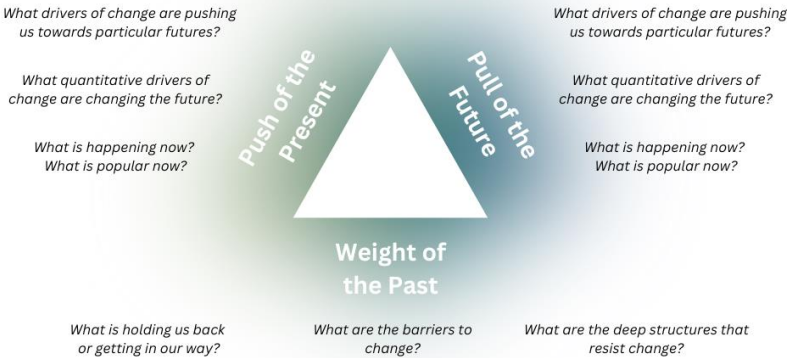


Figure 5: Futures Triangle. Source: UNDP

- **Using the Futures Triangle:** Utilize the Futures Triangle to analyse the forces shaping change: The Pull of the Future (aspirations), The Push of the Present (drivers), and The Weight of History (barriers/biases) (UNDP, 2018).
- **Engaging the Private Sector and Market Actors:** Quality foresight must actively engage the private sector, as it is a critical component of food systems and an agent of change. Focusing only on government policy or civil society creates an incomplete picture of transformation. Private sector engagement must be sought at various scales, including entrepreneurs, start-ups, and the informal sector. Foresight should be designed to support institutional innovation, particularly in redesigning incentives to address harmful externalities related to health and the environment that are often driven by market forces.

Much of the thinking and acting on shifting underlying patterns of thought and behaviour build on a kind of synthesis of the chapters in this Guide. This includes the level of success in application of the other nine quality criteria, the depth of understanding of systems dynamics, and the focus on generating lasting outcomes that make a difference. This latter topic is the focus of the next chapter: monitoring, evaluation and learning for foresight for systems change.



## Case study 9: Nakuru County manifesto for change: directions toward Nakuru's food system future

In 2023, Nakuru County initiated a participatory foresight process, convening over 40 stakeholders from government, civil society, and the private sector to co-develop a vision for the future of its food system over a process of two years. Initiated just after a new local and national government had come into power, the foresight process was also an opportunity to align the new government's development agenda with Kenya's Bottom-Up Economic Transformation Agenda and County Development Plans and facilitate conversations between political leaders, policy makers and their constituents in a structured way to build consensus and buy-in for the new leadership.

Facilitated by Foresight4Food and local partners, the process used foresight tools such as trend and uncertainty mapping, scenario development, visioning, and backcasting to bring together stakeholders to reflect on food systems challenges, articulate their desired future and identify pathways for change to steer Nakuru in that direction, while also preparing for a range of uncertainties.

### Results

The process yielded expected and unexpected results – a food systems manifesto was developed, articulating the county vision and pathways, with commitment by the county government and creation of a food systems technical working group. Other results that emerged as the process unfolded was the adoption of foresight tools for participatory and decision-making within the county – from parents' associations using foresight tools to design local homegrown school feeding programmes, to using these tools to lobby for budgetary allocations at the ward level.

### Enabling Conditions

Several factors contributed to the success of the initiative:

- **Timing and framing:** the process coincided with the new government's planning cycle and was framed as a practical way to implement national ambitions locally, as well as for the new government to engage in constructive dialogue with constituents.
- **Legal and institutional alignment:** The initiative aligned with Kenya's constitutional requirements for public participation and the national government's bottom-up economic transformation agenda. It was supported by IFAD and FAO, lending institutional credibility.
- **Effective champion:** The presence of a respected change agent helped mobilize actors across sectors.

For more information on the FoSTr work in Kenya, click [here](#)



# 4. Monitoring, Evaluation And Learning Of Foresight For Food Systems Change



## 4.1. Introduction

Evaluation of foresight initiatives has not been common or systematic in the past. However, in recent years this has been on the rise, with more practical experiences, cases, and frameworks being applied. This is in response to the need to demonstrate the tangible effects of foresight, as well as for reporting, accountability and learning purposes, particularly from funding organisations, decision makers and stakeholders. At the same time, there is growing adoption of systems approaches to guide interventions aimed at addressing complex problems, such as the food systems approach. As a result, the field of monitoring, evaluation and learning (MEL) is grappling with how to use MEL processes to engage with complex systems, evaluate results, and provide insights to learn and adapt within complex systems for positive change (Kusters et al., 2017; Muhereza, 2025).

This chapter is therefore designed as a bridge between foresight and MEL communities. It does not assume that readers are MEL specialists, but it also does not aim to provide a comprehensive MEL manual. Instead, it introduces key MEL concepts where necessary and adapts them to the specific features of foresight and systems transformation. The intention is to help foresight practitioners engage constructively with evaluation and learning processes, and to support MEL practitioners in adapting their approaches to the uncertainty, complexity, and long-time horizons that characterize foresight work.

The intention of this chapter is to provide resources, examples and basic tools for foresight practitioners interested in MEL for foresight. It starts with a broad overview of the foundations of MEL, followed by the fundamental elements of MEL design, adapted for evaluators and practitioners of foresight for food systems transformation. The final section summarises evaluation methods and practices into a toolbox to guide evaluative efforts. It provides a wide variety of additional sources, and a collection of case studies and lessons learnt gathered from the literature and discussions with foresight practitioners and researchers, with a focus on practitioners in Africa and the global south. It is not meant as a comprehensive evaluation guide, but to provide an overview of the challenges of MEL for foresight, additional resources and key concepts to consider when designing MEL for foresight, as well as how the quality criteria fit into MEL.

This guide is informed by, and builds upon, a range of existing resources. Readers who are less familiar with MEL may wish to begin with foundational materials that provide an accessible introduction to core concepts and terminology. In particular, [Managing for Sustainable Development Impact: An Integrated Approach to Planning, Monitoring and Evaluation](#) (Wageningen University & Research) offers a practical, results-oriented framework for planning and learning across sectors and contexts. It integrates a range of approaches and tools to support adaptive management and contribute to the Sustainable Development Goals (SDGs).

For readers specifically interested in the intersection of foresight and evaluation, the following resources provide further depth:

- [Lessons and Learning in Foresight Use for International Organisations](#) (IDRC), which documents and analyses diverse experiences of applying foresight in international development and research contexts, highlighting practical lessons and insights.
- [New Directions for Evaluation: Bridging Foresight and Evaluation](#), a special issue dedicated to foresight evaluation from both evaluation and foresight practitioner perspectives, combining theory, practice, and case studies.
- [Applying Evaluation Thinking and Practice to Foresight](#) (Association of Professional Futurists), which outlines evaluation constructs, methods, and measures tailored to foresight processes across diverse settings.

Rather than duplicating these resources, this chapter synthesizes and contextualizes them, highlighting key considerations for applying MEL to foresight in food systems transformation and related complex systems contexts.

### 4.1.1. General Context And Challenges For MEL For Foresight Food Systems Transformation

The use of foresight to inform food systems transformation has increased in response to a more challenging development context, but there is still a long way to go before foresight becomes regular practice. Foresight and scenario analysis are important tools for guiding food systems transformation. However, there is a growing need to demonstrate the concrete results of foresight – including how effective foresight is at driving food systems change and future-informed policy.

**Evaluations and learning reviews are one way to build an evidence base.** Foresight makes a lot of claims, including enabling future-informed policy and decision-making, building futures capabilities and helping stakeholders develop a shared vision of the future, yet the results are not sufficiently documented and shared (Ko & Yang, 2024). Expanding and diversifying foresight evaluation practice is therefore critical to mainstreaming foresight approaches and demonstrating their added value across different food system contexts.

**Integrating monitoring, evaluation, and learning (MEL) into foresight processes can support strategic learning, accountability, and evidence generation.** By assessing whether foresight achieves its intended outcomes and how it interacts with broader systems and drivers of change, MEL can enhance the effectiveness, credibility, and long-term impact of foresight for food systems (Miles, 2012; Gardner & Bishop, 2019).

**Evaluating foresight presents distinct challenges.** Foresight does not attempt to predict the future, as the future is unknowable. Foresight involves creating and applying alternative future scenarios, identifying signals and drivers of change, and building the capacities of individuals, communities, and organisations across sectors to engage with the future in meaningful ways. This additional complexity makes it challenging to use conventional evaluation approaches focused on linear causality or short-term outputs (Foresight Evaluation Taskforce, s. d.). Foresight evaluations are challenging because:

**There is no counterfactual for the future.** In empirical science, counterfactuals or placebos are often used to understand the impact or difference a specific intervention leads to in similar contexts. However, as foresight explores the current and many possible futures, these cannot be compared in a similar way. With many factors, dynamics and uncertainties at play, it is impossible to conduct this kind of comparative analysis.

**Monitoring a foresight process over a long period of time is generally seen as prohibitive.** Many foresight perspectives span 10 years or more, requiring substantial resources to monitor over time. At the same time, foresight may produce unexpected indirect impacts that are not captured, particularly in the short to medium term.

**The results of a foresight process are often intangible and diffuse.** Establishing direct causal links between foresight outputs and subsequent decision-making is methodologically difficult, as influences may be indirect, embedded in broader deliberations, or unfold over time. Policy decisions are rarely attributable to a single input, and the contribution of foresight may go unacknowledged.

**Foresight evaluation must assess whether short-term cognitive and behavioural shifts translate into longer-term institutional or policy change.** This requires tracking processes of uptake and application rather than only the quality of scenarios produced. Even where foresight outputs are robust or prescient, it remains difficult to determine whether they substantively improved decision-making compared to what might have occurred in their absence (Bourgeois & Sette, 2017).

**The following sections extract from core MEL processes to support foresight.** Elements of foresight MEL resemble traditional programme evaluations in that they are time-bound, guided by defined evaluation questions and methods, and framed by a budget and scope of work. At the same time, they are often more context-dependent, requiring careful selection of evaluation constructs and approaches suited to foresight and systems transformation. This guide therefore offers practical guidance on structuring foresight MEL processes to support learning, accountability, and informed decision-making. It also underscores the value of using evaluation not only for reporting purposes, but as a tool for reflection, self-assessment, and meaningful stakeholder engagement throughout the process.



### 4.1.2 MEL In A Foresight For Food Systems Change Context

**Foresight is used in policy contexts to inform business or government strategy and policy.** Hence, evaluations are important for three main reasons, given its demand on time and resources:

**To ensure accountability:** evaluating foresight initiatives is important for accountability as it can be used to assess whether the activities were conducted efficiently (Georghiou, 2008).

**To provide justification for use:** evaluations can determine whether foresight activities are effective, justifying investment in further continuation or expansion (Georghiou, 2008).

**To support strategic learning:** Strategic learning integrates reflection and evaluation into the design and implementation of foresight activities so that insights continuously shape decisions and actions (Patrizi et al., 2013).

**However, there are no standard rules for or commonly accepted understanding of foresight evaluations.** Its development has been fragmented, and its applications, spanning policy, innovation, learning, and strategic planning, inherently requiring different assessment approaches (Amanatidou, 2014; Poteralska & Sacio-Szymańska, 2014; Sokolova & Makarova, 2012).

**This challenge aligns with a broader, growing demand for robust MEL systems.** Internally, as organisations engage in more complex partnerships and multi-stakeholder processes, MEL is increasingly vital for generating evidence to inform strategic decisions. This is driving a shift toward more learning-oriented and stakeholder-centric MEL practices to enhance adaptability, particularly in resource-constrained environments (Kusters et al., 2017).

**In an increasingly complex world, there is a recognized need for MEL to evolve beyond traditional, linear models.** New approaches must be capable of measuring progress and change within dynamic real-world systems, such as the food systems approach highlighted since the 2021 UN Summit. The goal is to generate credible evidence of outcomes and impact to support policy, yet conventional results-based management often fails to capture new ways of working informed by systems thinking (Muhereza, 2025).

**These approaches need to help us understand if we are making progress, generating results and contributing to positive change within systems.** Consequently, there is a pressing need to develop MEL frameworks and practices that can:

- Track transformative change and its enablers over longer timescales.
- Facilitate continuous learning and adaptation within complex systems.
- Be adaptable to different scales (project vs. program), budgets, resources, and socio-cultural contexts.

Therefore, to bridge the gap between foresight's promise and its practical impact, this guide supports reflection towards the development of MEL frameworks that are both rigorous and adaptable. These systems must fortify accountability, enable strategic learning, and generate a trusted evidence base to ensure foresight effectively guides and accelerates food systems transformation in the global south.



## 4.2. Foundations Of MEL In Foresight For Food Systems Transformation

This section briefly presents the foundations of Monitoring, Evaluation and Learning, and provides additional resources to help you design and implement MEL for foresight. Food systems transformation and foresight involve change processes that are dynamic and often difficult to predict, bringing together a diversity of stakeholders with diverging interests, capacities and views of what in an ideal future will look like. This section explores the implications of this complexity for MEL:

### Applying systems thinking to understand change:

MEL should support understanding complexity and options for engaging strategically with complexity

### Stakeholder engagement:

Stakeholder involvement in the MEL process is crucial, structuring it as a collaborative process to learn about what worked, what was learnt and how anticipatory capacities can be strengthened over time

### Learning and adaptation:

integrating learning as a core process helps align monitoring and evaluation processes with long-term systems change

### 4.2.1. Apply Systems Thinking To Understand Change

Foresight for food systems change interventions are designed to anticipate and influence change in complex food systems. There are subsystems of relevance here as well, such as agricultural innovation systems or territorial governance systems, where multiple actors interact across levels, sectors, and scales. These systems are dynamic, characterised by evolving relationships, feedback loops, and non-linear and unpredictable outcomes (Brouwer et al., 2020).

Because of this complexity, MEL for foresight cannot rely on simple cause-effect models. It must recognize that foresight both influences, and is influenced by, the broader system in which it operates. Applying systems thinking helps evaluators and practitioners situate foresight activities within their wider context, understand the dynamics at play, and identify the conditions that enable or constrain change. Systems thinking also encourages evaluators to look beyond isolated project outputs and focus on patterns of interaction, feedback loops, and emergent effects that shape how foresight contributes to transformation. It supports a more adaptive and realistic understanding of change, where foresight is one of several interacting drivers influencing outcomes over time.

Foresight MEL must here draw upon principles of systems evaluation (Abercrombie et al., 2018; Hargreaves, 2010; Kania et al., 2018). This means that foresight MEL should be informed by a clear understanding of the system being addressed; the intervention itself and the outcomes and their dynamics, all which help clarify a different dimension of how foresight interacts with change (Hargreaves, 2010).



## Box 5: What does it mean to take a systems perspective?

Taking a systems perspective means recognising that foresight operates within **complex, dynamic systems**, where outcomes emerge from interactions between **actors, structures, and contexts** rather than from linear cause–effect relationships. Systems thinking focuses on **interrelationships, multiple stakeholder perspectives, and system boundaries** (who defines what is inside or outside the system).

Applied to foresight MEL, this involves:

- Understanding how foresight both **influences and is shaped by** the wider system
- Paying attention to **relationships, power dynamics, and feedback loops**
- Looking beyond outputs to identify **patterns, emergent effects, and shifts over time**
- Embracing **continuous learning and adaptation** as change unfolds.

Rather than trying to control complexity, systems thinking helps make sense of it, supporting more realistic, adaptive, and transformation-oriented MEL.

### Further resources

- Stroh, D. P. (2015). [Systems Thinking For Social Change: A Practical Guide To Solving Complex Problems, Avoiding Unintended Consequences, And Achieving Lasting Results](#). Chelsea Green Publishing. A comprehensive guide to help social change actors understand what systems thinking is and why it is so important in their work. It also gives concrete guidance on how to incorporate systems thinking in problem solving, decision making, and strategic planning without becoming a technical expert.
- Kania, J., Kramer, M., & Senge, P. (2018). [The Water Of Systems Change](#). FSG. Practical guide on creating actionable models for funders and other social sector institutions interested in creating systems change, particularly those who are working in pursuit of a more just and equitable future.

## 4.2.2. Stakeholder Engagement

A core component of foresight is **bringing together diverse actors to create shared awareness, dialogue and mobilise alliances for food systems change**. Food systems in the global south consist of complex, self-organised networks of formal and informal actors, with actors interacting and learning from one another, often generating unpredictable outcomes. As a result, bringing together diverse actors is a core component of both qualitative and quantitative foresight initiatives (Foresight4Food, s. d.; Hargreaves, 2010).

**Stakeholder engagement during the MEL process is crucial, as they offer valuable insights into program design, implementation and data utilisation.** This includes identifying relevant stakeholders, categorised as internal or external. Internal stakeholders include individuals within the organisation, such as staff and programme managers, while external stakeholders include participants in foresight, funders, technical experts, civil society and government and policy makers participating in the process.

The MEL process should be designed with a clear understanding of **power dynamics and resource constraints to be as inclusive as possible**. This is because a key part of foresight MEL will entail understanding multiple stakeholder perspectives and how they evolve over time. Systems stakeholders will have diverging views on how change happens, and what counts as success. Methods and approaches should be adapted to stakeholder needs and interests.

**Participatory approaches, and techniques such as Outcome Harvesting, Appreciative Inquiry and Most Significant Change are especially suited for evaluating the impact of participatory foresight.** These approaches that are designed for complex, adaptive interventions in situations where no clear outcomes and pathways can be predefined, focusing instead on a few core questions for data-gathering about the change in behaviour (EC, 2024). For more information, refer to Section 5.5 on [methods and approaches](#), and section 5.6: [Toolbox for MEL](#).



## Box 6: Stakeholder Engagement as the Core of Foresight MEL

Because foresight works through dialogue, learning, and shifting relationships, its evaluation must do the same. Foresight MEL therefore focuses on how different stakeholders experience change, how power and relationships evolve, and how anticipatory capacities are built over time, consistent with systems thinking principles that emphasise relationships, feedback loops, and adaptation.

Using the quality criteria introduced earlier in this guide, stakeholder engagement in foresight MEL should be:

- **Relevant and inclusive:** Methods should be adapted to context and capacity, engaging diverse actors (including informal stakeholders, women, youth, and local knowledge holders) to understand how foresight contributes to systemic change.
- **Learning-oriented:** Stakeholders should be involved in reflecting on both process and outcomes, turning MEL into an extension of foresight that strengthens futures literacy and institutional memory.
- **Credible and legitimate:** Evaluations should make power dynamics, competing perspectives, and value trade-offs explicit, recognising foresight as an inherently political process.
- **Systems-informed:** Engagement should examine relationships, networks, and interactions that shape how change unfolds.

### Key takeaways

- **Use mixed methods:** Combine early qualitative exploration (e.g., document review, environmental scanning, key informant interviews) with later data collection from diverse respondents to capture multiple perspectives and system dynamics.
- **Prioritise participatory approaches:** Methods such as outcome harvesting, appreciative inquiry, and Most Significant Change are well suited to foresight, where outcomes and pathways are emergent rather than predefined.
- **Invest time in understanding relationships and power dynamics:** Mapping stakeholder relationships is essential for assessing systems change. System mapping and social network analysis can help capture how actors interact, where influence sits, and how networks evolve over time

### Further resources

- Guijt, I. (2014). [Participatory Approaches. Methodological Briefs: Impact Evaluation](#) 5. UNICEF Office of Research, Florence: Guide on using participatory approaches with good practices and examples, focused on impact evaluations.
- UNDP (2021). [Guidance for Participatory Monitoring, Evaluation and Learning Systems](#). Practical advice on designing a participatory monitoring system that serves both measuring learning and tracking outcomes, while also reporting and communicating internally and externally to strengthen collective, individual and systemic learning.

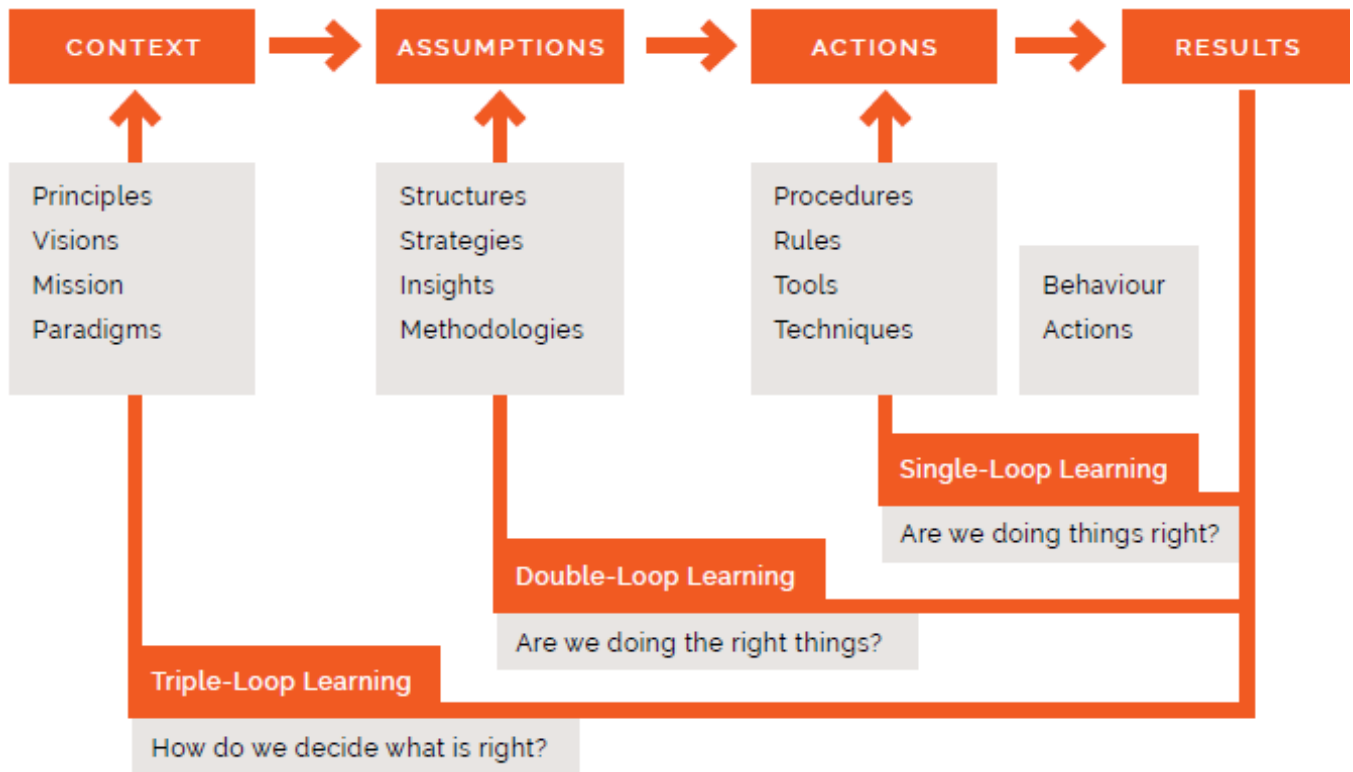
### 4.2.3. Learning And Adaptation



In systems change initiatives, MEL contributes to transformation by embedding learning at the core of organisational practice. When integrated into core processes, MEL goes beyond accountability to actively inform strategy, support adaptive decision-making, and link insights from monitoring and evaluation to broader system dynamics. In this way, MEL strengthens leadership capacity and enables organisations to navigate complexity and contribute to long-term systemic change.

Learning for systemic change requires engaging multiple actors across the system and reflecting beyond immediate actions. In foresight-oriented food systems' evaluations, learning is most effective when stakeholders from different parts of the system learn together, generating shared insights into complex dynamics and supporting more innovative and adaptive responses (Mausch et al., 2025; Woodhill et al., 2025).

**Triple-loop learning provides a useful framework for structuring learning at different depths.** Single-loop learning focuses on improving actions by correcting errors and increasing efficiency, without questioning underlying assumptions. Double-loop learning goes further by challenging the assumptions, goals, and strategies that guide those actions, opening space for alternative approaches. Triple-loop learning shifts attention to the broader context in which actions take place, examining norms, power relations, institutional structures, and the role of actors within the system. This level of learning supports foresight by questioning whether current goals, problem framings, and roles are appropriate, and by enabling changes in perspectives, relationships, and systemic conditions (Brouwer et al. 2015, based on Argyris & Schön, 1974).



*Figure 6: Levels of learning in an organisation – triple-loop learning*

*Source: Brouwer et al. 2015, based on Argyris & Schön, 1974*

In foresight for food systems, **triple-loop learning is particularly important because it supports transformation rather than incremental improvement.** By encouraging reflection on who defines goals, whose knowledge counts, and how existing structures shape outcomes, it helps democratise learning, surface hidden assumptions, and align evaluation processes with long-term system change.

**Ongoing learning relies on leadership, organisational values, and practices that encourage knowledge sharing and continuous improvement.** Key elements include engaging stakeholders at all levels, applying experiential learning cycles (Kolb, 1984), embedding regular critical reflection and triple-loop learning, and addressing barriers to learning. Essential strategic competencies include systems thinking, facilitation skills, stakeholder engagement, and effective communication. For more guidance, see Senge (1990) on learning organisations and Arkesteijn et al. (2015) on reflexive evaluation approaches

**Further Resources:**

- Tamarack Institute. [TOOL | Single, Double and Triple Loop Learning](#). Framework for understanding and applying triple loop learning to support organisational goals.
- Aston, T. Medium, [Assumptions And Triple Loop Learning](#). Dec 29, 2020. Guidance on how to apply triple loop learning to reveal assumptions behind theories of change.
- Brouwer, Herman & Woodhill, A.J. & Hemmati, M. & Verhoosel, K.S. & Vugt, Simone. (2015). [The MSP Guide : How To Design And Facilitate Multi-Stakeholder Partnerships](#). Comprehensive guidance on managing multistakeholder partnerships, including communication and learning.

### 4.3. Fundamentals of MEL Design

MEL processes consist of a sequence of activities that are designed to ensure that monitoring, learning and evaluation contribute to the overall goals of the initiative. This section provides guidance, additional resources and examples of how MEL can be designed to better support foresight for food systems transformation. MEL design depends on the key MEL questions to be addressed, the subject being monitored for evaluation and learning, and the context. This section looks at these steps, providing a brief overview, foresight for food systems-specific context and additional resources for further learning:

**Assessing evaluability:** determining if an initiative can be evaluated, and that there is value in doing so

**Scope of the evaluation:** defining the boundaries of the evaluation, using a systems aware lens

**Strategies for data collection, analysis and synthesis:** gathering and making sense of evidence where gathering sufficient data may be challenging and making sense of the information to support learning

**Monitoring processes, impact and indicators:** what can be monitored, when and how

**Evaluation criteria:** determining criteria to be used during the evaluation

The MEL strategy must also consider the core capacities and conditions, including competencies, incentives, finances, knowledge management and supporting infrastructure for MEL, which will determine the methods and approaches used.

#### 4.3.1. Assess Evaluability

Before launching a MEL process, it is essential to assess whether the foresight initiative is evaluable and to clarify how stakeholders will be engaged throughout. Evaluability assessments help determine whether clear objectives, a sound theory of change, and adequate information systems are in place to support meaningful learning (OECD-DAC, 2023).

In foresight, this process should also examine who is involved. This means exploring how participation is structured, and whether the quality of stakeholder engagement aligns with foresight quality criteria. Assessing participation quality is key to ensuring that MEL promotes ownership, inclusivity, and shared learning rather than simple accountability. Finally, evaluability should consider ethical frameworks and principles to ensure transparency, fairness, and respect for diverse perspectives throughout the foresight process.

Evaluability assessments help determine whether results can be demonstrated in the near, medium, and long-term based on available documentation and MEL systems. Additionally, they help determine whether conducting an evaluation would be useful (OECD-DAC, 2023). They are relatively low-cost and, if carried out at the design phase of a foresight initiative, can inform MEL framework development by clarifying objectives, strengthening the theory of change, and identifying necessary data (EC, 2024). Even without standard results chains, evaluability assessments with stakeholders can guide reflection on evaluation purpose, methods, and data needs.



## Box 7: Conducting an Evaluability Assessment for Foresight

Evaluability can be assessed across three levels: principle, practice, and utility.

### Evaluability In Principle

- Clarity of purpose and intended outcomes, even if multiple or emergent
- Presence of an implicit or explicit theory of change or conceptual logic
- Plausible (often non-linear) pathways through which change is expected to occur

### Evaluability In Practice

- Activities, processes, and stakeholder engagements are documented
- Relevant data (qualitative or quantitative) can be accessed and used for learning
- Progress or signals of change are captured through flexible or emergent indicators

### Utility Of Evaluation

- A clear reason for evaluating, aligned with stakeholder learning and decision needs
- Evaluation scope, timing, and methods are proportionate to the initiative
- Likely contribution to testing theories of change, generating lessons, or informing future design

Evaluability assessments are most useful when conducted early, to strengthen design and MEL frameworks, or to decide whether and how a later evaluation should take place.

To learn more about evaluability assessments, see Davies, R. (2013.) [Planning Evaluability Assessments: A Synthesis Of The Literature With Recommendations](#). Working Paper 40. London: UK Department for International Development

### 4.3.2. Clarify The Scope Of The Evaluation

**Clarifying the scope of a foresight evaluation is essential to ensure that expectations are realistic and aligned with the nature of systems change.** In food systems foresight, where ambitions often extend beyond direct attribution and unfold over long time horizons, the scope should clearly define the purpose of the evaluation, its primary users, and the unit and level of analysis (e.g., a foresight exercise, programme, network, or policy interface). It should specify which types of change are being examined: such as learning, capacities, relationships, narratives, decision-making or strategic orientation, rather than attempting to measure system-wide transformation. The scope should also make explicit the time horizon considered, the system boundaries within which the evaluation operates, and the role of external drivers of change.

Systems informed evaluations do this in three steps (Hargreaves, 2010):

**Understanding the conditions and dynamics of a system or situation**, including how to identify appropriate system boundaries, capture system relationships, and explore multiple perspectives.

**Identifying the elements and dynamics of a system intervention that can complicate an evaluation's design**, including evaluating evolving interventions, evaluating misaligned interventions, and monitoring unpredictable outcomes.

**Determining the intended users and purpose(s) of a system change evaluation**; aligning evaluation purposes, methods, and dynamics; and translating systems theory into evaluation practice.

The complexity and maturity of an initiative's strategy, specific foresight tactics, and levels of engagement (international, national, state, and local) are linked to specific methods and tools of the evaluation design. Finally, clearly stating what is out of scope is critical for maintaining credibility, supporting meaningful learning, and ensuring the evaluation remains feasible and useful.

### 4.3.3. Make The Theory Of Change Explicit

Theories of change describe the logic of a change or initiative. They capture and make explicit the assumptions and expectations built into a change initiative, explicitly linking activities to outcomes, and showing how various components work together in a causal pathway, with assumptions and risks clearly analysed and spelled out. However, they tend to encourage linear thinking, overemphasize inputs and outputs, and neglect people, relationships, and responsibility for change (Abercrombie et al., 2018; EC, 2024; ORS, 2004).

While theories of change are not always explicitly articulated, stakeholders involved each have their own understanding of how change works. It is therefore important to explore and articulate theories of change with stakeholders, to develop a shared understanding of the initiatives, its purpose, core values and strategic choices. Doing so creates a sense of ownership of the process, ensuring that the initiative is relevant and useful to end-users or target populations (Kusters et al., 2017). Increasingly, theories of change are a requirement from funders as it helps to better understand and track how an initiative supports desirable outcomes, particularly those related to behaviour, mindset shifts, and impact.

A good Theory of Change should make sense to stakeholders. The ToC should facilitate a deeper understanding about what or who will be involved in the change processes, how the change process is expected to be influenced by external factors and be evaluable. The ToC establishes the basis for strategic planning and provides the basis for anchoring the MEL framework, while providing flexibility to adapt as lessons from the field emerge (Kusters et al., 2017).



#### Box 8: Reviewing And Revising A Theory Of Change

When reviewing or updating an existing theory of change (ToC), engage staff, partners, and existing documentation to assess whether it is:

- **Contextually grounded:** informed by a situation analysis that identifies key problems, causal pathways, stakeholders (including power relations), and contextual factors (institutions, infrastructure, biophysical setting).
- **Evidence-informed:** based on relevant research and learning (qualitative and quantitative), and attentive to risks, uncertainties, and potential unintended effects.
- **Stakeholder-informed:** developed through meaningful stakeholder engagement that allows diverse perspectives, assumptions, and insights to be shared and challenged.
- **Explicit about assumptions:** clearly articulates assumptions about how and why change is expected to occur, including causal links, external influences, and underlying values or worldviews.

Adapted from the **Manager's guide to Evaluation** (Better Evaluation) and the **Management for Sustainable Impact Guide**.

For a step-by-step guide on developing a complexity informed theory of change, see [the M4SDI Guide](#), chapter 6

**At the design stage, a theory of change helps the planners better understand the impact.** It makes the design more solid by testing its internal coherence and linking strategies and activities to expected outcomes. It can be used to structure explicit conversations about expectations and degree of involvement with external stakeholders, clarifying roles. At the implementation and monitoring stage, the theory of change can allow stakeholders to understand short-term, intermediate and long-term outcomes. Clarity on expected outcomes also allows for more accurate and timely data to be collected, which is valuable for learning and reflection (Dhillon & Vaca, 2018).

**At evaluation stage, the theory of change can help to further define the scope and structure of the evaluation.** By helping the evaluator understand the theoretical underpinnings of the approach, strategies and activities, it supports the identification and agreement on key evaluation questions, indicators for monitoring and evaluation design. In terms of analysis, the ToC is the framework for strategic learning – guiding stakeholders in understanding why outcomes were achieved or not. Reconstructing the theory of change with stakeholders is useful and can help to define the scope of the evaluation (Dhillon & Vaca, 2018; Kusters et al., 2017).

### Box 9: Developing A Theory Of Change

**In food systems foresight, theories of change must recontextualise change within complex systems.** They should interrogate or re-imagine future possibilities for change, exploring multiple future scenarios, and shifting from backward-looking logic to anticipatory thinking about possible futures (ORS, 2004; UNDAF, 2019; Abercrombie et al., 2018; Carden, 2023). For guidance on how to develop a systems-informed theory of change, please refer to:

- [TIPC. Motion Handbook. Developing A Transformative Theory Of Change](#): A step-by-step guide on how to develop a Transformative Theory of Change, for innovation projects, programmes and organisations working on systems transformation. The method combines a traditional Theory of Change approach with a multi-level perspective, a systems theory that describes how innovation emerges and transforms the incumbent system. It introduces Transformative Outcomes as leveraging points for transformation. The approach is designed to maximise learning among participants of an initiative
- [Leverage Analysis To Develop A Systemic Theory Of Change](#): A systems-based technique used to identify where small, well-placed actions can create significant change within complex systems (Murphy & Jones, 2020). It builds on causal loop diagrams (CLDs) by applying simple algorithms from graph theory to identify key system features such as leverage points, bottlenecks, and indicators of change. For a more detailed guide on applying leverage analysis and constructing a Systemic Theory of Change, see Murphy & Jones (2020) and Ryan & Jones (2020).
- [Vector Theory Of Change](#): A cyclical, adaptive approach for guiding change in complex systems, making it highly relevant to foresight in food systems. Unlike traditional linear ToCs with fixed long-term goals, vector-based approaches focus on directional movement, adapting strategies in response to real-time feedback and emerging system dynamics.
- [Thinking Big: How To Use Theory Of Change For Systems Change](#): Guide on how to counteract the potential pitfalls when using the theory of change, with five rules of thumb to ensure that the theory of change is practiced in a way that will work in a systems context.



## Case Study 10: Incorporating Futures Thinking Into The Theory Of Change

### Context

The Difference Incubator (TDI) is an Australian social enterprise intermediary founded in 2010, working across the social enterprise sector, First Nations-led business development, and development initiatives in the Pacific. By 2021, TDI recognised that its existing strategy and Theory of Change (ToC) were no longer fit for purpose in a rapidly changing environment. TDI partnered with an evaluation firm and a university-based systems innovation unit to undertake a year-long process to reimagine its strategy using futures thinking integrated into ToC development.

### Step 1: Understand the system and the problem

The process began with a situation analysis to understand how TDI's context had evolved. This included exploring the organisation's origin story, reviewing its business model and existing ToC, and consulting staff, board members, partners, and sector leaders. Attention was paid to sector dynamics, institutional constraints, power relations, and differences across Australia and the Pacific. This grounding ensured the ToC was rooted in real system conditions rather than organisational aspirations alone.

### Step 2: Explore possible futures

Foresight tools were then used to expand thinking beyond current trends. The team combined interviews with sector experts, megatrends analysis, scenario exploration, and the Three Horizons framework to examine probable, possible, and preferred futures. This phase surfaced risks, uncertainties, and emerging shifts, helping participants identify assumptions about the future that no longer held ("used futures").

### Step 3: Articulate pathways of change

Insights from the futures work informed the development of a global ToC, which was then refined into an organisational ToC. Through facilitated workshops, participants prioritised impact areas and articulated causal pathways linking TDI's activities to desired system-level outcomes. Scholarly models and systems frameworks were used to support theory-building and ensure coherence across interconnected impact areas.

### Step 4: Make assumptions explicit and test them

A distinctive feature of the process was stress-testing the ToC against alternative futures. Assumptions about how and why change would occur were made explicit and tested through critical friend reviews, scenario reflection, and strategy discussions. This helped the organisation discard fragile assumptions and strengthen those that remained plausible across multiple futures.

### Step 5: Link ToC to strategy, learning, and evaluation

The final phase translated the futures-aware ToC into a refreshed strategy, business model, and a measurement, evaluation, and learning framework. This ensured the ToC functioned not only as an explanatory model, but also as a practical tool for decision-making, adaptation, and ongoing learning under uncertainty.

Foresight methods can be used to ensure that the Theory of Change is:

- **Contextually grounded:** informed by system analysis that clarifies problems, causal pathways, stakeholders, and power relations within specific institutional and biophysical contexts.
- **Evidence-informed:** drawing on research, trends, and scenarios to account for uncertainty, risk, and unintended effects.
- **Stakeholder-informed:** co-developed through inclusive dialogue that surfaces and challenges diverse perspectives and assumptions.
- **Explicit about assumptions:** making anticipatory assumptions visible and testable across multiple possible futures.



To read the case study in detail, please see: Dart, J., & Gates, E. (2024). [Incorporating Futures Thinking Into The Theory Of Change: Case And Lessons Learned From A Social Enterprise Intermediary In Australia](#). *New Directions for Evaluation*, 2024(182), 45-62.

## Box 10: Setting Indicators for Foresight MEL – considering SMART and SPICED

There are no fixed rules for setting indicators in foresight MEL. The choice depends on what kind of change is being tracked, stakeholder needs, and reporting requirements.

**SMART indicators** (Specific, Measurable, Attainable, Relevant, Time-bound) are well suited to tracking predefined outputs and outcomes and are often required for donor reporting. They tend to privilege quantitative measures and short- to medium-term results.

**SPICED indicators** (Subjective, Participatory, Interpreted, Cross-checked, Empowering, Disaggregated) prioritise stakeholder-defined measures of change. They are particularly useful for participatory foresight, where outcomes are emergent, qualitative, and relational, and where learning and sense-making are central.

### **Key takeaway for practitioners:**

SMART and SPICED indicators are complementary. Use (limited) SMART indicators where accountability and comparability are required, and SPICED indicators to capture learning, behaviour change, and systems effects that matter to stakeholders.

Additional resources:

Better Evaluation guide: [Project Objectives, Indicators and Assessing Social Change](#)

**MEL questions provide the basis for defining indicators and other evidence needs.** They may be descriptive, normative, causal or learning-oriented, and are often guided by evaluation criteria such as the OECD-DAC criteria of relevance, effectiveness, efficiency, impact, and sustainability and foresight quality criteria presented in this guide. Indicators can be qualitative or quantitative.

**MEL questions should be developed and agreed upon with stakeholders after reviewing the ToC.** Stakeholders should identify what information would be useful and why. For example, funders, researchers and the management team may be interested in understanding what works and why. This will mean thinking about how the objectives are related, what contextual factors influence changes and the capacities and conditions needed for change to take place. It is also useful to ask questions about partnerships to enhance the effectiveness of the initiative. Evaluation questions are also based on criteria, such as the OECD-DAC criteria and the foresight quality criteria elaborated on this guide.

### **4.3.5. Data Collection, Analysis And Synthesis**

**Effective data collection for foresight in food systems relies on both primary and secondary sources.** Secondary data come from existing records such as official statistics, evaluations, or project documents, while primary data are collected specifically for the evaluation and can target individuals, groups, or involve direct observation and measurements.

**Quantitative and qualitative methods provide complementary ways to gather information.** Quantitative methods generate numerical, precise, and verifiable measures of specific variables, such as surveys or physical measurements, while qualitative methods capture behaviours, perceptions, and experiences through interviews, focus groups, or observation. Combining both approaches allows for a richer understanding of systems, processes, and the context, supporting more robust evaluation.

**Participatory approaches are recommended whenever possible to enhance learning, ownership, and impact.** The choice of method depends on the type and precision of information needed, the skills of facilitators, available resources, the sensitivity of the information, and how the results will be used. For participatory approaches to data collection, see section on collaborative, participatory and empowerment evaluation approaches.

**Data analysis converts collected data into usable information by identifying trends, patterns, and relationships, and critically interpreting the results to inform decision-making.** It is an ongoing process throughout the initiative and should involve staff and primary stakeholders wherever possible, while keeping them updated on findings and discussing contradictions or gaps. The choice of analysis methods depends on the type of data collected, the questions being addressed, and the available tools and expertise.

**Critical reflection and sense-making help us learn from past actions and understand complex situations.** Critical reflection involves reviewing what happened, questioning assumptions, and drawing lessons from successes and failures, while sense-making connects these experiences to broader patterns and insights. In foresight for food systems evaluations, these processes are essential to interpret M&E data meaningfully, identify emerging challenges, and guide decisions for future interventions. By thinking critically about what worked, what did not, and why, teams can generate actionable insights that improve project outcomes and support adaptive management.

**To put critical reflection and sense-making into practice, create regular opportunities for structured and participatory review.** This can include individual reflection, group workshops, project review meetings, or informal field discussions. Encourage open dialogue, generative listening, and the sharing of observations, beliefs, and assumptions among stakeholders. Incorporate feedback loops and innovative channels, such as mobile-enabled feedback, to capture diverse perspectives. Doing so helps uncover new information, limit biases, build consensus, and ensure that decisions are well-informed, broadly supported, and effectively implemented. Additional practical examples and reflection tools related to data collection and synthesis are provided in the Annex, including examples of [Connecting Theory and Practice Using Reflection Pieces](#) and [Using Limited Data to Evaluate the Semi-Explicit and Implicit Dimensions of Change](#).



## 4.4. Monitoring Processes, Impact And Indicators

Foresight practitioners emphasise the difference between the impact of the process and the impact of outputs, such as scenarios, on decision-making. This distinction is important for two reasons:

**Foresight outputs can only inform change under the right conditions:** This is determined by external factors such as governance, social dynamics, institutional embedding and an identified opportunity for change, such as an ongoing policy or strategy process (see Kenya example). Without these conditions, even an excellent foresight process with the highest quality outputs is unlikely to result in policy change (Hebinck et al., 2018).

**The foresight process itself, independent of the outputs and their uptake, generates impact:** This includes the modification of the perceptions and expectations of the actors through building of futures literacy and anticipatory capacity, social capital and networking effects, learning and awareness (Amanatidou & Guy, 2008).

**Effective MEL for foresight thus requires attention to how the process was conducted, what immediate outcomes emerged, and the longer-term impact on systems and actors.** Several foresight evaluation frameworks reflect the need for this balance (see annex for examples of frameworks). Evaluators should be cognizant of the fact that effective foresight is not only about the influence of foresight outputs on decision making, but also about the transformative effects of the process itself, and how it contributes to shaping perceptions, relationships and building futures literacy and anticipatory capacities.

**The quality criteria in this guide are useful to help practitioners and evaluators to direct attention to promising outcomes of foresight initiatives.** First, by examining whether the process was designed and carried out in a robust, inclusive, and ethical way; second, by identifying the immediate outcomes generated in terms of learning, collaboration, and relevance; and third, by tracing the longer-term impacts on systems, behaviours, and institutions. Together, these three levels of evaluation – process, outcomes, and impacts, offer a structured way to understand not only whether foresight was done well, but also whether it made a lasting difference.

Depending on the focus (process, outcome and/or impact), different types of evaluation questions and connected approaches may be selected.

### 4.4.1. Process Evaluation: Did We Design And Carry Out The Foresight Well?

Process evaluation assesses whether the foresight initiative was designed and delivered in a way that is methodologically sound, inclusive, and contextually grounded. Key criteria include:

- **Contextual and social relevance:** Did the foresight process recognise local social dynamics, informal systems, and cultural perspectives, and use them to shape the questions, methods, and scenarios?
- **Inclusivity and empowerment:** Were diverse and marginalised actors, such as women, youth, informal actors, and citizens, actively engaged and supported to participate meaningfully?
- **Accountability, transparency and ethics:** Were objectives, methods, and outputs clear, documented, and perceived as fair and ethical?
- **Theoretical underpinnings and methodological foundations:** Were the objectives, tools, and scenarios grounded in appropriate theory and aligned with the local context, and were facilitation methods used to balance power dynamics and ensure all participants could contribute meaningfully?
- **Resourcing and planning:** Were sufficient time, funding, and human resources allocated for participation and capacity building?
- **Strategic foresight communication:** Were outputs tailored to audiences, ensuring they are accessible, inspiring, and practical?
- **Institutional Embedment:** To what extent did the process involve institutional champions, build political will, and align with policy processes, increasing the likelihood that foresight insights would be taken up and used?

Useful methodologies here include developmental evaluation and participatory process evaluation.

#### 4.4.2. Outcome Evaluation: What Immediate Results Emerged?

Outcome evaluations focus on the short-term changes and benefits experienced by participants and institutions:

- **Shared Understanding:** Did participants co-create a vision of the future and strengthen systems thinking around complex issues, such as food systems?
- **Capacity Building:** How did the process strengthen futures literacy or participants' sense of ownership over outcomes?
- **Coalition Building:** What new relationships, partnerships, or networks emerged as a result of the foresight process?
- **Policy/Strategy Relevance:** How did the outputs connect to ongoing strategies, policies, or planning cycles?
- **Trust and Empowerment:** To what extent did marginalised or less powerful actors feel heard, valued, and empowered by the process?

Useful methodologies that support outcome focus include Outcome Harvesting, Most Significant Change and Process Tracing approaches.



#### 4.4.3. Impact Evaluation: What lasting difference did foresight make, particularly on the food system?

Impact evaluations consider whether the foresight initiative has led to sustained changes in behaviour, systems, or decision-making, asking:

- **Policy uptake and institutionalisation:** To what extent has foresight been embedded in decision-making processes, institutional mandates, or planning frameworks?
- **Behaviour and practice change:** How have stakeholders acted differently following the process?
- **Resilience and adaptability:** In what ways has the process contributed to more adaptive, resilient, or inclusive systems?
- **Equity and power shifts:** Has there been a sustained levelling of the playing field, giving greater influence to women, youth, or marginalised groups?
- **System transformation signals:** Are there signs of structural (rules/resources), relational (coalitions/networks), or transformative (mindsets/narratives) change triggered by the foresight process?

Evaluating foresight through the three dimensions of process, outcomes, and impact ensures a comprehensive understanding of its value. Focusing only on policy/decision-making impact can overlook the deeper ways foresight creates change: by shifting mindsets, building futures literacy, strengthening relationships, and fostering emergence for systemic transformation. Assessing all three dimensions together allows practitioners to explore both the immediate and lasting effects of foresight, ensuring that their contributions to decision-making and change are fully recognised and sustained. Useful methodologies here can include Contribution Analysis, Transformative Change Evaluation and Transformative innovation policy evaluation.

For practical examples, please see [Evaluating the System-Level Impact of Foresight – Experiences from Sitra in Finland](#) and [Evaluating a Project-Based Participatory Foresight Initiative – Nakuru County](#) in the annexes.

#### 4.4.4. Evaluation Criteria

**Foresight initiatives serve multiple purposes, from informing policy and advocacy to building capacity and fostering networks.** Given this diversity of objectives, evaluating foresight requires tailored criteria that capture both the process and its outcomes.

**MEL practitioners can draw on several complementary frameworks when designing evaluations.** These include the core foresight evaluation criteria of learning, quality, and impact (Georghiou & Keenan, 2006), the OECD DAC criteria (including relevance, effectiveness, efficiency, impact, and sustainability), and criteria derived from this guide's foresight quality principles, such as inclusion, methodological soundness, transparency, and ethical practice. These approaches enable a holistic assessment of foresight initiatives, capturing what was achieved, how well the processes were managed and the contributions they made to systems change. These frameworks and criteria are presented in more detail to guide practical evaluation:

**The OECD-DAC evaluation criteria of relevance, coherence, effectiveness, efficiency, impact and sustainability are a staple in development projects, including foresight.** The criteria describe the desired attributes of development interventions: they should be relevant to the context, coherent with other interventions, achieve results in an efficient way and have positive, lasting impacts for sustainable development. Although useful, they have some limitations when it comes to evaluating foresight (see case study: *Evaluating food system transformation policy: strengths and limits of using OECD-DAC criteria*).

**Foresight core criteria:** the three most important elements of a foresight initiative according to Georghiou & Keenan (2006), are efficiency of implementation, impact and effectiveness, and appropriateness:

- **Efficiency:** Examine how efficiently the foresight process was carried out, focusing on how the initiative was organized and managed, and whether the methods used were appropriate. Conduct this assessment in real time or immediately after each activity to capture timely feedback.
- **Impact and effectiveness:** Focus on what the foresight activities produced in terms of outputs and outcomes. Track outputs such as the number of participants, reports disseminated, or meetings held. To demonstrate impact, analyse how these activities influenced decisions, behaviours, or systems. To the greatest extent possible, link activities to tangible and intangible effects of foresight on policy and practice.
- **Appropriateness:** Review the rationale behind the foresight activities by questioning whether they were necessary, whether the intervention was justified, and what alternatives might have existed. Ask whether foresight generated added value by looking for evidence on whether it helped achieve changes or led to better-informed actions. Keep in mind that direct attribution to foresight is often unrealistic, aim instead to assess contribution and added benefit.

It is important to note that evaluations themselves should follow the key ethical principles recommended for indigenous African contexts (see annex for reference).

#### Box 11: Using Foresight Quality Criteria for Evaluation

The foresight quality criteria presented earlier in this guide can also be used directly as evaluation criteria. Applying the same principles at both design and evaluation stages helps ensure coherence, learning, and accountability.

- **Contextually relevant:** grounded in local realities, knowledge systems, and real-world challenges.
- **Inclusive and empowering:** meaningfully engaging diverse stakeholders and strengthening agency and collaboration.
- **Methodologically sound:** using coherent, appropriate methods aligned with objectives and systems thinking.
- **Adequately resourced and sustainable:** realistically planned, institutionally embedded, and designed for adaptation over time.
- **Accountable and ethical:** transparent, trustworthy, and attentive to power dynamics and equity.

Using foresight quality criteria as evaluation criteria expands the focus of MEL to include understanding how and why foresight contributes to meaningful systems change.

## Box 12: Evaluating food system transformation policy – strengths and limits of using OECD–DAC criteria

### Context

The Changing Course in Global Agriculture (CCGA) initiative aimed to strengthen political support for sustainable agriculture and food systems at both international and national levels. Internationally, CCGA sought to contribute to progress monitoring of Agenda 2030 and to strengthen linkages between the UN Committee on World Food Security (CFS) and the High–Level Political Forum (HLPF). Nationally, it supported participatory, multi-stakeholder policy processes combined with system–dynamics planning tools. Given the very different scales and complexity involved, two separate evaluations were conducted; this case focuses on the international–level evaluation.

**Evaluation focus and scope:** The international evaluation examined the engagement of CCGA partners (Biovision and the Millennium Institute) in three major global policy processes: Rio+20 negotiations; the development of the CFS work programme, and the formulation of the Sustainable Development Goals (SDGs).

**Evaluation approach and criteria:** The evaluation applied the OECD–DAC criteria of relevance, effectiveness, efficiency, impact, and sustainability. Its objectives were to assess programme performance, identify success factors and constraints, and generate lessons and recommendations for future initiatives.

**Data and methods:** Evidence was drawn from extensive document review (correspondence, meeting minutes, internal reports, presentations, and technical outputs) and around 60 interviews with stakeholders, implementers, partners, and experts active in global food systems and sustainability policy.

**Findings:** Across relevance, effectiveness, and impact, the evaluation found that CCGA made a meaningful contribution to global debates on sustainable food systems. It supported consensus–building across international fora, championed multi-stakeholder assessment approaches, and enhanced awareness, knowledge, and the quality of policy dialogue. In terms of sustainability, CCGA’s engagement in Rio+20 and the SDG process contributed to longer–term shifts in global policy discourse on sustainable food systems.

**Limits of attribution under OECD–DAC criteria:** Despite these contributions, the evaluation faced significant challenges in demonstrating attributable impact. Global sustainability and agriculture policy arenas are highly crowded and politically negotiated. While CCGA was actively engaged and influential through facilitation, partnerships, and advocacy, it had limited control over final outcome documents. As a result, tracing direct, attributable changes in official texts proved difficult using standard OECD–DAC criteria.

### Key lessons for food systems evaluation

**Narrow success criteria underestimate influence:** Applying OECD–DAC criteria to initiatives seeking to influence global, political processes risks underestimating their true contribution. Many critical effects, such as alliance–building, agenda–setting, and shaping discourse are indirect, non–linear, and poorly captured by traditional impact metrics.

**Qualitative evidence is essential:** In advocacy– and partnership–driven initiatives, interviews are indispensable. They provide insight into indirect and intangible impacts, such as facilitating dialogue, building convergence, and strengthening networks, which are central to food systems change but difficult to quantify.

**Prioritise contribution–focused, systems–aware approaches:** Applying OECD–DAC criteria in isolation is insufficient for understanding change in complex food systems and policy–influence initiatives. Such approaches tend to undervalue indirect, non–linear, and collective forms of impact that are central to foresight and food systems transformation. Effective MEL in these contexts requires contribution–focused, qualitative, and systems–aware approaches that better reflect how change unfolds in complex systems.

### Further information

**Detailed evaluation report:** [External Evaluation of the Changing Course in Global Agriculture Programme \(CCGA\) Segment I, 2015](#)

## 4.5. Methods And Approaches For MEL

It is important to choose an evaluation approach that best fits the evaluation question that needs to be addressed for a particular initiative/organisation in its context. To agree upon the design for M&E, you will need to consider the M&E questions; the attributes, or nature of the initiative/organisation (e.g., level of complexity, uncertainty and risk), its purpose and context; and available M&E approaches and methods.

A wide range of frameworks, tools, methods and principles have been developed to evaluate projects and programmes like foresight, particularly those that operate in uncertain contexts, with unclear boundaries and that are participatory in nature. Many of these methods and approaches can be modified to evaluate foresight initiatives. These include:

### 4.5.1. Systems- And Complexity-informed Evaluations

Systems and complexity informed evaluations refer to evaluation practices that draw from theory, concepts and practices adapted from the systems and complexity fields. These approaches are especially encouraged in evaluating systems change initiatives, with emphasis on continuous learning and adaptation. There is no one theory or way of practicing systems and complexity informed evaluations, although several guides exist:



#### Box 13: Foundational Guidance On Systems Thinking In Evaluation

These resources introduce core systems concepts and how to apply them in evaluation design and practice.

[Principles for Effective Use of Systems Thinking in Evaluation](#): provides an introduction and guidance to using STCS in evaluation through overarching principles, grouped by systems concepts of interrelationships, dynamics, perspectives, and boundaries. Developed by the Systems in Evaluation Topical Interest Group (SETIG) of the American Evaluation Association (AEA)

[Evaluating System Change: A Planning Guide](#): Introduction on how to plan evaluations for system change interventions using systems thinking. It outlines a three-part process that aligns system dynamics, intervention design, and evaluation purpose and methods. It is a useful entry point for practitioners seeking to better capture complexity, influence, and systems-level effects in evaluation.

#### Practical guidance for food systems

[MEL Tools and Guidance for Food Systems and Other Complex Contexts](#): Developed by the UNDP, this is a practical guide to help MEL practitioners layer systems MEL approaches into existing MEL practices without discarding traditional evaluation frameworks. It also contains specialised guidance and tools that respond to the unique dynamics and interdependencies found in food systems.

#### Evaluation approaches for transformation and innovation

These approaches are suited to evaluating long-term, adaptive, and multi-actor system change processes.

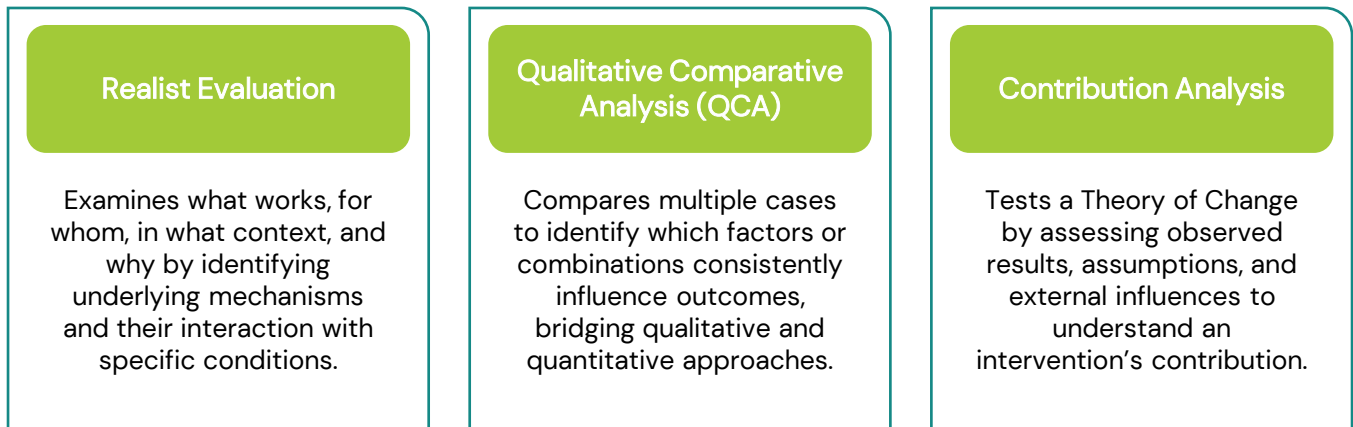
[Transformative Innovation Policy Evaluations](#): These evaluations seek to grapple with the challenge of evaluating ambitious systems change goals, such as food transformation, implemented through a series of disparate projects involving many local, geographically dispersed actors independently seeking to address long-term policy objectives. Combining the literature on sustainability transitions with policy evaluation, they propose an integrated evaluation framework composed of three main components: (i) programme theory (programme goals, systems boundaries and desired (or accepted) development paths); (ii) system analysis (transformative outcomes); and (iii) synthesis and overall assessment (including revision of programme theory).

[Developmental evaluations](#): Developmental Evaluation supports innovation development to guide adaptation to emergent and dynamic realities in complex environments. Innovations can take the form of new projects, programs, products, organisational changes, policy reforms, and system interventions.

### 4.5.2. Theory-based Approaches

**Theory-based approaches focus on understanding and testing the underlying theory of change (ToC) behind an intervention.** They examine the assumptions, conditions, and contextual factors that influence success, linking actions to results. They are especially useful for complex interventions, where outcomes depend on a series of interconnected actions and contextual influences. They investigate pathways and mechanisms that produce outcomes, offering deeper insights into the how and why of success or failure (UNDP-IEO).

Theory-based methods help explore how and why interventions produce outcomes, making them especially useful for complex food systems and foresight evaluations. Key examples include:



These approaches are valuable for foresight in food systems because they focus on mechanisms, context, and contribution rather than solely on measurable outputs. For further reading, see [Realist Evaluation](#), [Qualitative Comparative Analysis](#), and [Contribution Analysis](#) at BetterEvaluation

### 4.5.3. Collaborative, Participatory And Empowerment Evaluation Approaches

**These approaches revolve around stakeholder engagement.** Collaborative, participatory and empowerment evaluations are stakeholder involvement approaches to evaluation. They typically imply the incorporation of stakeholders into one or more components of the evaluation, with the underlying assumptions that stakeholder involvement creates a greater sense of ownership in the evaluation, increasing the likelihood of the use of evaluation results (Rodriguez-Campos, 2012). These approaches can be used in any impact evaluation design to collect qualitative and quantitative data, investigate causality, negotiate differences and validate key findings, score people's appreciation of an intervention impact, assess impacts in relation to wider developments in the intervention area and provide recommendations (Guijt, 2014). Participatory evaluation approaches can be useful for foresight projects, as they centre stakeholder engagement and co-ownership of the process and hence can be used throughout the foresight process to manage concerns about uncertainty and facilitate a deeper understanding of the complexity inherent in foresight processes.

Participatory evaluation methods often include self-assessment, stakeholder or internal evaluations, and participatory tools such as storytelling, social mapping, scoring, and brainstorming (EC, 2024). Common techniques include:

- Outcome mapping:** focuses on behavioural changes among individuals, groups, or organisations directly engaged by the intervention. Rather than proving causality, it highlights the logical link between these changes and the intervention's activities. It is particularly effective for identifying changes within supported groups, as it encourages self-reflection and ongoing learning.
- Social framework:** this method combines elements of the logical framework approach and outcome mapping but emphasise pathways of influence through social networks. By mapping these networks, practitioners can better understand the conditions needed to enable change and clarify the roles of different actors, which helps evaluators assess contributions by focusing on behavioural shifts rather than outputs.
- Participatory Impact Pathway Analysis (PIPA):** involves stakeholders in jointly reflecting on how an intervention leads to change. It acknowledges that impact pathways are rarely linear and encourages the identification of multiple contributing factors, and is useful when evaluating complex strategies or policies, as it allows for cumulative and context-sensitive assessments.

**Most Significant Change (MSC):** a story-based method that gathers narratives of meaningful change from intervention participants. These stories are reviewed and selected by panels of stakeholders to highlight the most valued outcomes. This process reveals what stakeholders consider important and helps refine the intervention's logic and objectives.

**Qualitative Impact Protocol (QuIP):** uses in-depth interviews with beneficiaries to uncover causal links between an intervention and its outcomes. It avoids control groups and instead relies on respondents' own accounts to trace how change occurred in complex, uncertain environments. This approach is particularly useful when multiple external factors are at play.

**Outcome Harvesting:** works by identifying what has changed and then tracing back to determine the intervention's contribution. It is well-suited for adaptive or complex programs where outcomes are not predefined. Rather than measuring progress against planned results, it collects evidence of actual change and explores how the intervention may have influenced it.

#### 4.5.4. Foresight Evaluation Frameworks

A wide range of foresight-specific frameworks can be reviewed to inform the design of evaluations, particularly where impacts are indirect, long term, or system level. These include:

**Results- and logic-based frameworks:** The For-Learn framework (Li et al., 2009) provides a structured, multi-phase approach that connects inputs, activities, outputs, outcomes, and impacts using effectiveness, efficiency, and appropriateness as core criteria. Piirainen et al. (2012) similarly propose a systemic input-process-output evaluation, together with attention to technical quality and ethical dimensions. Sokolova (2015) adds a staged approach combining project qualification, direct and comparative evaluation, and synthesis through SWOT analysis.

#### Box 14: Key lessons learnt from literature and practice

**Use multiple criteria and methods:** foresight initiatives pursue diverse objectives over long timeframes, so evaluations should combine multiple criteria and mixed methods to reflect this complexity.

**Evaluate processes as well as outcomes:** much of foresight's value lies in learning, networking, and shifts in perceptions and expectations. Evaluations should trace contributions across different phases and assess effects at both individual and organisational levels, not just final outputs.

**Focus on contribution, not attribution:** direct attribution is rarely feasible in complex systems. Evaluation should examine how foresight contributes to awareness, capability, and decision-making, while accounting for contextual factors such as governance, institutions, and windows of opportunity.

**Prioritise learning over accountability:** evaluation should strengthen organisational learning and foresight capacity, making explicit how futures knowledge is understood and used in strategy and operations, and reinforcing futures literacy and preparedness over time.

**Process quality and methodological soundness approaches:** These approaches help assess whether foresight was well designed and implemented, even where outcomes are uncertain or long term. For example, Pereira et al. (2007) offer a checklist assessing the quality of foresight knowledge across futuring, planning, and networking. Havas et al. (2010) link foresight effectiveness to its integration within innovation systems, while Miles (2012) highlights foresight as a service shaped by interactions among sponsors, practitioners, and stakeholders. Amanatidou (2014) extends this systemic view by explicitly linking foresight goals, functions, and impacts to grand challenges through programme theory and network analysis.

**Capturing less tangible and longer-term effects:** Johnston (2012) classifies foresight impacts into awareness raising, informing, enabling, and influencing, suggesting metrics and indicative outcomes for each. Van Lente (2012) and Harper (2013) emphasise societal expectations and temporal dimensions, highlighting the importance of anticipatory assumptions and evolving roles over time.

While many of these frameworks were designed to support institutionally embedded foresight initiatives in the global north, they nonetheless provide a rich source of approaches, tools and methods that can be modified for specific contexts.

#### 4.5.5. Communication and documentation

Communicating MEL findings is essential to building an evidence base for foresight and strengthening its credibility, legitimacy, and institutional support. More systematic and well-designed evaluations can help build trust in foresight, increasing the likelihood that insights are taken up by decision makers. Hence, MEL plays an important role in building the credibility, influence and long-term impact of foresight, helping to create a cycle of mutual learning between futures practitioners and decision-makers (Van der Steen & Van der Duin, 2012).

Strategically tailoring communication formats supports learning and improvement and helps translate foresight insights into influence, uptake, and sustained support. This means being aware that audiences have different information needs: programme teams may value detailed analysis, while funders and policymakers may prefer concise summaries, briefs, or targeted dialogues (IDRC, 2024).

#### 4.6. Toolbox for MEL

Effective monitoring and evaluation (M&E) of foresight requires combining principles from the literature with practical criteria tailored to foresight initiatives. In the following section, we summarise the foresight for food systems outcomes into a toolbox to guide evaluative efforts. We include some examples of MEL dimensions of interest, such as process quality, methodological soundness, learning and capacity building, and quality of foresight outputs, as well as outcomes and impacts, and provide sample indicators and examples of tools, methods and frameworks that can be used to assess these dimensions.

MEL practitioners can use the toolbox as a practical guide for designing foresight evaluation. This is done by identifying outcomes most relevant for the initiative; selecting tools and methods appropriate for capturing process, outcome, and impact indicators; ensuring participatory and iterative evaluation processes that allow adaptation based on emerging insights. Integrating these elements into MEL processes ensures that they are comprehensive, context-sensitive, and actionable, supporting learning and improvement across cycles.

For other guidance on appropriate evaluation design, please see: Gardner, A. L., Bontoux, L., & Barela, E. (2024). [Applying Evaluation Thinking And Practice To Foresight Evaluation](#). *Association of Professional Futurists*.

Table 3: MEL Toolbox

MEL Dimension	Key Evaluation Questions	Indicators	Suggested Tools / Methods	M&E Frameworks / Approaches
Process Quality	Did we design and deliver the foresight process effectively and inclusively?	<ul style="list-style-type: none"> <li>Diversity of participants (gender, youth, sectoral, regional)</li> <li>Evidence of equitable facilitation and reduced power imbalances</li> <li>Clarity of objectives and transparency in process</li> <li>Adequacy of resources, time, and communication design</li> <li>Recognition of local social/cultural dynamics</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholder mapping and diversity matrix</li> <li>Participation logs and reflection journals</li> <li>Process documentation review</li> <li>Facilitation debriefs / power mapping</li> </ul>	Developmental Evaluation, Participatory Process Evaluation
Inclusivity & Representation	Whose voices shaped the process and outputs?	<ul style="list-style-type: none"> <li>Extent of engagement of marginalised and informal actors</li> <li>Evidence of barriers identified and addressed (gender, digital, language)</li> <li>Recognition of local and indigenous knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholder engagement tracker</li> <li>Participant feedback surveys</li> <li>Inclusion and equity scorecards</li> </ul>	Gender-Responsive and Inclusive Evaluation
Quality of Engagement	How meaningful and balanced was participation?	<ul style="list-style-type: none"> <li>Stakeholders engaged across all foresight stages (framing, visioning, scenario-building, validation, follow-up)</li> <li>Safe spaces for dialogue and reflection</li> <li>Participant perception of fairness and transparency</li> <li>Outputs are accessible and tailored to audience</li> </ul>	<ul style="list-style-type: none"> <li>Post-workshop reflections</li> <li>Observation notes</li> <li>Power mapping and process tracing</li> </ul>	Utilisation-Focused Evaluation

MEL Dimension	Key Evaluation Questions	Indicators	Suggested Tools / Methods	M&E Frameworks / Approaches
<b>Methodological Soundness</b>	Were the methods appropriate, credible, and effective?	<ul style="list-style-type: none"> <li>• Methods aligned with goals, context, and resources</li> <li>• Participants' futures literacy, systems thinking, and shared understanding improved</li> <li>• Foresight recognized as a credible approach by institutions or stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Method alignment review against objectives and context</li> <li>• Pre/post surveys on skills and understanding</li> <li>• Research quality reviews</li> </ul>	Contribution Analysis, Outcome Harvesting, Participatory Process Evaluation
<b>Learning and Capacity Building</b>	Did participation enhance understanding, skills, and ownership?	<ul style="list-style-type: none"> <li>• Reported improvements in futures literacy and systems thinking</li> <li>• Integration of foresight in participants' work or planning</li> <li>• New tools or approaches adopted</li> </ul>	<ul style="list-style-type: none"> <li>• Pre/post surveys on futures literacy</li> <li>• Learning diaries</li> <li>• Key informant interviews</li> </ul>	Outcome Harvesting Capacity development evaluations (e.g., UNDP, OECD, World Bank, PACT)
<b>Trust, Collaboration &amp; Power Relations</b>	Did the process strengthen relationships and rebalance influence?	<ul style="list-style-type: none"> <li>• Increased trust, collaboration, or new partnerships</li> <li>• Empowerment of less powerful actors</li> <li>• Evidence of coalition-building or joint initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Social network analysis</li> <li>• Partnership mapping</li> <li>• Focus group discussions</li> </ul>	Most Significant Change (MSC), Social Network Analysis (SNA)
<b>Quality of Foresight Outputs</b>	Are outputs relevant, credible, and actionable?	<ul style="list-style-type: none"> <li>• Clarity, quality, and accessibility of foresight products</li> <li>• Evidence of co-creation and validation</li> <li>• Perceived usefulness for decision-making</li> </ul>	<ul style="list-style-type: none"> <li>• Output reviews and Research quality reviews</li> <li>• User feedback surveys</li> <li>• Policy uptake tracking</li> </ul>	Contribution Analysis, Theory-Based Evaluation
<b>Early Outcomes (1–2 years)</b>	What immediate results emerged for participants and institutions?	<ul style="list-style-type: none"> <li>• Policies: Specific food/agriculture policies revised or developed with foresight inputs; recommendations cited in debates; shift to anticipatory planning</li> <li>• Practices: Organisations adapt strategies to integrate foresight insights; adoption of futures-informed planning tools; testing of opportunity crops or resilience strategies</li> <li>• Resources: New funding lines for foresight priorities; funding for research and curricula</li> <li>• Connectivity: New alliances, coalitions, or working groups; increased trust and dialogue; joint visions/roadmaps agreed</li> <li>• Power: Dedicated foresight units created; institutional rules embed foresight; marginalised actors gain voice; foresight embedded in research institutions</li> <li>• Mental Models: Evidence of mindset shifts; futures literacy strengthened; media/policy/civil society discourse reflects foresight narratives; decision-makers understand interconnected food systems</li> </ul>	<ul style="list-style-type: none"> <li>• Outcome journals</li> <li>• Policy tracking</li> <li>• Stakeholder interviews</li> </ul>	Outcome Harvesting, Process Tracing Transformative innovation policy evaluation

MEL Dimension	Key Evaluation Questions	Indicators	Suggested Tools / Methods	M&E Frameworks / Approaches
<b>Intermediate Outcomes (3–5 years)</b>	How is foresight informing practice, policy, and collaboration?	<ul style="list-style-type: none"> <li>• Foresight integrated into institutional processes or policy frameworks</li> <li>• Visible behavioural or planning changes</li> <li>• –Increased inclusion in governance processes</li> </ul>	<ul style="list-style-type: none"> <li>• Policy document review</li> <li>• Institutional self-assessment</li> <li>• Contribution stories</li> </ul>	<p>Realist Evaluation</p> <p>Transformative innovation policy evaluation</p>
<b>Long-Term Impacts (5+ years)</b>	What difference did foresight make at the system level?	<ul style="list-style-type: none"> <li>• Sustained policy uptake and institutionalisation</li> <li>• Structural changes in resources or decision-making</li> <li>• Shifts in relationships, networks, and power dynamics</li> <li>• Transformation of mental models, narratives, and system resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Longitudinal studies</li> <li>• Participatory impact pathways analysis</li> <li>• Sensemaking workshops</li> </ul>	<p>Contribution Analysis,</p> <p>Transformative Change Evaluation</p> <p>Transformative innovation policy evaluation</p>



# 5. Taking Action – Moving Forward

## 5.1 *Summing Up: Enhancing Quality Foresight For Food Systems Transformation*

Food systems transformation is of paramount importance to reach global goals of food and nutrition security, environmental sustainability and socio-economic welfare. However, transformation processes are contested and political, and cannot be designed or engineered. Food systems transformation processes must therefore tackle systemic barriers, disrupt existing socio-technical regimes, nurture niche innovations, and foster under-utilised imaginative capabilities to envision alternative the food system futures.

Using a foresight for food systems change framework opens up new ways to tackle structural barriers and open up transformative change action. These include addressing issues such as power lock ins, dependence on technological solutions, lack of aligned visions, short-term thinking, and spatial and temporal disconnects. It supports such processes in four ways. First, by making the long-term negative consequences and risks of the existing regime much more apparent, helping to generate the necessary societal understanding and political will for change. Secondly, the process opens up imagination about how the future could be different helping to spur niche innovations. Thirdly, by bringing different stakeholders together who are working on niche innovations the process supports these to coalesce and scale, helping to create waves of innovation that can potentially disrupt the existing regime. Fourth, the foresight for systems change approach engages stakeholders in questioning existing assumptions, paradigms and mindsets and helps to create the new narratives and alliances necessary for transformation

Participatory foresight for food systems transformation – informed by the nine quality principles and criteria in this guide – has the potential to help food systems stakeholders initiate processes of transformation. It offers opportunities to (re)energise the national food systems transformation pathways initiated under the United Nations Food Systems Summit (UNFSS) as well as drive the long-term vision of the African Union Agenda 2063 flowing from the Kampala Declaration 2025. Supporting Monitoring, Evaluation and Learning, as elaborated in this guide, will contribute to continued learning, documenting lessons learnt, and building an evidence base to support uptake of foresight tools and methods to inform policy, strategy and practice. This guide has sought to share suggestions on how foresight approaches and cases can contribute meaningfully to food systems transformation processes.

The emerging global foresight community, spanning from quantitative modelling to qualitative foresight facilitation, has important capacities to offer to food systems leaders, facilitators and food security experts. To enhance collaboration and sharing across these spaces, it is important to further develop the intellectual foundations as well as the practical application of participatory foresight at different levels in the food system. The future is created by how it is imagined today. Let us therefore cultivate the power of participatory foresight so we may accelerate food systems transformation.

## 5.2 *Taking on African Food Systems Transformation*

Africa's agri-food systems are experiencing increasing volatility and uncertainty. This is driven by climate change, demographic pressures, environmental degradation, market disruptions, transboundary pests and diseases, conflict, and persistent food and nutrition insecurity. These pressures have heightened the urgency of meeting the CAADP Commitments, Agenda 2063 aspirations, and the Sustainable Development Goals.

The Kampala CAADP Declaration (2025) underscores the need for anticipatory, evidence-driven and inclusive approaches to achieve continent-wide targets. These include increasing agri-food output by 45 percent, reducing post-harvest losses by 50 percent, tripling intra-African agri-food trade, halving the gender-yield-gap, and strengthening resilience to climate and socio-economic shocks by 2035. These ambitions require stronger capabilities for foresight, strategic planning, and governance.



## 5.2 Driving African-led Food Systems Foresight

**Africa's foresight journey did not begin today.** Over the past decade, the Forum for Agricultural Research in Africa (FARA) and its CAADP-XP4 partners—AFAAS, ASARECA, CCARDESA, and CORAF—have nurtured a continental ecosystem that redefined how research and innovation systems anticipate the future. Through these partnerships, foresight evolved from an abstract planning tool into a strategic discipline shaping policy, institutional transformation, and anticipatory governance across Africa's agrifood landscape. Partnerships with CGIAR centres, FAO, IDRC, GIZ, Oxford University, and Wageningen University have strengthened foresight evidence and tools. Civil society in many countries has also championed foresight and scenario exercises, influencing political trajectories, national planning, building foresight capacity and generating valuable lessons learnt.

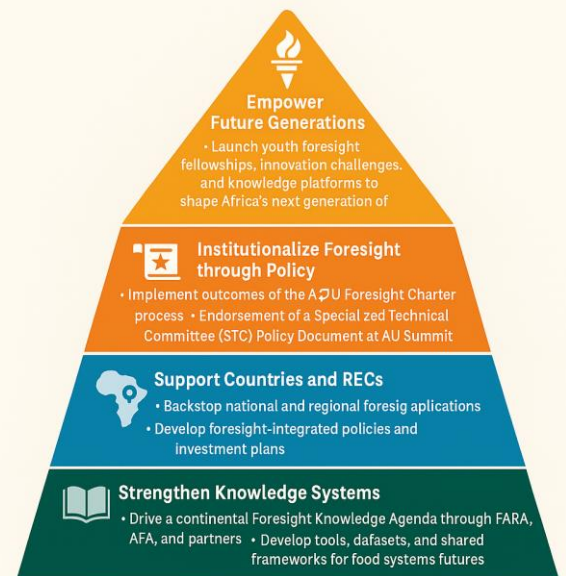
**Early milestones include the creation of the Africa Foresight Academy (AFA)**—a virtual knowledge platform hosting capacity-building programmes, foresight courses, and scenario laboratories that have reached over 8,000 practitioners. The establishment of country foresight hubs (13 in the CORAF region and seven in the CCARDESA region) created national structures for trend analysis, risk assessment, and policy advice. Foresight workshops held in Saly (2021), Lusaka, and Naivasha (2023) trained youth, policymakers, and leaders to integrate foresight into planning for climate-smart, resilient, and inclusive food systems.

This cumulative experience laid the foundation for a continental foresight knowledge agenda, now advancing under the CAADP Kampala Declaration and reinforced by the Africa Continental Foresight Consultations convened by the African Union Commission in Nairobi (December 2025). These consultations affirmed foresight as a core pillar of Africa's Food Systems Resilience Program (FSRP) and a critical instrument for embedding anticipatory governance into CAADP cycles, national investment planning, and crisis-preparedness systems.

The agenda seeks to embed foresight as a permanent governance capability through a coordinated continental foresight strategy that strengthens institutional capacity, aligns policy cycles, and scales evidence-based decision-making. Key strategic directions include institutionalising foresight across AUC, AUDA-NEPAD, RECs, and Member States through frameworks aligned with the Kampala Implementation Guidelines; strengthening AFA as the continental digital hub for foresight knowledge exchange, scenario learning, technical training, and peer-to-peer learning; integrating foresight outputs into NAIP and RAIP design, CAADP Biennial Reviews, Joint Sector Reviews, and the Mutual Accountability, Results and Learning Framework (MARLF); developing a Foresight Evidence Portal hosted by FARA and AFA linking data, tools, analytical models, and good practices; advancing a "One Foresight Africa" knowledge strategy coordinated by AUC-DARBE with CGIAR, FAO, IDRC, GIZ, RECs, and national foresight hubs; and supporting the operationalisation of a three-tier continental foresight and early-warning system linking Member States, RECs, and the African Union to strengthen risk anticipation across climate, markets, pests, conflict, and policy domains.

Building on the Nairobi consultations, the continental foresight strategy will be consolidated into a formal AU-endorsed policy and implementation roadmap, culminating in a Specialized Technical Committee (STC) Policy Document. Upon endorsement at the AU Summit, foresight will be elevated as a strategic continental policy function guiding planning, investment, budgeting, and governance across Member States, and anchoring foresight within CAADP, FSRP, and long-term development pathways.

### TAKING ACTION MOVING FORWARD INSTITUTIONALIZING FORESIGHT IN AFRICA



„From insight to institution — foresight is Africa's bridge to a prepared, resilient, and self-determined future.“

## *5.4 Recommendations For African Leaders, Food Systems Stakeholders And Future Generations*

The future of African food systems depends on decisions taken today to institutionalise foresight as a strategic public good and a permanent governance capability. Lessons from the CAADP-XP4 journey and the AU Continental Foresight Consultations show that foresight thrives where leadership, political mandate, evidence, financing, and collaboration converge.

**For African Leaders and Policymakers, priority actions include adopting foresight frameworks within national agricultural investment plans;** embedding scenario-based and risk-informed analysis into budgeting, medium-term expenditure frameworks, and policy reform; designating national foresight focal points within ministries of agriculture, planning, finance, and climate; institutionalising foresight within CAADP Biennial Review, Joint Sector Review, AU-STC, and Summit processes; and establishing or strengthening national response coordination and advisory units that translate early warning and foresight insights into timely policy and financing decisions.

**For Food Systems Stakeholders, priority actions include mainstreaming foresight** into climate adaptation, seed systems, food security, nutrition, and value-chain programmes; actively engaging in the Continental Community of Practice to co-create inclusive knowledge systems drawing on scientific, indigenous, and community-based foresight traditions; building cross-sectoral alliances among government, private sector, academia, civil society, and youth; and supporting the development of early-warning systems, risk dashboards, and decision-ready foresight products that shorten the gap between risk detection and action.

**For Future Generations, priorities include expanding youth foresight fellowships, innovation challenges, and leadership pipelines; preserving and teaching African foresight narratives** to sustain a legacy of resilience, systems thinking, and long-term stewardship; and treating foresight as a moral commitment to intergenerational equity and shared prosperity – the responsibility to build the Africa that future generations deserve.



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# Annex 1: Glossary of key concepts

Concept	Definition
<b>Anticipatory governance</b>	Anticipatory governance a proactive decision-making framework designed to manage complexity and uncertainty by preparing for and constructively shaping possible futures, rather than merely reacting to crises or events after they occur (Guston, 2014).
<b>Decolonizing Foresight</b>	This concept calls for a critical re-evaluation and transformation of foresight methodologies and practices to dismantle colonial legacies including Western-centric biases, valuing Indigenous and local knowledge and promoting local agency and self-determination (Jae, 2023).
<b>Democratising Foresight</b>	This principal advocates for shifting the ownership and practice of foresight from an exclusive domain of external "experts" to a collaborative process. This involves building local capacity for sustainability, simplified and accessible sensitization tools, and engagement through participatory workshops and local storytelling (Bourgeois, Penunia, Bisht, & Boruk, 2017).
<b>Disruption</b>	A plausible extreme development - categorized across environmental, social, technology, economic, and geopolitical domains - which, should it occur, would significantly change the policy landscape and challenge core assumptions (OECD, 2025).
<b>Feminist Futures</b>	An approach that intentionally centres gender equity, social justice, and intersectionality in the exploration of possible futures. It critically examines power structures and societal norms perpetuate inequalities, and envisions futures where these are dismantled, leading to more inclusive, equitable, and sustainable systems for all genders and marginalised groups. It seeks to amplify voices and perspectives of women and other historically excluded groups in foresight (Abdullah, 2025; Milojević, n.d.)
<b>Food Systems</b>	A complex system of interconnected activities involved in getting food from production to consumption. Food systems include all elements and activities involved in the production, processing, distribution, consumption, and disposal of food, as well as the resulting environmental, social, and economic outcomes. See for instance <a href="#">the High Level Panel of Experts, 2017</a> ) and <a href="#">Ingram (2010)</a> .
<b>Foresight</b>	A systematic and participatory process of exploring possible futures, understanding drivers of change, and anticipating potential challenges and opportunities. It is not about predicting the future but about enhancing preparedness, informing strategic decisions, and fostering innovation in the present. Key aspects include: challenging assumptions, exploring uncertainties, providing a holistic view, postulating future possibilities and stimulating strategic conversations ( <a href="#">Wilkinson, 2017</a> )
<b>Foresight vs. Planning</b>	While strategic planning relies on extrapolation and a single desired future, foresight actively challenges that strategy by exploring multiple, plausible futures. Foresight activities should precede and inform strategic planning to ensure the resulting strategy is robust (Conway, n.d.; UN Futures Lab, 2023).
<b>Futures literacy</b>	The capacity to recognize the role of the future in what people see and do, helping participants see the future as plural and open. This can help actors counteract passivity and resignation, and reflect on their roles and perspectives in the system. This competence empowers people to use their imagination consciously, enabling them to discover assumptions underlying their hopes and fears, thereby diversifying their range of choices and actions in the present (UNDP, 2018).

Concept	Definition
<b>Indigenous Knowledge Systems (IKSs)</b>	The collective wisdom, philosophies, and skills that have emerged from generations of interaction between communities and their surrounding environments. Foresight must engage with these systems and worldviews, as IKSs offer a grounded and accessible entry point to discuss long-term cycles, traditional practices, and modern scenario planning (Rutting, Veeger, von Breyman, Garcia, Sancir, Calel, Canek, Suyuk, and Vervoort, 2024).
<b>Monitoring, Evaluation, and Learning (MEL)</b>	An iterative process that assesses progress, effectiveness and impact of initiatives, programs, or policies. MEL means: Monitoring, tracking implementation of strategies informed by foresight, identifying emerging trends, and observing changes in food system environments; Evaluation, systematically assessing whether foresight work has achieved intended objectives, contributed to desired outcomes, and provided value. This can include evaluating the quality of foresight processes, the utility of outputs and influence on decision-making; and Learning: Using insights gained from monitoring and evaluation to adapt strategies, refine foresight methodologies, improve future interventions, and build organisational knowledge. See also <a href="#">Better Evaluation</a> .
<b>Policy Resilience</b>	The ability of a policy or strategy to remain effective across a wide range of plausible future scenarios (OECD, 2025). The process requires a commitment to stress-test policy proposals against future change (GO Science, 2022).
<b>Policy Stress-Testing / Policy Resilience</b>	The systematic process of testing current policies and proposals against a wide range of co-created scenarios, including systemic shocks and geopolitical risks. This is mandatory for identifying "No-Regrets" Policies (beneficial across all futures) and "Good-Bet" Strategies to ensure they are robust and future-proof (OECD, 2025)
<b>Strategic Foresight</b>	A systematic process to inform decision-making and policy design by exploring alternative futures. It is fundamentally not about prediction, but about informing strategy by testing current organisational purpose against future uncertainties (Conway, n.d; Monteiro & Dal Borgo, 2023).
<b>Systemic Practice</b>	A continuous, adaptive approach recognizing that change is emergent, chaotic, and unpredictable. It focuses on relationship brokering and anticipatory thinking to purposefully intervene for systems change (Guijt & Woodhill, 2023).
<b>Systems</b>	<a href="#">Meadows (2008)</a> stated that a system is "an interconnected set of elements that is coherently organized in a way that achieves something". This definition highlights three key components of any system: elements (the individual parts), interconnections (the relationships and interactions between those parts), and a function or purpose (what the system does or is meant to do). Systems thinking is focused on understanding interrelationships, recognising different perspectives and helps to establish boundaries of systems. See <a href="#">Woodhill and Millican (2023)</a> .
<b>Transformative Scenario Planning (TSP)</b>	A deep, highly participatory methodology that goes beyond simple forecasting to generate consensus, challenge dominant mental models, and increase community self-efficacy (belief in the capacity to implement actions). It is designed to foster a shared sense of capability and mobilize collective action (Roy, 2019).
<b>The Foresight-Decision Cycle</b>	Foresight and particularly must be framed as a continuous government cycle: Anticipate (scanning), Integrate (linking to policy), Decide (informing choices), and Act (monitoring context) (Monteiro & Dal Borgo, 2023).

## Annex 2: Additional Resources And Case Studies

### Case study: Connecting Theory And Practice Using Reflection Pieces

**Context:** After more than a decade of applying scenario-guided foresight across multiple regions, the CGIAR Climate Change, Agriculture and Food Security (CCAFS) programme undertook a reflective synthesis to assess how foresight had contributed to policy action. The team led an academic synthesis drawing on 11 years of foresight practice across regions and policy contexts, supported by a wide network of researchers, partner organisations, and institutions.

**Approach:** The synthesis was conducted collaboratively by researchers involved in CCAFS and related initiatives. Analysis was explicitly grounded in an academic theoretical framework to guide reflection on anticipatory governance, linking foresight and futures research with sustainability governance. This framework provided a structured lens to integrate evidence across cases and to critically examine how foresight shapes present-day decision-making. Rather than aggregating indicators or outcomes, the synthesis examined patterns across cases, focusing on how foresight interacted with institutional contexts, participation cultures, imaginaries, process design, and futures methods. This enabled reflection on successes and failures in connecting foresight to policy action.

**Results:** A central contribution of the synthesis was its explicit connection between evaluation and scaling. Insights were organised around how foresight can be scaled deep (building anticipatory capacity within institutions), scaled out (replicating approaches across contexts), and scaled up (influencing higher-level policy processes). Results were published as a qualitative-comparative case study on anticipatory climate governance processes in the Global South.

#### Key lessons for foresight for MEL

Reflection pieces drawing on theoretical frameworks can help to conceptualise and reflect on the effectiveness of foresight, as well as move forward foresight practice in the global south, where foresight as a formalised practice is not yet well established. Reflection pieces are especially valuable in demonstrating the indirect effects of foresight, as well as putting them in the context of systems change.

Effective reflection and synthesis should:

- **Draw on diverse expertise:** Engage stakeholders, partners, and knowledgeable peers to understand how and why a programme works.
- **Analyse indirect and systemic effects:** Look beyond immediate outputs to changes in awareness, relationships, networks, or decision-making patterns.
- **Learn across cases and time:** Compare experiences from different contexts to identify patterns and transferable lessons.
- **Link evaluation to action and scaling:** Use insights to guide future initiatives, improve processes, and inform strategies for broader influence.
- **Use frameworks as guides:** Conceptual tools can structure thinking about complex change, even without a full academic analysis.

Further reading:

Reflection piece on the CCAFS experience: [Transformative Horizons: Reflecting On A Decade Of Scenario-Guided Policy Formulation](#)

Case study developed: [Muiderman et al., 2023. Is Anticipatory Governance Opening Up Or Closing Down Future Possibilities? Findings From Diverse Contexts In The Global South](#)

## Case study: Using Limited Data To Evaluate The Semi-explicit And Implicit Dimensions Of Change

### Based on the Transformative Scenario Planning in Koutiala, Mali – linked to Case 2 in Chapter 1

#### Context

In 2016, ASSAR implemented **Transformative Scenario Planning (TSP)** in Koutiala, Mali, engaging a diverse group of stakeholders to explore the future of agriculture, natural resources, and food security through 2035. TSP is a structured process that brings together participants with different perspectives to reflect on complex challenges and co-develop pathways for action. Workshops generated “Vision 2035,” identifying priority actions to improve rainwater management, soil fertility, and access to improved seeds. The initiative was part of CARIAA and funded by DfID and IDRC.

#### Evaluation purpose and design

The evaluation focused on understanding the influence of the TSP workshops on participants. Four outcomes were assessed: systems understanding, relationship building, learning across boundaries, and change in practice (referred to as transformational change). A case study design was used to capture individual-level learning and changes over time, recognising that policy-level impacts may be slower to materialise.

#### Data collection

Structured interviews were conducted with 26 participants, representing 68% of workshop attendees, 12 months after the workshops to capture potential behaviour change over time. Participants included district officials, development agents, traditional authorities, civil servants, and farmers. Data collection tools were adapted to local cultural norms and participant comfort, enabling open and authentic responses while respecting social sensitivities.

#### Findings

The evaluation found that participants reported positive outcomes in relationship-building and cross-boundary learning, while improvements in systems understanding were more limited. Changes in practice were modest and occurred at the individual level, with no direct evidence of policy-level outcomes. Nevertheless, by strengthening participants’ adaptive capacity, the process laid the foundation for potential collective action and future institutional or policy transformation.

#### Key lessons for foresight MEL practitioners

**Time matters:** Conduct follow-up interviews months after interventions to capture behaviour change and learning over time.

**Cultural and local sensitivity:** Adapt methods and tools to participant comfort levels and social norms to ensure authentic engagement.

**Focus on adaptive capacity:** Short-term workshops may not produce policy change but can build networks, relationships, and adaptive thinking that underpin longer-term transformation.

**Define multiple outcome levels:** Capture both implicit and explicit dimensions of transformative change, including learning, relationship-building, and systemic understanding, which are harder to see but have profound influence on systems change.

**Use small, structured samples strategically:** Even partial coverage (68% of participants) can yield meaningful insights when combined with careful qualitative analysis.

**Further reading:** [Using Transformative Scenario Planning to think critically about the future of agriculture, natural resources and food security in Koutiala, Mali](#)

## Case study: Evaluating the system-level impact of foresight – experiences from Sitra in Finland

### Context

Sitra is Finland's public innovation fund operating under Parliament, with a mandate to support long-term societal futures. As a future-oriented think-and-do tank, Sitra promotes systemic change through foresight, experimentation, joint projects, and policy capability building. Its futures work focuses on societal renewal, the transition to a carbon-neutral circular economy, and sustainable work and economic systems. Financial independence through endowment returns and institutional proximity to Parliament enable long-term, policy-relevant foresight without short-term political pressure.

### Step 1. Evaluability and evaluation challenge

Sitra initially monitored projects using a conventional input-output-outcome-impact (IOOI) framework. While useful for project-level accountability, this approach proved insufficient to assess Sitra's contribution to system-level and society-wide change. In 2016, Sitra identified the need for an impact evaluation approach capable of capturing long-term, complex transformations.

### Step 2. Evaluation framework and Theory of Change

Sitra developed a formal impact evaluation framework that clarified the rationale for evaluating foresight impact, assumptions about how Sitra contributes to systemic change, and the principles guiding evaluation in complex systems. By explicitly situating the evaluation within Sitra's broader strategic planning and impact management processes, the framework ensured that evaluation was not a stand-alone exercise but a tool for organisational learning and strategic steering. Laying out this information upfront also clarified the role of intended users of the evaluation and supported their early involvement in the process, which strengthened both use and learning (Patton, 2008).

### Step 3. Review of evaluation practice

A review of foresight and impact evaluation literature informed the framework and led to five guiding principles:

- Account for long time horizons of societal change
- Apply a holistic, systems perspective
- Focus on contribution rather than attribution
- Embed learning and development in the evaluation
- Use methods appropriate to context and purpose

### Step 4. Evaluation purpose and questions

The evaluation combined accountability, learning, and knowledge generation. Its purposes were to produce independent evidence on Sitra's impact, support strategic steering and organisational learning, and assess progress toward shared societal impact goals. Key evaluation questions asked whether Sitra was doing the right things, in the right way, at the right time, and how its actions, partnerships, and strategic choices contributed to observed changes.

### Step 5. Impact definition and indicators

Impact was defined as long-term systemic change, aligned with Sitra's shared societal impact goals. Rather than fixed indicators, these goals functioned as directional principles guiding action in a complex and uncertain environment.

### Step 6. Data collection and methods

Methods were selected based on evaluation questions and evidence needs, and included media and document analysis, big data and bibliometric analysis, interviews, surveys, and stakeholder consultations. These methods captured both the use of Sitra's foresight outputs and their influence on public discourse and decision-making.

### Step 7. Synthesis and sensemaking

An independent external evaluation team synthesized quantitative and qualitative evidence and conducted interviews with 22 stakeholders across academia, government, the private sector, civil society, labour organisations, culture, and politics. This enabled triangulation and assessment of Sitra's contribution to systemic change.

### Key lessons for foresight MEL

- Evaluating foresight impact requires explicit attention to context, time horizons, and system boundaries
- Method choice should reflect the nature of foresight influence, particularly discursive and capacity-building effects
- Impact evaluation should strengthen foresight capability by linking evaluation, strategy, and operations
- Clear evaluation frameworks and early stakeholder engagement enhance both learning and use

For further reading, see: [Sitra's Evaluation Framework](#)

## Case study: Nakuru County, Kenya – Evaluating a project-based participatory foresight initiative – linked to Case 9 in Chapter 3.9

### Context

From 2023 until 2025, Nakuru County stakeholders engaged in a participatory foresight project to co-develop a shared vision for the future of its food system. Over 40 stakeholders from county government, civil society, farmer organisations, and the private sector participated. The initiative coincided with the start of a new county and national government, creating a strategic window to align local priorities with Kenya's Bottom-Up Economic Transformation Agenda and County Integrated Development Plans. Foresight was framed as a practical planning and engagement tool to support participatory governance and policy coherence, rather than as a stand-alone futures exercise.

### Evaluation challenge and scope

The key challenge was translating national ambitions into locally owned and implementable food system strategies, while strengthening trust, legitimacy, and coordination. From an evaluation perspective, the initiative was designed to influence processes, alignment, and decision-making capacity, rather than to deliver immediate system-level change. This was suitable for process and outcome evaluation in short to medium term, with impact evaluation only feasible over longer time horizons.

### Foresight design and implicit theory of change

Facilitated by Foresight4Food and local partners, the project assumed that inclusive, participatory foresight would generate shared understanding, align political and societal priorities, and strengthen collective agency. The implicit theory of change linked structured sensemaking and visioning to improved policy coherence, stakeholder buy-in, and follow-on action in county planning and investment decisions.

### Foresight process

The process was guided by the Foresight4Food framework, with tools including trend and uncertainty mapping, scenario development, visioning, and backcasting. Five food system scenarios were developed around four critical uncertainties: business structure, consumption patterns, scale of trade, and environmental sustainability. These supported the articulation of a shared vision and strategic pathways, consolidated in the [Nakuru County Manifesto for Change](#).

### Outputs and early outcomes

The main output was the food systems manifesto, outlining strategic directions such as shifting diets through education and food safety, strengthening farmer collectives and private-sector partnerships, enabling inclusive governance through multi-stakeholder platforms, and improving decision-making through continued use of foresight tools. Early outcomes included formal commitment by the county government, establishment of a technical working group in the Governor's Office to review food system policies against the manifesto, and uptake of foresight tools at community level (e.g. school feeding initiatives and successful advocacy for water and irrigation investments).

### Enabling conditions shaping success

Several contextual factors amplified the effectiveness of the initiative:

- Timing and political window: alignment with a new administration and planning cycle
- Institutional and legal fit: consistency with constitutional requirements for participatory planning and national development agendas
- Credibility and support: backing from IFAD and FAO
- Local leadership: presence of a trusted local champion enabling cross-sector mobilisation

**Methods** included document and policy analysis, stakeholder interviews, focus groups, observation of planning processes, and contribution analysis. Participatory reflection serves evaluative and learning purposes.

### Key MEL insight

Project-based participatory foresight is rarely evaluated through immediate impact metrics. Its primary value lies in **agenda-setting, alignment, capacity-building, and legitimacy**, all of which are evaluable and essential foundations for longer-term food systems transformation.

Source: author interview with FoSTr Kenya Country Facilitator, and [FoSTr programme](#)



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