Foresight4Food

UNITED NATIONS FOOD SYSTEMS COORDINATION HUB

The Power of Foresight:

Supporting the Implementation of Food Systems Transformation Pathways

Workshop Report

Ministry of Foreign Affairs

Food and Agriculture Organization of the United Nations

IFAD
Investing in rural people

Summary

On 30 and 31st of January 2025, the Foresight4Food Initiative and the United Nations Food Systems Coordination Hub organized a workshop titled "The Power of Foresight- Supporting the Implementation of Food Systems Transformation Pathways". Held at the headquarters of the United Nations Food and Agricultural Organisation (FAO) in Rome, the event gathered 48 experts from 28 countries.

The purpose of the workshop was to advance the use of foresight with the perspective to:

1. Enhance knowledge and data mobilization.
2. Support the design and implementation of national food systems transformation pathways.
3. Drive food systems transformation in the context of the UN Food Systems Summit.

Workshop participants shared experiences and explored how to use the "power of foresight" to accelerate food systems transformation efforts, particularly at the national level. Contributions by 17 food system foresight initiatives were shared, as a basis for dialogue between foresight specialists, representatives of national food systems convenors, civil society organisations, researchers, and UN organisations.

Ahead of the upcoming Food Systems Stock Taking Moment (UNFSS+4), participants agreed that now is the time to consolidate experiences, identify synergies and learn how to operationalize foresight to help implement national food systems transformation pathways. Many initiatives presented in Rome shared cases that directly or indirectly support National Pathways.

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Why this workshop?

Food systems transformation is needed to achieve the UN Sustainable Development Goals (SDGs) by 2030. In support of this agenda and since the United Nations Food Systems Summit in 2021, many countries have developed National Pathways for food systems transformation. Supporting these efforts, a diverse range of coalitions have emerged to provide expertise, resources, and collaboration. To improve the implementation of national food systems pathways, an integrated process of multi-stakeholder collaboration, knowledge gathering, data use and dialogue is required. At the same time, to imagine and realise new food systems futures, there is a growing interest in using foresight to support future readiness, stakeholder dialogue, and policy innovation.

Many initiatives supporting National Pathways incorporate elements of foresight to better understand the future of food systems. As food system transformation becomes increasingly complex and uncertain, countries, UN agencies, and global initiatives are turning to foresight as an innovative tool to navigate these challenges. For instance, the UN 2.0 agenda promotes a forward-thinking culture within the United Nations, recognizing foresight as one of the essential skills in its 'quintet of change' framework.

This workshop **explored the contribution foresight can make**, by:

- **Establishing the Necessity:** Clarifying the urgency and potential of foresight to support the implementation of food systems transformation pathways.
- **Exploring the Offering:** Presenting foresight services and related knowledge/data initiatives to show how foresight can help the designing and implementation of food systems transformation pathways.
- **Working on Alignment:** Brainstorming and identifying opportunities for joint synergetic action between foresight and related knowledge/data initiatives.
- **Collaborating for Deployment:** Identifying where joint synergetic action can be taken to support specific country (or regional) food systems transformation processes.

Key Messages Emerging

- Insights from **17 case studies and the experiences of 48 participants across 27 countries** highlight the valuable role foresight approaches play in food systems transformation.
- It is all about **working within complex systems** and effective foresight practices for food system change recognize and embrace it.
- **Openness to new and inclusive perspectives should be central** to all foresight for food systems transformation efforts.
- **The process brings the answer,** while foresight can bring awareness on crucial process elements such as collective intelligence, agency, time and scale.
- **Embracing the 'ifs'** — how foresight is conducted, who is involved, and what precedes and follows the process — is just as important as scenario development.
- **Foresight is not one approach or one methodology**; rather, it offers a diverse set of frameworks, tools, and methods that can be tailored to specific needs.
- **The national food systems transformation pathways can benefit from foresight approaches.**

Highlights from Day 1

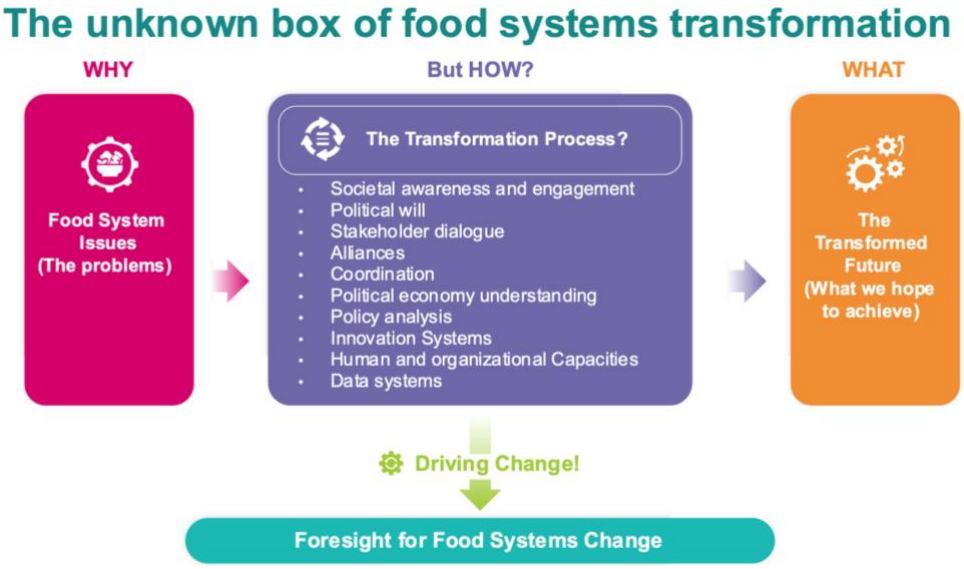
Food Systems, Foresight and the Myth of Cassandra

In opening remarks, Stephanos Fotiou, Director of the UN Food Systems Coordination Hub, emphasized on the opportunity for achieving the SDGs through food systems transformation, stressing the role of science, research and innovation.

Invoking the Greek myth of 'Cassandra', who had been granted the gift to foresee the future but was also cursed to not be believed by anyone, he recalled similarities with those working on foresight for food systems transformation and climate change, who may now be called Cassandras – "so how can we find ways for all food systems stakeholders to listen to the stories being told about the future?" He called for foresight practice to be strongly linked to the National Pathways and national action to promote more inclusive, healthy a sustainable food systems.

Process and Progress: Where Does Foresight Come In?

Jim Woodhill, Lead of the Foresight4Food Initiative, explored both the *process* and *progress* of food systems transformation. He highlighted that since the UN Food Systems Summit in 2021, significant efforts have been dedicated to developing transformation pathways. However, much work remains. As a food systems community, we now have a clear grasp of the ***Why***—the urgency and scale of the challenge—and growing clarity on the ***What***—the key areas of change needed (health/livelihoods/environment). Yet, he argued, the real challenge lies in the ***How***. The *How* is about navigating the complex and dynamic interactions between organizations, people, and interest groups. Woodhill emphasized the importance of applying systems thinking and practice—going beyond surface-level changes to shift underlying paradigms and mental models. He highlighted the need to identify signals, incentives, and triggers that can drive meaningful and lasting transformation.



Jim emphasized that **foresight plays both a direct and indirect role in transformation processes**. Directly, foresight methods—such as scenario planning—help anticipate future consequences, assess risks and opportunities, envision desirable alternative futures, and explore pathways for change. Indirectly, well-facilitated multi-stakeholder foresight efforts can foster shared awareness and understanding, support informed decision-making, and enrich dialogue. They also help create common ambitions, recognize power dynamics, bridge science, society, and policy, enable stakeholders to see the system as a whole, build trust, mobilize alliances, and shift mindsets—all of which are essential for meaningful transformation.

Jim observed that scenarios for food systems transformation can broadly be divided into two sub-sets:

- **Big picture scenarios** for how the global food system might look in the future.
- **Scenarios of differing options** for how to achieve desirable food systems futures.

Scenario work focused on desirable futures is becoming increasingly vital for building momentum and purpose for change. To drive meaningful transformation, we must critically examine our underlying assumptions about how change happens. Currently, numerous 'theories of change' exist for addressing global challenges—whether through flagship reports, technological innovation, civic activism, education, free markets, consumer choices, or even authoritarian leadership. Ultimately, it all comes down to how we, as a society, perceive and shape transformative change. The key is to develop positive visions and a diverse set of desirable scenarios. When these possibilities become clear, they can help shift incentives, foster collaboration, and align efforts toward an alternative, more sustainable food system.

Foresight for Changing Perspectives: Stories from the Pacific

Emily Sharp, Director Strategy, Performance and Learning from The Pacific Community (SPC) started with a story about perspective. She spoke about how crucial it is to also be able to change your perspective. For example, "if you look at our planet from space with the Pacific islands at the centre, you almost only see water."

She explained that we often talk about food systems as if it's mostly about agriculture, when in the Pacific it is more about marine ecosystems, with 12 million people spread over 28 million square kilometres, representing 20% of the worlds Exclusive Economic Zones. From this perspective, the Pacific food systems are not 'small island states' but rather 'large ocean states' connected with the global food system through trade, governance, and oceanic currents. Emily shared that in the Pacific there is a strong sense of what it means to think about future generations, exemplifying with Pacific Island meetings often having an empty seat representing future generations.

Transforming food systems outcomes in the Pacific islands means looking at health, environment, fishing and global trade, much more than just agriculture. Obesity and non-communicable diseases (NCDs) are clear challenges: 75% of all deaths in Pacific are attributable to NCDs, making this not a health issue but a food systems issue. Emily made the link to root issues of global trade inequality and human rights. The Pacific Community works together with many stakeholders across the region to implement national food systems transformation pathways, through the Pacific Community Food Systems Flagship. Examples of approaches and methods used include Futures Triangles, Visioning, pathway analysis, serious games, which all are meant to bring perspectives together, support integrated policymaking, and create co-ownership of the food system future.

Insights from the Exploration Lab

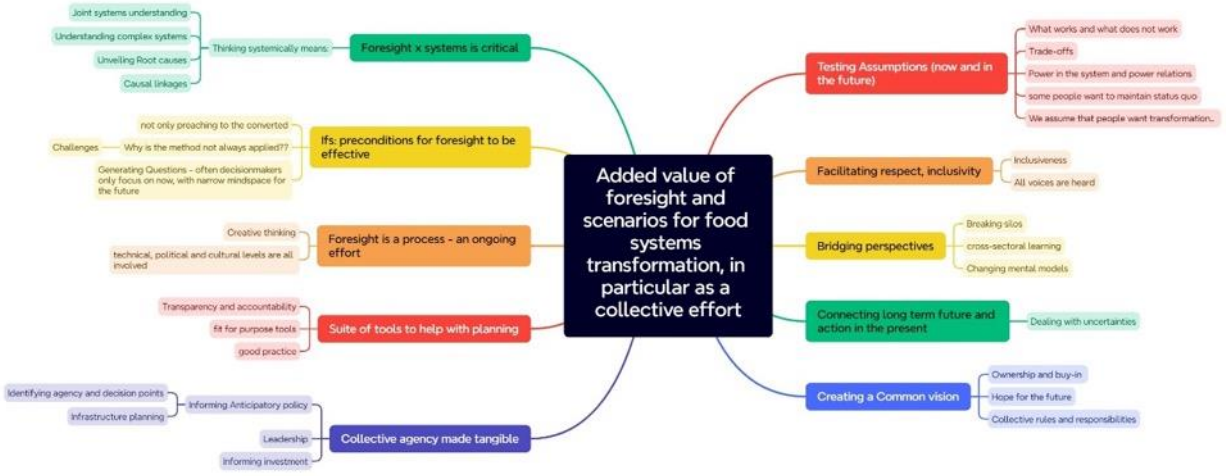
Patrick Caron, President of Agropolis International and co-Chair of Foresight4Food, kicked off the Exploration Lab emphasising the importance of foresight in a time of polycrisis and cascading impacts across systems, with unknown futures. This is now a time to think and act. This means revisiting some of the key perspectives that have shaped food systems until now:

- The focus has shifted from a 20th-century emphasis on agricultural supply and food security to a 21st-century food systems approach that integrates human health, ecosystem health, and social justice.
- There is a need to reassess the role of science. Traditionally, the focus has been on trends, projections, and evidence. *"But, is science able to help stakeholders to organise their doubts, and deal with complexity and uncertainty?",* he asked.
- Moving beyond a tendency toward specialization and analysis, can we instead *"embrace a richness and diversity in objectives, scales, and methods?"*

Patrick identified four key avenues of foresight during these reflections:

- Moving from trends and forecasting to exploring different possible and plausible futures.
- From sectorial to trans-sectorial analysis and action.
- From certainties to addressing controversies – creation of risky, safe spaces where stakeholders can dialogue, mediate and negotiate.
- From linear processes to iterative learning and actioning regime change by connecting local innovations and global challenges: bringing learning across different levels of scale.

Participants (both live and online) brainstormed together about how they see the value of foresight. Whether it is about co-creating alternative futures, conducting backcasting towards a more desirable scenario, highlighting the cost of delayed action, or informing anticipatory policy – foresight and scenario methods are central in a toolbox for systems change champions.



In deliberations, participants noted there are conditional 'ifs' regarding the effectiveness of foresight. **Foresight can add value to processes of food systems transformation** if foresight practitioners can:

- Tackle the deeper pre-conditions, obstacles, and constraints affecting how stakeholders to prepare for future.
- Preach beyond the converted – engaging a wider network of stakeholders to think and act differently.
- Be cognisant of power differences, lock-ins and the political economy.
- Link foresight with other approaches, such as design thinking, human centred development and mission-oriented policy making.
- Place scenario development in a wider context of systems change - engaging stakeholders in mapping of systems and exploring factors that enable or constrain systemic change.
- Use scenarios as a means for dialogue and creation of shared understanding between different stakeholders and not as an end in themselves.

To summarise the brainstorm, Patrick suggested the acronym 'CATS', reminding us of the crucial elements that effective foresight can bring into a food systems transformation process:

Collective intelligence: This speaks to the power of collective intelligence and collaboration. A foresight process embedded within a larger food systems transformation process is all about bringing together inclusive multi-stakeholder perspectives, creating a common shared vision, working together to analyse root causes and unearth different assumptions or controverses. 'Collective' must entail acting together, whether it's about learning, policymaking or entrepreneurship.

Figure 1: Comic by Sarah Anderson

Agency: Agency refers to the willpower, responsibility, and capacity of individuals and institutions to drive change. At its core, agency is about empowerment—enabling people to take meaningful action toward a better future. It is not about achieving consensus but about overcoming the barriers that prevent transformation. For foresight to contribute to systemic change, it must actively catalyze agency by combining evidence and data with participatory action. Engaging in dialogue about the future and moving from disagreement to shared understanding are essential steps in building momentum and securing buy-in for change.

Time: Foresight is about bridging the past, present and future. It's about how we overcome short-term thinking. As the Māori saying goes: "I walk backwards into the future with my eyes fixed on my past." This means that time and life is a continuous connected process. What we do now is enabled and shaped by the past. What future generations will do is formed by our decisions today. This way of thinking can be cultivated by foresight.

Scale: There is not just one food system. There are many nested systems interacting with each other. Framing and scoping of a food system may differ in each setting, depending on who is in the room. It does not make sense to only view food systems from local, national, regional or global levels. Understanding and facilitating interconnections across scales is therefore crucial: to understand uncertainty, to explore drivers and to exchange local innovations with global knowledge and boundary spanning social movements.

Foresight Initiatives from Across the World

17 participants delivered poster presentations, showcasing a diverse array of experiences in applying foresight to food systems transformation. The goal was to facilitate knowledge exchange, foster learning, and highlight the expertise and initiatives represented in the room. Each presenter prepared a poster summarizing their initiative, key insights, results, and next steps. The presentations varied widely in scope, approach, methodology, and purpose, reflecting the richness of perspectives in the field. Below is a brief overview of each presenter and their work. For more information, see Annex 1.

Rathana Peou Norbert-Munns, Food and Agriculture Organisation of the UN (FAO) presented on climate foresight planning uses for policy and investment development in Asia, where FAO and Green Climate Fund (GCF) extended their partnership to strengthen six Southeast Asian countries' capacity to access climate finance and implement agricultural climate resilience measures using foresight.

Alex Ruane, NASA Goddard Institute for Space Studies; AgMIP and CMIP Communities, shared how the Agricultural Model Intercomparison and Improvement Project (AgMIP) has aligned a community of climate, crop, livestock, economics, and nutrition experts to allow multi-faceted insights into the future of food across a number of time horizons.

Maria Diaz, Food, Agriculture, Biodiversity, Land Use and Energy (FABLE) Consortium talked about how FABLE partners co-develop integrated pathways for food and land-use systems through modelling, capacity building and cross-country collaboration.

Arthur Muliro, Society for International Development (SID) shared how SID works on transitions to plural politics by fostering dialogue, building common ground, and guiding leadership through a volatile environment. Public scenario exercises were used to promote dialogue, align on core principles, shape policy, and develop a shared understanding of future challenges and leadership responses.

Keith Wiebe, the International Food Policy Research Institute (IFPRI), spoke about how the CGIAR Foresight Analysis & Engagement initiative engages in multidisciplinary and multi-scale collaboration between CGIAR and policy research institutes in ~30 countries. The initiative focuses on national priorities and strategic planning in regional and global context, combined with capacity sharing and joint analysis, embedded in policy dialogue.

Nevena Alexandrova, FAO – Office of Innovation, presented about the FutureFood - ILab, a pioneering initiative that harnesses the power of strategic foresight and other anticipatory methodologies, through Agrifood Foresight Observatory, Agrifood Foresight Academy, Innovation Policy Labs (IPLs), and Innovation Foresight Partnerships.

Joost Guijt, Wageningen University and Research, presented how the African Food Fellowship equips passionate and professional food systems leaders through building food systems awareness and design, how to bring about systems change, the role of leadership in transformational change. In Rwanda, a network of Fellows is supporting individual and collective use of foresight and scenario use in design of food systems actions.

Walid Abed Rabboh, Foresight4Food, showed how, in Jordan, the [Foresight for Food Systems Transformation (FoSTr)] programme is supporting national food systems pathway implementation through a combination of food systems mapping, scenario development and systemic change facilitation.

Grace Bwengye, National Planning Authority Government of Uganda shared how the Government of Uganda is using foresight to inform the 4th National Development Plan, by developing future scenarios for 10 agro-ecological zones based on agricultural commodities, helping to prioritize investment.

Luke Tay, Cornucopia FutureScapes, challenged listeners to ask whether Asia is leading future-ready food systems transformations. Actionable foresight, together with future-ready actors and organisations are key to bend the probable towards the preferred. He left the audience on a thought-provoking note, *but what is actually the preferred future?*

Emily Sharp, The Pacific Community, shared in greater detail how in the Pacific foresight and food systems approaches are combined. She highlighted that impactful, inclusive and innovative food systems works require traditional knowledge, indigenous and coastal food practices, a holistic approach to combat Non-Communicable Diseases (NCDs), and governance.

Just Dengerink, Wageningen University and Research, and Bram Peters, University of Oxford, shared how the Foresight4Food Initiative has grown as a network, connecting providers and users of food systems and foresight expertise, linking qualitative and quantitative approaches, facilitating cross-country learning, and supporting four countries (Bangladesh, Jordan, Kenya and Uganda) in implementing national food systems transformation pathways.

Vittorio Fattori, FAO - Agrifood Systems and Food Safety Division, presented how the FAO Food Safety Foresight programme uses foresight methodologies to understand how new trends, changes or knowledge gaps can affect agrifood systems, with a focus on food safety. Particularly regarding new food sources and production systems, food safety in a circular economy, the impact of climate change on food safety, and food safety implications in the use of environmental inhibitors for sustainable food systems

Juan David Saenz Henao, Organisation for Economic Co-operation and Development (OECD), illustrated how 'pre-mortem' foresight was used to imagine a world where reliable information on the carbon footprint of firms and products were widely available, alongside a 2030 scenario in which such a world had not been achieved. To explore building blocks of how to achieve the vision, experts took on the role of **"**detectives," investigating who "killed carbon footprints".

Lorenzo Giovanni Bellù and Pedro Morais De Sousa, FAO - Agrifood Economics and Policy Division, presented a deep dive of FAO's Overarching Strategic Foresight (OSF). These exercises investigate cause-effect relations likely to shape the development patterns of agrifood systems. Regional OSF exercises revealed that investigating interdependences, including between High Income Countries (HICs) and Low- and Middle-Income Countries (LMICs) help identifying game-changing actions for "triggering the triggers" for transformation, addressing trade-offs and short-termism.

Johannes Svensson, the Institute for Sustainable Development and International Relations (IDDRI), presented the Deep Decarbonisation Pathways Initiative, which produces scenarios exploring how energy- and food systems can reach net-zero GHG emissions while achieving other nationally important objectives (energy security, food security, protection of biodiversity, etc). The network has a country-driven approach where national set of scenarios are defined to inform domestically identified issues. The most recent study involved Brazil, India, and Indonesia.

Stella Nordhagen, Global Alliance for Improved Nutrition (GAIN), shared about the Food Systems Countdown Initiative, which aims to monitor progress towards food systems transformation, providing actionable evidence to guide decision-making. The Initiative mobilised 50+ collaborators, 30+ institutions, tracks 50 indicators actors and 5 themes, providing annual reports and papers + country-level data available on the Food Systems Dashboard.

World Café: Offer, Challenges and Scaling

A World Café session involved participants moving to different tables sharing their impressions and insights from the presentations. The discussions were structured around what is on offer, gaps, and needs for scaling up the offer of foresight.

1. **What's on offer (considering what we have learned from cases and ongoing initiatives)?**

Insights were generated about the breadth and depth of the different foresight initiatives. Building on the discussion from the morning, and learning from what all 17 cases demonstrated, the following key offerings of foresight were distilled.

- **Clear purpose**: foresight helps to set the agenda for food systems transformation, envisions alternative futures, and seeks to anticipate and avoid negative events.
- **Dialogue**: foresight processes create a structured space for listening, learning, and engaging in constructive discussions. They provide a platform to navigate politically sensitive issues—such as trade, conflict, and subsidies—while addressing present and future trade-offs. By fostering collaboration, foresight helps stakeholders identify critical decision points and work together in shaping a more resilient future.
- **Applicability at different scales**: it can work to support food systems thinking and change at global, regional, national and local/grassroots levels.
- **Diversity of approaches and methods**: foresight comprises of a range of qualitative and quantitative approaches, analytical tools, and participatory or expert-driven methods.
- **Strategic action**: foresight can help decision-makers and champions of food systems identify impactful policies and alliances to help shape resilient and desirable food systems for the future.

2. **What are the gaps, limitations, and obstacles?**

Participants also discussed the gaps and obstacles that could impact the offering of foresight:

- **Analytical and cognitive barriers**: can lead to wishful or blinkered thinking with a tendency to focus on narrow or optimistic scenarios rather than realistic negative possibilities or radical alternative futures.
- **Temporal and systemic constraints**: foresight processes often operate on longer timescales, while policy and decision-making cycles are short-term.
- **Stakeholder and governance issues**: competition and lack of coordination between different foresight initiatives, can reduce overall effectiveness.
- **Institutional and structural challenges**: including lack of facilitation capacities or limited ownership of foresight processes will constrain a wider scaling up of impact.

- **Monitoring, impact, and policy linkages**: demonstrating impact is a challenge because it is difficult to show tangible results of foresight processes in the short term.
- **Implementation and communication gaps:** translating foresight exercises and insights into actionable strategies is challenging. Also, foresight insights risk getting lost in broader policy and economic discussions.

Other obstacles observed included how 'public-good foresight' is different than 'private sector-oriented foresight'. This brought out the challenge of addressing power lock-ins in existing food systems through foresight. Another issue mentioned was whether it would help to have global reference scenarios for food systems, like the IPCC scenarios, which serve as a benchmark and rallying point for climate action.

The discussions centered on fundamental questions about what is needed for foresight to effectively drive the implementation of innovative, systemic pathways for food system transformation. For example, how can foresight processes remain both rapid and cost-effective without compromising quality or stakeholder buy-in? A key reflection on scenario development was whether these scenarios genuinely inspire stakeholders to adopt transformative thinking and action or if they remain constrained by existing mindsets and frameworks.

3. What is needed to develop the offering further at scale?

To move forward a set of practical and conceptual ideas emerged:

- **Tackling controversial issues**: to really be transformative, foresight must engage with difficult topics, open up frank discussions, explore radical ideas and help to shift power dynamics.
- **Recognising conflicts and synergies between countries with different income status**: food systems function globally and the benefits of improved food systems in low-income countries for higher-income countries need to figure in foresight work to help drive global effort for change.
- **Better engagement strategies with users are needed**: bringing government representatives to regional and global foresight events, making a stronger connection between foresight and policy analysis, and better compilation of examples.
- **Being demand driven**: much of the existing foresight work is being driven by foresight proponents, there is a need to develop the demand for foresight from all actors across food systems.

- **Not just foresight**: there are many other approaches to strategy development and bring about change that don't go under the label of foresight, but which are still focused on creating a better future - it is important to connect with these other efforts.
- **Business, foresight and disruption**: there needs to be more awareness that powerful companies are also using foresight, often for disruptive innovation and attracting new investors. Hence, understanding disruptive business models needs to be part of the foresight process.
- **Learning from institutionalised foresight processes**: In in Singapore, the United Kingdom and European Union, for example, there are established foresight units and processes in government and policy making, these can over lessons for institutionalising foresight in countries of the Global South.

Closing the day, **Katindi Sivi, Longview Consulting,** noted that all the foresight experiences on offer show great work, but that the impact and action orientation is not always clear. She also highlighted that several reflexive issues need to be considered: are we factoring in the sensitive issues in our foresight process such as the terms of international trade, cultural diets, capitalism, land ownership? Can we see, acknowledge and shift away from Western knowledge systems and link to indigenous knowledge, spiritual aspects, storytelling? Katindi also highlighted the central role of capacities, asking "are we building up champions that can help co-create the future and creating foresight ownership." Central for her is whether we create trust of people in the process, so the take-up of foresight can be better.

Keith Wiebe, IFPRI, shared his appreciation in hearing from the diversity of approaches people are taking to use foresight. This connects to different purposes of foresight in different contexts. Keith reminded the audience that foresight and futures thinking is as old as humanity – farmers are using it every day. Private companies are using it in their strategy. Now, here it is important to look at foresight in more systemic way to address an issue as complex as food system transformation. He ended with a question and a challenge: how to better align and coordinate foresight efforts while recognizing the diversity in purposes, contexts and approaches that are essential to ensure relevance, trust, ownership and impact?

Highlights from Day 2

Envisioning Effective Foresight Processes Supporting National Pathways

The second day of the workshop focused on how to align and deploy foresight for enhancing change processes at country level to support transformation. Four groups were challenged to brainstorm and tackle three questions, to develop a short pitch to convince decision-makers about the value of foresight within national food systems transformation processes. The questions were:

1. What **processes** are needed to accelerate the implementation of **national food systems transformation pathways,** being mindful of dynamics across scales?
2. What could be a **menu of foresight support** to assist these processes?
3. **What is needed** to put such foresight support in place?

Four Pitches

Pitch 1: Listening to the Unborn Generations in Future Food Systems

"My name is the Future. It's said that a society grows great when old men and women plant trees in whose shade they shall never sit. But I am not so sure of the story you are telling now. Everything you are saying and doing says otherwise. I am afraid of coming into the world in 2030 – hold me a little longer and tell me another story about different choices you will make for my future."

With future generations at the centre, we see foresight as a way to engage in dialogue with the yet-unborn generations to come. To move away from a dystopian future and to move into a positive desired future, vision building, and trust establishment is needed. Transformation pathways should be government-led and intersectoral, guided by inclusive consultations, high-quality data systems, and forward-looking policy processes. Furthermore, there is a need to engage in systemic changes in mindsets through education and value system cultivation. Multi-stakeholder mechanisms and alliances of champions ushering a

sustainable future are key drivers of change. Foresight approaches and methods can be used in every one of these processes.

In this pitch, three key foundations need to be built in order for foresight to play an impactful role:

- Political, social and economic commitment for change.
- Institutionalisation of foresight.
- Inclusive foresight processes.

Pitch 2: The Futures Cone of Foresight in Food systems

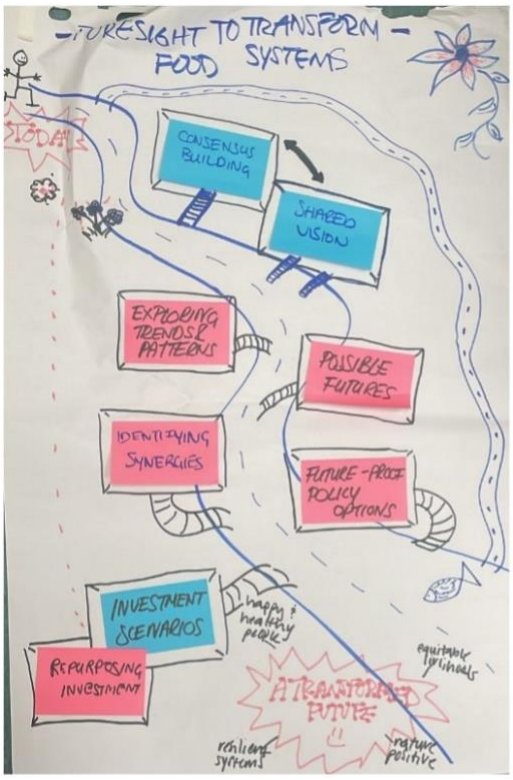
Food systems are constantly changing – they have changed throughout history and will continue to do so. There is no perfect food system – there are always areas of improvement and trade-offs. Navigating these dynamic food systems into the future means being resilient and adaptive.

And yet, foresight is ready to support and is increasingly being practiced. The group of experts and collaboration are growing, and many agencies and institutions are now integrating foresight. This workshop shows that foresight can steer practical insights, and support policy. Decision-making is not necessarily easier but more robust. We can support agencies to navigate uncertainties and complexity. We are moving away from controlling the future to an exploration of choices and uncertainty.

In a complex world, foresight offers no lies, but choices: Moving from certainty to uncertainty, we focus on foresight exploring options and choice to develop different pathways and realising different futures. We put this in action: foresight needs to be implemented, with practical outputs. We don't want beautiful scenarios as dust catchers on desks – we provide governments and agencies agility.

If you are a food systems decision-maker: why do you need foresight? Your needs will depend on different things: your context, purpose, and experience with foresight. Stakeholders hold diverse values and interests regarding the ideal structure of the food system. With an inclusive process, stakeholders can utilise foresight and systems thinking to find harmony among different interests – providing dialogue, agility and feedback connections. Foresight practitioners offer not only insights but also continuous support beyond scenarios – so you have a strong back-up in this complex transformation process.

Pitch 3: The Journey of Foresight for Food System Transformation

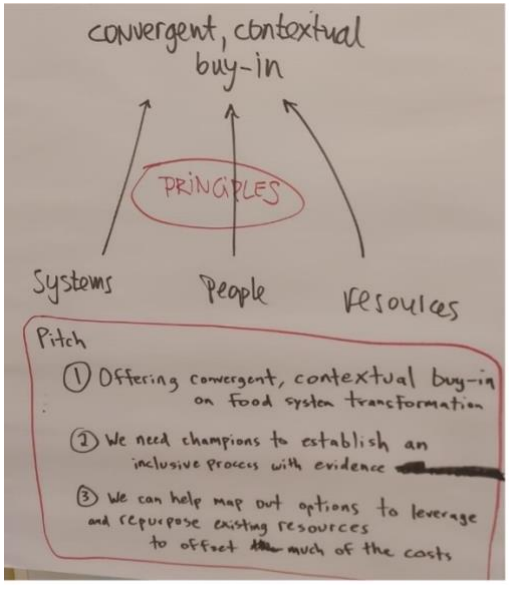


Building a path towards a transformed food system, means taking it as a **journey where the path is as important as the destination.** This group developed a path towards a more equitable societies, resilient ecosystems, happier and healthier people.

What foresight offers is a toolkit to take along on the journey. At the initial stages, foresight can support to identify a shared vision and build consensus. Data analysis and quantitative databases can help to monitor information, explore trends and patterns in data. This includes patterns from the past and projections of trends into the future. Foresight can help to start to envision possible futures, including directions we would like to go towards, and link these to specific, future-proof policy options. We identify synergies across parts of the system, and find leverage points to change the system, and avoiding negative dynamics that can lead to setbacks. Finally, we need to think about how to realise this: we need investment scenarios – looking at data, futures, policy options to repurpose investment and subsidies and identify risks.

The journey is not a linear process but a process of iteration and retracing of steps where needed.

Pitch 4: Convergent, Contextual Buy-In for Food Systems Transformation



In order for food systems transformation to happen, this group argued, three key elements are brought together: **systems, people and resources**. These are brought together with a set of key principles.

Foresight can support based on the following:

- We need a convergent, contextual buy-in on food systems change.
- We need champions to establish an inclusive process with evidence.
- Foresight practitioners can help to map out options to leverage and repurpose existing resources to off-set the costs of change.

Convergence is about uniting visions, ambitions and values. It recognizes the need of buy-in from many stakeholders across society for food systems transformation. Success depends on inclusive participation—ensuring no one is left behind. If some groups are seeking to interfere, this may affect how successful transformation is. **Contextual** means that localised knowledge, unique experiences and differences between stakeholders and mandates is recognised. **Buy-in** is about getting high-level leadership and political will, with champions being endorsed by decision-makers. It is critical that this process is inclusive but is also supported by evidence.

This group channelled the insights of an **'AI Chatbot'** assisting with foresight questions. Depending on your purpose, foresight can help with accelerating food systems transformation – all you must do is make the right prompt!

- *You may need to understand where you have some traction, or where there is willingness or readiness for transformation*: we have templates to help you with that
- *You may want to know what your current food systems status is*: based on evidence and data, we have status briefs to help with that
- *You may be curious what your future looks like*: we can help with horizon scanning, signals and emerging trends
- *You may want to know what your vision of the future is*: we can help you with futures triangle or the futures cone
- *If you already have a vision:* we can help you to explore future uncertainties
- *If you want to prepare for worst-case scenarios*: we can help you with disused futures
- *If you want to achieve your best-case scenario*: we can help you with scenario planning
- *You may want to know what sits beneath the change*: we can help you with causal layered analysis
- *If you want to create stories, images and artefacts of the future*: we can help with creative tools

Follow-up Actions

In closing, the workshop recalled the importance of tapping into the political momentum for transformative change. As we move into the fourth year following the 2021 United Nations Food Systems Summit (UNFSS), 156 national convenors are actively working on implementing 137 national food systems transformation pathways. Throughout the event, experts identified key processes needed to support food systems transformation, where foresight is vital and effective.

Established to do the follow up of the UNFSS, the UN Food Systems Coordination Hub is actively supporting countries worldwide as an accelerator of the 2030 Agenda for Sustainable Development and its 17 SDGs.

With the rising urgency of multiple and interconnected global crises, the second United Nations Food Systems Summit Stocktake (UNFSS+4), taking place in Ethiopia in July 2025, offers a valuable opportunity to engage countries in foresight.

Sharing the lessons from this workshop and supporting the national convenors to further realise impact on transforming food systems outcomes will be crucial in the run up to the UNFSS+4.

At the end of the day, various participants shared their perspectives on what they took from the workshop and, in some cases, shared how they would like to continue integrating foresight within their initiatives:

- **UN Food Systems Coordination Hub**: Reiterating the commitment of the Hub, to bring these messages to countries through UNFSS convenors and FAO representatives. The Hub is preparing a roadmap or guidance document on foresight for food systems transformation towards the UNFSS+4.
- **Foresight4Food**: Contributing to sharing stories from countries where the foresight for food systems approach is being implemented, continued convening of foresight and food systems practitioners. Foresight4Food will also support the Hub to take this message to the UNFSS+4 Stocktaking Moment in July. All are welcome to join our Global Workshop in Jordan.
- **Office of the Convenor from South Africa:** The workshop informed the South Africa strategic planning unit to get to know and find out how to use foresight. The unit will make the link to training and grow ecosystem of foresight in South Africa.
- **Food and Agriculture Organization (FAO)**: Many departments and offices within FAO are now using foresight. There is a lot of potential for developing this further and sharing more within FAO about innovative approaches. Furthermore, there is a strong interest to further engage in thematic sub-groups.
- **Global Alliance for Improved Nutrition (GAIN):** Have a strong interest to keep sharing and exchanging about ongoing data initiatives and tools.
- **African Food Fellowship**: Is building a network of young leaders and champions, focusing on where the demand is: What is the business case for foresight and food systems transformation by finding out from 5 countries what they need for their food system transformation process.
- **Cornucopia FutureScapes**: There is a lot of potential for regional collaboration, and there is an interest to test these approaches with some countries – with the idea to sharpen the offer of foresight.
- **Society for International Development (SID)**: Discussions in the past 2 days have shown that food systems transformation is not just technical – it is very much political and societal. This community is important to grow and cultivate. Networks do matter for this work, as they allow valuable brainstorming on opportunities. SID will continue to support country work and to help advocate for foresight uptake.
- **International Food Policy Research Institute (IFPRI):** This workshop has been useful in putting the future in the context of the present and the past. This has been also shown the power of listening to each other. IFPRI is happy to keep sharing the IFPRI experiences around foresight.
- **International Food Policy Research Institute (BMZ)**: Interesting to see the foresight approaches, and about further learn more about in-country perspectives towards how to use these tools.

- **Permanent Mission of France to the UN**: It was important to see this community in action and there is a great interest in foresight as tool for food system transformation.

Conclusion

The workshop highlighted a growing community of practitioners using foresight and scenario thinking to accelerate food systems transformation. Participants universally recognized that foresight—by combining stakeholder engagement with a strong evidence base—plays a crucial role in building understanding, political will, and collective intelligence for change.

To scale up the use and impact of foresight, several key themes emerged from discussions:

Tackling difficult issues: Food system transformation is often hindered by entrenched challenges, including economic incentives, power dynamics, vested interests, and rigid mindsets. These difficult issues are frequently avoided, slowing progress. Foresight provides a structured way to open dialogue around these complexities, fostering honest discussions that can lead to meaningful change.

Engaging all food system stakeholders in constructive process of dialogue and decision making for change: Achieving systemic change requires the involvement of a critical mass of stakeholders—citizens, businesses, governments, producers, and civil society organizations. At both national and local levels, there is a need to expand and strengthen multi-stakeholder engagement. Foresight facilitates structured, informed, and trust-based dialogue, encouraging openness and critical questioning to enhance decision-making and impact.

Building a larger cohort of capable foresight facilitators: A major challenge identified was the limited number of skilled foresight facilitators worldwide. Effective facilitators require expertise in participatory methods, foresight and scenario planning, and a strong understanding of food systems. Expanding this talent pool is essential for scaling foresight processes globally.

Institutionalising foresight: For foresight to have lasting impact, it must be embedded in policy-making, business strategy, and civil society planning. Rather than being a one-time exercise, foresight should be an ongoing process of reviewing and adapting to emerging insights about the future. This requires dedicated foresight responsibilities, mechanisms, and units within government agencies, research institutions, and organizations.

Embracing diversity in foresight methods and practice: Workshop discussions reinforced that there is no single "correct" way to conduct foresight. A diverse range of qualitative and quantitative methods exist, and processes must be tailored to specific contexts. Flexibility in approaches ensures that foresight remains relevant and effective across different regions and challenges.

Sharing and learning from foresight experiences: Participants valued the opportunity to share experiences and learn from one another. Applying foresight to food system transformation is a relatively new but rapidly evolving field, with many opportunities for improvement. Events like this workshop play a crucial role in fostering knowledge exchange and strengthening foresight practice.

Overall, participants found the event encouraging and reinforcing of their efforts to bring foresight into the food system transformation agenda. The discussions during the two days identified ways in which the different organisation present could work synergistically to scale up their foresight efforts.

Foresight4Food and the UN Food Systems Hub are committed to finding ways of providing greater support to countries interested in utilising foresight to support the national food system transformation pathways. A first step in this regard will be the production of joint foresight guide to support countries implementing food systems pathways. The outcomes from this workshop and options for strengthening the use of foresight will be brought forward during the UN Food Systems +4.

Annex 1: Poster Presentations

All poster presentations can be accessed **here**.

Annex 2: Additional Resources

Category	Title & Link
Food Safety & Foresight	Thinking about the future of food safety
	Foresight | Food safety and quality | Food and Agriculture Organization of the United Nations
	Food Safety Foresight - YouTube
	Using foresight in food safety
	Food safety in a circular economy | Food safety and quality | Food and Agriculture Organization of the United Nations
	Food Safety in a Circular Economy
	Plant-based food products, precision fermentation, and 3D food printing
	Food safety implications from the use of environmental inhibitors in agrifood systems
Climate & Food Systems Foresight	Chapter 33: Water and the Climate Crisis, Handbook of Futures Studies (2024)
	OECD: Measuring and communicating environmental impacts in food systems
	Deconinck, K., Jansen, M., & Barisone, C. (2023) "Fast and furious: The rise of environmental impact reporting in food systems."
Foresight & Evaluation	Gardner, A., Davies, R., & Kelly, T. (2024) 'Bridging foresight and evaluation: A bridge worth building.' *New Directions for Evaluation*,2024,117–128.
	Sitra's evaluation framework
Systems Change Processes	Foresight4Food Slide Deck with a range of different systems thinking frameworks compiled by F4F. Additions welcome.
	Full slide deck from Foresight4Food Online Course. Work in progress, comments welcome.

	Report on Foresight4Food Systems change workshop in Oxford, June 2023.
	Woodhill, J. and Millican, J. (2023) Systems Thinking and Practice: A guide to concepts, principle concepts, principles and tools for FCDO and partners.
	Brouwer, Herman and Woodhill, Jim, with Hemmati, Minu, Verhoosel, Karènand van Vugt, Simone (2016). The MSP Guide, How to design and facilitate multi-stakeholder partnerships, Wageningen: Wageningen University and Research, WCDI, and Rugby, UK: Practical Action Publishing.
	Kusters, C.S.L. and Batjes, K. with Wigboldus, S., Brouwers, J. and Baguma, S.D. (2017) Managing for Sustainable Development Impact: An Integrated Approach to Planning, Monitoring and Evaluation, Wageningen: Wageningen Centre for Development Innovation, Wageningen University & Research, and Rugby, UK: Practical Action Publishing
	Fazey, I. and Colvin, J. (2023): Transformation: A Guide To Fundamental Change In A World Of Crisis
Emerging Technologies & Innovations	Alexandrova-Stefanova, N., Nosarzewski, K., Mroczek, Z.K., Audouin, S., Djamen, P., Kolos, N. & Wan, J. 2023. Harvesting Change: Harnessing Emerging Technologies for Agrifood Transformation – Global foresight synthesis report. Rome. FAO and Cirad. (2023)
	Alexandrova-Stefanova, N., Nosarzewski, K., Mroczek, Z.K., Audouin, S., Djamen, P., Kolos, N. & Wan, J. 2024. Shaping Sustainable Agrifood Futures: pre-emerging and emerging technologies and innovations for impact – An extended global foresight report with regional and stakeholders' insights. Rome, FAO and Paris, CIRAD (2024)
Foresight & Policy	Strategic Foresight Toolkit for Public Policy. A Comprehensive Foresight Methodology to Support Sustainable and Future-Ready Public Policy.
	Future-Gazing Trends in Asian Food Security
	Pacific Pathfinder Toolkit
Studies & Modelling of Food Systems	FABLE (2024) Transforming food and land systems to achieve the SDGs. In Sachs et al. (2024) The Sustainable Development Report 2024. SDSN, New York and Paris.
	Mosnier, A. et al. (2023) "A Decentralized Approach to Model National and Global Food Systems."
	FABLE (2024). Integrating UN Food Systems Pathways with Quantitative Trajectories. FABLE Policy Brief. Sustainable Development Solutions Network (SDSN), Paris.
	Mosnier, Aline et al. 2023. "A Decentralized Approach to Model National and Global Food and Land Use Systems." Environmental Research Letters.

	Mosnier, Aline et al. 2022. "How Can Diverse National Food and Land-Use Priorities Be Reconciled with Global Sustainability Targets? Lessons from the FABLE Initiative." Sustainability Science.
	FABLE (2022). National food and land mitigation pathways for net zero. FABLE Policy Brief. Sustainable Development Solutions Network (SDSN), Paris.
Regional Foresight & Food Systems	Chapter 27: Future-Gazing into the Trends Affecting Asian Food Security , Food Security Issues in Asia (2024)
	Pacific Pathfinder toolkit
Reflections on Foresight & the Future	Heinzen & Muliro (2004): "The World is Not Makeable"
	Heinzen (2004): "Introduction: Surviving Uncertainty"
Other studies	Global Donor Platform 2024: Financing food systems transformation and rural revitalization: Opportunities and challenges
	The CGIAR Initiative on Foresight: What do we know about the future of food systems?
	African Food Fellowship: Leading the Change in Africa's Food Systems
	Food Systems Countdown Initiative

Annex 3: List of Participants

Name	Organization
Alex Ruane	NASA Goddard Institute for Space Studies / AgMIP
Andreas Schaumayer	Federal Ministry for Economic Cooperation and Development
Arthur Muliro	Society for International Development
Bart de Steenhuijsen Piters	Foresight4Food / Wageningen University & Research
Bram Peters	Foresight4Food / University of Oxford
Emily Sharp	The Pacific Community (SPC)
Fabrizio Bresciani	FAO
Gosia McFarlane	Foresight4Food / University of Oxford
Grace Bunanukye Bwengye	National Planning Authority Uganda
Herman Brouwer	Foresight4Food / Wageningen University & Research
Hideki Kanamaru	FAO
Isabel Parras	FAO
Jan Bade	Permanent Representation of the Kingdom of the Netherlands to the UN FAO

Jim Woodhill	Foresight4Food / University of Oxford
Johannes Svensson	IDDRI
Jose Rosero Moncayo	Food Systems Countdown Initiative / FAO
Joost Guijt	African Food Fellowship / Wageningen University & Research
Juan David Saenz Henao	Food Systems Countdown Initiative / FAO
Justus Dengerink	Foresight4Food / Wageningen University & Research
Katindi Sivi	LongView Consult
Keith Wiebe	IFPRI
Lorenzo Bellu	FAO
Ludovica Nesbitt	UN Food Systems Coordination Hub
Luke Tay	Cornucopia FutureScapes
Maria Diaz	Sustainable Development Solutions Network (SDSN)
Mia Madsen	UN Food Systems Coordination Hub
Mmaleho Lekganyane	Department of Agriculture, Land Reform and Rural Development
Monika Zurek	Foresight4Food / University of Oxford
Morgan Gillespy	Systemiq
Moses Abukari	IFAD
Nadine Gbossa	IFAD
Natalia Galat	FAO
Nevena Alexandrova-Stefanova	FAO
Nicole DePaula	UN Food Systems Coordination Hub
Patrick Caron	Cirad / Agropolis International
Patrick Mink	Federal Office for Agriculture Switzerland
Pedro Morais de Sousa	FAO
Raoul Mille	French Permanent mission to UN in Rome
Rathana Peou Norbert-Munns	FAO
Roger Tuckeldoe	Department of Agriculture, Land Reform and Rural Development
Rudaba Khondker	GAIN
Sandy Thomas	Global Panel on Agriculture and Food Systems for Nutrition
Silo Sok	Council for Agricultural and Rural Development
Stefanos Fotiou	UN Food Systems Coordination Hub
Stella Nordhagen	GAIN
Thembani Malapela	UN Food Systems Coordination Hub
Tisorn Songsermsawas	IFAD
Vittorio Fattori	FAO
Walid Abed Rabboh	FoSTr/ Jordan