Foresight4Food
International Collaborative Initiative

Foresight For Food Systems Change
Process Guide & Toolkit

Version 1.0

- Scope the process
- Map the food system
- Explore future scenarios
- Mobilise for systems change

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Map the food system

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Partners

Foresight4Food — International Collaborative Initiative

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Introduction

Introduction

◆ **Who is this toolkit for?**

Welcome to the Foresight4Food process guide.

This process guide is designed both for those new to the concepts of foresight and food systems as well as those with many years of experience. It is first and foremost focused on the how: the steps, methods and tools required to working with key stakeholders to explore different futures.

◆ **How to navigate the toolkit?**

• The foresight process is built around **four phases**: scope the process, map the food system, explore future scenarios, and mobilise for change. These phases are always indicated on the right–hand side of each page to help orient you as you dive into the details. The phases are explained in detail later in the introduction.

• The **tools and methods** are the practical exercises used to engage stakeholders in the foresight process. For each phase, there are a 4–5 recommended 'core tools' and a number of 'supporting tools' that can help you to dive deeper.

◆ **Foresight4Food**

This process guide & toolkit has been produced by the Foresight4Food Initiative. Foresight4Food is an international initiative that supports food system transformation processes by offering organisations foresight expertise, synthesising foresight work in the agri–food sector and linking food systems foresight professionals around the world.

The initiative holds regular events and webinars and brings together a wide range of actors, platforms and networks who have an interest in food systems foresight. The Secretariat of Foresight4Food is currently hosted by the Food Systems Group of the Environmental Change Institute of Oxford University.

For more information go to https://foresight4food.net/

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The challenge of transforming our food systems

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Our global food systems require fundamental transformation to tackle hunger, enable good health, protect the environment, and ensure long term food security. But setting our food systems on a more sustainable and resilient path is a complex challenge with many interacting factors from local to global scales.

Transforming food systems will require imagining radically different food system futures. This requires food systems stakeholders to reframe their understanding what food systems should deliver, how they function, and the incentives that drive the behavior of actors in the system.

Change will require concerted and coordinated efforts from across government, research, business and civil society. But what are the pathways forward? What are the future risks and opportunities? What different scenarios might evolve in the future given the complexity and uncertainty of food systems?

More than ever, long-term perspectives are needed to underpin food system transformation efforts. Bringing about deep change hinges on effective multi-stakeholder alliances, strengthening the policy-science-practice interface, effective knowledge systems, and developing a society-wide urgency for change.

WHY

Food System Issues (the problems)

But HOW?

The Transformation Process?

- Societal awareness and engagement
- Political will
- Stakeholder dialogue
- Alliances
- Coordination
- Political economy understanding
- Policy analysis
- Innovation Systems
- Human and organizational Capacities
- Data systems

WHAT

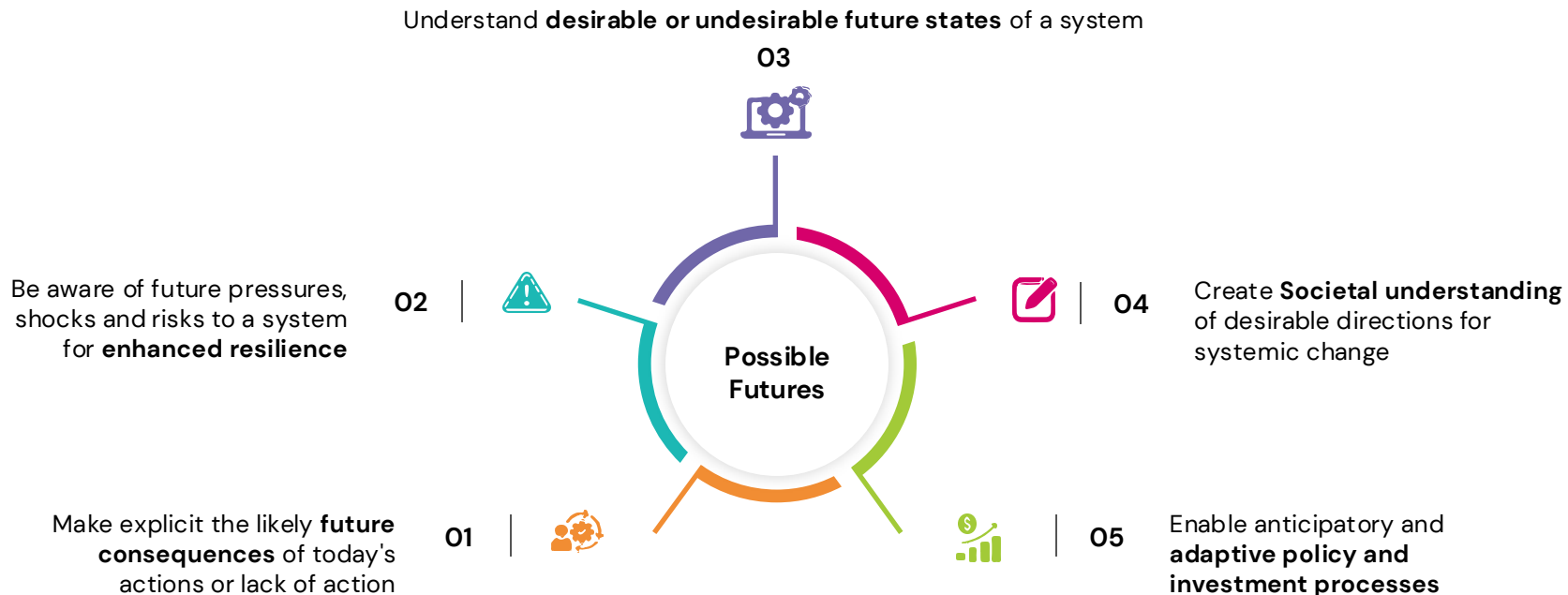**The Transformed Future (what we hope to achieve)**

How foresight can support food system transformation

Foresight can provide the long-term perspective needed to realize food system transformation. Not to try and predict the future, but rather to intelligently engage citizens and leaders in a better understanding of what is currently going on, what the future consequence would be and what might be alternative pathways with more desirable outcomes.

Foresight integrates a range of methods and tools for exploring the future. Horizon scanning, stakeholder analysis, mapping systems, data modelling, scenario development, trade-off analysis, visioning, and theory of change analysis are all elements of the foresight process. A wide range of participatory stakeholder engagement tools can be integrated into the overall process.

Foresight can contribute to food system change in various ways
Exploring different scenarios about how the future of food systems could develop can assist policy makers in different ways:

Understand **desirable or undesirable future states** of a system

O3

Be aware of future pressures, shocks and risks to a system for **enhanced resilience**

O2

Possible Futures

Create **Societal understanding** of desirable directions for systemic change

O4

Make explicit the likely **future consequences** of today's actions or lack of action

O1

Enable anticipatory and **adaptive policy and investment processes**
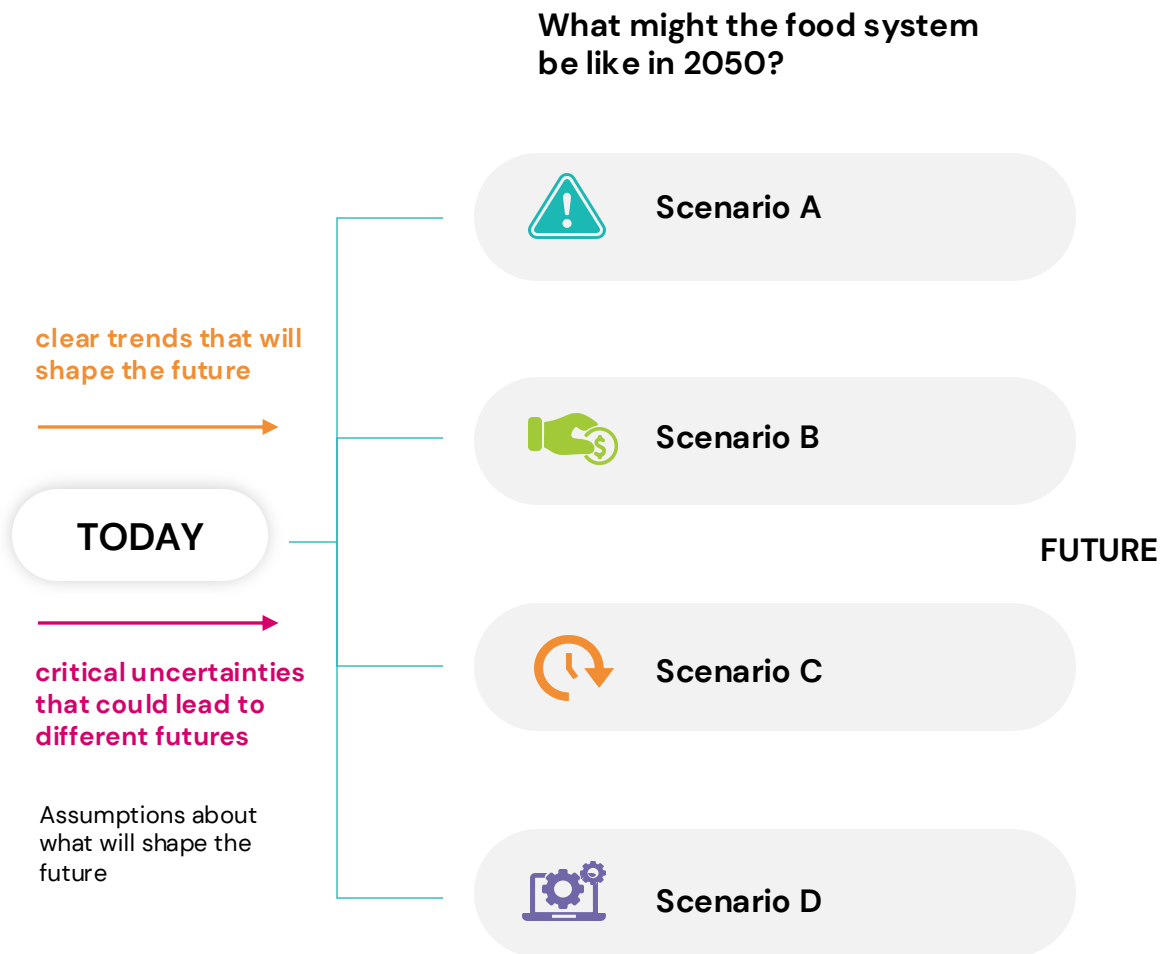
O5

What is Foresight

Increasing turbulence and uncertainty call for enhancing the resilience of food systems. New approaches are needed to enhance the resilience of food system to cope with future stresses, shocks and extreme events. Foresight analysis can help by exploring key trends and critical uncertainties in food systems and enabling better preparation for a range of different future events, risks and circumstances.

Fundamental changes are needed in how food is consumed and produced – for human and planetary health and for equitable economic development. This requires thinking about the future of our food system. What will be the possible consequences of decisions taken or not taken? What future risks and opportunities may be faced? How can food systems actors be nudged to deliver more desirable outcomes in the future?

Tackling these questions is the domain of foresight. Not to try and predict the future, but rather to intelligently engage citizens and leaders in a better understanding of what is currently going on, what the future consequences would be and what might be alternative pathways with more desirable outcomes.

This process guide provides a step-by-step approach to developing and applying foresight scenarios.

What might the food system be like in 2050?

Scenario A

Scenario B

TODAY

Scenario C

Scenario D

FUTURE

clear trends that will shape the future

critical uncertainties that could lead to different futures

Assumptions about what will shape the future

Key principles for using foresight to support food system transformation

Principle 1

Evidence-driven foresight

A strong information and knowledge base is at the heart of the foresight process. Ideally it relies on a diverse set of information sources and a mix of qualitative and quantitative methods. These methods produce a rich set of resources and information that will be used in the systems mapping and foresight process. To enrich and shape the debate among stakeholders, this information needs to be presented in a way that is easily understood.

Principle 2

Multi-stakeholder involvement

An effective foresight process must engage the right range of stakeholders in defining its objectives, formulating its key questions and considering the implications of its outcomes. It needs to be a multi-stakeholder process that recognises the different values and diversity of interests of different groups, and that enables debate about both the potential trade-offs and synergies, such as those between socio-economic and environmental aspects of different agricultural development pathways.

Principle 3

Pluralism of foresight methods

For a foresight process to be effective, it is important to use the appropriate tools and techniques from the broad range of foresight methods available. There are many different ways to go about it, but it is key to make sure the purpose of the tool aligns with what is needed in the process.

Principle 4

Demand and user driven

Food systems and foresight analysis should be driven by the needs and interests of those various stakeholders involved; they should support the ability and capacity of decision-makers, food systems leaders and research institutions to transform their food system.
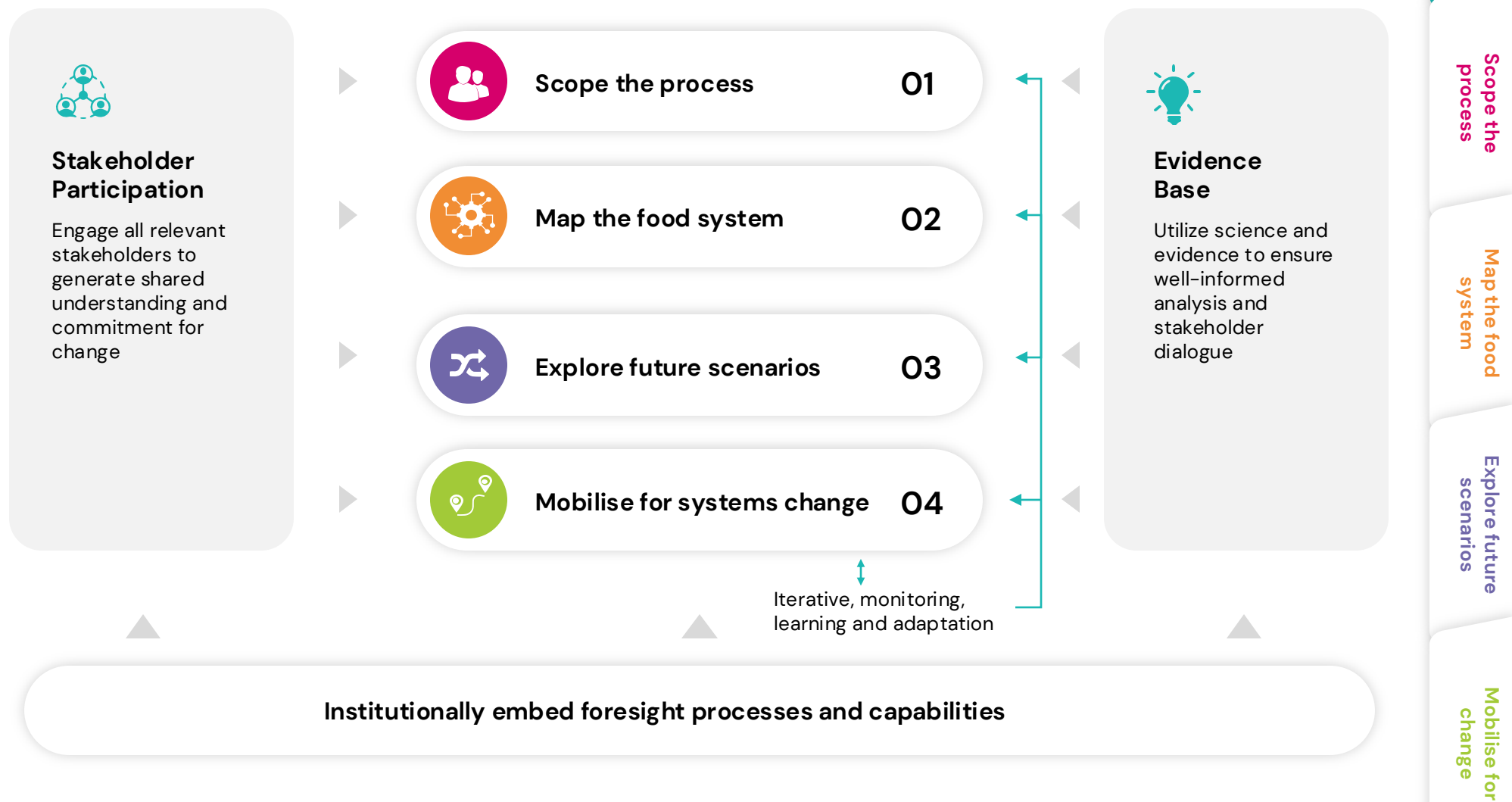
Principle 5

Work with power

Understanding of political economy and power is critical to embed foresight and food systems thinking within the process of transformation. It is essential to balance working with current leaders to shape transformation processes while also including critical voices to offer alternative perspectives and framings.

The Foresight4Food Guiding Framework: foresight for food systems change

Stakeholder Participation

Engage all relevant stakeholders to generate shared understanding and commitment for change

Scope the process O1

Map the food system O2

Explore future scenarios O3

Mobilise for systems change O4

Evidence Base

Utilize science and evidence to ensure well-informed analysis and stakeholder dialogue

Iterative, monitoring, learning and adaptation

Institutionally embed foresight processes and capabilities

Key phases within the foresight for food systems change guiding framework

Scope the process
Understand the reasons and ambitions for undertaking a foresight process. Identify key stakeholders and explore their concerns, interests and influences. Establish mechanisms to guide the foresight process and to keep stakeholders engaged and informed. Clarify the purpose, focus and key questions of the foresight analysis. Outline an overall foresight process and identify the necessary financial, knowledge and human resources.

Map the food system
Clarify the boundaries of the food system(s) being mapped and engage stakeholders in understanding the current status and future trends in the food system in terms of outcomes, activities and drivers. Assess the political economy and power relations of the food system to understand enabling and constraining factors for change. Clarify key relationships, dynamics, trade-offs and synergies in the food system, and identify additional information needed to support the foresight process.

Explore future scenarios
Identify and shape potential futures with stakeholders by identifying key drivers, trends and uncertainties, which form the basis for developing different scenarios of future food systems. Assess implications of these scenarios for different stakeholders, society at large and for current strategies and policies.
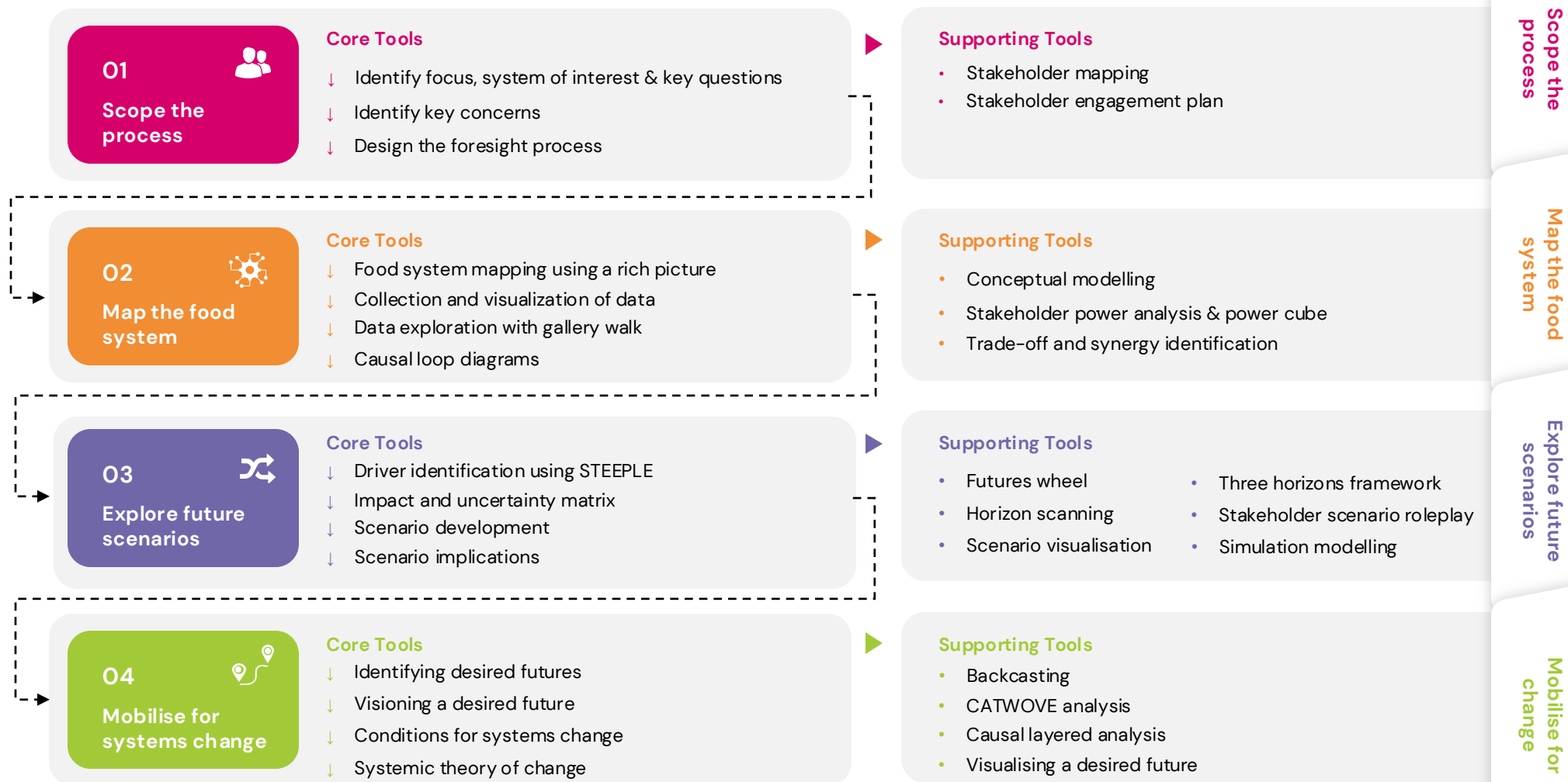
Mobilise for change
Develop a common vision around desired future(s), map out broad and then more detailed steps. Identify leverage points, barriers and opportunities for systems change. Develop action plans that include goals and targets, actions and responsibilities, monitoring mechanisms and the institutional and budgetary resources.

Overview of tools

This toolbox contains tools for each of the four phases in the foresight process. We make a distinction between core tools and supporting tools. **Core tools** are tools that are often used within the work of Foresight4Food and are recommended for any foresight process focused on food system change. **Supporting tools** are useful tools that can support the core foresight process with deeper insights to explore plausible futures, should you have the time and budget available.

01 Scope the process

Core Tools
↓ Identify focus, system of interest & key questions
↓ Identify key concerns
↓ Design the foresight process

Supporting Tools
- Stakeholder mapping
- Stakeholder engagement plan

02 Map the food system

Core Tools
↓ Food system mapping using a rich picture
↓ Collection and visualization of data
↓ Data exploration with gallery walk
↓ Causal loop diagrams

Supporting Tools
- Conceptual modelling
- Stakeholder power analysis & power cube
- Trade-off and synergy identification

03 Explore future scenarios

Core Tools
↓ Driver identification using STEEPLE
↓ Impact and uncertainty matrix
↓ Scenario development
↓ Scenario implications

Supporting Tools
- Futures wheel
- Horizon scanning
- Scenario visualisation
- Three horizons framework
- Stakeholder scenario roleplay
- Simulation modelling

04 Mobilise for systems change

Core Tools
↓ Identifying desired futures
↓ Visioning a desired future
↓ Conditions for systems change
↓ Systemic theory of change

Supporting Tools
- Backcasting
- CATWOVE analysis
- Causal layered analysis
- Visualising a desired future

↓ Identifying desired futures

Practical tips and guidance for workshop facilitation

To achieve the results you want using this toolkit in large part comes down to getting the most out of the workshop sessions – and making sure participants want to come back again. With the right preparation, implementation and follow-up a lot can be achieved in a short period of time. Following are some practical tips for each stage. The first one overall is, don't do this alone! Create a team to help guide, organise and facilitate events.

Before

- Start planning workshops well ahead of time, send out invitations, and follow up on attendance. Getting the right people in the same room is already an achievement!
- The workshop space must be fit for purpose; consider size (e.g. big enough for plenary and break-out sessions), comfort (windows for daylight and oxygen), flexibility (tables and chairs that can be easily moved), practicality (enough wall space for posters and projector) and accessibility (toilets and restaurant close by).
- Make sure the location is not too far or remote and consider covering cost of travel and lodging to encourage attendance, especially for those with little resources.
- Get there early, to check everything is ready – materials, projector, table and chair settings. Do a dry-run to test equipment. If possible, do such a dry-run the evening before the event.

During

- Keep time for participants to meet and greet 1–1 and in plenary, to make sure everyone is comfortable speaking. If necessary, agree on ground rules and put them on the wall.
- The larger the group, the more often you will have to break out into subgroups; keep these to about 7 to allow for inclusive discussions.
- Keep people engaged; besides them speaking, keep refreshments close by, have breaks every 1.5–2 hours, have snacks available, and use energizers to reactivate and bring people back together.
- Consider other barriers and how to address them, including language (needs translation), power (deference to those most senior), gender and culture (norms on who speaks most).
- Ensure the roles and responsibilities of the facilitators and others are clear (time-keeping, note-taking, speaking) and have regular checks to make sure the process is on track.
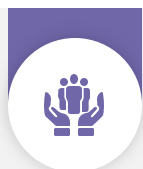
After

Follow up with participants within a few weeks afterwards so they remain engaged. You can:

- Thank people again for their attendance.
- Share a topline summary of the results.
- Let them know what the next steps are, and if so, how they will be involved.
- Inform them about how they can reach you or others with any questions.
- Inform them how to connect with other participants from the workshop (make sure to have consent to share contact details).

Scope the process

Scope the process

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What is this phase about

The first phase is all about defining the purpose, scope and design of the foresight process. It engages key stakeholders in agreeing on why a foresight process is needed, and how it could support their efforts on food systems transformation. This requires doing a preliminary stakeholder analysis, identifying the system in question and key concerns, developing focusing questions, and designing the overall foresight process.

This phase helps you to answer the following questions

? What is the boundary of the investigated food system (local, regional, national, global)?

? How are the actors in the food system (directly and indirectly) involved, and how do they relate to each other?

? What are the concerns and ambitions of stakeholders that motivate their engagement?

? Who needs to be involved in the foresight process and how?

01	Scope the process

Core Tools
- ✓ Identify focus & questions
- ✓ Identify key concerns
- ✓ Design the foresight process

Supporting Tools
- • Stakeholder mapping
- • Stakeholder engagement plan

01
Understand the reasons and ambitions for undertaking a foresight process

02
Identify key stakeholders and explore their concerns, interests, ambitions and influence

03
Establish mechanisms to guide the foresight process and to keep stakeholders engaged and informed

04
Clarify the purpose, focus and key questions and of the foresight process

05
Outline an overall foresight process, including monitoring, and identify the necessary financial, knowledge and human resources

Identify focus & questions

Preparation
Consultation of key food system actors to determine key issues and questions

Knowledge required
Clarity on resources (time, knowledge, money) to plan scope of foresight process

Group size
Small group (4–6 people) who will be involved in the foresight process

Time needed
3–6 hours

Purpose

With an initial selection of stakeholders, identify the focus of your foresight process and the questions that will guide your foresight analysis

Output

A clearly defined focus of your foresight process, with 2–4 key focus questions to guide your analysis

Think about

Whole food system, sector or thematic focus

Time frame

Questions relevant to the concerns and interest of stakeholders

Geographic boundaries

Key steps

01 With input from relevant stakeholders, identify the key food system issue that will be the focus of your foresight process

02 Decide whether your foresight process will focus on the whole food system or specific parts of the food system

03 Determine the geographic boundaries of your foresight analysis: a neighborhood, municipality, district, country or region

04 Together with relevant stakeholders, identify different questions that are relevant to the focus of your foresight process

05 Evaluate whether the scope of your process is not too wide (dealing with too many factors) or too narrow (too many relevant factors not considered)

Further reading

Detailed guide on determining focus of foresight exercises

Identify key concerns – iceberg model

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Preparation
Post-its, flip-over sheet with shape of the Ice-berg model, markers

Knowledge required
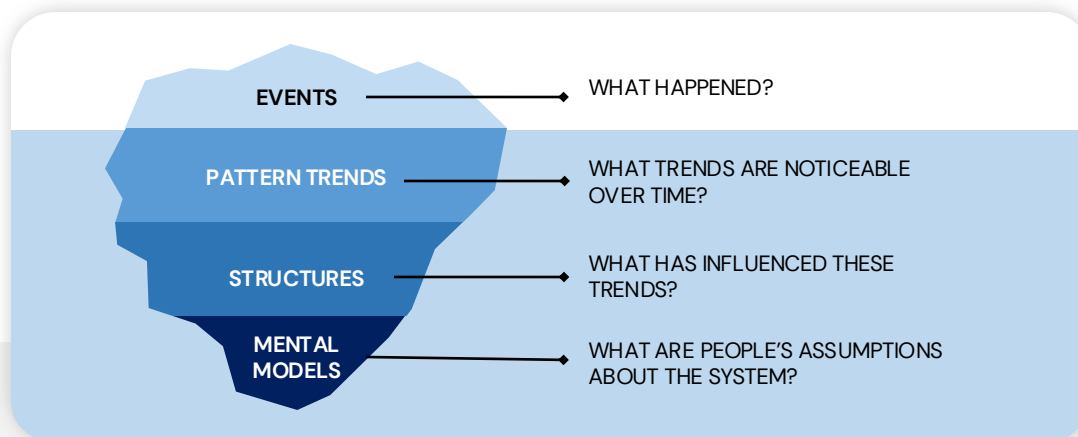Knowledge of the food system, an open mind and a willingness to challenge assumptions

Group size
A small group (4-6) within your organisation or with a wider group stakeholders (15-30)

Time needed
Light-touch: 1 hour
Detailed: 2-3 hours

Purpose

To select and unpack a range of key issues for stakeholders, that allows a better understanding of the root causes of these issues within the system

Output

A range of concerns, unpacked from event, to pattern, structure and mental model levels. Insights will also be developed about potential entry points for change

EVENTS — WHAT HAPPENED?

PATTERN TRENDS — WHAT TRENDS ARE NOTICEABLE OVER TIME?

STRUCTURES — WHAT HAS INFLUENCED THESE TRENDS?

MENTAL MODELS — WHAT ARE PEOPLE'S ASSUMPTIONS ABOUT THE SYSTEM?

Key steps

01 Identify the key issue or problem that stakeholders have witnessed in the system, surrounding or context

02 Inquire and discover: what are the patterns that you can analyse – look at historical data, trends and feedback loops. What causes these patterns to reoccur over time?

03 Identify root causes and drivers of patterns, looking at behaviour of stakeholders, policies, power and relationships. Ask, what relationships between structures are leading to what we now see happening

04 Examine the mental models, myths and deeper stories that may be influencing the behaviours, decisions, and actions of individuals and organizations within the system. Mental models are the beliefs, assumptions, and values that motivate people

05 Having analysed these levels of a key concern helps to sharpen the focus and key questions of your foresight process

Further reading

The iceberg model tool

Design the foresight process

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Purpose

To design the foresight process, providing clear guidance to everyone involved in the process

Output

A clear foresight process design, including timeline, key activities, support processes and outcomes to work towards

Preparation
Consultation of key food system actors on most relevant outcome of the foresight process

Knowledge required
Have a clear focus and set of key questions that will guide your foresight process

Group size
Small group (4-6 people) who will play a key role in organizing the foresight process

Time needed
4-6 hours

Months	01	02	04	05	06	08
Series of stakeholder workshops	Kick off meeting with core group	Orientation workshop with stakeholders	Systems mapping workshop	Scenario development workshop	Scenario Implications workshop	Systems change workshop

Supporting processes / working groups

Steering Group

Communication and engagement

Technical / sector working groups

Data gathering, research, modelling, and visualization working group

Outcomes of the process

Shared agenda and commitment for action

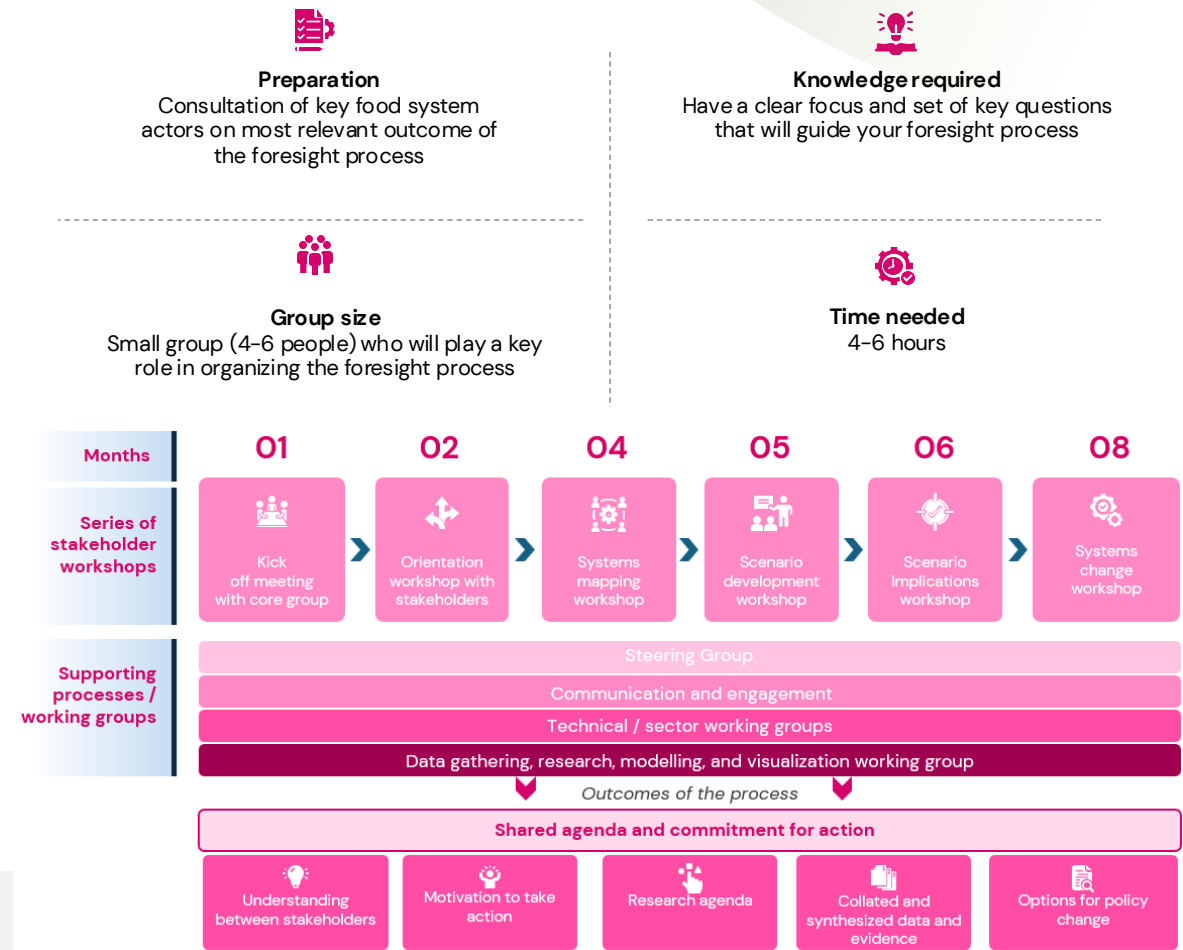| Understanding between stakeholders	Motivation to take action	Research agenda	Collated and synthesized data and evidence	Options for policy change

Motivation to take action

Key steps

01 Decide what the foresight process needs to achieve: a food system vision, a shared agenda, policy recommendations

02 Identify the key activities (data collection, analysis, expert meetings, workshops) needed to achieve this

03 Determine the time needed to carry out the activities in the foresight process, identify important milestones & deadlines

04 Think through the required supporting processes: having a steering group, technical or sector working groups, a team working on communication and engagement, different data, research, modelling or visualization working groups

Further reading

Guidance on shaping a relevant foresight process

Stakeholder mapping

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Preparation
Big sheet on the wall with stakeholder mapping table (see below); markers

Knowledge required
Have the boundaries clear of the food system you want to focus on

Group size
Small group (4-6 people) from different parts of the food system

Time needed
2-4 hours

Purpose

To identify the full range of key stakeholders relevant to the food system in your foresight process

Output

A list of key stakeholders and the role they play in the food system

Stakeholder Group	Role in food system	Current concerns	Longer term interests	Power and influence	How to engage in foresight

Key steps

Make an inventory of different stakeholder groups playing a role in the food system

01 Discuss and write down for each group what their role is in the food system – which functions do they perform?

02 Discuss and write down for each group what their current concerns are – what challenges do they face?

03 Discuss and write down for each group what their longer-term interests are – what are their objectives?

04 Discuss and write down for each group the level of power and influence over the food system

05 Discuss and write down for each group how they can be best engaged in a participatory foresight process

Further reading

Overview of different stakeholder mapping methods

Stakeholder engagement plan

Preparation
Identifying key players shaping the food system transformation agenda

Knowledge required
The main interests and roles in food system change processes of key actors

Purpose

To make sure there is a clear demand for the outcomes of the foresight process, and key food system players are supporting the foresight process

Group size
Small group (2-3 people) preparing a pitch and meeting key players in the food system

Time needed
4-6 hours for preparing pitch
1-2 hour meeting with each player

Output

Formal or informal endorsements of key players (governments, private sector players) of the foresight process

Key steps

01 Identify key players shaping the agenda around food systems in your focus area (e.g. ministries, planning agencies, NGO's)

02 Analyse what their main interests are and in which change processes they are already engaged

03 Create a convincing pitch showing how your foresight process will contribute to ongoing processes around food systems change

04 Organize meetings with key food system players in which you share your pitch and discuss possibilities to add more value

05 If needed, formalize your foresight process, by writing a letter describing the proposed process, and getting a formal approval

Further reading

Example of Foresight4Food on organizing buy-in

Map the food system

Map the food system

What is this phase about

An overall understanding of the food system is key to identify and assess drivers, trends and uncertainties, and then to develop alternative future scenarios. This involves using rich pictures to map out the food system being assessed, providing a shared visual understanding. This phase also includes compiling and visualising relevant data. A report summarizing food system drivers and dynamics can inform the rest of the foresight process.

Core Tools	Supporting Tools
✓ Rich picture mapping	• Conceptual modelling
✓ Data collection and visualization	• Stakeholder power analysis & power cube
✓ Data (gallery) walk	
✓ Causal loop diagrams	• Trade-off and synergy identification

01 Clarify the **boundari**es of the food system(s) being mapped

02 Engage stakeholders in **understanding the food system** in terms outcomes, activities, drivers and relationships

03 Collect, synthesize, and graphically illustrate **key information** about historic and projected trends across the food system

04 Assess the political economy, and power relations of the food system to **understand enabling and constraining factors** for change

05 Clarify **key relationships**, dynamics, trade-offs and synergies in the food system which need to be understood, and identify additional information needed to support the foresight process

Food system mapping using a rich picture

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Preparation
Big flipchart for each group, colored markers

Knowledge required
A good understanding of the current situation (trends, actors, policy, practice)

Group size
Groups of 4–6 people

Time needed
1–2 hours

Purpose

The rich picture provides a visual aid to structure discussions and offers a fun way of approaching sensitive topics. It also provides a way to understand stakeholders roles in the system

This tool recurs in different phases of the foresight process. It is an inclusive and engaging way to foster a comprehensive and shared understanding of the entire system among stakeholders

Output

A complex illustration of the current system, visualising a mixture of elements that are viewed as important by different stakeholders

Key steps

01 Clearly define what the focus is you would like the participants to draw, this is usually in the form of a question

02 Create groups of 4–6 stakeholders and get them to individually think about what they would like to contribute

03 Allow all group members to easily access the large paper and start drawing elements which they think are important or resonate with them when they think about the topic

04 Make sure that everyone in the group is adding to the picture, using images and icons as much as possible

05 Once each group member has finished drawing, get them to discuss what they have drawn, describing key elements and key linkages

06 Bring the smaller group back to plenary and get them to present their rich picture

07 If there is more than one group, get the groups to compare the images and cluster the ideas that are similar and that diverge so that you can identify the most important issues to discuss

Further reading Rich Picture Tool (Better Evaluation), Rich Picture Tool (MSP Guide)

Data collection and visualization

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Preparation
Ask stakeholders in the food system about data sources for each of the parts of the food system; involve researchers from the context to collect and analyze data

Knowledge required
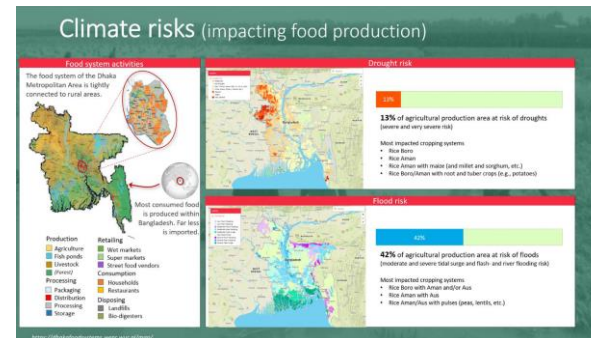Know where to find key food systems data and how to access it

Group size
3–5 people

Time needed
5–20 days

Purpose

To identify relevant data that can help inform the make-up and trends in the food system. After selection, data will be analysed and visualized

Output

An accessible overview of visualized key trends in the food system that helps stakeholders understand the bigger picture on where the food system is moving

Key steps

01 Collect data about the different elements of the food system: its drivers, activities and outcomes

02 Analyse key trends in food system drivers, activities and outcomes over the past 20-50 years

03 Identify the most interesting trends and use graphs, maps and dashboards to visualize them

Data (gallery) walk

Preparation
Printed out graphs of key trends in the food system posted along the walls

Knowledge required
Good understanding of the existing food system by participants

Group size
Groups of 3-5 per information point, with max 8 points

Time needed
45-60 minutes

Purpose

The gallery walk helps activate stakeholders; using graphs and statements, promote discussion amongst participants on key aspects of the food system, including outcomes, drivers and activities

Output

Stakeholders start to think about the available data and assess its reliability. Stakeholders have an increased awareness on the key trends shaping the food system we see today. We can gather an updated list of sources whereby more accurate or trusted data can be obtained from

Key steps to use the tool

01 Create a repository of the key trends shaping the current food system in PowerPoint, ensuring that the trends are visualised in graphs

02 Write a short sentence describing each of the trends and ensure that the data sources are clearly indicated

03 Print out the graphs and their descriptions on large pieces of paper and paste these along the walls of a large room, clustered by different themes

04 Create groups of 3-5 people to review the trends of each theme, discussing the data that they see. Provide some guiding questions for the discussion.

05 Ring a bell to indicate people can move to the next theme. When each group has visited all themes, have the participants return to plenary and share some key reflections

Causal loop diagrams

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Preparation
Large flipcharts, pens, sticky notes

Knowledge required
Detailed knowledge of food system drivers, activities, outcomes and how they interact

Group size
5-7 stakeholders (enough space and materials for everyone to contribute)

Time needed
Approximately 1.5 hours

Purpose

Illustrate how key elements in the food system interact with one another. This helps to identify system patterns and where there are opportunities for intervening

Output

A visualization of the causal linkages between system elements

Key steps

01 Identify the key drivers, activities and outcomes of the food system you would like to focus on

02 Write down these elements on different coloured sticky notes using nouns to describe them so that arrows can be used to indicate the direction of casual linkage

03 Draw casual links between the elements to show how they are related . When a variable increases or decreases use '+' or '–' signs to denote the relationship

04 Identify the feedback loops within the diagram, these can be reinforcing or balancing

05 Label the feedback loops and write a short description to capture the system pattern

There are many apps available that can help visualize and better organize causal loop diagrams, such as Vensim, Miro, Figjam and Visual Paradigm

Conceptual modelling

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Preparation
Scanning reports and articles describing the relevant food system

Knowledge required
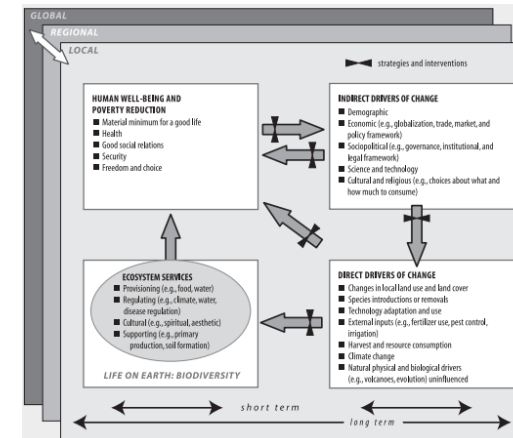Familiarity with current and potential key drivers and trends to be modelled

Group size
Individually (in prep for workshop) or in groups of 5–7 (during workshop)

Time needed
Min 2 hours to 1 day

Purpose

To create a visualisation of key concepts and how they relate to each other, which then lays the basis to help design quantitative models. This allows for drivers and trends to be assessed, and to help in simulation modelling to compare and contrast what could happen as a result of different scenarios

Output

Visualisation of relations between key indicators that can help to build a quantitative model

Example of a conceptual model from Millennium Ecosystem Assessment

Key steps to use the tool

01 Identify the key drivers, activities and outcomes of the food system

02 Draw arrows between them to describe their relations

03 Reduce the conceptual model to indicators that are available

04 Group different elements of the food system to create more clarity

05 Use colours and shading to make the conceptual model more engaging

Stakeholder power analysis

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change

Preparation
Flipcharts, markers

Knowledge required
Awareness of the different groups of stakeholders who are affected

Group size
Break-out groups of 5-7 people

Time needed
3-4 hour workshop session

Purpose

To identify the level of power and interest held by key stakeholders, which will help shape activities to keep them engaged

Output

A visual categorisation of key stakeholders and their levels of power and interest with regards to the topic

FOOD & NUTRITION SECURITY

POWER — HIGH / LOW

INTEREST — LOW / HIGH

Media, TVET, Aggregators/Vendors, Solidaridad, IDH, KIT, WUR, APEX, Federal Ministry of Agriculture, State Ministry of Agriculture, Dutch Embassy in Nigeria, Processors, Dutch Ministry of Agriculture, Friesland Campina, CGIAR/IFPRI, Farmer unions, GAIN, Supermarkets, Unilever, Farmers
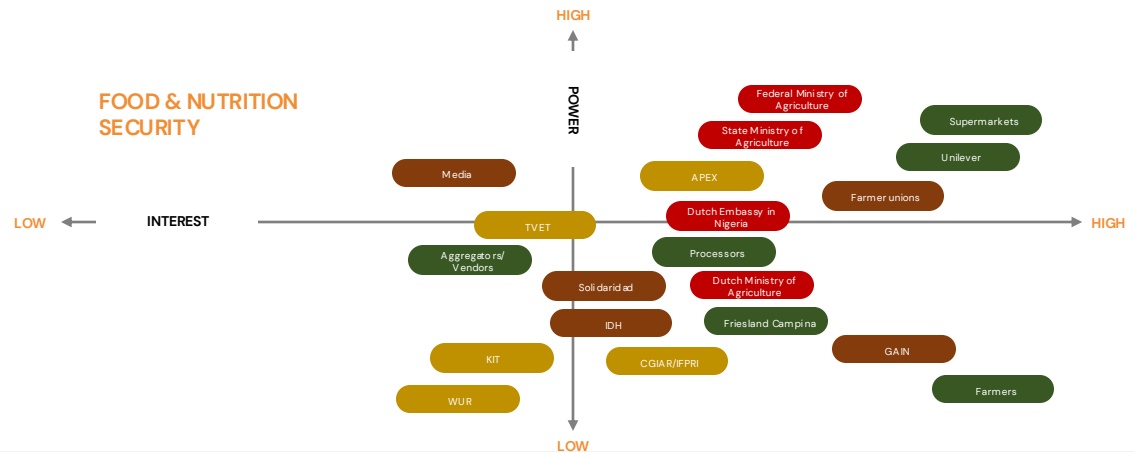
Key steps

01 Create a power-interest matrix with level of interest on the x-axis and level of power on the y-axis

02 Ask the group to brainstorm key stakeholders that play a role in the food system and put them on a post-it. Identify the key stakeholders that were mentioned by multiple participants

03 Assess the level of power each key stakeholder possesses. This can be achieved by answering guiding questions such as 'who is dependent on whom" and 'who has control over resources/ information'. Rank the stakeholders according to their level of power

04 Assess the level of interest for each stakeholder using a range of sources; both formal and informal

05 Classify their interest as (+) when they are in support of the topic and (–) when they disagree and (0) when they are neutral

06 Reflect on the defined interests by asking questions such as 'how high is this strategy on their agenda?' and 'how likely will they actively support / oppose the topic?'

07 Review both the level of power and interest for each of the stakeholders and place them in the corresponding section of the matrix

08 These findings can then be used to identify which stakeholders are most influential, powerful and interested in the topic and identify subsequent actions to maintain stakeholder buy-in

Further reading : IIED, 2005

Stakeholder analysis and power cube

Purpose

To identify the features of key stakeholders, and to analyse the type of power that stakeholders bring to the table

Output

A table with features per stakeholder, and a filled-out cube form with places, spaces and power

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change
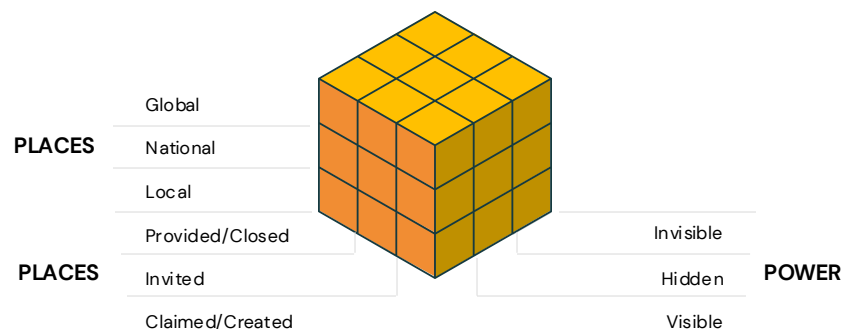
Preparation
Flipcharts, markers

Knowledge required
Familiarity with the power dynamics and who's involved

Group size
Break-out groups of 5-7 people

Time needed
2-3 hours workshop session

PLACES: Global, National, Local
PLACES: Provided/Closed, Invited, Claimed/Created
POWER: Invisible, Hidden, Visible

Key steps to use the tool

01 Ask the group to brainstorm key stakeholders that play a role in the food system and put them on a post-it. Identify the key stakeholders that were mentioned by multiple participants

02 Break up in break-out groups and ask each group to fill out the table below, for each of the key stakeholders identified

03 As you get a better sense of the features of each stakeholder, introduce the power cube. Ask: in this particular case, where is power located?

04 As the cube gets populated with examples, look at the implications: who is excluded/included? How does this affect the outcomes of the foresight process? How can power of less privileged stakeholders increase in this situation?

Stakeholders	Characteristics	Interests	Resources	Challenges
Stakeholder A				
Stakeholder B				
Stakeholder C				

Trade-off and synergy identification

Purpose
Identify key trade-offs and synergies between different food system outcomes in a particular context

Output
A visualization of trade-offs and synergies between food system outcomes

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change

Preparation
Big post-its, green and red markers, four large flipcharts taped to each other, with a big circle drawn on it and key food system outcomes written around it

Knowledge required
Good understanding of trade-offs and synergies, ability to explain these with examples in relevant context
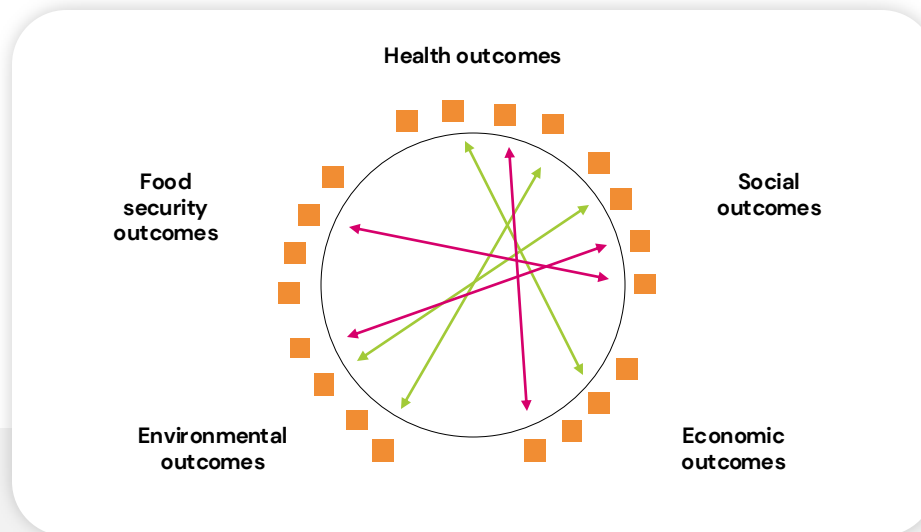
Group size
In plenary group of 15-30 participants

Time needed
1 – 1.5 hours

Health outcomes

Food security outcomes

Social outcomes

Environmental outcomes

Economic outcomes

Key steps to use the tool

01 Ask the group to write on post-its desired outcomes of the food system

02 Ask members of the group to stick their post-its around a big circle

03 The post-its can be categorized under different types of outcomes: social, economic, environmental, food security, health

04 Ask members to draw red lines between outcomes that have a trade-off. Ask members to come forward one-by-one and explain the trade-off they drew

05 Ask participants to draw green lines between outcomes with possible synergies. Ask members to explain the synergy they drew

Trade-offs: when achieving one food system outcome (e.g. food security) might limit the ability to achieve another food system outcome (e.g. sustainability)

Synergies: when one activity can serve one food system outcome (e.g. improved farmer income) as well as another food system outcome (e.g. biodiversity)

Explore future scenarios

Explore future scenarios

What is this phase about

◆ Building on the previous phase of understanding the current system, this phase engages key stakeholders in assessing different plausible futures. During this phase you will take a step-by-step approach to identifying the key trends and critical uncertainties that may shape the future of your food system, and then use these factors to identify different possible scenarios. Exploring the implications of different scenarios for individual and collective interests lays the basis for agreeing on what would be the most desirable future, and identifying the systemic shifts needed to move towards such a future

◆ The tools guide you through a process of first identifying what the key trends are and how they will interact to shape the future. Second, based on these trends you will map out a range of different future scenarios, and visualize them. Finally, through discussions with stakeholders, you will identify what implications these scenarios will have for different audiences, society at large and for current strategies and policies

03 | Explore future scenarios

Core Tools	Supporting Tools
✓ Driver identification (STEEPLE)	• Futures wheel
✓ Impact and uncertainty matrix	• Horizon scanning
✓ Scenario development	• Visualise scenarios
✓ Scenario implications	• Three horizons framework
	• Stakeholder scenario roleplay
	• Simulation modelling

01 **Decide on the best scenario approach** to use given the context, purpose and focus of your foresight process

02 **Identify the key drivers, trends and uncertainties** likely to shape the future of the food system

03 **Develop plausible scenarios** using key trends and critical uncertainties

04 **Create story lines** for each scenario, using **backcasting** to illustrate how scenarios could emerge

05 **Assess the implications** of the scenarios for the interests of different stakeholders and for society overall

Driver identification (STEEPLE)

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change

Preparation
Flipcharts, pens, post-its

Knowledge required
Detailed understanding of the food system trends and drivers

Group size
Break-out groups of 6–8. The seven topics can be divided up over the different groups

Time needed
2 hours

Purpose

To analyse the wider context, or operating environment, within which the food system functions. This helps to identify drivers that will be influential in shaping the future food system

Output

Thorough overview of how the contextual environment influences the problem in the food system

Image from SlideModel : STEEPLE analysis

Key steps to use the tool

01 Create groups of 5-7 people and clearly articulate the scope of the food system for this assignment

02 In break-out groups, ask participants to brainstorm factors which are driving change in the food system.

03 Ask group members to contribute drivers from different categories in the STEEPLE acronym: social, technological, economic, environmental, political, legal and ethical

04 Get members of the group to write down these drivers on post it notes. Make sure participants write down one driver per post-it.

05 Try to cluster the drivers within each of the categories, what themes seem to emerge?

Impact & uncertainty matrix

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change

Preparation
Flipcharts, pens, post-its

Knowledge required
Detailed understanding of the food system and its key drivers

Group size
Break-out groups of 6-8, to then compare & contrast results in plenary

Time needed
1 hour

Purpose

To explore future scenarios that explore how the food system may unfold, based upon the most uncertain and important drivers which currently shape the food system

Output

A description of scenarios that describe different plausible futures of the food system

Brainstorm as many drivers as possible (consider driver types and use STEEPLE)

Cluster drivers into common groups/themes

Place drivers in the matrix

Level of Impact on System

Key Trends

Critical Uncertainties

Other influencing factors

Level of uncertainty

Key steps to use the tool

01 List the key drivers which are currently shaping the food system

02 Construct an impact and uncertainty matrix with level of uncertainty on the x-axis and level of impact on the food system on the y-axis

03 Rank each driver in terms of its impact on the food system and its uncertainty. To identify the level of uncertainty, think about how uncertain this driver is when thinking about the future of the food system

04 Use these rankings to place the drivers onto their corresponding sections of the impact/ uncertainty matrix

05 Identify the most important and uncertain drivers. These are the drivers located on the top right side of the matrix and are called 'critical uncertainties'
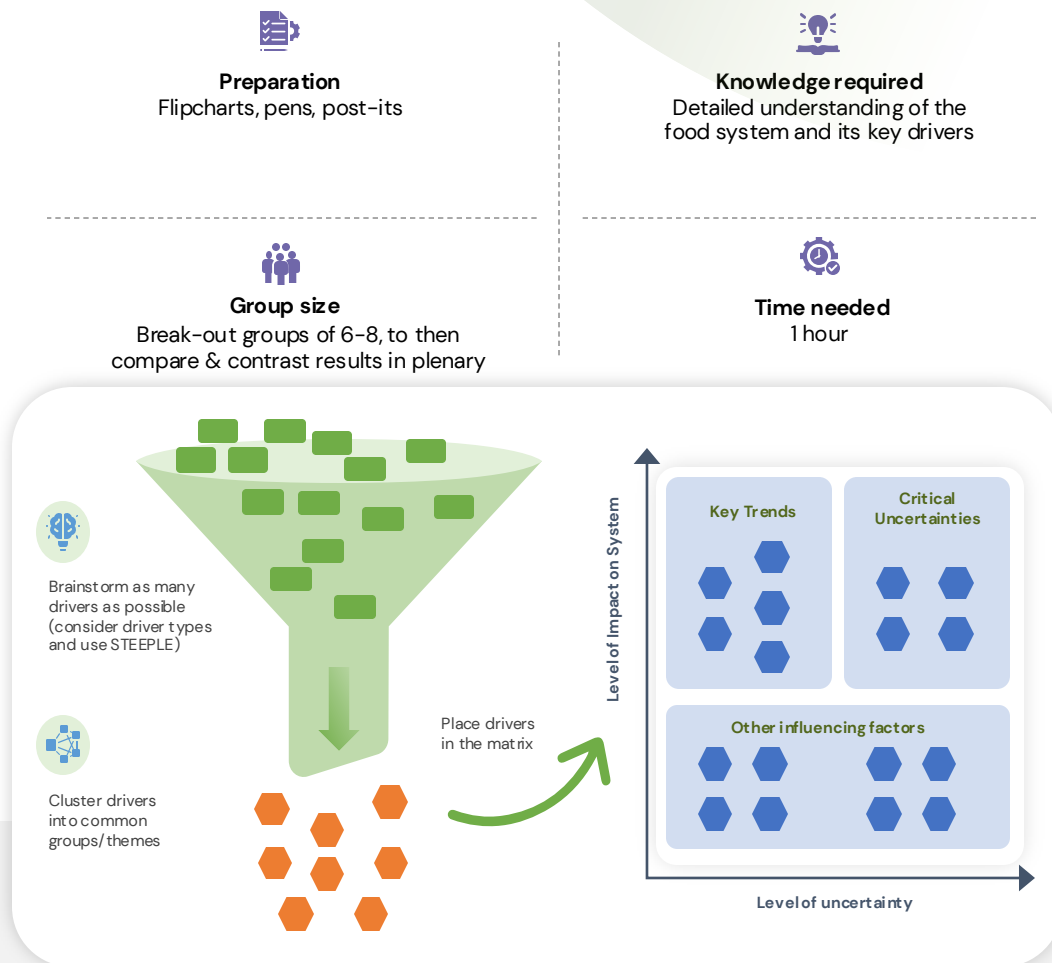
Scenario development: 2X2 matrix

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change

Preparation
Flipcharts, markers, 3–5 people

Knowledge required
Stakeholder context and needs in current and potential future scenarios

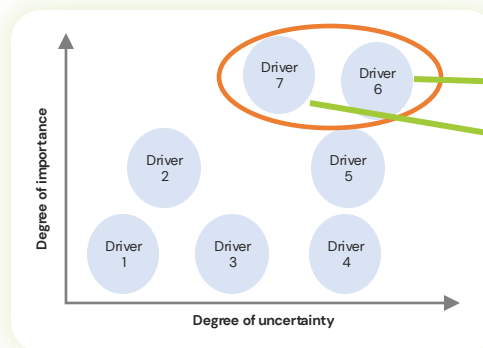**Group size**
15–30 stakeholders

Time needed
2–3 hours

Purpose

To construct four plausible future scenarios of the food system using the most uncertain and important drivers shaping the system

Output

Four scenario logics that describe the future of the food system

Step 1. Identify the two most uncertain and important drivers, known as 'critical uncertainties' by ranking all the drivers
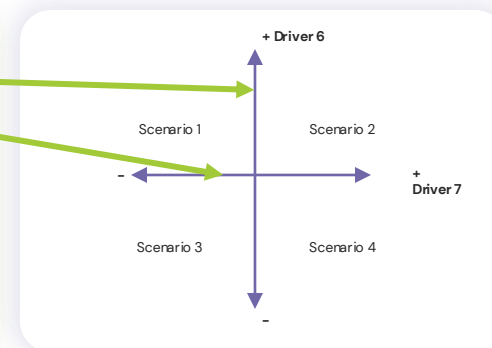
Step 2. Place each identified driver on one of the axes and identify the two extreme assumptions of these uncertainties. Then combine the two opposing extremes to create four scenario logics.

Henrichs et al. 2010

Key steps to use the tool

01 Identify from the list of 'critical uncertainties' (see impact & uncertainty matrix) the two uncertainties that are most uncertain and have most impact on the food system

02 Construct a 2 x 2 matrix and place the two most critical uncertainties on both axes. For each axis, add the two extreme values related to that uncertainty (e.g. high and low resilience)

This tool can be used in combination with rich pictures, simulation modelling and the impact & uncertainty matrix

03 In each quadrant, add the word 'scenario' and number them (e.g. scenario 1, 2, 3, 4 or scenario A, B, C D)

04 Think of a creative name for each scenario that captures the essence of each scenario and write a short paragraph to describe the characteristics of each scenario

05 Make groups for each scenario. Ask groups to develop a storyline of how each future scenario might evolve in the future (including key events that might happen under such a scenario)

Scenario implications for stakeholders

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change

Purpose

To identify the implications of future scenarios on stakeholder groups, given their different circumstances

Output

A visualisation of how different stakeholder groups would benefit from different scenarios

Preparation
Identify stakeholder groups most relevant for the context

Knowledge required
Stakeholder context and needs in current and potential future scenarios

Group size
15-30 stakeholders from across the food system

Time needed
1 hour

Key steps :

01 Draw the table below on a large sheet of paper (or multiple sheets attached to each other)

02 Identify a list of key stakeholders for which you would like to explore the implications of each scenario

03 Ask the group to identify the implications of each scenario for each stakeholder group and write these down in the table

04 Discuss for each stakeholder which scenario would benefit them the most, and which scenario would benefit them the least

Stakeholder group	Scenario 1	Scenario 2	Scenario 3	Scenario 4
e.g. poor consumers				
e.g. small-scale businesses				
e.g. women farmers				
e.g. traders				
e.g. agri-food corporation				
e.g. policy makers				
Society at large				

Futures wheel

Introduction

Tool list

Scope the process

Map the food system

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Mobilise for change

Preparation
Flipcharts, markers, post-its, groups of 3-5 people

Knowledge required
Experience from the previous exercises, which will be brought into this one
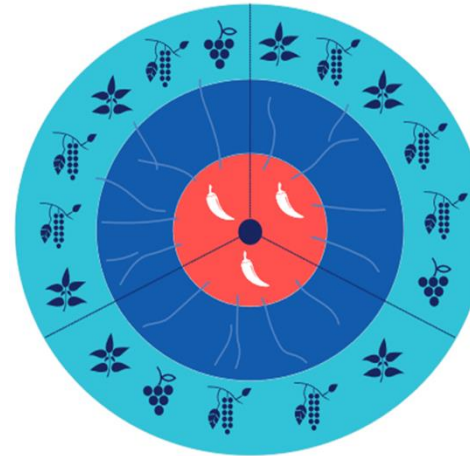
Group size
5-7 per break-out group. Max 4 groups

Time needed
2 hours

Purpose

The futures wheel aids individuals and organizations in mapping out the relationships between causes and their ripple effects, allowing them to anticipate and plan for possible future scenarios

Output

This tool enables you to visually identify a broad spectrum of direct and indirect impacts of a specific change, and their relationships in a given context

Image from: Building Better Futures Toolkit, 2021

Key Steps:

01 Ask people in groups to identify three of four 'Seeds of Change': tools, technologies, initiatives, projects, organisations or movements that appear to be contributing to the creation of a future that is just, prosperous, and sustainable

02 Participants will then explore the immediate impacts that directly result from the seeds of change within the context of study. The impacts may be political, economic, technological, environmental, social or legislative in nature. Write these down on sticky notes and place them around the seeds of change (blue middle layer)

03 After exploring the immediate effects, build on them further by asking what further impacts these effects might lead to (the 'second order impacts'). Position these second order impacts around the immediate effects, forming the light blue outer layer

05 At the end, each group shares their story on the immediate and second order impacts of their 'Seeds of Change' with the other groups. Make sure to highlight connections between the stories

Further reading : WCVA community workshop (Building Better Futures Toolkit, 2021) see slides 20-30

Horizon Scanning

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change

Preparation
Completion of earlier exercises to be able to frame and delimit the research in this process

Knowledge required
A good understanding of resources, people and events to find references

Group size
Individually or in small groups (to be brought into workshops for discussion)

Time needed
Research can be 1 week – 2 months

Purpose

To identify emergent, or weak, signals of future trends and uncertainties that can potentially disrupt the current system. These 'weak signals' present risks to mitigate or opportunities to leverage

Output

An overview of under-observed emerging trends and their potential impacts, risks and opportunities, together with proposals for follow-up and next steps for key stakeholders

Source: https://www.ncbi.nlm.nih.gov/books/NBK556423/

Key steps

Research

01 Frame the research, needs & resources (see also tool on 'identify focus & questions')

02 Research key potential signals through reports, interviews, events, social media, etc.

03 Long- and shortlisting of potential disrupting factors, including rationale for plausibility, impact

Validation

04 Submit findings to key stakeholders and/or core expert group for review and feedback

05 Complete discussions during a workshop to confirm (revised) findings

Horizon scanning can best be repeated every so often to assess changes in these signals. The timeline for repeating this exercise is dependent on the needs of the scenario work

Scenario visualisation

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change

Preparation
Large flipcharts, pens, space for a group of 4-6 stakeholders to draw on the large sheet of paper

Knowledge required
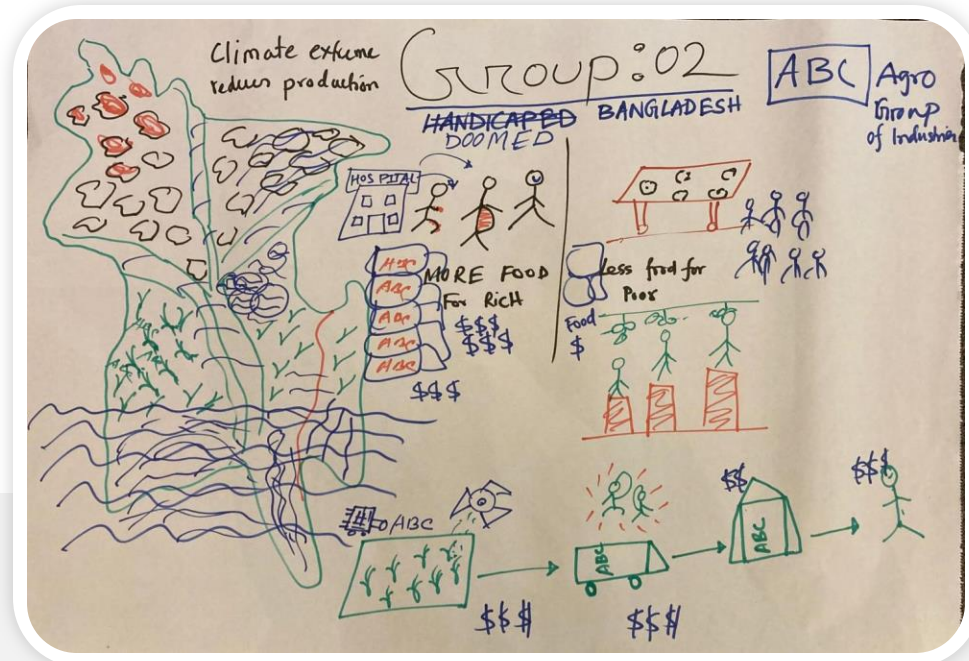A set of clearly defined scenarios with its main characteristics

Group size
5-7 participants for each of the four pictures (15-30 in total)

Time needed
45 minutes

Purpose

This rich picture exercise is similar to that in phase one (rich picture mapping), but looks to the future; the purpose is to build imaginary images of how the future under different scenarios could look like. This provides a way to structure discussions and offers a fun approach to sensitive topics. It also provides a way to understand stakeholders' roles in the system

Output

A complex illustration of the current system, visualising a mixture of elements that are viewed as important by different stakeholders

Key steps to use the tool

01 Put the pre-defined scenarios (2x2 matrix or otherwise) on the wall for everyone to see

02 Make for each scenario a group of 5-7 people sitting around a table with a big empty flipchart, or even two flipcharts taped together

03 Allow all group members to easily access the large paper and start drawing how the future would look like in that particular scenario

Three horizons framework

Purpose

This sense-making tool helps individuals and organisations to understand and navigate change by mapping out potential transitions from present to future, identifying emerging trends, tensions, and opportunities for transforming the food system

Output

Visual representation of a transition process, highlighting the transition from the current state via emerging changes to long-term visionary futures. The process reveals tensions, opportunities, and strategic actions necessary for navigating the shift from the current system to more desired futures

Preparation
Flipcharts, 3 colours of sticky notes, marker pens

Knowledge required
Understanding of current situation, existing assumptions and developments

Group size
To be presented in plenary and then discussed in smaller roundtables (max 7)

Time needed
2 hours

Key steps to use the tool

01 All answers are written on post-its and placed on the three horizons drawn by the participants

02 Begin with Horizon 1 (H1) – Business as usual- and brainstorm on the main working assumptions about the topic you are focusing on, what is taken for granted in decision-making around this topic
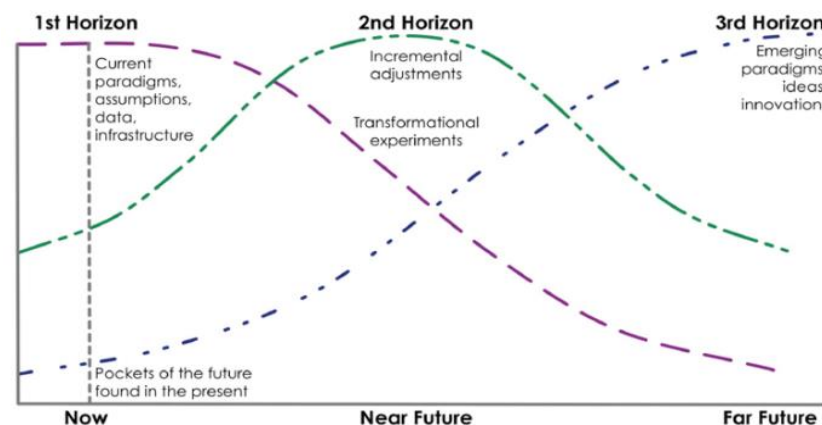
03 Now look at H3 - the far future – and identify emerging changes that represent transformation shifts from the present: what changes are emerging as new paradigms?

04 After reviewing assumptions associated to H1 and H3, choose two or three emerging changes (business models, new processes, new markets, etc.) to create an interesting transition idea for the industry/sector which helps bridge from H1 and H3. This is your H2 – the near future

Further reading : Step by step guide, Horizon scanning tips & tricks

Stakeholder scenario roleplay

Preparation
Masking tape, empty papers, markers

Knowledge required
You need a set of 4 scenarios to be developed before this exercise

Group size
Break-out groups of 5-7
15-30 in plenary

Time needed
1 hour

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Purpose

Explore how different stakeholder groups would be impacted differently by different scenarios

Output

Better understanding of stakeholders what the implications of different scenarios are for key actors in the food system

Key steps :

O1 Use masking tape to create a large 2x2 matrix on the ground where all participants of the workshop can easily stand in. Write the names of the scenarios and two critical uncertainties on big papers and stick them on the floor as well

O2 Ask the group to identify themselves as one particular stakeholder group, and walk to the scenario that they think would be most desirable for that stakeholder group. You can think about these groups: smallholder farmers, corrupt trader, politician, trade union member, urban consumer, CEO of processing business, market seller

O3 After you did this for 4-6 different stakeholder groups, ask a few members of the larger group to reflect on how it was to do this exercise. What did they notice?

Simulation modelling

Purpose

Use computational models to analyze and simulate outcomes of interactions between variables within a system domain. Models can help to analyse how changes in policies, technologies, or external conditions affect economic variables like prices, production, and consumption

Output

Different kinds of graphs that illustrate the modelled future trends. The work itself is typically done by a group of well-trained food system modellers, and the results presented to stakeholders to validate and discuss implications of the results.

Key steps to use the tools

There are many simulation models focused on exploring future food systems, each with a different focus, such as policy evaluation, economic projections or agricultural flows

Go to https://foresight4food.net/data-modeling/ for an overview of tried and tested data modelling practices, and how to contact the teams that use them. There are types of simulation models such as general equilibrium, life cycle assessment models, optimization models and so on

This tool can be used in combination with 'conceptual modelling'

Preparation
Select a few modelling tools and inquire on their relevance for your specific scenario work. Engage with key stakeholders to confirm their value before making use of the models
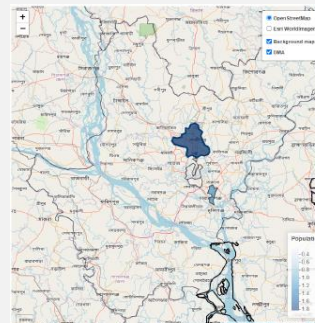
Knowledge required
Whether sufficient data and resources are available to feed into the model(s) and come up with reliable projections

Group size
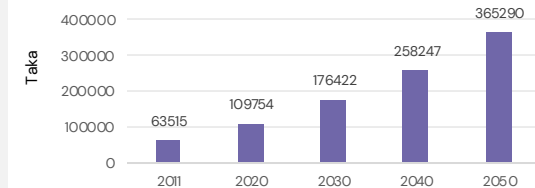Individually or small teams in preparation for a workshop

Time needed
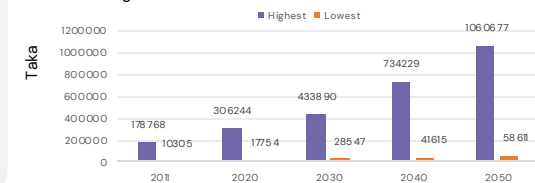4–8 weeks

(a) Average Income per household per year (Taka)
DIMA Region CCC

Source: 55P database

DIMA Projections

(b) Average income per household (Taka)
DIMA Region CCC

Source: MAGNET model

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Explore future scenarios
Mobilise for change

Mobilise for systems change

Introduction

Tool list

Scope the process

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Mobilise for systems change

What is this phase about

Following the third phase where a series of scenarios were developed and discussed, this final phase aims to develop a common vision around a more specific desired future, together with a pathway to get there. The key objective of this phase is for stakeholders to identify strategies for systemic changes that would make the desired future more likely to occur

This phase explores the changes needed to achieve the most desirable future. In this phase, you develop pathways for realizing this change, including activities, interventions, roles and responsibilities. In this phase, the processes and partnerships are established to achieve the desired future of the food system

04

Mobilise for systems change

Core Tools	Supporting Tools
✓ Identifying desired futures	• Backcasting
✓ Visioning a desired future	• CATWOVE analysis
✓ Conditions for systems change	• Causal layered analysis
✓ Systemic theory of change	• Visualising a desired future

Generate shared visions and **desired outcomes** for the future of the food system based on the scenarios
01

Explore options and conditions for systems change considering institutional structures, technologies, relationships and power, and mental models (mindsets and values)
02

Articulate pathways of change, including, direction, principles, policies interventions, and stakeholder roles, responsibilities and actions
03

Build partnerships and alliances to gain societal support, establish political will, shift power structures, and take action
04

Establish processes necessary for innovation, research and learning, effective governance, collective action and adaptive management
05

Identifying desired futures

Preparation
Clear scenario summaries on big flipchart paper or posters

Knowledge required
Development of different scenarios including storylines

Group size
15–30 participants
3–5 for scenario review

Time needed
Up to 1 hour

Purpose

Engage stakeholders in a discussion about plausible futures of the food system, exploring which of the developed scenarios are more or less desirable

Output

A voting with your feet exercise, where the output is an exchange of views on what scenarios are most likely (based on the current major drivers and trends), and which scenarios are more desirable to majority of stakeholders, bringing out the tension between the two

Who needs to be involved :

This needs to take place in a multi-stakeholder setting, preferably after stakeholders have, in groups, developed and presented a range of different food systems scenarios

Key steps :

01 Present the previously developed scenarios and their storylines

02 Create a scenario matrix on the floor of the room and allocate individuals to a stakeholder group (this may be their real role, or you can ask participants imagine being a particular stakeholder)

03 Ask the group to, individually and without discussion, vote with their feet by moving to one of the scenarios, asking themselves; which of these scenarios do you consider as most desirable?

04 Ask from a range of people their perspective on why they voted the way they did

05 Vote again, now asking; which of these futures do you think are most likely? Ask them what trends they feel are most important in their consideration

06 Discuss as a group: what does it mean if the most likely scenario is not the one they find most desirable?

This tool can be used in combination with scenario matrix building

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Visioning a desired future

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change

Preparation
Coloured marker pens, flipcharts, sticky notes

Knowledge required
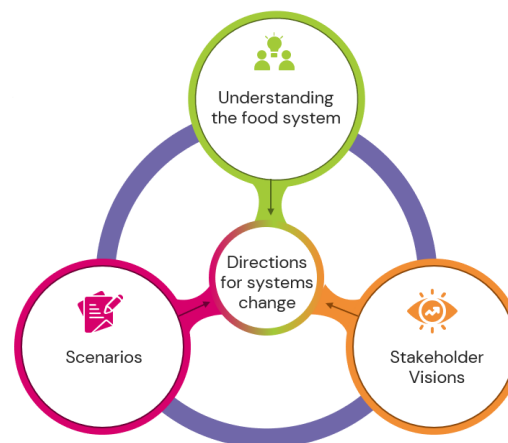Understanding of the current situation and which aspects participants want to improve

Group size
5–7 participants

Time needed:
2–3 hours

Purpose

This exercise builds on the previous visualised scenarios, now focusing on the desired future. The purpose of this exercise is to shape a shared vision of the future by engaging stakeholders. It is an inclusive process that stimulates creativity, aligns priorities, and builds a clear, compelling picture of a desired future

Output

A unified vision of the future that includes clearly defined long–term goals and a detailed path to achieve them

Key steps to use the tool:

01 Define the purpose of the visioning exercise and set up a creative space for brainstorming whereby a diverse group of participants are engaged to ensure a range of perspectives

02 Encourage participants to envision ideal future scenarios, focusing on goals, values, and desired outcomes

03 Develop a clear and detailed vision statement that captures the essence of the desired future scenario

04 Work backward from the envisioned future to identify the necessary steps and strategies to achieve it, thereby creating a practical plan with specific actions, timelines, and responsibilities to move toward the desired future scenario

05 Regularly revisit and adjust the vision and action plans to stay aligned with evolving circumstances

Conditions for systems change

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change

Preparation
Drawing of conditions for systems change triangle on big flipchart, post-its, coloured stickers and markers

Knowledge required
Understanding of different levels of systems change, explanation of different conditions of systems change
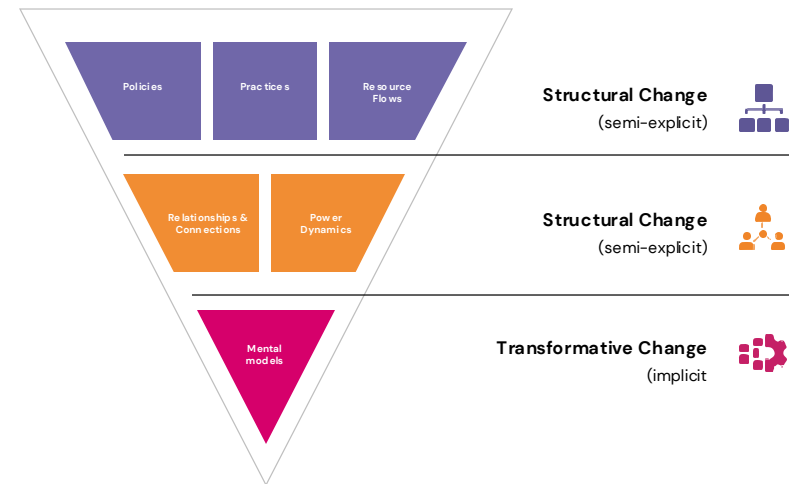
Group size
Break-out groups of 5-7 (max 20 people)

Time needed
1.5 hours

Purpose

Explore conditions for food system transformation, at different levels of systems change

Output

List of prioritized activities that could contribute to food system transformation

Structural Change (semi-explicit)

Structural Change (semi-explicit)

Transformative Change (implicit

Policies · Practices · Resource Flows

Relationships & Connections · Power Dynamics

Mental models

Key steps:

01 Explain different levels and conditions of change

02 Make small groups of 5-7 people

03 Give every group a flipchart with a drawing of the conditions for change triangle

04 Ask members of the group to take 10 minutes to write down on post-its possible activities that could contribute to change at different levels

05 For each level of change, ask members of the group one-by-one to stick one post-it on one of the conditions in the triangle and explain why they think this activity could contribute to this condition

06 If all post-its are on the triangle, give each member 3 stickers and ask them to put the stickers at the activities they think have most potential

Systemic theory of change

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change

Preparation
Clear understanding of systems dynamics (recommended to use online software such Mural or Kumu)

Knowledge required
Good understanding of systems thinking, theory of change, open mindset

Group size
Break-out groups of 5–7 and total group of 20–40

Time needed
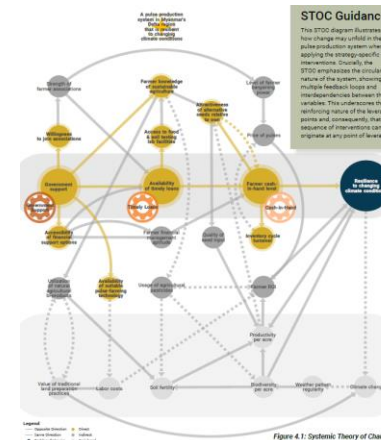2–3 days (additional work by core team to develop the SToC in detail)

Purpose

Develop collective systems change strategies that describe how one type of intervention or leverage point contributes to other changes or interventions

Who needs to be involved

Core team of facilitators with experience in systems analysis methods (such as causal loop diagramming) supported by a wide range of stakeholders

Output

One Systemic Theory of Change, to be included in a policy, project proposal or programme implementation guide

An example SToC visualisation. Source: MOSS Consultants & Capital, ICCO Cooperation and TunYat (2020) Towards Sustainable Food Systems: Myanmar Delta Region Pulse Production System

Key steps to use the tool

01 Map systems dynamics (based on STEEPLE and a tool such as Causal Loop Diagramming supported by stakeholder analysis)

02 Within the scope and boundaries of programme, organisational capabilities and mandates, identify key 'transformations' that should take place in key sub-systems (based on CATWOVE soft systems analysis, Iceberg Model or Casual Layered Analysis)

03 Explore and analyse leverage points: these can be 'shallow' leverage points (buffers, stocks, and flows in the system) and 'deep' leverage points (rules, mental models and paradigms)

04 Select focus transformations and key leverage points, and draft a systemic theory of change which includes the following elements: 1) pathways; 2) processes and principles that are needed to work these pathways; 3) partnerships and alliances needed to sustain emergent behaviour

This tool should be used in combination with STEEPLE, CATWOVE and/or stakeholder mapping. Click here for further reading

Backcasting

Preparation
Flipcharts, markers, post its, slides with clear instructions and examples

Knowledge required
A good understanding of both the current situation and the desired and an alternative futures

Group size
In plenary with a group of max 20 or in break-out groups of 5-7

Time needed
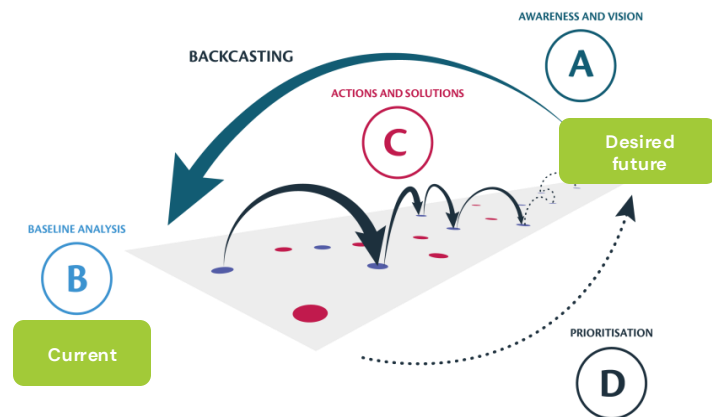Light-touch: 2-3 hours
Detailed: 4-5 hours

Purpose

Backcasting is a method for determining the steps that are needed to work towards a desired future. Backcasting helps to explore different pathways, identify actions, obstacles and opportunities

Who needs to be involved

A mix of experts and practitioners in the food systems—generally include people with responsibility for food systems policy or strategy. Participants don't need to have developed the scenarios or vision directly

Output

A clear future vision based on a shared view of the future and the steps required to deliver it

Figure adapted from DPMC New Zealand

Key steps to use the tool

01 Introduce/develop the preferred future

02 Discuss how the desired future differs compared to the current situation

03 Build a timeline that sets out the key changes needed to move from the present reality to the preferred future

04 Identify which changes are in your control and which aren't

05 Identify what you need to do to deliver the steps that are in your control

06 Identify how you can influence or facilitate the steps that are outside your control

This tool can be used in combination with normative scenario building and visioning.
Further reading here

CATWOVE analysis

Introduction

Tool list

Scope the process

Map the food system

Explore future scenarios

Mobilise for change

Preparation
Flip-over sheets, stickies and post-its, group set up

Knowledge required
expertise in soft systems methodology

Group size
4-6 participants

Time needed
Brainstorming: 1.5 hours
Modelling the system: 3-4 hours

Purpose

CATWOVE is about exploring the human activity systems that lead to a certain system outcomes, and exploring the perspectives of stakeholders in these systems

Output

An overview of different perspectives on the system that can help to guide systems change.

C Clients / Beneficiaries
A Actors
T Transformation
W World view (values)
O Owner
V Victims
E Environment

Key steps
In groups composed of multiple different stakeholders discuss and write down:

01 Identify the transformation: what does the system create (output) based on various inputs? This should be a statement that reads in the form of 'A system to do X, by Y in order to do Z'

02 Who are the clients that would benefit from the transformation?

03 Worldview: what beliefs underlie the importance of the transformation?

04 Who are the Actors that facilitate the transformation to reach the customers?

05 Who are the victims (or losers) from the transformation? (this is not about vulnerability!)

06 Who are the greatest influencers in the system?

07 What environmental drivers and factors influence human activity in the system?

Once you have identified these elements, you can write a description of a possible system. Depending on time, you can run the CATWOVE exercise a number of times to get different viewpoints and identify different versions of possible systems. In a follow-up exercise, you can start mapping and modelling all the different activities needed to make this system work effectively over time

The value of CATWOVE and subsequently developing (a) model(s) of the transformation is that it allows you to pose questions that challenge the current situation and find accommodation among stakeholders that the current system should be changed.

Further reading For more information about Soft Systems Methodology, see here

Causal layered analysis

Purpose

To analyze and understand the root causes and underlying factors contributing to complex problems, events, or issues, and consider what an alternative future could look like

Output

An analysis of the root causes driving important challenges in food systems and the strategies that are needed to address the root causes of these challenges

Key steps

Preparation
CLA templates, pens, flipchart materials, sticky notes

Knowledge required
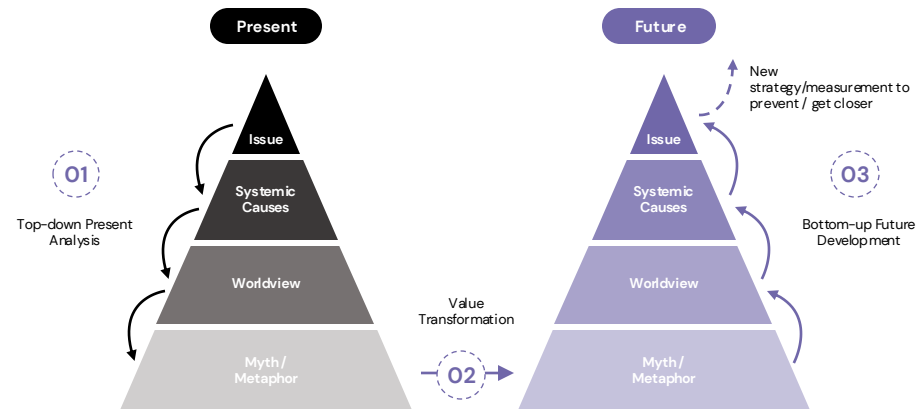a representative group of stakeholders from the food system

Group size
5–7 (if larger split into two groups)

Time needed
about 90 mins

O1 With your group, discuss the first pyramid from top to bottom

- Identify the key issue or problem that needs to be addressed or changed in the food system
- What are the root causes (systemic causes). Brainstorm and write this down on the template
- What are the norms and values that influence systemic causes (World view)
- What myths and deeper stories shape the world view?

O2 Now discuss the second pyramid, going from bottom to top

- What would be the best myth/metaphor to address the issue at the top of the first pyramid?
- What would that mean for the worldviews, norms and values of people?
- How could changing worldviews help address some of the systematic causes of the issue?
- Which strategies could help change dominant paradigms and shift worldviews to address root causes of issues?

Further reading : For more information on this tool read <u>here</u>

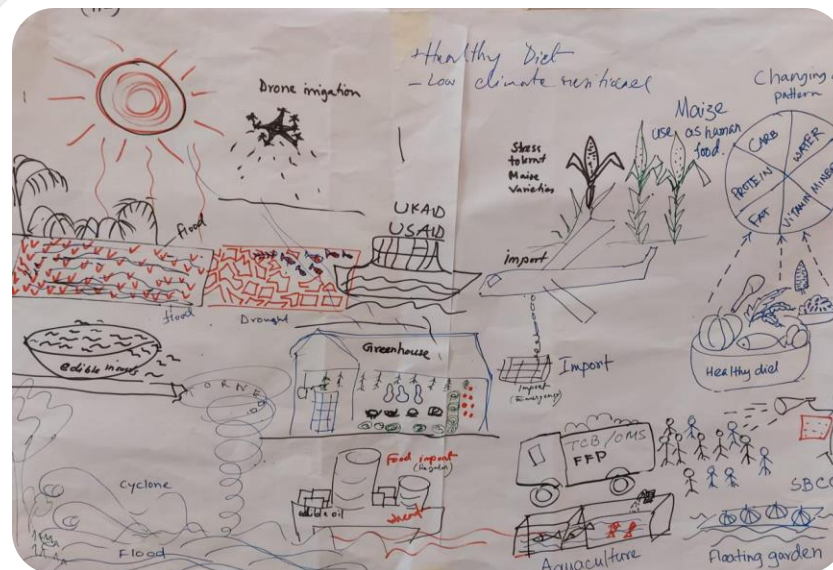# Visualising a desired future

Preparation
Large flipcharts, pens

Knowledge required
Clear definition of the system and is boundaries

Group size
5-7 participants

Time needed
45 minutes

Purpose

This visualization zooms in on the desired future. It is an inclusive and engaging way to identify key elements of desired futures.

Output

An illustration of the food system in the most desired future, visualising a mixture of elements that are viewed as important by different stakeholders

Key steps to use the tool:

01 Identify the most desirable future you want to explore in more detail and put them on the screen

02 Create groups of 4-6 stakeholders and get them to individually think about what they would like to contribute

03 Allow all group members to easily access the large paper and start drawing elements which they think are important or resonate with them when they think about the topic

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Introduction

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Map the food system

Explore future scenarios

Mobilise for change

Partners

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