

Systematic Participatory Foresight Toolkit

down approach

Innovative Financial Mechanism

Climate resilient community response force

Encourage alternative & diversified livelihood

Next-Depth
UNDP → Gilgit-Baltistan → GLOF Project
↓
Climate Resilient Intra-Community
Donor from Community model.
↓
HIVRA → Investment ↑
→ Community led

Int...

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This publication is available in electronic form at www.icimod.org/himaldoc

Published by

International Centre for
Integrated Mountain Development,
GPO Box 3226, Kathmandu, Nepal

Citation

Tuladhar, S., Silpakar, S., & Manandhar, S. (2026).
Systematic Participatory Foresight Toolkit. ICIMOD
<https://doi.org/10.53055/ICIMOD.1126>

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The toolkit was developed by ICIMOD in partnership with Foresight4Food as a companion to the Systematic Participatory Foresight Practitioners Guide. It provides an in-depth step by step guide to implementing the participatory tools and explains their key concepts and frameworks.

Why?

The Systematic Participatory Foresight Toolkit has been developed to:

- Build awareness of the range of participatory foresight tools available and enhance understanding of their applications
- Provide a step-by-step guide for implementing participatory foresight tools

For whom?

This toolkit is intended for practitioners, facilitators, and strategists seeking to strengthen their understanding, design or customise tools to their specific context, and effectively apply participatory foresight tools and frameworks.

How to navigate?

The toolkit has three parts:

Section 1: The process: A snapshot of the systematic participatory foresight process.

Section 2: The participatory tools: A snapshot of the key participatory foresight tools followed by a detailed step-by-step implementation guide detailing when to use each tool, activity duration, prerequisites, and process flow.

Section 3: Model for planning systematic participatory foresight workshops

The background is a sepia-toned photograph of a stone wall in the foreground. In the middle ground, a person is walking on a wooden walkway or bridge. The background shows a steep, rocky hillside. The overall image has a dark, muted color palette.

SECTION 1

Systematic Participatory Foresight

**The Systematic
Participatory
Foresight
process includes
four phases:**



Scoping



**Sensitisation, building
understanding and
mapping the system**

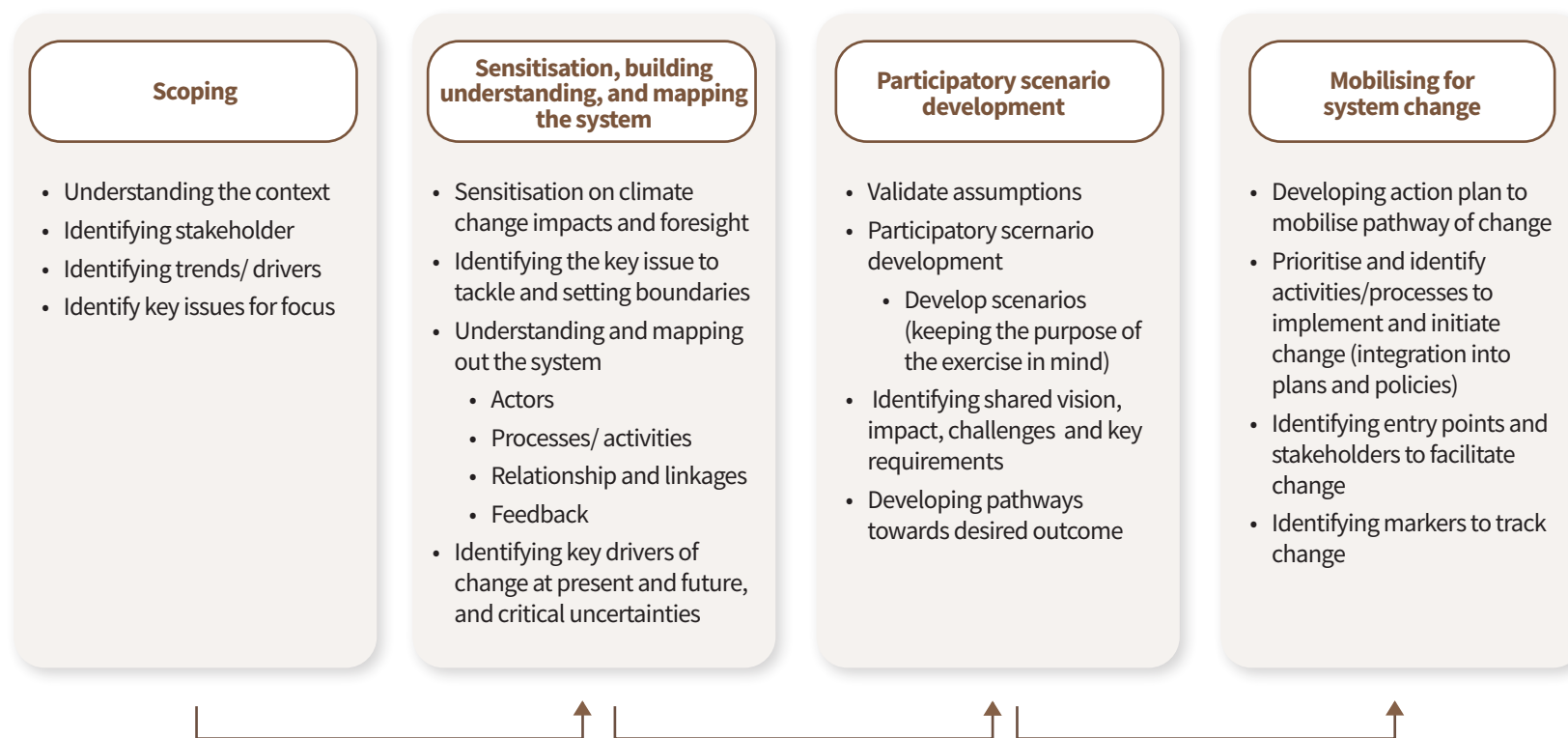


**Participatory scenario
development**



**Mobilising for system
change with strong
GESI integration**

Four phases of the Systematic Participatory Foresight Process with key aspects of GESI integration



The Systematic Participatory Foresight process is built on eight principles

Core methodological principles

1. Systems thinking

The foresight process must be implemented using a systems approach, taking into consideration the key elements/activities, interlinkages, and feedback loops in the system.

2. Anticipatory action

The foresight process must build towards an anticipatory pathway of change that considers multiple plausible alternative futures.

3. Participatory approach

A participatory approach provides opportunity for the inclusion of diverse perspectives, priorities and aspirations. Engagement of diverse stakeholders throughout the process ensures recognition and acknowledgement of their different needs, concerns, interests, and impacts.

Thematic priorities

4. GESI integration

GESI integration will ensure identification, recognition and engagement of the diverse stakeholders in the system, including marginalised and vulnerable groups. It will help to explore and assess differential impacts leading to plural outcomes.

5. Drivers and priorities

While understanding drivers of change, it is important to consider not only those shaping the present, but future

trends and their potential impacts on the system. Anticipatory pathways of change should then be identified and prioritised in line with stakeholders' priorities and shared vision, considering potential alternative futures.

6. Climate change impact

Climate change is a crucial driver that directly and indirectly impacts the system by accelerating shocks, creating new risks and amplifying vulnerabilities. It is a mega trend that is interconnected with other megatrends influencing future trajectories.

Implementation criteria

7. Substantiate with evidence

Each step of the foresight process must be validated and substantiated with evidence.

8. Appropriate scale

Foresight should be implemented at an appropriate scale to ensure meaningful and resilient adaptation. In the context of HKH, this would be at the sub-national level. Such a scale enables meaningful engagement with local stakeholders, capturing ground realities and needs, while also aligning with formal development institutions (i.e. local government) to integrate foresight processes and outcomes into plans and policies. The scale of data availability should also be taken into consideration.

A person wearing a traditional conical hat is seen from the side, standing on a narrow boat on a large body of water. The person is holding a long pole or oar. The background shows a wide expanse of water with some distant land and hills under a cloudy sky. The entire image has a dark, brownish tint.

SECTION 2

**Participatory
foresight tools**



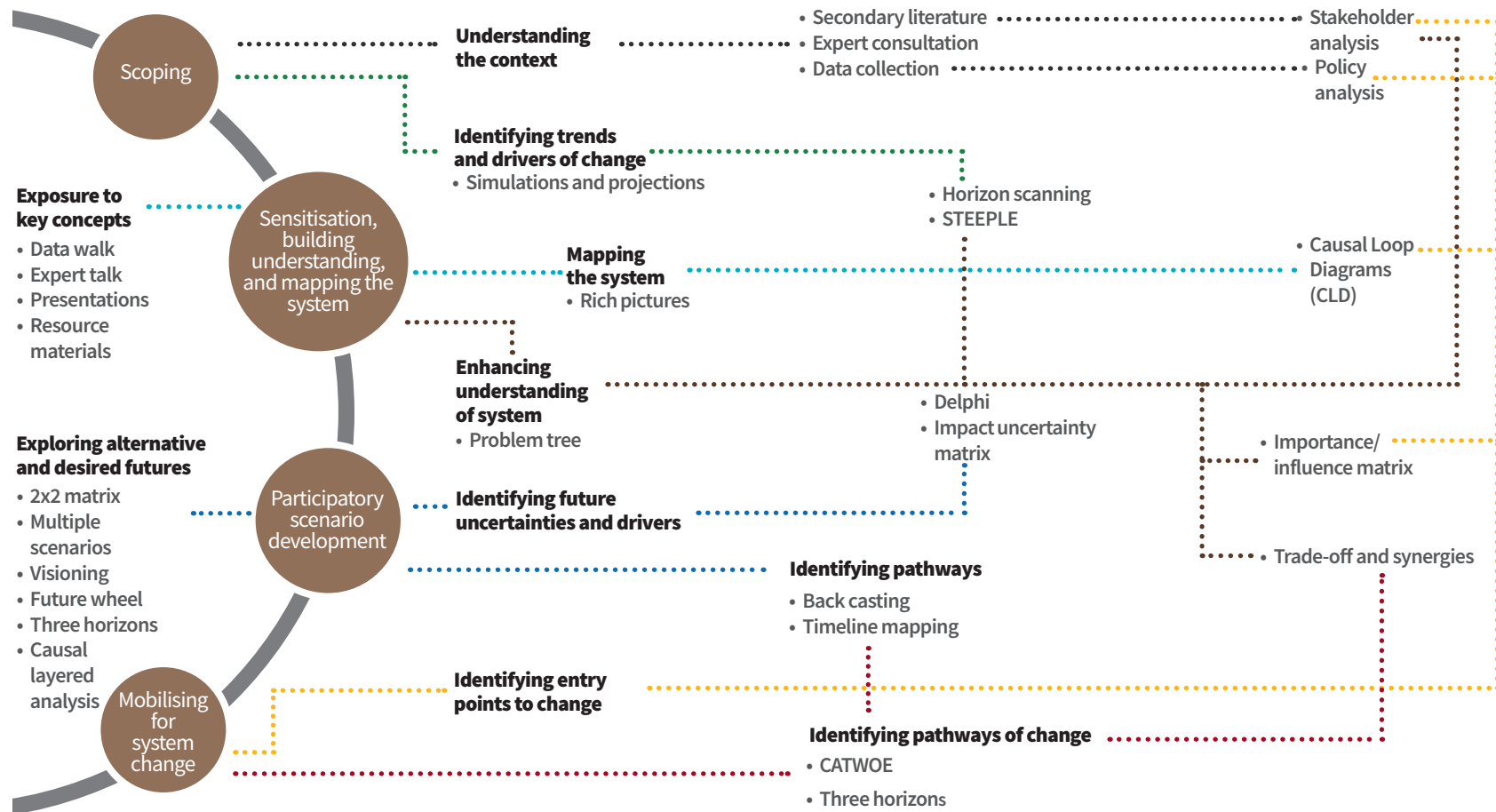


Figure 1: Participatory foresight tools and their application across the systematic foresight process

This section presents a range of participatory foresight tools available to practitioners for use throughout the process.

The objective of this section is to:

- Explore a range of participatory tools and engagement activities
- Help identify the most effective tools for your specific context

- Facilitate the practical implementation of participatory approaches
- Integrate participatory principles at each stage of the systematic participatory foresight process.
- Ensure the engagement of diverse stakeholders in collaborative exercises and analysis.

2.1 Snapshot of select foresight tools and when to use them

Foresight tools	Purpose of tool	Phase of development and use	Time required*	Remark	Level of technicality
Stakeholder mapping/ Actor Mapping/ Stakeholder analysis	Identify relevant stakeholders in the system and understand and evaluate their interests, influence, and needs	Phase 1/2 - Scoping/ Mapping the system: Development	30–60 minutes	Key stakeholders are identified during the scoping phase. The key stakeholders are engaged in the process of understanding and mapping the system, ensuring multiple perspectives are captured.	Med-High
Data walk	Expose participants to extensive amount of information to ensure robust analysis and understanding of the situation	Phase 2 - Mapping the system	60–150 minutes	Using the information collected during the scoping phase	Med-High
Rich pictures	Visual representation of the system's actors, institutions, services and facilities, the process and core activities	Phase 2 - Mapping the system: Development	45–120 minutes		Low
Causal loop diagram (CLD)	Visualise the system and understand and analyse interlinkages and feedback loops in the system	Phase 2 - Mapping the system: Development Phase 4 - Mobilising for system change: Use	>60 minutes		High
Social, Technological, Economic, Environmental, Political, Legal and Ethical (STEEPLE) factors	Identify factors that are likely to shape the future of the system or affect operation of the system	Phase 1/2 -Scoping/ Mapping the system	30–120 minutes		Low-Med

Impact / uncertainty matrix	Evaluate and prioritise driving forces or uncertainties that could significantly affect decision-making and scenario planning	Phase 2 - Mapping the system: Development Phase 3 - Scenario development: Refinement and Use	45–120 minutes	Builds upon STEEPLE	High
2x2 matrix/ 4 scenarios	Construct four plausible scenarios using the uncertain and important drivers that are likely to be crucial in the future	Phase 3 - Scenario development: Development and use	120–240 minutes	Builds upon Impact/uncertainty matrix; Stakeholder analysis; Data Walk; CLD	High
Visioning and Backcasting	Develop a clear and motivating picture of a desired future (visioning) and determine the key steps and events required to achieve future goals and strategic plans (Backcasting)	Phase 3 - Scenario development: Development Phase 4 - Mobilising system change: refinement and use	120–240 minutes	Builds upon STEEPLE, Stakeholder analysis; Data Walk; CLD; Rich picture	Med
Power analysis/ importance/ influence matrix	Evaluate degree of influence and level of interest of stakeholders/ actors in the situation	Phase 1/2 -Scoping/ mapping the system: Development Phase 4 - Mobilising system change: Use	40–120 minutes	Builds upon Stakeholder mapping	High

* Approximate time required for the exercise using participatory approach (in minutes). Timing subject to change based on the number and type of participants and the complexity of the system.

2.2 Step-by step guide to applying the Systematic Participatory Foresight tools

Delphi Method

The Delphi method is a technique for facilitating group communication on complex issues. It involves experts participating in multiple rounds of surveys to achieve a consensus. The process begins with a facilitator formulating questions about the future based on the context, and participants respond by ranking or providing comments. Facilitators utilise the feedback from participants to refine the questions and continue the process until a consensus is reached. Participants can contribute their views without in-person meetings ([Chuenjitwongsa, D. S., 2017; UNDP, 2018; 30](#)).



Use: It is used to gather expert opinions and achieve consensus on complex issues through a structured, iterative process of questionnaires and feedback



Participants:
15–30



Time: 1–3 weeks depending on participants' response time (when done electronically; e-Delphi)



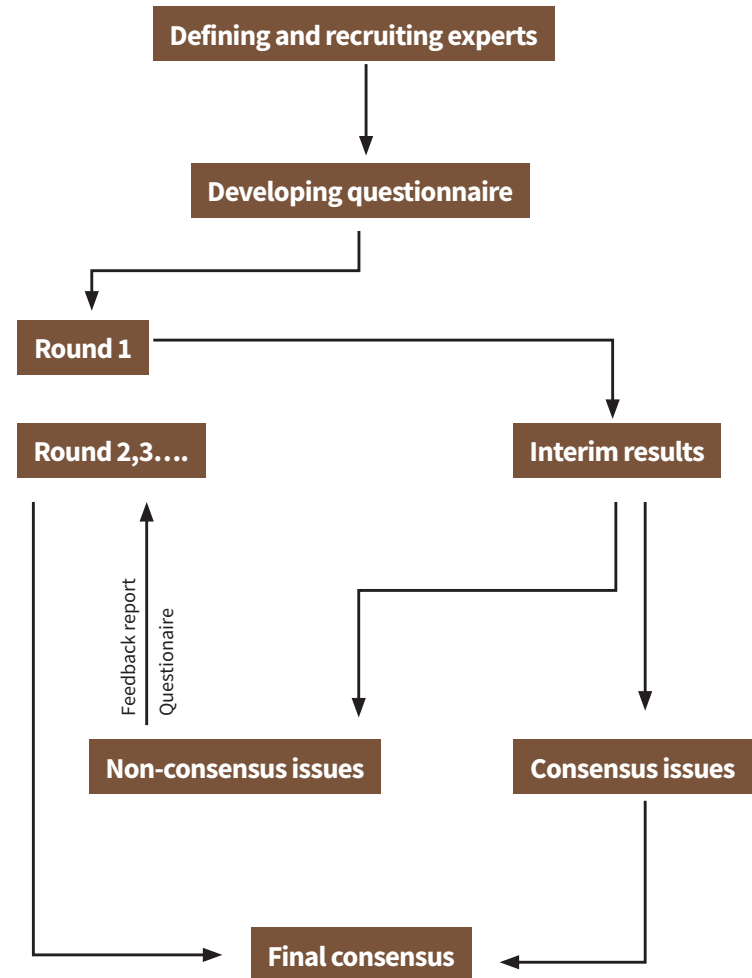
Pre-information required: Review of relevant and up-to-date literature on the topic

Steps

- Identify and recruit experts in the field of interest or on the issue that is to be solved.
- **Round one:** Distribute an open-ended questionnaire (qualitative) to all experts, who independently provide insights, predictions, or suggestions related to the study's objectives. Alternatively, ask participants to rate concepts (quantitative) that are pre-determined by the researcher/facilitator from a comprehensive literature review.
- Summarise the responses providing interim results that reveal areas of consensus and disagreement.
- Analyse qualitative feedback alongside descriptive statistics (like mean and median) to represent group opinions. Use inferential statistics (such as non-parametric tests) to identify relationships between factors and use thematic analysis to understand reasons for consensus or disagreement.

- **Defining consensus:** The required level of consensus can range from 51% to 80% and is based on the study's objectives. This level is determined by the mean or median, which helps set the agreement threshold. The acceptable level of agreement is also influenced by the standard deviation (SD), with a value of 1.0 generally being acceptable for a Delphi study (Robinson, 1991). However, the specific statistics used depend on the rating scale (ordinal or interval) and its number of points.
- **Round two:** Develop a second set of questions based on the first round's responses maintaining expert anonymity to promote candid feedback. Experts complete this updated questionnaire, potentially adjusting their opinions after reviewing the summary report from the first round.
- Analyse these responses for a summary report that again highlights areas of consensus and disagreement.
- Continue subsequent rounds until an adequate level of consensus is reached, no new consensus issues arise, or the response rate falls below a satisfactory level. The final consensus will include issues on which the experts agree (consensus) and those that remain disputed (non-consensus).
- Analyse the results and use it for decision-making, forecasting, or any other purpose defined in the study's objectives.

Note: To ensure rigour, it is recommended that the response rate for each Delphi round should be at least 70% (Kilroy and Driscoll, 2006). No subsequent rounds should be launched if the response rate of the previous round is low.



Source: [Chuenjiywongsa \(2017\)](#)

Rich picture

The rich picture tool is used to illustrate and highlight the scenarios developed during the process. It will encompass a wide range of linkages, insights, relationships, problems, opportunities depicting possible present scenarios and indicating possible alternative future scenarios. These scenarios may extend beyond current trends, and it is crucial to verify that they are convincing, coherent, and plausible. In case of multiple scenarios, it is important to ensure that they do not intersect or correlate with one another ([Foresight4Food, 2025](#); [UNDP, 2018; 32](#)).



Use: To understand the main elements, relationships, and complexities of a situation.



Participants:
5–8



Time:
45–150 minutes



Pre-information required: Basic understanding of the situation/ case.

Steps

- Start drawing the current situation without any discussion. Explain as you draw. The illustration can use symbols, drawings and arrows to depict the current situation. Try to limit use of words. The drawing can include both facts and subjective information.
- What to draw:
 - Actors/elements: Who are the stakeholders or actors?
 - Processes /relationships: What are the processes/ activities that are happening in the situation? How are the actors and processes related to one another and the issues?
 - Factors: What are the social, economic, environment and political factors or issues in the situation? What is the cause-and-effect linkage observed?
 - What are the main challenges coming through?

TOOL IN ACTION

Mapping the system with rich picture

Rich picture, a visual tool, was used to map pastoralism with participants discussing and drawing out key components of the system. Questions regarding the scale and boundaries of the system for the exercise were clearly defined and the key features, players, and big changes occurring in the system were mapped out accordingly. This allowed the participants to visualise and build the context related to their system, while also giving them a holistic view by incorporating diverse perspectives.

The picture (top right) shows the group discussing and adding to the rich picture. Below it is a rich picture, mapping a typical pastoral system in the Hindu Kush Himalaya. The participants made generous use of sticky notes to add description to the existing rich picture full of detailed drawings and symbols to facilitate understanding of what the drawing represented.



Stakeholder analysis

This tool is a method to identify the stakeholders, and understand and evaluate their interest, influence, and needs. It also helps to understand the key area of intervention, individuals or groups that can be affected by the decision or action. Through stakeholder analysis and engagement, participatory approaches can be designed to prioritise areas for scenario development and policy action aligned with the priorities of identified, relevant stakeholders. ([Foresight4Food, 2025](#); [Action Toolkit – Climate, Peace and Security](#))



Use: To identify key stakeholder/actors in the situation.



Participants:
5–8



Time:
45–150 minutes



Pre-information required: Understanding of stakeholders involved in the system.

Steps

- Discuss and list the stakeholders involved in a system [GESI note: Recognise and identify diverse stakeholders]
- Discuss and list their roles, concerns, interests, influence and power in the system, and how they can be engaged to achieve the desired change (in the following format):

Stakeholder	Role in system	Current concerns	Future interests	Influence and power	How to engage in pathways of change

TOOL IN ACTION

Identifying stakeholders in the system

Stakeholder analysis/mapping helped the participants identify stakeholders who affect or are affected by the system. The discussions that followed led to understanding their current roles and concerns, long-term interests, and how to engage them in the foresight approach. They also discussed what motivates the stakeholders to act, while being mindful of disproportionate impacts of changes and power dynamics at play. Some of the identified stakeholders were herders' group, and government agencies like the Department of National Parks and Wildlife Conservation, and Department of Livestock Services.

Stakeholder Group	Roles	Current Concerns	Long-term Interests	Power & Influence
Herders groups	Users & managers of rangeland	<ul style="list-style-type: none"> Availability of Resources Access to resources, markets, & services Alternative livelihood opportunities Health & breed of cattle & livestock Human-Wildlife conflict Decreasing Effective grazing area 	<ul style="list-style-type: none"> Sustainable availability of Resources Herders livelihood supportive Policies & plans Management/mitigation of climatic & Ecological challenges Transboundary cooperation on livelihood movement Increased livelihood augmentation & Income opportunities 	Low power to influence policies
Department of Forests & National Parks	Governing body of rangelands, forests, & National Parks	<ul style="list-style-type: none"> Conservation of resources Adequate financial resources & technical capacity Not enough support from local community & resource users 	<ul style="list-style-type: none"> Sustainable conservation of resources Improved revenue generation from rangeland landscapes Improved collaboration with other governmental, non-govt & local community 	High power to influence policies
Department for Livestocks	Ensuring health & Quality of Livestocks	<ul style="list-style-type: none"> Deteriorating health & quality of livestock breed Emergence of livestock diseases Data gap on multiple areas Lack of enough financial & technical capacity Declining productivity of livestock Lack of cooperation with Dept. of forest & DNPWC 	<ul style="list-style-type: none"> Introducing Improved Breeds & Establishment of breeding centers Quality research & strengthen Institutional & Technical capacity Improved coordination with other relevant Ministers & Departments 	

Importance/ influence matrix

This tool assesses the stakeholder’s power to impact relevant issues as well as their level of engagement. The process helping to identify potential stakeholders who might be overlooked. ([Foresight4Food, 2025](#); [Action Toolkit – Climate, Peace and Security](#))



Use: To capture the degree of influence and level of interest of stakeholders/actors in the situation



Participants:
5–8



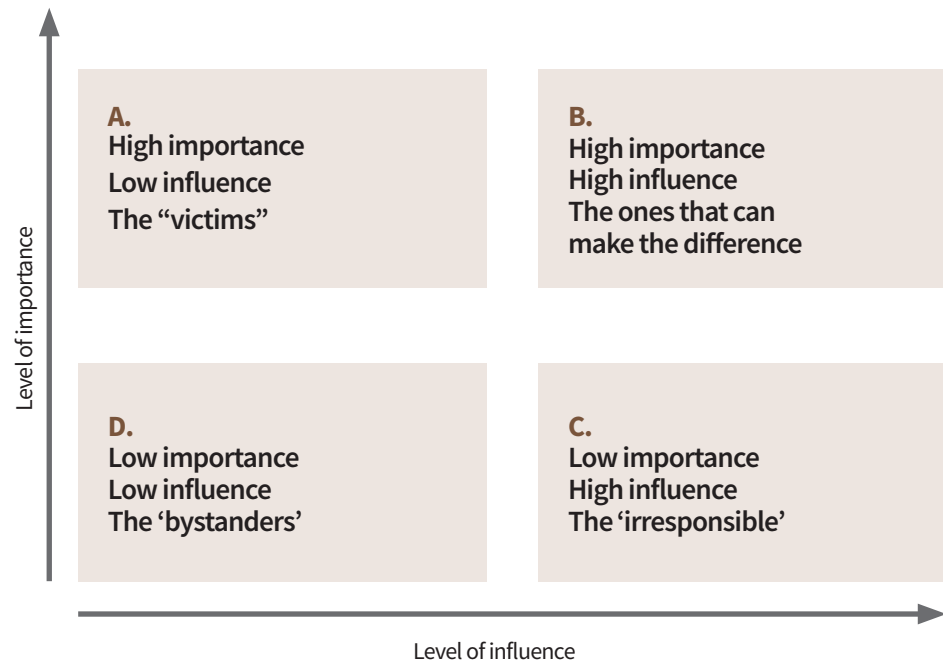
Time:
45–150 minutes



Pre-information required:
Understanding the role of stakeholders involved in the system. Stakeholder analysis can build information for the importance/influence matrix.

Steps

- Discuss and list the stakeholders involved in a system
- Based on understanding of their roles, interests, influence, and power in the system, categorise them using the following format:



Source: APMAS Knowledge Network (Brouwer et al. (2019))

Data walk

Data walk is a tool to interactively engage participants (community stakeholders) and expose them to extensive amounts of information. Here, participants, in small groups, are encouraged to explore the information in a variety of media posted on the walls at various stations. This tool facilitates meaningful dialogue around findings by engaging participants in discussions within small groups, encouraging them to share their understanding, ideas, and responses. Subsequently, their reflections are consolidated through a facilitated discussion. ([Foresight4Food, 2025](#); [Murray et. al, 2016](#) ; Francek 2006; [The Annie E. Casey Foundation](#)).



Use: To expose participants to extensive amounts of information to ensure robust analysis and understanding of the situation



Participants:
2-4



Time: 45–150 minutes (subject to number of data stations and participants)



Pre-information required: Set up “stations” where data is displayed visually and textually to tell a story for participants to interpret, discuss, and reflect upon.

Considerations for selecting data to be displayed:

- Data that is most relevant to the issue
- Range of data that best reveals the current circumstance
- Focus on a few interesting and pertinent data points on priority issues rather than an exhaustive data profile of the community
- Since some community data may be difficult to assess in isolation, include global, regional, national, or sub-national data as benchmarks to help provide context and perspective
- Uses disaggregated data wherever possible to reveal disparities
- Try and balance positive with negative information

Consideration for data display layout and arrangement:

- Make the data easy to take in and understand for discussion. For complex tables and figures, highlight key points in simple text.
- Label the data displayed and indicate the source and year
- Consider language and reading levels of participants to maximize accessibility and inclusion
- Data should ideally be displayed in large charts that can be viewed from anywhere in the room
- Ensure adequate space for the data to be displayed and for people to move around the data stations easily. Data should be arranged so people have room to walk around.

Steps

- Form small groups for the data walk. Encourage people to form groups with participants they do not know well.
- The issue or the call to action must be clearly stated
- The groups go around the stations and review, discuss, and react to the data displayed
- Each group spends 6 minutes at each station. A bell can be rung to indicate time and move groups to the next station.
- Participants may carry notebook/paper and pens to note down important points and thoughts
- A data guide could be used. Potential questions for the data guide are:
 - What is the current state?*
 - What is the current state for different populations? Is everyone faring equally?*
 - What are the connections to available resources?
 - What surprised you a bout this information?
 - What is the good news, and what is the bad news?
 - What data are we missing?*

Post data walk reflection and discussion: Whole group reconvenes

- Share your understanding
- Reflect on the similarities and differences in perception, experience, and interpretation
- What implication does this hold for the future and the issue stated (including for marginalised and disadvantaged groups)?
- Synthesise the information through discussion to reach agreement on what data to use for strategies and to track progress.
- Identify the data gaps and how they can be filled.

TOOL IN ACTION

Sensitisation with data walk

Through the data walk exercise, participants engaged in the foresight process for pastoralism were made aware of the key information and trends relevant to their system of interest. The primary and secondary data and other information shared were collected during the scoping phase. Data included climatic and demographic projections, adaptation measures, information on adverse impacts of different drivers, local case studies, and so on. Participants formed groups of three and rotated among the displayed categorised data charts, allocating time to each, and engaged in peer discussions regarding their relevance and implications. At the conclusion of the exercise, participants reflected on and discussed the insights or observations that stood out to them the most.





Social, Technological, Economic, Environmental, Political, Legal and Ethical (STEEPLE) factors

STEEPLE analysis is a tool to identify the external factors that affect operation of the system (The only difference between STEEPLE and PESTLE is the inclusion of ethical factor in the former.) STEEPLE is used for examining the external macro environment the system operates in ([Foresight4Food, 2025](#); [Makos, 2024](#)).



Use: To identify key drivers likely to shape the future of the system



Participants:
4–8



Time:
30–120 minutes



Pre-information required:
Understanding of the system and important trends relevant to the system

Steps

- Identify the factors influencing the system and processes under the corresponding letter of the STEEPLE analysis template
- Determine if their influence is positive or negative
- Discuss the underlying assumptions and reasoning and validate the identified factor. Recognise how different groups have different perspective and assumptions.

TOOL IN ACTION

Understanding system drivers with STEEPLE

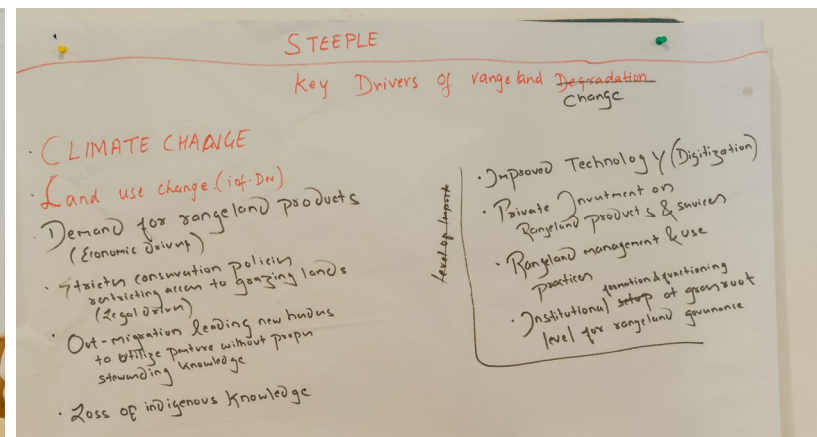
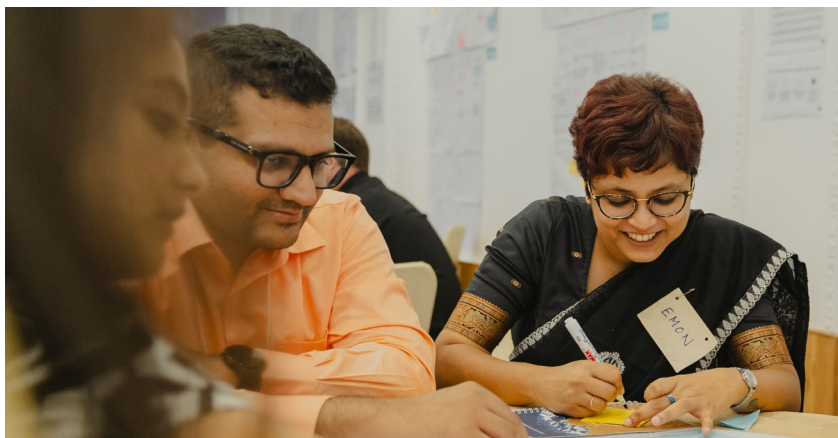
After clarity was achieved regarding the boundaries and scale of the system, the pastoralism system group identified key drivers of change in their system using the STEEPLE tool.

Multiple drivers were identified under each category (Social, Technological, Economic, Environmental, Political, Legal, and Ethical), drawn from the diverse expertise and perspectives of the participants.

Through collective discussion, the group identified critical drivers from the list generated reflecting on its past, present, and potential future impacts on the system and on diverse actors within the system. Climate and land use change were collectively singled out as the most impactful drivers of change for the pastoralism system.

STEEPLE analysis template

S	T	E	E	P	L	E
Social	Technological	Economical	Environmental	Political	Legal	Ethical
<ul style="list-style-type: none"> • Rapid population growth and urban crowding • Cultural and language barriers affecting integration • Gender-specific migration dynamics • Disruption of traditional community network • Social stigma towards displaced populations 	<ul style="list-style-type: none"> • Mobile phones ease remittances and communication • Lack of digital access limits migrant access to services • Limited tech-based data systems to track and support migrants • Use of surveillance and biometrics at borders 	<ul style="list-style-type: none"> • Rural poverty and unemployment • Remittances as a key income source • Job insecurity and exploitation in informal sectors • Urban-rural economic disparity 	<ul style="list-style-type: none"> • Climate change-induced disasters • Migration to environmentally risky urban slums • Climate change altering traditional migration and livelihood patterns 	<ul style="list-style-type: none"> • Weak recognition of climate migrants in policy frameworks • Restrictive border controls and refugee policies • Political tensions affect cross-border migration • Lack of regional cooperation for migration governance 	<ul style="list-style-type: none"> • Many migrants lack formal legal status or ID documents • Labor rights often not extended to informal or migrant workers • No legal category for 'climate migrant' in most national laws • Weak enforcement of anti-trafficking laws 	<ul style="list-style-type: none"> • Exploitation and trafficking of vulnerable migrants • Involuntary or unsafe relocations post-disaster • Marginalisation of women, children, LGBTQ+ and differentially abled migrants • Equity concerns in access to aid and services post-migration



Impact /uncertainty matrix

It is a strategic tool used to evaluate and prioritise driving forces or uncertainties that could significantly affect decision-making and scenario planning. This matrix helps organisations identify critical uncertainties and assess their potential impacts on a focal issue ([Foresight4Food, 2025](#)).



Use: To identify important trends and drivers that will be critical in the future based on the level of impact and uncertainty



Participants:
6–8



Time:
45–120 minutes

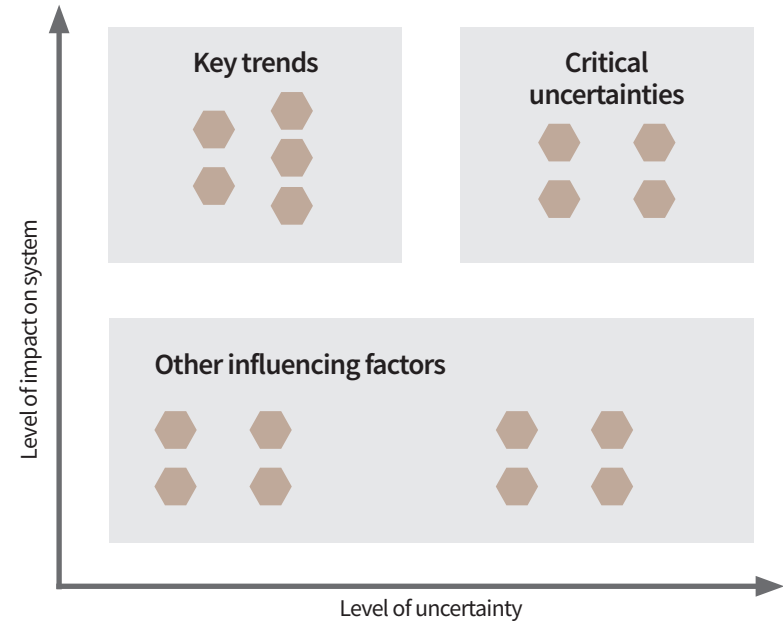


Pre-information required:
Understanding of the system and important trends relevant to it

Steps:

- Identify the factors influencing the system and processes (recommend using STEEPLE to identify the factors)
- Assess the relevant drivers and trends based on their
 - Impact: The potential level of impact of the driver/trend on processes and outcomes of the system.
 - Uncertainty: The level of unpredictability of each factor.
- Map them out in the impact/uncertainty assessment matrix (below) based on the level of impact and degree of uncertainty.
- Identify the trends that have the highest impact and highest uncertainty.
- Discuss the assumptions, challenges and uncertainties.

Note: Uncertainties are factors about which we have limited knowledge, particularly regarding how they may evolve in the future.



Source: [Foresight4Food, 2025](#)

TOOL IN ACTION

Identifying key uncertainties with Impact Uncertainty Matrix

The key drivers of change in the context of pastoralism were identified using STEEPLE. Following the identification of drivers of change, participants employed the Uncertainty Matrix to determine which drivers are likely to be significant for the system's future yet remain uncertain in terms of how they will evolve and influence outcomes. These drivers were positioned within the matrix according to their relative levels of importance and uncertainty.

Climate change was identified as the driver with highest degree of importance and uncertainty.



Causal Loop Diagram (CLD)

Causal loop diagrams are a systems thinking approach-based tool that helps us visualise the system. The CLD has three basic elements: elements, connections, and feedback loops. In the CLD, the causal links and interconnections of complex systems are mapped out to facilitate understanding of the system's behaviour ([Foresight4Food, 2025](#); [Bala et al., 2017](#); [Sterman 2002](#)).



Use: To visualise and analyse the feedback loops and causal relationships within a system to understand its dynamics and identify potential issues or interventions



Participants:
4-6



Time:
60-120 minutes



Pre-information required: Basic understanding of the system's components, interactions, and key variables

Steps:

- Identify the system or problem to be analysed, including its boundaries and key components.
- List the main variables or elements in the system that influence each other, considering both direct and indirect factors that affect the problem. When selecting variable names:
 - Use nouns and avoid verbs and action phrases. e.g. “cost” is preferred over “increasing cost”
 - Use variables that represent quantities that can vary over time. e.g. “happiness” or “sadness” rather than “state of mind”
- Establish how these variables interact by determining the cause-and-effect relationship between them, drawing connections to indicate how they affect each other and whether these relationships are positive or negative. If a link between two variables needs a lot of explanation, redefine the variables or use an intermediate term.
 - Positive causal relationships: They are depicted by an arrow with a plus (+) sign above it. In this case, cause and effect change in the same direction, i.e. when the cause increases, the effect also increases, and when the cause decreases, the effect decreases.
 - Negative causal relationships: They are depicted by an arrow with a minus (-) sign. In this case, cause and effect change in opposite directions, i.e. as the cause increases, the effect decreases, and as the cause decreases, the effect increases.
- Map out closed paths to identify feedback loops, labelling them as either reinforcing (R) or balancing (B) and using symbols to indicate the polarity of each link.
 - Reinforcing feedback loop: A change in the cause creates a similar change in the effect, which then amplifies the initial change, creating a feedback loop. The loops can involve either negative or positive causal relationships, so change can proceed in either increasing or decreasing direction.
 - Balancing feedback loop: They counterbalance, or cancel-out, an initial change and restore a system to equilibrium. Some balancing loops can also produce continuing oscillations instead of static equilibrium.

Future wheel

A future wheel method is a graphical visualisation of direct and future consequences of change or development. It is used to identify the consequences of changes that can be crucial for the sensitisation process among stakeholders ([ADB, 2020](#); [Action Toolkit – Climate, Peace and Security, Matters, 2020](#); [UNDP, 2018](#)).



Use: To explore potential future scenarios by organising thoughts around a central concept, allowing for a comprehensive analysis of possible outcomes or consequences.



Participants:
6–8



Time:
2 hours



Pre-information required: Issue context or environment surrounding the change to identifying consequences accurately

Steps:

- Define the main concept for analysis and place it at the centre of the concentric circles. This should be well-defined to clearly map possible consequences and scenarios.
- Set a timeline to map future events along a specific time horizon.
- Identify the direct (first order) consequences of the main concept. These could be political, economic, technological, environmental, social, or legislative in nature. Place them in the first circle layer.
- Build on the direct consequences to identify second order consequences and place them in the second circle layer.
- Identify different possible scenarios based on this mapping.
- At the end, each group shares the three or four outcomes or scenarios from their wheels with the other groups.



Source: Nielsen et al., 2023.

Four scenarios/ 2x2 matrix/ Quadrant analysis

This is a scenario development tool to explore four distinct scenarios based on two key drivers/uncertainties. The tool utilises a systematic approach, integrating a range of factors and inputs gathered during the scoping and workshop phases. This foresight tool facilitates a dynamic and interactive process, allowing stakeholders to visualise and comprehend the diverse pathways that the system could potentially traverse ([Birkmann et al., 2015](#); [Woodhill and Hasnain et. al, 2020](#)).



Use: To construct four plausible scenarios using uncertain and important drivers that are likely to be important in the future



Participants:
6-8



Time:
60-120
minutes



Pre-information required: List of drivers and trends that are likely to impact the system based on level of importance and uncertainty (recommended use of Impact/ uncertainty matrix to determine critical uncertainties)

Steps:

- Identify ‘critical uncertainties’: Identify the two drivers that are most impactful and uncertain.
- The two critical uncertainties are used to construct the 2x2 matrix with two extreme assumptions of the critical uncertainties (e.g. ‘more/less’, ‘weak/strong’, ‘high impact/low impact’, ‘rapid/slow’)
- Combine the two opposite extreme combinations to create four scenarios (A, B, C, D) across different timelines.
- Describe in detail what the context will look like in each scenario.
 - What are the implications of this scenario? For different groups? (below)
 - What opportunities and threats does this scenario bring? For different groups?
 - Where and in what kind of scenario would the different groups like to be? Which groups might become more or newly vulnerable in this scenario?
 - What are our strategic priorities? How should we respond to this scenario?
- Think of a captivating title to capture the essence of the scenario.

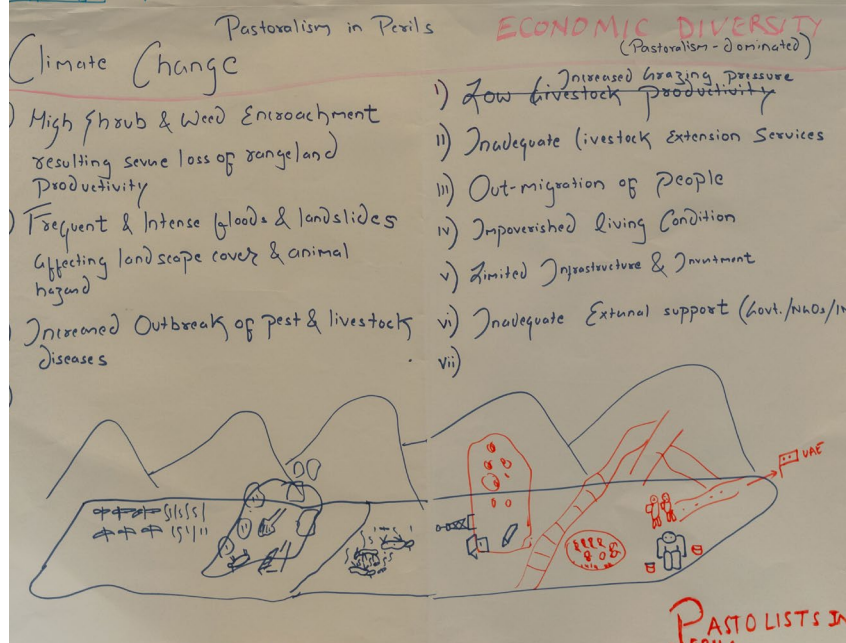
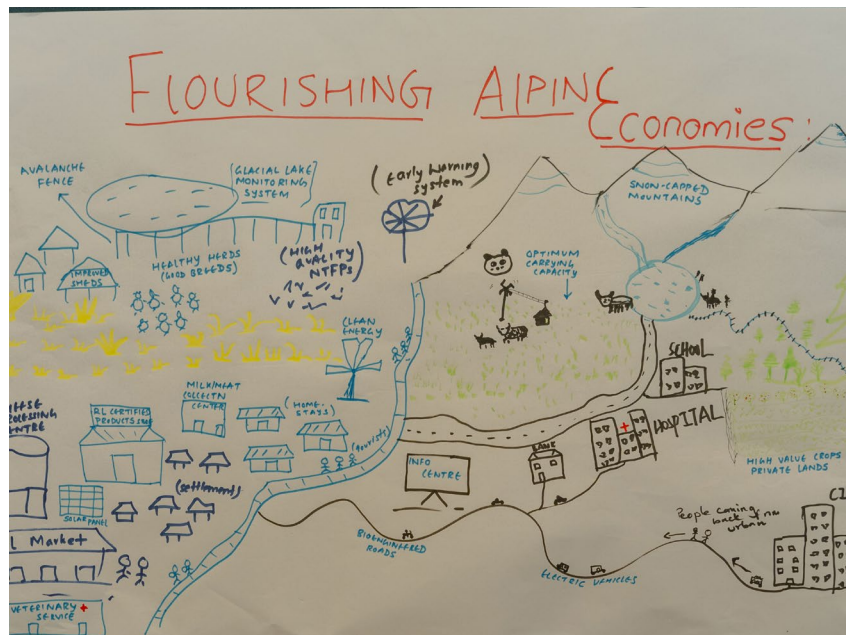
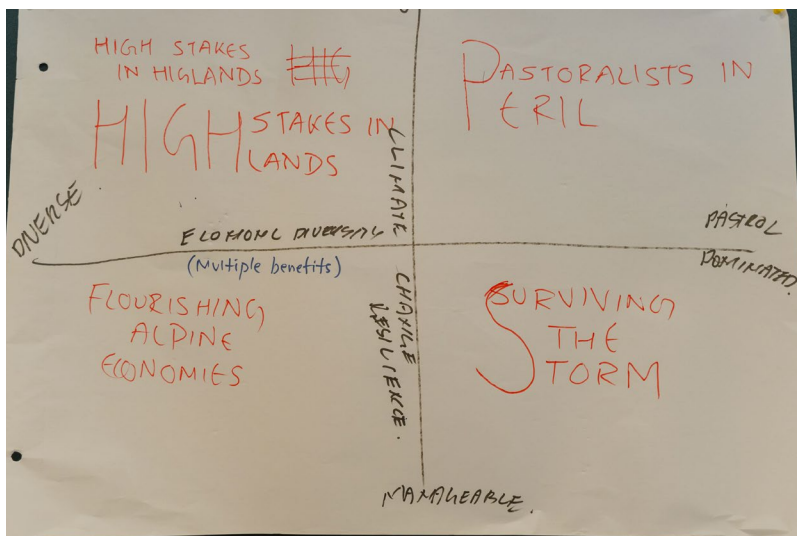
SAMPLE SCENARIO IMPLICATION TEMPLATE:

Stakeholder	Implications for stakeholders (risks/opportunities)				Overall risks and opportunities
	Scenario A	Scenario B	Scenario C	Scenario D	
X					
Y					
Z					
Society at large					

TOOL IN ACTION

Looking into possible futures with 2x2 matrix

The two critical drivers – climate change and economic diversification – identified as most significant for the future using the Impact Uncertainty Matrix were considered in developing four possible future scenarios. Storylines were developed for each scenario, highlighting key features. Participants also assigned names to each future scenario, deliberately avoiding terms such as 'best case scenario' or 'worst case scenario,' recognising that what may be perceived as favourable by one stakeholder could be unfavourable to another.



Timeline mapping

It is a tool used to visually and chronologically map key events, trends, disruptions, or decisions over time, to understand how the past has shaped the present and to explore possible future trajectories. It helps reveal relationships between events and contextual factors (social, economic, political, cultural) over time, providing insights into patterns, progress, and critical moments in a process or history (FSG, 2021). It helps in understanding an issue's context and history to support strategic planning, evaluation, and communication. It can also contribute to a comprehensive understanding of past events, providing essential contextual information prior to undertaking the Visioning and Backcasting exercise, which aims to identify and assess potential future developments.



Use: To draw on historical patterns to inform plausible futures, identifying turning points, missed opportunities or systemic shifts.



Participants:
6–8



Time:
90–120
minutes



Pre-information required: Basic knowledge or documentation about the events, activities, or milestones to be mapped.

Steps:

- Discuss and clarify what the timeline will cover.
- Collect information on known events, milestones, and other contextual information.
- Choose a timeframe for the mapping activity with a historic start point relevant to the subject.
- Arrange the events in order along a timeline axis. Include social, technological, economic, political, environmental, legal or cultural factors influencing events or breakthroughs.
- Discuss and analyse the connections, dependencies, and turning points.
- Validate the timeline and make changes as necessary.

Guiding question for discussion:

- What were the noteworthy events and why?
- How have people responded to these events/milestones?
- Are the events related or have they influenced each other?
- What is not in the timeline but should be?
- What is in the timeline that should not have been?
- What findings will be important for future work?

Theme of the timeline

(e.g. Agricultural development in Chitwan under the KRISHEE project)

Social						
Economic						
Technological						



Environmental						
Political						
Legal						
Ethical						

Source: [FSG](#)

Visioning/ Backcasting

Visioning is an initial phase in creating a robust strategy or transformative policy. It is a method to recognise, develop, and enrich a preferred future that typically projects at least 10 years into the future. This participatory process involves relevant key stakeholders to effectively design policy, plans, acts, or services by envisioning a preferred future that is jointly co-owned by stakeholders. In foresight, visioning is occasionally called “in casting” because of its in-depth exploration of a specific scenario (UNDP, 2018; 34; Pandey et al, 2021).

Backcasting is a method that helps to explore different pathways, identify actions, obstacles and opportunities to determine the steps needed to work towards a desired future (Foresight4Food, 2025). It is a strategic planning approach that begins with envisioning a desirable future and working backwards to identify the necessary steps to achieve that future. Instead of projecting forward from current conditions, it maps out the trajectory from the ideal outcome to the present, helping to determine the actions and policies needed today to achieve the envisioned future (UNDP, 2022). This method acknowledges the non-linear nature of the future and focuses on shaping the present to create the conditions for the desired future (UNDP, 2018).



Use: To create a clear and motivating picture of a desired future by engaging a group to co-create and focus on what a successful outcome looks like by promoting collaboration and alignment towards common goals.

Back casting is used to determine the key steps and events required to achieve future goals and strategic plans by exploring pathways, identifying necessary actions, and recognising potential obstacles and opportunities. It also helps visualise the strategic alliances and stakeholders needed to successfully reach the desired future.



Participants:
5–10



Time:
2–3 hours for visioning, 3–4 hours for back casting



Pre-information required: Having information on the current situation, stakeholder views, relevant trends, core values, initial goals, and past experiences is useful.

Before back casting, gather information on the desired future vision, current situation, key stakeholders, relevant trends and data, and strategic objectives.

Visioning Steps

- Establish the visioning goal, invite a diverse group of participants, and create a conducive environment for creativity.
- Ask the participants to brainstorm ideas and formulate a clear and common vision of a preferred future. The following guiding questions could be used (UNDP, 2022):
 - What are the positive changes and major accomplishments made by the visioned future?
 - Whose lives have been impacted and how?
 - What would be the most significant breakthrough? How did it happen? Who helped it happen?
 - Have there been any new or unexpected supporters who contributed to achieving the future as an organisation or as an individual?
 - What aspects of the desired future are different from and similar to the present?

- When a common vision is achieved it can be stress-tested with the following guiding questions (UNDP, 2022):
 - What are the risks of taking forward this transition?
 - What is the benefit of making this change to achieve the future vision?
 - What impact could this have on business models and service areas?
 - What internal challenges and opportunities should be considered when managing this shift

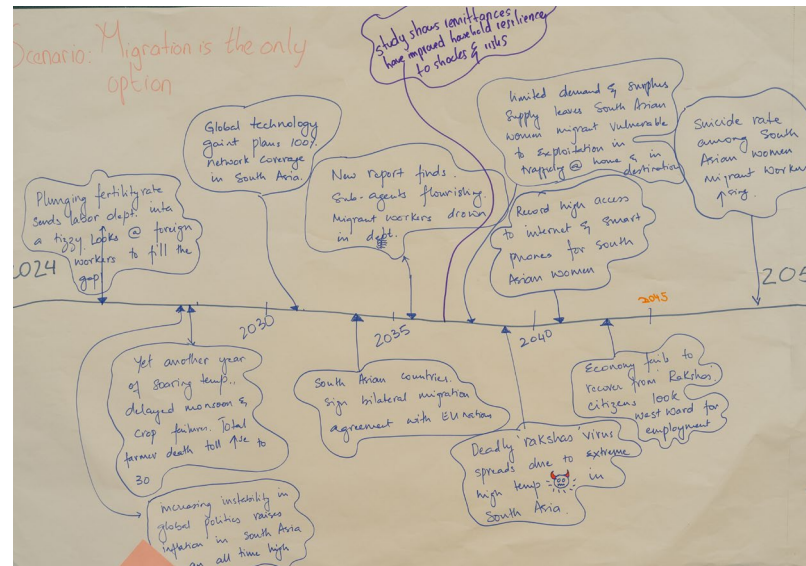
Backcasting Steps

- Establish the desired or preferred future (identified using vision exercise).
- Clearly define the current situation and how things are.
- Discuss how the desired future differs compared to the current situation.
- Discuss and build a timeline that sets out the key changes needed in sequential order to move from the present reality to the desired future.
- Identify the changes that are under our control (and not under our control).
- Discuss influence strategies for change beyond your direct control.

TOOL IN ACTION

Pathways for the desired future with back casting

The participants identified possible futures using the 2x2 matrix and developed a consensus on a future scenario that was most desirable. After articulating a detailed vision and its characteristics within the context of pastoralism, participants engaged in discussions on the pathways required to achieve the envisioned future in collaboration with relevant stakeholders. They identified the chronological sequence of events that must occur within a defined timeline to facilitate progress toward the envisioned future. They also considered potential implications of these events and changes for various stakeholder groups.



Climate analogue

Climate analogue is a process of on-ground empirical testing and visualising future scenarios. It entails locating areas where the present climate is similar to the projected climate scenarios. The analogue tool connects areas with statistically “analogous” climate in other geographic locations and/or time with historical or projected future climate conditions ([Ramírez et al., 2011](#)).

**Where can
I find sites
that**



- Are at present
- Were in the past (x year)
- Are projected to be in the future (in y year)



...analogous to my
selected site at...



- At present?
- In the past (z year)?
- In the future (projected n year)

Branching scenarios

Branching scenarios involve a sequence of decisions made by relevant stakeholders, typically answered with “yes” or “no”. This process results in a decision tree, generating different scenarios. The branching continues until a consensus is reached. However, it is crucial to avoid unnecessary complexity by limiting the creation of multiple scenarios. This approach raises awareness about the consequences of decisions and underscores the importance of considering various scenarios for preparation and planning. The key focus is on understanding the implications of decisions and establishing conditions that contribute to favourable outcomes ([UNDP, 2018](#); 39).

Three horizons framework

It is a tool used to envision and navigate future possibilities by categorising initiatives into three-time frames: Horizon 1 focuses on optimising current operations; Horizon 2 explores emerging opportunities and innovations; and Horizon 3 envisions radical, long-term changes that could transform the organisation. It helps to identify and understand the various possible futures that could arise from conflicts and challenges between the current reality and the envisioned future scenarios (Curry & Hodgson, 2008; ITCILO).

The three horizons are:

First horizon: current context and conditions; the focus is maintaining stability, and the mindset is that of a manager. “What does it look like now”?

Second horizon: actions taken in the present to resist change, to adapt to change, or to build on change; the focus is on creating and managing change, and the mindset is that of an entrepreneur. “What is changing”?

Third horizon: transformative emerging changes, ideas about possible futures, and visions of preferred futures; the focus is on transformation and disruption, and the mindset is that of a visionary. “What assumptions are challenged by those changes, and how can we respond to the resulting opportunities and risks”?

Three horizons



Use: To connect an organisation's current state to its desired future by mapping interactions between present activities and future innovations, helping to balance immediate needs with long-term growth.



Participants:
2–5



Time:
2–4 hours



Pre-information required:
Concept of three horizons and drivers and trends that are likely to impact the system.

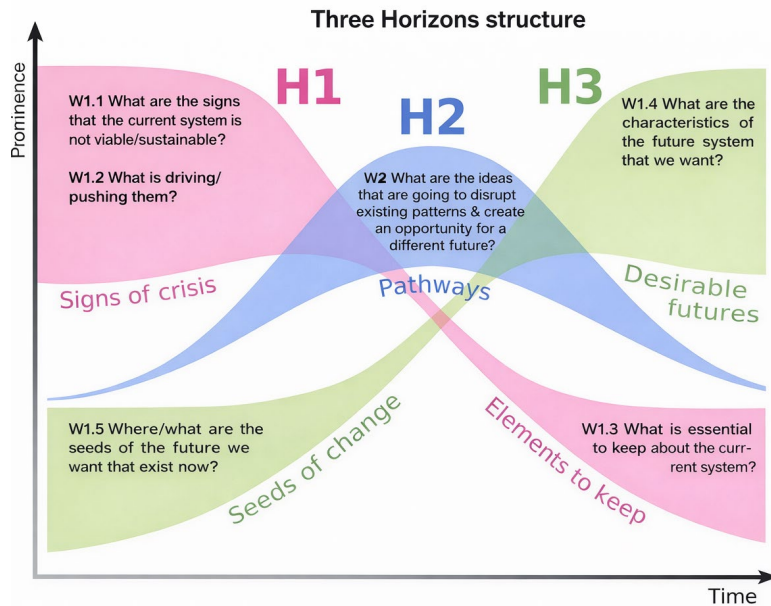
Steps:

- Start by introducing the three horizons framework, describing the horizons.
- Ask participants to work in pairs and write their responses in Post-it notes that are placed in the three horizons mural.
- Begin with Horizon 1 (current state of play).

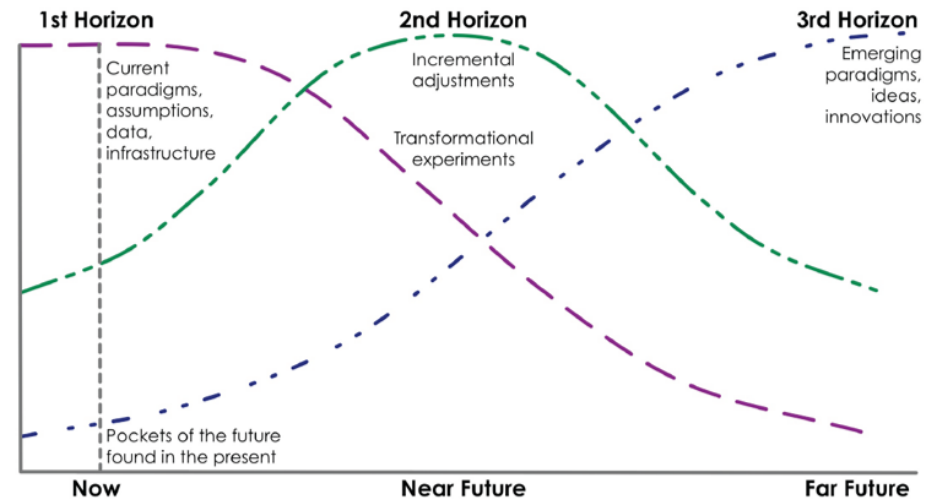
What is business as usual? What are currently the dominant patterns in the system? (20-30 mins)

- Ask participants to brainstorm as many responses as possible to the following questions:
- What are the main working assumptions about the topic of focus?
- What is being taken for granted in decision making around this topic?

- Now look at Horizon 3 to identify emerging changes that represent transformation shifts from the present (45 mins). Ask guiding questions:
 - What changes are emerging as new paradigms?
 - What new issue or invention has you worried or excited?
 - What are visionary leaders saying?
- In Horizon 2, review the assumptions in H1 and emerging issues in H3 (45 mins). Ask guiding questions:
 - Which assumptions will be most challenged by change?
 - Which are most vulnerable to these emerging changes?
- Are there any that are being strengthened? Pick one highly vulnerable assumption.
- How can you use the emerging changes to create entirely new products, services, and markets?
- After reviewing assumptions associated with H1 and H3, choose two or three emerging changes (business models, new processes, new markets) to create an interesting transition idea for the industry/sector which helps bridge H1 and H3.
- In plenary participants can discuss the key highlights from the exercise (15 mins).



Source: [Schaal et al., 2023](#)



Source: [ITCIL0](#)

Causal layered analysis

Causal layered analysis (CLA) is a tool that uses different perspectives to help explore and discuss future scenarios. It examines various dimensions-empirical, interpretive, critical, and unconscious-to provide a comprehensive view of the future and stakeholder's role in it. It allows for deep, holistic reflection about the future and how ideas are rooted to information or disinformation, power structures, interests, cultural beliefs, philosophical foundations and collective myths and narratives ([Matters, 2020](#); [Hao Wang, 2023](#)). Each perspective is considered in its own layer:

Litany: It encompasses the visible and superficial aspects of a situation, such as public opinions, media coverage, and statistical data. It reflects the immediate concerns and perceptions that are easily observable.

Systems: It explores the underlying social, economic, political, and technological factors that contribute to the issue. It focuses on the systemic structures and relationships that shape the surface-level observations identified in the litany.

Worldview: Analysis shifts to the collective beliefs, values, and norms that influence how individuals and groups perceive the issue. It examines the deeper ideologies and assumptions that inform societal narratives.

Myth/metaphor: It investigates the cultural narratives and archetypes that shape identities and worldviews. It looks at the historical and emotional dimensions that often remain unconscious, influencing how stories are told and understood.



Use: To explore and understand complex issues by examining them from multiple perspectives and transform underlying assumptions and visions of the future.



Participants:
1-8



Time:
60-90 minutes

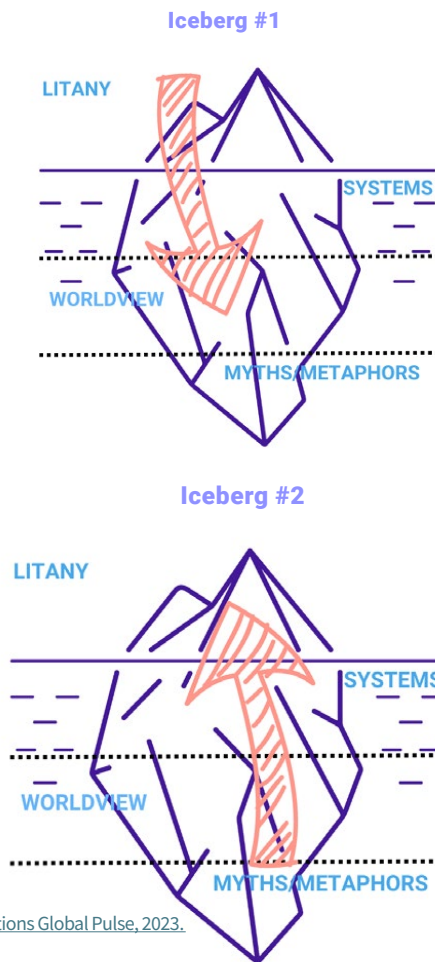


Pre-information required: Understanding of the historical background, cultural beliefs, social norms, and collective narratives and previous developments related to the topic helps in recognising patterns and underlying causes. Additionally, relevant data, trends, power structures and current understanding related to the topic can help in analysing how these elements shape and are shaped by the issue.

Steps:

- Select a topic and a +35 years (or greater) time horizon to imagine the future of the topic.
- Describe each layer of the CLA iceberg.
- Ask the participants to write the answer in Post-it notes for each layer. Guiding questions for each layer (in sequence) for the first CLA iceberg (iceberg #1) are:
 - **Litany:** What do people of this future say about this topic? What indicators are discussed? What would they read in the news?
 - **Systems:** What systems produce the key events and conditions of this future? What are relationships like among various actors?
 - **Worldview:** What is the underlying philosophy? What are the dominant values? What is valorised or dismissed?
 - **Myths/metaphor:** What myth, story, figure of speech, song lyric, or saying conveys the complexity of what happens in this future?

- Ask the participants to start with a new iceberg (iceberg #2), this time starting from the bottom: myths/metaphor. Ask them to identify a myth or metaphor that best supports the concept of intergenerational equity for their topic and time horizon.
- Write the chosen myth/metaphor on the myth/metaphor area of iceberg #2 and move upwards to the top layer.
- Participants then reflect on the two icebergs to analyse what changed in the second iceberg. Guiding question: What do the

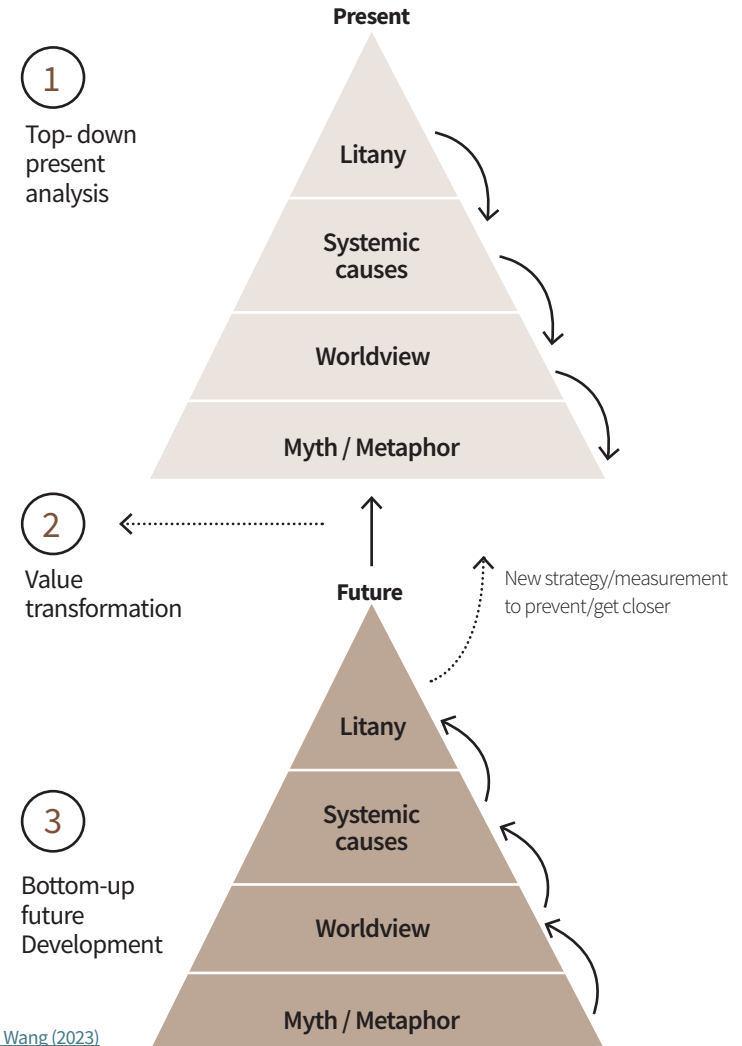


Source: [United Nations Global Pulse, 2023](#).

two icebergs help us realise about intergenerational equity and your work area?

- Participants share their realisations/insights.

What happens if we reshape myths and deeper stories?



Source: [Hao Wang \(2023\)](#)

CATWOE

It is a structured problem-solving framework that is used for defining and analysing stakeholder perspectives in complex situations. By capturing diverse viewpoints, CATWOE enhances stakeholder management, clarifies problems, and promotes effective communication and decision-making in situations with conflicting interests. It serves as a checklist to first identify the problem and then find solutions by considering six key components ([Augustsson, 2019](#)):

Customer: They are the beneficiaries or victims directly impacted by the system being analysed and with whom the team/organisation would work directly with.

Actors: They are the stakeholders or stakeholder groups involved in executing the transformation and enabling the business to function.

Transformation: It is the core of the CATWOE analysis and includes the action items of the programme. It is the process that converts inputs into outputs within the system. It should be defined by a single process.

Worldview: It summarises stakeholders' beliefs about the organisation, including its purpose and goals. Exploring these perspectives reveals the underlying assumptions that inform stakeholders' views on the importance of the transformation.

Owner: The individuals or groups who own the system and have the authority to instigate change or even closure; they are responsible for the proposed intervention.

Environment: All organisations operate within environmental constraints, such as policies, procedures, and rules. While the programme is expected to succeed, there are potential barriers that could hinder the intervention's success.



Use: To enhance understanding of how stakeholders interact with a system and are impacted by proposed interventions. It helps identify key stakeholders, their perspectives, and the leaders who will manage the change.



Participants:
7–8



Time:
2–3 hours



Pre-information required:
Understanding of the issue being addressed and the stakeholders that influence or are influenced by the issue.

Steps:

- Identify the elements of the system under the corresponding letter of the CATWOE analysis. The following guiding questions can be used for each category:

Customers

- Who is on the receiving end?
- What challenges are they currently facing?
- How are they likely to respond to the proposed solutions?

Actors

- Who will implement the solutions?
- What effect will this have on them?
- How might they respond to the changes?

Transformation

- What is the process for converting inputs into outputs?
- What are the inputs, and where do they originate?
- What are the outputs, and where are they directed?
- What are all the intermediary steps involved?

Worldview

- What is the broader context surrounding this situation?
- What is the fundamental issue you are addressing?
- What are the potential wider implications of any proposed solution?

Owner

- Who are the true owners or stakeholders of the process or situation you are looking to change?
- Are they able to assist you or hinder your efforts?
- What factors might lead them to obstruct your progress?
- What circumstances would encourage them to support your initiative?

Environment

- What are the overarching constraints influencing the situation and your ideas?
 - What ethical boundaries, legal requirements, financial limitations, and resource restrictions are present?
 - How might these constraints impact your proposed solution, and what strategies can you use to navigate them?
- Discuss the reasoning and validate the identified elements.
 - Recognise how different groups have different perspective and assumptions.



Trade-off and synergy analysis

Trade-off analysis examines how gains in one desired outcome may require sacrificing others, while synergy analysis identifies positive relationships where multiple outcomes improve together, helping decision-makers balance or leverage these effects in foresight and strategic planning (Hetemäki et al., 2024). Trade-off analysis identifies conflicts between objectives so that policies and investments can be better balanced. Synergy analysis helps identify strategies or investments that can simultaneously advance multiple goals, enhancing the overall system (Foresight4Food, 2025).



Use: To understand how different goals or outcomes interact when planning.



Participants:
6–8



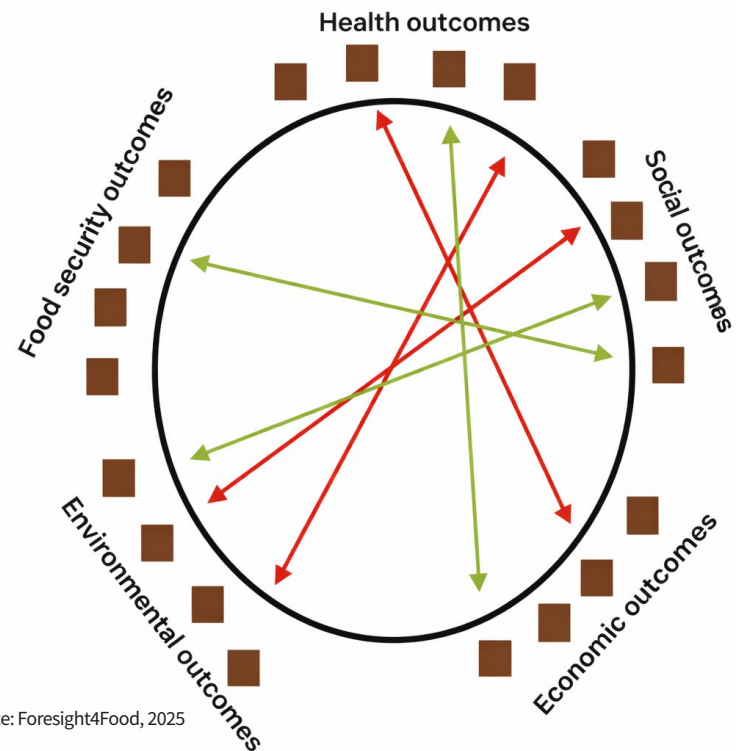
Time:
30–60 minutes



Pre-information required: Basic understanding of the system and desired outcomes

Steps:

- Discuss the desired outcomes of the system of interest and write them down on Post-its.
- Stick the Post-it notes around a big circle.
- The Post-its can be categorised under different types of outcomes such as social, economic, environmental, health, political, etc.
- Draw red lines between outcomes that have a trade-off.
- Draw green lines between outcomes with possible synergies.



Source: Foresight4Food, 2025

Problem tree

It is a participatory tool used to map out the cause-and-effect relationships surrounding a central problem. It visually represents the problem as a tree where the trunk is the focal problem, the roots are its causes, and the branches are its effects ([Wageningen University & Research, 2022](#)). It helps to break down complex problems into manageable parts, clarifies the hierarchy of cause and effect, and provides a comprehensive overview of the situation to guide problem-solving and planning. This helps identify leverage points for intervention.



Use: To undertake structural analysis of the causes and effects of an issue or problem that leads to clear prioritisation of factors and helps focus objectives.



Participants:
6–8



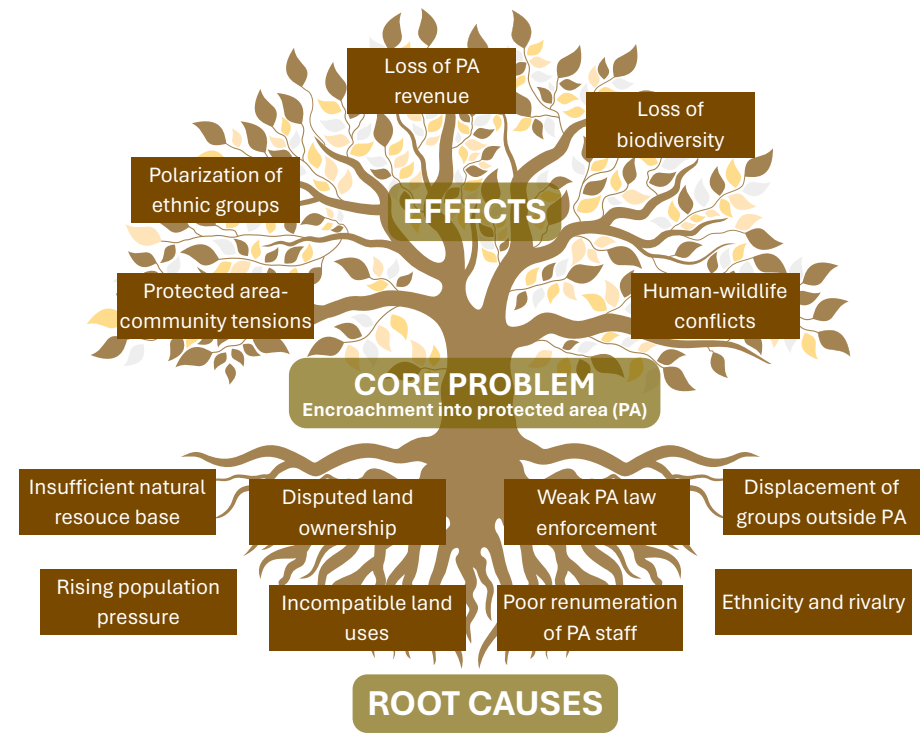
Time:
90–120
minutes



Pre-information required:
Existing knowledge or data about the problem area.

Steps:

- Discuss and decide on a broad focal problem or issue to analyse. Write it at the centre of the chart as the ‘tree’s trunk’.
- Identify the causes of the focal problem (roots) and its consequences (branches) and write them on Post-it notes or cards.
- Arrange the Post-it notes or cards in a cause-and-effect logic, where causes are placed below and effects above, in sub-dividing roots and branches.
- Check the logic and completeness of the cause-effect relationships and refine as needed. Discussion questions can include:
 - What are the social, economic, political, legal, environmental, and ethical dimensions of the problem to be considered?
 - What is causing the problem/challenge? What can be controlled or influenced?
 - Are these identified causes sufficient to explain why the problem occurs?
 - What are the most significant causes and serious consequences?
 - Which are the easiest and most difficult to address? What are the potential solutions?



Source: Irénées. (n.d.). (International Institute for Sustainable Development)

The background of the slide is a photograph of a mountainous landscape. In the foreground, there is a grassy field with several small tents or huts. In the middle ground, a small village with several buildings is visible. In the background, there are large, rugged mountains under a clear sky. A vertical yellow bar is positioned on the left side of the slide, partially overlapping the text.

SECTION 3

Model for planning systematic participatory foresight workshops

CONSULTATIVE WORKSHOP 1

Understanding and mapping the system of interest

Time	Session topic	Methodology
Objectives: Understand and map the system		
Day 1		
30 minutes	Opening session	
<ul style="list-style-type: none"> • Welcome, overview of objectives, collect expectations • Explain the agenda and set the stage for intensive consultations • Introduction of participants and ice breakers to make them comfortable 		
MODULE I: SENSITISATION ON KEY CONCEPTS AND HIGHLIGHTING INFORMATION		
Objective: Enhance conceptual clarity on foresight and the system of interest		
60 minutes	Session 1: Conceptual clarity on foresight <ul style="list-style-type: none"> • What is foresight • Defining key foresight terms • Why foresight • How to foresight • Gender, Equality and Social Inclusion (GESI) in foresight • Q&A and discussion 	Presentation and discussion
75 minutes	Session 2: Exposure to key information and trends <ul style="list-style-type: none"> • Information sharing • Q&A and discussion 	Presentation and discussion <ul style="list-style-type: none"> • Data (gallery) walk
MODULE II: MAPPING THE SYSTEM		
Objectives: Identification and mapping of the system components, processes, interlinkages, feedback, and drivers of change		
120 minutes	Session 3: Participatory visualization of the system <ul style="list-style-type: none"> • Introduction to mapping the system step of foresight • Overview: System mapping tools and guidelines for system mapping • Groupwork: Participatory system mapping 	Groupwork and discussion <ul style="list-style-type: none"> • Rich picture • CLD
45 minutes	Session 3 (continued) <ul style="list-style-type: none"> • Presentation • Q&A, reflection and discussion 	Presentation and discussion

Time	Session topic	Methodology
Day 2		
15 minutes	Recap of Day 1	
105 minutes	Session 4: Identifying drivers of change <ul style="list-style-type: none"> • Overview: Trends and drivers concepts, mapping tools and guidelines • Groupwork: Identifying drivers of change • Presentation • Q&A, reflection and discussion 	Group work, presentation and discussion <ul style="list-style-type: none"> • STEEPLE
105 minutes	Session 5: Identifying key drivers of change and critical uncertainties (continued) <ul style="list-style-type: none"> • Overview: Identifying key drivers and uncertainties and trend trajectory - tools and guidelines • Groupwork: Identifying and prioritising key drivers of change • Presentation • Q&A, reflection and discussion 	Group work, presentation and discussion <ul style="list-style-type: none"> • Impact/ uncertainty matrix
60 minutes	Session 6: Stakeholder mapping <ul style="list-style-type: none"> • Overview: Stakeholder mapping- tools and guidelines • Groupwork: Participatory stakeholder mapping 	Groupwork and discussion <ul style="list-style-type: none"> • Stakeholder analysis
60 minutes	Session 6: Stakeholder analysis <ul style="list-style-type: none"> • Overview: Stakeholder analysis - tools and guidelines • Groupwork: Analysing stakeholders • Presentation • Q&A, reflection and discussion 	Groupwork, presentation and discussion <ul style="list-style-type: none"> • Importance influence matrix
15 minutes	Closing	

Participants:

- Facilitators
- Experts
- Stakeholders of the system
 - Inclusion and engagement of the vulnerable and the marginalised groups

Activities pre workshop:

- Identification of stakeholders for engagement
- Compilation of information for exposure on the topic
- Scope the event venue and ensure resources required are available and the technical equipment required are operational

Activities during workshop:

- Ice breakers to make people feel comfortable and share
- Energisers and games to maintain level of engagement
- Sufficient time for people to understand, interact, and provide inputs
- Frequent breaks for people to reflect and informally interact among themselves

- Managing diverse and contradictory perspectives without compromising on inclusion of different voices
- Allocation of participants into groups for group activities based on the context, power dynamics-hierarchy and participation level
- Key concepts and issues introduced in sequential order on logical progression linked to the process and activities
- Clear communication of the scope, objective and process of the group activity to the participants and indicate the purpose of the activity and its link to the process. Provide supporting resources as per need.

Activities post workshop:

- Synthesis for holistic understanding of the system its components and processes
- Synthesis of the stakeholders their roles, interest, concerns, influence and power
- Synthesis of the drivers of change its impact on the system and identification of key drivers and uncertainties
- Validation of the above-mentioned points

CONSULTATIVE WORKSHOP 2

Participatory scenario development

Time	Session topic	Methodology
Objectives: Participatory scenario development to understand alternative future trajectories		
Day 1		
30 minutes	Opening session	
<ul style="list-style-type: none"> • Welcome, overview of objectives, agenda • Participant introduction and remarks 		
MODULE III: PARTICIPATORY SCENARIO DEVELOPMENT		
Objective: Enhance conceptual clarity on foresight and the system of interest		
60 minutes	Session 7: Recap and highlight of Workshop 1 and setting the stage <ul style="list-style-type: none"> • Overview of the system of interest • Highlights of the key drivers of change (and its impact) and critical uncertainty identified • Introduction to participatory scenario development • Setting the boundaries 	Presentation and discussion
105 minutes	Session 8: Participatory scenario development - exploring alternative futures <ul style="list-style-type: none"> • Overview: Scenario development guidelines and tools • Groupwork: Participatory scenario development • Discussion on key future trends and assumptions • Group work sharing, discussion, and reflection 	Group work, presentation and discussion <ul style="list-style-type: none"> • Future wheel • Four scenarios • 3 horizons • Multiple scenarios
120 minutes	Session 9: Visioning desired future and pathways <ul style="list-style-type: none"> • Introduction to visioning desired future and developing pathways of change • Overview: Visioning and pathways tool and guidelines for system mapping • Groupwork: Visioning and pathway development 	Groupwork and discussion <ul style="list-style-type: none"> • Visioning and Backcasting
30 minutes	Session 9 (continued) <ul style="list-style-type: none"> • Presentation • Q&A, reflection and discussion 	Presentation and discussion
15 minutes	Closing	

Participants:

- Facilitators
- Experts
- Stakeholders of the system
 - Inclusion and engagement of vulnerable and marginalised groups

Activities pre-workshop:

- Validation of the system mapped
- Validation of the drivers of change and exploration of their impact
- General boundaries for scenario development
- Coalition of additional information to enrich and facilitate the scenario exercises
- Scope the event venue, ensure the resources required are available and technical equipment required are operational

Activities during workshop:

- Energisers and games to maintain level of engagement
- Sufficient time for people to understand, interact, and provide inputs
- Frequent breaks for people to reflect and informally interact among themselves

- Managing diverse and contradictory perspectives without compromising on inclusion of different voices
- Allocation of participants into groups for group activities based on the context, power dynamics-hierarchy and participation level.
- Key concepts and issues introduced in sequential order on logical progression linked to the process and activities
- Clear communication of the scope, objective and process of the group activity to the participants and indicate the purpose of the activity and its link to the process. Provide supporting resources as per need.

Activities post workshop:

- Synthesis of the desired visions from multiple stakeholders. Assess the plausibility of realistically achieving the desired goals and outcomes.
- Synthesis of the pathways outlined for outcome achievement.
- Validation of the above-mentioned points

CONSULTATIVE WORKSHOP 3

Pathways to mobilising for system change

Time	Session topic	Methodology
Objectives: Development of detailed strategy for system change		
Day 1		
30 minutes	Opening session	
<ul style="list-style-type: none"> • Welcome, overview of objectives, agenda • Participant introduction and remarks 		
MODULE IV: PATHWAYS TO MOBILISE FOR SYSTEM CHANGE		
Objective: Enhance conceptual clarity on Foresight and the system of interest		
60 minutes	Session 10: Recap and highlight of Workshop 2 and setting the stage <ul style="list-style-type: none"> • Overview of desired vision, outcome and pathways identified • Introduction to mobilising for system change 	Presentation and discussion
105 minutes	Session 11: Pathways of system change <ul style="list-style-type: none"> • Overview: Pathways tool and guidelines for system mapping • Groupwork: Identification of desired and required changes and the pathways to achieve change • Group work sharing, discussion, and reflection 	Group work, presentation and discussion <ul style="list-style-type: none"> • Backcasting • Timeline mapping • Six conditions of system change • Causal layer analysis • Three horizons • CATWOE • Trade-off and synergies
120 minutes	Session 11: Identifying entry points and instigators of change <ul style="list-style-type: none"> • Overview: Entry points to initiate change tools and guidelines for system mapping • Groupwork: Entry points to initiate change 	Groupwork and discussion <ul style="list-style-type: none"> • CLD • Stakeholder analysis/ Importance influence matrix • Policy review and analysis
30 minutes	Session 11 continued <ul style="list-style-type: none"> • Presentation • Q&A, reflection and discussion 	Presentation and discussion
15 minutes	Closing	

Participants:

- Facilitators
- Experts
- Stakeholders of the system
 - Inclusion and engagement of vulnerable and marginalised groups

Activities pre-workshop:

- Synthesis of the shared vision and desired outcomes and pathways of change
- Evaluate: Practicality of the desired goals, outcomes, and pathways
- Reflection: The potential impact of the pathway on stakeholders and system. The trade-off and synergies and risk and opportunities from the identified pathways. Identification of desired feasible outcomes and pathways against its influence on the stakeholders and system feedback.
- Coalition of additional information to enrich and facilitate the scenario exercises
 - Identification of feedback loops in the system.
 - Listing of relevant policies, strategies, plans and interventions
 - Stakeholder information (role, interest, concern, power and influence) for mobilisation or nudging
- Scope the event venue, ensure the resources required are available and technical equipment required are operational

Activities during workshop:

- Energisers and games to maintain level of engagement
- Sufficient time for people to understand, interact, and provide inputs
- Frequent breaks for people to reflect and informally interact among themselves
- Managing diverse and contradictory perspectives without compromising on inclusion of different voices
- Allocation of participants into groups for group activities based on the context, power dynamics hierarchy, and participation level
- Key concepts and issues introduced in sequential order on logical progression linked to the process and activities
- Clear communication of the scope, objective and process of the group activity to the participants and indicate the purpose of the activity and its link to the process. Provide supporting resources as per need.

Activities post workshop:

- Detailed outline of the pathways outlined for outcome achievement
- Identification of optimum entry points in the system with maximum impact and minimum negative feedback
- Identification of stakeholders and engagement required
- Reflect: The potential impact of the pathway on stakeholders and the system. The trade-off and synergies and risks and opportunities from the identified pathways. Strategies to counter negative feedback and plan for possible shocks.
- Development of mechanism for monitoring and tracking progress.
- Continuous engagement with the stakeholders for mobilisation.

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ICIMOD and its Regional Member Countries gratefully acknowledge the generous support of Austria, Norway, Sweden and Switzerland for core and programme funding, and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ); Foreign, Commonwealth & Development Office (FCDO), United Kingdom; Government of Australia, Department of Foreign Affairs and Trade (DFAT); International Development Research Centre (IDRC), Canada; Norwegian Agency for Development Cooperation (NORAD); Oxfam International; United Nations Environment Programme (UNEP); Asian Development Bank (ADB); Adaptation Fund; Sasakawa Peace Foundation and The Department of Foreign Affairs, Trade and Development, Canada for project funding.