



# FORESIGHT FOR FUTURE PLANNING TRAINING SERIES Toolkit



**Citation:**

Chesterman S, Neely CN. 2021. Foresight for Future Planning Training Series: Information Pack. Wageningen, the Netherlands: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Available online at: [www.ccafs.cgiar.org](http://www.ccafs.cgiar.org).

**Published by the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).**

The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) is a strategic partnership of CGIAR and Future Earth, led by the International Centre for Tropical Agriculture (CIAT). The Program is carried out with funding by CGIAR Fund Donors, Australia (ACIAR), Ireland (Irish Aid), Netherlands (Ministry of Foreign Affairs), New Zealand Ministry of Foreign Affairs and Trade; Switzerland (SDC); Thailand; The UK Government (UK Aid); USA (USAID); The European Union (EU); and with technical support from The International Fund for Agricultural Development (IFAD).

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# ACRONYMS AND ABBREVIATIONS

<b>AICCRA</b>	Accelerating Impacts of CGIAR Climate Research for Africa	<b>GHG</b>	Greenhouse Gas	<b>NGO</b>	Non-Governmental Organisation
<b>AU</b>	African Union	<b>IDA</b>	International Development Association	<b>NRM</b>	Natural Resource Management
<b>CAADP-XP4</b>	Comprehensive Africa Agriculture Development Programme ex Pillar 4 Programme	<b>IFAD</b>	International Fund for Agricultural Development	<b>Q&amp;A</b>	Question and Answer
<b>CCARDESA</b>	Centre for Coordination of Agricultural Research and Development for Southern Africa	<b>IPCC</b>	Intergovernmental Panel on Climate Change	<b>RISDP</b>	Regional Indicative Strategic Development Plan
<b>CSA</b>	Climate-Smart Agriculture	<b>M&amp;E</b>	Monitoring and Evaluation	<b>SADC</b>	Southern African Development Community
<b>DRC</b>	Democratic Republic of Congo	<b>NAMA</b>	Nationally Appropriate Mitigation Action	<b>SDG</b>	Sustainable Development Goal
<b>EU</b>	European Union	<b>NAPA</b>	National Adaptation Programme of Action	<b>UN</b>	United Nations
<b>GDP</b>	Gross Domestic Product	<b>NDC</b>	Nationally Determined Contribution	<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
		<b>NDP</b>	National Development Plan		
		<b>NFCS</b>	National Framework for Climate Services		





Photo: ©C.Shubert

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## ABOUT THE TRAINING SERIES

The Foresight for Future Planning Training Series was organised by the Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA) and supported by the Comprehensive Africa Agriculture Development Programme ex Pillar 4 (CAADP-XP4) programme funded by the European Union (EU) and administered by the International Fund for Agricultural Development (IFAD). The series was produced by foresight specialists supported by the Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) project and funded by the International Development Association (IDA) of the World Bank.

The Foresight for Future Planning Training Series is a four-part training series for applying foresight to address climate change impacts and uncertainties. The training series equips users to practically apply a range of foresight tools and methods for innovative research in development prioritisation, specifically assisting in strategic planning and policy formulation for climate-relevant transformation in agriculture and food systems.

The training series has been designed for policy makers, technical officers, advisory services, researchers and academicians from regional and national government linked to agriculture, food systems and climate change across the Southern African Development Community (SADC) region.

### The objectives of the Foresight for Future Planning Training Series are to:

- 1 Introduce the foresight method as an approach to catalyze transformational planning.
- 2 Demonstrate the practical and concrete foresight tools and methods.
- 3 Demonstrate the methods and approaches using the context of climate resilience in food systems and agriculture in the SADC region.

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Photo: ©P.Casier (CGIAR)

# STRUCTURE OF THE TOOLKIT

The toolkit is presented in four series:

## Series 1 Setting the Stage



- Introduction to Foresight
- Transformational Planning
- Climate Resilient Food Systems

## Series 2 Bringing Evidence to Bear



- Trends Analysis
- System Thinking
- Causal Analysis

## Series 3 Cultivating the Climate Resilient Future



- Developing scenarios
- Using scenarios to inform future interventions

## Series 4 Pathways to a Desired Future



- Visioning
- Backcasting
- Prioritisation and Transformative Pathways for Long-term Impacts



# THE TRAINING APPROACH

The training approach follows the process of presenting a foresight method or tool, introducing the key steps as to how and when to apply it and then demonstrating its application in the context of agricultural development and climate resilience.

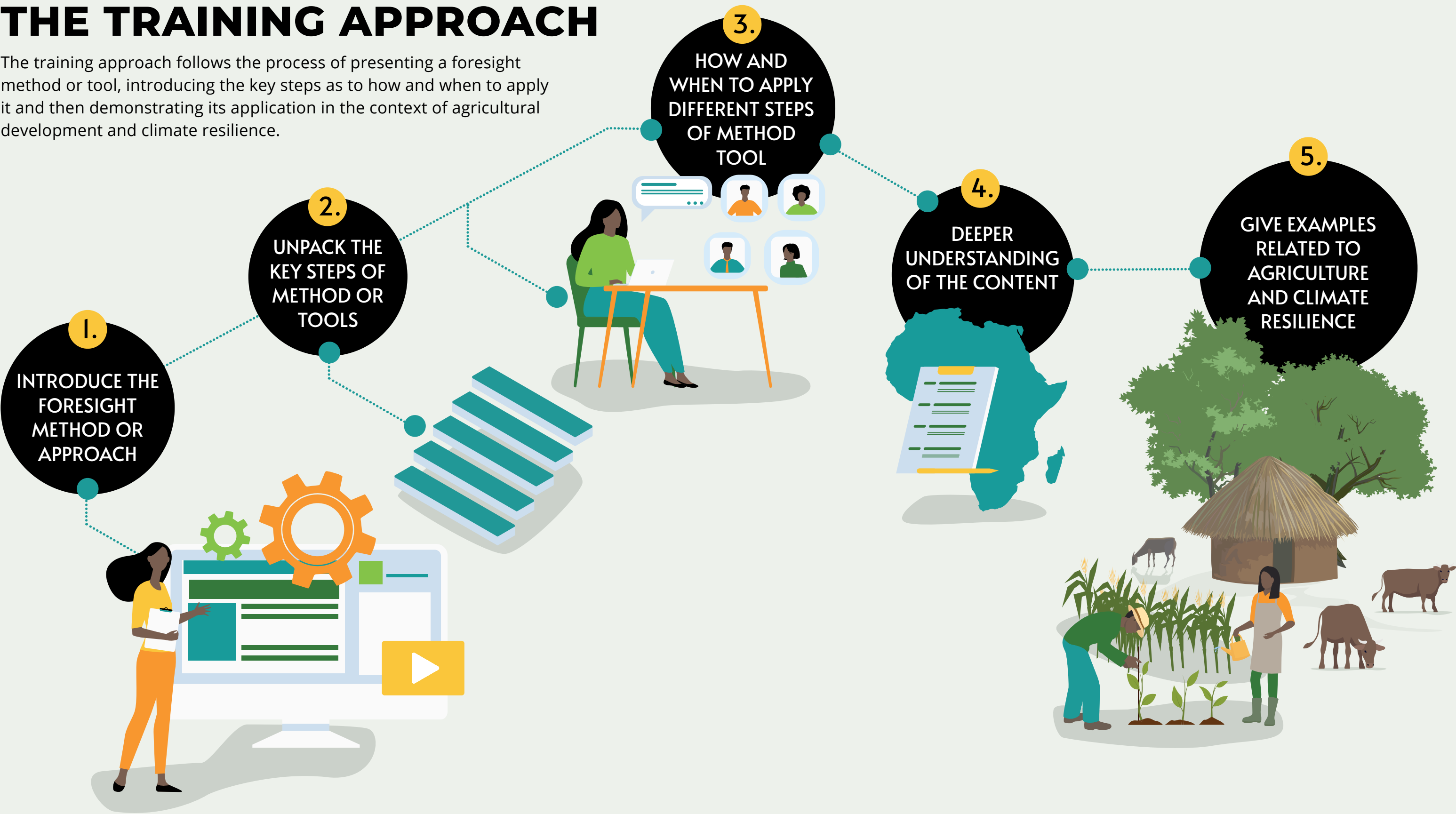
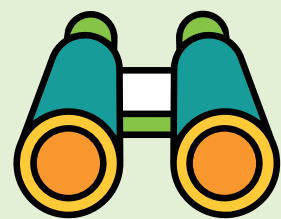






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## Series 1



# SETTING THE STAGE

The first series of the toolkit 'sets the stage' for the foresight planning process. The objectives are to:

- 1 Give an overview of climate impacts in the SADC region and why future planning is so critical.
- 2 Provide an introduction to foresight and 'future' thinking methods.
- 3 Differentiate between planning for incremental and transformational change.
- 4 Elaborate upon how foresight can lead to more transformational planning.

Setting the stage is presented as a series of topics interspersed with question and answer (Q&A) sessions and learning exercises.



## SESSION 1 OVERVIEW



**Why we need to  
plan for the future?**



**Climate-resilient  
food systems**



**Introduction to  
foresight**

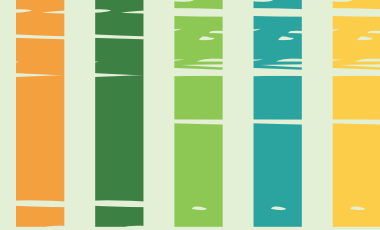


**Planning for  
transformational change**



**Q&A**





## Why we need to plan for the future

The SADC region is severely impacted by climate change. Climate change impacts are caused by climate-related stresses, which are long-term trends, or climate-related shocks which are acute events. Climate shocks are hard to predict when planning for the future and enhanced regional resilience is crucial in this regard.



**Climate-related stresses** are “long-term trends or pressures that undermine the stability of a system and increase vulnerability within it.”

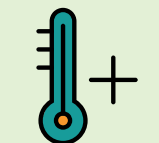
**Examples of climate-related stresses include:**



Decreased average annual rainfall



Delayed onset of the rainy season



Higher temperatures



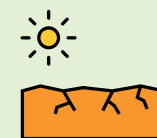
**Climate-related shocks** are “external short-term deviations from long-term trends that have substantial negative effects on people’s current state of well-being, level of assets, livelihoods, safety or their ability to withstand future shocks.”

Shocks are normally acute events that either slowly emerge e.g., droughts or rapidly emerge e.g., flooding.

**Examples of climate-related shocks include:**



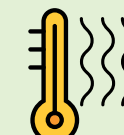
Floods



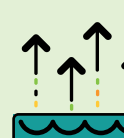
Droughts



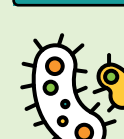
Wildfires



Heatwaves



El Niño events



Livestock or crop disease outbreak



# Series 1

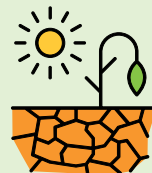
It is important to understand when planning for climate resilience that there are other interacting stressors on the system. For example, if we are sitting in a Climate Change Directorate or research program addressing climate resilience there are other integrated stressors and development priorities that need to be considered such as poverty, population growth and land degradation.

**When we are thinking about the future and starting to plan for it, it is important to use a wide lens to take into account the many linked stressors, sectors and systems.**

**Other key stressors include:**



Rural poverty



Land degradation  
and deforestation



Population  
growth



Lack of water  
access/  
infrastructure



Unequal  
distribution/  
access to natural  
resources



Gender inequality



## Q&A

**In addressing the effects of climate change, shouldn't we come up with different systems for different ecological regions?**

This can be done by incorporating planning for different agro-ecological zones, for example, by applying a biophysical lens and looking specifically at the crops, agricultural activities and social interactions within the area and plan accordingly. This is where the first step in a foresight process, the **'scoping'** stage, is so important. It delineates the boundaries of the area you want to work on and defines the timelines you want to plan within i.e. are you looking to plan ahead by 10 or 20 years when considering the climate change impacts on your agro-ecological zone? Then it is also important to consider the policy landscape and institutional structures. For example, you need to ask yourself what laws, by-laws and policies pertain to the area you want to plan within.

It is worth noting here that stakeholders are to be engaged throughout a foresight process and so in the context of a specific agro-ecological zone it would be important to include indigenous knowledge through a multi-stakeholder engagement process. When considering climate change trends and impacts indigenous knowledge is a critical evidence source.

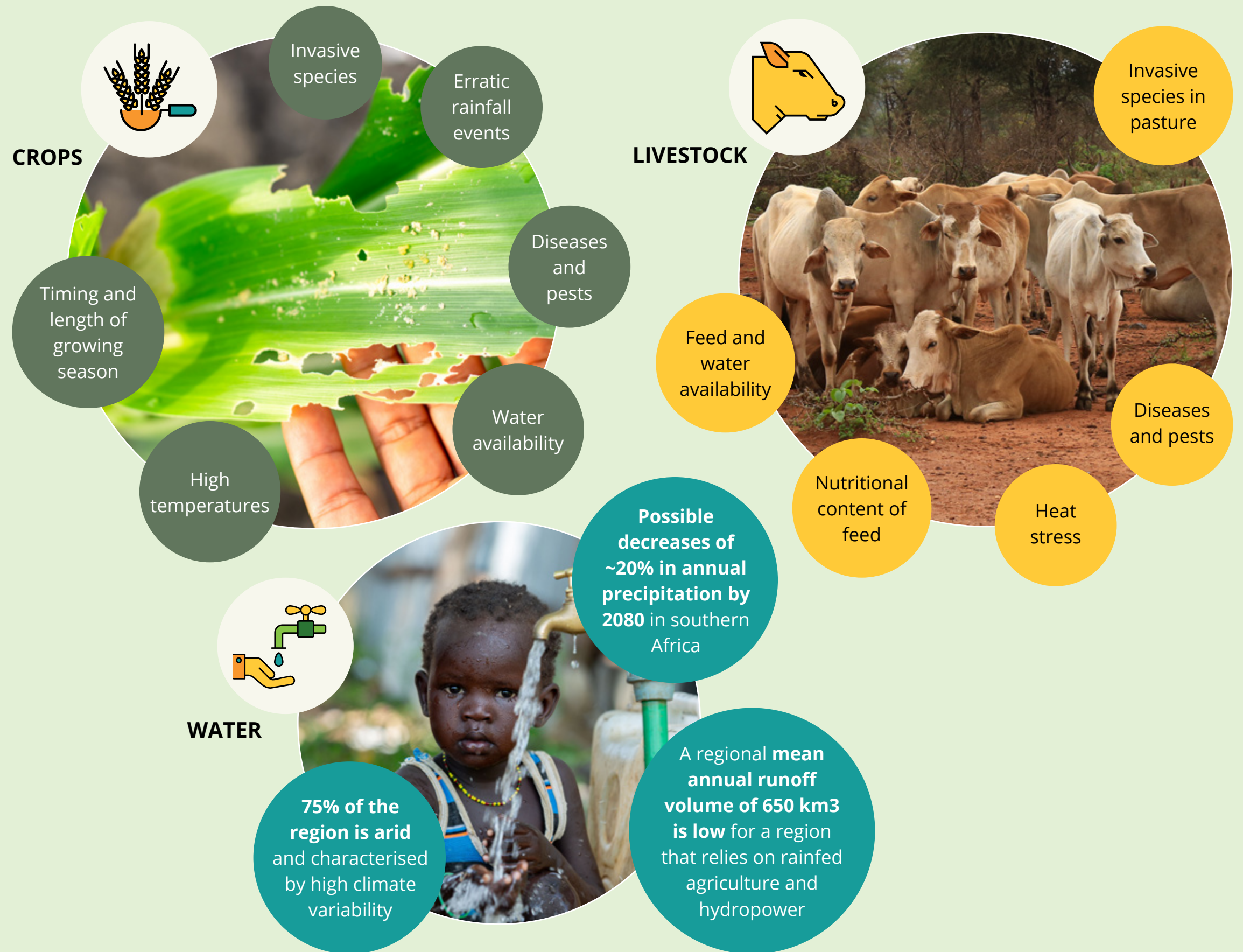


# Series 1

Climate change is impacting the region's agricultural system in numerous ways, for example, the crop and livestock production systems are affected by erratic rainfall events, changes to the timing and length of growing seasons, reduced feed and water availability, amongst others. The situation is unlikely to improve with hydrological models showing large decreases in annual precipitation and run-off in Southern Africa in the future, which will have serious implications for agricultural productivity as well as electricity generation. Furthermore, climate models are indicating an increase in extreme rainfall events and droughts in the SADC region by 2050.

**These impacts affect the region's future development pathways and are exceedingly difficult to plan for in terms of policy and development strategies.**

## HOW DOES CLIMATE CHANGE IMPACT AGRICULTURE IN SOUTHERN AFRICA?







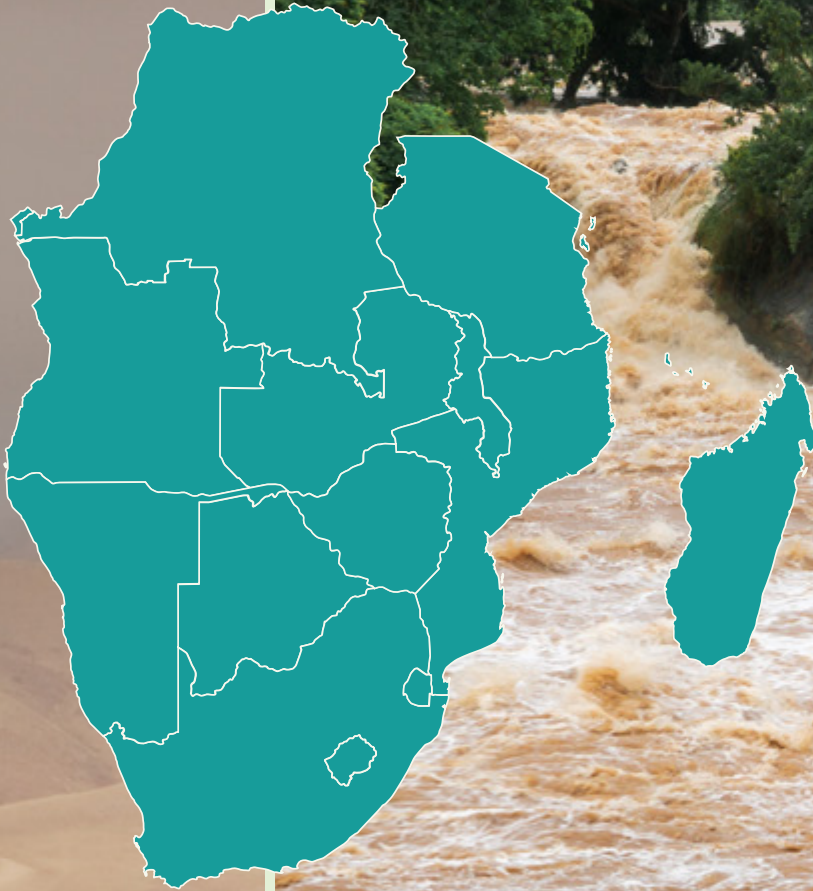
PROJECTED CLIMATE  
CHANGE IN THE SADC  
REGION

**Drought  
more  
frequent**

By mid-century, droughts will be more frequent across much of the north and west of the SADC region

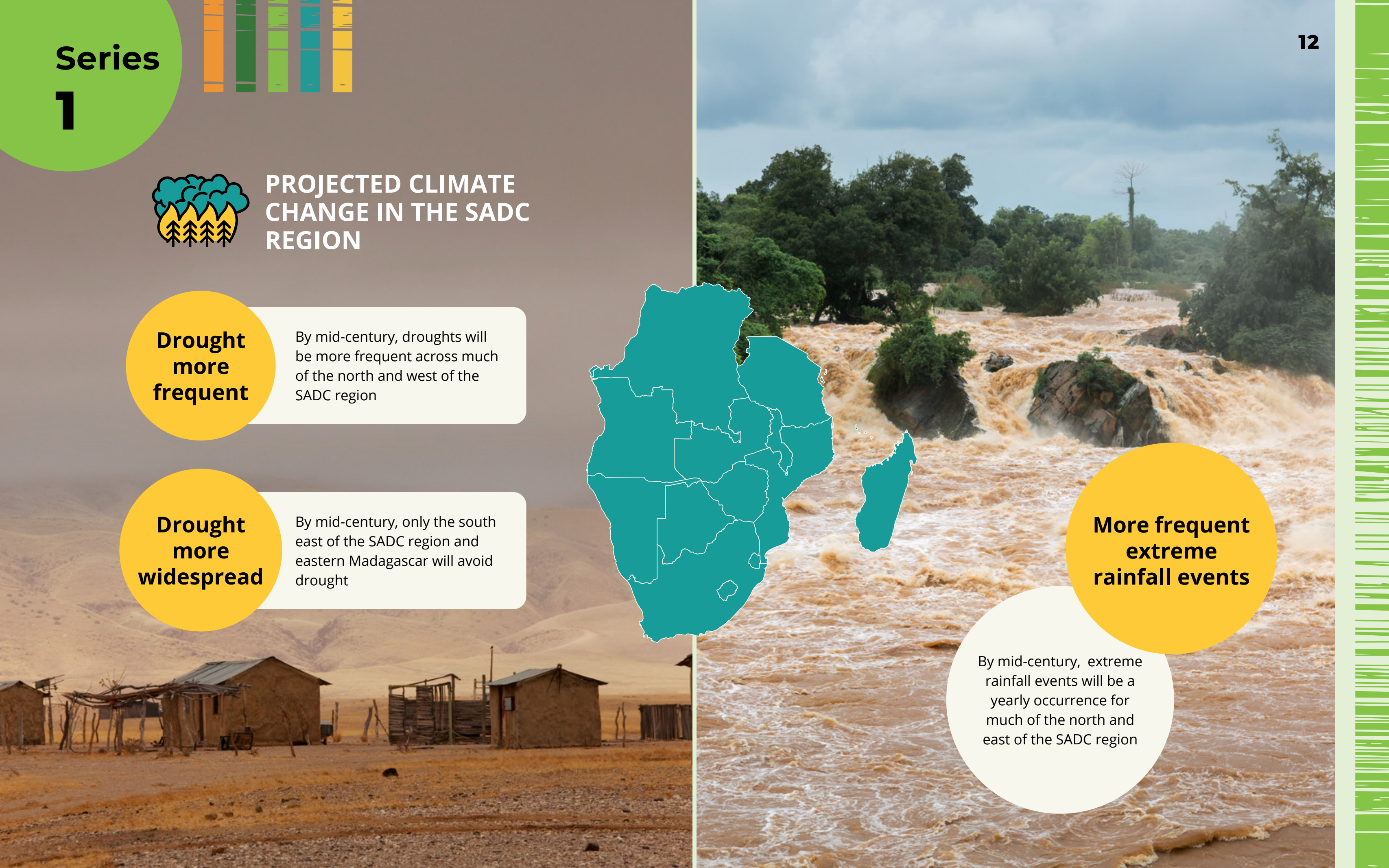
**Drought  
more  
widespread**

By mid-century, only the south east of the SADC region and eastern Madagascar will avoid drought



**More frequent  
extreme  
rainfall events**

By mid-century, extreme rainfall events will be a yearly occurrence for much of the north and east of the SADC region







## LEARNING EXERCISE

How will you be experiencing climate change in 2040? Name one personal impact.

“Erratic rainfall”

“Less physical jobs”

“Water shortages”

“There will be  
food shortages”

“Decline in  
agricultural  
productivity”

“A hotter and drier  
city and more fires”

“Frequent droughts”

“Loss of native grasslands  
to alien invasive species”

“High levels of uncertainty”

“Uncertain rainfall, a hot climate”

“Flooding”

“Outbreak of  
insect pests  
and diseases”

“Arid agriculture”

“Extreme heat waves”

“Food insecurity”



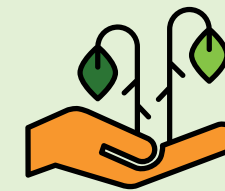


Planning for the agricultural future of the SADC region requires responding to climate change impacts but also enhancing the resilience of the system to future change and uncertainty. This will allow the agricultural system to continue to function in much

the same way, despite external stressors or shocks. Useful tools and approaches for moving towards climate resilience include the application of a climate lens, climate-smart development, climate-proofing and climate mainstreaming.

**“Climate resilience”** is the ability to cope with actual or expected climate-related stresses and shocks and keep functioning much the same way.

**“Climate lens”** is a tool or approach used to examine a strategy, policy, plan, program or regulation in light of climate change.



## Climate-compatible or climate-smart development

Development which minimises harm caused by climate impacts, while maximising the many human development opportunities and delivers benefits across all three priority areas: climate mitigation, climate adaptation and poverty eradication.

## Climate-proofing

A process that makes projects, strategies, policies and measures resilient to climate change, including climate variability, by:

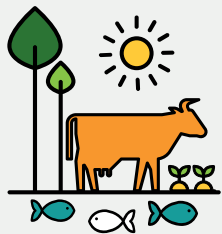
- Systematically examining projects, strategies, and policies to identify ways to minimise climate change risks and optimise adaptation, i.e., climate risk screening; and
- Integrating these ways into programming and projects, i.e., mainstreaming.

## Climate-mainstreaming

Integrating climate concerns and adaptation responses into relevant policies, plans, programs, and projects at the national, sub-national, and local scales.



A food system connects people, their food and where the food comes from, it affects and is affected by governance, economics, sustainability and health.



**Food system** – A food system is a complex web of activities involving the production, processing, transport, and consumption – connecting people to their food. Issues concerning the food system include the governance and economics of food production, its sustainability, the degree to which we waste food, how food production affects the natural environment and the impact of food on individual and population health.

Food systems are complex, comprising numerous dimensions (e.g. socio-cultural, economic, political and environmental), integrated components (e.g. health and nutrition, education, technology, climate, pollution, waste, water cycle, transport, trade, processing, storage and consumption) and levels (e.g. national level, sub-national level and community level).

The diagram illustrates a holistic view of a farming system and its interactions with various sectors and the environment. At the center is the **FARMING SYSTEM**, represented by a green circle with a cow, sun, and crops. Surrounding it are four main sectors, each with a distinct color and set of icons:

- SOCIO-CULTURAL (Orange):** Includes icons for Gender youth, Info research extensions, Social organization, Media, Health nutrition, Education, and Technology. It also features a central icon for hands shaking, representing community or social interaction.
- ECONOMIC (Yellow):** Includes icons for Import, Retail provisioning, Processing, Storage distribution, Export, Transport, Pollution/waste, Transport trade, Aggregators farmgate, Product (Livestock, Tree, Crop, Fish), and Productive inputs (Seeds, Amendment, Equipment). It also features a central icon for a bar chart, representing financial services.
- ENVIRONMENT (Green):** Includes icons for Biological diversity, Waste, Pollution, Climate, Diseases, Energy, Water cycle, and Mineral cycle. It also features a central icon for a tree, representing the natural environment.
- POLITICAL SYSTEM - ENABLING ENVIRONMENT (Dark Green):** Includes a central icon for a scale of justice, representing governance and policy.

The diagram is divided into three concentric rings, each representing a different level of interaction:

- NATIONAL LEVEL:** The outermost ring, showing the relationship between the farming system and the national context.
- SUBNATIONAL LEVEL:** The middle ring, showing the relationship between the farming system and subnational entities.
- COMMUNITY LEVEL:** The innermost ring, showing the relationship between the farming system and the local community.

Arrows indicate the flow of information, products, and resources between the farming system and the various sectors, as well as between the sectors themselves. The entire system is contained within a large circle labeled **ENABLING ENVIRONMENT**.



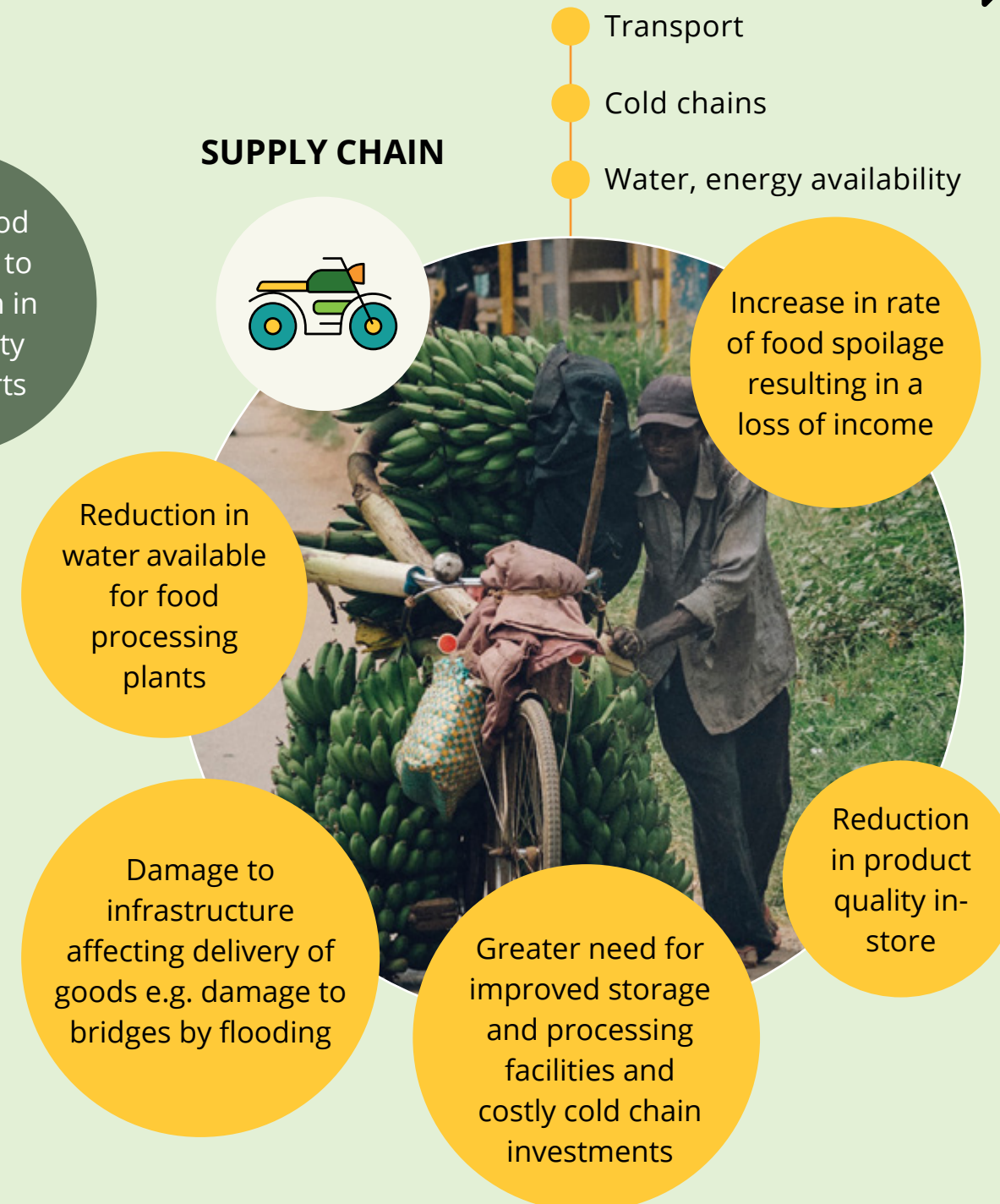
## IMPACTS OF CLIMATE CHANGE ON THE FOOD SYSTEM

Climate change impacts on the food system may manifest as health risks, poor consumer experiences, volatile food prices and increased food wastage or interruptions to the supply chain due to damaged infrastructure or water shortages restricting the productivity of processing plants.

### CONSUMPTION



### SUPPLY CHAIN

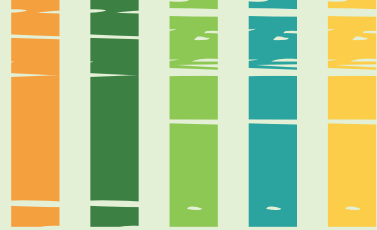


### Q&A

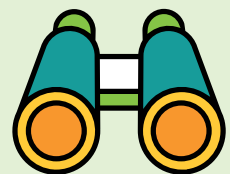
**Living in a country where people do not believe in the causes and impacts of climate change how can we prepare for it and shift the government's perspective towards zero net emissions?**

Foresight is important in helping people to understand the situation in reality. This is done by bringing in evidence such as robust data and models, sharing it with people, and encouraging their continual participation to allow for enhanced understanding and changes in perspectives and behaviour patterns. People start to understand their own ways of thinking and decision-making processes, and the foresight planning process can be used to show them a new way.





## Introduction to foresight



### What is foresight?

**Foresight** is a set of tools and methods to practically help us to move toward the future we want.

**Foresight** is the process of looking to the past and the present to envision and prepare for different futures, which then allow us to make strategic decisions today.

**Foresight** is not a prediction of **the future**, but rather a process of imagining many different possible futures.

A foresight process is guided by four questions that allow you to move from looking at past and present patterns and trends to creating a strategy or plan that addresses what might happen in the future – a plan or strategy that is ‘future-proofed’. This entails different approaches and tools such as scenario planning and a change in mindset to consider different possible futures.

Foresight practitioners need to develop skill sets such as identifying drivers that are causing change within the system with which they have defined and then determining what needs to be done to move towards their preferred future.

**It is inspiring to think that the future is still in the making and that foresight provides a set of tools that can be used to actively influence or create the future you want to move towards.**

**There are four guiding questions to foresight:**

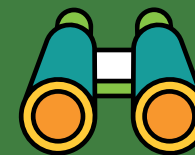
**WHAT SEEMS TO BE HAPPENING?**

**WHAT’S REALLY HAPPENING?**

**WHAT MIGHT HAPPEN?**

**WHAT DO WE NEED TO DO?**

## KEY TERMS



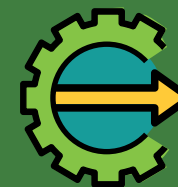
**Foresight:** structured tools, methods and thinking styles to enable the capacity to consider multiple futures and plan for them.



**Forecasting:** an estimate / best guess of what might happen in the future but not a definitive prediction.



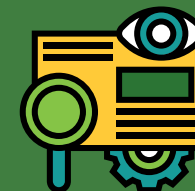
**Futures thinking:** - describes the practice of thinking about the future in a structured way, and the methods and approaches that are used to do so.



**Drivers:** factors that cause change, thereby affecting or shaping the future.



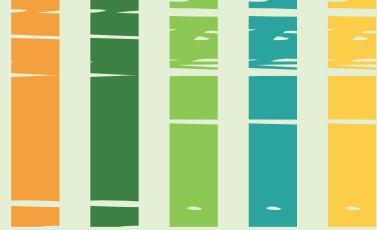
**Strategic foresight:** the combination of foresight and strategic management.



**Futuring:** the act, art, or science of identifying and evaluating possible future events.



**Scenario planning:** a technique of strategic planning that relies on tools and technologies for managing the uncertainties of the future.

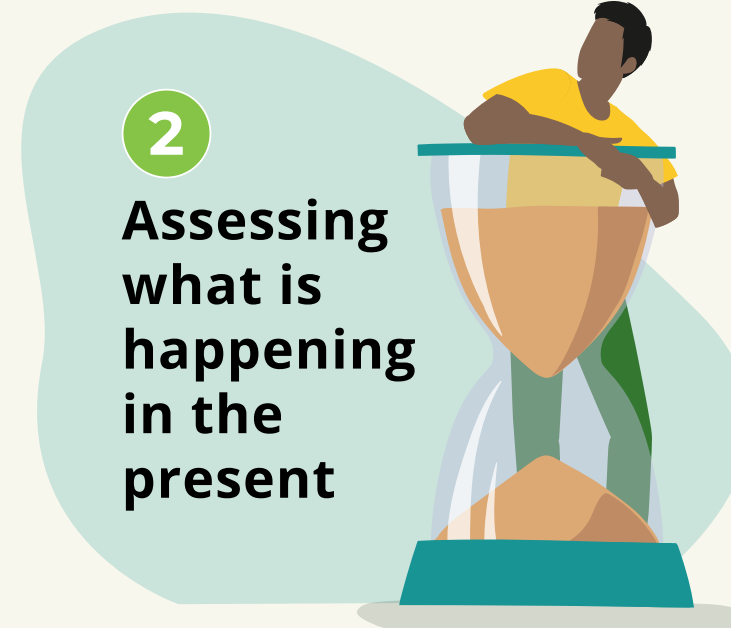


The premise of foresight is that the future is still in the making and can be actively influenced or even created.





The foresight process involves tools and methods that allow us to consider three different time frames – to look back into the past, assess what is happening in the present and anticipate the future.



There are many stages involved in a foresight process; the two key stages covered in this training series are situational analysis and long-term future planning. The foresight framework comprises multiple stages, key steps and the four **key questions**. During the situational analysis stage we develop an understanding of the context by asking **‘what is happening?’** and **‘why is it happening?’** The long-term future planning stage is where we try to determine **‘what might happen in the future?’**, **‘why might it**

**be happening?’**, **‘what might we want to do differently?’** and **‘what will we do differently?’**

The **‘reflection’** step is crucial in future-proofing plans and strategies and the **‘strategy’** step involves unpacking, naming and developing new future-proofed planning structures. Each of the stages in the foresight process has linked tools and methods such as ‘scoping’ in the ‘context’ phase through to ‘developing a road map’ in the strategy phase.

Across the whole foresight process data, evidence, knowledge and creativity are incorporated. There is an emphasis on creativity as planning for the future involves envisioning very different possible futures. Another crucial component of a foresight process is stakeholder engagement and continuous participation throughout the different stages and steps. Continuous participation is needed even if you just plan to conduct a foresight process within your department or team.



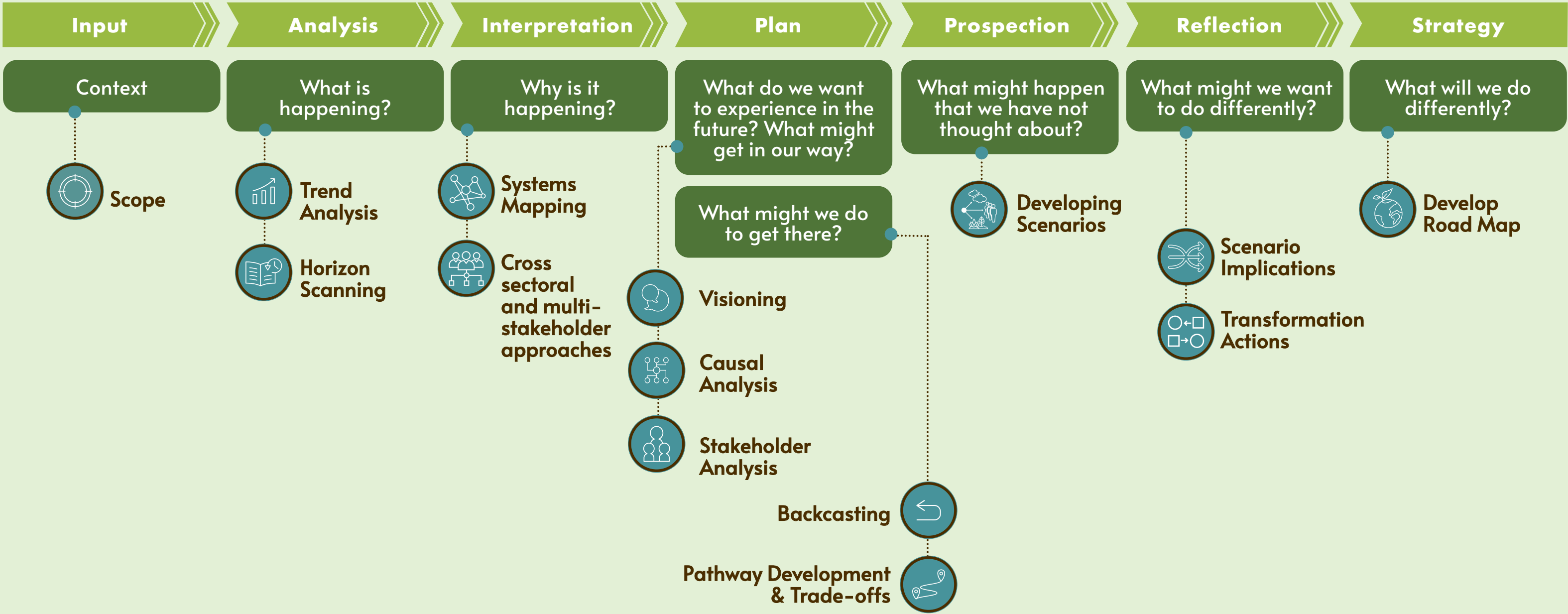
DATA, EVIDENCE, KNOWLEDGE AND CREATIVITY

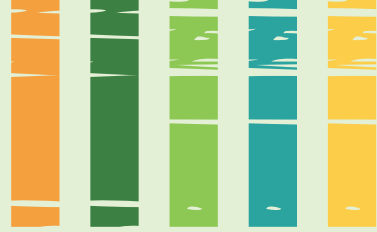


STAKEHOLDER ENGAGEMENT AND PARTICIPATION

SITUATIONAL ANALYSIS

LONG TERM FUTURE PLANNING





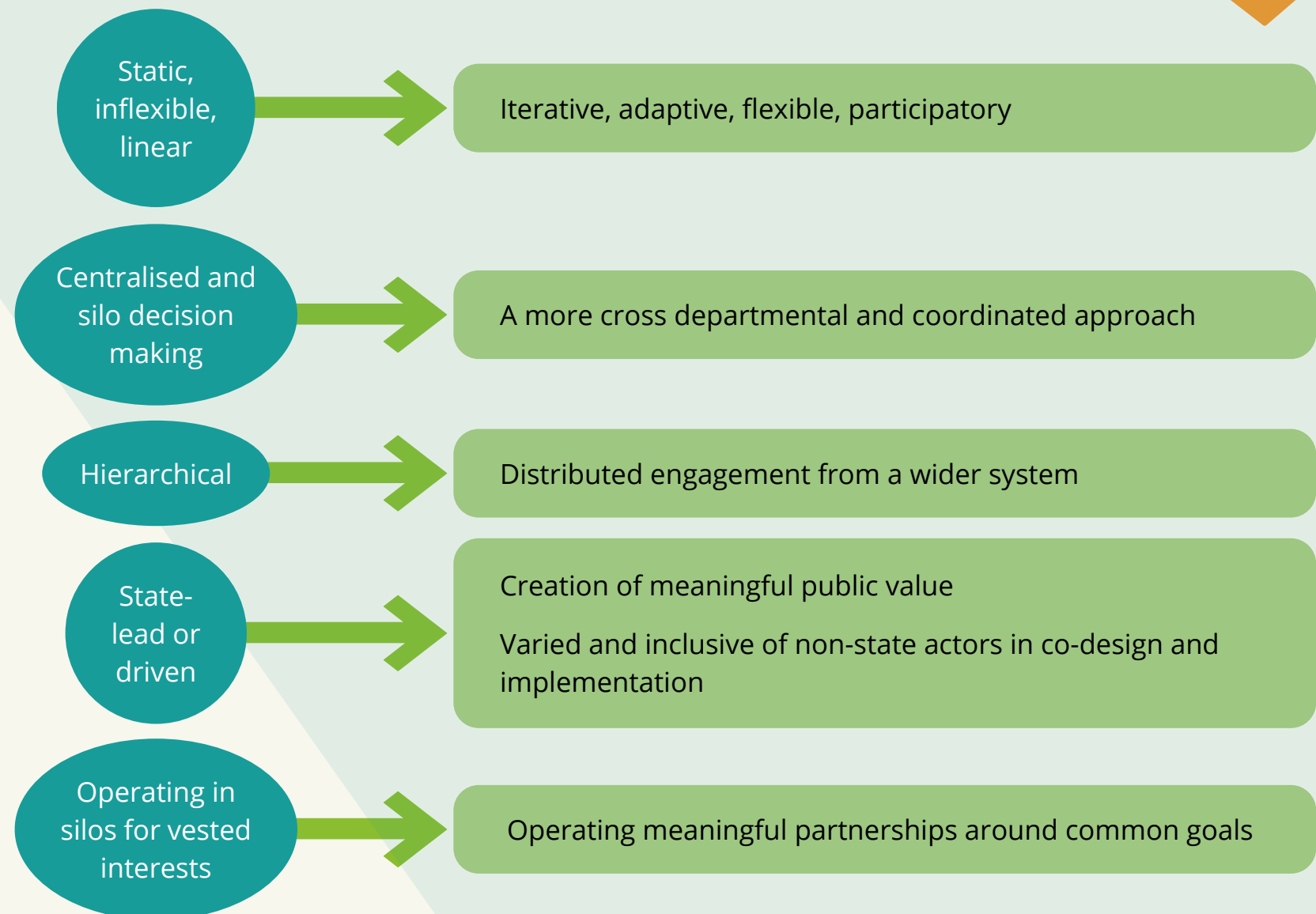
Applying foresight to policy and strategic planning processes allows them to become more flexible and adaptive, it encourages cross-departmental approaches,

frequent participation and engagement from a wider pool of stakeholders and the creation of more meaningful and transformative partnerships.



**There is no standardised way of doing foresight, the tools and methods applied depend on your specific situation, objective, scale and scope. There is no foresight manual that can be used across all contexts; different sets of tools and methods are applied according to the objectives proposed.**

## APPLYING FORESIGHT PROCESSES TO INFLUENCE POLICY AND STRATEGIC PLANNING







## Q&A

**The COVID-19 pandemic arrived and changed the way we live. Does this mean that the world had not applied foresight and prepared for this as a potential future?**

The public health modelling agency in the United States had previously highlighted the possibility of a global pandemic occurring. They could not say when it would happen but estimated it to be within the next five to ten years. So foresight was used, they had looked at the data and the trends and had identified that a global pandemic was likely BUT a pandemic response unit was never established. This illustrates that foresight planning is only effective if action is taken. The pandemic has taught people that some things that are seemingly impossible or inconceivable can in fact occur. Most people in 2019 would not have thought it plausible that a global pandemic could occur in 2020.

## "BE CLEAR AS TO WHERE YOU ARE GOING AND BE FLEXIBLE AS TO HOW TO GET THERE"

- Bob Johansen

**Foresight will equip you with adaptable skills and the ability to assess, change and plan for different futures.**

What skills or characteristics are required to be able to apply a foresight approach? Foresight invites us to have a radically curious mind, to be able to think outside of silos and respect the ideas of others. It is important to have a neutral viewpoint and not to judge based on past experiences.



## CHARACTERISTICS OF FUTURE THINKERS

- Justifiably terrified and **determined**, and stubbornly optimistic
- Maintains a **solid vision** and has capacity to shift the storyline/ narrative to one of **purposeful shared meaning**
- **Thinks in systems** and sees the larger picture
- Wants an **accurate version of reality** and takes responsibility for one's destiny
- **Open to possibilities** and curious, intrigued with contradictions
- Willing to **test individual beliefs** and cut through individual biases, always ready to ask the next question
- Enjoys **interacting with new data** and information, balancing the creative and analytical
- **Grounded** - their self worth is not tied to how right or wrong they are



## LEARNING EXERCISE

Expected futures - COVID-19 pandemic

**What seems to be happening?** Think back to what you were expecting you would be doing in the year 2020 before the COVID-19 pandemic started...what were your plans?

"I intended to travel overseas for a conference"

"Travelling for collaborative work"

"Ramp up research work"

"Enrolling for a PhD overseas"

"Lots of international travel and physical meetings"

"To graduate and get a new job"

"Field work"

"Conduct face to face trainings"

**What might happen?** Now think ahead to late 2021 or early 2022, describe what you think your working environment will look like or your personal activities.

"More zoom meetings"

"More remote working"

"Tight budgets"

"I don't have a clue!"

"Social distancing"

"Better adapted to the new normal"

"More field work and in-person trainings"

"Work and study online"





## LEARNING EXERCISE CONT.

**What do we need to do?** Think back to February 2020, what would you have done differently if you had known that COVID-19 was coming – what would you have changed in how you planned for 2020-2021?

“I would have saved more money”

“Would have done less field work and more lab work”

“Would be better prepared for online working and saved money”

“Put in more resources to finish field work and publish results”

“Taken courses in information and communications technology”

“Invested in an on-line business”

“Invested in a better Wi-Fi network”

“Started an online business”



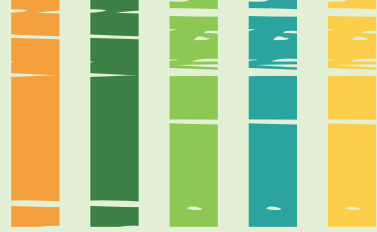
## WHAT ARE WE FINDING?

This exercise teaches us that if we had any anticipation that things were going to change in the future we would plan better.





# Series 1



## Planning for transformational change

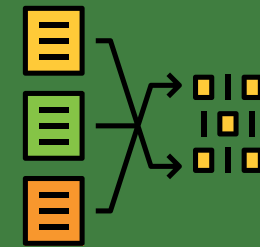
The United Nations (UN) Climate Panel said that **“we have 10 years left to begin a radical transformation of this civilisation to move quickly to a zero emissions society...”**. What does this mean and how does it relate to incremental change?

**“Today’s interim report from the UNFCCC is a red alert for our planet. It shows governments are nowhere close to the level of ambition needed to limit climate change to 1.5 degrees and meet the goals of the Paris Agreement”**

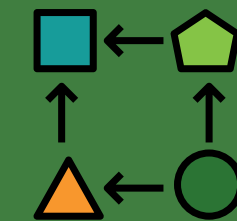
– Secretary-General António Guterres on the report findings (February 2021)



### KEY TERMS



**Transformational change:** includes major long-term changes in the way we operate and may shift us between or into new ‘systems’ and processes.



**Incremental change:** refers to change that occurs slowly and without necessarily modifying the essence of social structures or organizational practices.



# Series 1



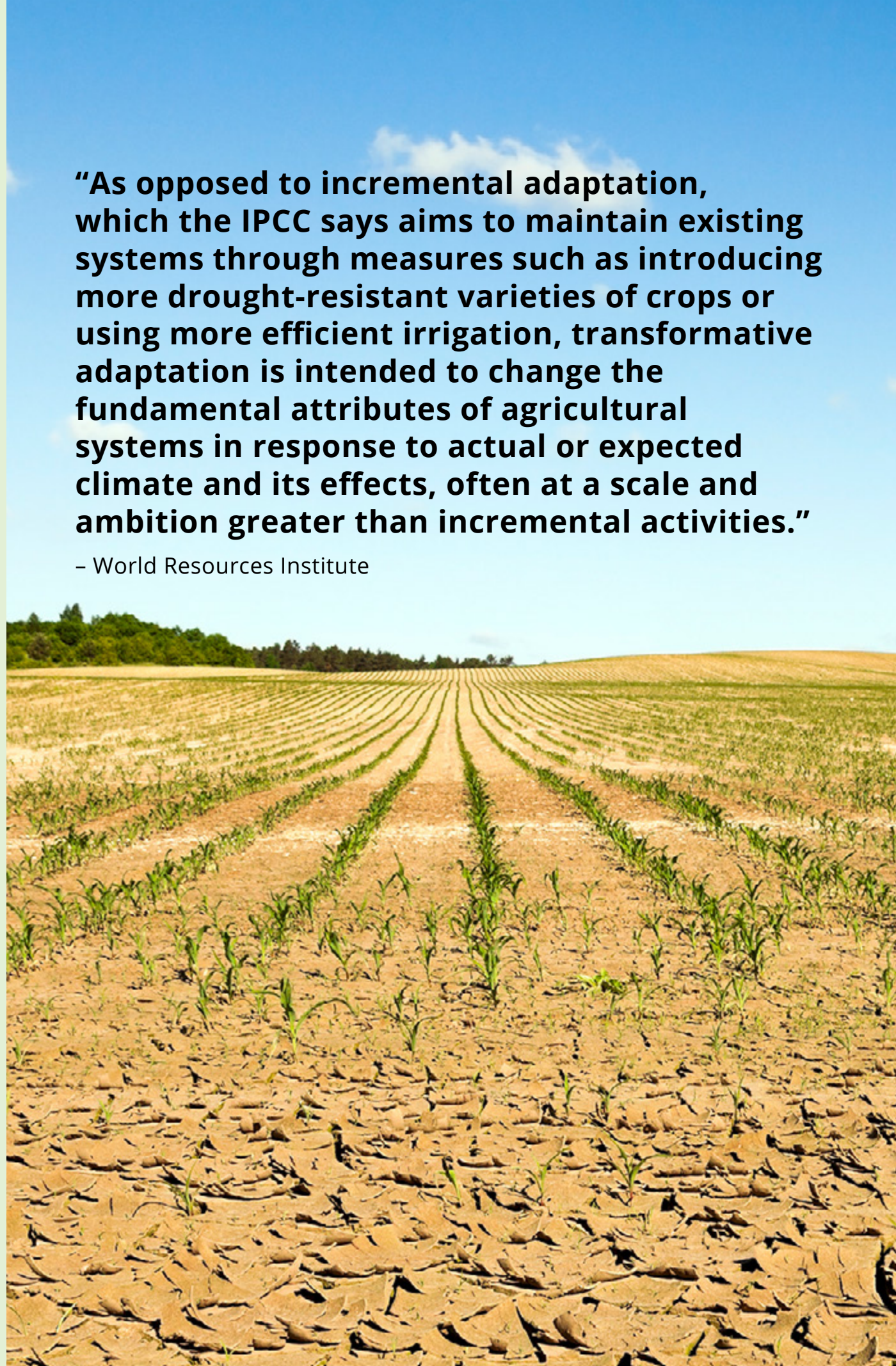
## WHAT MIGHT TRANSFORM?

The future is going to require transformative change involving new interventions, policies and partnerships and disruptive technology. Transformative change is needed to move us beyond incremental change to changing the way systems operate in the long-term. Futurists expect that transformational shifts will take place in several dimensions such as markets, ownership, buying and selling, gross domestic product (GDP) and productivity.

Sectors that are likely to transform in the future include communications, power and energy, transportation, mobility and logistics, and education.

**“As opposed to incremental adaptation, which the IPCC says aims to maintain existing systems through measures such as introducing more drought-resistant varieties of crops or using more efficient irrigation, transformative adaptation is intended to change the fundamental attributes of agricultural systems in response to actual or expected climate and its effects, often at a scale and ambition greater than incremental activities.”**

– World Resources Institute



## LEARNING EXERCISE

**In your work, would you say you have been planning for incremental change or transformational change, and why?**

A transformation, in the context of agriculture and food systems, can be defined as follows:

**“An agriculture and food systems transformation is a significant redistribution—by at least a third—of land, labour and capital, and/ or outputs and outcomes (e.g. types and amounts of production and consumption of goods and services) within a timeframe of a decade”**

– Steiner et al. 2020



## HOW CAN WE PLAN FOR SUCH A TRANSFORMATION, WHAT ACTIONS CAN WE TAKE? THERE ARE THREE MAJOR CATEGORIES OF TRANSFORMATIVE ACTIONS:



### Integrated and adaptive **interventions**

Some examples of integrated and adaptive interventions include:

- A monitoring, reporting, and verification system
- New design/infrastructure
- Scaling existing innovations
- Awareness, knowledge, skills, empowerment development
- Knowledge/data platforms
- New technology
- A lifestyle or behaviour change
- Finance/incentives/subsidies (Financial technology to get private sector to directly pay farmers for restoring land health)
- New businesses and business models (loan facility for smaller holder farmers that can geo-stamp)



### Flexible, robust and synergistic **institutions and policies** that drive implementation

These interventions need to be supported by new policies and institutions that are flexible, robust and synergistic, and drive implementation, for example:

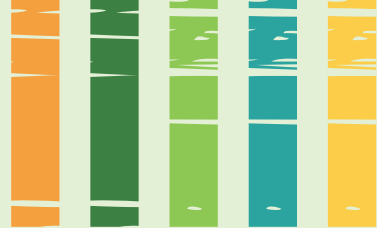
- Changes in decision making processes (Develop formalized office in financial planning for cross sectoral coordination, joint planning and joint budgetary allocations)
- A form of decentralization or distributed decision making
- Nested scale policy design
- Time bound reflections on policies
- Cross sectoral policy development and financing frameworks



### Novel **partnerships**, cross sectoral or multi-stakeholder relationships

Novel partnerships, cross-sectoral or multi-stakeholder relationships are also needed. These include:

- New set of actors working together in an informal or formal setting
- New cross sectoral, multi-stakeholder relationships
- Pooling resources, money or labour for synergy
- Trans-generational and thematic partnerships



**We often build our plans and strategies based on actions that result in incremental change – when we need actions that are transformative and suitable for the future that is coming.**



## Q&A

**How do political will and resource allocation influence transformative change?**

The transformation of institutions requires substantial political will and funding. In some ways the COVID-19 pandemic has opened our eyes; there is not just a need to change policies and programmes and access support schemes, there is also a need to transform institutions by building capacity and developing necessary skills to achieve the goals that we set.

By using foresight methods to identify possible futures we can say very clearly what changes need to take place, for example, changes to political will or institutions and how they invest. Often in a foresight process you deal with a specific strategy or policy, but it is also important to ask if the right institutions and people are involved. When thinking in terms of future planning we should ask if we need to establish new institutions and engage with different stakeholders.

Traditional strategic planning reinforces our biases; we predict and plan for the future based on our past experiences. **Foresight requires letting go of cognitive biases towards the past to ready ourselves for the future that is coming.**

What is a cognitive bias? It is a deviation from rationality because of past experiences and world views. For example, if I am making a case, I may only look for the data that reinforces my beliefs or understanding and that corresponds to my world view. This is an important aspect to address in becoming a critical thinking.

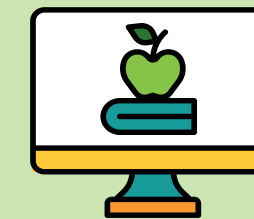
**So where does foresight come into play?**

**Foresight tools and methods, we can plan the transformational change that will be needed to move towards the future we want.**



**Traditional strategic planning reinforces the cognitive bias of humans that makes us simply extrapolate into the future what we know of today and what we have experienced in the past.**

– Gomez, 2021: Just Labs



## LEARNING OUTCOMES

**Increased capacity to:**

- 1** Understand future impacts that climate change may bring to the food system and why future planning is so critical.
- 2** Define foresight including key methods, tools and skill sets to be a foresight practitioner.
- 3** Explain the difference between between iterative and transformational planning and what foresight offers to improve transformational planning.



## Series 2



# BRINGING EVIDENCE TO BEAR

The second series of the toolkit **'brings in the evidence'** for the foresight planning process. Firstly, there will be a short recap of series 1, followed by instructions on how to **set up a foresight exercise**. The three different time horizons will then be explained, demonstrating how to scan historical and current trends to understand where we are going in the future. The series will wrap up with **systems thinking** and **causal analysis**.

**In summary, the objectives are to:**

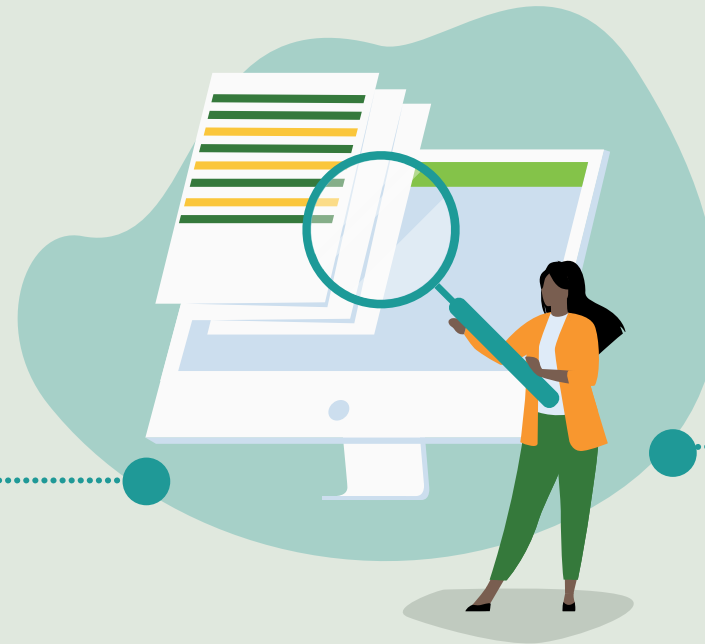
- 1 Recap on Session 1
- 2 Key things to setting up a foresight exercise
- 3 3 time horizons – scanning historical and current trends
- 4 Digging deeper – provide insights into thinking in systems and causal analysis in the planning process

**The layout of this series is provided on the next page. Learning exercises and Q&A sessions are included throughout.**

Photo: ©Neil Palmer (CIAT)



**Recap on foresight introduction**



**Key things to setting up a foresight exercise**



**Historical and current trends**

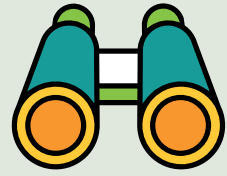


**Systems mapping and root causes**



**Q&A**





## Recap on foresight

### INTRODUCTION TO FORESIGHT

**The SADC region is severely impacted by climate change.** Climate change impacts are caused by climate-related stresses, which are long-term trends, or climate-related shocks which are acute events. Climate shocks are hard to predict when planning for the future and enhanced regional resilience is crucial in this regard.



#### LEARNING EXERCISE

How do you define foresight?

**"Looking into the past and the future"**

**"Tools and methods to go to the future we want"**

**"The process of looking to the past and the present to envision and prepare for different futures, which then allow us to make strategic decisions today"**

**"A set of tools and methods used to plan for the future"**

**"Looking at the past/present to prepare for the future"**



**Foresight is a set of tools and methods that help us move towards the future we want.** Foresight is an approach that is future-focused and positively oriented. By applying a selection of foresight tools, methods and approaches the future can be actively influenced or created. Importantly, foresight is not a prediction, it's a process that allows us to look ahead and imagine and plan for different futures.





There are three core time frames in foresight planning. When considering a foresight process it is important to look back into the past, assess what it is happening in the present, and then use the understanding to anticipate the future.

1

Looking  
back into  
the past



2

Assessing  
what is  
happening  
in the  
present



3

Anticipating  
the future



In **strategic foresight**, these **time frames are designated actions and form three phases**. Addressing the past requires collecting or 'scanning' information. Scanning is an in-depth process to produce evidence and insights on historical, current, and potential future insights. Once the information is collected, it needs to be analysed and interpreted to determine plausible future pathways.

Typical methods used here are identifying emerging strategic issues, causal analysis and scenario planning. Lastly, in anticipating the future, plans and strategies are developed or enhanced to provide different options for action. A foresight process ensures that plans and strategies are future-proofed.

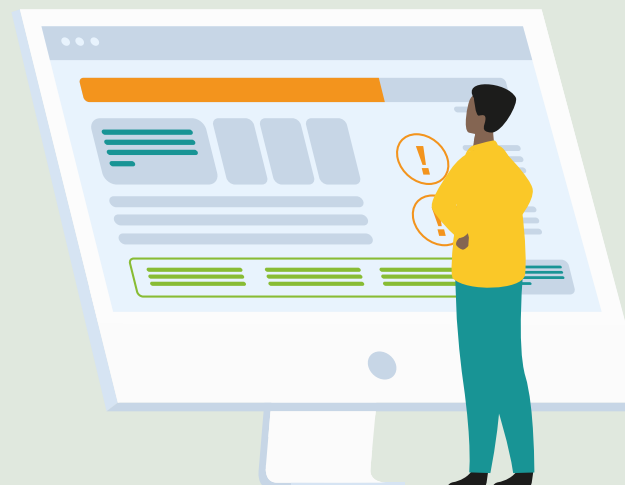
1

Collecting information  
or 'scanning'



2

Interpreting data and  
formulating versions of  
the future



3

Developing options  
for action





## KEY FORESIGHT QUESTIONS, STEPS AND STAGES

Series 1, **'Setting the Stage'**, described the **key questions** in relation to the steps and stages of a foresight process. Situational analysis forms the frontend of the foresight process. Here, it is important to understand **'what is happening?'** and to use tools and methods to unpack why. After interpreting the data and information and on completion of the analysis of the context, the long-term future planning stage comes into play.

In the long-term future planning stage, exercises are carried out to develop our understanding of **'what might happen?'** and **'what do we want to experience in the future?'** It is during this stage that actions are planned and any barriers to preventing us from reaching our preferred future are identified. Finally, a plan or strategy is developed.

It is important to reiterate here that data, evidence, knowledge and creativity are required throughout the foresight process. Key characteristics of being a foresight practitioner include being able to use a future-oriented mindset, having a neutral, creative viewpoint about the future and the ability to think critically. Stakeholder engagement needs to be broad and ongoing; this means talking to and working with actors or stakeholders that you would not traditionally bring into your planning process.



### LEARNING EXERCISE

What are the guiding questions for a foresight process? Hint: there are four.

**WHAT SEEMS TO BE HAPPENING?**

**WHAT'S REALLY HAPPENING?**

**WHAT MIGHT HAPPEN?**

**WHAT DO WE NEED TO DO?**







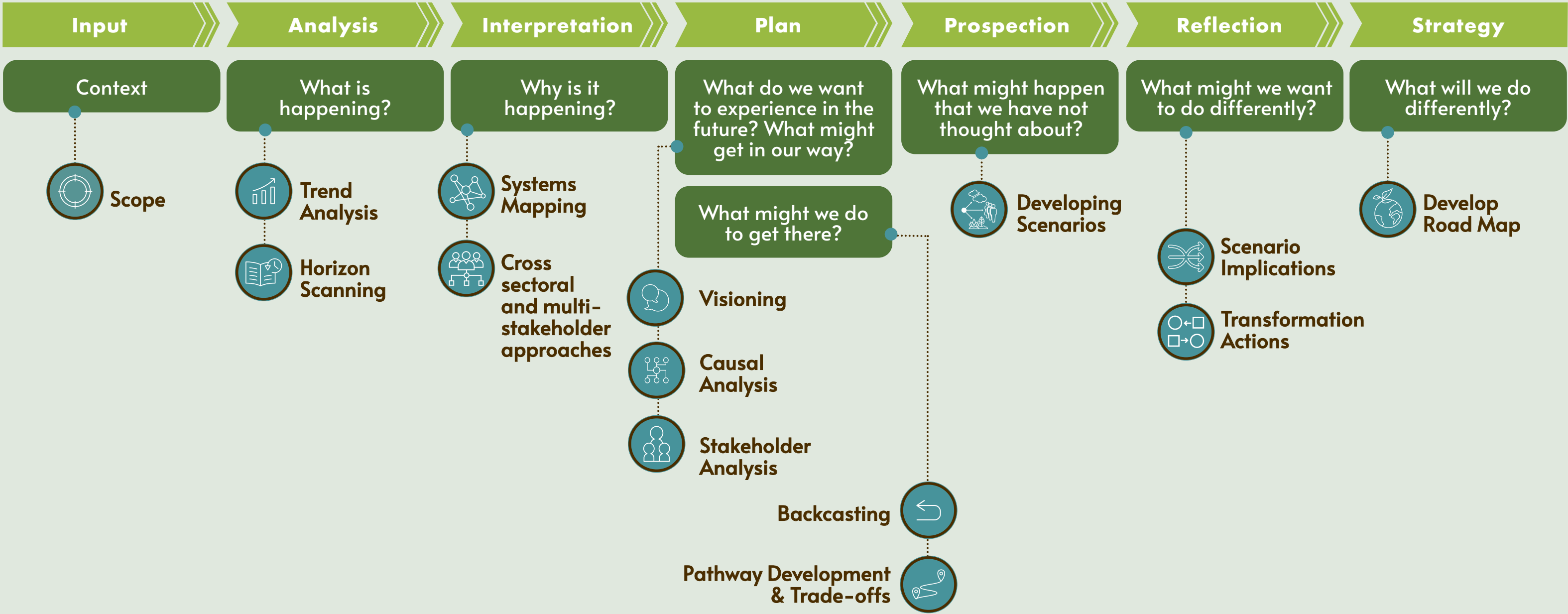
DATA, EVIDENCE, KNOWLEDGE AND CREATIVITY



STAKEHOLDER ENGAGEMENT AND PARTICIPATION

SITUATIONAL ANALYSIS

LONG TERM FUTURE PLANNING



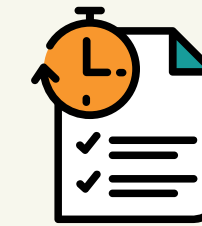
# Series 2

The tools and methods illustrated in the foresight framework cannot all be covered in this training series; the focus is on those that are most commonly used. There is no set way of doing foresight, the tools and methods chosen are dependent on the specific context or theme.



Photo: ©Hugh Rutherford (CIP)

## TRANSFORMATIVE ACTIONS



### LEARNING EXERCISE

Identify three types of actions associated with transformational planning.

Transformative change requires transformative actions which can be categorised as adaptive interventions, synergistic institutions and policies, and new partnerships. Foresight focuses on developing transformative approaches and plans as opposed to less effective incremental planning.



Integrated and adaptive **interventions**



Flexible, robust and synergistic **institutions and policies** that drive implementation

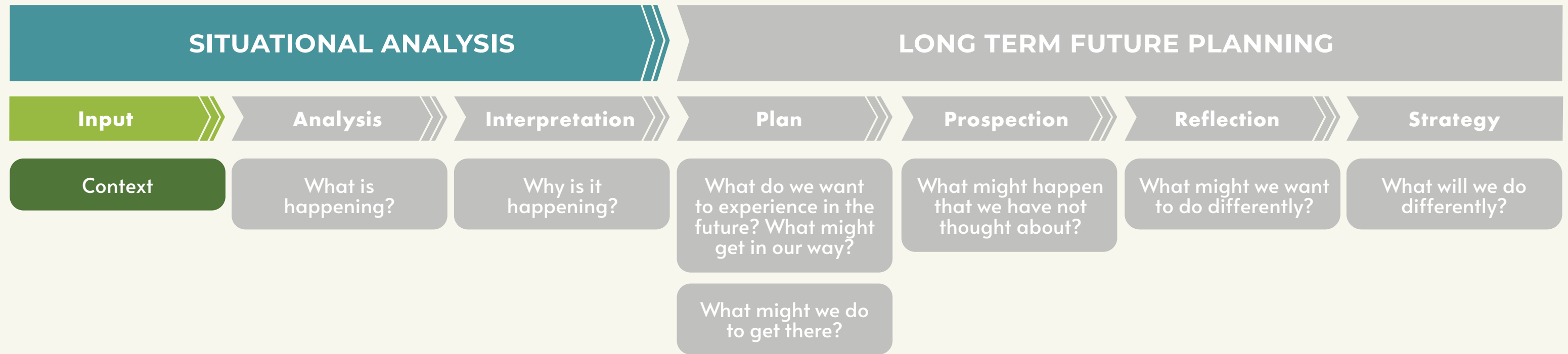


Novel **partnerships**, cross sectoral or multi-stakeholder relationships

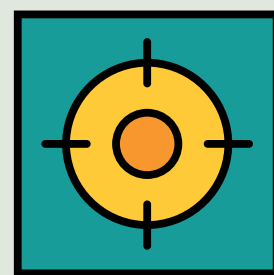


## Setting up a foresight exercise

This series outlines the input phase of a foresight process. The 'scope' tool is used to define the context of your foresight exercise.



When using the **scope tool** in a foresight process, there are five key steps to address: setting the theme or key topic; setting the geopolitical boundary; within that boundary, understanding the relevant structures and policies; setting the timelines; and mapping the stakeholders.



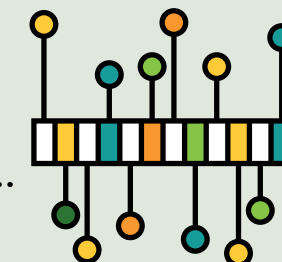
Setting the theme or key topic



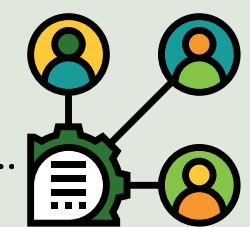
Setting geopolitical boundary



Understand relevant structures and policies



Setting the timelines



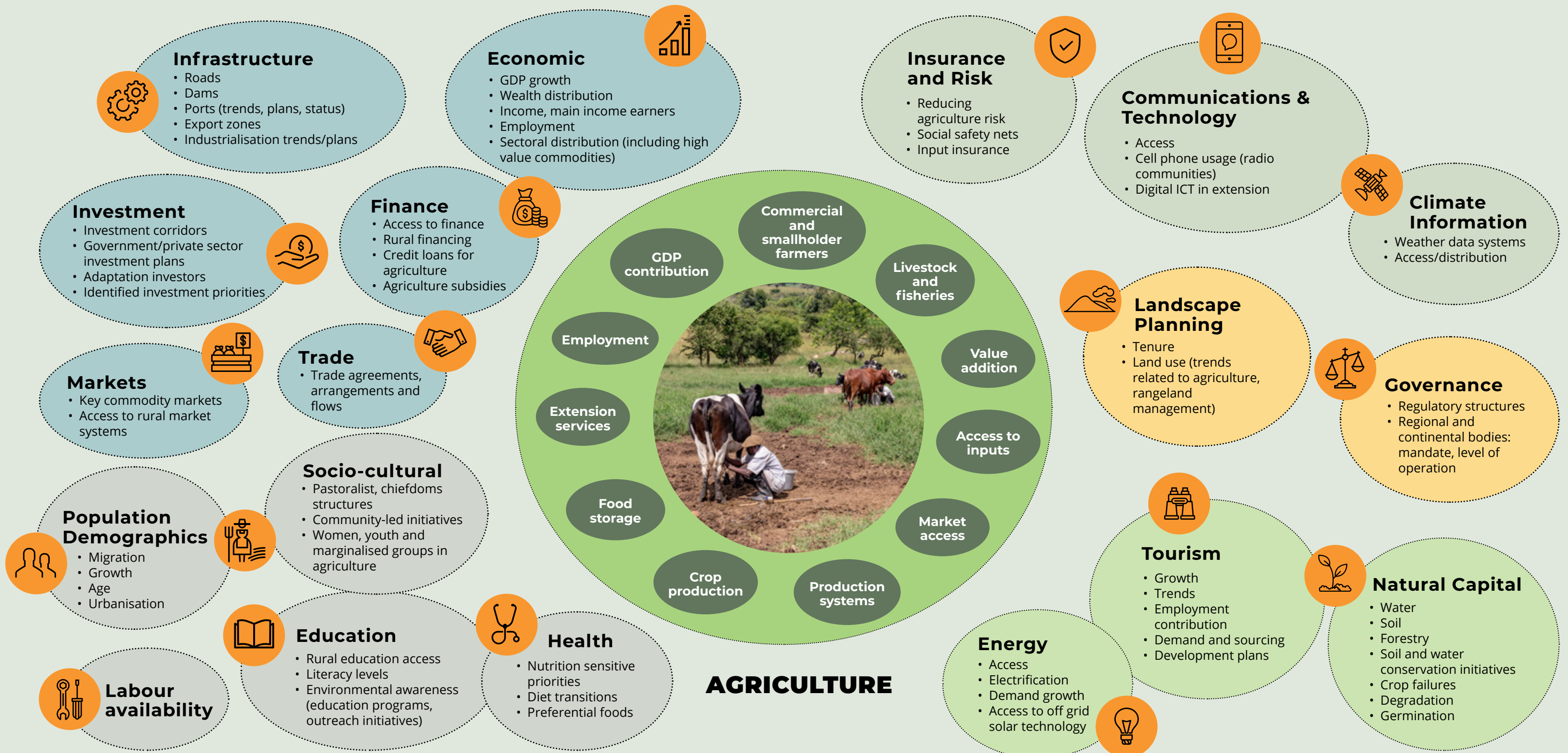
Mapping the stakeholders



## SETTING THE THEME OR KEY TOPIC

The **theme of climate-resilient agricultural development** is complex. For example, in a foresight process, the greater theme would be agriculture, but this topic can be unpacked further to crop production, livestock rearing, employment, market access, etc. This second layer of the theme can be unpacked even further to aspects such as employment, trade, investment, infrastructure, etc.

It is crucial to think hard about your theme or topic in question and to try to unpack it further. It may become clear that it is a lot deeper or wider than you originally thought.







## Q&A

Why have you used different colours in the depiction of the agri-food system?

This allows us to clearly see the different categories such as infrastructure, labour availability, energy, communications and technology, and governance. Although it allows us to clearly retain the different categories in our minds, we also understand that they are all inter-related.



## SETTING THE GEO-POLITICAL BOUNDARY

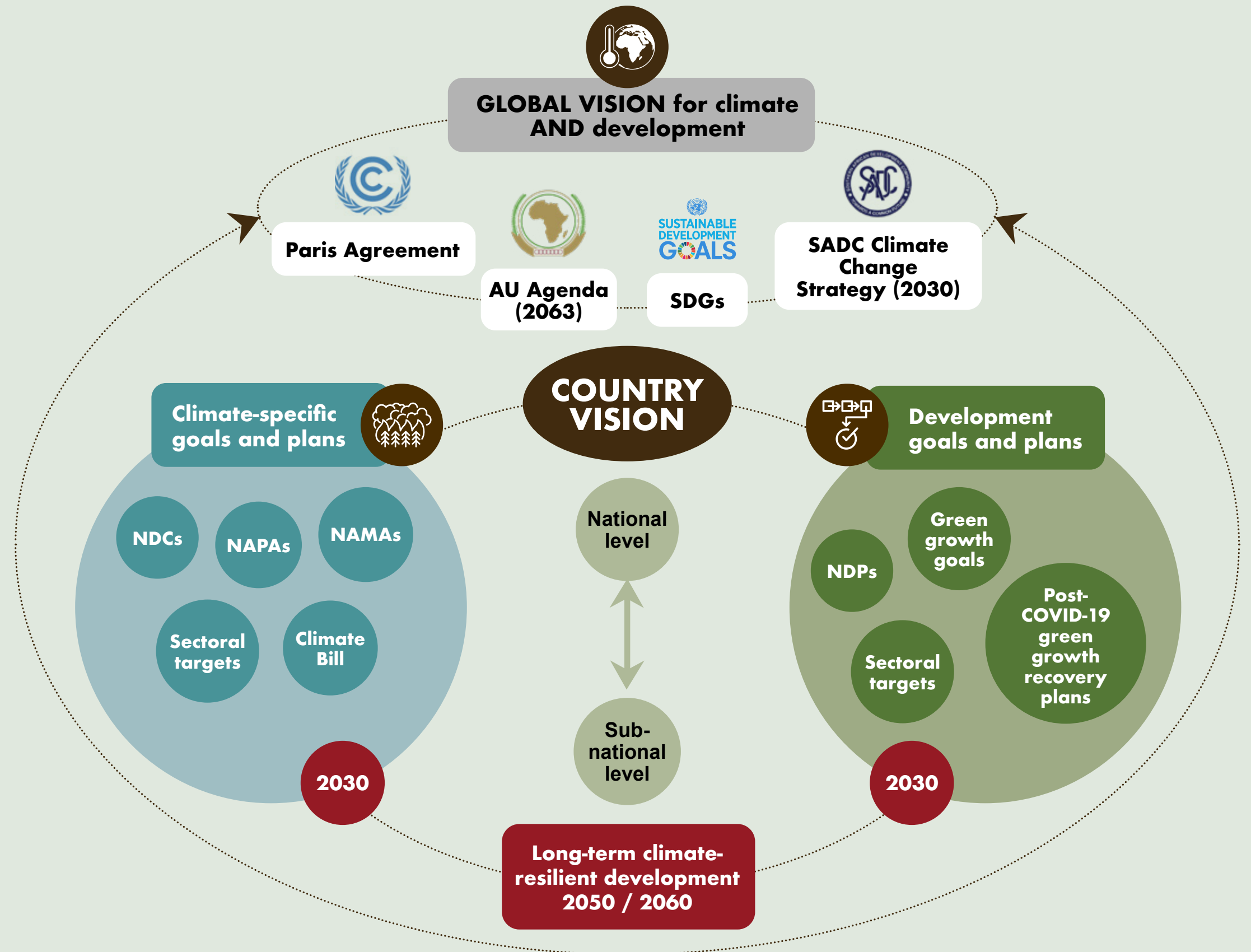
Once the theme is determined, the **geo-political boundary needs to be set**. For example, looking at the SADC region it would be useful to unpack the socio-cultural and natural environments. For example, are there cross-boundary issues pertaining to shared watercourses? From an economical perspective you might think about communication, roads and other infrastructure.





## UNDERSTANDING RELEVANT STRUCTURES AND POLICIES

Next, it is important to think about **relevant structures and policies**. Even if the focus of the foresight process is at a community or village level, there will be relevant structures and policies and by-laws that have to be taken into account. For example, if you were going to unpack climate change in setting a country's visions for long term strategies, there are national development goals and plans, local and regional policies, different sectoral targets, and new and emerging policies such as Post-COVID Green Growth Recovery Plans to consider. It is important to map out the relevant structures and policies within the geo-political boundary to understand the wider enabling environment.





There are **numerous scales to consider when looking at the structures and policies**. For example, although your geo-political boundary is at a sub-national or community level, there may be national goals that impact the area you are working in. A broad lens should be applied when considering how the theme fits within the wider structural and policy environment.



## GLOBAL LEVEL GOALS

SUSTAINABLE  
DEVELOPMENT  
GOALS



UNFCCC Paris Agreement on Climate Change



## CONTINENTAL LEVEL GOALS



AU Agenda 2063 - Comprehensive African Agricultural Development Programme



## REGIONAL LEVEL GOALS

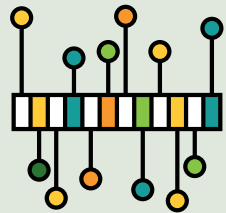


SADC Vision 2050  
RISDP 2020-2030  
SADC Climate Change Strategy and Action Plan  
Regional Agricultural Policy



## NATIONAL LEVEL - POLICY EXAMPLES

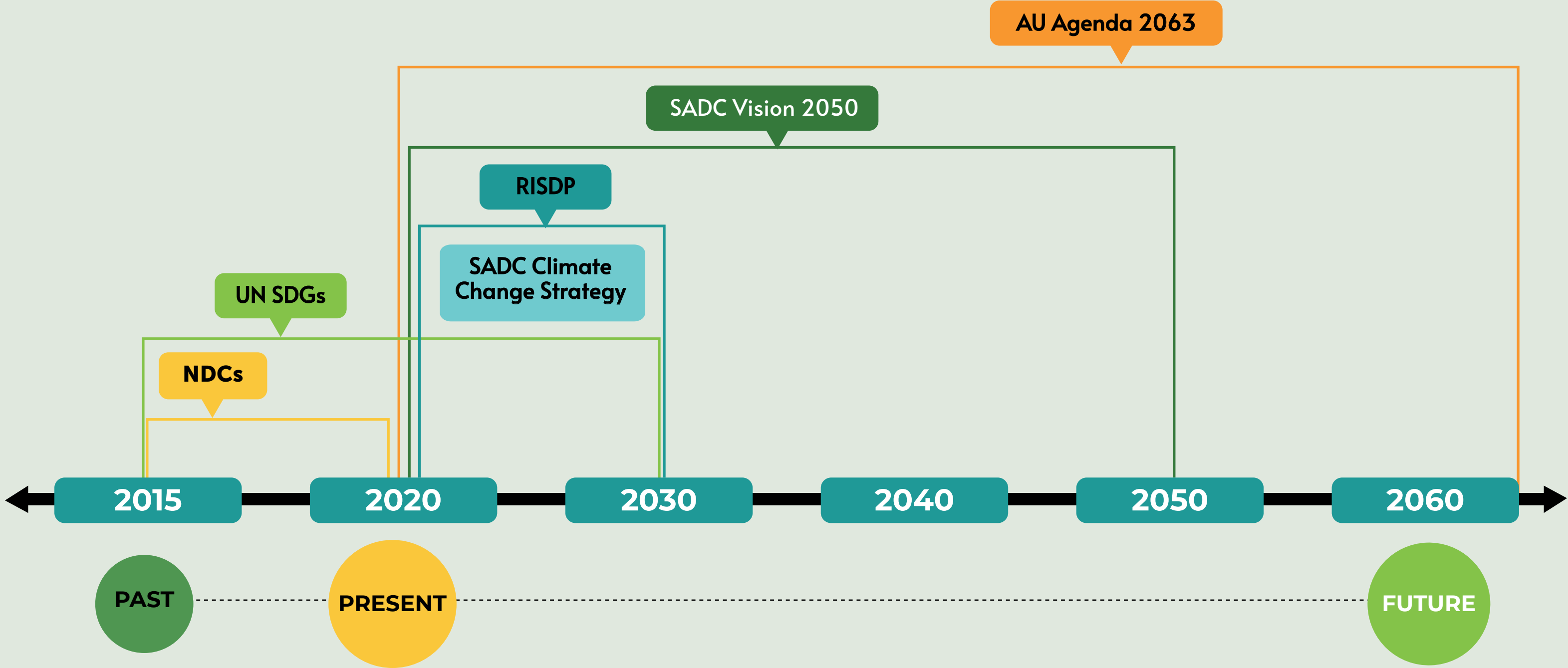
Mozambique's - Agricultural Policy and Implementation Strategy (1995)  
South Africa's - National Climate Change Response Policy (2011)  
Angola's - National Strategy for Climate Change (2008)



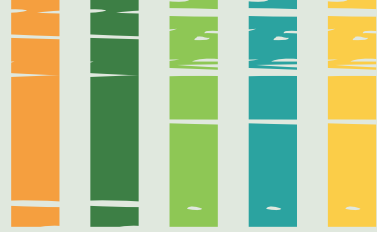
## SETTING THE TIMELINES

The next step entails **setting the timeline of the foresight process**. For example, do you want to look far ahead to 2050, or do you want your plans to be more short-term, to 2030? In conducting a foresight exercise at the SADC regional level, key timelines to consider could include the African Union

(AU) Agenda to 2063, or the 10 or 5-year Nationally Determined Contributions (NDCs) and the 10-year Sustainable Development Goals (SDGs). It is important to understand the overarching timelines that affect your theme to determine the time frame most relevant to your question at hand.







This is an example of how to map stakeholders and their relationships. The stakeholder map illustrates how people interact and highlights the power dynamics.

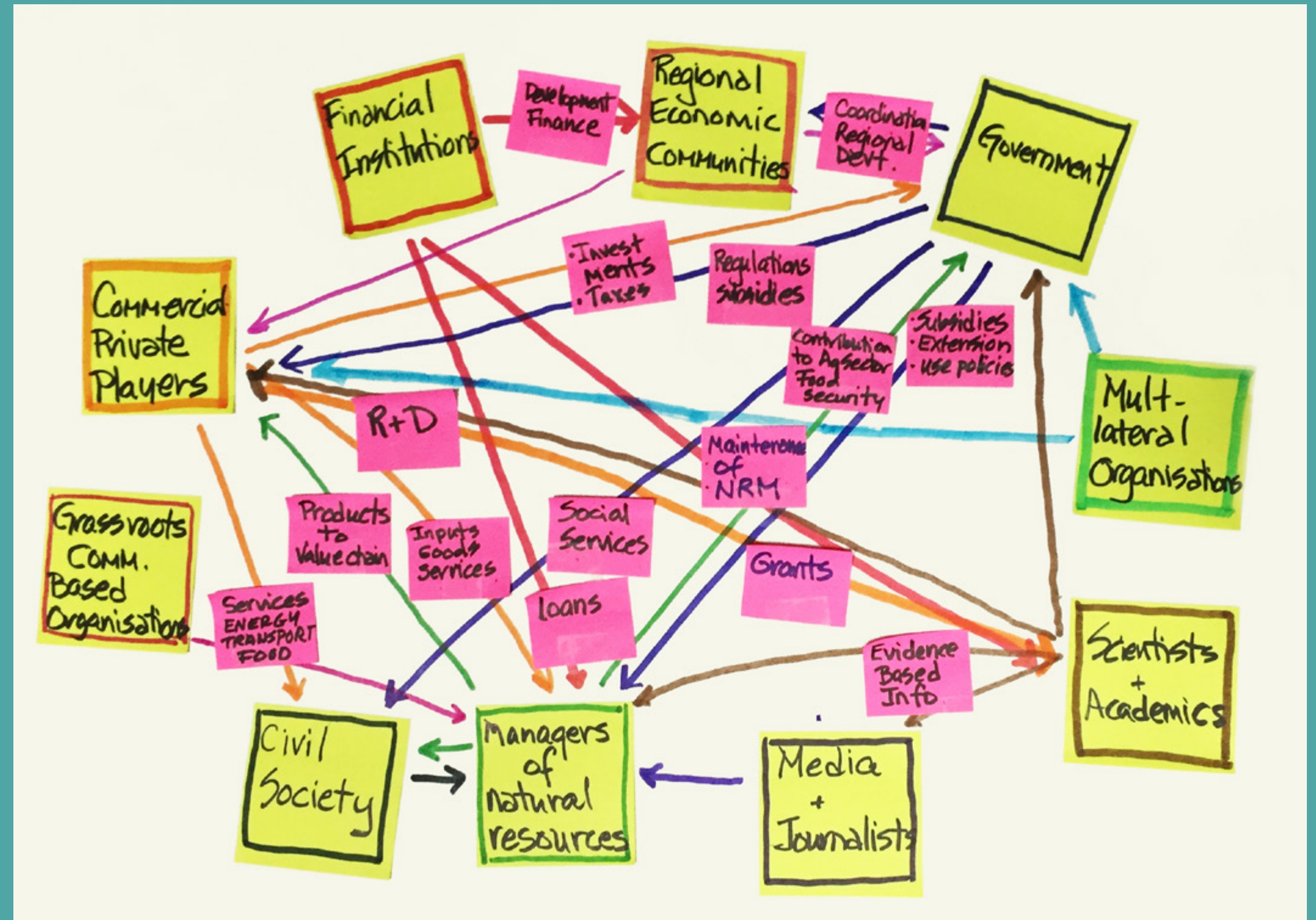


## MAPPING THE STAKEHOLDERS

Mapping stakeholders is a crucial component of a foresight process.

The resultant stakeholder map will be a live document that is revisited throughout the process. This step entails identifying the key stakeholders that are relevant to the theme and how they relate to each other. Of importance here is who is working with who, what is being exchanged between the stakeholders, what the potential power dynamics are and who is missing?

As with unpacking the theme, the greater stakeholder network is complex, and it is important to take the time to think of stakeholders that you might not usually engage in planning but need to include as part of the foresight process.







## KEY QUESTIONS

Some **key questions** to consider when mapping stakeholders are:

- How many people are engaged in deciding the scope?
- How wide do we cast the net in the participants in our foresight process?
- Are there actors we often overlook that should be included?



Photo: ©Sabrina Chesterman



## LEARNING EXERCISE

Based on the foresight introduction and the scoping steps covered above, is there a planning process that you think foresight could use in your line of work?

For example, in Zambia it could be used to inform the development of an agricultural investment plan.

**“Rangeland restoration, carrying capacity, grazing systems and governance of communal rangelands”**

**“Climate mitigation and adaptation planning in the agricultural sector of Zimbabwe”**

**“Planning for pest management strategies to increase food production and improve food and nutrition security in Mozambique”**

**“Developing a climate-smart agriculture framework for the Department of Agriculture in South Africa”**

**“In Southern Zimbabwe, I plan to use foresight for a breeding program that entails farmers cross-breeding indigenous goats with exotic breeds to improve resilience, counter diseases, improve the quality of the meat and the size of the animal”**

**“Drought-resistant crop production and value addition in the SADC region”**





# Trends analysis and horizon scanning

The next step, within this series on ‘**bringing evidence to bear**’, focuses on the **tools and approaches used for analysis**, specifically trends analysis and horizon scanning. In terms of the foresight process we are now trying to understand ‘what is happening?’ within the analysis phase.



In the **analysis phase of a foresight process**, it is important to identify and understand key related historical and current trends. Foresight planning involves identifying possible futures based on key uncertainties and trends of the past. Analysing trends requires looking at historical trends, horizon scanning, applying a framework to organise trends into major categories and analysing **key questions**.

**A trend is defined as a general tendency in movement or direction over time.** For example, in the context of climate-resilient agricultural development in the SADC region, there is increasingly erratic seasonal rainfall patterns.

**Mega-trends are long-term changes** that affect governments, societies and economies permanently over a long period of time. An example of a mega-trend faced in Africa is the rapidly growing youth population. By 2050, Africa is set to have the biggest population of young people in the world.

# Series 2

## KEY TERMS



**Trend:** a “general tendency” or direction of a movement/change over time *e.g. Increasing erratic seasonal rainfall patterns.*



**Mega-trend:** a long-term change that affects governments, societies and economies permanently over a long period of time. *e.g. Africa’s growing youth population.*



## LEARNING EXERCISE

Name a trend you have witnessed in your lifetime.

“Floods”

“Droughts and dry spells”

“Floods, starvation and poverty”

“Drought every 10 years”

“Political instability”

“Decreases in crop yields”

“Increased use of cars”

“Extreme winter”

“Insecurity and conflict surrounding elections”

“Floods and cyclones”

“Disease outbreaks”

“Rising prices of commodities”

## DEVELOP A PLAN FOR YOUR TRENDS ANALYSIS

When planning for a **trends analysis**, firstly you need to **think about who the key people are that need to be interviewed**. This would have been covered in your initial stakeholder map, where you would have identified the stakeholders operating within your theme. Within the identified stakeholders, there are likely to be some people that have knowledge on the trends that you want to understand. Other sources of information could include previous work or historical research.

**There are a variety of tools that are useful to apply when analysing trends such as key:**



Informant interviews,



Statistical models,



Developing timelines,



Surveys, and



Workshops, amongst others.

Conducting a trends analysis requires substantial amounts of evidence.





## LEARNING EXERCISE

How would you define evidence?

“Data”

“Fact-based information”

“Proof”

“Confirming facts”

“Series of data”

“Validated data”

“Analysed data”

“Supporting information”

“Concrete facts”

“Historical data”

“Research based data”

“Empirically substantiated data”

**Evidence in this context is defined as the integration of raw data** constituting numbers, works, images, and insights emerging from diverse knowledge sources. It is important to note here that knowledge input is required throughout a foresight process and indigenous knowledge is a critical type of evidence to include.



## Evidence

We define evidence as the integration of raw data constituting numbers, words, images, and insights emerging from diverse knowledge sources.

**There are many different types of evidence that can be used in trends analysis such as scientific evidence;** practice and implementation informed evidence, i.e. the insights of people that are carrying out activities on the ground; participatory and consultative evidence, i.e. the evidence and people’s insights given through targeted conversations; and local and indigenous knowledge and stories. Stories are not always thought of as hard evidence, but they are critical to the foresight process as they allow us to see what has actually been happening.

The last two types of evidence are qualitative data and quantitative data.

Qualitative data allows us to ask ‘**what?**’, ‘**when?**’, ‘**where?**’ and ‘**why?**’ Quantitative data answers questions such as ‘**how many?**’, ‘**to what extent?**’ and ‘**how much?**’



**Scientific evidence**



**Practice and implementation informed evidence**



**Participatory and consultative evidence**



**Local and indigenous knowledge and stories**



**Qualitative data** ‘who, which, what, when, where and why?’



**Quantitative data** ‘how many, to what extent or how much?’





Photo: ©Olivier Girard (CIFOR)



## LEARNING EXERCISE

What kind of evidence sources do you currently use most in your planning?

“Scientific data”

“Consumer trends”

“Research results”

“Data and stories”

“Participatory and evidence based”

“Scientific evidence”

“Case studies”

“Quantitative and qualitative data”

“Indigenous knowledge”

“Statistics and survey data”

**There are many different ways that evidence can be communicated.** The types of communication may need to be adapted to your audience. Evidence should come from multiple sources such as from within your project and beyond (e.g. local government, national research). Evidence will likely come from multiple sectors and cover the environment (bio-physical) and people (socio-economic). It is important to gather evidence from a variety of sources, e.g. not only from the scientific community

but also from indigenous communities, government and development partners. There are a variety of evidence formats that have differing benefits for inclusion.

Testimonials are particularly useful if they are documented in a systematic way and photographs provide really powerful visuals in a trends analysis exercise. Evidence can be presented in meeting rooms but also in the field (e.g. exposure and dialogue visits).



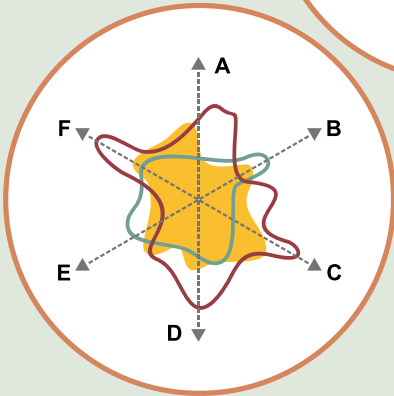
Testimonials

“FMNR improved productivity on my farm and improved nutrition for my livestock”

Photos

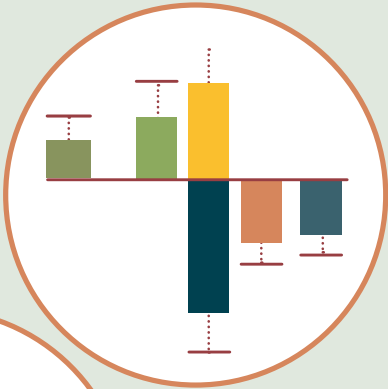


Data



Radar chart

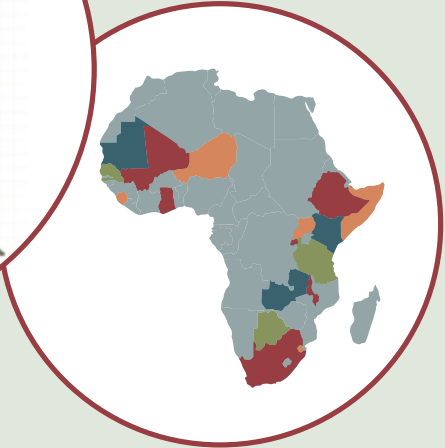
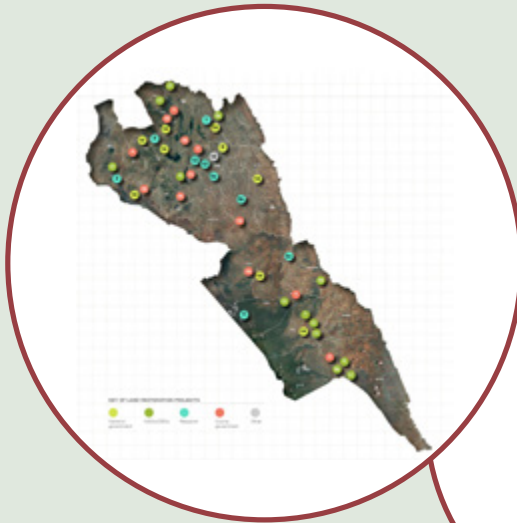
Box plot



Bar chart



Maps





# HISTORICAL ANALYSIS

Although a foresight process is aimed at planning for the future, a critical aspect of the process is understanding **‘what has happened historically within your theme?’** The first step is to determine your timeline—**‘how far back do you need to go?’** Key determinants here are time and resources.

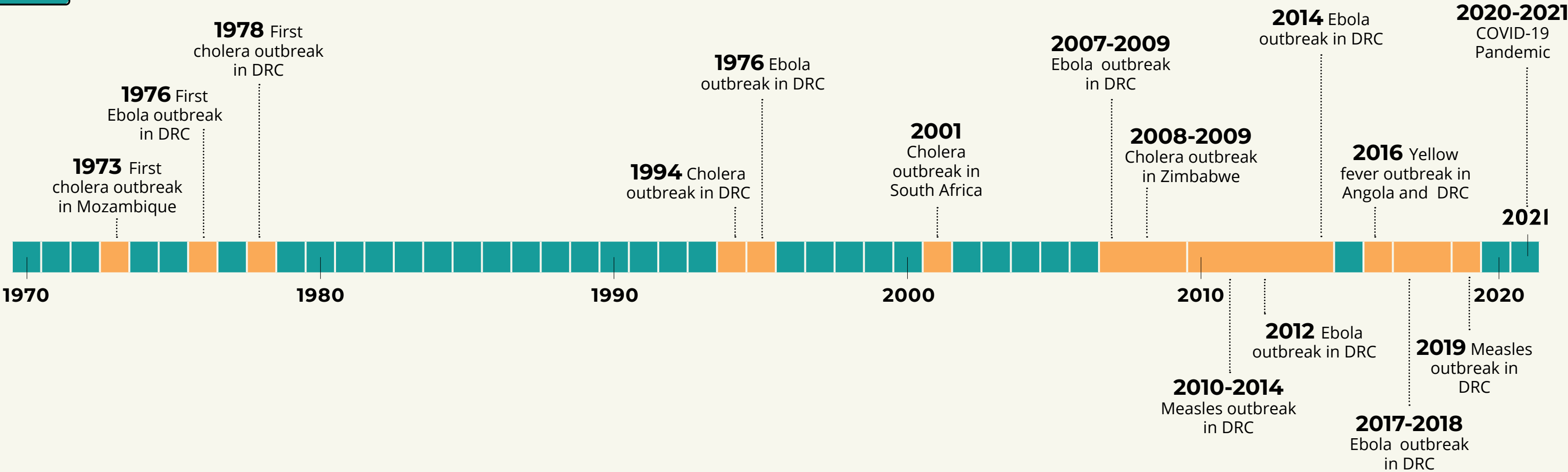
For example, **a historical analysis of climate and agriculture related trends and events was conducted for the 50-year period of 1970 to 2020.**

To develop a historical timeline, first you need to do some research. Next, it can be useful to split your findings according to set categories or dimensions. For example, the historical climate and agriculture related trends and events were analysed according to the following dimensions: human health, drought and political past or conflict.

Once you have identified the events, it is important to note their magnitudes (e.g. the number of people that have been affected) to understand their relative significance.

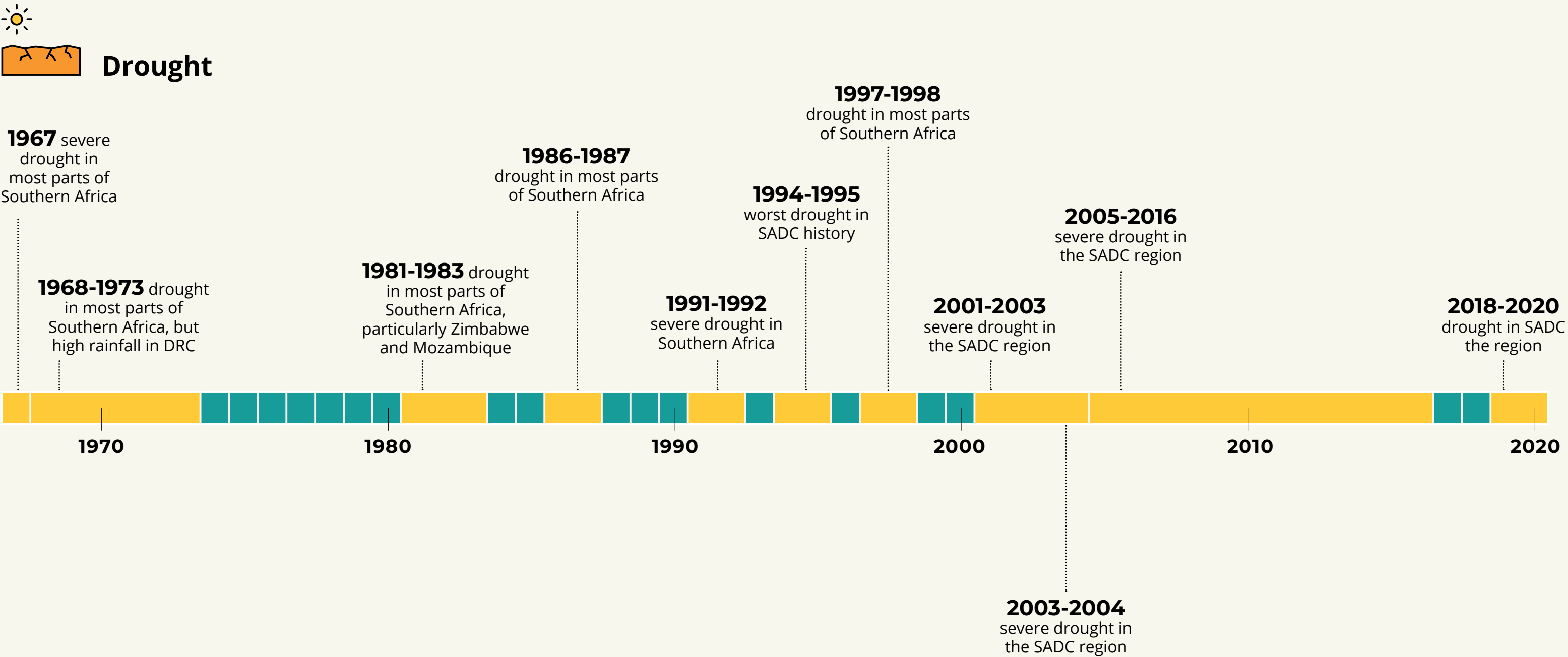


## Human health





The next category considered was drought. Are there any trends evident, is there a cyclical pattern?

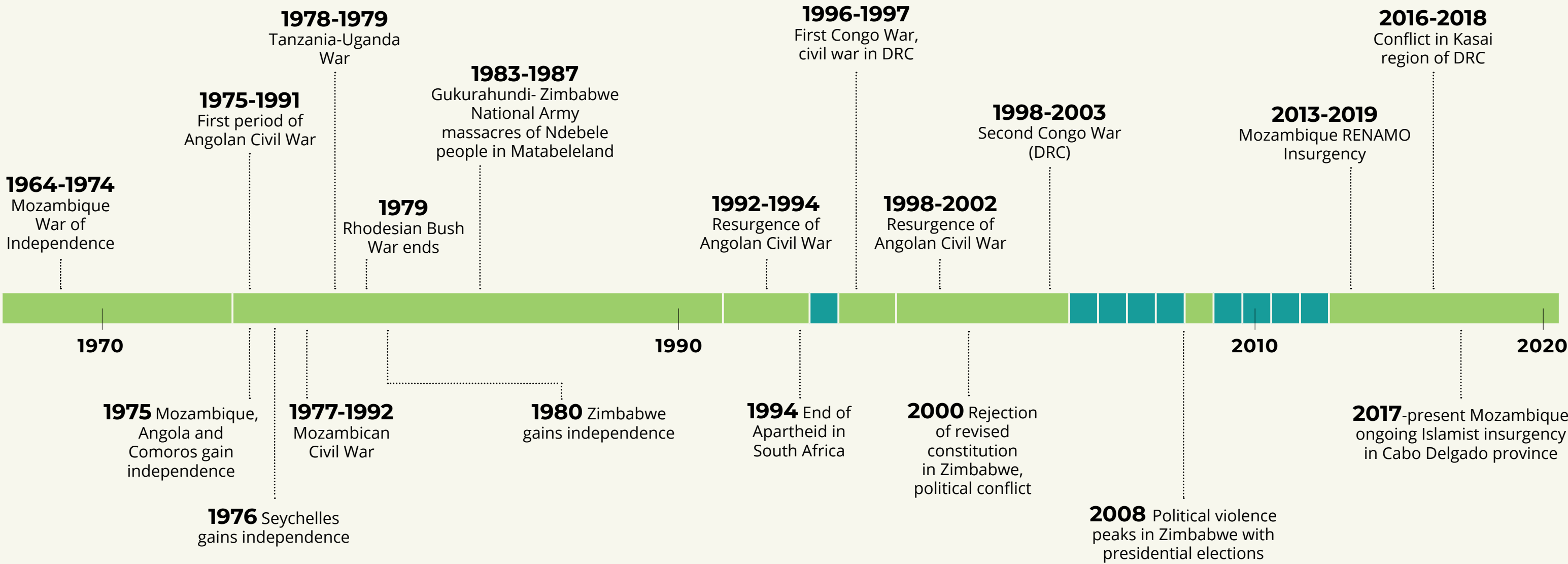


The same process was followed for determining the political past and conflict in the SADC region. Once the historical reviews are complete it is useful to group them together and look for common

trends. For example, does war in a country typically precede a disease outbreak, potentially due to malnutrition or a lack of clean drinking water?



Political past, conflict





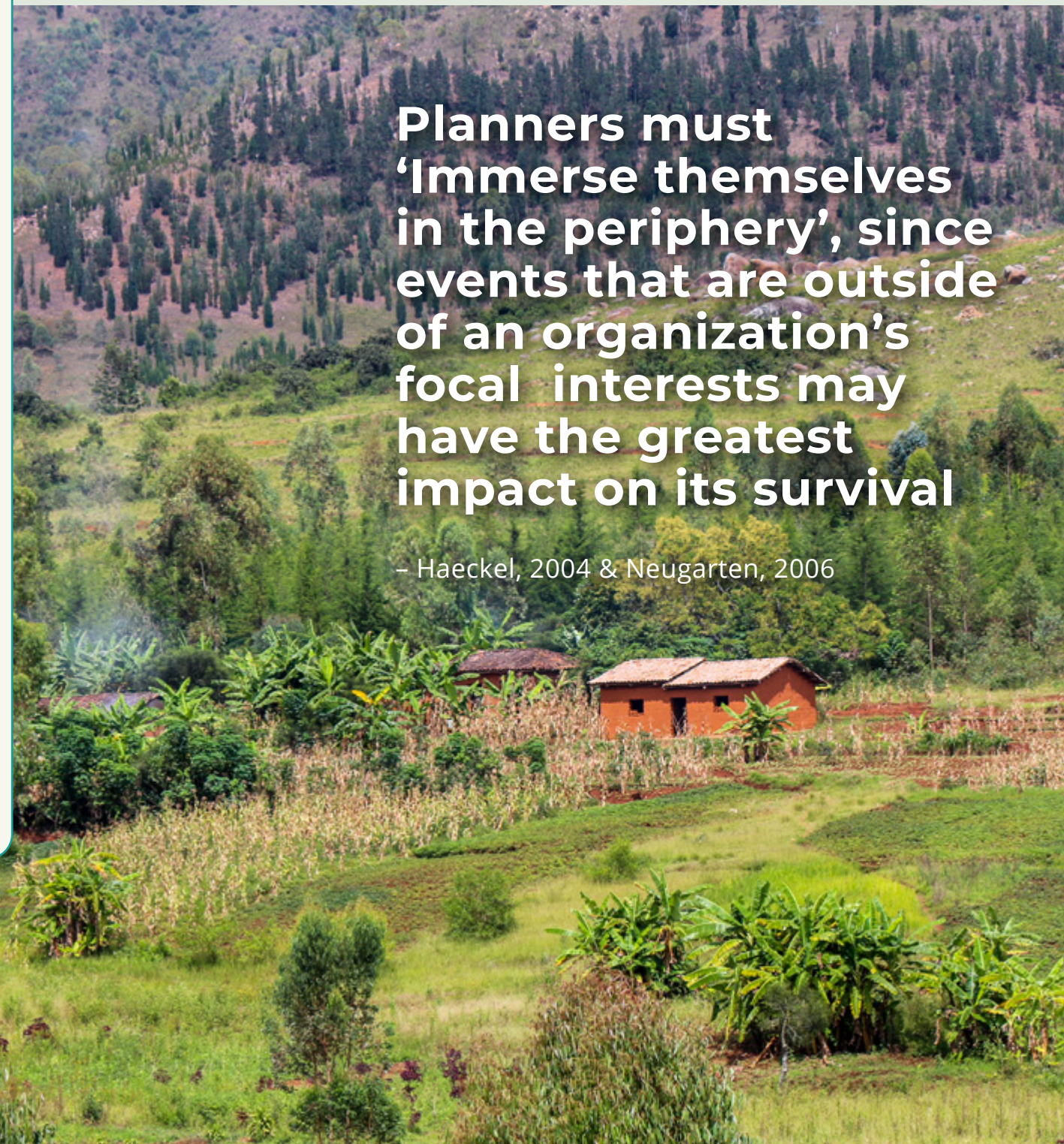


## LEARNING EXERCISE

**How can we use technology to improve foresight planning in preparation for climate change in Africa?**

In **'Setting the Stage'** we covered how technological advancements can be used to support transformative activities going forward. In terms of preparation technology for gathering data or evidence, there are new trends analysis technologies emerging that allow us to scan information at a faster rate. In planning for the future, there may be new technologies or innovations that we do not yet know about that we need to have within our planning sphere.

**It is important to reiterate here that foresight planning requires immersing yourselves in the periphery.** This means to really try to think of events that are outside of your organisation's focal interest that may have a great impact on survival. So, although you may be a climate change planner, open your eyes to what is actually happening in the peripheries that might be impacting the work you do.



**Planners must 'Immerse themselves in the periphery', since events that are outside of an organization's focal interests may have the greatest impact on its survival**

– Haeckel, 2004 & Neugarten, 2006



## HORIZON SCANNING

The second part of **trends analysis involves a tool called horizon scanning.** This is a process of examining diverse information sources and identifying signals of change. Horizon scanning is a tool that allows us to start future-oriented planning by looking at things to come.

### KEY TERM



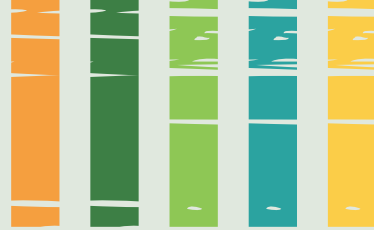
**Horizon Scanning:** the process of examining diverse information sources to identify potential signals of change and future impacts from trends identified.

Applied at the beginning of a forward-looking activity it is used to identify **"things to come,"** often new science and technology.

**Horizon scanning helps in identifying emerging issues,** weak signals of change and events that could lead to changes in behaviour, strategy or policy. It can be used to identify early signs of change not yet on the policy radar or adequately addressed.



# Series 2



## Horizon scanning relies on collective sense-making sessions of scanned signals and validation through further research.

When implementing horizon scanning, a key question to ask is: 'what are the early signs of change that are not yet on our policy radar?' For example, the European Commission uses horizon scanning in policy development processes. They run a horizon scan several times over to determine emerging issues that could have significant future implications for policy.

### What is the purpose of scanning?

Scanning for weak signals must be distinguished from searching for information. In searching, the research scope is fairly well-defined, often based on an analyst's particular interests and expertise on a topic. Scanning looks for new insights outside an analyst's existing mental model. In scanning, the foresight practitioner does not necessarily know what they are looking for, hence the scope is broad, often shedding light on previously uncharted unknowns.

### When scanning, key things to look for include:

**New trends:** Non-obvious or very recently identified trends likely to weigh significantly on future events (e.g. virtual working mode).

**New drivers of change:** New conditions that will impact how certain social, natural or technological parameters will evolve (e.g. shift towards renewable energy).

**Weak signals:** Small events or novelties that, combined with other existing elements, could lead to significant changes (e.g. low rates of current school attendance).

**Discontinuities:** Abrupt changes that either stop certain existing phenomena, introduce major changes in their dynamics or generate novel phenomena (e.g. global pandemic).

## ORGANISING TRENDS INTO MAJOR CATEGORIES

It can be useful to apply the **STEEP** framework to understand different trends. **STEEP** encourages you to consider categories that fall outside of your norm. For example, a climate change specialist might have an environmental focus and subsequently when attempting to analyse a trend, he or she would apply an environmentally-biased thought process.

Using the **STEEP** tool forces a person to think outside of their biases. For example, the climate change specialist would also need to consider technological and economical aspects which they may not have considered previously.

**S**  **Social**

**T**  **Technological**

**E**  **Economic**

**E**  **Ecological / Environmental**

**P**  **Political**



# Series 2



Q&A

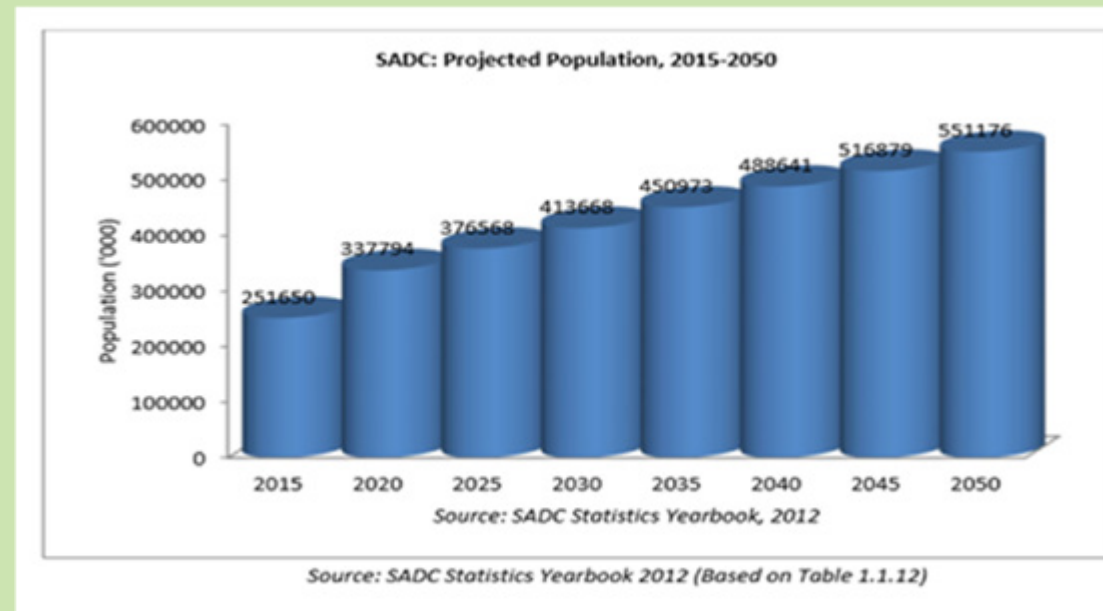
I have used a strategic tool known as PESTEL which is similar to STEEP. However, PESTEL incorporates a legal dimension that is not included in STEEP. Is the legal dimension not critical in categorising trends?

STEEP is not the only framework that can be used for categorising trends; there are three of four different examples. It is not important which framework you use, but rather that you develop the key skill of considering multiple categories without focusing on your thematic area or your area of bias.

So, for example, if you were to categorise trends in the context of a foresight process addressing climate-resilient agricultural development in the SADC region, you would look at social trends such as population growth.



## POPULATION GROWTH



**Increasing but at a slower rate, and slower than all other African regions.**

**Large growth of youth (under age 24) up to 2050 particularly in rural areas.**

**Highest rate of urbanization in Africa and expected to continue growing.**

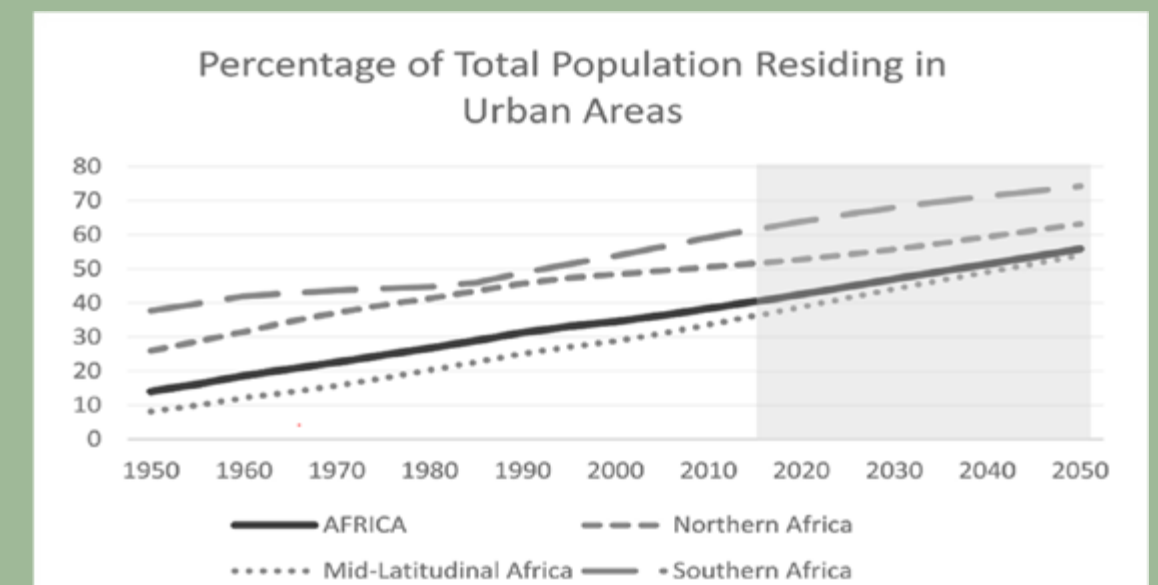


Photo: ©Thomas Bennie (Unsplash)

You might also consider other social aspects such as urbanisation.

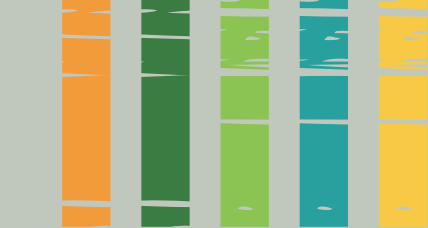


## URBANIZATION





Series  
2



Energy demand would also be important to consider and would need to be unpacked further in terms of access, sources of energy and growth in renewables.



ENERGY DEMAND

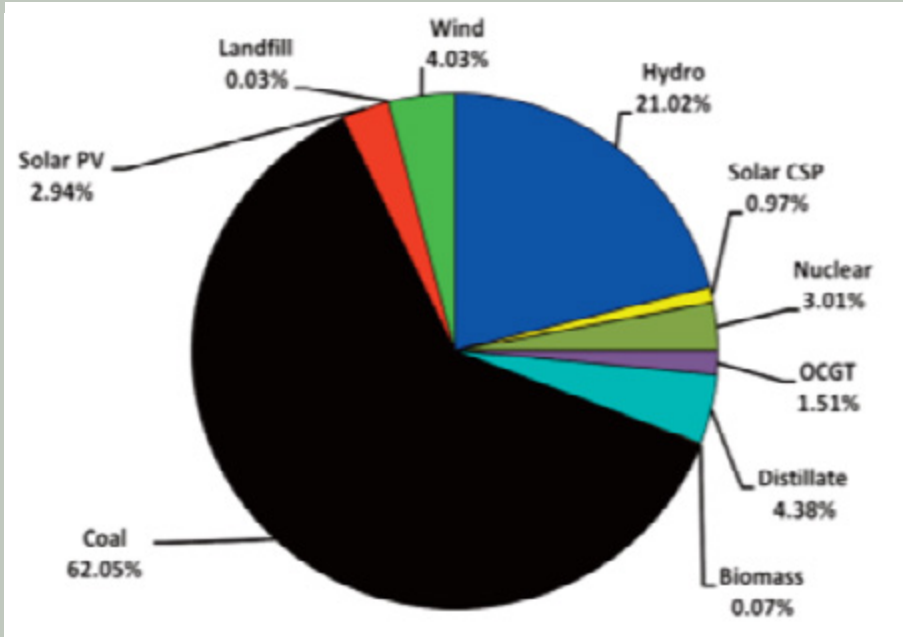
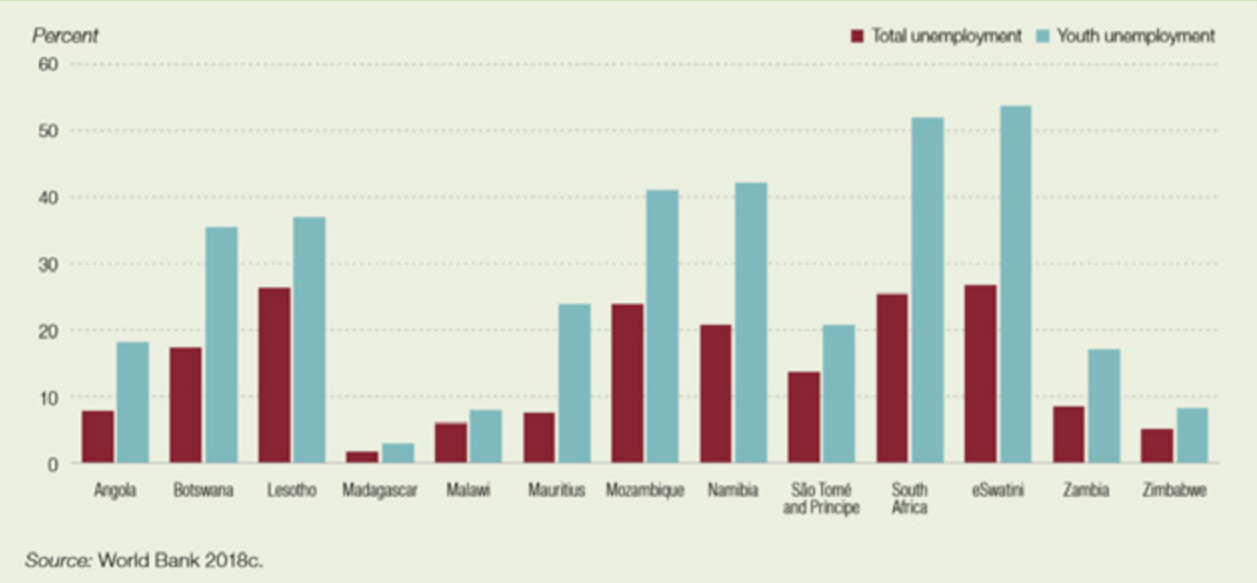


Photo: ©Olivier Girard (CIFOR)

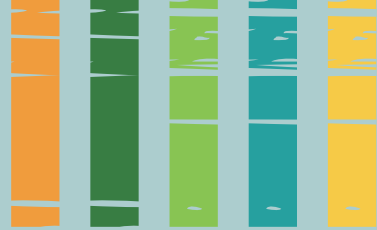
The issue of unemployment is another important aspect to consider. It could fall within the social or economic categories.



UNEMPLOYMENT



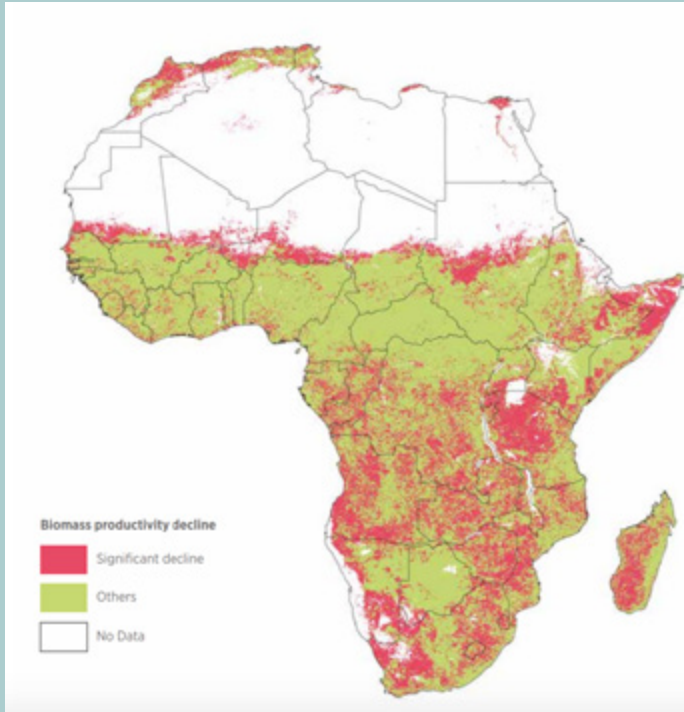




Land degradation could be considered when unpacking the environmental category of the STEEP framework. It may be necessary to determine the levels of degradation and how it is impacting on development in the region.



LAND DEGRADATION

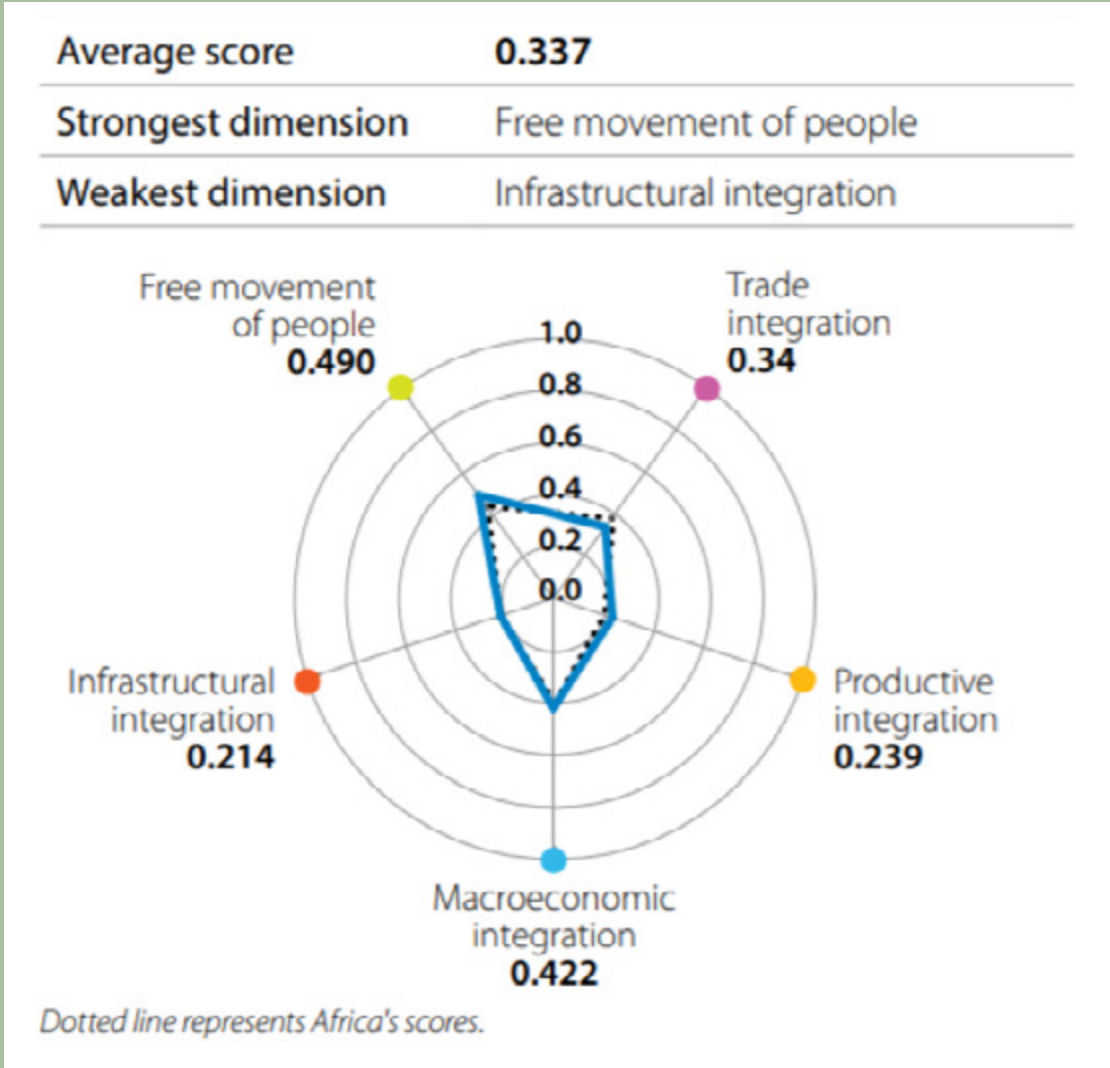


The **STEPP** framework incorporates a political category. In terms of climate-resilient agricultural development in the SADC region, an important trend to consider is effectiveness of regional integration.

Recent data indicates that SADC’s regional integration scores are low in comparison with other regional economic communities. The SADC region scores highly for the free movement of people and poorly for the integration of infrastructure.



EFFECTIVENESS OF  
REGIONAL INTEGRATION





**Be wary of collecting too much information**, you can spend copious amounts of time gathering data but if you do not have the time to analyse and organise it, it will not be useful to the foresight process.

A key skill of a foresight practitioner is being able to sift through information to determine if a trend is emerging or if there is a signal of future change. For example, a large consumer company like Unilever looks 15 to 20, or sometimes 30 years ahead to try to understand what consumers' lifestyles will be like in Africa and what products they will want. It is this kind of skill in private sector companies that we need to build into climate change planning, to start to consider what the world will be like in 2040 and 2050.



**Do we know whether greenhouse gas (GHG) emissions are a problem for us in the SADC region, or Africa as a whole? I guess the answer to this question is evident in the extreme changes in temperature and the increased frequency of erratic rainfall and flooding that we are experiencing?**

This reiterates the importance of defining your theme so you have clarity in deciding which types of information you need to inform your foresight process. There is also the issue of data availability that needs to be taken into account; sometimes the data we need is not available, consistent or reliable.



Analysing **key questions** really highlights the need to be inquisitive. It requires asking:

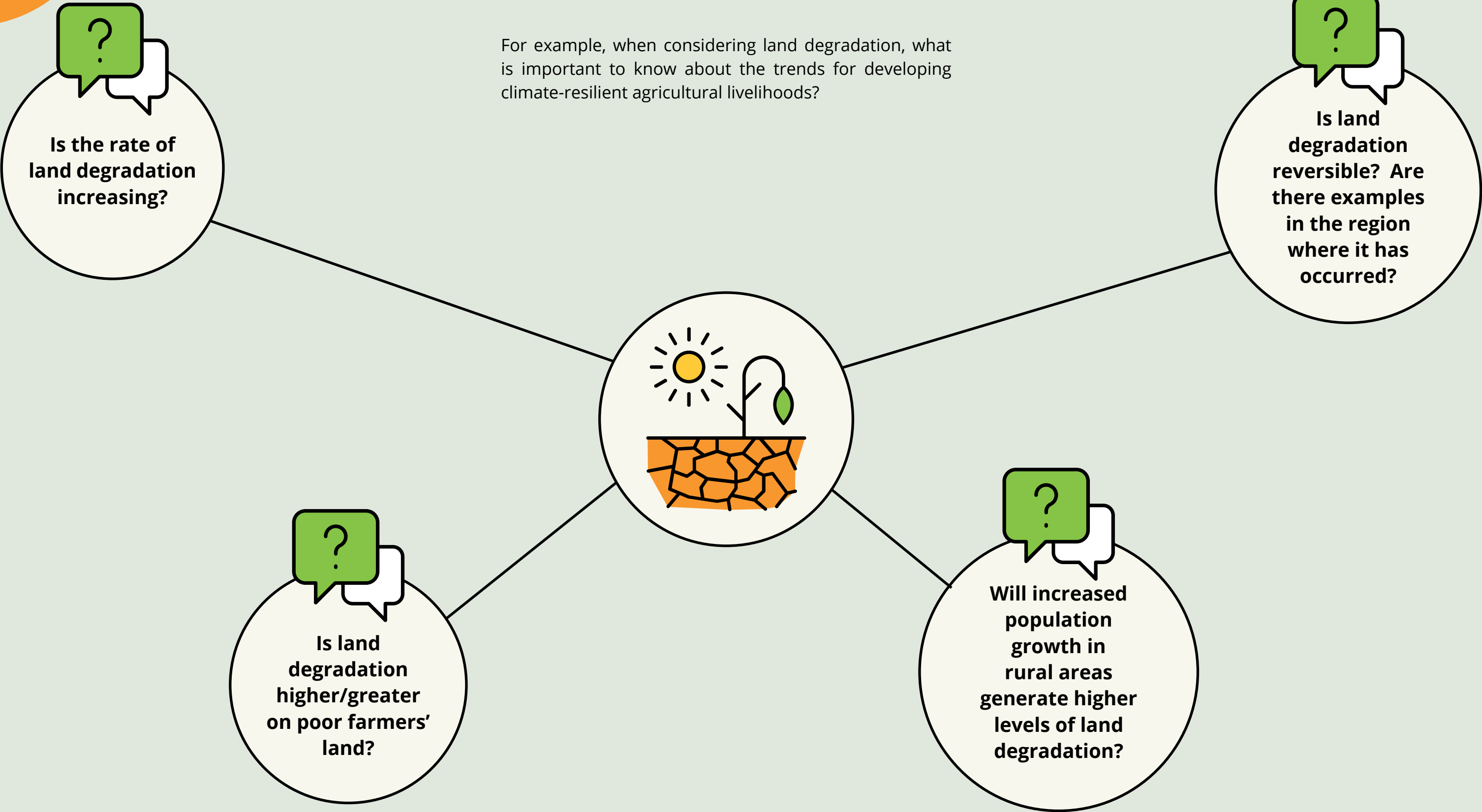
**“What questions are important to pose in understanding the theme when considering the future?”**

**“What do we think we know?’, ‘what do we have data, evidence and stories to support?’**

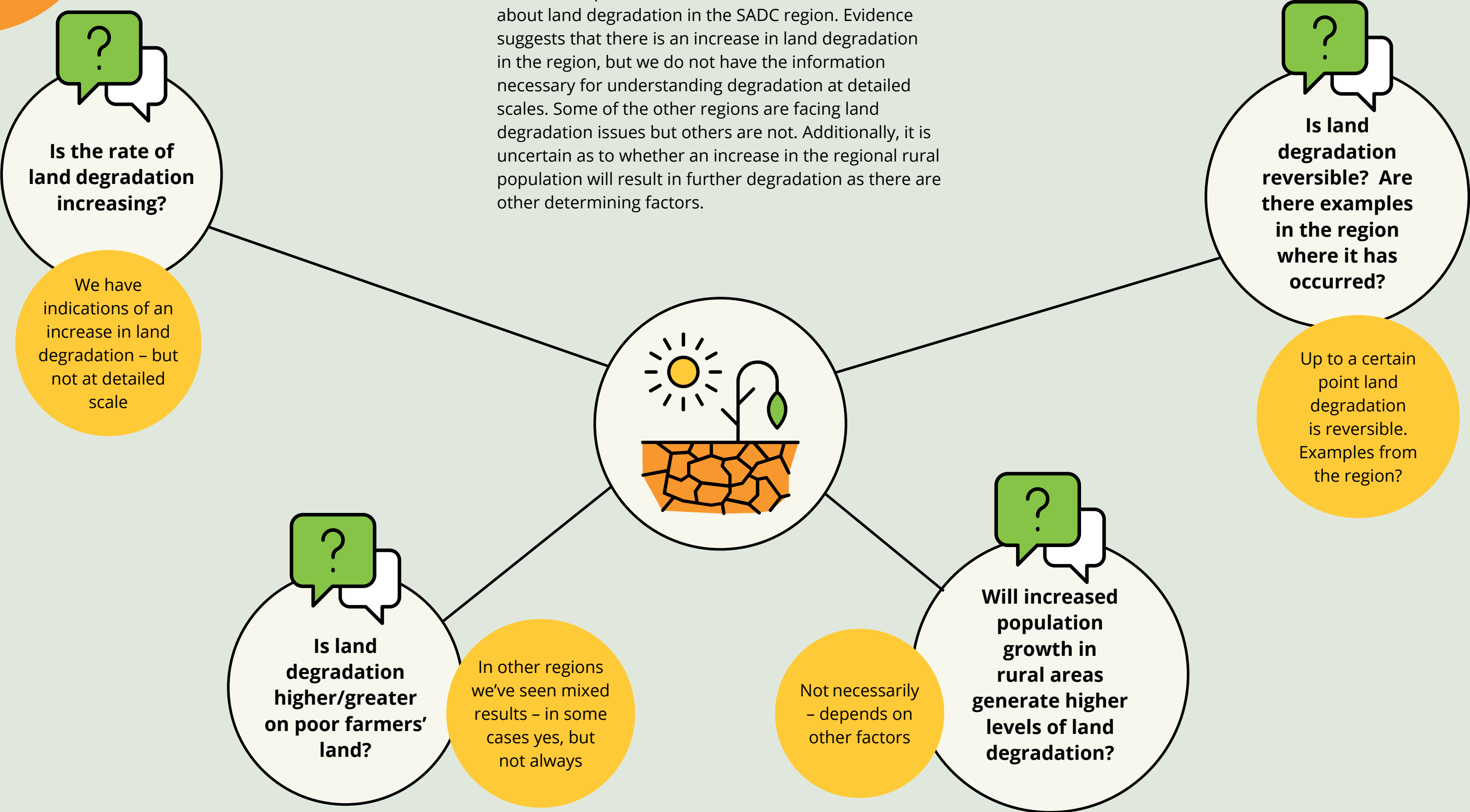
**“What do we still need to find out, or what are the known unknowns?”**



For example, when considering land degradation, what is important to know about the trends for developing climate-resilient agricultural livelihoods?



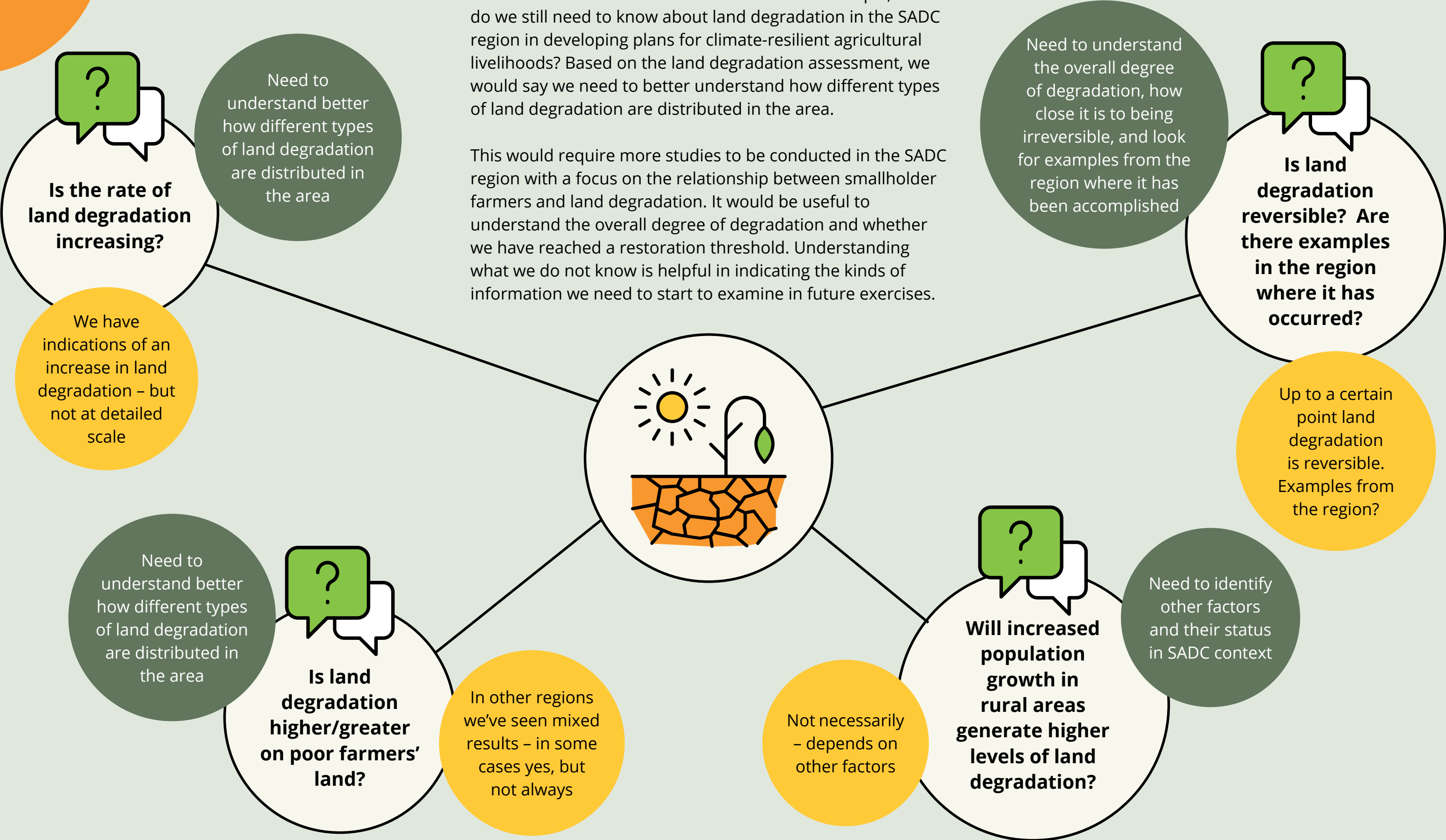
Next, it is important to consider what we think we know about land degradation in the SADC region. Evidence suggests that there is an increase in land degradation in the region, but we do not have the information necessary for understanding degradation at detailed scales. Some of the other regions are facing land degradation issues but others are not. Additionally, it is uncertain as to whether an increase in the regional rural population will result in further degradation as there are other determining factors.

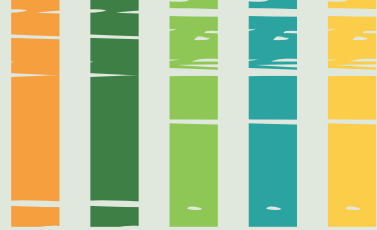




The next key question is **‘what do we need to know?’** or **‘what are the known unknowns?’** For example, what do we still need to know about land degradation in the SADC region in developing plans for climate-resilient agricultural livelihoods? Based on the land degradation assessment, we would say we need to better understand how different types of land degradation are distributed in the area.

This would require more studies to be conducted in the SADC region with a focus on the relationship between smallholder farmers and land degradation. It would be useful to understand the overall degree of degradation and whether we have reached a restoration threshold. Understanding what we do not know is helpful in indicating the kinds of information we need to start to examine in future exercises.





LEARNING EXERCISE

Analysing trends

In this exercise, we will consider one mega-trend in the SADC region and will practice using trend questions.

1

Let’s consider the mega-trend of agriculture production - **right now productivity is very low for poor farmers**. What do you want to know in working towards climate resilient development?

Write down your questions (maybe guided by youth, gender, environmental and political issues).

What do you need to know about agricultural production to plan for a climate-resilient future?

For example, “**How do we improve women’s productivity?**”

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2

Thinking of your examples of key questions we need to respond to – we now want to know how much do we know?

Share two things that you feel confident that you know a lot about.

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3

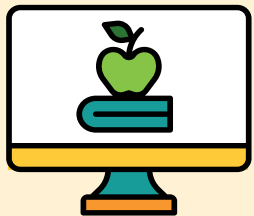
Now thinking back to your questions what do we not know that we need to know?

Please give us an example of a knowledge gap. For example, “**we don’t know the impact of technology on women’s engagement.**”

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LEARNING OUTCOMES

The learning outcomes from this series on ‘bringing evidence to bear’ include:

- 1 How to get started on defining key elements for a foresight exercise.
- 2 Understanding planning in three time horizons and researching and analyzing historical and current trends to support your future planning process.
- 3 Consider causal relationships and underlying causes and working within systems for future planning.





Photo: ©Noaa Led (Unsplash)

## Series 3



# CULTIVATING A CLIMATE-RESILIENT FUTURE

This series introduces **causal analysis** and **thinking in systems**. It then outlines how to **develop scenarios** to explore possible **future pathways**. The next step is an introduction to developing scenarios which requires **identifying drivers of change**. Lastly, a demonstration on how to develop different and **plausible scenario narratives** is given.

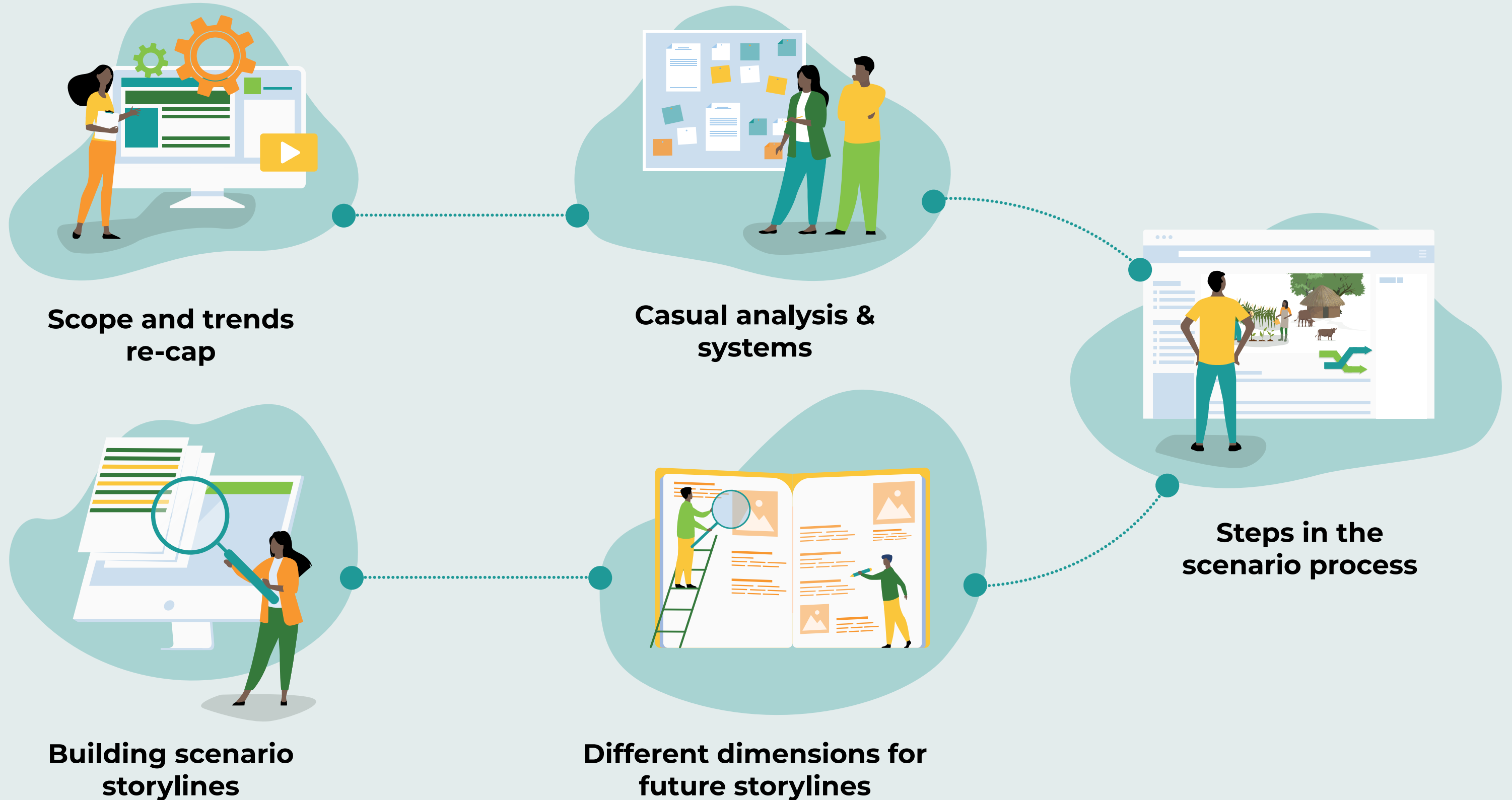
**In summary, the objectives of this series are:**

- 1** Examine **causal analysis and working in systems** within a foresight process.
- 2** Introduce the **development of scenarios** to explore possible futures.
- 3** Identify **drivers of impact and uncertainty**.
- 4** Demonstrate concretely how to develop different and plausible **scenario narratives**.

**The flow of this series follows the learning objectives. As with the previous series, learning exercises and Q&As are included throughout to encourage a mind shift to that of a foresight practitioner.**



## SESSION 3 OVERVIEW







## Recap on bringing evidence to bear

This **recap focuses on trends and trends analysis as well as setting up a foresight exercise**, the topics that were covered in Series 2. First, to reiterate, foresight and specifically strategic foresight is the ability to create high-definition forward views, and to apply them in an organised way. This training series introduces a set of tools and methods and demonstrates how to apply them to look ahead and plan for the future.



### LEARNING EXERCISE

Based on my participation in the last session(s), one thing I learned is...

“Evidence”

“Analysing trends”

“Horizon scanning”

“Building relationships with stakeholders”

“Trends analysis”

“Trends”

“STEEP, stakeholder maps and timelines”

“Systems approach”

“Four key questions of foresight”

“Imagining many different possible futures”

“Climate-related shocks”

“Agri-food themes”

“Transformative change”



### LEARNING EXERCISE

The acronym \_\_\_\_\_ helps me ensure that I am looking at multiple dimensions when I try to understand trends.

**S**  Social

**T**  Technological

**E**  Economic

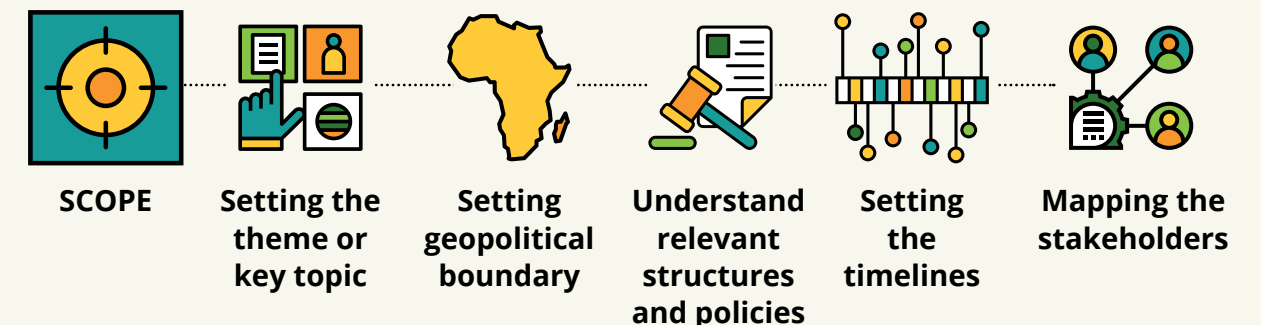
**E**  Ecological / Environmental

**P**  Political



### LEARNING EXERCISE

What do you need to know when defining the scope for your foresight exercise?



At the top frontend of the foresight framework is the situational analysis. This part of the process assists us in understanding **‘what is happening?’** and **‘why it is happening?’** The backend of the framework is focused on long-term future planning.

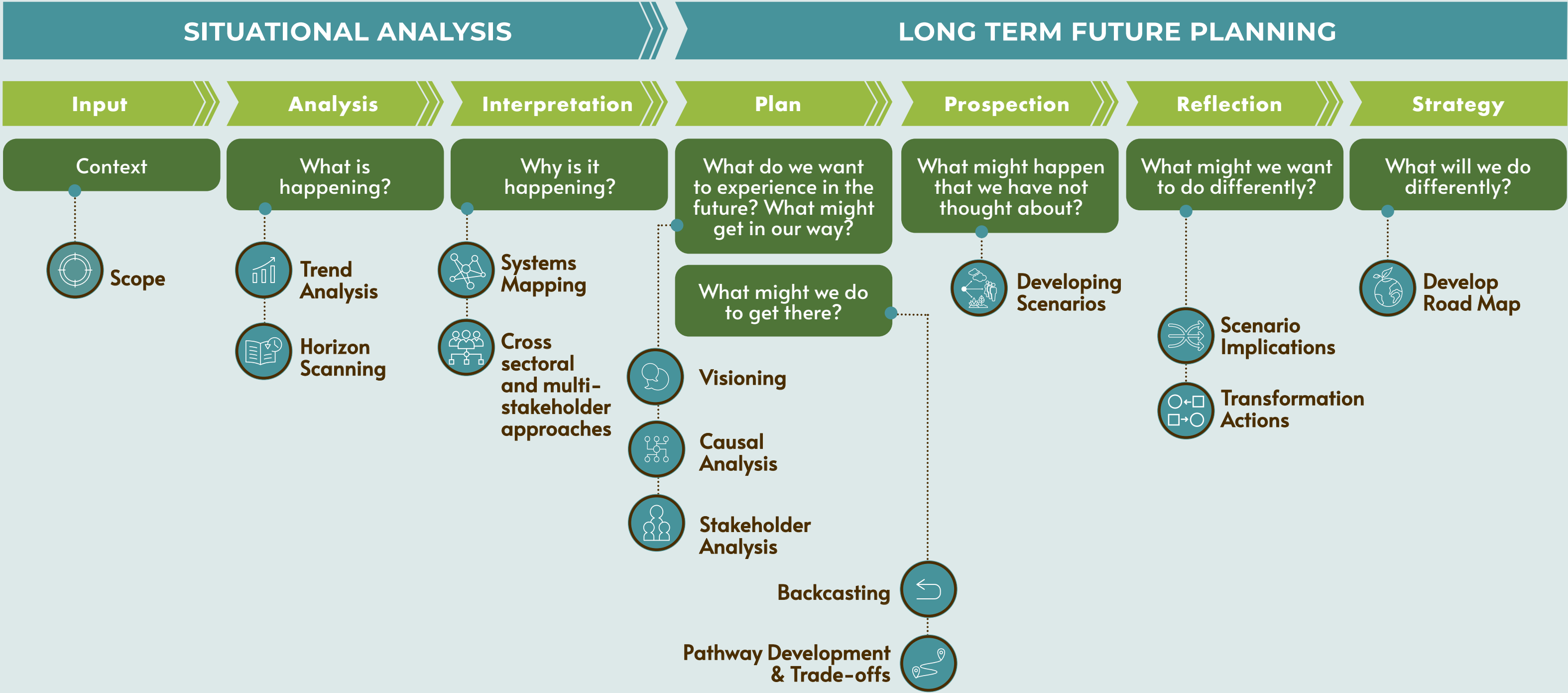
This part of the process encourages you to ask, **‘what might be the future we want to see happening?’**, **‘what might we need to do differently?’** and **‘what might happen that we have not thought about?’** The shift between the two stages requires a critical change in mindset, to be able to envision very different futures to the present.



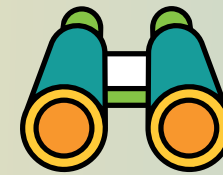
DATA, EVIDENCE, KNOWLEDGE AND CREATIVITY



STAKEHOLDER ENGAGEMENT AND PARTICIPATION

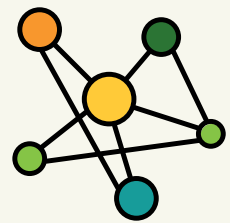






It is important to remember that there is no standardised way of doing foresight.

The tools, methods and approaches that you apply are dependent on the theme or topic in question.



## Thinking in systems and causal analysis

As part of the situational analysis stage, the identified trends need to be analysed. The key question to consider is: **'why is it happening?'** Causal analysis assists us in answering this.



**Causal analysis** is used to investigate the evidence and ask, ‘**what is really happening?**’, i.e. not what do we perceive to be happening.

When planning or deciding what our interventions are, it is common to treat the symptoms instead of the root causes of our issues. Therefore, root cause analysis is so critical in a foresight process—but what is root cause analysis?

## KEY TERM

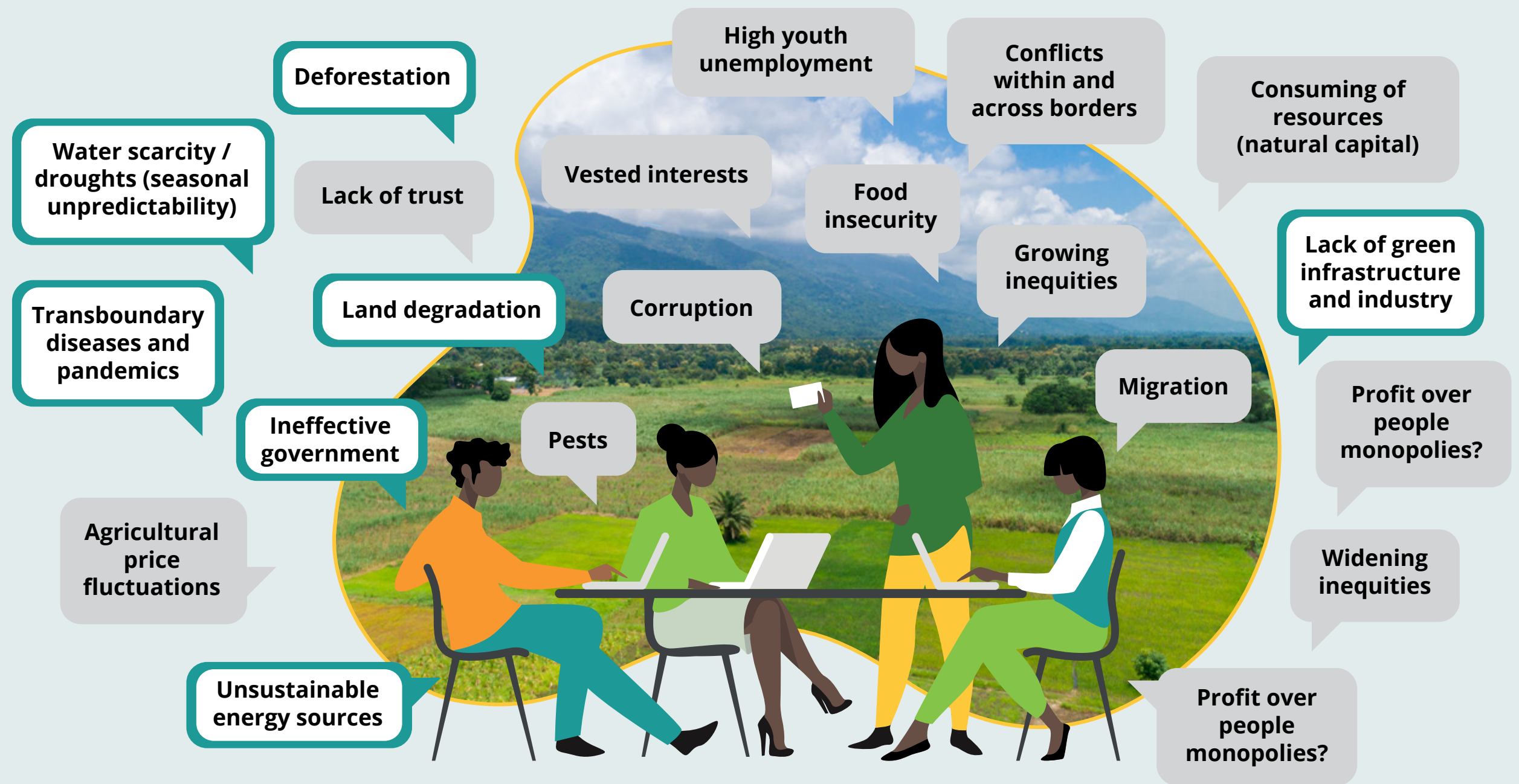


**Root cause analysis** or simple **causal analysis** is used to understand what issues underpin identified barriers to achieving a desired outcome.

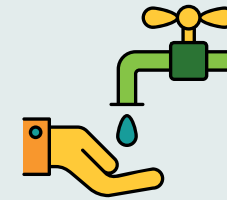
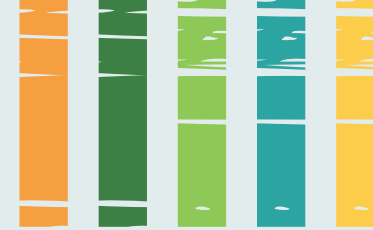


## IDENTIFYING BARRIERS

The first step in **root cause analysis** is to **identify and unpack the barriers** to reaching a preferred outcome.







**Example: Consider water scarcity as the issue in question.**

**What are the likely causes and what are the implications if no action is taken?**

One of the issues faced is the overuse of available water resources.

**But what is causing it?**

**Is it a lack of awareness in urban users, an issue of unequal access, overexploitation due to greed or a lack of knowledge on water conservation practices?**

**Perhaps there are poor water management policies in place, or the policies are in place but are not being implemented?**

Another underlying cause could be that there is no cross-sectoral coordination, i.e. water use in the agricultural sector may not take into account water use in the tourism or energy sector.

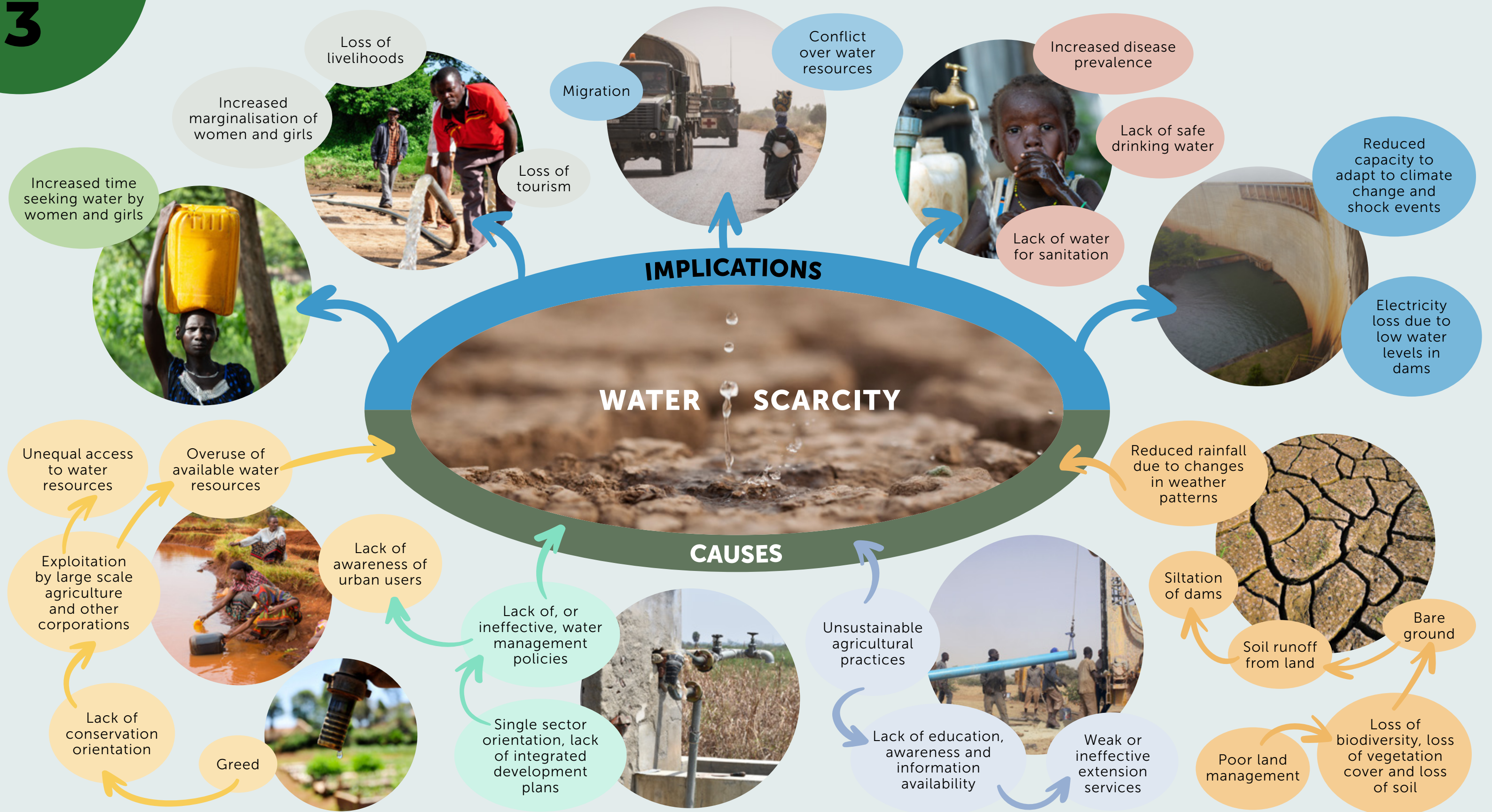
**Could the cause of water scarcity be due to poor land management resulting in a loss of groundcover leading to the siltation of dams?**

The implications of water scarcity are very serious such as increased time poverty for women and girls as they are forced to walk further to seek water, a loss of tourism, conflict, migration, electricity shortages, etc.



Photo: ©Nohaom Tesfaye (UNICEF)







By unpacking the **causes of water scarcity**, it becomes obvious that there are multiple dimensions at play, such as social, economic, political, institutional and environmental dimensions.

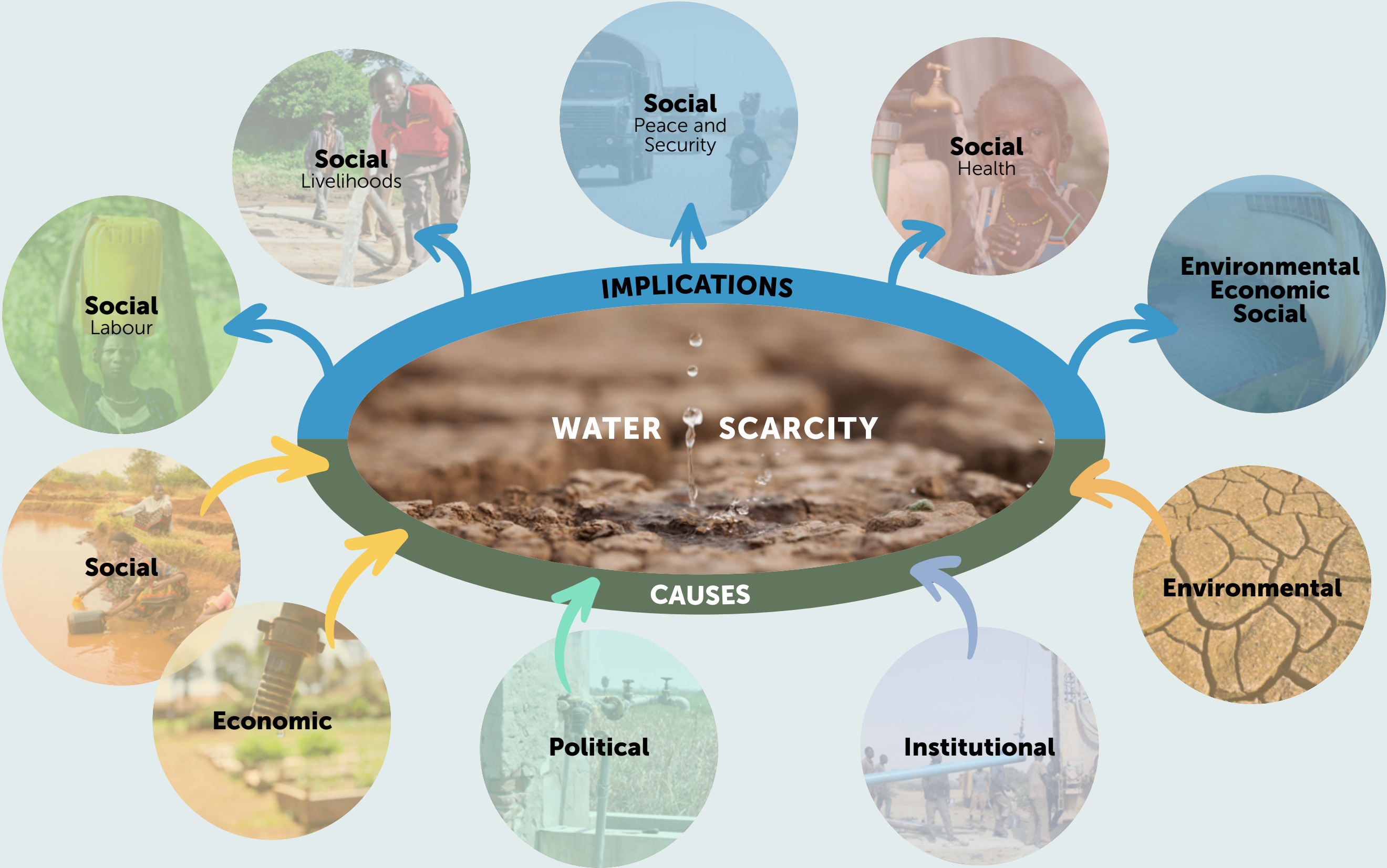


Photo: Clockwise from Top Middle ©Nohaom Tesfaye (UNICEF), Neil Palmer (CIAT), Danyell Odhiambo (ICRAF)



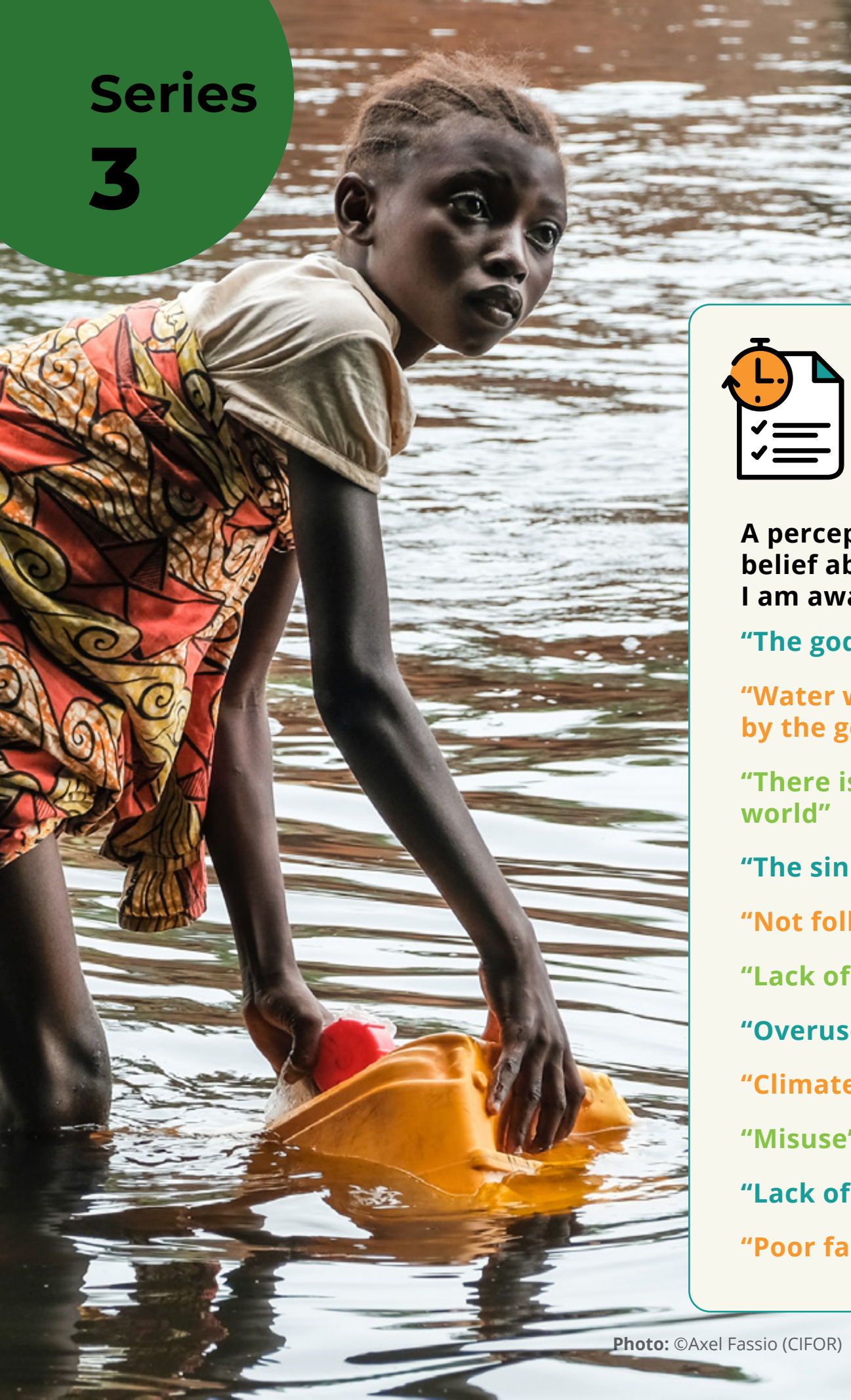


Photo: ©Axel Fassio (CIFOR)

Another important consideration in **undertaking a causal analysis** is that people's perceptions or beliefs can also form barriers to reaching the preferred future. So, when addressing these issues, try to determine whether there is a deeply held belief or perception that could be preventing a solution.



## LEARNING EXERCISE

A perception or strongly held belief about water scarcity that I am aware of is...

"The gods are unhappy!"

"Water was blocked deliberately by the government"

"There is enough water in the world"

"The sin of people"

"Not following traditional rules"

"Lack of storage facilities"

"Overuse"

"Climate change"

"Misuse"

"Lack of planning"

"Poor farming practices"



## LEARNING EXERCISE

Given this causal analysis, I would definitely invite \_\_\_\_\_ and \_\_\_\_\_ as stakeholders to plan for solutions to water scarcity.

"Community representatives"

"Local government"

"Government departments"

"Traditional leaders"

"Entrepreneurs and scientists"

"Water affairs ministry"

"As many diverse stakeholders as possible"

"Universities"

"NGOs"

"Policymakers"

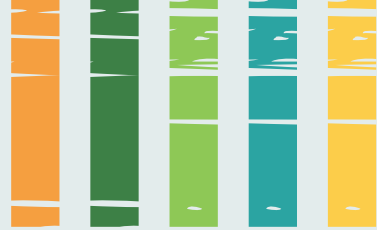
"Farmers, traditional leaders and government"

"Consumers and the water regulatory body"

"Community, policy makers and technical stakeholders"

"International community: experts in water"





It is important to identify and **engage with stakeholders** in the early stages of a **foresight process**. Some examples of the wider network of stakeholders to engage with on the issue of water scarcity are provided below:

ENGAGING A WIDER NETWORK OF STAKEHOLDERS



Government

- Water Department
- Land Department
- Agricultural Department (livestock, aquaculture, crop production, extension)
- Environment/NRM Department
- Health Department
- Finance and Planning
- Trade Department
- Education Department
- Department of Culture, Youth, Gender



Civil Society

- Large, medium and small scale farmers' organisations
- Health, education, agricultural, environmental International and local NGOs
- Youth groups and entrepreneurs
- Women's Organizations
- Community Based Organizations



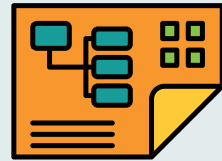
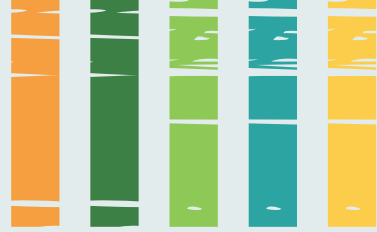
Private Sector

- Agricultural and Tree Product Companies
- Aggregators and Processors
- Local Farmers' Markets
- Sustainable Charcoal and Woodfuel Vendors
- Transportation companies
- Forestry, Wildlife, Tourism operators



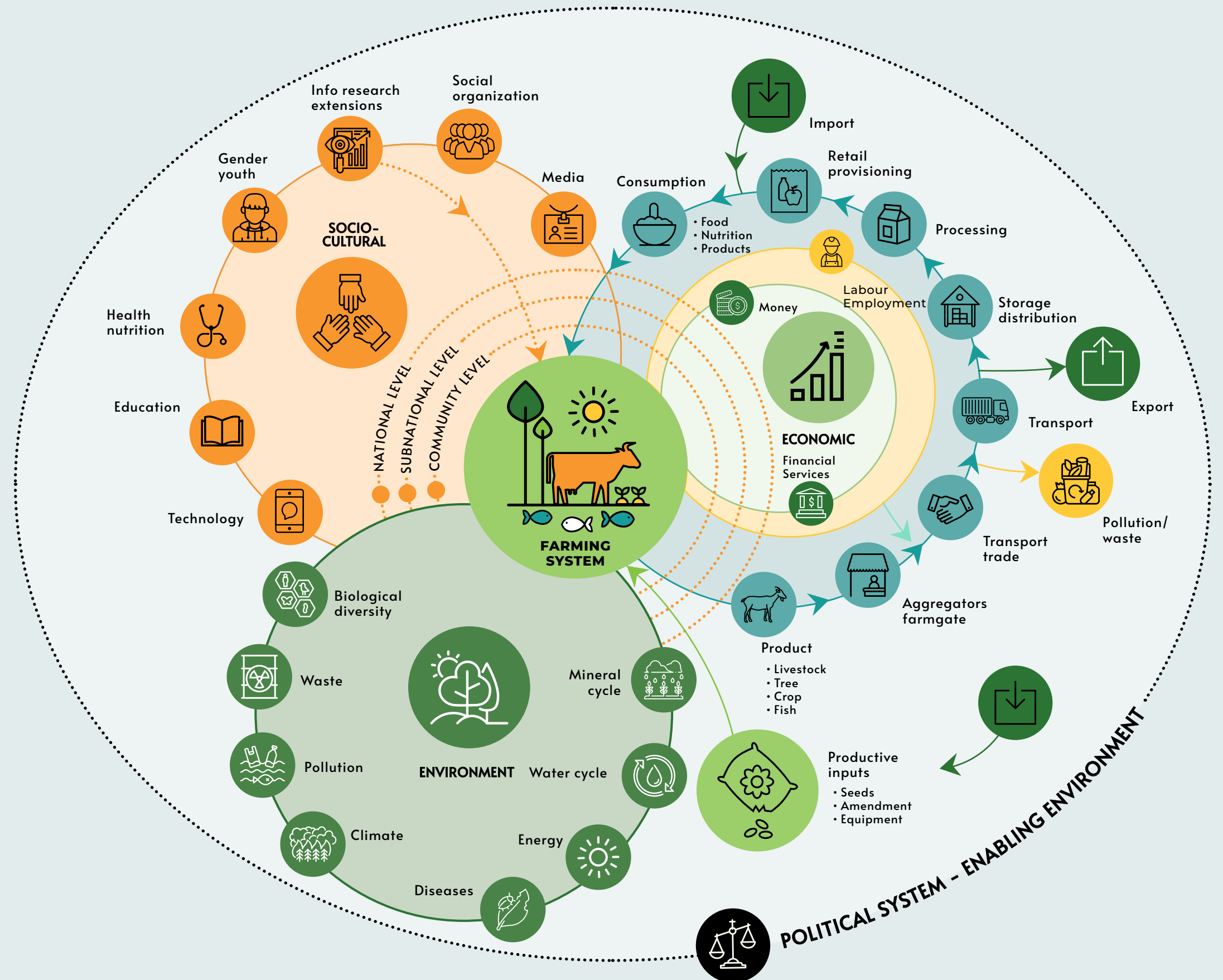
Others

- Research Institutions
- UN: FAO, UNEP, UNICEF
- Media
- Bilateral Donors



## Future planning within a system

The theme for the foresight process demonstrated in this training series is climate-resilient food systems. To reiterate, the theme is complex and involves a variety of different dimensions, i.e. social, economic, environmental, cultural and political dimensions. It is useful to map out the system that you are working within so that you can clearly see the relationships and interchanges between the different actors and develop a clear, holistic view. **When we understand the system that we are working in, we have a better sense of how drivers of change impact different dimensions of the system.**

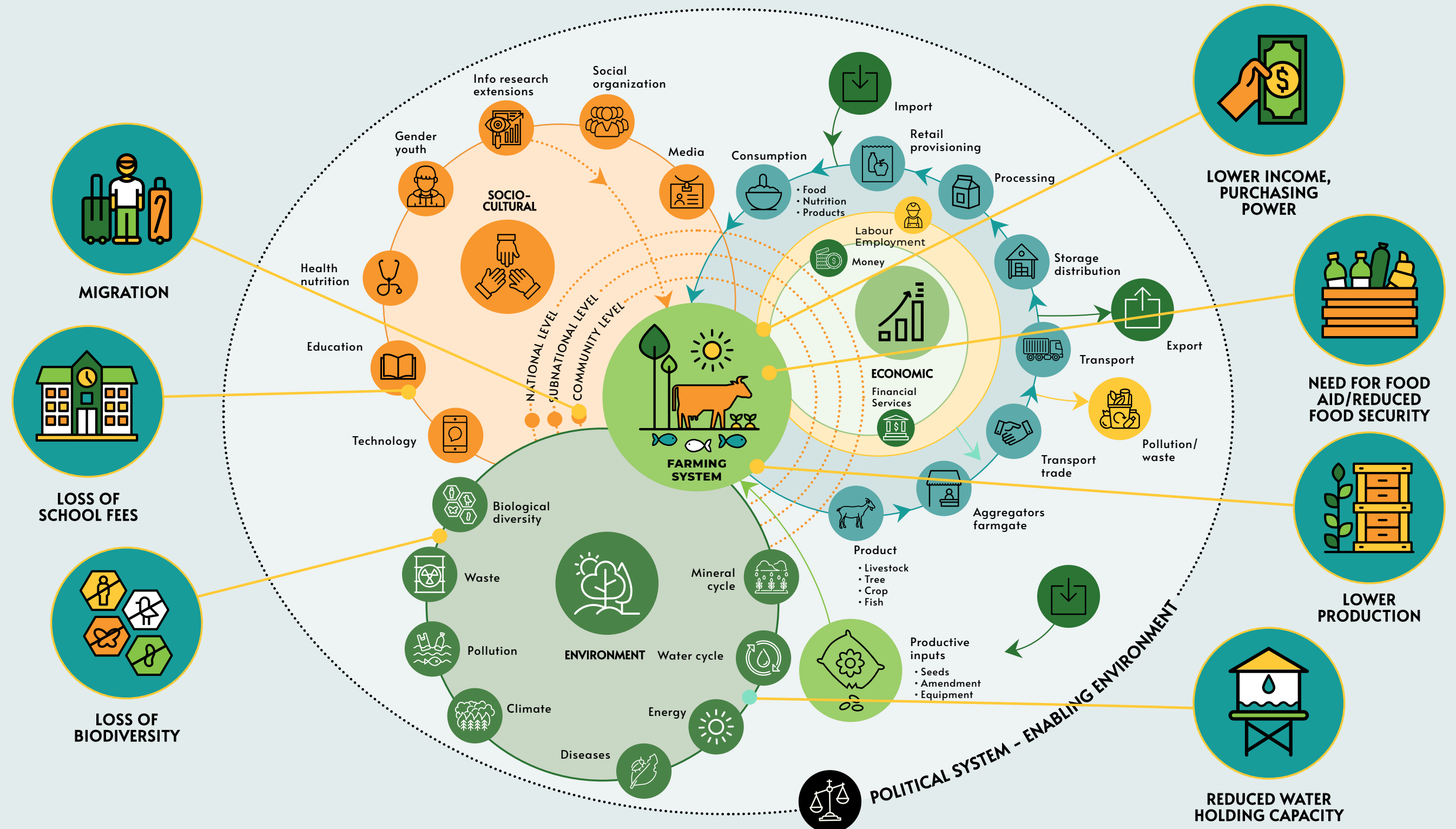




## ENVIRONMENTAL DRIVER Land Degradation

For example, consider an **environmental driver** such as land degradation, what impact does it have on the system?

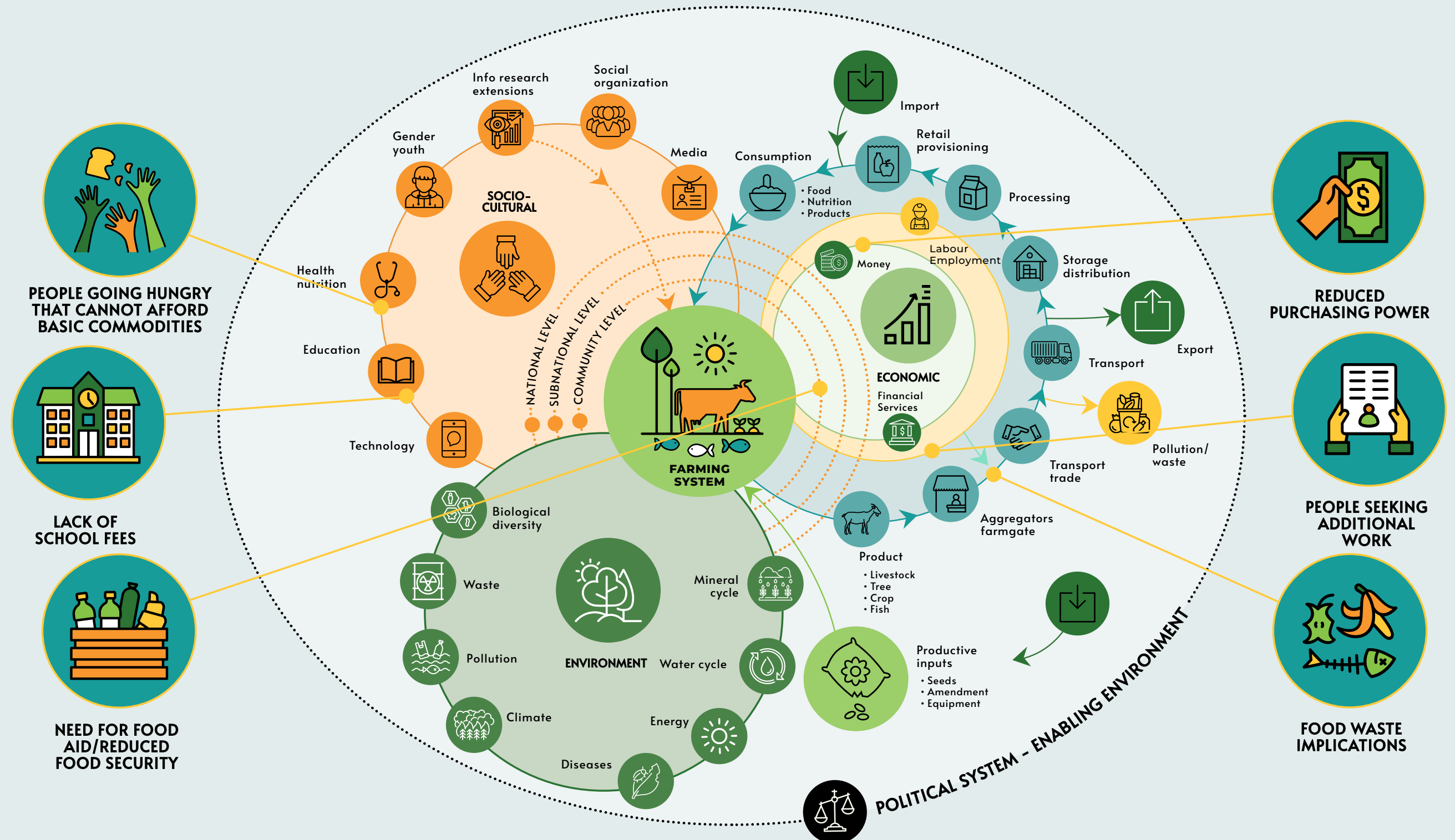
**Land degradation** could cause food insecurity and poverty, school fees may become unaffordable, and people could be forced to migrate.



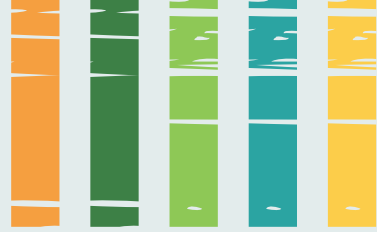
## ENVIRONMENTAL DRIVER Food Price Hikes

Another example is an **economic driver** resulting in food price hikes. This could result in impacts such as the inability to pay school fees, a need for food aid, basic commodities could become unaffordable, etc.

There are many other drivers that you could unpack such as youth employment, a lack of regional integration, political unrest, etc.



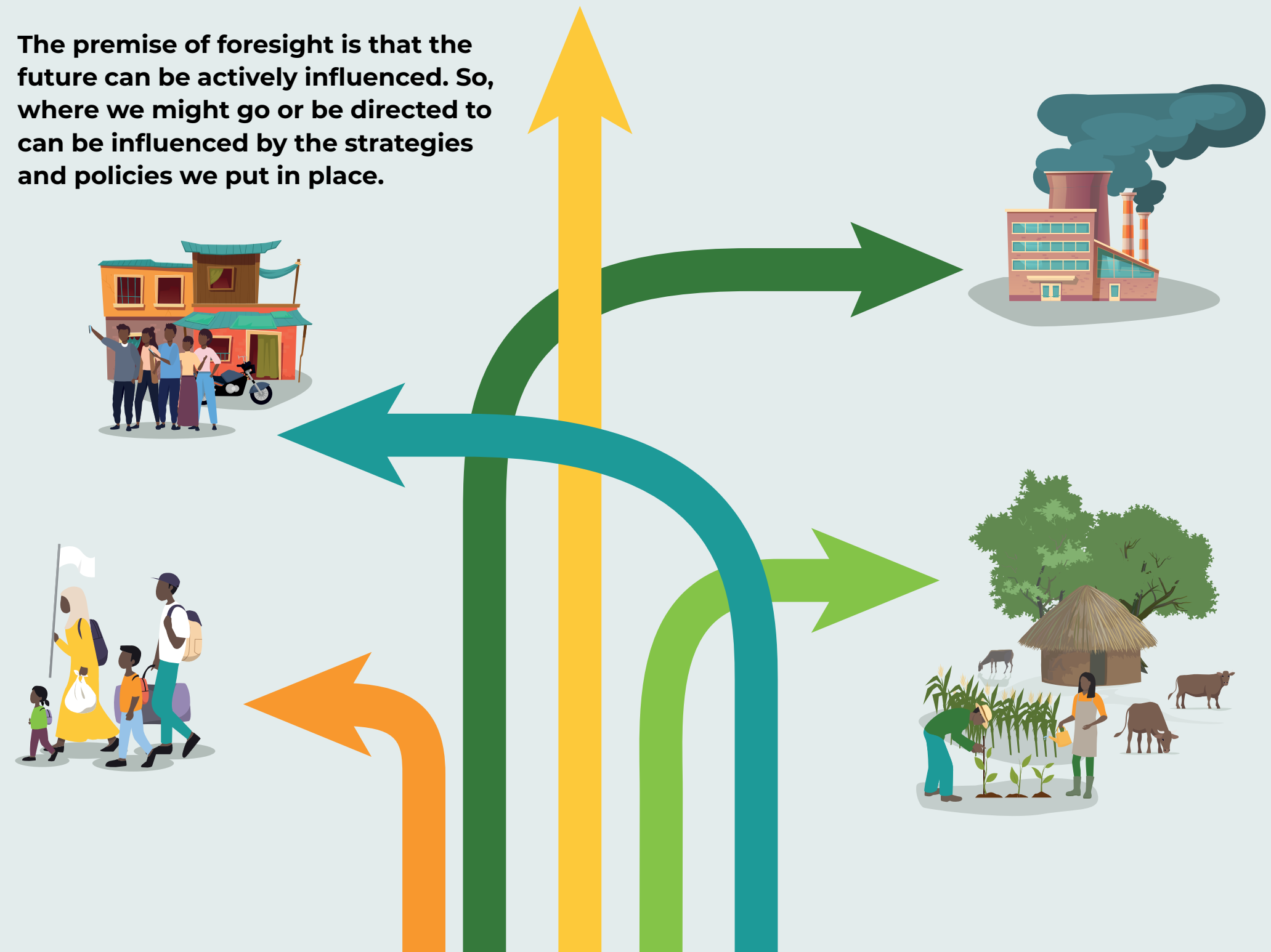




# Introduction to scenario development

The next stage of the framework is where we ask **‘what might happen?’** One of the key skills of a foresight practitioner is being able to imagine different possible futures. Having a curious mind helps a foresight practitioner to investigate trends and evidence and start to think **‘what might happen in the future?’**

**The premise of foresight is that the future can be actively influenced. So, where we might go or be directed to can be influenced by the strategies and policies we put in place.**

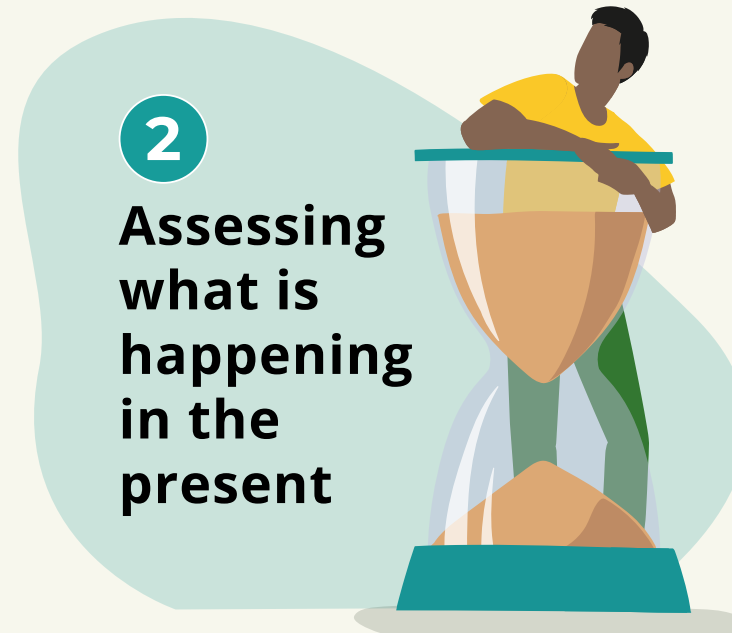


## Q&A

We are at the stage of identifying the root causes to the current situation, but one of the main problems that many institutions and governments face is defining their scope. They are unable to come together to identify the problems and so they cannot conduct a scenario planning process as there is no focus. What is the solution?

Planning requires multi-stakeholder engagement, for example, in the development of National Development Plans. Such events are ideal for encouraging people to talk about root causes or to unpack the barriers to a vision. During such a process it may be recognised that the different government agencies, NGOs, the UN and researchers need to all be working towards the solution. It can be a valuable exercise to do a root cause analysis on a policy to see if it is addressing the causes as opposed to the symptoms of an issue.

A **foresight process** works within **three core time zones**. There are sets of tools and methods that help us to look back into the past, to consider what is happening in the present and to anticipate the future. **The focus of the scenario process is on anticipating the future.**



**Long-term planning is subject to great uncertainty.** For example, when developing a long-term plan, the time frames can extend across multiple decades, or the plans may need to account for complex socioeconomic and biophysical systems. There are other external factors that affect the certainty of long-term planning, such as:



Future climate impacts;



Technological innovation and deployment;



Policy development and implementation;



Availability of large-scale solutions; and



Reliability of current data, models and skills to interpret evidence.

When carrying out a scenario process, the key question to consider is **‘what might happen that we have not thought about before?’**

**For example,** if the COVID-19 global pandemic had been an outcome of a scenario process and had been included in policy and put into practice we may have been better able to manage the situation.





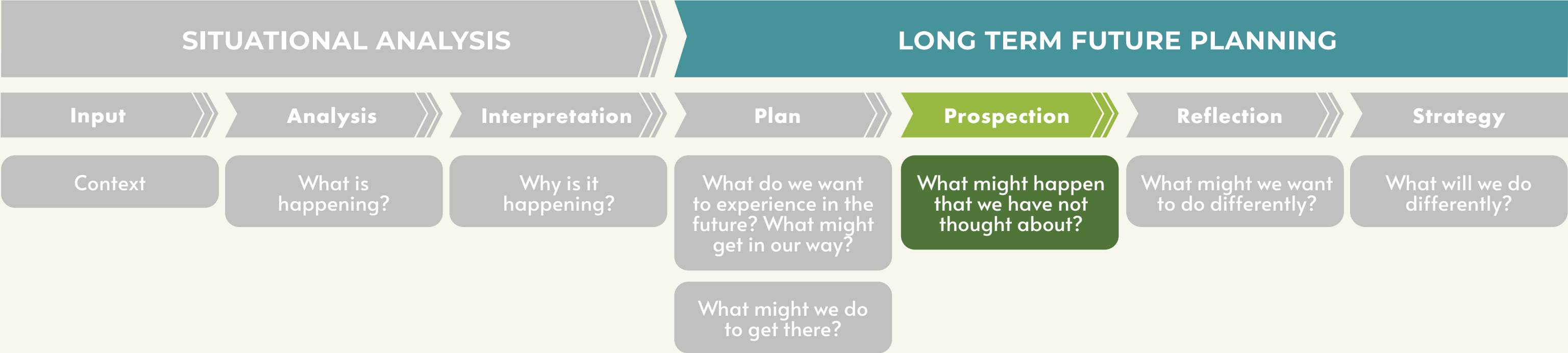
What might happen  
that we have not  
thought about before?



**Reminder:** The premise of foresight is that the future is still in the making and can be actively influenced or even created.



**The key question**, ‘**what might happen that we have not thought about before?**’ falls into the prospection step within the long-term future planning stage of the foresight framework. The premise of foresight is that the future is still in the making and can be actively influenced or even created.



KEY TERM



**Scenarios:** Storylines / narratives, answering ‘what if’ questions that describe multiple alternative futures spanning a key set of critical uncertainties. Scenarios identify future drivers of change and then plot out plausible directions that they may take.

Scenarios are a method that helps us to think about possible future states and to understand how uncertainties might unfold in the future. The **key question** to ask is, ‘**what if?**’

For example, if in 2019 you were modelling public health pandemics and had said ‘**what if we had a global pandemic?**’ the present situation may have been very different. Similarly, long-term planners in South Africa had run scenarios and had seen the possibility of political unrest in 2021 as a plausible future. This highlights the value of the scenario planning method, especially in policy and strategic planning, and how it can be used to capture uncertainties.

Scenarios are used as a method to **think about possible future states** and how uncertainties might play out.

Answering ‘**what if?**’ questions that describe multiple alternative futures spanning a key set of critical uncertainties.

A group of scenarios are alternative dynamic stories that **capture key ingredients of uncertainties of the future**. They reveal the implications of current trajectories, thus illuminating options for action.

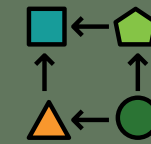




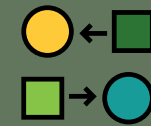
Photo: ©Shashank Hudkar (Unsplash)

**Scenarios must be plausible;** it needs to be reasonable to assume that a scenario might happen. This can be difficult, for example looking at the COVID-19 pandemic, some people would have said that a global pandemic is not plausible, and they would not have run a scenario process. It is also important to note here that scenarios are not a prediction of what will happen, they bring together qualitative and quantitative evidence as well as participatory multiple views to plan for the future but are not an exact prediction.

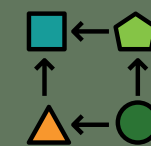
## SCENARIOS MUST BE....



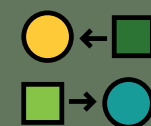
**Plausible** – it is reasonable to assume the scenario could happen. Plausibility does not mean that a future situation will happen.



**Viable** – able to be done or could occur.



**Feasible** – possible and practical.



**Not predictive** – participatory with multiple viewpoints, bringing in quantitative and qualitative evidence but not predictive.

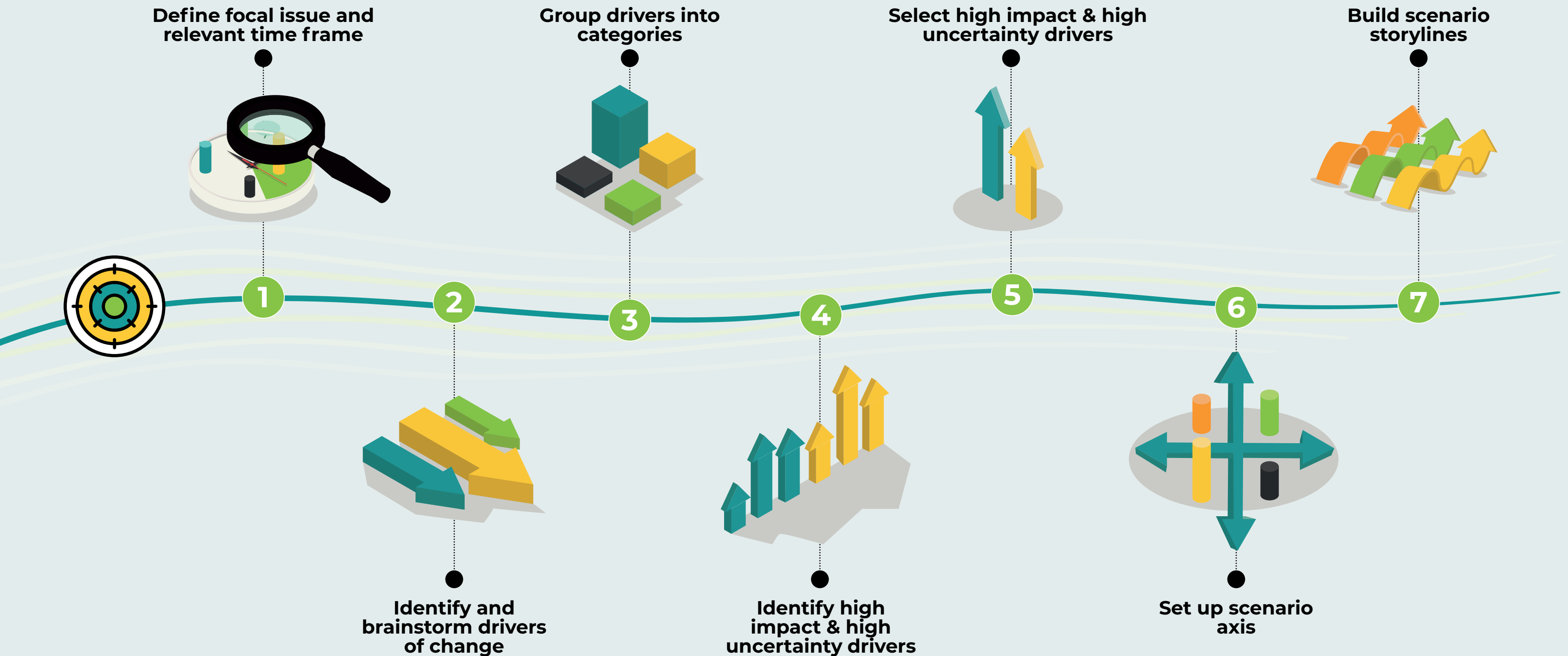
A scenario process is carried out over a number of steps. There are many different ways of building scenarios; the method demonstrated in this training is one of the simplest and most commonly used.



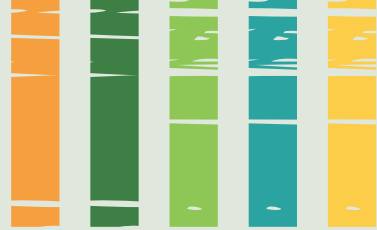


The **7-step process** starts with defining the focal issue and ends with building storylines. The first step of defining the focal issue and time frame was completed during the scope step in Series 1. **Step 2** requires identifying drivers of change in the system that you have defined.

## BUILDING SCENARIO PROCESS



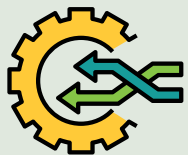




**A driver is a factor, an issue or a trend that may cause change that can affect or shape the future.** There are internal drivers, for example, the future of a farm including the employees and their families could be affected by an individual farmer's decision. On the other hand, an external driver might affect the market prices within the village that the farm supplies.



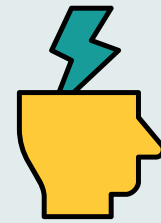
**Drivers** – are factors, issues or trends that cause change thereby affecting or shaping the future



**Internal driver** – internal force of change for example social drivers within a farm or community and directing decision making of a farmer



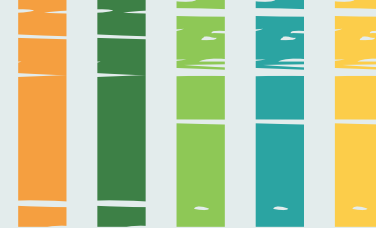
**External driver** – external force of change, for example political or market drivers



**Brainstorming drivers is best done in a group setting.** You would identify and openly discuss the different drivers that could affect your system in question.





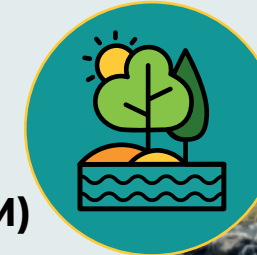


The next step is to organise the drivers that you have brainstormed. This can be done using the **STEEP** framework. Some of the drivers may not fall into any of the **STEEP** categories and some may be applicable to two. What is important is that you develop the skills to categorise them.



Socio-cultural

Natural Resource Management (NRM) and Environment



Governance / Political / Institutional



Agriculture Productivity



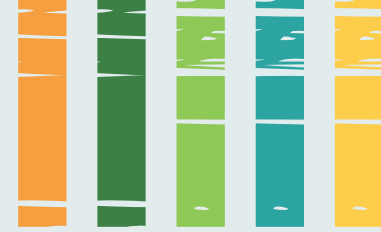
Economic





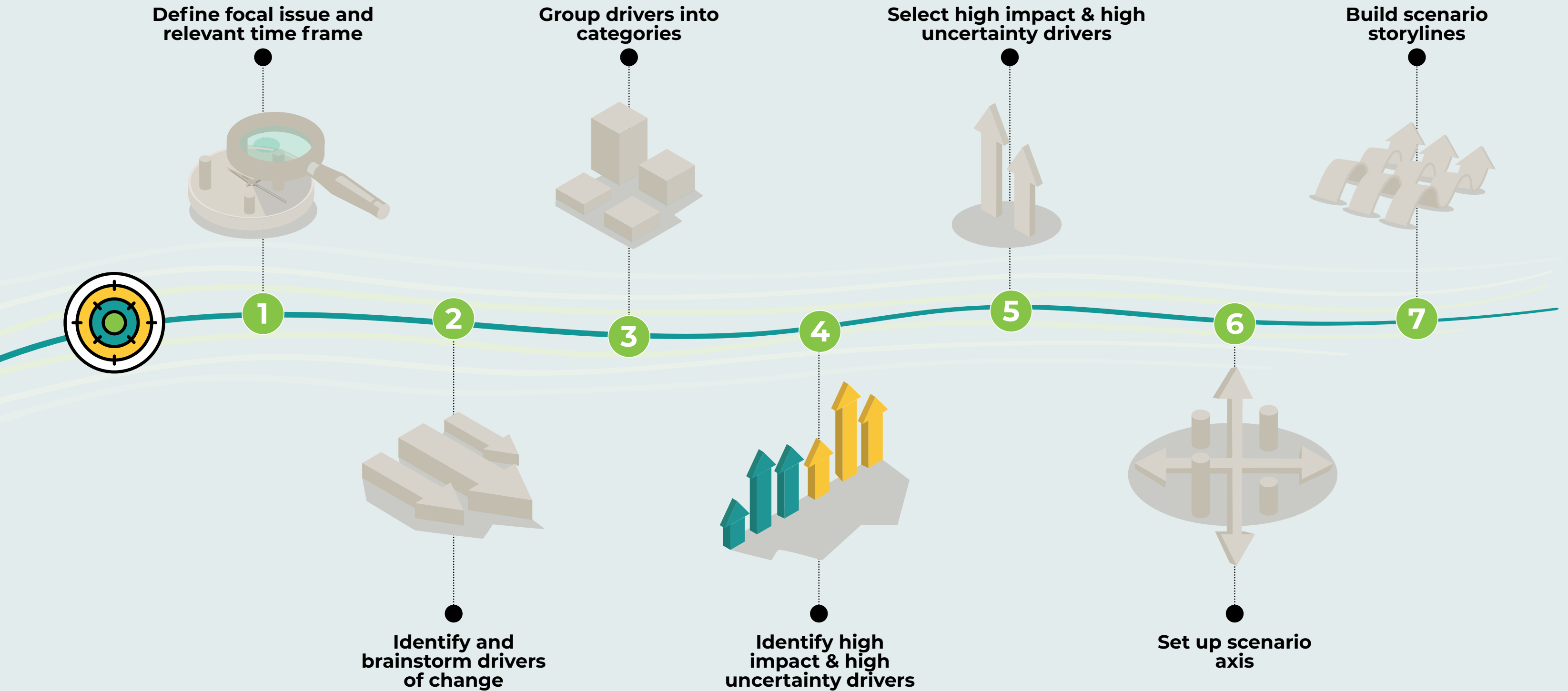
Categorising drivers can be done by grouping post-it notes. This method is beneficial in terms of visual clarity.



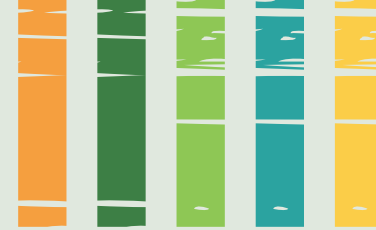


## BUILDING SCENARIO PROCESS

With the second and third steps complete, the next step is to identify high impact and high uncertainty drivers.







Taking each of the drivers within the different categories, you need to ask: **‘what is the scale of the impact of that driver?’** and **‘how much is it going to affect the future?’** Then, to understand the uncertainty, you need to consider how certain or uncertain you are that the driver is going to play out.

**For example**, population growth can be modelled, and we can say with relative certainty how it will affect a given area. On the contrary, climate risk or extreme events are less certain. The purpose of this step is to identify these high impact and highly uncertain drivers, or critical uncertainties, and use them to inform the scenario axes.



**Drivers** – refers to the potential scale of impacts of the driver on your scenario theme



**Uncertainty** – in scenarios refers to how much or how clear we are on how a driver will emerge or play out in the future. High uncertainty does not mean ‘high improbability’, high uncertainty can mean having little knowledge of how something may pan out.



**Critical uncertainties** - are drivers that are both high impact and highly uncertain.



## LEARNING EXERCISE

What driver do you think will be highly impactful in your country in the next 10 years?

“Technology”

“Politics”

“Information and communications technology”

“Water stress”

“Land degradation”

“Drought”

“Climate risk”

“Water and digital agriculture”

“Climate change”

“Markets”

“Policy change”

“Flooding”

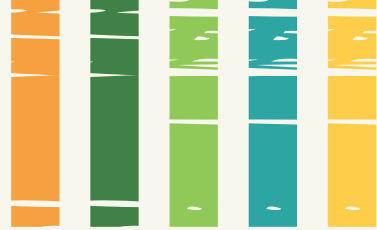


## KEY QUESTIONS

**Key questions** to consider when ranking a driver are:

‘Is it low or high impact?’ and ‘is it high or low uncertainty?’ This is not always as straightforward as it seems.





**This is the type of table you would compile to rank your drivers.**

The table was completed using the theme of climate-resilient agri-food systems in the SADC region. In the brainstorming session it was suggested that ‘expanding areas for major commodities’ is a key driver of the agri-food system. The driver was then ranked according to how impactful it was thought to be. In this case the driver was considered to have a very high impact as it could affect critical system inputs.

The uncertainty was ranked as low because it could be modelled. Population growth was also considered to be highly impactful, but the uncertainty was ranked as low as again, it is fairly easy

to model. The next driver considered was ‘open borders’ which implies free trade. This was deemed likely to have a high impact on the food system, but the certainty was ranked as low as it is difficult to predict the status of borders in 5-10 years’ time. Lastly, the driver of ‘export regulations’ was considered.

To provide context, in the SADC region, one of the biggest impacts on the food system, especially beef, was the introduction of a European Union (EU) regulation on imports. This had a large impact on beef exports and production in countries such as Botswana. So, this impact was considered to be very high and very uncertain.

**LET’S TAKE THE DRIVERS OF CHANGE IN FOOD SYSTEMS**

Driver	Impact - how impactful they are (Low, High)	Uncertainty - how well we know how they will play out (Low, High)
Expanding areas for major commodities	HIGH	LOW / MEDIUM
Population growth	HIGH	LOW
Open borders	HIGH	HIGH
Export regulations	HIGH	HIGH
Climate Risk to agriculture	HIGH	HIGH





LEARNING EXERCISE

Climate variability as a driver is \_\_\_\_\_ in terms of its impact and is \_\_\_\_\_ in terms of uncertainty on plant pest and diseases.

Driver	Impact - how impactful they are (Low, High)	Uncertainty - how well we know how they will play out (Low, High)
Climate variability	?	?



Q&A

What happens if we disagree on the ranking of drivers?

There are likely to be disagreements in these group planning sessions which emphasises the importance of robust evidence. At the top of the foresight framework, across all the stages, are the critical processes of evidence and stakeholder engagement, knowledge and creativity.

**Climate variability**, for example, may be considered as low uncertainty to those who have seen modelled data generated by a research institution. How the evidence is applied and incorporated with other knowledge systems when thinking about your plan is crucial. In foresight planning there is a need to

unpack, question and be critical of all evidence pieces and viewpoints. If you cannot come to an agreement, you may need to revisit the evidence and do further research to continue with enhanced knowledge and confidence.

**Foresight** is not a linear process; when using the tools and methods, should you find that you do not have enough evidence do some more research and re-conduct the trends analysis; perhaps you missed one of the STEEP categories. As a foresight planner you need to progress with confidence in these approaches.



The next step is to build a scenario axis with the high impact and high uncertainty drivers that you have identified.



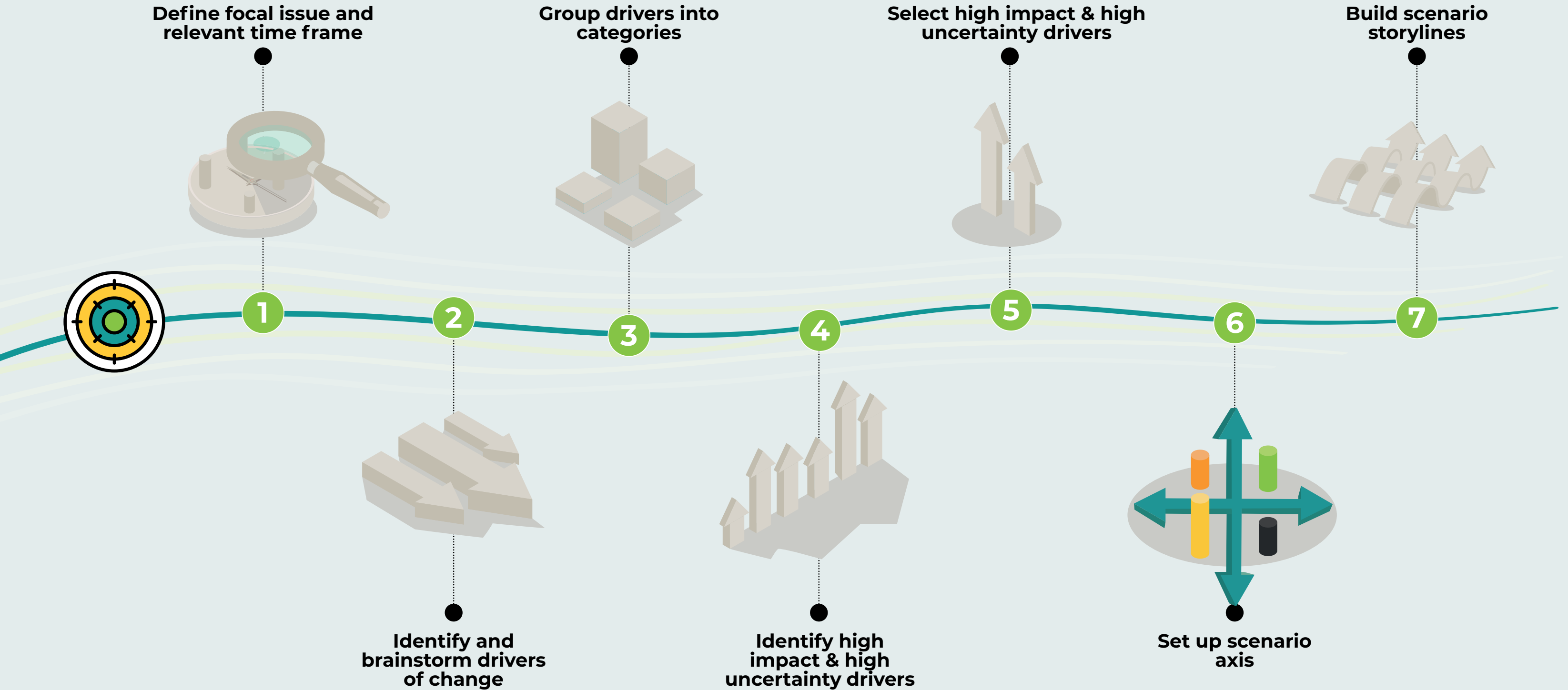
Photo: ©Axel Fassio (CIFOR)





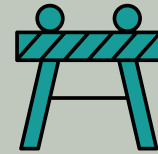
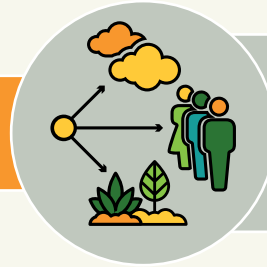
## BUILDING SCENARIO PROCESS

The next step is to set up a scenario axis.



**For example**, the high impact and high uncertainty drivers of regional integration and youth employment can be juxtaposed on scenario axes. This allows us to look across the full spectrum of possibilities for the scenario and build storylines.

## SCENARIO 1

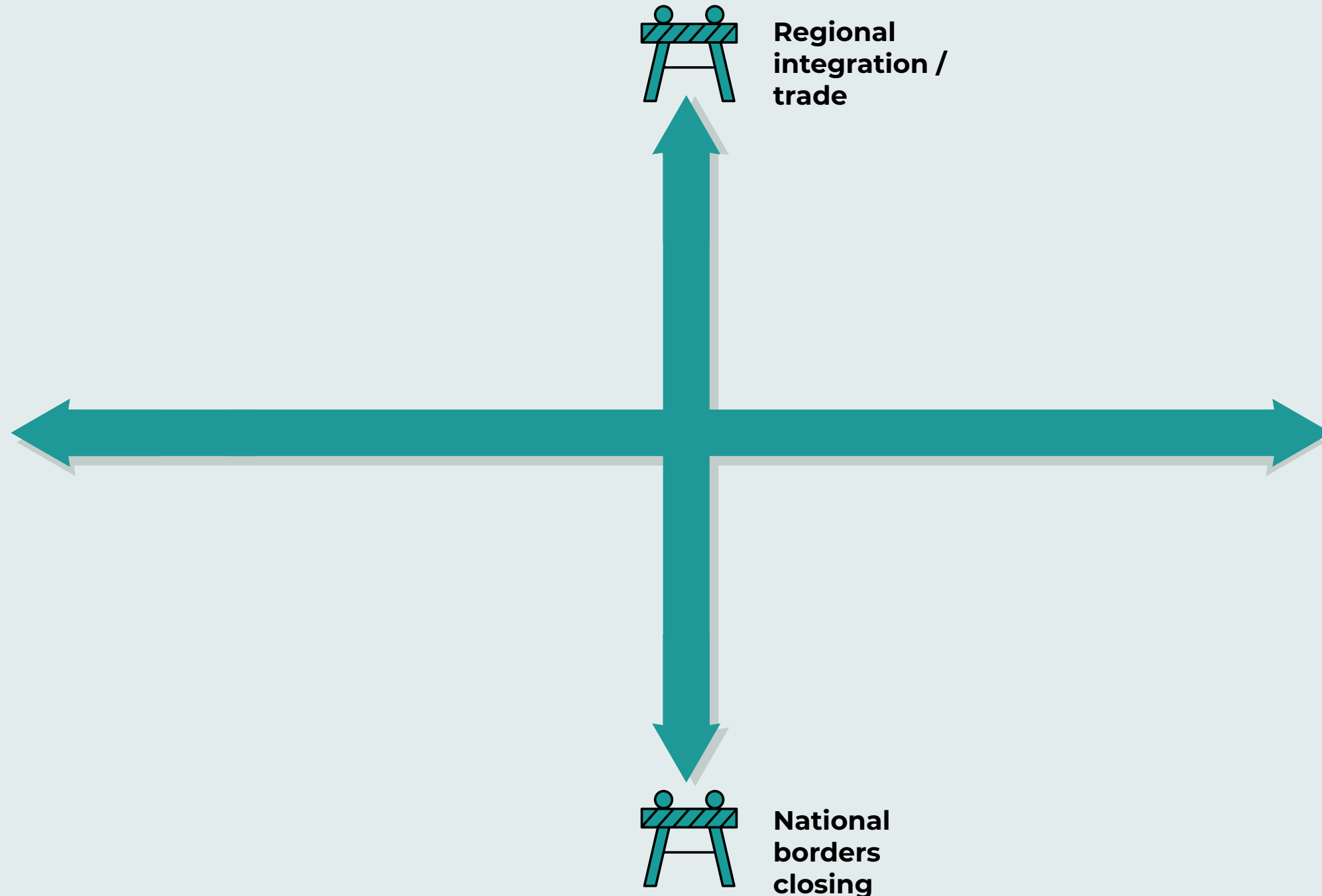


**National border closing  
to regional integration**



**Low youth unemployment to  
high youth unemployment**

**LOW** youth  
unemployment



**Regional  
integration /  
trade**



**National  
borders  
closing**

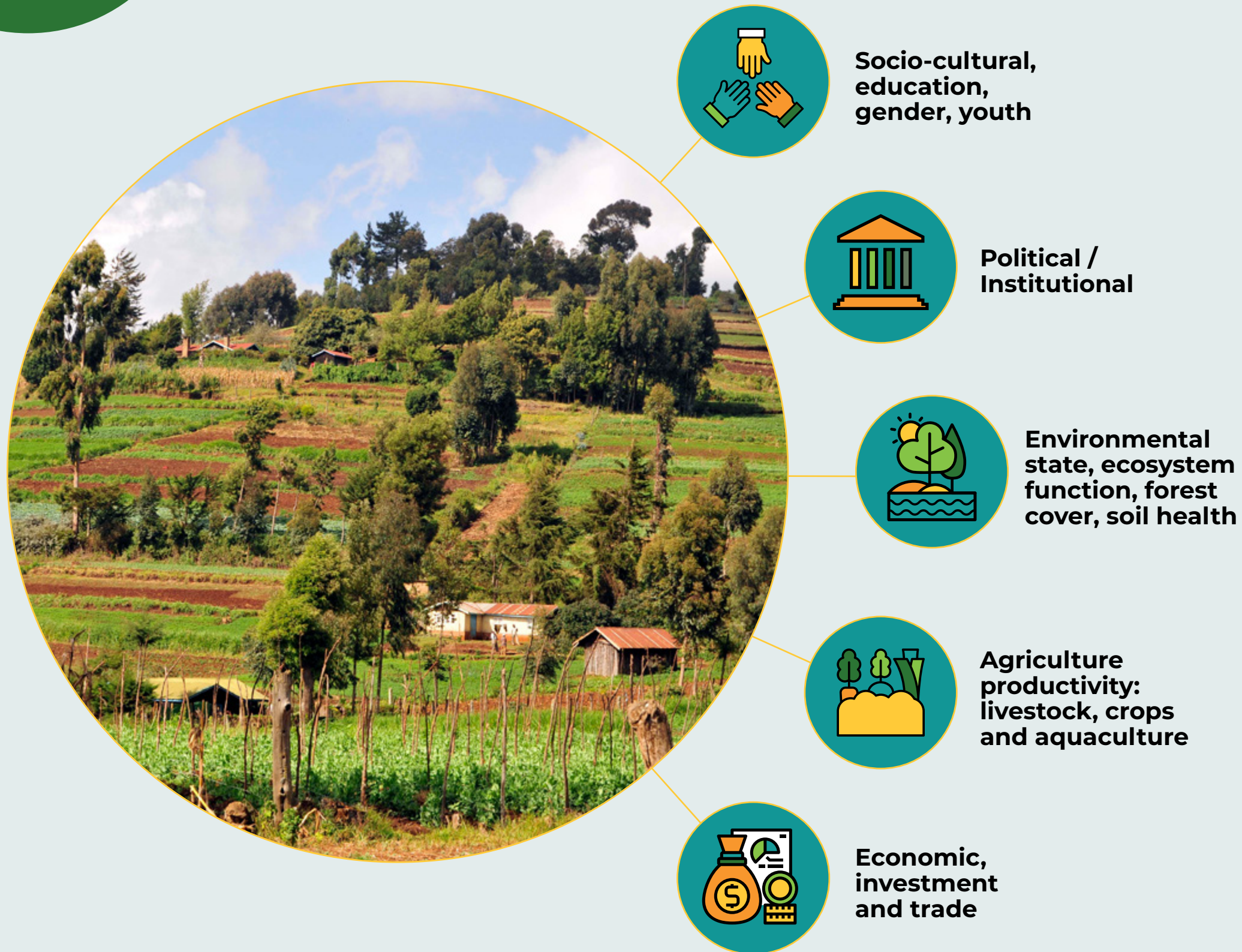


**HIGH** youth  
unemployment





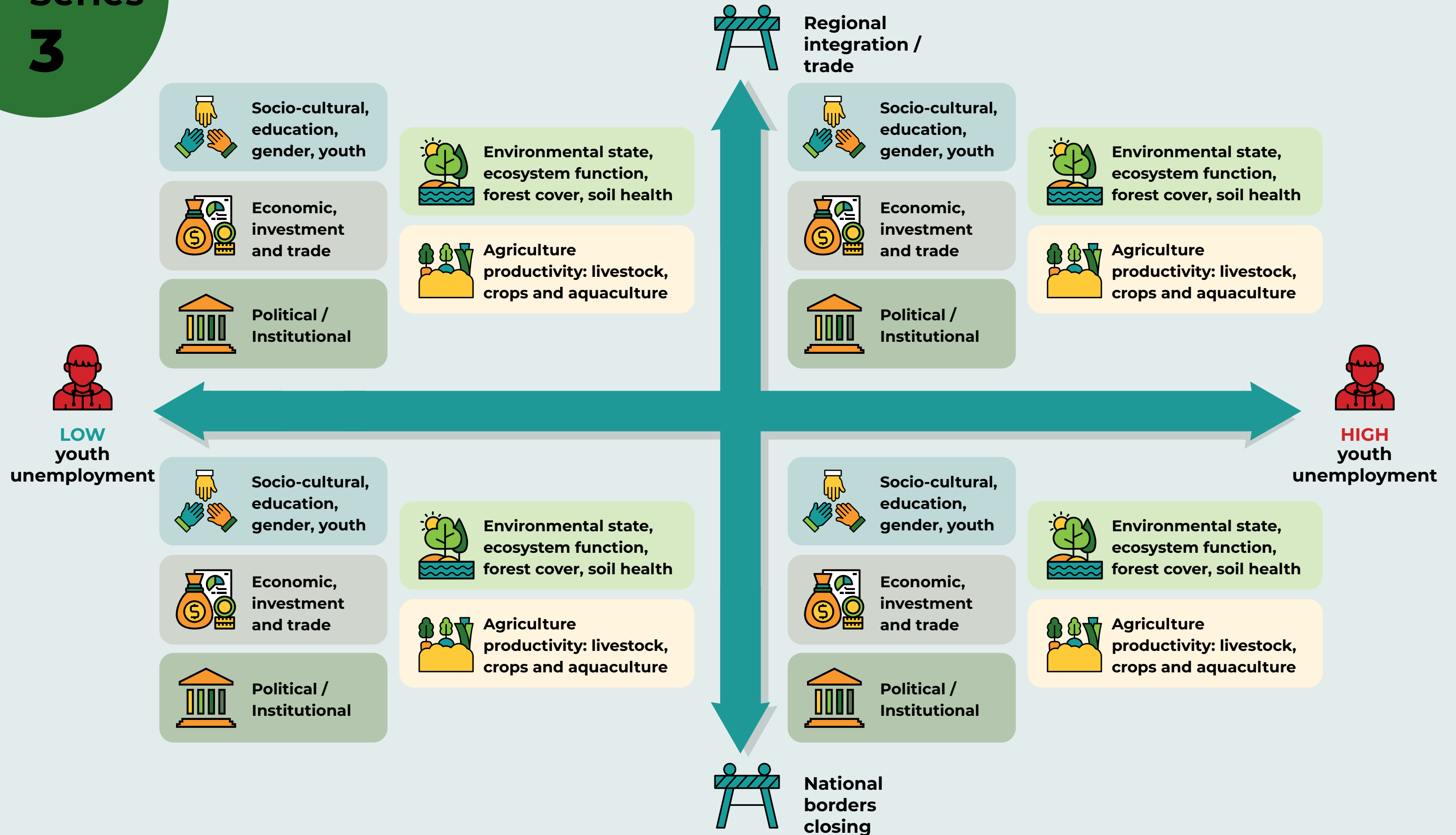
## DIMENSIONS FOR BUILDING STORYLINES



The process for **developing storylines** requires unpacking the **scenarios** in each of the quadrants.

**For example**, in the case of good regional integration and high unemployment it is important to ask what the impact would be in terms of education, gender, investments and the environment.

Without the different dimensions to categorise the impacts it is quite likely that some of the impacts would be missed, depending on the expertise within your group.



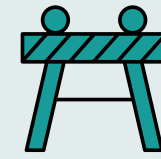


# Series 3

So, for demonstrative purposes, consider the situation where we have closed borders and having high youth unemployment, and the first dimension in question is economic investment and trade.

  
**LOW**  
youth  
unemployment

  
**HIGH**  
youth  
unemployment



**Regional  
integration /  
trade**



**Economic,  
investment  
and trade**



**National  
borders  
closing**



## LEARNING EXERCISE

Consider the quadrant with high youth unemployment and high nationalism (not well regionally integrated).

What does the future for the economy look like in 10 years' time with high youth unemployment and high nationalism or closed borders?

"Economic isolation"

"Bleak"

"Economic performance might be uncertain"

"Hunger for imported products"

"No economic growth"

"Economic crisis"

"High domestic innovation"

"Political unrest"

"Skewed economy towards the adult working class"

"Inflation"

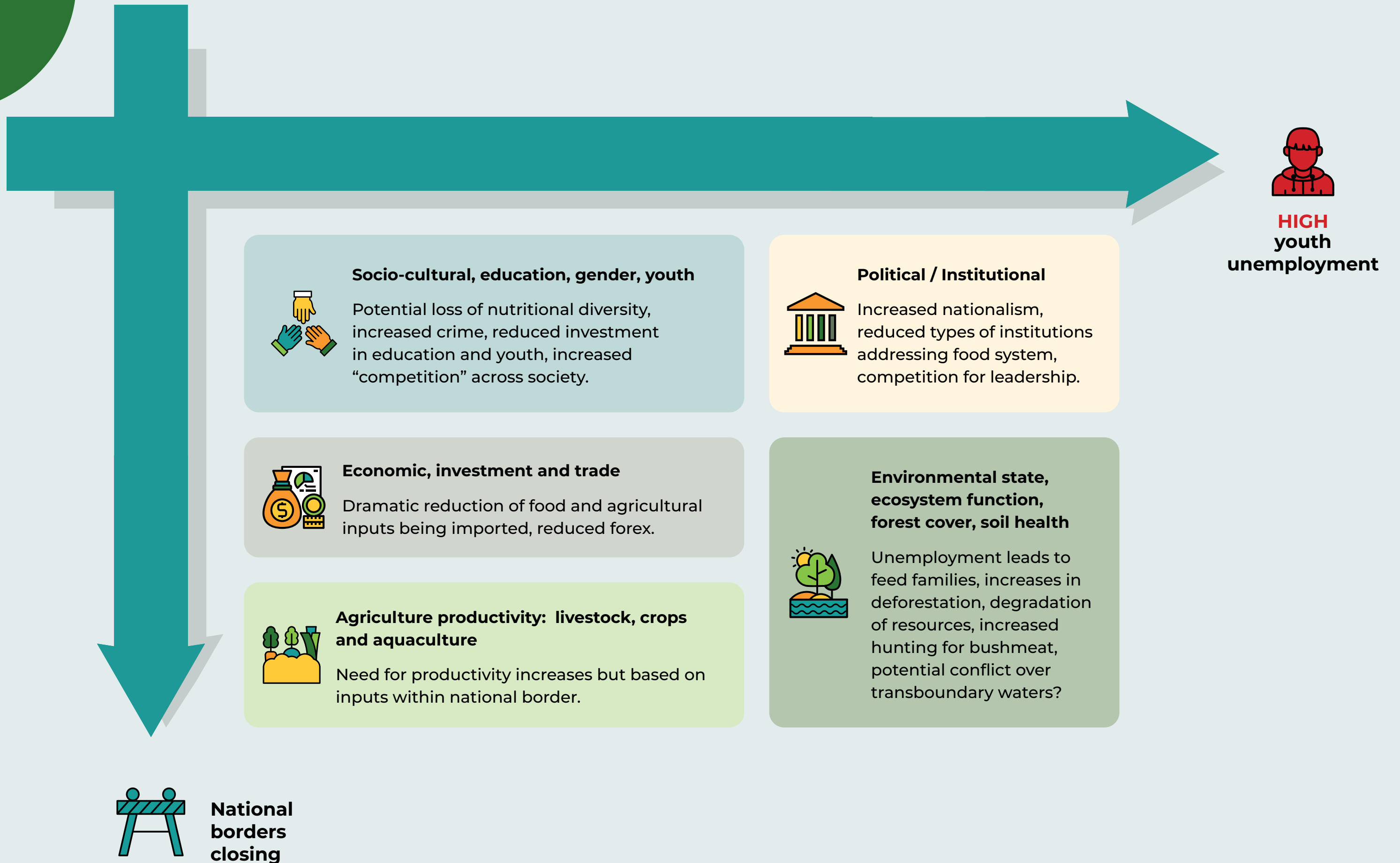


Photo: ©Axel Fassio (CIFOR)

This process would then be repeated for each of the **different dimensions and a storyline** slowly starts to unfold. For example, in considering the **political dimension**, there may be increased nationalism, or institutions may not address the food system because they are getting more competitive.

**High youth unemployment** would make it challenging to feed families so there may be an associated increase in degradation/deforestation, hunting and potential conflict. **Economically**, there could be a dramatic reduction in agricultural inputs being imported and a reduced availability of forex. **These impacts combine to form the storyline of a potential future.**



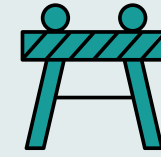


# Series 3

The next quadrant to unpack is low youth unemployment and good regional integration with a focus on the agricultural productivity dimension.



Agriculture productivity: livestock, crops and aquaculture



Regional integration / trade



LOW youth unemployment



HIGH youth unemployment



National borders closing





## LEARNING EXERCISE

Consider the quadrant where you have low youth unemployment and high regional integration. Can you describe in a sentence what agricultural productivity might look in the future under this scenario?

“Economic boom”

“Youth engage more in agriculture”

“Migration”

“Innovation and collaboration”

“Positive economic growth”

“Mechanisation and economic growth”

“High productivity and economic growth”

“Food security”

“Inclusive rural economies and improved markets”

“Low imports and high exports-  
budget surpluses”

“Increase in agricultural exports”

“Youth employment”

“Zero hunger”

“External investors”

“Youth led innovation in agriculture”



Within the same **scenario**, the quadrant with the drivers of **high youth unemployment** and **closed national borders** would also need to be unpacked.

Impacts in the **socio-cultural dimensions** could be that governments have increased national budgets but have not focused resources on improved social safety nets, education and empowerment.

In the **agricultural dimension**, pastoralists, small scale farmers and fishers may be marginalised in favour of large-scale production systems. Impacts in the environmental dimension may include a desire for short-term benefits that lead to land and forest degradation.

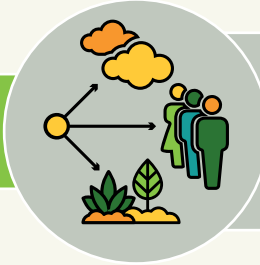




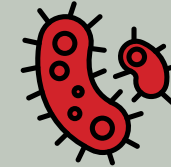


Another interesting scenario to unpack is one **incorporating the drivers of climate risk and disease prevalence**. The extremes (low-high) of these drivers are added to a scenario axes where high disease prevalence, low disease prevalence is one axis, and low climate risk and high climate risk forms the other axis.

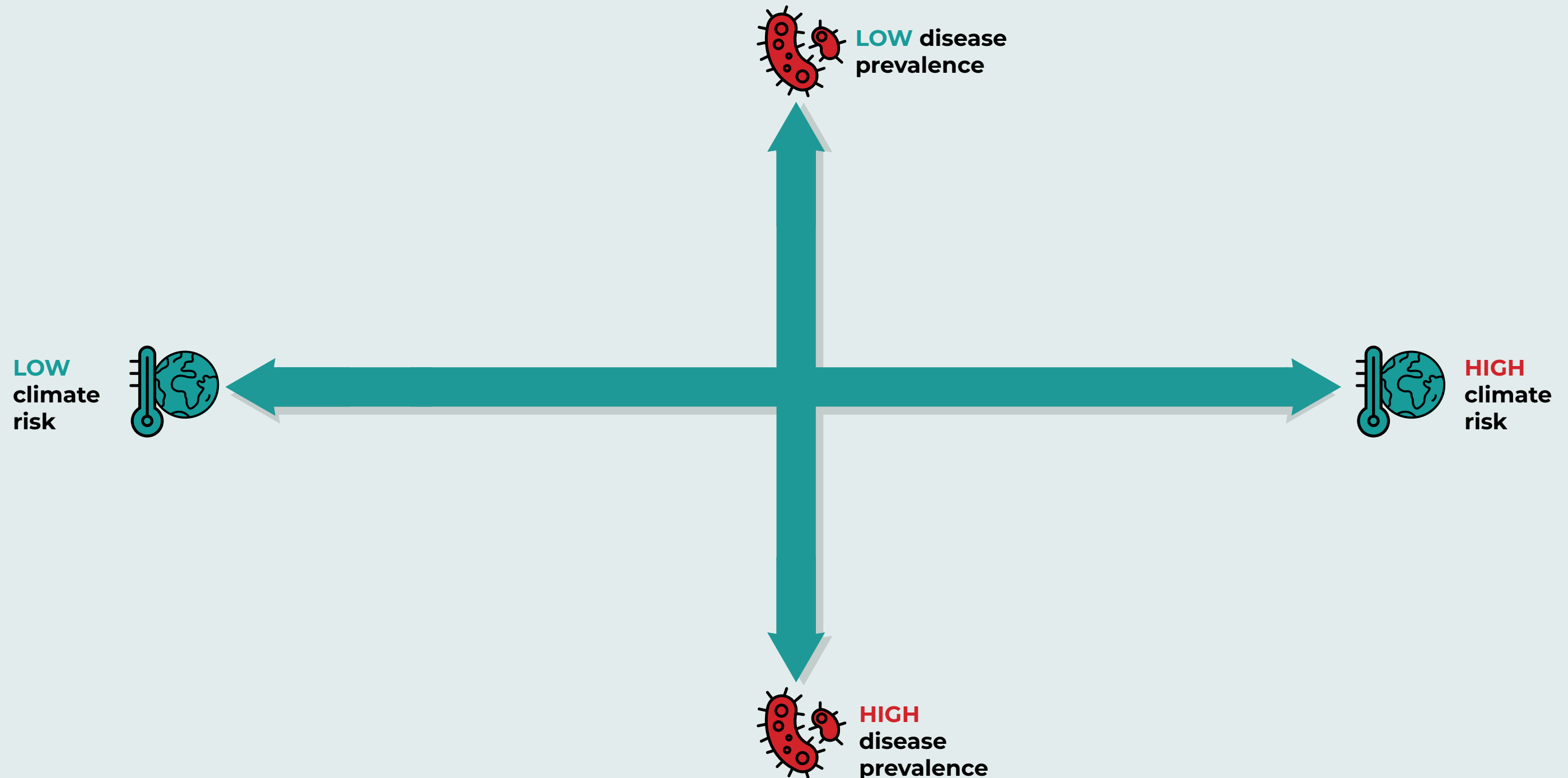
## SCENARIO 2



Low climate risk to  
high climate risk



Low disease prevalence / spread to  
high disease prevalence / spread



If you were to unpack the quadrant relative to **high climate risk and high disease prevalence** you would find that the different dimensions are greatly impacted. For example, in the socio-cultural dimension you might identify the impact of a widening wealth gap, nutrition and food insecurity, a diminishment of social safety nets and enhanced disease prevalence.

In terms of the **agricultural productivity dimension**, impacts could include a loss of crops, a loss of livestock due to drought, reduced livelihood options, a reduction in national productivity and even an outbreak of conflict. In the **political dimension**, a likely impact could be an increase in power grabs and a move towards a more authoritarian type of governance.



**HIGH climate risk**

## Socio-cultural, education, gender, youth



Widening wealth gap, nutrition and food insecurity, school dropouts, greater impact on women - alternatively women farmers become more important, social safety nets are diminished, potential increases in displacement due to droughts, floods, enhanced disease prevalence; Inequitable impact of disease across society (poor and marginalized, elderly, women), health resources overstretched, district and backlash to lockdowns.

## Agriculture productivity: livestock, crops and aquaculture



Loss of crops, livestock to drought, potential for greater climate disease risk, severe challenges meeting food security needs of population.

## Political / Institutional



Likely power grabs by government leaders, move to more authoritarian government through shutdowns, loss of trust between GO and other societal sectors.

## Environmental state, ecosystem function, forest cover, soil health



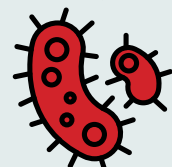
Reduced sources of livelihoods lead to enhanced conflict over resources leading to destruction, loss of wildlife, vegetative cover, forest, water quality, concerns over sources of disease lead to destruction of resources.

## Economic, investment and trade



Dramatic reduction in national productivity and GDP, potential damage to infrastructure, focus on self-sufficiency (staples), closing of business across value chains.

**HIGH disease prevalence**







As you unpack the **four different quadrants** the **storyline** unfolds, and a picture of the potential future starts to become clearer. These storylines assist you in focusing your **plan of action**, i.e. to determine ‘**what you want to work on to ensure it does not happen**’ or ‘**what you want to work on to ensure a desirable future happens.**’

**Scenario story lines serve as plausible futures that provide insights into what may happen that we have not considered allowing us to plan accordingly.**



**It seems that foresight is like having many strategic innovations on the shelf to be applied or used when the need arises in the future, is that right?**

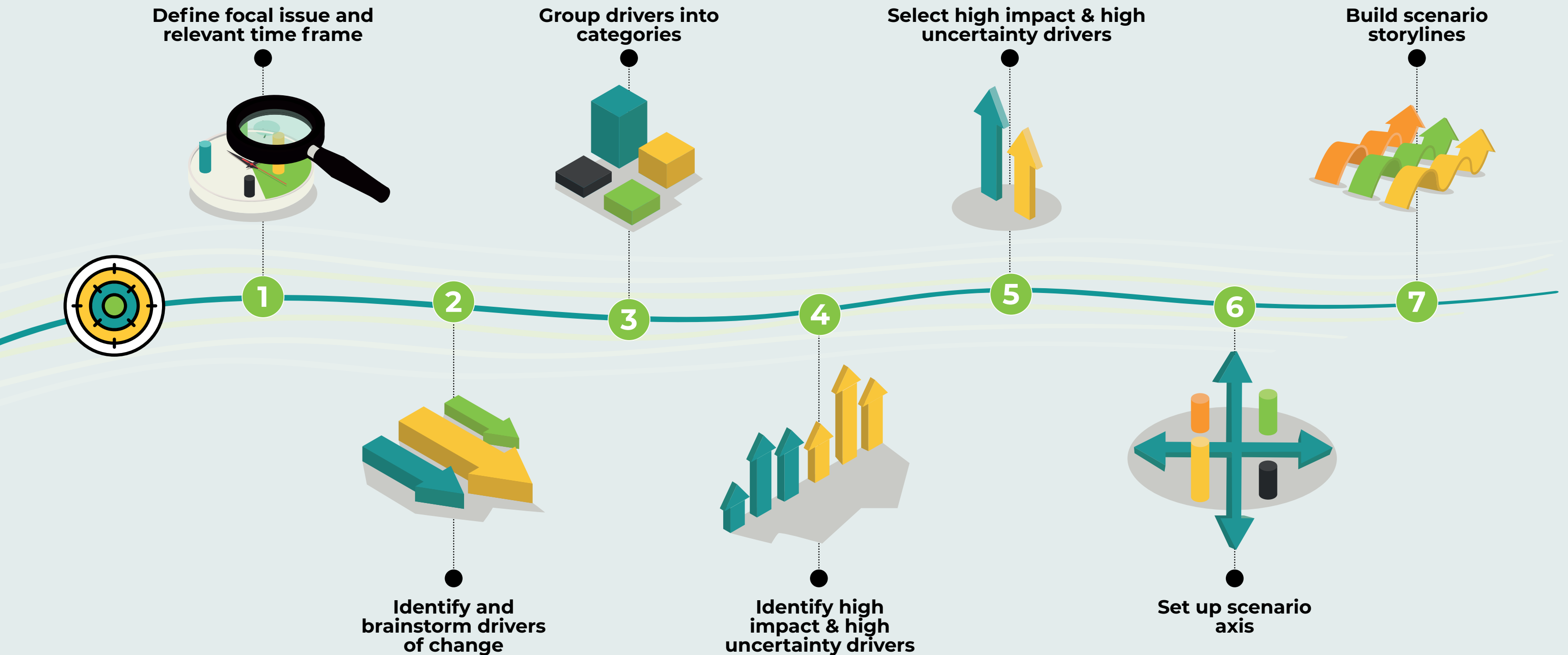
It is important to be prepared for the future, for example, if COVID-19 had been built into our scenarios and planned for as a plausible future we may have had a stockpile of masks ready to use.





So, to recap, there are **seven key steps** in the **scenario building process** that have been demonstrated in this training. It is important to reiterate here that there are a **variety of different ways to do a scenario process**.

## BUILDING SCENARIO PROCESS

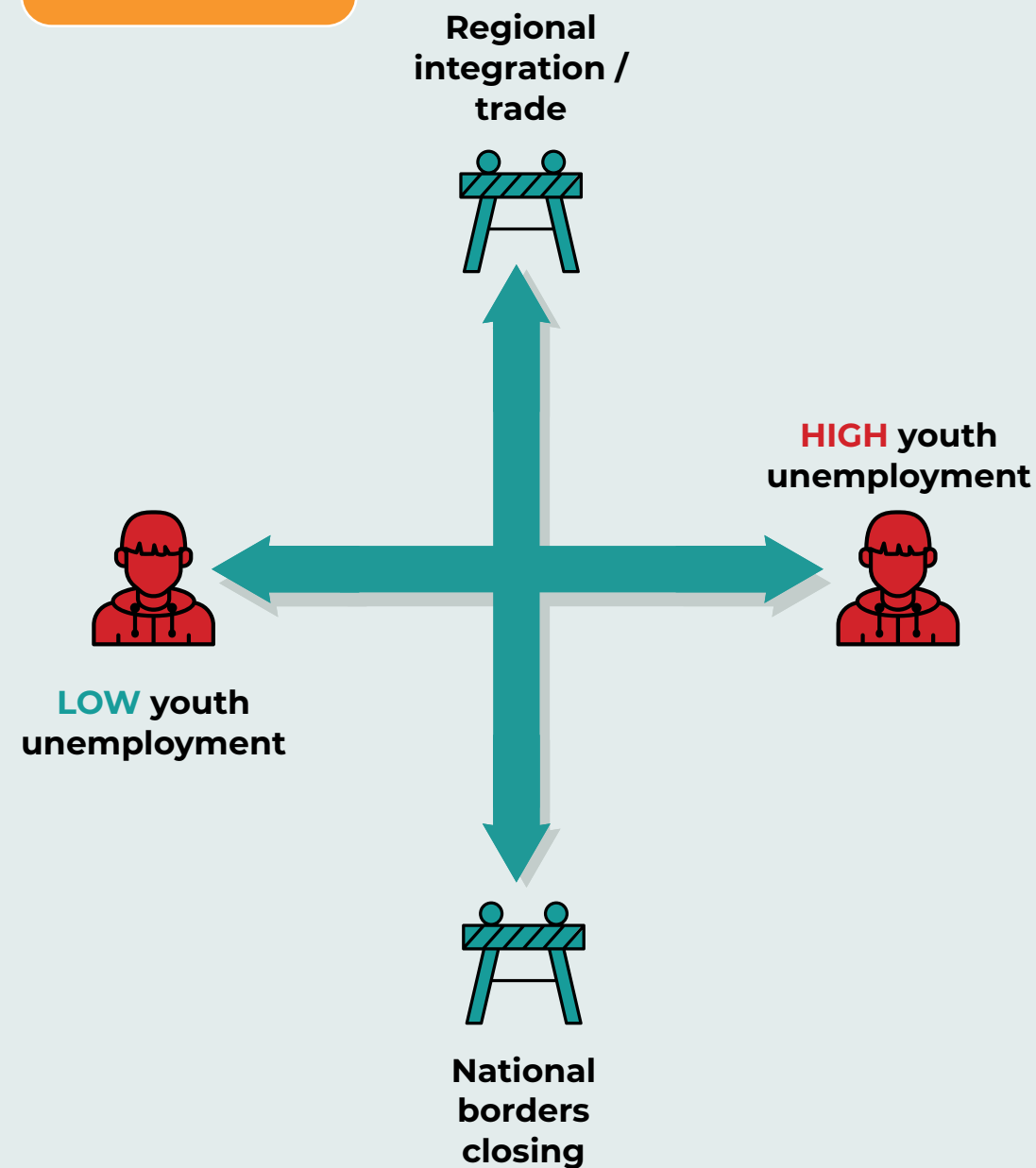




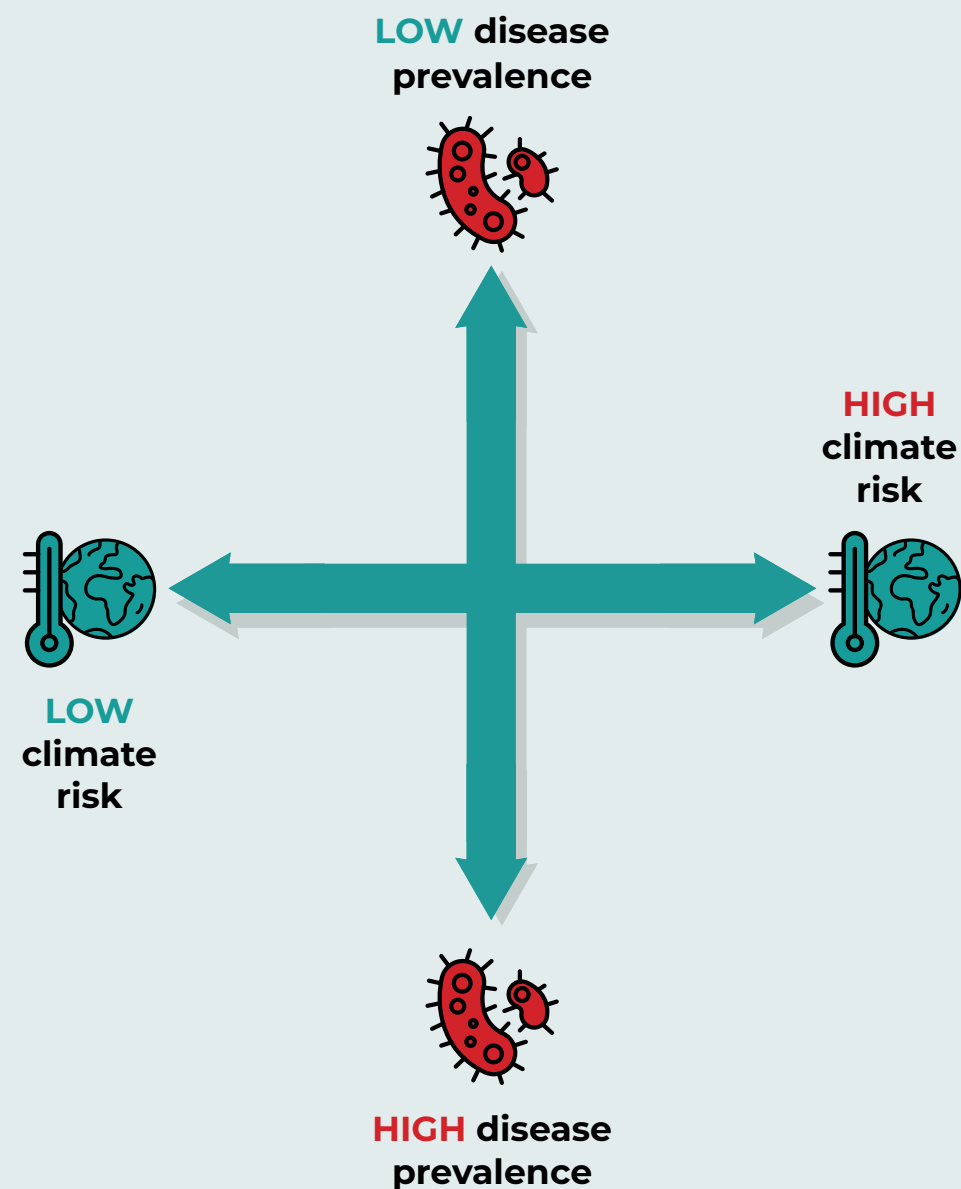
The value in a **scenario process** comes from **building multiple narratives, putting many different high impact and high uncertainty drivers against each other.**

For example, if we were only to unpack one set of drivers our understanding of the potential future would be very narrow. What we really want to do is group a variety of different and unusual drivers together to develop an **understanding of the complexity and the uncertainty of many plausible futures.**

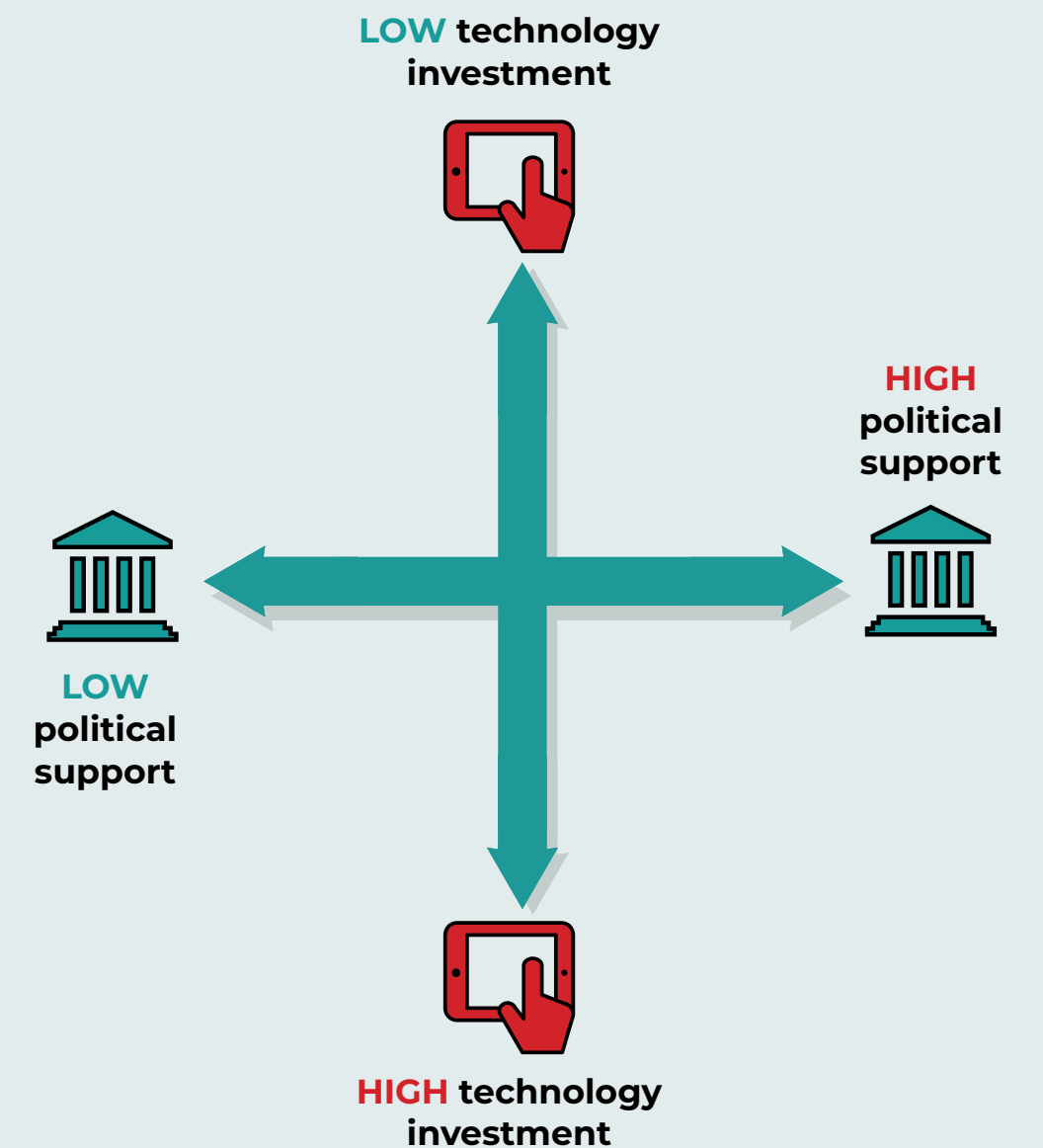
## SCENARIO 1



## SCENARIO 2



## SCENARIO 3





## Q&A

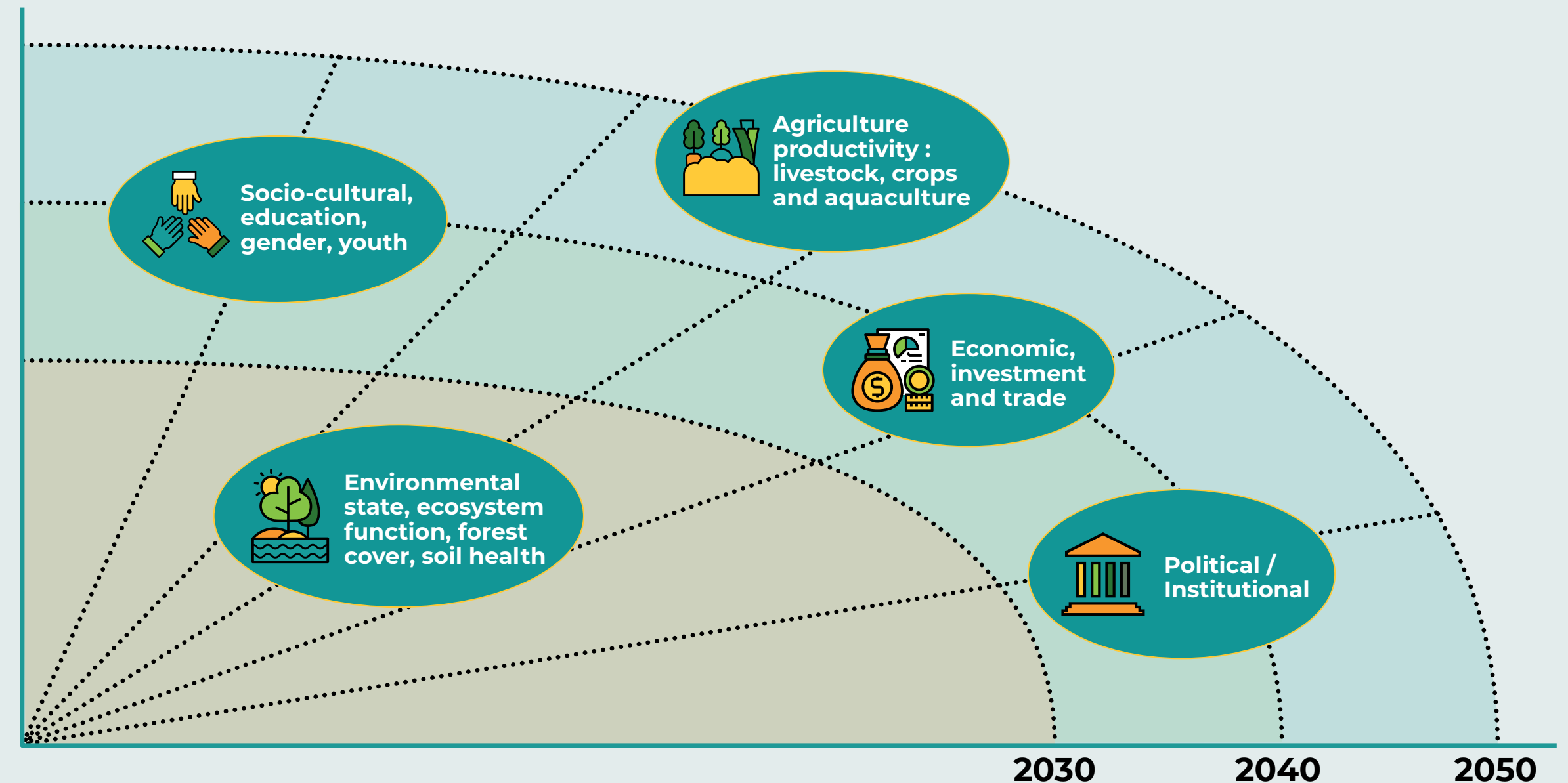
After running multiple scenarios, how do you then reconcile them into something that is comprehensive enough to inform planning and that takes barriers such as resource restrictions into account?

This question is covered in Series 4, it is a difficult area of scenario planning. One of the most important parts of the foresight process is putting an action plan together, and strategic and budgetary constraints are not uncommon.

In a **scenario process it is possible to apply different timelines**, for example, you may be planning towards 2030 but are also looking ahead to 2050. This could be the case if an **economic driver** results in a stoppage of trade, you might ask **‘what is the impact going to be in five years’ time?’** or **‘what is the impact going to be in 10 years’ time?’** These different time horizons can assist with the planning process.

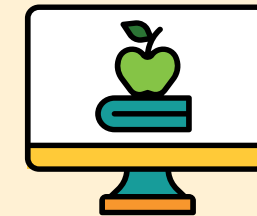
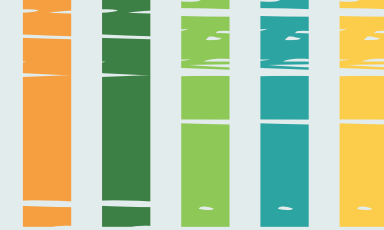
**For example**, planners in Malawi are in the process of putting together a long-term vision to 2063. The scenario process is useful in such an activity as the impacts of drivers are identified and storylines for five years into the future emerge, and the planners can focus their policies and plans accordingly or amend existing strategies. The scenario process can also be used by planners to drive the positive storylines to fruition.

## WHAT IS COMING OUT OF YOUR SCENARIO - ASPECTS IN THE NEXT 5-10 YEARS THAT NEED URGENT ATTENTION





**True value lies in enhancing the ‘cognitive agility’ of planners by extending long-term thinking and exploring future developments**



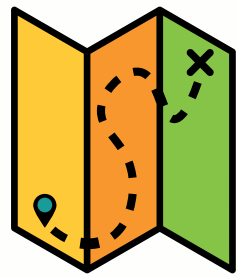
## LEARNING OUTCOMES

The learning outcomes from this series on ‘cultivating a climate-resilient future’ include:

- 1 Dig into root causes of an issue and develop a system map.
- 2 Define what scenario planning is and how it helps to plan for uncertain futures.
- 3 Understand the steps for developing scenarios.
- 4 Build story lines across different dimensions.



## Series 4



# PATHWAYS TO A DESIRED FUTURE

By this stage of the Foresight for Future Planning Training Series you should start to experience a **shift towards a futures-oriented mindset**. For example, you may be starting to think and talk about planning for the future at work, identifying the incremental planning structure currently in place and understanding the need for transformational planning using a future-proofing lens.

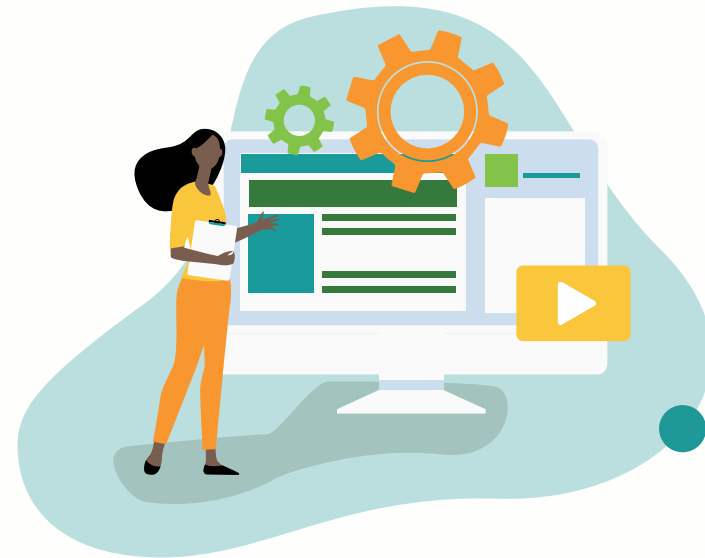
This series starts with a recap of series 3, **'cultivating a climate-resilient future'**. This is followed by introducing two critical processes for developing a vision. **'Backcasting'** is then demonstrated as a method for planning and designing transformational actions. The series closes with outlining the necessary steps to take when prioritising and developing a transformative strategy and the steps needed to building foresight in the region.

**In summary, the objectives of this series are to:**

- 1 Short Recap on Series 3.
- 2 Introduce the articulation of a compelling vision that integrates desired future scenarios to support long-term planning.
- 3 Demonstrate backcasting as a tool to work backwards from the desired future to design transformational actions.
- 4 Show steps to prioritize and develop a transformative strategy.
- 5 Discuss opportunities for foresight support.

**The layout of this series is illustrated below. Learning exercises and Q&A sessions are included throughout.**





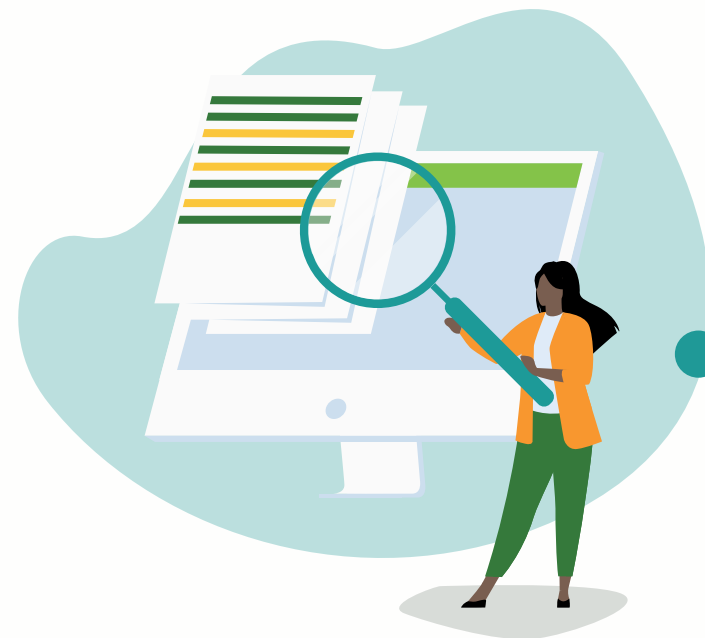
Scenario re-cap



Visioning and integrating preferred future



Backcasting



Bringing foresight into your planning process



Strategy - what will we do differently?



## Recap of Series 3 Cultivating a climate-resilient future



### LEARNING EXERCISE

What are the three time frames that foresight focuses on?

**Foresight** is an approach which looks into the **past**, at the **current time** and then into the **future to vision** many possible different futures.

#### 3 CORE TIME FRAMES







LEARNING EXERCISE

What tool would you use to understand the difference between symptoms and problems?

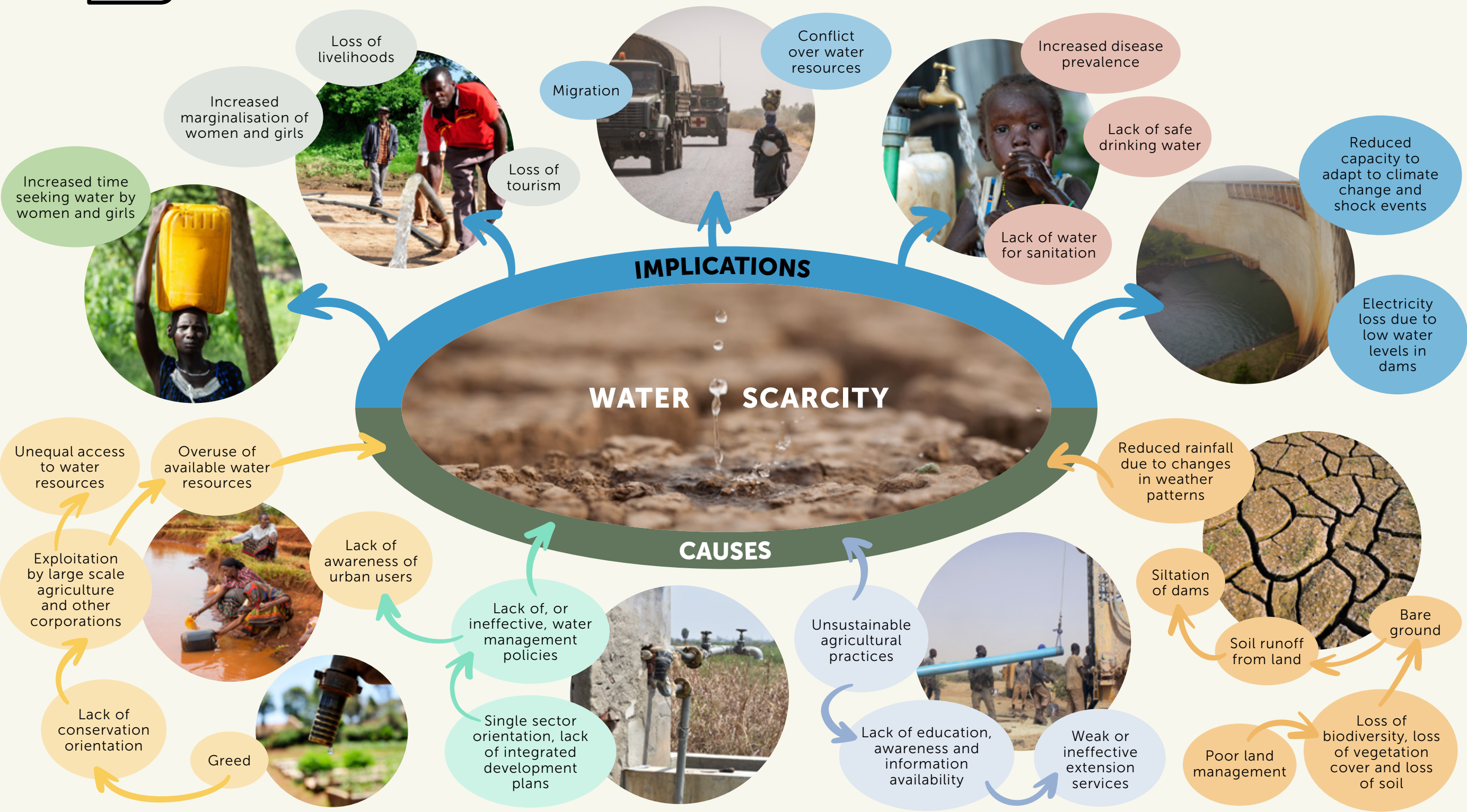
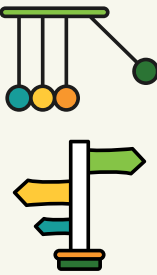


Photo: Clockwise from Top Middle ©Nohaom Tesfaye (UNICEF), Neil Palmer (CIAT), Danyell Odhiambo (ICRAF)



### LEARNING EXERCISE

When developing a scenario process, we want to identify those drivers that are highly\_\_\_\_\_and highly\_\_\_\_\_?



**Impact** – how impactful they are (Low, High)

**Uncertainty** – how well we know how they will play out (Low, High)



## Visioning

The scenario process helps us to know ‘what might happen?’ and visioning involves trying to understand ‘what should happen?’



### LEARNING EXERCISE

Does your organisation / institution / department / programme / company have a future vision? What year does this vision take you to?

- “1 year”
- “2030 and 2065”
- “2025”
- “10 years”
- “5 years”
- “2030”
- “55 years”

### WHAT IS VISIONING?

**Visioning** is a method for collaboratively outlining a compelling vision of a preferred future.





## Series 4



There are many **political processes** and **international organisations** that are setting **future visions** based on their assessments and values and there is a large collection of individual aspirations that shape the response to the visions.

It is therefore important to link and align **multi-scale views**, aspirations and processes to truly enhance our progress.

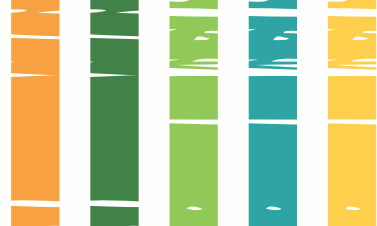


Local political processes and international organizations are **setting future visions based on their assessments and values** while a **collection of individual aspirations** is shaping the response to these through the multitude of visions for future lives.

Linking and aligning multi-scale views and processes could significantly improve outcomes and **accelerate progress.**







This section demonstrates how to **build a vision in the context of climate-resilient food systems at a national level**. The **timeline** for the vision is set at

**2035**. The **dimensions** of the agri-food system need to be considered in the vision. These dimensions could be around **sustainability or resilience**.

DEFINE THE THEME AND TIMELINE

**Theme:** Climate-resilient food systems at national level

**Timeline:** 2035

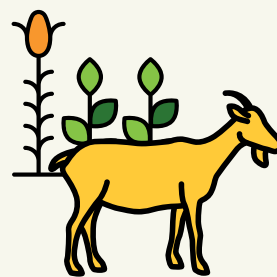
**Define the dimensions of the vision:**



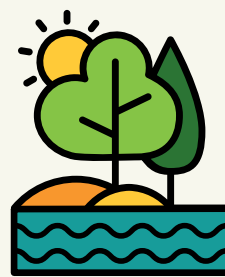
Economic



Socio-cultural



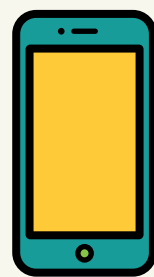
Agricultural productivity



Environment



Institutional

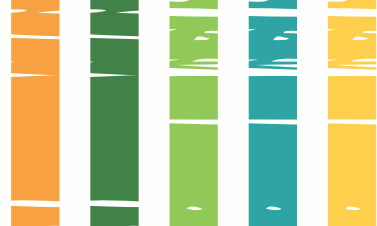


Technology & Information

The next step is to lay out the **desired outcomes** and **aspirations** that we want to see within the different dimensions. **For example**, in the context of the theme, **economically** we need investments and decent green employment, with a focus on social protection systems that

cover the needs of the poor. **Institutionally** we want climate change measures built into all our national plans and policies. There will likely be some overlap between the aspirations for the different dimensions.





DESCRIBE DESIRED OUTCOMES & ASPIRATIONS



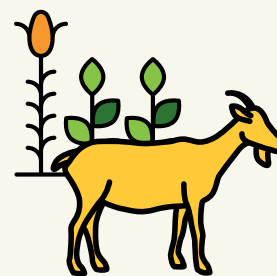
Economic

Private sector and government invest in decent, green employment with a focus on women, youth and marginalized groups.



Socio-cultural

Nationally appropriate social protection systems (health, nutrition and livelihoods) cover needs of poor, marginalized and vulnerable.



Agricultural productivity

Market-oriented diversified small farms using agroecology dominate Southern African agriculture.



Environment

Energy sources are increasingly based in renewable resources.



Institutional

Climate change measures are built into all national policies, strategies and planning. Sectoral plans adequately integrate climate risks and resilience and are clearly linked across sectors.



Technology & Information

Rural and urban farmers have connectivity market products shorten supply chains and increase transparency.

Next, we need to understand **‘what has to be in place for these aspirations to be achievable?’** For example, we said we wanted green employment now we need to create green jobs and entrepreneurship for the youth. Mechanisms need to be put in place to encourage cross-sectoral integration in our governments.

Lastly, we need to ask ourselves: **‘what do I have to have in place to sustain all of this?’** For example, thriving local livelihoods, respect across all citizens, functioning ecosystem services and responsive and trusted governments. This allows us to look at the long-term priorities and understand **‘what we have to have in place’** and **‘what we need to work towards in the long-term.’**



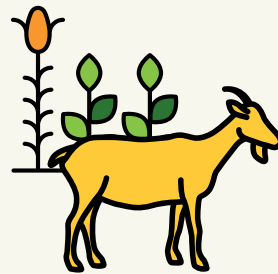
DESCRIBE DESIRED OUTCOMES & ASPIRATIONS



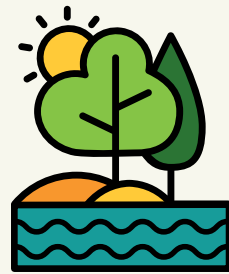
Economic



Socio-cultural



Agricultural  
productivity



Environment



Institutional



Technology &  
Information

Supporting



Mechanisms for private  
sector to invest in value  
chains and entrepreneurship



Green jobs and  
entrepreneurship  
of youth



Mechanisms to enhance farmers  
organizations' capacities agroecological  
and nutrition smart practices



Mechanisms to incentivize and  
coordinate multi-stakeholder  
and multi-sectoral efforts

Sustaining



Thriving  
local, resilient  
livelihoods



Society respects and values  
the equity, education and  
prosperity of all of its members



Resilient ecosystem,  
functioning water cycles, high  
biodiversity, healthy land



Responsive,  
effective and trusted  
government



Political  
will and  
commitment





By combining the aspirations from the different dimensions with the supporting and sustaining elements you can craft a robust vision statement. **Leadership with integrity and long-term views** and **resilient natural resources** will be required to sustain the vision below. The robust vision statement can then be used to inform the planning of future activities.



### CRAFT A VISION STATEMENT

In the **SADC region**, we aspire to integrate climate resilience throughout the agri-food system where the government, civil society and private sector are aligned, committed and coordinated for a climate resilient future and opportunities are created for:

- A** Investments in decent, green employment and climate friendly value chains;
- B** Farming and pastoral systems are diversified to increasing productivity and enhance ecosystem functions;
- C** All citizens to be empowered, safe and resilient to climate threats; and
- D** Climate change information and measures are built into cross-sectoral and multi-stakeholder planning, decision making, and investments at all levels, and all of this is underpinned by a leadership with integrity and a long-term view and sustainable and resilient natural resources.

**A vision is critical to initiating a transformative shift for the following reasons:**

- It brings to light what individuals **aspire to** and **diminishes competing objectives**. More often than not we share values.
- When tied to the different **dimensions of the system** in which you are working, visions can support deeper engagement of actors who may have diverse objectives. Everybody feels a part of it and shares ownership.
- It can foster relationships and **shift values among stakeholders**.
- The communication and creation of a **shared vision builds ownership** and ensures the necessary buy-in to carry out the actions necessary to achieve the vision.

Over what theme and timescale

Who will be engaged

Who will be impacted

Dimensions and transformational outcomes

Elements to support and sustain

Craft a vision statement

Craft a policy aspiration

☒

☒

☒

☒

☒

☒

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### LEARNING EXERCISE

**Is it accurate to say that one sentence is not adequate to define a vision? It seems that developing a vision requires multiple sectors and points of view to be inclusive?**

Vision lengths may vary but what is important is that they are inclusive. A detailed vision that is agreed upon by multiple stakeholders does not necessarily have to be shared with the public; a summary may suffice.

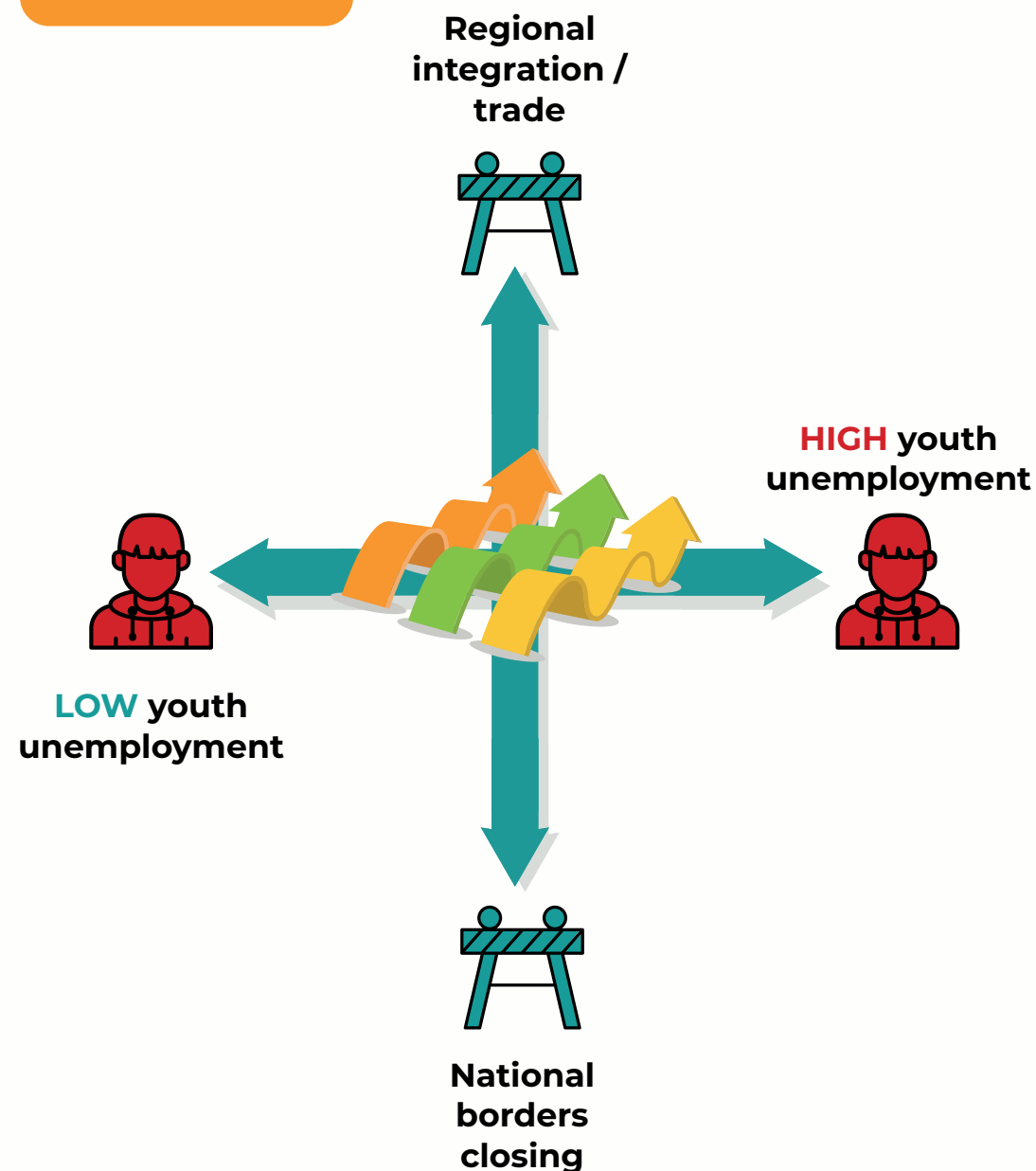
## Where scenarios meet visions

In series 3, you developed **scenario storylines** and **identified preferred futures**, now you are probably wondering **how this is different from a vision**.

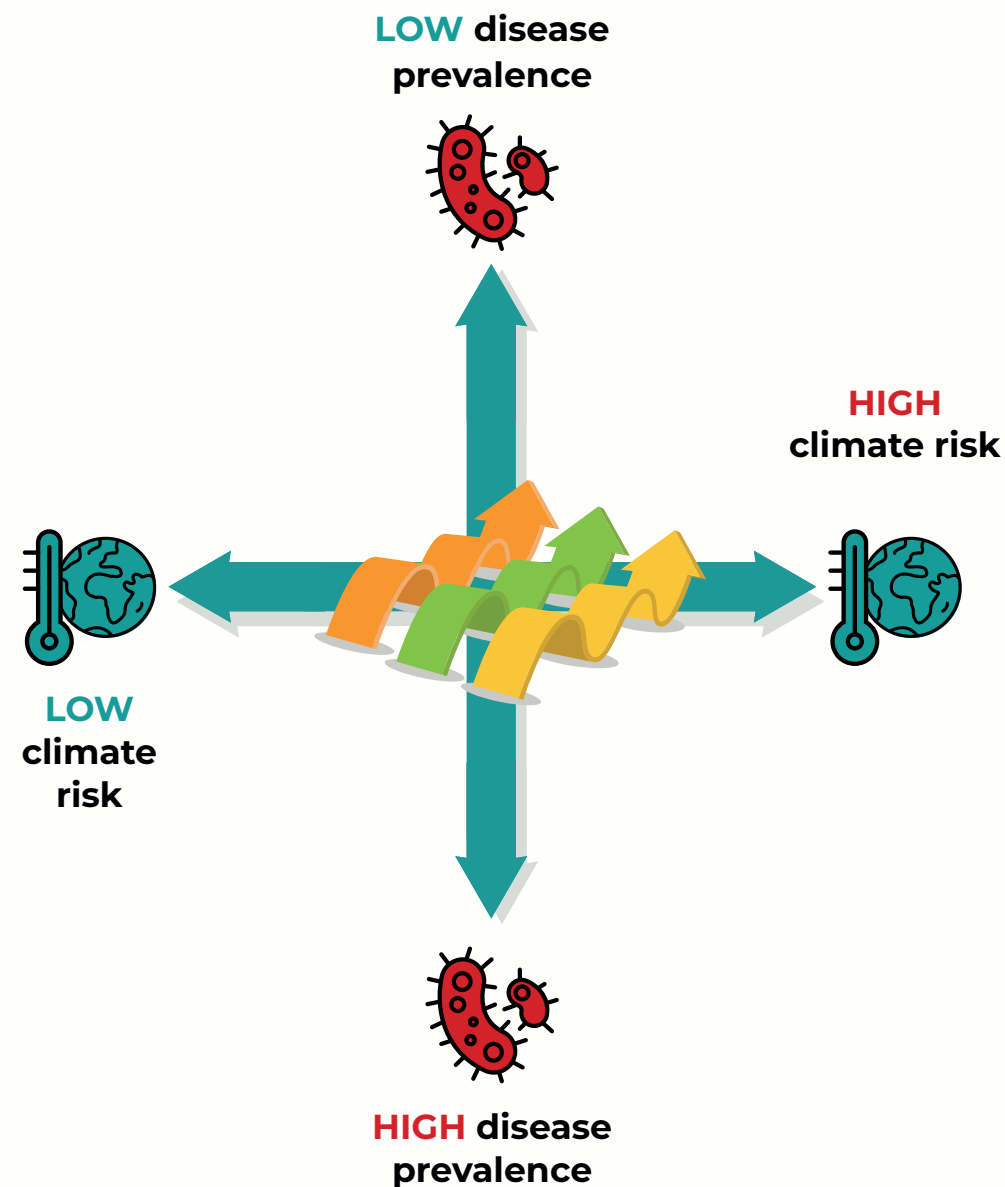
Once you have completed your scenarios and developed your storylines you are able to see what preferred futures you want and which ones you want to avoid. We extract storylines that we want and ensure that our vision reflects them.

For example, in our storylines we determined that we wanted to avoid **'power grabs'**, so we would go back to our **three-part vision development** and **add in the required measures**. We use the scenario storylines and the futures we want and merge them into the vision to ensure all uncertainties are captured.

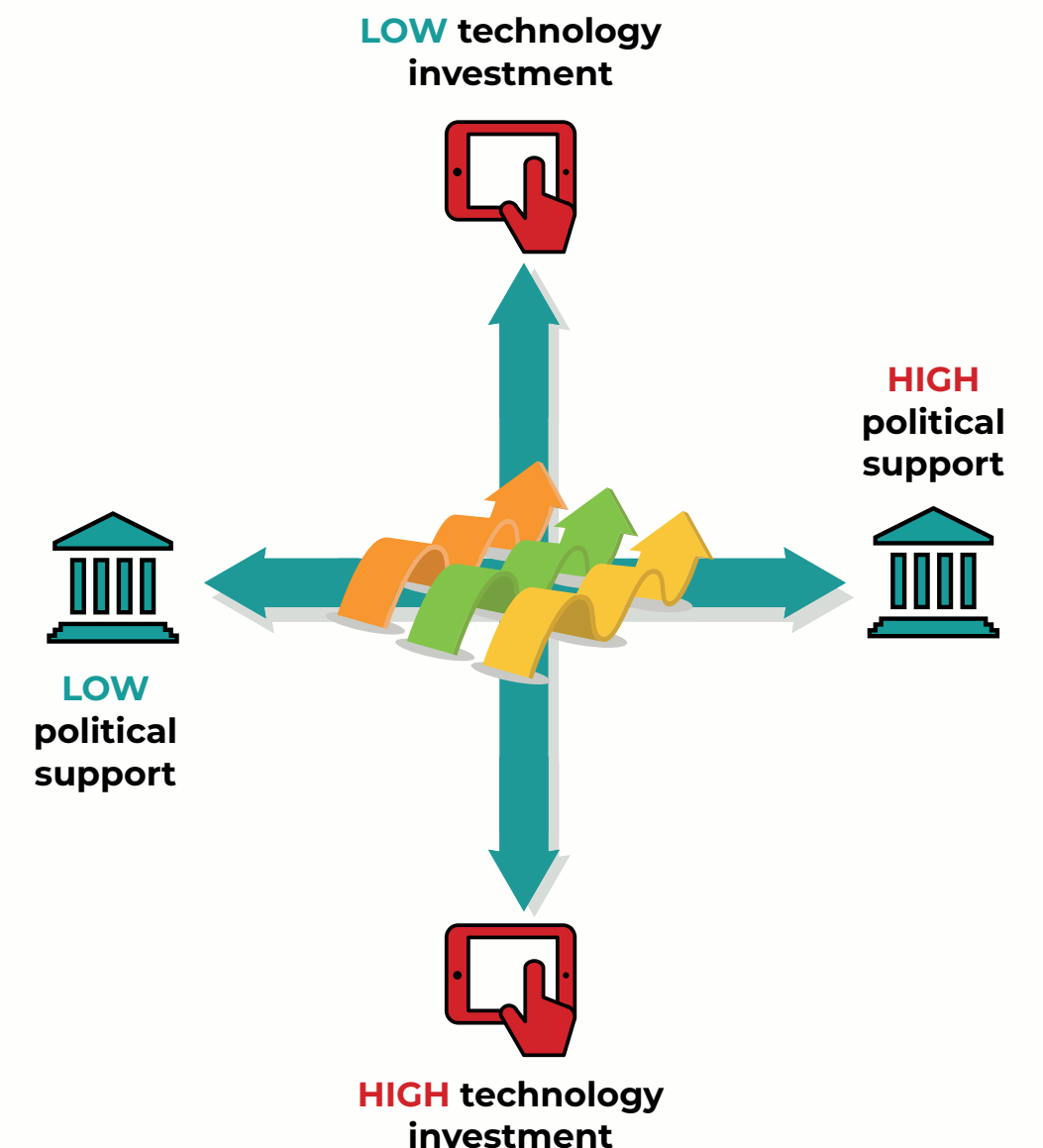
### SCENARIO 1



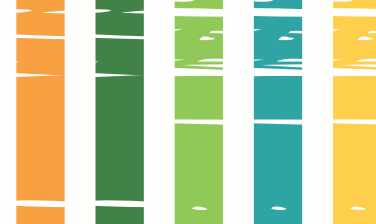
### SCENARIO 2



### SCENARIO 3







## PREFERRED FUTURE STORY LINES



### Socio-cultural, education, gender, youth

**Students are staying in school** to increase opportunities of better employment. Social safety nets are in place to provide women and youth with nutrition foods and vocational training. Investments are focused on preventative health approaches in conjunction with emergency response.



### Environmental state, ecosystem function, forest cover, soil health

Investments are made in land health and diverse land cover to enhance carbon capture prevent transboundary disease transfer.



### Agriculture productivity: livestock, crops and aquaculture

Farming systems are diversified through agro-ecological to reduce climate risk, increase water holding capacity and enhance nutrition.

## FUTURE STORY LINES TO AVOID



### Agriculture productivity: livestock, crops and aquaculture

Loss of crops, livestock to drought, potential for **greater climate related disease risk**, severe challenges meeting food security needs of population.



### Political / Institutional

Likely **power grabs** by government leaders, move to more authoritarian government through shutdowns, loss of trust between GO and other societal sectors.



### Economic, investment and trade

Dramatic reduction in national productivity and GDP, potential **damage to infrastructure**, focus on self-sufficiency (staples), closing of business across value chains.

DESCRIBE DESIRED OUTCOMES & ASPIRATIONS



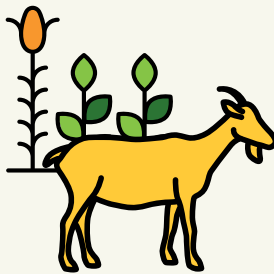
Economic

Private sector and government invest in decent, green employment with a focus on women, youth and marginalized groups.



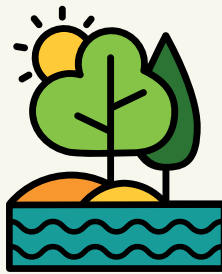
Socio-cultural

Nationally appropriate social protection systems (health, nutrition and livelihoods) cover needs of poor, marginalized and vulnerable.



Agricultural productivity

Market-oriented diversified small farms using agroecology dominate Southern African agriculture.



Environment

Energy sources are increasingly based in renewable resources.



Institutional

Climate change measures are built into all national policies, strategies and planning. Sectoral plans adequately integrate climate risks and resilience and are clearly linked across sectors.



Technology & Information

Rural and urban farmers have connectivity market products shorten supply chains and increase transparency.



Climate proof infrastructure

Education and continued learning are deeply valued

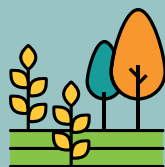
Supporting



Mechanisms for private sector to invest in value chains and entrepreneurship



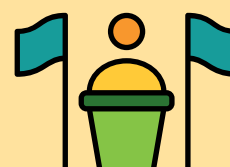
Green jobs and entrepreneurship of youth



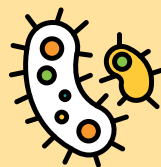
Mechanisms to enhance farmers organizations' capacities agroecological and nutrition smart practices



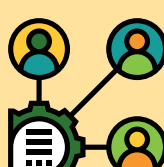
Mechanisms to incentivize and coordinate multi-stakeholder and multi-sectoral efforts



Create guardrails in policies to support governance

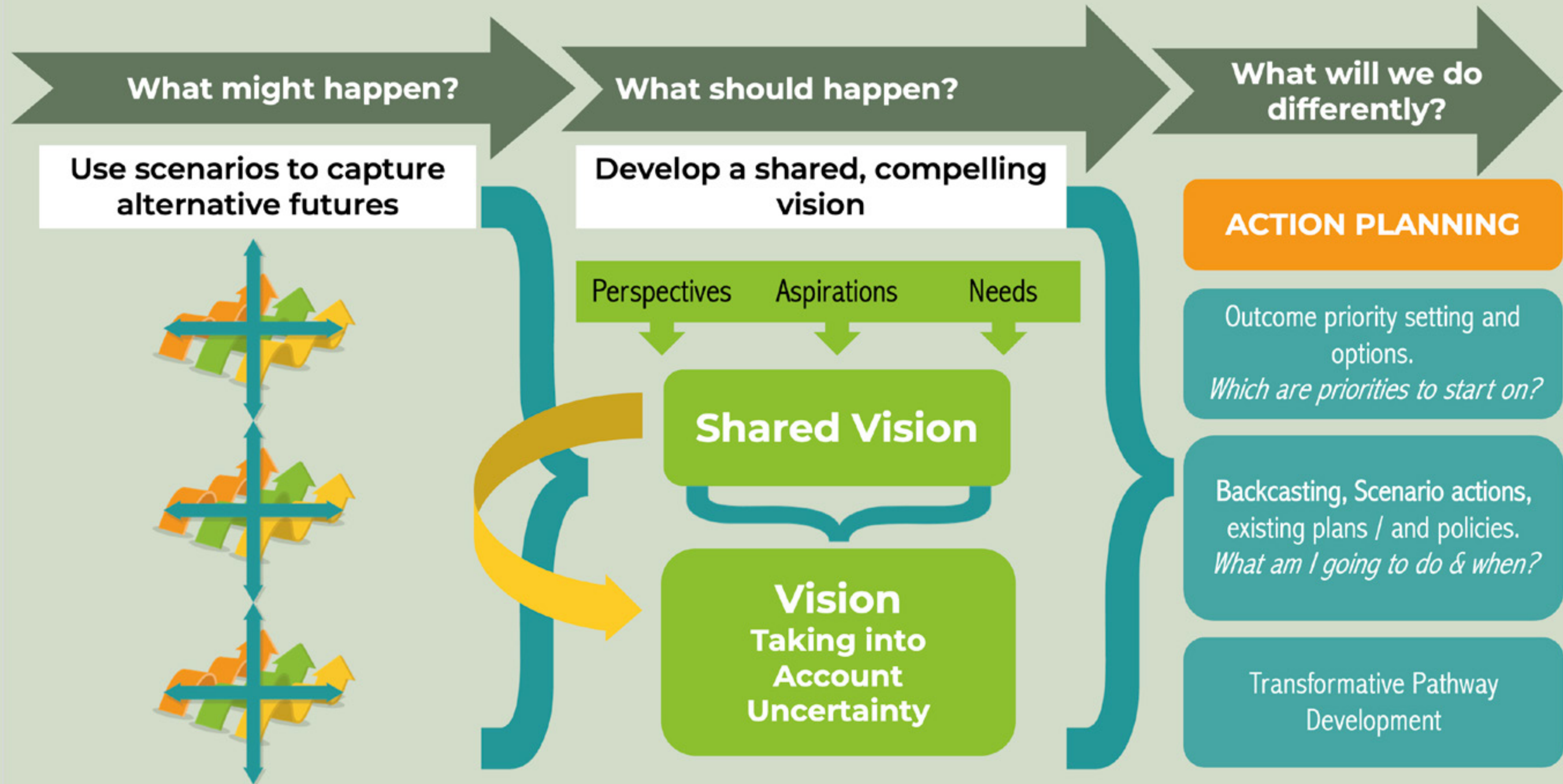


Means of monitoring for and preparing for climate-oriented disease and disaster



Mechanism are place for effective local and distance learning





Use scenario narratives to fortify the vision and scenario implications to explore pathways toward the vision.

# Series 4



A **vision** can be **critical to initiating a transformative shift**, for example, South Africa has developed its long-term strategy for the United Nations Framework Convention on Climate Change (UNFCCC). South Africa had already developed a solid National Development Plan (NDP), however, after running some scenarios for the development of their long-term strategy, they are going to revisit and update their NDP.

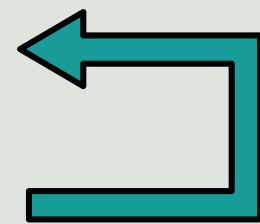
This illustrates how if you have completed your vision you can run scenarios and make your vision more robust or if you have developed your scenarios you can collaboratively craft a vision using the preferred futures.



## LEARNING EXERCISE

**Does your mission statement and vision need to align?**

A vision is broader than a mission statement. A mission statement would often at times be derived from a vision. A mission statement is focused on implementation—what you are going to do—and is generally made available to the public.



## Backcasting

**Backcasting** is a **key tool in the foresight process** as it assists us in reaching the **preferred future**. In this stage of the foresight process we ask: **‘what do we need to do?’**

Once we have our **defined vision or preferred future**, **backcasting allows us to step into that place and work backwards to identify key actions**, partnerships and policy changes that will connect that future to the present. It improves our understanding of what it will entail to reach that preferred future.

**Backcasting** is an approach that starts with **defining a vision or desirable future** and then **works backwards** to identify key actions, partnerships, policy changes that will **connect that future to the present**.

## BACKCASTING STEPS



Step into 2035 and **position yourself in the successfully achieved vision** such that the future becomes the present.



Look back to 2021 and ask **“what do we remember about how we got to here?; what actions, partnerships, policy changes, etc. did we carry out”** to get to the 2035 success?



Remember **which barriers we overcame** and how we addressed them.



As best possible identify **when key activities took place**.



## KEY QUESTIONS

The key question to ask when backcasting is:

**‘how did we get here?’** This means envisaging that you are in the preferred future and have achieved your vision, and then you look backwards and ask **‘how did we get here?’** Creativity is key in this process.







## LEARNING EXERCISE Backcasting

In this exercise we will consider one aspect of our 2035 vision as if we have successfully achieved it and look back to see what we did to get to this day.



### TIP

When you are doing this exercise—you have the futures and the vision and are ready to deal with the uncertainties—you need to remember the importance of transformational as opposed to incremental changes.

**Ask yourself:** what transformational changes are needed to get you to that desired future?

This exercise is a series of three questions.

### 1 How did we get to where we are now?

We are in 2035 and have successfully achieved this aspect of our vision and desired future:

**Outcome.** *Farmers and pastoralists across the 16 SADC member countries are using climate-resilient, agroecological approaches and providing diverse sources of food to equitably meet food and nutritional security requirements of rural and urban populations.*

How did we manage to successfully achieve this and when? For example, I remember that in 2022, SADC launched a wide-reaching radio campaign in local languages to raise awareness on climate and nutritionally-smart farming.

“Capacity building of local farmers in 2023”

“TV programmes in 2016”

“Training farmers on climate-smart agriculture in 2022”

“Enhanced productivity training from 2020 to 2025”

“Introduction of new technologies in 2004”

“Farmers were sensitised on how to use climate resilient seeds in 2020”

“A 2021 Agricultural Recovery Plan”

“Introduction of agro-forestry and climate smart agriculture in 2024”

“Introduction of a national climate change learning strategy by 2030”

### 2 How did we overcome the barriers on the way?

Tell us what you remember about how we were able to minimise the effects of the drought in Zambia, Botswana, and Namibia in 2026. To achieve our success, we had to overcome barriers. How did we do that?

“Planted more trees”

“Adopted drought resistant cultivars”

“Water harvesting”

“Promoted climate smart agriculture”

“Crop diversification programs”

“Development of drought tolerant crops”

“Building of water storage facilities”

“Drilling of boreholes”

“Diversified incomes sources”

“Managed the soils carefully”



# Series 4



## LEARNING EXERCISE Backcasting CONT

In this exercise we will consider one aspect of our 2035 vision as if we have successfully achieved it and look back to see what we did to get to this day.

### 3 Who were some of the stakeholder groups we brought in?

To achieve our vision, what were some of the surprising new partnerships we formed? Please give us an example of a new partnership we formed to achieve our vision.

“Agricultural research institutions and universities”

“NGOs and youth groups”

“UN agencies”

“Youth and older farmers working together”

“Local traditional leadership”

“Government and NGOs”

“Private sector with the community”

“Research - extension- education”

“Farmers and computer app developers”

“All stakeholders along the value chain”



Photo: ©Jenny Vaughan (Mercy Corps)



## Strategy: What will we do differently?

During the **foresight process** you gather **multiple insights into the future**. The last step of the process involves developing your strategy. This is where you consider **‘what we will do differently?’** It is important to reiterate that there is no single way of doing foresight.

In this training foresight planning has been presented as a linear process, however, it is an iterative process and steps are often repeated, such as bringing in more evidence or engaging with new stakeholders. A foresight process should be on-going, for example, a mission statement should be continuously revisited and updated in accordance with the timeframes and any changes to the preferred future.

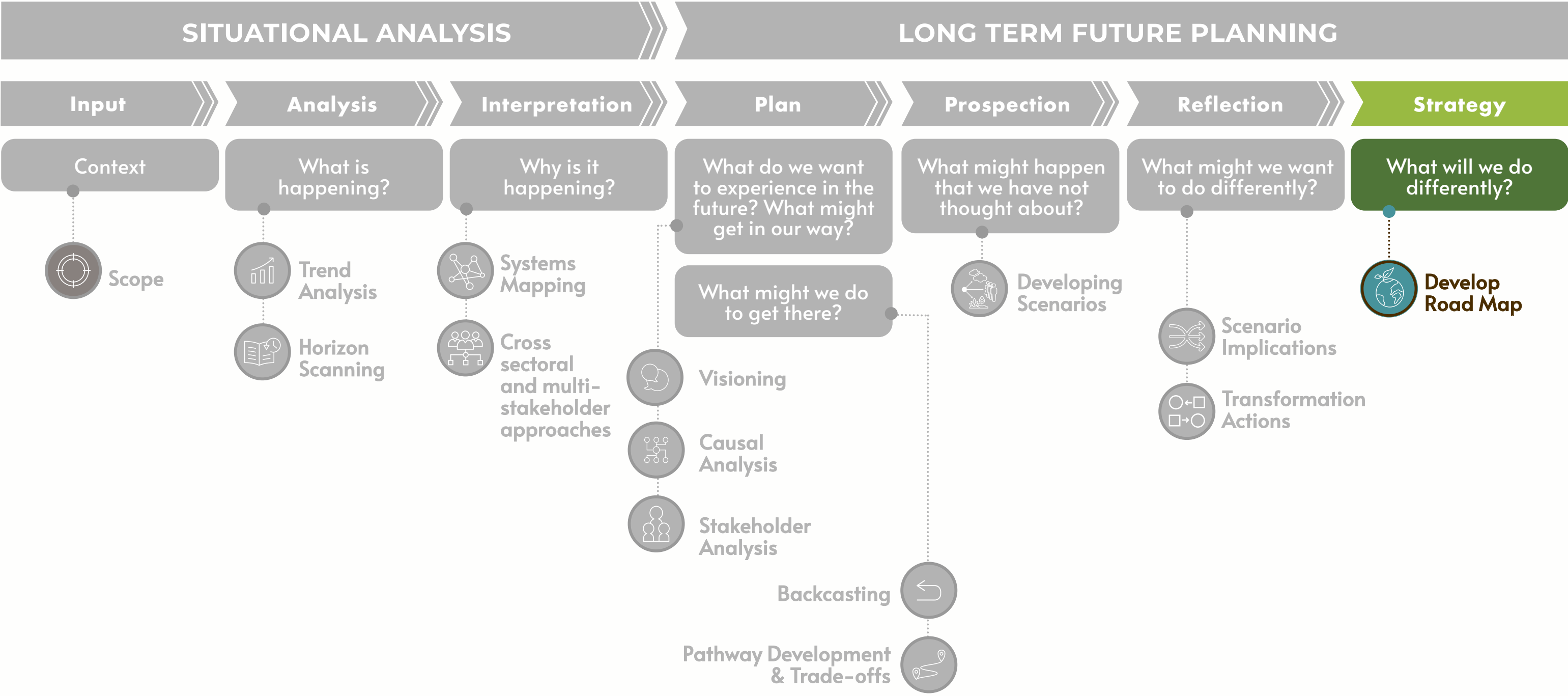




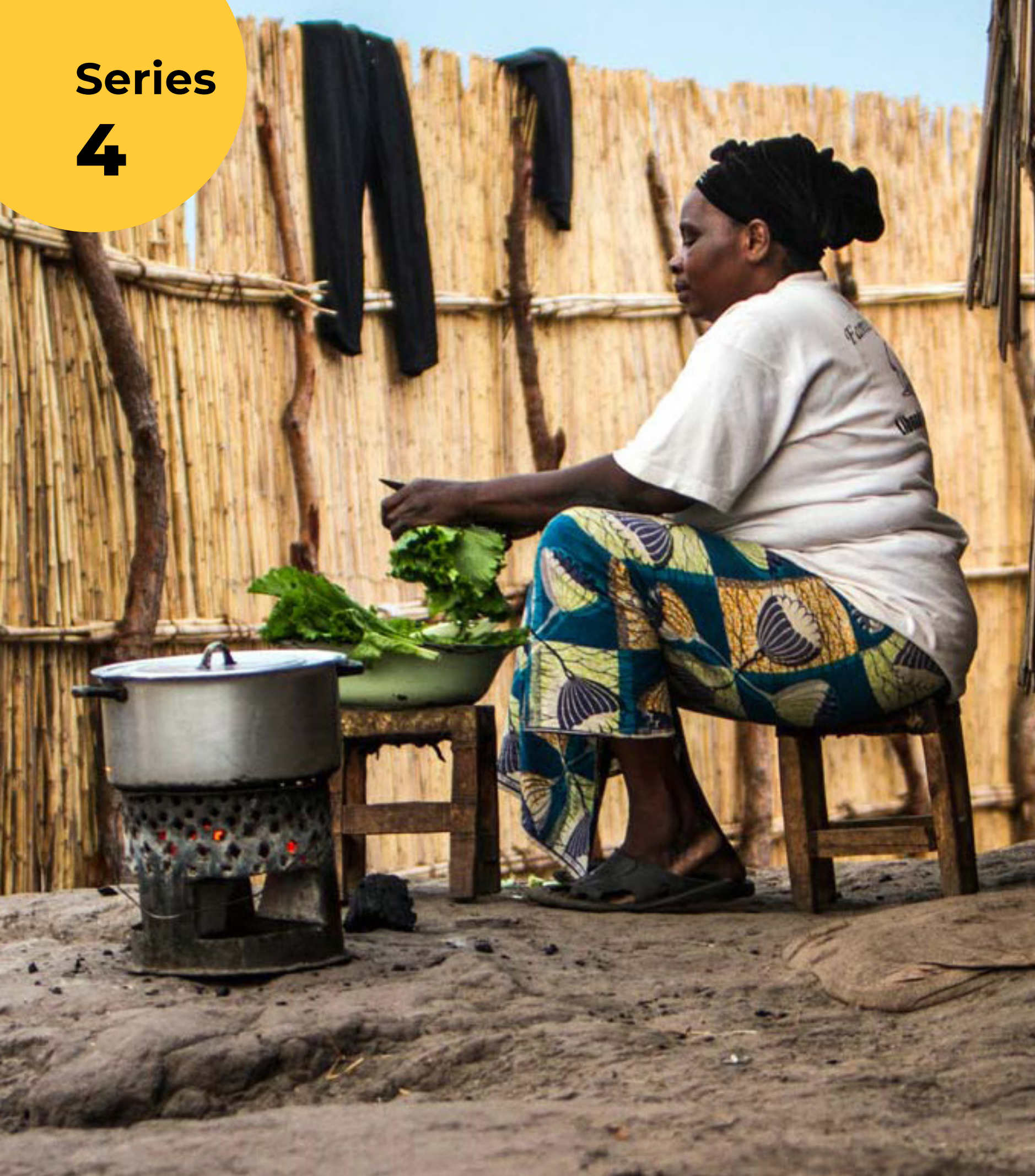
DATA, EVIDENCE, KNOWLEDGE AND CREATIVITY



STAKEHOLDER ENGAGEMENT AND PARTICIPATION







The different scenarios identified help us to plan away from the futures we do not want to unfold and move towards the preferred scenarios of the future.

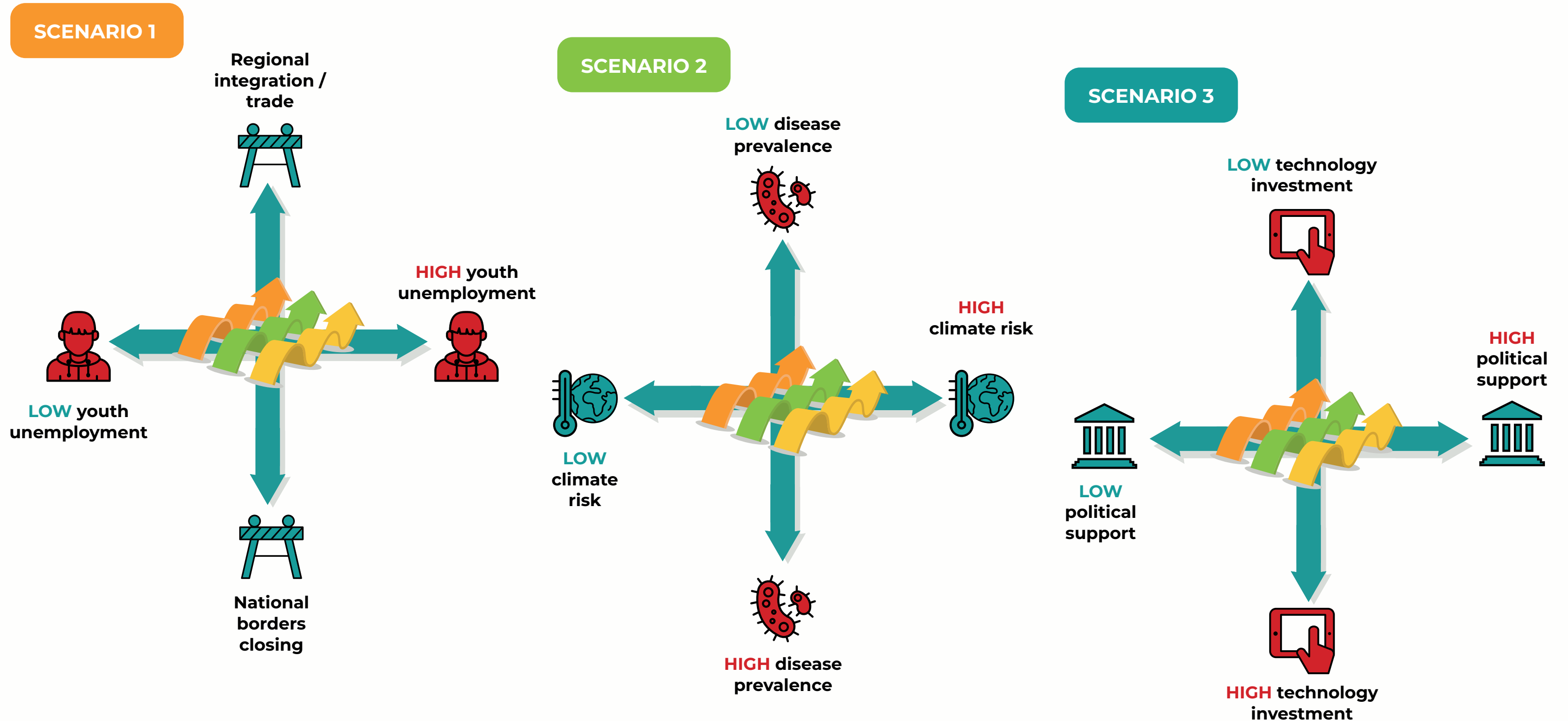
**With a view to possible futures, we can better plan interventions to avoid unfortunate scenarios and move toward more resilient and preferred scenarios.**



# Series 4

In Series 3 we **built scenarios** using a **selection of drivers** such as youth unemployment, climate risk and technological investment. In a **scenario process** you would **build multiple storylines** and

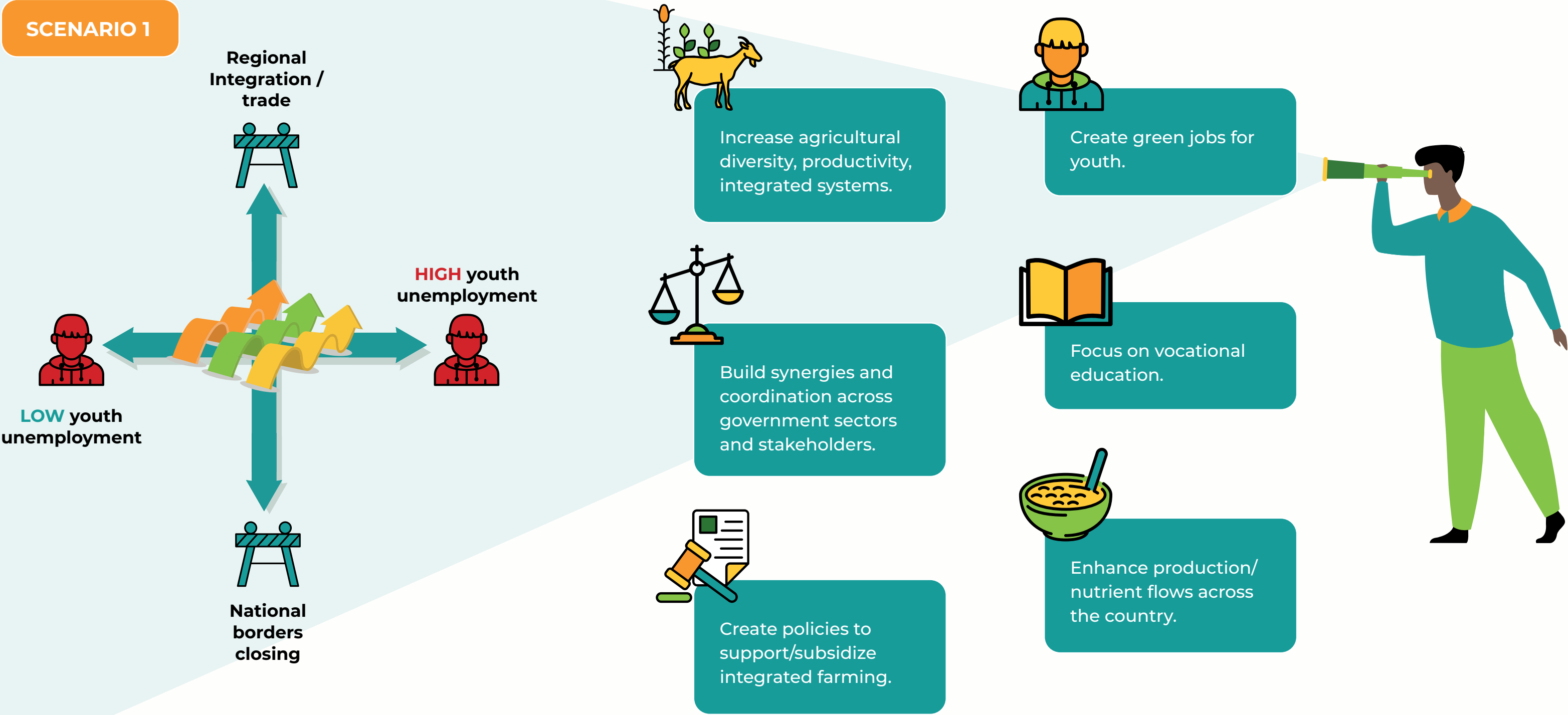
try to understand their implications and what **actions** are needed to manage them. **This understanding is then used to develop your strategy.**



For example, a scenario with **high youth unemployment and poor regional integration** could require actions such as the creation of green jobs for youth or an increase in agricultural production/nutrient

flows across the country. You start to think ‘**what do we need to do for the future that we have mapped out?**’

SCENARIO 1







A number of **scenario development processes** have been conducted at both national and SADC regional level. A process that was conducted two years ago brought together different stakeholders at the SADC regional level. In a scenario process, you will bring together multiple stakeholders, which will result in both common and divergent visions. Some stakeholders will see the future in one way and others in a different way. This means that a lot of **different future storylines** will be generated, and the

**foresight planner** will really need to hone their prioritisation skills to be able to filter through the different options and select those that need to be taken forward into the **strategy development**.

When **considering the implications and indicative actions** and starting to develop a strategy, it is important to remember the need for transformative actions as opposed to incremental actions.

## CATEGORIES OF TRANSFORMATIVE ACTIONS



Integrated and adaptive  
**interventions**



Flexible, robust and synergistic  
**institutions and policies** that  
drive implementation



Novel **partnerships**, cross  
sectoral or multi-stakeholder  
relationships



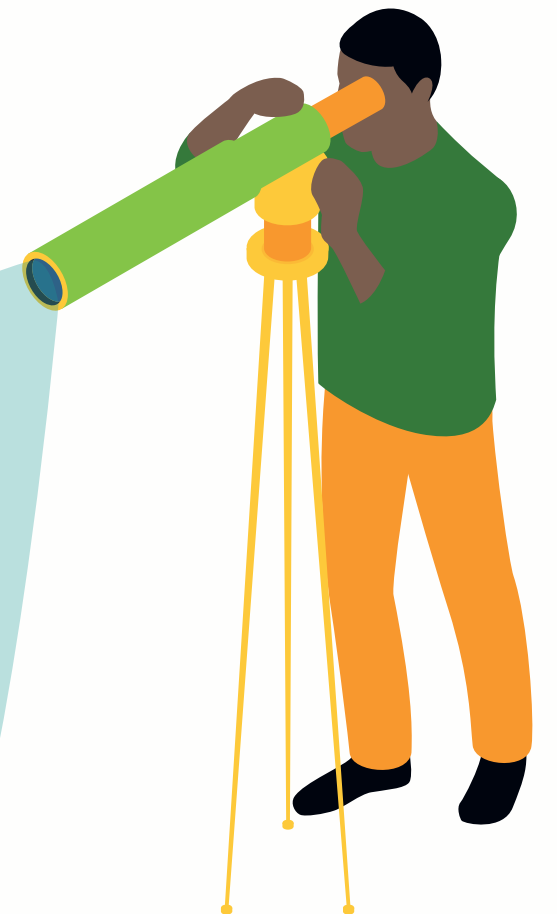
## RESULTS FROM A SCENARIO PLANNING PROCESS CONDUCTED AT THE SADC REGION AND MEMBER COUNTRY LEVEL

### Common Visions

- Higher levels of equality in income distribution
- Improved conservation and natural resource management
- Reduction in food imports
- Increased investment in education and health
- Increased investment in infrastructure

### Divergent Visions

- Roles of regional government
- Relative importance of small-scale farming sector to economic growth and food supply
- Degree to which the region is inward or outward looking
- Nature of the transition to get to the ideal future







The principle to note here is that **foresight** allows us to **build action plans** and ensure that **current policies and plans** are developed using a future lens.



## LEARNING EXERCISE

How do you prioritise your planning?

**"By ranking and analysing impact"**

**"Revenue and likelihood of success"**

**"Ranking with stakeholders"**

**"Rank impacts and look at the possible obstacles that may arise"**

**"Cost-benefit consideration"**

**Prioritisation** is a **crucial foresight skill** in terms of combining everything we know about the past (e.g. by doing backcasting, scenario building, looking at complex systems and mapping stakeholders) and working within our planning or strategy development processes and fixed resources (e.g. budgets or data) to determine the best order of actions needed to improve the future.

The ambition with prioritisation in the **strategy phase** is to look at the **impact of various methods** and the urgency with which you need to implement them. It is important to filter, **'what do we really need to do?'**, **'what would be nice to have?'** and **'what could we perhaps leave to later?'**



**Prioritization is the art of combining everything we think we know about the past with the fixed resources we have right now to predict the order in which to do things to improve our collective future.**



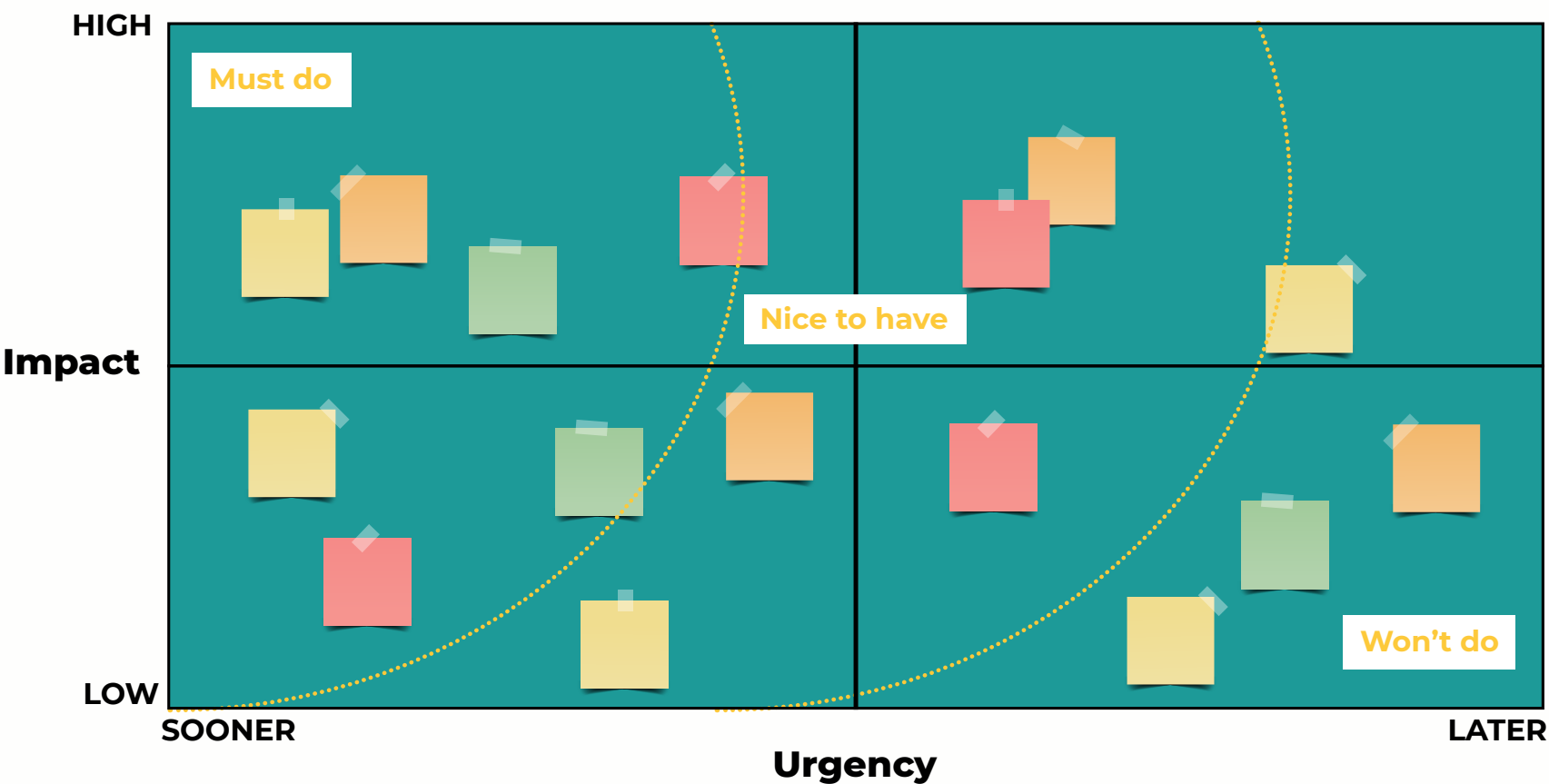


There are both **qualitative and quantitative** (e.g. cost-benefit analysis) **tools for prioritisation**. Prioritisation should be done

as a collaborative exercise with multiple stakeholders to ensure that many perspectives are taken into consideration.

IMPACT-LIKELIHOOD MATRIX

IMPACT ON ISSUES	HIGH	Hard and ineffective <i>Potential target, may require resources for adoption</i>	Easy but ineffective <i>First priority, probably already targeted</i>
	LOW	Hard and ineffective <i>Low priority</i>	Easy but ineffective <i>Possible target, may help leverage other behaviours</i>
		LOW	HIGH
LIKELIHOOD OF ADOPTION			

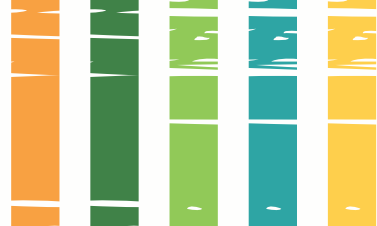


LEARNING EXERCISE

Can you generate outcomes and impacts simultaneously?

This question is very relevant to planning processes which involve impact pathways. There has been a lot of debate in building impact pathways as to whether the impact is part of the outcome or whether it comes afterwards. Typically, the impact is the final transformational result. There can be multiple outcomes feeding into that final impact.

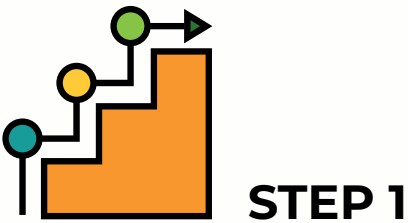




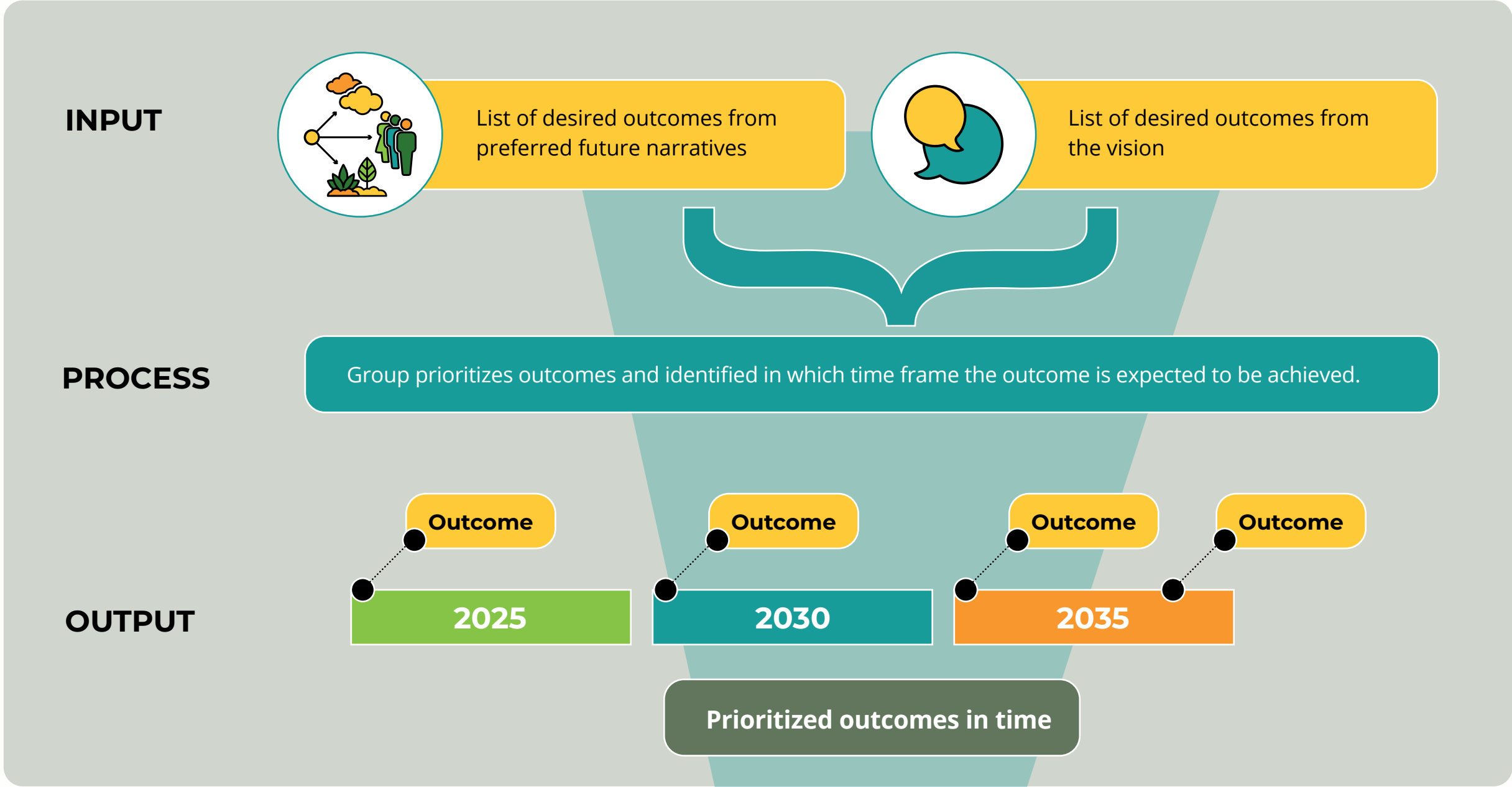
Using the **scenario narratives** you can start to **build specific outcomes for different timeframes**. The **backcasting tool** is really valuable in this step as you **envisage yourself in the preferred future** and **determine what actions you took** to

get there. This can be done for whichever **timeline your planning** is aiming towards. The inputs used to inform the backcasting exercise are from the scenario process and your vision.

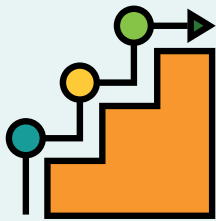
1 PRIORITIZING ACTIONS TO ACHIEVE THE DESIRED FUTURE



Using desired outcomes from our scenario narratives of our preferred future and our compelling vision, the group will prioritize outcomes and when in time we want to achieve them.

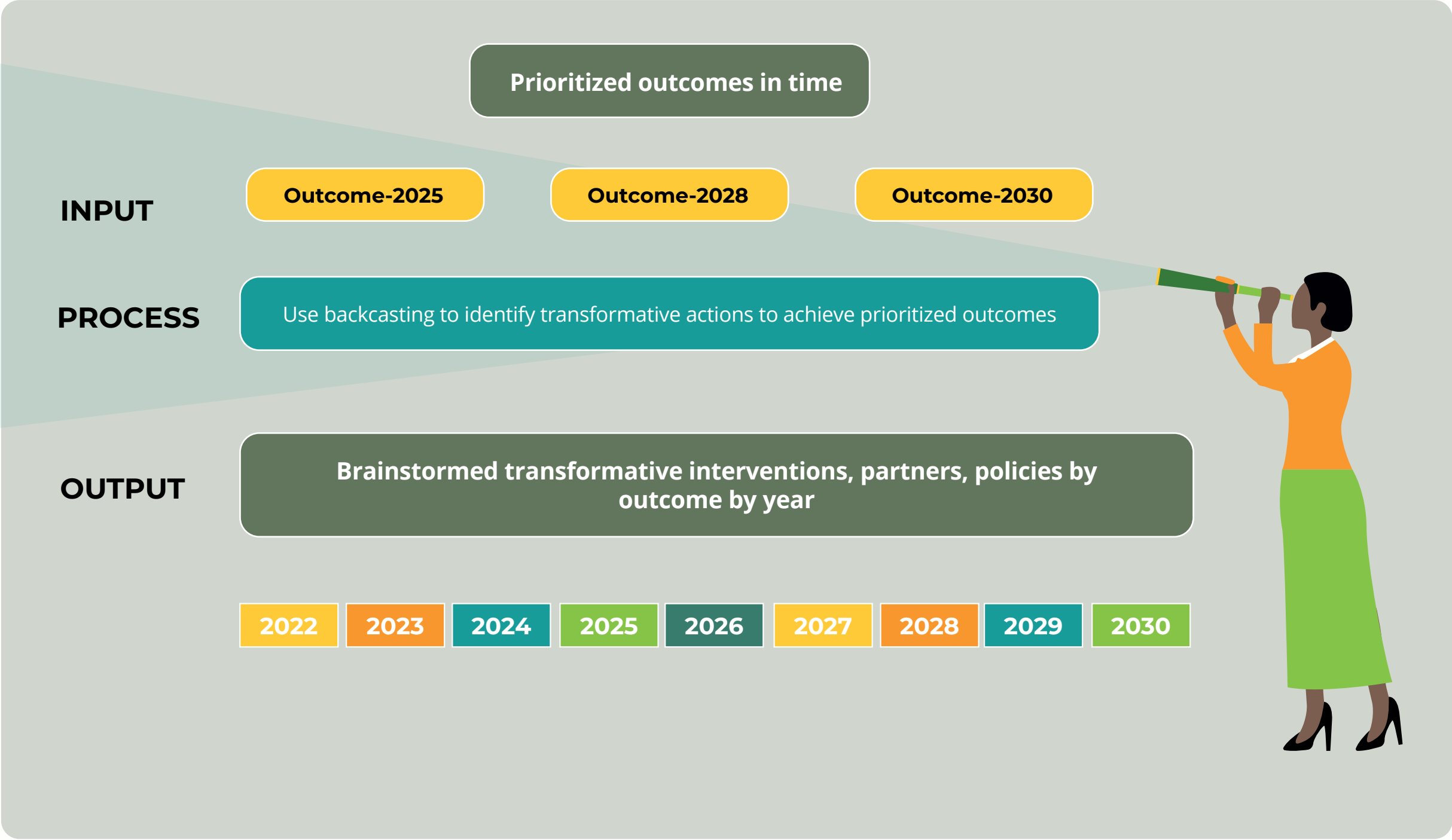


2 PRIORITIZING ACTIONS TO ACHIEVE THE DESIRED FUTURE



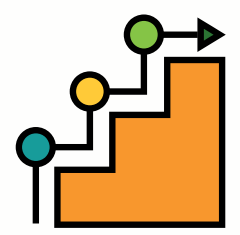
STEP 2

With prioritized outcomes and timeline to achieve, use backcasting to brainstorm transformative interventions, partners and policy to achieve the outcome.





3 PRIORITIZING ACTIONS TO ACHIEVE THE DESIRED FUTURE



STEP 3

With the **prioritized outcomes** from Step 1 as the guide, we will look across:

- Brainstormed interventions from Step 2
- Indicative actions from our scenarios
- Relevant existing strategies and policies

To prioritize which transformative actions (interventions, partners and policies) and any complementary existing/ updated plans/strategies/ policies will most effectively achieve the outcomes.

INPUT



Brainstormed interventions, partners, policies



Indicative actions from scenarios



Relevant existing plans, strategies and policies

Prioritized outcomes in time

PROCESS

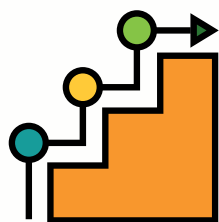
Look across new actions from emerging backcasting and scenarios and check against the relevant scenarios and policies.

OUTPUT

**Prioritized transformative actions** and **existing / updated strategies and policies** that will most effectively achieve the desired outcomes.



4 PRIORITIZING ACTIONS TO ACHIEVE THE DESIRED FUTURE



STEP 4

With sets of transformative actions(new and existing/ updated), it is now time to describe the different detailed pathways and check across different pathways for trade-offs among them to ensure pathways are integrated, complementary and effective.

INPUT

Prioritized transformative actions and existing / updated strategies and policies that will most effectively achieve the desired outcomes.

PROCESS

Describe detailed pathways to achieve the outcomes and check for trade-offs among pathways

- Outcome
- Output
- What
- Who
- How
- When



OUTPUT

Future Proofed Roadmap of Transformative Pathways





## LEARNING EXERCISE

### Do output and outcome differ in practice?

The outcome is what you are aiming to achieve, for example, by 2030 the whole region has adopted climate-smart agriculture (CSA). There could be a variety of outputs that assist you in reaching this desired outcome such as by 2022 you would have rolled out a regional CSA awareness campaign and in 2024 national CSA extension services would be established. Essentially, outputs are stepping stones towards achieving an outcome.



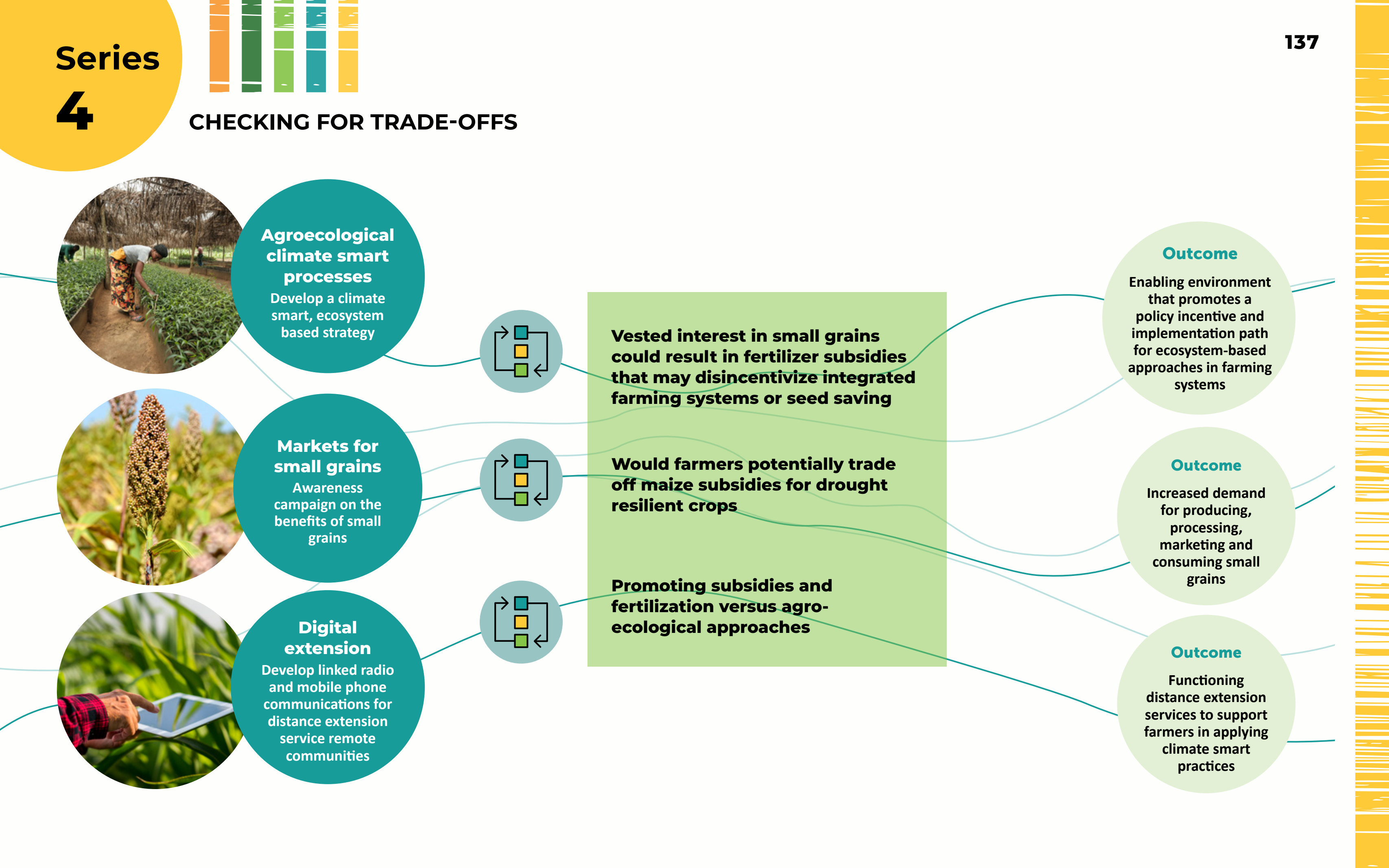
In the **strategy stage** of your foresight process it is critical to check for **trade-offs, as depending on the future scenarios** you are planning for, the actions you put in place may have repercussions elsewhere.

**For example**, you may be investing in digital extension, but would this potentially promote subsidies and fertilisation versus agro-ecological approaches?

Are you enabling one aspect at the cost of another because of your intervention?

Time needs to be set aside to consider these tradeoffs as part of the prioritisation process.

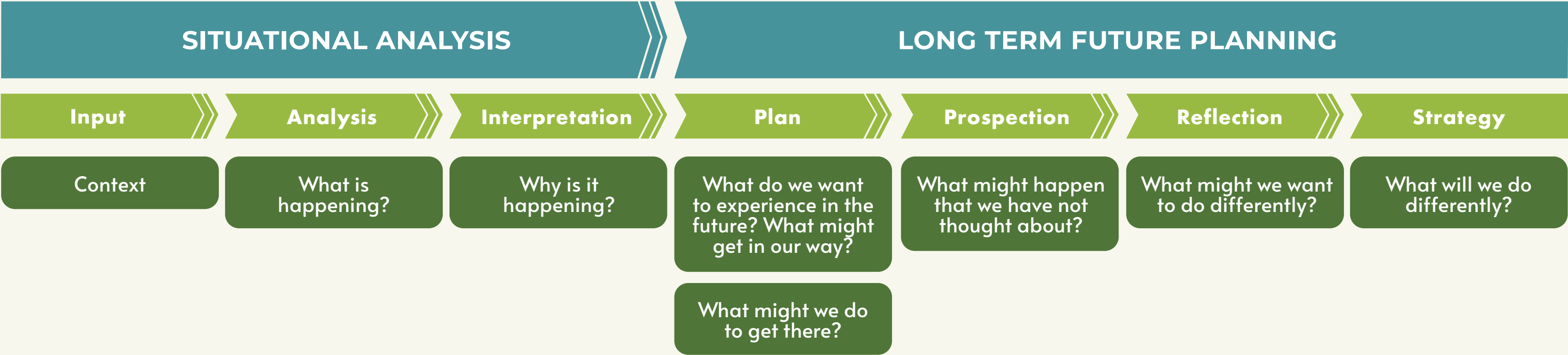






“ Having a group of motivated people work through a foresight process together is more valuable than relying on the intuition of a single leader. ”

This training has provided an overview of a **foresight process**, covering the **key questions, tools, methods and steps to consider in developing a strategy**.

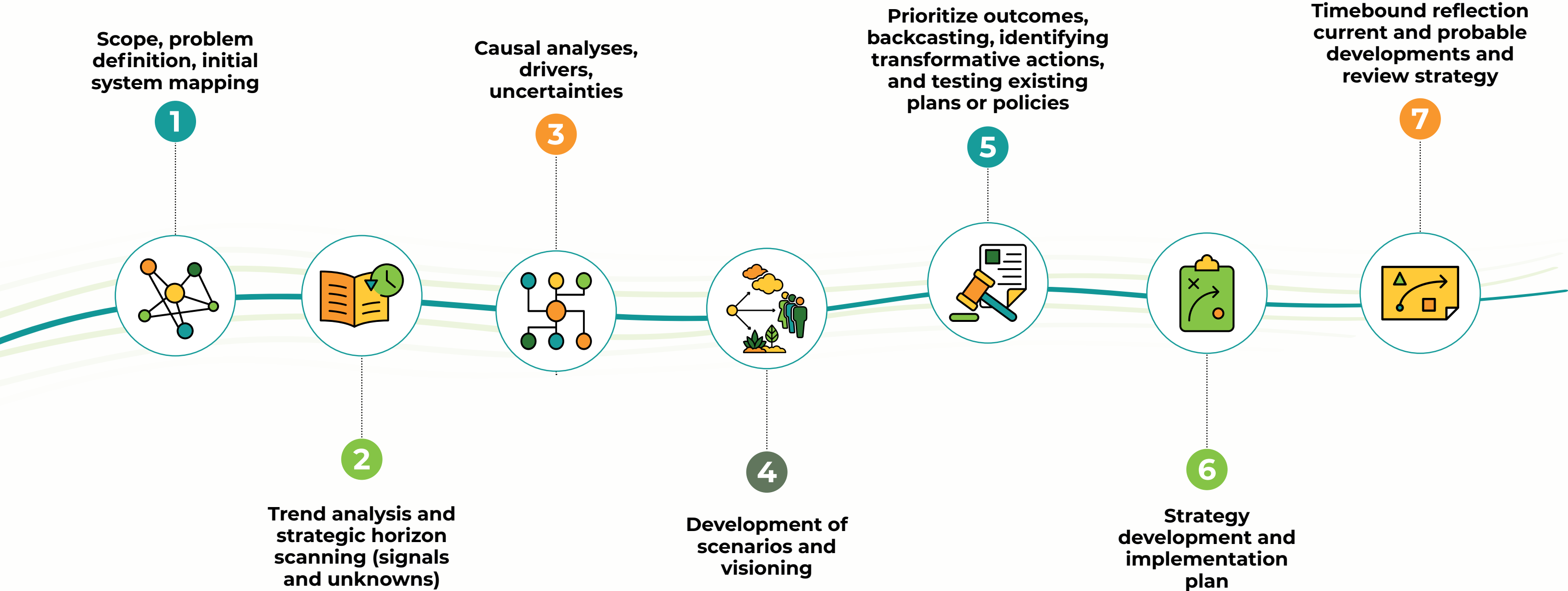




A full **strategic foresight process flows from understanding your scope to trends analysis and horizon scanning**; causal analysis and ranking drivers; scenario development and visioning; prioritising outcomes, backcasting and identifying transformative

actions; to ultimately developing or updating an existing strategy or plan. **The strategy or plan then needs to be monitored, reviewed and revised as the future unfolds.**

FLOW FOR A FULL STRATEGIC FORESIGHT PROCESS







## STEPS FOR A STRATEGIC FORESIGHT PROCESS

### Set the scope

- Define the theme, problem statement, timeline
- Set the geopolitical boundary
- Map existing institutional arrangements, selecting existing targets and national priorities
- Map the stakeholders

1

### Analyse causes, drivers and uncertainties

- Define the theme, problem statement, timeline
- Set the geopolitical boundary
- Map existing institutional arrangements, selecting existing targets and national priorities
- Map the stakeholders

3

### Analyse the trends and scan the horizon

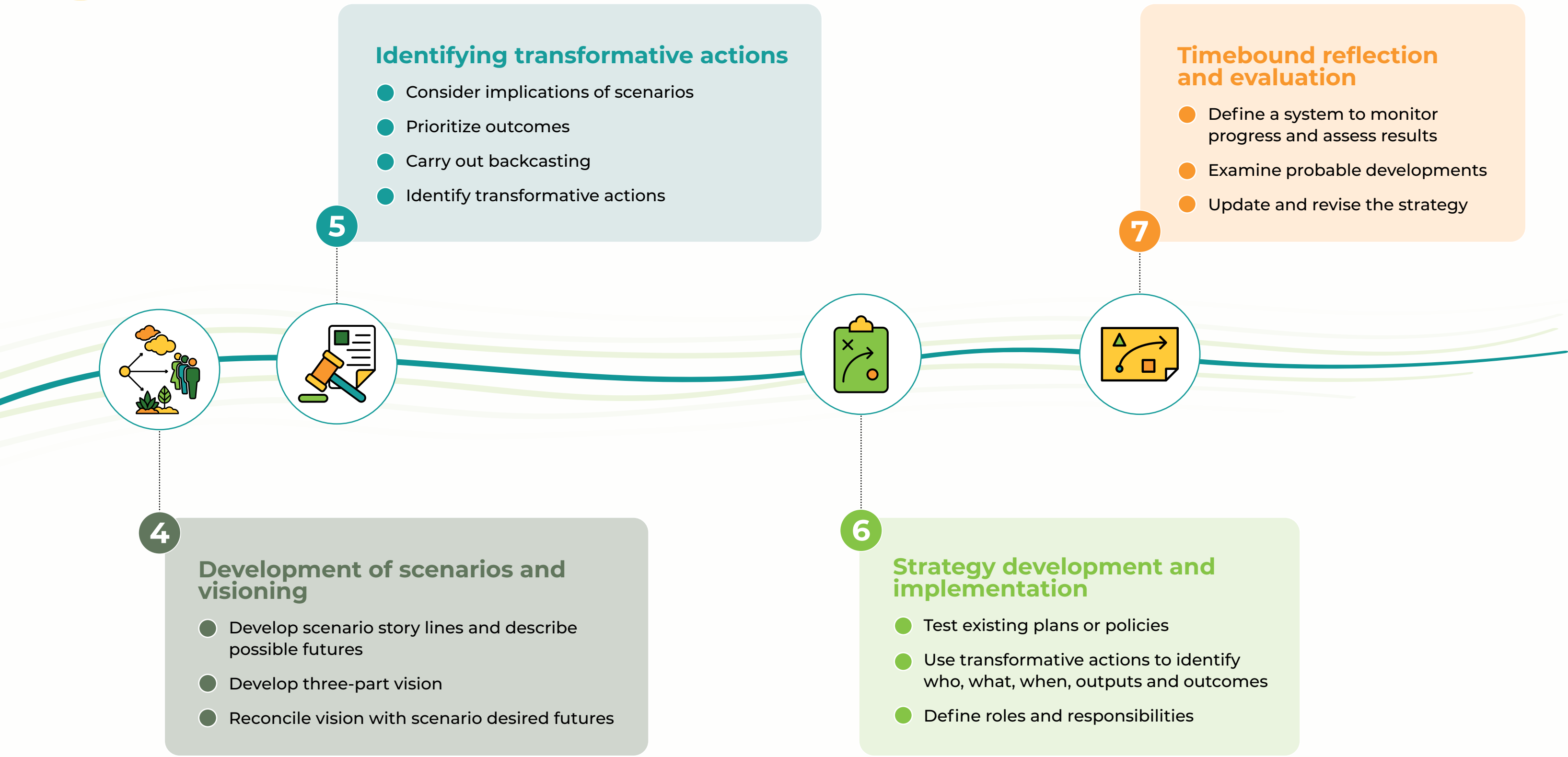
- Create a plan to identify, develop and analyse relevant historical trends
- Using the STEEP framework, collect diverse information sources
- Analyse the trends to detect 'signals' of disruption or new trends
- Define known unknowns

2

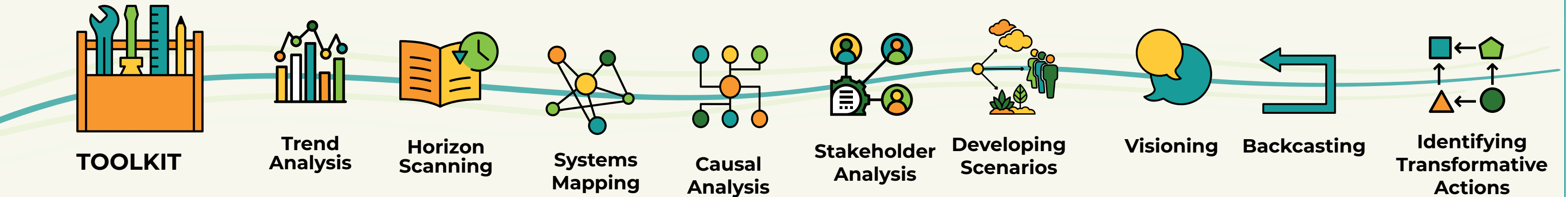
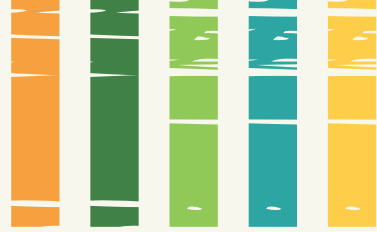




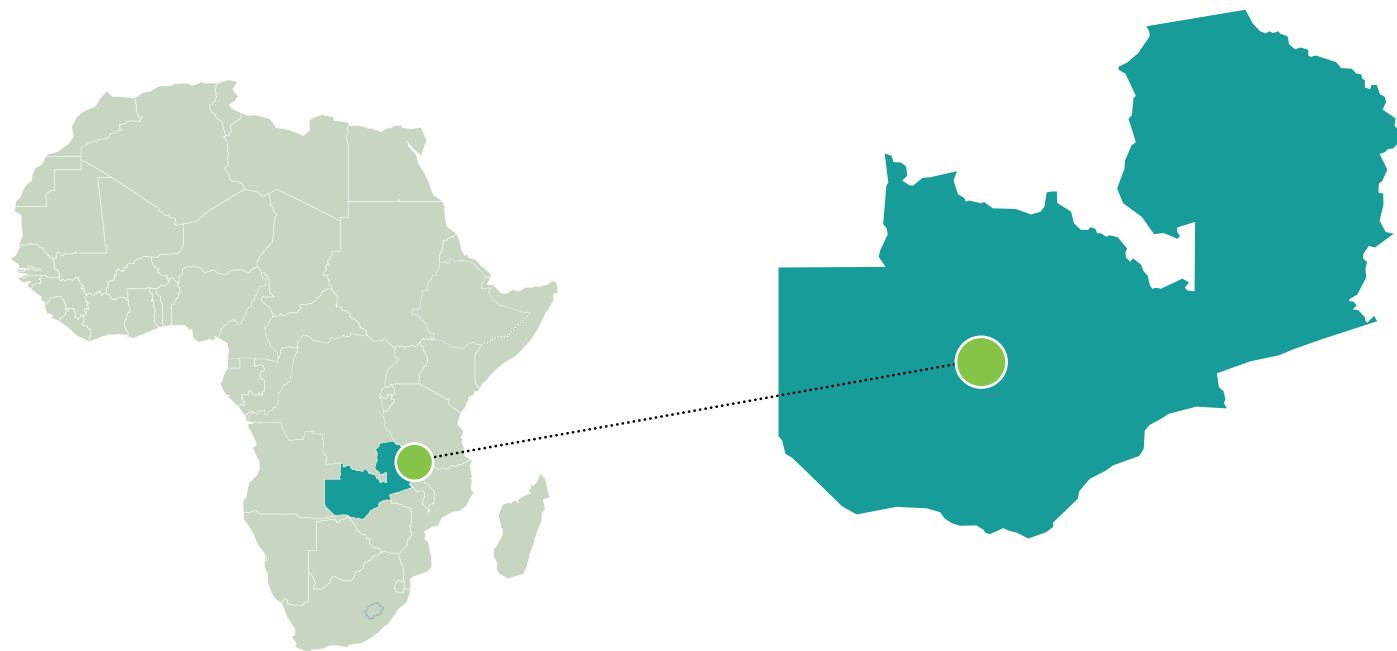
STEPS FOR A STRATEGIC FORESIGHT PROCESS





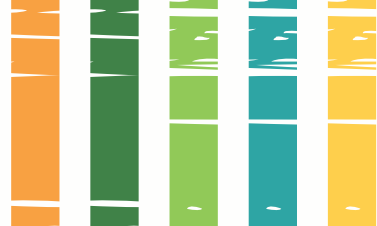


## APPLYING FORESIGHT

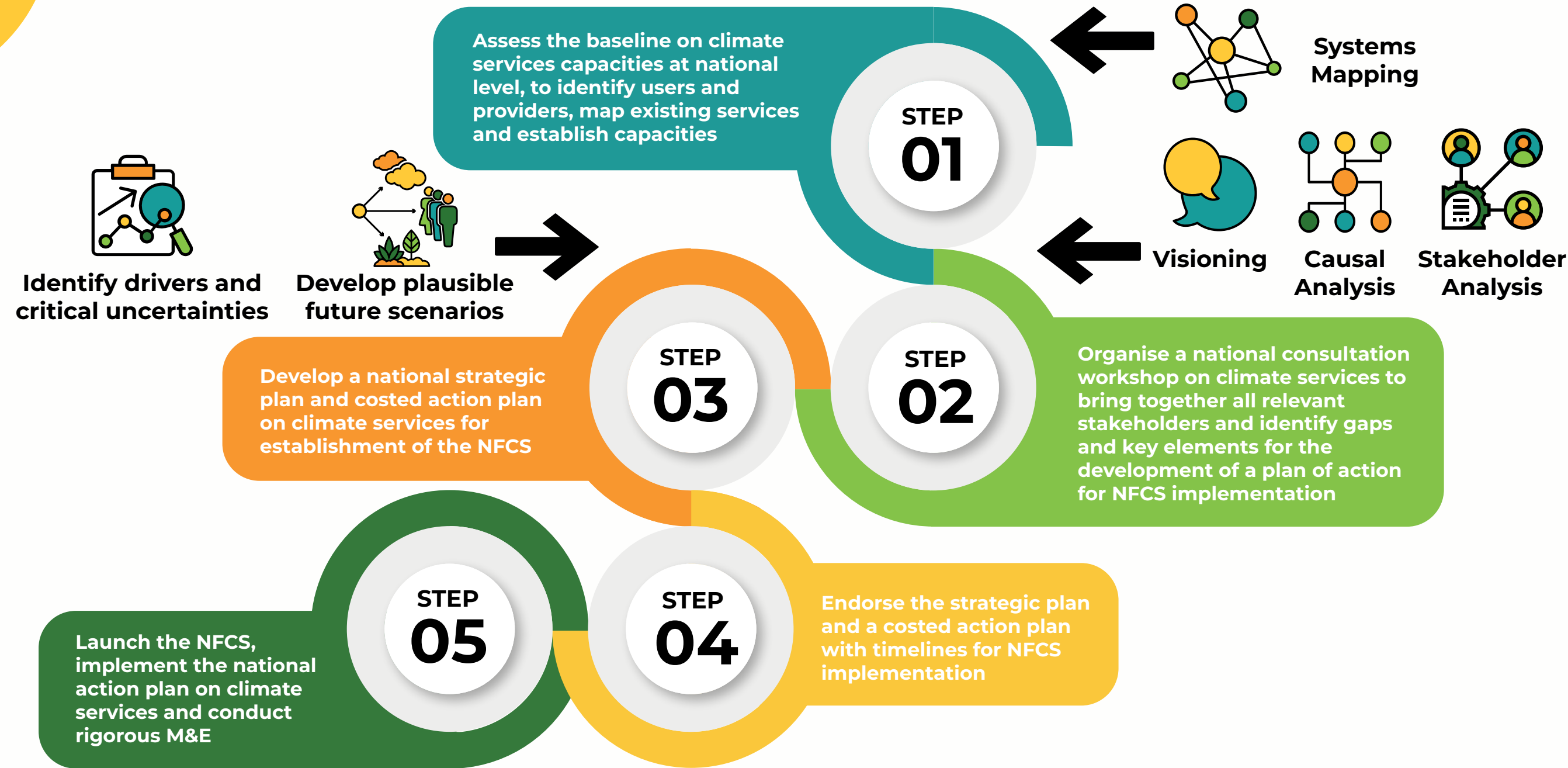


A good **example of applying foresight for futures planning** is evident in the development of **Zambia's National Climate Services Framework**.

The development process followed five key steps and integrated foresight planning tools, methods and approaches such as systems mapping, visioning, causal analysis, stakeholder analysis, identifying drivers and critical uncertainties, and developing plausible future scenarios



PLANNING INTO DEVELOP - Zambia's National Climate Services Framework



LEARNING  
EXERCISE

Take a minute to think to yourself about your own work, activities underway or planned, and where foresight tools and methods might enhance these to be 'future-proofed'. Where do you see a gap or opportunity that foresight could support? Are there specific foresight tools or methods that would be useful to backstop the process?

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LEARNING EXERCISE CONT.  
EXAMPLES OF WORKING GROUP OUTPUTS

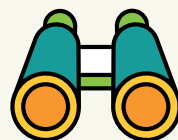


Process / Policy  
Development / Activity /  
Project – 2021 / 2022

NCFS Zambia

Crop research annual  
planning in Zimbabwe

Regional climate-smart  
agriculture alliance



Gaps / areas that foresight  
could support

Engagement methodology – and  
planning national consultation workshop

Scoping for priorities

Work through a time bound plan and  
ambition of the alliance



Potential foresight tools  
or methods to backstop  
process

Systems mapping and  
stakeholder engagement plan

Horizon scanning – looking at  
emerging signals

Backcasting



Main contact point for  
follow up

Name  
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Name  
xxx@xxx.xxx

Name  
xxx@xxx.xxx

“Scale up and promote indigenous  
livestock – requires the full suite of  
foresight tools and methods”

“New agricultural policies – missing  
baseline data, there is a need for evidence  
and trends analysis”

“Aquaponics project – need for  
transformational mind shifts in South  
Africa”

“National Extension Service Policy  
in Nigeria – use foresight tools to  
mainstream CSA practices”

“National Development Strategy  
in Zimbabwe- requires stakeholder  
mapping and changes in mind set away  
from the static status quo to futures  
thinking and what might change”

“Innovation centres for climate

resilience in Zimbabwe – need to look at  
innovation in the future and what the  
centres will need to provide”

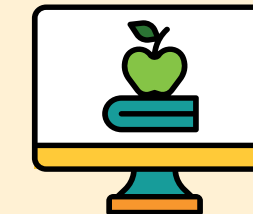
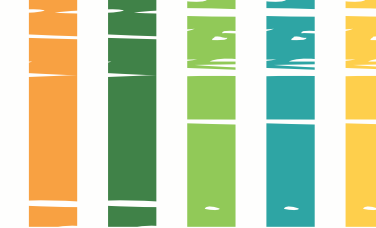
“Opportunity for cattle production in  
Lesotho – need to bring in evidence,  
do a trends analysis and understand  
stakeholder relationships”

“Hydroponic system in Eswatini –  
bringing in evidence”

# Series 4

This series provided a sensitisation on the foresight framework, and a need has been identified for adopting these skills and building them into planning processes. **Some ideas for building foresight in the region include:**

- 1 Tailored support to a policy or investment planning process.
- 2 Training of trainers as foresight practitioners.
- 3 Community of practice.
- 4 Ideas of scale – institutional training or individual level courses.



## LEARNING OUTCOMES

**The learning outcomes from this series on 'pathways to a desired future' include:**

- 1 Understanding of how to build a robust vision to drive your planning process
- 2 Using backcasting to generate innovative ideas for interventions, structure and policy shifts, and partnerships to achieve your vision
- 3 Using foresight outputs and processes to prioritize and develop a strategy
- 4 Insights on how one can apply foresight.



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