



# Regional Stakeholders (NARES) Sensitization of the Relevance of Foresight for Food Systems Training & Establishment of a Regional Hub in Zambia



5-7 March 2024

Lusaka Zambia

Meeting Report

## Table of Contents

<b>1. Introduction</b> .....	1
<b>2. Objectives of the workshop</b> .....	1
<b>3. The Workshop</b> .....	2
<b>4. Workshop Proceedings</b> .....	2
<b>4.1. Introductions</b> .....	3
<b>4.2. Keynote Speeches</b> .....	3
<b>4.3. Setting the Scene</b> .....	4
<b>4.4. Food Systems and Transformation Planning (Dr Abdulrazak)</b> .....	4
<b>4.5. Introduction to Foresight</b> .....	7
<b>4.6. Re-Imagining/Reframing: Introduction to Causal Layered Analysis</b> .....	9
<b>4.7. Horizon Scanning and Trends Analysis</b> .....	12
<b>4.8. Developing Scenarios and using Futures Wheel to develop scenario narrative</b> .....	16
<b>4.9. Develop way forward using the 3 Horizons Framework</b> .....	19
<b>5. Way Forward</b> .....	21
<b>Appendix I: Concept Note</b> .....	23
<b>Appendix II: Regional Foresight For Food Systems Training Workshop -Proposed Programme</b> .....	27
<b>Appendix III: List of Participants</b> .....	29

**LIST OF TABLES**

Table 1: Cross Impact Matrix – Group Work Example..... 17

**LIST OF FIGURES**

Figure 1: Food Systems ..... 5  
Figure 2: Transformative food system..... 6  
Figure 3: Interlinked Process of Food System Transformation..... 7  
Figure 4: Foresight Process ..... 9  
Figure 5: Causal Layered Analysis (CLA)..... 10  
Figure 6: CLA Example..... 10  
Figure 7: CLA elaboration..... 11  
Figure 8: Identifying Signals - Group Exercise Example. .... 13  
Figure 9: Trends ..... 13  
Figure 10: DEFT Analysis – Group Example..... 16  
Figure 11: Futures Wheel..... 18  
Figure 12: Scenario Narratives..... 19  
Figure 13: Horizons Framework..... 19

## 1. Introduction

Food Systems provide a direct pathway to Sustainable Development Goals (SDG) achievement in particular in regard to food insecurity and poverty. Therefore, transforming Food Systems – making them more productive, competitive and resilient is key. At the same time, Food Systems resilience is threatened by conflicts, climate change, inflation (rising food, fertilizer, fuel prices) and also pandemics e.g. Covid 19. More crucially we are now in a “VUCA” world characterized by **V**olatility as reflected in the speed and turbulence of change, **U**ncertainty which means that outcomes, even from familiar actions are less predictable, **C**omplexity due to the growing vastness of interdependencies in globally connected economies and societies and **A**mbiguity as conveyed in the multitude of options and potential outcomes from the many forces buffeting the world.

While enabling appropriate policy environment, investments, innovation, and collaboration are key in making the food system deliver its promise and a clear understanding of the drivers of food systems and what they mean is key. Looking ahead and seeing what is on the horizon and better anticipating potential changes is key to making effective policies. This underscores the importance of foresight in food systems. The benefits of utilising a futures/foresight approach include being able to:

- Challenge deeply held assumptions and think more openly and in a non-biased way.
- Improve awareness of the changing external environment and anticipate change.
- Create a platform for new thinking about strategy, policy, and innovation, leading to more creative, broader, and deeper insights.
- Better understand the whole system, patterns of change, and complexity within it.
- Focus on asking the 'right' questions and problems more clearly and be more aware of assumptions and mental models.
- Identify a wider range of opportunities and options and prioritise and make better, more robust decisions.
- Construct pathways from the present to the future that enable rehearsing and avoid surprises.

## 2. Objectives of the workshop

This training therefore aimed to impact the participants in several ways. These are:

- i. Help participants appreciate what food system (FS) is and provide them with a summary of food systems work done in the region by CCARDESA and in Africa in general (by FARA and by FAO).
- ii. Sensitise stakeholders on the relevance of foresight for the food system. In particular, understand the crucial role foresight plays in making food systems productive and resilient.
- iii. Understand the process of foresight.
- iv. Understand what foresight is and what foresight is not i.e. where to use foresight.

- v. Understand the tools and methods of foresight. Appreciate there are many ways of doing foresight.
- vi. Build foresight capacity – methods, application, and their application. In particular the hands-on use of foresight tools to improved understanding of both the foresight process and also the African food system.
- vii. Provide some initial thoughts on establishing a foresight hub in the region and forming a community of practice in food systems foresight.
- viii. Network and collaboration among workshop participants.

The expected Outputs of the workshop were:

- i. Participants have attained applicable skills on how to apply and use Foresight for Food Systems Models.
- ii. Participants have acquired practical skills to utilize Foresight for Food systems models.
- iii. Participants will develop actionable plans for on Foresight for Food Systems.
- iv. Individuals that will support the establishment of country foresight hubs identified.

(see concept note in appendix I)

### 3. The Workshop

The event was a 3-day workshop running from May 5-7, 2024. It was a mix of speeches, presentations, and hands-on group work. The event took place at the Hilton (Garden Inn) Hotel in Lusaka Zambia. The program of the event is provided in the appendix II.

A total of 46 attended the workshop drawn from 9 countries<sup>1</sup>. The participants were drawn from many sectors including universities, policy and private sector representatives, development partners, farmers, youth groups (see appendix III).

### 4. Workshop Proceedings

As pointed the workshop was conducted over a 3-day period. A summary of proceedings of each is provided. The training was conducted through a number of sessions. The structure of the workshop was as follows:

- i. Introduction and Keynote speeches from invited guests
- ii. Setting the Scene
- iii. Food Systems and Transformational planning
- iv. Introduction to Foresight
- v. Re-Imagining/Reframing: Introduction to Causal Layered Analysis
- vi. Horizon Scanning and Trends Analysis
- vii. Developing Scenario and using Futures Wheel to develop scenario narrative
- viii. Develop a way forward using the 3 Horizons Framework

---

<sup>1</sup> Botswana, eSwatini, Ghana, Kenya, Lesotho, Malawi, Namibia, Zambia, Zimbabwe

#### 4.1. Introductions

The first session was a welcome note by Dr Baiti Podisi who acknowledged and introduced officials present: These included Mr Clemence T Bwenje - Board member for CCARDESA from Zimbabwe; Dr Mguni – Director of Zambia Agricultural Research Institute representing the PS for Agriculture Ministry; Frank Kayula Board member of CCARDESA from Zambia.

Thereafter participants were asked to introduce themselves (see attached list of participants).

#### 4.2. Keynote Speeches

Mr Clemence T Bwenje representing Executive Director of CCARDESA gave the first keynote speech. The speech dwelt on food systems and emphasized the need for taking action including capacity building and forward planning to unlock the potential of African Food Systems. The key takeaways:

- Food Systems are a direct pathway to Sustainable Development Goals (SDG) achievement especially halving poverty and well-being improvement.
- Transforming Food Systems – making them more productive, competitive, and resilient – requires enabling appropriate policy environment, investments, innovation, and collaboration.
- Food Systems resilience is threatened by COVID-19, conflicts, climate change, and cost (food, fertilizer, fuel prices); vulnerability to these challenges is due to unforeseen events—predicting what might happen, and anticipatory planning for them.
- Forward thinking is important to use knowledge and innovation to tackle the threats to Food Systems.
- Capacity building is key, 4 elements were highlighted: (i) sensitising stakeholders round the importance of foresight, (ii) facilitating development, conduct of foresight initiatives, (iii) supporting the application of foresight initiatives, and (iv) documenting the processes of food systems.
- The need for a dynamic environment for Food Systems. Global events are negatively affecting economies, and this calls for a need to plan, mitigate and adapt to the situation. Need for unforeseen events to be converted to expected events and thus ensure adequate planning for the event happens i.e. adopt an anticipatory posture.
- Resources on foresight planning and methods are available online for use – participants are encouraged to make use of them.

The second keynote speech was delivered by Dr Nguni representing PS- Ministry of Agriculture of Zambia. The PS commended the participant for taking the time to attend the workshop. He pointed out the program responds to SADC priorities of strengthening the resilience of Food Systems amidst climate change by highlighting foresight tools and approaches and Encouraged participants to use the tools in their line of work. Other takeaways from this speech were:

- The workshop will facilitate networking, collaboration among players in the Food System space.
- Expressed appreciation to the funders and organisers, and facilitators of workshop as it was opportune as the region is struggling with EL Nino and Climate change challenges.
- The workshop responds to key SADC priorities by exposing policymakers, researchers, and farmers to tools and approaches for strengthening the resilience of Food Systems amidst climate change.
- The effects of climate change in the region have been devastating. Thus, the region must plan, create scenarios, envision, and strategize on how to manage climate change effects.
- Commended SADC member states for adopting foresight models, developing action plans, and establishing country foresight hubs.

### 4.3. Setting the Scene

Dr. Abdulrazak set the scene by polling participants to assess their knowledge regarding foresight and whether they have applied foresight in their line of work. The results indicated that some participants have prior interaction and use of the practices but also a majority had limited exposure. In general, they did not feel confident to use the practice foresight.

Reflecting on the result, Dr Abdulrazak pointed out that Foresight on food systems in Africa is an ongoing process and FARA has been pushing this agenda. In this regard, FARA has established the Africa Foresight Academy (AFA) and AFA has a roadmap to the establishment of national hubs and seek grants to facilitate foresight work. He advised participants to have a look at the website for FARA's Africa Foresight Academy (AFA) (<https://faraafrica.org/afa/>).

### 4.4. Food Systems and Transformation Planning (Dr Abdulrazak)

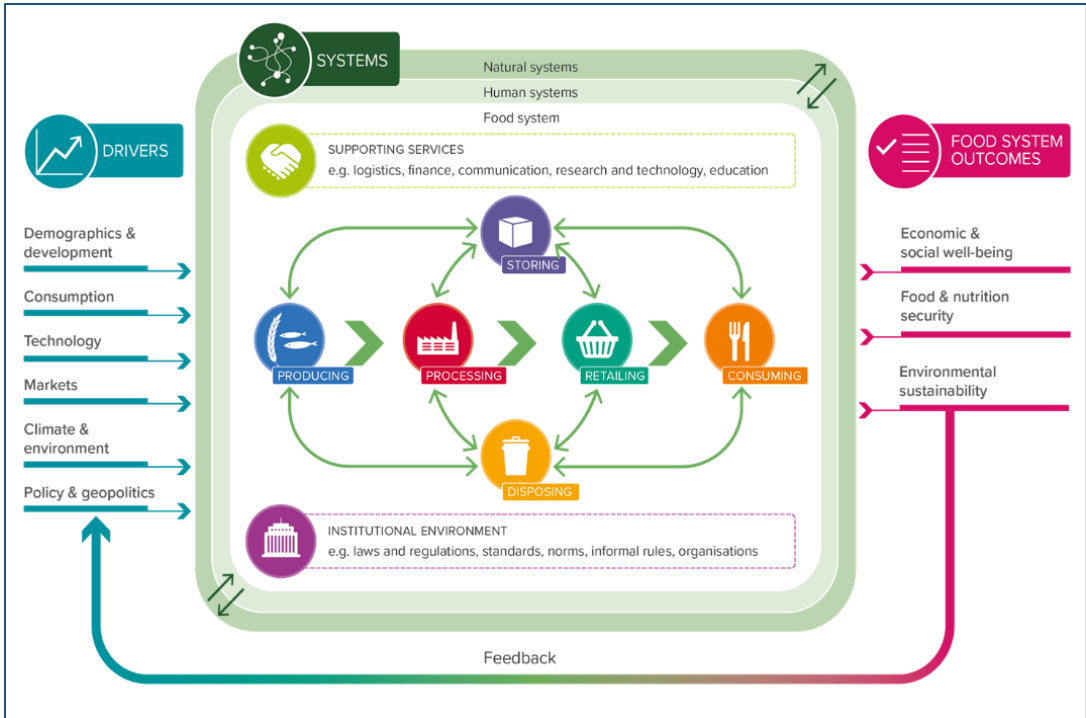
#### **Why Food Systems Transformation**

Over the last 70 years, food systems have evolved to feed a vast global population and have lifted billions out of poverty and malnutrition. But now the world faces new challenges. Nearly half the world's population does not have a sufficiently nutritious and balanced diet to ensure good health, with current trends going in the wrong direction. Our ways of consuming and producing food take a heavy and unsustainable toll on the environment and contribute massively to climate change. Most of the world's poorest people earn their income from the food and agriculture sectors, but many of them are being left behind economically and inequalities are growing. Realising the SDGs and ensuring longer-term sustainability and prosperity hinges on transforming the ways food is consumed, produced, and distributed.

The participants were introduced to food systems to get a deeper understanding of the various components of the system and how they interact. The various components and how they interact

are shown in Figure 1. Transforming food systems will also require understanding the food systems process. This requires understanding issues and trade-offs and stakeholders' perspectives, understanding the actions and strategies and the agreed pathways to support change.

Figure 1: Food Systems



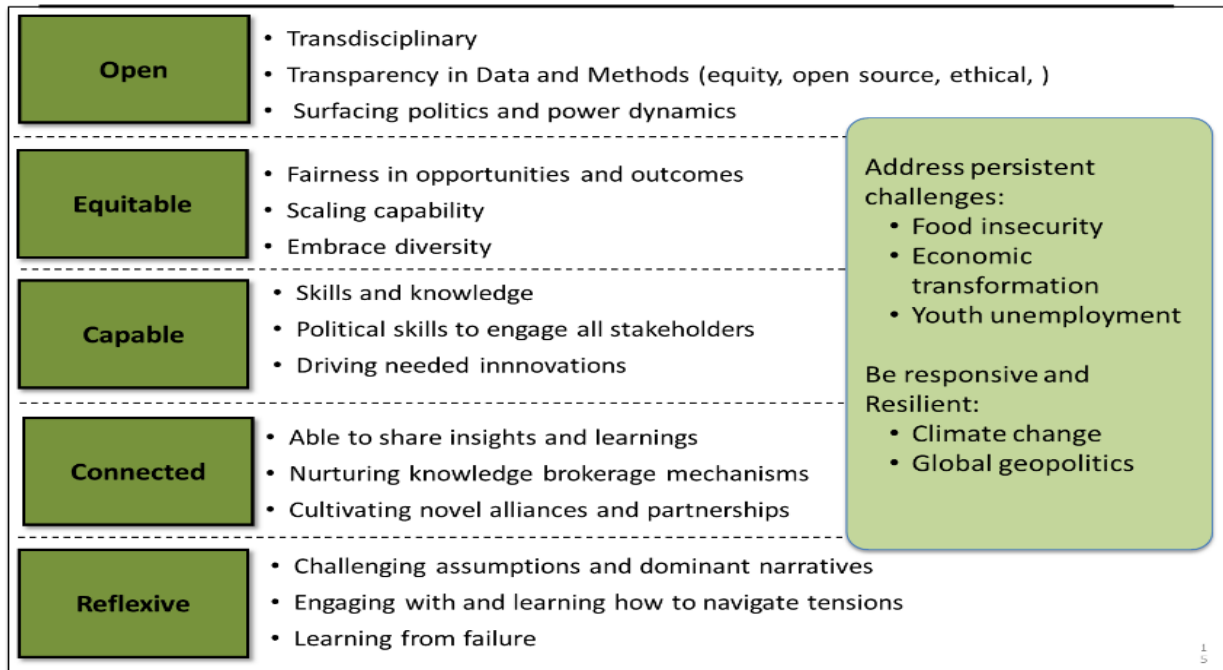
Transforming Food System will require:

- Understanding food system drivers, directions, uncertainties, and risks
- Exploring scenarios that could make food systems healthier, more equitable and more sustainable.
- Taking action now to avoid longer-term potentially catastrophic risks.
- Open and informed dialogue between food system actors is key to generating societal understanding of the issues, creating coalitions for change, and mobilizing political will to act.

A transformative food system was characterized as being open, equitable, capable, connected and reflexive. The details are in Figure 2.



Figure 2: Transformative food system.



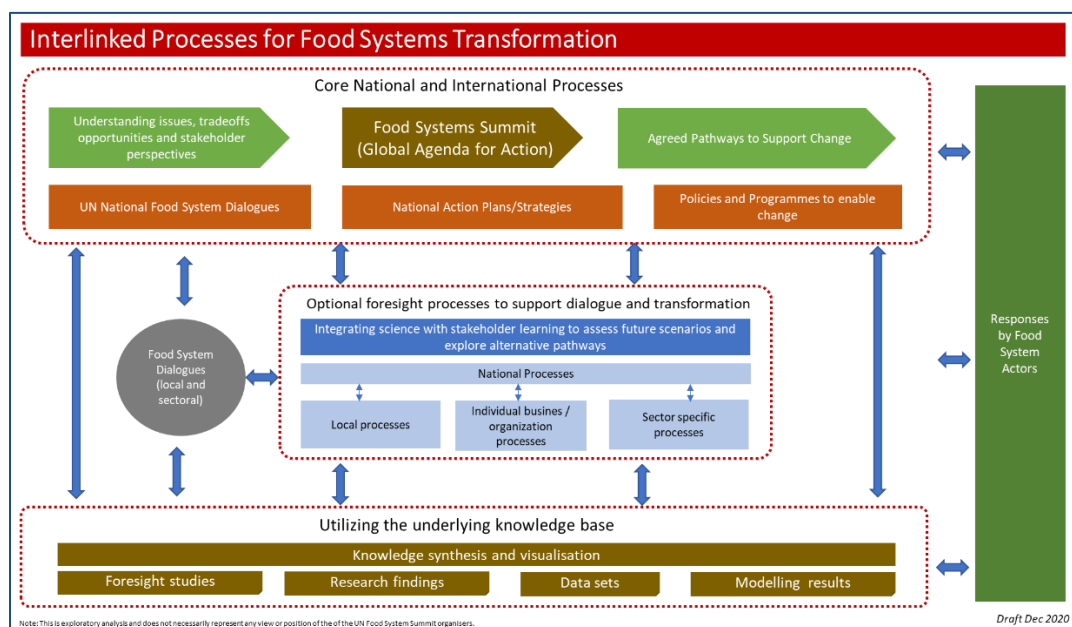
### Why Foresight for Food Systems?

The key role of foresight in regard to food systems were summarized as follows:

- Foresight involves creating awareness of the risks posed by current trends and generating viable alternatives.
- The future is largely created by surprises and uncertainties, they can't be fully predicted but we can be better prepared to cope with the unexpected.
- Foresight links science and societal dialogue. It recognizes that decision-making is a complex mix of rationale analysis, emotional responses, and political positions.
- Foresight involves optimizing human potential for collective intelligence in the face of uncertainty and turbulence.
- Foresight strengthens feedback loops that enhance the capacity of human systems to be adaptive.
- Foresight works with the principles of how complex adaptive systems behave.
- Dialogue is critical but can be enhanced and informed by deeper ongoing processes of foresight and scenario analysis that integrate science and research with stakeholder engagement and learning.
- There is much to gain by integrating human processes of sense-making about the future with the technological capacities of modelling, big data and visualization.

The place of foresight in the food systems process was also discussed. This is summarized in Figure 3.

Figure 3: Interlinked Process of Food System Transformation



#### 4.5. Introduction to Foresight

Participants were introduced to foresight rationale and the foresight process to provide an understanding of what foresight is and what foresight is not. The rationale for foresight was elaborated as follows:

- **Biases and Comfort:** Human judgment is influenced by biases, and we often find comfort in relying on past experiences for navigating the future.
- **Assuming Continuity:** We tend to assume that the future will resemble the past, with only minor adjustments, and that our past skills will ensure future success.
- **Vulnerability to Radical Change:** This mindset leaves us exposed to radical future changes that can disrupt our plans and strategies.
- **Complex Systems:** Linear thinking and singular cause-and-effect relationships are risky in a complex world.

Foresight is needed when forecasting does not provide reliable insights anymore because we lack factors that are predetermined. Foresight helps us to overcome biases, e.g. the present bias which overemphasizes events and prevents us from appreciating patterns, system structure and mental models. Foresight helps bring back imagination. It was emphasized that foresight is not; (i) A way to predict the future and (ii) Forecasting. Rather foresight is about:

- Spotting waves of change ahead,
- Anticipating capabilities that are needed to win,
- Building capabilities and readiness to act,

- Using the right moment to take the window of opportunity.

The benefits of the foresight approach were also elaborated. These are:

- Explore more unorthodox trends and ideas, and challenge deeply held assumptions,
- Improve awareness of the changing external environment,
- Create a platform for new thinking about strategy, policy, and innovation,
- Better understand a whole system, patterns of change, and the complexity within it,
- Thinking is more diverse, open, balanced, and non-biased,
- Focusing on the 'right' questions and problems more clearly
- Being more aware of assumptions and mental models
- Anticipating change and avoiding surprise
- Producing more creative, broader, and deeper insights
- Identifying a wider range of opportunities and options
- Prioritising and making better and more robust decisions,
- Constructing pathways from the present to the future that enable.

It was pointed out that questions that foresight seeks to explore are as follows:

- What are the major driving forces of the changes we are experiencing?
- What are some of the shocks or disruptors that could surprise us, and how are they connected?
- Where are the signs of a new reality? Are there any sources of inspiration and hope?
- And what are some of the enablers of a desirable future?

It was emphasised that foresight requires:

- **Active Scanning for Signals:** We must actively scan for signals of change and use them to anticipate and prepare for the unexpected.
- **Challenging Beliefs:** Scanning the environment involves challenging our existing beliefs and accepting that change may not follow our expected path.
- **Exploration, Not Prediction:** The goal is not to predict the future but to explore different scenarios, sparking new thinking about our business and personal lives.

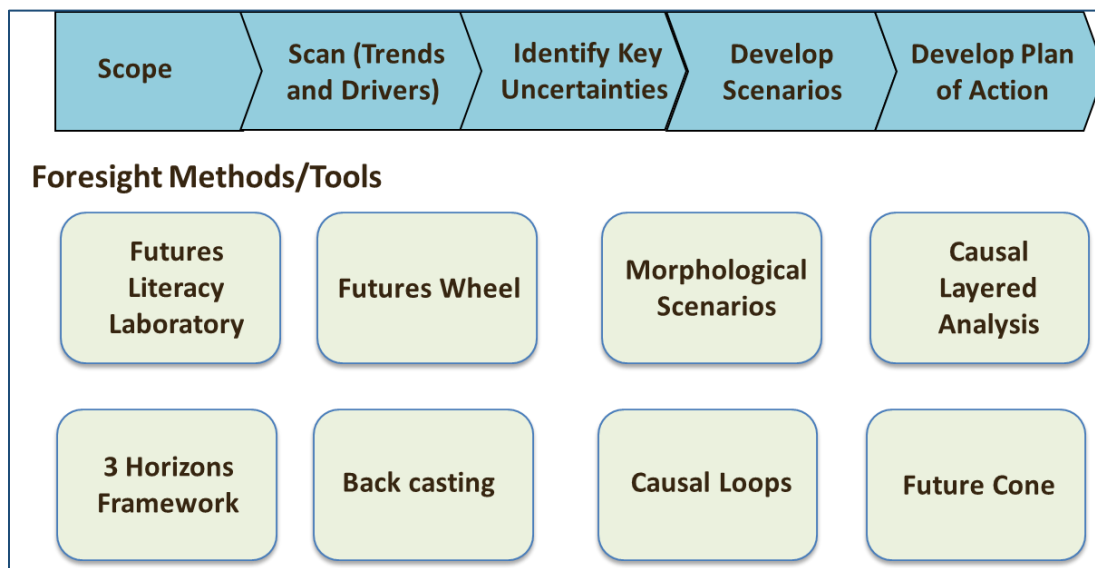
The key principles of foresight were summarized as;

- **Forget Predictions:** Acknowledge that all available data is about the past and that planning based on historical data is straightforward when circumstances remain constant.
- **Focus on Signals:** Pay attention to emerging signals, like trends or changes in behavior, as they can indicate fundamental shifts in your field or industry.
- **Look Back to See Forward:** While past data alone may not predict the future, examining historical patterns, particularly those related to human behavior, can offer valuable insights.

- **Uncover Patterns:** Aggregate signals and connect them to the broader historical context to understand larger trends and transitions.
- **Create a community:** Engage a diverse group of individuals with various perspectives and expertise to collaboratively envision and shape the future, as futures thinking is about deep consideration, imagination, pattern recognition, and informed decision-making.

The foresight process was also elaborated, and a few tools were discussed. It was emphasised that there are a multitude of tools applied in foresight and the focus should be on getting the process right and choosing the tools to used depending on the context. The process is illustrated in Figure 4.

Figure 4: Foresight Process



It was also pointed out that foresight practitioners need to understand the context, scope, identify uncertainty, develop scenarios and plan of action. They need to be able to construct a different narrative that drives the change needed to bring better futures. This requires paying attention to signals and understanding how to leverage them e.g. people want good health, and care about the environment – how do we take advantage of this?

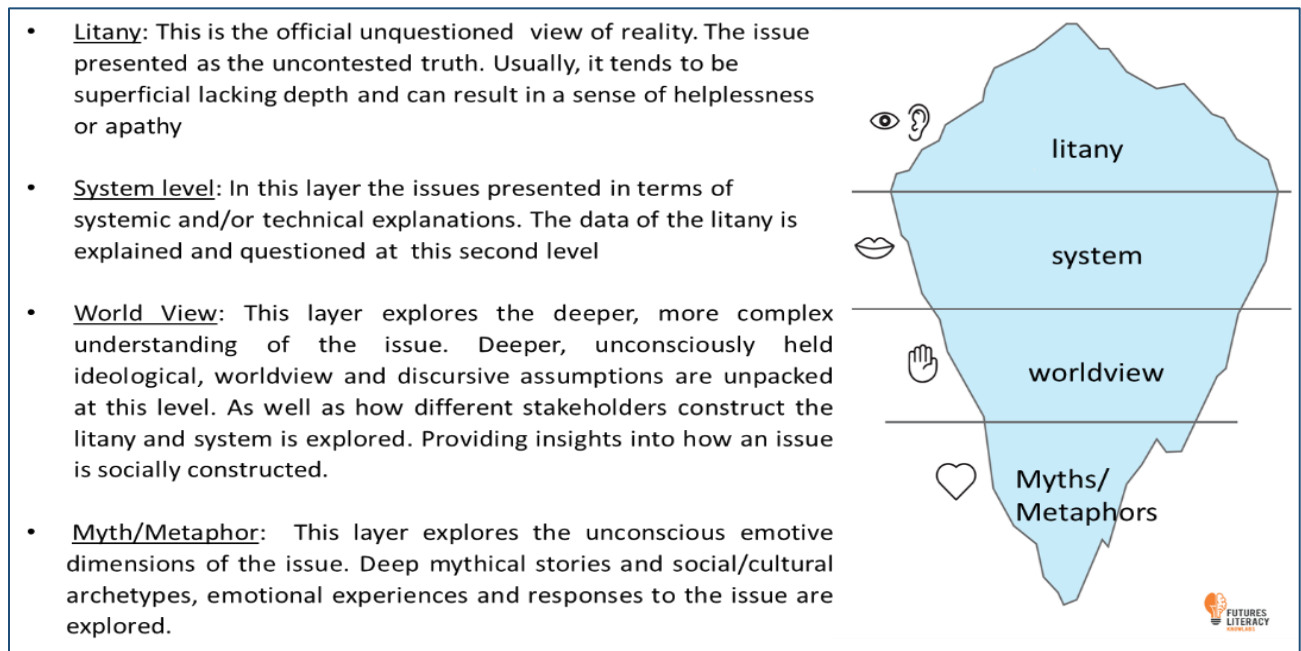
#### 4.6. Re-Imagining/Reframing: Introduction to Causal Layered Analysis

To provide an appreciation of what issues foresight seeks to uncover and provide new insights the iceberg model was introduced. The objective was to help illustrate that foresight seeks to go beyond the headline and understand the underlying structure driving the headline. It is this understanding that can help identify levers that can help drive towards better futures. The Causal Layered Analysis (CLA) model was introduced to help illustrate this. See Figure 5.

This was a particularly illustrative exercise as it helped the participants understand that for a desired future to come about it will require actions at several levels. It was pointed out that in delving to lower layers the following questions need to be explored. These include:

- Economic System
  - How is value created, what is valuable?
  - How do people transact? Time as currency? (*seen the movie Out of Time??*)
- Political and Governance systems
  - What leadership styles, what values
- Social Systems
  - How do people interact, what is leisure? Who are the celebrities? Where do current attributes of beauty come from?
- Religious and Spiritual matters
  - Does the prosperity gospel survive?

Figure 5: Causal Layered Analysis (CLA)

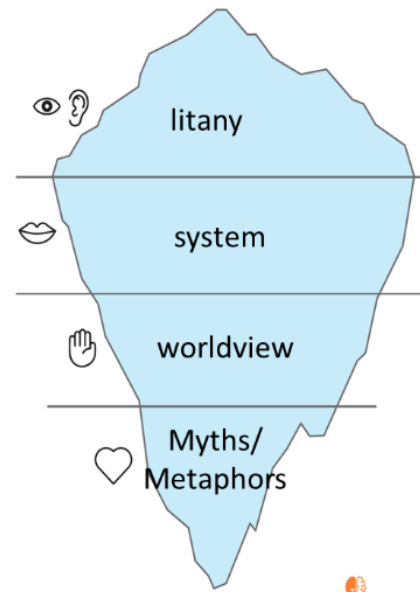


Participants were provided with some examples of how CLA can be used to interrogate a headline. See the example in figure 6.

Figure 6: CLA Example

## CLA Example

- Litany/Headline: Zambia Teenager makes history as the youngest general
- System level: Technology is the new frontier of war
- World View: We are at permanent state of war. We have enemies
- Myth/Metaphor: Survival for the fittest.



Participants were then grouped into 5 groups to play around with the CLA tool. Each group developed a headline in the future (2050) that pointed to (i) a probable food system scenario given the current trends; and (ii) a desired food systems scenario. Interrogate the headline “Africans gain 4 inches in height – millet is the suspect”. The objective was to collectively identify what could have happened to bring back traditional grains of sorghum and millet. After several deliberations and iterations, the CLA for this headline is shown in Figure 7.

Figure 7: CLA elaboration

Litany (Headline): African gains 4 inches in height, millet the prime suspect!!

Systems (Economic, political, religious, etc):

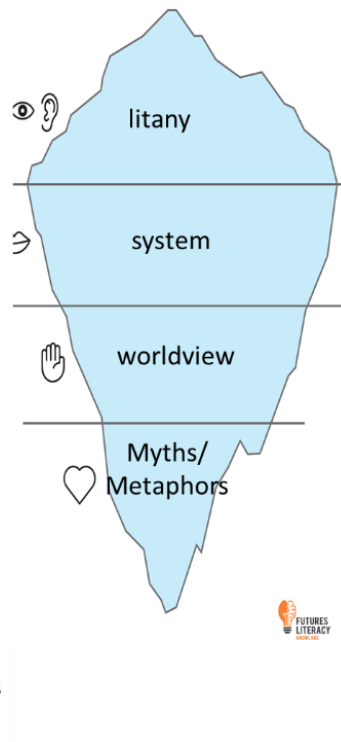
- Economic: Diaspora Telephone farmer develops a niche market millet superfood, interviewed by Oprah and demand takes off
- Political: Political farmers see to cash on the new cash crop. Millet becomes the new political crop
- Social: Remix of Mkoboti become a global hit, Africa NBA takes off, desire for height and clever social marketing expounds on the power of micronutrients in millet
- Religious: new age preachers start using millet as the sacrament
- Effective trap is quelea bird developed. It is now a new sources of protein; Drone scarecrows now manage the quelea bird. Telephone farmer platform unlock 30% of underutilized land

World View: (norms, ideologies etc)..

- Health is Wealth accepted mantra. Search for superfoods, Gluten lined to health crisis

Myth/Metaphor: (beliefs).

- Millet is the food of the Gods (manna).
- Millet is God gift to Africa as Rice is God gift to Asia and Wheat is God gift to Europe and Maize is God gift to Americas



#### 4.7. Horizon Scanning and Trends Analysis

At the heart of foresight is identifying trends and more crucially, what is driving the trends. This session sought to help participants understand the process of scanning to identify trends and the drivers. Further how to analyse the drivers.

At the core of horizon scanning is identifying signals. Participants were taken through the process of identifying signals within food systems that could indicate future trends. Participants were encouraged to consider signals relevant to their respective countries and to understand the drivers behind these signals. Plenary discussions took place to discuss some merging signals. One example discussed was the emergence towards organic food consumption driven by consumer health awareness and environmental concerns, which was identified as a signal that could influence policy development.

Participants were divided into groups and asked to identify 3 signals and elaborate on them. One example of the participants' outputs is given elaborating the signal on proliferation of genetic engineering. Is shown in figure 5

Figure 8: Identifying Signals - Group Exercise Example.

THINK ABOUT SOME RELEVANT **SIGNALS IN THE FOOD SYSTEM**

**SIGNALS:**  
**PROLIFERATION OF GENETIC ENGINEERING**

1. What **kind of change** does this represent, from what to what?  
Natural breeding to Engineered Breeding.

2. What's **driving this change**? What's the future force behind it?  
Population Growth  
Developments in science  
Politics

3. What will the **world look like in ten years** if this signal is common and widespread?  
Extinction of numerous natural species.

4. Is this a future we want to **help make**? Do we feel excited by it or alarmed by it? Why?  
No.  
We feel alarmed.

Food systems have naturally developed to where we are today. Continued proliferation of genetic engineering will result in an uncontrolled development of species, which leads to a loss in original genetics, designed by nature.

### **Trend Analysis**

Trends and drivers were discussed and elaborated as shown in Figure 9.

Figure 9: Trends



Trend is a *pattern* that signifies change. “Trends” refer to patterns of recorded data in the external, contextual environment that surrounds a business or an industry.

- A trend is a visible (recorded in time-series data) effect of a force of change. That force is a “**change driver**”.
- Sometimes hard to see the force itself. Can only the record of its effects (the trend).
- A trend has no life of its own. It has life as long as the underlying driver has life.



- A trends may have more than one driver
- A trend may lead to multiple outcomes
- A driver may underpin more than one trend.
- A trend may become the driver of another trend

Danger of simple projection of trends;

- Ehrlich vs Simon Bet
- ATT projection about operators

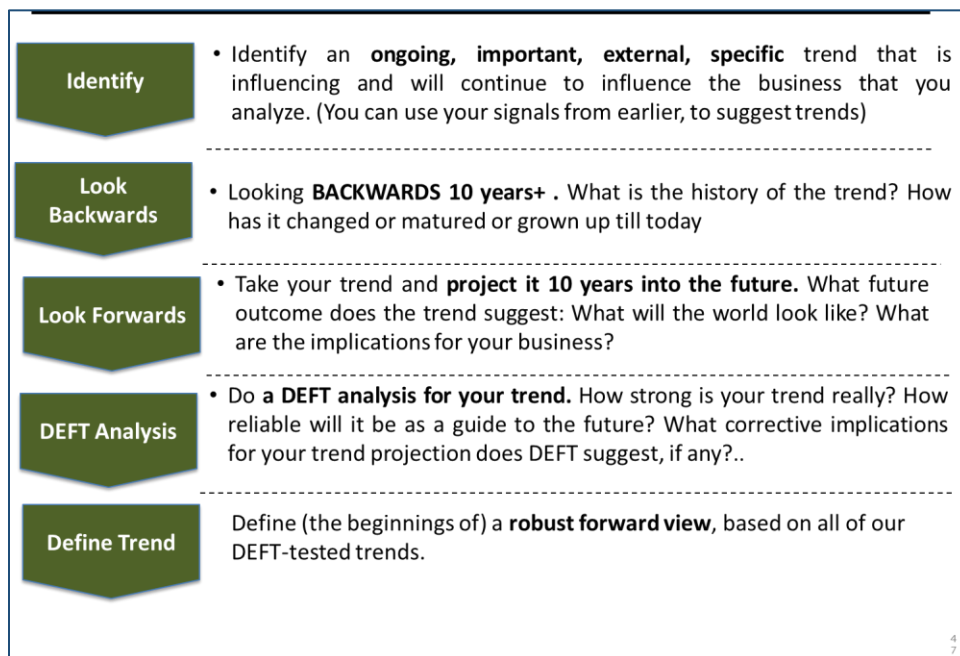
**Investigate how other variables impact it and how it impacts**

**Objective is to anticipate an outcome and prepare for it**

The participants were then introduced to DEFT analysis as a tool used to understand the dynamics of trends and their implications on food systems. The four DEFT components are:

- *Drivers*: forces that create and sustain a trend
- *Enablers*: catalysts that support the Drivers
- *Friction*: resistance that impedes a trend
- *Turners*: events that actively block a trend

The process of trends analysis was discussed. The process is summarized in figure .



## Food Systems Drivers

The participants were introduced to the FAO that has identified drivers of the food System. Each driver is subject to a plenary discussion to get the opinion of the participant as to its relevance. In general, it was agreed that all the drivers are relevant. The discussion regarding the impact and uncertainty of the drivers came up with the following conclusions.

### Agrifood systems drivers

1. Population dynamics and urbanisation- HIGH IMPACT/ CERTAIN
2. Economic growth - HIGH IMPACT/CERTAIN
3. Cross-country interdependencies -HIGH IMPACT/UNCERTAIN
4. big data use- HIGH IMPACT/ UNCERTAIN
5. Geo-political Instability - HIGH IMPACT/ CERTAIN
6. Rural and urban poverty- UNCERTAIN/HIGH IMPACT
7. Inequalities- UNCERTAIN/HIGH IMPACT
8. Food prices- UNCERTAIN/ HIGH IMPACT
9. innovation and science- HIGH IMPACT/ UNCERTAIN
10. Public investment- HIGH IMPACT/ uncertain
11. Capital-info intensity - CERTAIN/ HIGH IMPACT
12. in out market concentration- HIGH IMPACT/ UNCERTAIN
13. Consumption and nutrition patterns- HIGH IMPACT/ UNCERTAIN

### Environmental systems drivers

1. Scarcity of natural resources -high impact uncertainties
2. Epidemics and ecosystems degradation- high impact/certain
3. Climate change-High impact/ certainty
4. Sustainable ocean economics- high impact/ medium certainty

A perspective of CCARDESA on food system drivers was also presented. It was pointed that in general Africa not doing well according to the biannual report from CAADP -XP4 . All the same Africans can come up with our local grown solutions and it has the brain power and resources to do it. The mega trends driving food system in SADC were summarized as

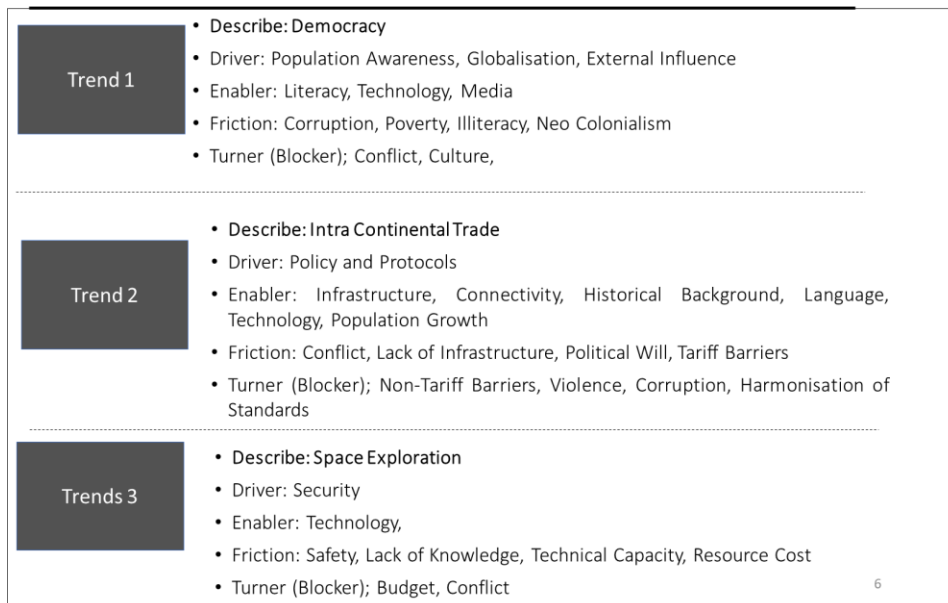
- Increment of population
- Urbanisation
- Highly refined food consumption
- Poverty increment
- Land tenure
- Women's access to resources to be a challenge
- Water scarcity
- Political strife

- Food insecurity
- Poor access to energy
- Decline in contribution of agriculture in GDP
- High youth employment

### Applying DEFT Analysis

To get a good undertaking of how to apply the DEFT tool participants broke into groups picked a 3 drivers of food system they consider relevant and subject them to DEFT analysis. An example is of group work is shown in Figure 10.

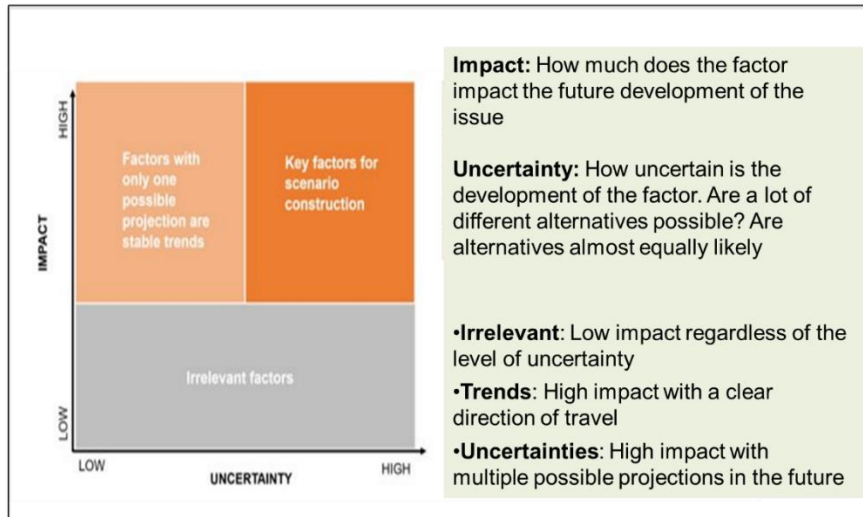
Figure 10: DEFT Analysis – Group Example.



## 4.8. Developing Scenarios and using Futures Wheel to develop scenario narrative

### Cross Impact Matrix

The process of developing scenarios was elaborated. Two drivers are needed to develop a scenario. The choice of drivers is based on the impact and the level of uncertainty. Drivers are mapped on the matrix and drivers with high impact and high level of uncertainty are identified as the potential candidates.



Participants broke into groups and mapped drivers on the cross-impact matrix. An example of group results is shown in Table 1.

Table 1: Cross Impact Matrix – Group Work Example.

Impact	8					DIGITAL ECONOMY	REGIONAL CONFLICT		
	7	GLOBAL WARMING				INTRA CON TRADE			
	6								
	5							SPACE X	
	4						DEMOCRACY		
	3								
	2								
	1								
			1	2	3	4	5	6	7
		Uncertainty							

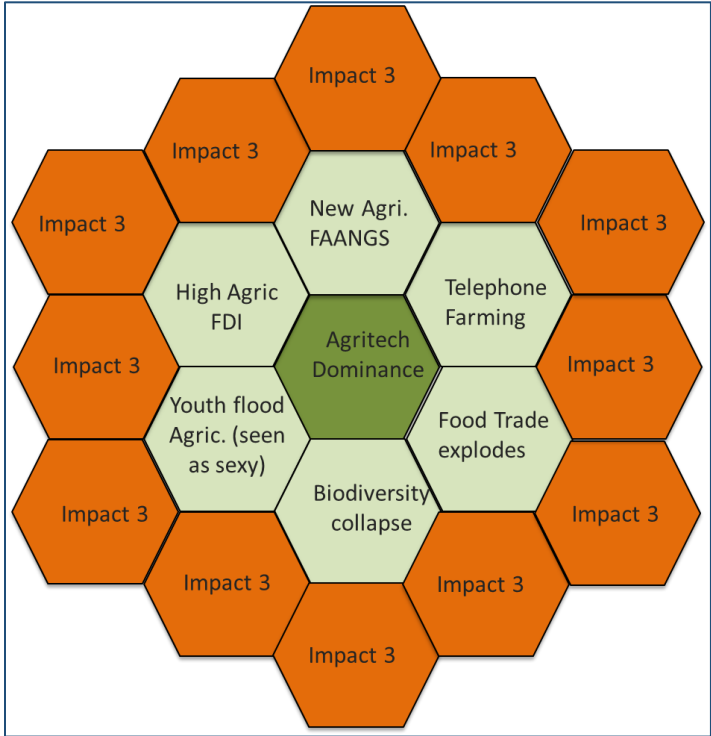
### Futures Wheel

To develop a scenario narrative the participants were introduced to Futures wheel. The Futures Wheel helps to understand how the projected factors will affect the industry, the company or the world. Combining all these elements give the core storyline of one of the scenarios. There are [5 steps](#) for creating a Futures Wheel.

- i. Identify the change you want to analyze.
- ii. Identify direct or first order consequences.
- iii. Identify indirect or second order consequences.
- iv. analyze and prioritize implications.
- v. Identify Actions

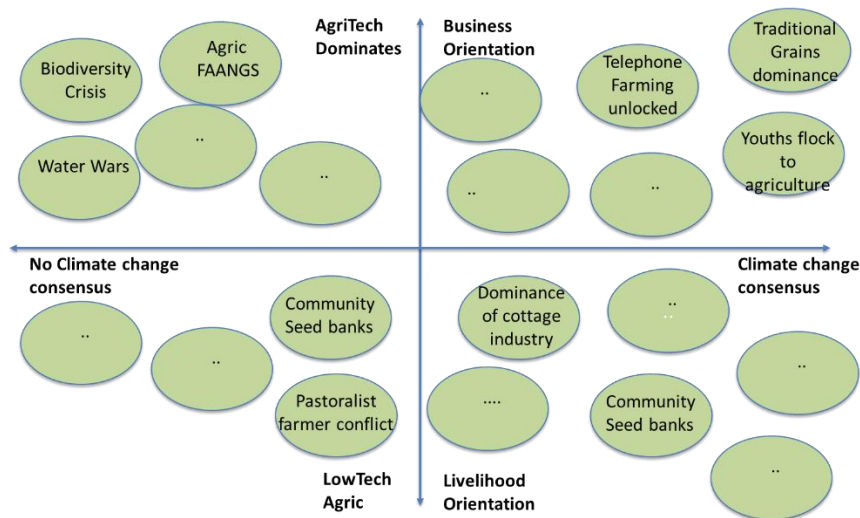
Using this process groups elaborated the two key drivers identified. One example is shown in figure 11.

Figure 11: Futures Wheel



Based on futures the participants created narratives around the scenarios they identified. One potential scenario discussed is presented in Figure 12.

Figure 12: Scenario Narratives.



#### 4.9. Develop way forward using the 3 Horizons Framework

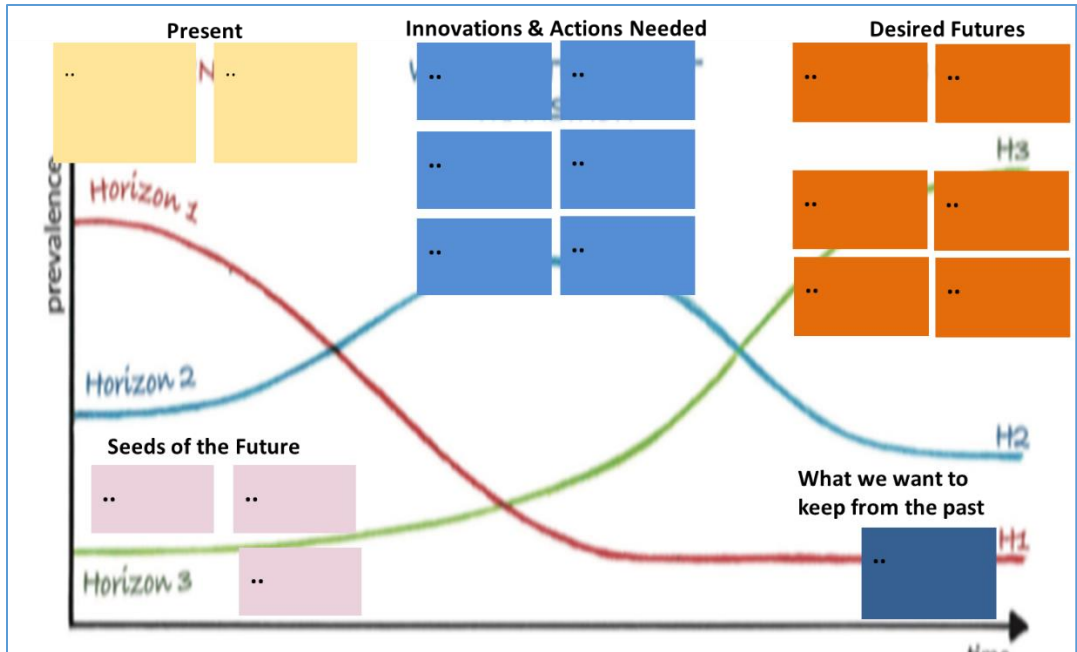
Scenarios provide potential futures, some desirable some not desirable. The key then is to determine actions needed to bring a better future. To identify what needs to be done the participants were introduced to the 3 horizons framework.

Three Horizons Framework stimulates structured strategic conversation about systemic change, preferred futures and the interventions needed to shift systems. It is a conceptual model that aids peoples’ thinking about current assumptions, emerging changes, and possible and desired futures.

The framework points to the present situation that included seeds of the future in the present. The desired future and innovations/action needed to bring about that future. The framework also highlights the tension between the status quo that has stakeholders who might resist change and push for innovations that make the status quo stay relevant and the need for a combination of various innovators (technology, business model, social and policy innovators) needed to drive the radical changes needed to bring about the desired future.

Participants broke into groups and did a horizon framework exercise on the desires for food systems future they had articulated in the CLA exercise (see figure 13).

Figure 13: Horizons Framework



## Backcasting

Backcasting was also introduced as a tool to help trace the journey to the future by telling a story of how a particular future was arrived at.

**Backcasting invites people to come together to articulate a shared intention about a different future they want to create and then find new ways of working together to achieve it.**

### Awareness

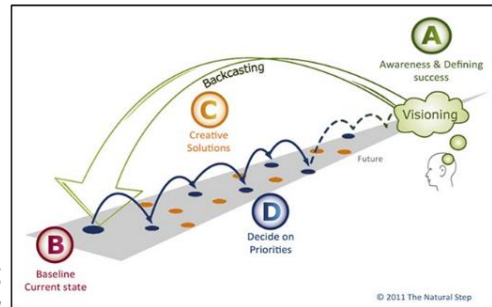
- Opportunities, future risks, new ways if doing things

### Baseline to Compelling Vision

- Opportunities, future risks, new ways if doing things

### Down to Action

- Brainstorming potential actions and prioritizing them by evaluating how they help us move towards our compelling vision



The headline of “African Gains 4 inches – Millet the Suspect” and the associated CLA analysis were used to illustrate how backcasting works. By breaking down the potential sequence of that could potentially lead to such a headline. The participants were asked to discuss the backcasting process associated with the various headlines they came up with during the CLA exercise.

## Causal Loop Diagrams (CLA)

To support the push for the right policies to bring about the desired changes participants were introduced to causal loops diagram. A causal loop diagram is used to analyse and craft a narrative of a system to help explain interactions and their importance. The process of causal loop diagram in agri-food system was articulated as follows.

- Discuss and investigate the more systemic causes of the current state of agri-food systems.
- Better understand the dynamics, power and influence regarding the specific aspects.
- Understand better the key drivers maintaining current dynamics.
- Familiarise with the complexity of agri-food systems.
- Develop initial insights on the potential key leverage points for change in agri-food systems in Africa.

## 5. Way Forward

The CCARDESA Workshop on Foresight provided a comprehensive understanding of the interplay of drivers, enablers, friction, and turners in the SADC region's agricultural sector. By anticipating and preparing for the challenges and opportunities that lie ahead, stakeholders can better



navigate the complexities of food systems in the face of technological changes, organic agriculture's rise, and the ongoing climate crisis.

Foresight will be key in helping the region navigate the changing food system landscape and unlock the potential of the food system in addressing SDG goals. In this regard there is CCARDESA-FARA are collaborating with the Africa Foresight Academy. This will be open to the governments in the region. In Each countries some people will be nominated for further training so that they can train others. There is a need to identify who is to facilitate further meetings as a matter of urgency. Important to go to the Ministry of Agriculture to enquire.

In closing the program the e importance of collaboration and inclusion in planning on our desired future was underscored. Also the importance of engaging the CCARDESA websites to keep abreast of developments.

## Appendix I: Concept Note



### CONCEPT NOTE

## Training Workshop

### Regional Stakeholders (NARES) Sensitization of the relevance of Foresight For Food Systems Training & Establishment of a Regional Hub

**5<sup>th</sup> to 7<sup>th</sup> March 2024**

**Lusaka, Zambia**

**12<sup>th</sup> February 2024**

<b>Dates</b>	<b>5<sup>TH</sup> TO 7<sup>TH</sup> MARCH 2024</b>
<b>Venue</b>	<b>Lusaka-Zambia</b>
<b>Activity Code</b>	<b>3.2.1</b>
<b>Convener and Co-Convener</b>	<b>Organized by CCARDESA with technical support FARA</b>
<b>Contact persons Technical Team</b>	<b>Dr Baitisi Podisi , CAADP-XP4 Coordinator Bridget Kakuwa, CCARDESA Foresight Focal Point Person</b>

## **Background**

The Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA) is a sub-regional research organization established as a subsidiary entity of SADC and charged with the responsibility of coordinating agricultural research and development in Southern Africa. CCARDESA is implementing a four-year EU-funded project administered by IFAD called CAADP-XP4. The overall objective of the project is to enable agricultural research and innovation, including extension services, to contribute effectively to food and nutrition security; economic development, and climate mitigation in Africa. The project is targeting seven countries in the SADC region and these are; Botswana, Eswatini, Mozambique, Namibia, Tanzania, Zambia, and Zimbabwe.

The CAADP-XP4 seeks to deliver five key outputs and one of them is on Foresight for food systems awareness and sensitization including the relevant tools used in Foresighting.

Foresight is not a prediction of the future but rather a process of understanding evidence and uncertainties and imagining different possible futures and thinking through their potential consequences. It is a set of structured tools, methods, and thinking styles to enable the capacity to consider multiple futures and to plan for them. Some examples of the tools and methods used include:

- Horizon scanning - using a variety of reliable sources to identify potential signals of change and future impacts resulting from identified trends.
- Backcasting - the process of working backwards from the definition of a possible future to determine what needs to happen to make the future unfold and connect to the present.
- Scenario planning - developing multiple narratives of how the future could look and exploring them in terms of implications for the present, for example, stress-testing agricultural policies.

Foresight methods can be used to investigate the future incorporating climate change implications, thereby allowing for the creation of resilient agricultural development policies and strategies. Foresight methods and tools can be selected and applied to adapt the process to suit the specific purpose and context

As a follow-up action from the Montpellier Foresight for Food Systems training, CCARDESA in partnership with the Forum for Agricultural Research in Africa (FARA is planning a 3-day Foresight for Food Systems Sensitization and training Workshop for the National Agriculture Research Institutions (NARES).

<b>Main Objective</b>	The objective of the training is to <b>build foresight capacity within agricultural research and development institutions</b> and relevant regional organisations to enable the application of methods and approaches for robust, future-proofed planning and implementation for climate-resilient sustainable food systems.
<b>Specific Objectives</b>	The specific objectives of this assignment are to: <ul style="list-style-type: none"> <li>I. Sensitize stakeholders within NARES from 9 SADC member states on the Foresight for food systems Models</li> <li>II. Strengthen capacities of national-level stakeholders on Foresight for Food Systems from Zambia, Malawi, Namibia, Botswana, Mozambique, Lesotho, Eswatini, Tanzania and Zimbabwe.</li> <li>III. To facilitate networking and collaboration among participants and encourage interdisciplinary knowledge exchange and collaboration on Foresight.</li> </ul>
<b>Expected Outputs</b>	<ul style="list-style-type: none"> <li>I. Participants have attained applicable skills on how to apply and use Foresight for Food Systems Models.</li> <li>II. Participants have acquired practical skills to utilize Foresight for Food systems models.</li> <li>III. Participants will develop actionable plans for on Foresight for Food Systems</li> <li>I. IV. Individuals that will support the establishment of country foresight hubs identified</li> </ul>
<b>Expected Participants</b>	The primary participants will be the CCARDESA Foresight Focal Point Person, the CAADP-XP4 Coordinator, the CAADP-XP4 Officer, and the Foresight Focal Point Person from FARA.

<b>Approach</b>	The 3-day workshop will be convened from the 5 <sup>th</sup> to 7 <sup>th</sup> March, 2024. This workshop will be a physical event bringing together foresight focal point persons and technical experts in an interactive, practical, and blended learning approach.
<b>Logistics</b>	Finance and Administration
<b>Facilitation of the Meeting</b>	The meeting will mainly be facilitated by a Foresight Consultant who work closely with <ul style="list-style-type: none"> <li>a) Dr Baitsi Podisi-CCARDESA</li> <li>b) Ms. Bridget Kakuwa -CCARDESA</li> <li>c) Ms Futhi Magagula - CCARDESA</li> <li>d) Dr Abdulrazak Ibrahim -FARA</li> <li>e) Finance and Administration</li> </ul>
<b>Reporting</b>	The CAADPX4 institutions will be responsible with leadership from CCARDESA
<b>Outputs</b>	<ul style="list-style-type: none"> <li>➤ Report on the workshop</li> <li>➤ Article published</li> </ul>

## Appendix II: Regional Foresight For Food Systems Training Workshop -Proposed Programme



Time	ACTIVITY	Responsible
<b>DAY 1</b>	<b>5<sup>th</sup> March 2024</b>	
<b>Moderator: Dr Baitisi Podisi</b>		
<b>Rapporteurs: Malawi</b>		
08:30: - 09:00	Registration of delegates & Administration Notices	Finance & Admin
09:00 – 09:15	Introductions	Moderator
09:15 – 09:30	Opening Remarks	Mr Clemence T. Bwenje
09:30 – 09:40	Objectives of the meeting	Ms Futhi Magagula
09:40 – 10:00	Official Opening	P.S. Min. of Agriculture (Zambia)
10:00 - 10:30	Group photo	Happy Mulolani/Kabosha Lwinya / Reginald Nsala
<b>10:30 – 11:00</b>	<b>HEALTH BREAK</b>	
<b>Moderator: Facilitator</b>		
<b>Rapporteurs: Botswana</b>		
11:00 – 13:00	Setting the Stage Introduction to Foresighting Transformational Planning	Dr Abdulrazak Ibrahim / Julius Gatune
<b>13:00 – 14:00</b>	<b>LUNCH BREAK</b>	<b>All</b>
14:00-15:00	Introduction to Food Systems	Dr Abdulrazak Ibrahim /Facilitators
15: 00 -16:00	Discussions	ALL
<b>16:00-16:15</b>	<b>HEALTH BREAK</b>	<b>All</b>
16: 15-16:45	End-of-Day Wrap-up Session	Dr Abdulrazak Ibrahim

<b>Time</b>	<b>ACTIVITY</b>	<b>Responsible</b>
16:45-17:30	House-Keeping	Finance & Admin
<b>DAY 2</b>	<b>6<sup>th</sup> March 2024</b>	
	<b>Moderator: Facilitator Rapporteurs: Zambia</b>	
08:15-08:30 08:30-09:00	Circulation of Delegates Register Recap	Finance & Admin ALL
09:00-10:30	Horizon Scanning and Trends Analysis	Julius Gatune
<b>10:30- 11:00</b>	<b>HEALTH BREAK</b>	<b>ALL</b>
11:00-12:30	Horizon Scanning and Trend Analysis	Julius Gatune
12:30-13:00	Groups Work and Discussions	All
<b>13:00-14:00</b>	<b>LUNCH BREAK</b>	<b>ALL</b>
14:00-15:30	Reframing/Reimagining 1: Intro to Causal Layered Analysis (CLA)	Julius Gatune
15:30 – 16:00	SADC Foresight Futures Programme	Dr Baitsi Podisi
16:00 – 16:30	Discussions	
16:30 – 16:45	<b>HEALTH BREAK</b>	<b>ALL</b>
	<b>END OF DAY</b>	

### Appendix III: List of Participants



#### REGIONAL STAKEHOLDERS (NARES) SENSITIZATION ON THE RELEVANCE OF FORESIGHT FOR FOOD SYSTEMS TRAINING IN LUSAKA, ZAMBIA, 5<sup>TH</sup> – 7<sup>TH</sup> MARCH 2024

CCARDESA is required to collect basic data on attendees of its events, including meetings. (\*) You may leave the phone field empty to avoid being contacted.

Date: \_\_\_\_\_

No.	NAMES	ORGANISATION (Abbreviation)	GENDER [M/F]	Age Cat. 1=<25yr 2=25-29yr 3=30-35yr 4= 36+	Type of person (e.g., Researcher, Policy maker, Administrator)	EMAIL	*Telephone number	Signature
1	Dr Mirriam Matita	LUANAR -Malawi	F	4	Researcher	<a href="mailto:mmatita@luanar.ac.mw">mmatita@luanar.ac.mw</a>	+265888409930	
2	Mr Jacob Nyirongo	Farmers Union of Malawi	M	4	Farmer	<a href="mailto:jnyirongo@farmersunion.mw">jnyirongo@farmersunion.mw</a>	+265997921846	
3	Dr Bonet Kamwana,	LUANAR-Malawi	M	4	Researcher	<a href="mailto:bkamwana@luanar.ac.mw">bkamwana@luanar.ac.mw</a>	+265886852755	
4	Ms. Fydes Mkomba	LUANAR-Malawi	F	4	Researcher	<a href="mailto:fkhundi@gmail.com">fkhundi@gmail.com</a>	+265995277164	
5	Mr Clemence T. Bwenje	University of Zimbabwe- Zimbabwe	M	4	Policy Maker	<a href="mailto:ctwenje@gmail.com">ctwenje@gmail.com</a>	+263773629864	
6	Mr Nelson Mavuso	Ministry of Agriculture-Eswatini	M	4	Administrator	<a href="mailto:nelsonmavuso@ymail.com">nelsonmavuso@ymail.com</a>	+26876062612	



No.	NAMES	ORGANISATION (Abbreviation)	GENDER [M/F]	Age Cat. 1=<25yr 2=25-29yr 3=30-35yr 4= 36+	Type of person (e.g., Researcher, Policy maker, Administrator)	EMAIL	*Telephone number	Signature
7	Mr Bavukile Dlamini	Ministry of Agriculture-Eswatini	M	3	Policy Maker	<a href="mailto:bavukile.dlamini@ndma.org.sz">bavukile.dlamini@ndma.org.sz</a> <a href="mailto:bavukiledlamini@gmail.com">bavukiledlamini@gmail.com</a>	+26876336002	
8	Mr Ambrose G. Dlamini	Ministry of Agriculture- Eswatini	M	4	Agro-meteorologist	<a href="mailto:gcinumuzidlamini12@gmail.com">gcinumuzidlamini12@gmail.com</a>	+26876942528	
9	Angellah Chitanje	YPARD (Young Professionals for Agricultural Development ) Malawi	F	3	Freelancer	<a href="mailto:cchipatso316@gmail.com">cchipatso316@gmail.com</a>	+265884606096	
10	Mr Dumisani Mambiya	Food & Agribusiness Development Company (FADC) Ltd Malawi	M	4	Researcher	<a href="mailto:dmambiya@fadcmw.org">dmambiya@fadcmw.org</a>	+26588515388	
11	Mr Emmanuel Mkomwa	Malawi Resilience and Disaster Risk Management-Malawi	F	3	Researcher	<a href="mailto:nafemko@yahoo.co.uk">nafemko@yahoo.co.uk</a>	+2659888474006	
12	Happiness Chinangwa	Women for Social Change Programs - Malawi	F	3	Researcher/Administrator	<a href="mailto:happie91@gmail.com">happie91@gmail.com</a>	+2659935491928	
13	Ms. Lilly Singano	Lily Meals -Malawi	F	1	Agro-processor	<a href="mailto:lilycharitysingano@gmail.com">lilycharitysingano@gmail.com</a>	+265883928522	
14	Ms Dorcas Kabuya	National Agricultural Information Services (NAIS)- Zambia	F	4	Communication	<a href="mailto:domucar10@gmail.com">domucar10@gmail.com</a>	+260977439597	
15	Ms Kabosha Lwinya	Zambia Agricultural Research Institute (ZARI)-Zambia	F	3	Statistician	<a href="mailto:lwinyakabosha@gmail.com">lwinyakabosha@gmail.com</a>	+260979155634	

No.	NAMES	ORGANISATION (Abbreviation)	GENDER [M/F]	Age Cat. 1=<25yr 2=25-29yr 3=30-35yr 4= 36+	Type of person (e.g., Researcher, Policy maker, Administrator)	EMAIL	*Telephone number	Signature
16	Mr Happy Mulolani	National Agricultural Information Services (NAIS)- Zambia	M	4	Communication	<a href="mailto:mulolanih@gmail.com">mulolanih@gmail.com</a>	+260972028107	
17	Prof. Elijah Phiri	University of Zambia	M	4	Researcher	<a href="mailto:ephiri62@gmail.com">ephiri62@gmail.com</a>	+260977781655	
18	Prof. Thomson Kalinda	University of Zambia	M	4	Researcher	<a href="mailto:thomsonkalinda@gmail.com">thomsonkalinda@gmail.com</a>	+260977321932	
19	Mortin Mwanza	Ministry of Agriculture- Zambia	M	4	Chief Agric Officer	<a href="mailto:mortonmwanza@yahoo.com">mortonmwanza@yahoo.com</a>	+260977321932	
20	Swithen Pondamali	Ministry of Agriculture -Zambia	M	4	Principal Agric Officer	<a href="mailto:swithenpondamali2016@gmail.com">swithenpondamali2016@gmail.com</a>	+260977383112	
21	Ms Peggy Thole	Department of Meteorology -Zambia	F	4	Agro-meteorologist	<a href="mailto:peggytholezulu@gmail.com">peggytholezulu@gmail.com</a>	+260976489026	
22	Mr Abel Hangoma	Organic Farm 7	M	3	Farmer	<a href="mailto:ellenbeltech@gmail.com">ellenbeltech@gmail.com</a>	+260971089771	
23	Ms Manda Sianga	Manda Farms	F	2	Agronomist	<a href="mailto:elizabethmasianga@gmail.com">elizabethmasianga@gmail.com</a>	+260967057356	
24	Dr Abdulrazak Ibrahim	Forum for Agriculture Research in Africa (FARA)	M	4	Researcher	<a href="mailto:aibrahim@faraafrica.org">aibrahim@faraafrica.org</a>	+2347034589199	
25	Moyo Chris	Ministry of Agriculture -Zambia	M	4	Planner	<a href="mailto:crismoyo@gmail.com">crismoyo@gmail.com</a>	+260966622029	
26	Dr Julius Gatune	Foresight Academy- Kenya	M	4	Consultant	<a href="mailto:gatune@gmail.com">gatune@gmail.com</a>	+2540714328240	
27	Dr Frank Kayula	Lusaka-Zambia	M	4	Researcher	<a href="mailto:drkayula@gmail.com">drkayula@gmail.com</a>	+260955506945	
28	Mr Dalisto Mbewe	CAADP Youth Network -Zambia	M	3	Coordinator	<a href="mailto:mbewe.dalisto@gmail.com">mbewe.dalisto@gmail.com</a>	+260773844110	
29	Mahali Makoloi	Ministry of Agriculture-Lesotho	F	4	Researcher	<a href="mailto:hadysm@gmail.com">hadysm@gmail.com</a>	+26658083690	

No.	NAMES	ORGANISATION (Abbreviation)	GENDER [M/F]	Age Cat. 1=<25yr 2=25-29yr 3=30-35yr 4= 36+	Type of person (e.g., Researcher, Policy maker, Administrator)	EMAIL	*Telephone number	Signature
30	Reginald Nsala	Next Edition Media-Botswana	M	4	Communication	<a href="mailto:nextedition@gmail.com">nextedition@gmail.com</a>	+26776395782	
31	Antoinette Moleele	CAADP Youth Network -Botswana	F	3	Consultant/Farmer	<a href="mailto:anto.mol21@gmail.com">anto.mol21@gmail.com</a>	+26771759611	
32	Dr,Paul Falakeza Fatch	LUANAR Malawi	M	4	Academician	<a href="mailto:paulfatch@gmail.com">paulfatch@gmail.com</a>	+265999638978	
33	Fanuel Kapute	Mzuzu University Malawi	M	4	Researcher	<a href="mailto:fkapute@gmail.com">fkapute@gmail.com</a>	+26599916110	
34	Helvi Shindume	Youth Network - Namibia	F	2	Farmer	<a href="mailto:helvishindume1@gmail.com">helvishindume1@gmail.com</a>	+264 813788475	
35	Alfios Mayoyo	CAFP-Zimbabwe	M	4	Researcher	<a href="mailto:alfios.mayoyo@cafp.org.zw">alfios.mayoyo@cafp.org.zw</a>	+263782040979	
36	Upile Muhariwa	Ministry of Agriculture-Malawi	F	3	Knowledge Management	<a href="mailto:upifaith@gmail.com">upifaith@gmail.com</a>	+265993155272	
37	Walter Mupangwa	Marondera University of Agricultural Sciences and Technology, Zimbabwe	M	4	Researcher	<a href="mailto:mupangwawt@gmail.com">mupangwawt@gmail.com</a> <a href="mailto:wmupangwa@muast.ac.zw">wmupangwa@muast.ac.zw</a>	+263715020882	
38	Timothy Gondwe	LUANAR Malawi	M	4	Researcher	<a href="mailto:tgondwe@luanar.ac.mw">tgondwe@luanar.ac.mw</a>	+265888386547	
39	Ms Christabel Makumba	Student -Zambia	F	2	Student	<a href="mailto:makumbachristabel@gmail.com">makumbachristabel@gmail.com</a>	+260973371100	
40	Tisiyengi Sakala	Student -Zambia	F	4	Student	<a href="mailto:tisidak.ts@gmail.com">tisidak.ts@gmail.com</a>	+260977747538	
41	Dr Noah Zimba	Climate Change Association of Zambia	M	4	Researcher	<a href="mailto:gbnaturals@gmail.com">gbnaturals@gmail.com</a>	+260977873673	
42	Nkolola Halwiindi	Women Farmer Association -Zambia	F	4	Policy Maker	<a href="mailto:nkolola_halwindi@yahoo.co.uk">nkolola_halwindi@yahoo.co.uk</a>	+260960257107	

No.	NAMES	ORGANISATION (Abbreviation)	GENDER [M/F]	Age Cat. 1=<25yr 2=25-29yr 3=30-35yr 4= 36+	Type of person (e.g., Researcher, Policy maker, Administrator)	EMAIL	*Telephone number	Signature
43	Dr Baitsi Podisi	CCARDESA-Botswana	M	4	Researcher	<a href="mailto:bpodisi@ccardesa.org">bpodisi@ccardesa.org</a>	+26775509755	
44	Futhi Magagula	CCARDESA -Botswana	F	4	Programmes Officer	<a href="mailto:fmagagula@ccardesa.org">fmagagula@ccardesa.org</a>	+26776229709	
45	Bridget Kakuwa	CCARDESA Botswana	F	4	Communication/KM	<a href="mailto:bkakuwa@ccardesa.org">bkakuwa@ccardesa.org</a>	+260969770885	
46	Lerang Maruping	CCARDESA- Botswana	F	4	Finance/Admin	<a href="mailto:llephole@ccardesa.org">llephole@ccardesa.org</a>	+26775956113	