



Foresight for Food

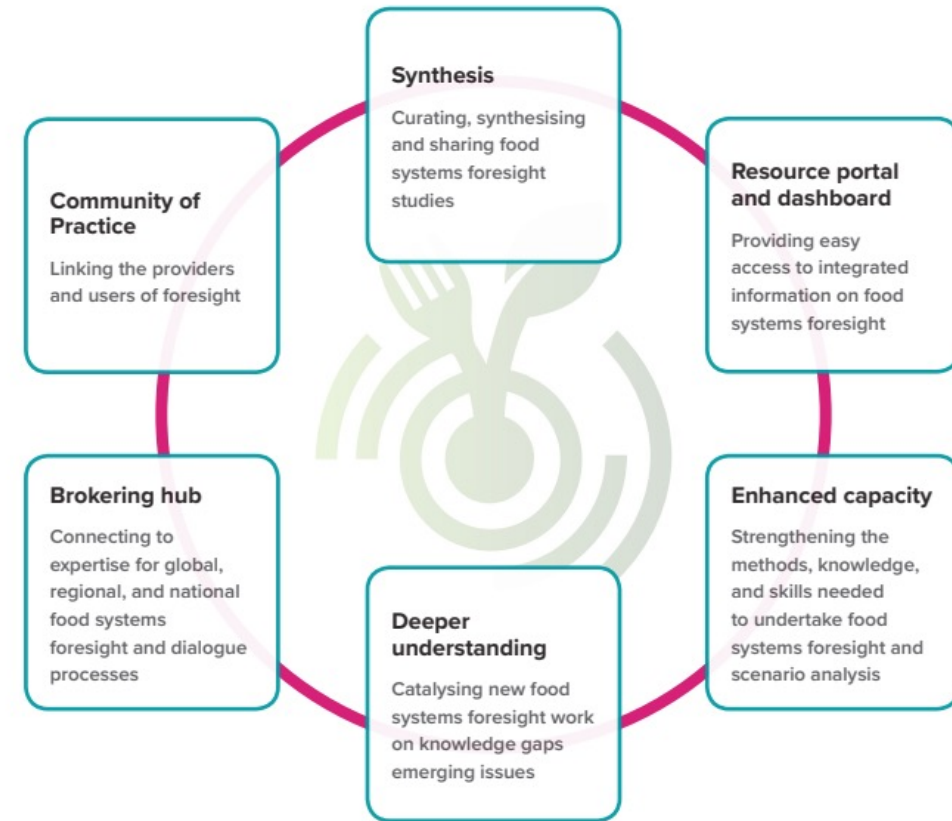
Virtual Foresight Masterclass for Cross-Country Learning

18 April 2023



Introducing Foresight4Food

- Network of providers and users of foresight and scenario analysis
- Promotes futures thinking for food systems transformation
- Helps to build capabilities for foresight
- Focus on linking participatory processes and data modelling





Programme for the day

Opening

10 mins

Warm-up group discussion

10 mins

FoSTr update and word of welcome

10 mins

Foresight and Food systems

15 mins

Dhaka Urban Food Systems

15 mins

Group discussions via Mural

35 mins

Reporting back

15 mins

Closing words

5 mins

Warm up group discussion (10 mins)

Lets get to know each other a bit!

Assignment: take 30 seconds to collect an object from your room that symbolizes something related to foresight for food systems to you.

In your break-out groups, share the following:

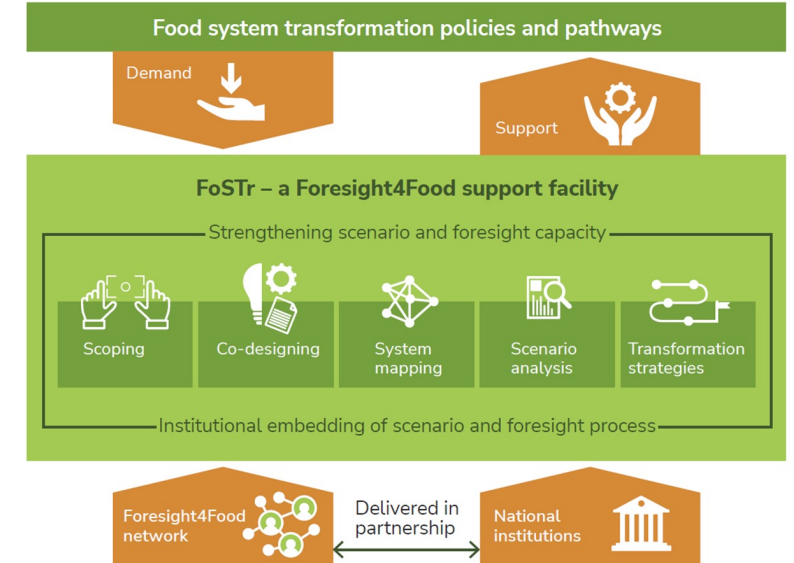
- Introduce yourself (name, organisation, country):
- Share your object and what it symbolizes
- Why are you interested in foresight for food systems



The Foresight for Food Systems Transformation (FoSTr) Programme



- A three-year scenario & foresight programme (2022-2025) to help transform food systems in five countries across the globe: Jordan, Bangladesh, Uganda, Kenya and Niger.
- Funded by the Netherlands, delivered through IFAD and implemented by Foresight4Food, University of Oxford, Wageningen University and in-country research partners.



Ministry of Foreign Affairs of the Netherlands



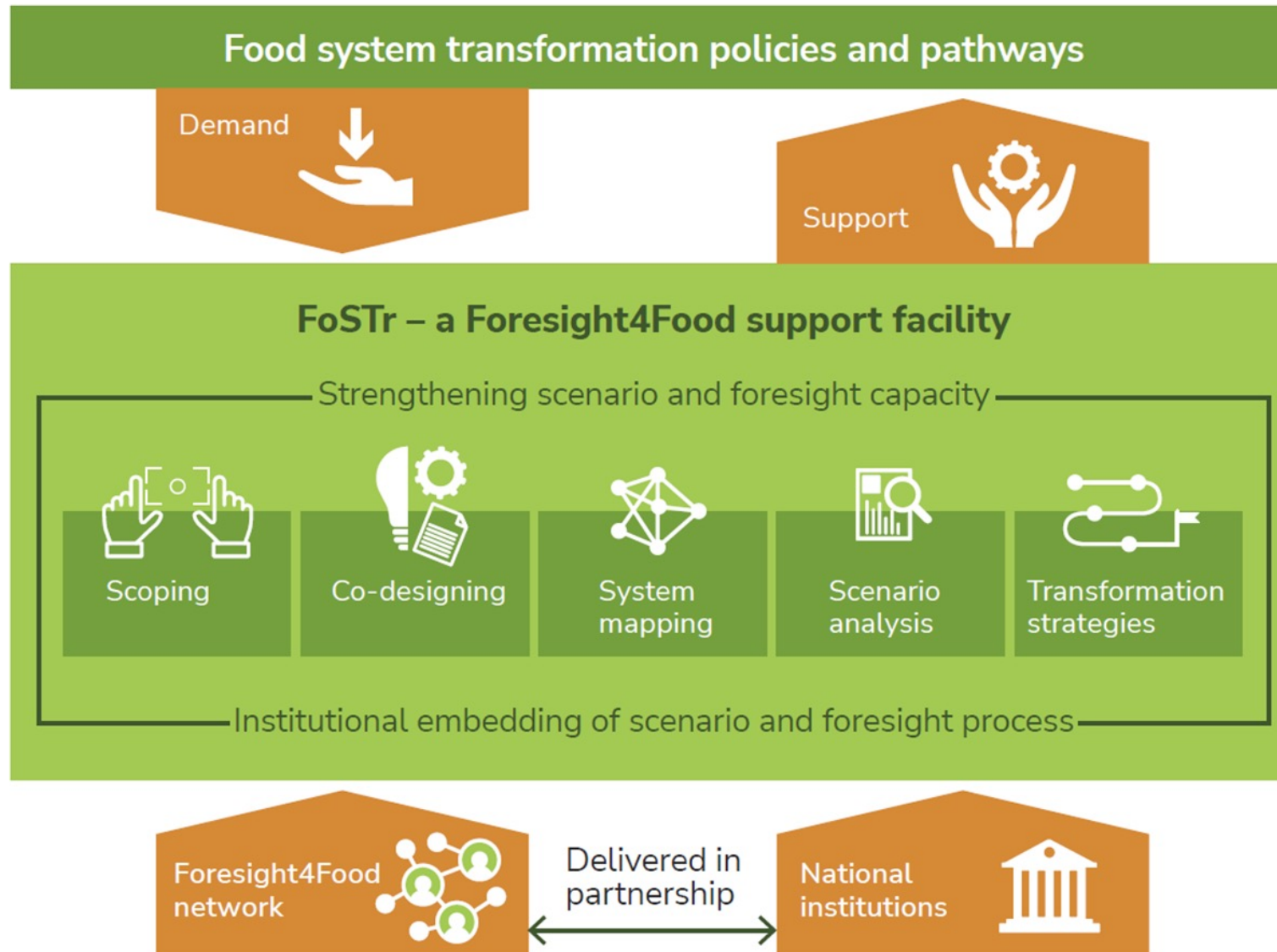
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FoSTr: a national foresight support facility





Participatory foresight processes...





Jordan: exploratory visit & roundtable (October 2022)



Welcoming words from Jordan Minister of Agriculture H.E. Khalid Hneifat





Bangladesh (Exploratory visit & SHiFT workshop, November 2022)





Niger (Exploratory visit & workshop, February 2023)



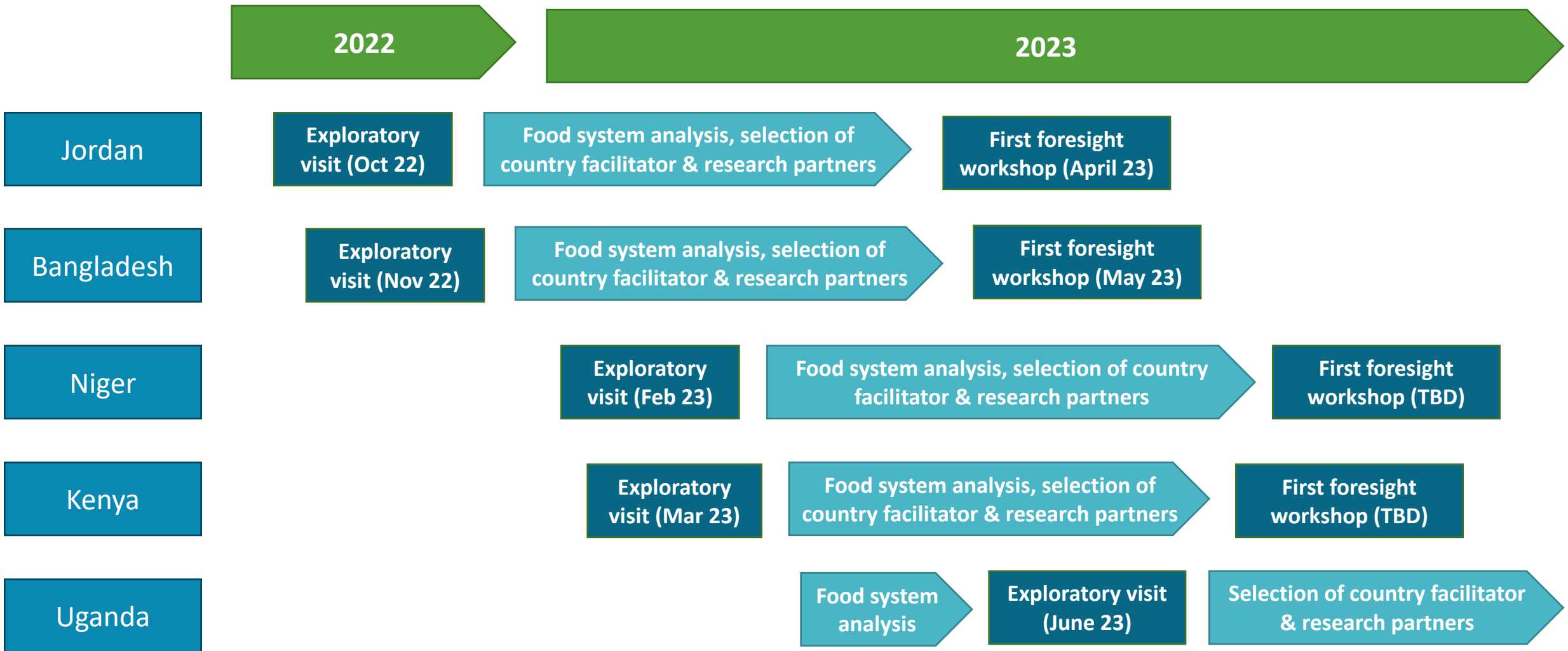


Kenya (Exploratory visit & workshop, March 2023)





Timeline per country





Upcoming country visits

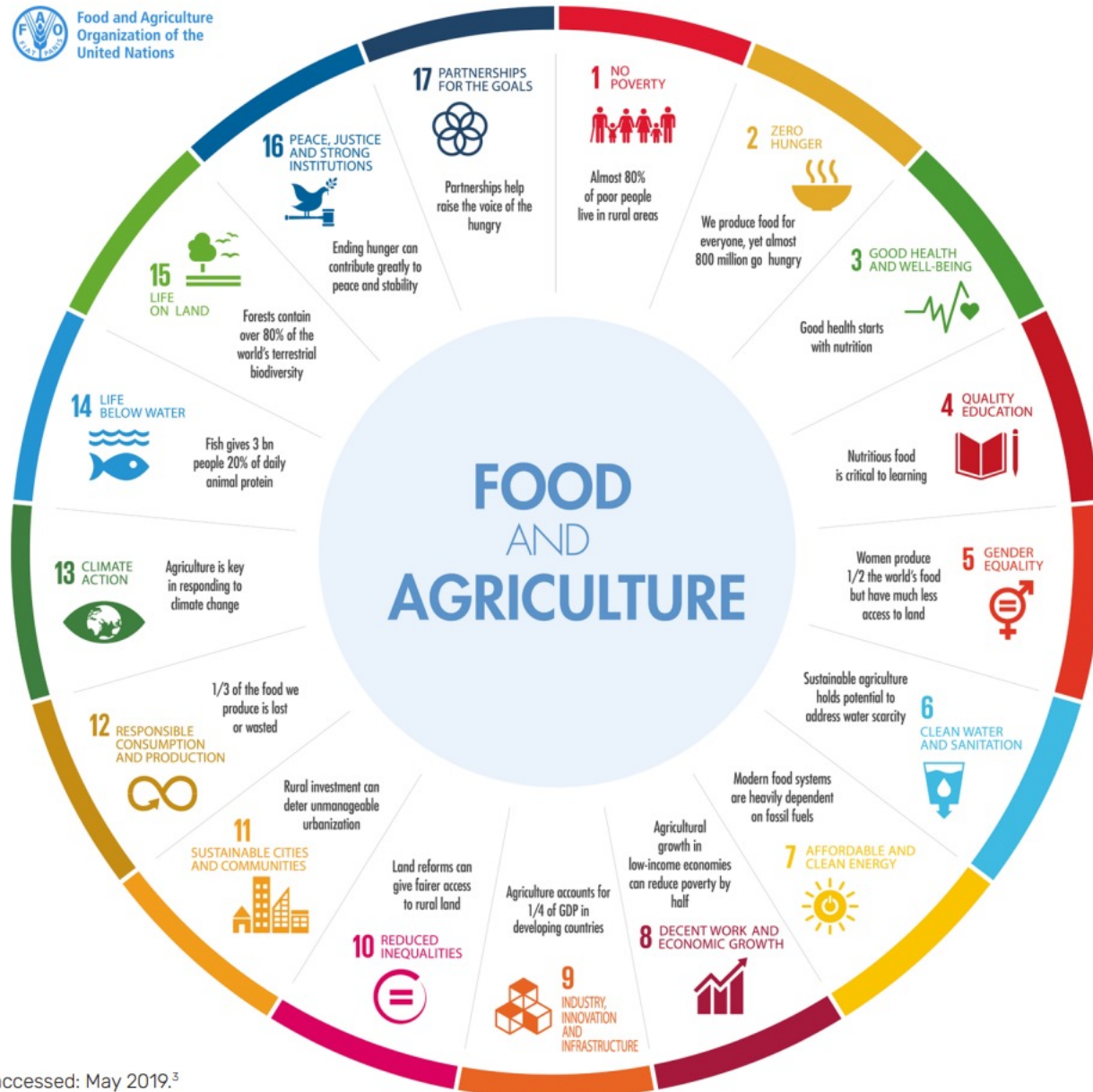
- Bangladesh: foresight workshop (April 28 - May 4)
- Jordan: foresight workshop (May 7 - 11)
- Uganda: exploratory visit (June 5- 9)
- Kenya: foresight workshop (TBD)
- Niger: foresight workshop (TBD)

Foresight for Food System Change

An Overview



Jim Woodhill
Lead Foresight4Food Initiative



Our future planetary and human well-being depends on our collective capacity to fundamentally transform food systems!

But how?



Current Context

Turbulence

Reoccurring
crises

Uncertainty

Distrust

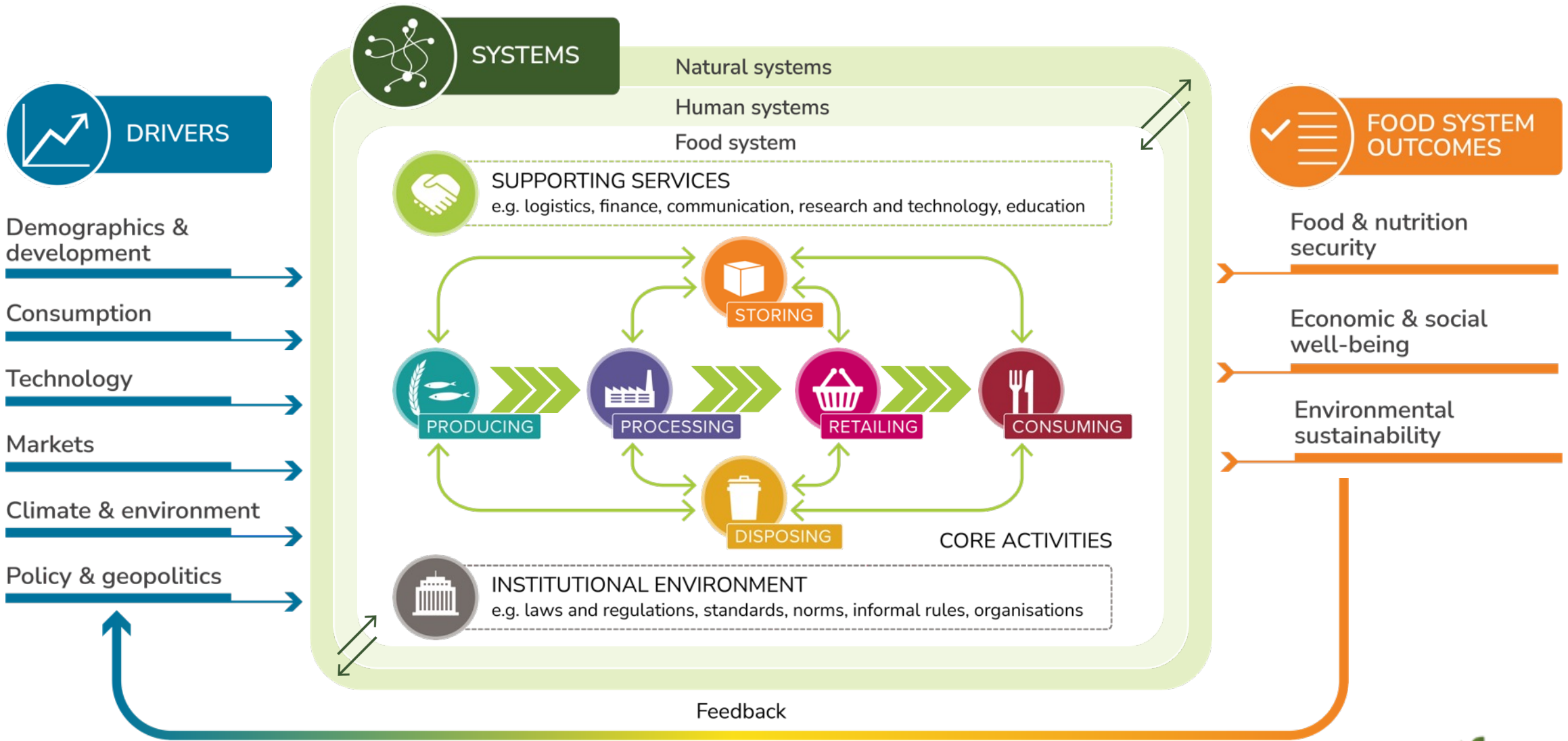
Existential
Threats



There are Many Opportunities for Change

- Collective understanding and will
- Emerging technologies
- Changing economic incentives
- Alternative and novel foods
- True cost accounting
- Artificial intelligence and big data
- Alliances across government civil society business and science
- Innovation and learning systems

A Simplified Food Systems Model

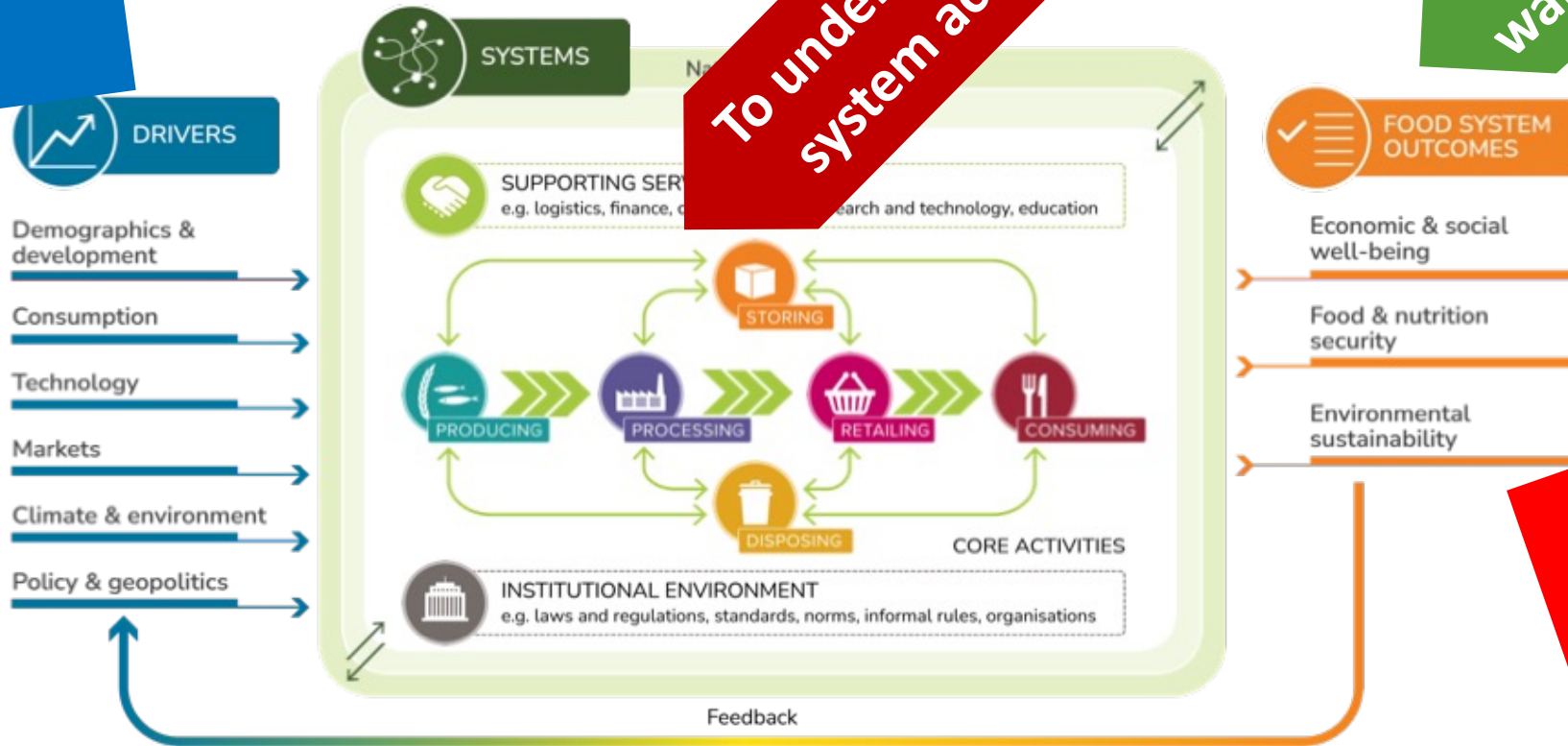


Why is A Food Systems Approach Important?

To recognize drivers and feedback loops

To understand food system activities

To agree on what we want from food systems

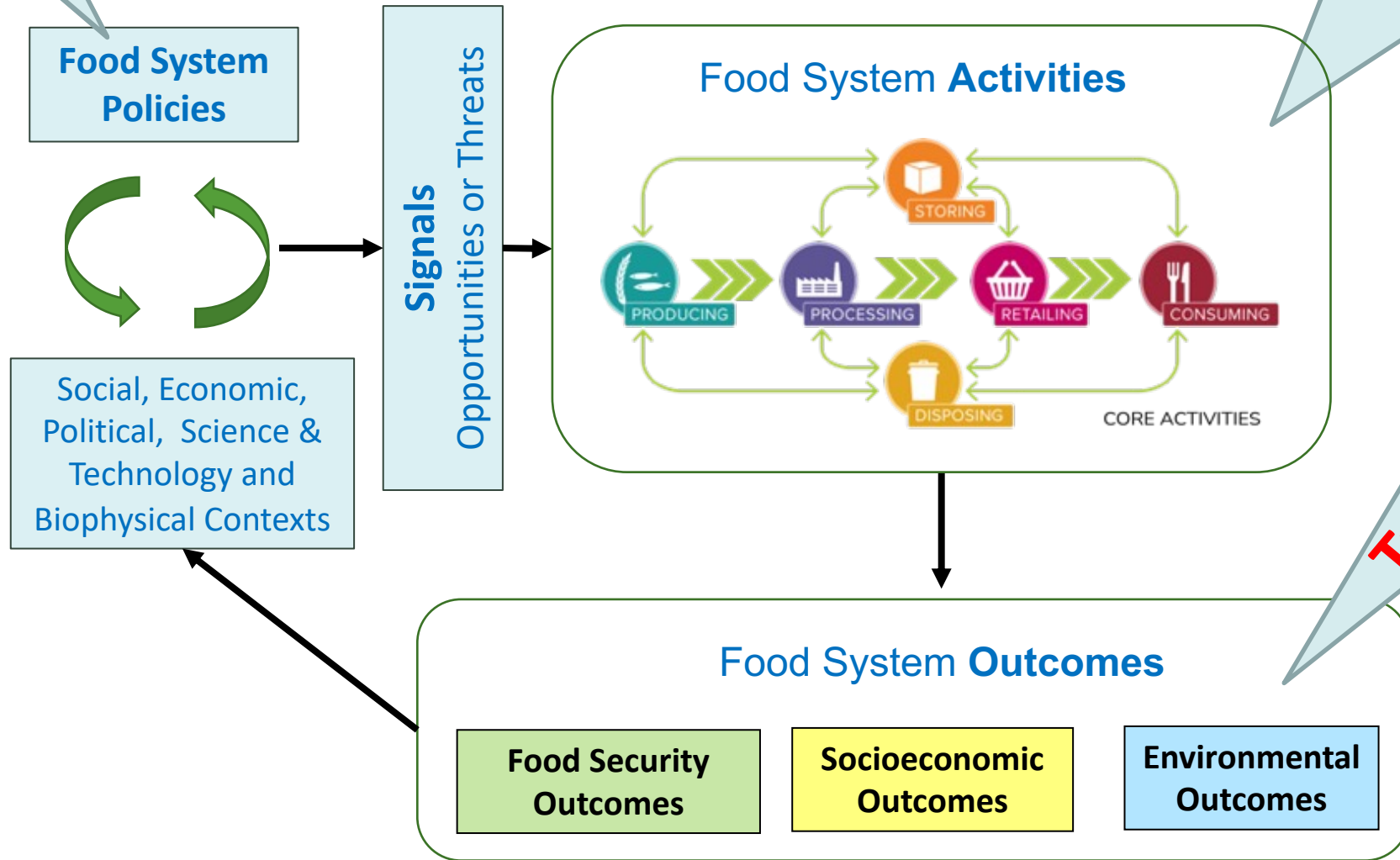


To recognize trade-offs and synergies



Need a Food System Approach to Transform Food System Outcomes

Reassess



Adapt

Transform



Foresight and Scenarios in Simple Terms

*Being prepared for
and creating
alternative futures*

SCENARIOS

Scenario 1: Crocodile lunch

Scenario 2: Lucky escape

Scenario 3: Smooth ride

Scenario 4: Unseen dead end

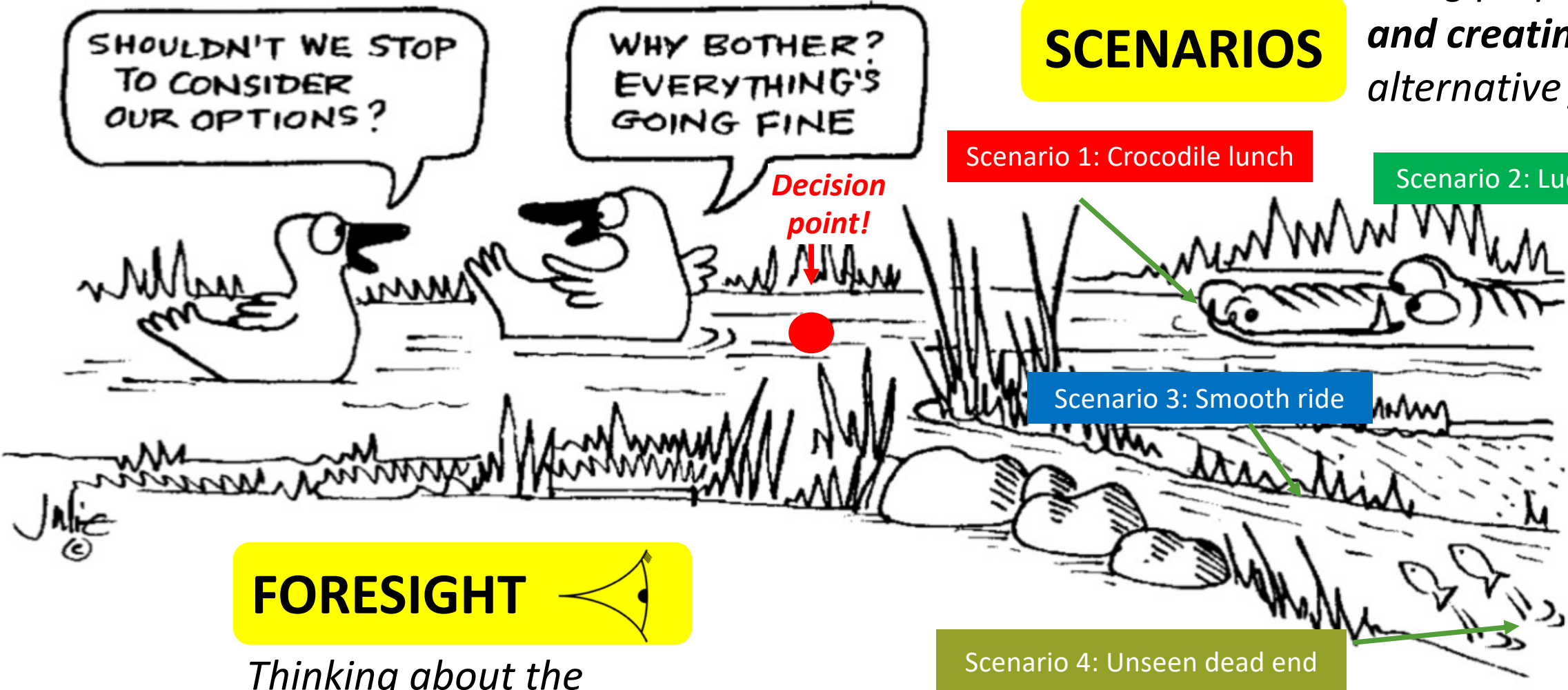
Decision
point!



FORESIGHT



*Thinking about the
future to improve
decision making today*





Risks and Opportunities

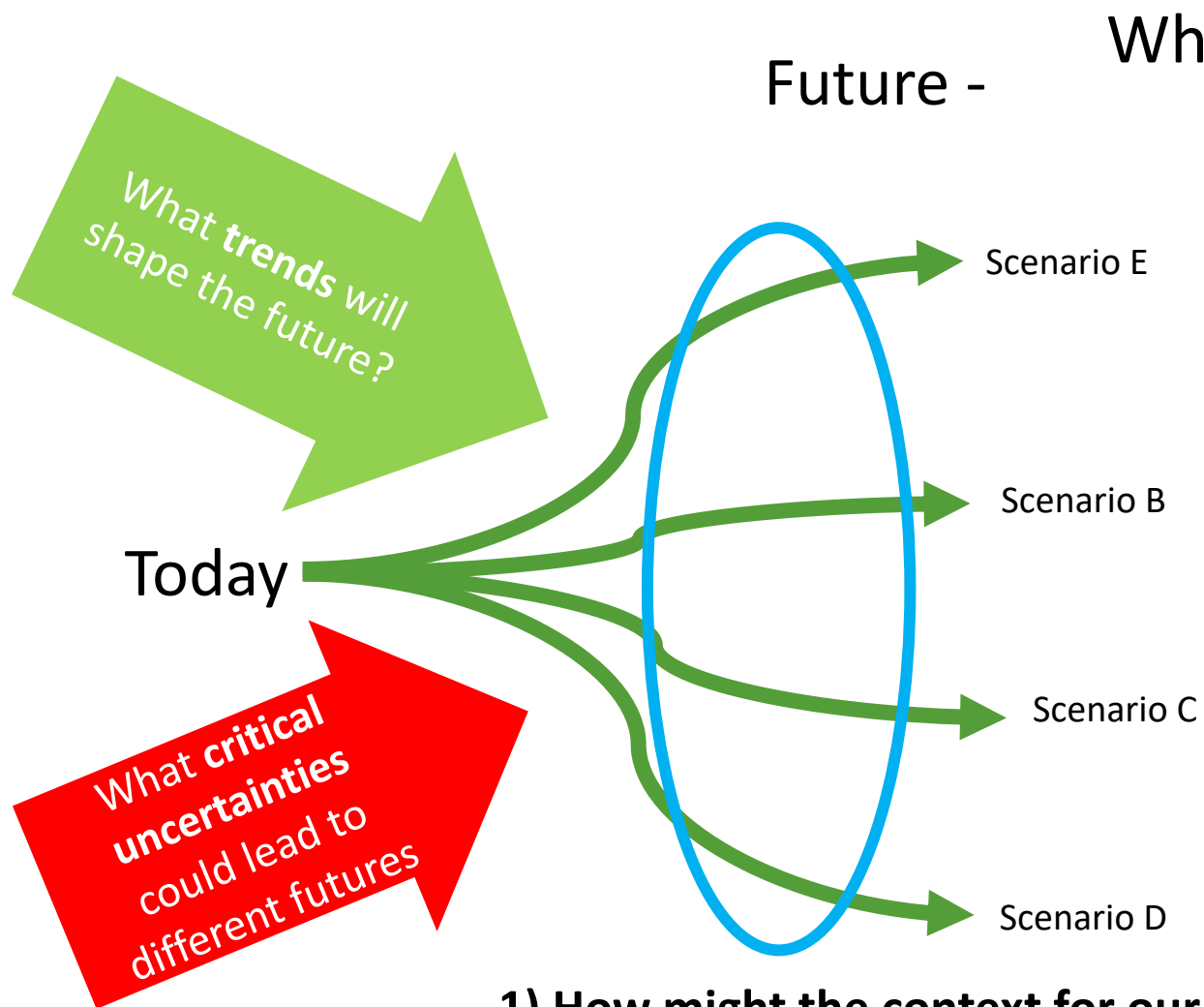
Systemic
Risks



Transformational
Opportunities



Foresight: Key Questions



Assumptions about what will shape the future

1) How might the context for our actions and interventions change with what implications?

What might the system be like in 10 - 20 years?

2) Which future scenarios would be more or less desirable, and how could systems change be “nudged” in desirable directions?

3) To what extent would planned actions / policies / investments remain relevant in different future scenarios?



Why Foresight and Scenarios

Possible Futures

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

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

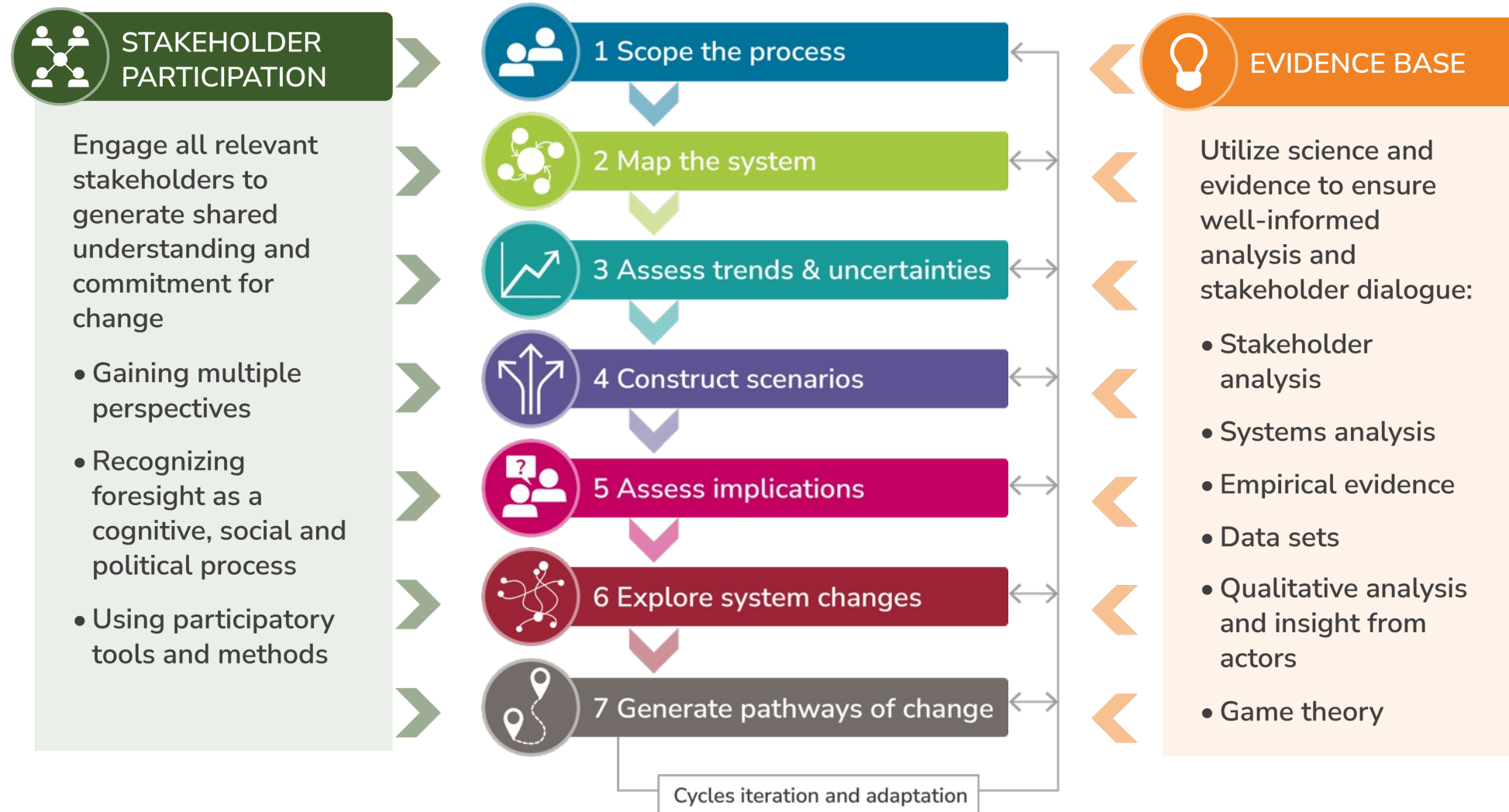
3) Understand **desirable or undesirable future states** of a system

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

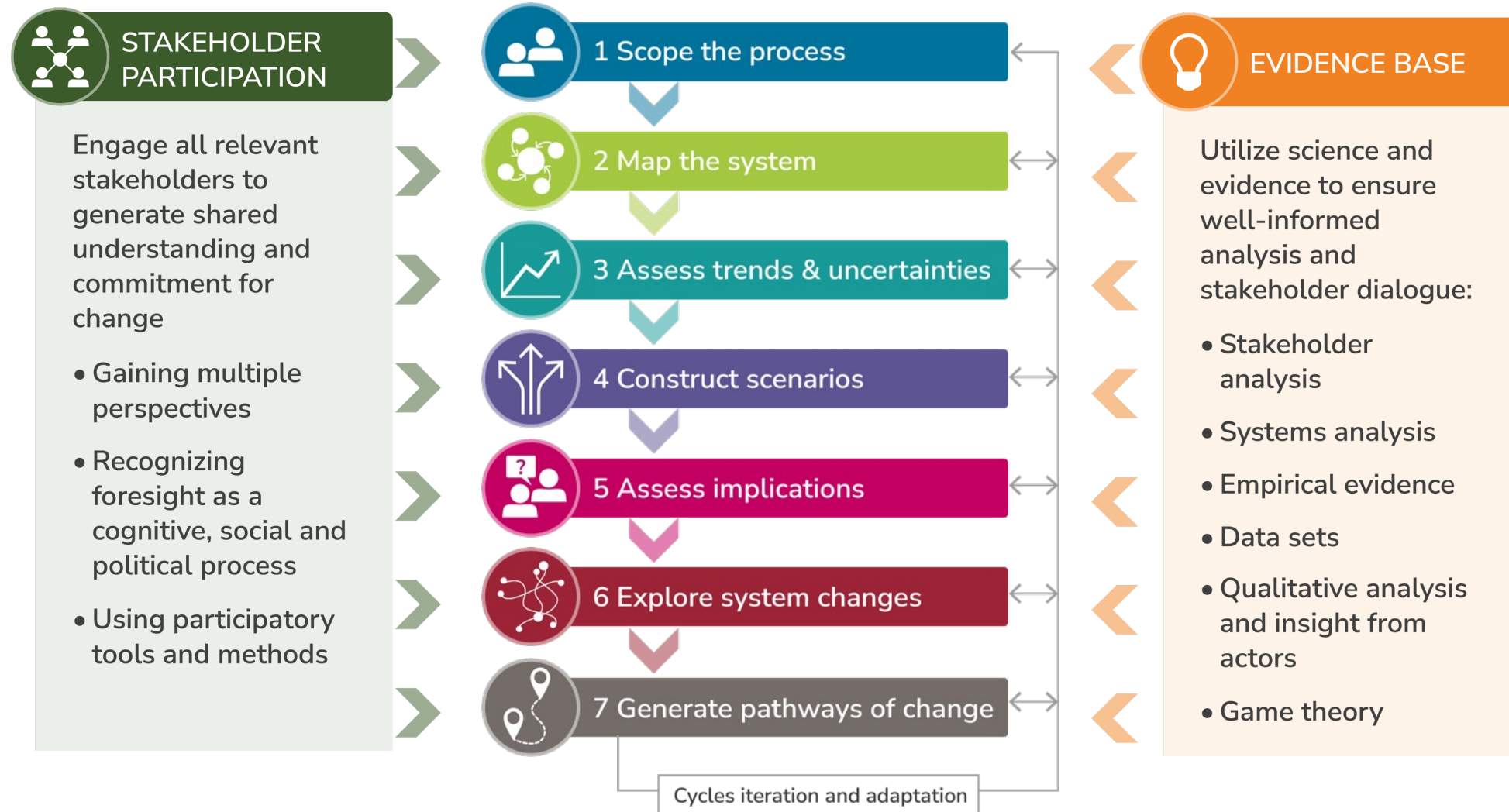
5) Enable anticipatory and adaptive policy and investment processes

The
future is
created
by how it
is
imagined
today!

Foresight4Food Guiding Framework

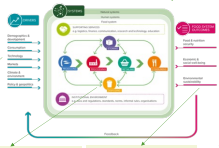
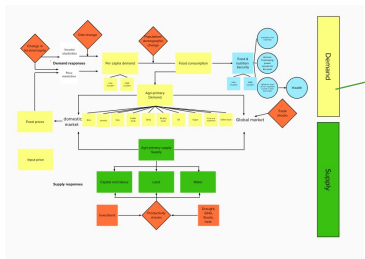
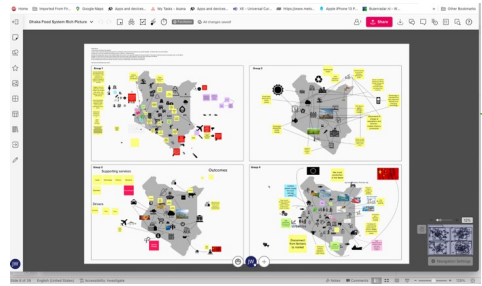


Foresight4Food Guiding Framework

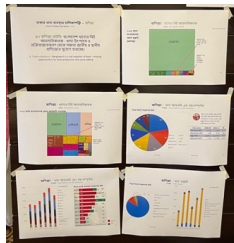




Tools in the Process



Food system drivers	Food system activities	Food system outcomes
Demographics • Total population and growth • Share of urban population Climate and Environment • Flooding and food production • Drought and food production Markets and Trade • Trade balance • Key imports and exports Policy & Public Expenditure • Total development expenditure and commitments • Responses to achieve SDG2	Food production & supply • Farming and livelihood • Informality and livelihood • Agriculture sector share of GDP • Agricultural land Retail • Fresh markets customers and access • Growing demand of other retailers Consumption and diets • Diets by income • Consumption projections	Nutrition and Health • Malnutrition • Overweight and obesity Economic & Social Wellbeing • Income and livelihood • Household income GNI • Inequality Environmental Sustainability • Environmental impact of waste • Use of fertilizers in agriculture • GHG emission in agri-food sector



1 Scope the process

2 Map the system

3 Assess trends & uncertainties

4 Construct scenarios

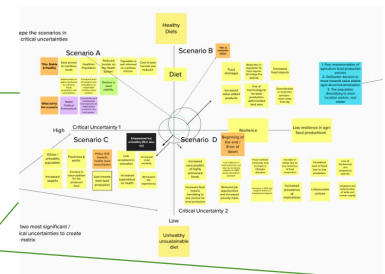
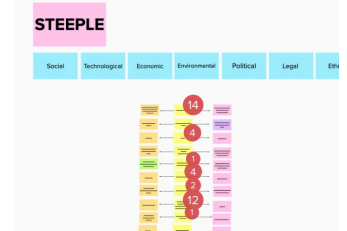
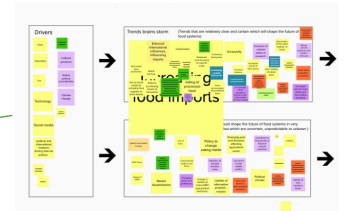
5 Assess implications

6 Explore system changes

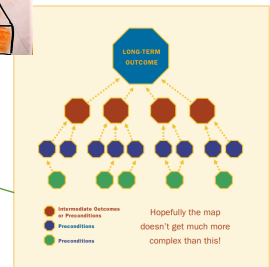
7 Generate pathways of change

Cycles iteration and adaptation

Stakeholder	Role in food system	Current concerns	Future interests	Influence and power

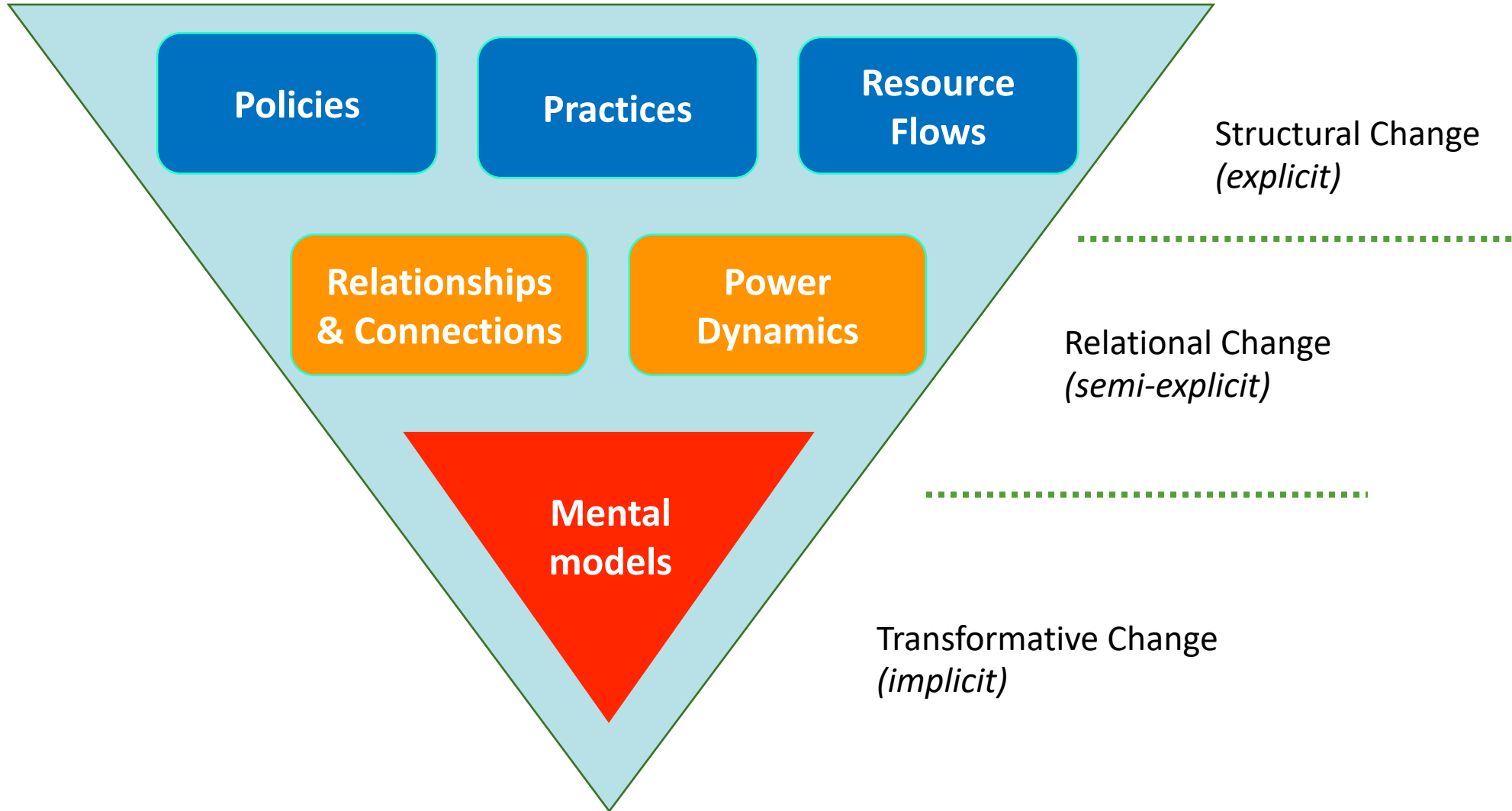


Stakeholder	Implications for Stakeholders				Overall risks and opportunities
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	
A					
B					
C					
D					
E					
F					
Society at large					





Conditions for Systems Change



Experiences Dhaka Food Systems project

FoSTr Cross country learning session, 18th April 2023

Marion Herens & Riti Herman Mostert, WCDI, on behalf of the FAO-WUR DFS team



Food and Agriculture
Organization of the
United Nations



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Kingdom of the Netherlands

Content

- Aim and rationale of the project
- Why foresight & scenario
- The process
- The results to date
- Some insights & dilemmas



The Dhaka Food System Project

Aim: Improving performance of the Dhaka Metropolitan Area food system and contribute to the challenge of ensuring that all current and future citizens of Dhaka have access to sufficient safe, healthy and nutritious food

*Duration: August 2018 - June 2023
Overall budget (5 yrs): 12.5 million US\$
Donor: Embassy of the Kingdom of the Netherlands (EKN) Bangladesh
Lead implementor: FAO Bangladesh
Co-implementor/knowledge partner: Wageningen University and Research*



Current issues in Dhaka's Food Systems

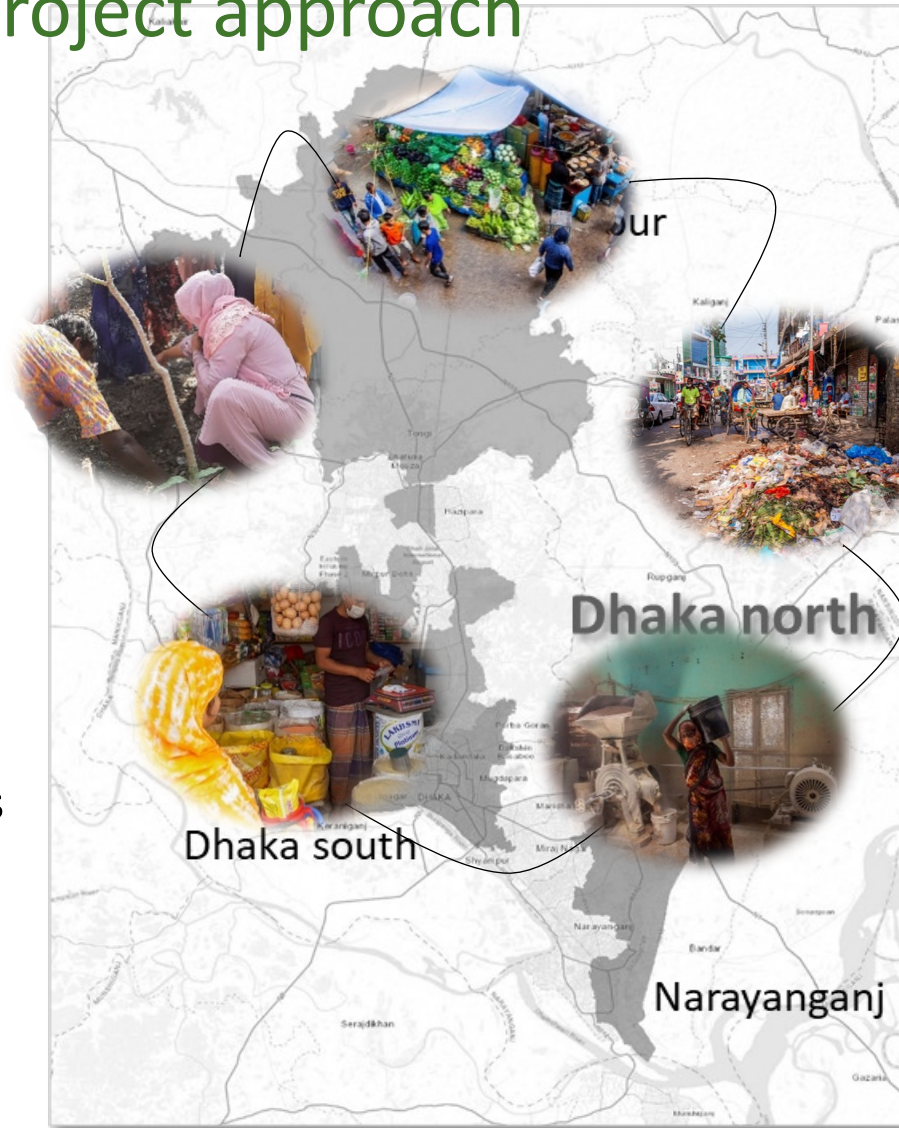
- Dhaka is one of the world's largest and fastest growing megacities. Population >22 million, with half a million climate migrants annually
- Food for everyone is an immense challenge (infrastructure, food prices, food safety, management, nutrition, access, etc...).
- Food (security) is considered an agricultural issue, the domain of Min of Agriculture, Min of Food, and Min of Fisheries and Livestock.
- Food is *NOT* on the urban agenda. City Corporations are unfamiliar with food (i.e. not considered in urban plans) and lack knowledge and experience in food system management.
- Many Gov. agencies are responsible for the food system (w/ clear mandates) but coordination and collaboration is challenging.



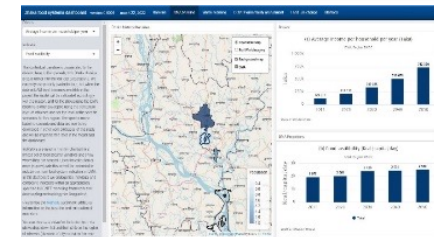
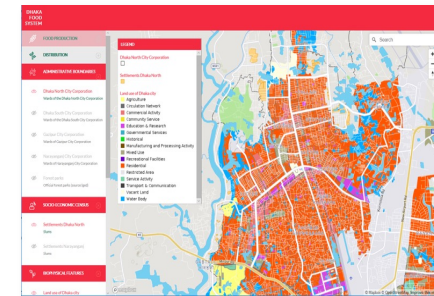
Dhaka food system Project approach

Short-term impact: Targeted interventions with direct impact on food systems activities and specific target groups:

- Promoting nutrition & food security
- Upgrading fresh markets
- Reducing Food loss & waste
- Improving food safety & consumer awareness
- Strengthening food value chains



Long-term impact: enable institutions for stronger food governance (*multi actor, multisector*) and support adaptive planning capacity (*multilevel*)



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BIG aim: development of the Dhaka Food Agenda 2041

- The Foresight4Food foresight framework is being used in Bangladesh to help developed a Dhaka Food Agenda 2041
- A first phase of the foresight process was conducted in early 2022 involving four virtual workshops and a two-day face to face workshop in Dhaka
- Over the course of 2022 the preliminary work was further elaborated with additional stakeholder engagement, data gathering, and analysis.
- The Dhaka Food Agenda 2041 is a collaborative effort across Bangladesh national, local and city governments. It is supported by FAO and Wageningen University and Research (WUR) with funding form the Netherlands.



Video Gallery ePaper Archives Bangla

Wednesday, 6 April, 2022, 5:11 PM

dailyobserver

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Dhaka Food Agenda 2041 looks to address future needs

Published : Sunday, 3 April, 2022 at 12:00 AM

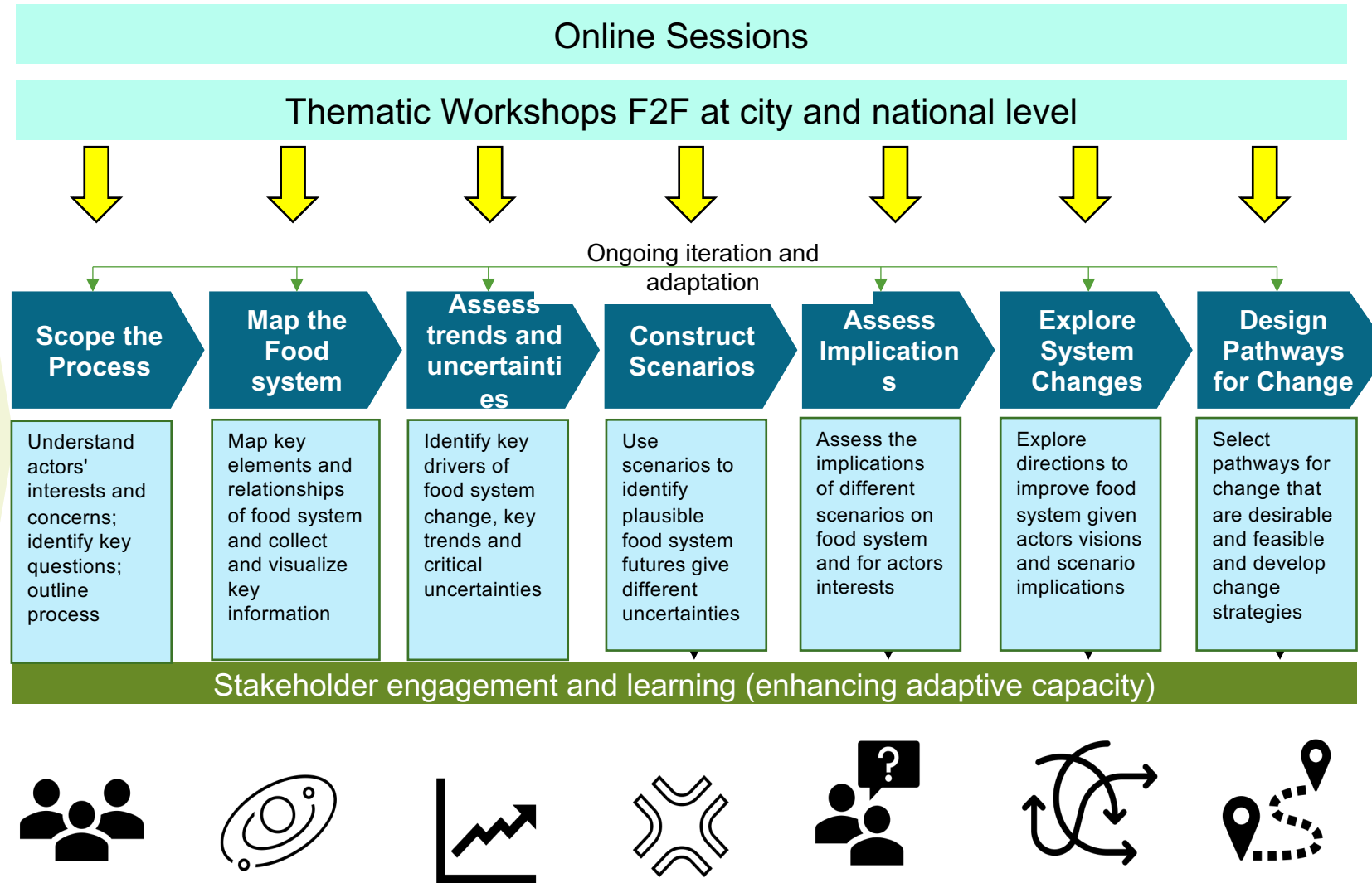
Business Correspondent

Dhaka faces pressing problems in supplying all its 20 million plus population with affordable, safe, and nutritious food. Experts on Saturday met to take the first steps to formulate the Dhaka Food Agenda 2041 taking aims at developing integrated solutions that will address Dhaka's present and future food needs. Dhaka, which comprises four city clustered together - Dhaka North, Dhaka South, Narayanganj, and Gazipur - is on course to become the third largest megacity in the world. Rapid growth has left a mismatch between food needs and what is accessible for certain populations. One-fifth of Dhaka's population lives below the poverty line and receives inadequate nutrition. There is a lack of availability and access to healthy food and food safety issues pose a serious threat to public health. These issues have all become even more pressing during the COVID-19 pandemic.

Process overview

The overall foresight framework translates into this step by step (but iterative) process.

Each step used a set of methods and tools which support the analysis



**Dhaka
Food
Agenda
2041**

Scope the Process

Scope the Process

Understand actor's interests and concerns; identify key questions; outline process



The foresight process started by asking participants what “keeps them awake at night” and what surprises them when thinking about Dhaka’s food System.



The next step was to identify key stakeholder groups and their current concerns and future interests regarding Dhaka’s food system. Common interests and tensions/ conflicts were then be identified.

Stakeholder Category	Stakeholder Group	Description and Data	Current Concerns	Future Interests / Desires	Influence / Power
Consumers	Peer				
	Weather				
Retailers	Wet market traders				
	Local stores				
	Supermarkets				
Food Services	Home delivery				
	Restaurants and hotels				
SME Midstream	Traders				
	Processors				
Corporate Midstream	Wholesalers				
	Traders				
	Importers				
Producers	Processors				
	Wholesalers				
	Periurban small scale				
Agriculture Services	Rural small scale				
	Corporate / large				
Government	National				
	Local				
Civil Society / Advocacy					
Business Associations					



Note: All the virtual sessions used the online facilitation tool Mural with templates created for each activity

Map the Food System – Emerging Issues and Questions from the Data

Map the Food system

Map key elements and relationships of food systems and collect and visualize key information



Ten key observations and associated questions to guide the foresight and scenario work emerged from reviewing the available data



During the face-to-face workshop the food systems data was posted around the room, grouped by the 10 themes, and reviewed by participants working in pairs

1. A **growing population** in Bangladesh, in combination with urbanisation leads to an increasing demand for food
2. Dhaka has a significant and **growing triple burden of malnutrition** – with high rates of poverty, malnutrition and stunting remaining high while overweight and obesity is likely to increase rapidly
3. **Increasing wealth** over the coming decades will dramatically **reshape food consumption and demand**. At the same time, Dhaka is likely to see significant **food inequality** in terms of quality, safety and diversity of diets between its richer and poorer resident
4. Food supply for Dhaka has a huge **environmental footprint**, and will get bigger – how can this be managed?
5. Vast numbers of **very poorly paid people are involved in supplying food** for Dhaka (farmers, processors, traders, retailers) – there is a dilemma between cheap food vs living incomes for people in the food supply chain.
6. Most food is purchased from local **fresh markets**, but these markets must be safe, hygienic and supply a diverse selection of fresh foods. Upgrading is crucial, but what will be their role in the future?
7. **Where will food come from?** Urban and peri-urban production? Bangladesh's rural areas? Imports? What are the environmental, socio-economic and food and nutrition security implications and how should this be managed?
8. **Trade imbalance** - Bangladesh is a net importer of food – missing opportunities for local production and value adding
9. **Climate change** will have a big impact on Bangladesh and Dhaka – what are the implications for food supply and distribution for Dhaka?
10. Commitments are made at national level to improve food and nutrition security for all, but **budget allocations** do not match those commitments.

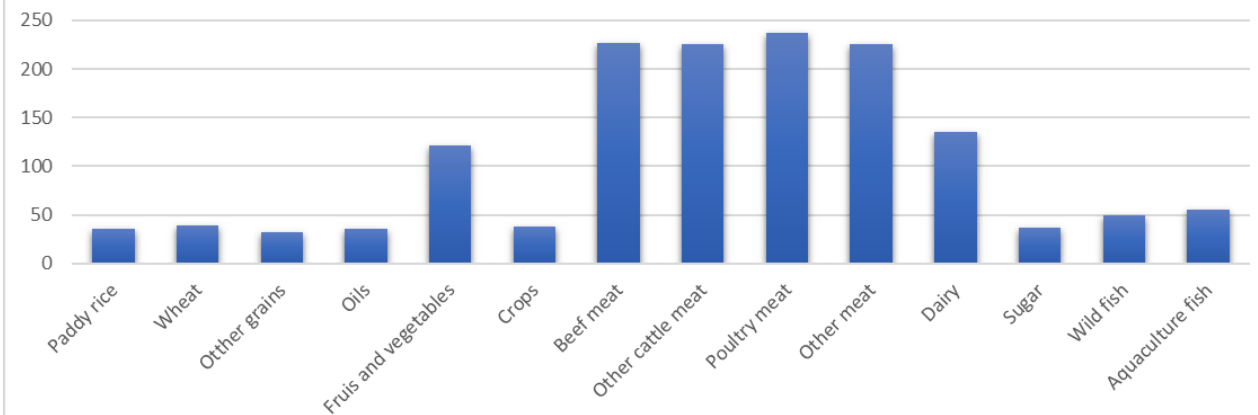
Insights from Modelling and GIS

Map the Food system

Map key elements and relationships of food systems and collect and visualize key information



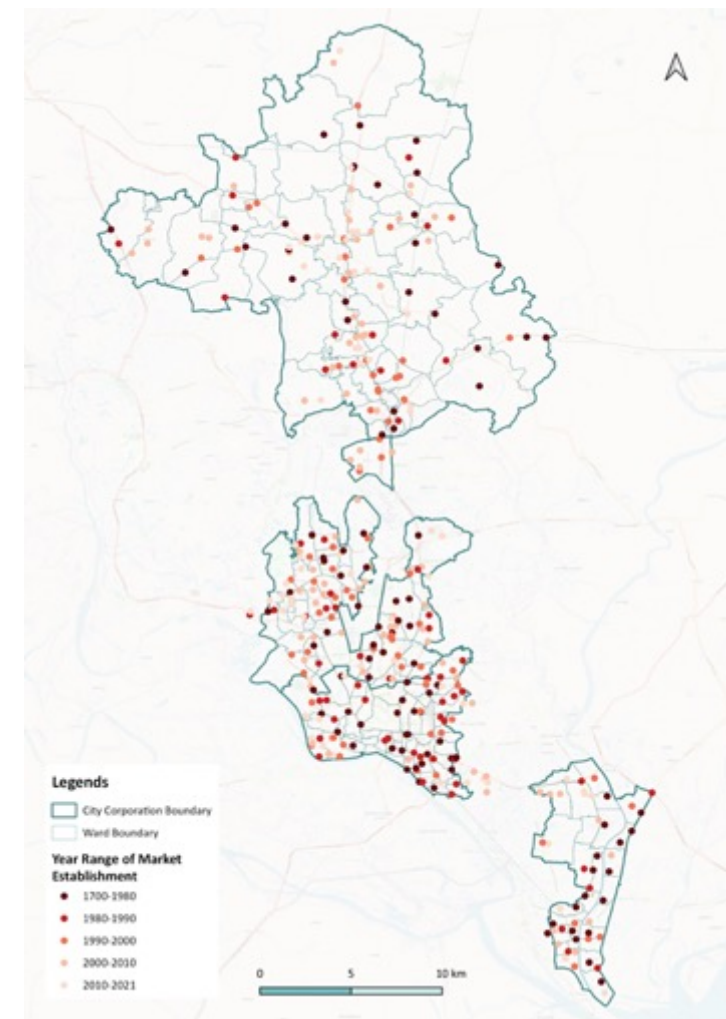
Food consumption %change 2011-2050



Quantitative modelling and spatial analysis is helping to provide insight about the current situation and future scenarios. Support for this work is being provide by WUR researchers.

The modelling work is further developed to help provide more details for the scenarios

Distribution of wet markets in Dhaka



Critical Uncertainties for Dhaka's Food System Towards

2041

Assess trends
and
uncertainties

Identify key
drivers of food
systems
change, key
trends and
critical
uncertainties



Analysis of data and stakeholder
consultation led to these six critical
uncertainties being identified

Resilience

Trade

Equity

Food price

Consumption patters

Business Structure

Scenarios crafted for further dialogue and validation

Scenario A: "Diversified and viable small-scale entrepreneurship enables health for people and planet"

Consumers have shifted to healthier diets that are resource efficient. Food demands are being met by many micro, small and medium scale enterprises working in partnership with larger firms, with good food safety and quality standards in place. Appropriate technology plays an increasing role in sustainable business operations. Farmers can get a fair price, and incentives are in place to protect the environment. Healthy food is more available and affordable to both poor and wealthy consumers with a diversity of retail options.



Healthy and environmentally sustainable diets

Consumption patterns

Many micro-, small- and medium-scale enterprises

Business structures

High consumption of unhealthy and/or resource intensive diets. Food sector remains dominated by many micro, small and medium enterprises operating with poor standards and low returns. Growing food inequalities between those who can afford better quality healthier food and those who can't. Limited power of small retailers over types of food to sell and pricing. Growing difficulties in domestic production and increased reliance on the international market.



Scenario C: "Fragmented, uncoordinated and unsustainable agri-food sector hangs on"

Unhealthy and resource intensive diets



Dhaka Food Agenda 2041 – A shared vision for Dhaka's food system

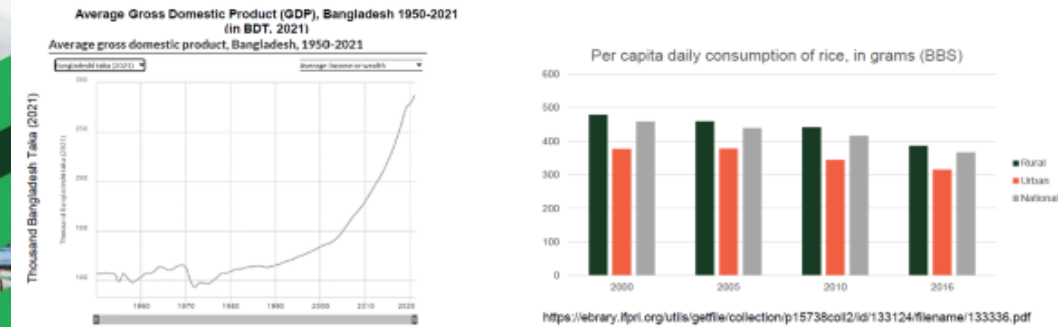
stakeholders from different sectors in Dhaka's food system were engaged.

Scenario D: "Profit driven larger-scale companies drive unsustainable and unhealthy consumption"

exploited low number of larger-scale companies monopolising the market. Purchasing from supermarkets becomes more prevalent, many of which provide cheap poor quality and low nutritional value food products. Food inequalities increase.

... Consolidation in the Dhaka Food Agenda 2041

Why a Food Agenda for Dhaka: Current Trends



■ Gross Domestic Product | PO-100 | average income or wealth | Adults | Individual
Source: <https://ind.world/country/bangladesh/>

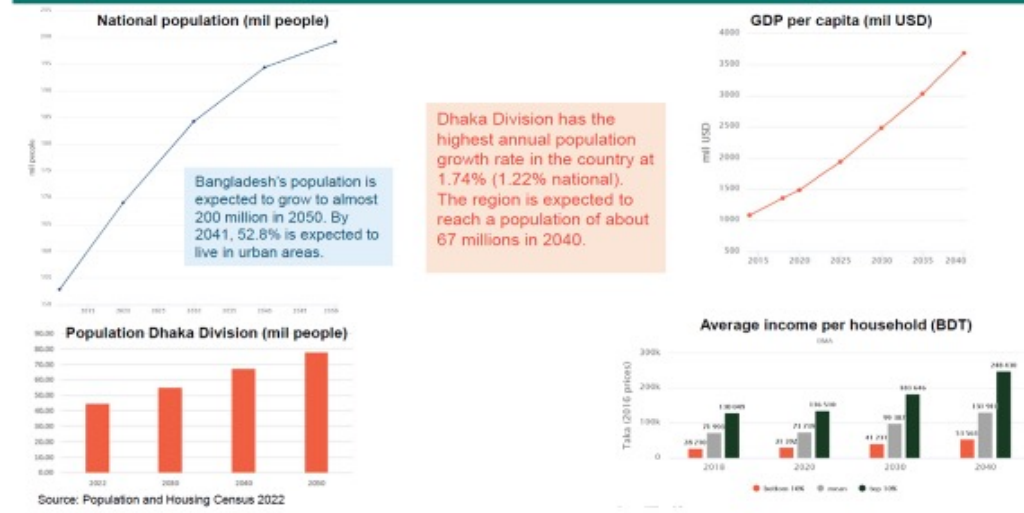
Income has been steadily growing...

... this is projected to continue to increase by 3.5 times to 2050 in Dhaka, associated with rising inequalities and changes in diets and food preferences.

Critical uncertainties

A series of critical uncertainties likely to shape the transformation of the Dhaka food system were identified through the participatory process as listed in figure 14. Now, moving forward, the Government of Bangladesh is integrating some of the uncertainties in formulating the long-term plans and policies. As such, the uncertainties remain but are beginning to be articulated into the key future visions and policies.

Why a Food Agenda for Dhaka: Future Projections



... And translated into an actionable agenda



Key directions for change

Draft workshop document for stakeholders

The key directions of change identified for a healthier, sustainable and more resilient urban food system were further elaborated in stakeholder consultations into interlinked immediate, short term, and long term areas of actions. Each action would contribute to change in the key directions. Immediate actions (within next twelve months) defined seek to contribute to quick wins. Long term actions (for 2027-2041) aim for the future are sustained by immediate and short-term actions (for 2024-2026). They refer to actions that are not easily implementable or simply require longer periods to mature. In addition, putting the Dhaka food agenda into action and enabling a responsive approach to an uncertain future will require new forms of governance and stakeholder collaboration and learning across government, businesses, consumers, civil society and research.

1. Consumption of healthy and nutritious food

Around the world, diets are changing and especially in urban areas, consumers tend to change their consumption patterns. Considering projected increase in welfare, it is safe to say that also in Dhaka, diets will continue to change in the future. However, what those diets will look like exactly, or how this might be different across income groups are some important uncertainties. What Dhaka's population will consume has many implications. If diets start mimicking other middle- and high-income countries, issues such as overweight, obesity and related non-communicable diseases such as cardiovascular disease and type-II diabetes should be anticipated. Navigating away from this scenario requires that healthy and nutritious food become accessible and affordable to all, through reliable and adequate food outlets in their neighbourhood, and that consumers are able to make informed choices: knowing what foods are healthy, safe and fitting their dietary needs. Their food environment should support consumers to make those healthy choices.

Therefore, the following three key areas of action are proposed:

1. Ensure (consumer) awareness and access to information about healthy diets and nutrition facts
2. Enhance consumers' access to affordable, diversified, healthy diets
3. Ensure physical access to foods for all

Regardless of what business structures will dominate Dhaka's food system in the future, these three actions ensure that appropriate foods reach all consumers in a transparent and affordable way. At the same time, demand is shaped by ensuring that consumers can make informed choices and act accordingly.

[2] NPANZ, NFNSP 2020
 [3] NFNSP 2020, NPANZ, Food Safety Act 2013, Packaged Food Labelling Act 2017
 [4] NFNSP 2020
 [5] 2nd National Plan of Action for Nutrition - NPANZ (2016-2025)
 [6] Bangladesh Standards and Testing Institution Act 2018
 [7] Food Safety Act 2013, Dept. of Livestock Services Quality Control Laboratory Policy 2021
 [8] NPANZ
 [9] The Consumer's Right Protection Act 2009
 [10] NFNSP 2020, NPANZ, Food Safety Act 2013, Packaged Food Labelling Act 2017

1.1 Ensure (consumer) awareness and access to information about healthy diets and nutrition facts

Immediate actions (steps in next 12 months)

- Conduct targeted good food campaigns, training on healthy diets, proper cooking/ consumption practices,[2] food labelling and food safety, engaging producers, consumers, private sector, media and monitoring institutions for responsible food offer and choice[3]
- Promote healthy foods more attractively, engaging the private sector[4]

Short-term actions (2024-2026)

- Incorporate nutrition education in academic curriculum[5]
- Test food items regularly[6] to check for nutrition facts and publish results publicly[7]
- Widely disseminate age- and key-groups-specific dietary guidelines based on local foods (e.g., for pregnant and lactating women - PLW, children, adolescents)[8]

Long-term actions (2027-2041)

- Ensure consumer rights through policies and their implementation[9]
- Ensure proper labelling of food items (in easy terms/ Bangla) with food facts, nutrition values[10]

Leading actor: Ministry of Food (MoF)

Roles for specific actors, champions, networks:

- MoF/ BFSA: Raise awareness (esp. for children and youth to change their mindset) and enforce laws
- DAE/ DoF/ DLS (MoA, MoFL): Raise awareness and formulate policies
- MoEducation: Integrate nutrition and safe food in curriculum
- BSTI: Ensure proper labelling
- Research organization/ CGIAR: Conduct evidence based research

1.2 Enhance consumers' access to affordable, diversified, healthy diets

Immediate actions (steps in next 12 months)

- Keep nutritious foods affordable by setting price ceilings for basic food items/ major food groups[11]
- Increase transparency and competitiveness by displaying daily product prices in fresh markets, and monitoring markets for prices, unethical stocking, and syndicates and enforce laws[12]

[11] NFNSP 2020, National Food Policy 2006, Allocation of Business among the Different Ministries and Divisions (Schedule I of the Rules of Business, 1996 Revised up to April 2017); Ministry of Commerce
 [12] Agricultural Marketing Act 2018, Local Government (City Corporation) Act 2009, Bangladesh Govt. Hats and Bazars (Management) Order 1972, Allocation of Business among the Different Ministries and Divisions (Schedule I of the Rules of Business, 1996 Revised up to April 2017); Ministry of Commerce

To realize this vision and steer or "nudge" Dhaka's food system towards a desirable future scenario the following five key directions for action were identified during stakeholder workshops:

1. *Consumption of healthy and nutritious food*
2. *Meeting Dhaka's future food demands*
3. *Optimizing people livelihoods in the food system*
4. *Protecting Dhaka's population from shocks to the food system*
5. *Feeding Dhaka in a nature positive way*

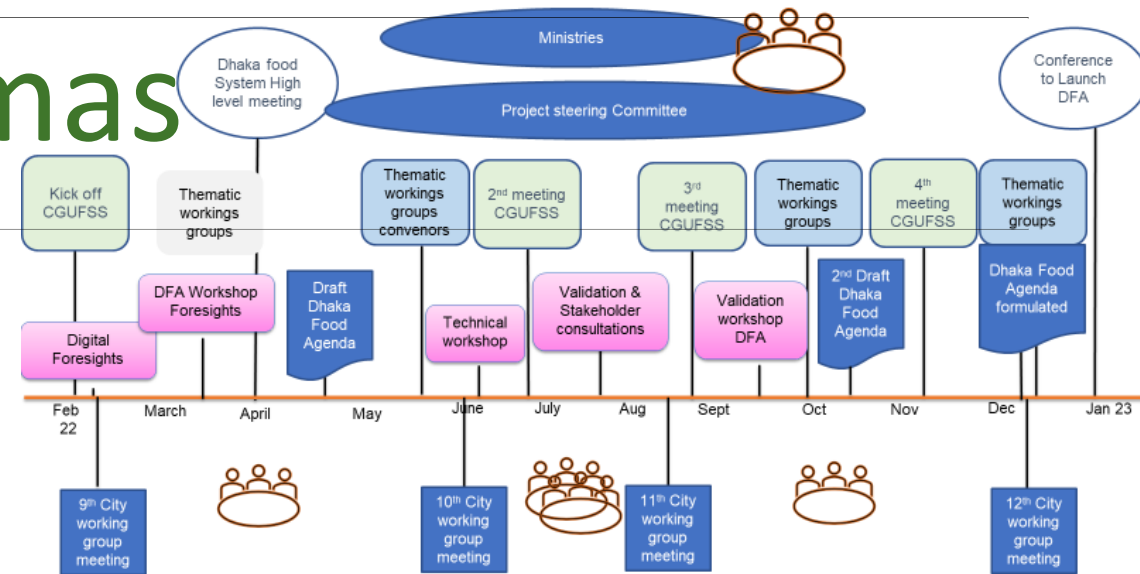
Some insights & dilemmas

Insights:

- *Stacked engagement processes* fostered foresight dialogues in bringing in broad range of stakeholders
- *Trust and action focus* critical factors (advantage of applying utilitarian lens on foresight & scenario development)

Dilemmas:

- Turning foresights into action: Who holds the foresight process (and can be held accountable)?
- How to 'build an enabling environment' for foresights processes?
- How to maintain long-term focus on the future of urban food systems (usually driven by projects). Short term urgencies keep reappearing and tend to dominate agendas at the different levels.
- How to establish a functional flow and good interactions between the qualitative and quantitative components (timelines, reflection moments etc.)?



Thank you for your attention

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DFS project: <https://www.wur.nl/en/research-results/research-institutes/centre-for-development-innovation/show-cdi/improving-dhakas-food-system.htm>

Foresight videos:

<https://www.youtube.com/watch?v=uO2Jv5nYG3I&t=6s>

<https://www.youtube.com/watch?v=m8JCsgsnpzY>





Group discussion (max 35 mins)

How can we enhance foresight capacities through cross-country learning?

In break-out groups, discuss the following questions:

1. What are the 3 biggest issues your country is facing in terms of food systems transformation?
2. How you think could foresight add value in bringing about food systems transformation?
3. What key questions should underpin our cross-country learning?
4. What ideas do you have about how to engage across countries?

On Mural:

- Use sticky-notes to capture your thoughts
- Put this under the relevant headings, supported by F4F team members
- Don't discuss too long on single issues but rather brainstorm together!

Brainstorming: Learning questions for cross country learning

	What are the 2 biggest issues your country is facing in terms of food systems transformation?	How do you think foresight add value in bringing about food systems transformation?	What key questions would leaders in our community be asking? (What is it you would like to learn from other countries?)	What ideas do you have about how to engage across countries?
Group 1	■ ■	■	■	■
Group 2	■ ■	■ ■	—	■
Group 3	■ ■	■ ■	■ ■	■ ■
Group 4	■ ■	■ ■	■	■



Thank you!



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