Foresight for Food

Virtual Foresight Masterclass for Cross-Country Learning

18 April 2023




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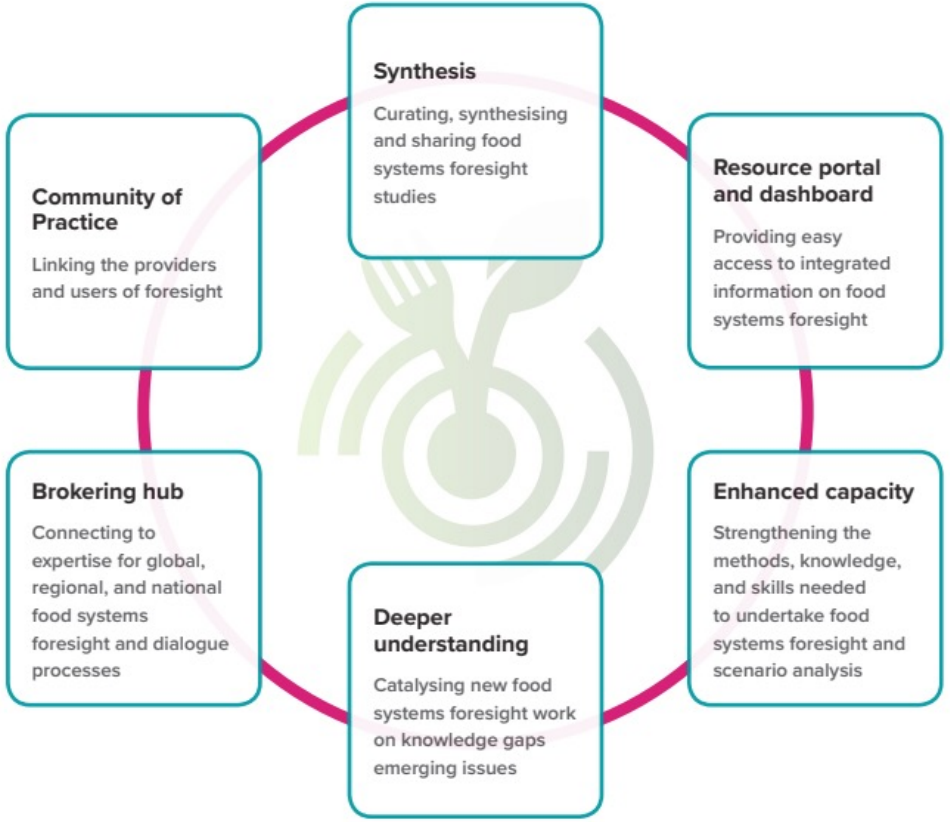
International Collaborative Initiative

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



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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

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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

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The Foresight for Food Systems Transformation (FoSTr) Programme

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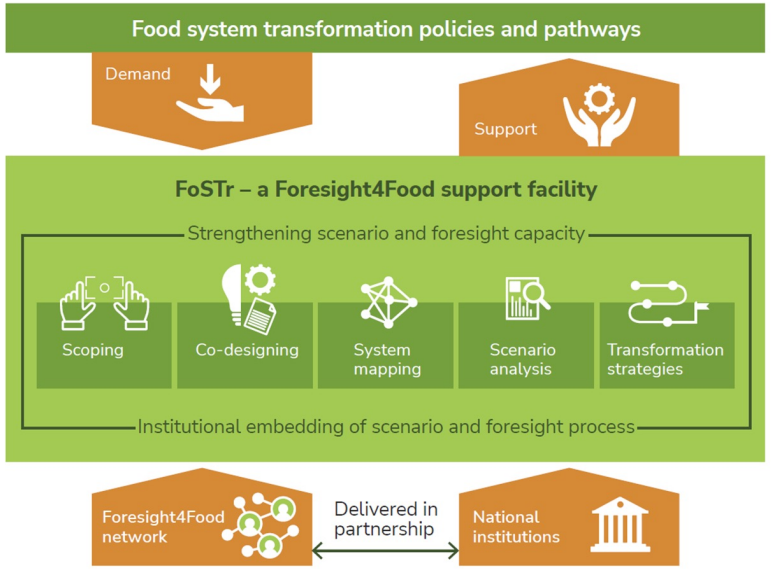
- A three-year scenario & foresight programme (2022-2025) to help transform food systems in five countries across the globe: Jordan, Bangladesh, Uganda, Kenya and Niger.

- Funded by the Netherlands, delivered through IFAD and implemented by Foresight4Food, University of Oxford, Wageningen University and in-country research partners.



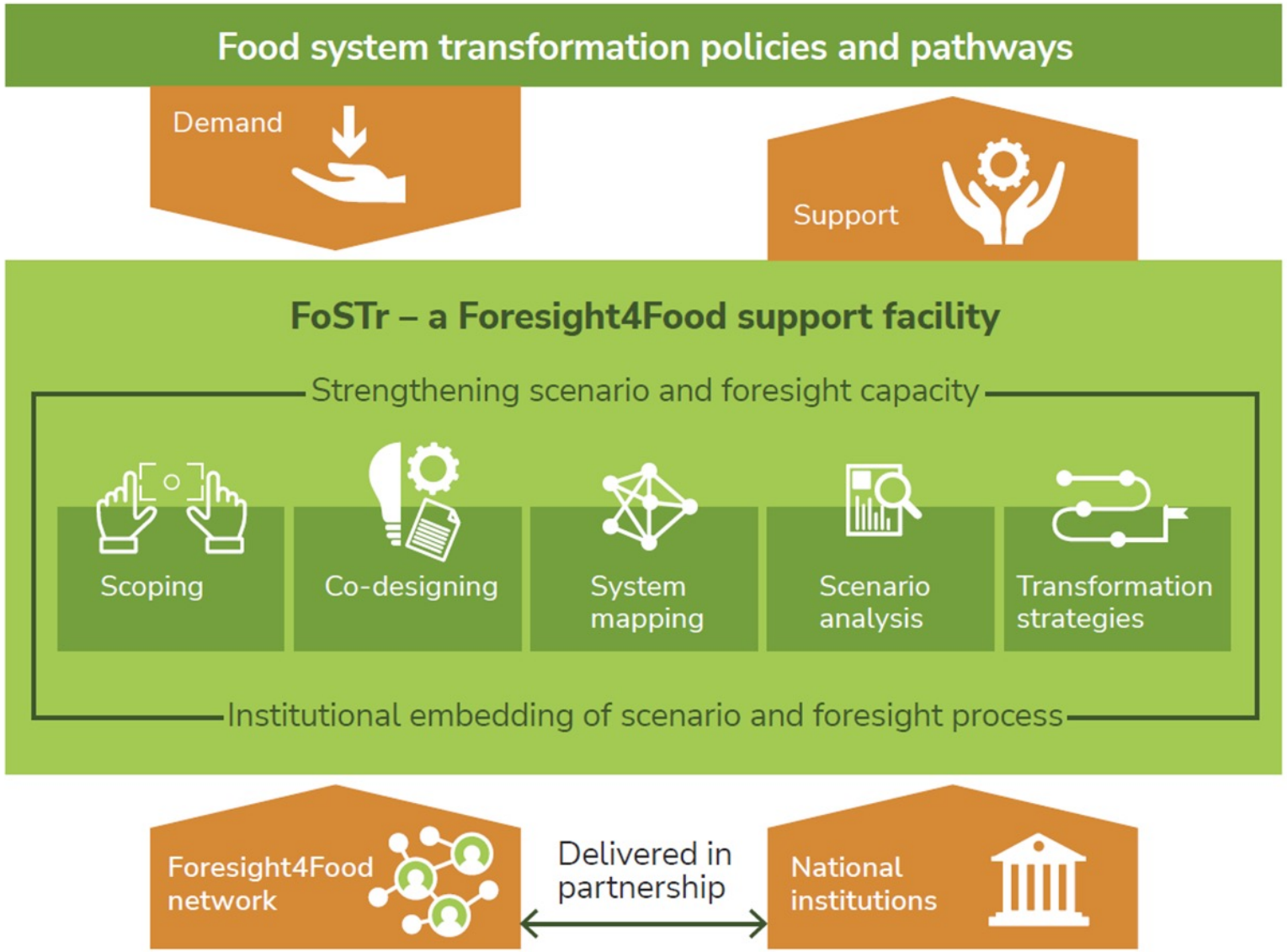
Ministry of Foreign Affairs of the Netherlands

IFAD
Investing in rural people

UNIVERSITY OF OXFORD

WAGENINGEN
UNIVERSITY & RESEARCH

FoSTr: a national foresight support facility



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Participatory foresight processes...

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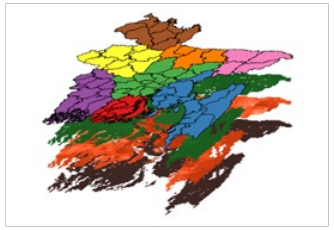
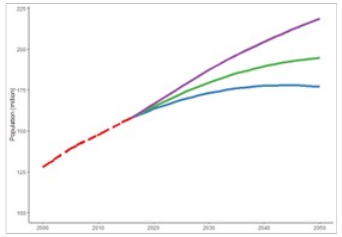
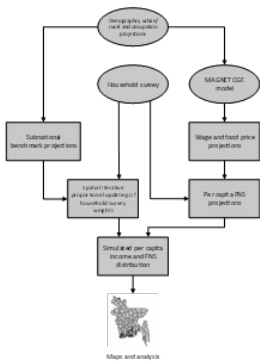
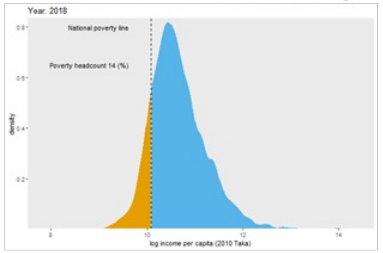
… informed by quantitative modelling

Inputs	Tools	Output	Analysis
National data	Global macro-economic model with national detail	Land use, water use, ghg emissions	Trade-offs
Diets	Microsimulation model	Poverty, import dependence, diet affordability	
Scenarios			









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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)

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Kenya (Exploratory visit & workshop, March 2023)

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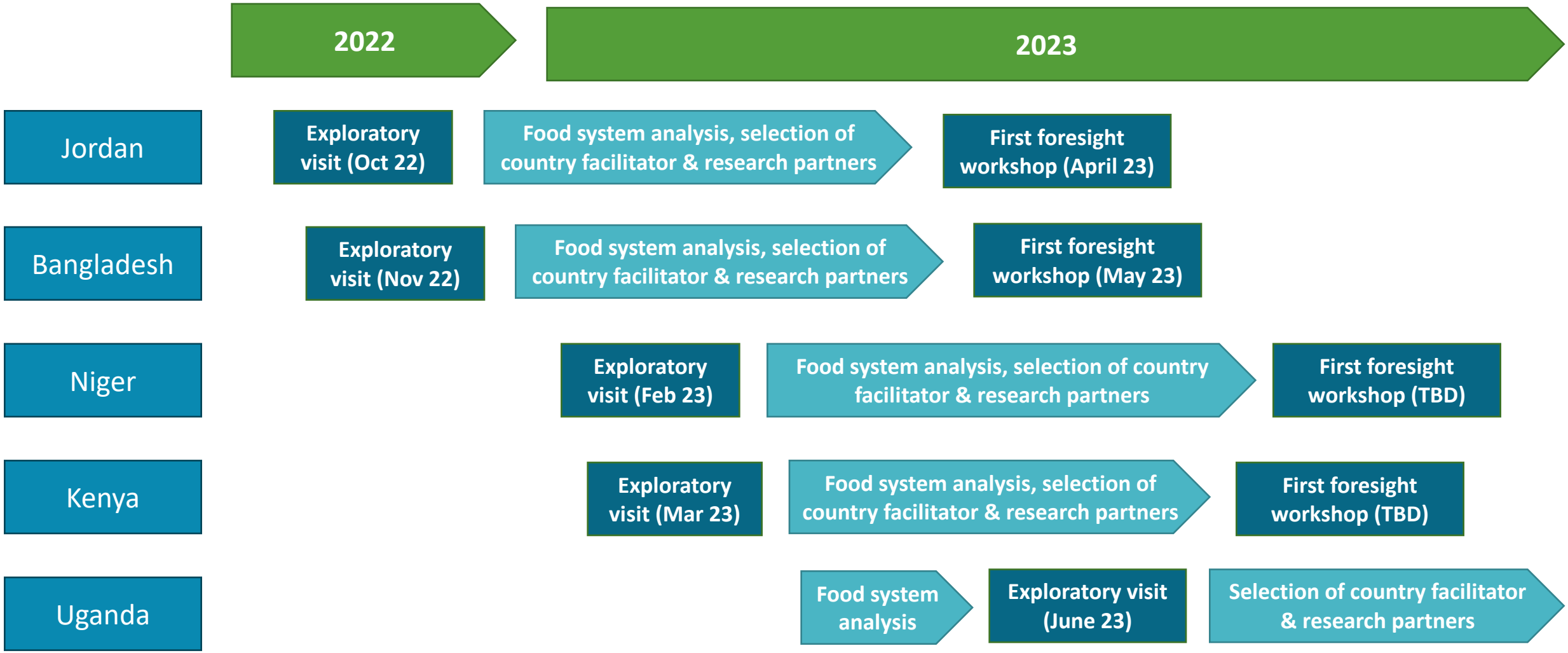
Timeline per country



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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

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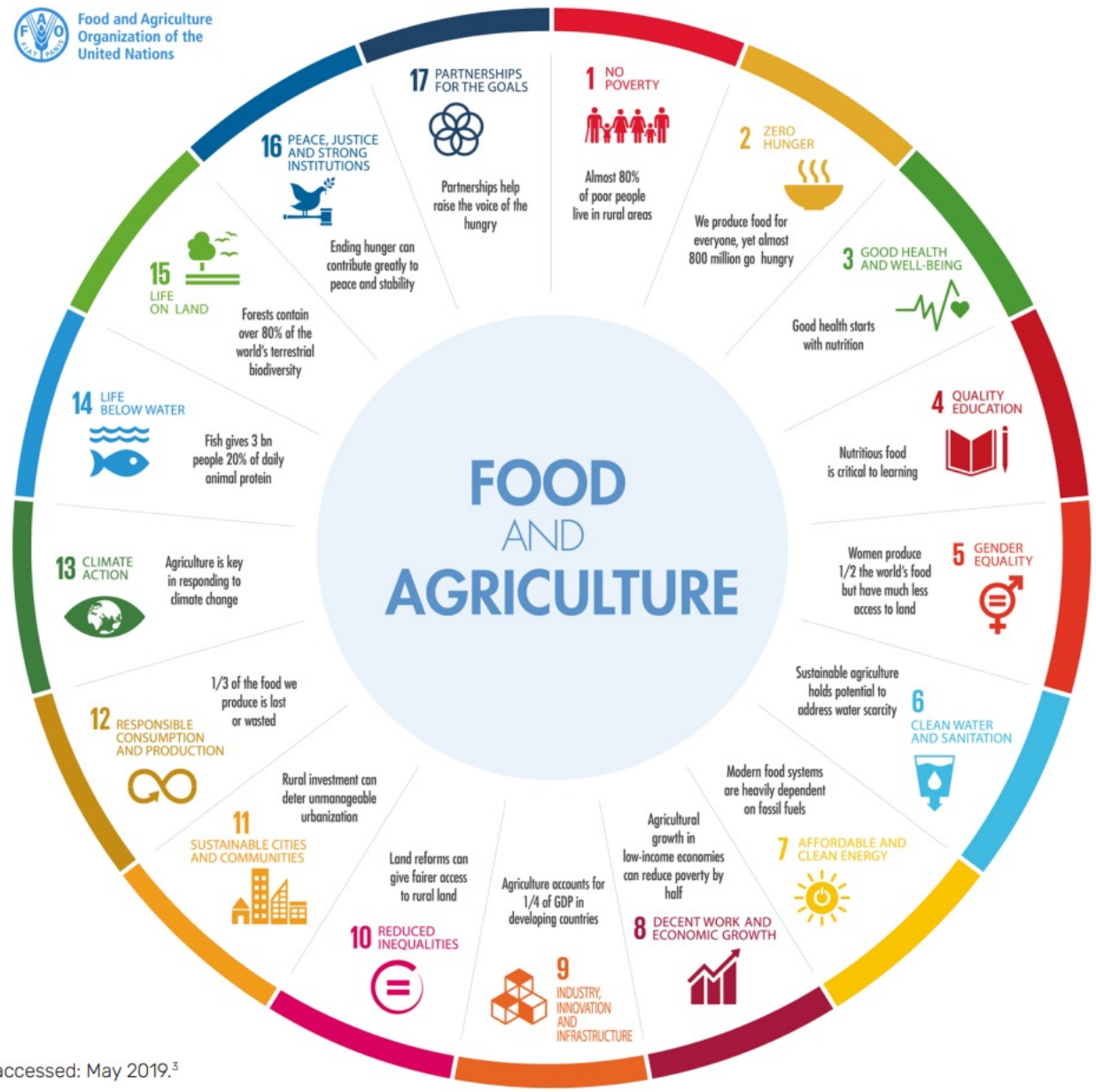

Source: FAO, n.d. Date accessed: May 2019.[3]

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

But how?

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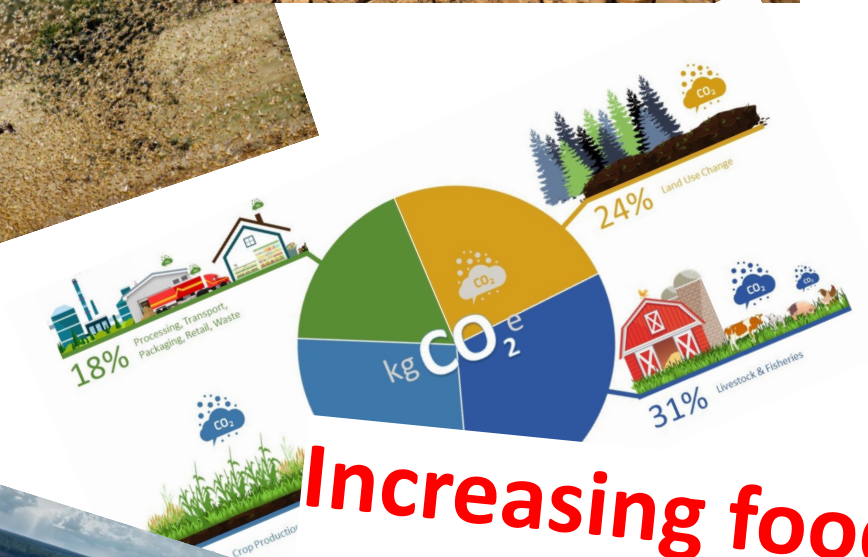
What are we seeing today?



Increasing food GHG emissions

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Current Context

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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

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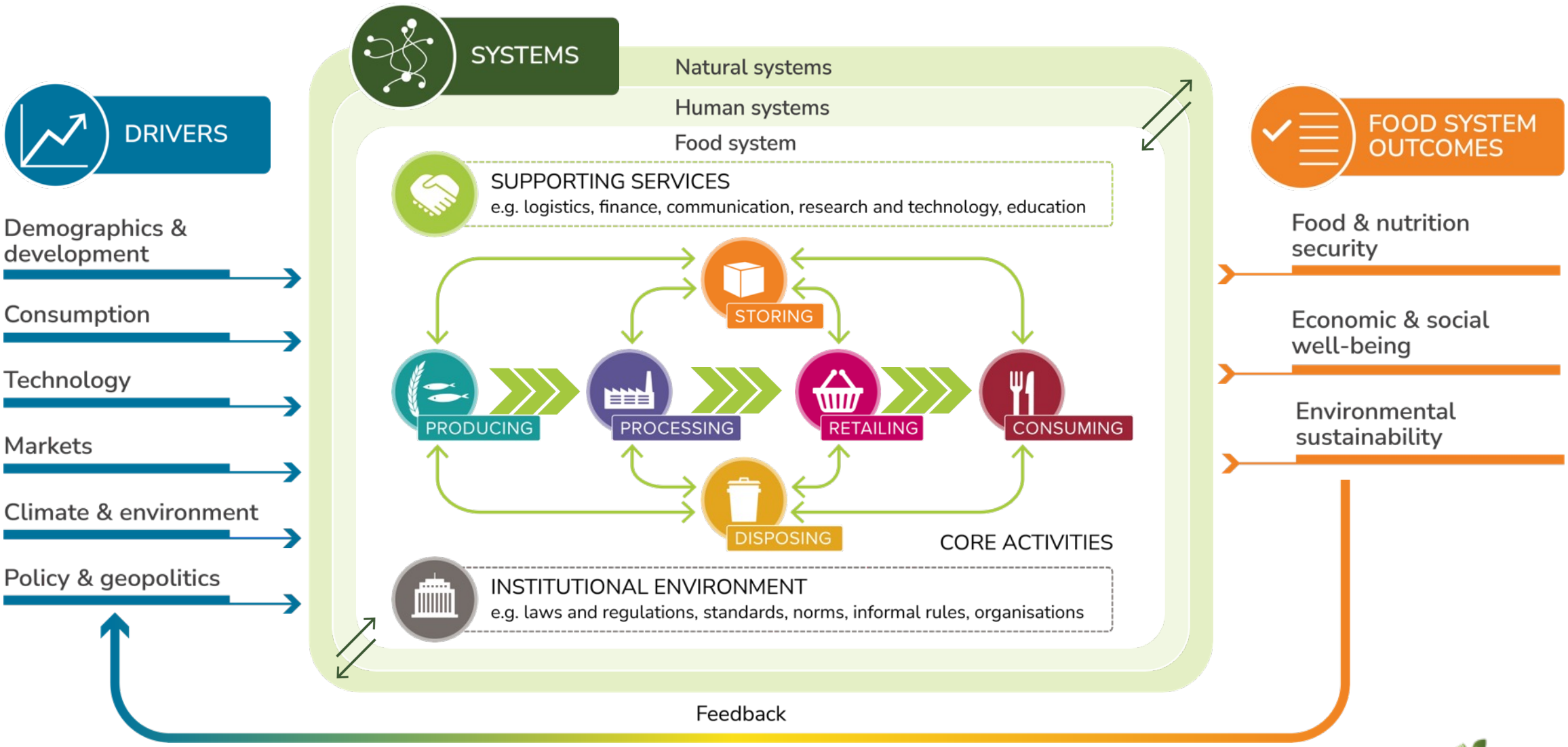
A Simplified Food Systems Model



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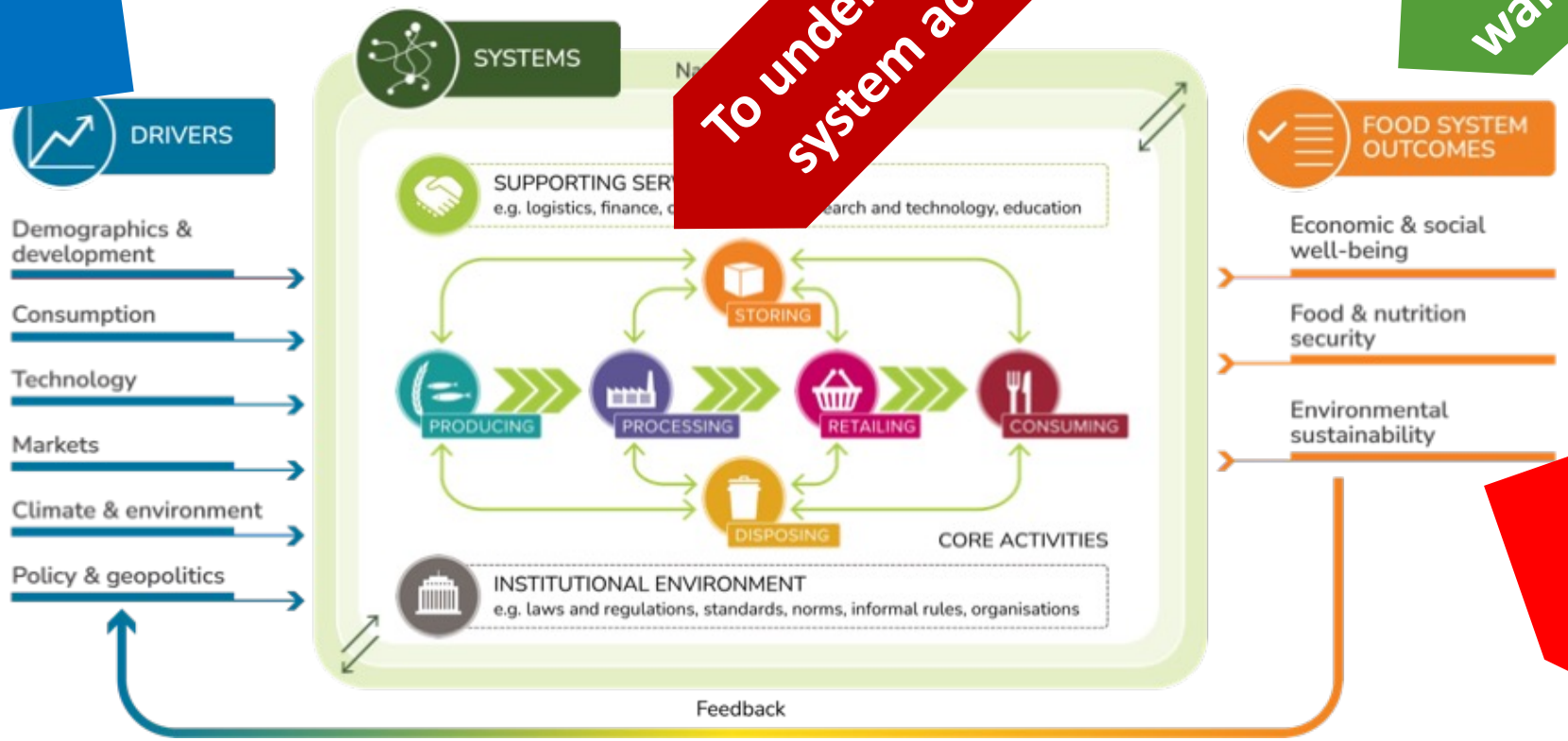
Why is A Food Systems Approach Important?

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

Food System Policies

Social, Economic, Political, Science & Technology and Biophysical Contexts

Signals Opportunities or Threats

Food System **Activities**

Food System **Outcomes**

Food Security Outcomes

Socioeconomic Outcomes

Environmental Outcomes

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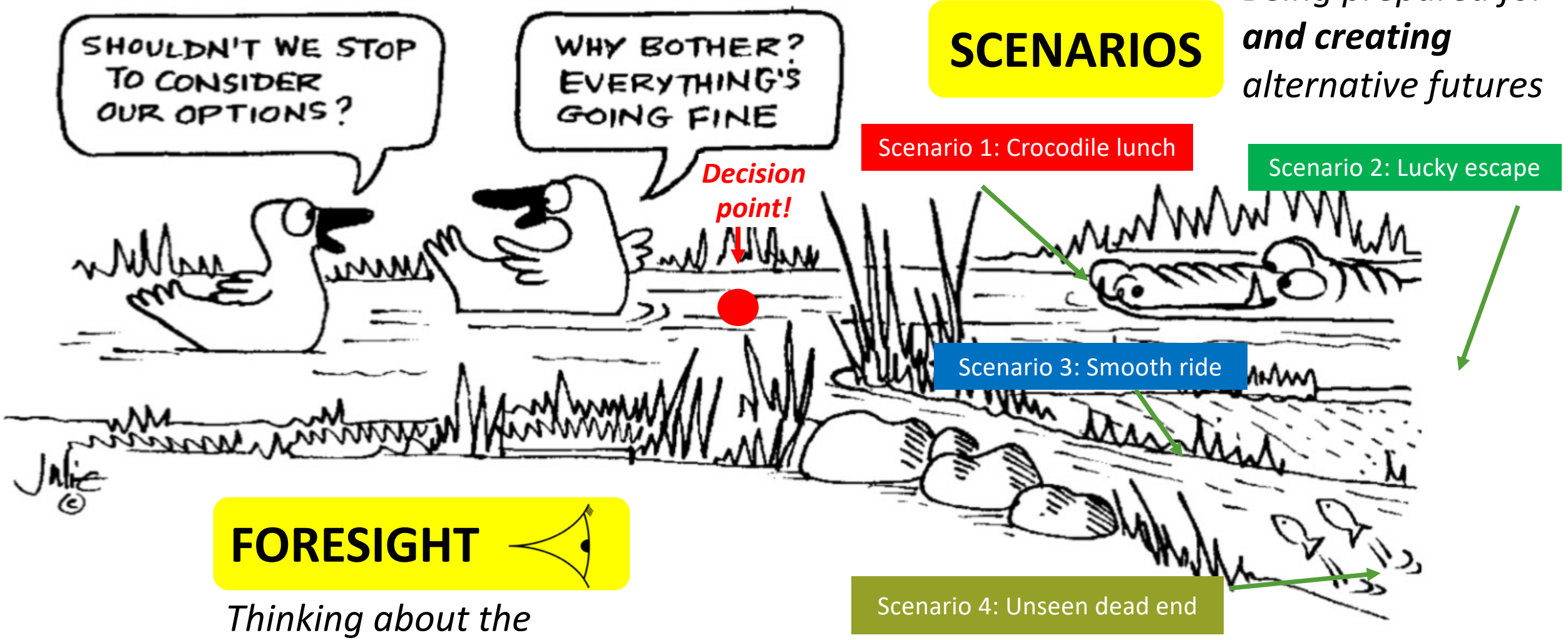
Foresight and Scenarios in Simple Terms

SCENARIOS

*Being prepared for **and creating** alternative futures*



FORESIGHT

Thinking about the future to improve decision making today

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Risks and Opportunities

Systemic Risks

Transformational Opportunities

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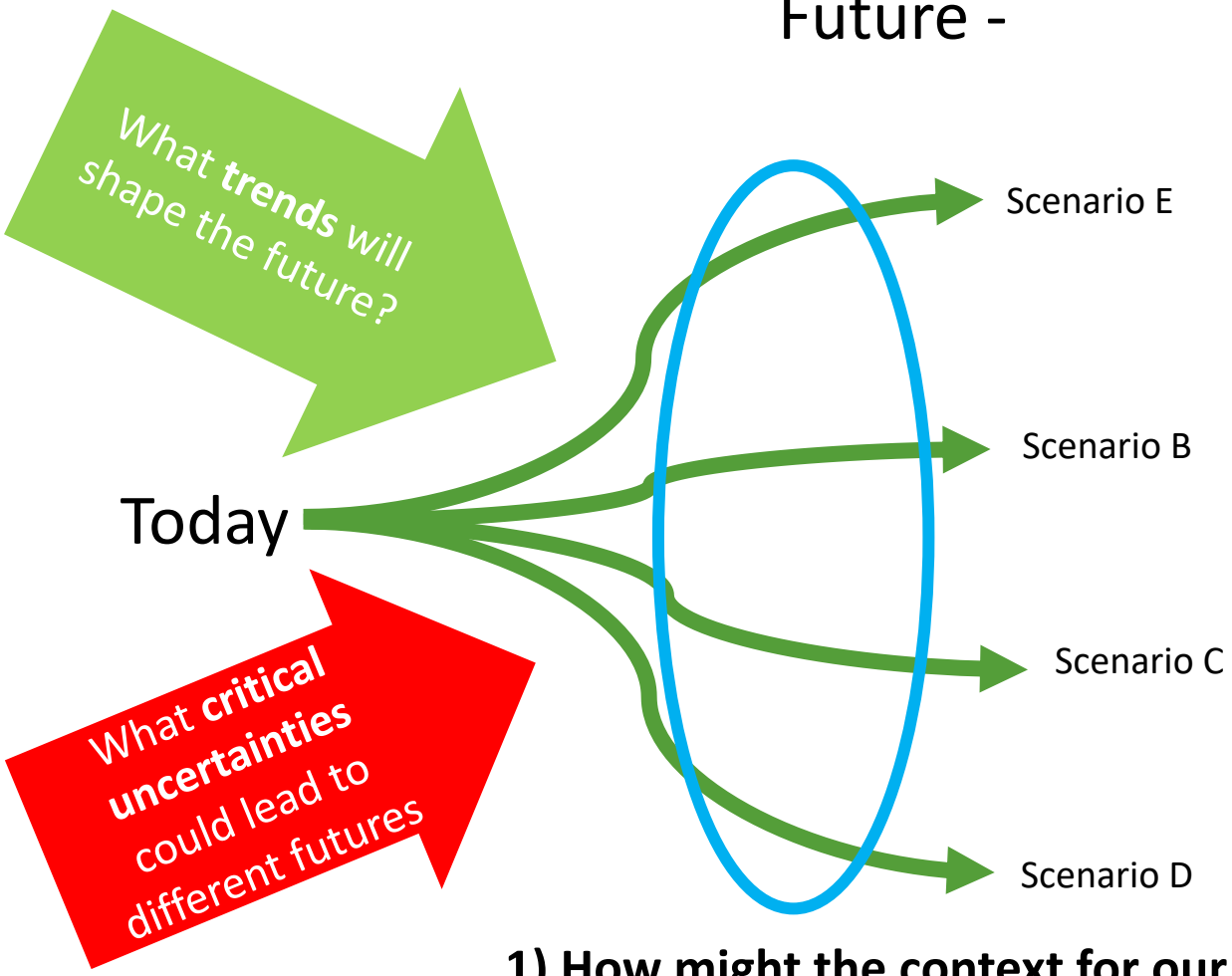
Foresight: Key Questions



Assumptions about what will shape the future

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

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?

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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!

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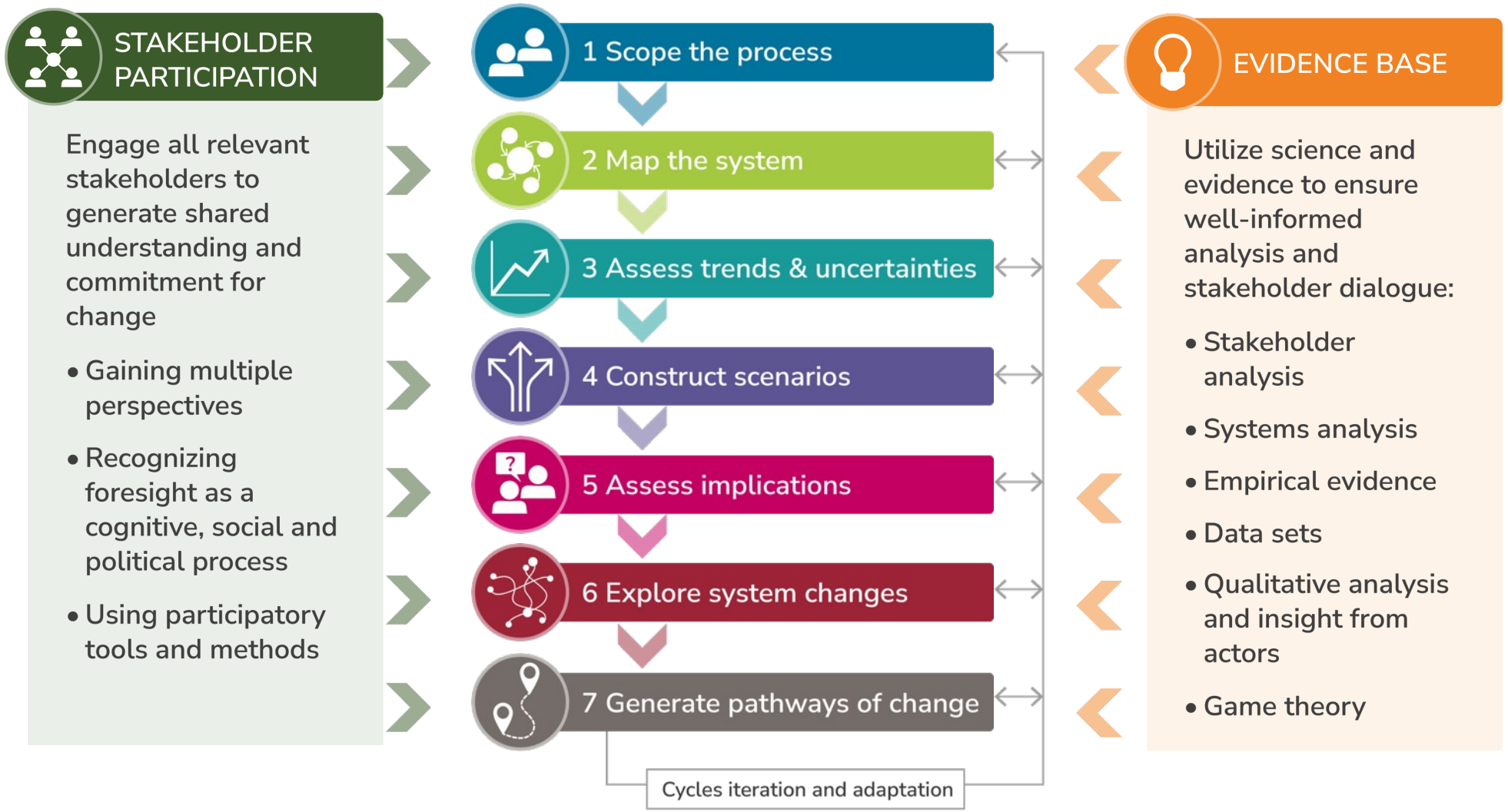
Foresight4Food Guiding Framework



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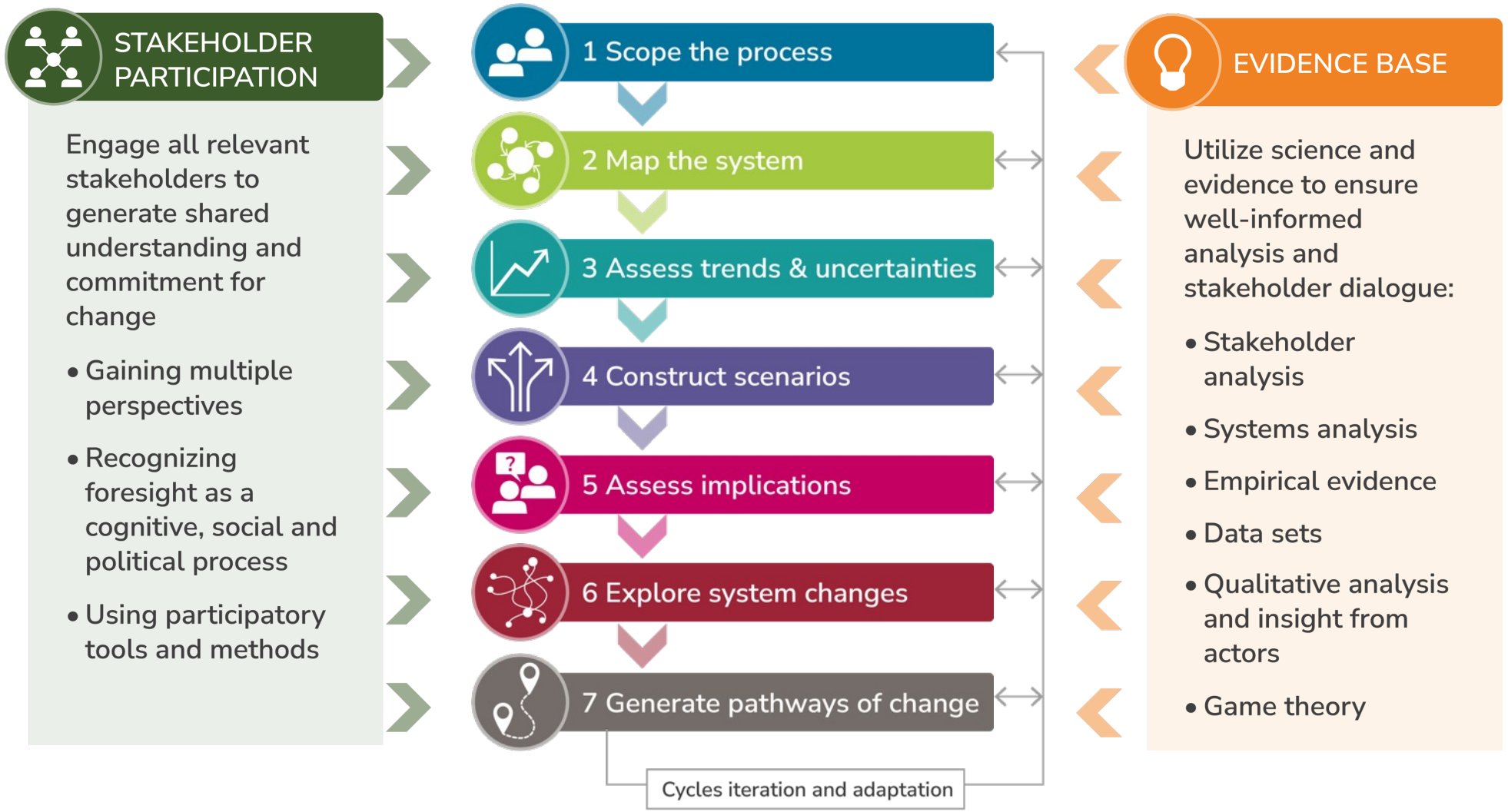
Foresight4Food Guiding Framework



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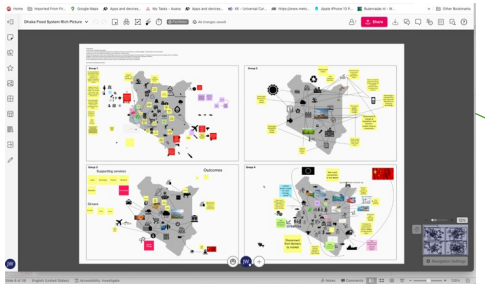
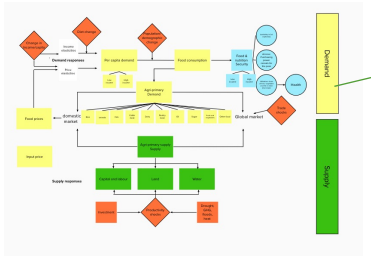
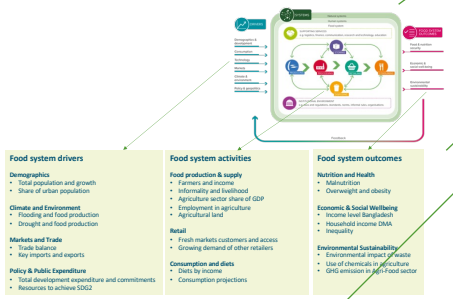
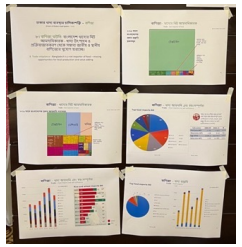
Tools in the Process









1 Scope the process

2 Map the system

3 Assess trends & uncertainties

4 Construct scenarios

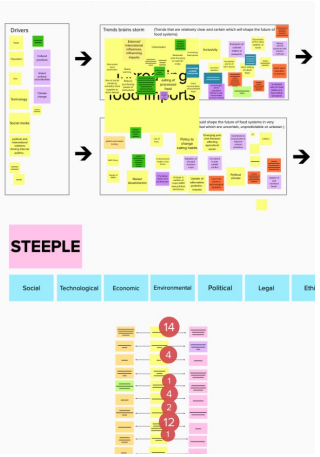
5 Assess implications

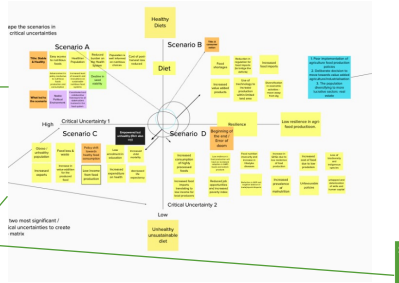
6 Explore system changes

7 Generate pathways of change

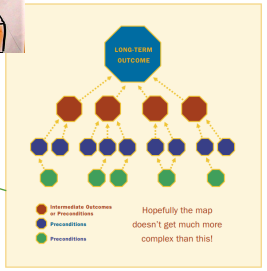
Cycles iteration and adaptation

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					



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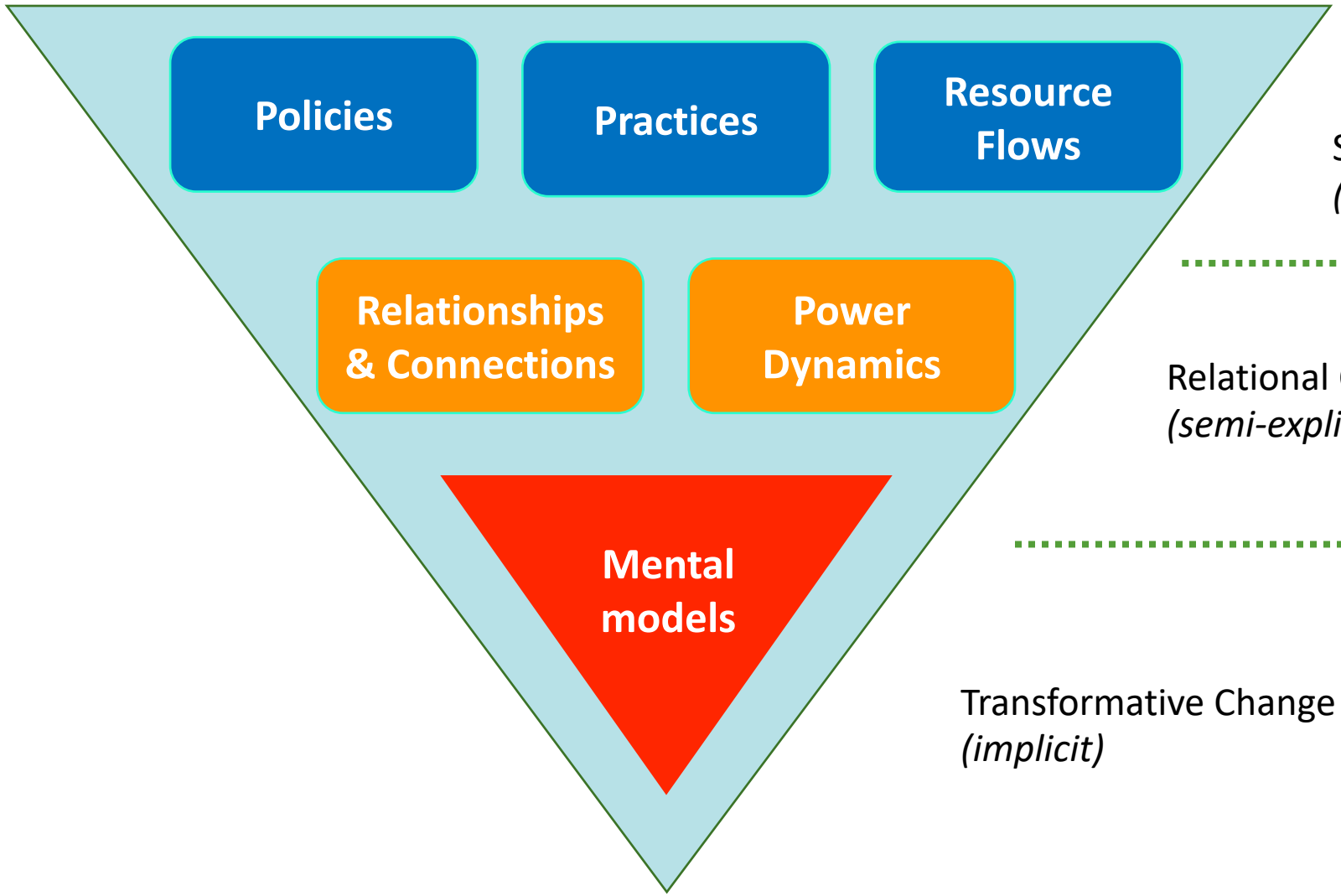
Conditions for Systems Change



Structural Change
(explicit)

Relational Change
(semi-explicit)

Transformative Change
(implicit)

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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

WAGENINGEN UNIVERSITY & RESEARCH

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 a 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.

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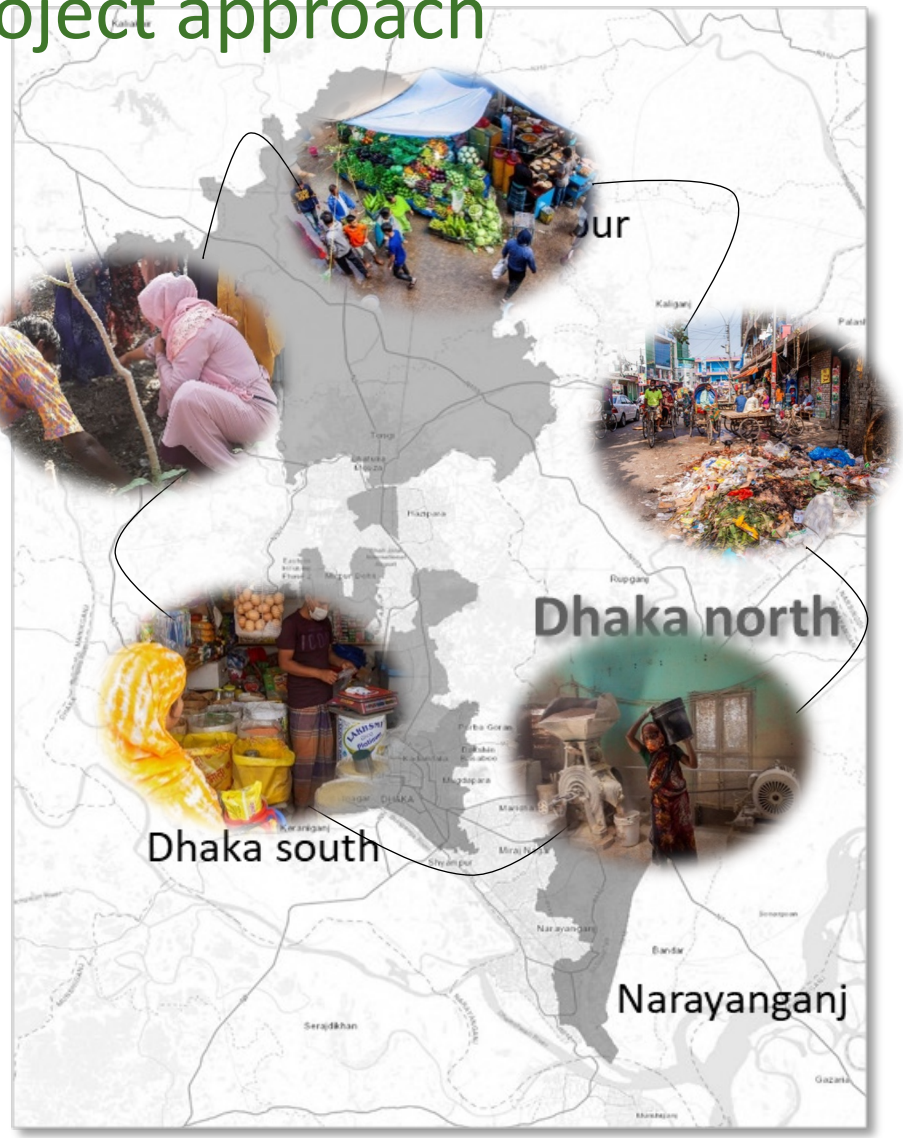
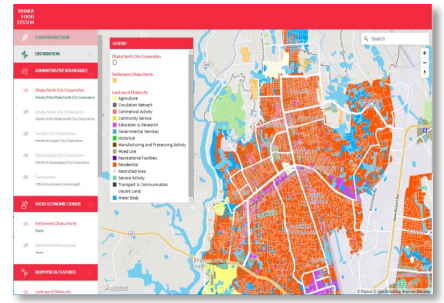
Dhaka food system Project approach

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

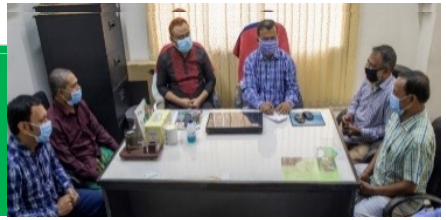


Long-term impact: enable institutions for stronger food governance *(multi actor, multisector)* and support adaptive planning capacity *(multilevel)*



Reducing nutrition and food insecurity | Upgrading fresh markets | Reducing food loss and waste | Improving food safety and consumer awareness | Strengthening food value chains

Strengthening food system planning and governance



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.

dailyobserver

Wednesday, 6 April, 2022, 5:11 PM

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, Narayangaj, 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.

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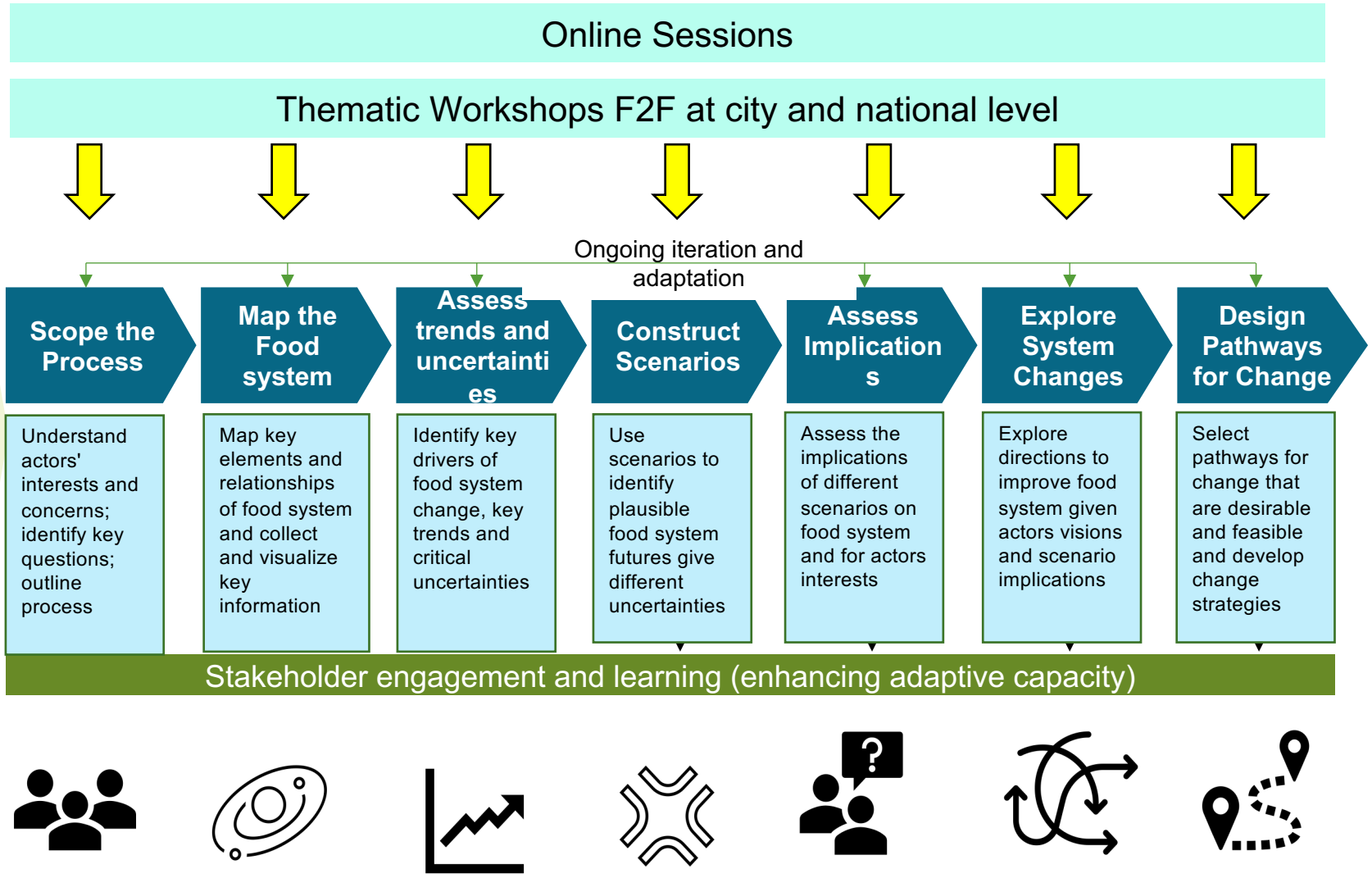
Process overview

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.

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

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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 (famers, 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.

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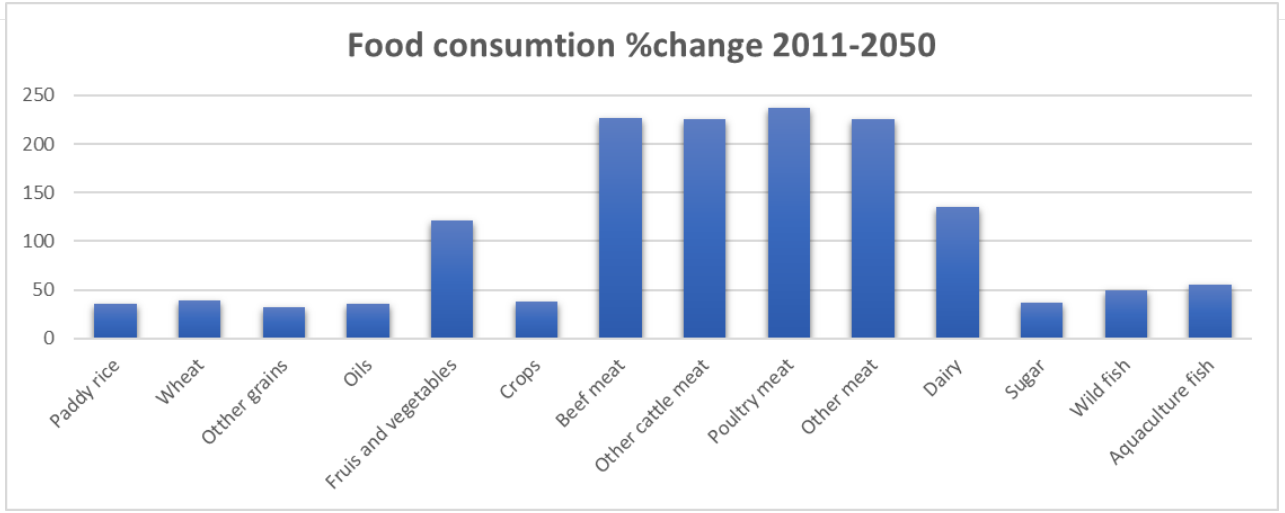
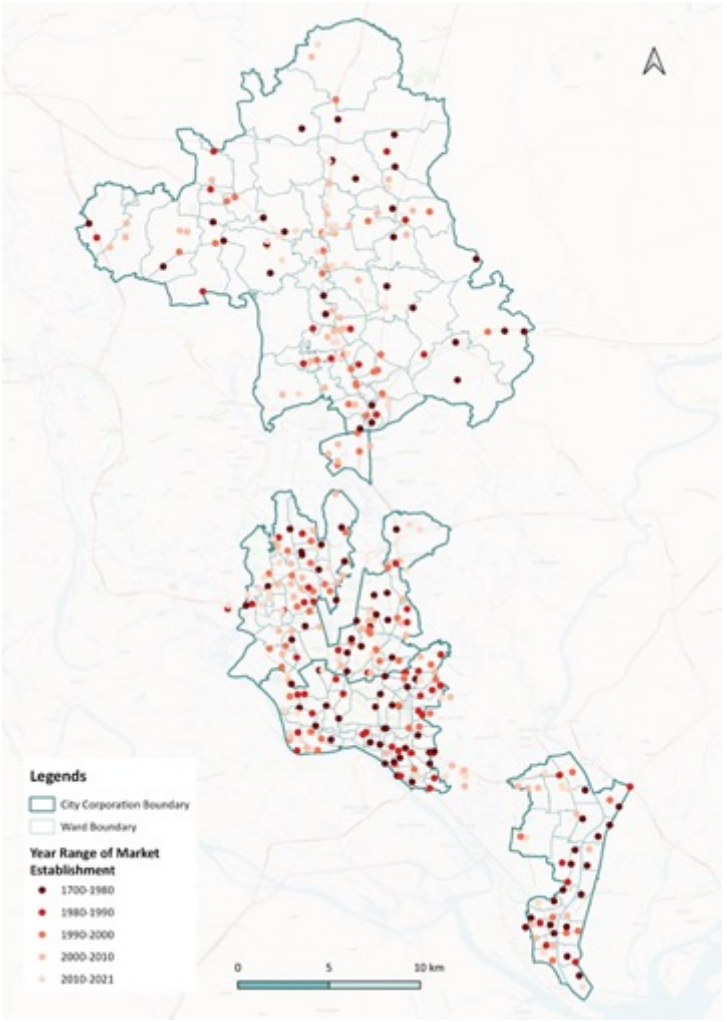
Insights from Modelling and GIS

Map the Food system

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



Distribution of wet markets in Dhaka



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

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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

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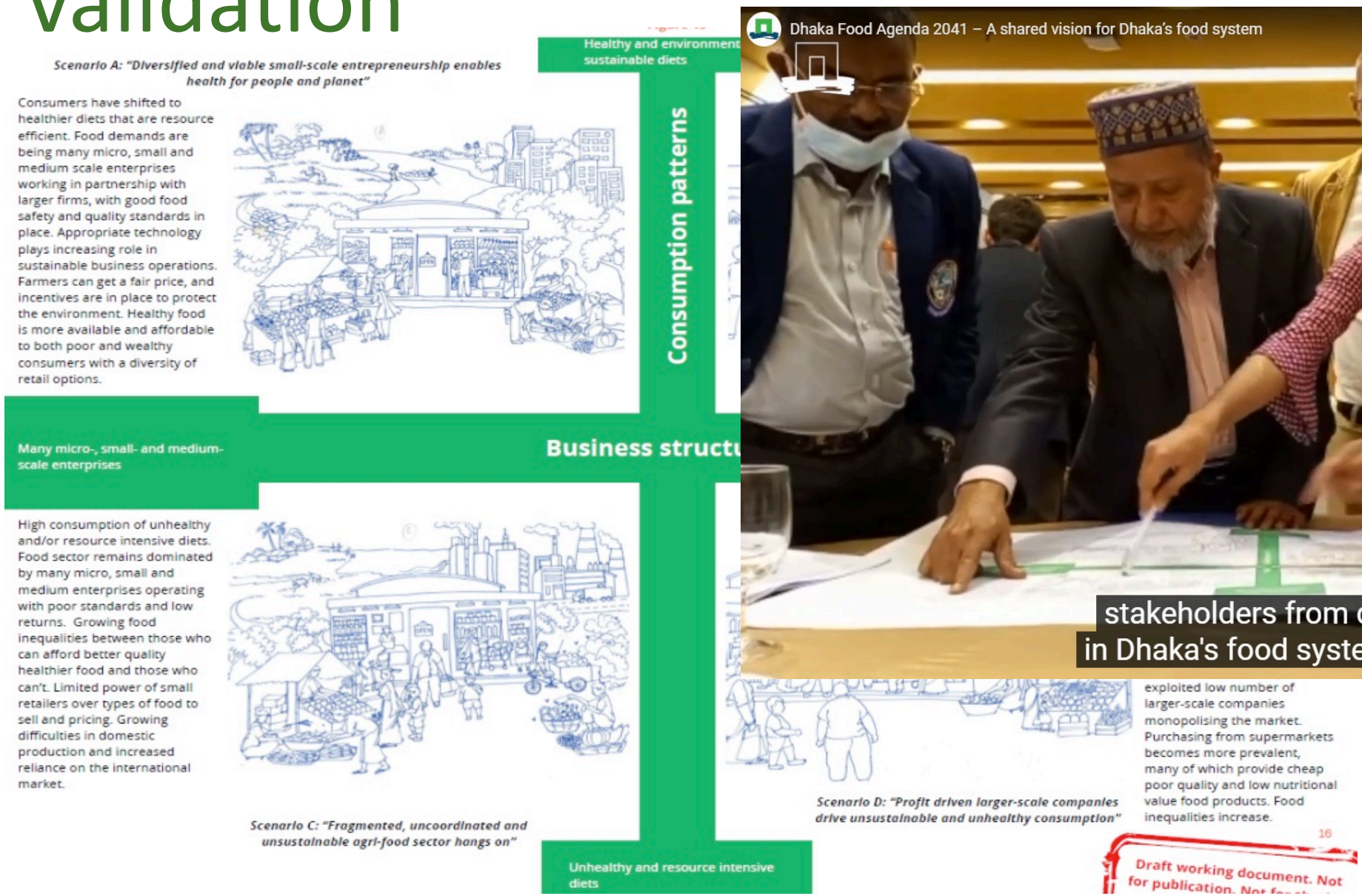
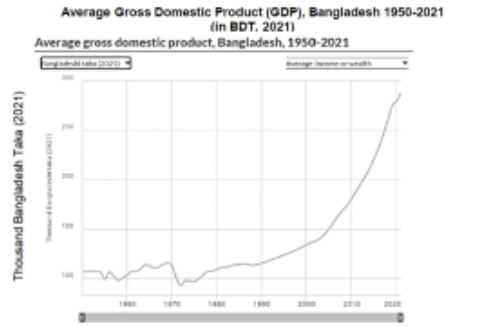
Scenarios crafted for further dialogue and validation

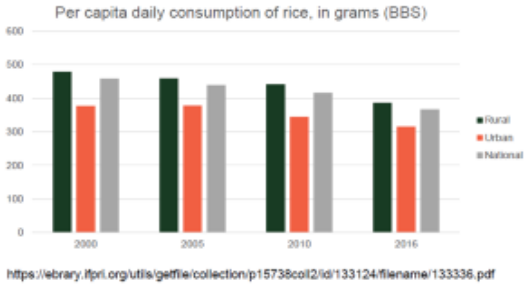


… Consolidation in the Dhaka Food Agenda 2041

Why a Food Agenda for Dhaka: Current Trends

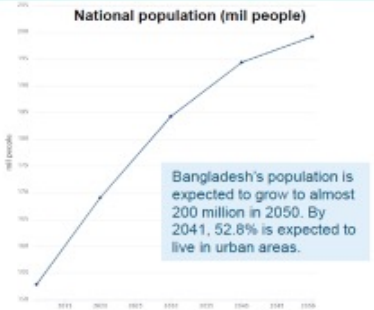


Income has been steadily growing…



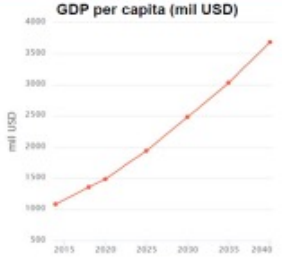
… this is projected to continue to increase by 3.5 times to 2050 in Dhaka, associated with rising inequalities and **changes in diets** and food preferences.

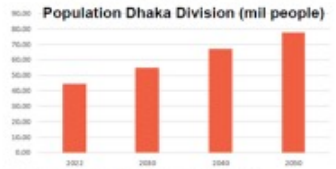
Why a Food Agenda for Dhaka: Future Projections

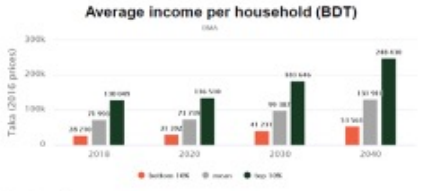


Bangladesh's population is expected to grow to almost 200 million in 2050. By 2041, 52.8% is expected to live in urban areas.

Dhaka Division has the highest annual population growth rate in the country at 1.74% (1.22% national). The region is expected to reach a population of about 67 millions in 2040.







Source: Population and Housing Census 2022

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 1.4. 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.

Critical Uncertainties

Climate resilience	Is food going to be reliably produced, accessible and affordable despite climate change?
Trade	Will Bangladesh rely positively on an open or will need to respond to geopolitical setback of globalization?
Business structure	Which businesses will be selling food? A diversified set of retailers or will this be concentrated in a few hands?
Equity	Is the expected growth in incomes translated in shared prosperity or inequalities?
Consumption patters	Is consumption going to be healthy and sustainable, may be or may be not?
Food prices	Can we expect price stability and affordability?

… And translated into an actionable agenda

Key directions for change

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***

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] NPAN2, NFNSP 2020
[3] NFNSP 2020, NPAN2, Food Safety Act 2013, Packaged Food Labelling Act 2017
[4] NFNSP 2020
[5] 2nd National Plan of Action for Nutrition - NPAN2 (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] NPAN2
[9] The Consumers' Right Protection Act 2009
[10] NFNSP 2020, NPAN2, 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]

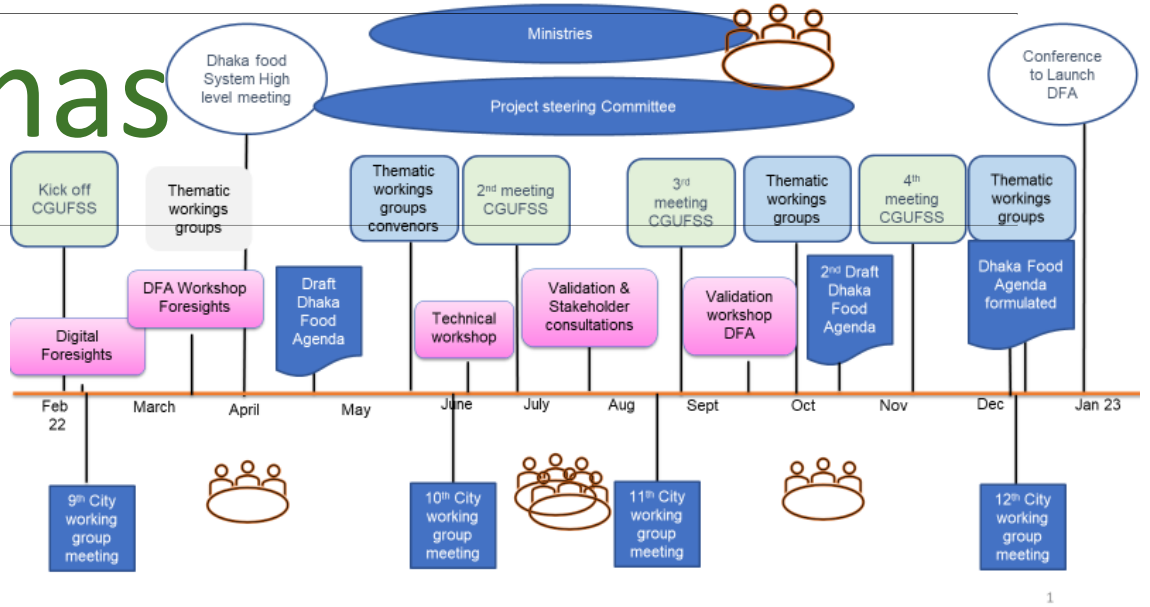
Leading actor: Ministry of Food (MoF)
Roles for specific actors, champions, networks:
- MoF/ BFSA: Raise awareness (esp. for children and youth to change their mindset) and enforce laws
- DAE/ DoF/ DLS (MoA, MoFL): Raise awareness and formulate policies
- MoEducation: Integrate nutrition and safe food 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

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!

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International Collaborative Initiative

Thank you!

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