



SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically



Second event

Framing, System Boundaries & Thematic Linkages



While you wait: go to menti.com and use code 3398 7128



SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically



Framing, System Boundaries and Thematic Linkages

NOW: Part I: Setting the stage (John Ingram)

- ***Recap of Key Features (Food Systems Essentials)***
- ***Introduction to concepts of system framing and the importance of system boundaries***

At 10:25 CET: Part II - Entering the inter-thematic space

- *A short expert panel discussion*

At 10:55 CET: Part III: Have your say

- *Break-out sessions*

At 11:40 CET: Part IV: Looking ahead

- ***The Food Systems Dashboard (Lawrence Haddad, GAIN)***
- *What's next?*



SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically



Mentimeter

What do you see and what are you focusing on?
(30 seconds)

→ Wordcloud

Go to menti.com and use code 3398 7128

Or scan the QR code





SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically



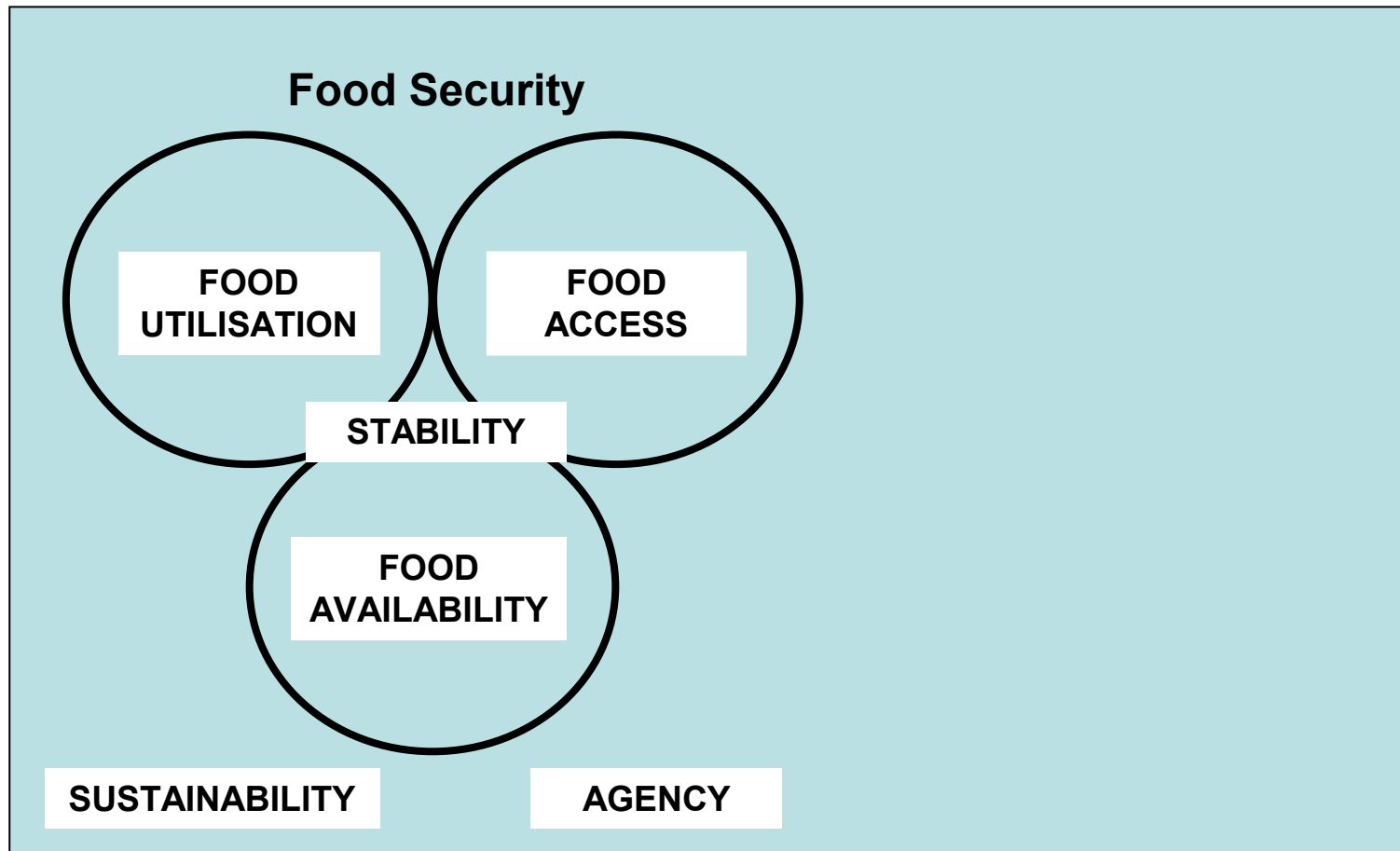
Part I – setting the stage

Food Systems Key Features

Dr John Ingram

JohnSIIngram@gmail.com

What do we want from Food Systems?





SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically



Mentimeter

- What else do we want from Food Systems?
(30 seconds)

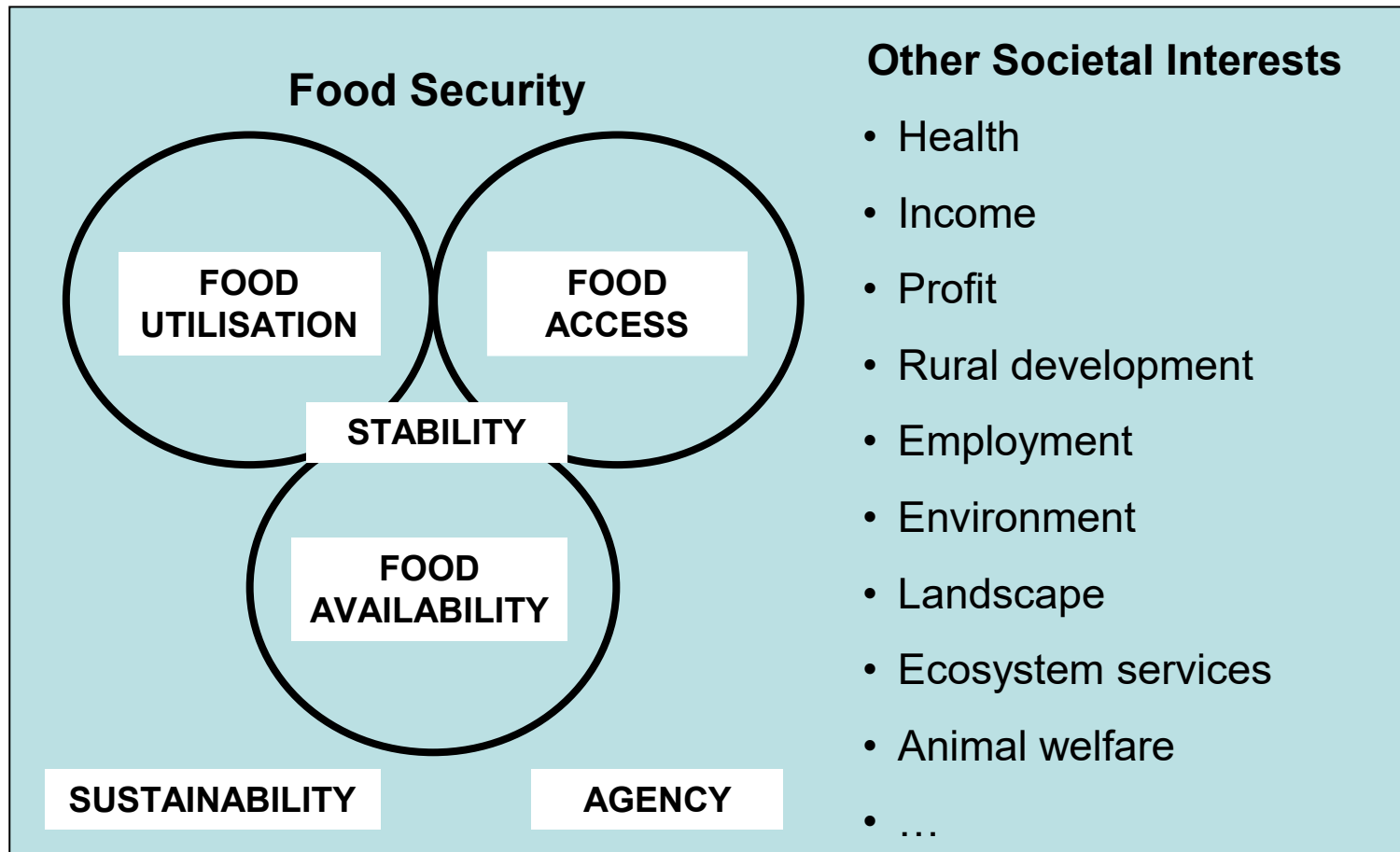
→ Wordcloud

Go to menti.com and use code 3398 7128

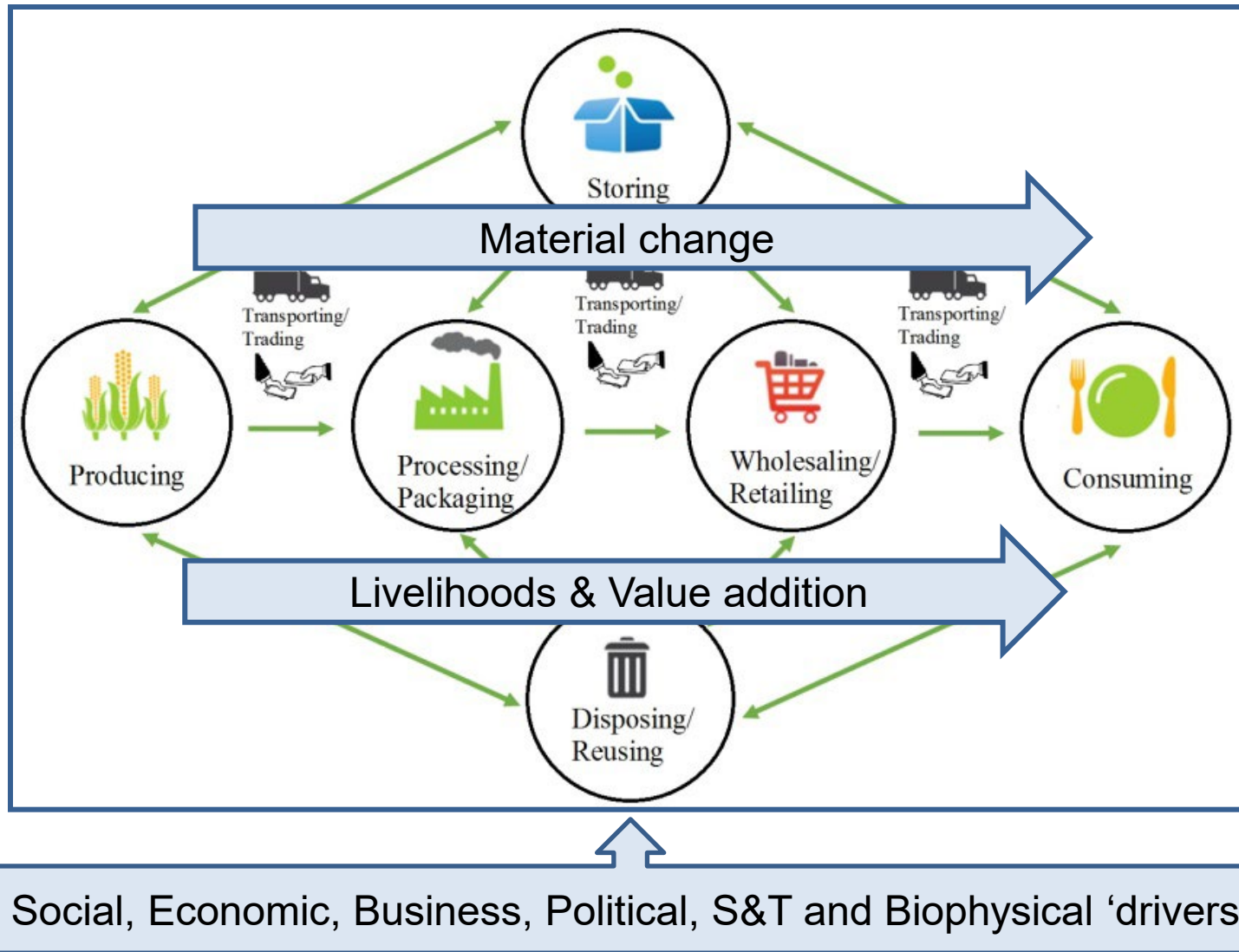
Or scan the QR code



What else do we want from Food Systems?

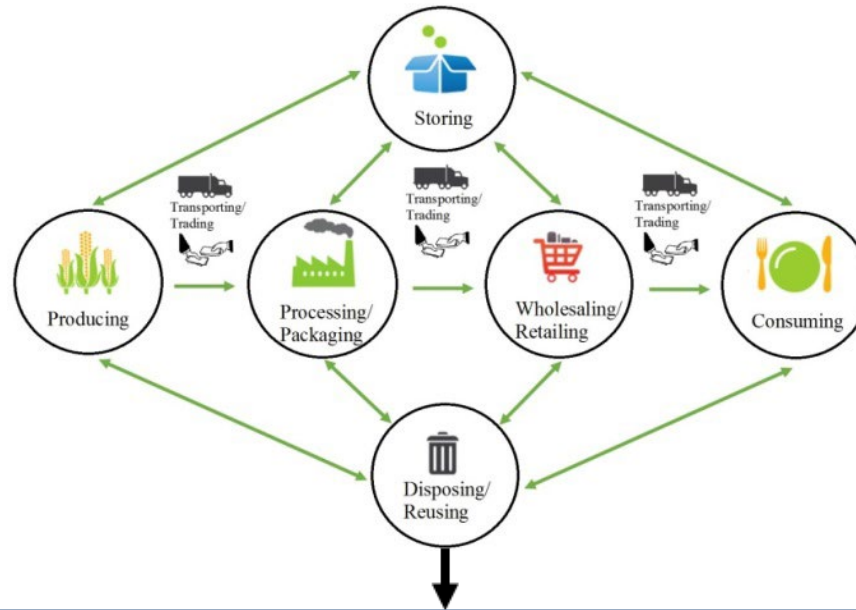


Food System *Actors, Activities and Drivers*



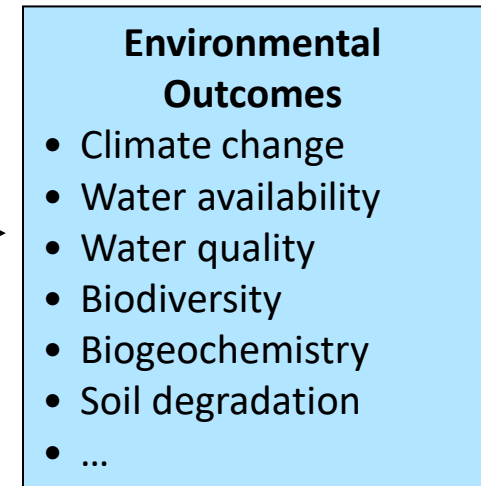
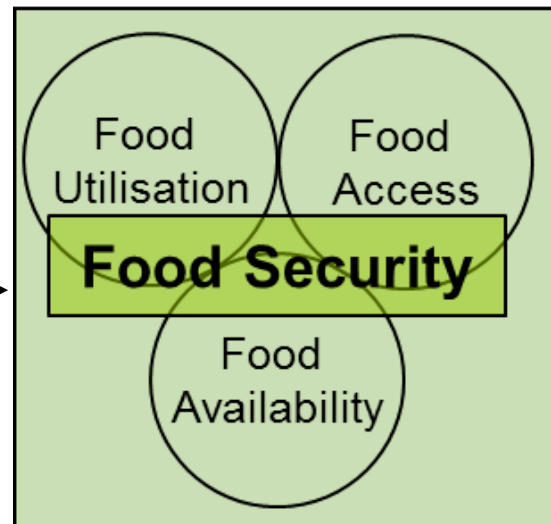
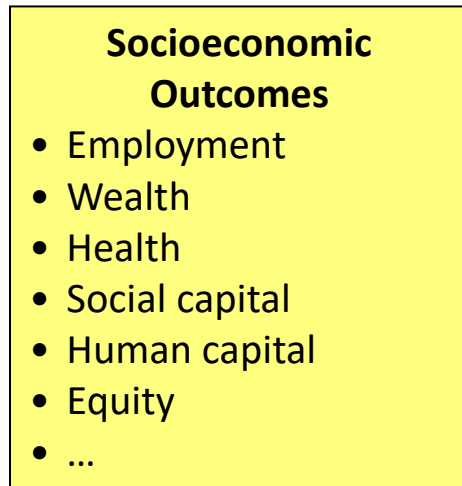
Food System 'Activities' and 'Outcomes'

Balancing the '*What We Do*' with the '*What We Want*' but the '*What We Get*'



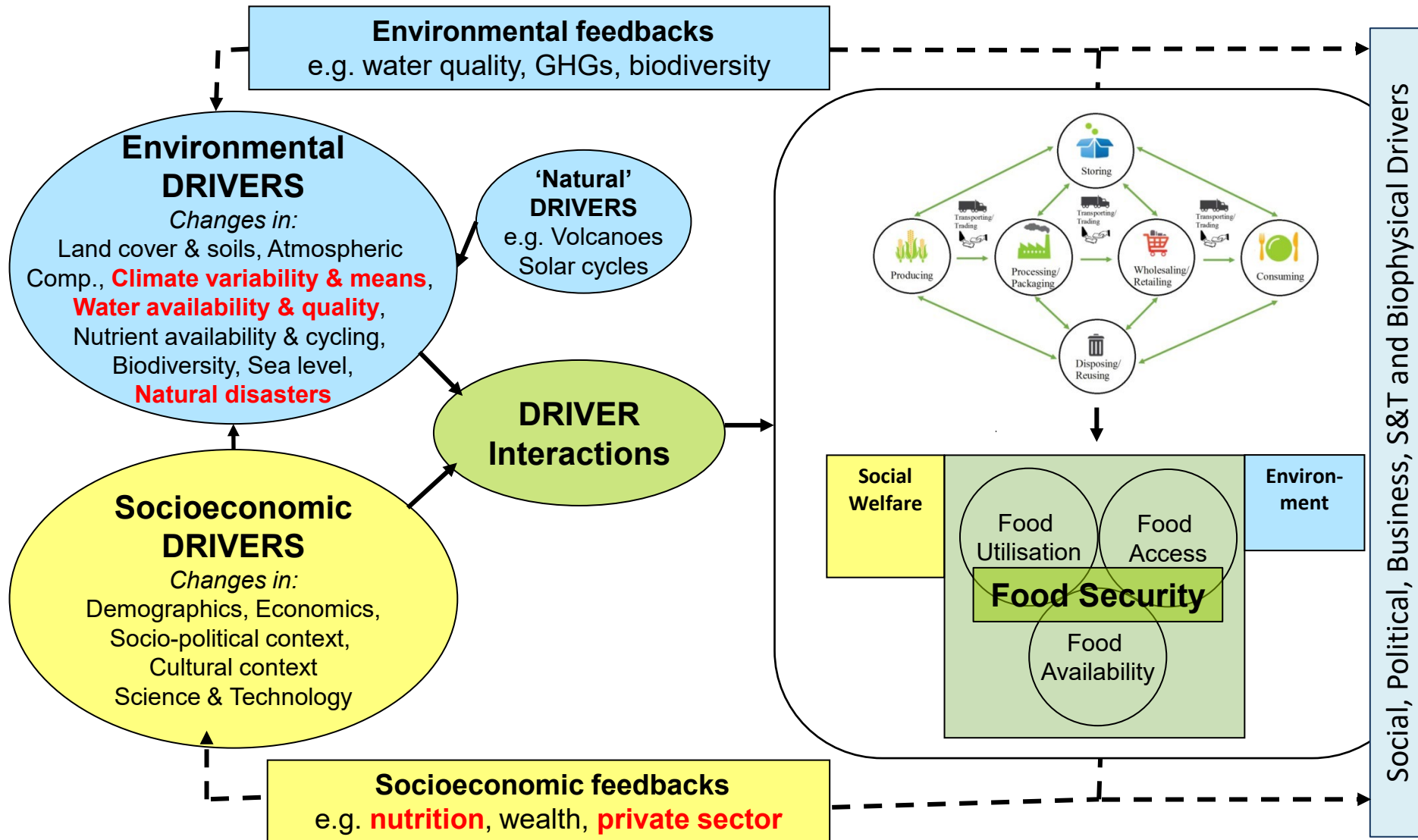
Trade-offs to
be aware of!

Synergies to
exploit!



Food System Dynamics

Drivers & Feedbacks; Tradeoffs & Synergies





SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically



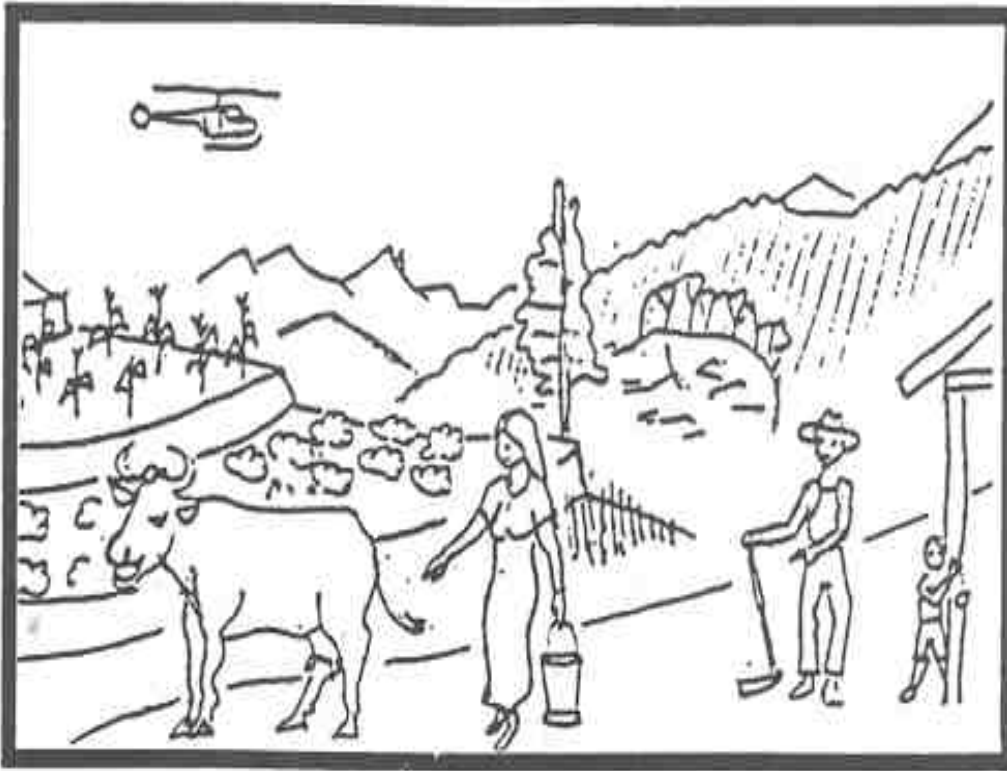
Part I – setting the stage

Framing and boundary setting

what's in and what's out?

Dr John Ingram

Framings



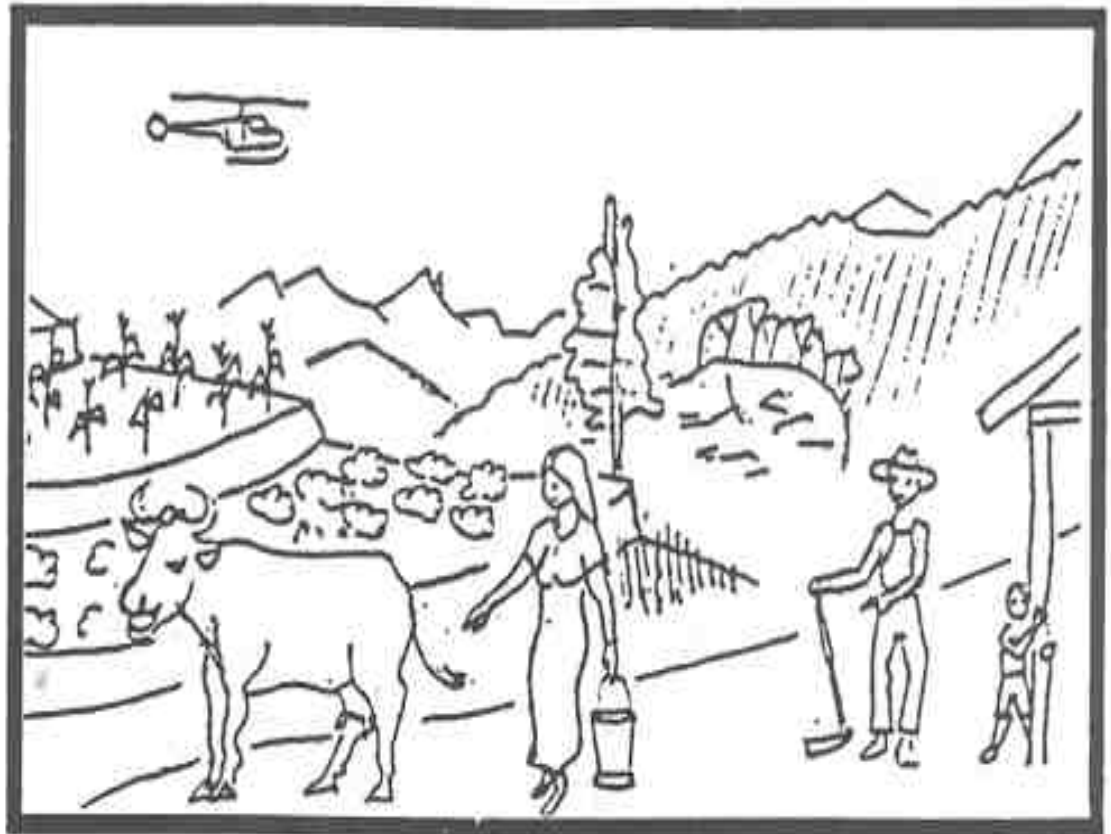
“Current Reality”

- What do you see?
- What are you thinking about when you see this picture?
- Why are you drawn to any specific aspect?
- What is your ‘frame’ of reference?

Mentimeter 2

- What do you see and what are you focusing on (30 seconds)?

=> Wordcloud





SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically

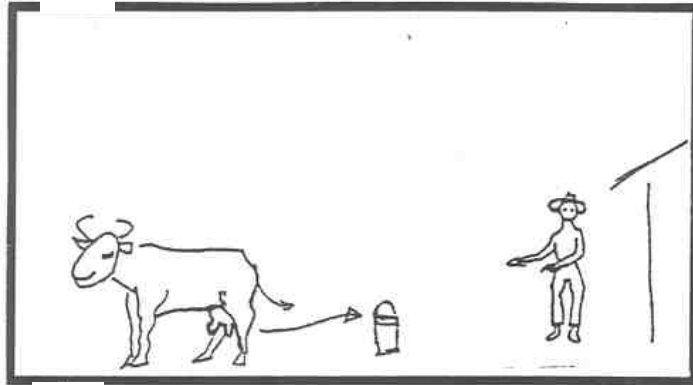


Go to menti.com and use code 3398 7128

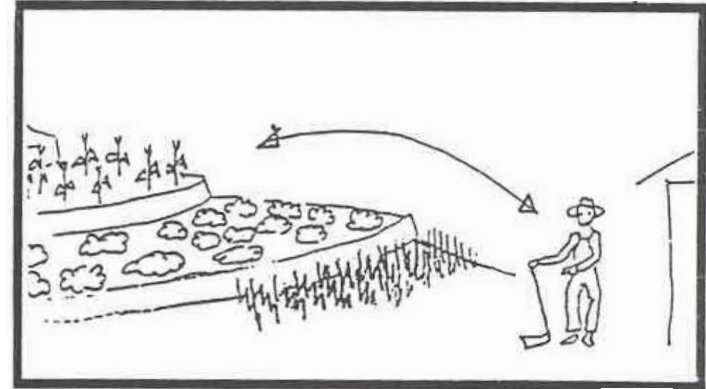
Or scan the QR code



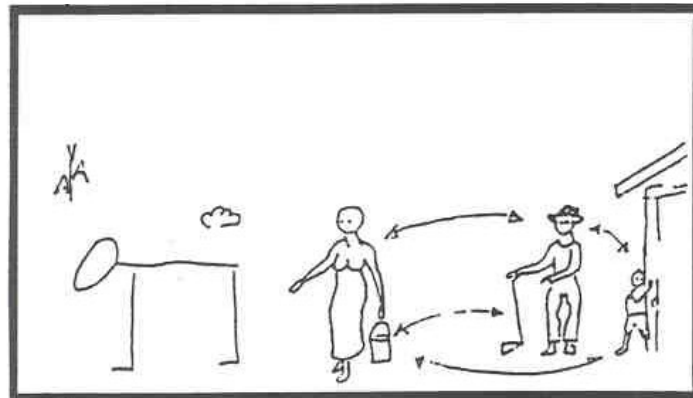
Framings: Who 'sees' what?



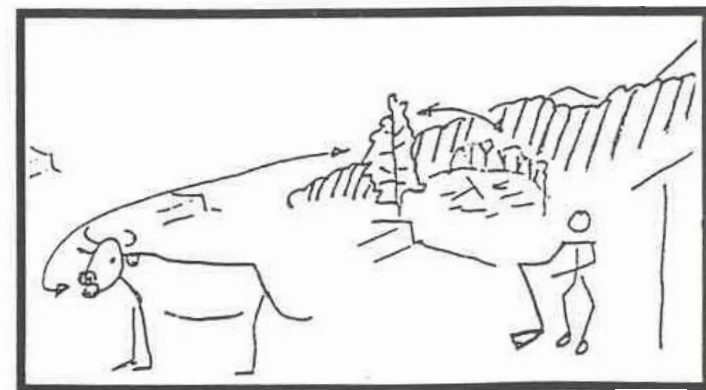
The view of a dairy specialist



The view of an agronomist

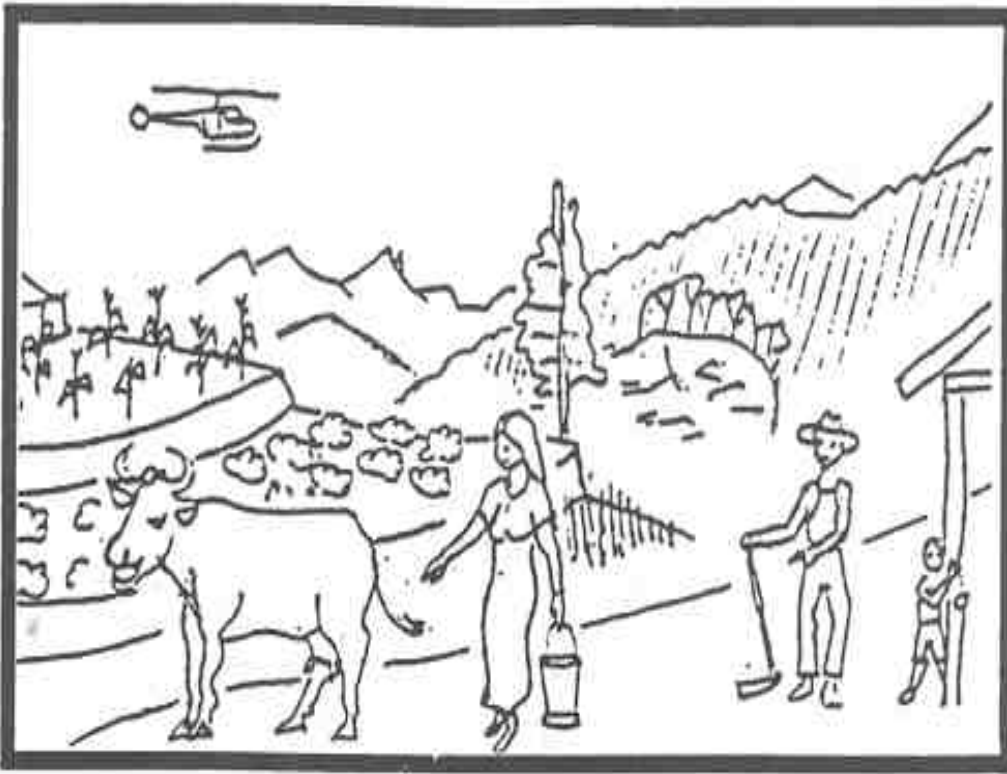


The view of a sociologist



The view of an ecologist

Framings



“Current Reality”

The whole picture

“A systems approach begins when you first see the world through the eyes of another.”

C.W. Churchman

Framings

When we 'frame' something, it allows us to focus on certain objects by bringing them to the foreground of our thinking, while reducing others to the background



We do this all the time in our thinking when we decide on what to focus on, or determine what something is, and isn't

Boundaries

- Physical and temporal boundaries (e.g. area, walls and duration)
- Conceptual boundaries (e.g. what is included/excluded)

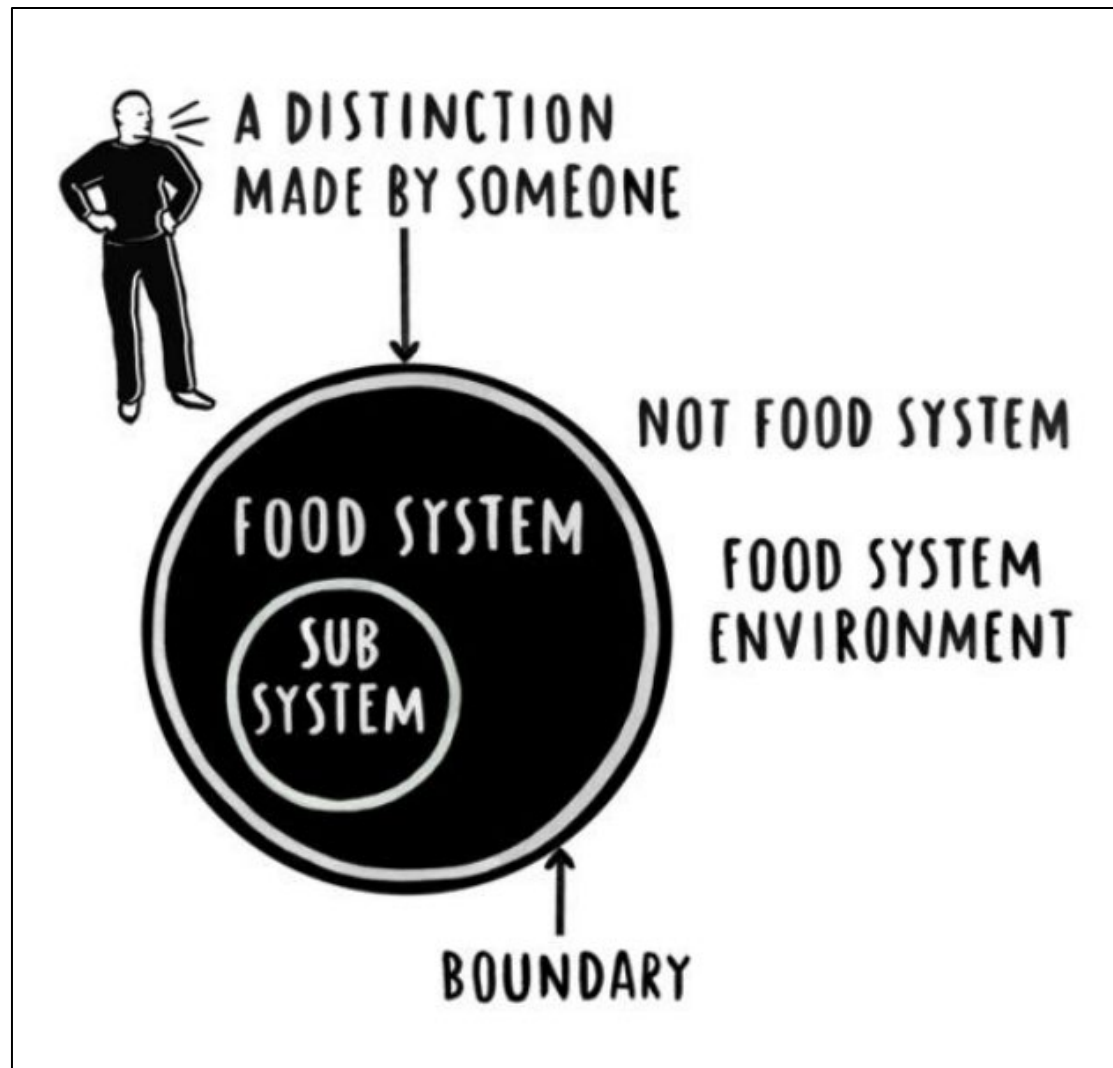
What kinds of boundaries can you think of for the project you are involved in?

How do these types of boundaries fit within the food system?

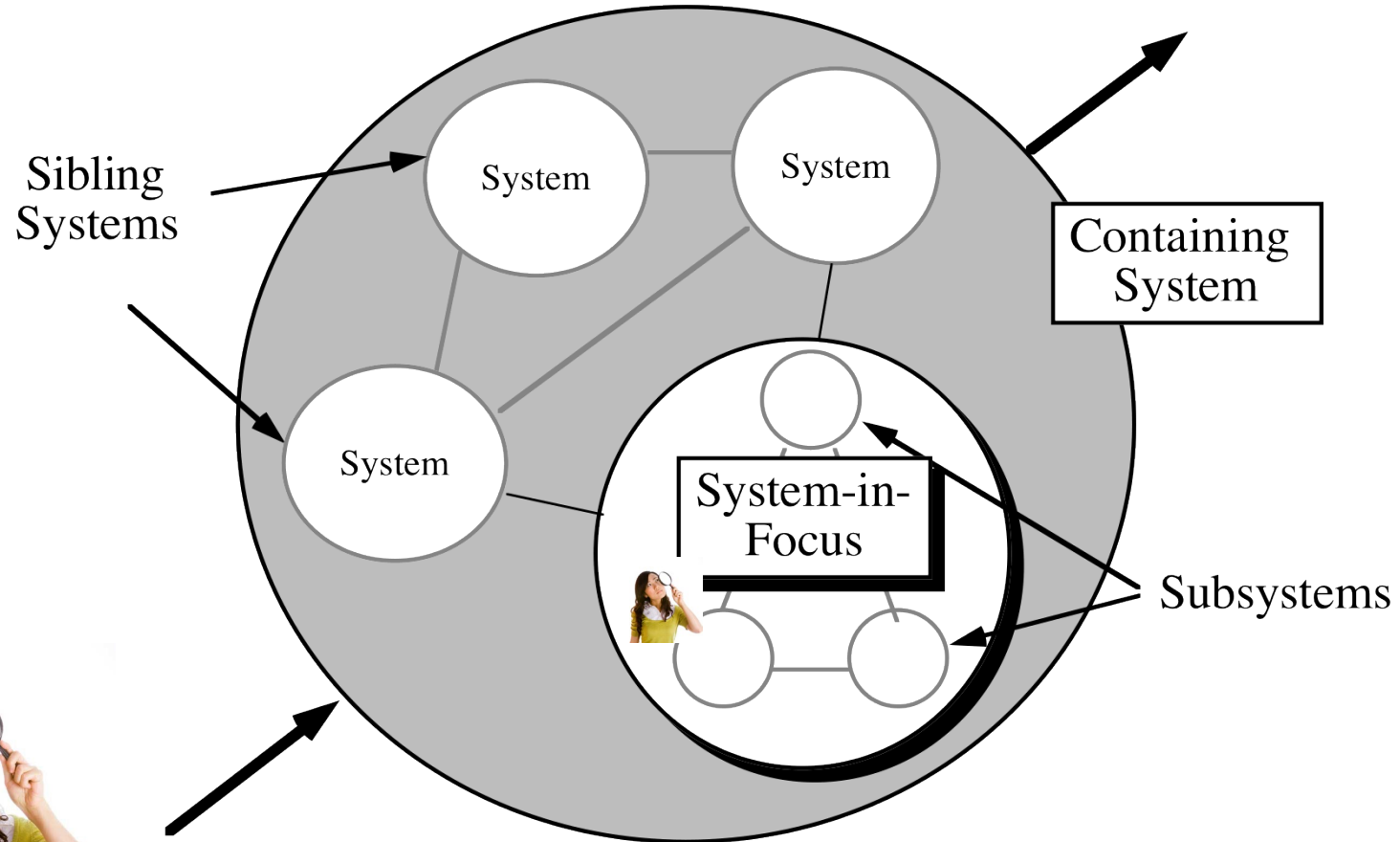
- jurisdictional borders
- organizational structures
- limits of knowledge and understanding
- values and what is important



System Boundary Judgements



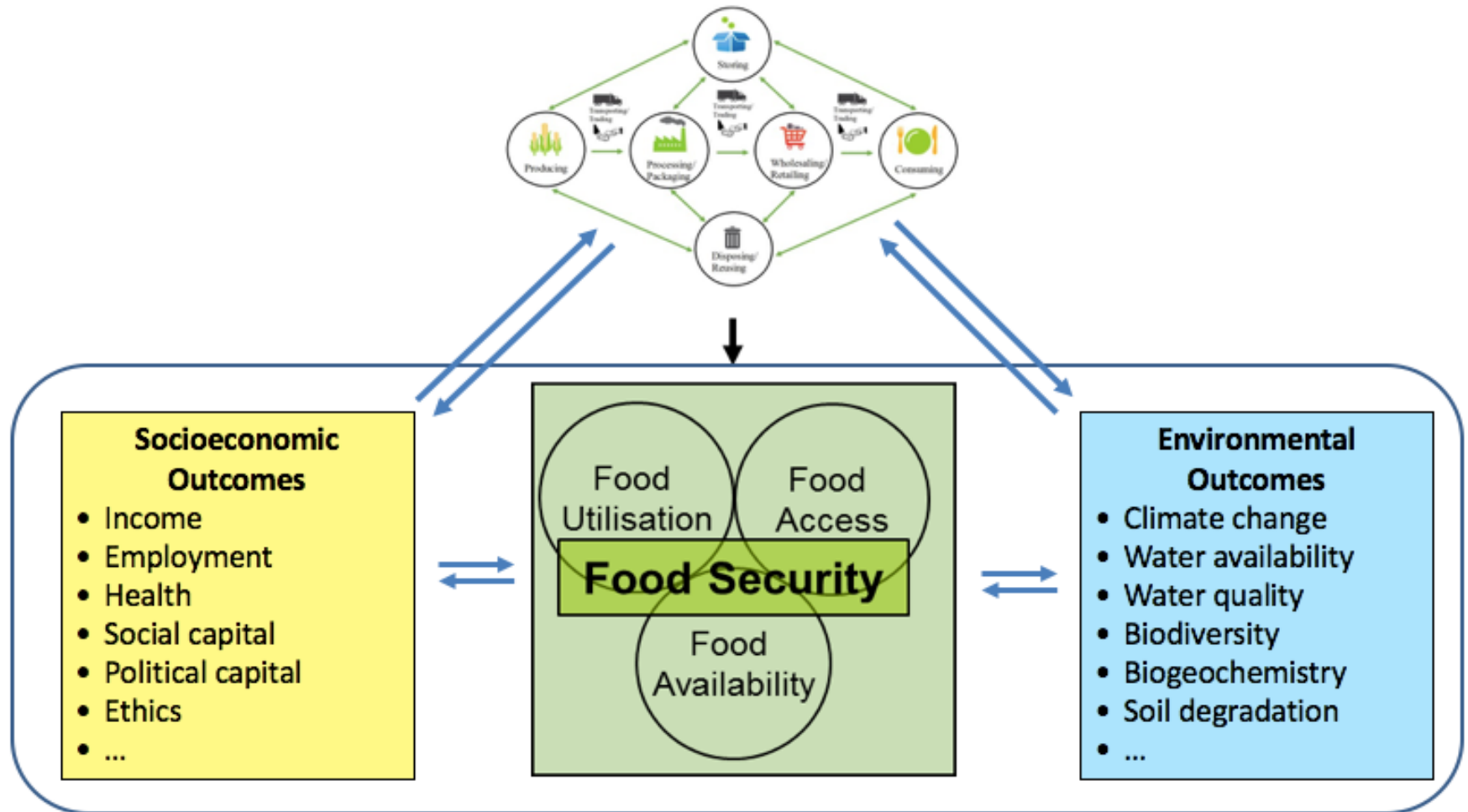
What is 'the' System?



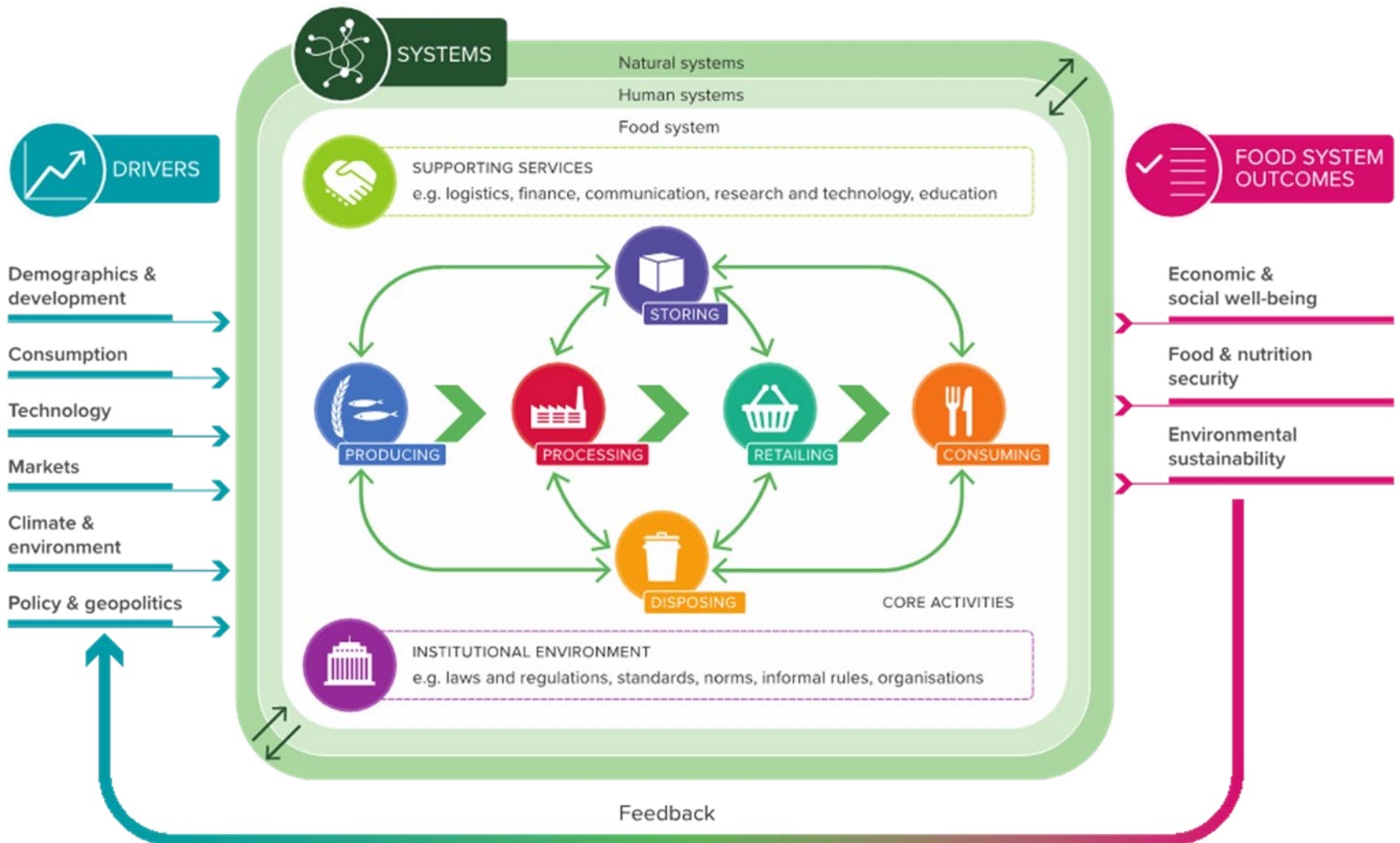
So is this the 'Food System'?



Or this?

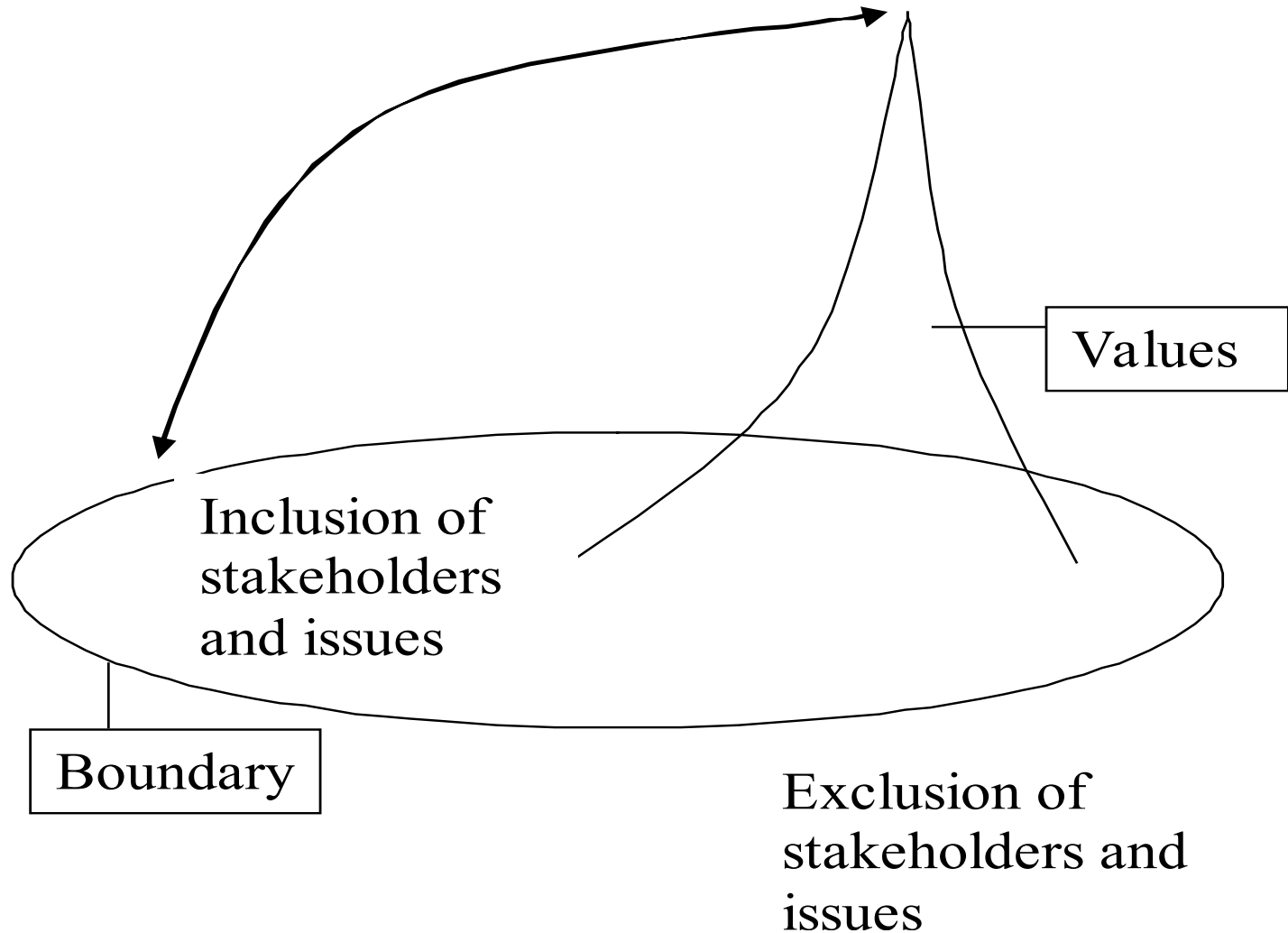


But lets think of it as this

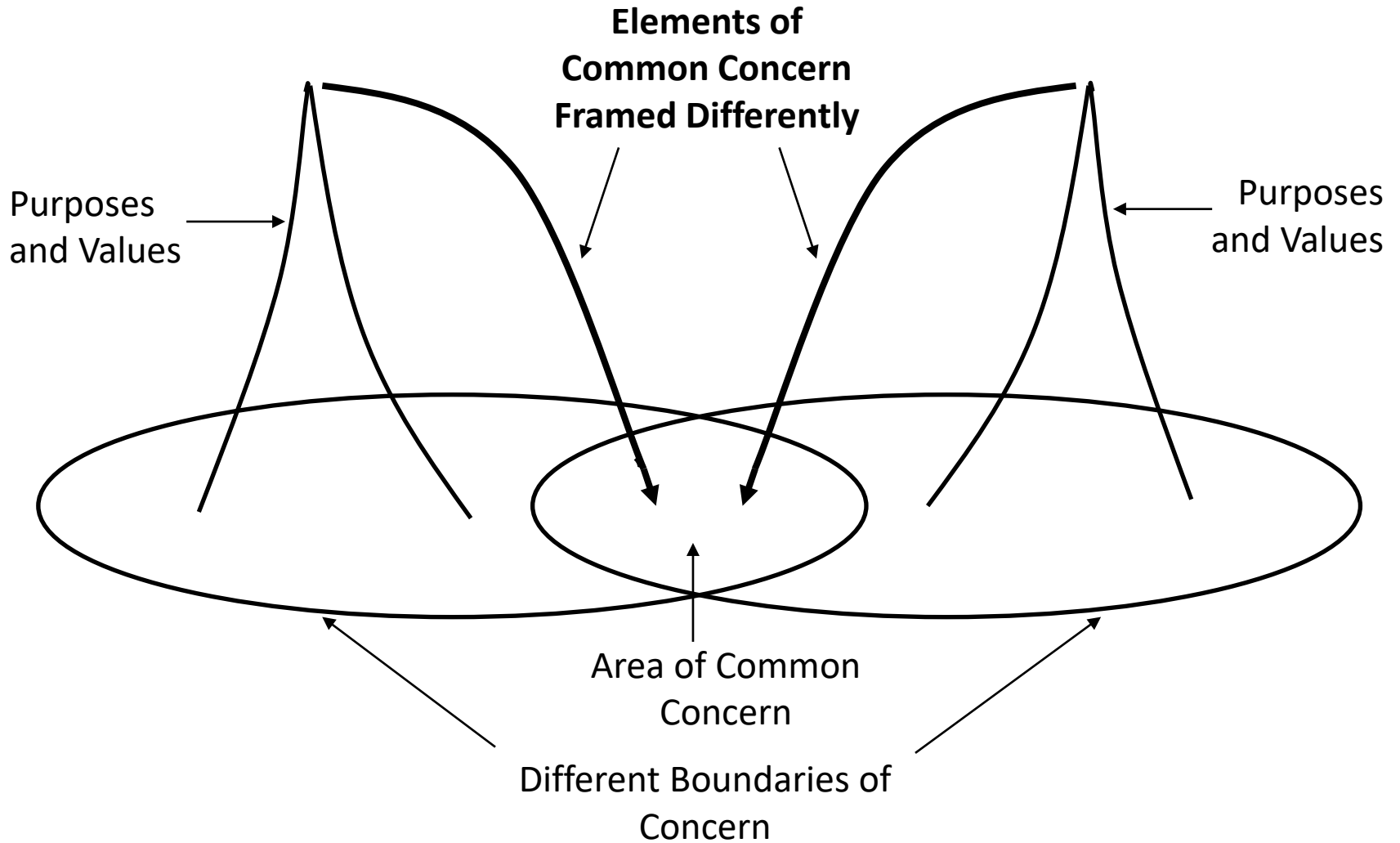


The Boundary Idea

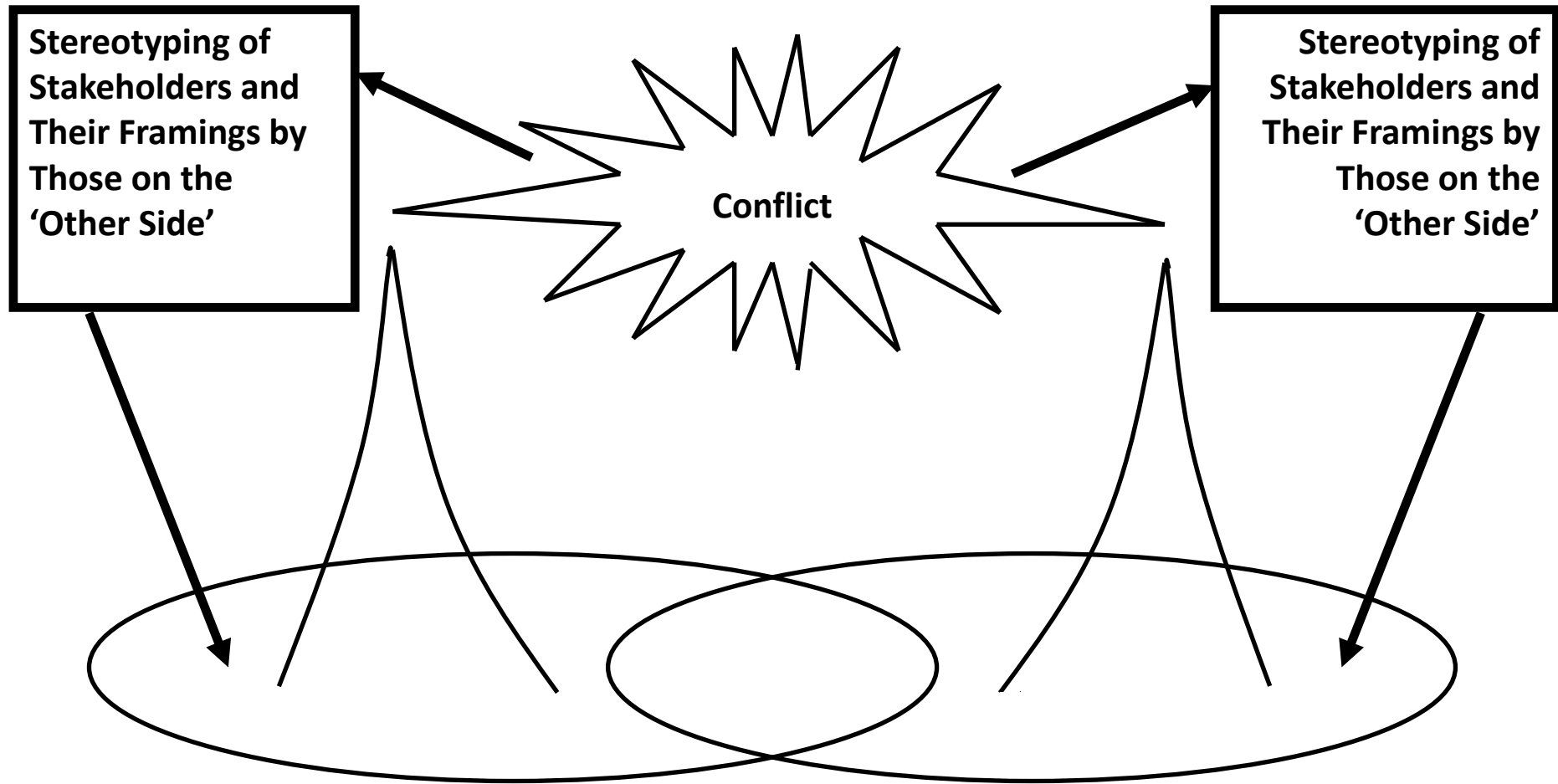
Churchman, 1970



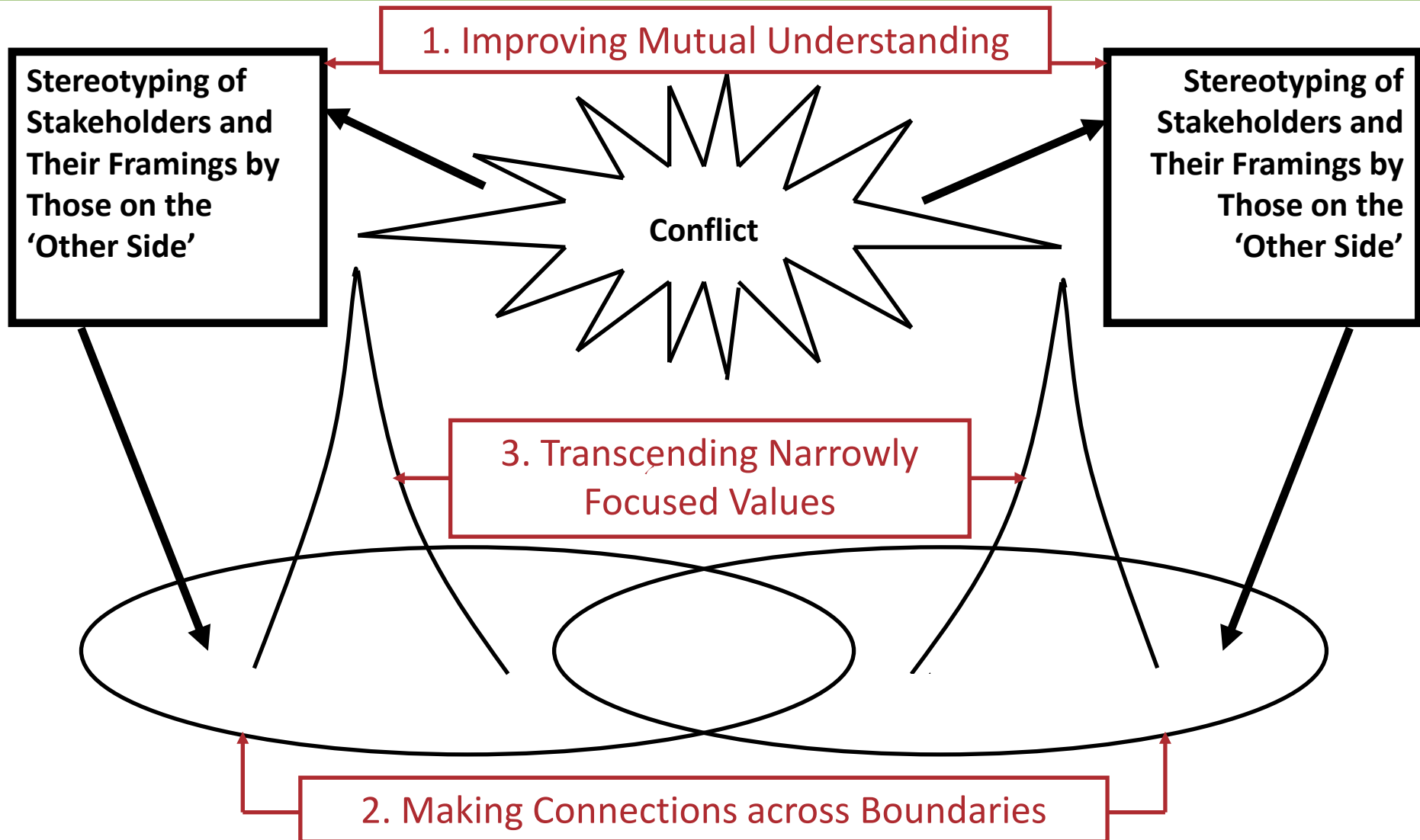
Competing Frames



Stereotyping of Others and Loss of Trust in the Ability to Communicate



Three Points of Intervention



Questions to help 'surface' boundary judgements

Motivation: What are you concerned about and what is your purpose in seeking to understand or intervene?

Power: Who is in control of what is going on, and has power of veto? Who has control over preference shaping, agenda setting and decision making within the project? Who determines the measure of success? What do different groups of people have a say over?

Knowledge and expertise: What experience and expertise are involved? What forms of knowledge are necessary, and from what sources?

Legitimacy: What is the basis of legitimacy within the project (positional authority, scientific methods, democratic processes, consensus, end user backing, etc.)?

Questions?



SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically



Part II – entering the inter-thematic space

What some experts think about thematic linkages

Our Panellists:

Corinne Huser, Gender

Olivier Praz, Health

Stephanie Guha, Social Protection

Patrick Sieber, Climate Action



SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically



Part III – have your say

Break-out sessions



SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically



Part IV – looking ahead

The Food Systems Dashboard

Lawrence Haddad

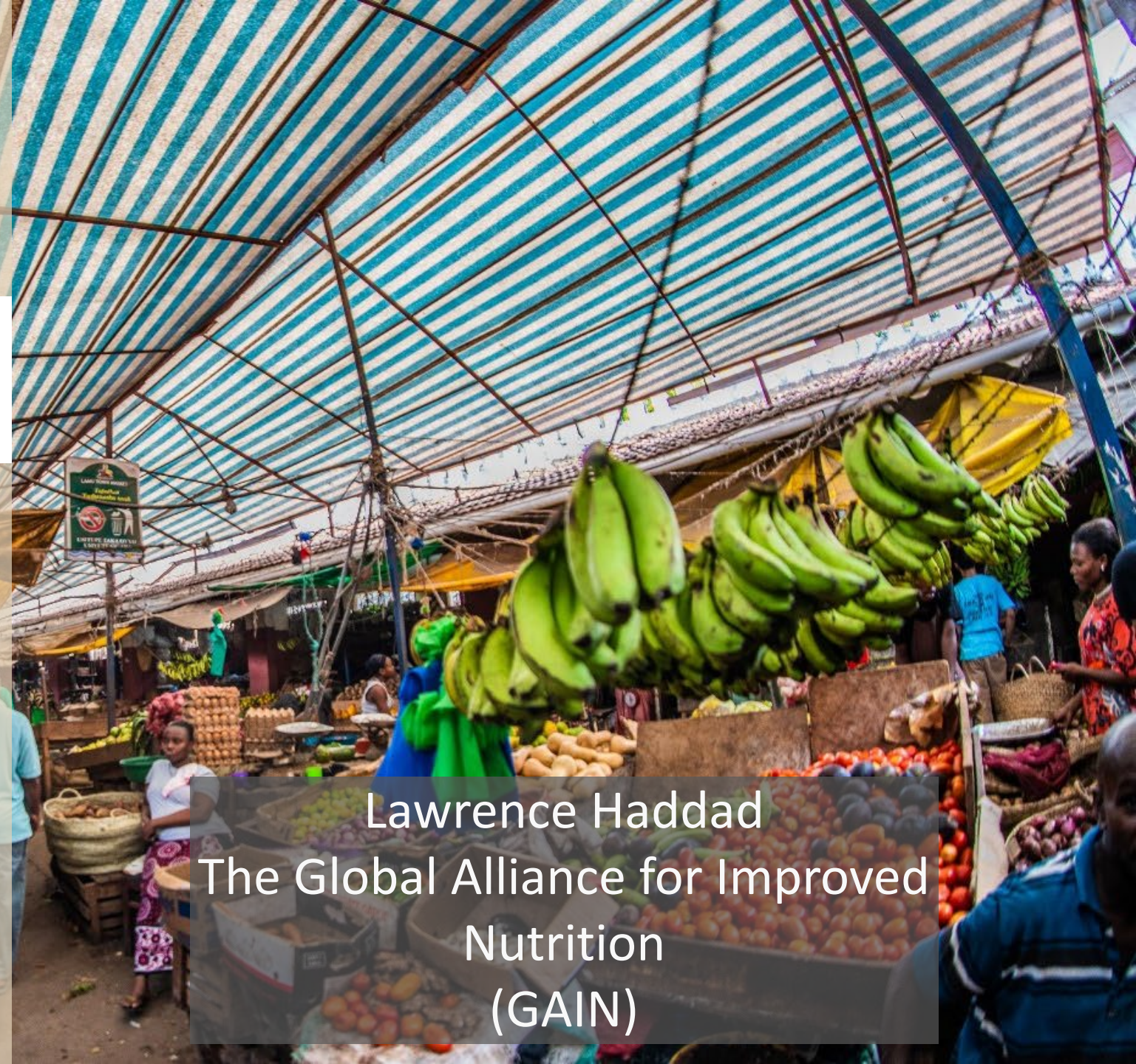
GAIN



Food Systems Dashboard

The *International* Food Systems Dashboard

A Tool for Holistically Examining the World's Food Systems



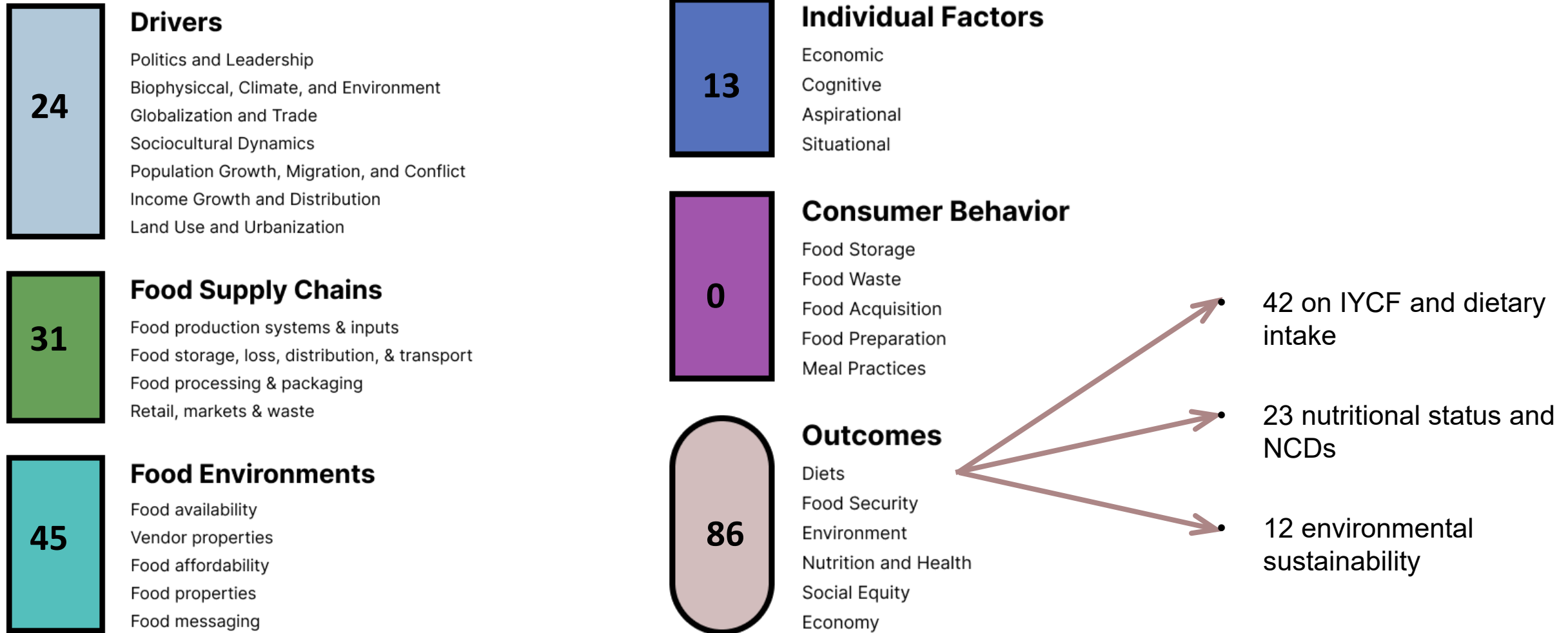
**Lawrence Haddad
The Global Alliance for Improved
Nutrition
(GAIN)**

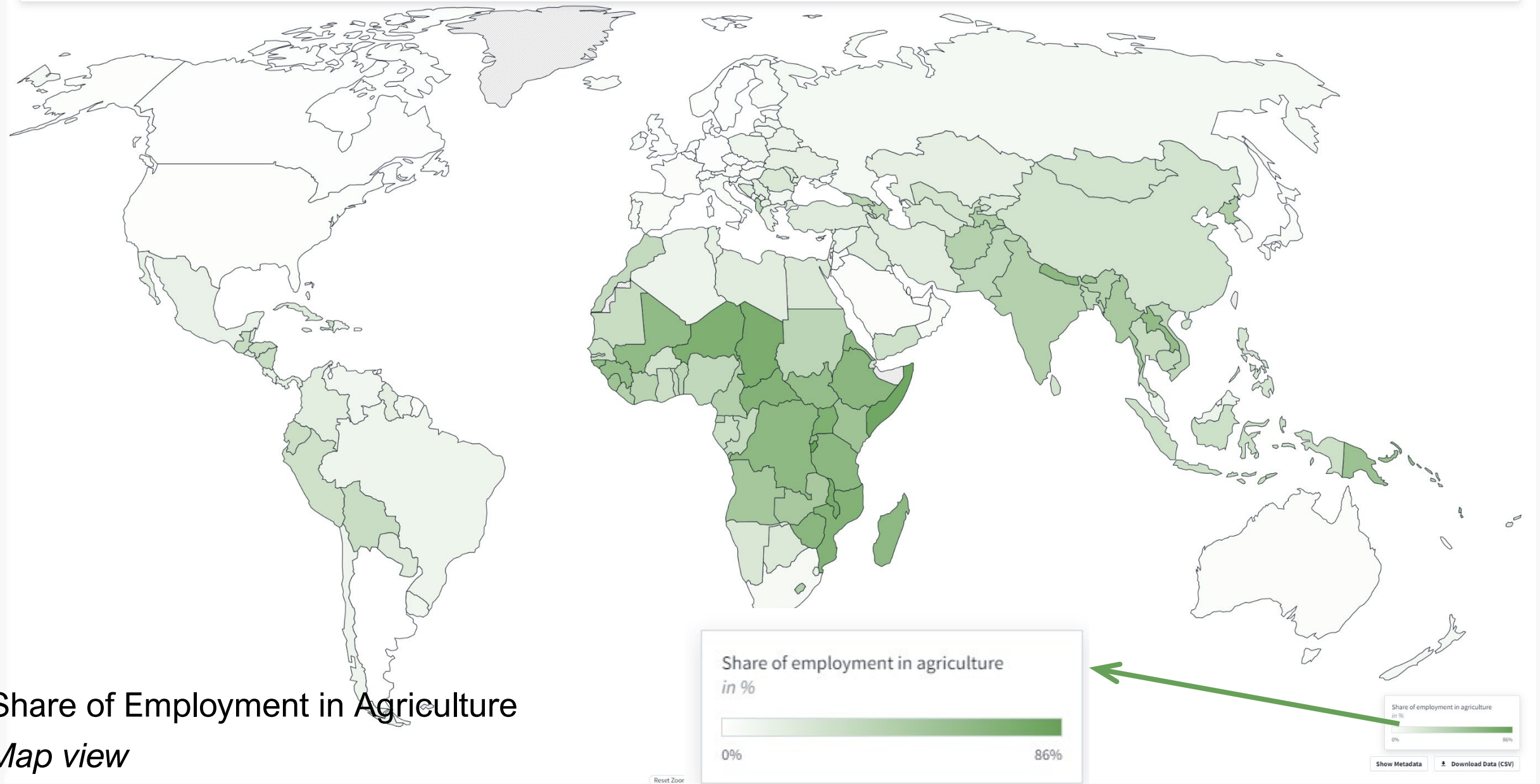
The problem for food system decision makers

- Food Systems are complex: decision makers need data to guide them
- Data for food systems too difficult to access and use
 - Over 40 different data sources had to be searched to find comprehensive data on food systems
 - Data not organised by elements of food systems
 - Data not quality screened
 - Data not easily visualised
 - Data not diagnosed/benchmarked
 - Data not linked to action



The Dashboard currently includes over 200 indicators from over 40 sources for 230 countries and territories – over 630,000 data points.





Share of Employment in Agriculture
Map view



Source

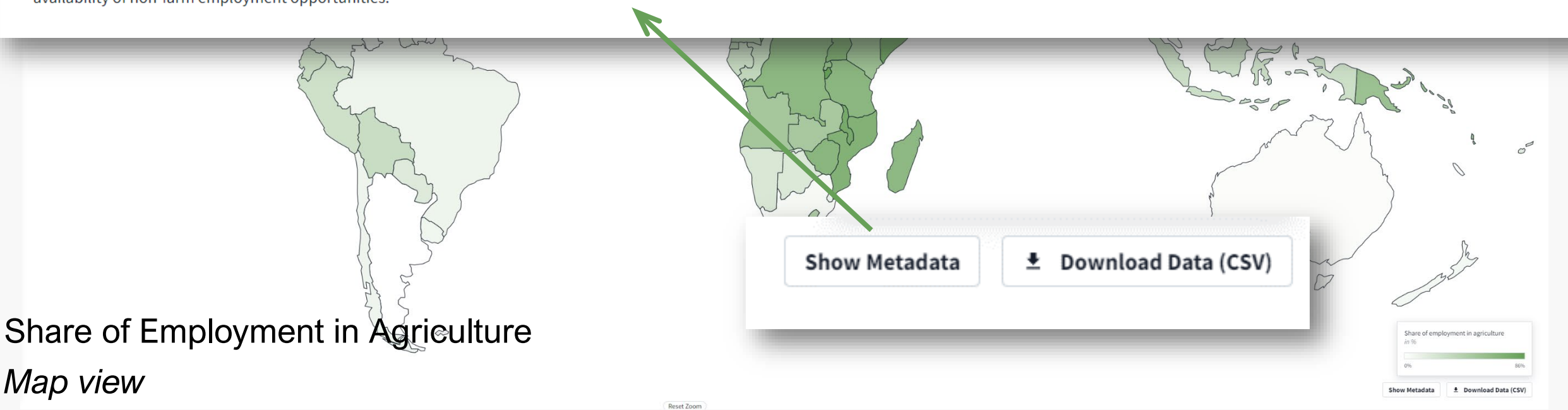
[International Labour Organization](#), [World Bank](#)

Definition

The share of people employed in agriculture among the total employed population. Employment includes both paid labor (full or part-time) and self-employment.

Relevance

This indicator provides a measure of the relative importance of a country's agriculture sector for employment. As a country's income increases, it's share of employment in agriculture tends to decrease, also reflecting the availability of non-farm employment opportunities.



Share of Employment in Agriculture
Map view

www.foodsystemsdashboard.org



Describe Diagnose Decide

200 + indicators
230 countries & territories

Diagnose citation:

<https://journals.plos.org/plosone/article/comments?id=10.1371/journal.pone.0270712>

Decide citation:

<https://www.gainhealth.org/sites/default/files/event/publication-42-policies-and-actions-to-orient-food-systems-towards-healthier-diets-for-all.pdf>



All Countries > Western Africa
Mali

DIAGNOSE AND DECIDE SCORECARD

Drivers

- Average threats soil biodiversity

Food Environments

- Affordability of a healthy diet: ratio of cost to food expenditures [CoHD_fexp]
- Cost of a healthy diet [CoHD]
- Cost of an energy sufficient diet [CoCA]
- Cost of legumes, nuts and seeds relative to the starchy staples in a least-cost healthy diet [CoHD_frsi]
- Dietary energy in food supply
- Share of dietary energy from cereals, roots, and tubers (3-year average)
- Supply of fruit
- Supply of pulses
- Supply of vegetables
- Retail value of ultra-processed food sales per capita

Food Supply Chains

- Cereal losses (% of domestic supply)
- Fruit losses (% of domestic supply)
- Pulse losses (% of domestic supply)
- Vegetable losses (% of domestic supply)

Outcomes

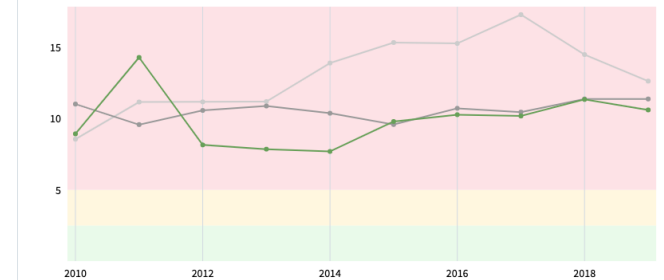
- Prevalence of undernourishment
- Adult obesity (BMI >= 30)
- Adult raised blood pressure (systolic and/or diastolic blood pressure >= 140/90 mmHg)
- Anemia in women 15-49 years
- Infants and children (6-23 months): Minimum diet diversity (MDD)
- Overweight in children under 5 years
- Stunting in children under 5 years
- Wasting in children under 5 years
- Agricultural land change during the last 10 years
- Average proportion of natural vegetation embedded in agricultural lands
- Average species crop richness
- Per capita biodiversity impact of food consumption
- Per capita eutrophication of food consumption
- Per capita GHG emissions of food consumption
- Per capita water use linked to food consumption
- Total ecological footprint of consumption (higher = worst)
- Total ecological footprint of production (higher = worst)
- Adult Underweight (BMI<18.5) - Female
- Adult diabetes prevalence
- Prevalence of moderate or severe food insecurity

- Unlikely Challenge Area
- Potential Challenge Area
- Likely Challenge Area
- Missing Data

Pulse losses (% of domestic supply)

Food Supply Chains > Storage and distribution

Mali Western Africa World



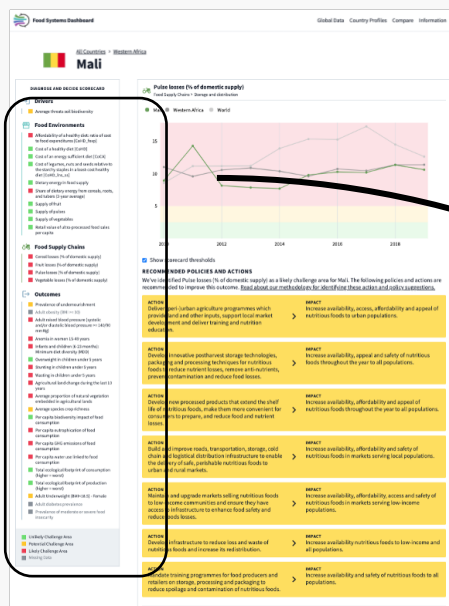
Show scorecard thresholds

RECOMMENDED POLICIES AND ACTIONS

We've identified Pulse losses (% of domestic supply) as a likely challenge area for Mali. The following policies and actions are recommended to improve this outcome. [Read about our methodology for identifying these action and policy suggestions.](#)

ACTION Deliver (peri-)urban agriculture programmes which provide land and other inputs, support local market development and deliver training and nutrition education.	IMPACT Increase availability, access, affordability and appeal of nutritious foods to urban populations.
ACTION Develop innovative postharvest storage technologies, packaging and processing techniques for nutritious foods to reduce nutrient losses, remove anti-nutrients, prevent contamination and reduce food losses.	IMPACT Increase availability, appeal and safety of nutritious foods throughout the year to all populations.
ACTION Develop new processed products that extend the shelf life of nutritious foods, make them more convenient for consumers to prepare, and reduce food and nutrient losses.	IMPACT Increase availability, affordability and appeal of nutritious foods throughout the year to all populations.
ACTION Build and improve roads, transportation, storage, cold chain and logistical distribution infrastructure to enable the delivery of safe, perishable nutritious foods to urban and rural markets.	IMPACT Increase availability, affordability and safety of nutritious foods in markets serving local populations.
ACTION Maintain and upgrade markets selling nutritious foods to low-income communities and ensure they have access to infrastructure to enhance food safety and reduce food losses.	IMPACT Increase availability, affordability, access and safety of nutritious foods in markets serving low-income populations.
ACTION Develop infrastructure to reduce loss and waste of nutritious foods and increase its redistribution.	IMPACT Increase availability nutritious foods to low-income and all populations.
ACTION Mandate training programmes for food producers and retailers on storage, processing and packaging to reduce spoilage and contamination of nutritious foods.	IMPACT Increase availability and safety of nutritious foods to all populations.

SOURCE: FAO Food Balance Sheets



Mali

The **DIAGNOSE** tool generates an overview of food systems performance for each country.

- Unlikely Challenge Area
- Potential Challenge Area
- Likely Challenge Area
- Missing Data

DIAGNOSE AND DECIDE SCORECARD

Drivers

- Average threats soil biodiversity

Food Environments

- Affordability of a healthy diet: ratio of cost to food expenditures [CoHD_fexp]
- Cost of a healthy diet [CoHD]
- Cost of an energy sufficient diet [CoCA]
- Cost of legumes, nuts and seeds relative to the starchy staples in a least-cost healthy diet [CoHD_Ins_ss]
- Dietary energy in food supply
- Share of dietary energy from cereals, roots, and tubers (3-year average)
- Supply of fruit
- Supply of pulses
- Supply of vegetables
- Retail value of ultra-processed food sales per capita

Food Supply Chains

- Cereal losses (% of domestic supply)
- Fruit losses (% of domestic supply)
- Pulse losses (% of domestic supply)
- Vegetable losses (% of domestic supply)

Outcomes

- Prevalence of undernourishment
- Adult obesity (BMI ≥ 30)
- Adult raised blood pressure (systolic and/or diastolic blood pressure $\geq 140/90$ mmHg)
- Anemia in women 15-49 years
- Infants and children (6-23 months): Minimum diet diversity (MDD)
- Overweight in children under 5 years
- Stunting in children under 5 years
- Wasting in children under 5 years
- Agricultural land change during the last 10 years
- Average proportion of natural vegetation embedded in agricultural lands
- Average species crop richness
- Per capita biodiversity impact of food consumption
- Per capita eutrophication of food consumption
- Per capita GHG emissions of food consumption
- Per capita water use linked to food consumption
- Total ecological footprint of consumption (higher = worst)
- Total ecological footprint of production (higher = worst)
- Adult Underweight (BMI<18.5) - Female
- Adult diabetes prevalence

We've identified Cereal losses (% of domestic supply) as a likely challenge area for Mali. The following policies and actions are recommended to improve this outcome. [Read about our methodology for identifying these action and policy suggestions.](#)

Intervention	Impact
ACTION Mandate training programmes for food producers and retailers on storage, processing and packaging to reduce spoilage and contamination of nutritious foods.	IMPACT Increase availability and safety of nutritious foods to all populations.

Strategic Objective	Key Action	Impact
1. Increase the availability of nutritious foods to urban populations	Deliver (peri-)urban agriculture programmes which provide land and other inputs, support local market development and deliver training and nutrition education.	Increase availability, access, affordability and appeal of nutritious foods to urban populations.

ACTION	IMPACT
Develop innovative postharvest storage technologies, packaging and processing techniques for nutritious foods to reduce nutrient losses, remove anti-nutrients, prevent contamination and reduce food losses.	Increase availability, appeal and safety of nutritious foods throughout the year to all populations.

ACTION	IMPACT
Develop new processed products that extend the shelf life of nutritious foods, make them more convenient for consumers to prepare, and reduce food and nutrient losses.	Increase availability, affordability and appeal of nutritious foods throughout the year to all populations.

ACT	IMPACT
ACTION Build and improve roads, transportation, storage, cold chain and logistical distribution infrastructure to enable the delivery of safe, perishable nutritious foods to urban and rural markets.	IMPACT Increase availability, affordability and safety of nutritious foods in markets serving local populations.

ACTION	IMPACT
Maintain and upgrade markets selling nutritious foods to low-income communities and ensure they have access to infrastructure to enhance food safety and reduce foods losses.	Increase availability, affordability, access and safety of nutritious foods in markets serving low-income populations.



Traffic Light Benchmarking for 55 African countries



The problems--and answers--are within food systems

Ireland's challenge areas

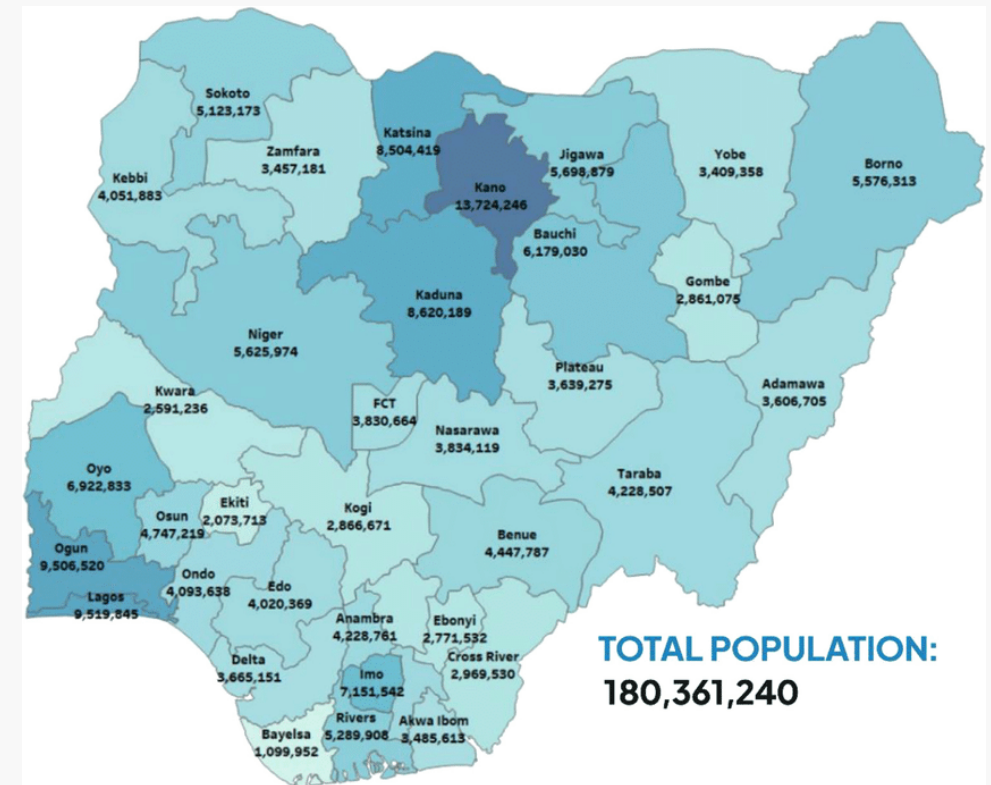
- Low supply of pulses
- High consumption of ultra processed foods
- Adult obesity
- GHG emissions
- Water consumption from food
- Eutrophication (quality of body of water)

From the Food Systems Dashboard

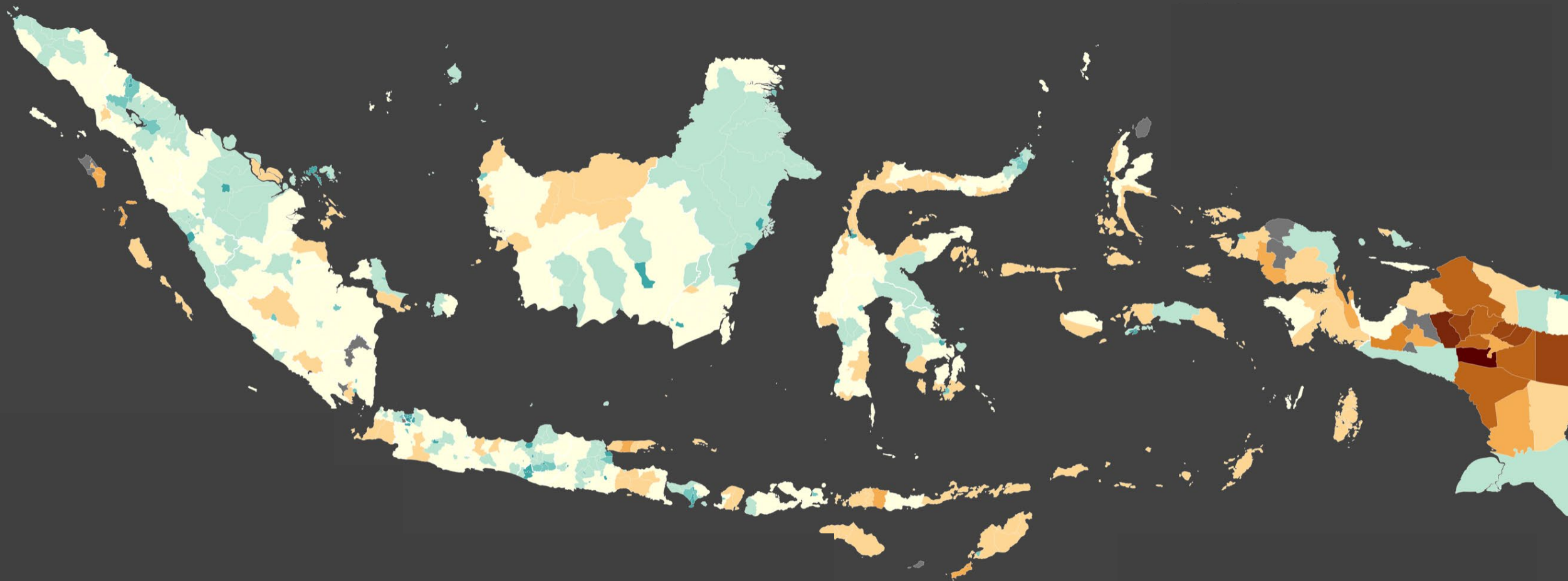
www.foodsystemsdashboard.org

We are working with key government partners on 6 country and subnational Dashboards, covering >1 billion people

1. Bangladesh: The Food Planning and Monitoring Unit, Ministry of Food
2. Indonesia: The National Development Planning Agency (Bappenas) and the Central Bureau of Statistics
3. Pakistan: The Ministry on Planning Development & Special initiatives, Planning Commission of Pakistan
4. Mozambique: The Ministry of Industry and Commerce, the Ministry of Agriculture and Rural Development and the Ministry of Health
5. Kenya: The Ministry of Agriculture, The Department of ICT, The Department of Trade, The Department of Health
6. Nigeria: The Ministry of Agriculture and the Ministry of Finance, Budget & National Planning



In Indonesia we will be able to build diagnostic profiles for
514 cities and regencies



Having access to comprehensive, quality-vetted set of indicators that span across aspects of the food system, in a way that is easy to use for analysis and visualisation, is a critical tool for policymaking, programme design, and research. The Food Systems Dashboard helps to make this possible.



A photograph of a market scene. In the foreground, a person wearing a white and black patterned dress is holding a woven basket filled with ripe, red and yellow tomatoes. Below this, a large green plastic crate is also filled with similar tomatoes. To the right, another person in a colorful patterned dress is holding a blue plastic basket. The background is slightly blurred, showing other people and market stalls under a red umbrella. A semi-transparent beige rectangle is overlaid in the center of the image, containing the text "Thank you!".

Thank you!



Food Systems Dashboard



JOHNS HOPKINS
UNIVERSITY



gain
Global Alliance for
Improved Nutrition



SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically



Part IV – looking ahead

What's next?



SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically



2022 Workshops

West Africa / Bamako – Regional workshop 5th/6th December (Fr)

→ *West Africa online event: 20th December 10 – 11:30 CET*

MENA / Cairo – 12th/13th December (En)

→ *MENA online event: 12th January 2023 10 – 11:30 CET*



SDC A+FS Network

Food Systems Learning Journey

A learning adventure taking us around the globe to understand and act more systemically



2023 Workshops

*East & Southern Africa / Harare –
week of 16th – 20th January (En)*

→ E & S Africa online event: 25th January 10 – 11:30 CET

Asia / Tashkent – 16th/17th March (En)

Asia / Bangkok – 20th/21st March (En)

→ Asia online event: 5th April 2023 9 – 10:30 CET

Latin America / Harare – Santa Cruz 18th/19th April (Sp)

→ Latin America online event: 5th May 16 – 17h CET

**Thank you for
joining us!**

See you soon....



... in Bamako?

... in Cairo?

... or online?