FoSSNet
CONFERENCE 2025

Funded by the European Union

UK Research and Innovation

FOSTER
Advancing societal food system knowledge and innovation

foodclic

FEAST

CLEVER FOOD

Food Systems Countdown Initiative

foodpaths

Breakout Group Activity

- Jesica López– Lund University
- Bobby Tsvetkov – Wageningen University & Research
- Trang Nguyen– Wageningen University & Research

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Focused conversation

Jesica López– Lund University
Bobby Tsvetkov – Wageningen University & Research
Trang Nguyen– Wageningen University & Research

26 March 2025

Programme

Introduction

Pitch 1 — Christian Bugge Henriksen - CLEVERFOOD

Pitch 2 — Rosaline Remans - Food System Countdown Initiative

Pitch 3 — Paul Milbourne - FoodCLIC

Pitch 4 — Niels Halberg - FOODPathS

Pitch 5 — Rosina Malagrida - FOSTER

Pitch 6 — Anant Jani - FEAST

Focused conversation

Sharing back

Focused Conversation

‘What gaps, opportunities and challenges are present in the current state of FSS in Europe, that can shape the development of a Pan-European FSS Network?’

ORID - Method

Objective phase	Key question: What are the main objectives and activities of the FSS networks represented here?
Reflective phase	Key question: What excites or concerns you most about the current state of FSS networks?
Interpretive phase	Key question: What gaps or opportunities do you see in the current network landscape for advancing FSS?
Decisional phase	Key question: What are the most important actions we can take to strengthen collaboration and impact across FSS networks?

Pitch 1 - CLEVERFOOD

Christian Bugge Henriksen – University of Copenhagen

CLEVERFOOD and FOOD 2030 Networks

Represented by CLEVERFOOD Coordinator Christian Bugge Henriksen, University of Copenhagen, e-mail: cbh@plen.ku.dk

Duration: 2023-2026

MORE INFORMATION AT WWW.FOOD2030.EU

CLEVERFOOD: 23 partners, including universities, research institutions, SMEs, NGOs, NPOs, local and national authorities.
OBJECTIVES: Facilitating a society-wide mobilization of all food system stakeholders for transforming the food system to become more fair, healthy and sustainable in line with key EU policy priorities
CORE ACTIVITIES: i) Establish FOOD 2030 Networks, ii) Develop FOOD 2030 Online Platform, iii) Co-create and deploy FOOD 2030 Interactive Exhibition, iv) Designate and train FOOD 2030 Competence Centres, v) Support cross-project collaboration and living lab activities on policy, innovation, business development, education, multi-stakeholder collaboration, citizen empowerment, dissemination and mass mobilization

FOOD 2030 NETWORKS: 80+ projects in the FOOD 2030 Project Collaboration Network; 90+ living labs in the FOOD 2030 Connected Lab Network
OBJECTIVES: Breaking down silos and joining forces between initiatives that are sharing a similar vision of transforming the food system on the local, regional, national, European and international level
CORE ACTIVTIES: i) Developing new relations and expanding networks, ii) Sharing successful practices and exploring synergies, iii) Providing and receiving targeted support, iv) Collaborating on vertical themes, common objectives and concrete actions, v) Organizing joint events, vi) Showcasing project results and maximizing impact, vii) Influencing policymaking and informing future EU legislation

Funded by the European Union

Scan the QR code to join the FOOD 2030 Project Collaboration Network as Coordinator or project manager:

or as WP leader/representative:

Scan the QR code to join the FOOD 2030 Connected Lab Network as living lab manager/representative:

FOOD 2030 Project Collaboration Network

The FOOD 2030 Project Collaboration Network is a network for projects, partnerships and networks that are working on technological, social and governance innovation for transforming the food system to become more fair, healthy and sustainable in line with key EU policy priorities

86 projects joined by 30 June 2024!

- AfriFoodLinks
- AgriLoop
- agroBRIDGES
- BEATLES
- Breadcrumb
- CHORIZO
- Cities2030
- CLEVERFOOD
- COCOREADO
- CODECS
- CODIET
- Coevolvers
- CO-FRESH
- COREnet
- CULTIVATE
- Data4Food2030
- DigitAF
- DOMINO
- DRG4FOOD
- ECO-READY
- EdiCitiNet
- EFUA
- ENFASYS
- ENOUGH
- EU4ADVICE
- FAIRCHAIN
- FEAST
- FER-PLAY
- FLORA
- FNS Cloud
- FOLOU
- Food Screening EMR
- Food Trails
- FoodCLIC
- FoodDataQuest
- FoodE
- FOODCoST
- FOODITY
- FoodLoops
- FoodPaTHS
- FOODRUS
- FoodSafety4EU
- FoodSHIFT 2030
- FoSSNet
- FOSTER
- FOX
- FUSILLI
- GenB
- GIANT LEAPS
- GOLF
- HealthFerm
- HealthyFoodAfrica
- Hungry EcoCities
- InBestSoil
- INCiTiS-FOOD
- INCREASE
- INNOPROTEIN
- LESTRA
- LIKE-A-PRO
- LiveSeeding
- LOWINFOOD
- MICROBIOMES4SOY
- NUTRISOIL
- PIMENTO
- PLAN'EAT
- PrAEctiCe
- Precision Nutrition
- RefresCAR
- RESPONSE
- RURALITES
- SchoolFood4Change
- ShapingBio
- SISTERS
- Smart Protein
- SWITCH
- TITAN
- TRIOBIOME
- TrustEat
- TRUSTyFOOD
- URBAG
- VISIONARY
- WASTELESS
- WATSON
- YouAreIn
- Zero Hidden Hunger EU
- ZeroW

Cross-project collaboration facilitated by CLEVERFOOD and other projects

Vertical themes facilitated by CLEVERFOOD

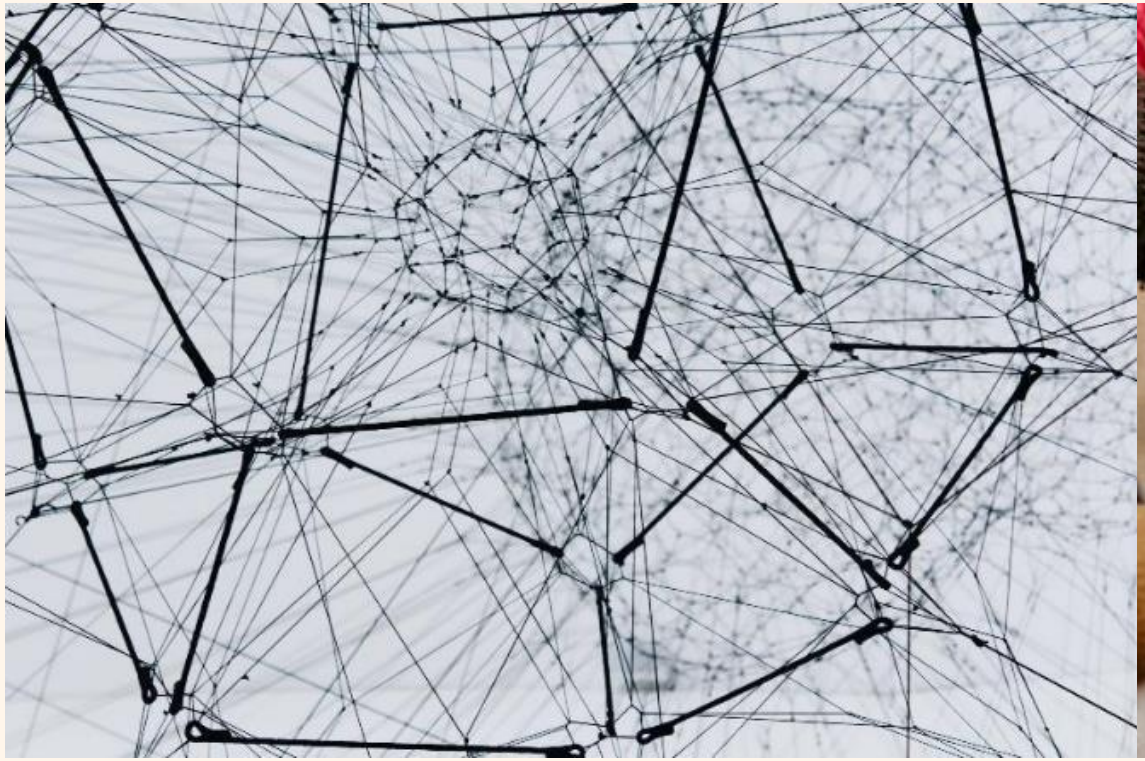
- Policy and governance for food system transformation
- Innovation, data, digital tools, and sustainability assessment
- Business development, investment and financing
- Education and citizen science
- Public engagement, multi-stakeholder collaboration and empowerment
- Communication, dissemination and mass mobilization

Common objectives facilitated by other projects in the FOOD 2030 Project Collaboration Network

- Reducing food loss and waste across the food value chain
- Developing localized food systems and short food supply chains
- Optimizing the efficiency and sustainability of future food production
- Ensuring a just transition that is fair for both farmers and consumers
- Contributing to citizen-driven and city-led food system transformation
- Learning and knowledge sharing for supporting food system transition
- Shifting to healthier & more plant-based food production and consumption

FOOD 2030 Connected Lab Network

The FOOD 2030 Connected Lab Network is the corresponding network for living labs, communities of practice and other co-creation initiatives working on transforming the food system at the local, regional and national level



Pitch 2 — Food System Countdown Initiative

Rosaline Remans - Glocolearning

Food Systems Countdown Initiative

The Food Systems Countdown Initiative: Monitoring food system transformation to 2030 and beyond

March 26, 2025

Roseline Remans, PhD Ir.
glocolearning and the Alliance of Bioversity & CIAT

CO-CHAIR ORGANIZATIONS:

Food and Agriculture Organization of the United Nations

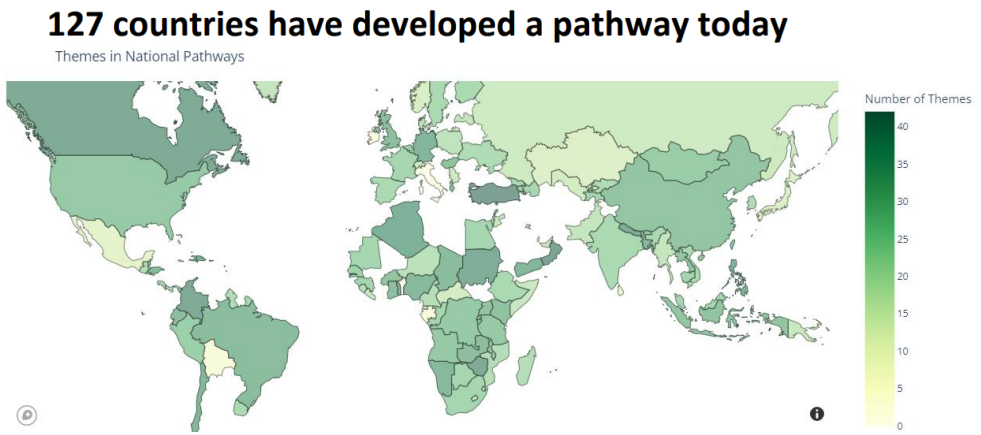
gain Global Alliance for Improved Nutrition

Columbia Climate School Climate, Earth, and Society

Cornell CALS College of Agriculture and Life Sciences

UNFSS catalyzed food system transformation pathways

Country progress on national pathway operationalization



United Nations | Food Systems Summit 2021

UNITED NATIONS FOOD SYSTEMS COORDINATION HUB

But no monitoring system was agreed upon

- The SDG framework is insufficient to guide food system transformation
- Evidence-base decision-making needs indicators and data to guide decisions
- Demand for a multisectoral, multi-scale indicator framework to monitor food systems change and transformation

The Food Systems Countdown Initiative formed to fill this gap.

The FSCI is an interdisciplinary, multi-institution scientific partnership to monitor global food systems in service of meeting the SDGs and other global goals.

Co-chair organizations:

gain
Global Alliance for Improved Nutrition

Food and Agriculture Organization of the United Nations

Columbia Climate School
Climate, Earth, and Society

Cornell CALS
College of Agriculture and Life Sciences

The Food Systems Countdown Initiative formed to fill this gap.

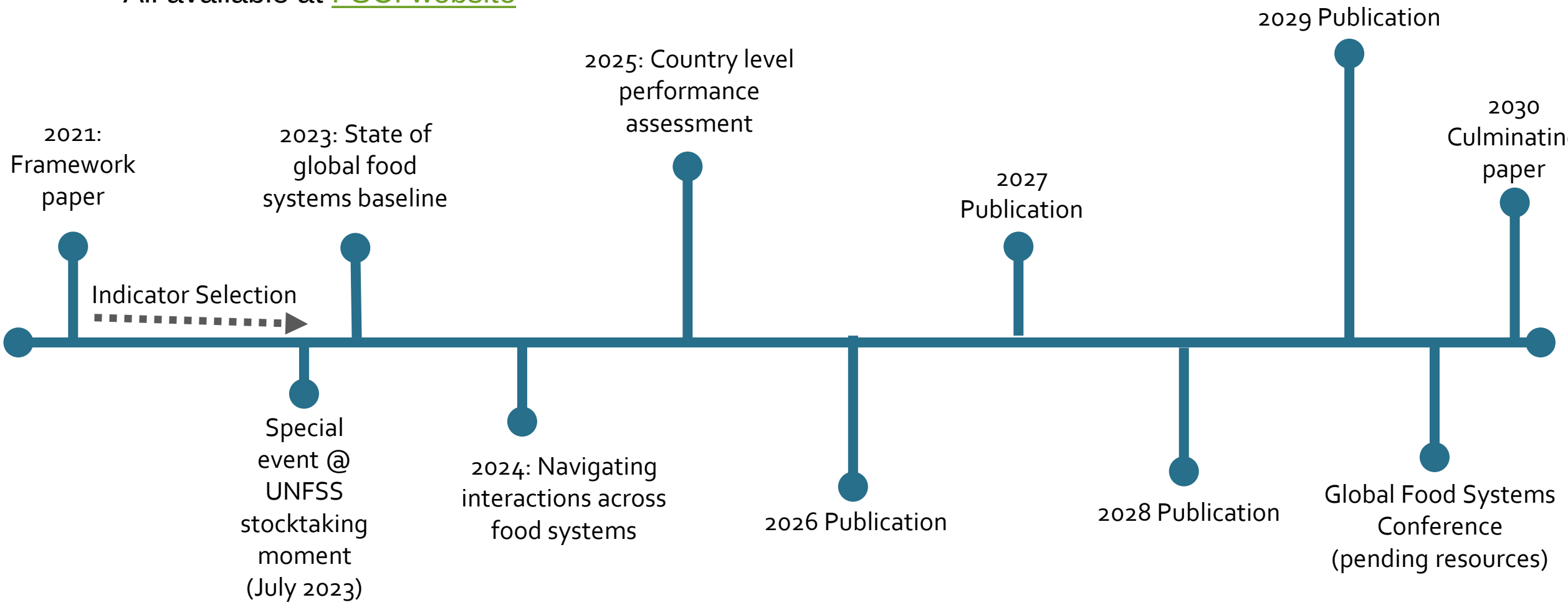
The FSCI is an interdisciplinary, multi-institution scientific partnership to monitor global food systems in service of meeting the SDGs and other global goals.

Objectives:

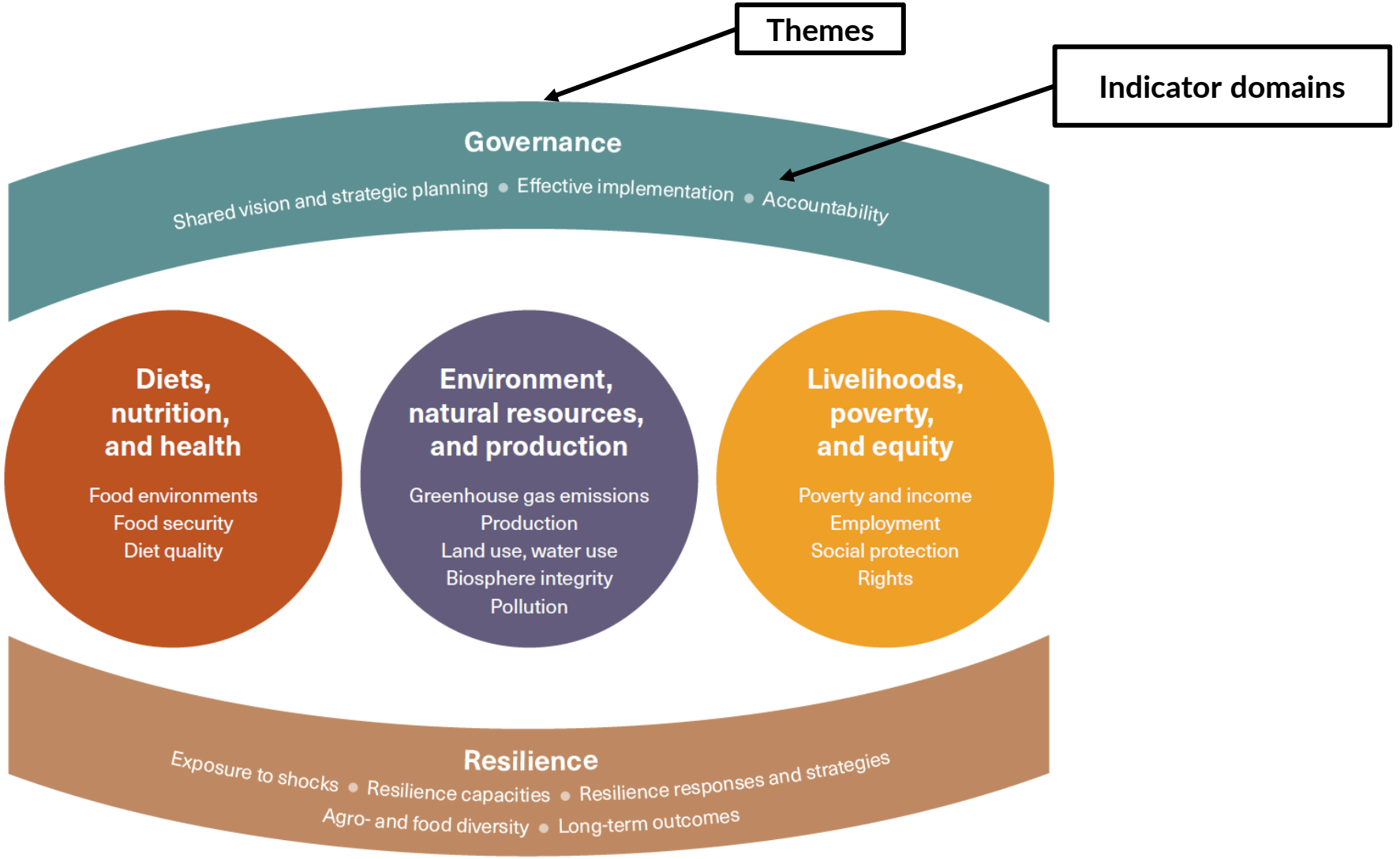
- To provide actionable evidence to track progress and guide decisions for transformation
- Complement other monitoring and tracking initiatives
- Contribute to advancing the science of food systems and their transformation

FSCI timeline to 2030

All available at FSCI website



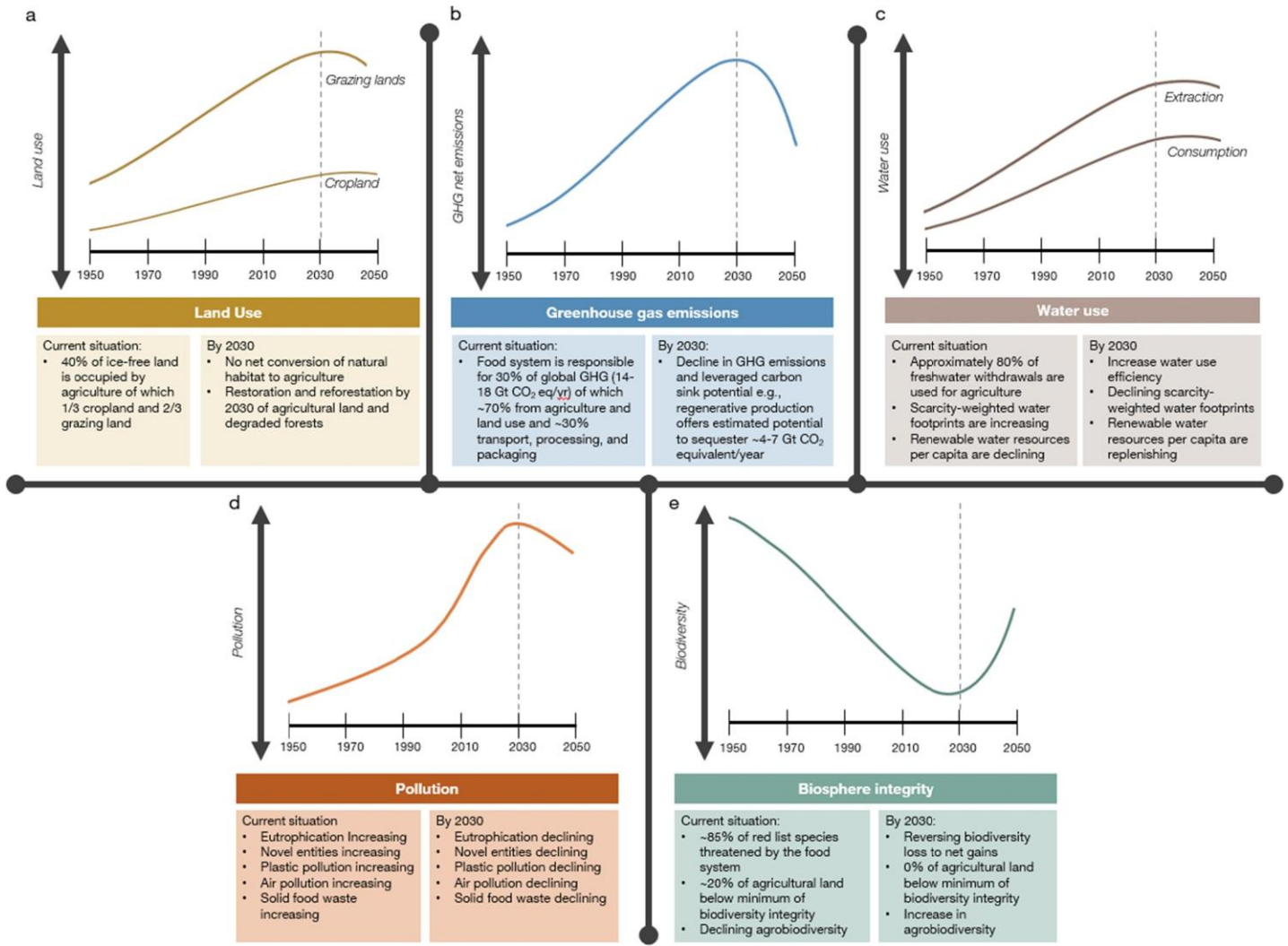
Indicator architecture



Fanzo et al. 2021

Indicator architecture

Types of change for food systems transformation

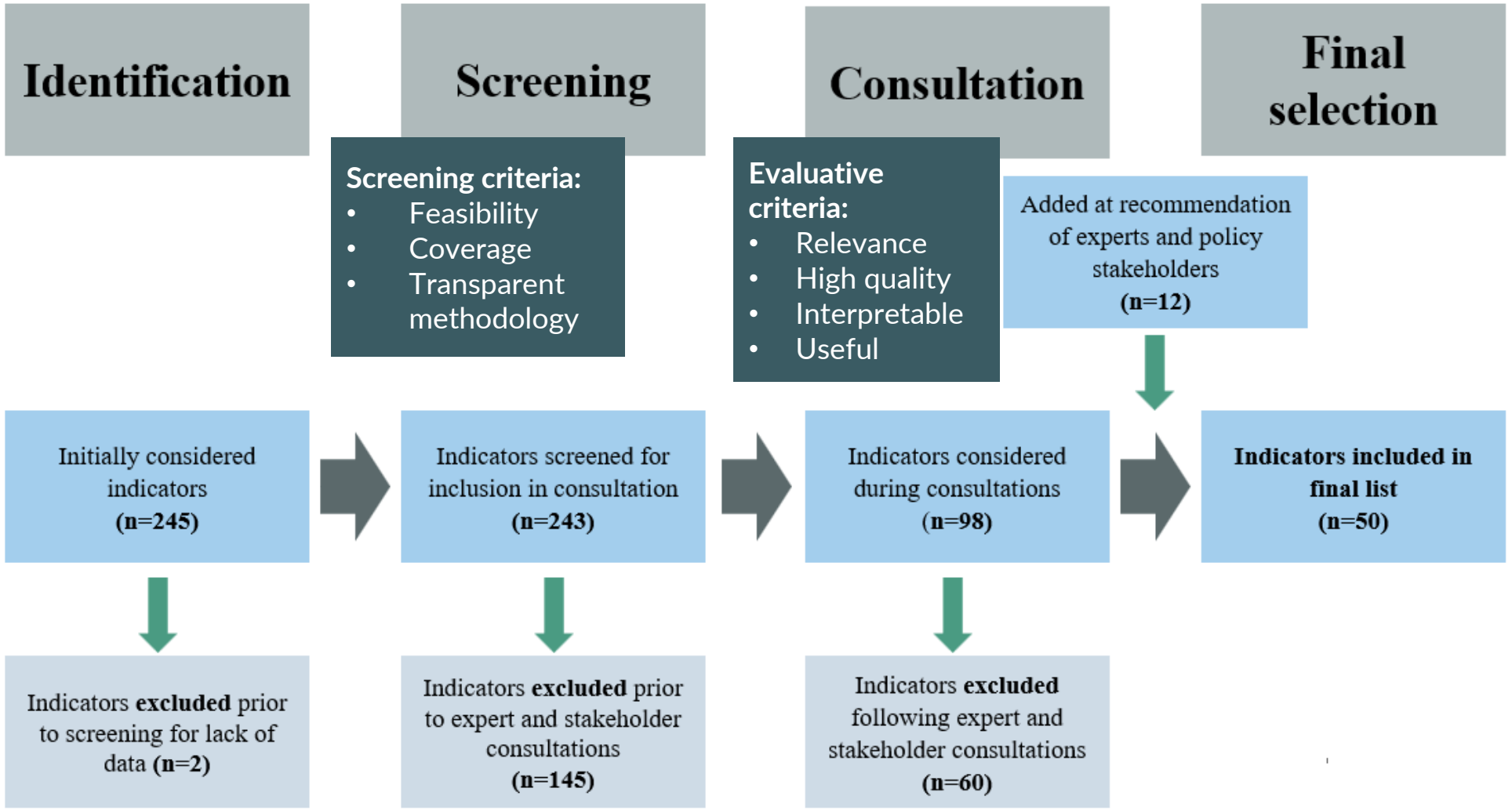


Fanzo et al. 2021

Indicator selection: transparent, inclusive, rigorous

57 scientists in the FSCI collaboration conducted identification, screening and final selection.

Dozens of additional scientists and over 550 policy stakeholders participated in the consultations.



Schneider et al. 2023

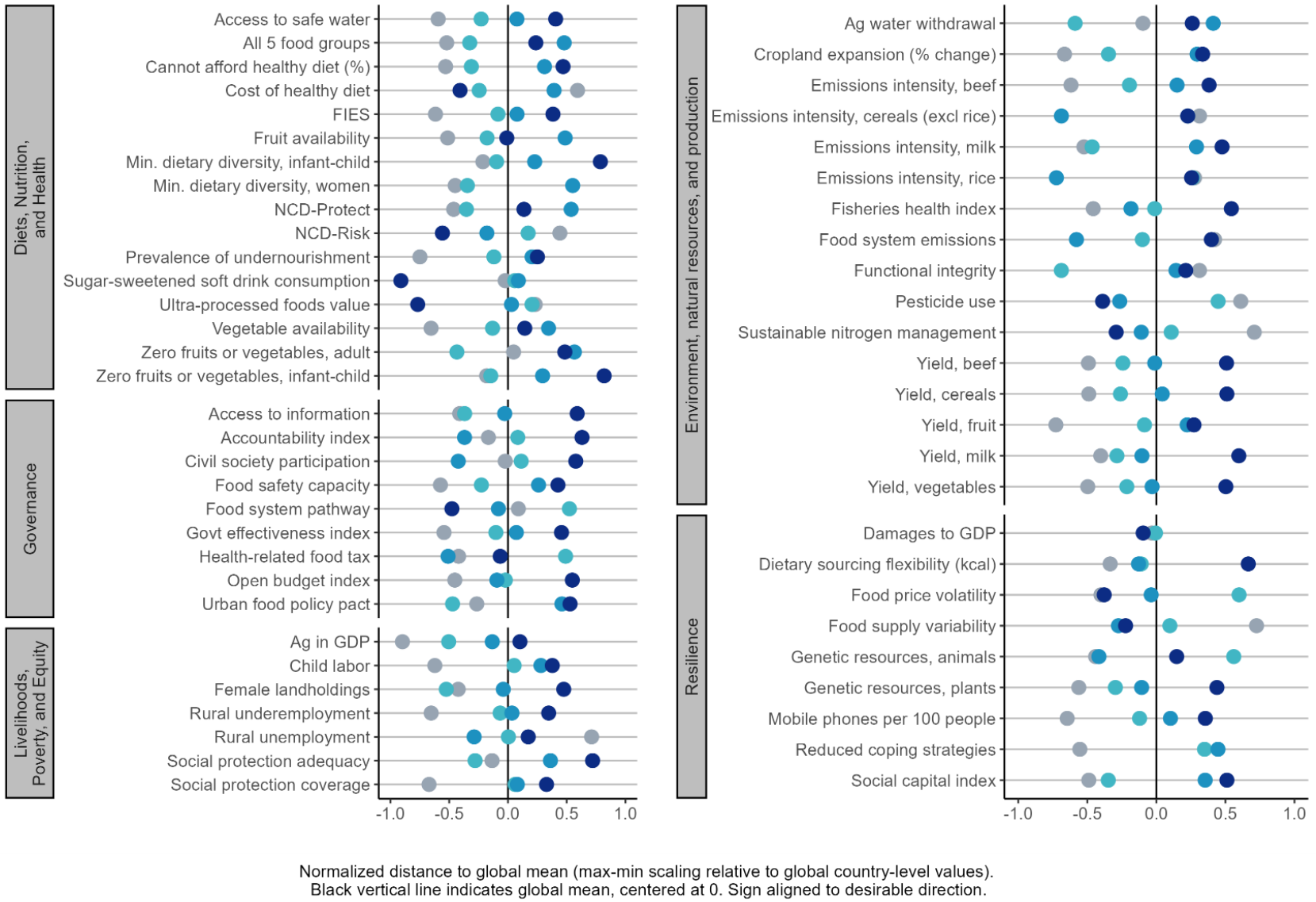
nature food

Analysis https://doi.org/10.1038/s43016-023-00885-9

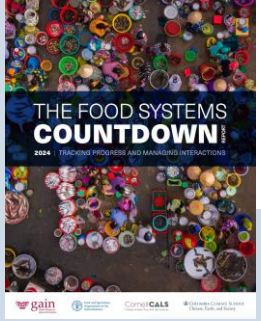
The state of food systems worldwide in the countdown to 2030

Global food systems baseline

- Food system success is not synonymous with country income.
- Explore FSCI indicators and country profiles on the food systems dashboard



Schneider et al. 2023



nature food

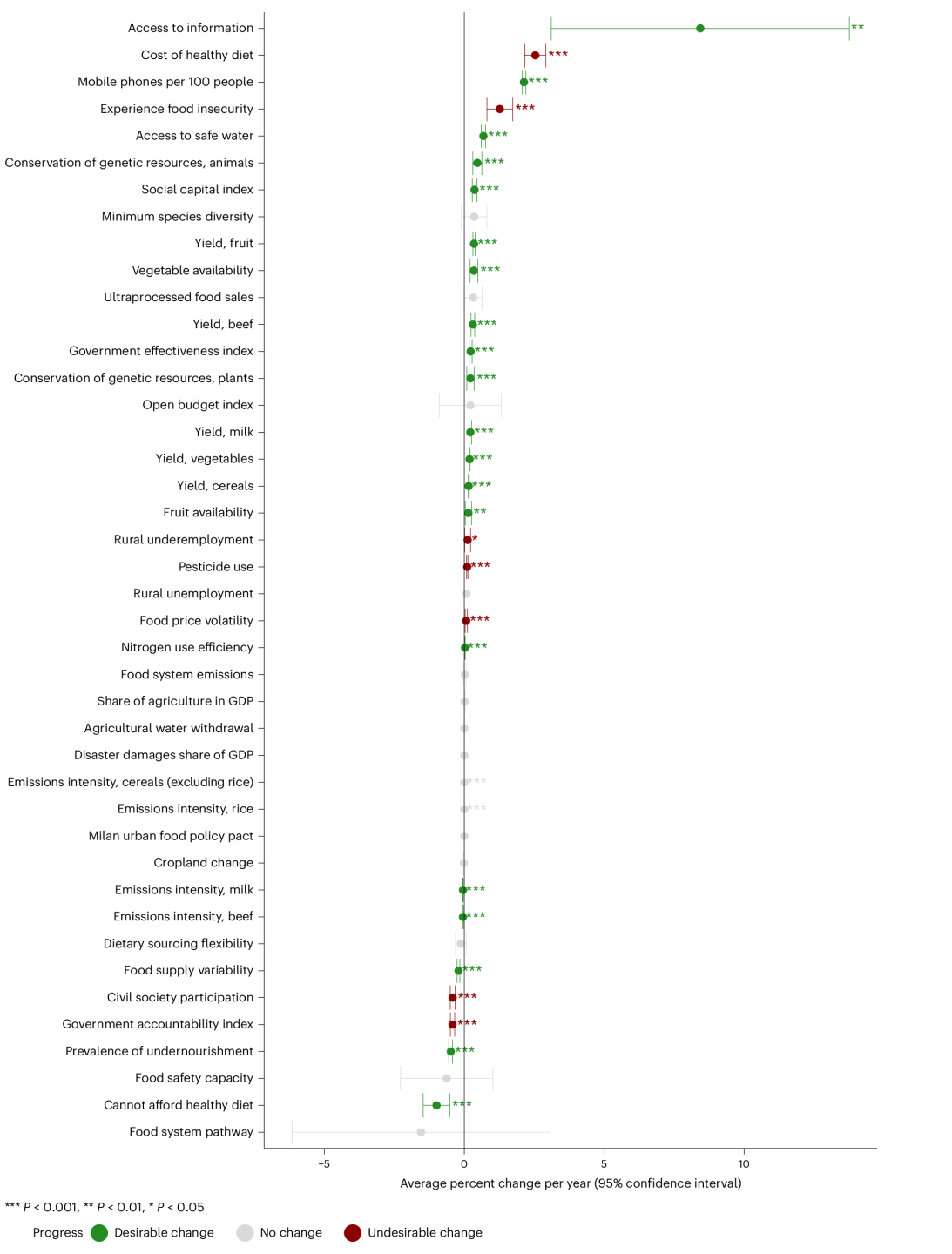
Analysis https://doi.org/10.1038/s43016-024-01109-4

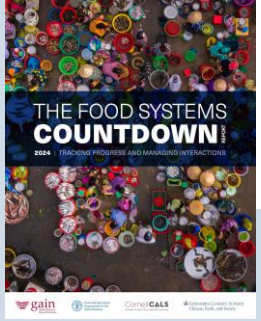
Governance and resilience as entry points for transforming food systems in the countdown to 2030

Global food systems trends 2000-2022

- show 20 out of 42 indicators moving in the desirable direction
- 7 indicators trend undesirably, and the rest show no change, which is also undesirable

Schneider, Remans et al. 2025





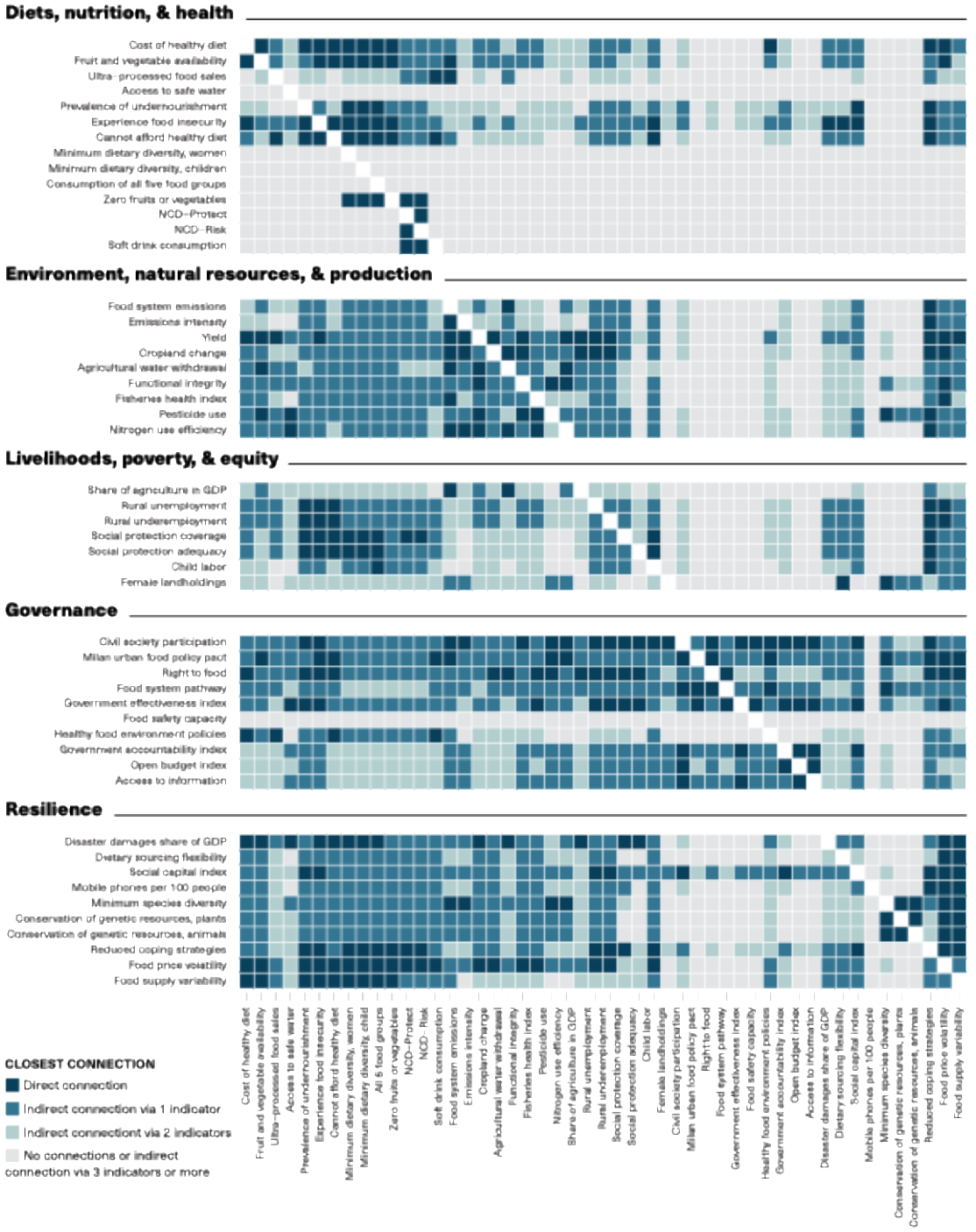
nature food

Analysis https://doi.org/10.1038/s43016-024-01109-4

Governance and resilience as entry points for transforming food systems in the countdown to 2030

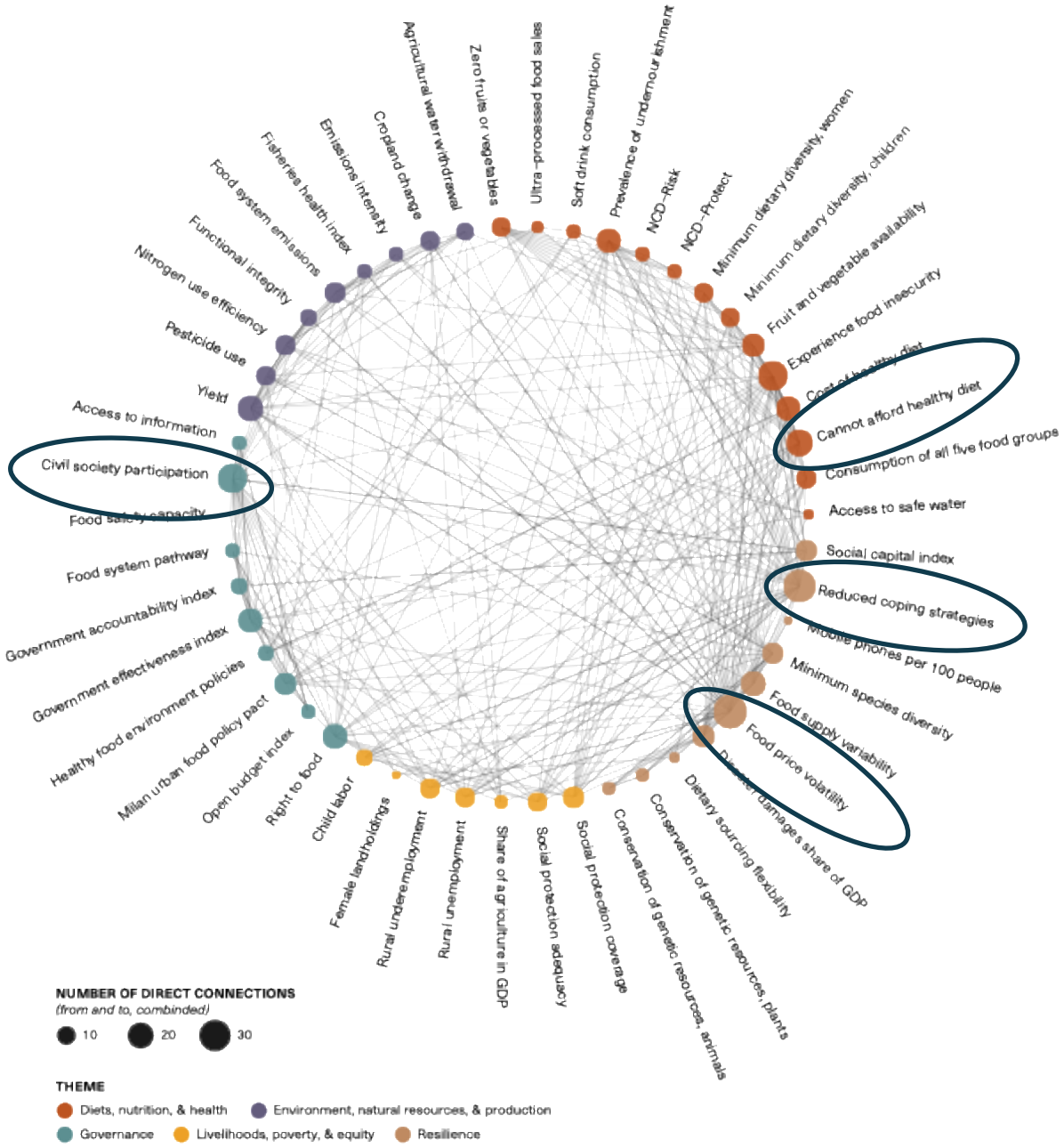
Navigating interactions between indicators

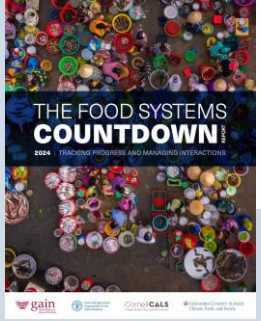
- Many interdependencies
- One third of interactions occur across themes
- Governance and resilience show the largest number of connections to other themes.



Highly connected indicators

- Change in these indicators could have broad impact on others and/or require multiple coordinated actions
- Explore on the [food systems dashboard]





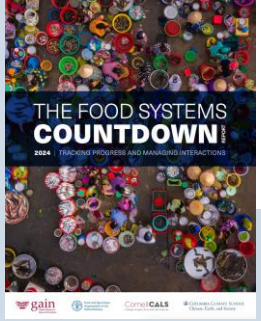
nature food

Analysis https://doi.org/10.1038/s43016-024-01109-4

Governance and resilience as entry points for transforming food systems in the countdown to 2030

Highly connected indicators

Rows highly connected across columns show where changes in these indicators could have broad impact on others.



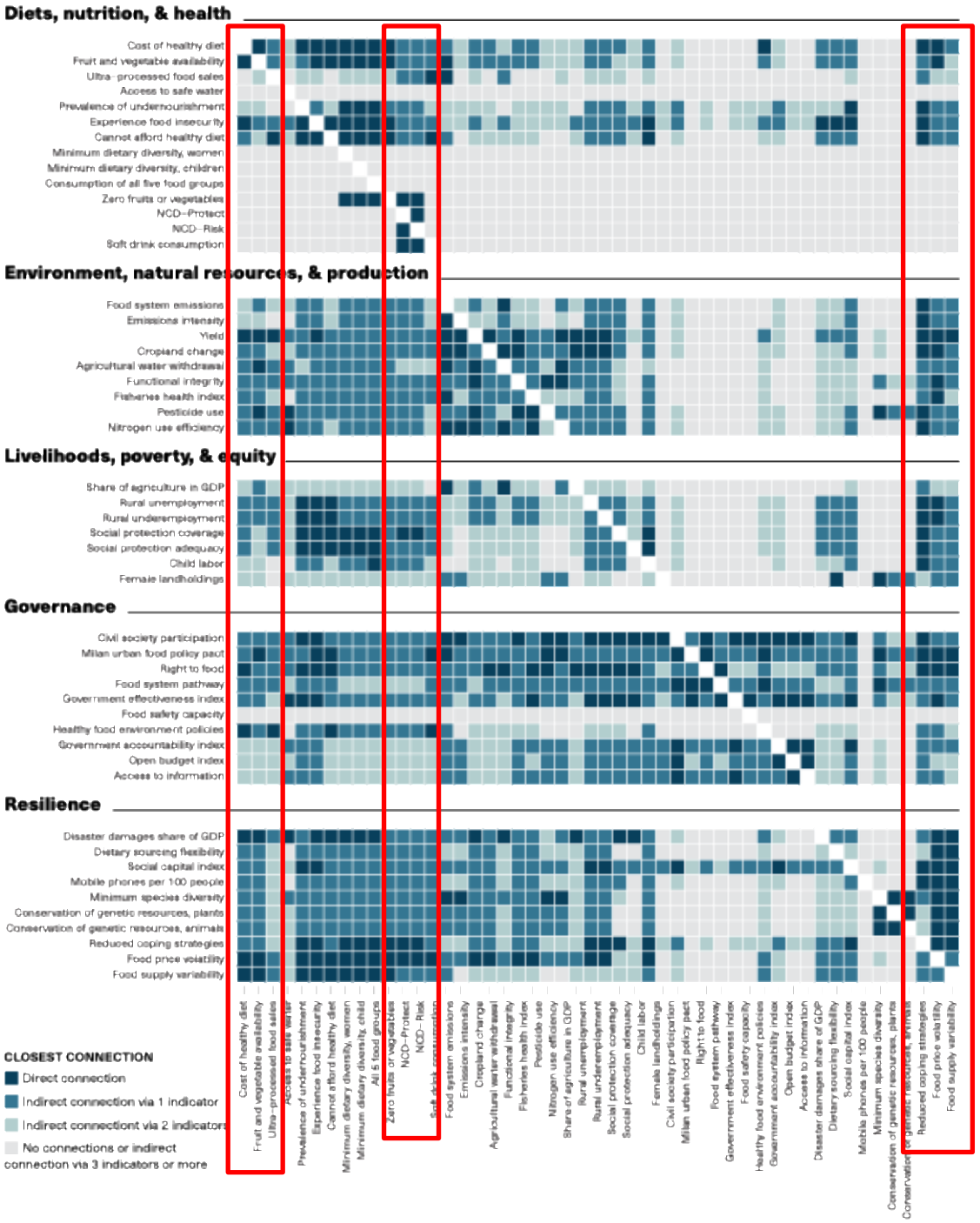
nature food

Analysis https://doi.org/10.1038/s43016-024-01109-4

Governance and resilience as entry points for transforming food systems in the countdown to 2030

Highly connected indicators

Columns with many influencing rows suggest indicators where multiple coordinated actions are needed to drive change.



Critical data gaps exist to measure Food Systems

Economic value

Workers and worker welfare

Productivity

Policy coherence for transformation

The true cost of food

Food loss and waste

Budgetary allocations

Food safety

Food Systems Countdown Initiative

SAIS JOHNS HOPKINS SCHOOL of ADVANCED INTERNATIONAL STUDIES

Thank you!

Roseline Remans
on behalf of Food Systems Countdown Initiative
roseline@glocolearning.com; kschne29@jhu.edu

www.foodcountdown.org

Explore the data on the Food Systems Dashboard!
https://www.foodsystemsdashboard.org/

Pitch 3- FoodCLIC

Paul Milbourne – Cardiff University

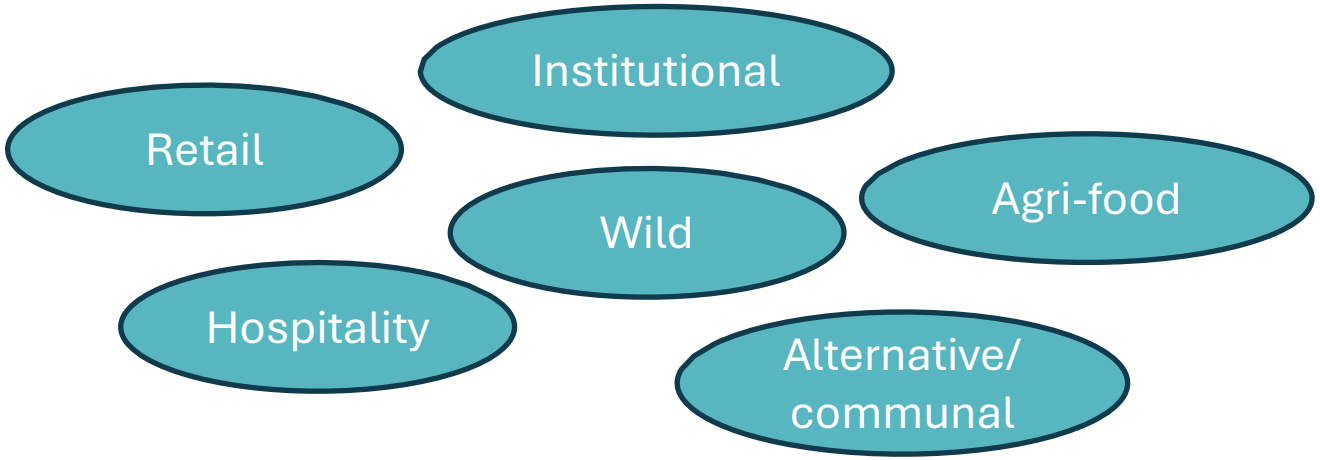
developing a pan-European HEI network of research institutions working on sustainable food systems

Paul Milbourne
Cardiff University

FOODCLIC'S AIM

Interface where people interact with wider food system to grow, share and eat food

Develop more **integrated food policies** to create sustainable urban **food environments** , so citizens are empowered to access healthy, sustainably produced food



How to accelerate food system transformation?

CLIC FRAMEWORK

System thinking requires **integration across four pillars** when designing, implementing and evaluating interventions and policies

C

We foster sustainability **Co-benefits**.

L

We create **Linkages** to strengthen rural-urban food systems.

I

We prioritise **Inclusion** of all stakeholders and groups in a food system.

C

We build **Connectivities** between food and other complex systems and policy areas.

FPNs AND LIVING LABS IN 8 CITY REGIONS

AARHUS
Aarhus University
Aarhus Municipality

AMSTERDAM
City of Amsterdam
Food Connect Foundation
(Stichting Voedsel Verbindt)
VU Foundation (Stichting VU)

BARCELONA
Metropolitan Area of Barcelona
IrsiCaixa AIDS Research Institute

BERLIN
Humboldt University of Berlin
Berlin Food Policy Council

BRASOV
City of Brasov
Transilvania University of Brasov

BUDAPEST
Municipality of Budapest
ESSRG Nonprofit KFT

LISBON
Faculty of Medicine, University of Lisbon
Municipal Environmental Government Agency (EMAC)

LUCCA
Municipality of Capannori
University of Pisa

What we said in our proposal

- FOODCLIC will facilitate the development of a pan-European HEI network of research institutions committed to sustainable food systems

- Two network meetings will be organised to catalyse the formation of a pan-European HEI network committed to sustainable food systems

Other developments since we started

- CLEVERFOOD - transformation of higher education teaching on food systems and the establishment of the FOOD2030 Higher Education Network

- FossNet - development and implementation of an academy for food systems scientists and professionals and the development of next generation Food Systems Science curricula

Joined up working

- Conversations and commitment to work together
- Sustainable food systems pedagogy / teaching
- Sustainable food systems research
- Civic mission / engagement with organisations working on sustainable food
- Sustainable food procurement
- Amendment to our timetable
- First joint event – May 2025

Berlin workshop, October 2024

- To what extent are sustainable food systems part of the work of your department, centre or institution?
  - research
  - civic mission / engagements with food organisations
  - pedagogy / teaching
  - food procurement policy
- In what ways would a pan-European HEI network on (sustainable) food systems be of value to you / your institution?
- What would you like from it?

Pitch 4 - FOODPathS

Niels Halberg – Aarhus University

foodpaths

Funded by the European Union

FOODPathS - towards FutureFoodS, the Partnership on Sustainable Food Systems (P-SFS)

Food Systems Science Network

1st Conference – Oxford, 25-27 March 2025

Theme: Food Systems Conceptual Issues

Niels Halberg, Aarhus University, on behalf of the entire FOODPathS Team

The role of FOODPathS:

- Developing the **prototype Partnership on Sustainable Food Systems** (funding, governance, modus operandi, FS Labs, chart, RIPE, trade-offs,..) and providing **suggestions / input** to DG RTD & FutureFoodS

- **Giving voices to various actors** (thanks to **17 partners representing 19 networks** (local, regional, national, European, global, public-private, philanthropic, research, education, innovation, communication, management)

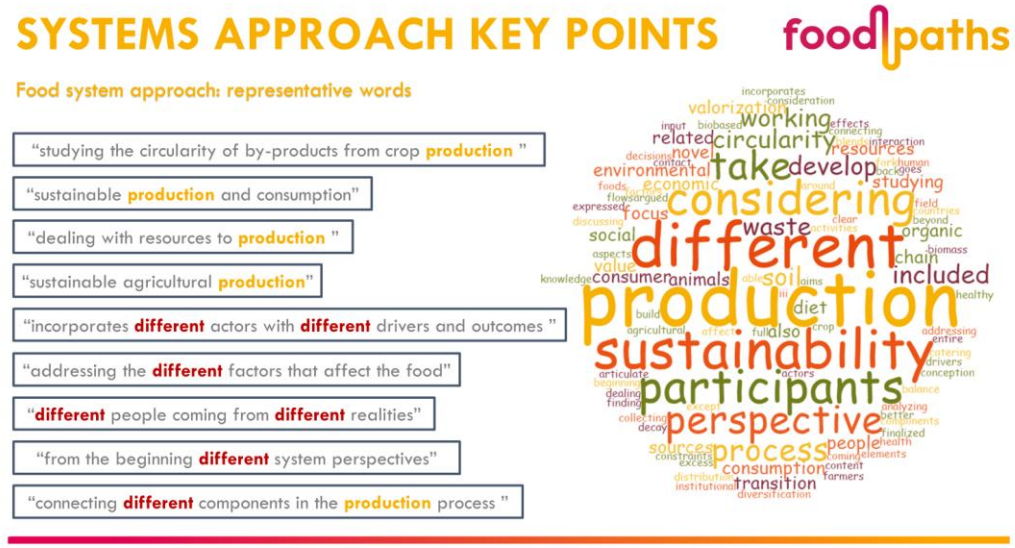
www.foodpaths.eu

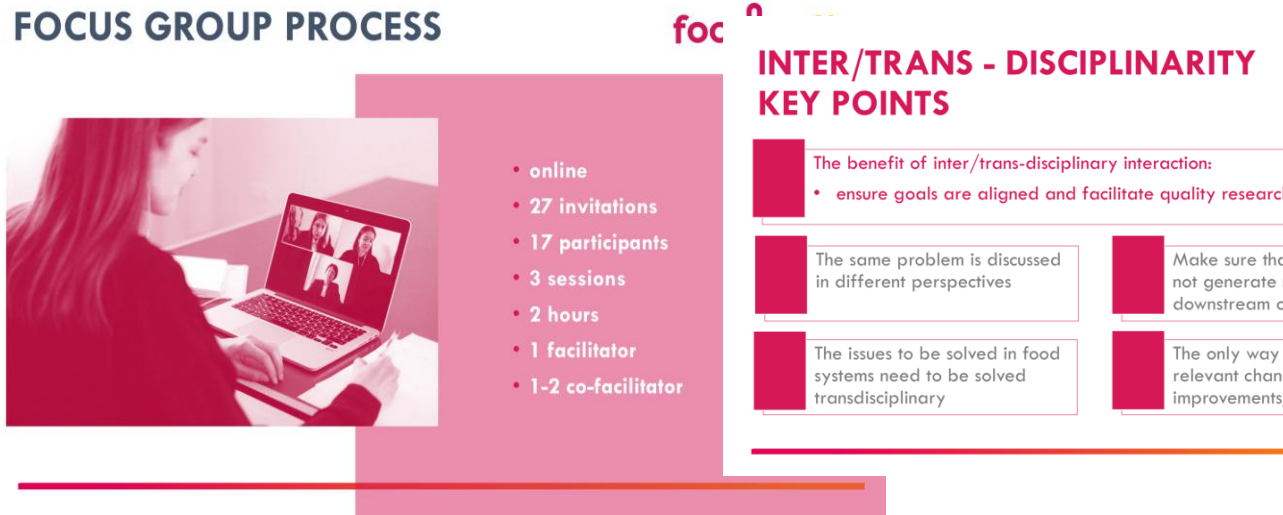
European CSA Project no. 101059497; June 2022 – Dec 2025

Funded by the European Union

Key activities in support of R&I in partnership *FutureFoodS*

- Developing the SRIA
- **Building network of funding agencies**
- Principles for calls :
- ? How to ensure a systems approach
- ? Demands for inter-disciplinarity
- Focus groups: Researchers w systemic research experience



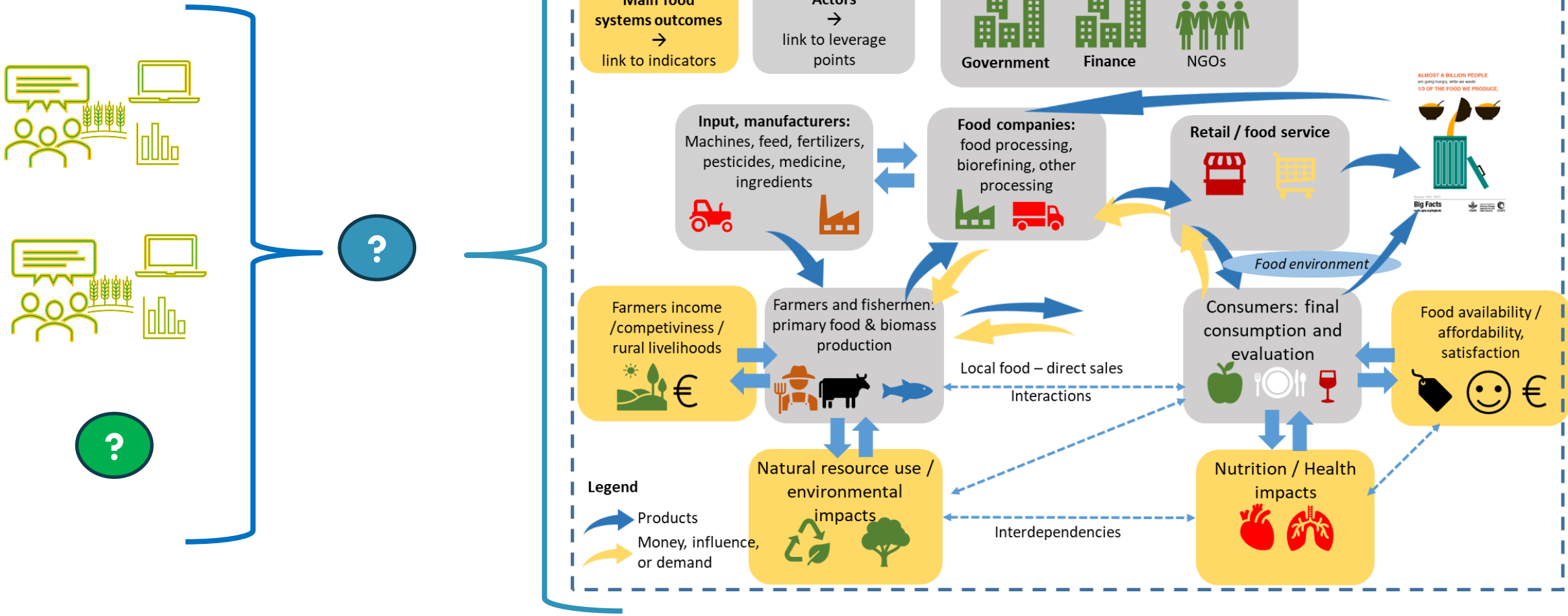


What constitutes a **Food Systems** observatory?

How to observe ***FS transition*** across **actors, activities, outcomes** in a coherent set-up?

How to account for **interactions, feed-back loops** and **interdependencies**?

Which users are interested in what (type of information?



16 food systems observatories - representing broad networks of experts

- FSCI: Global monitoring of food systems across five thematic areas tracking the progress towards the conclusion of the UN Sustainable Development Goals
- (**Food Systems Countdown Initiative**)

- SUSFANS: EU MS, visualizing and benchmarking diets against policy and sustainability goals.

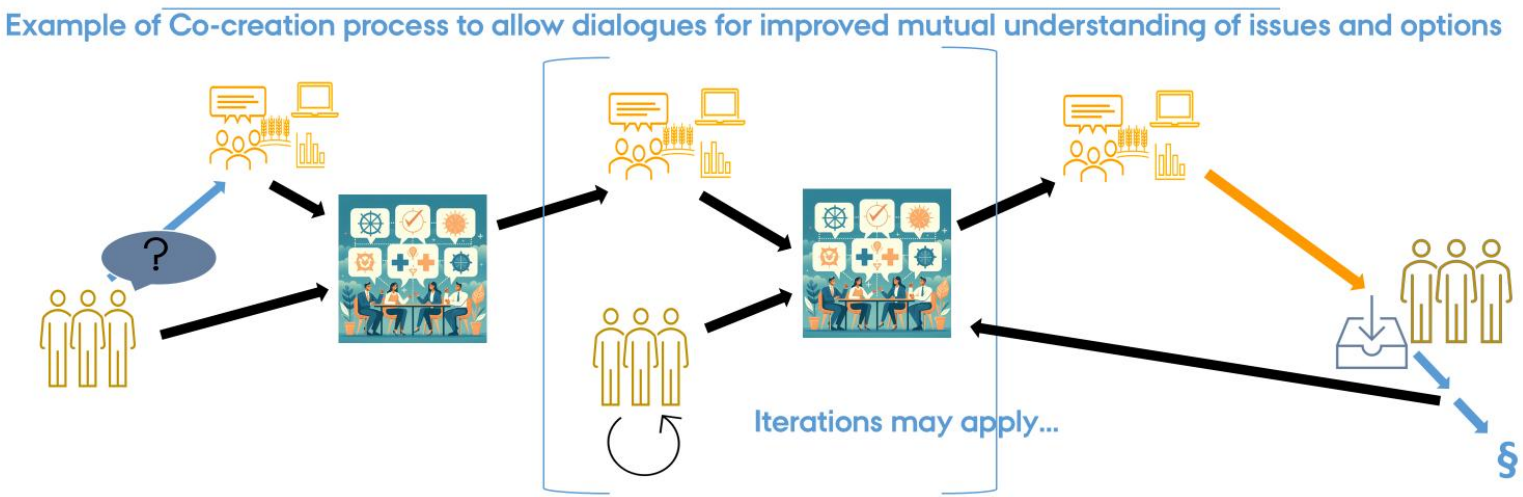
- FAO database: Global with data on 16 thematic areas including agriculture, nutrition and sustainability

- CRFS: City Region Food Systems, Urban Food Practices

- EUROSTAT (FSDN): EU database on agriculture, health, socioeconomics, economics
- (**Farm Sustainab ility Data Network**)

- EU-FSMD (JRC): EU monitoring dashboard tool to monitor the sustainability of the EU food system based on environmental, economic and social indicators
- (**Food System Monitoring Dashboard**)

Policy makers/civil servants: Complexity of food systems causes need for rethinking S-P-I

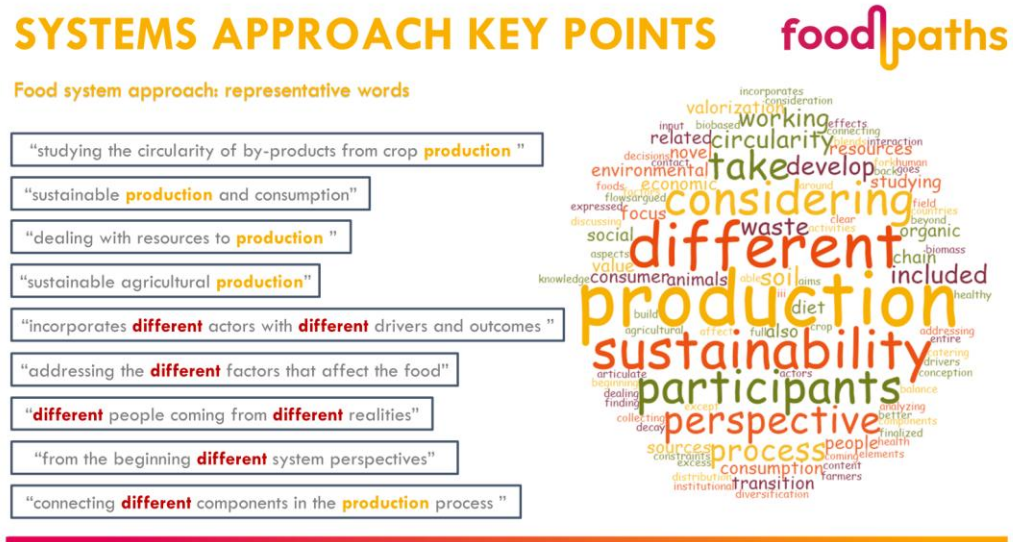


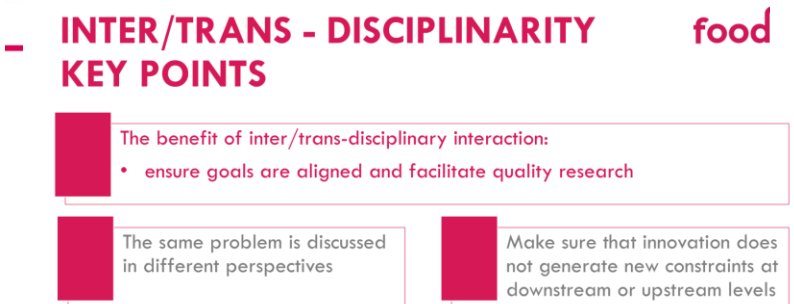
Both diagrams are simplifications of a much broader S-P-I landscape!

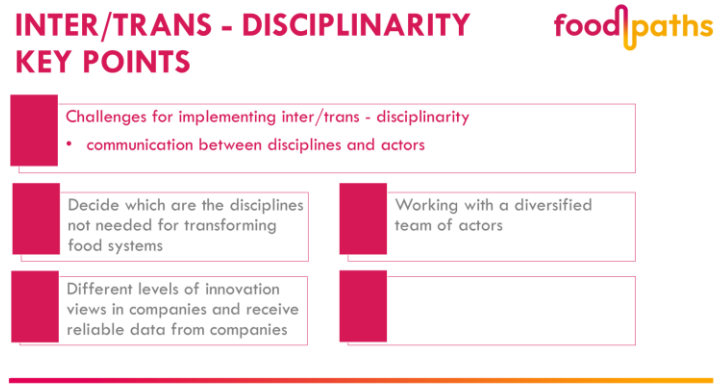
An even more radical change: Moving from S-P-I to Science-Policy-society Interfase? Needs further development…

Work done and Results achieved

- SRIA update was a stakeholder survey via Foodpaths' advisory board members
- Guidelines for Science to Policy interface'
- Focus groups and workshops to receive experts input to requirements for inter-disciplinarity in FS research projects. Collaborated with SCAR SWG FS on the same questions. (Milestone 12 "Consensus about need for inter-disciplinariry "systemsoriented topics")
- Recommendations re. need and description of inter-disciplinarity and FS approach in FutureFoodS calls reported as part of D2.2







Pitch 5 - FOSTER

Rosina Malagrida

Pitch 6 - FEAST

Anant Jani – Heidelberg University

FEAST

Food systems that support transitions to healthy and sustainable diets

Dr Anant Jani
anant.jani@uni-Heidelberg.de

Co-funded by the European Union

FEAST is co-funded by the European Union's Horizon Europe research and innovation programme under grant agreement number 101060536. Views and opinions expressed are those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

UK participant in FEAST (Good Food Oxfordshire) is supported by Innovate UK grant number 10041509 and the Swiss participant in FEAST (FiBL) is supported by the Swiss State Secretariat for Education, Research and Innovation (SERI) under contract number 22.00156.

Current Food Systems: Lose-Lose-Lose-Win

People: LOSE[1]

- Poor-quality diets - leading cause of death and a top contributor to Non-Communicable Disease (NCD – high BP, diabetes, obesity/overweight)
  - NCDs: ~75% of all diseases in Europe
  - NCDs: ~ 85% of all deaths in Europe

- Entrench health inequalities

Environment: LOSE[1]

- 26% of global greenhouse gas (GHG) emissions
- 50% of global habitable land use
- 70% of freshwater use
- 78% of eutrophication
- 60% of biodiversity loss

Public Sector/Society: LOSE[1]

- EU governments spend about €700 billion/year to treat NCD
  - ~70% of the ~€1 trillion (7-10% of GDP) EU governments spend annually on healthcare

- Cost of overweight/obesity to increase from $2 trillion to $4 trillion by 2035

Large Multinationals: WIN[1]

- Processed foods sales: ~$350 billion, ~7% profit margin

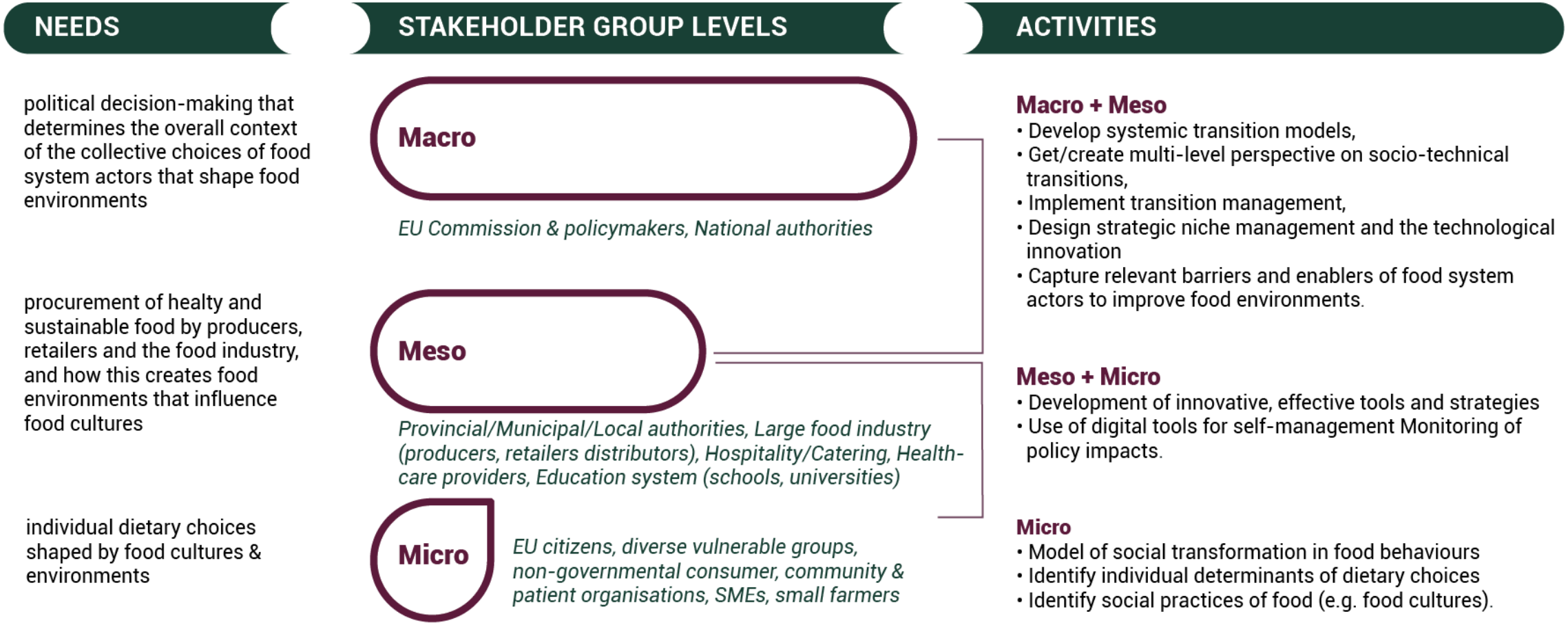
- Soft drinks – sales: ~$100 billion, ~14% profit margin

- Fast food – sales: ~$75 billion, ~13% profit margin

Hidden costs of global agrifood systems worth at least $10 trillion[2]

1. https://www.frontiersin.org/journals/sustainable-food-systems/articles/10.3389/fsufs.2022.1039127/full
2. https://www.fao.org/newsroom/detail/hidden-costs-of-global-agrifood-systems-worth-at-least--10-trillion/en

FEAST: Transition to Win-Win-Win-Win



https://www.frontiersin.org/articles/10.3389/fsufs.2022.1039127/full?trk=organization_guest_main-feed-card_reshare_feed-article-content

A Consortium to deliver **Win-Win-Win-Win**

Cannot be academically led & must be ‘European’

- FEAST = represent partners for European food typology regions (slide 6)
- FEAST = 50% Academic / 50% non-Academic partners
- FEAST = 50:50 budget split to academic/non-academic partners
- FEAST = Flat structured & avoid annoying/exclusionary academic jargon

Need to have a mechanism/authority to embed/sustain change

- FEAST = ~40% partners are municipalities or have strong working links with municipalities
- FEAST = all partners selected for experience of driving/sustaining change on the ground

This is going to be hard work & sometimes demoralising; Never give up, never give in!

- FEAST = strong & shared mission alignment

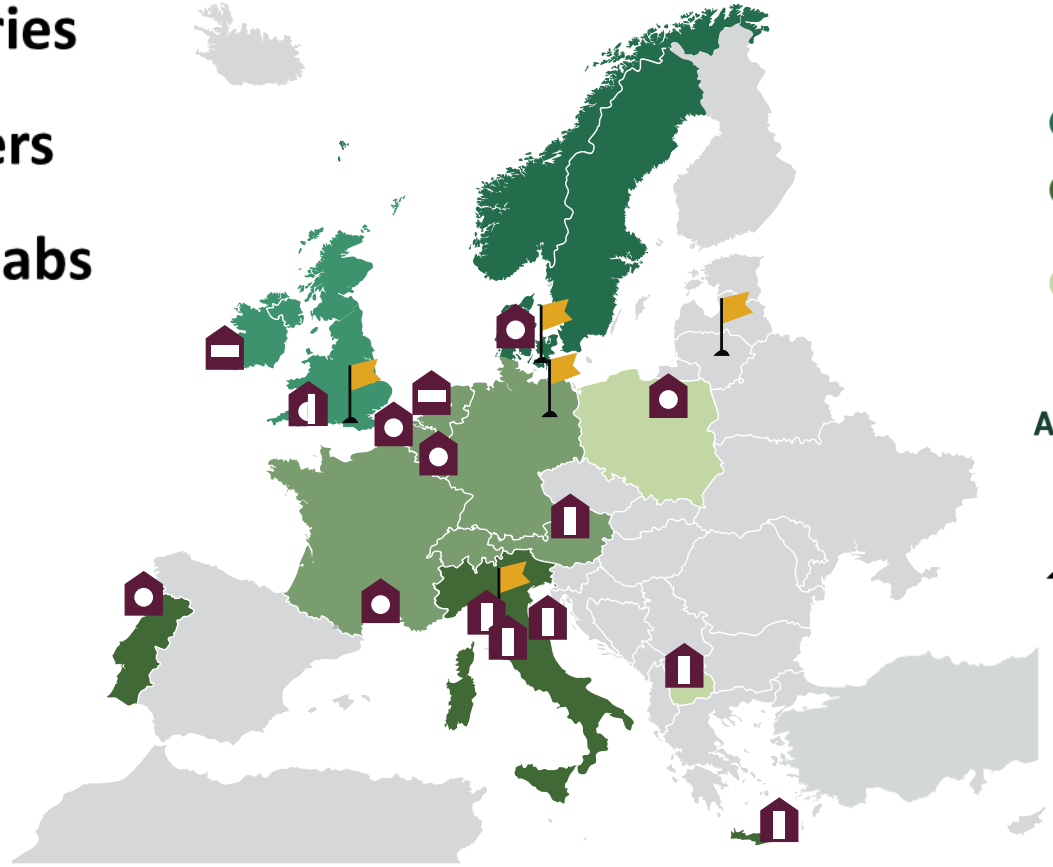
FEAST Consortium

FEAST Consortium

15 countries

35 partners

13 living labs



LIVING LAB

Large City | Small City | Rural

Anglosaxon group
Cork Oxfordshire (GFO)

Central European group
Rotterdam (ROT) Avignon (AVI)
Leuven (LEU) Ghent (GEN)
LEADER Region Weinviertel-Donauraum (LEA)

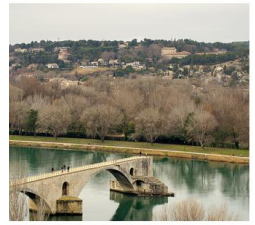
Scandinavian group
Guldborgsund (GUL)

Southern group
Alto Minho (CIM) Sitia (SIT)
Lucca Valli Etrusche (TNO)

Eastern European group
Lodz (UL) Prilep (PRI)

ASSOCIATED SITES

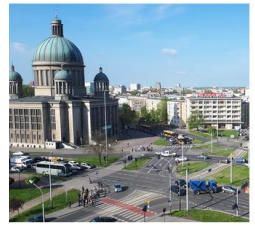
Berlin
Bologna
London
Kaunas
Stockholm



Avignon

CIM Alto Minho

Ghent



Lodz

Oxfordshire

Prilep

Guldborgsund

LEADER Weinviertel

Leuven

Rotterdam

Tuscany

Sitia

Focused conversation

Focused Conversation

‘What gaps, opportunities and challenges are present in the current state of FSS in Europe, that can shape the development of a Pan-European FSS Network?’

ORID - Method

Objective phase	Key question: What are the main objectives and activities of the FSS networks represented here?
Reflective phase	Key question: What excites or concerns you most about the current state of FSS networks?
Interpretive phase	Key question: What gaps or opportunities do you see in the current network landscape for advancing FSS?
Decisional phase	Key question: What are the most important actions we can take to strengthen collaboration and impact across FSS networks?

Per table:

- Read the hand-out
- Assign a note taker
- Spend 10 minutes on each phase
- Write down your answers on the A1 or on a sticky note
  - 1 idea per sticky note

Sharing back

FoSSNet

CONFERENCE 2025

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UK Research and Innovation

Thank you!

15 April 2025