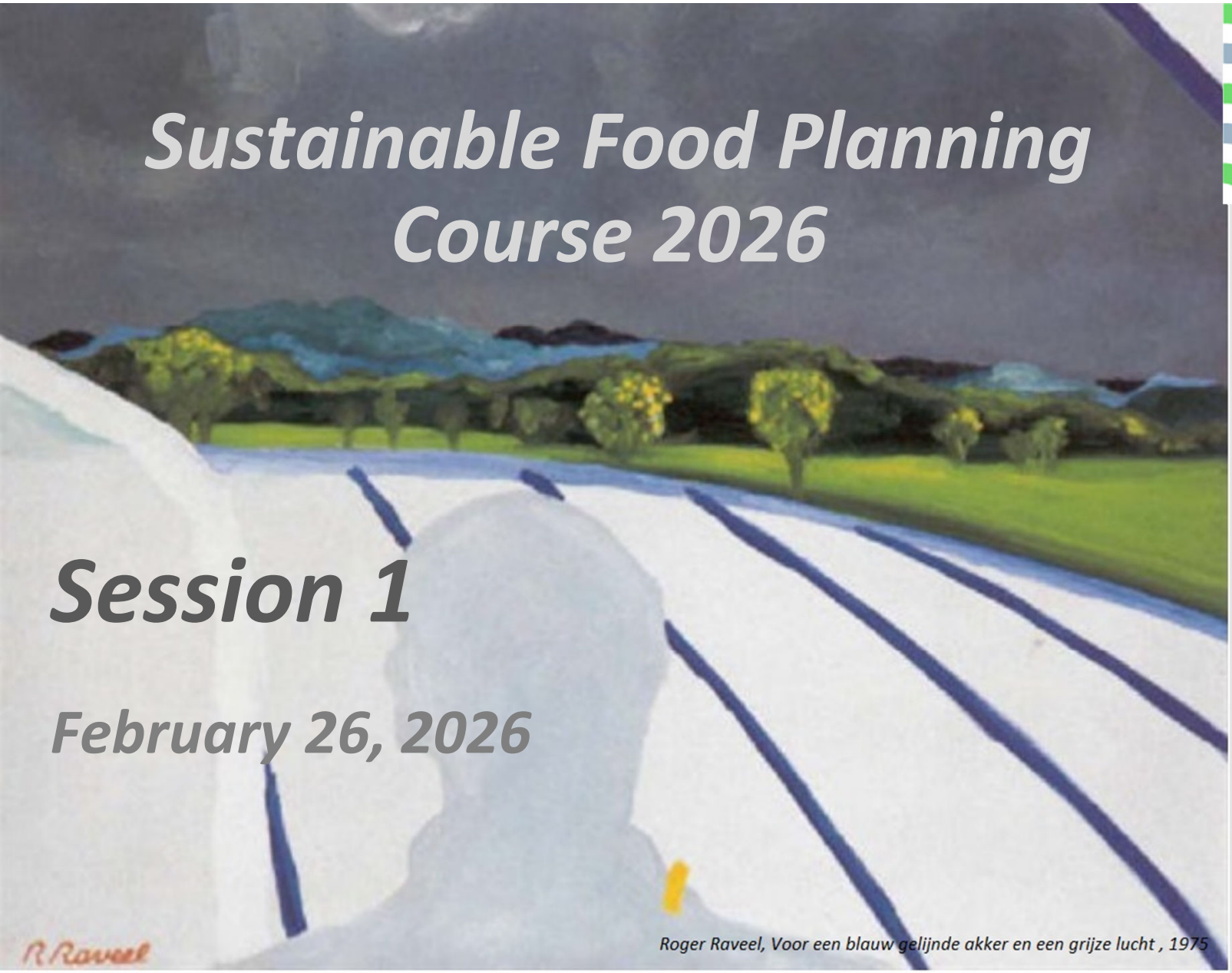
Sustainable Food Planning Course 2026

Session 1

February 26, 2026



Roger Raveel, Voor een blauw gelijnde akker en een grijze lucht , 1975

AESOP4FOOD
Action for Education Spatial Organisation and Planning For Sustainable Food

Part of the lecture will be recorded, so if you do not want to be seen turn your camera off during the recording.

Jeroen de Vries &
Roxana Triboi
LE:NOTRE Institute

based on material of the AESOP4Food project

Today's programme 17h00 – 18h15

Aim and purpose of the course, practical issues

Major challenges of the food system

Answers to the challenges by IPES-Food

The role of planners

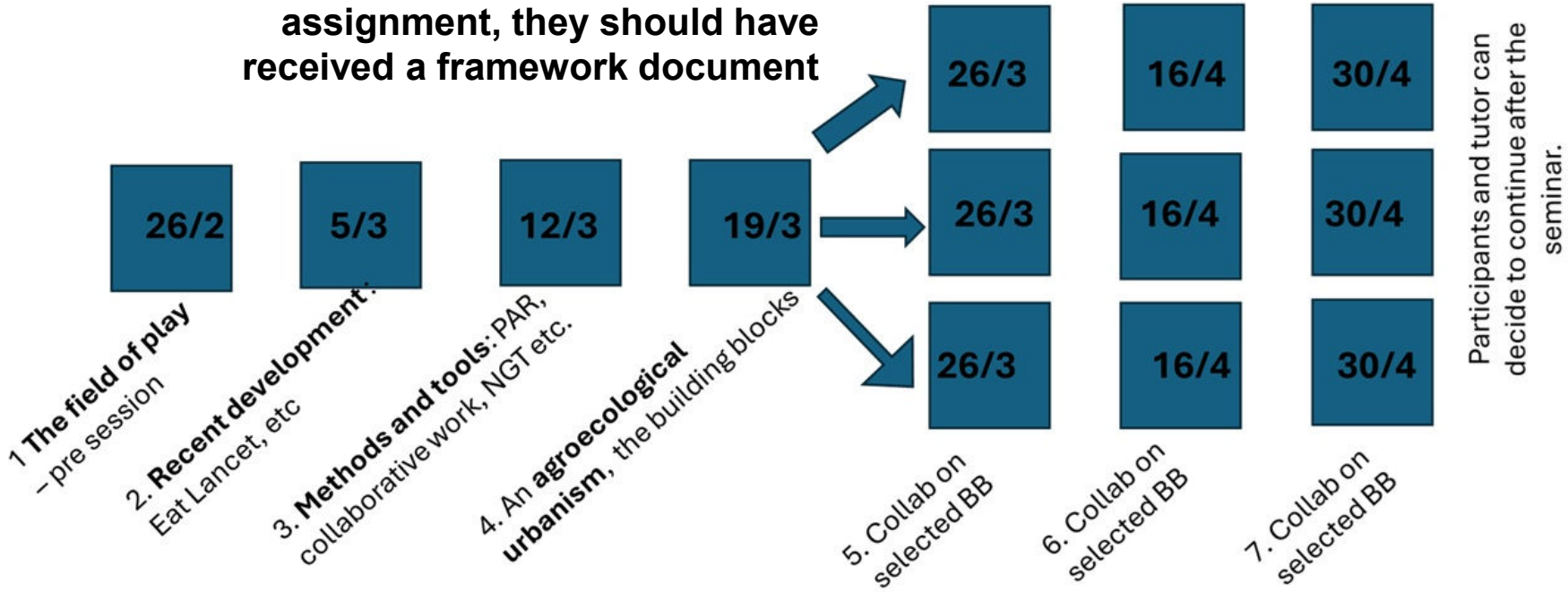
Q&A, discussion

4 sessions with lectures and Q&A

February 26	**Introduction to the course, the main challenges for developing sustainable food systems, the position of the planner for transformative actions.**
March 5	**Current developments in sustainable food planning, de EAT-Lancet report relating diets to planetary boundaries, food as a commodity in world trade.**
March 12	**Research and planning approaches, principles of Participatory Action Research, starting and organising living labs, steps of Design Thinking, methods for collaborative goal setting and evaluation.**
March 19	**Agroecological Urbanism, the building blocks and how they may be applied. Exemplary case studies of some of the blocks.**

3 feedback sessions for those who are working on an assignment

24 participants working on an assignment, they should have received a framework document



Developing a community of practice

Padlet to get to know each other

(only if you want this)

https://padlet.com/geronimo2/getting-to-know-the-participants-of-the-2026-aesop4food-semi-gbebbahaln9kmawg

Padlet for making comments, asking questions, giving suggestions

https://padlet.com/geronimo2/comments-q-a-for-aesop4food-seminar-2026-u1nhogoy8vsguuoa

The idea is that participants who are working on similar building blocks will be able to connect in the future.

Central information on the AESOP4Food wiki

Here we will post the powerpoints after each session, actual information, links to references.

https://wiki.landscape-portal.org/index.php/AESOP4Food_Spring_Seminar_2026

Main challenges introduction

CFP: Failure to put sustainable farming first

Ensuring access to land, water and healthy soils

Source: Common Food Policy, IPES, 2019

CFP: Techno-Fixes that sideline the real solutions

Source: Common Food Policy, IPES, 2019

Rebuilding climate-resilient, healthy agro-ecosystems

CFP: The hidden costs of cheap food

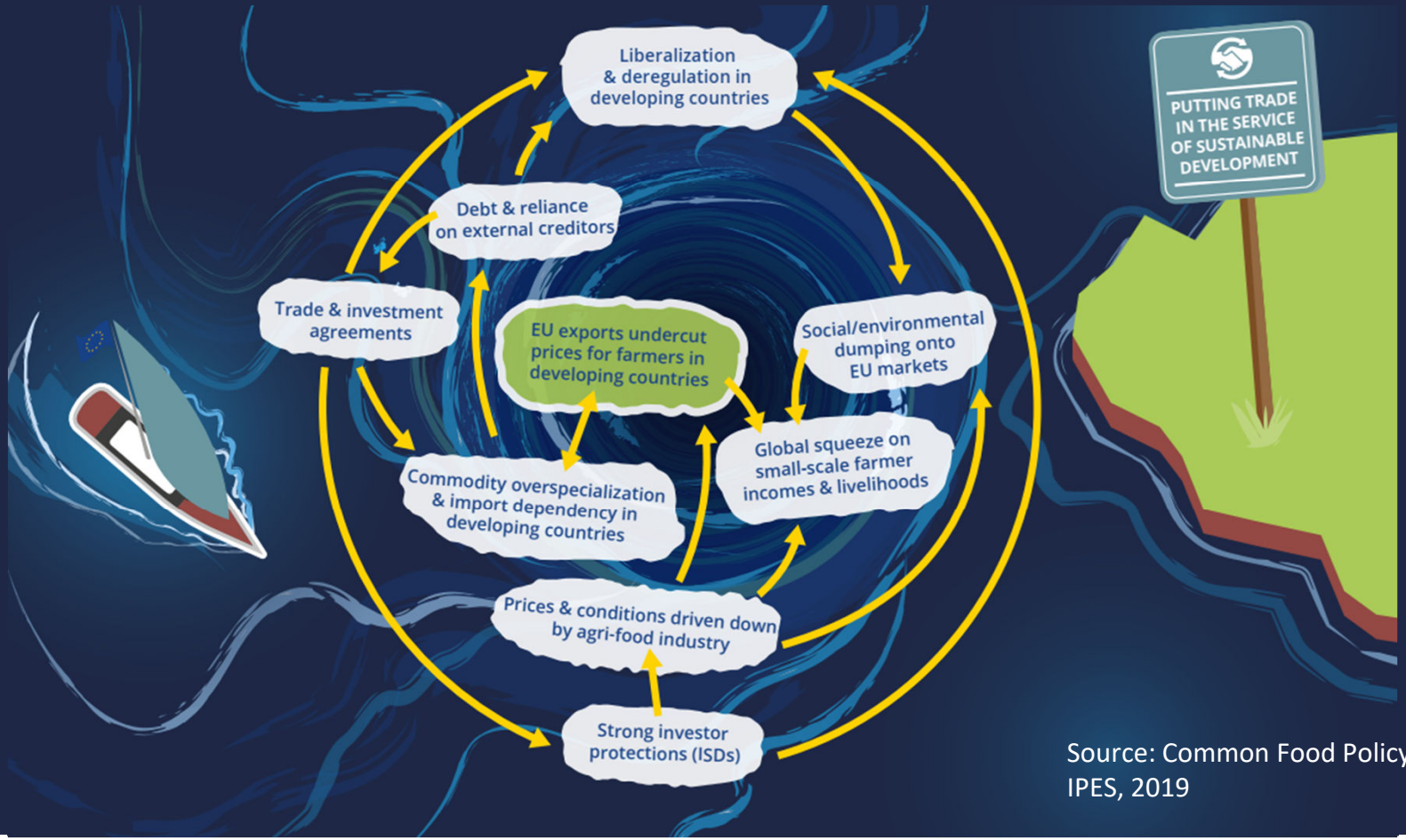
Promoting sufficient, healthy and sustainable diets for all

CFP: The untapped potential of alternative foodsystem initiatives

Source: Common Food Policy, IPES, 2019

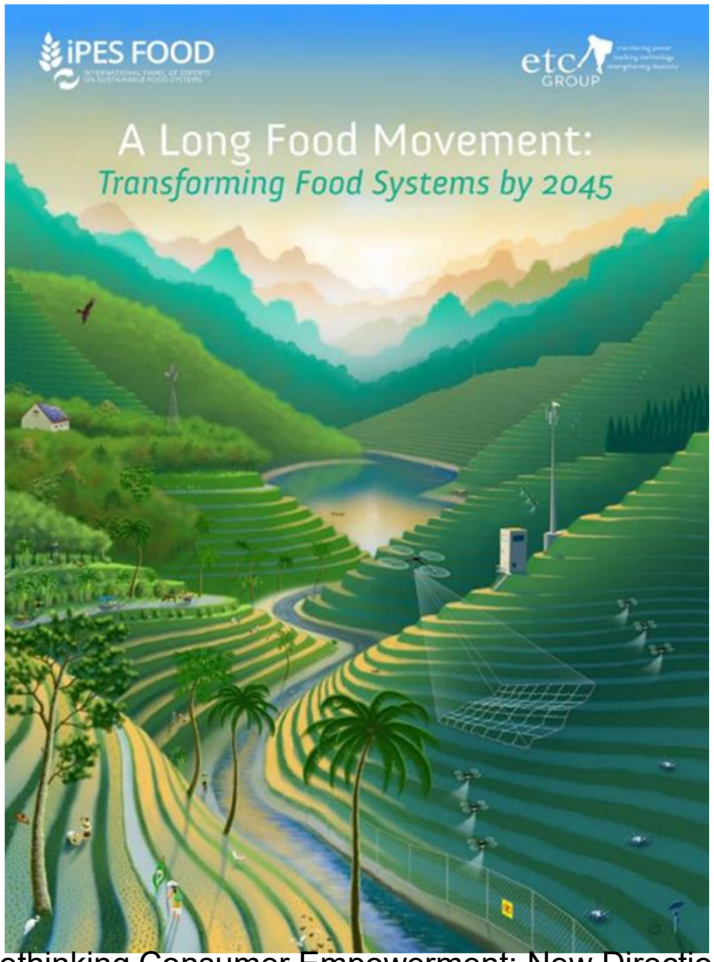
Fairer, shorter & cleaner supply chains

CFP: Export orientation, race to the bottom



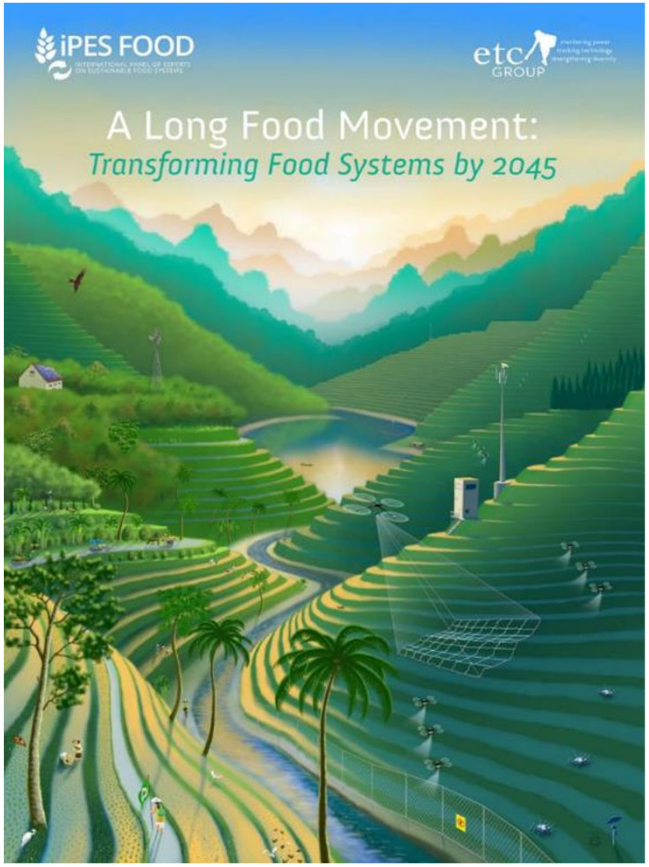
Source: Common Food Policy, IPES, 2019

Putting trade in the service of sustainable development



V Delhomme (2024). “Rethinking Consumer Empowerment: New Directions for Sustainable Food Law in an Era of EU Discontent”. European Journal of Risk Regulation 15, 232–252. https://doi.org/10.1017/err.2024.42

IPES Long food movement



Two scenarios

Looking ahead to 2045: Agribusiness-as-Usual

Looking ahead to 2045: Civil society as Unusual

Four pathways

Rooting food systems in diversity, agroecology, and human rights

Transforming governance structures

Shifting financial flows

Rethinking the modalities of civil society collaboration

http://www.ipes-food.org/pages/LongFoodMovement

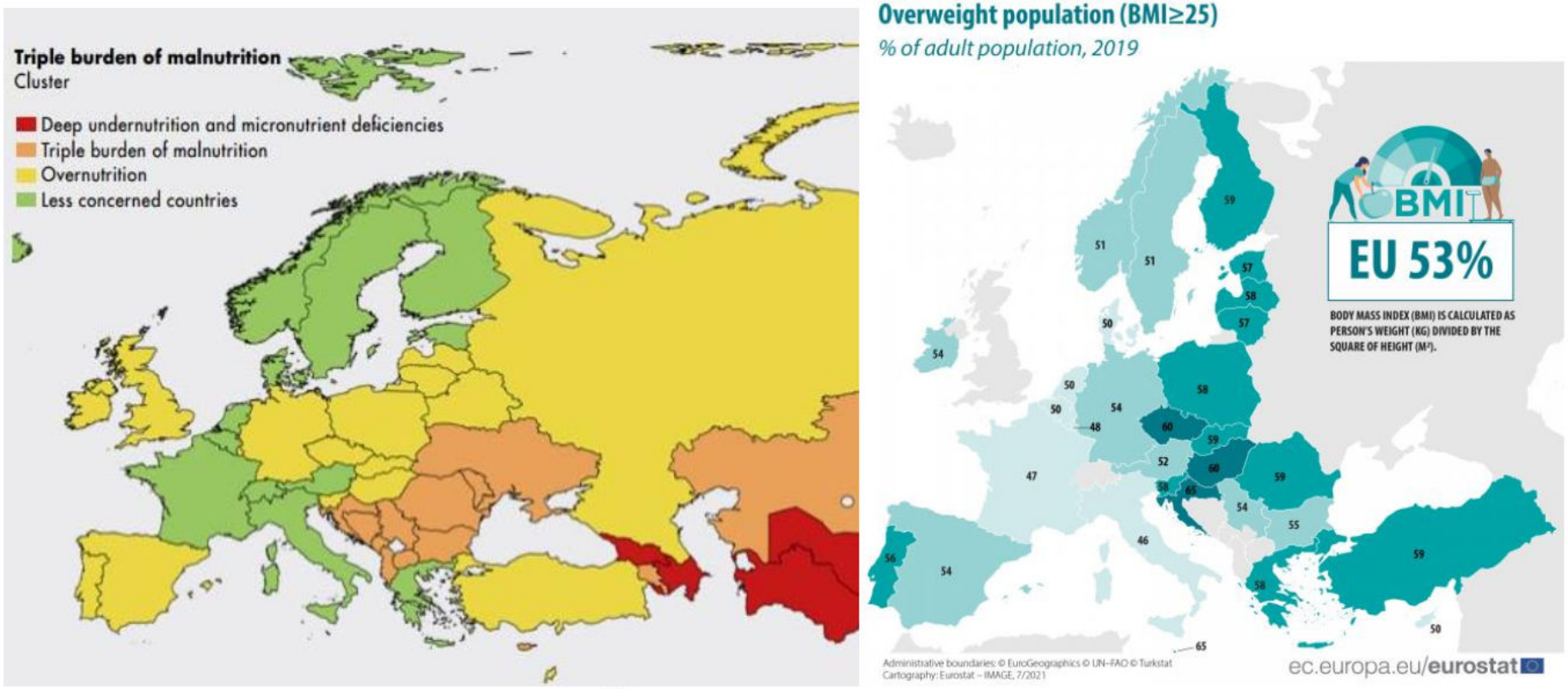


Figure 8 Triple burden of malnutrition[20] (left) and overweight population in percentages (%) of the adult population[21].

https://www.researchgate.net/publication/377308036_A_diverse_healthy_and_just_food_future_for_Europe_in_2100_A_co-creative_journey/citation/download

Prevalence of food insecurity in Europe 2007 & 2011

.Food insecurity entails that a person does not have regular access to enough safe and nutritious food for normal growth, development and an active, healthy life.

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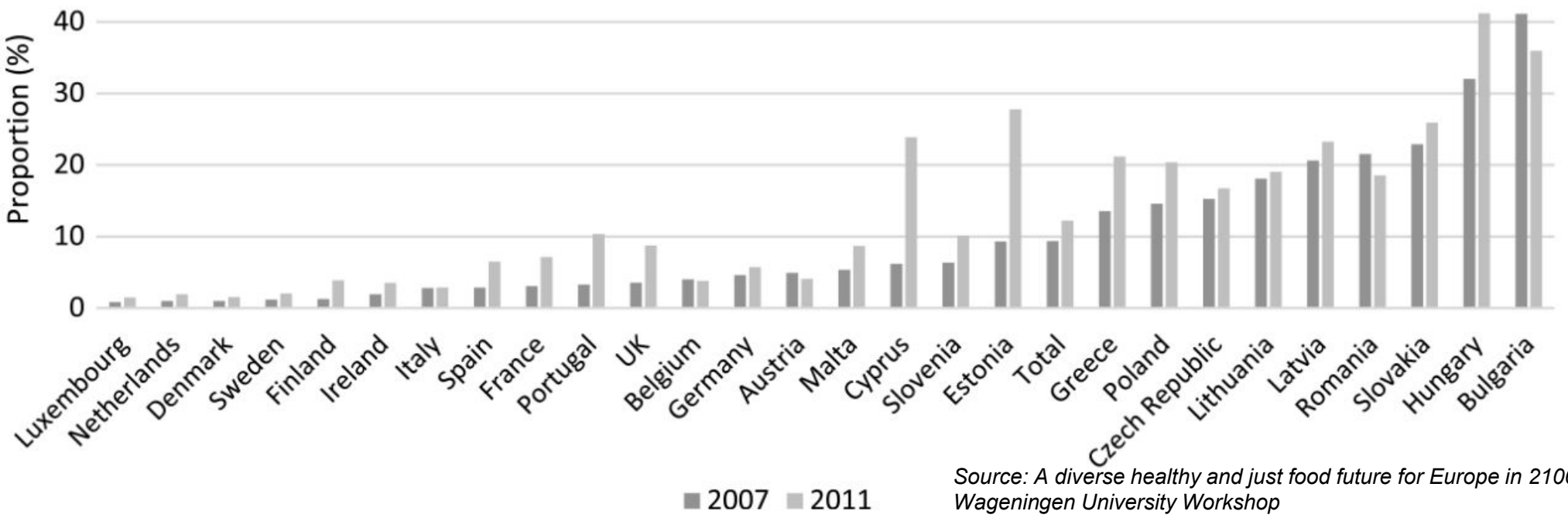
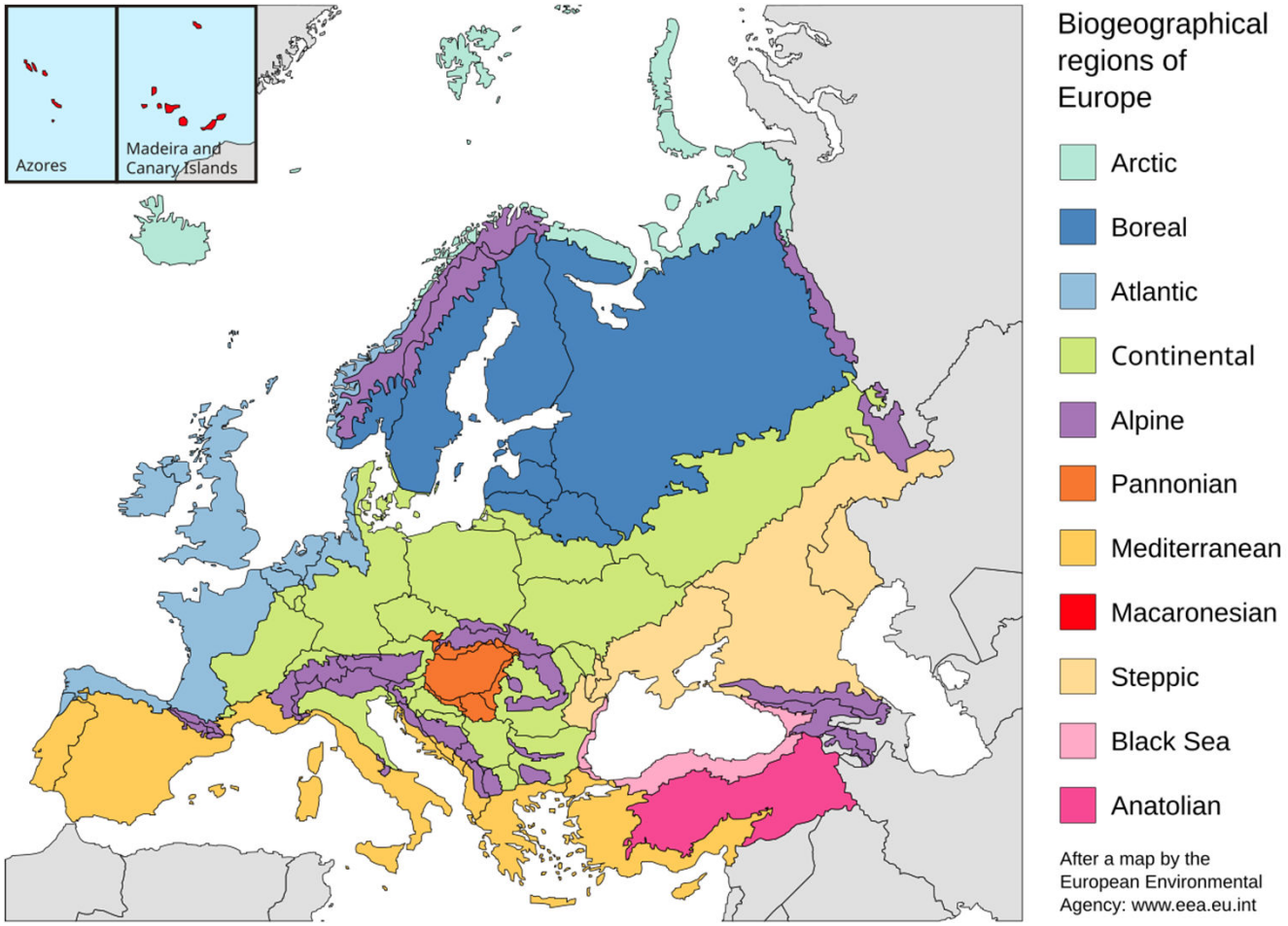


Source: A diverse healthy and just food future for Europe in 2100 – Wageningen University Workshop

Figure 6 Prevalence of food insecurity in Europe, 2007 and 2011.[18]

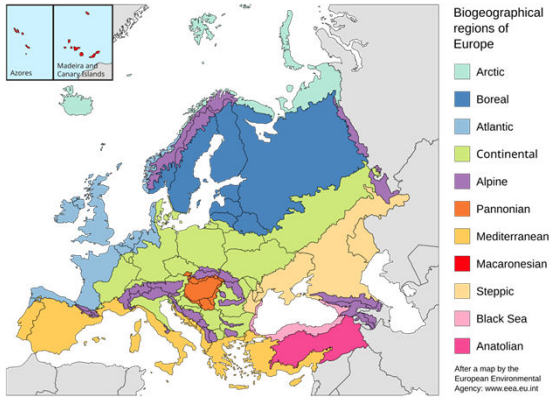
The challenges differ from region to region



A diverse healthy and just food future for Europe in 2100 – Wageningen University Workshop

Challenges and potentials of European regions

	North / Boreal	West	Continental / central europe	Mediter-ranean	Central Alpine
Challenges	Water management Increasing urbanisation	River flooding Sea level rise More droughts Salination Wild fires Lack of marine strategy	Urban sprawl Land grabbing	Droughts Intensive rain Wild fires Heat waves	Ecosystem restoration Uncontrolled runoff Land degradation Landslides
Potential	Climate change – longer production season	Regenerate soils Retention, filtration fresh water Changing crops	Culture of subsistence farming New forms of managing extensive areas	New forms of managing extensive areas	Waterheds Energy



https://www.researchgate.net/publication/377308036_A_diverse_healthy_and_just_food_future_for_Europe_in_2100_A_co-creative_journey/citation/download

CATTLE DENSITY IN EUROPE ↑

WWW.NEDERLANDVEGANLAND.NL

35

PIG DENSITY IN EUROPE ↓

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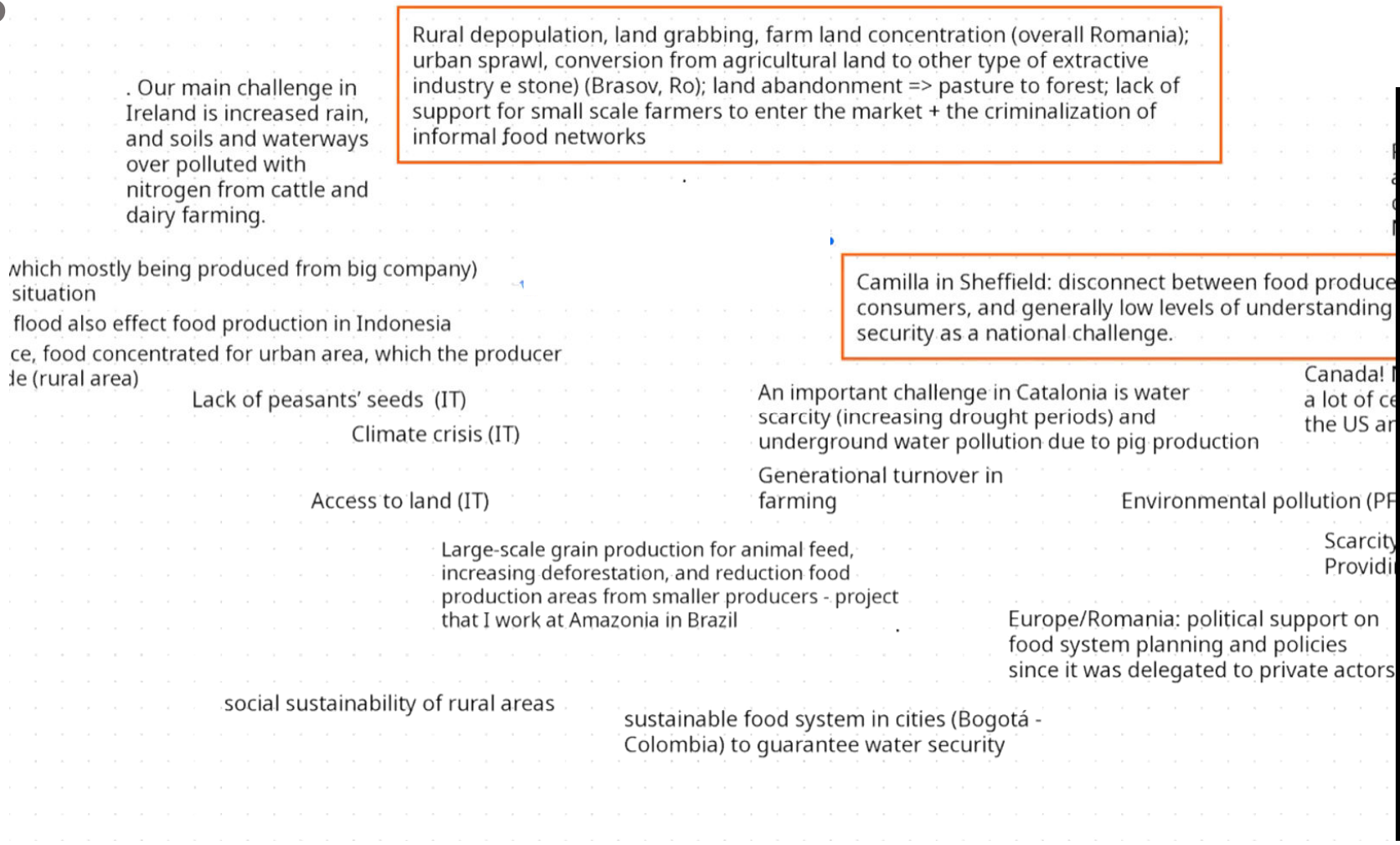
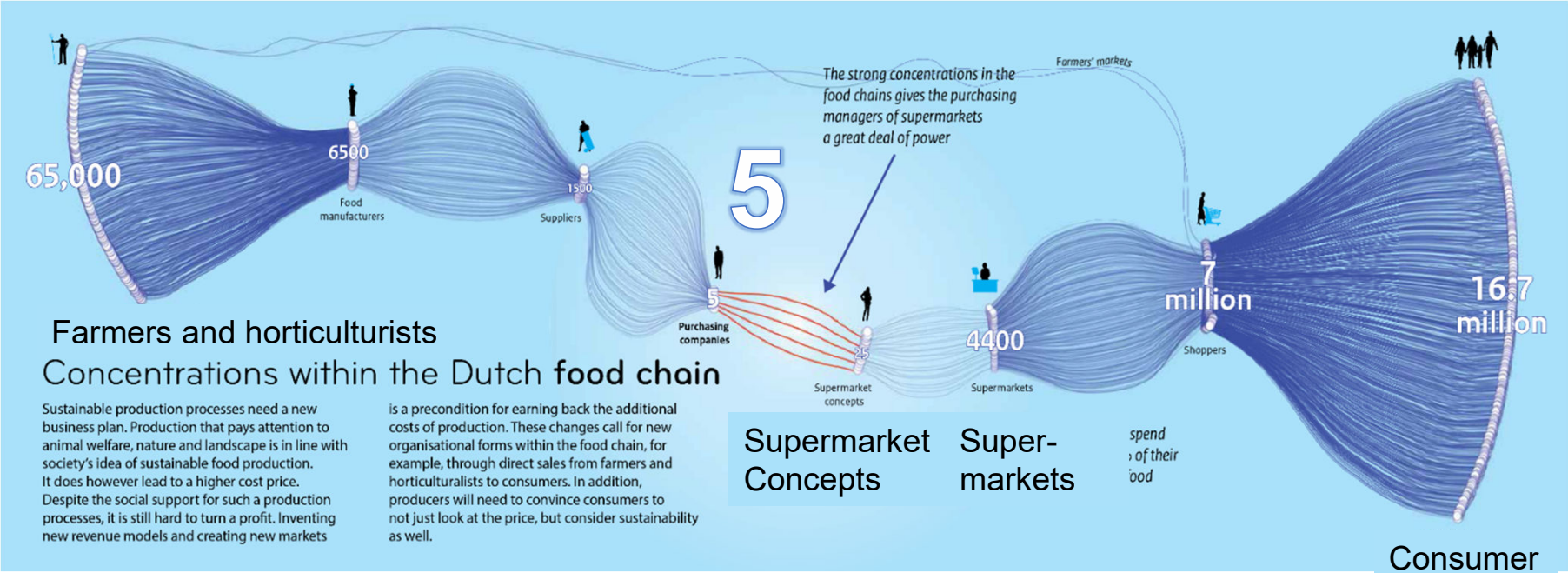
Differences between regions, countries, city-regions



the flows of food in the Netherlands

power concentration in the food chain



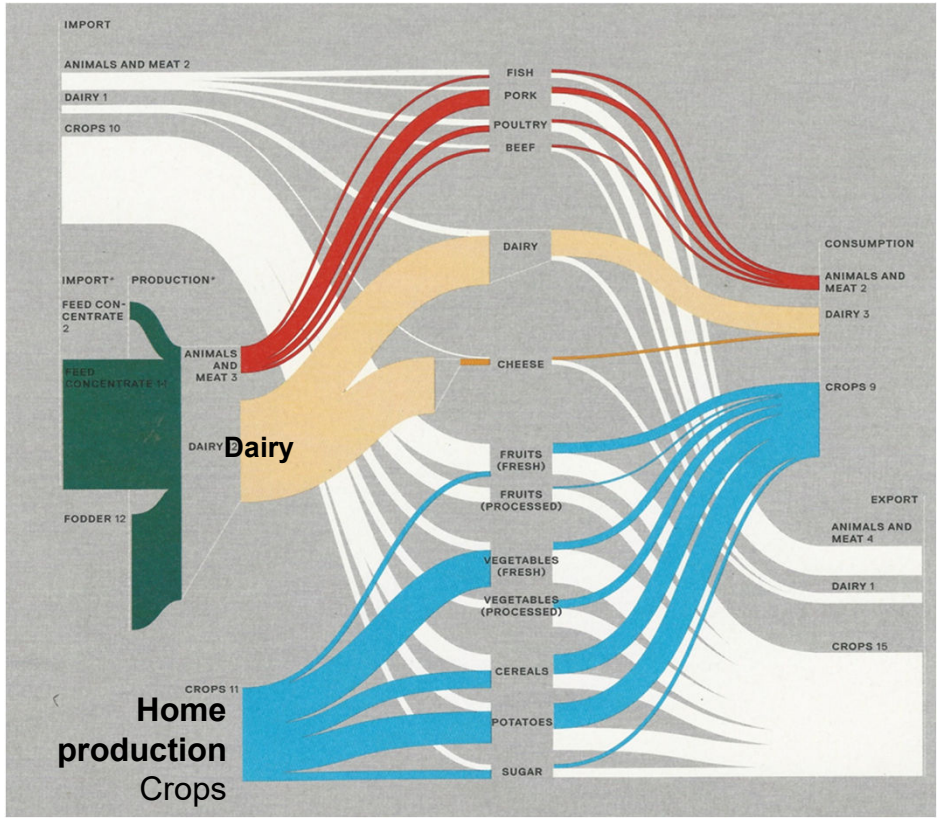
Source PBL,2014

the flows of food in the Netherlands

Import food: animals and meat, dairy and crops

Import for production
Feed concentrate

Fodder



Consumption of animals and meat, dairy and crops

Export of animals and meat, dairy and crops

Import
Production
Export
Consumption

An open system with a major import and culture of animal feed

Source: PBL, 2014

Benefits and costs of current Dutch agriculture

Today's Dutch agricultural system delivers a **net negative impact of - €5.3 billion**, when offsetting societal costs against economic benefits.

Economic benefits

€ 13.3 billion

(value added to the Dutch economy through primary agricultural production**)

1.4%

share of total Dutch GDP

The economic output of primary production is significant, but limited compared with the GDP contribution of the wider sector*** (6.9%).

* Data used to define the current Dutch agricultural system is from 2022

** within the total Dutch agricultural system (Ministerie van LVVN, 2022, visited May 2025)

*** Wider sector includes primary production, distribution, processing and supply sector

Societal costs

Societal costs

€ 18.6 billion

Environmental impacts and societal costs related to primary production exceed current economic benefits.

Societal costs per environmental impact for the current state (€bn)

Climate change	-€ 7.9
Phosphorus	-€ 0.1
Nitrogen (inc. ammonia)	-€ 7.2
Water consumption	-€ 0.1
Land use and biodiversity loss	-€ 2.5
Particulate matter	-€ 0.5
Pesticides	-€ 0.4

Nutritional value

Dutch agriculture produces more than twice the protein and energy the Dutch population needs.

Protein production[1] in the Netherlands

1.8 billion kg

60%

Animal-based[1]

40%

Plant-based[1]

26%

Over a quarter of protein production is derived from raw milk.

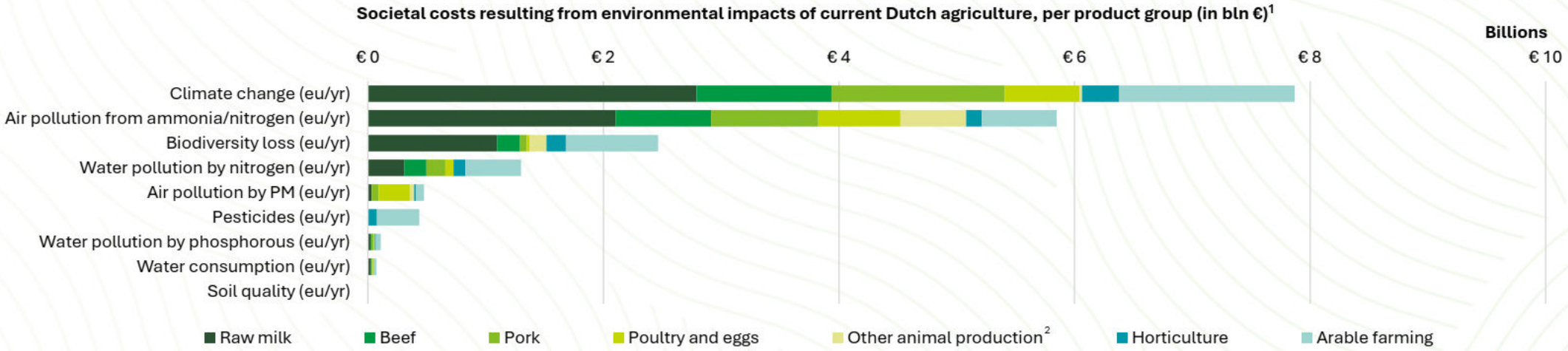
Total kcal production can feed the Dutch population 2.5 times

[1]Based on yield per product group (in kg) and amount of protein per product group (in kg/kg). See Methodology.

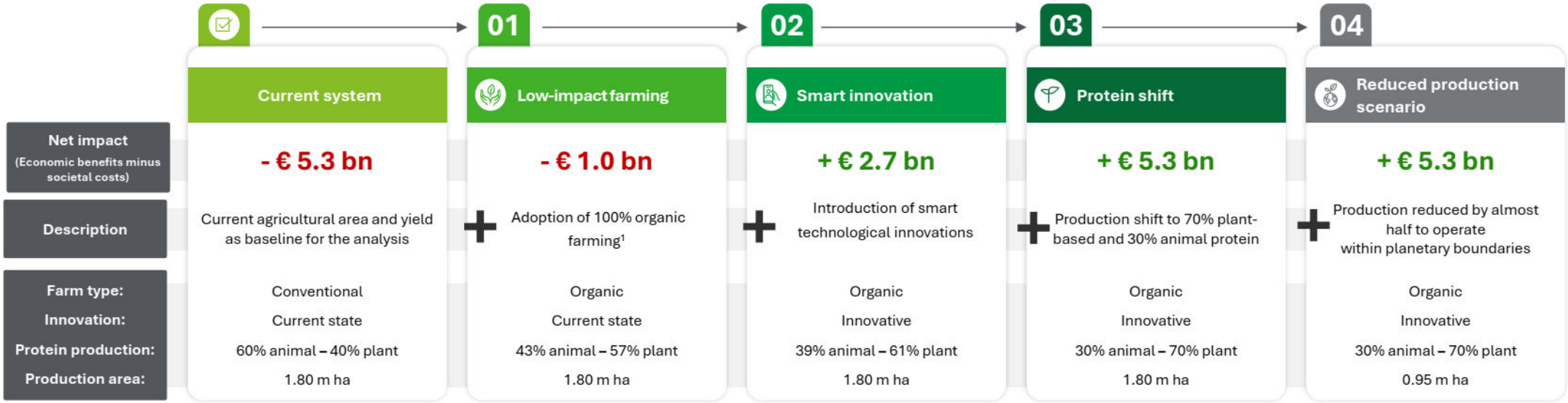
Deloitte Netherlands. 2025. The Hidden Bill. An analysis of the societal costs of Dutch agriculture today versus alternative systems. October 2025.

© 2025 Deloitte The Netherlands

- Deloitte Netherlands. 2025. The Hidden Bill. An analysis of the societal costs of Dutch agriculture today versus alternative systems. October 2025. page 17.



four scenarios presented in the Hidden Bill



PM methodology

Deloitte Netherlands. 2025. The Hidden Bill. An analysis of the societal costs of Dutch agriculture today versus alternative systems. October 2025. page 17.

City-region strategies

City-regions are full of resources

- financial (80% of the world GDP)
- biomass to be recycled
  (urban metabolism)
- cultural diversity
- knowledge
- public/political powers
- infrastructures
- information networks

Source: FAO. (2018)

The Milan Urban Food Policy Pact

In 2014, the Mayor of Milan decided to launch an international protocol aimed at tackling food-related issues at the urban level, to be adopted by as many world cities as possible.

The Milan Urban Food Policy Pact was signed on the ***15 October 2015*** in Milan by more than **100 cities**.
It represents one of the most important legacies of Milan EXPO 2015.

MILAN URBAN FOOD POLICY PACT

330	550M	9	23	968
Signatory Cities	Inhabitants	MUFPP Global Fora	MUFPP Regional Fora	Food Policy practices collected

Milan Urban Food Policy Pact

More than 50% of the world's population currently lives in urban areas, a proportion that is projected to increase to almost 70% by 2050.

Source: http://www.milanurbanfoodpolicypact.org

The Milan Urban Food Policy Pact

- Voluntary commitments *"for the development of sustainable food systems and the promotion of healthy diets »*

- Adoption of a framework of recommended actions (governance, social and economic equity, support to production, local supplying...)

- Exchange of good practices

- Monitoring Framework consists of 37 recommended actions organized around **6 categories**:
  1. Governance
  2. Sustainable diets and nutrition
  3. Social and economic equity
  4. Food production (including urban-rural linkages)
  5. Food supply and distribution
  6. Food waste

Source: http://www.milanurbanfoodpolicypact.org

The Milan Urban Food Policy Pact

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1. Acknowledging that **cities** which ***host over half the world's population*** **have a strategic role to play in developing sustainable food systems and promoting healthy diets**, and because while every city is different, they are all centres of economic, political and cultural innovation, and manage vast public resources, infrastructure, investments and expertise;
2. Noting **current food systems are being challenged to provide permanent and reliable access to adequate, safe, local, diversified, fair, healthy and nutrient rich food for all**; and that the task of feeding cities will face multiple constraints posed by inter alia, unbalanced distribution and access, environmental degradation, resource scarcity and climate change, unsustainable production and consumption patterns, and food loss and waste;
3. Acknowledging that accelerated urbanisation is profoundly impacting our world –in economic, social and environmental dimensions –which therefore necessitates re-examination of the ways in which **cities are provisioned with food and water** as well as other **essential goods and services**;
4. Acknowledging that **hunger** and **malnutrition** in its various forms exist within all cities, posing great burdens on individual health and well-being and thus generating major social and economic costs at household, community, municipality and national levels;
5. Recognizing that **family farmers** and **smallholder food producers**,(notably women producers in many countries)play a **key role in feeding cities** and their territories, by helping to maintain ***resilient, equitable, culturally appropriate food systems***; and that reorienting food systems and value chains for ***sustainable diets*** is a means to **reconnect consumers with both rural and urban producers**;

Source: http://www.milanurbanfoodpolicypact.org

The Milan Urban Food Policy Pact

6. Acknowledging that **urban and peri-urban agriculture** offers **opportunities to protect and integrate biodiversity into city** region landscapes and food systems, thereby contributing to synergies across food and nutrition security, ecosystem services and human well-being.

7. Acknowledging that since **food policies are closely related to many other urban challenges and policies**, such as *poverty, health* and *social protection, hygiene* and *sanitation, land use planning, transport* and *commerce, energy, education,* and *disaster preparedness*, it is essential to adopt an approach that is comprehensive, interdisciplinary and inter-institutional.

8. Acknowledging that **civil society** and the **private sector** have **major roles** to play in **feeding cities**, bringing experience, innovation and campaigns for more sustainable food systems and mainstreaming the critical need for a socially inclusive and a rights-based approach in urban food policy.

9. Recalling that cities have made commitments to **address climate change.**

10. Acknowledging hat cities and their neighbouring territories will be active in operationalising international processes such as **Sustainable Development Goals (SDGs**) and targets in the post-2015 Development Agenda.

Source: http://www.milanurbanfoodpolicypact.org

City Region Food Systems

A food system is the complex set of activities and relationships in the food cycle: growing, producing, processing, distributing, marketing, retailing, storing, preparing, consuming and disposing' (City of Hamilton 2014).

An ideal CRFS fosters four interconnected elements through out the food chain:

(1) food security and nutrition;

(2) livelihoods and economic development;

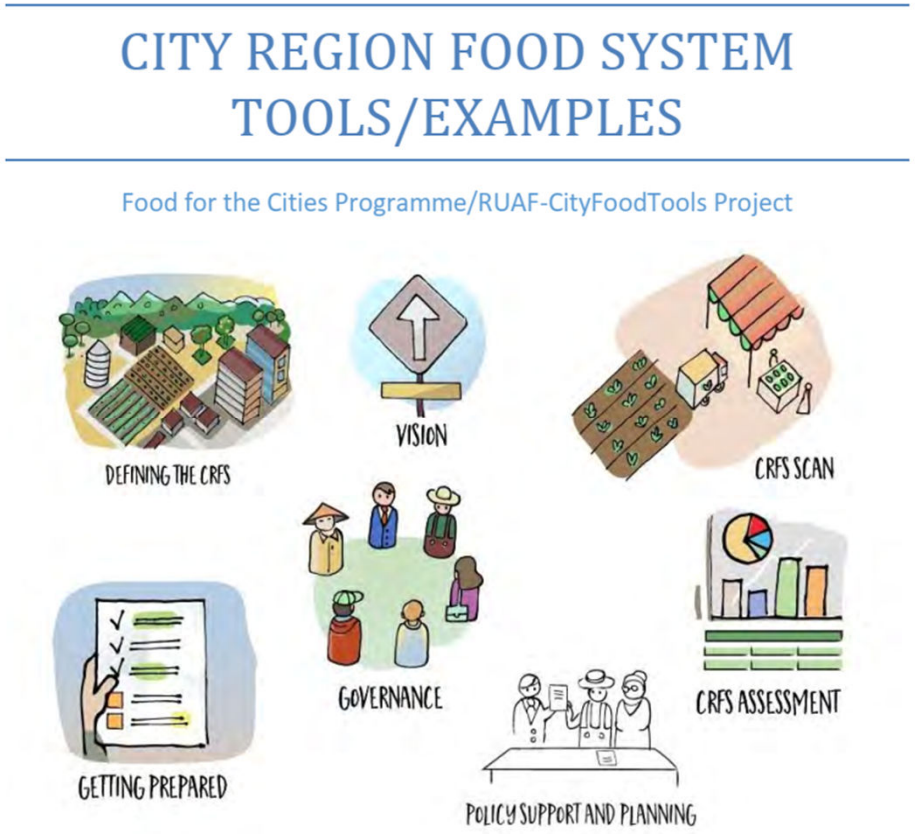
(3) sustainable natural resources management;

(4) social inclusion and equity (FAO and RUAF 2015).

Better connections among cities and towns and between them and their rural surroundings

Source: FAO. (2018)

A practical guide with examples

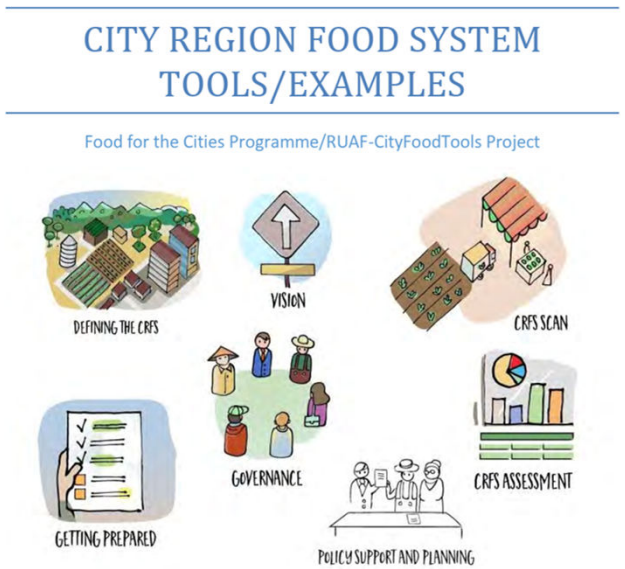


- Assess the current status and performance of a city region food system following a whole-system approach
- Identify priority areas for action with clear desired outcomes and ways of measuring change
- Help with planning strategy and action to achieving the desired outcomes
- Establish baselines and monitor changes resulting from (future) policy and programme implementation.

Source: FAO. (2018)

Sustainability areas / Components of food system

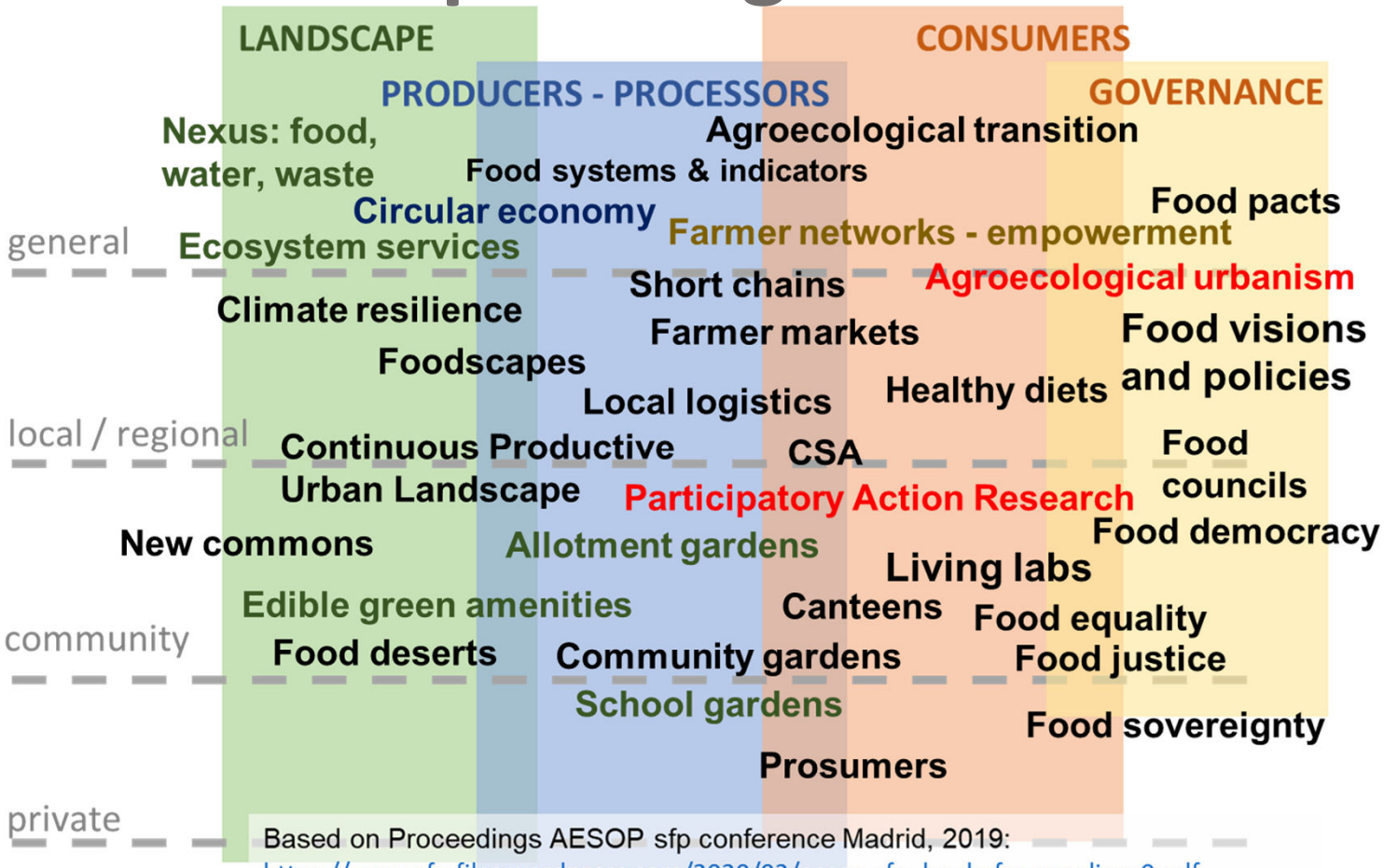
Sustainability areas	Food system aim
Input supply and food production	Develop and strengthen the city region food production capacity and potential
Food storage, processing and manufacturing	Optimise regional food processing capacity (that meet food safety standards and provide healthy and sustainable food to the population)
Food wholesale and distribution	Develop & strengthen wholesale and distribution of city region produced food e.g. markets, food supply hubs
Food marketing, catering and retail	Develop and strengthen the presence of food outlets (shops, canteens, markets, street traders) that supply fresh healthy food to city region residents
Food consumption	All city region residents consume healthy, safe and nutritious food in the right amounts for good health
Food and organic waste management	Reduce overall food waste throughout the food chain in the city region and optimise recycling of nutrients, water and energy for city region food production
Cross cutting - City region food system policy planning	Develop, implement and monitor improved and more resilient city region food policies and strategies



Source: FAO. (2018), page 133-144

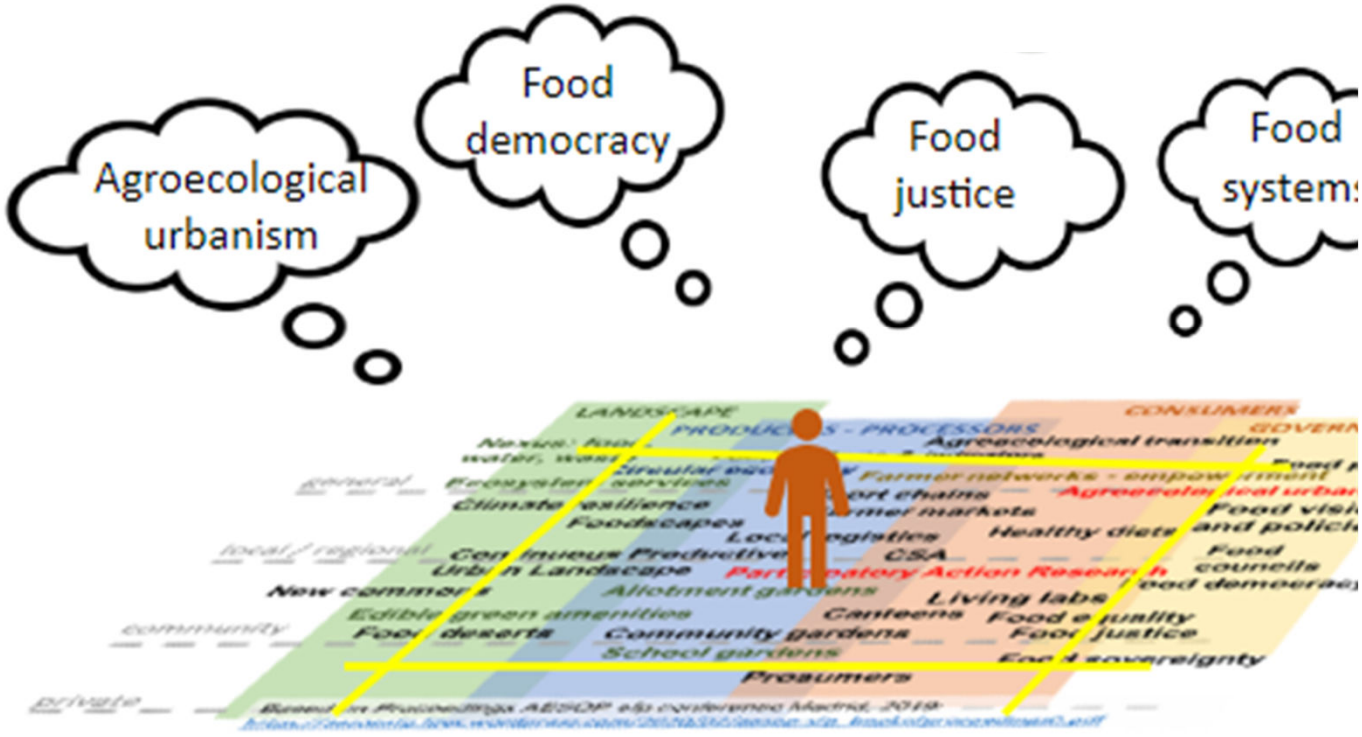
Positions in the field of planning

the field of play of sustainable food planning



Based on Proceedings AESOP sfp conference Madrid, 2019:
https://aesopsfp.files.wordpress.com/2020/02/aesop-sfp_bookofproceedings0.pdf

Your position in the field of planning?



What might be your focus?
You may type it on the whiteboard

Your positions in the field of planning

My focus is on peri-urban agriculture and its potential to provide social and environmental benefits. I´m also interested on how policies could promote food justice through peri-urban agriculture

Intersection between food value chain, market access and territorial development

My Focus is on urban agriculture spaces and how they contribute to the democratisation of the food system. It's about the pedagogical element of UA, it's link to food justice, agroecology, and food democracy

NL-support farmers in acces to land, either by influencing local auth or crowd funding

I'm interested in experimenting with a Community Kitchen based on participatory governance for alternative models of community food provisioning; alternative practices and economies based on solidarity, mutual help and co-governance

My focus currently is on how production area could feed the cities but still within the radius (Food Environment / seeing production area as facility for cities), territorial development. More into food securities for now and my thesis trying to see how school meal program shapes institutional foodscapes

I'm focusing on sustainable agri-food production
how and if land use planning could be applied and or food system planning and land use planning can be integrated

artistic food interventions at the community level; private kitchens and the culture of informal food sharing; informal food networks and diverse food economies

JC- my focus will be at the scale of Private meeting Community, concentrating on a future school garden in my son's school yard, 100% paved at the moment, and linking it to an edible landscape and their vegetarian daily meals cooked on site by the kitchen staff (very unusual in Ireland)

interest also in potential financial streams for subnational f

Community Food Resilience (More places to grow food in the city, sell local/ regional food in the city) More pathways to market for smallholder farmers. City Food Resilience - be prepared to respond to shocks/stressors that could disrupt the food system (climate/geo-political/pandemic)

My interest is in productive growing spaces in new Housing landscapes

Food-animal-water geographies
Agroecology movements

Relationships between producers-citizens

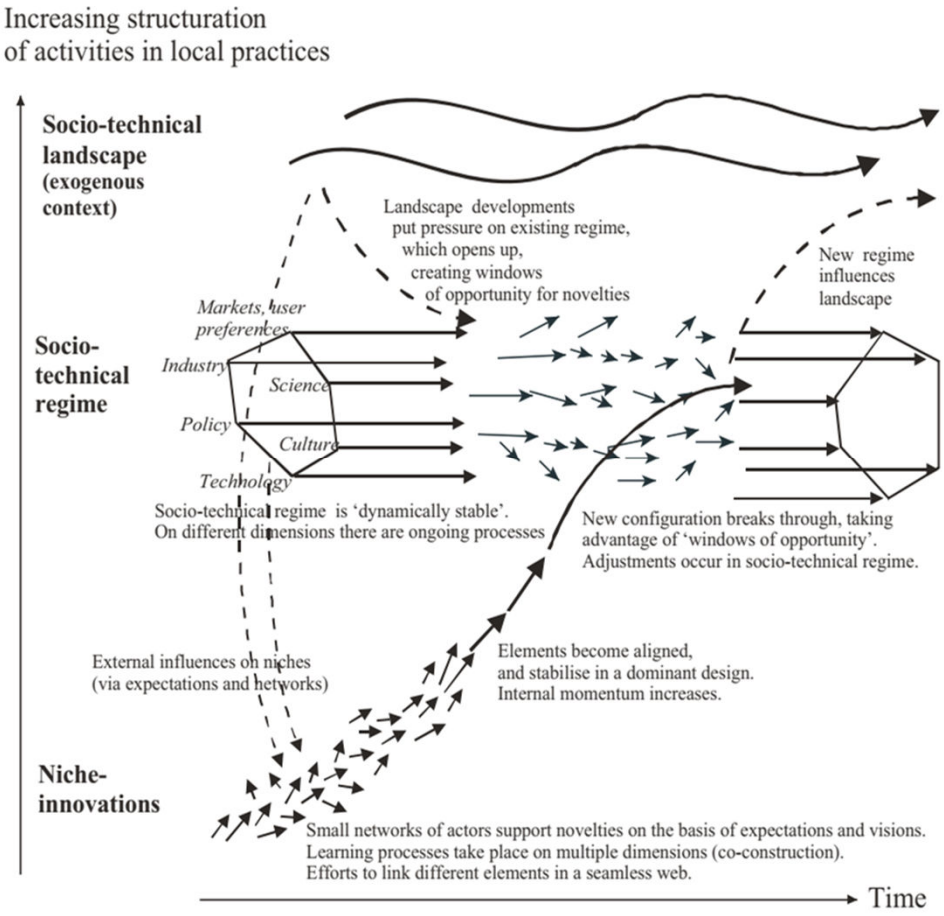
Food democracy ("Making Food Democracy" project in IT)

My focus is on city-region food systems.
My research analyzes the relationship between food systems, public food policy, and governance.
I am particularly interested in urban food systems and in the Milan Urban Food Policy Pact.

I'm interested in urban agriculture, the edible city, and food policies at both urban level but also city-region.

I am interested in recommendations and tips to create a food policy strategy o policy or also to create a food policy council

Multi-level perspective on transitions

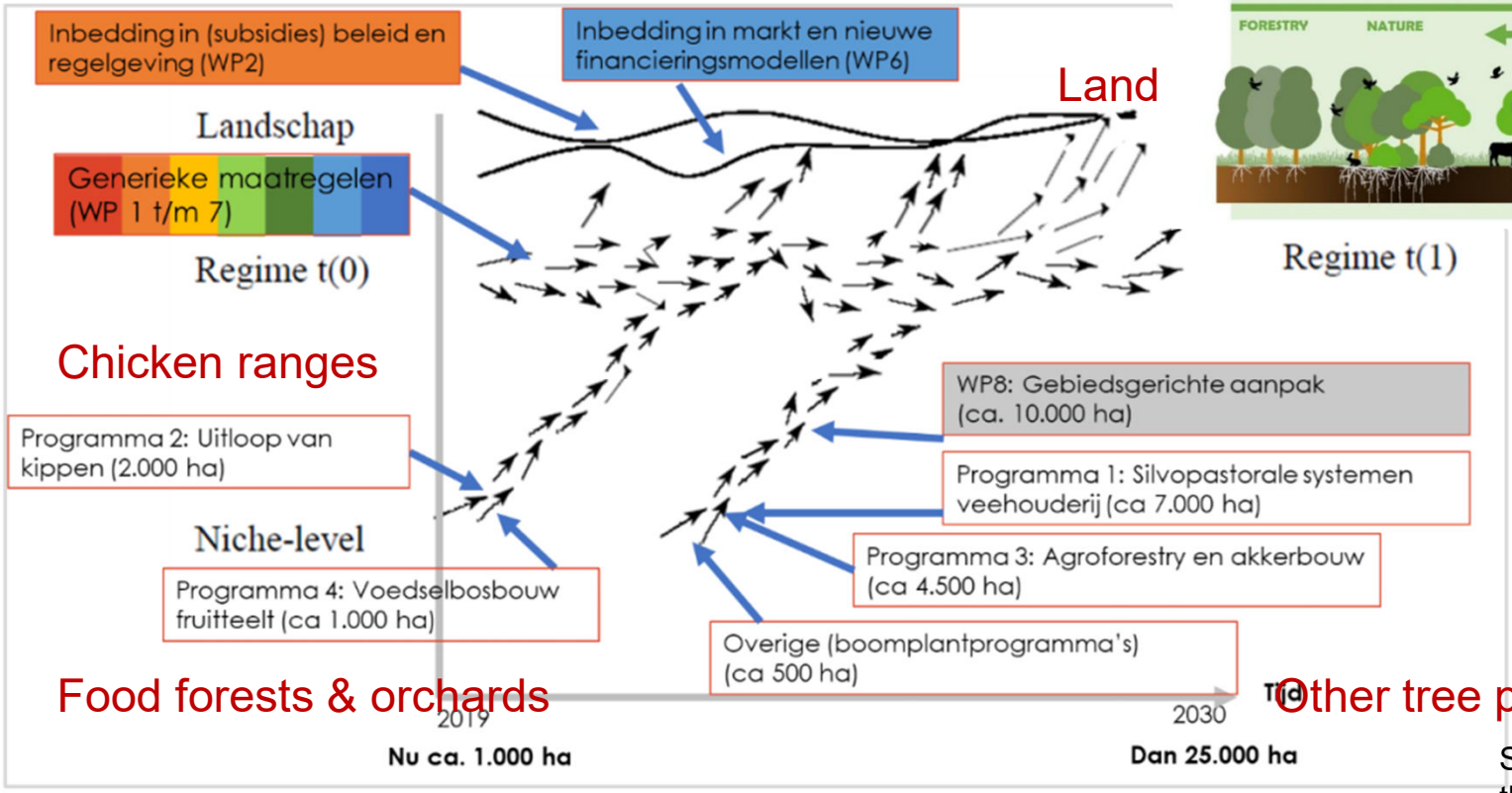


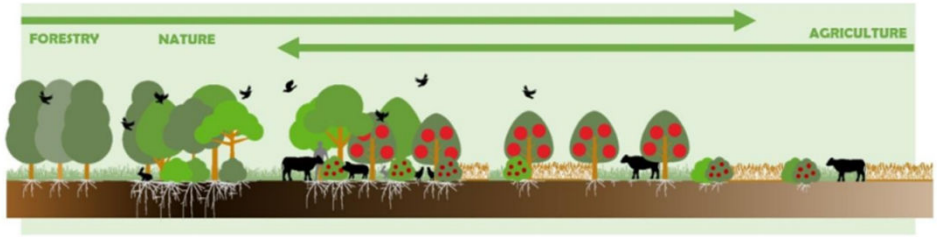
Source: F.W Geels, Environmental Innovation and Societal Transition 1 (2011) 24-40

Multi-level perspective on transitions: NL

Subsidies

Finance models





Regime t(1)

Area planting

Silvo-pastoral systems

Agroforestry and crops

Source: Masterplan Agroforestry, 2020, for the Dutch Government,

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Question & Comments for this session

Aim and purpose of the course, practical issues

Major challenges of the food system

Answers to the challenges by IPES-Food

The role of planners

LE:NOTRE Institute
Linking landscape education, research and innovative practice
POLITÉCNICA
UNIVERSIDAD POLITÉCNICA DE MADRID
UNIVERSITEIT GENT
L'INSTITUT agro Montpellier
RED DE MUNICIPIOS POR LA AGROECOLOGÍA
pracownia dóbr wspólnych
Terres en villes
Erasmus+

Questions and Getting to know

Padlet to get to know each other

(only if you want this)

https://padlet.com/geronimo2/getting-to-know-the-participants-of-the-2026-aesop4food-semi-gbebbahaln9kmawg

Padlet for making comments, asking questions, giving suggestions

https://padlet.com/geronimo2/comments-q-a-for-aesop4food-seminar-2026-u1nhogoy8vsguuoa

The idea is that participants who are working on similar building blocks will be able to connect in the future.

Building Blocks of an Agroecological Urbanism

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Productive Housing Estate

The Productive Housing Estate looks at complementary relationships between housing and food growing spaces. It is set to overcome the latent conflict between the capacity to exercise the right to grow and the right to shelter within an urbanised context.

Land & Market Access Incubator

The Land & Market Access Incubator develops institutional support for agroecology and coordinates this with an appropriate programme for farmers to access land, skills, infrastructure and markets at the same time.

Landed Community Kitchen

Landed Community Kitchens coordinate large-scale food sourcing, food cooking, and availability of food to large numbers of people. They bridge the gap between agroecological movements and community food initiatives.

Political Pedagogies

The political pedagogies of the agroecological movement are rural in origin and may be reconfigured in ways better fit to address the challenges posed by current processes of urbanisation and the residualisation of agroecological farming.

Healthy Soil Scape

The Healthy Soil Scape relates the practices of soil care to a landscape geography in which nutrient streams can be circulated. It considers the ways in which humans and non-humans look after each other through the medium of soil, and how these caring relationships can be strengthened.

Territorial Food Hub

The Territorial Food Hub is a place-based node of a wider agroecological food system rooted in a specific neighbourhood. It builds new economic and social relations and enables communities to retake control over and manage local resources.

Agroecological Park

The (peri-urban) Agroecological Park combines territorial measures to protect land and soil with specific initiatives to facilitate the agroecological cultivation of these protected lands.

Farming the Fragmented Land

Farming the Fragmented Land looks at practices that valorize residual patches of land within the complex land mosaic of the peri-urban fringe, building the necessary linkages to resource the landscape beyond the level of the farm.

https://agroecologicalurbanism.org/

Next week: Thursday March 5

Key findings on the current unsustainability of food systems:
Food systems are major drivers of climate change, biodiversity loss, and social inequality.
Unhealthy diets are now the leading global cause of premature death.
Transformation must address ecological limits and social justice together.

Reports on:
Ultra-processed foods and health
EAT–Lancet and planetary boundaries
Doughnut Economics framework
Corporate power in food systems
FAO's integrated systems approach
IPES–Food on fossil fuel dependency

From Unsustainable Food Systems to Just Transitions: Insights from Recent Global Reports

- **Ultra-Processed Foods (UPFs):** Industrial products dominate diets and worsen health inequalities.
- **EAT–Lancet Commission (2025):** Defines the Planetary Health Diet; shows food systems breaching planetary limits and deepening inequality.
- **Doughnut Economics (Raworth):** Links social needs and ecological boundaries; exposes the global imbalance between North and South.
- **Titans of Agriculture (Clapp):** Reveals corporate concentration across seeds, trade, and retail, undermining food sovereignty.
- **FAO 2025 –Systems Integrated Approach:** Advocates integrated, inclusive, and resilient food systems through multi-level governance.
- **IPES–Food – Fossil Fuel Addiction:** Shows food's deep fossil dependence; urges decarbonisation via agroecology and just transitions.

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