



THE AFRICA-EU PARTNERSHIP
LE PARTENARIAT AFRIQUE-UE



EU-AU Research and Innovation Partnership on **Food and Nutrition Security and Sustainable Agriculture (FNSSA Partnership)**

As part of the HLPD on Science
Technology and Innovation

Africa-Europe : Challenges and Opportunities in Research and Cooperation

Bologna, 15 April 2025

Dr. Rosalinda SCALIA
European Commission,
Directorate General Research & Innovation,
Deputy Head of
Unit Bioeconomy and Food Systems

HLPD in a nutshell

Africa-EU-Partnership

- 1st AU-EU Summit in Cairo, Egypt 2000
- Formal political channel of AU-EU cooperation relations



Joint Africa-EU strategy (JAES)

- 2nd AU-EU Summit in Lisbon, Portugal 2007
- Long-term strategic partnership of the AU-EU cooperation
- Prioritising Research and Innovation

AU-EU High Level Policy Dialogue (HLPD) on Science, Technology and Innovation

- 3rd AU-EU Summit in Tripoli, Libya 2010
- Platform for regular exchange on Research & Innovation (R&I) AU-EU policy

Timeline of the FNSSA Partnership

2014 EU-Africa Summit

- Establishment of EU-Africa Expert Group to draft a Roadmap towards an EU-Africa R&I Partnership on FNSSA

2016 AU-EU High Level Policy Dialogue on Science, Technology and Innovation Senior Officials Meeting

- Adoption of the Roadmap (2016-2026)

2017 Establishment of the FNSSA Working Group

- First Meeting of the Working Group



Food and Nutrition Security and Sustainable Agriculture (FNSSA) Partnership

- **The first agreed common priority research and innovation area**, as part of the AU-EU High Level Policy Dialogue (HLPD) on Science, Technology and Innovation (STI), embedded in the Joint Africa-EU Strategy (JAES).
- **Addresses the challenges set out in UN Sustainable Development Goal 2** on ending hunger, achieving food security and improved nutrition and promoting sustainable agriculture.
- **Aims to boost the impact of AU-EU joint research at local level** by addressing the entire value-chain, strengthening capacity-building (human, research infrastructures and institutional) and focusing on demonstration projects and pilot actions to bring research and innovation results to users.



Working Group of the R&I Partnership on FNSSA

Co-chaired by the African Union Commission (AUC) and the European Commission (EC)

- **Representatives from:** Egypt, France, Ghana, Germany, The Netherlands, Nigeria, Portugal, South Africa, Sudan, and Sweden
- **Responsibilities:**
 - Oversight of the implementation of the FNSSA Roadmap
 - Facilitating coordination among various instruments and stakeholders
 - Monitoring and evaluating the FNSSA Partnership and Roadmap implementation
- **Support:** 2017 RINEA project, 2018-2022 LEAP4FNSSA project, 2023-> CEA-FIRST project



The FNSSA Roadmap 2016-2026

PRIORITY RESEARCH AND INNOVATION AREAS

- **SUSTAINABLE INTENSIFICATION**
- **AGRICULTURE AND FOOD SYSTEMS FOR NUTRITION**
- **EXPANSION AND IMPROVEMENT OF AGRICULTURAL MARKETS AND TRADE**
- **CROSS-CUTTING ISSUES: RESEARCH INFRASTRUCTURES, CAPACITY BUILDING, EARTH OBSERVATION**
- **OBJECTIVES**
 - Enhance coordination
 - Operate across the entire value chain
 - Design, own, manage, and resource jointly
 - Recognize and address cross-cutting issues



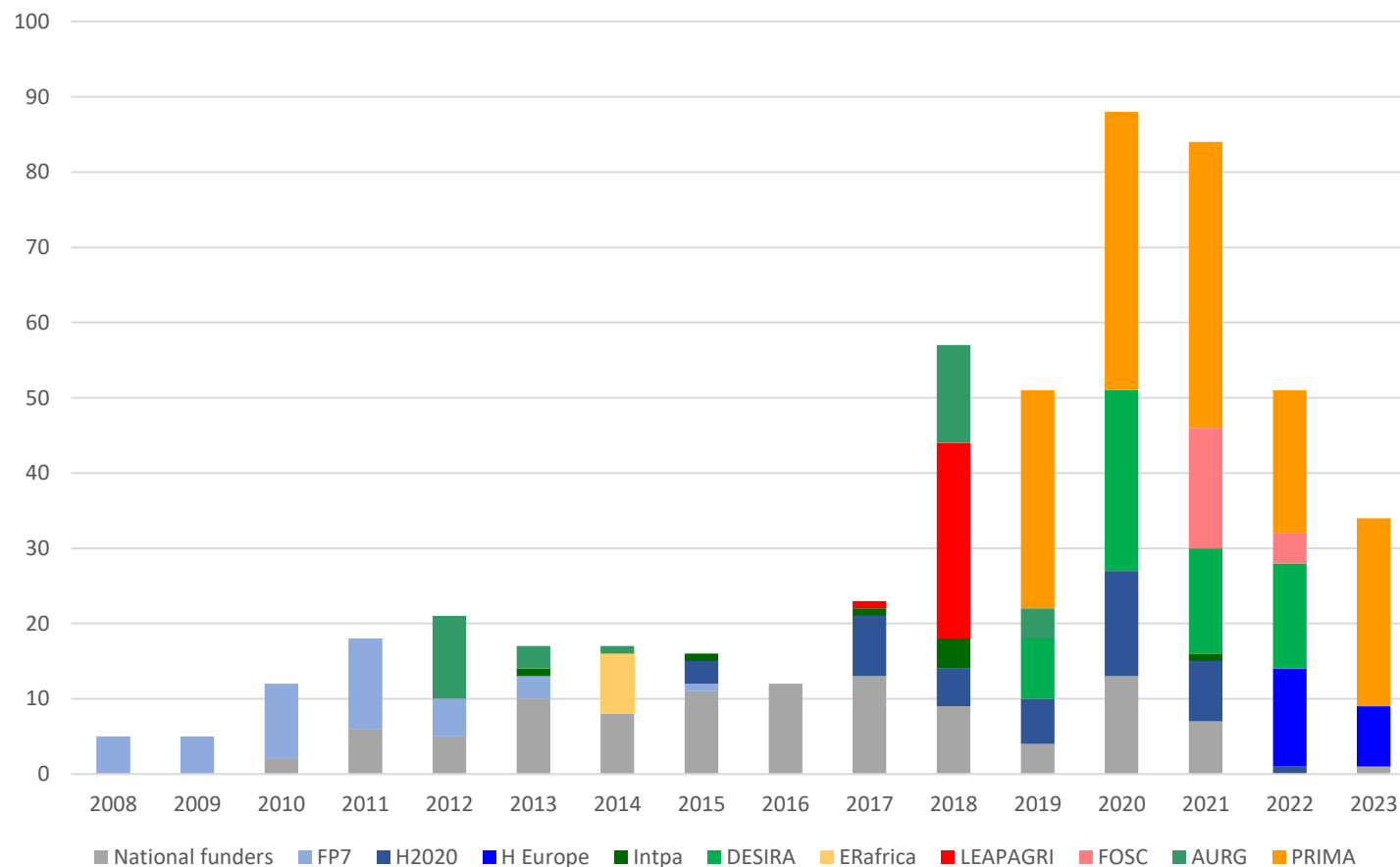
The FNSSA Roadmap 2016-2026

PROJECTS IMPLEMENTING THE PARTNERSHIP

FUNDING AND CO-FUNDING TOOLS

- The number of projects implemented during last 15 years has increased markedly from 2016.
- Launch of innovative **LEAP-Agri**, **FOSC**, **AURG**, **DESIRA** and **PRIMA** programmes with an increase of 500% of projects number when comparing the 2017-2023 period to the 2010-2016 period.

Estimated Projects number / Year / Programme





The FNSSA Roadmap 2016-2026

ACHIEVEMENTS OF THE PARTNERSHIP

- **FUNDING: MORE THAN 1B€ (+800M€ BY EC) MOBILIZED BY SEPTEMBER 2024**
 - **Horizon 2020** (41 projects) + Horizon Europe (21 projects)
 - **PRIMA** (20 European & African countries co-funding 238 joint projects)
 - **FOSC** (18 European & African countries co-funding 22 joint R&I projects)
 - **LEAP-Agri** (18 European & African countries co-funding 27 joint R&I projects)
 - **Development Cooperation Instrument** (African Union Research Grants II, 32 projects in 30 African countries; DeSIRA, 61 projects in 30 African countries)



The FNSSA Roadmap 2027-2037 UPDATE OF THE PRIORITY AREAS

- A process initiated by the HLPD Bureau to renew the FNSSA Roadmap 2016-2026 for the next 10-year period
- Update process to be guided by the AU-EU HLPD Working Group on FNSSA
- Supported by the CEA-FIRST Project
 - Review of the implementation of the FNSSA Roadmap 2016-2026 and Recommendations for developing the Roadmap 2027 – 2037 conducted in Autumn 2024
- Linked to the development of the AU-EU International Research Consortium on FNSSA

The AU-EU International Research Consortium on FNSSA (IRC)



- **Outcome of the European Union Horizon 2020 Coordination & Support Action project LEAP4FNSSA (2018-2022)**
 - main objective to provide a tool for European and African institutions to engage in a Sustainable Partnership Platform for research and innovation on FNSSA
- **Transitioning the AU-EU FNSSA Partnership to a long-term sustainable Platform to improve the implementation of the FNSSA Roadmap**
- **An alliance of Research and Innovation stakeholders with a long-term and sustainable governance and funding mechanism, and a knowledge management and communication system**

The AU-EU International Research Consortium on FNSSA (IRC)



- **Objectives:**

1. Increase the synergies and coherence between actors, research and innovation projects, initiatives and programmes
2. Develop a learning environment and a large knowledge base
3. Establish a long term and sustainable coordination infrastructure, governance and funding mechanism .
4. Liaise with the HLPD Bureau.

- **Founding launch in September 2022**

- Aims to be operational in Winter/Spring 2025, [manuscript available](#)
- Operationalised by the CEA-FIRST project (2023-2027)



Project: CLEVERFOOD

CLEVERFOOD is an EU Food 2030 project that will:

Develop a **new food science education toolkit for formal, non-formal and informal settings**, including science centres and museums.

Create a **food system lab travelling exhibition** will visit science centres and museums in **5 different countries** introducing the theme of food system transformation to different audiences.

Project Information

CLEVERFOOD

Grant agreement ID: 101086320

DOI

10.3030/101086320 [🔗](#)

Start date

1 January 2023

End date

31 December 2026

Funded under

Food, Bioeconomy Natural Resources, Agriculture and Environment

Total cost

€ 7 999 981,25

EU contribution

€ 7 999 981



Coordinated by

KOBENHAVNS UNIVERSITET

 Denmark

Food 2030: R&I Policy Framework of IA5



Future-proofing

By 2030

Sustainable

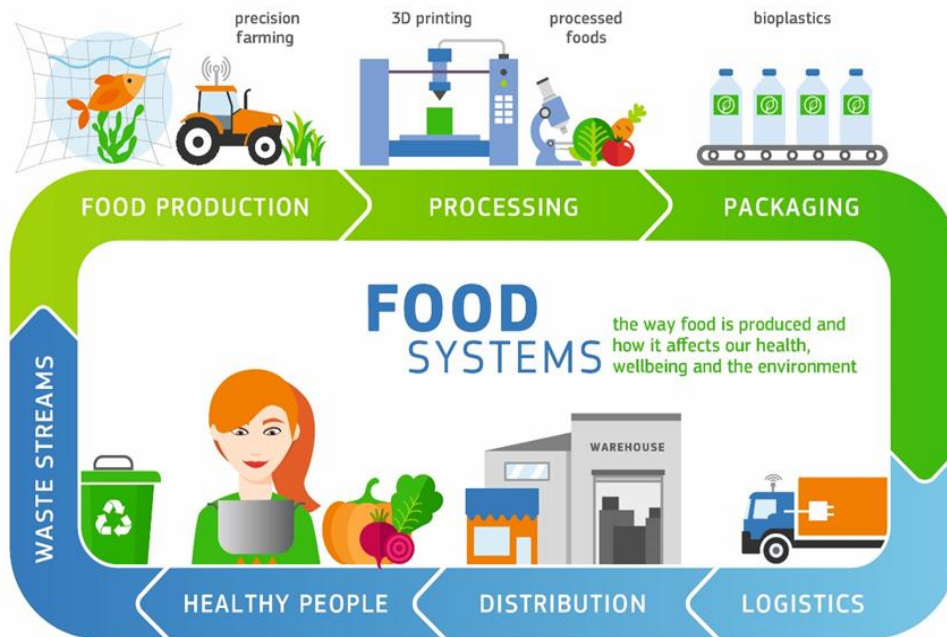
Resilient

Responsible

Diverse

Competitive

Inclusive



Priorities



NUTRITION for sustainable and healthy diets



CLIMATE smart and environmentally sustainable food systems



CIRCULARITY and resource efficiency of food systems



INNOVATION and empowerment of communities

- Need for a systemic approach to future-proofing food systems by structuring, connecting and scaling-up R&I
- To provide **evidence** for policies and **solutions** (knowledge, methods, technologies, services, business models, etc) addressing 4 priorities.

Research and Innovation



Drivers



Research breakthroughs



Innovation and Investment



Open Science



International collaboration



Food 2030 Pathways for Action 2.0



Nutrition



Climate



Circularity



Communities

Pathway 1	Governance for food systems change
Pathway 2	Urban food systems transformation
Pathway 3	Food from oceans and freshwater resources
Pathway 4	Alternative proteins for dietary shift
Pathway 5	Food waste and resource-efficient food systems
Pathway 6	The microbiome world
Pathway 7	Nutrition & sustainable healthy diets
Pathway 8	Food safety systems of the future
Pathway 9	Food systems Africa
Pathway 10	Data & digital transformation
Pathway 11	Zero-pollution food systems












Food 2030 pathways

The approach should be “systemic” – delivering co-benefits, inter/transdisciplinary and multi-actor including primary producers, processors, retailers, food-services, civil society, researchers, policymakers, etc.

Placed-based approaches will be key to testing, demonstrating, experimenting, deploying, partnering, learning, sharing !!

All types of innovation: social, governance, technology ...

Over 100 projects and 760 M EUR

FOOD 2030 Pathways		Projects	Investment (million EUR)
	PATHWAY 1 GOVERNANCE FOR FOOD SYSTEMS CHANGE	6	31
	PATHWAY 2 URBAN FOOD SYSTEMS TRANSFORMATION	7	71
	PATHWAY 3 FOOD FROM THE OCEAN & FRESHWATER RESOURCES	28	175
	PATHWAY 4 ALTERNATIVE PROTEINS FOR DIETARY SHIFT	8	77
	PATHWAY 5 FOOD WASTE & RESOURCE- EFFICIENT FOOD SYSTEMS	9	64.4
	PATHWAY 6 THE MICROBIOME WORLD	9	77
	PATHWAY 7 NUTRITION & SUSTAINABLE HEALTHY DIETS	11	96.3
	PATHWAY 8 FOOD SAFETY SYSTEMS OF THE FUTURE	9	42.8
	PATHWAY 9 FOOD SYSTEMS AFRICA	8	63.50
	PATHWAY 10 DATA & DIGITAL TRANSFORMATION	7	49.80
	PATHWAY 11 ZERO-POLLUTION FOOD SYSTEMS	NA	NA

Horizon 2020, SFS 34 2019: Food systems Africa

3 projects for EUR 21 M

Project	Description
<u>InnoFoodAfrica</u> - Locally-driven co-development of <u>plant-based</u> value chains towards more sustainable African food system with healthier diets and export potential	8/2020-7/2023, RIA, EUR 6.466 M Addressing key bottlenecks of African food systems, limited access to urban markets, affordability and convenience by local actions to develop novel technologies in agriculture, food manufacturing and use of residual biomass for packaging.
<u>HealthyFoodAfrica</u> - Improving nutrition in Africa by strengthening the diversity, sustainability, resilience and connectivity of food systems	6/2020-11/2024, RIA, EUR 6.917 M Raise consumer awareness about healthy nutrition, whilst enhancing the capacity of producers and food system actors to deliver diverse, nutritious, high quality, affordable food. The approach is co-developed in ten context-specific Innovation Food System Labs in Ghana, Benin, Ethiopia, Uganda, Kenya & Zambia.
<u>FOODLAND</u> - FOOD and Local, Agricultural, and Nutritional Diversity	9/2020-8/2024, RIA, EUR 7 M FOODLAND will create and validate (TRL 5) 12 prototypes for crop and fish farming and food processing systems that will deliver 17 novel food products. FOODLAND will empower smallholder farmers and food operators to foster nutrition-responsive and sustainable agro-biodiversity in 14 local innovation food hubs.

Horizon Europe CL6-2022 F2F 01-14

Food Cities Africa and Malnutrition Africa: 3 projects for EUR 28 M

Project	Description
<u>AfriFOODlinks</u> – Transforming Africa`s Urban Food Environment through Strengthening Linkages between Systems Stakeholders in Cities across the Continent and Europe	12/2022-11/2026, RIA, EUR 11.8 M AfriFOODlinks aims to improve food and nutrition security, while delivering co-benefits for climate, the environment, and social and ecological resilience in 65+ Cities (15 African, 5 European and 40+ Network Cities) by promoting shifts to healthy, sustainable diets, transforming urban food environments; promoting inclusive governance and innovative food businesses.
<u>INCiTIS-FOOD</u> - – Integrated and Circular Technologies for Sustainable city region FOOD systems in Africa	1/2023-12/2026, RIA, EUR 6 M INCiTIS-FOOD aims to develop science based circular food solutions, suitable for African cities to overcome deficiencies of proteins, vegetables and fruits following a multi-actor approach of circular food innovations and business models, with 8 city Living Labs in 6 countries from 3 African regions (East: Kenya; West: Ghana, Nigeria, Sierra Leone; Central: Cameroon, Gabon).
<u>HealthyDiets4Africa</u> <i>Combating Malnutrition in Africa Through Diversification of the Food System</i>	1/2023-12/2028, RIA, EUR 10,3 M HealthyDiets4Africa is targeting diversification of food systems to combat all forms of malnutrition with co-benefits for the environment. Dietary diversity is monitored in 8 African countries of different regions. Targeted group-specific metrics to measure the diversity of food systems and their health outcomes will be developed.

Horizon Europe CL6-2023 F2F 01-20 Food Safety Africa: 2 projects for EUR 10 M

Project	Description
<u>UP-RISE</u>	01/2024-12/2027, RIA, EUR 5 M The UP-RISE EU-African Union (AU) project integrates food safety practices associated to mycotoxin contamination into all aspects of food production, distribution, marketing and consumption in the AU and provides tangible tools and strategies to enhance inclusive participation in the improved African Food Safety System (AFSS) at the local, national and regional level. UP-RISE activities are aligned with the current AU Food Safety Strategy for Africa, focusing on 3 regions of the AU with field work in 5 target member states (Benin, Côte d'Ivoire, Nigeria, Kenya, and South-Africa).
<u>Food Safety for Africa</u>	01/2024-12/2027, RIA, EUR 5 M The Food Safety for Africa (FS4Africa) proposal is designed to address food safety challenges in Africa. Focus is given to addressing food safety issues associated with weak channels for value chain organisation, traceability & authentication of safe food. Food safety challenges addressed include mycotoxin contamination in multiple food crops including food and feed, pesticide residues in grains and vegetables, microbial contamination particularly <i>Escherichia coli</i> contamination, and food adulteration of foods.

Horizon Europe CL6-2024 F2F-01-11 EU-African Union – towards climate-neutral, social just fair-trade food systems 2 projects for EUR 9 M

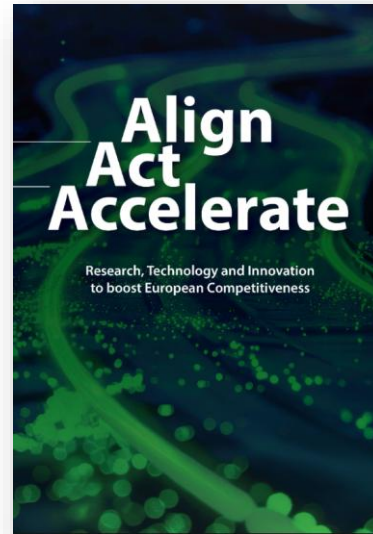
Project	Description
<u>STREAMING</u>	02/2025-07/2028, RIA, EUR 4.4 M The project STREAMING (Sustainable Trade Regimes with Europe and Africa through Mapping Innovation, New-technology and Growth-mindset) seeks to develop fair, healthy and sustainable food systems across the continent. By connecting research with practical application, STREAMING promotes innovation and entrepreneurship among diverse groups, including women, researchers and farmers. Through networking platforms, hubs and training programmes, the project aims to bridge academia and industry, fostering sustainable practices in African food trade. Additionally, STREAMING focuses on policy recommendations to enhance resilience against climate change and improve trade relations between Africa and Europe.
<u>FCI4Africa</u>	11/2024-10/2028, RIA, EUR 4.5 M The project FCI4Africa (Food Convergence Innovation for Africa) presents a holistic approach to agriculture that emphasizes fair, sustainable, and climate-neutral practices. Through a digital platform, it empowers farmers and businesses to achieve trade compliance while enhancing food safety. By evaluating certification criteria like deforestation-free, organic, and fair trade, FCI4Africa guides policymakers in fostering economic prosperity and social justice. Ultimately, this project aims to expand trading opportunities for African stakeholders, paving the way for a more equitable and sustainable agricultural sector.

EU Policy reports 2024

FOOD
2030



The “Letta Report”



The “Heitor Report”



The “Draghi Report”



The “Strohschneider Report”

On 29 January 2025, the European Commission published the Competitiveness Compass as a guidance document for the next 5 years.



On 28 February 2025, the European Commission adopted two packages of proposals – Omnibus I and Omnibus II – to simplify EU rules, boost competitiveness, and unlock additional investment capacity.

Omnibus: A single legislative document that amends several other legislative acts.

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Directives 2006/43/EC, 2013/34/EU, (EU) 2022/2464 and (EU) 2024/1760 as regards certain corporate sustainability reporting and due diligence requirements

(Text with EEA relevance)

{SWD(2025) 80}

Vision for agriculture and food: 4 priority areas

- ① Building an attractive sector that ensures a fair standard of living and leverages new income opportunities
- ② A competitive and resilient sector in the face of global challenges
- ③ Future-proofing the agri-food sector that works hand in hand with nature
- ④ Valuing food and fostering fair living and working conditions in vibrant rural areas

Enabling environment: putting research, innovation, knowledge and skills at the heart of Europe's agri-food economy



New EU Bioeconomy Strategy in 2025

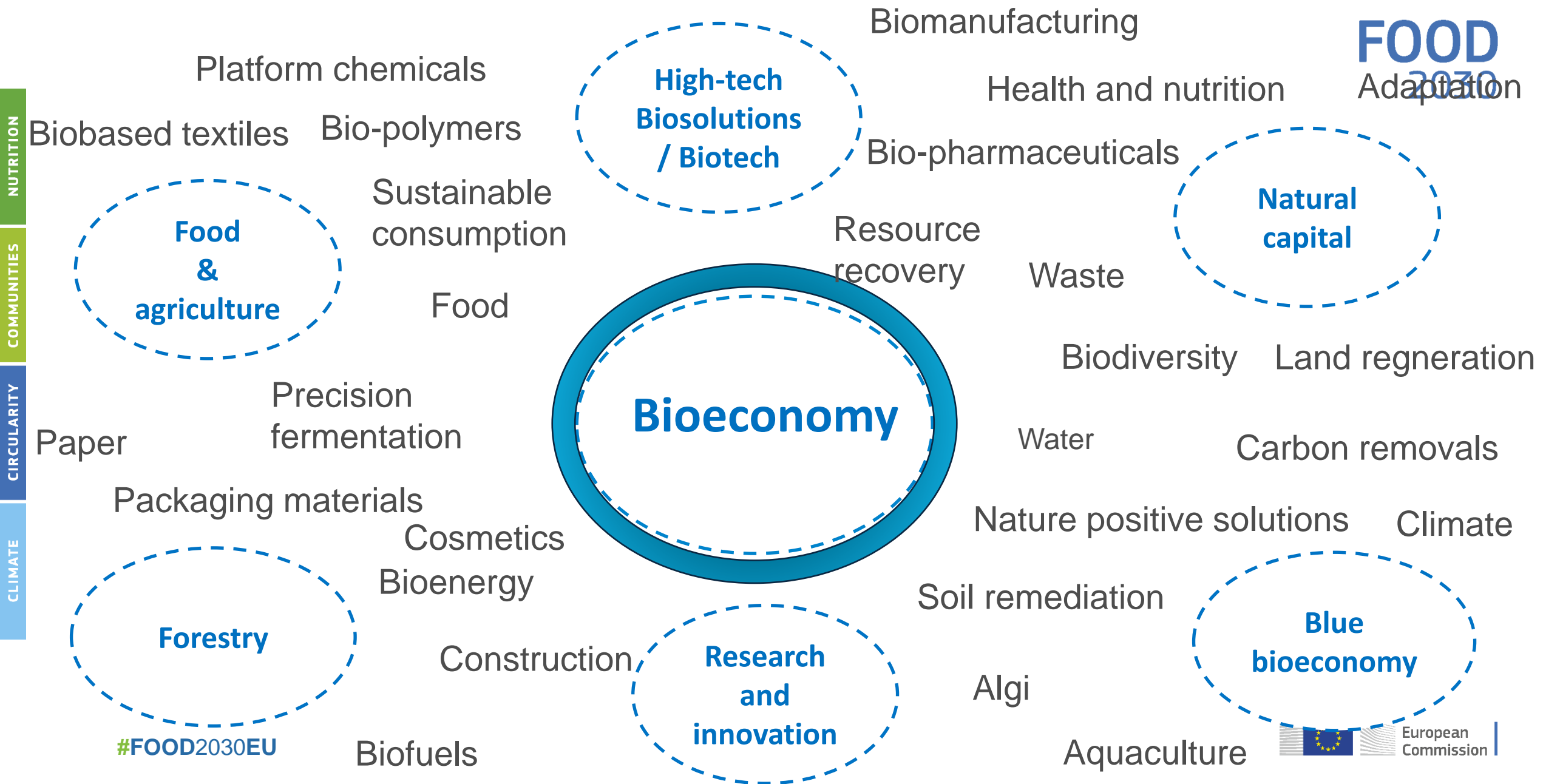


What is the BIOECONOMY?

EU's understanding: All sectors and associated services and investments that produce, use, process, distribute or consume biological resources (animals, plants, micro-organisms, including organic waste), including nature-based solutions and (ecosystem) services.

- **Primary production** systems (agriculture, forestry, aquaculture / fisheries)
- **Organic waste/ side streams**
- Food, feed, fibre, fuels and bioenergy
- **Bio-based industries**
- **Ecosystem services** on land and sea / Nature based solutions

Bioeconomy – cross-sectorial concept



Evolution of the EU Bioeconomy Strategy

First Bioeconomy Strategy



Efficient use of renewable resources
Focus on R&I



Council Conclusion



Central role of a sustainable and circular Bioeconomy
Better integrate bioeconomy in all EU policies
Updated EU Bioeconomy Strategy and Action Plan

Update of the 2018 Bioeconomy Strategy

2012

2018

2022

2023

2024

2025

Updated Bioeconomy Strategy



Update: linear upscale within ecological boundaries:
+Substitution of harmful products
+Regional development

Bioeconomy Progress Report



Resolving multiple pressures on land and sea
Focus on overall consumption of biological resources

Communication on Boosting Biotech & Biomanufacturing in the EU



The EU Bioeconomy Strategy (2018): a cross-sectoral solution provider for various objectives



- 5 strategic objectives
- **Cross-sectoral** policy framework (forestry, agriculture, marine / aquaculture, industry, R&I, ..)
- Strategic view on **trade-offs** (e.g. scarce biomass), **co-benefits** (e.g. for climate)
- **Holistic approach** on all 3 dimensions of sustainability



Why do we need a New Bioeconomy Strategy?

FOOD
2030

- to address the gaps identified in the Progress Report
 - Tackle the potential **biomass gap** between increasing demand and sustainable sourcing of biomass
 - Offer consumers more **sustainable and circular bio-based products**
- to increase policy coherence across different policies and ensure links with up-coming initiatives
 - Accelerate **circular economy** approach in bioeconomy applications
 - Scale-up from “**lab to fab**” of bio-innovation, **biotechnology** and **biomanufacturing**
 - Boost **innovations**, high-tech and **high value-added products** and materials



Bioeconomy is a hotspot for innovation



Finnish company offering an ecological alternative to ceramic bathroom products. Manufactures washbasins, toilets, tiles, etc. from an innovative wood composite material that reduces CO2 footprint by 99%



HORIZON
2020

European
Innovation
Council



avantium

Dutch Avantium opened new factory to produce biobased chemicals at scale including PEF, that outperforms fossil-based PET for packaging & textile.
Result of PEFerence flagship of CBE JU.

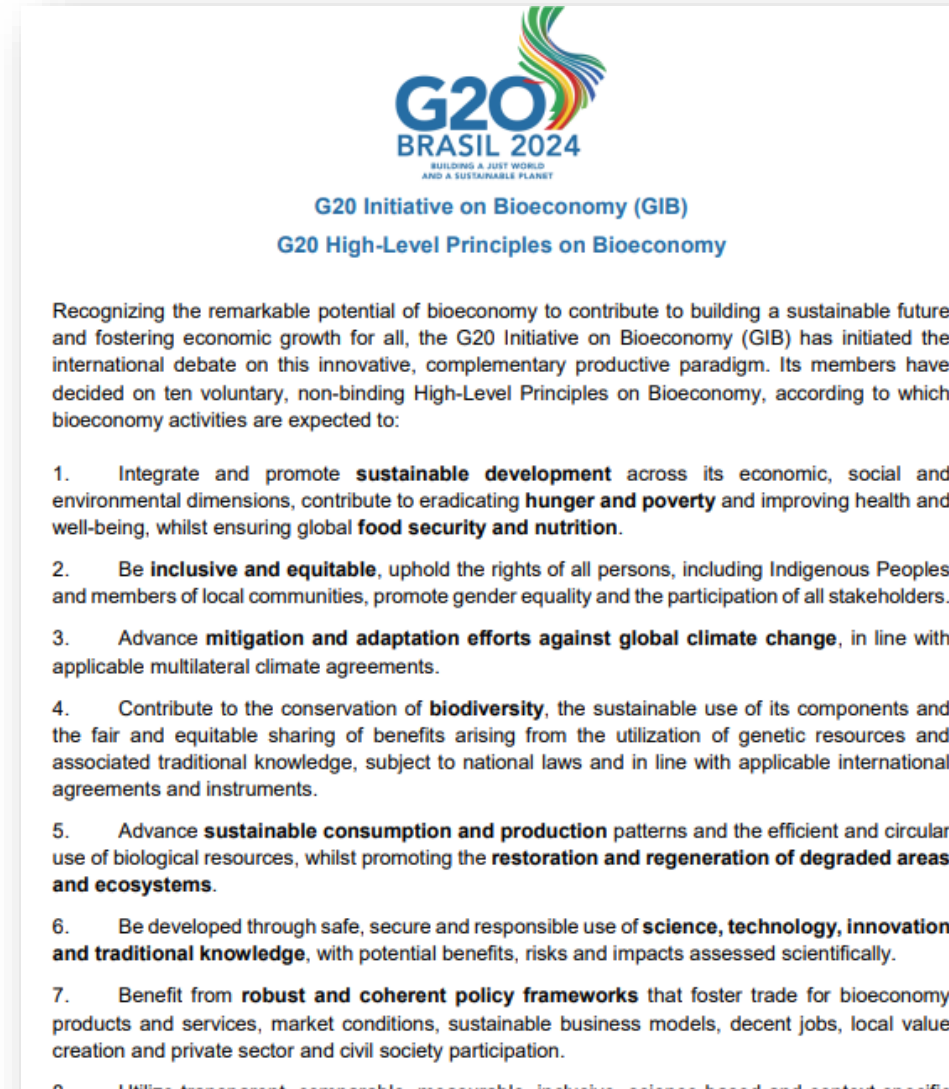
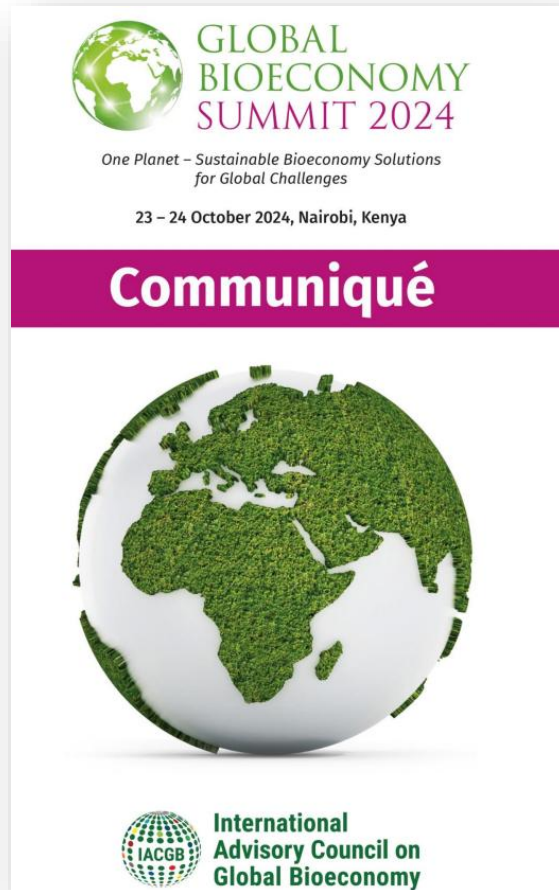


Fibenol

Estonian start-up that developed a new generation of sugars, lignin and cellulose from hardwood residues. For a new era of biomaterials and bioproducts, helping industries do more with less. *Result of Sweetwoods flagship of CBE JU.*



European Commission drives international bioeconomy cooperation



Thank you!



Food Systems & Food 2030 webpages

News & Events: Join *FOOD 2030 Stakeholder list*



Rosalinda.SCALIA@ec.europa.eu