Social Sciences & Humanities in Cluster 6

Brokerage event

15-16 June 2022

Agenda (15-16 June 2022)

9.35	**Introduction on the inclusion of SSH in Cluster 6**
10.15	**Case study | EU-China-Safe, Professor Moira Dean, Queen's University Belfast**
10.30	Break
10.45	**Case study | Supporting the inclusion of social sciences in the H2020 project "MASTER", Dr Áine Macken-Walsh, Teagasc**
11.00	**Panel discussion with:** Prof Moira Dean, Consumer Psychology, Queen's University Belfast Dr Áine Macken-Walsh, Sociologist, Teagasc Professor Barry Quinn, Business supply chain, Ulster University Dr Klaus Schuch, Societal Impact, ZSI - Centre for Social Innovation, Austria
12.00	Closing comments & end of the plenary session
12.05 – 17.00 &	**1:1 meetings to network and discuss project ideas**
16 June all day	

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Introduction on the inclusion of SSH in Cluster 6

Main research areas & required SSH expertise

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Horizon Europe (2020-2027) – € 95.5 Bn

[Funding & tenders (europa.eu)]

To access the work programmes, do not hesitate to contact your National Contact Point:
https://horizoneuropencpportal.eu/find-your-ncp

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7 destinations (areas of impact) in Cluster 6

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2. Fair, healthy and environment-friendly food systems from primary production to consumption

- Based on the European Farm to Fork strategy addressing **Food Systems sustainability** challenges
- Food systems: from production to consumption, on land and sea
- Main idea: sustainable, climate neutral and biodiversity friendly farming provides economic, social, environmental and climate benefits.

Sustainable farming systems providing consumers with **affordable**, safe, healthy and sustainable food and generating **fair economic returns for farmers**

Sustainable, healthy and **inclusive food systems**: food poverty reduction, empowered citizens and communities

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2. Fair, healthy and environment-friendly food systems from primary production to consumption (1/2)

Organic food/Farming	• Farmers' and consumers' acceptability • New governance models/relations among food chain actors • Social and economic performance
Food systems	• Policies (resilience) • Business strategies (resilience) • Co-benefits for producers, climate and citizens • Citizens science (sustainability) • Social just fair trade food systems (Africa)
Novel/alternative food	• Societal acceptance • Socio-economic impacts
Livestock systems, seafood, aquaculture	• Social, economic and ethical considerations
Food waste	• Optimising marketing standards • Economic issues
Healthy nutrition	• Socio-economic analysis, policies (for vulnerable groups) • Tools to eat better at home, culinary culture dimension, financial impact

2. Fair, healthy and environment-friendly food systems from primary production to consumption (2/2)

Ecosystem services	• Improved quantification of the ecosystem services in environmental and economic terms;
Plant health	• Citizen science as a tool to monitor emerging plant pests • Social and economic implications for farmers
Animal feed	• Economic sustainability and environmental impact
Farming & wildlife	• Cost/benefit analysis of current and new adopted farming strategies • Stakeholders' perspectives and needs, reduce conflicts • Damages and compensation mechanisms

Organic inputs – contentious inputs in organic farming (2017)

RELACS - Replacement of Contentious Inputs in organic farming Systems

Led by the Research Institute of Organic Agriculture, Switzerland

https://relacs-project.eu/

To promote the development and adoption of environmentally safe and economically viable tools and technologies to reduce the use of external inputs in organic farming systems:

- Copper and mineral oil for plant protection,
- Recycled fertilizers and conventional manure in plant production,
- Antibiotics and anti-worm drugs (anthelmintics) in animal production,
- Synthetic vitamins in animal production.

RELACS involves organic farmers, advisors, industry, scientists and policy makers:

- to plan the removal of contentious inputs
- to share it with the sector
- to facilitate the adoption of the alternative practices.

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4. Clean environment and zero pollution

Based on the Green deal, the main aim is:

- to remove the pollution of **fresh and marine waters**, **soils, air**, including from nitrogen and phosphorus emissions;
- on **substituting harmful chemicals**,
- on improving the **environmental sustainability** and circularity of bio-based systems
- on reducing environmental impacts and **pollution from food systems**.

Move towards achieving clean, unpolluted ocean and seas, by implementing successful scientific, technological, behavioural, socio-economic, governance and green-blue transitions

4. Clean environment and zero pollution

Air, soil and water pollution	• Cost-benefit assessment of practices/technologies (Manure) • Environmental performance and socio-economic aspects / policies linked to the recycling of fertilising products • Policies / environmental, economic and behavioural effects of measures (Nitrogen/Phosphorus) • Water management assistance for local people and other economic sectors
Seas and ocean pollution	• Climate change and predictions with socio-economic models (Arctic)
Bio-based processes and products	• Analysis of trade-offs and synergies with economic and social objectives; • Social engagement / social innovation • Public awareness / environmental monitoring by citizens
Food system pollution	• Economic, social/health sustainability • Social innovation to reduce plastic food packaging

Water farms – improving farming and its impact on the supply of drinking water (2016)

WATERPROTECT - Innovative tools enabling drinking water protection in rural and urban environments

https://water-protect.eu/en

Led by Vito, Belgium

To create an integrative multi-actor participatory framework that enables actors to monitor, to finance and to effectively implement management practices and measures for the protection of water sources.

- **Participatory monitoring** - To increase the trust, awareness and credibility, farmers and the public were engaged in the design and the setup of water monitoring.
- **Water governance** & Policy advice

5. Land, ocean and water for climate action

Based on the Green deal principle ‘to do not harm’

- Supports solutions for climate- and environmentally-friendly practices, to reduce emissions of major greenhouse gases and other pollutants
- To reduce the environmental impact of ocean and land use and agricultural activities (e.g. restore Carbon sinks)

Sustainably manage scarce resources by informing decision-makers and stakeholders and by integrating adaptation measures in relevant EU policies.

5. Land, ocean and water for climate action

Alternative water	• For society: societal awareness / acceptability and trust / societal, environmental and economic use • For agriculture: socioeconomic and environmental and health impacts
Smart farming	• Social innovation • Dependence to fossil-energy • Business models for farm-produced energy • Behavioural sciences linked to the change of production systems
Smart wood use (construction sector)	• Built space, human health & wellbeing, cultural traditions and customs

Climate-smart and resilient farming (2018-19)

Stargate – Resilient farming by adaptive microclimate management

Led by CERTH (Centre for Research and Technology Hellas), Greece

https://www.stargate-h2020.eu/

Smart decision support tools for farmers and policymakers to manage local and regional microclimate more efficiently.

Stakeholder Community building (living labs)

1. Biodiversity and ecosystem services

- Supporting the implementation of the EU's Biodiversity Strategy, a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems.
- Ensure that mainstreaming biodiversity in society and the economy takes into account justice, fairness and global aspects, as promoted under the Green Deal.
- Main ideas: understand drivers of biodiversity decline; use knowledge to expand protected areas; mainstream the importance of biodiversity; develop and improve sustainable practices to support biodiversity and ecosystems services; interconnect biodiversity research and support policies

Projects should contribute towards ensuring biodiversity is back on a path to recovery, and ecosystems and their services are preserved and sustainably restored on land, inland water and at sea through improved knowledge and innovation.

1. Biodiversity and ecosystem services

Invasion of alien species	• Public awareness and engagement; Citizen science
Pollution: noise, light, other	• Policies • Environmental history • Potential for social solutions
Pollinators	• Value of ecosystem services - economic impacts and financial models • Social impacts of loss
Nature-based solutions	• Education and governance • Benefits (monetary, social) of landscape features' ecosystem services • Markets / business models • Nature-centred design • Social innovation
Ecosystem services loss & urban areas	• Social equality & spatial justice • Policies
Biodiversity friendly practices in agriculture, forestry and aquaculture	• Business models and economic viability • Integrating environmental, economic, and social outcomes • Improved quantification (environmental & economic) of ecosystem services

Demonstrating innovative nature-based solutions in cities (2017)

URBAN GreenUP: New Strategy for Re-Naturing Cities through Nature-Based Solutions

https://www.urbangreenup.eu/

Led by FUNDACION CARTIF, Spain

Nature-based solutions - exploiting the properties of plants, soils and other natural elements to re-shape cities and to increase the sustainability of our life style:

- Re-naturing urbanisation: trees for shade and cooling, urban carbon sinks and societal health benefits
- Green infrastructure: green facades and roofs, urban orchards, community composting, green noise barriers
- Water interventions: green pavements (drainage), natural wastewater treatment, water retention and flood prevention
- Non-technical aspects: coaching, engagement, education.

URBAN GreenUP involves scientists, planners, city policy makers, trusts and NGOs to:

- Support the development of Renaturing Urban Plans
- Demonstrate NBS accompanied by innovative business models

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3. Circular economy and bioeconomy sectors

Supporting the Circular Economy Action Plan (2020) and related aspects of the EU Green Deal and building on the Bioeconomy Strategy (2012).

- Accelerate regional and consumer-based transitions towards a sustainable, regenerative, inclusive, just and clean circular economy and bioeconomy across all regions of Europe
- Enhance European industrial sustainability, competitiveness and resource independence
- Develop innovative and sustainable value-chains in the bio-based sectors
- Improve on consumer and citizen benefits, including in the rural settings
- Safeguard multi-functionality and management of forests in Europe
- Enlarge potential of marine and freshwater biological resources and blue biotechnology

Sets out a credible pathway to developing circular economy and bioeconomy sectors, achieving sustainable and circular management and use of natural resources, prevention and removal of pollution, clean secondary raw materials, guaranteeing a clean environment and ensuring competitiveness with wide deployment and market uptake of innovative solutions.

3. Circular economy and bioeconomy sectors

Sustainable bio-based solutions & materials	• Humanitarian applications: environmental, social and economic conditions; • Social Innovation for eco-friendly consumer products • Social sustainability and acceptance • Ecological, economic environmental and social benefits of value chains.
Enabling a Circular Bioeconomy	• New business models • Social innovation to strengthen rural innovation ecosystems • Societal acceptance
Forestry	• Market trends and societal perceptions of ecosystem services • Policies on multi-functionality of forests • Social, economic, and political factors in forest management at different levels

Realising the potential of regional and local bio-based economies (2018)

POWER4BIO: emPOWERing regional stakeholders for realising the full potential of european BIOeconomy

Led by CIRCE Innovation Technology Centre, Spain

https://power4bio.eu/

To increase the capacity of regional and local policy makers and stakeholders to structure their bioeconomy and to support the emergence of a thriving bio-based sector, through:

- A catalogue of business model pathways
- Knowledge and best practice exchange and networking within and among regions, across the EU.

A 3-step approach (stakeholder engagement, regional analysis and strategy development) to guide European regions when preparing and reviewing their regional bioeconomy strategy

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6. Resilient, inclusive, healthy and green rural, coastal and urban communities

Main aims:

- Support transdisciplinary research with strong social, behavioural and humanities sciences for sustainable and inclusive communities;
- Explore innovative ways to tailor policy responses to place-based needs;
- Support and empower communities to develop, test and upscale solutions that answer global challenges in locally adapted ways.

Contribute to the EU's flagship R&I for Rural Communities, a Long-term vision for rural areas, and complement the New European Bauhaus (NEB) initiative.

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6. Resilient, inclusive, healthy and green rural, coastal and urban communities

Inclusive rural innovation	• Social inclusion • Improved territorial governance and policies • Climate-neutral communities and behaviours • Societal perceptions of rural life and jobs (Covid shift) • New business models
Urban farming	• Economic, environmental and social risks, impacts and policies
Urban food systems	• Engage citizens with nature for their wellbeing and health • Food sustainability: communication, consumer information, expectations, needs, consumer behaviour
Environmental innovation	• New societal vision, citizen engagement, social innovation • Traditional knowledge of communities (e.g. Arctic)

Business models for modern rural economies (2017)

RUBIZMO: Replicable business models for modern rural economies

https://rubizmo.eu/

Led by RISE RESEARCH INSTITUTES OF SWEDEN AB

Working to discover the vital ingredients for developing entrepreneurship and successful business models in rural areas for high potential sectors such as food and agriculture, new bio-based value chains and ecosystem services.

- *Analysing business models from previous funded and private enterprise initiatives.*
- *Examining the reasons for success / failure – to discover and share the key ingredients to recreate innovative business ideas.*
- *Providing active coaching and peer-to-peer training to rural entrepreneurs and networks to instigate sustainable business transformation.*

7. Innovative governance, environmental observations and digital solutions in support of the Green Deal

Aims at achieving:

- Better informed decision-making processes, societal engagement and innovation, maximizing the impacts of R&I and sparking behavioural and socio-economic change;
- Enhanced sustainability performance and competitiveness;
- Better informed and engaged stakeholders and end users including primary producers and consumers;

*Innovative **governance models** and science-based **policy design**, **implementation and monitoring**, taking advantage of the use, uptake, deployment and exploitation of environmental observations as well as digital and data-based green solutions*.

7. Innovative governance, environmental observations and digital solutions in support of the Green Deal

Governance models and support policies	• Farmer behaviour for sustainable practices • Making use of data for innovative food systems: changing behaviours, inclusive policies • Bio-based business models and social innovation • Building trust for biotechnology and bio-based innovations
Environmental observations	• Empowering citizens for environmental monitoring and reporting
Digital and data technologies as key enablers	• Develop socially sustainable innovations • Ensure user-friendliness and aid development of training materials • Social innovation, e.g. requiring social change, new social practices or social ownership
Agricultural knowledge and innovation systems	• Social aspects of novel and innovative approaches

Demonstrating the concept of 'Citizen Observatories' (2015)

LANDSENSE: A Citizen Observatory and Innovation Marketplace for Land Use and Land Cover Monitoring

Led by International Institute for Applied Systems Analysis, Austria

https://landsense.eu/

To aggregate innovative technologies to empower communities to monitor and report on their environment.

- Bidirectional information flows between different communities (i.e. citizens, scientists, policymakers, industries, SMEs, NGOs, etc.);
- Involve new citizen functions in accumulating and using information;
- Support multi-scalar government from the EU level downwards;
- Complement remotely sensed data and state-organized data collection
- Give communities access to easily-understandable information needed for decision-making.

- ***Uncovering the potential of citizen science and earth observation to improve the way we see, map, and understand the world***
- ***Kickstarting an earth observation enabled crowdsourcing economy***

How can SSH disciplines help in SC6?

Sociology ❖ Psychology ❖ Communication ❖ Political science
Gender ❖ Economics ❖ History ❖ Culture ❖ Law ❖ Ethics

- Different thinking;
- Different approach to challenges and their solutions;
- More people-centred methods;
- Aid development of innovative solutions and products that are socially acceptable, directly applicable, marketable and cost-effective;
- Enhance the impact of a project and support effective dissemination of results and communication with the target group and the wider public.

SSH Flagged Topics - Evaluation

Good:

- *Social Sciences and Humanities (SSH) and interdisciplinary approaches are very well integrated in the proposal, using a well-chosen combination of tools and methods from social science disciplines and natural sciences.*

Poor:

- *The role of social sciences and related methods is not sufficiently discussed,* ***which is a shortcoming.***
- *The SSH dimension is rather limited in scope and focuses on an assessment of stakeholder perceptions and the dissemination of findings,* ***which is a shortcoming.***
- *The availability of adequate SSH expertise to carry out the described social science components (perception analyses, key informant interviews, stakeholder surveys) remains unclear,* ***which is a shortcoming.***

Additional resources

Sources of further information:

- Horizon Europe portal
- Horizon Europe |Eligible countries
- Cordis | to find information on EU funded projects
- European Commission SSH integration (from Horizon 2020)
- Net4Society is the international network of National Contact Points for Cluster 2
  SSH Integration in Horizon Europe
- Bridge2HE NCP Portal (Training for NCPs and others)
  Integrating Social Sciences and Humanities in Horizon Europe

Net4Society

BRIDGE2HE with NCPs

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Case study

EU-China-Safe & Consumer Psychology

Professor Moira Dean

The Institute for Global Food Security

Queen's University, Belfast

www.qub.ac.uk/igfs

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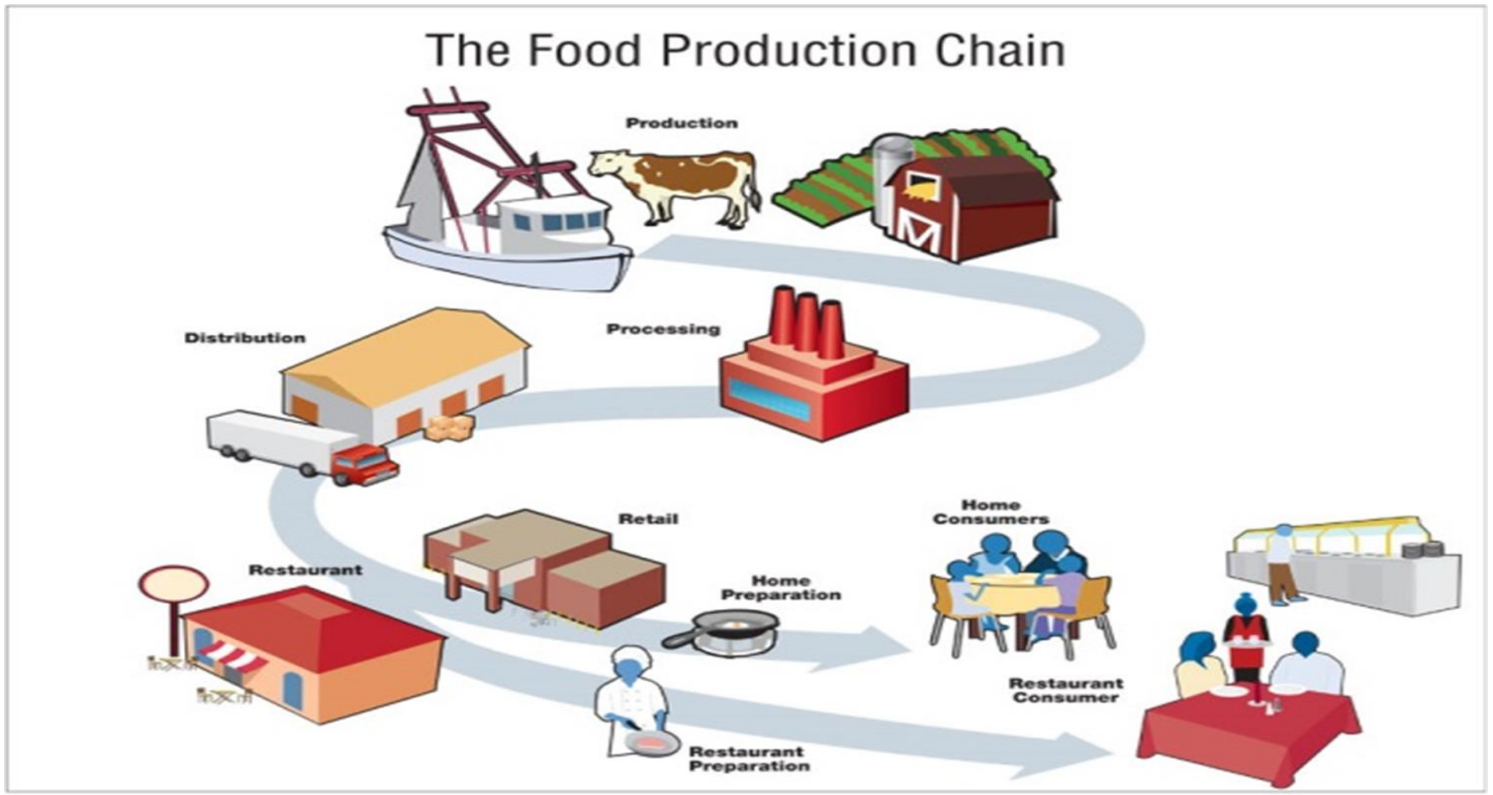
Interdisciplinary Research

Planetary Health

Transformative Food Systems

Nutrition and Human Health

Actors along the Food Chain



- Farmers
- Processors
- Retailers
- Regulators
- Consumers

Delivering an Effective, Resilient and Sustainable EU-China Food Safety Partnership

In Europe and China, consumer trust in the food industry and regulatory authorities has been damaged by a large number of accidental and deliberate food contamination and adulteration incidents.

1. The project aimed to develop & implement a shared vision of best practice between the EU & China

<u>The key goals have been to:</u>

- **Enhance food safety,**
- **Deter food fraud,**
- **Restore consumer trust,**
- **Deliver mutual recognition of data and standards and**
- **Support agri-food trade between the two trading blocks to promote economic growth.**

How?

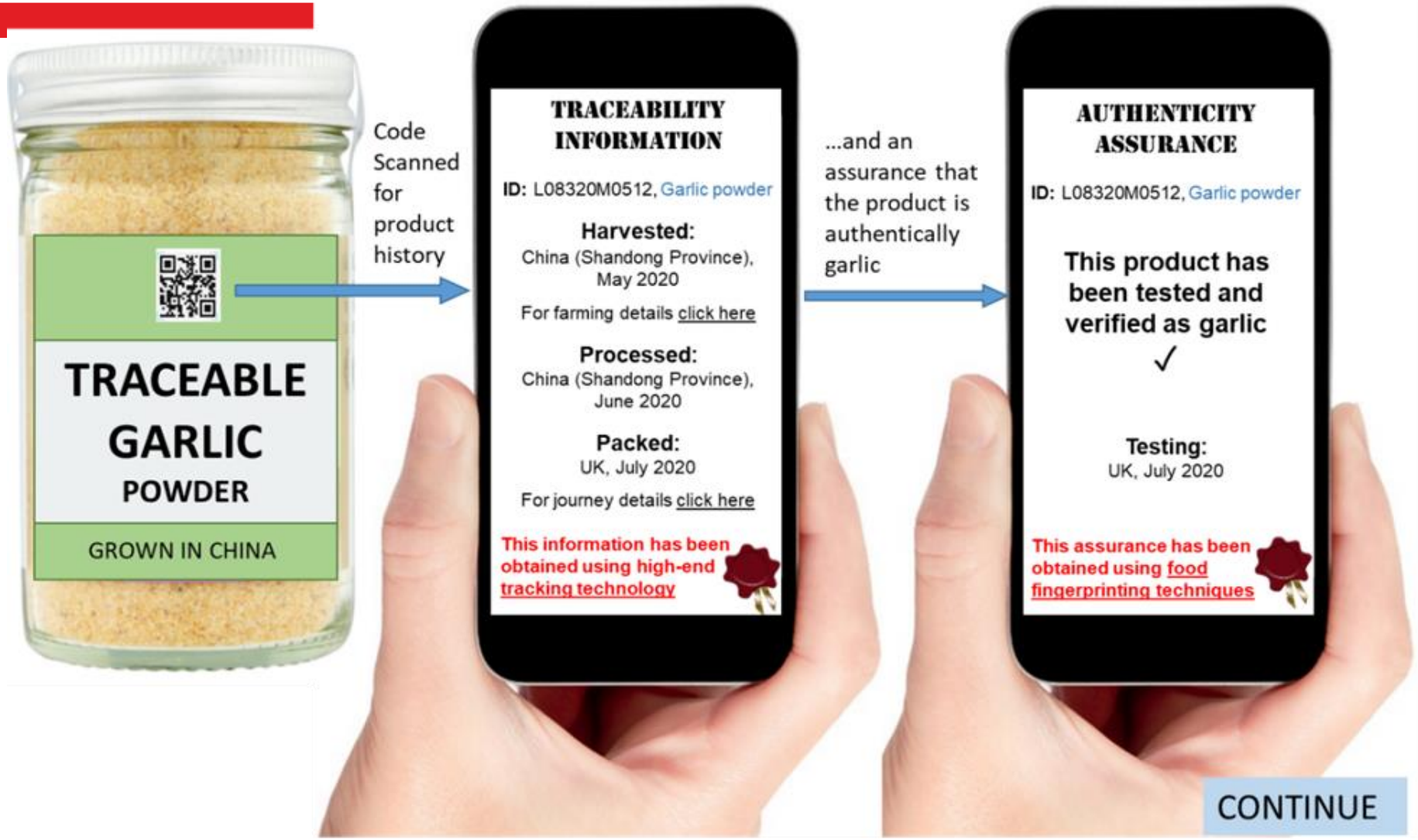
Innovative food fraud strategies present new long-term proactive solutions for ensuring food integrity e.g.,

- blockchain technology
- non-targeted analysis of food for authentication
- QR code for counterfeit protection

- Can these strategies enhance consumer trust in the food chain, add value and increase sales?
- We conducted an online consumer
- surveys with exemplar food…

EUCHINASAFE
中欧食品安全

Delivering an Effective, Resilient and Sustainable EU-China Food Safety Partnership



If this code exists in the **EU** manufacturer's database and hasn't been scanned before, the pack is revealed to be a genuine product

Infant Formula Milk

Pack is **tracked** using high-end record-keeping technology

Tracked infant formula milk

By scanning this code, you can access a brand page containing tracked information on where the formula was
and the prod
through the

Infant Formula Milk

Formula in pack is **tested** using high-end analytical scanning technology

Upon scanning the formula, captured sensory data is communicated to a cloud platform for further analysis. The cloud platform then reveals the geographic origin.

Tested infant formula milk

- A system of convincingly guaranteeing the origin of high end food was well received by consumers and so increasing transparency is a worthwhile investment for exporters. However, for added value consumers need exposure and familiarity. Also Technology needs to be independent.
- Trust in products and manufacturers are country dependent. Baseline trust matters.
- Manufacturer trust biggest contributor based on: *caring, honest, open and protective*
- Thus, provision of traceability and authenticity information is a promising strategy to increase consumer trust, through transparency of process.

•Education, Insurance, Trust base

EUCHINASAFE
中欧食品安全

Delivering an Effective, Resilient and Sustainable EU-China Food Safety Partnership

www.euchinasafe.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 727864 and from the Chinese Ministry of Science and Technology (MOST).

Disclaimer: The content of this presentation does not reflect the official opinion of the European Commission and/or the Chinese government. Responsibility for the information and views expressed therein lies entirely with the author(s).

Time for a break

Case study

Supporting the inclusion of social sciences in the H2020 project “MASTER”

Dr Áine Macken-Walsh, Teagasc

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Supporting the inclusion of SSH in Horizon Europe

Dr Áine Macken-Walsh
Senior Research Officer
Rural Economy Development Programme

15th June 2022

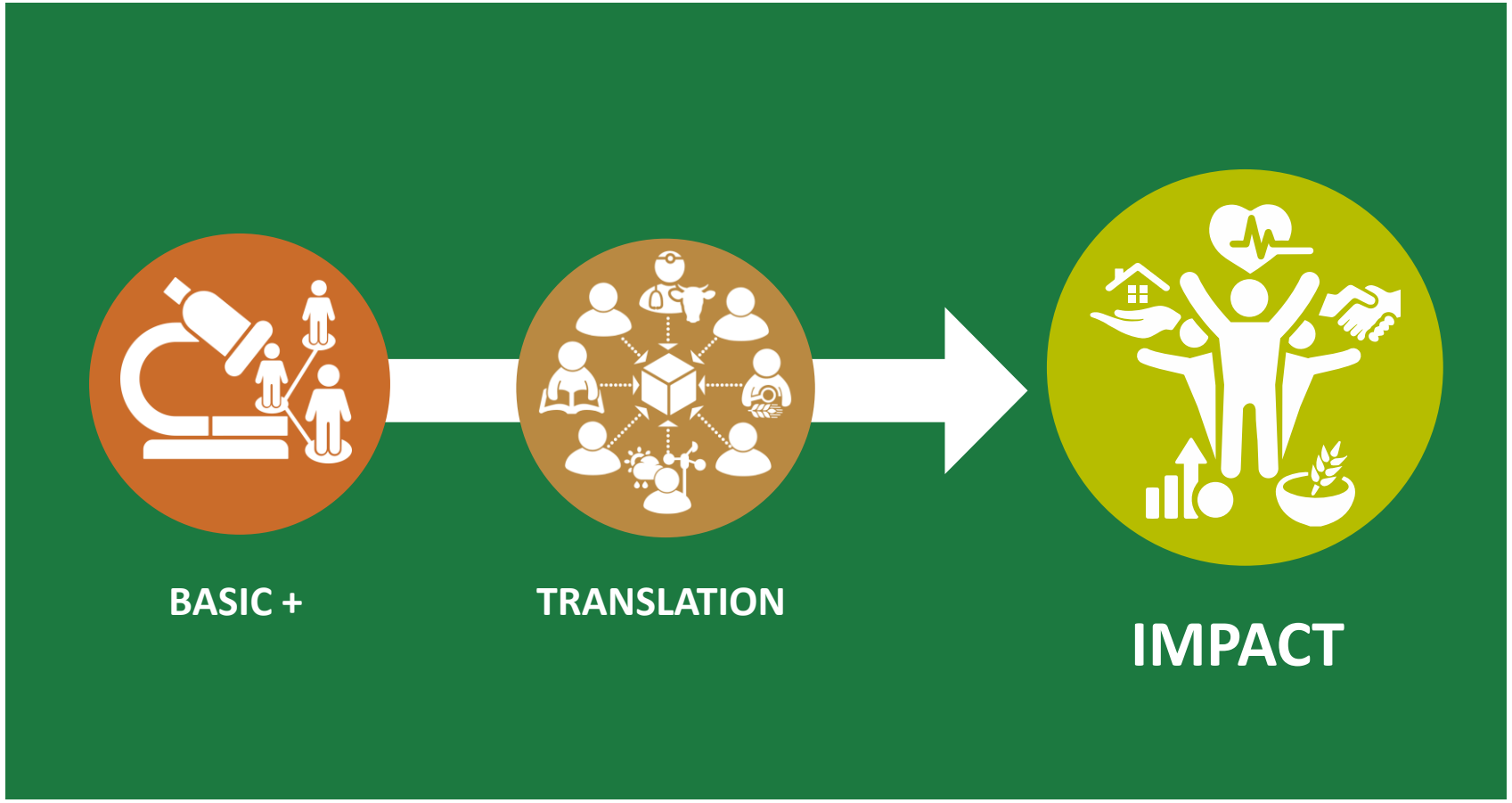
teagasc
Agriculture and Food Development Authority

Horizon Europe – 5 criteria

- Be bold, inspirational, with wide ***societal relevance;***
- Have a clear direction: targeted, measurable, and time-bound;
- Be ambitious but realistic research and innovation actions;
- Be ***cross-disciplinary, cross-sectoral, and cross-actor*** innovation;
- Drive multiple, ***bottom-up solutions***.

Mazzucato (2018)

Translational Research



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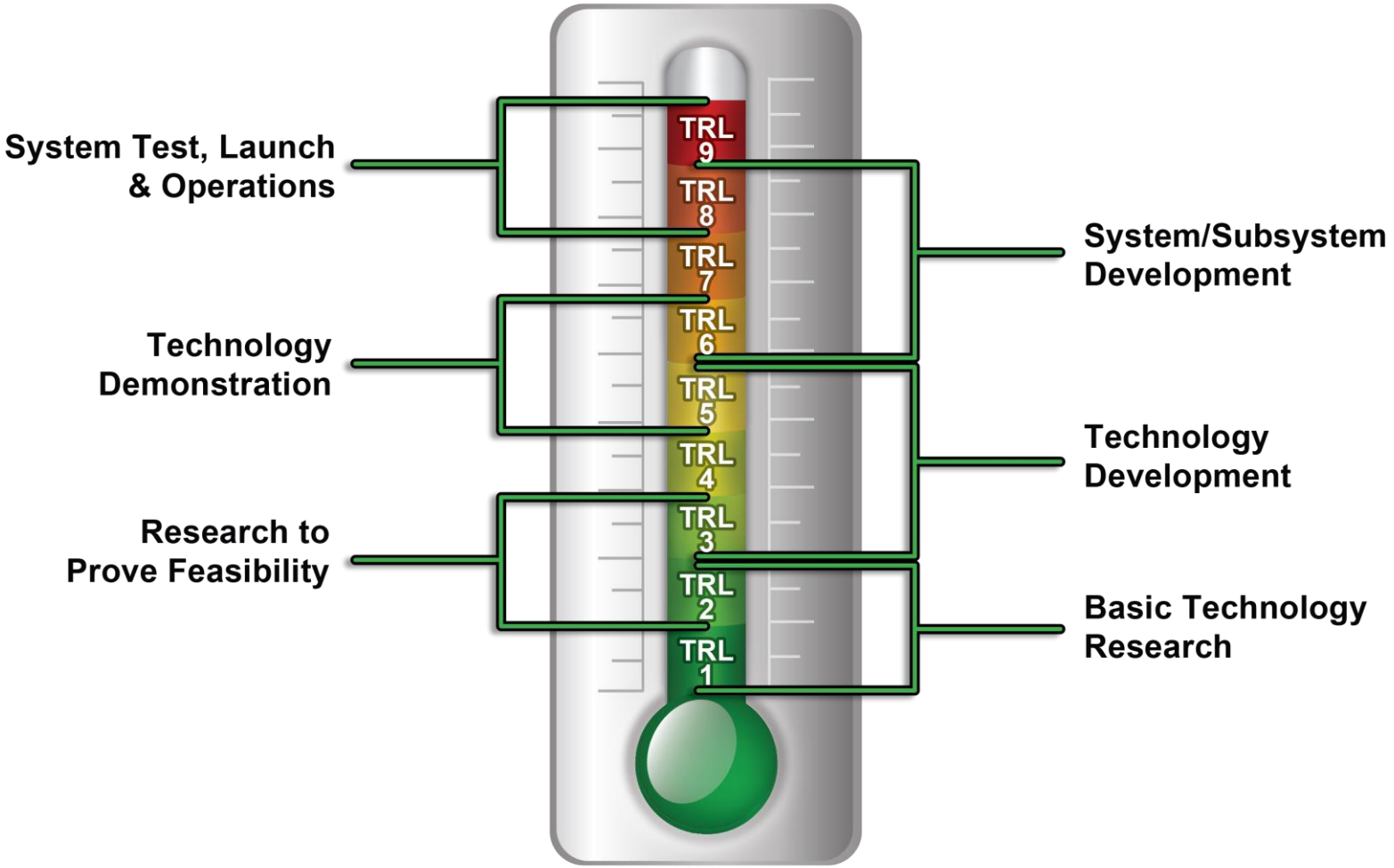
Technology Readiness Level



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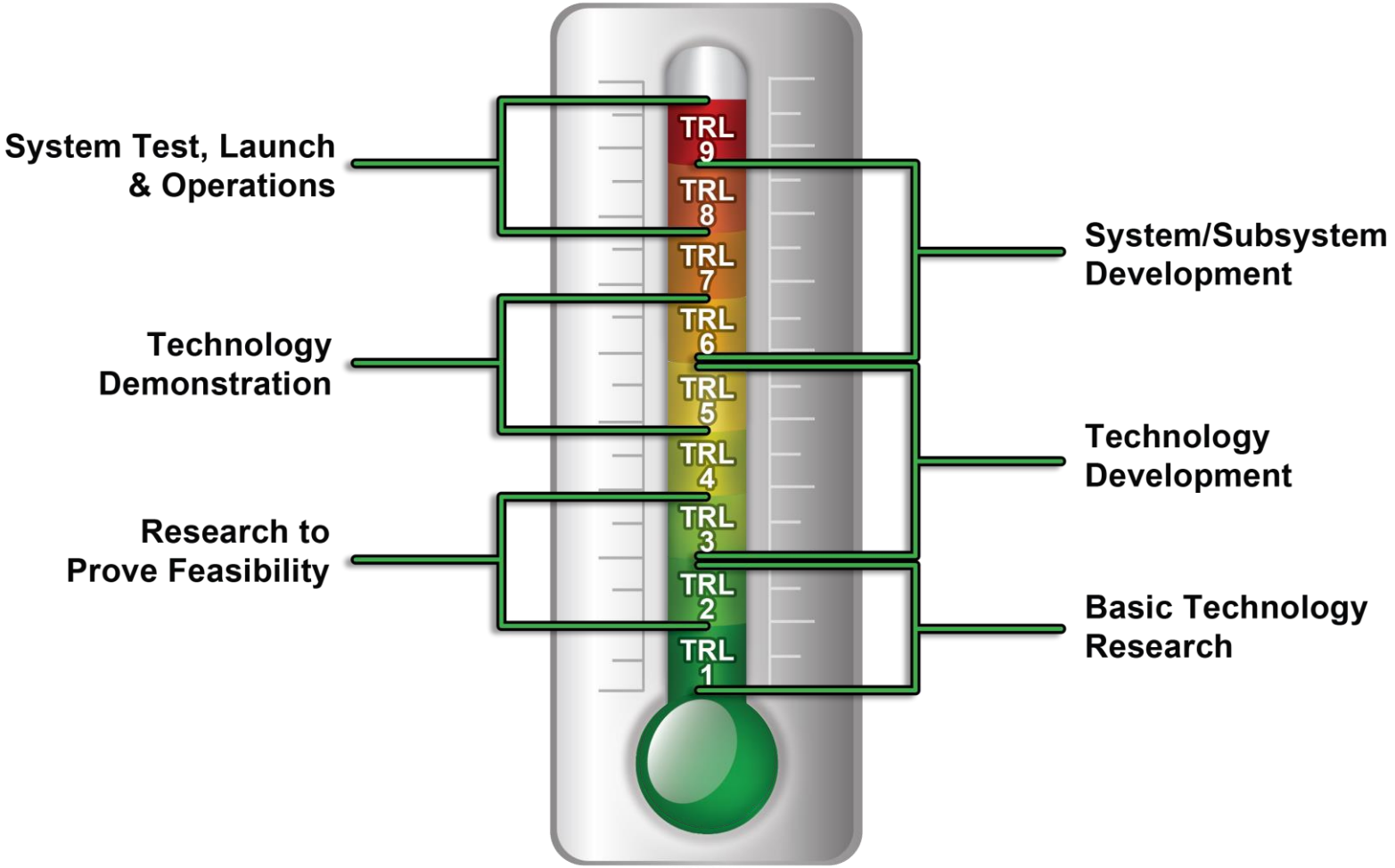
Impact / Social Readiness Level



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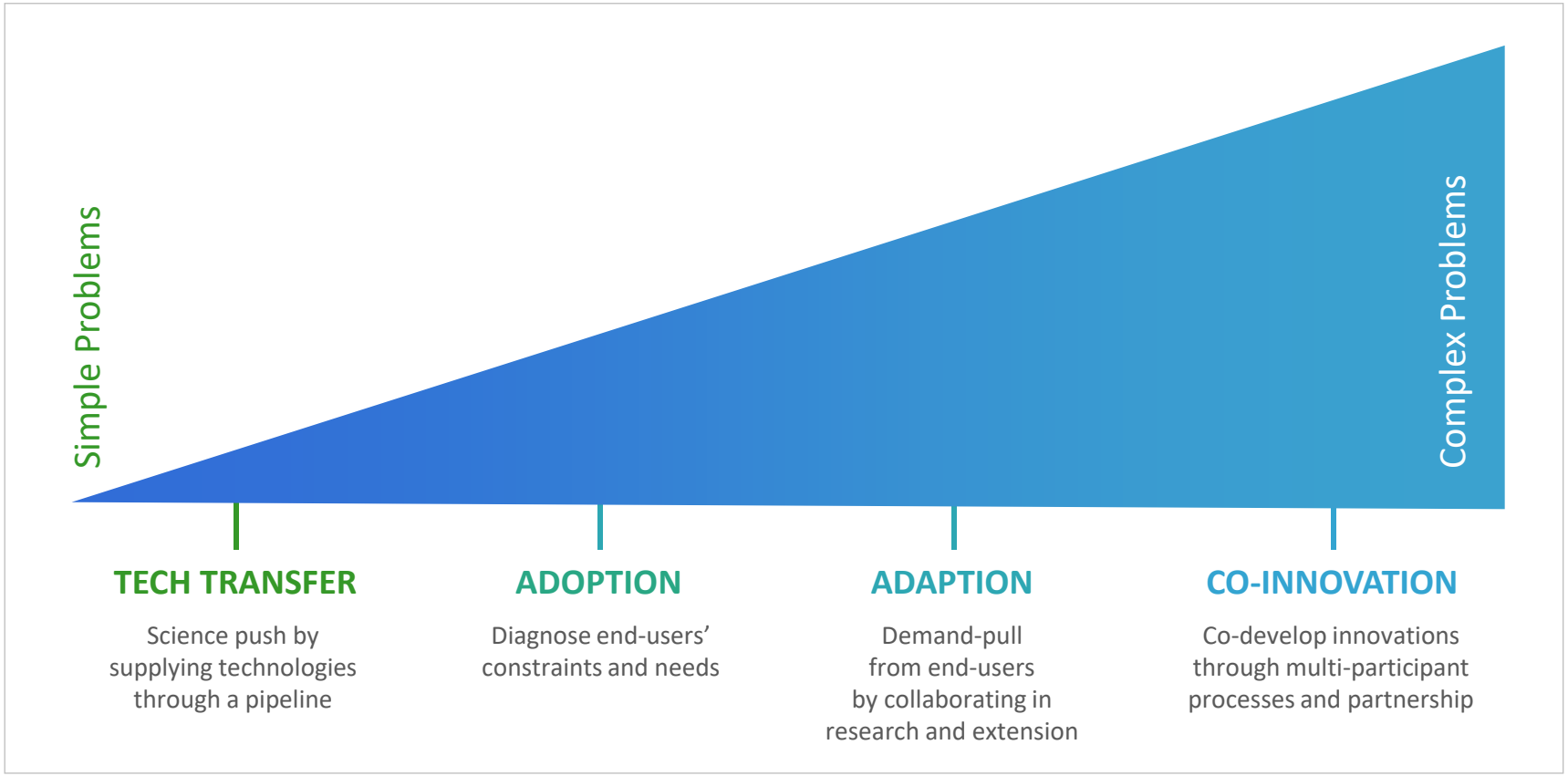

beyondresults.co.nz

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‘Multi-Actor’

AgriDemo-F2F actors

Demand side:

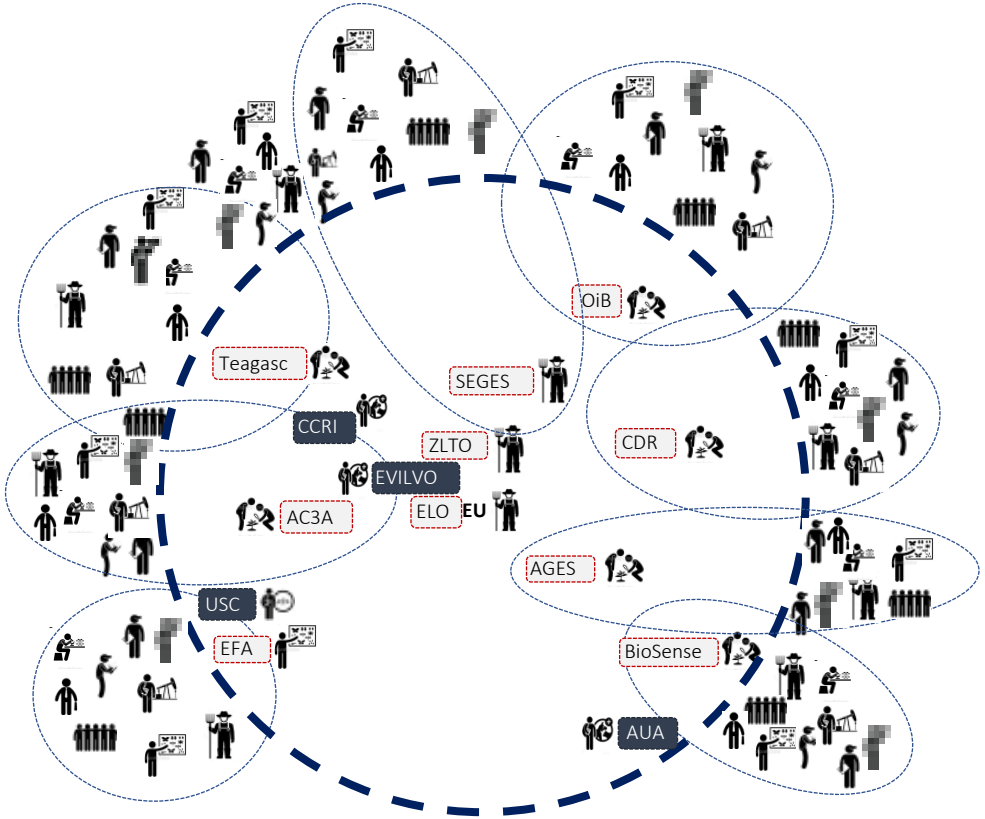
- Technology-input providers
- Advisors
- Agri research
- Training-education centers
- Agri magazines

Supply side:

- Farmers and farmer cooperatives/associations
- Operational groups , EIP thematic networks

Umbrella organisations:

- Agricultural policy advisors
- NGOs - international agricultural federations - civil society organizations



AgriDemo-F2F partners

Practioner partners:

- Farmer associations cooperatives
- Private education organizing bodies
- EU farmer/land owner association
- Governmental or public bodies providing research, advisory and training services

Research partners:

- Social scientists
- IT scientists within agronomic universities / research institutions

AgriDemo:F2F, 2018

Teagasc
Agriculture and Food Development Authority

‘Multi-Actor’

eagasc
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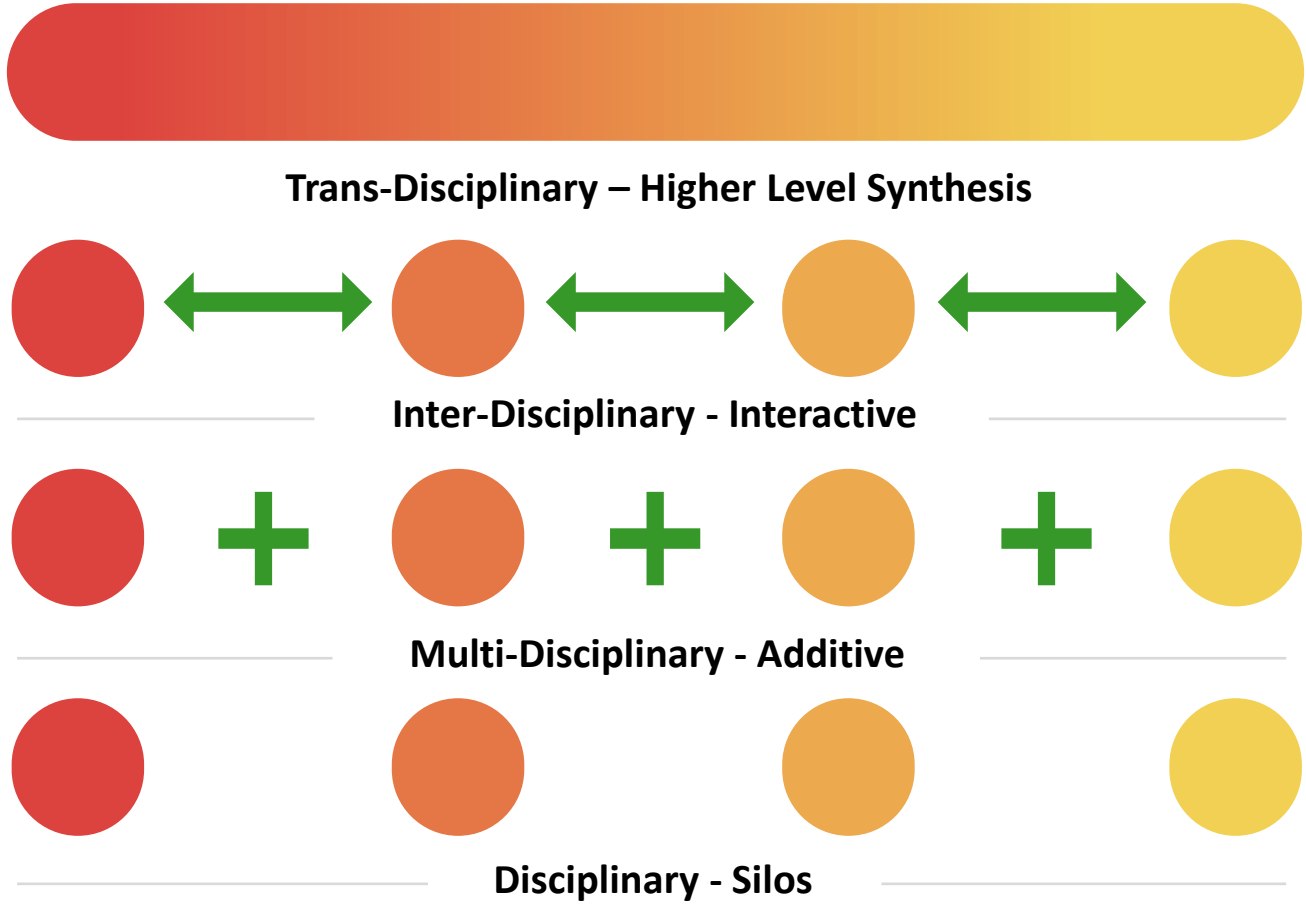
'Multi-Actor’


Trans-Disciplinary – Higher Level Synthesis
Inter-Disciplinary - Interactive
Multi-Disciplinary - Additive
Disciplinary - Silos

Arnstein 1969, adapted in Macken-Walsh 2017

The Horizon 2020 ‘multi-actor’ rule…

- **Stakeholder:** ‘consulted’ at various stages

- **Actor:** actively involved as a partner all along the project

van Oost, 2017

Multi Actor Work in Horizon 2020: Five Scenarios

1

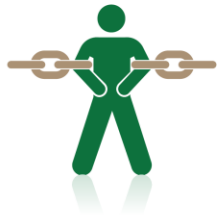
ENGAGING & INCENTIVISING
actors and stakeholders by establishing and demonstrating the relevance of project activities, re/shaping activities where possible.

2

INTERROGATING
existing knowledge from experts and from static sources such as EIP abstracts.

3

CREATING
new ideas and knowledge, including co-design of processes & products.



4

ADDRESSING
challenges, problem solving, trouble shooting.

5

APPLYING
knowledge to particular contexts, scenarios.

This project has received funding from the European Union's Horizon 2020 research & innovation programme under grant agreement N° 728055

Video: https://youtu.be/J5H8mazdu20

Horizon Europe – Impact, flexibility, co-design

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Panel discussion with:

- Professor Moira Dean, Consumer Psychology, Queen's University Belfast
- Dr Áine Macken-Walsh, Sociologist, Teagasc
- Professor Barry Quinn, Business supply chain, Ulster University
- Dr Klaus Schuch, Societal Impact, ZSI - Centre for Social Innovation, Austria

Closing remarks

- The ‘SSH in Cluster 6’ platform will remain open for another month
- Look at the Pitching presentations on our dedicated YouTube channel
- The work programmes 2023-24 are expected to be released after summer

For Irish and NI participants

A few seats are left for the free **‘Pitching’ training** offered by InterTradeIreland. If you are interested, please contact Ms Grainne Lennon (grainne.lennon@intertradeireland.com)

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