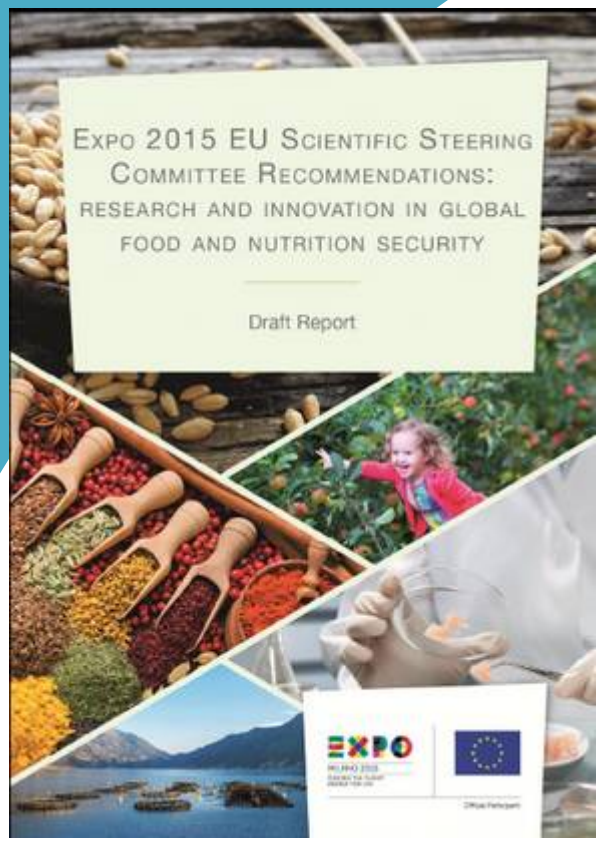


5th ICA Rectors and Deans Forum 2015

Towards a European Research & Innovation Agenda for Global Food and Nutrition Security

Franz Fischler

Milano, October 22, 2015

What is food security?

Food security occurs when all people at all times have access to **sufficient, safe and nutritious** food that meets their dietary needs and preferences for an **active and healthy life**

SDG 2:

- End hunger

- Achieve food security and improved nutrition

- and promote sustainable agriculture

The Scientific Steering Committee

IDEA:

… to establish the EU‘s role as a key player in the debate about Global Food and Nutrition Security and to work towards a fruitful collaboration on these matters with other stakeholders, both public and private (COM 2013)

INITIATIVE:

… is a joint initiative of the European Commission, the European Parliament and the Italian Government, launched on March 21, 2014

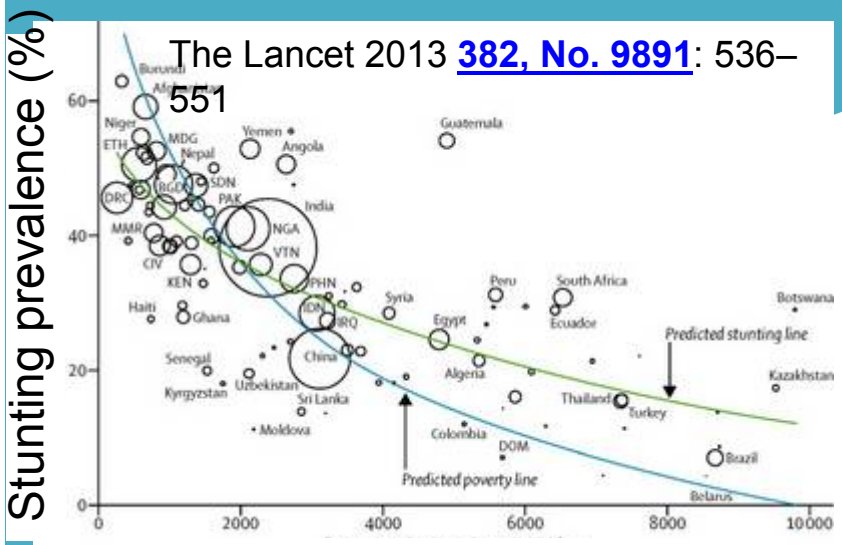
The Scientific Steering Committee is committed

- to contribute to the **legacy of EXPO 2015**
- to strengthen the **EU's role** as a key player in the debate on global food and nutrition security
- to exploit the **opportunity of EXPO 2015** for a six-months global dialogue

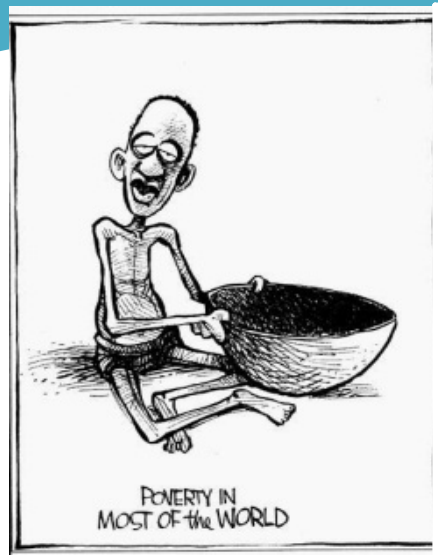
The Scietific Steering Committee‘s working programme

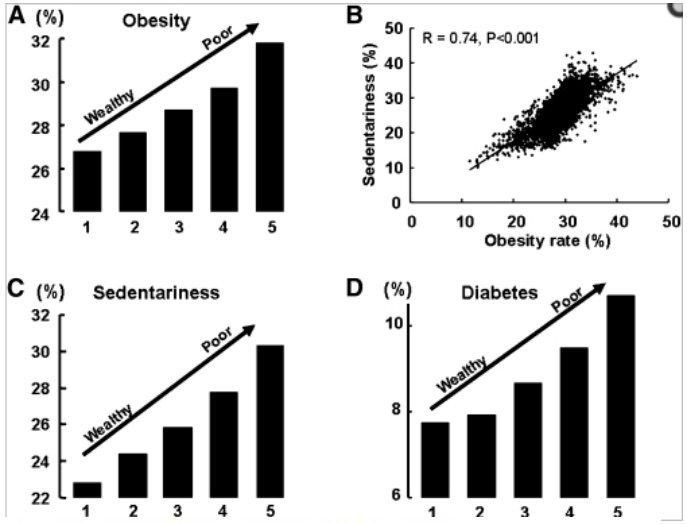
- Discussion paper on the role of research in Global Food and Nutrition Security
- Consultation Process
- 20 EXPO Events have been attended by a rapporteur from the SSC
- Recommendation for the Future European Research Strategy

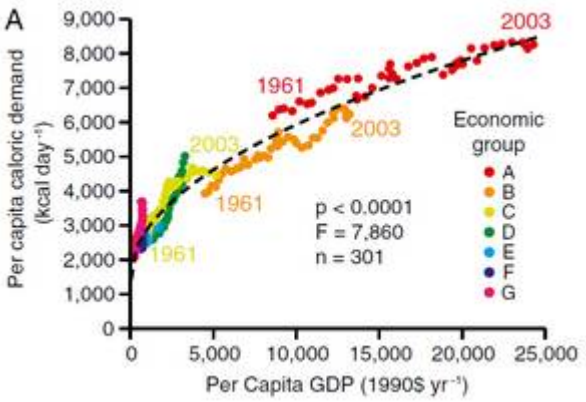
Food security and malnutrition



The Lancet 2013 **382, No. 9891**: 536–551







Diabetes. 2011 Nov; 60(11): 2667–2668.
Published online 2011 Oct 17. doi: 10.2337/db11-1118

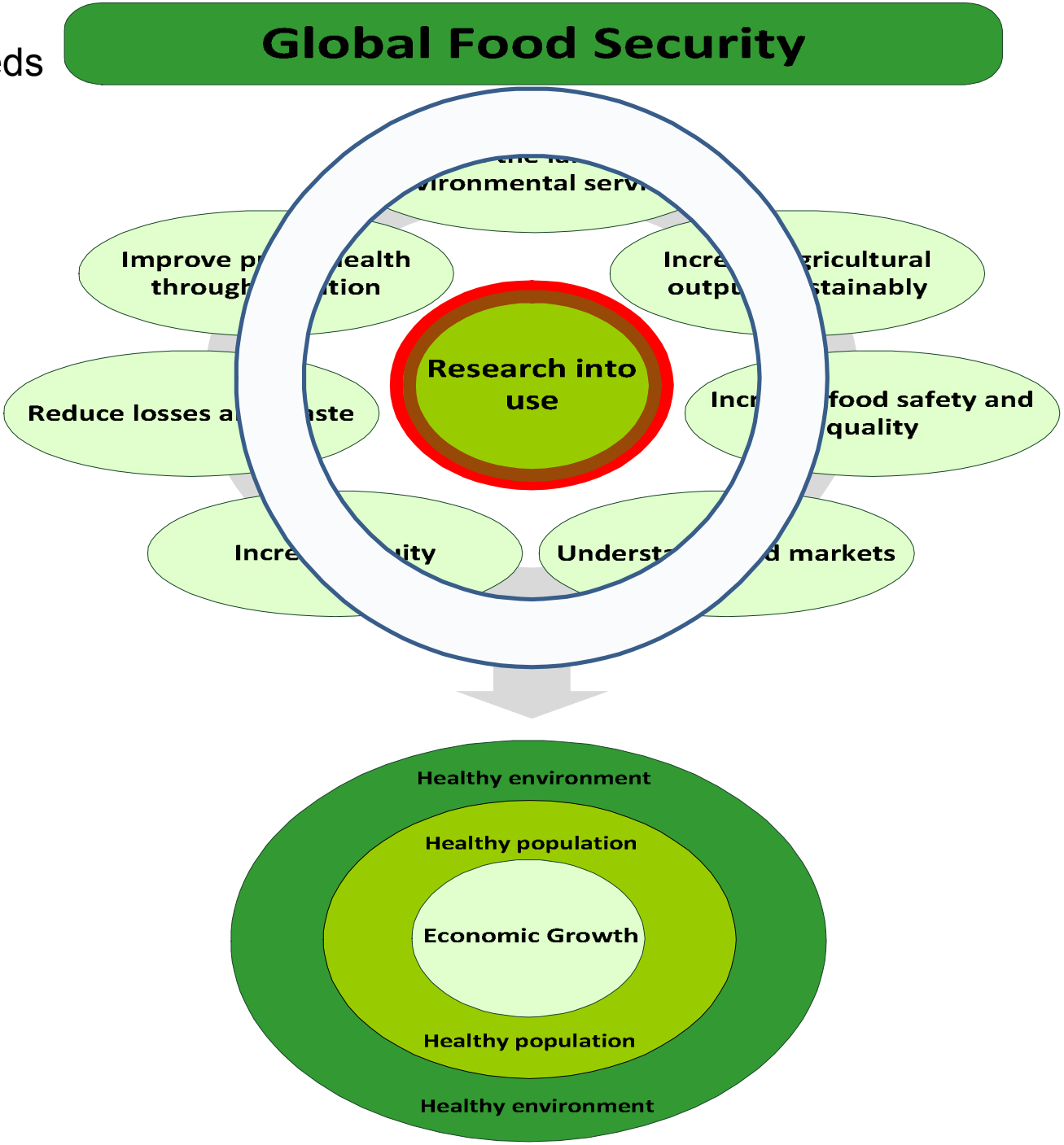
The VISION: sustainable, nutritious food to meet needs for a healthy diet for all

Recommendation 1:
"systems thinking" and interdisciplinary research

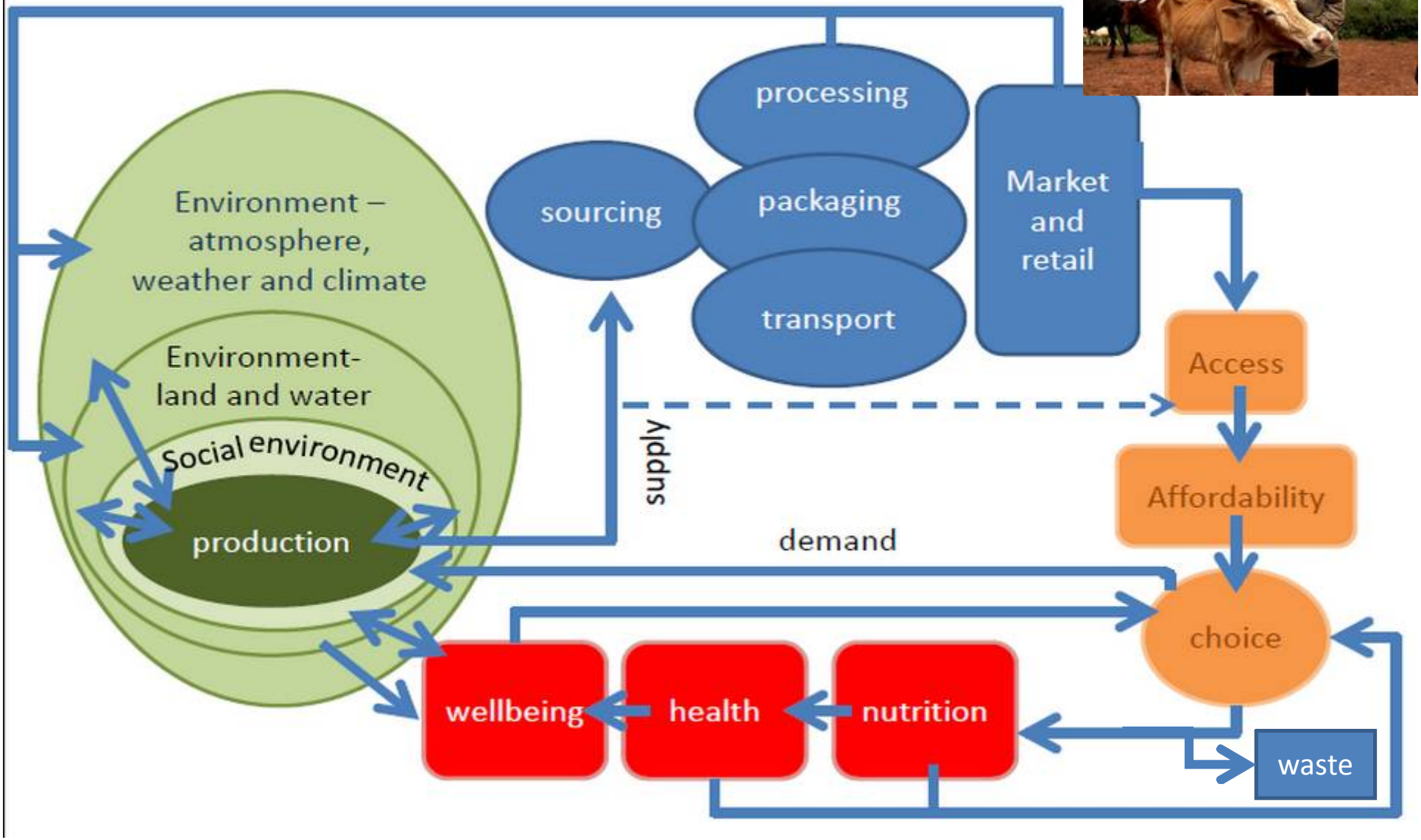
Recommendation 2:
innovating engagement in the "sustainable food" challenge

Recommendation 3:
driving the innovation environment

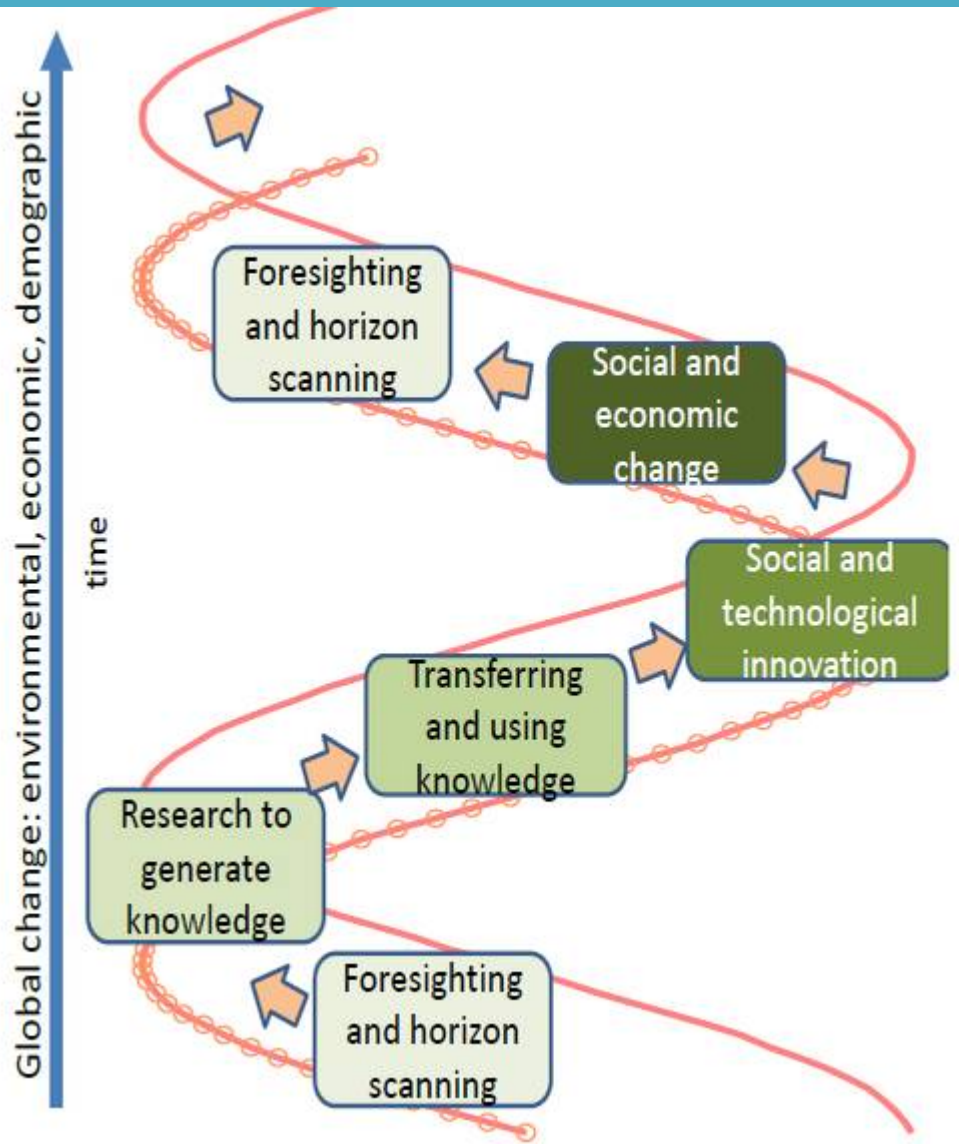
END GAME:
healthy environment, population and economy



“Systems” and “interdisciplinary” thinking



Coordinated and strategic research



- Virtuous spiral:
  - Horizon scanning to set the agenda
  - Research into use
  - Societal change
- Need for greater national and international alignment

Main Results of the Online Consultation Process

From 13/04-01/09 2015
306 contributions

The most significant challenges mentioned:

- Improve public health through nutrition
- Reduce food losses and waste
- Manage the land for all ecosystems

Recurring themes in responses

- Need for trans- and interdisciplinary research
- Suggestion to establish multi-disciplinary research centres or an interdisciplinary food authority

The EU EXPO 2015 Scientific Programme

- 200 Scientific EU Events during the 6 months of EXPO
- 2 International Conferences organised by SSC:

- May 8, 2015 "Towards a Research Agenda for Global Food and Nutrition Security"
- October 15, 2015 Conference

The Committee's tasks during EXPO 2015

- Collate and analyse the “discussion” around the discussion paper: “The Role of Research in Global Food and Nutrition Security”
- Attend to and report on EXPO 2015 events
- Prepare the EU Scientific Steering Committee Recommendation Document for EXPO 2015

Four recommendations

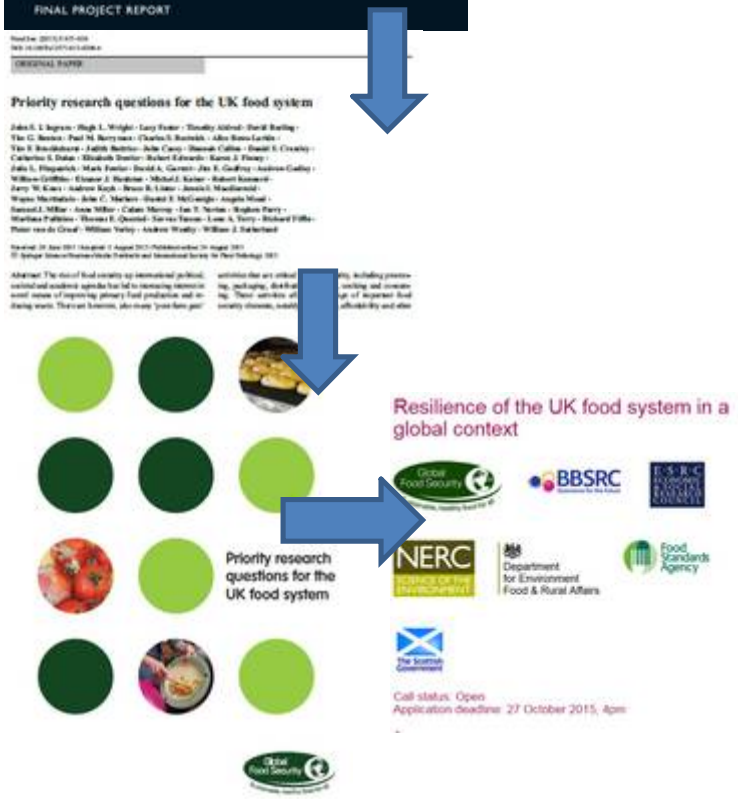
Rec 1) Systems Thinking and Interdisciplinarity

Rec 2) Innovating Engagement in the "Sustainable Food Challenge"

Rec 3) Driving the Innovation Environment

Rec 4) Towards an International Panel on Food and Nutrition Security

Rec 1: Systems Thinking and Interdisciplinarity



- **Innovate to create a culture of systems thinking embedded in universities, government and industry.** For example by framing disciplinary challenges within interdisciplinary thinking. In particular:
  - foster **more interdisciplinary research** through investments in research in programmes, projects and encouragement for interdisciplinary training, and discipline hopping
  - in conjunction with Recommendation 4, develop a funded **programme of foresighting/horizon scanning exercises that are systemic and not sectoral** to set the challenges jointly across policy, industry and academic communities and across sectors.
  - **reflect the leverage points identified by such inclusive foresighting programmes in research funding programmes** and, where appropriate via partnership with national and regional funders in the EU and internationally

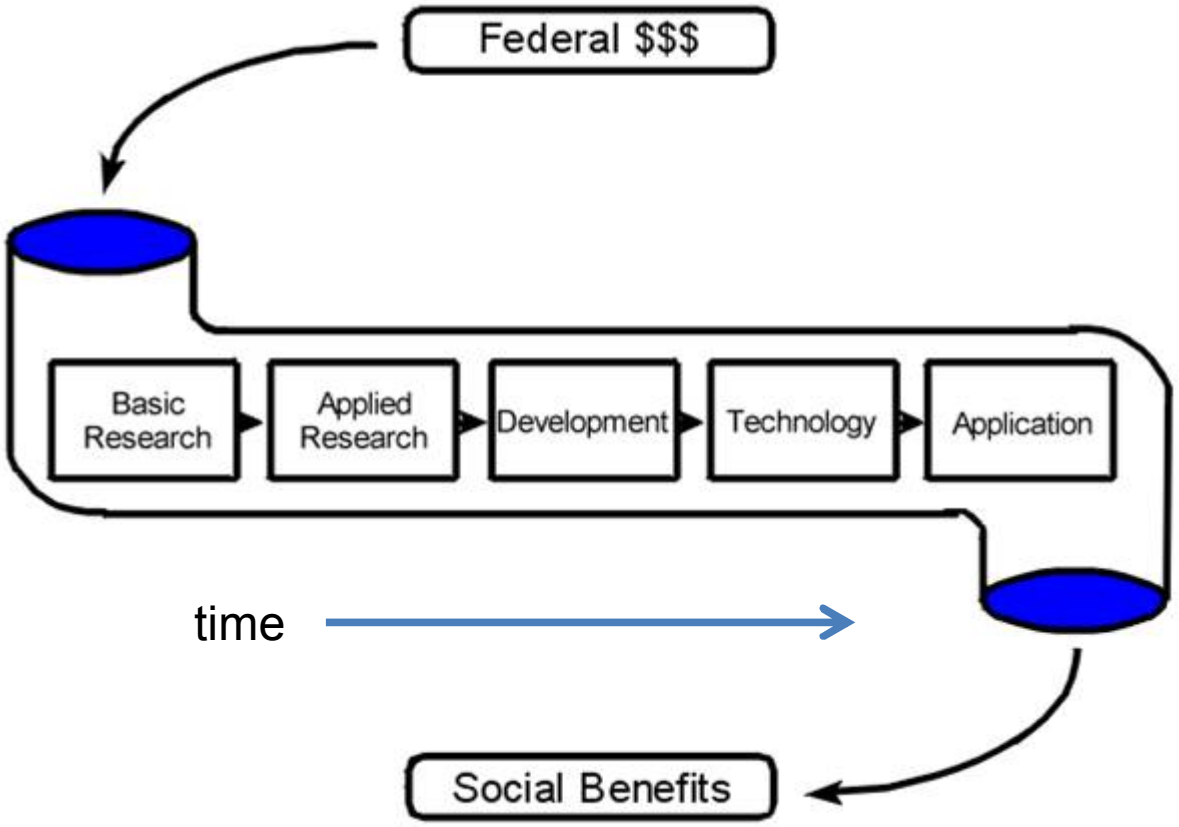
Rec 2: Innovating Engagement in the "Sustainable Food Challenge"

"It's definitely a question of re-educating yourself. I do find myself wandering around [the supermarket] thinking 'can I buy that? Should I buy that?' Whereas before I would probably just run around, shoving into the basket anything I wanted to buy." (London, Female)

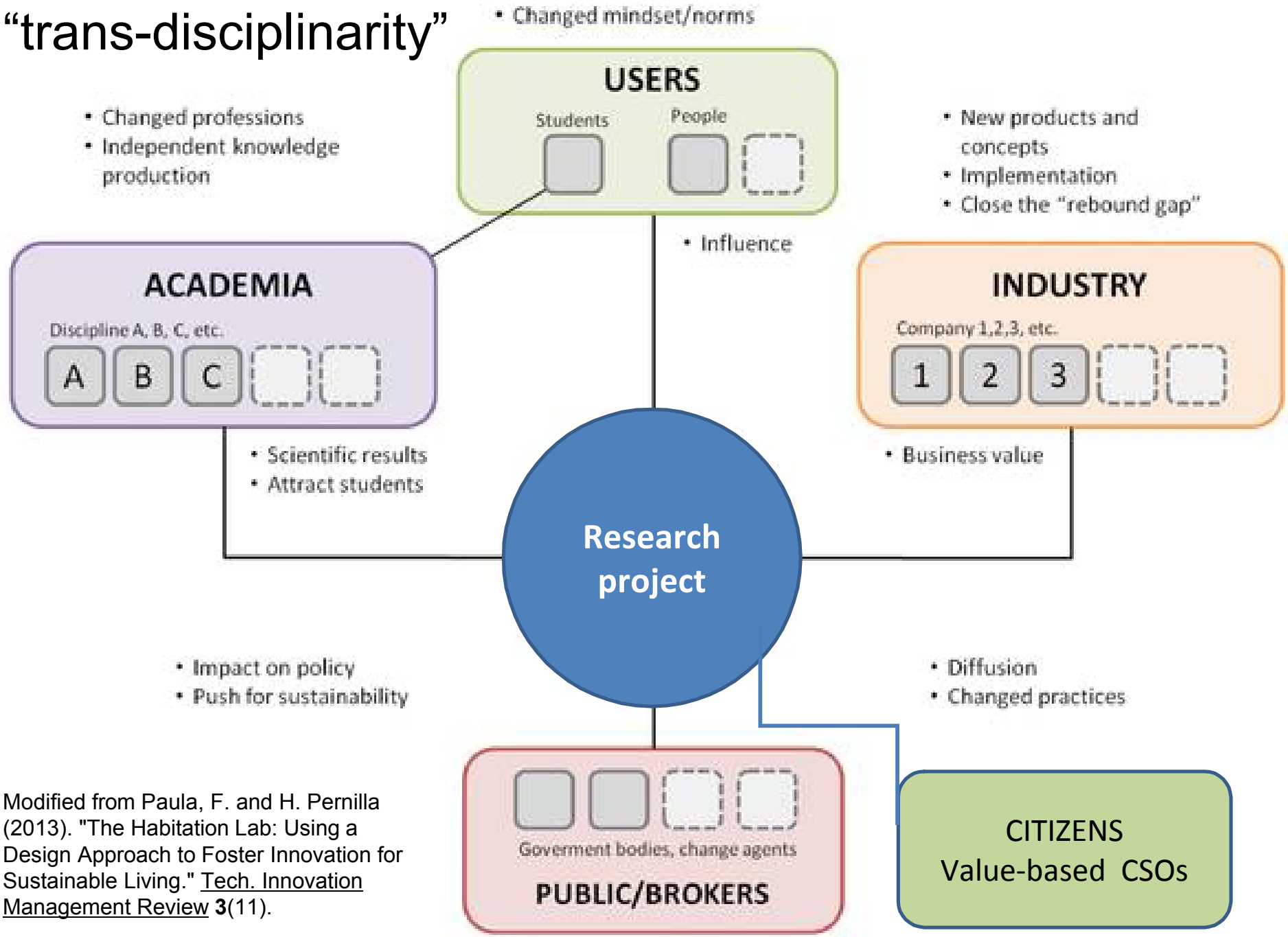
"I didn't really have much to do with food. I went to the supermarket, I bought my food every week and never gave it much thought but now I'm thinking about it. I'm thinking about what we buy and what we eat as well." (Cardiff, Male)

- Using syntheses developed by inter-disciplinary and systems analysis (Recommendations 1 and 4), **create increased societal awareness of, and engagement in, the importance of food for a healthy life and environment**, and the challenges to develop a sustainable food system in the face of climate change.

Rec 3: Driving the Innovation Environment



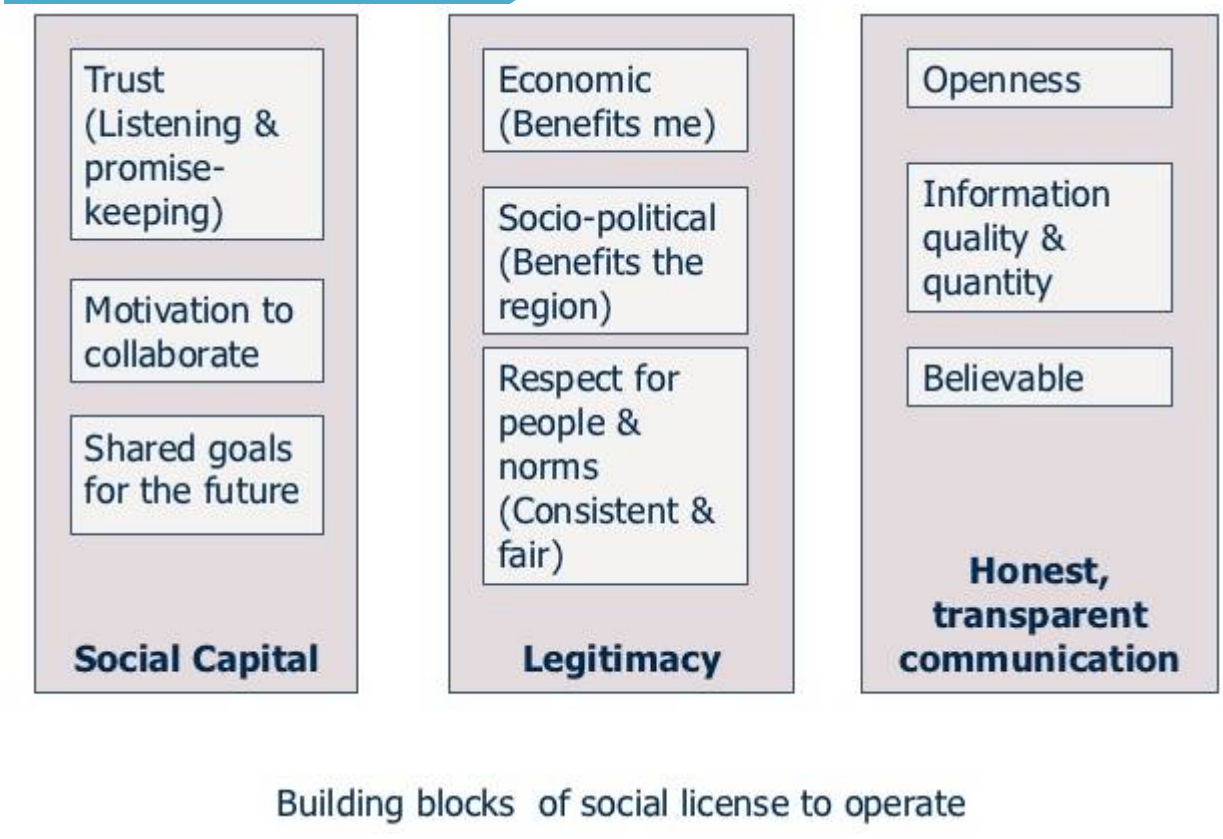
“trans-disciplinarity”



Modified from Paula, F. and H. Pernilla (2013). "The Habitation Lab: Using a Design Approach to Foster Innovation for Sustainable Living." Tech. Innovation Management Review **3**(11).

the social licence is intended as a metaphor to encapsulate values, activities and ideals which companies must espouse within society to ensure successful operation (Joyce & Thomson, 2000)

Trans-disciplinary work must help create a social license



Building blocks of social license to operate

- Trust in research requires that public researchers shouldn't be seen to work "for industry"
- Research should have public goods element to build the SLO

Dr Leeora Black, Managing Director, Australia Centre for Corporate Social Responsibility

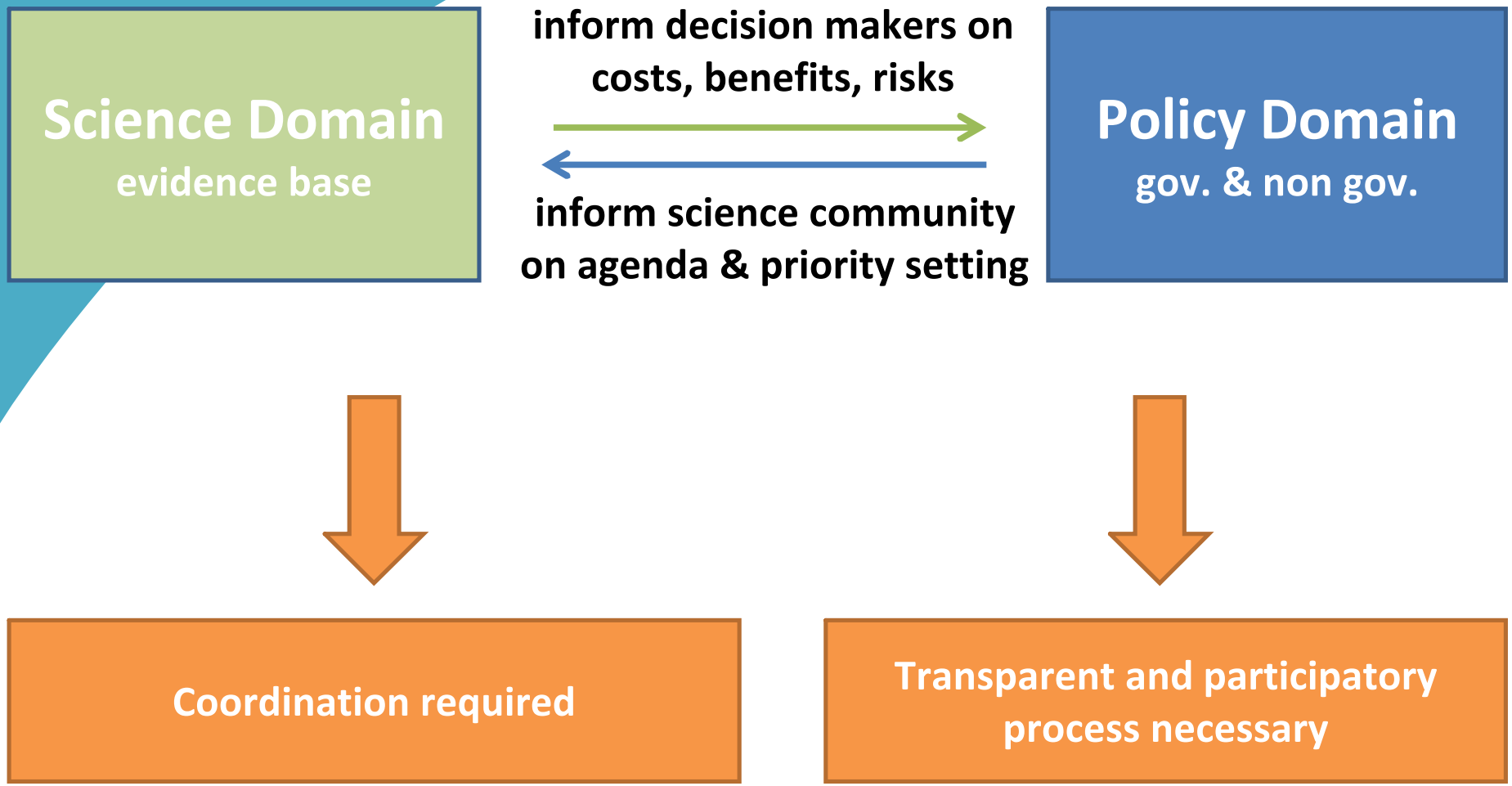
Rec 3: Driving the Innovation Environment

- **Stimulating innovation should remain a high priority for the EC**. Dedicated innovation funding should remain available, and all research instruments should require the "impact and innovation agenda" to be addressed. The EU should also work with MS to encourage researchers, whatever their funding, to "make a difference". For this to happen, *innovation needs to be broadly defined* and encouraged beyond creating an immediate economic impact

REF impact

The Research Excellence Framework was the first exercise to assess the impact of research outside of academia. Impact was defined as 'an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia'.

Rec 4: Towards an “International Panel on Food & Nutrition Security“



What the IPFN might address:
form must follow functions

1. Permanent function (not a project): Assessment of food and nutrition security based on scientific advances

2. Critical themes, selected in science policy interphase, e.g.:

- Healthy nutrition in changing food systems (CFS/HLPE)
- Citizen science, gender, participation
- Water, sanitation, food safety
- Bio-economy & food systems in circular economy
- stabilization, financial markets, trade
- Climate, land use change
- Hunger crises, nutrition in conflicts

How IPFN should make a difference

- Operate effectively, efficiently at low costs
- Embrace existing institutions as partners, not duplicate

Advantages compared to the current system:

1. better reflect the **diversity** and presence of / lack of consensus in science and knowledge from different disciplines; resolve key issues with new research,
2. improve **coordination among science disciplines at scale**, and with policy domain,
3. increase transparency in the synthesis and assessment process based on rigorous **peer cooperation and peer review**,
4. increase the **legitimacy of assessments** and recommendations to governments and society

Overview on three Options

Options	Best suitable for	Implementation
1: Working within the current system	Issues of disciplinary or national scope;	• Many uncoordinated actors; informal networks • No new initiative
2: International Panel on FN (Science in the lead)	Decision-making based on comprehensive science base; not necessarily on consensus	• Umbrella of national & internat. Res. Orgs.; Academies (IAP) • EU+ might initiate
3: Inter-governmental Panel on FN (Policy with science bodies in the lead)	Decision making based on comprehensive science base; consensus is necessary (IPCC model)	• IPCC-like intergovernmental organization • UN to initiate

Thank you!