



# Roadmap for improved science-policy interface

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# FOOD SYSTEMS IN FLUX

## a focus on flexibility

Final  
Conference

Keynotes from:  
Jessica Duncan (WUR)  
Inge van Oost (DG AGRI)  
Alexandre Meybeck (FAO)

Register now: 28-29 nov Leuven, BE

**TRANSMANGO**



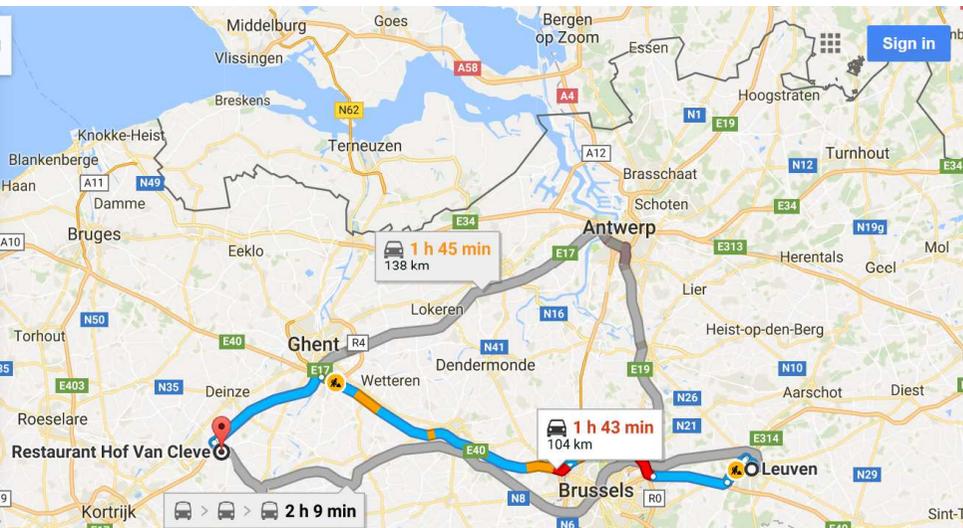
Following

The Future of Food & Farming – a flexible, fair  
& sustainable Common Agricultural Policy:  
[europa.eu/!Nh37NV](http://europa.eu/!Nh37NV) #FutureofCAP



GIF

# What kind of roadmap do we need?



OR



Concrete instructions on how to get to Belgium's best restaurant

A map with all good restaurants



# Rationale

- Worlds of science, policy and practice interact actively **interact** with each other, as they depend upon each other
- These spheres have their **own intentions and logics**
- Provision of science-based policy recommendations takes places within **complex ecosystem**
- Reconciling the supply of scientific information with the demands of decision makers is **not automatically performed** in such an ecosystem
- Leads to many **frustrations** among both scientists and decision makers

Gluckman, P., 2016. The science-policy interface. *Science* 353, 969. McNie, E.C., 2007. Reconciling the supply of scientific information with user demands: an analysis of the problem and review of the literature. *Environmental Science & Policy* 10, 17-38.



# Barriers

- **Functional** barriers  $\leftrightarrow$  differences in objectives, needs, scope and priorities
- **Social** barriers  $\leftrightarrow$  differences in cultural values leading to distorted communication, misunderstanding and mistrust.
- **Structural** barriers  $\leftrightarrow$  differences in institutional settings and standards, such as time frames and reward systems

# Science-policy interface



- Criteria:
  1. **credible**: meeting the standards of science
  2. **salient**: relevant to help solve the decision makers' dilemmas
  3. **legitimate**: produced and exchanged using unbiased and fair processes
- While all **thresholds** for all three attributes need to be reached, the interactions between them may result in both **synergies** and **tensions**.

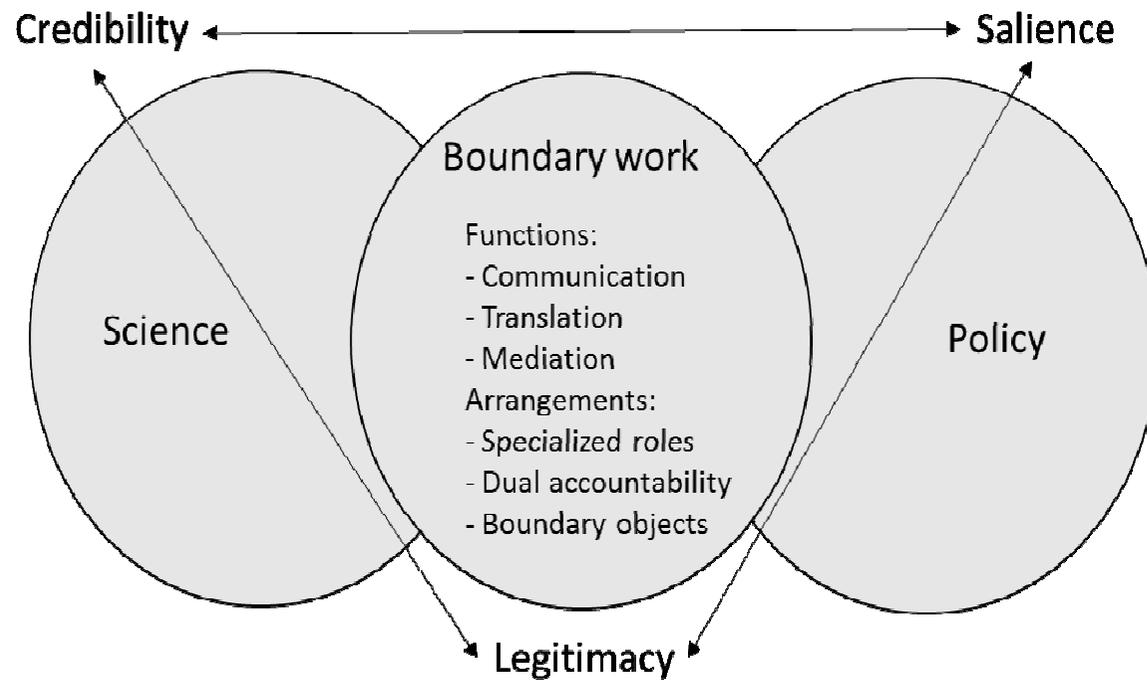
Cash, D. et al., 2002. Saliency, Credibility, Legitimacy and Boundaries: Linking Research, Assessment and Decision Making. John F. Kennedy School of Government, Harvard University, Faculty Research Working Paper Series RWP02-046. Cash, D.W. et al., 2003. Knowledge systems for sustainable development. PNAS 100, 8086-8091.



# Science-policy interface

- **Boundary work** to effectively break down the multiple barriers by
  - active, iterative and inclusive **communication** between scientists and decision makers
  - enhanced by **translating** scientific jargon into accessible language
  - involving multiple stakeholders through **mediation**
- Boundary work organisations requires
  - **dedicated** actors
  - who are **accountable** to their constituency
  - a set of **boundary objects**, such as models, scenarios, reports, etc.

# Science-policy interface

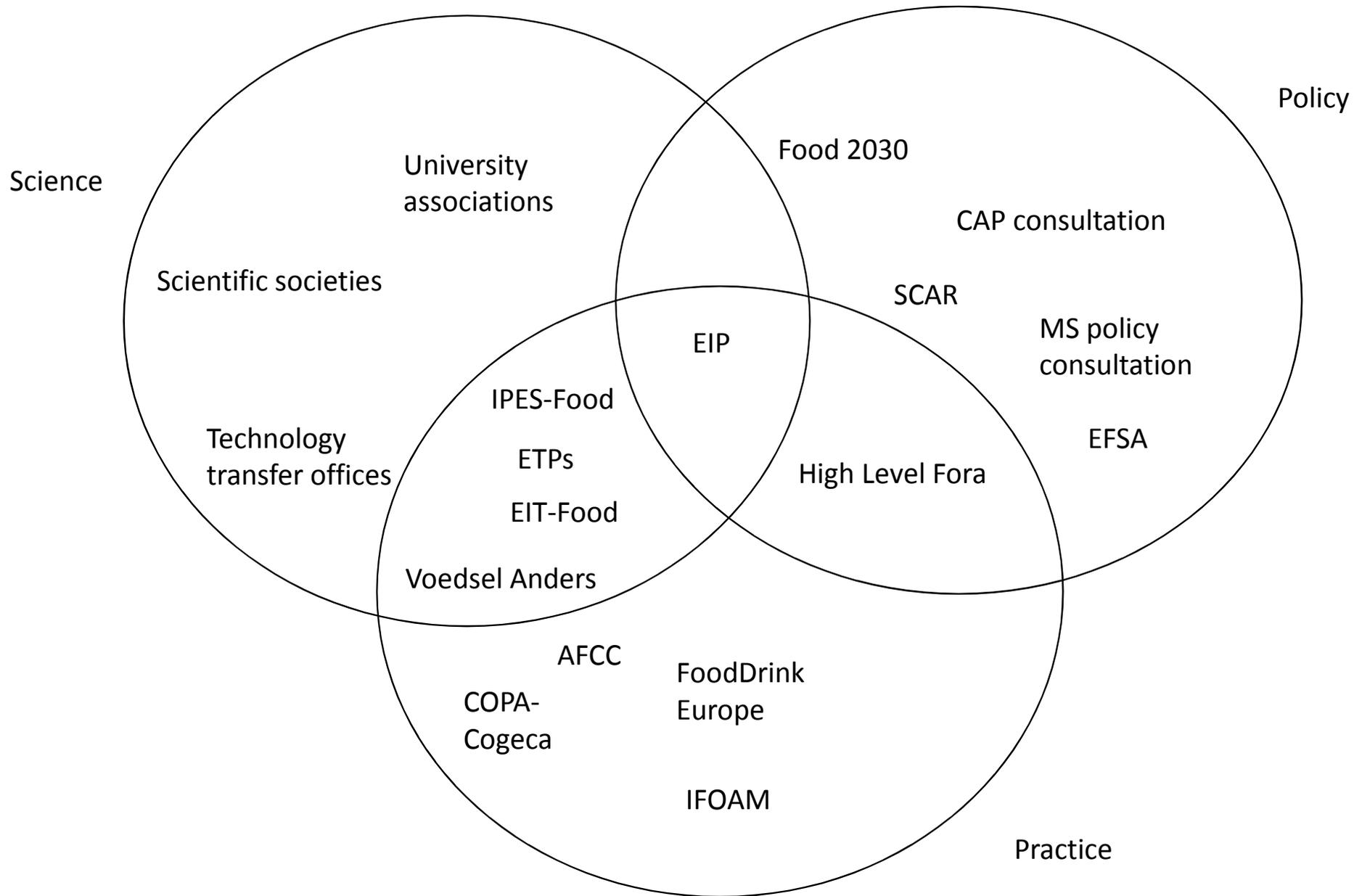


*Own elaboration based on Cash et al., 2002, 2003*



# TRANSMANGO FNS boundary objects

- **Conceptual map** of the food system ensures consideration of all elements in system (activities/actors, assets, institutions, outcomes)
- **Vulnerability matrix** links external shocks and stresses to vulnerability components of the food system
- **Systems thinking tools** enable decision makers and stakeholders to consider and evaluate interactions, feedback loops and dynamic effects to design better systems interventions and transition pathways
- **Future scenarios** help decision makers and stakeholders in making their interventions more robust or in creating new solutions





# Conclusions

- Lack of boundary organisations for science-policy interface at EU level
- Learn from international examples: CGIAR, Committee on World Food Security (CFS)
- Towards a European Policy Partnership for Agricultural and Food Systems / Food Security and Nutrition? Or widen existing EIP?
- What about other concepts: bioeconomy, circular economy,...?
- Situation different at national or regional level?
- What about local level, Urban Food Policy Councils?
- How to set up cross-scale boundary organisations linking local to global ('translocal')?
- Where is the conflictual debate? Within Science? At the interface?