

# Desafíos de desarrollo rural y retos de las políticas: síntesis de las problemáticas a nivel internacional

*Patrick Caron*

*Presidente HPLE/CFS, CIRAD – Université de Montpellier*

5 de septiembre 2018

**Seminario internacional:**

**Políticas públicas y desarrollo rural en América Latina: balance y perspectivas**

**5 al 7 de septiembre 2018, Cali, Colombia**

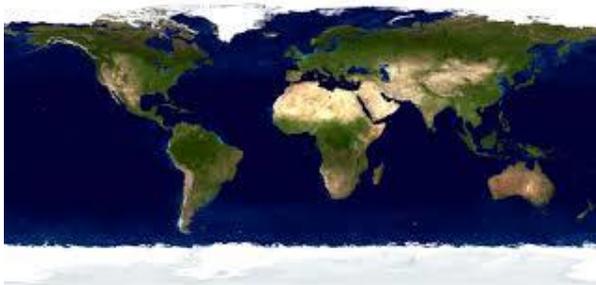


RED POLÍTICAS PÚBLICAS  
Y DESARROLLO RURAL EN  
AMERICA LATINA



# /// Action Framework

## SUSTAINABLE DEVELOPMENT GOALS



# Global issues on the international agenda in 2018

## UN priorities:

- Equitable globalization
- Climate action
- Human mobility /Migrations
- Technology
- Counter-terrorism
- Sustaining peace
- Countering nationalism
- Gender equality

UNGA 2018: 'Making the UN Relevant to All People: Global Leadership and Shared Responsibilities for Peaceful, Equitable and Sustainable Societies'

## WSF priorities:

- Women's rights
- Youth precarity
- Environment and climate change
- Financial regulation

WSF 2018: 'To resist is to create, to resist is to transform'

## WEF priorities:

- Women's empowerment
- Financial regulation
- Protectionism vs. multilateralism
- Carbon pricing
- Youth employment
- Technology, AI and cyber-security
- Private sector engagement

WEF 2018: 'Creating a Shared Future in a Fractured World'

+

Gaps

Amnesia

Crisis, urgencies and  
volatility

**High Level Panel of Experts  
on Food Security and Nutrition (HLPE),  
Science-policy interface of the  
Committee on World Food Security (CFS)**

**2<sup>nd</sup> HLPE note on  
*Critical and emerging issues for FSN*  
2017**

# HLPE Roles (as per CFS rules)

i) Assess and analyze the current state of food security and nutrition and its underlying causes.

(ii) Provide scientific and knowledge-based analysis and advice on specific policy-relevant issues, utilizing existing high quality research, data and technical studies.

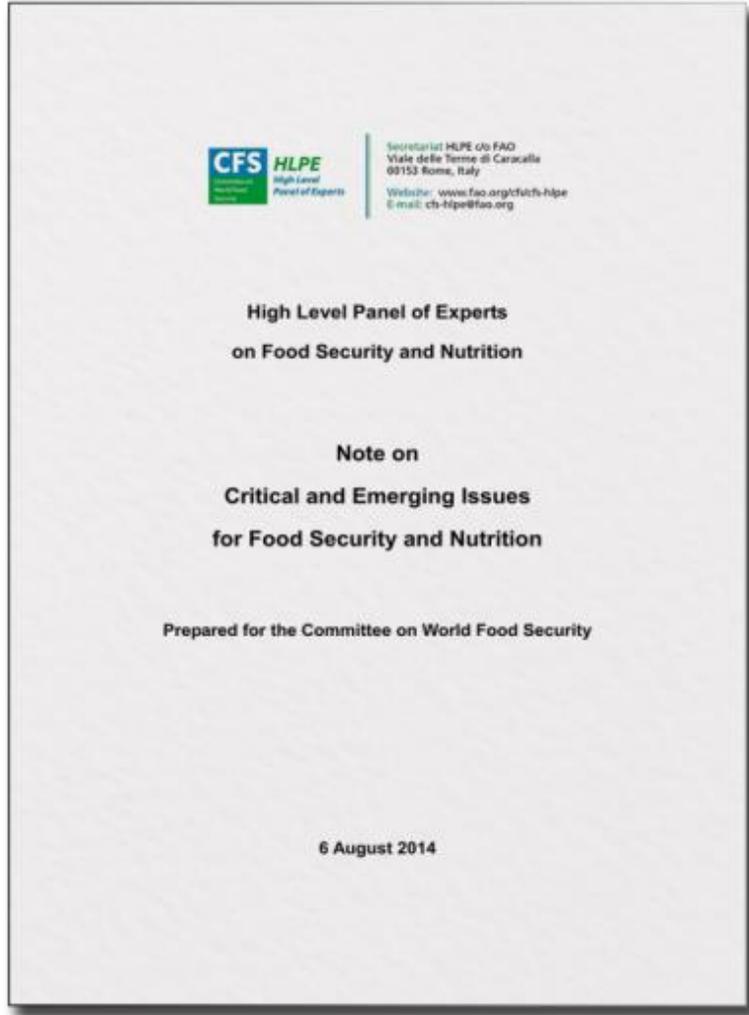
(iii) Identify emerging issues, and help members prioritize future actions and attentions on key focal areas.

# In 2016, CFS requested the HLPE:

To produce a second note on *Critical and emerging issues* (C&EI) for FSN, providing insights, through an evidence-based perspective, built on the knowledge of diverse actors

[http://www.fao.org/cfs/cfs-hlpe/  
critical-and-emerging-issues/en/](http://www.fao.org/cfs/cfs-hlpe/critical-and-emerging-issues/en/)

# Not from scratch!

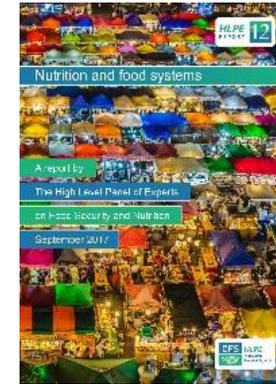


Critical: *“an issue that has a profound influence on one or more of the dimensions of food security, either directly or indirectly, positively or negatively”*

Emerging: *“an issue for which there are concerns that they could become critical in the future”*

# First note 2014: 5 interrelated issues

Healthy nutrition



Livestock systems



*Inequalities*



?

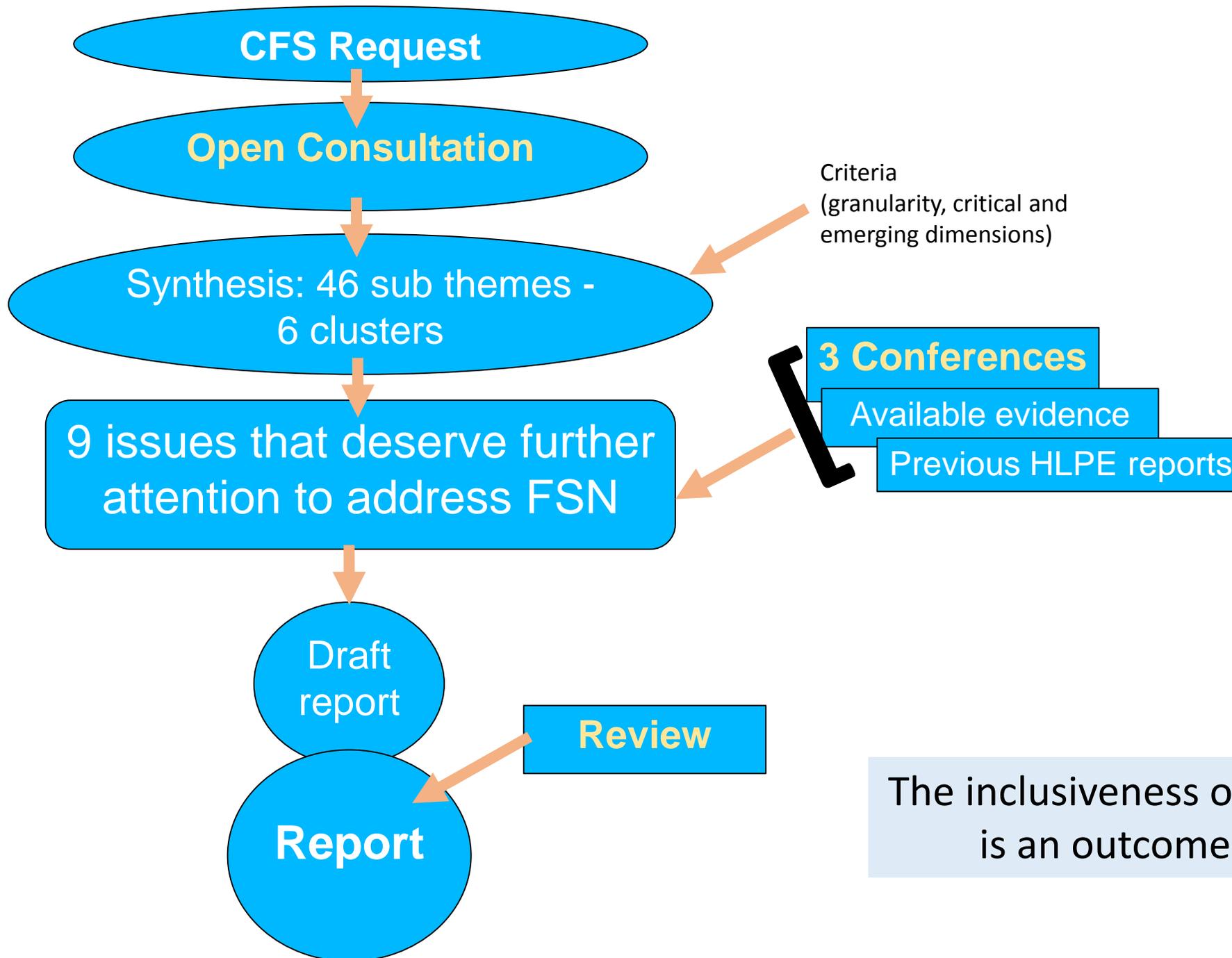
*Role of financial markets*



?

Pathways to sustainable food systems





The inclusiveness of the process is an outcome in itself

# Results of inquiry 2014 - 2017

	2014	2017
Knowledge organizations, institutions and knowledge networks	90 issues (from 25 sources out of 77 invited)	104 issues (from 38 sources out of 181 invited)
Open consultation	42 issues (from 28 sources)	70 issues (from 42 sources)
Total	132 issues 590 pages from 53 contributors	174 issues 915 pages from 80 contributors

# 9 critical and emerging issues in 2017 to complete 5 in 2014

1. Anticipating the inter-connected future of urbanization and rural transformation
2. Conflicts, migrations and FSN
3. Inequalities, vulnerability, marginalized groups and FSN (reviewing C&EI, 2014)
4. Impacts of trade on FSN
5. Agroecology for FSN in a context of uncertainty and change
6. Agrobiodiversity, genetic resources and modern breeding for FSN
7. Food safety and emerging diseases
8. From technology promises towards knowledge for FSN
9. Strengthening governance of food systems for an improved FSN

# 1. Anticipating the inter-connected future of urbanization and rural transformation

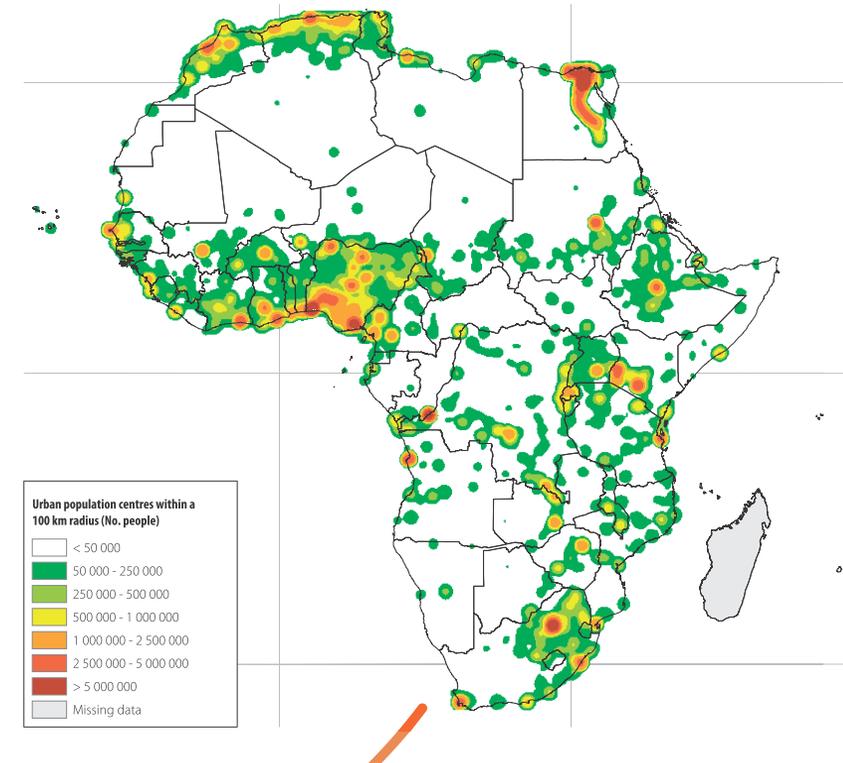
30% people in cities in 1950,  
66% in 2050.

Cities: a powerful driver of change and innovation in urban / rural areas



**M8. Urban population centres within 100km radius**

Source: eGeopolis 2016



## 2. Conflicts, migrations and FSN



Increasing number of international migrants  
(conflicts, natural disasters, shocks and crises)

173 million in 2000

244 million in 2015



**How do food systems operate in times of conflict?**

**FSN consequences of conflicts?**

**Designing food systems resilient during conflicts and crises?**

### 3. Inequalities, vulnerability, marginalized groups and FSN (reviewing C&EI, 2014)



Photo by: [www.flickr.com/people/santarosa/](http://www.flickr.com/people/santarosa/)

**One of the main causes of food insecurity and malnutrition**

**Reducing for improved FSN?**



24831\_8740.jpg ©Sebastian Liste/NOOR for FAO / UNFAO

Reducing inequalities to build peace and prevent conflicts and migration?

Empowering women and youth employment programmes for social justice and better FSN?

# 4. Impacts of trade on FSN

Photo credit: Maersk



Growing importance of international trade in food and agriculture:

1 /6 people obtain their staple calories from international trade

1 /2 by 2050



**Capturing the “true costs of production”?**

**Power imbalances and increasing concentration in food and agriculture commodity markets?**

International trade strategies and rules that respect national FSN objectives and needs?

Rebuild a common basis for multilateral negotiations?

## 5. Agroecology for FSN in a context of uncertainty and change

Gaining traction and challenge to harness contributions of such innovative approaches

Contribution to resource efficiency; strengthen resilience; secure social equity / responsibility?

Integration of different knowledge systems?

**Enabling conditions?**



Photo: Ricky Martin/CIFOR

## 6. Agrobiodiversity, genetic resources and modern breeding for FSN



Improving resource efficiency and strengthening resilience to biotic and abiotic threats and shocks... Yet:

30 crops / 95 % of food energy needs

75 % food production / 12 commercial crops and five animal species



Diversification of crop species?

**Participatory breeding initiatives and seed systems?**

Protecting agrobiodiversity?

Global regulations for modern breeding?

# 7. Food safety and emerging diseases

Food safety, food-borne diseases, antimicrobial resistance: major challenges. In 2010: 31 food-borne hazards = 600 million food-borne illnesses and 420 000 deaths

Comparable with major infectious diseases

International and national initiatives to be strengthened and developed to address food-borne hazards?

Adapting them?

**Large-scale industrial agricultural model supplying global value chains more or less likely to result in greater food safety incidents? localized food systems?**



Photo: ILRI/Hardisman Dasman



24862\_0052.jpg ©FAO/ UNIFAQ

## 8. From technology promises towards knowledge for FSN

Science, technology and innovation : engine in the past, pivotal in the future. Taking stock of modern science advances (e.g. genetics, data) and knowledge

Positive and negative impacts: risks, mistrust and controversies

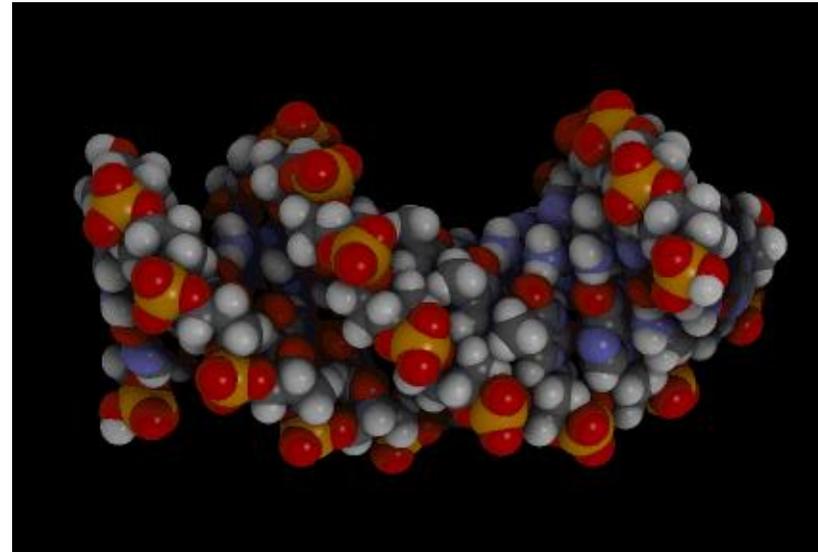
Technology gap/ adapted innovation, including insecure people

Knowledge and technologies for FSN?

Processes, partnerships, regulations and institution?

**Technology related risks through regulatory frameworks?**

Which metrics?



# 9. Strengthening governance of food systems for an improved FSN

To steer transformation, inclusive and inter-sectoral governance mechanisms are needed at all scales:

policy coherence across scales and sectors

specific issues (erosion of diversity, power imbalance, footprints, etc.)

Local initiatives through territorial approaches?

**Inclusive and intersectoral functioning of policies and institutions?**

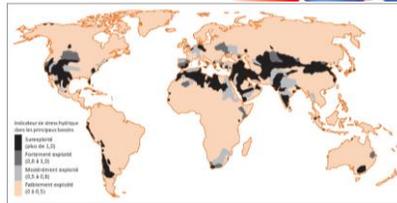
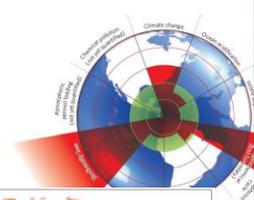
Innovation and institutions for FSN and alignment of local, national and international arrangements?

FSN concerns in global agreements and conventions? trade-offs impacting FSN?



# Multifunctional agriculture at the heart of complex interactions and equations

Source: Rockström et al., Nature, 2009



Source: Banque mondiale, 2008



Environment



Employment/  
income



Energy

## Agriculture ?

@ unicef.ca



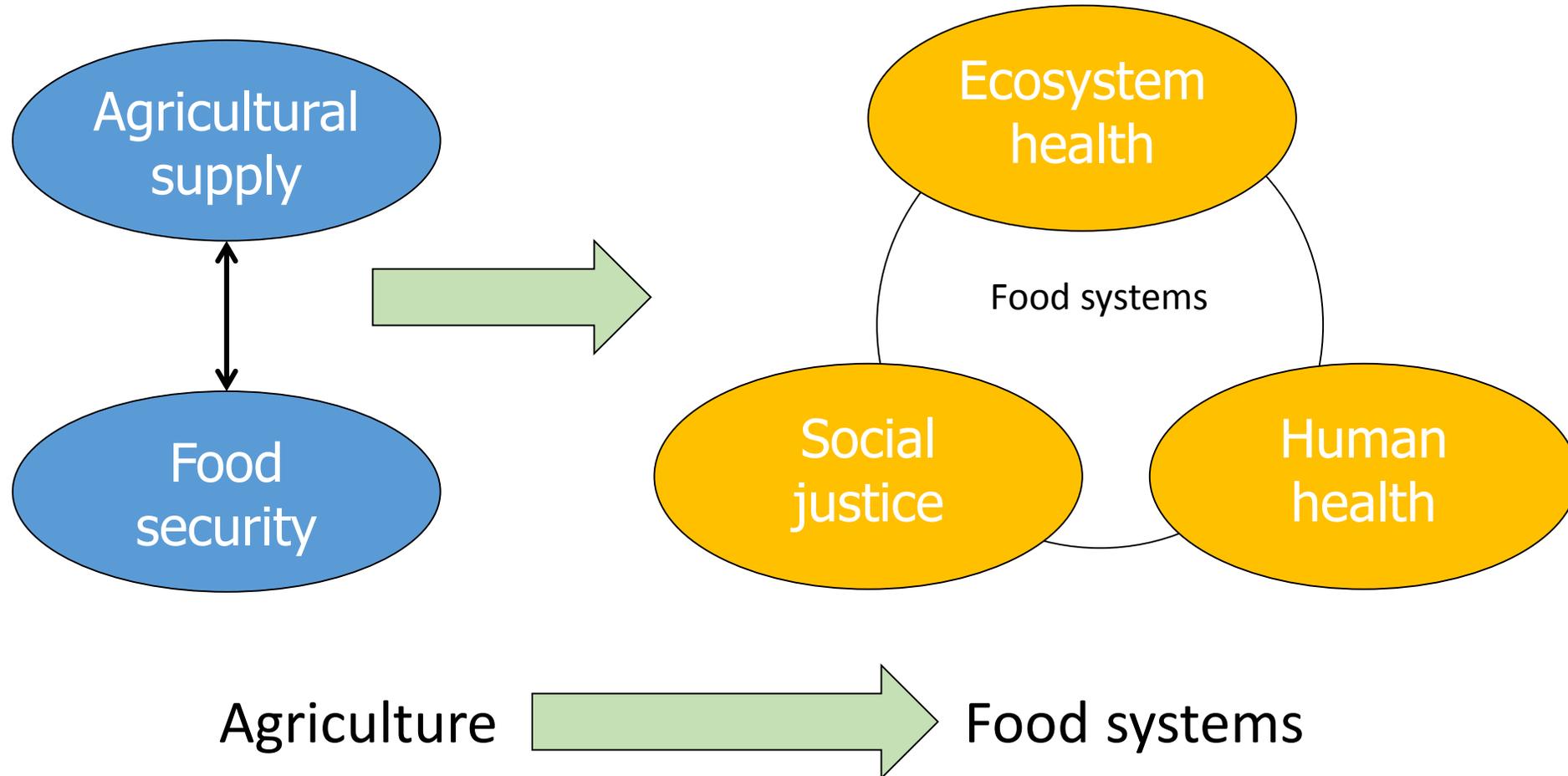
FSN



Nutrition and Health



# Agriculture / food systems: lever for FSN and Agenda 2030!



## Food systems for sustainable development: a four-part transformation

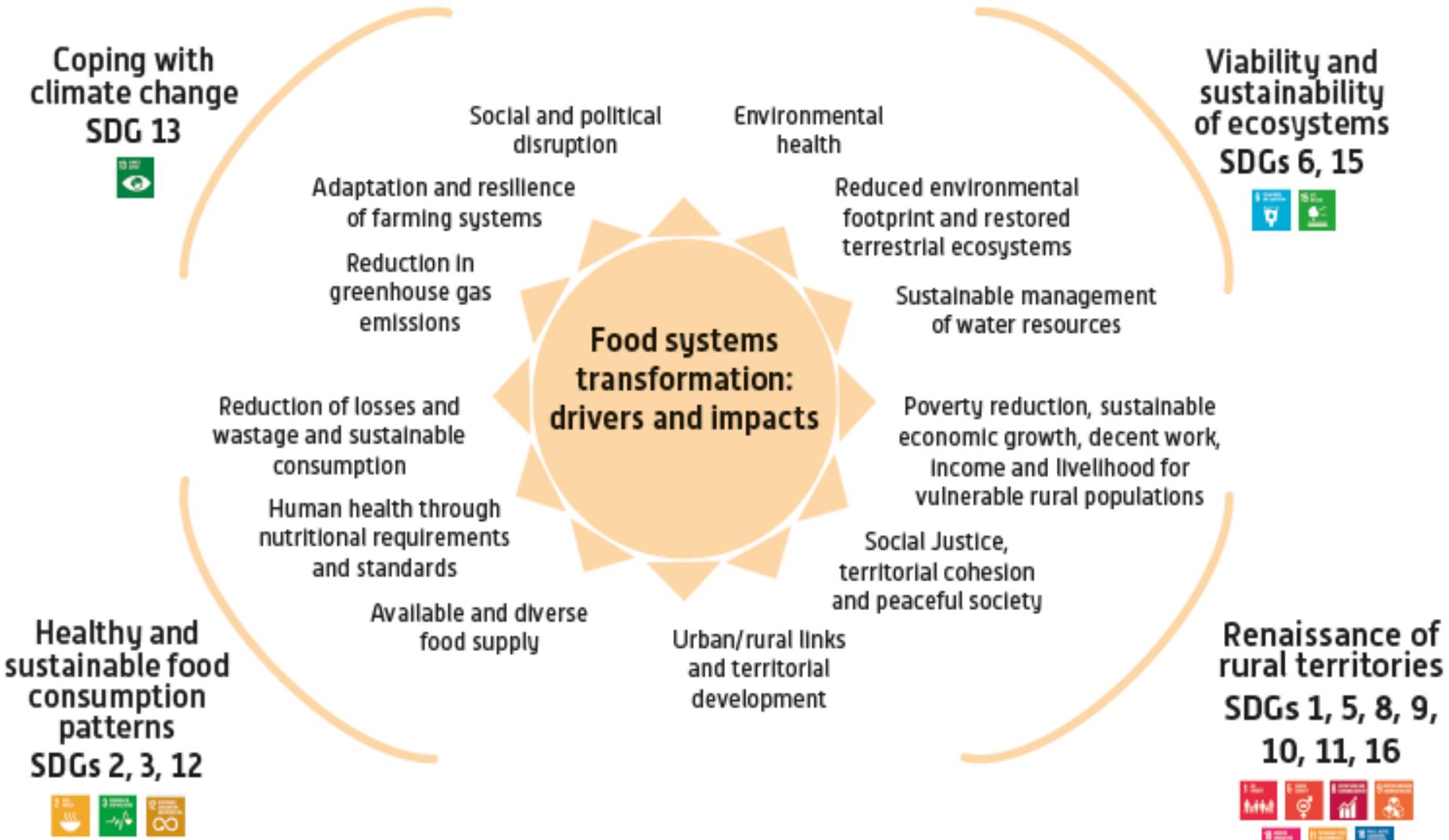
Patrick Caron<sup>1,2</sup> · Gabriel Ferrer Inger Andersen<sup>3</sup> · Tom Arnold<sup>4</sup> · Paula Caballero<sup>5</sup> · Bruce M. Carr<sup>6</sup> · Martin Gallagher<sup>7\*</sup> · Jean-Pierre H. Johan Rockström<sup>8\*</sup> · Marlen Schu

Accepted: 3 July 2018  
© The Author(s) 2018

### Abstract

Evidence shows the importance of nutrition, and human health, the viable focus on food supply, and sometime point is that agriculture and food systems for deep changes in comparison with identify the comprehensive food systems people to benefit from nutritious and chains. Third, they should mitigate territories. The implementation of this through convergence of food and global build on the work of the "Milano City Backed by a literature review, what transformation of food systems at Agreement. The narrative highlights local-level innovations. It emphasizes to local and national expectations. So action within the context of global p

**Keywords** Food systems · Agriculture



# 3 challenges for the new food system transformation

- Assessing contributions of food systems to the SDGs through relevant metrics
- Achieving impact at scale through local level action
  - No universal model and context specific pathways
  - Multidimensional
  - Stakeholders, knowledge and practices
- Managing the intersection of global and local priorities and looking at consistency through territorial approaches



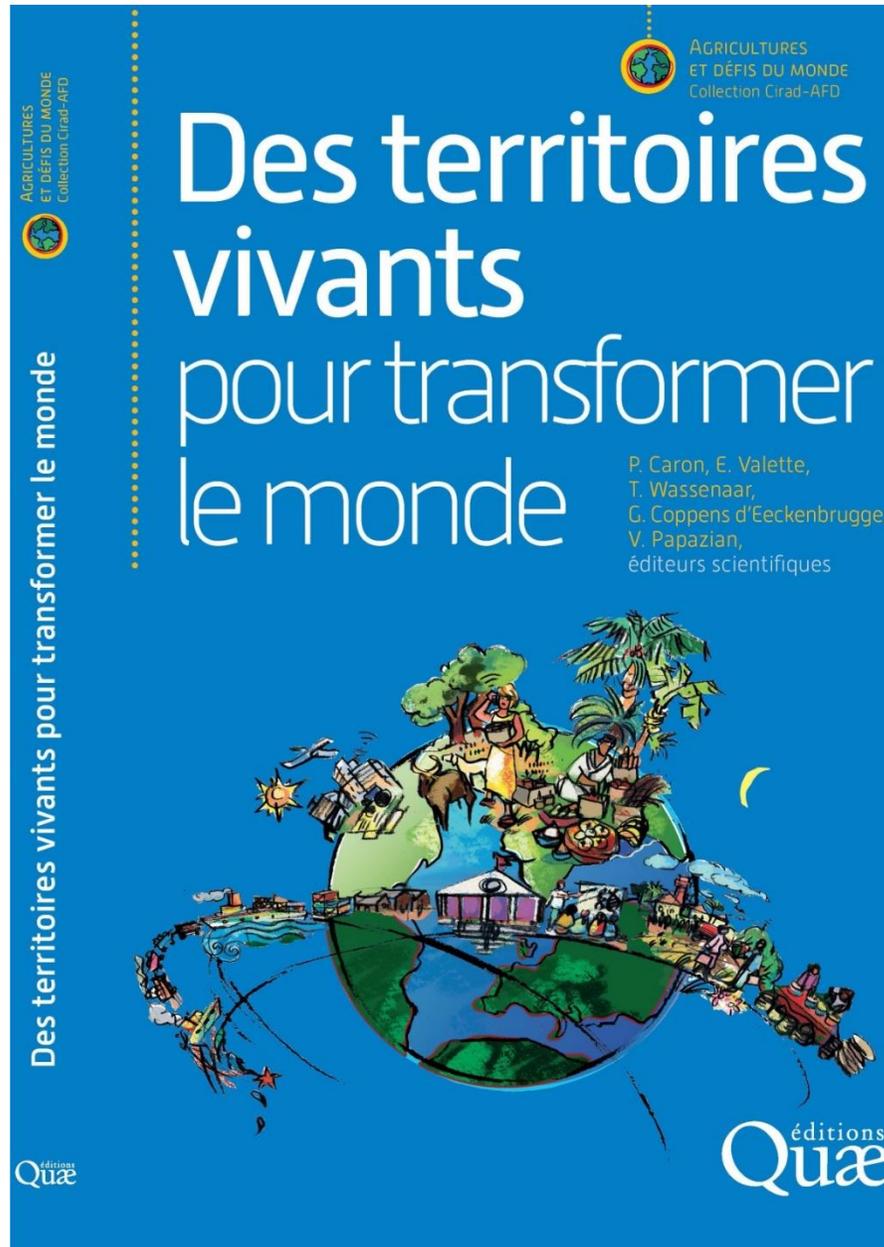
Fig. 1 Vibrant and innovative local-specific human-driven systems as engine for a profound food system transformation (source: N. Le Gall/ Cirad—Année internationale des Forêts 2011). Illustrates the profound



CONFÉRENCE  
Lundi 27 février 2017  
Paris / SIA



Des territoires ruraux vivants  
pour transformer le monde



Why now ? Not just by chance!

The need to invent new supra and infra national regulatory mechanisms!

Risk of protectionism...

# Assumptions and convictions about « territory »

1. Not a passive framework: institutions which act as engines
2. Just like state and market, a 3rd regulatory institution towards regulation (Ostrom and common good)
3. Connecting supra and infra national processes through
  - The strenghtening local capacity to anticipate
  - A contribution to national and international policies
4. The « space » to design the future of the world: anticipation, control, political stability

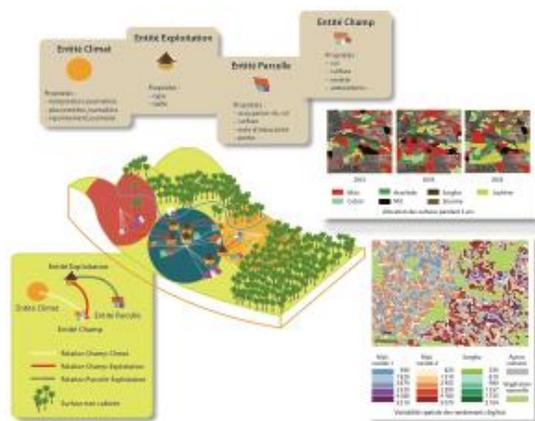
# Territorial is not local : at the heart of

the interrelations between local, regional, national and global scales  
the connection between collective and public action

Territorial approach should not be  
small is beautiful  
we don't need state any longer



Des territoires ruraux vivants  
pour transformer le monde



**2.1 Pour gérer les ressources**



**2.5 Pour penser et concevoir les politiques publiques**

**Le territoire**

**2.2 Pour produire**

**2.4 Comme ressource**

**2.3 Pour rendre des services**



RED POLÍTICAS PÚBLICAS  
Y DESARROLLO RURAL EN  
AMERICA LATINA



22-24  
January

# Living territories

## 2018

Le Corum, Montpellier  
France



RED POLÍTICAS PÚBLICAS  
Y DESARROLLO RURAL EN  
AMÉRICA LATINA



# From Montpellier to Cali: challenges and frontiers

- Addressing the multi-functionality of agriculture (, environment,...)
  - The performance and its measure (eg employment)
  - Trade-offs and consistency (eg employment vs environment ? Local vs global ?)
- Rural – urban connectivity and the role of intermediate cities (eg « ordenamiento territorial »)
- Beyond objectives, designing and implementing transitions through diverse adapted pathways
- Diversity and co-existence and their political management and support: targetting and induced effects? (eg agricultura familiar vs empresarial)
- The articulation of territory x value chain to address concentration processes and the need for the controle and regulation of economic dynamics

# Consequences for policy oriented research

- Understanding diversity of values, views and expectations and highlight controversies
- Understanding policy design and their consistency and inconsistency, beyond sectors
- Identifying the role of policies to enable and ease transformation at different levels (rather than scaling-up, i.e. extrapolation of local « success stories »)
- Assessing the effects and impacts of policies at different levels



D'après Catherine Emmanuel, médiatrice d'Etat

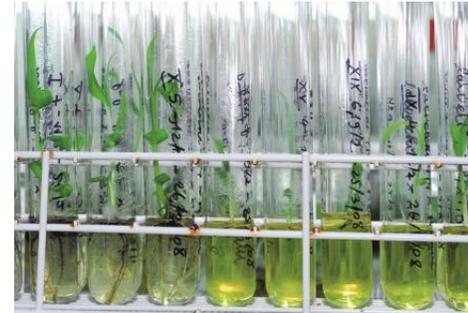


Source: Etienne Hainzelin



# Research ...

- To contribute to technology design, of course!
- But also knowledge production to:
  - Innovate
  - Plan
  - Look forward and anticipate
  - Move beyond disagreements



## Consequences

- Addressing complexity and assuming transdisciplinarity
- Reflexivity about « évidences », metrics, data and information systems
- Look at controversies as fertile fields
- New forms of interaction: knowledge based negotiation (IPCC/GIECC, HLPE)