

Discussion elements

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Webinar series: Crop Protection and
Scenarios for the Future of Agriculture

Session 4

12th October 2020



INRAE

Summary (1/2)

- EAT-Lancet Commission (F De Clerck):
 - A global approach towards a safe operating space for our global food system (targets, strategy)
 - Quantitative references of healthy diets, global ag. sector safe boundaries, and commodity-specific footprints
 - An integrated strategy across demand, supply and land governance
 - Two strategy elements explicitly focused production systems:
 2. Reorient agricultural priorities (producing 'more' > producing 'healthy products')
 3. Sustainably intensify food production, generating more high-quality output
- N-input as a limit to organic agricultural production expansion (P. Barbieri):
 - A bottom-up approach on the role of N within organic agricultural systems & potential for expansion
 - Quantitative methods for exploring the feasibility space for organic production systems
 - N resources limit the expansion of organic agriculture at global scale
 - Livestock & other sources of N are key to sustain organic agriculture
 - For ambitious transformation of food systems, supply & demand are simultaneously needed

Summary (2/2)

- Points of convergence:
 - More sustainable production practices should & could expand
 - Action on supply and demand simultaneously is needed to reach a sustainable path
 - Limited consideration of socio-economic aspects (economics of production and consumption, rural development, poverty, food security, trade, etc.)

- Points of contrast:
 - The role of synthetic N input:
 ban in organic agriculture (P Barbieri) vs. to be more efficiently applied & redistributed (F. De Clerck)

 - The role of livestock:
 support to organic agriculture expansion (P Barbieri) vs. consumed to an unsustainable level (F. De Clerck)

 - Potential changes in agricultural land cover:
 stable grassland & cropland (P Barbieri) vs. a mix of expansion and restoration (F. De Clerck)

Questions to F De Clerck

- What future agricultural land cover change might be compatible with a safe operating space?
 - No-expansion (at global scale) vs. Half-Earth (at ecoregion level) may lead to quite some redistribution?
 - How may reduced consumption of livestock products impact grassland and cropland?
- What agricultural practices might be compatible with a safe operating space?
 - What is the role of organic production practices?
 - What other production practices may be available?
 - How is nutrient input (N, P) framed across a range of different practices?

Questions to P Barbieri

- How considering the socio-economic feasibility space might impact the results?
 - What if supply need to match (some share of) demand for certain geographic (e.g., country) or commodity (e.g., livestock vs ruminants/monogastrics)?
 - How is profitability of agricultural production considered?
 - What if conversions between cropland and grassland were allowed?
- A broader perspective on nutrients?
 - What if N losses to the environment were considered?
 - What might be expected if P was framed in?

Questions to both

- What is the role of diets, livestock and synthetic fertilizer within sustainable food system?
- Other key information gaps that need answer to enable a transition to a sustainable future food system?
- What methods to generate further evidence on transition to a sustainable future food system might be?

Need to consistently link:

- A broad range of actors in the food system (from consumption choices to production practices)
- A broad range of environmental and socio-economic outcomes