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The Role of Science in the UN Food Systems Summit

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Seminar at the Academy of Global Food Economics and Policy (AGFEP).

Beijing, China Agricultural University

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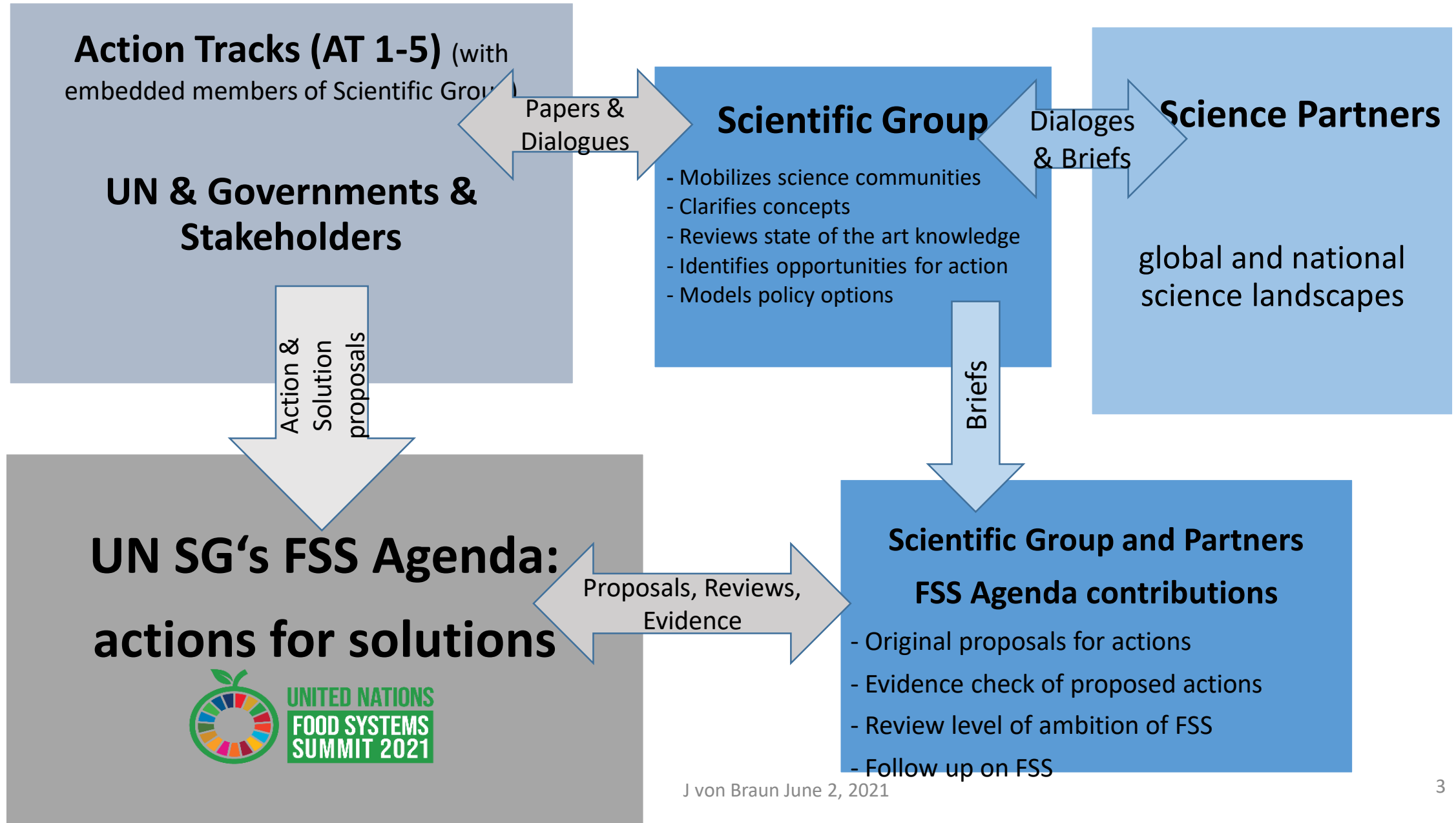
Scientific Group (28 members; selected by excellence, diverse fields of science, regions)

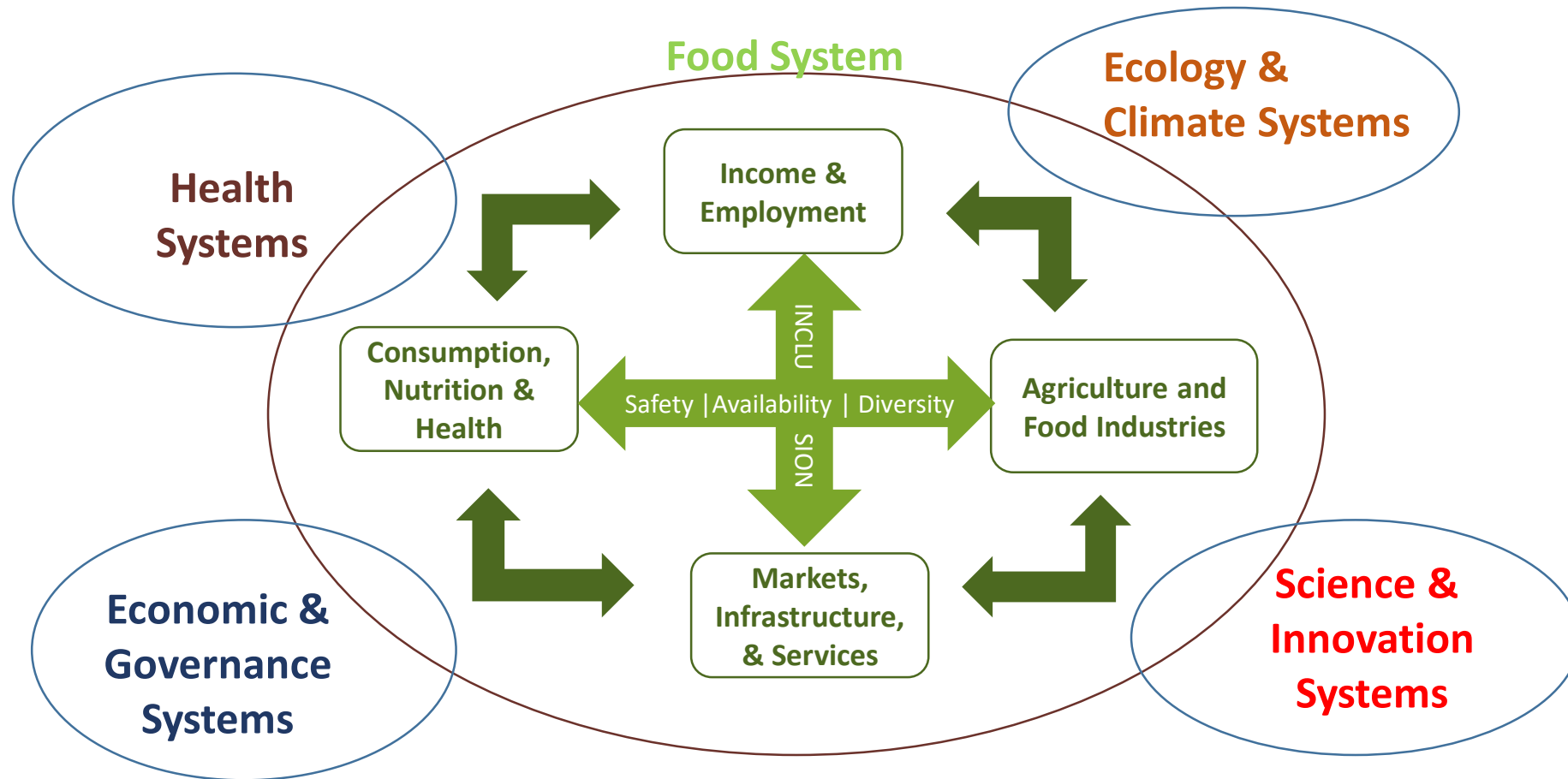
TOR of Scientific Group from UN Leadership

- 1. Evidence-based**, drawing on best science, respecting diverse knowledge base, practicing peer review
- 2. Engaging in Action Tracks of FSS** with expertise from research making the tracks evidence-informed
- 3. Bringing science into FSS Dialogues** at national and regional levels through science networks and partnerships
- 4. Contributing to the FSS agenda** and follow-up after the Summit.
Output: evidence based policy options

https://sc-fss2021.org/wp-content/uploads/2020/11/Terms_of_Reference_web.pdf

The Scientific Group's Engagement





Food Systems – Definition, Concept and Application for the UN Food Systems Summit
– now peer reviewed <https://sc-fss2021.org/materials/scientific-group-reports-and-briefs/>

Scientific Group on key FSS issues

<https://sc-fss2021.org/materials/scientific-group-reports-and-briefs/>

Food Systems – Definition, Concept and Application for the UN Food Systems Summit

Healthy diet: A definition for the United Nations Food Systems Summit 2021

AT1 - Ensure Safe and Nutritious Food for All

AT2 - Shift to Sustainable Consumption Patterns

AT3 - Boost Nature Positive Production

AT4 - Advance Equitable Livelihoods

AT5 - Build Resilience to Vulnerabilities, Shocks and Stress

More to come (modelling tradeoffs; true price of food; etc.)

**FSS Briefs: partnering with science communities
on key issues
(academies of sciences, professional associations, etc.)**

| about 40 papers | |
|---|--|
| A. Modelling Food Systems Transformations | |
| B. Science, Technology, and Innovation Actions | |
| C. Actions for Equity, Inclusiveness and Nutrition and Health | |
| D. Actions for Sustainable Resource Use and Foresight | |
| E. Investment, Finance, Trade and Governance actions | |
| F. Regions and Countries (Africa, LAC, Asia, Europe, China, India, Russia...) | |
| https://sc-fss2021.org/materials/fss-briefs-by-partners-of-scientific-group/ | |

Some insights from research partners' FSS Briefs

China: “New vision towards better food systems; National food policies towards 2035; Strengthening institutions, policies and investment using food systems approach” https://sc-fss2021.org/wp-content/uploads/2021/05/FSS_Brief_Food_Systems_China.pdf

India: Marketing food with low intermediation costs and low food losses; more nutritious and safer food for consumers; ensuring remunerative prices to farmers; more “nutrition-sensitive” policies https://sc-fss2021.org/wp-content/uploads/2021/04/FSS_Brief_Food_Systems_India.pdf

Russia: Strengthening its own base for productivity growth (breeding; fertilizers, animal health); digital technologies; personalized nutrition; Urban farming; competitiveness in the transition to Agriculture 4.0. https://sc-fss2021.org/wp-content/uploads/2021/05/FSS_Brief_Food_Systems_Russia.pdf

Europe: Agriculture-environment nexus and agroecology; Delivering sustainable and healthy diets under climate change; Strengthening research and its uptake into policy and practice https://sc-fss2021.org/wp-content/uploads/2021/04/FSS_Brief_IAP_Europe.pdf

See more on **Americas, Africa, Asia** <https://sc-fss2021.org/materials/fss-briefs-by-partners-of-scientific-group/>

Drawing on research publications related to FSS themes (a repository >2015)

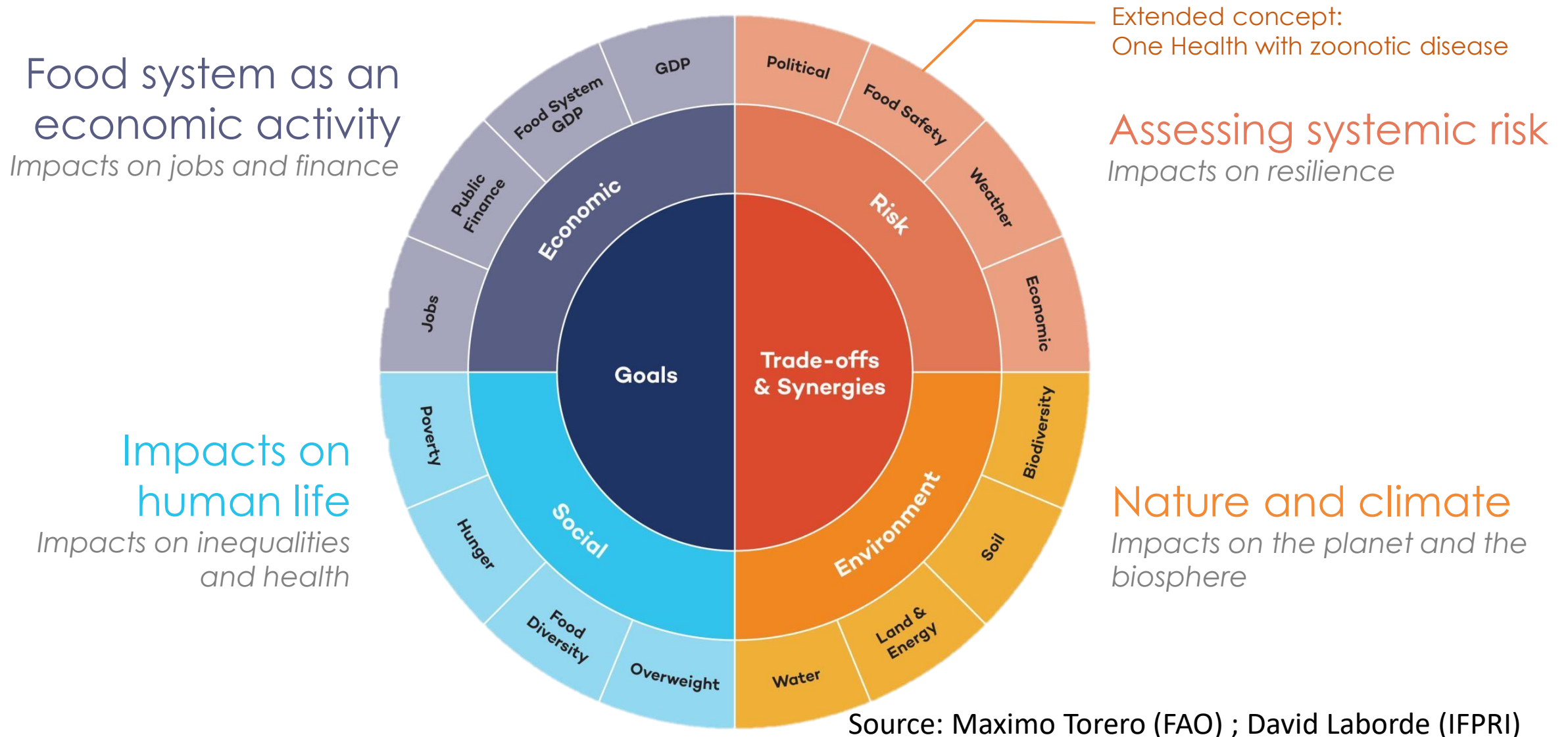
<https://sc-fss2021.org/materials/publications-and-reports-of-relevance-for-food-systems-summit/>

Structured by

- Systems-wide research
- Agriculture and Food Industries
- Markets, Infrastructure and Services
- Consumption, Nutrition and Health
- Income and Employment

and by **Action Track** themes

Quantification Framework for Food Systems



Emerging Propositions of Scientific Group (work in progress)

Policy and institutional innovations to

- a) end hunger and increase availability and affordability of healthy diets and nutritious foods
- b) overcome inefficient and unfair land, credit, and labor arrangements
- c) facilitate inclusion of and empowerment and rights of women and youth
- d) de-risk food systems
- e) Bioscience innovations
- f) Digital innovations and engineering

Technology-based innovations

- a) for climate-neutral, climate-positive, and climate-resilient food systems
- b) to keep – and where needed, regenerate – productive soils, land and water, and to protect the agricultural genetic base and biodiversity
- c) for sustainable fisheries, aquaculture, and protection of coastal areas and oceans

Mechanisms to connect innovations in food systems to innovations in adjacent socio-ecological systems.

Also see Statement of Scientific Group: Science and Innovations for a Sustainable Food System (Workshop of the Scientific Group, April 21-22, 2021). <http://www.casinapioiv.va/content/accademia/en/events/2021/foodsystems.html>

Science policy options for food systems innovation

1. Food systems science and policy need a stronger framework for the long term.
2. At the national level, food systems research policies to be integrated into national development policies; countries develop their own food systems strategies.
3. Explore options for a new, inclusive, global Science-Policy Interface for a sustainable food system that will assist in an evidence-based follow up to the Summit (because of complexity; data systems; translation into policy options)
4. The effective participation of research communities from emerging economies in the Science – Policy Interface must be strengthened.
5. Governments and UN agencies could initiate a process to explore options, existing as well as new, for a global Science-Policy Interface (SPI) for a sustainable food system.

VIRTUAL EVENT

UN FOOD SYSTEMS SUMMIT 2021

SCIENCE DAYS

08 - 09 JULY 2021

REGISTRATION NOW OPEN

Organized by the Scientific Group of the



Facilitated and Hosted by



<https://sc-fss2021.org/events/sciencedays/>