Sustainability in agribusiness: the role of technology, of network management and consequent value chain disruptions.

While the development of new and sustainable technologies is crucial for managing environmental and climate challenges that will continue to impact the future of food, such technologies are complex and often intertwined with new business models, value chains, industry standards and institutions (1). Consequently, the transition toward more sustainable production systems, requires long-term strategies that include technology-specific, systemic structures—actor networks, value chains, institutions—aligned with the emerging needs of the population. The adoption of these technological advances may also lead to market upsets, and system and institutional failures (2) that require multi-faceted policy interventions (3) (4) (5) (6) (7). Our assumption is that network management, the activities affecting structure, the configuration of actor networks, and the collaborative processes taking place in these networks are essential to effective innovation policy.

Scholars are invited to submit novel proposals of effective innovation policies for sustainable technological development devoted to specific actions, performance, and management of actor networks.

Authors are invited to present accepted presentations during the IFAMA 2022 conference in beautiful Costa Rica, June 18 - 23, 2022.

Hot topics

Governing sustainability transitions in agribusinesses and food-systems.

Today, we face fundamental sustainability challenges in several domains that are affected by strong inter-dependencies of agriculture and food-systems. Consolidated technologies are vastly knotted with user practices and lifestyles, complementary technologies, business models, value chains, organizational structures, regulations, institutional structures, and political structures. Therefore, existing socio-technical systems must undertake radical changes to address the challenges. Against this backdrop, the question of how to encourage sustainable modes of production and consumption is garnering more attention in the policy arena (8) (9) and substantiates empirical and conceptional research in sustainability transitions. This call for papers reaches beyond existing approaches as we identify scholarly communities, such as economic geography, management studies, sociology, modeling, and political sciences, that are working on related issues but remain somewhat disconnected from the main body of the sustainability transitions literature until now. Our ambition is to
stimulate discussion on the novel concepts and lines of thought to both enrich and challenge the existing theoretical basis of sustainability transitions research in agriculture and food-systems. We also would like to facilitate a dialogue of established scholarly communities and raise awareness for sustainability transitions in communities that have not yet addressed these topics and the underlying challenges.

**The role of network management strategies in the innovation policy mix.**

Although published literature recognizes the importance of actor networks in advancing the development of sustainable technology (3), there are not many studies conceptualizing how policy can help strengthen the collaborative practices in such networks. Other studies recognize the importance of actors' agency and view it as the result of a collective and embedded capacity, and hence developed and reproduced through actor networks (10). Still, this line of research lacks the conceptual analyses of policies purposefully designed to influence the performance of these networks.

The overall objective of this track is to analyze the role of network management throughout the technological development processes. The analysis builds on the notion that the research on sustainability transitions (11) could benefit from cross-fertilizations with the policy network literature (12) (13).

**New challenges from supply chain disruptions.**

The digitalization phenomenon is enforcing new relationship models throughout the entire supply chain network (SCN).

As new reconfigurations of SCN's operation models have emerged (14), both the relationships and operations models are introducing new challenges. For example, establishing trust between supply chain members, transparency, and accountability throughout the network (15); new types of collaboration (16); knowledge sharing (17); and realizing demand and supply chain integration (18), among others. Despite these disruptions empirical evidence on digitalized SCN is still limited and justifies this call for papers.

**Agribusiness strategies, artificial intelligence, and business analytics.**

Agribusiness strategies relying on new technologies, such as artificial intelligence and business analytics, can contribute to more efficient production and address the global demand for food while supporting a more inclusive and sustainable food system. Indeed, new technological approaches promise to enhance the resilience of farming methods while reducing the cost of higher quality inputs and services to underserved farmers and improve market access to facilitate smallholder farmer integration (19) (20).
Although the application of these approaches is booming especially in emerging countries, there is a lack of empirical evidence about how they affect the emergence of new business strategies in agri-food sector. Contributions would help businesses, government, and scholars better understand this emerging phenomenon.

**Circular Economy and Decarbonization business strategies to tackle environmental losses.**

The current production and consumption patterns are based on the linear “take-make-waste” model and generates an enormous amount of waste, contamination, and food emissions that are leading to climate change and environmental losses.

Circular economies offer a solution to reducing waste and therefore can contribute to environmental and economic sustainability (21). Recent studies report an increasing number of businesses are implementing decarbonization strategies in the agri-sector which can be incentivized through the circular economy approach. However, these strategies require that firms radically change existing business operations and adopt long-term operational plans that incorporate carbon footprint measurements, utilize clean energy providers in their production processes (on-site or off-site), and the design of decarbonization programs along the value chain. (22).

Our goal is to collect empirical contribution on the application of Circular Economy and Decarbonization business strategies to feed the discussion on their impacts on the way businesses are organized.

**Biodiversity: the new capital.**

The Natural Capital Protocol is rapidly gaining acceptance as the standard approach for companies seeking to better understand their relationships with the environment. Framing nature as "natural capital" is a way of looking at the environment from an economic perspective, with living and non-living elements of the environment viewed as a "reserve" or an "asset". Recognizing these benefits, a new fertile land of opportunities has been opened to agro-industrialization through biodiversity as a source of valuable resources and the possibility of establishing new value chains based on the bio economy.

Likewise, this search for new resources in biodiversity has developed lines of research on new food sources and new technologies have been developed that have impacted the more traditional value chains with sustainability strategies in agriculture and fish farming. Economics has a central role to play in analyzing the value of natural capital and in designing incentives to conserve and restore it (23).
Companies, academia, and governments are embracing the bio economy in their strategies and policies, placing this issue at the center of the future of agroindustry for discussion. We seek contributions that are addressing the Natural Capital Protocol.

Other Themes

In addition to extended abstracts, full papers, and teaching cases, on the above topics, we welcome contributions addressing these broader themes:

- New generation involvement in agribusiness sector: strategies on how to attract young population.
- Agribusiness strategies to optimize value chain management.
- Linkages between agribusiness strategies and technological usage.
- Customer orientation and marketing in agribusiness.
- Commodity price volatility and availability.
- Food, health, security, and safety issues.
- Agribusiness education in the 21st century.
- Entrepreneurship in agribusiness innovation.
- New financial schemes and insurance in agribusiness.
- Food loss and waste: new business strategies to prevent and limit them with usage of new technologies.

Format

IFAMA accepts:

Extended abstracts up to 5-7 pages which must be written in English, and contain the following structure:

- Problem definition, context, and relevance of a paper. Provide references to key literature
- Methodology
- Key findings
- Implications for policymakers and/or food and agribusiness firms
- Conclusion
- References - A maximum of five literature references may be added at the end of the abstract text.
“Full papers and teaching cases” of up to 9,000 words – to report research that has been completed.

“Poster Papers” of up to 2,000 words – to propose a research idea, seek research collaboration, present a literature review, describe a research design, or report work-in-progress.

**Submissions**

Submission accepted beginning **October 1, 2021**.

Deadline for extended abstracts, full papers, and teaching cases: **December 15, 2021**. All submissions will undergo a double-blind peer review. The outcome of the review will be sent to the authors by **February 1, 2022**.

Please submit abstracts and papers through the [Submittable Portal](#).

**Practitioners**

Practitioners wishing to contribute to the conference are invited to submit an abstract (in Word format) of approximately 500 words no later than **January 31, 2022**. The abstract should address:

- Industry background.
- Presentation objectives.
- Problems addressed.
- Results in terms of contribution to the practice of (continuous) innovation management.

If your abstract is accepted you will be asked to submit a PowerPoint/Poster presentation, not a full paper, before **March 30, 2022**.

Please send abstracts for Practitioners only to: [caleb.consultor@incae.edu](mailto:caleb.consultor@incae.edu)

All other submissions should be submitted through [Submittable Portal](#).

**Teaching Cases**

The International Food and Agribusiness Management Association is committed to developing and showcasing best practices in case study writing, teaching, and learning to facilitate problem-solving and transfer knowledge for the next generation of agri-food management talent.
The Case Conference track of IFAMA’s academic Symposium is directed at a broad audience of professionals who are interested in developing effective food and agribusiness related cases and using them as learning tools, as well as for those interested in the specific case topics discussed. The Teaching Case Workshop will include “featured cases” that are structured to provide constructive feedback to the case writers on their cases and discussion leadership skills. By modeling the case discussion process, we hope to encourage others to write cases or use cases (and the case discussion method) in their classes.

See complete Case Conference submission guidelines here: Call for Teaching Cases

**Best paper and teaching case awards**

Every year, IFAMA selects two award-winning papers or teaching cases in full version only. To participate you must submit an extended abstract, full paper, or teaching case by December 15, 2021. If your extended abstract, full paper, or teaching case is accepted for presentation in the Conference (announcements on February 01, 2022) you have until February 28, 2022, to present the final version.

**Special issues and publication**

Depending on the quality of the submissions, the Scientific Committee will select the best papers presented at the conference and consider them for publication in a special issue of leading international academic journals such as the International Food and Agribusiness Review.

*Symposium Chairs*

Maria Carmela Annosi  
Wageningen University and Research

Irene Alvarado  
EARTH University

*Conference Co-Chairs*

Esteban R. Brenes  
INCAE Business School

Irene Alvarado  
EARTH University

Juan Jose Bolaños  
CEO Piñalbo, IFAMA Young Board
For more information please visit:
https://www.ifama.org/

References


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