



Digital Days

Foodtech: how will we eat in the future?

swissnex Brazil

and

Science & Technology Office Seoul



Overview

About The [Swiss Digital Days](#)

Under the direction of digitalswitzerland, the aim is to make digitisation a tangible experience and promote dialogue on the subject. The programme encourages collaboration, new ways of thinking and vibrant debate on varied topics.

Mission

With more than 150 free events, 90 partners and more than 20 locations across the country united like-minded digital enthusiasts, newcomers, industry experts and businesses are called to foster the development of ideas. This year, the main question posed for all participants is: What future do we want? Collaboration and debate are the key to understanding and plan for digital change of tomorrow.

swissnex and Digital Days

Swiss global network (5 swissnex locations + 21 Science & Technology Offices in Swiss Embassies) connecting the dots in education, research, and innovation. Our mission is to support the outreach and active engagement of our partners in the international exchange of knowledge, ideas and talent. This year our network became partner of digitalswitzerland to bring international voices into the Swiss Digital Days.

«tell» events

The Swiss Digital Days consist of six different event formats. The swissnex network and its partners from all around the world will contribute to the «tell» format, which is inspired by the World Café method. It should engage participants in the discussion with a focus on the hopes, concerns and concrete action points. Join a dialogue session for and with the public on one of many important issues, allowing you to express your views and engage in a collaborative debate.

Foodtech: How will we eat in the future?

<<tell>> event organized by swissnex Brazil and STO Seoul

Background

Food is a central element of our lives, and feeding 9.8 billion people in 2050 will require new tools and concepts. Environmental challenges, new technologies and digitalisation allow us to explore new concepts of food production, preservation and consumption. In agriculture, for instance, the concerns about efficiency, sustainability and environmental impacts are accelerating the digitalisation processes and the adoption of new technologies to cope with consumer and market demands. In parallel, there is a growing interest in healthier lifestyles and customised diets. Plant-based proteins have been gaining attention and new alternatives are constantly becoming available. However, food waste remains a challenge at all the levels of the food supply chains, but various technologies are being developed to prevent it from the farm to our tables.

Topics and Development

The proposed event aims to address the theme of the future of food under the bias of new technological frontiers, digitalisation and the environmental challenges that drive the development of new technologies in the digital and biotechnological field.

To explore this theme and offer participants the opportunity to observe the paths that open up for the future of food three key topics will be highlighted:

- a. Agriculture System & Food
- b. Technology & Food (alternative foods and new foods)
- c. Food Waste

These three topics are strongly connected to a chain in crisis. However, changes in production models usually happen gradually. Transitorily, a new economy takes the place of the previous one. Thus, the environmental impact on the current agricultural production model and food waste from pre and post farming create the needs for the adoption of new technologies to improve production, and answer consumer and market demands for innovation & sustainable processes.

In this framework, groups are expected to discuss current status and main challenges of each topic, new technologies and model breakthroughs. The outcomes will result in a broad overview of the whole chain and emerging solutions, paving the way to new food production and consumption.

Schedule and General Info

- **Duration:** 2h30 (10' General Intro; 1h50' group discussions, 30' reporting/conclusion)
- **Date & Time:** November 3, 8:30 am BRT, 12:30 pm CEST, 8:30 pm KST.
- **Where (online only):** Zoom platform / Digital Day platform / youtube channel
- **Target Participants:** Field professionals, researchers, students and general public.

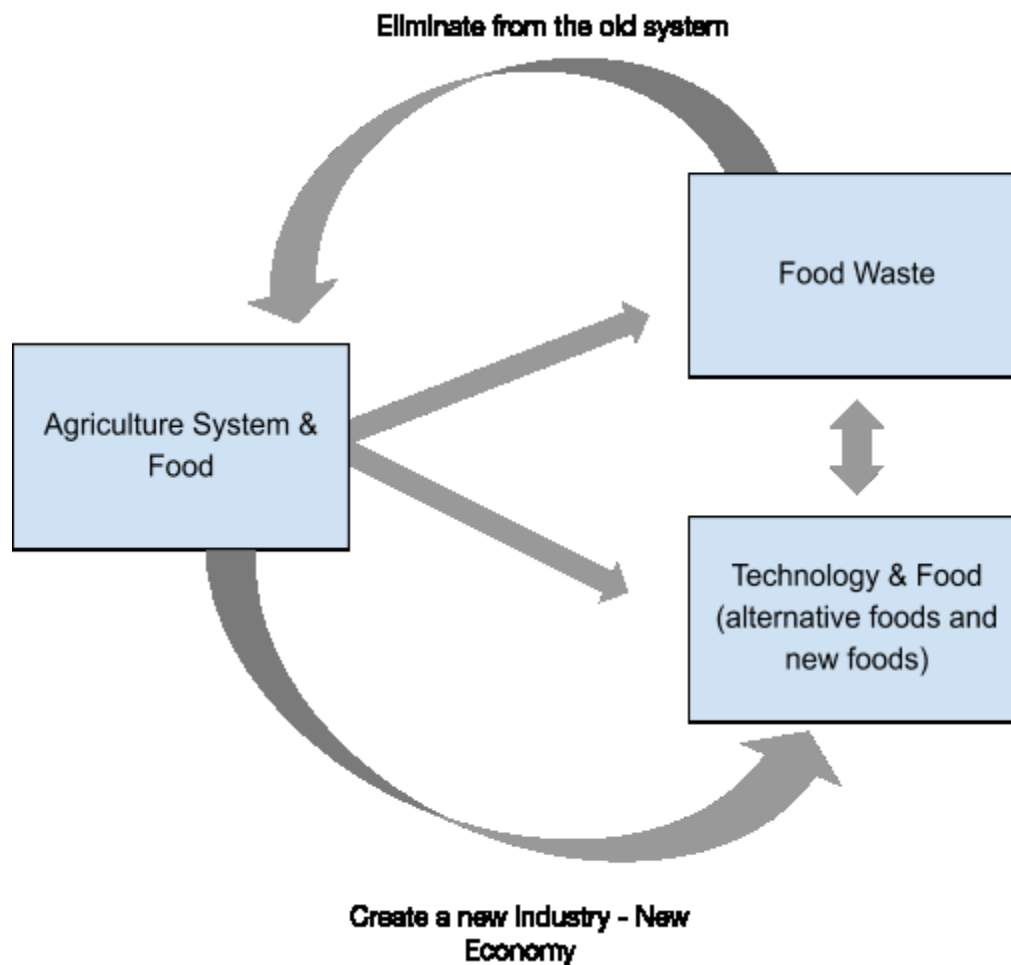
- **Social Interaction:**
 - About 15 participants in total will be invited to collaborate (no more than 24).
 - 3 groups (A, B, C) to discuss ideas and at the end present the possibilities and opportunities.
 - 1 MC for the entire event. 2-3 moderators/experts to facilitate/inspire the discussion in each group. 1 STO Seoul or swissnex member per group for technical support and time/focus keeping
- **Technical Aspects:**
 - Platform: Zoom + breakout rooms option to have separate group discussions; youtube channel; other tbc.
 - Miro platform (www.miro.com) to organize the ideas & proposals.
- **Language:** English (no translation provided)

Expected Outcomes

The event is jointly organized by swissnex Brazil and the Science and Technology Office Seoul, and will bring relevant stakeholders together to discuss these issues and identify best-practices in Brazil, Korea and Switzerland.

- New connections between industry, research and startup from Brazil, Korea and Switzerland paving the way to future exchanges and cooperation
- Publication of the results summary as infographic all along with an article
- Organization of further events with guest speakers and stakeholders to deepen the discussion on the subjects

In Depth



A. Agriculture System & Food

Agricultural technology or agrotechnology is the use of technology in agriculture, horticulture, and aquaculture with the aim of improving yield, efficiency, and profitability. Agricultural technology can be products, services or applications derived from agriculture that improve various input/output processes.

1. How advanced is digitalisation in agriculture systems and food production? Are there big gaps or resistances in adopting new technologies in farming?
2. The agriculture sector generates significant impacts on the environment, potentially affecting the construction of a "future that promotes prosperity and improves the quality of life of people, without degrading the natural environment of our planet" (UN, 2011). What mishaps and pitfalls can affect our sustainability, health, security, and economy in the future of agriculture?

3. How digitalisation and new technologies in agriculture can tackle global challenges, such as hunger, sustainability, health, and energy? Can we shape the cities of the future with new concepts of food production and consumption? Can agritech contribute to building a better tomorrow?

B. Technology & Food (alternative food and new foods)

With the growing interest in a healthy lifestyle, plant-based protein and fermented food are getting more attention, as more of the health benefits are discovered. Is this reflected in the current offer and vision of the food industry? Science proposes solutions inspired by nature enhancing nutrients, preventing diseases and creating flavors. Where does it stand? Is the current technology caught-up with the market demands for alternative food? Future is now and together with new products also new services have been enabled by digitalization. What's next?

1. What is the current status and vision in the food industry?
2. Where does science stand and how does it envision healthy nutrition?
3. What are the avenues for the future of food and food-related services?

C. Food Waste - Prevent Transform Manage

Food waste is a big challenge for the future of food, UN estimates that each year around one third of the food production is wasted, and amounts for 1 trillion US dollars in value. Technologies that prevent rotting during transportation and keep products fresh for longer are vital. This also true for technologies that help manage and monitor production and stock levels. "Zero Waste" - massive food waste reduction - as final goal, but also prevention and transformation as instruments thanks to automation and digitalization.

1. What is the current status and available services/technologies helping prevent food waste? (Please, elaborate on the needs, status and what is foreseen)
2. If on the one hand waste transformation in resources has been identified among the solutions to food waste, on the other hand, this idea might induce citizens not to seriously engage in food waste reduction. What are the current initiatives and outcomes? What is still missing which might be provided by a better use of technology?
3. Food waste reduction must be the ultimate goal and solution. However, alternative digitally-led solutions to waste have been developed to overcome the massive amount of "left-over" from restaurants, catering and supermarkets. What is currently the citizens' participation? What is foreseen to transform these alternatives in regular, not exceptional, options?