

# Integration of Frontier Technologies and Indigenous Knowledge for Food Systems Transformation

Monday, July 26th, 2021

Time 19:30-20:20 (CEST - Rome Time) 13:30 – 14:20 (EST- NY Time)

Registration link:

https://caneus.org/unfss2021/ https://filac-org.zoom.us/webinar/register/WN\_unl2BlgeQKqkSsZ0w1uoJQ

### **Overview:**

This session is a unique and ambitious attempt to formulate a *Global Research Initiative and Knowledge Repository to integrate Indigenous Knowledge into the Food Systems*, which we aim to launch at the Food Systems Summit in September by mobilizing multi-stakeholder partnerships, including potential financing mechanisms, for creating solutions targeting Indigenous youth empowerment, addressing language barriers and gender inclusion.

The proposed initiative builds on the outcome from our series of food systems related multi-stakeholder collaborative efforts during 2020-21, including the 2021 UN STI Forum: <a href="https://caneus.org/unsti2021/">https://caneus.org/unsti2021/</a>, independent Global Dialogue held on May 31st, 2021: <a href="https://caneus.org/UN-FSS\_May\_31\_en.pdf">https://caneus.org/UN-FSS\_May\_31\_en.pdf</a>, <a href="https://caneus.org/Report\_UNFSS\_Global\_Dialogue\_May\_31\_2021.pdf">https://caneus.org/UN-FSS\_May\_31\_en.pdf</a>, and the UN HLPF 2021 SDG learning session:

https://sdgs.un.org/events/integrating-recovery-planning-covid-19-building-resilience-and-strengthening-policy

The focus of this session is "making innovation a significant enabling factor" for food systems transformation and accelerate progress and impact on the 2030 Agenda amongst Indigenous Peoples, specifically youth, women, and producer groups.

The session will be addressed by a panel of global experts contributing to a structured framework and partnership to deliver a wide range of nature positive food system transformations.

The outcome from this session is further expected to contribute to the goals of the Pre-Summit program supporting the 5 Action Tracks, particularly Tracks 3 and 5, by delivering the latest evidence-based and scientific approaches from around the world, explicitly linking the earth observation systems (EOS) and Innovation of geospatial intelligence (IGI) with frontier technologies for the benefit of Indigenous Peoples, landscapes and leverage indigenous knowledge.

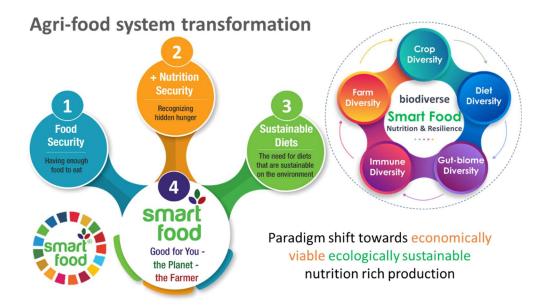










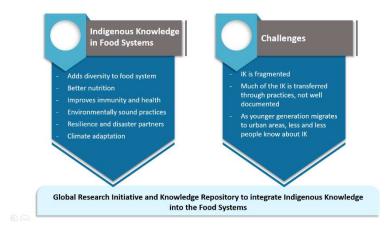


# **Relevance and Importance to the Food Systems Summit:**

We strongly believe that in the 4th revolution, industrial advances Frontier Technologies such as Earth observation and geospatial intelligence should bring advantages to indigenous integrating people by Indigenous through knowledge structured approach and mechanism to support the inclusive policy, as part of the Food Systems Summit.

Therefore, this session aims to launch sets of new commitments through coalitions of action by mobilizing new partnerships and potential financing mechanisms.

## Project idea - Rationale



# **Key Desired Outcomes:**

- 1. Formulate new global public-private partnership covering key stakeholders, e.g. public and private entities, research and academic institutions, Indigenous communities and consumers, to create a global research initiative and knowledge repository to integrate Indigenous Knowledge into the Food Systems.
- 2. Build and sustain related science, innovation, and knowledge capacities, including data infrastructures
- 3. Ensure that WTO TRIPS Art 66.2 is implemented:











- Developing countries, in particular, see technology transfer as part of the bargain in which they
  have agreed to protect intellectual property rights. The TRIPS Agreement aims to achieve the
  transfer and dissemination of technology as part of its objectives, and specifically requires
  developed country members to provide incentives for their companies to promote the transfer
  of technology to least-developed countries
- 4. Define the components, procedures and best practices using a technology-based repository covering frontier technologies for the development of a portal to capture, process, analyze and present for a structured framework to support food systems for climate and other global priorities.
- 5. Inspire engagement of youth to develop entrepreneurship tools and technology transfer by highlighting the importance of Sustainable food systems and long-term economic gains.
- 6. Identify and mobilize potential public and private financing mechanisms to implement this global collaborative initiative to help advance related bold, ambitious targets by the Food Systems Summit.
- 7. Leveraged key initiatives that support research and development: examples include the European Unions horizon Europe framework programme for research and development, in addition to the neighbourhood, international cooperation and development is supporting range of priorities for developing nations.
- 8. Ensure that developing nations are considered within the context of enabling global policies and related regulations to ensure that the global regulatory environment does not become a barrier to the exchange of knowledge but rather supports access to and use of knowledge and know-how, including in the patent system.

#### **Indigenous Knowledge**

#### Components

- Food/nutrition
- Traditional medicines

#### **Procedures**

- Cultivation practices
- Food
- handling/storage/processing
- · Consumption practices

#### **Best practices**

- · Resilience to disasters
- Resilience to climate change
- Natural resources management

#### **Technology-based Repository**

Frontier Technologies (Earth observation and geospatial intelligence with 4<sup>th</sup> Industrial Revolution Technologies) for Development of portal to capture, process, analyse and present indigenous knowledge through

- Compiling knowledge from existing studies
- · Sponsor new studies
- Specific need-based projects
- · Routine surveys

#### **Objectives**

- Sensitise decision making
- Trigger public-Private interest
- Develop entrepreneurship
- Protect geographic set up of indigenous systems
- Producer to consumer connection
- Technology transfer

#### **Outcomes**

- Preservation of Indigenous knowledge
- Sustainable food systems
- Improved nutrition/health
- Long-term economic gainsPreservation of food diversity
- Sustainable supply demand chain

Key stakeholders: Indigenous communities, Public and Private entities, Research and Academic institutions and consumers

### **Format for the Session:**

The format for the 50 minutes session has been structured using an interactive approach to include moderated panel discussion, demonstration of use cases and sharing experiences, quick poll, and exercises with online brainstorming, expecting active participation of participants.











### **Program:**

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A. Setting the Stage and *Raison d'être*:

15 minutes

- Moderator: Dr. Milind Pimprikar, Chairman, CANEUS
- Dra. Mirna Cunningham, President Board FILAC
- Prof. Vladislav Popov, Vice Rector, Agricultural University-Plovdiv, Bulgaria
- Mr John Dennis Liu, Ecosystem Ambassador and Film/TV Producer, USA
- B. Proposed Global Research Initiative and Knowledge Repository to integrate Indigenous Knowledge into the Food Systems 15 minutes

Moderator: Dr Shirish Ravan, UNOOSA

#### Contributors:

- Dr Chandrashekhar Biradar, International Center for Agricultural Research in the Dry Areas (ICARDA)
- Dr Juan Miguel González Aranda, LifeWatch ERIC CTO, ERIC FORUM Executive Board Member, Spain
- C. <u>Stakeholders, Partners</u>: Discussion covering potential partners, and implementation framework

  15 minutes

<u>Moderator</u>: Mr Declan Kirrane, AERAP African-Europe Science Platform and ISC, Brussels Contributors:

- Mr Patrick Worms, Senior Science Policy Advisor of World Agroforestry, President, European Agroforestry Federation
- Yon Fernandez de-Larrinoa, Chief, FAO, PSUI Partnerships and UN collaboration Division
- D. Outcome: Summary and next steps moving forward

4 minutes

- Dr Milind Pimprikar, Chairman, CANEUS
- Ms Jessica Vega, Champions Network for Food System Summit. Global Indigenous Youth Caucus
- Quick poll
- E. Wrap up: Closing Remarks

1 minute

• Mr. Gabriel Muyuy, FILAC

# **Supporting Materials:**

Following documents are provided to all participants:

- a. Concept Note outlining the proposed initiative
- b. Report from the Global Dialogue held on May 31st, 2021 https://caneus.org/Report UNFSS Global Dialogue May 31 2021.pdf





