

Background Paper

Integrating Indigenous Knowledge with Emerging Technologies To Enhance Sustainability and Resilience of Food System

1. Overview:

Indigenous Peoples see the Food Systems Summit as an opportunity to contribute to the Summit goal which is to achieve inclusive and sustainable food systems. Indigenous Peoples possess ancestral knowledge about cultivation, production and processing of food and conservation of diverse crop varieties that has proven to be resilient and in tune with the nature, and it is an opportunity to integrate this knowledge with emerging technologies.

There is a need to examine and identify the challenges and barriers that currently exist related to food systems and how Indigenous Peoples can contribute solutions combined with emerging technologies that can be adapted and replicated.

Scientific concepts such as space data would address the inequitable access to resources and distribution of value, which is further expected to improve resilience through social protection and seek to ensure that food systems “leave no one behind.”

Additionally, the dialogue plans to leverage the ongoing efforts of the Scientific Advisory Group of the Summit by inviting their participation, and thereby offering an opportunity to reconcile the resilient ancestral Indigenous Peoples knowledge with evidence based scientific knowledge.



The infographic features a central circular diagram with four panels: Panel A (top, green), Panel B (left, blue), Panel C (bottom, orange), and Panel D (right, purple). Panel A is highlighted with a larger border and contains the text: "Leverage the ongoing efforts of the Scientific Advisory Group of the Summit" and "Combine developments in emerging scientific concepts integrated with Indigenous knowledge." To the right of the diagram, the text reads: "Objectives, Structure and Expected Outcome : Milind Pimprikar, Founder & Chairman, CANEUS". The top right corner of the infographic contains the "FOOD SYSTEMS SUMMIT 2021 DIALOGUES" logo. The bottom left corner specifies the date and location: "31st May, 2021 La Paz, Bolivia". Logos for FILAC, CANEUS, and the United Nations Office for Outer Space Affairs are displayed at the bottom.

2. Vision and Mission:

The focus of this Global Dialogue is in combining developments in scientific concepts such as space data and identifying solutions to those mandated to deliver the Summit outcome, specifically focusing on Indigenous communities.

Therefore, through the outcome from this “Global Dialogue”, we have an opportunity to contribute to the agenda and program of the Summit, specifically by addressing the issue of emerging technologies in the context of Indigenous knowledge for food security.

3. Objectives:

The goals of this “Global Dialogue” are:

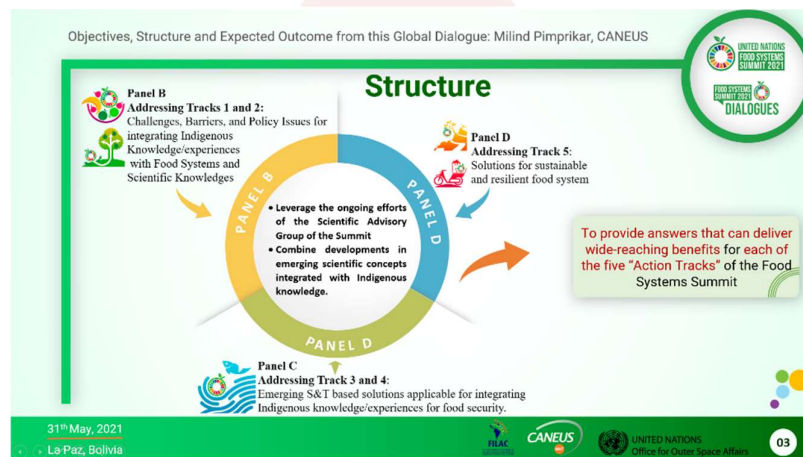
1. To demonstrate that indigenous ancestral knowledge and aspects linked to Science and Technology can contribute to the achievement of the Food Systems Summit objective.
2. To promote a dialogue from the perspectives of Indigenous Peoples and aspects of science and technology that can demonstrate that these two aspects can synergize and contribute to more inclusive food systems.
3. To link the technical scientific aspects with the resilient ancestral knowledge of Indigenous Peoples.
4. To make the regional collaborative effort using lessons learned during the Covid-19 pandemic, as scalable and replicable worldwide, with the aim of addressing technological inequalities among Indigenous Peoples, techno-cultural complexities and the role of emerging tools and solutions based on Earth Observation and Artificial Intelligence that have great relevance to complement Indigenous knowledge for the economic, social, and environmental dimensions of sustainable development.



4. Structure:

The dialogue is structured to identify solutions that can deliver wide-reaching benefits for each of the five “Action Tracks” of the Summit:

- Action Track 1: Ensure access to healthy and nutritious food for all.
- Action Track 2: Adopt sustainable consumption patterns.
- Action Track 3: Promote nature-friendly production.
- Action Track 4: Promote equitable livelihoods.
- Action Track 5: Building resilience to vulnerabilities, shocks, and stresses.



5. Expected outcome

The outcome from this Global Dialogue is expected to contribute to the food summit by (a) examining the challenges, barriers, and policy issues for integrating Indigenous knowledge/experiences with emerging science and technologies, and (b) identifying workable and replicable solutions, and new development model for improving the food security for Indigenous People.

