SIXTY-FOURTH SESSION OF COPUOS

United Nations
Committee on the Peaceful Uses of Outer Space

AGENDA ITEM 8:

Space and Sustainable Development

A Global Initiative to Integrate Indigenous Knowledge with Frontier and Space Technologies based Solutions for Building Diverse and Resilient Food System

PRESENTERS:

Milind Pimprikar (CANEUS) Shirish Ravan (UNOOSA) Chandrashekhar Biradar (ICARDA-CGIAR)















PRESENTATION OUTLINE

Overview, Objectives and Significance to the UNFSS 2021

Process Leading to the Proposed Initiative



About the Global Research Initiative and Knowledge Repository



Framework and Implementation Plan





UNITED NATIONS

Office for Outer Space Affairs







OVERVIEW & OBJECTIVES

Global Research Initiative and Knowledge Repository to Integrate Indigenous Knowledge into the Food Systems



Integration of Indigenous Knowledge with Frontier and Space Technologies based Solutions.



The world will come together at the Food Systems Summit (FSS) in September 2021.



The UN engaged global community to identify and develop innovative solutions



Formulate Potential Global Public-Private Partnership

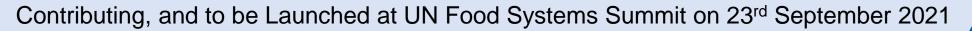


Identify & Mobilize Potential Public and Private Financing Mechanisms





Define the Components, Procedures and Best Practices for the Global Research Initiative















PROCESS LEADING TO THE PROPOSED INITIATIVE

MAY 4th 2021

Attempt to Bridge the Gap Between Indigenous and Scientific Knowledge



Integration of Indigenous and Scientific Knowledges for SDG's



UN STI Forum MAY 31st 2021



Global Dialogue

JULY 26th 2021

23 SEPTEMBER 2021



Main Summit at UN NY

Integrating Indigenous
Knowledge with Emerging
Technologies

To Enhance Sustainability and Resilience of Food System

Contributing to the UN FSS agenda

UN

Pre-Summit











PROCESS FOR INTEGRATION OF IK WITH STI SOLUTIONS















STEP 1: COMMUNITY ENGAGEMENT

Community engagement:

- Collaboration with community and stakeholders
- Identification of community goals
- Establishing a rapport and trust

STEP 2: IDENTIFICATION OF VULNERABILITY FACTORS

Identification of intrinsic and extrinsic components contributing to hazard vulnerability. Identified through:

- Community situation analysis
- · Identification of priorities

STEP 3: IDENTIFICATION OF INDIGENOUS AND SCIENTIFIC STRATEGIES

Indigenous strategies:

- · Past and present
- Examples may include: land use planning, building methods, food strategies, social linkages, and environmental strategies

Scientific strategies:

- Past and present
- Examples may include: land use planning, building methods, food strategies, social linkages, and environmental strategics

STEP 4: INTEGRATED STRATEGY

Integrated strategy:

- Addressing intrinsic components to hazards
- Dependent on effectiveness level of each strategy identified



Contribution to Frameworks



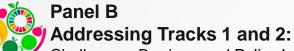








GLOBAL DIALOGUE PROCESS



Challenges, Barriers, and Policy Issues for integrating Indigenous Knowledge/ experiences with Food Systems and Scientific Knowledges





 Combine developments in emerging scientific concepts integrated with Indigenous knowledge. To provide answers that can deliver wide-reaching benefits for each of the five "Action Tracks" of the Food Systems Summit

PANEL C













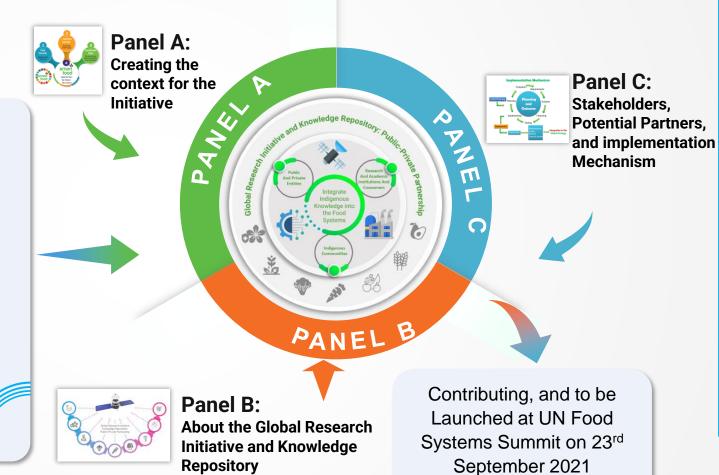
PRE-SUMMIT PROCESS

Mobilize multi-stakeholder partnerships:

- Public and Private entities
- Research and academic institutions
- Producers and consumers groups
- Indigenous communities
- Financing mechanisms

Building on our recent related efforts:

- UN STI Forum Session held on May 4th, 2021
- UN FSS Global Dialogue held on May 31st, 2021
- UN HLPF 2021 SDG learning session held on June 7th, 2021
- UN FSS Pre-Summit, July 26, 2021















Dr Shirish RavanUNOOSA

Global Research Initiative and Knowledge Repository to integrate Indigenous Knowledge into the Food Systems

CANEUS



Office for Outer Space Affairs





Indigenous Knowledge in Food Systems

- Adds diversity to food system
- Better nutrition
- Improves immune and health
- Environmentally sound practices
- Resilient to risks and disasters
- Climate sensitive

Challenges

IK is scattered, at times in small pockets

Much of the IK is transferred through practices, not well documents

As younger generation migrates to urban areas, less and less people know about IK

Global Research Initiative and Knowledge Repository to integrate Indigenous Knowledge into the Food Systems











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 4th 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

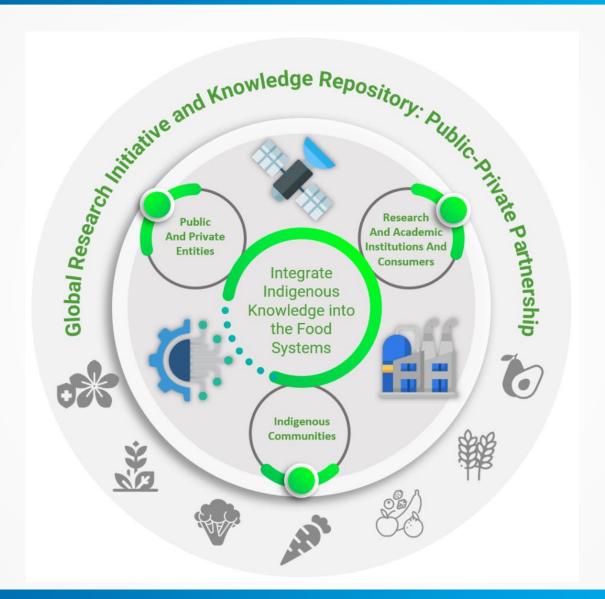
- Preservation of Indigenous knowledge
- Sustainable food systems
- Improved nutrition/health
- Long-term economic gains
- Preservation of food diversity
- Sustainable supply demand chain

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























Dr. Chandrashekhar BiradarResearch Team Leader, ICARDA- CGIAR Research Center

Global Research Initiative and Knowledge Repository to integrate Indigenous Knowledge into the Food Systems Transformation









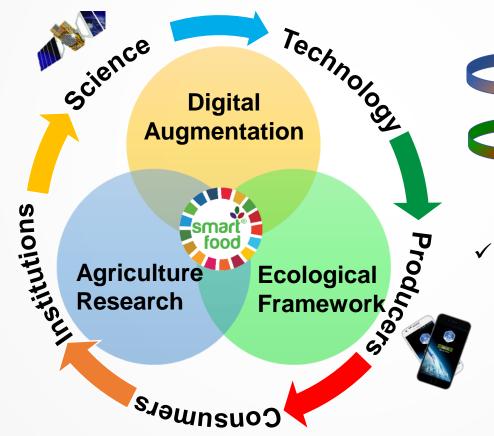
EXCELLENCE IN INCLUSIVE AGROECOSYSTEMS

Augmenting research and outreach for sustainable agroecosystems

CANEUS



- **Food & Nutrition**
- Agroecology
- **Self-sufficiency**
- Citizen-science
- Resilience



Structure

Functions

Production

Services

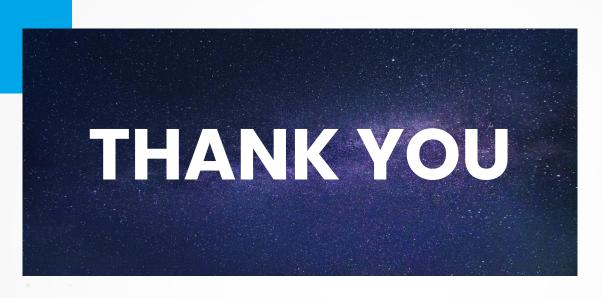
Wellbeing

✓ Integrating indigenous knowledge and technology for functional food system transformation









You are invited to join
"Global Research Initiative and Knowledge Repository to
Integrate Indigenous Knowledge into the Food System"
https://caneus.org/unfss2021/contact/

VIENNA







