CANEUS STATEMENT

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Agenda Item 5: United Nations Programme on Space Applications

Adaptation of Space Technologies with Indigenous Knowledge for Socio-Economic and Environmental Challenges and Lessons from the COVID-19 Pandemic

By
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**FILAC (Fund for the Development of Indigenous Peoples of Latin America and the Caribbean)
***UNOOSA (United Nations Office for Outer Space Affairs)

Chair and Distinguished Delegates,

On behalf of CANEUS and our collaborators, I am pleased to share lessons learned and empirical evidence acquired from series of global collaborative efforts representing Indigenous communities and space sector, which were launched, and undertaken during the COVID-19 pandemic, with a goal to create a platform to identify the challenges and opportunities to develop and implement culturally relevant space-based tools enabling its widespread impact on climate change, food security and youth empowerment.

Chair,

With the challenges of accelerated technological inequalities amongst Indigenous Peoples, there is an urgent need to bridge the gap with these imbalances, including language barriers and gender inclusion with the space community.

CANEUS has therefore partnered with FILAC, the only Indigenous "Inter-Governmental" organization with Permanent Observer representation at the United Nations, empowered to develop solutions to current challenges to serve the needs of Global Indigenous communities, and UNOOSA, to help the Indigenous communities bridge the gap with technological equalities, specifically hands-on training, and capacity development using emerging EO technologies.

Chair and Distinguished Delegates,

Indigenous Peoples want sustainable solutions from the perspective of their Indigenous science and knowledge, possibly through their own institutional and organizational mechanisms. Therefore, the global space community need to involve Indigenous knowledge in the process, at the same time, Indigenous Peoples need to adapt emerging space technologies.

There is a need to examine and identify challenges and barriers for Indigenous communities to implement workable and replicable space-based solutions.

Thus, the objectives of these collaborative efforts were:

A. To reduce the sense that space technology sector has been overlooking Indigenous peoples as active participants in attaining the SDG's, as opposed to mere recipients. Specifically, the emergence of the global data revolution have been a double-edged sword for indigenous peoples; and
B. To convert the regional collaborative effort using the lessons learned during Covid-19 pandemic, as scalable and replicable worldwide.

These efforts were further steered using the "Guidance Note by the UN Inter-Agency Support Group (IASG) on Indigenous issues" in April 2020, which recommended that the UN system engage with Indigenous Peoples and promotes their participation through traditional knowledge with science experts.

Chair and Distinguished Delegates,

The activities were implemented in phased approach.

The initiative was launched as a side event at UN HLPF 2020 by mobilizing stakeholders and partnerships to offer sustainable innovations, and access to technologies to address the issues of inequalities relating to technological imbalance, language barrier and gender inclusion.

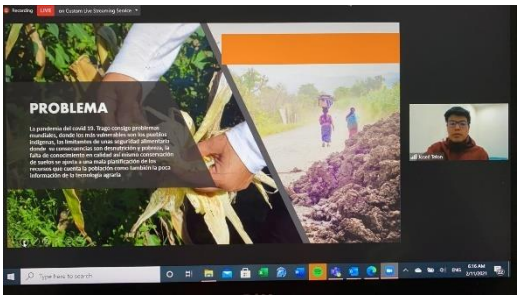
- It aligned with HLPF2020 theme "Accelerated solutions for Indigenous Peoples 2030 agendas using EO based solutions".
- 20 experts and 454 participants representing Indigenous communities and space technology sectors, shared methodologies, experiences, and lessons learned that can support key areas of land/ocean/seas.
- The crossdisciplinarity input also offered insight on broader issues, e.g., technology gaps and the pandemics, innovation challenges, need for empowerment of youth, and Indigenous capacity development in decision-making, and data sovereignty.
- It specifically helped identify focused activities, e.g., pilot projects, training programs as well as challenges covering climate change, food security, amongst others, which are being pursued through FILAC-CANEUS 5-year 2021-2025 cooperation agreement supported by UNOOSA.

  Here, I must emphasize the key role and leadership of UNOOSA Director Ms. Di Pippo to help launch the cooperation programme.

Chair and Distinguished Delegates,

In the second phase, a global challenge "leave no one behind" was designed and undertaken by CANEUS, UNOOSA, FILAC, and CNES/ESA.

- The challenge was to design a solution using one or a combination of satellite-based technology to mitigate the near and long-term impacts on food production of COVID-19 pandemic on indigenous communities.
- 70 Participants representing young Indigenous students and entrepreneurs from 21 countries responded to the global challenge and four teams devised innovative solutions using emerging space technology to compliment Indigenous knowledge.
- The winning team has been offered an opportunity to present at the UN Food Systems Summit in Sept 2021.



Chair,

Now, during the ongoing phases, CANEUS, FILAC and UNOOSA are working to create a capacity building platform to address the accelerated technological inequalities with "leave no-one behind" using EO based tools and solutions and Ecosystem-based Disaster Risk Reduction (Eco-DRR) that has high relevance to complement the knowledge of Indigenous communities, by leveraging several initiatives like "Access to Space 4All" and "Space Economy".

For example, a recent joint study undertaken by CANEUS, FILAC and UNOOSA, for the Global Assessment Report (GAR) 2022 reviewed potential of EO based tools to complement the Indigenous Knowledge covering nature-based solutions in building disaster resilience (I will be presenting the details in my technical presentation on April 26th).

Chair and Distinguished Delegates,

The results from the completed and ongoing activities offer following key measurable impacts on SDG's by contributing to bridge the technological and gender inequalities.

1. Empowering Indigenous communities from 21 countries with space technology-based solutions.
2. Focused programs through Indigenous Intercultural University to address the accelerated technological inequalities.
3. The "leave no-one behind" challenge having long-term impact on sustainable food systems as well empowerment of youth.
4. Formulation of dedicated multi-year program for integrating EO and Indigenous Knowledge for accelerating SDG implementation.

The key messages included:

(a) The knowledge possessed by Indigenous community is valuable and must be documented or archived by employing space technologies to collect, assimilate and reproduce it before it disappears due to the developmental pressures coupled with risks posed due to climate change.
(b) The knowledge possessed by Indigenous community should be complemented to space technologies-based solution for SDG implementation.

Chair and Distinguished Delegates,

These findings underline the gaps and barriers impacting technological inequalities which appear growing especially due to Covid-19 pandemic and the challenges to meet the 2030 targets.

I would therefore like to enlist your valuable help to join us to help address these critical challenges faced by our fellow Indigenous Peoples.

Thank you for your kind attention.