

Task Force 06

STRENGTHENING MULTILATERALISM AND GLOBAL GOVERNANCE

Justice as a Tool for Sustainable Development and Global Governance: A Holistic Perspective of Science, Space, Justice, and Society Alliance Against Organized Environmental Crime

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Abstract

In compliance with the UN-approved 2030 Agenda, COPUOS approved the *Space 2030 Agenda: Space as a Driver of Sustainable Development*, where space science and technology provide fundamental benefits for the achievement of the SDGs and their Targets. Once approved, COPUOS and the international community made multilateral progress in the fields of health, climate change and others using space data. But there is no transnational vision (especially in developing countries and the Global South) of how much organized crime affects the environment, biodiversity and natural resources, and thus human development; and how much satellite technologies can help as early information and judicial evidence, to prevent organized crime.

In drug trafficking, illicit crops are grown after deforestation, logging and fires, generating socio-cultural and on ecosystems impacts. This affects economies and biodiversity in each geographic region involved (especially in developing countries) linking other crimes (human trafficking, migrant smuggling, cultural property, wildlife and flora, and weapons) for profit. These earnings are introduced into formal markets through acts that conceal their illicit origin, undermining the economic and financial order and generating illicit flows (SDG 16).

This proposal to the G20 offers a holistic perspective against environmental organized crime, as a factor that undermines the SDG (particularly 1,3,4,5,8,10,13,15,16). For effective multilateralism (SDG17) and governance, it is proposed to build alliances between the scientific community, academia and global judiciary in charge of complex crime investigations (which require better access to space data as evidence). This involves strengthening their capacities and incorporating space technologies and information as evidence, in order to dismantle criminal networks effectively, for the collective well-being.

Keywords: Justice, Evidence, Organized Crime, Drug trafficking, Space Data, Satellite, Multilateralism, SDG.



Diagnosis

Transnational economic and organized crime undermines the sustainable development of the present generation and compromises future generations. For this reason, it is important that States incorporate a holistic perspective against crime as a factor undermining the environment and SDG of the 2030 Agenda (particularly 1, 3, 4, 5, 8, 10, 13, 15,16) and thus strengthen governance and deployment of strong institutions for the collective well-being of the global community.

Transnational criminal groups have taken advantage of the globalized world (Global Initiative, 2021:27) to expand, perpetrating multiple serious illicit acts in a concatenated or simultaneous manner in different geographical areas, forming complex criminal operations systems that are difficult to detect¹. In the case of drug trafficking, the installation of illicit crops occurs after deforestation, logging and fires that are part of the stage prior to coca sowing (González Posso, 2024). The geographical areas chosen by these criminal groups are characterized by their tropical humidity, climatic variety, soil fertility and hydro-road tributaries.

In Latin America and the Caribbean, they have been concentrated in the region of the Mesoamerican Biological Corridor of global importance, where there has been an indiscriminate increase in deforestation, at the same pace as the transit of cocaine (McSweeney, 2017). This area, distinguished as a conservation zone (Myers, 2013), is not only used as a scenario for the installation of illicit crops, but also for the capture of wildlife and native flora for commercialization, locally and abroad. The same happens in the Amazon region, declared a World Heritage Site and comprising nine countries, which

¹ UN Convention Against Transnational Organized Crime, 2000.



is also chosen by criminals because it makes it easier to hide from police and criminal prosecution.

Already in 2019, prosecutors dedicated to environmental crimes from Brazil, Peru and Colombia analyzed the "Challenges of Environmental Prosecutor's Offices in the Amazon region" at III Congress of Protected Areas of Latin America and the Caribbean, with the aim of presenting proposals for articulation and improvements between the environmental prosecutors of the region on environmental crimes (DAR,2019).

The Amazon rainforest, due to its biodiversity of flora and fauna, is home to one out of every ten species on Earth, a high number of endemism and its Amazon River hydrographic basin represents 20% of the world's freshwater surface. It is culturally diverse with 420 indigenous peoples who are often displaced from their ancestral territories through intimidation and violence to occupy their lands for illicit crop production (CEPAL,2013). Victims of organized crime, they abandon their place of origin and cease their economic activity, damaging their culture and identity, violating their human rights (CIDH,2019).

The current and imminent transgressions caused by transnational crime are repeated in every geographical area of the world linked to drug trafficking, which leads to human trafficking, trafficking of migrants, cultural goods, fauna, flora and weapons, among others. This is because their objective is profit. Thus, the profits obtained are introduced into the formal markets through acts of conversion, transfer and administration, with the aim of disguising or hiding their illicit origin. As a result, the crime of money laundering is configured along with other related crimes that damage the economic and financial

order in a dual manner (national and at global level), generating illicit financial flows (SDG 16.4) (Global Initiative, 2021:31)².

The holistic perspective of prosecution of environmental crimes perpetrated by organized crime is proposed insofar as it has a direct impact on crime but also on its effects on the environmental, cultural and society, as it generates poverty and more inequity in the affected populations, and concentrates wealth in the leaders of criminal organizations (such as drug trafficking) derived from spurious businesses.

For effective multilateralism (SDG17) and governance, it is proposed to build alliances between the scientific community, academia, civil society and global judicial bodies in charge of complex crime investigations (which require better access to data and spatial applications as evidence to be more effective and efficient, reducing costs through the implementation of technology). This involves strengthening their capacities and incorporating space technologies and information as evidence (Catani, 2023), in order to dismantle criminal networks effectively, for the collective well-being.

² Money laundered represents the 2.7 % of global GDP (Global Initiative: 31)



Recommendations

Battle against transnational economic and organized crime is a fundamental action that must be tackled nationally and multilaterally, as it undoubtedly undermines sustainable development. This is particularly true for those crimes that are framed as environmental impact crimes.

For this reason, it is important that States, especially developing countries, incorporate a holistic perspective against crime as a factor that undermines the SDGs of the 2030 Agenda (particularly 1, 3, 4, 5, 8, 10, 13, 15,16) and thus strengthen the deployment of strong institutions for the collective well-being of the global community.

In effect, these organized criminal groups take advantage of poverty, hunger and the resulting vulnerability to capture lives and affect rights, subjugating and objectifying those who fall into their nets. They affect the health (considered here in the perspective of "One Health") and welfare of communities, through the intrusion of drug trafficking, weapons, adulterated medicines and organs, generating social and political chaos, dehumanizing those who cross their path. They will break education, since it will give the knowledge of fundamental rights to those captured, freeing them from their nets. Gender equality will be greatly minimized by objectification, torture and subjugation. Water, energy, work, climate, underwater life, terrestrial ecosystems will be the first to be violated by pollution, deforestation and burning of forests for the installation of illicit crops, illegal mining, among others.

For their part, the G20 member states and various space agencies are investing in strategic space technology developments. In this regard, the use of geopositioning and Earth observation satellites provides timely and accurate information and monitoring tools (ST/SPACE/85, p23). Hence, science and technology acquire a preponderant role



in the development of countries' economies, as well as in the strengthening of their capacities. As space activity is eminently cooperative, it allows for the establishment of alliances with virtuous effects both in the fight against crime and environment protection, and in the interlinked growth between developed and developing countries.

In order to strengthen the possibilities of combating these types of crimes, which affect both the Global South (mainly) and the Global North, the following set of recommendations are proposed to the G20, which will also make multilateralism (SDG17) effective:

[1] Battle against organized crime with a holistic (justice, science and society) and multilateral perspective (SGD 17), considering that it, especially those related to drug trafficking, have an impact on the environment and society.

[2] Generate alliances between the scientific community and the world's judicial bodies in charge of complex crime investigations, in order to provide them with knowledge on **the use of space-satellite technologies and applications.**

There is an underutilization of satellite tools, mainly due to a lack of knowledge of the feasibility of their use as evidentiary evidence. It is also necessary to implement a network of access to satellite images to combat transnational crime with environment implications on the bases of International Cooperation. New approaches (global perspectives) are required to change the trajectory of organized crime in times of globalization and climate change, to prosecute crimes that affect the environment and generate more inequity and exclusion for the affected population.

[3] Promote and apply space science to the investigation of complex crimes perpetrated by organized crime, including satellite information (geomatics, geopositioning and telecommunications) as a tool for the prevention, monitoring and prosecution of environmental crimes. Satellite information (satellite data and images) is an unavoidable evidential element for the legal-criminal assessment in the event of the commission of acts that damage natural resources, biological diversity and sustainable development, thus affecting the human rights. It is a technical tool that provides accurate, objective and current information on the state of the planet earth, observed from space. The evaluation and interpretation of these images, in the hands of specialists, will provide useful, pertinent and more than sufficient elements of conviction to magistrates and prosecutors involved in criminal proceedings.



FIGURE 1. Satellite detection of suspected clandestine airstrip. Presentation of the Public Prosecutor's Office (2023). Images processed by CONAE

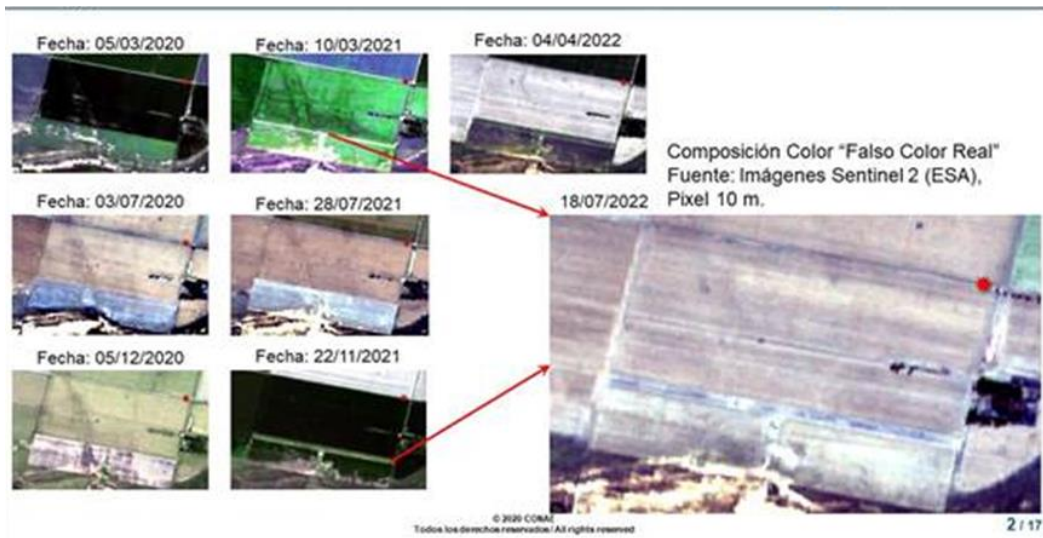


FIGURE 2. Temporal analysis with satellite images of clandestine airstrip. Presentation of the Public Prosecutor's Office (2023). Images processed by CONAE

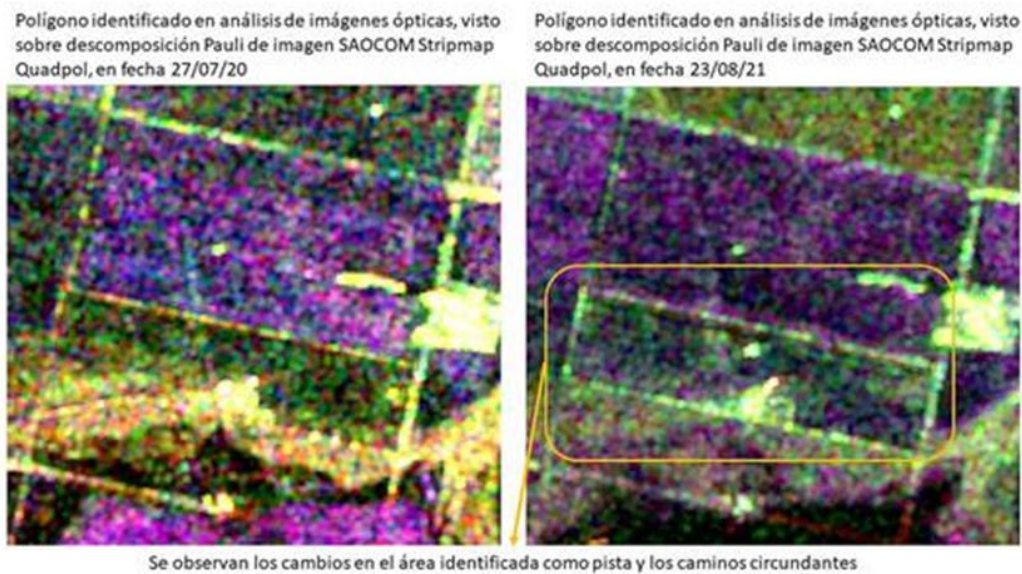


FIGURE 3. Detection of suspected clandestine landing strip. Presentation of the Public Prosecutor's Office (2023). Source: SAOCOM polarimetric compositions



FIGURE 4. Presentation of the Public Prosecutor's Office (2023). Source: PleiadesNEO images in detail and false color. Yellow ellipse highlights areas compatible with suspected clandestine landing strip and building infrastructures.

“Landing strips and roadways built for illicit trafficking have brought about deforestation. Nearly half of all tropical deforestation is caused by illegal logging to covert land for commercial agriculture” (Global Initiative, 2021:23).

[4] Strengthen the capacities of judicial officials (Magistrates, Prosecutors, assistants and professionals involved in the judicial process), modernizing judicial processes through the incorporation of spatial technological tools³ in order to effectively

³ See <https://unitar.org/sustainable-development-goals/united-nations-satellite-centre->



dismantle criminal networks (also complying with the objectives of the Spatial Agenda⁴).

[5] Include and strengthen environmental education at the primary and secondary level, and in science and technology to awaken vocations in these topics (vgr: 2Mp Program)⁵.

[6] Coordinate actions with stakeholders from public, private, academia, civil society and NGO sector) to obtain financing and cooperation both internationally and nationally for space technology development projects These opportunities must be monitored in order to ensure their correct implementation.

[7] Promote cross-cutting regional and/or global projects considering the environment, economic, social (local, traditional and indigenous communities) and the Justice, to allow rapid and sustainable progress especially of the developing countries. All stakeholders must be in dialogue to change the trajectory of environmental crime.

[unosat/our-portfolio/satellite-imagery-evidence-international-justice-proceedings](https://unosat.unoosa.org/our-portfolio/satellite-imagery-evidence-international-justice-proceedings)

⁴ UN A/RES/76/3, The Space 2030 Agenda: Space as a driver of Sustainable Development, Viena 2024.

⁵ See CONAE 2MP Program: <https://www.argentina.gob.ar/ciencia/conae/unidad-educacion/acerca-de/programa-2mp>.



Scenario of outcomes

It's necessary to remember that:

“Transnational organized crime profits from the plundering of our planet (...) Crime and environmental degradation have a circular relationship. Environmental changes brought about by climate change, such as extreme weather and drought, increase resource scarcity, put pressure on local economies and generate instability. All of this encourages the emergence of new illicit markets, which in turn exacerbate environmental degradation.” (Global Initiative, 2021:22).

Despite the efforts of nations to protect the environment, actions are not always perceived in a holistic and integrative perspective (especially in developing countries and the Global South) of how much organized crime affects the environment, biodiversity and natural resources, and thus human development; and how much satellite technologies can help as early information and judicial evidence, to prevent organized crime.

On the other hand, there are numerous laws that protect native forests, natural resources and terrestrial and oceanic ecosystems, but it must be clear that criminal prosecution against organized economic crime within the framework of the guarantees of the rule of law means protecting the Sustainable Development Goals and the universal action plan to 2030. For which it is essential to integrate all actors (State, science, academia, judiciary and NGOs) at the same table of dialogue.

Already at the 3rd meeting of the Conference on Science, Innovation and Information and Communications Technologies of the Economic Commission for Latin America and the Caribbean (CEPAL, 2021) the member states

“Reaffirming that it is crucial to strengthen the institutional framework for science, technology and innovation, not only by providing the necessary financial resources, but also by creating capacities for the design, implementation, administration, monitoring and evaluation of policies, along with better linkages with countries’ development strategies, taking into account, in particular, their contribution to national strategic challenges”; and “[Recognized] the need to create the necessary conditions for a transformative recovery, which requires the alignment of changes in productive structures with the strengthening of capacities in the field of science, technology and innovation”.

In the light of the biennial (2022-2023) program of regional and international cooperation activities the States proposed continuing the joint effort to improve the positioning of science, technology and innovation policies with a view to fostering dynamic sectors that lay the foundations for more sustainable and inclusive development in the countries of the region, and also continues to create new areas for the sharing of experiences that foster science, technology (CEPAL, 2021).

In this regard, it is important to move from the consideration of multilateral bodies to national implementations (public policies), allocating the necessary economic resources to make this happen.



This Policy Brief proposes to incorporate the "Judicial System of Nations" as a tool for sustainable development and global governance, mainly in relation to environmental crimes or crimes of environmental impact.

To this end, it is proposed to integrate science and technology (especially space technology) into transnational investigations, which will make it possible to bring adequate and scientific evidence to the judicial process in order to act against the crime.

It is hoped that this holistic vision will increase the multilateral relationship between states, as it is expected to change the trajectory of crime.

And while the Global South region is seriously affected by this type of criminal activity with environmental impact, the Global North is not isolated from these transnational crimes. It is therefore proposed that the G20 work in an integrated and multilateral manner to strengthen governance and the well-being of society.

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