



MATCHING TOOLS AND TECHNIQUES TO SUSTAINABILITY GOALS

Significance

Indigenous territories are threatened by fires, illegal logging, mining, and other external land use activities. The sustainable management of such land, most effectively stewarded by indigenous peoples, is critical for mitigating greenhouse gas emissions, increasing resilience to climate change, conserving biodiversity, and protecting the heritage of indigenous cultures.

Objective

Earth observations (EO) data and tools can provide spatial information for forest monitoring, mapping, and responding to ecosystem threats. Earth Observations for Indigenous-Led Land Management (EO4IM) aims to strengthen the technical capacity of indigenous organizations in the Americas to harness the power of EO for enhanced sustainable land management. EO4IM is a NASA funded project aligned with the Group on Earth Observations (GEO) AmeriGEO initiative. This multi-country initiative aims to increase the application of EO data and tools benefiting society.

Approach

EO4IM's novel approach combines earth observation data and technologies with rigorous social science. Social science methods are employed to quantify the land management goals and capacities of indigenous peoples' organizations in Ecuador and Peru. Webinars and on-site workshops will provide technical capacity building in EO tools that can help communities monitor the status and condition of their lands and make informed decisions to meet their conservation and land management goals.



EO4IM

**EARTH OBSERVATIONS FOR
INDIGENOUS-LED LAND MANAGEMENT**

Project Activities

- Conduct participatory needs assessments to understand how indigenous groups in Peru and Ecuador currently approach sustainable land management decisions.
- Conduct activities to enhance land management utilizing EO data, products, and tools based on the results of the needs assessment.
 - Design targeted training materials
 - Bilingual NASA Applied Remote Sensing Training (ARSET) webinar series targeted to indigenous peoples' organizations globally (arset.gsfc.nasa.gov/land/webinars/GEO-EO4IM)
 - Conduct on-site trainings and knowledge exchanges introducing EO data and tools

Selected Communities

Communities selected for involvement in this project were prioritized based on their interest in technical training, technical resources to use EO data, and who are already engaged with CI.



The Achuar Nationality of Ecuador— Indigenous communities whose territory is in the Pastaza and Morona Santiago provinces and contains 84 communities. CI has been working with the Achuar nation to strengthen the Achuar System of Ecological Reserves (SACRE) to manage their territory.

The Awajun Indigenous Group, Peru— An indigenous group of 14 communities in the Alto Mayo watershed of San Martin in northern Peru. CI has been working with these communities since 2013 to support sustainable activities.

Anticipated Outcomes

- Increased knowledge exchange of EO applications within indigenous communities in the Americas and globally.
- Enhanced capacity of indigenous representatives from two AmeriGEO countries (Ecuador and Peru) to assess and use EO data in decision-making for sustainable land management.
- An innovative framework for engaging indigenous organizations to utilize EO data to inform decisions and actions for sustainable resource management.

CONSERVATION
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Learn more at www.conservation.org/eo4im

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