Artisanal Small-scale Gold Mining (ASGM) Sector Expansion in Latin America: Drivers, Impacts, Solutions

LAC Environment Learning Series Webinar
Which ASGM impact is most relevant to your work?

- Deforestation
- Mercury contamination
- Corruption and transnational criminal organizations
- Climate change
- Human trafficking
- Biodiversity loss
- ASGM and its impacts are not relevant to my work
LAC Environment Learning Series

Today:
1. Artisanal Small-scale Gold Mining (ASGM) Sector Expansion in Latin America: Drivers, Impacts, Solutions

Upcoming Webinars:
2. Tuesday March 9 12:30- 2:00 pm EST
   - Private Sector Engagement Learning Sprint and PSE in Sustainable Cattle Practices

3. Combating Conservation Crime: Spotlighting the Colombia Mission’s experience with analyzing corruption- March 23

4. Reducing Ocean Plastics in LAC- TBD date and time
Agenda

• Welcome
• Combating Conservation Crime Learning Agenda
• Presentations
  – Ana Villegas, Biodiversity and Forest Advisor, USAID LAC Bureau
  – Beatriz Torres, Regional Amazon Environment Specialist, USAID/Peru
  – Luis Fernandez, Executive Director, Wake Forest University’s Center for Amazonian Scientific Innovation (CINCIA)
• Q&A with presenters

LAC Environment Learning Series Webinar
LAC Environment CCC Learning Agenda

Strategic Approaches:

- Strengthen reporting by Indigenous/local communities
- Strengthen law enforcement

Purpose and Context:
The U.S. Agency for International Development (USAID) is a key partner in the U.S. Government's interagency Task Force on Combating Wildlife Trafficking (CWT) and on conservation crime more broadly. The 2013 CWT Executive Order and the Eliminate, Neutralize, and Disrupt Wildlife Trafficking Act of 2016 established combating wildlife trafficking as a U.S. government priority. With the 2017 Executive Order on Transnational Organized Crime, the Administration added combating conservation crimes to the interagency CWT effort, highlighting the links between transnational organized crime and illegal logging, illegal extraction and trade of gold, illegal unreported, and unregulated (IUU) fishing.

The LAC Environment Combating Conservation Crime (CCC) Learning Program and Agenda address the need to understand the drivers, actors, and patterns of conservation crimes particular to the LAC region, and the conditions under which prioritized CCC strategic approaches best function to achieve environment outcomes. This learning agenda is designed to gather and share evidence on the effectiveness of approaches to deter conservation crimes to inform USAID programming for biodiversity conservation and sustainable landscapes. It defines learning questions and then develops types of learning activities to address them.

This Learning Agenda complements the USAID Office of Forestry and Biodiversity’s CWT Learning Program. While FAO’s CWT Learning Program contributes to global learning, it has been primarily informed by CWT efforts in Africa and Asia, the regions with the deepest history of attention to this issue. The particular dynamics of conservation crime in Latin America necessitate focused learning. For example, understanding and addressing threats to the safety of Indigenous and other local communities, who are often the frontline defenders against conservation crimes, is especially urgent in the LAC region.

The Learning Agenda will also link to the Targeting Natural Resource Corruption Learning Series and USAID’s Self-Balance and Democracy, Human Rights and Governance Learning Agendas and Environment and Natural Resource Management Framework.
LQ 1
Under what conditions is community reporting effective at deterring conservation crime?

LQ 2.1
Under what conditions is law enforcement effective at deterring conservation crime?

LQ 2.2
Under what conditions does transnational coordination improve the effectiveness of combating conservation crime?

LQ 3
What are the factors related to corruption that impact the effectiveness of combating conservation crime?
USAID: Small-Scale & Artisanal Mining
Impacts on Biodiversity in Latin America - March 2019

Ana Cristina Villegas, Ph.D., Biodiversity & Forestry Advisor
Office of Regional Sustainable Development/Environment (RSD/ENV), LAC
Map showing presence of ASGM in major ecosystems and biodiversity hotspots in target countries. Most of these ecosystems have been degraded and no longer cover the full extent of the area depicted. Data source: USGS, 2017c.
Trends and Drivers

Changes in gold prices, forest area converted to mining in the Madre de Dios region, and Peruvian mercury imports 2002-2010. (Swenson et al., 2011)
Impact in South America

Maps showing distribution of small-, medium-, and large-scale gold mining sites with significant changes in forest cover from 2001-2006 and 2007-2013 in northern South America. Source: Alvarez-Berrios and Aide 2015.
Relative Impact on Deforestation/Degradation

(a) Proportion of deforestation drivers

(b) Area proportion of deforestation drivers

(c) Proportion of forest degradation drivers

Legend:
- Urban expansion
- Infrastructure
- Mining
- Agriculture (local/subsistence)
- Agriculture (commercial)
- Livestock
- Uncontrolled fires
- Fuelwood charcoal
- Timber logging
Illegal Mining in Protected Areas

At least 81 protected areas and/or their buffer zones experience various stages of illegal mining projects.

Ecuador
A flight over the Esmeraldas area shows that 80% of the river banks where illegal mining takes place are deforested.

Peru
In 2010 alluvial gold production came from the Madre de Dios Department.

Bolivia
There are 638 mining concessions overlapping 281,564 hectares of protected areas.

Brazil
There are 31 major mining areas distributed across 9 states.

Number of protected areas with detected illegal mining by country

- BRA (34)
- PER (17)
- COL (12)
- BOL (8)
- ECU (5)
- VEN (5)
Multiple Biophysical Impacts and Stresses Documented

- Land surface alteration
- Soil and sub-soil
- Hydrology
- Pollution on air, land and surface water, groundwater, noise and light
An astronaut aboard the International Space Station (ISS) took this photograph of numerous gold prospecting pits in eastern Peru on December 24, 2020.

https://scitechdaily.com/

Photo: Nikon D5 digital camera using a 400 millimeter lens.
Administrative Districts with Illegal and Informal Mining in Peru
Interoceanic Highway
Complex Scenario
Drivers: Price of Gold, New IIRSA Road...
Money Laundering: Legal Mining and Export Companies...

Dimensión de la minería ilegal de oro: aproximación macro

Macroconsult
Money Laundering: Transnational Criminal Organizations

In Peru, the company money launderer Pedro Peter Ferrari.

Illegal gold mined hundreds of millions was melted into credit Miami International was broken up when shipment of Ferrari’s 2018.

U.S. Gold Refinery Pleads Guilty to Charge of Failure to Maintain Adequate Anti-Money Laundering Program
Social Impacts
What are we doing?
USG–Peru ASGM MoU (2017)

- Promote alternative economic development opportunities
- Prevent, investigate, and prosecute illegal gold mining and related crimes
- Prevent illegal mining in protected areas
- Build a transparent and traceable supply chain
- Reduce mercury emissions
USAID Strategic Approach

1. Support and promote **legality** (e.g., formalization)
2. Collaboration and strengthening GOP **capacities** (national and subnational)
3. **Alliances** with civil society (CSO, academia, IPs).
4. Forging **collaboration** with other cooperation agencies and private sector.
5. **New technologies** (satellite monitoring units, drones) & innovation
6. Enhancing **visibility** of issues and increasing awareness (media)
7. **Education** (school and university levels)
USAID Interventions

CENTRO DE INNOVACIÓN CIENTÍFICA AMAZÓNICA

CHS Alternativo
Capital Humano y Social

PARTNERSHIPS FOR ENHANCED ENGAGEMENT IN RESEARCH (PEER)

SERVIR AMAZONIA
Prevent (Prevent and Reduce Environmental Crimes)

• National legal framework

• Formalization

• Capacity building

• Support decision making

USAID PREVENT PROJECT

The Peruvian Amazon is one of the world’s most biodiverse and culturally rich ecosystems. Yet environmental crimes like illegal logging and mining, and trafficking of endangered species, increasingly threaten biodiversity. USAID works with the Government of Peru and civil society to address this complex challenge.

The Prevent Project works with the Government of Peru and civil society to improve the enabling conditions to prevent and combat environmental crimes, thereby reducing these crimes and negative impact within and around protected areas and forest and indigenous lands.

HOW DOES THE PROJECT WORK?

Prevent will work with Peruvian environmental justice officials and government institutions to build capacities and institute necessary reforms to reduce environmental crimes. Through a systems approach, the project will tailor solutions to local realities to optimize targeted interventions.

The project will use data and technology to accelerate the engagement of local and indigenous communities in monitoring to reduce environmental threats. Through an intensive public outreach strategy, Prevent will promote active participation from civil society, media, activists and the business sector to strengthen advocacy and information dissemination. All project interventions will incorporate gender equity and social inclusion, private sector resource mobilization, civil society engagement, and sustainability.
Goal: “eradicate illegal gold mining for good”
Phase 1: Military and Police Interdictions (15 days)
Phase II: Consolidation “Recovered Areas” (6 months)

Many ceremonies with authorities
COVID-19

- Mining has **not** stopped in Madre de Dios
- Impacting protected areas and Indigenous lands
- “Creative approaches” (delivery of mining supplies)
- GOP funding prioritized the sanitary emergency

**Good news:** 400 interdictions by environmental prosecutors, police and military
What else can be done?

• Due diligence and certificate of legal origin at port of entry
• Follow the money (laundered)
• Promote champions to raise consumer awareness
• Publish commercial advisories advising buyers
• Identify priority areas for reforestation and conservation in Madre de Dios, promote sustainable development and connectivity (in progress)
Thanks!