Emerald Mining and Human Security

A Comparative Case Study of Emerald Mining in Colombia & Zambia
The Team

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In coordination with and thanks to Elizabeth Orlando, U.S. Department of State, Office of Threat Finance Countermeasures and Patricia Syvrud, University of Delaware, Minerals, Materials, and Society Program
Project Overview

- Research project on emerald mining in Colombia and Zambia through the lens of the Jewelry Development Impact Index (JDII).

- Continues research started in Fall 2017 adding more countries researched and building upon and modifying the Fall 2018 methodology to increase scalability.
Objectives

A two-country comparison of Colombia and Zambia

Improved scalability of existing methodology - An eight country comparison
Jewelry Development Impact Index Overview

- Production of jewelry has a significant impact on the economies, development, conflict management, and peace in the countries in which the industry functions.

- Presently, the international jewelry industry lacks a standardized tool to measure how it impacts socio-economic activities.
Emeralds Around the World

- Emeralds are a variety of the mineral beryl and must have a rich green color or else are classified as green beryl, aquamarine or heliodor.
- Naming affects pricing and marketability.
- Many common imitations.
Zambia and Colombia

Select Findings
Overview of Emerald Mining in Colombia
Key Findings: Colombia

- Government institutions in place help lower risk to human security.
- Presence of informal mining.
  
  "Today, criminal mining brings more money to criminal groups, to guerrilla groups, to mafias... than drug trafficking" - Former President Juan Manuel Santos, 2015

- Lack of enforcement mechanisms for environmental regulation.
- Afro-Colombian and indigenous peoples are disproportionately affected by displacement.
Overview of Emerald Mining in Zambia
Key Findings: Zambia

- Capital Flight: Lack of beneficiation limits Zambia’s ability to leverage its economic potential.
- Low local demand for finished emerald products.
- Informal and unlicensed sales drive down market prices.
- Exclusion of women in large-scale mining.
Comparison

Differences
● Formal vs. informal
● Remediation processes after the closure of mines
● Open pit vs. tunneling
● Presence of non-state actors

Similarities
● Indigenous people displacement
● Weak environmental regulation enforcement
● Informal child labor
Moving Forward

- Increasing internal effectiveness and oversight
- Enforcement of regulations and policies
- Formalizing the mining industry
- Increase access to and quality of health care
Gaps and Successes

- Available data was generalized.
- Lack of specific information to the emerald mining industry.
- Information on governance was quite limited and potentially biased.
- Additional concrete information on the informal markets.
Methodology Overview

- Indicators and sub-indicators
- Identification of key questions; in line with OECD Guidelines
- Interviews with key informants
- Literature review and desk research
- Averaging
Modifications

Standardized Scoring
● Previously: 0-1 scale for some questions; 0-5 score for others.
● Scoring method changed to standardize the 0-5 scoring across all questions.

Scalability
● Moving from case studies to a comparable index score.
● Broader questions applicable to more countries.
● Eight-country Comparison
Eight-Country Comparison

![Bar Chart]

- Myanmar: 3.40
- Afghanistan: 3.43
- Botswana: 1.80
- Peru: 3.01
- South Africa: 2.24
- Madagascar: 3.04
- Colombia: 2.69
- Zambia: 3.06
Conclusion
Questions