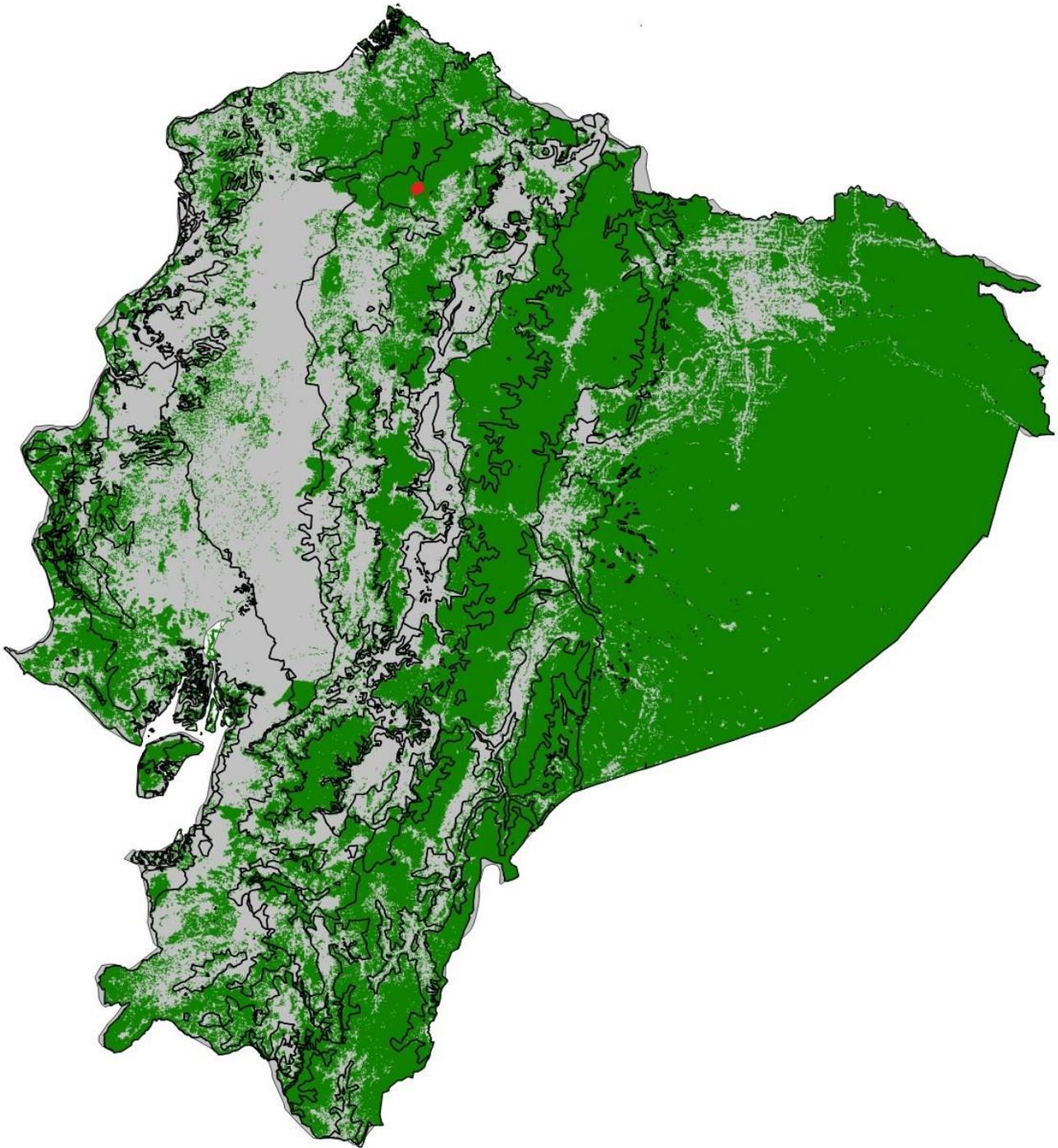


A photograph of a lush, green cloud forest covering a hillside. The trees are dense and vibrant, with a thick layer of white mist or fog hanging between the canopy layers, creating a soft, ethereal atmosphere. The lighting is diffused, highlighting the textures of the leaves and the overall density of the forest.

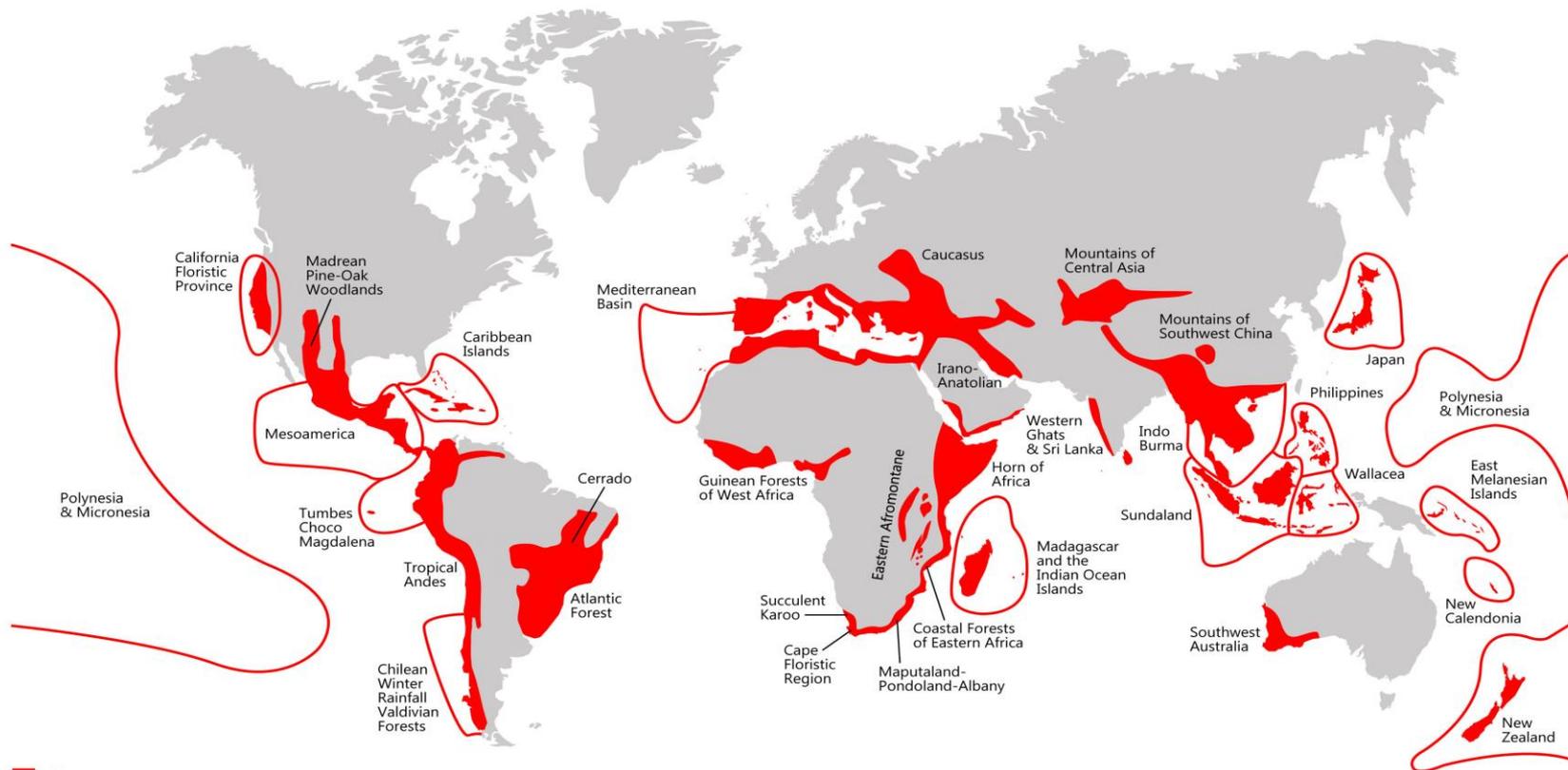
*Fear, Loathing and Hope in Ecuador's Cloud Forest*  
*On the Hardships of Protecting a Little-known Place*

Carlos Zorrilla  
Sussex University  
September 2014



# Biodiversity Hotspot

CONSERVATION INTERNATIONAL



■ Hotspots

February 2005

# Tropical Andes Biological Hotspot



# Map of Ecuador





















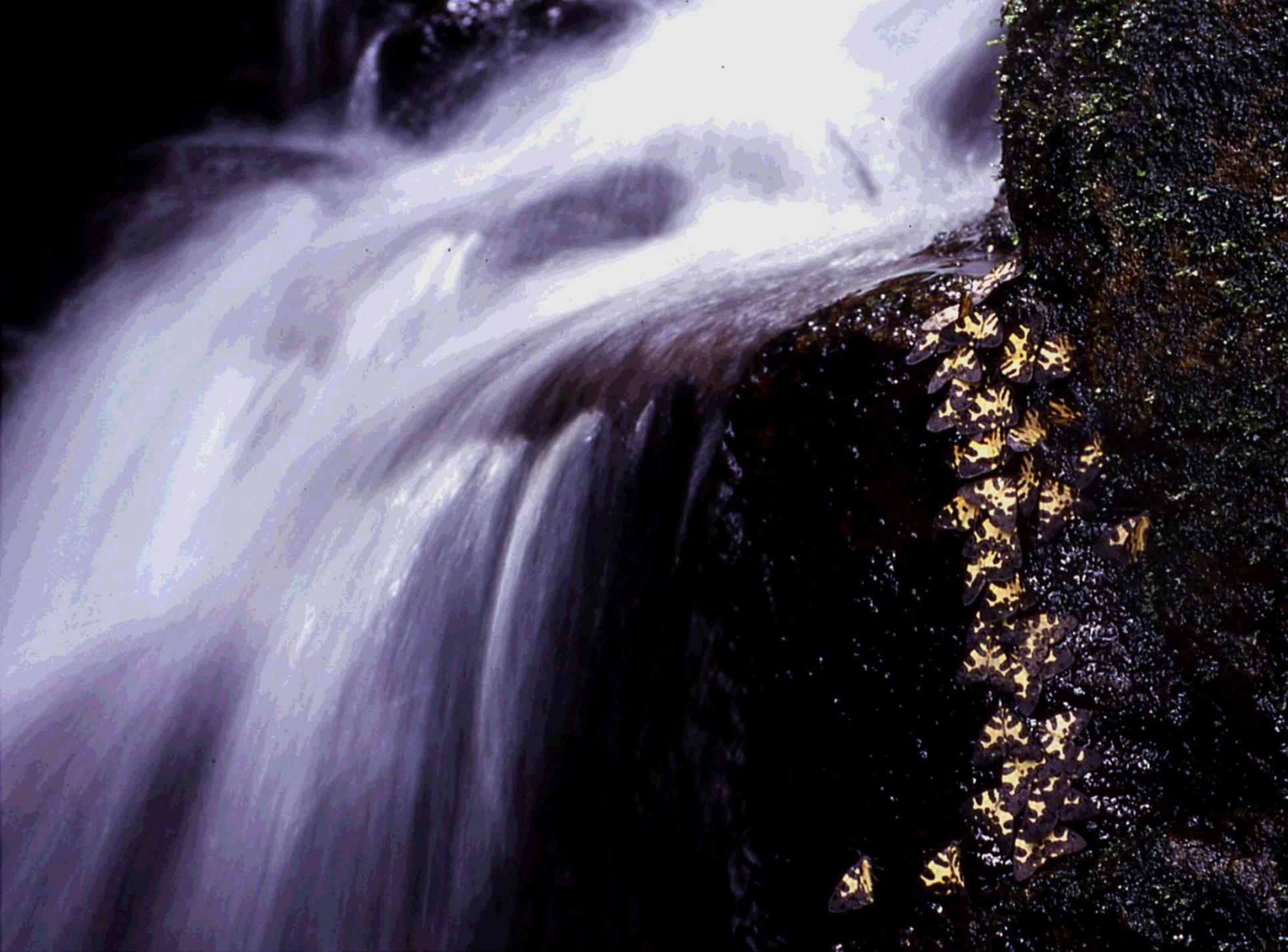
































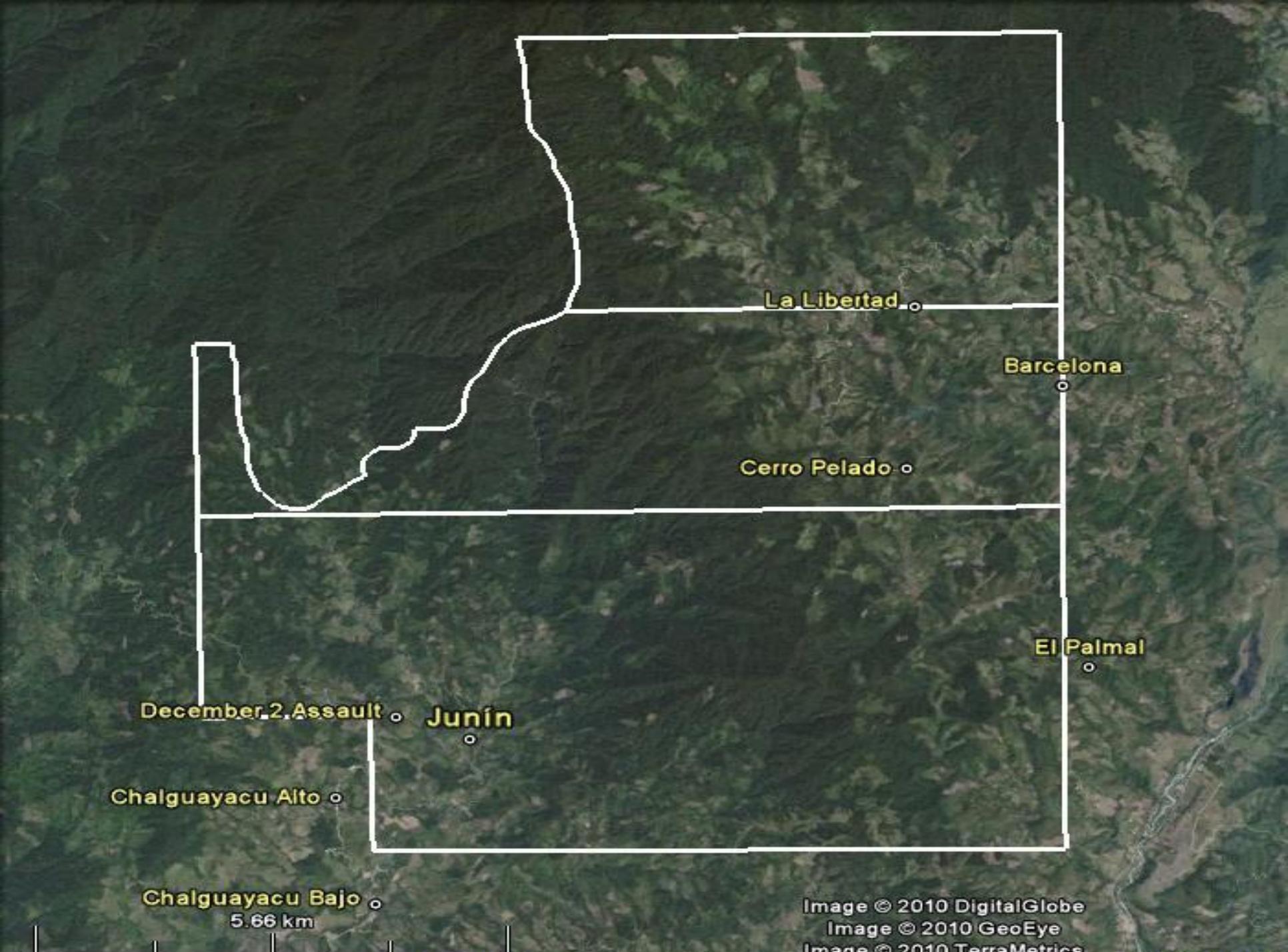












La Libertad

Barcelona

Cerro Pelado

El Palmal

December 2, Assault

Junín

Chalguayacu Alto

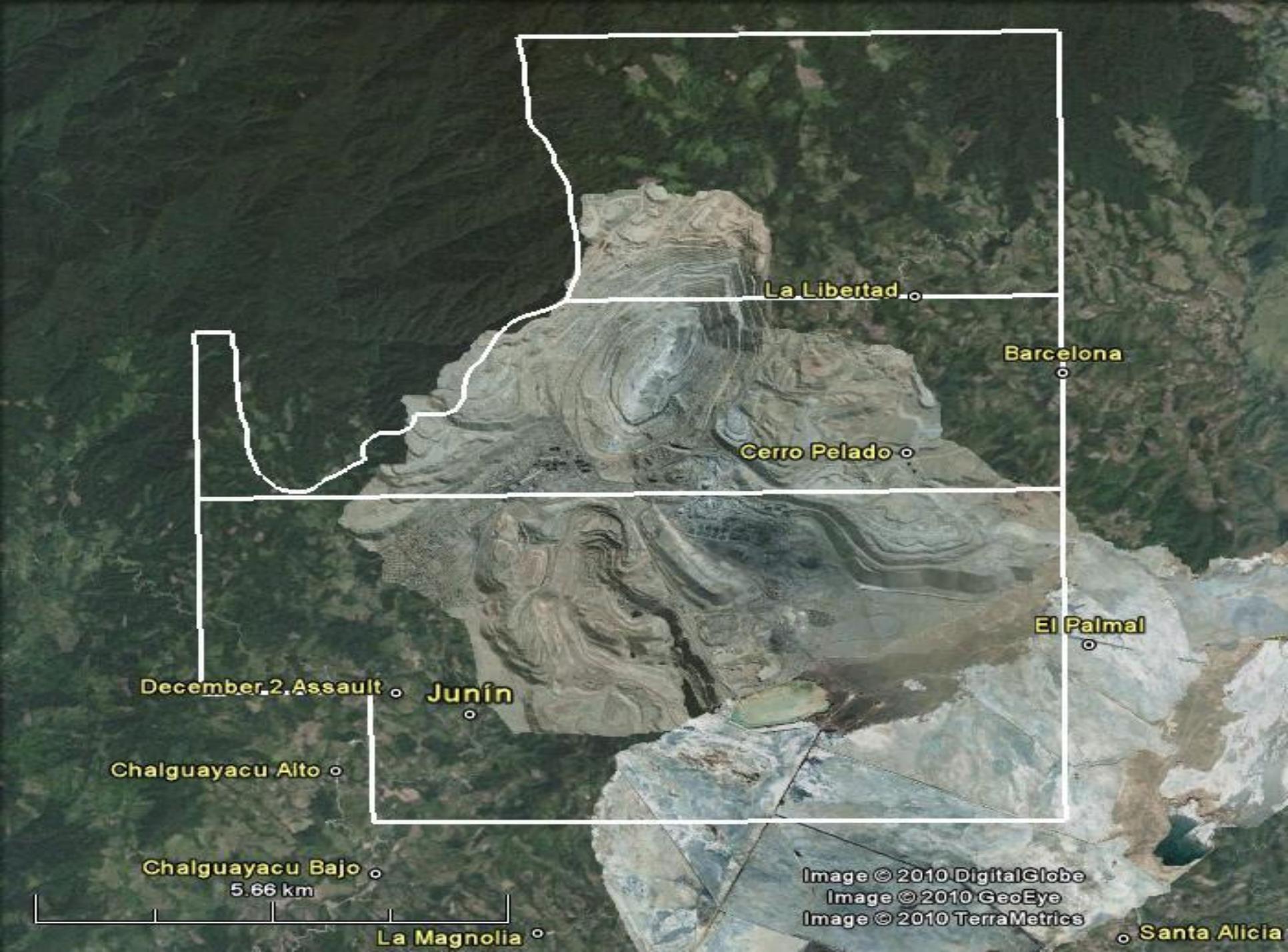
Chalguayacu Bajo

5.66 km

Image © 2010 DigitalGlobe

Image © 2010 GeoEye

Image © 2010 TerraMetrics



La Libertad

Barcelona

Cerro Pelado

El Palmal

December 2. Assault

Junín

Chalguayacu Alto

Chalguayacu Bajo

5.66 km

La Magnolia

Image © 2010 DigitalGlobe  
Image © 2010 GeoEye  
Image © 2010 TerraMetrics

Santa Alicia



# Aerial View: Chuquicamata Copper Mine

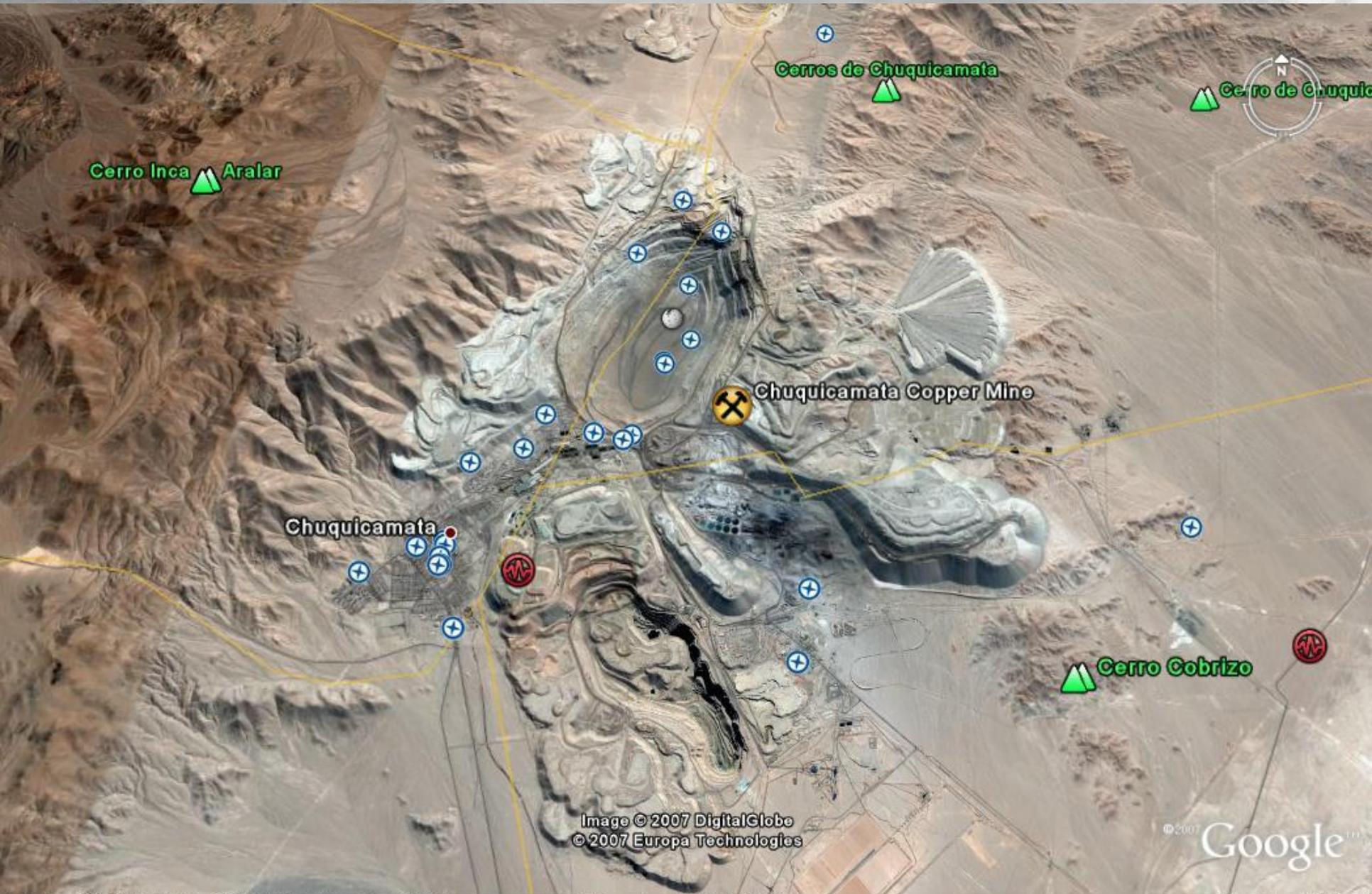




Image © 2007 DigitalGlobe  
© 2007 Europa Technologies

Google

2981 ft

Pointer 22°17'39.32" S 68°54'43.14" W elev 8947 ft

Streaming ||||| 100%

Eye alt 18696 ft



# SOCIAL AND ENVIRONMENTAL IMPACTS

The 1996 preliminary Environmental Impact Assessment prepared by two Japanese organizations PREDICTED these impacts:

- Relocation of hundreds of families from **four** communities-
- Increase in crime
- **Massive** deforestation, which would dry up our climate (almost literal quote from EIA)-
- Impacts to the Cotacachi-Cayapas Ecological Reserve- one of the world's most diverse protected area.
- Impacts to the habitat of **dozens** of threatened mammals and birds, including: jaguars, ocelots, spectacled bears, pumas, brown-headed spider monkey, and the plate-billed mountain toucan.
- Contamination with **lead, arsenic, chrome and cadmium** of rivers and streams

Since these impacts were based on a much lower estimate of the copper ore discovered by Mitsubishi, the impacts will be much greater, and as many as seven communities may have to be relocated and thousands of additional hectares deforested

# Main Strategies used by mining companies

After in-depth socio-economic studies:

- Offers of infrastructure and services lacking in communities, including: roads, clinics, free medical assistance, computers, schools, sports stadiums, low-interest loans, even free housing.
- High paying jobs to key individuals
- Exaggerated offers of jobs, and hiring of community members regardless of whether mining has been approved.
- Creation and financing of pseudo development organizations

# Strategies / Principle Violations Against Opposition

When the “nice guys” strategies fail,

- Attempts to outright buy off key leaders
- Death threats
- Smear campaigns
- Attempt to create new local government
- Attempts to undermine local community organizations
- Land purchasing to debilitate communities
- Abuse of the country’s legal system for intimidation
- Judicial set up
- Use of paramilitaries (“private security”)
- Attempted homicide

# High Cost of Attaining Social License

- ✓ Division of communities
- ✓ Conflicts within the family and between communities
- ✓ Death threats
- ✓ Violence
- ✓ Land trafficking
- ✓ Social disintegration
- ✓ Use of the courts to persecute and intimidate

**Results:** Deep divisions, severe degradation of communities, social chaos, economic stagnation, insecurity and a permanent climate of hostility, severe human rights violations.

*Principal Actors and Factors Contributing to Social and Environmental Chaos in Communities Affected by Extractive Industries in Intag and Unsustainability*

**Development Agencies:**

Belgian Government

JICA

**IFI's: World Bank**

**Weak Gov Institutions**

**Lack of  
Regulations**

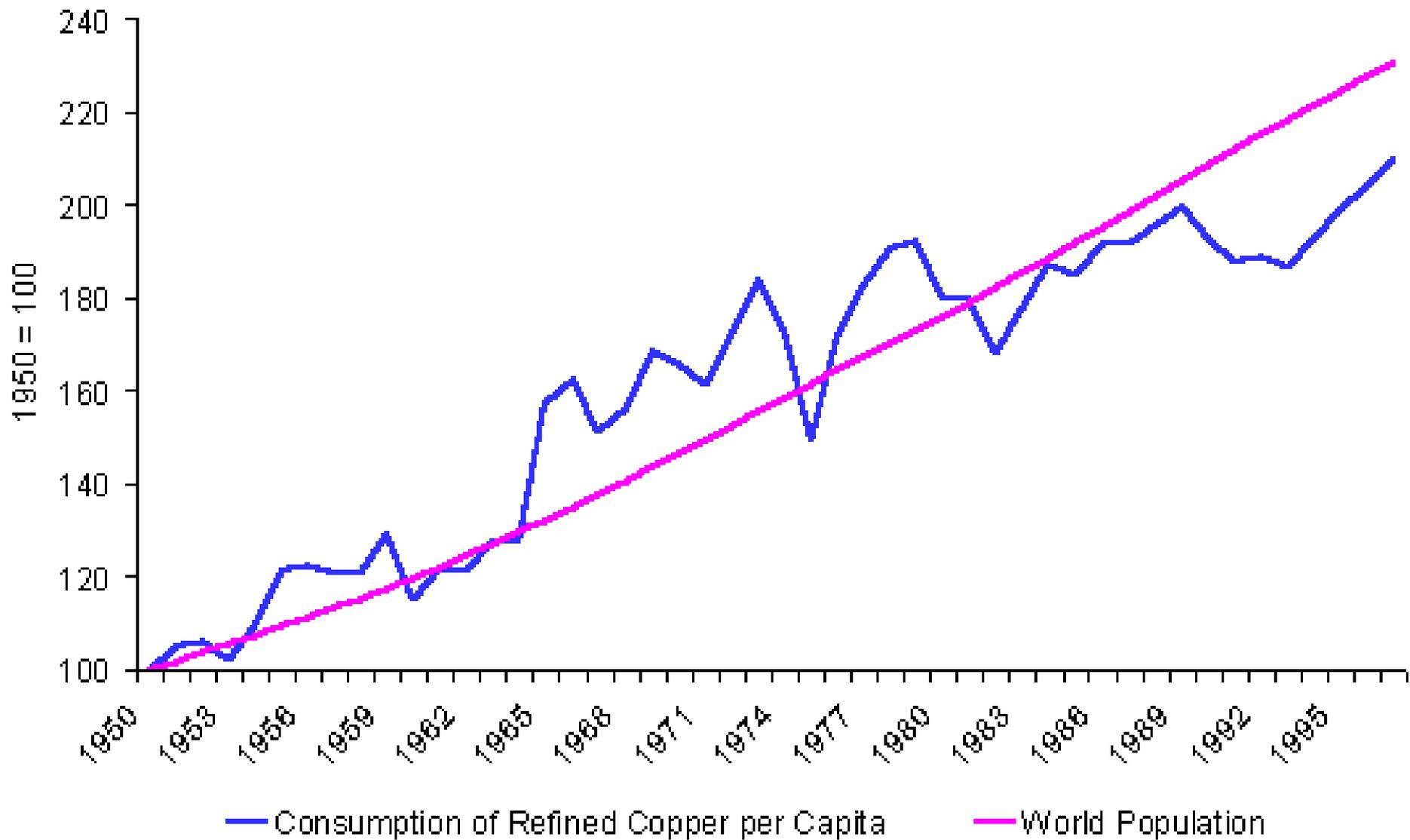
**Corruption**

**Financincial: Unregulated  
Investment / Uncaring public**

**\*High demand for  
Metals (unethical lyfestyles  
WRONG LIFE PREMISES**

# Copper Wars: Consumption

- ✓ 22 million metric tons of copper in 2010
- ✓ Average 500 tons of earth mined, and 50 to 60,000 liters of water tons of used for each ton of pure copper produced
- ✓ Over 60% of the world's copper is used by 15% of the citizens of the richest countries



# Consumption of Refined Copper per Capita 1960-1995

# Per Capita Copper Consumption

✓ The world consumed 22 million tons of copper in 2010.

Consumption per person in 2000:

✓ US: 10.9 Kilograms per person

✓ Japan: 10.8 Kg\*

✓ Australia: 8.9 Kg\*

✓ Latin America: 2 Kg\*

✓ China and India: 1 Kg\*

✓ Africa, Middle East : 0.3 Kg\*

Per capita world consumption is 2.6 kilograms

\* For the year 2000

Sources. *Breaking New Ground*. Mining, Minerals and Sustainable Development Project.2002

United States Geological Survey. 2008

**Copper Price**  
3.90 USD/lb  
10 Feb '12



Increase in the price of copper 10 years:  
500%

**BIENVENIDOS**  
**COMUNIDAD JUNIN**  
NUMERO DE HABITANTES 260  
**AGRICULTURA**  
**GANADERIA**  
**TURISMO**  
**AQUI NO PERMITIMOS LA MINERIA**

# Alternatives created by communities and NGO's

- ✓ Shade-grown coffee (400 families and growing)
- ✓ Community ecological tourism
- ✓ Hand-made soap and shampoos
- ✓ Lufa handicrafts
- ✓ Sisal handicrafts (several women's groups)
- ✓ Agroecological groups- Organic products
- ✓ Fish farming;
- ✓ Agroecological farming coops
- ✓ Small-scale hydroelectric projects (proposed)



# Alternatives











DEVELOPMENT  
OR DESTRUCTION?  
CANADIAN MINING  
OUT OF INTAG



RESPECTAR la conservación  
Nunca nos consultaron por  
mineras en la zona de T  
iii NO QUEREMOS M

MINERA 10  
INTAG  
ESTRUI  
ELARIO.

INTAGCHI  
FUERA ASCENTANT

LA COMUNIDAD YA NUESTRO  
DESARROLLO NO QUEREMOS  
LA COMPANIA DE INTAG  
UN AMBIENTE VERDE Y PRO

Ultimas Noticias

QUITO



CHALGUAYACO ALTO  
RECHAZA LA MINERIA  
LAS TIERRAS DE LOS ANCIANOS DEFENDEN

OS  
EZA  
DA  
VIR  
A

COLENDOS el año y la  
antiguos

TIERRA  
CHALGUAYACO

MINERIA: VIVIR  
NO

DE HABER

OXY hoy mañana ASPIRANT  
Ya basta de divisas!

TIERRA  
CHALGUAYACO

NO A

La Coordinadora de JÓVENES  
la ACCAI. Unidos  
contra la minería.

Jerre Pelado  
rechaza  
la minería

Para la Zona de

No Queremos Ingresos  
Bajas PARA LA DESTRUCCIÓN  
FUEBIA EMPRESAS MINERAS

**MINERÍA: Pan para hoy  
hambre y contaminación  
mañana**

20.05.2006 10:54







DEVELOPMENT  
OR DESTRUCTION?  LAHADIHAN MINING  
OUT OF INTAG

RESPECTAR la Convencion  
Nunca nos consultaron  
mineras en la zona de J  
iii NO QUIEREMOS M  
NATURALES NOSOTROS

INTAGCHI WERPUSKA MAS  
FUERA ASCENDANT

LA COMUNA  
YA NUESTRO  
DESARROLLO  
NO QUEREMOS  
LA COMPANIA  
COMUNIDAD  
UN AMBIENTE  
VERDE Y PRO

Ministros:  
APROBE UNIA  
EN INTAG

QUITO

Ultimas Noticias

Ultimas Noticias



LA MINERÍA CONTAMINARÁ...



El agua que utilizamos de los ríos para lavar cocinar, bañarse y dar agua a las plantas.

El suelo y el aire. Nuestros alimentos y plantas no crecen y se van a morir. Los hombres se enferman y mueren y ya no tienen hijos.

Ley de Minería  
Ley de las...  
Compañías

UN TIPO  
CONTAMINAR  
RÍO...RE  
QUE EL D



# The Mineral Wars

- ✓ Many of the conflicts can be attributed to extractive industry policies meant to primarily benefit the north
- ✓ The conflicts will continue to ravage renewable natural resources, people and human rights unless effective measures are taken to curb the power of transnationals by creating enforceable international standards.
- ✓ Our lifestyle is an important factor in determining the outcome of this tragedy

# Importance of Global Awareness

*A key factor in the struggle against the ravages of the transnational mining industry in developing countries is, and will always be, awareness... Awareness not only of the problem, but also of the part we play in the making of the tragedy, combined with a willingness to participate in finding a genuine solution to the problem.*

# What to do

## **International:**

- ✓ i. Support the creation of international standards to curb the impacts of transnational extractive industries
- ✓ ii. Work to undo the de-regulatory damage done by the W Bank and similar IFI's

## **National:**

- ✓ i. Support legislation to make companies abide by the strictest social and environmental regulations.
- ✓ **ii. Support the de-materialization of the economy**

# Community/ Individually

- i. AWARENESS: Find out more and share what you know
- ii. Support and get involved in public transport initiatives and local government
- iii. Demand accountability from corporations, Banks, government, Export Credit Agencies, etc.

## Personal:

- i. **Reduce** your use of materials / update, restore, fix, learn to live with less
- ii. Green up your campus and community- **reuse**, recycle; **support fair trade**, and other socially and environmentally responsible alternatives

***BECOME AN ACTIVIST***



Thank you

# Chronology of Intag's Mineral Wars

- ✓ 1991 Ecuador and Japan sign Technical Assistance Agreement
  - ✓ 1992 Mitsubishi Subsidiary Bishimetals begins Exploration work
  - ✓ 1995 DECOIN founded on concern over mining activities
  - ✓ 1995-1997 Communities learn about real impacts of mining and try to engage government
  - ✓ 1994-1996 Bishimetals discovers large Copper-Molybdenum deposit
  - ✓ May 1997 Communities destroy mining camp; Mitsubishi leaves Intag- end of project- Relative peace ensues.
  - ✓ Response to mining development by local groups include creation of many community-based successful economic alternatives.
- 
- ✓ WORLD BANK
  - ✓ 2000- DECOIN files complaint against PRODEMINCA World Bank mining project
  - ✓ 2000 Pro-industry reforms to Ecuador's Mining Law funded by World Bank
  - ✓ 2001 Mining exploration boom begins

# Chronology, cont'd

## ASCENDANT/ COPPER MESA

- ✓ April 2004 Ascendant acquires Junín Mining Concessions
- ✓ November 2004 Ascendant Copper Corporation is created primarily to exploit Junín's copper
- ✓ June 2004 Ascendant's tactics to obtain "social license" starts
- ✓ 2004-2008- Company is unable to access its mining concessions due to local government, NGOs and community opposition
- ✓ November –December 2006, paramilitaries stopped by communities- severe backlash, resulting in stop-work order for the company.
- ✓ 2008 National government issues Mining Mandate, reverting back to the state most mining concessions, including Ascendant's
- ✓ August 2008, company changes name to Copper Mesa and shifts operations to Arizona and Nevada
- ✓ 2009- Lawsuit in Canada against company and the Toronto Stock Exchange
- ✓ 2010 (Feb) Company is delisted from the Toronto Stock Exchange

# World Bank Prodeminca Project

- ✓ Mineral "*Development*" Project financed by a 14 million dollar loan. Main objective was to
- ✓ ***Increase private mining activity in Ecuador; by***
- ✓ Generating mineralogical information useful to the mining industry (including from protected areas)
- ✓ Privatizing the mining sector
- ✓ Completely overhauling mining law ("modernize")
- ✓ De-regulating mining activities