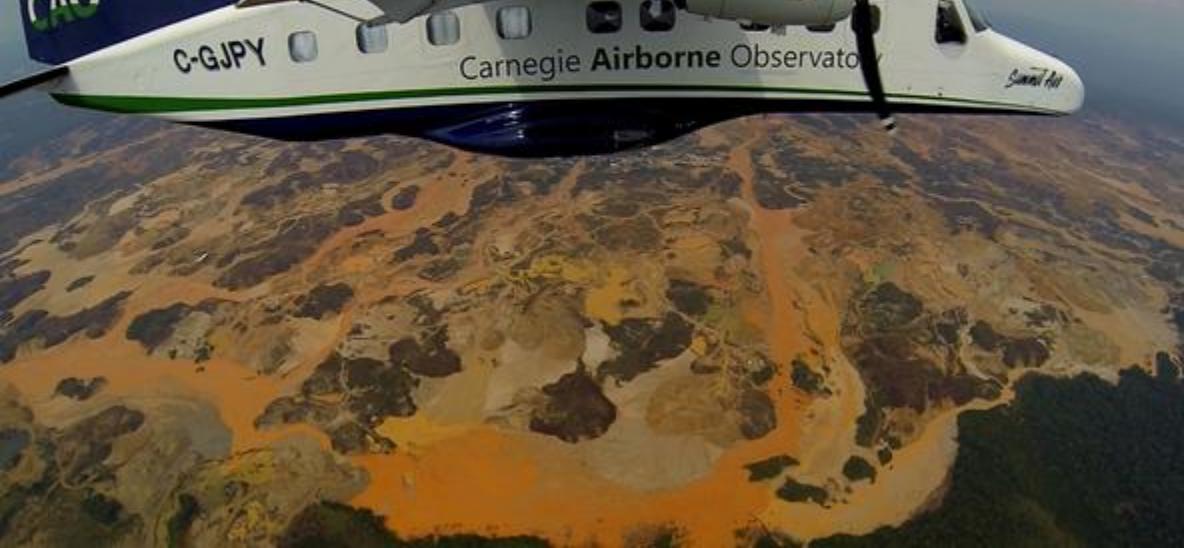


Open Data and Infographics about the Gold Rush in the Peruvian Amazon

Final presentation for the “Government 3.0” class
ITP-NYU, Fall Semester 2013
Professor: Beth Noveck





The Madre de Dios Region in Perú is one of the most important biodiversity pools of the world: 1000+ species of birds, 200+ mammals, and several thousands of plants

Price of gold has gone 360% up in the last decade.

Illegal Gold Mining:

- 300, 000ha of forest destroyed
- 70,000 kg mercury spilled into rivers every year
- 77.9% of population has higher mercury blood level accepted by WHO
 - causes impaired neurological development in children and a lot of other health related problems
- 98% of gold mining in Madre de Dios is illegal
- 50 000+ migrant miners, invading pristine forests and other lands. More miners arriving each year
- 1800 millions of dollars a year, no taxes, bigger than drug trafficking
- corruption, human trafficking, minor prostitution

What is being done to stop this? Who?



- various **government** branches
- regional & national



- NGOs
- Universities,
Research Institutions

law enforcement

create/promote sustainable
alternatives

monitoring

regulation / legal aspects

research

advocacy

education / training

communication

reforestation

A complex problem -> needs a comprehensive, multilateral, coordinated approach

All this institutions:

- collaborate (and probably would need to do it more)
- need, produce and share data.
 - Where to find it? Scattered in the web.
 - Format? Mostly pdf.



1. Perú has an open data agenda.
-> But when?
2. What happens to the data produced by other institutions?

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Data examples: **Deforestation**

Several sources, conflicting findings, different methodologies. Some is open data, some not:

Carnegie Institution of Science

Deforestation increased 400% since 1999. 6000h + every year. No general figures, nor data openly available on the web.

Ministry of Environment

18 000 hectares, adding another 150 000 of degraded forests (2011)

Ministry of Agriculture

Their projection is 300, 000h. Shared by SPDA.

Nasa (infoamazonia.org)

Raw, open GIS data: Global forest heights 2011

Terra-i system (infoamazonia.org)

Raw, open GIS data

Data examples: Law Enforcement

16 operatives by the Peruvian military and police have captured or destroyed about 280 different equipment pieces in 2013 (not open data).

2009 report by three organizations:
Cáritas, Cooperación and
Conservation International

shows estimate production by each of the different equipments.

Can we cross relate this data to measure the real impact of the government's actions?

Parámetros Técnicos	Método				
	Ingenio	Canaleta	Arrastre	Shute	Chupadera (*)
Principales maquinarias y equipos	Picos y lampas.	Picos y lampas.	Bomba 18 HP, manguera de succión 3"	Cargadores frontales (1.5, 2.5 y 3,5m ³). Volquetes de 15m ³ . Bombas 20-80 HP.	Bombas 24 - 180HP, mangueras de succión, 2 ó más tolvas.
Altura frente de explotación (m)	2	2	Hasta 7m	Hasta 20m	Hasta 30m
Área de operación (m ²)	40	50 - 500	100 - 500	Mínimo 500	Mínimo 250
Mangueras: Longitud (m) Diámetro (pulgadas)	----	----	3 3"	8 - 20 6"	30 4 - 6"
Canaleta de recuperación:					
Material	Madera	Madera	Madera	Madera	Madera
Longitud	1,5 - 2	2,5 - 4	2 - 4	8 - 10	8 - 10
Ancho	0,60	0,90	0,95	0,95	0,95
Inclinación	20 - 25	10 - 15	20 - 25	10 - 20	10 - 20
Zarandas	NM	NM	NM	4 x 5. 1/3" Ø.	2 x 2. 1/3" Ø.
Caudal promd de agua	NM	NM	NM	NM	NM
Desmonte (altura, m)	2	2	2	5 - 10	5
Nº trabajadores	2 - 3	2 - 4	2 - 4	7-10 por maquinaria	12
Turno por día	01	01	02	02	01
Producción día	3 - 5 g	3 - 5 g	3 - 5 g	50 - 150 g	40 g

Elaboración Propia.

NM = No medido. (*): Este método también es aplicado en zonas de llanura aluvial.

Mercury Contamination

in water, on fish, on humans.

different locations.

Several sources: government (Ministry of Health), research Institutions (Carnegie Institution for Science), Universities, independent studies.

2 examples:

CENSOPAS - Ministry of Health: 5 in 192 probes with high levels
Huepetuhe town in 2010, Mining zone

Carnegie Institution for Science: 77.9% of Puerto Maldonado
Inhabitants (200 000+)
Puerto Maldonado, Capital of Madre de Dios 2013

Possible Open Data Benefits:

- ease the access to and help organize available data.
- allow different uses and cross relations of data
- foster coordination, a basis for collaboration between the institutions
- create shared indicators.
- help validate the data by various actors.
- help create a culture of more continuous data gathering
- shared methodologies, standards, fill in the blanks.

Pitfalls

- extra work
- no perception of benefits
- no actual demand

Proposal

Preliminary Open Data Assessment Study

Visiting organizations, interviews:

- **see possible benefits / hardships**
- **assess demand, readiness, procedures**
- **do workshops / training**
- **seek partners**



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SIMPLIFYING THE NIGERIAN BUDGET

Using creative technology to intersect civic engagement and institutional reform.

FEDERAL



STATE

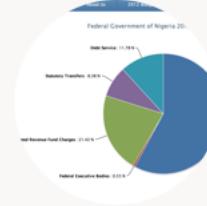
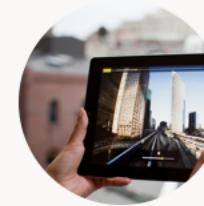


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BUDGET REQUEST DATA ABOUT BLOG VISUALS DOWNLOADS



Nigeria

Budget Implementation Report As at Sept. 2012



*Source: Budget Office of the Federation

What FG Received (Jan-Sept 2012)



N1.33tn

Oil Revenue



N547.2bn
Non-oil Revenue



N357.3bn
Excess Crude Acct



N191.2bn
Other Revenue



N163.6bn
Funds from Stabilisation



N694.3bn
Domestic Borrowing



N80bn
Borrowing from Natural Resources Fund

The data representation above excludes N7.5bn earned from privatization. Non-Oil Revenue includes taxes and customs levy. Total funds received by FG equals N3.36tn.

How FG Spent Funds (Jan-Sept 2012)

Debts Servicing
N492.36bn

Release for Capital Projects
N471.38bn



OIL REVENUE NAIRA 8025950000000

HOW MANY CLASSROOMS CAN BE
BUILT?

NIGERIA

445886

STATE

12386

LGA

576

YOUR WARD

46

Imagine What Oil Revenue Can Do To Your
Community If We Have Spend It Alone On Common
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 Me gusta A 2491 personas les gusta esto. Sé el primero de tus

1 kg = 3839 m² = XXX
gold (41077 ft²) destroyed people contaminated
with mercury

Gold price today (12/13/2013) 1234.8 US\$ per ounce -> 43,556 US\$ per kg of gold

Second Part / Proposal

Site with visualizations and Infographics

-> different (non-expert) audiences: miners, policy makers, gold buyers (international) etc.

goals:

- one stop site to understand the size, scope and current trends
- educate people about the real price of gold
- list all currently available sources / organize them
- create powerful, viral content for different audiences
- curate data with experts -> valid source of information
- put things into meaningful contexts
- communicate what can we do about it (nationally and internationally)

Thank you!

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