



# Gold Mining in the Amazon. Traceability and its repercussion for Criminal Liability

**Mara Elisa Andrade - Juíza Federal da 7a Vara da Seção Judiciária do Amazonas**

# Environmental Court in Amazonas State

## (case portfolio)

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- ❖ **Environmental and associated crimes.**
- ❖ Deforestation related to the timber industry, agriculture expansion, land invasion (land grabbing) and illegal mining activities.
- ❖ The environmental permit procedures (major infrastructure federal projects such as hydropower projects, bridges, ports, roads and alike) as well as activities of federal interest (**mining in federal lands and rivers**).
- ❖ Federal water resources cases (**pollution related to illegal mining and overfishing activities**).
- ❖ Biodiversity and habitat loss (animal trafficking and commercial fishing).
- ❖ Financial Compliance. Wood, meat and **gold supply chain**.
- ❖ Environmental and economic zoning, deregulation, governance failure and climate change liability.

# The Amazon Forest

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- ❖ The biggest tropical forest in the world, found in nine countries.
- ❖ Mega biodiversity of fauna and flora (estimated 30% of all species in the world).
- ❖ Essential for carbon storage and climate change mitigation.
- ❖ Planet's fresh water 2.75%, 20% in the Amazon River Basin. Water cycle and rain pattern. The floating rivers theory.
- ❖ More than 300 indigenous people in the region.

# Amazon river basin



# Why is gold business so attractive?

## Economic approach

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- ❖ Universal currency. Gold as tangible financial asset.
- ❖ High demand, global scarcity and steadily high prices.
- ❖ Economic crisis and wars. Gold as a valuable commodity, that presents reliable returns, liquidity and security (safe investment in times of recession).
- ❖ Gold business: low-risk undertaking and skyrocketing profits.
- ❖ Gold can be negotiated as commodity-product or as a financial asset in the financial system.

# Brazil's gold prices record

10 Year Gold Price in BRL/oz

Last Close: 9944.26

High: 11025.36 Low: 2636.20 ▲7013.42 239.30%



goldprice.org

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# Gold mining legal and institutional framework

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- ❖ All mineral resources belong to the Federal Government (CRFB, art. 20, IX).
- ❖ Two different governmental authorization: environmental permit and mineral exploitation title (licenses). Two agencies and, frequently, two governmental levels (federal and state/local agencies).
- ❖ The acquisition of monetary gold through Securities Dealer Companies (DTVM – Distribuidora de títulos e valores mobiliários) monitored by the Central Bank of Brazil (BACEN).
- ❖ CEFEM payment to the federal government (public price/“royalty”). Annual extraction report. Invoice (receipt).

# Gold exploitation titles granted by ANM

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- ❖ **1. Mining prospecting license and mining concession CL.** Mining capacity previously determined through research. Activities can be entrusted to individuals or companies (legal personality). Areas ranging from 50ha, 1000ha and 2000ha. Title designed for any mineral. More stringent rules on exploitation methodology and technology.
- ❖ **2. Mining permission PLG (“permissão de lavra garimpeira”).** Immediate exploitation. Activities can be entrusted to individuals or mining cooperatives (Co-op). Areas of 50ha for individuals and 1000ha for cooperative. A smaller range of mineral (gold and diamonds included). No minimum requirement in regards to exploitation technology.



# Artisanal and small-scale gold mining (ASGM) and criminal organizations

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- ❖ **PLG is the designed method for ASGM.** It was created with the aim to regulate small scale individual miners. It presents less stringent requirements, such as no previous study or research for mining capacity, allowing for immediate exploitation on site, and no restrictions on the methods or technology applied.
- ❖ **Historically, PLG has been the preferred regime for gold mining.** Studies show the **misuse and the abusive use of PLG** legal regime for gold mining with heavy machinery, uncontrolled use of mercury and near industrial scale of exploitation.



# Why is gold business attractive to criminal enterprises?

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- ❖ *“Intrinsic characteristics that make gold attractive to criminal networks include anonymity (currently it is nearly impossible to forensically assess the origin of gold, and many upstream transactions are informal and anonymous with little to no transaction records), easy to concealment for smuggling due to its small size, and global fungibility”.*
- ❖ (Livia Wagner and Marcena Hunter in “Links Between Artisanal and Small-Scale Gold Mining and Organized Crimes in Latin America and Africa”, in the book *Illegal Mining*, Springer International: 2020).

# Why is gold business attractive to criminal enterprises?

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- ❖ Anonymity and difficult identification of origin (traceability). Low risk of being caught.
- ❖ Effortless concealment for smuggling. Easy introduced to formal legal gold market.
- ❖ Complex supply chain (network complexity).
- ❖ Loopholes in regulation (national and international).
- ❖ Weak transaction records.
- ❖ Lack of adequate monitoring and deficient command-control government response.
- ❖ Opportunity for money laundering by Criminal Organizations (OCG).



# Recurrent crimes associated to illegal gold mining operations in the Amazon

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- ❖ Environmental crimes – such as deforestation; ‘water’ pollution and contamination; degradation of especially protected areas; and others.
- ❖ Public land invasion (land grabbing).
- ❖ Violation of federal ownership on mineral resources.
- ❖ Organized crime and money laundering.
- ❖ Government corruption.
- ❖ Slave labor (labor intensive and precarious activity, and degrading living conditions on remote areas in the Amazon Forest). ASGM.
- ❖ Sexual exploitation of woman and children. Human trafficking.

# Other serious social, environmental and political consequences of illegal gold mining

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- ❖ Undermining the rule of law (Lawless).
- ❖ Aggravating deforestation and forest degradation.
- ❖ Habitat and biodiversity loss.
- ❖ Water pollution, contamination and river-bed deformation.
- ❖ Disruption and displacement of local communities. Violence and land conflict.
- ❖ Serious risk to vulnerable groups, such as indigenous people, subsistence fisherman and agricultural families.
- ❖ Dumping effect on legal and formal gold extraction business.
- ❖ Uncontrolled use of mercury and cyanide. Increased health risks and impacts.





# Traceability as key policy feature to prevent and deter illegal gold mining

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- ❖ **Legal framework and sector regulation.** Mechanism to enable transparency throughout the supply chain.
- ❖ **Enforcement.** Registries, chain custody, monitoring from the initial source, command and control policies.
- ❖ **Civil, administrative and criminal liability.**
- ❖ *Weak regulation and loose monitoring enables a parallel market for criminal extractive commodities. To tackle this problem we need traceability in each production and transaction chain, from keeping record of every agent within the supply chain to tracing the origin of gold being introduced in formal markets.*

## Most vulnerable links in the supply chain (where traceability and effective policies are most needed)

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- ❖ Extraction - gold sourcing and transportation. Informal business related to PLG, highly susceptible to informal and criminal activities in the Amazon river basin (alluvial gold mining and ASGM).
- ❖ The difference between formal regularity and real (substantial) regularity of the activities, from the mining regulatory and environmental point of view.
- ❖ The use of ASGM and shell companies and “straw man” to introduce illegal gold into the formal market, providing formal documentation to further links of the supply chain.

# Gold Traceability: challenges

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- ❖ Weak regulation and deficient enforcement.
- ❖ Opaque source in the PLG regime.
- ❖ Regulatory gaps in regards to chain a custody (transportation and initial transactions)
- ❖ .Informal records of the initial transactions. Paper invoice.
- ❖ Self declaratory records not followed by source monitoring.
- ❖ Presumption of good faith.
- ❖ Human and structural resources for monitoring and enforcement. Budgetary constrains.

# Gold Traceability: proposals

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- ❖ The need to strengthen regulation and effective enforcement.
- ❖ Create records, registry and improving data collection by governmental agencies.
- ❖ Self declaratory records need to be checked (transparency of source).
- ❖ Adequate sanctions to fraud and false declarations.
- ❖ Creating due diligence schemes to each link of supply chain. No presumption of good faith.
- ❖ Investment in human and institutional resources (including the best technology available) for effective control measures.
- ❖ Certification methods.
- ❖ Coordination with correlated policies\*\*\*.

# Recent efforts to strengthen regulation and monitoring

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- ❖ Proposals to strengthen regulatory framework: BACEN Res. 5008, 2022 (DTVM); ANM Res. 103, 2022 (1st buyer's registry)
- ❖ Electronic and digital invoice (RFB IN. 2138, 2023).
- ❖ No presumption of good faith for those who buy gold (STF, ADI 7345 and 7273, the constitutionality control of Lei 12.855, 2013, art. 39, §4º).
- ❖ ANM Res. 129, 2023 (prevention and deterrence of money laundering, terrorism finance and uncontrolled gun market).
- ❖ The use of new technology to deter crimes associated to illegal mining in the Amazon Forest.
- ❖ PL 2159, 2022 (proposal for new rules for the gold market) and studies for a "MP do Ouro" (presidential order to change the rules).



# Normative reference

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- ❖ Legislação criminal Código Penal, Lei 4947/66 (Lei da invasão de terras públicas), Lei 9.605/98 (Lei de Crimes Ambientais), Lei 9.613/98 (Lei de Lavagem de Capitais), Lei 12.128/2013.
- ❖ ANM Res. 37, 2020 (guia de utilização), Res. 37, 2021 (regras de fechamento), Res. 85, 2021 (aproveitamento de rejeitos), Res. 90, 2021 (garantia de aporte financeiro), Res. 94, 2022 (classificação de recursos e reservas) and Res. 95, 2022 (segurança de barragem), Res. 103, 2022 (cadastro de primeiro adquirente de PLG), Res. 106, 2022 (certificado Kimberley), Res. 129, 2023 (regulamenta a Lei de Lavagem).
- ❖ RFB IN. 2138, 2023

