

ASM OF GOLD – PERU: Experiences, Lessons and Proposals

Augusto Cauti

**Independent International Consultant /
Former Vice Minister of Mines of Peru**

Lausanne, Switzerland – 2~~e~~3 May, 2023

Current situation



Imagen: Perú 21



Imagen: USI



Imagen: Proactivo



Imagen: MP



Imagen: FEMA

Current situation: ¿“informal” or illegal?

ECONOMÍA

OPERAN EN TODO EL PAÍS, SOBRE TODO EN LA EXTRACCIÓN DE ORO

Minería ilegal e informal mueven US\$ 4,000 mlls. al año en el Perú

La minería informal está en todas las regiones del territorio peruano. Mueve US\$ 4,000 millones al año e influye en miles de economías locales. Gestión mapeó en qué zonas opera y dimensionó su verdadero alcance.

ALESSANDRO AZURÍN ASTORGA
alessandro.azurin@diariogestion.com.pe

Se suele pensar en Madre de Dios como el único foco de minería ilegal e informal en el país. No es verdad. Esta actividad alcanza a todo el territorio, sin excepción.

El Registro Integral de For-

malización Minera (ReInfo) y los Reportes de Operaciones Sospechosas (ROS) de la Unidad de Inteligencia Financiera (UIF) son fuentes oficiales que permiten mapear la extensión de la actividad minera ilegal e informal a lo largo del país, así como sus puntos más ‘calientes’.

Miles de millones

La minería ilegal de oro es la economía ilícita peruana que más dinero mueve al año, con US\$ 1,777 millones, de acuerdo al libro “Laseconomías criminales y su impacto en el Perú”, elaborado por Capital Humano y Social y la fundación

Según el *Anuario Minero 2021* del Minem, la producción aurífera del Perú en el 2021 fue de 97,3 toneladas métricas finas (TMF), un aumento del 10,5 % en comparación a similar periodo del 2020 (87,1 TMF). En conclusión, si la producción aurífera del Perú en el 2021 fue de 97,3 TMF y si tomamos como referencia que la producción ilegal de oro llegó al 29 % del total de la producción formal en el 2019 (Macroconsult S. A., 2019); entonces, la producción ilegal de oro en el 2021 fue de aproximadamente 28 TMF, valorada, a un precio de USD 1799 ozt (Consejo Mundial del Oro), en aproximadamente USD 1777 millones en manos de los mineros ilegales.

Monto involucrado en los Informes de Inteligencia Financiera por Delito Precedente (enero de 2013 a febrero de 2022)

Posible Delito vinculado	Acumulado: ene 2013 a feb 2022		12 meses: mar 2021 – feb 2022	
	N° de IIF	Total Millones US\$	N° de IIF	Total Millones US\$
Minería ilegal	61	7301	1	111
Defraudación tributaria	48	1502	9	89
Delitos contra la administración pública (corrupción de funcionarios y enriquecimiento ilícito)	168	1378	15	27

Conceptual situation

ASM (“MAPE”)

Artisanal mining

Small mining

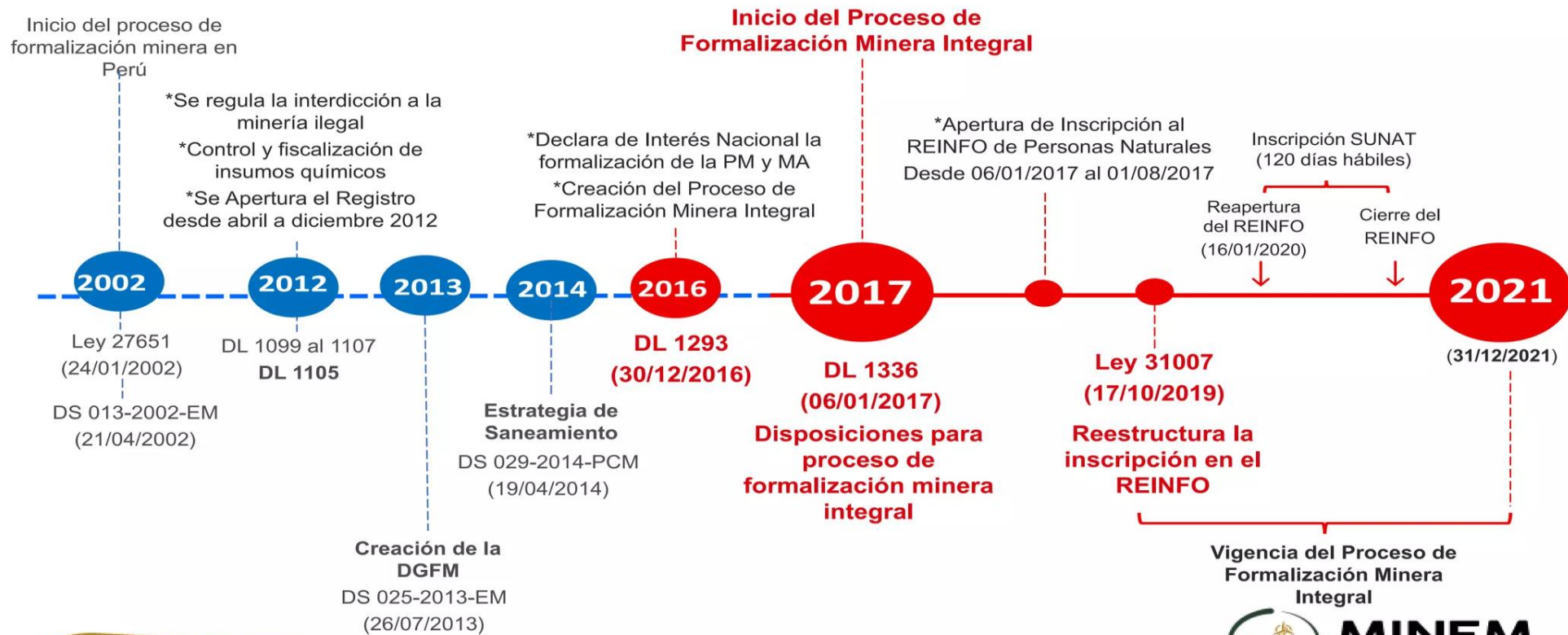
Informal mining

Informal mining in process
of formalization

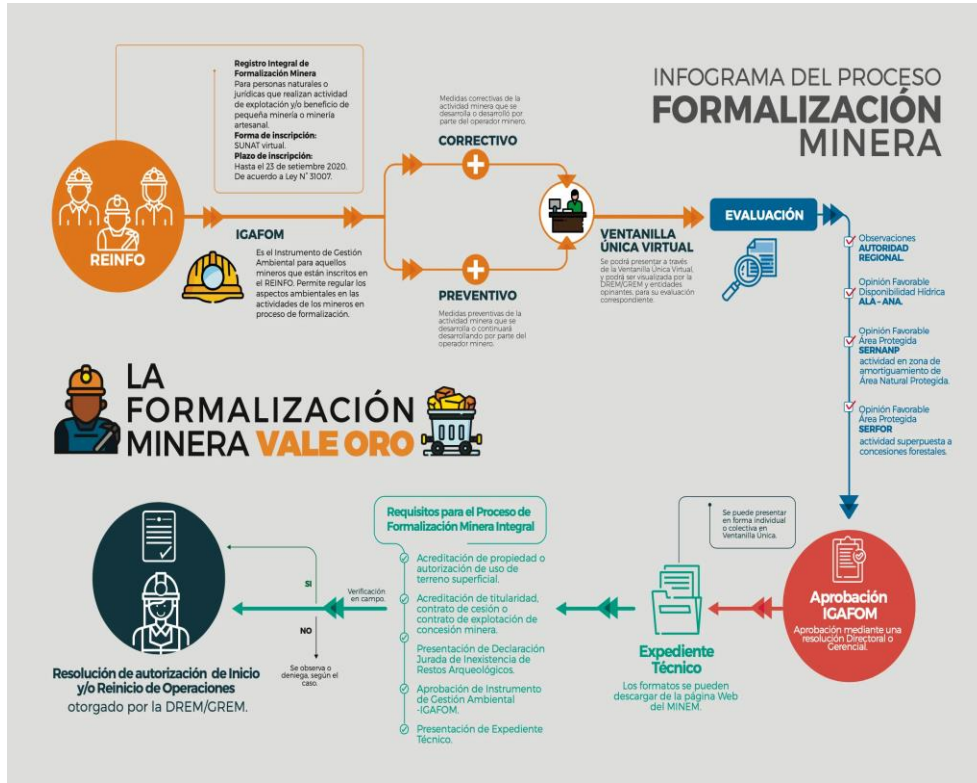
Illegal mining

Legal framework

Evolución del Marco Legal del proceso de formalización minera en el Perú



Administrative proceedings



Infografía: SwissBetterGold Initiative

La interminable ampliación del proceso de formalización minera



Infografía: Interacción Ambiental

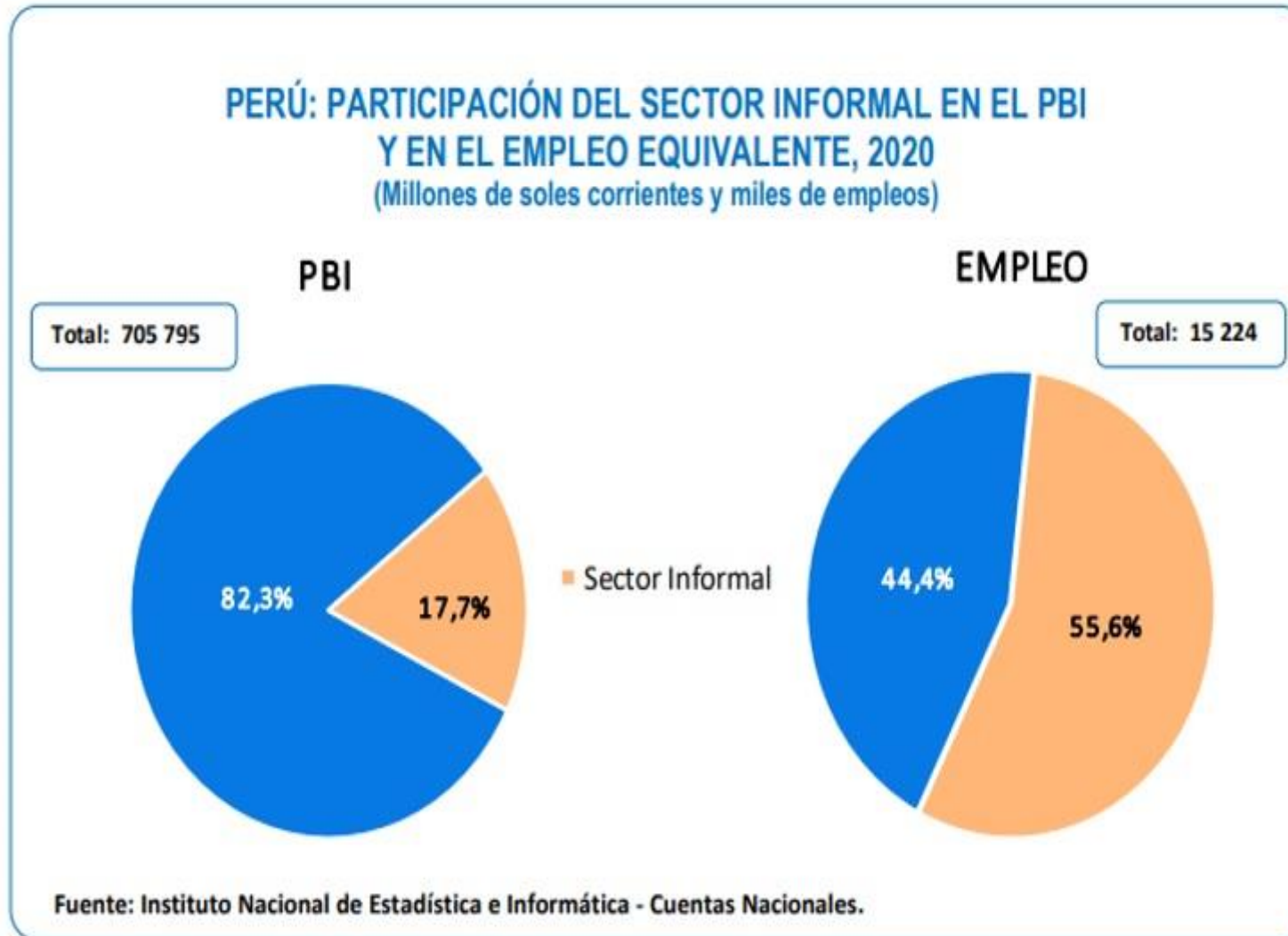
Avances del proceso de formalización minera



* Sin incluir a Madre de Dios

Saleman Consultores, Instituto Redes de Desarrollo Social, MEM

Informal economy within the country

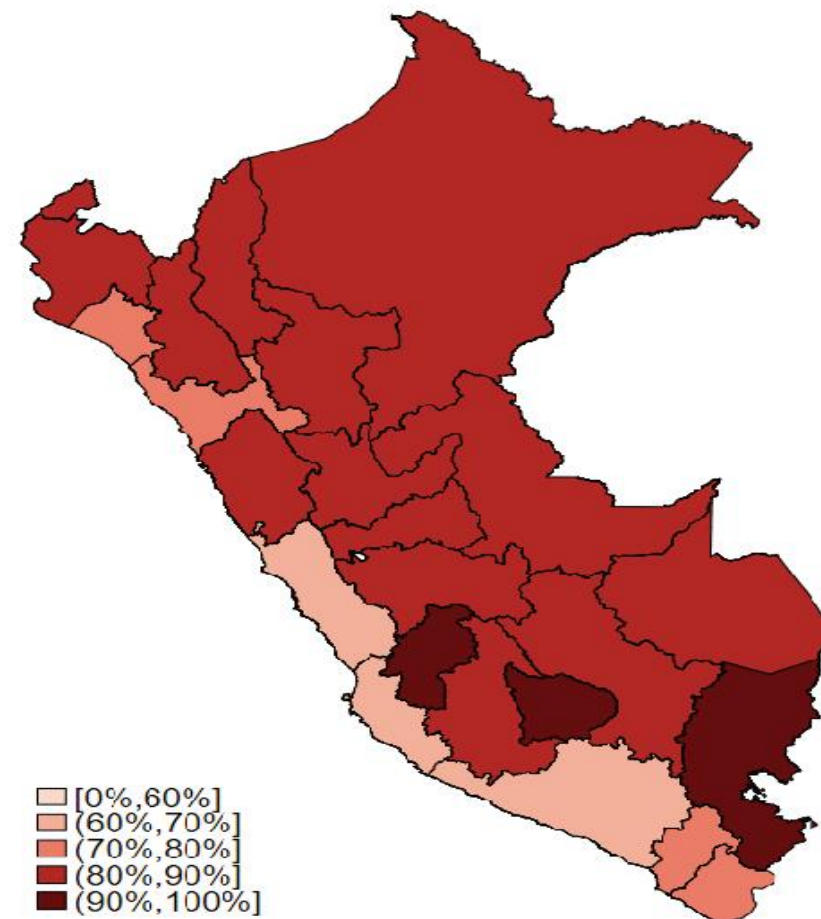


Labor informality in the regions

Empleo informal en 2021, según departamentos

Departamento	Empleo informal	Empleo formal	% informalidad
Huancavelica	285,677	15,700	94.8%
Apurímac	258,709	26,951	90.6%
Puno	802,275	85,607	90.4%
Huánuco	442,361	49,863	89.9%
Cajamarca	818,747	97,255	89.4%
San Martín	480,624	57,363	89.3%
Ayacucho	350,918	44,274	88.8%
Amazonas	228,444	30,357	88.3%
Cusco	691,110	101,185	87.2%
Loreto	476,539	77,907	85.9%
Pasco	151,485	25,761	85.5%
Junín	636,958	109,813	85.3%
Ucayali	255,548	44,196	85.3%
Áncash	533,658	107,119	83.3%
Piura	831,693	180,855	82.1%
Tumbes	111,552	24,730	81.9%
Madre de Dios	74,937	18,234	80.4%
Tacna	141,822	40,292	77.9%
Nacional	13,156,308	3,963,833	76.8%
Lambayeque	505,218	157,938	76.2%
La Libertad	716,950	261,340	73.3%
Moquegua	75,260	32,092	70.1%
Arequipa	473,770	211,513	69.1%
Ica	297,504	133,186	69.1%
Lima	3,190,959	1,832,638	63.5%
Callao	323,592	197,662	62.1%

Informalidad laboral en 2021



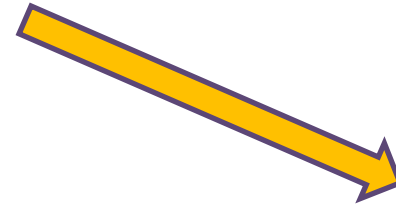
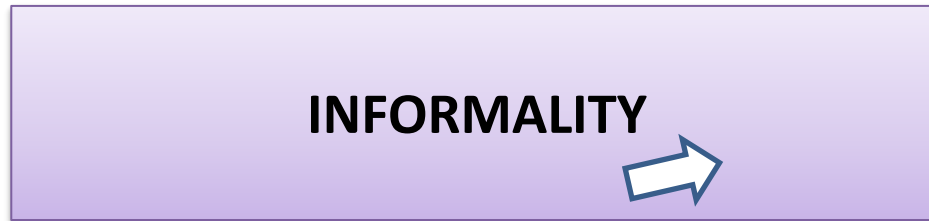
Fuente: Enaho. Elaboración: ComexPerú.

In a nutshell...

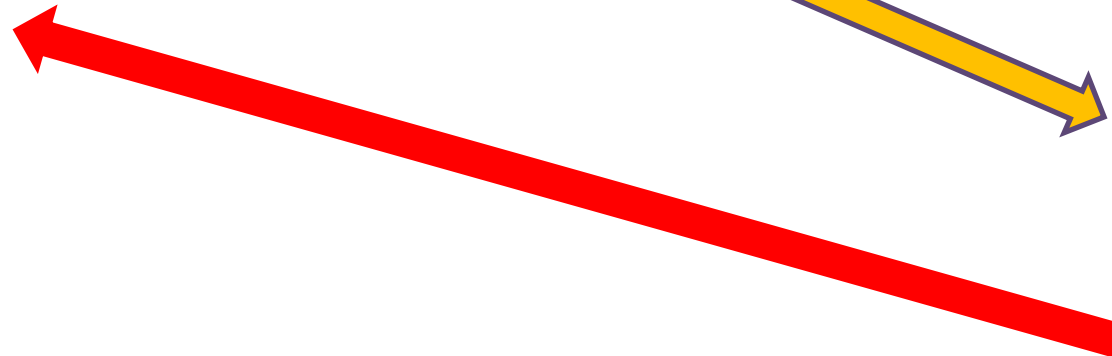
80% of GDP and
26% of employment



20% of GDP and 74% of employment



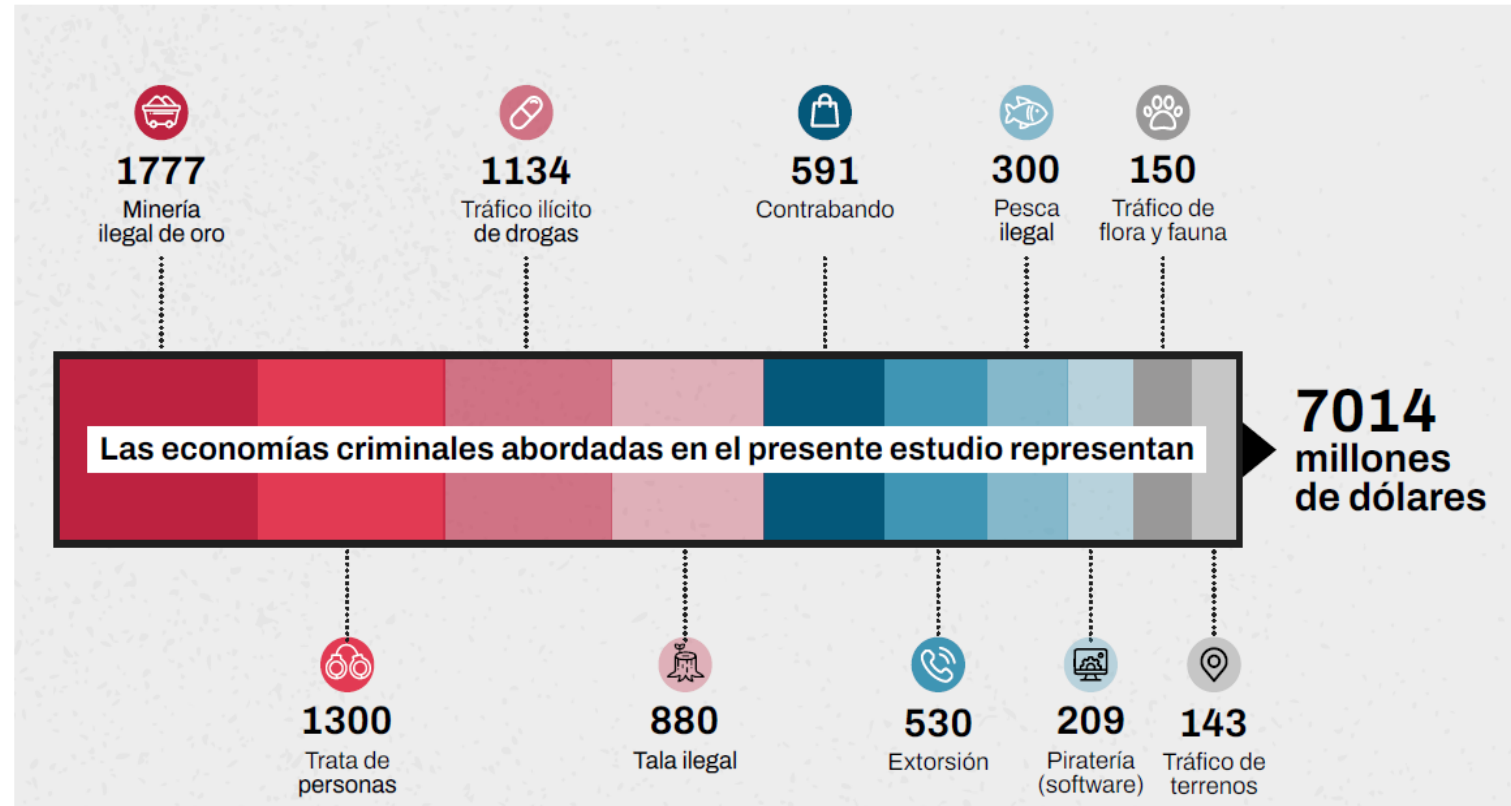
Tendency to grow
due to deterioration
of the family
economy, public
sector
mismanagement,
lack of security



Illegal economies in Peru

Figura 14

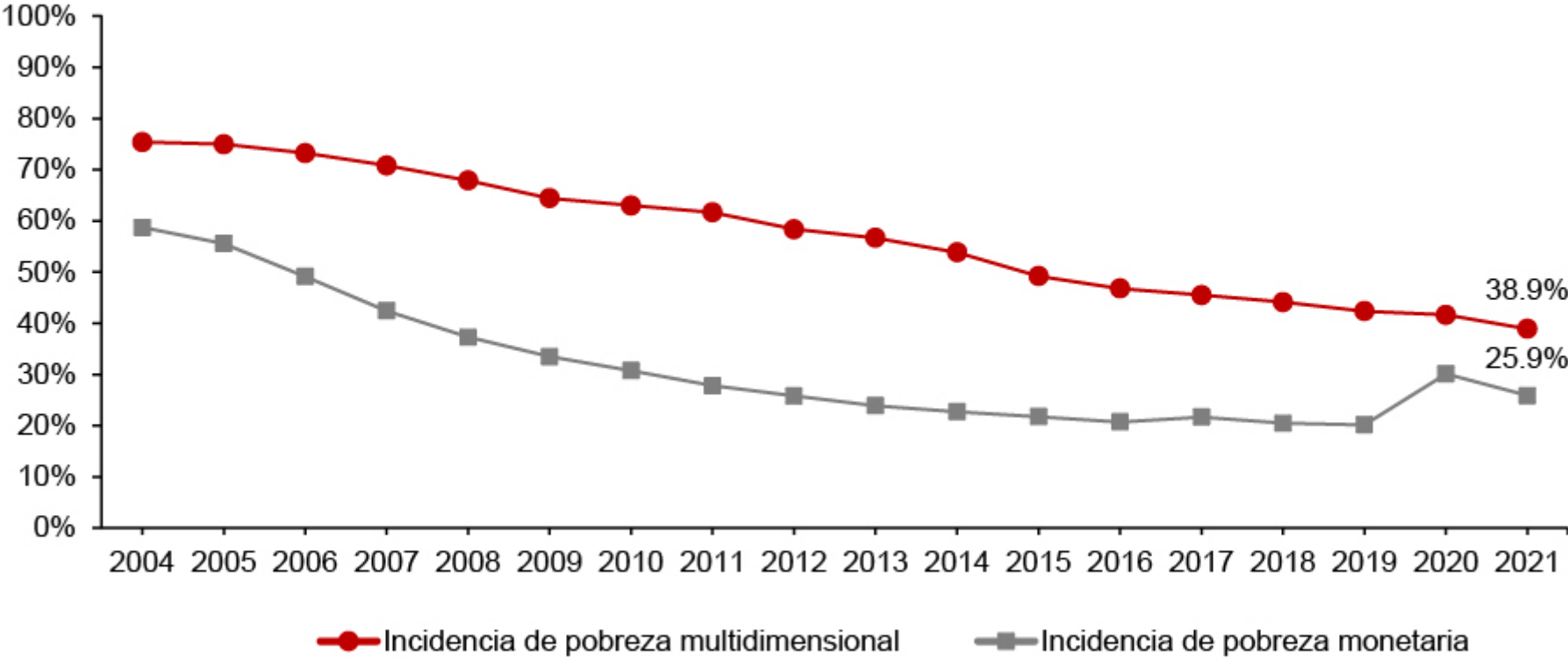
Piso estimado del tamaño anual de la economía criminal en el Perú



**Estimated size
of criminal
economies**

Poverty – evolution at national level

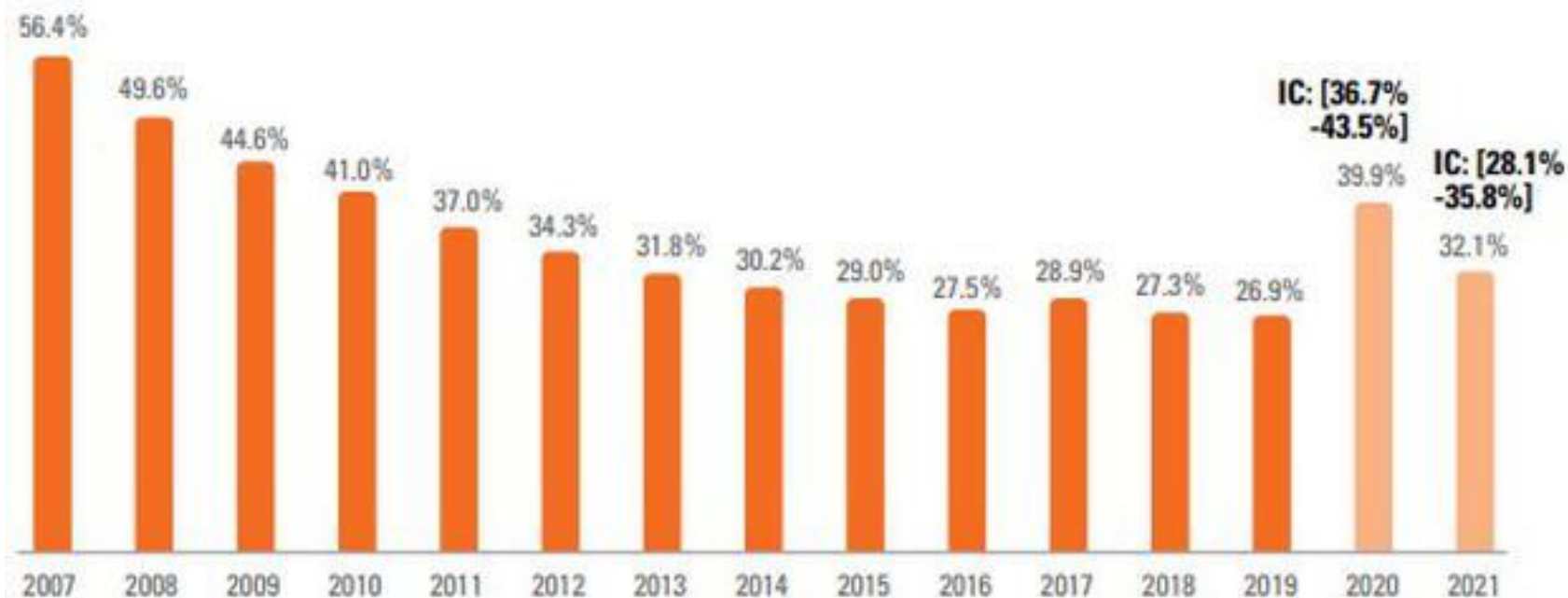
Evolución de la pobreza en el Perú (% de la población)



Fuente: Enaho. Elaboración: ComexPerú.

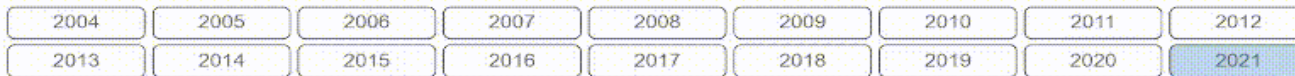
Poverty – vulnerable people (national level)

Figura 7. Estimación de la pobreza monetaria en niñas, niños y adolescentes (2020-2021)



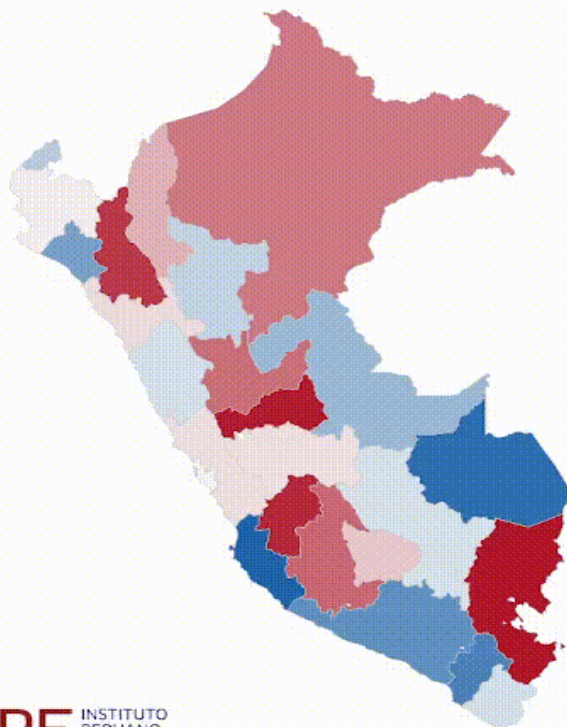
Nota: Estimaciones consideran el intervalo de confianza al 95%.
Fuente: ENAHO (2007-2019).

Poverty – evolution at regional level

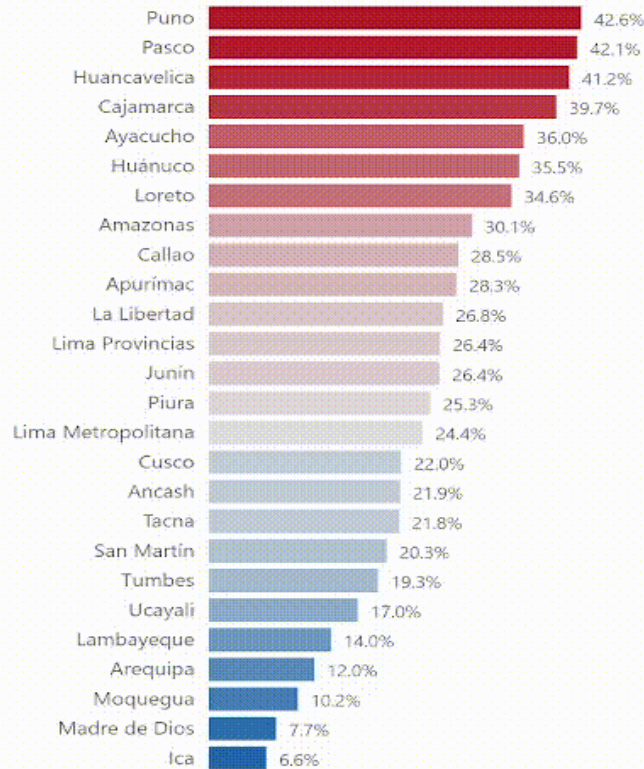


2021

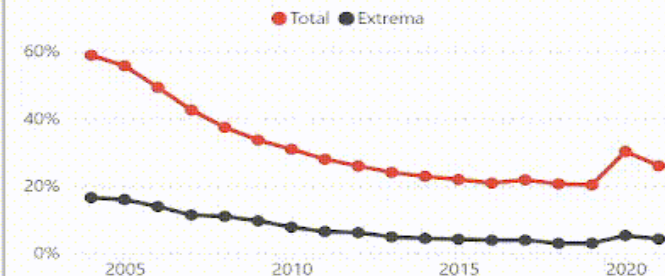
Mapa de pobreza regional



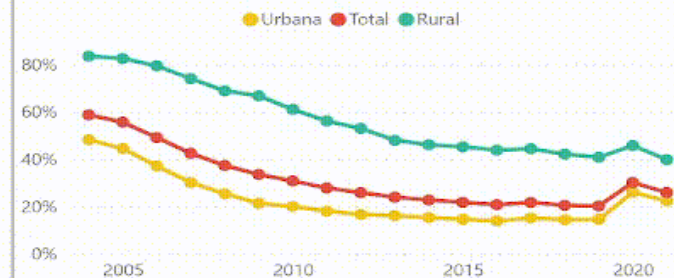
Pobreza total según regiones



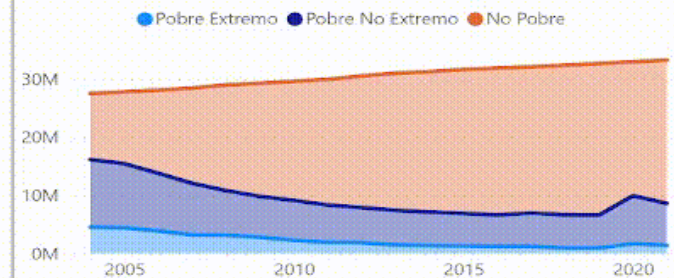
Pobreza total y pobreza extrema, 2004-2021



Pobreza total según área, 2004-2021



Población según condición de pobreza



Low caps. in Gov. - Political instability - Corruption



From 11 presidents since the end of the military regime (1980), 9 were convicted, are stained with scandals, or have ongoing prosecution investigations.



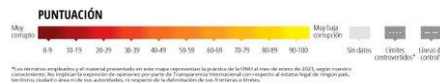
Peru : Six presidents in the last 6 years.

ÍNDICE DE PERCEPCIÓN DE LA CORRUPCIÓN 2022

AMÉRICAS

43/100

PUNTUACIÓN PROMEDIO



PUNTUACIÓN	PAÍS/TERRITORIO
74	Canadá
74	Uruguay
69	Estados Unidos de América
67	Chile
63	Barbados
64	Bahamas
60	San Vicente y las Granadinas
55	Dominica
55	Santa Lucía
54	Costa Rica
52	Granada
45	Cuba
44	Jamaica
42	Trinidad y Tobago
40	Guyana
40	Surinam
39	Colombia
38	Argentina
38	Brasil
36	Ecuador
36	Panamá
35	Perú
33	El Salvador
32	República Dominicana
31	Bolivia
31	México
28	Paraguay
24	Guatemala
23	Honduras
19	Nicaragua
17	Haití
14	Venezuela

The country continues to be disapproved on its fight against corruption, according to International Transparency.

#cpi2022

www.transparency.org/cpi

Este trabajo de Transparencia Internacional (2022) cuenta con licencia de tipo CC BY-ND 4.0

Mining in Peru

Mining represents:

- +14% of national GDP
- +16% of private investment
- +60% of total exports
- +5% of national formal employment
- +19% of corporate taxes
- +50% of electrical energy consumption
- +10 billion US Dollars transferred directly to regions between 2012-2022

Multiplier effect of mining employment:

It is estimated that 1 direct job in the sector generates 9 in the rest of the economy

Fuente: IPE

Worldwide mining production - Peru

- Leader –among, first positions- in metal production within Latin America and worldwide:

PRODUCTO	LATINOAMÉRICA	MUNDO
Oro	①	8
Cobre	②	②
Plata	②	②
Zinc	①	③
Plomo	①	4
Estaño	①	4
Molibdeno	②	4
Cadmio	②	8
Roca Fosfórica	②	10
Diatomita	①	5
Indio	①	6
Andalucita y minerales relacionados	①	4
Selenio	①	10

Fuente: USGS



Portfolio of mining projects "to be placed in valued"

- Portfolio of **47 mining projects** with a value of US\$ 53,715 MM.
- 71% of the total investment are **copper projects (27)** with an investment of US\$ 38,521 MM and 14% of **gold projects (6)** with an investment of US\$ 6,993 MM.
- The **northern macro-region** (Cajamarca, Lambayeque, La Libertad and Piura) concentrates **44.6%** of the total portfolio (US\$ 23,972 MM) and the **southern macro-region** (Apurímac, Arequipa, Cusco, Moquegua and Puno) concentrates **40.9%**, with an investment amount of US\$ 21,960 MM.

Fuente: Minem

Inversión minera según ubicación del proyecto			
Departamento	Monto de inversión (US\$ millones)	Número de proyectos	Participación
Cajamarca	18,494	6	34.4%
Apurímac	10,199	7	19%
Arequipa	5,817	4	10.8%
Moquegua	3,275	4	6.1%
Piura	2,950	2	5.5%
Áncash	2,889	5	5.4%
Cusco	1,880	2	3.5%
Junín	1,586	3	3%
La Libertad	1,485	2	2.8%
Ayacucho	1,319	1	2.5%
Lambayeque	1,043	1	1.9%
Puno	789	2	1.5%
Huancavelica	655	1	1.2%
Lima	560	2	1%
Pasco	345	2	0.6%
Amazonas	214	1	0.4%
Ica	140	1	0.3%
Huánuco	76	1	0.1%

Fuente: Minem. Elaboración: ComexPerú.

Impact from metal prices

COPPER

- The increase in copper demand has significantly increased the price of the red metal in recent years. Demand is gradually recovering as the economies are restarting.
- Regarding the opening price of copper on April 28, 2023, it is US\$3.888/lb per pound.



Fuente: BBC news

GOLD

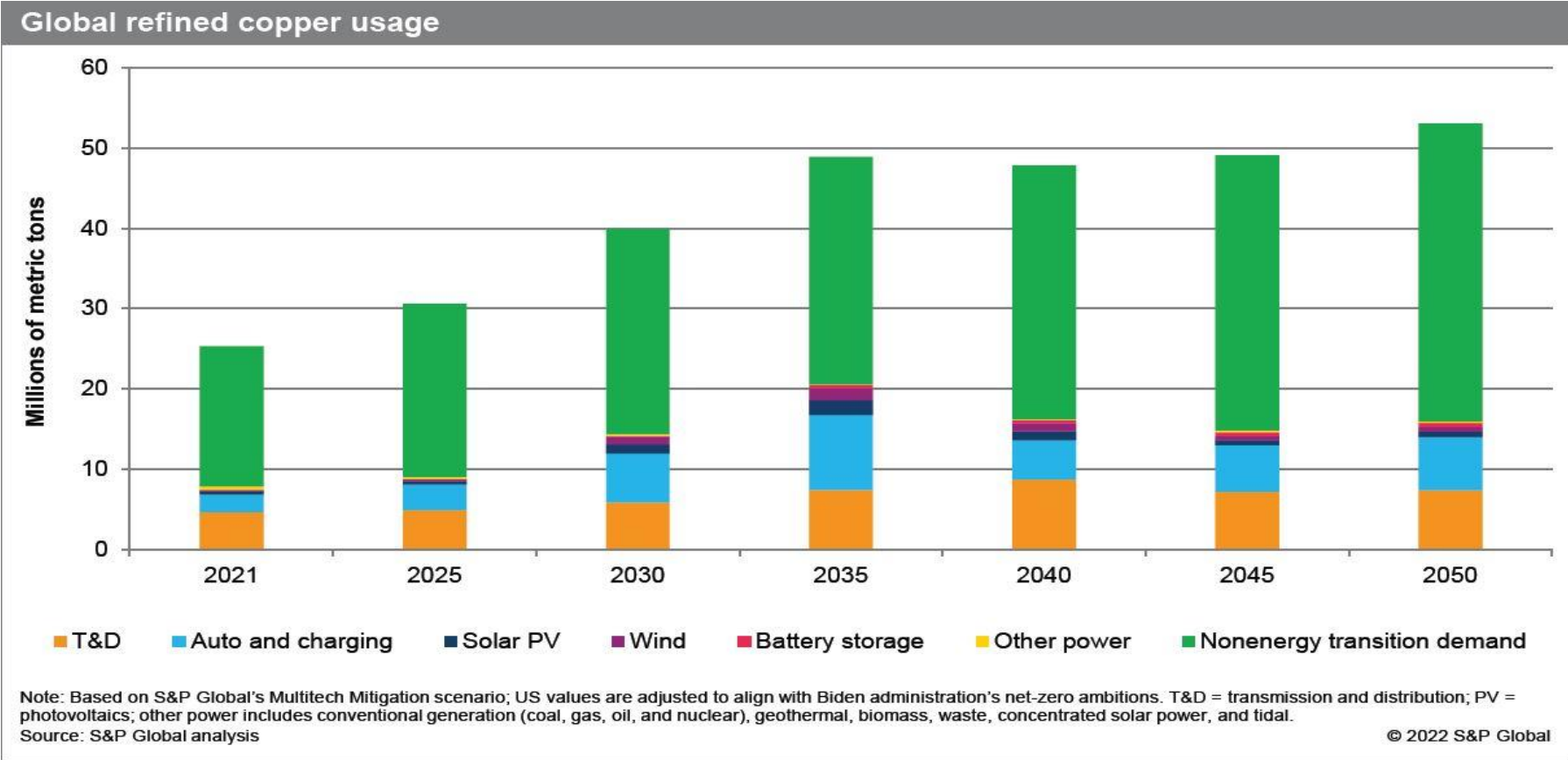
- The recovery of the Gold price responds to the refuge value of this precious metal in contexts of high uncertainty in the commodity market, wars, pandemics, fears of global recession.
- Regarding the negotiation price of gold on April 28, it was traded at \$1,989.50 per ounce.



Fuente: LME

Future impact due to metal demand

According to S&P, twice as much copper is needed in 2035 for accompanying the goals of Net Zero by 2050.



Future impact due to Gold demand

According to Australia and New Zealand Banking Group Limited (ANZ), the demand for gold in Asia and from the world's central banks will double by 2030, which will increase the price of this metal.



“Cooking” (Lessons, Experiences)



Peru: Formal, Informal and Illegal mining

- **Formal Mining.-** It is the activity carried out by an individual or legal entity, **who has authorization** to start or restart mineral exploration, exploitation and/or beneficiation activities and/or mining or beneficiation concession title, issued by the authority competent.
- **Informal Mining (in formalization).-** It is the activity carried out in areas that are not prohibited for mining activity by those individual or legal entities subject to the integral mining formalization process. They are **registered in the REINFO** (article 2.2 of Legislative Decree 1336).
- **Illegal Mining.-** Mining activity carried out without the authorization of the competent administrative authority or without being within the process of integral mining formalization or exercised in prohibited areas (article 34 of Legislative Decree 1451). **It's a crime.**

Causes of the problem

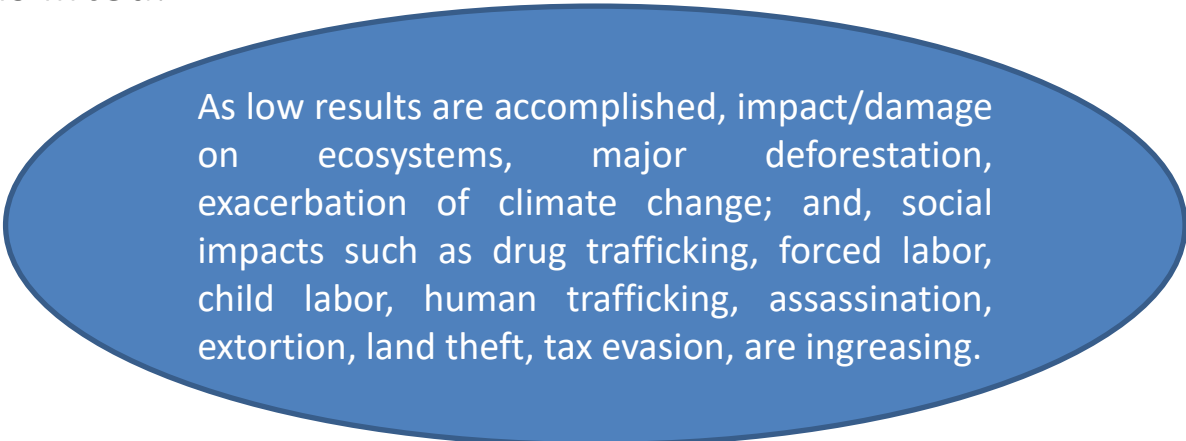
- Lack of studies on the number of informal and illegal miners
- Homogeneous vision of the whole issue –without distinctions, neither territorial differences, nor types of operation / linkages-
- Permanent regulatory changes in the formalization process and multisectoral public policies, lack of an integral public policy
- Weakness of state capabilities at all levels, specially in regional governments
- Poor articulation between public entities
- Lack of decision in the governing role of the State (despite decentralization)
- Fight against illegal mining generates tensions with miners in the process of formalization
- Problems in the gold chain in regards to supply chain and commercialization process

Formalization process: Lessons learned

- Two formalization processes in parallel: ordinary and extraordinary.
- REINFO reopening: April-December 2012; February-August 2017; January-September 2020.
- Last extension of term until December 31, 2024.
- The exception becoming the rule; the temporary becoming permanent.
- Incentives for the mining owner, i.e. reduction of the payment for the fees for its rights in the event that it signs exploitation or assignment contracts, are not enough; problems of coexistence between the development of the activity of the small-scale miner and the mining concession holder; reluctance and distrust of the owner to enter into exploitation contracts; delay in required technical opinions (ANA, SERNANP, SERFOR); few specialized professionals for preparing IGAFOM; delays in the adjudication of properties if property belongs to the State or in the identification of landowner to negotiate the land use if private.
- 20 years after the process began, there is no evidence of improvements in regards to environmental damage and risks, worker safety, improvements in the quality of life in the areas where these activities are carried out, retribution to the State through the payment of taxes, mining royalties and others, etc.

Formalization process: Results

- As of **September 2022**, the formalized **miners amount to 10,692**, while **87,851 miners are registered** in the Comprehensive Mining Formalization Registry (REINFO).
- Of this total of 87,851 registrations in REINFO, **only 24,356 are valid (27.72%)** and **63,495 are suspended (72.28%)**, among other aspects, for not presenting their Environmental Management Instrument (IGAC or IGAFOM).
 - The **suspension implies the cessation of the activity** until the reason for the suspension is lifted.



As low results are accomplished, impact/damage on ecosystems, major deforestation, exacerbation of climate change; and, social impacts such as drug trafficking, forced labor, child labor, human trafficking, assassination, extortion, land theft, tax evasion, are increasing.

REINFO – Lessons Learned

REINFO = Voluntary registration subject to subsequent verification.

✓ **Usually, the statement is not checked so:**

- It is unknown how many registered are active and how many who are active are not registered.
- Safety and environmental obligations are breached.
- Intermediaries appear with REINFO, without mining activity, who collect, transport or finance.

✓ **Acquired rights of mining concessionaires are violated by :**

- Failure to notify the owner about the formalization process (Third-party with legitimate interest).
- Using REINFO to invade third-party areas and/or mine in undeclared areas, exposing the real mining owner to invasions and mineral theft.
- Generate a high security risk by destabilizing formal mining operations and the rock mass.

“Stews” (Proposals, Recommendations)



A holistic approach to the process

Capabilities

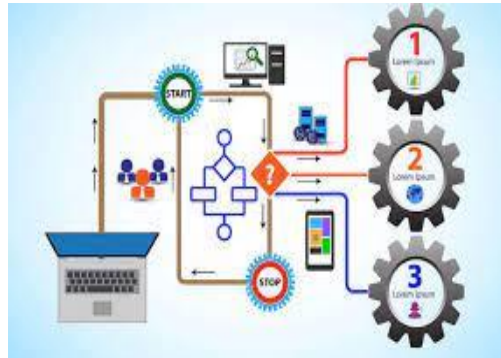


National government, regional governments

Supervision and control

Order, security and eradication

Administrative process



Technical and legal standards

Administrative simplification

Incentives, benefits

Information-Technology-Innovation



Environmental care

Economic and financial feasibility

Traceability

Proposals / Recommendations

- ✓ Define a **unique regime** to achieve the objective of formalizing and establishing **strict deadlines**
- ✓ **Simplify** the mining formalization process (digitalization, one-stop-shop).
- ✓ Provide incentives for the **use of clean technologies** (environmental improvements).
- ✓ Implement **formality promotion mechanisms** as created by DL 1336, mining fund (provide technical and business assistance) and certification "formal gold, Peruvian gold" (best prices for good practices).
- ✓ Facilitate **the identification and accreditation** of the **legal origin** of the mineral.
- ✓ **Reduce risks** for stakeholders involved in **the transport chain and the financing**.
- ✓ **Strengthen control and inspection mechanisms** for small-scale and artisanal miners, processing plants, and other traders.
- ✓ Look for **alternative development strategies** against illegal mining.
- ✓ Reinforce prevention strategy and fight **against illegal mining**, with greater inter-institutional coordination work.

A large yellow hydraulic crane is positioned inside a tunnel. The crane has the text "CAPACIDAD NOMINAL 3200 KG" on its side. Three workers in safety gear are visible: one is seated on the crane's platform, and two others are standing on a lower level, one pointing towards the crane. The tunnel walls are lined with concrete segments, and the ceiling features a series of lights.

**Merci
beaucoup!**