

*Chemicals and Waste Management
Beyond 2020 Series*

SESSION 3: SOUND MANAGEMENT OF CHEMICALS AND WASTE: ARTISANAL AND SMALL-SCALE GOLD MINING

Webinar powered by CoP Environment



UN
environment
programme



Photo: Chika Ohasi, UNDP Guyana



TODAY'S SPEAKERS



Tim Scott
UNDP



Evelyn Swain
GEF



Ludovic Bernaudat
UNEP



Susan Keane
NRDC



Baiq Dewi Krisnayanti
UNDP Indonesia



Mario Rodas
UNDP Ecuador



Kirsten Dales
planetGOLD+



Kasper Koefoed-Hansen
UNDP



Artisanal and Small-Scale Gold Mining

Background - Issues

- ▶ The sector is the **largest user and emitter** of mercury to the environment
- ▶ Informality
- ▶ Destruction of habitat, deforestation, encroachment in protected areas



Background – Why is mercury used

- ▶ Easy to use and to find
- ▶ Cheap
- ▶ Miners have no mining training
- ▶ Miners are not formalized
- ▶ Produces gold daily
- ▶ Miners are not aware of the risks
- ▶ Mercury is easily available, even in remote locations



Background – Mercury releases



During amalgamation



During roasting of the amalgam

Background – Alternatives exist

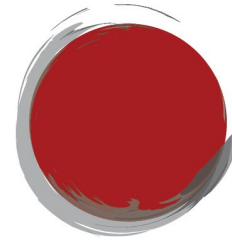


Background – Opportunities

- ▶ Unique employment opportunity for **rural** population
- ▶ Possible to do in a safe, environmentally friendly way
- ▶ When well managed, a means of **poverty alleviation**



Global Mercury Partnership



GLOBAL
MERCURY
PARTNERSHIP

- 92 partners from Academia, Member States, NGOs
- Numerous activities by partners, on a range of topics:
Hg-free technology, finance, responsible supply chains, mercury trade, remediation

Co-lead(s):

NRDC: Susan Keane

UNEP: Ludovic Bernaudat

UNIDO: Jerome Stucki

Minamata Convention

- ▶ ASGM has its own article (Article 7)
- ▶ Countries have to take steps to reduce mercury use in the sector
- ▶ Countries which declare the sector as “more than insignificant” have the obligation to develop a National Action Plan
- ▶ Annex C provides the structure of the NAP (largely taken from the Global Mercury Partnership ASGM area business plan)
- ▶ GEF provides funding for NAPs (to all) and ASGM work to parties



Links between Informal/Formal ASGM and SDGs

From: deHaan, J., Dales, K. and McQuilken, J. 2020. Mapping Artisanal and Small-scale Mining to Sustainable Development Goals. Newark, DE: University of Delaware (Minerals, Materials and Society program in partnership with Pact). Available online at www.pactworld.org and <https://sites.udel.edu/ceoc-mms/>



Thanks



Ludovic Bernaudat

ludovic.bernaudat@un.org



Making a world of difference
in small-scale gold mining.

A GEF Initiative

April 21, 2021

Overview of the planetGOLD Programme

Susan Keane
planetGOLD global coordinator

Supported by:



Led by:



In partnership with:



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



CONSERVATION
INTERNATIONAL

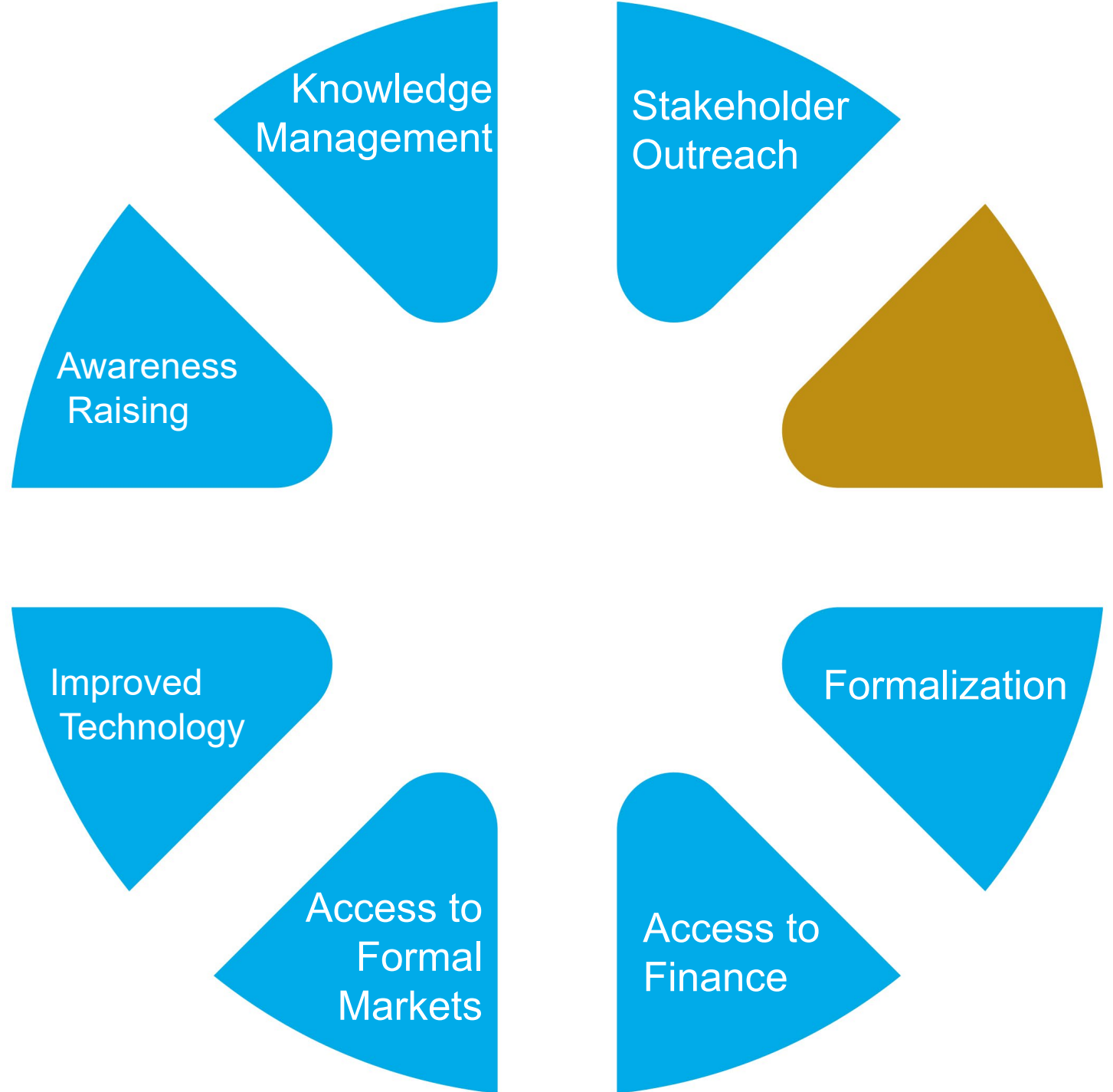


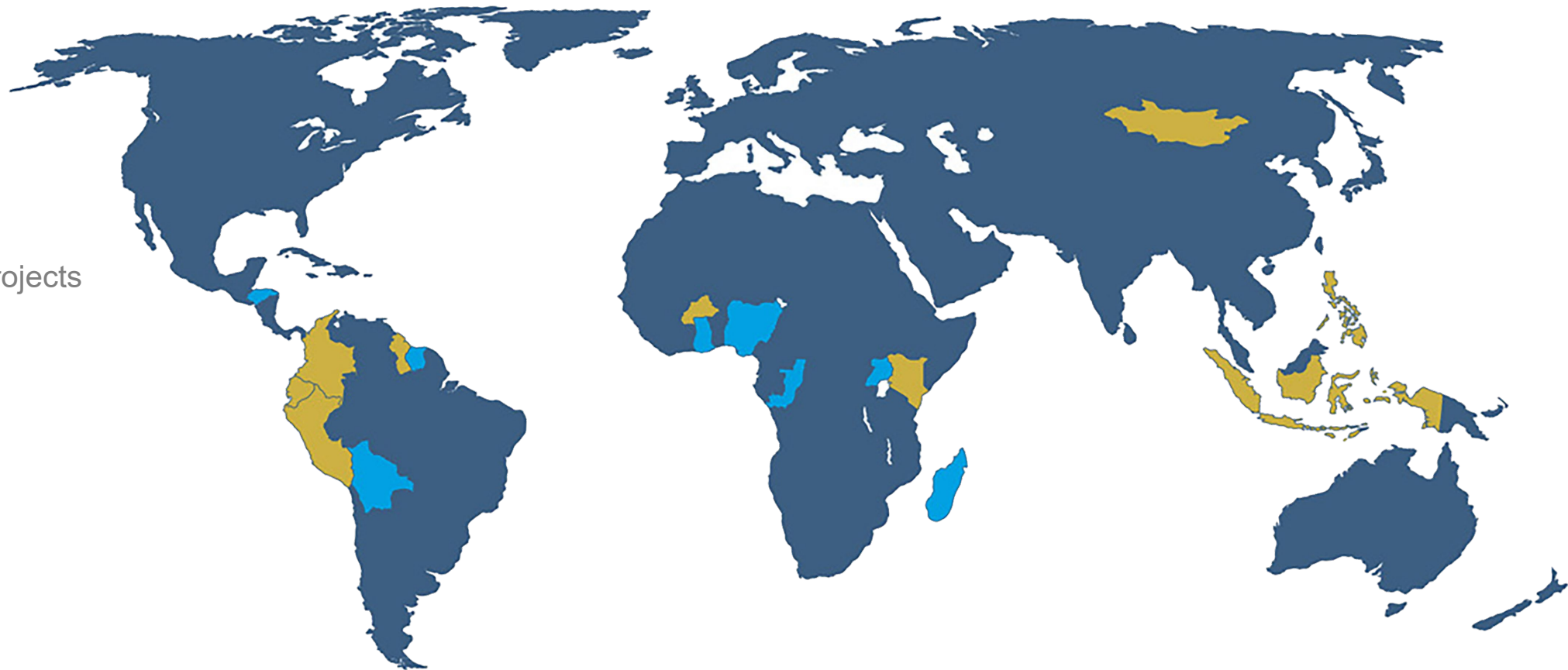
Mission:

To make small-scale gold mining safer, cleaner, and more profitable

Vision:

A clean global supply of gold from small-scale miners





 planetGOLD Active Projects

 Burkina Faso

 Colombia

 Ecuador

 Guyana

 Indonesia

 Kenya

 Mongolia

 Peru

 Philippines

 planetGOLD Projects in Development

 Bolivia

 Ghana

 Madagascar

 Suriname

 Congo

 Honduras

 Nigeria

 Uganda

Cooperation Among planetGOLD Projects

Global Project

Create knowledge repository; develop syntheses, guides and tools

Educate and facilitate contact with international finance and gold supply chain actors

Disseminate information to global community

National Projects

Test new approaches; document field experiences and lessons

Build capacity and facilitate contact with project beneficiaries

Disseminate information through in-country amplifiers





planetGOLD Programme Advisory Group

Large Scale Mining



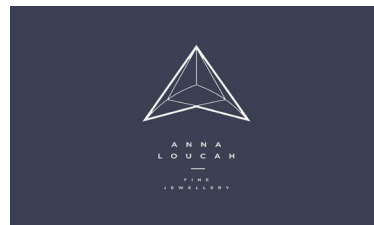
Academia



Governmental Entities



Jewelers



FUTURA
JEWELRY



Mining Finance

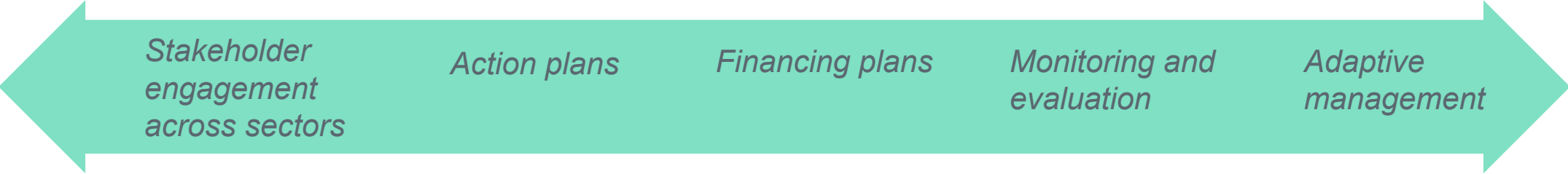
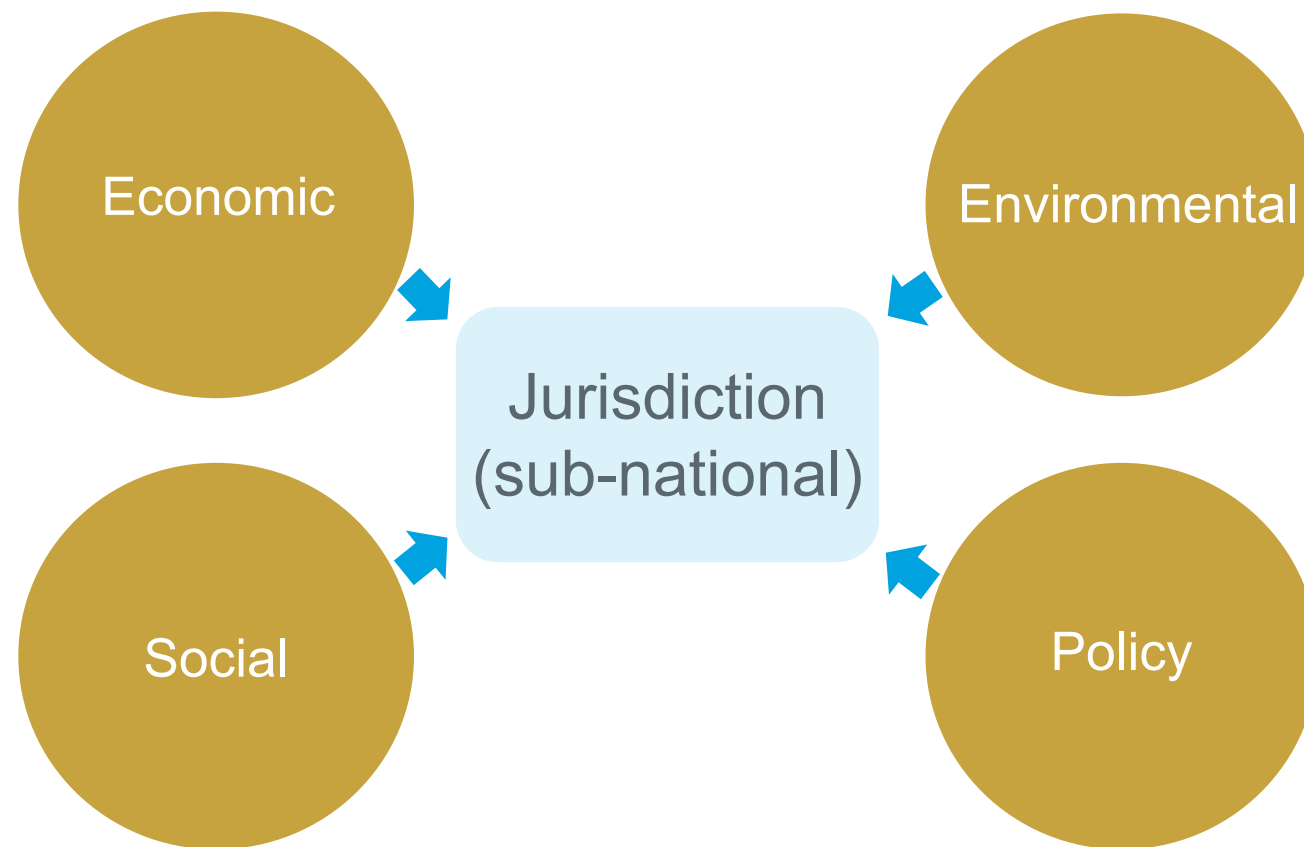


NGO/Social Enterprises



Refiners





*Stakeholder
engagement
across sectors*

Action plans

Financing plans

*Monitoring and
evaluation*

*Adaptive
management*

Thank you



Supported by:



Led by:



In partnership with:





Jakarta, 21st Aril 2021

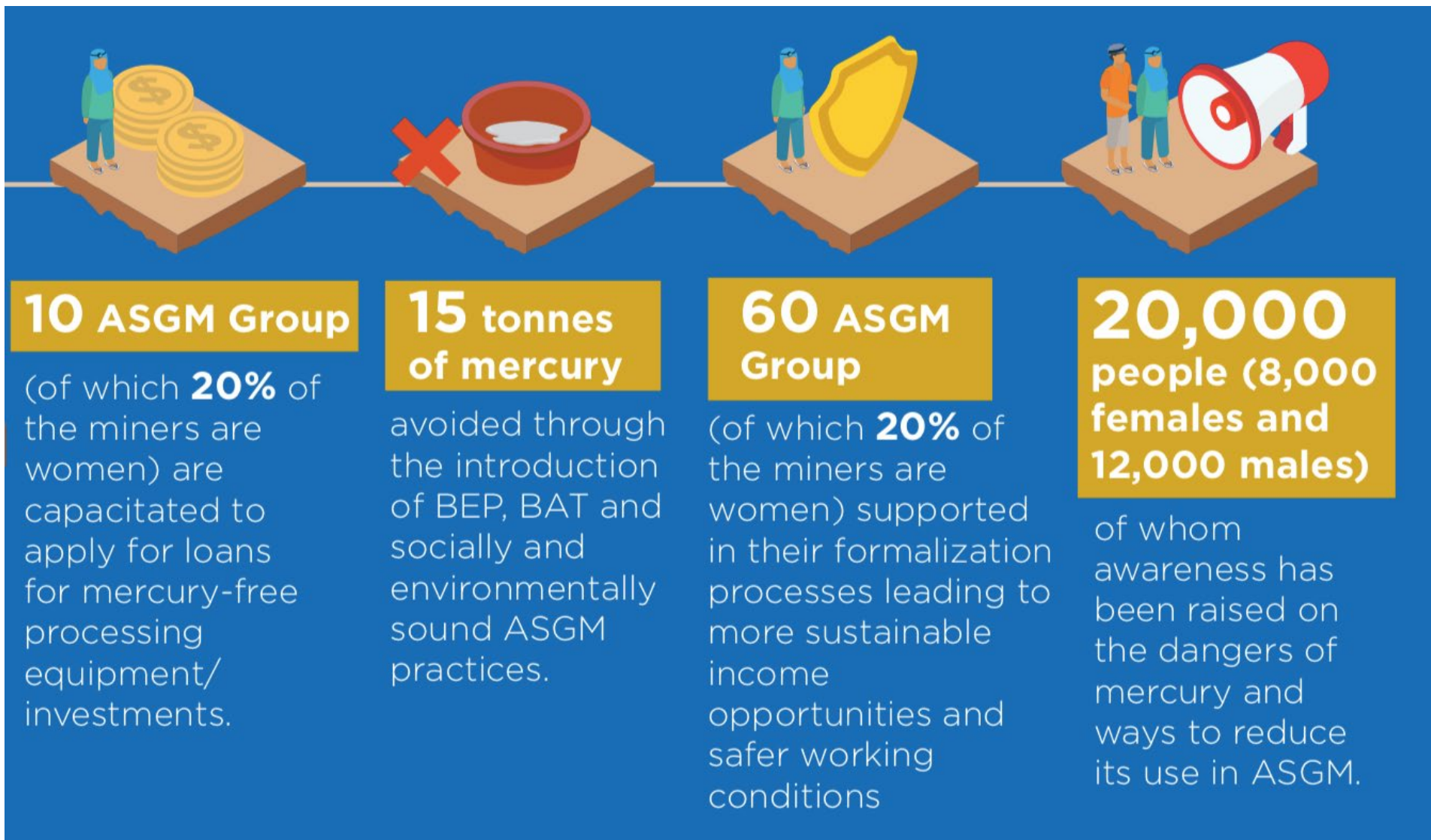
LESSON-LEARNED FORMALIZATION ON ASGM

BAIQ DEWI KRISNAYANTI
National Project Manager
UNDP Indonesia



*Empowered lives.
Resilient nations.*

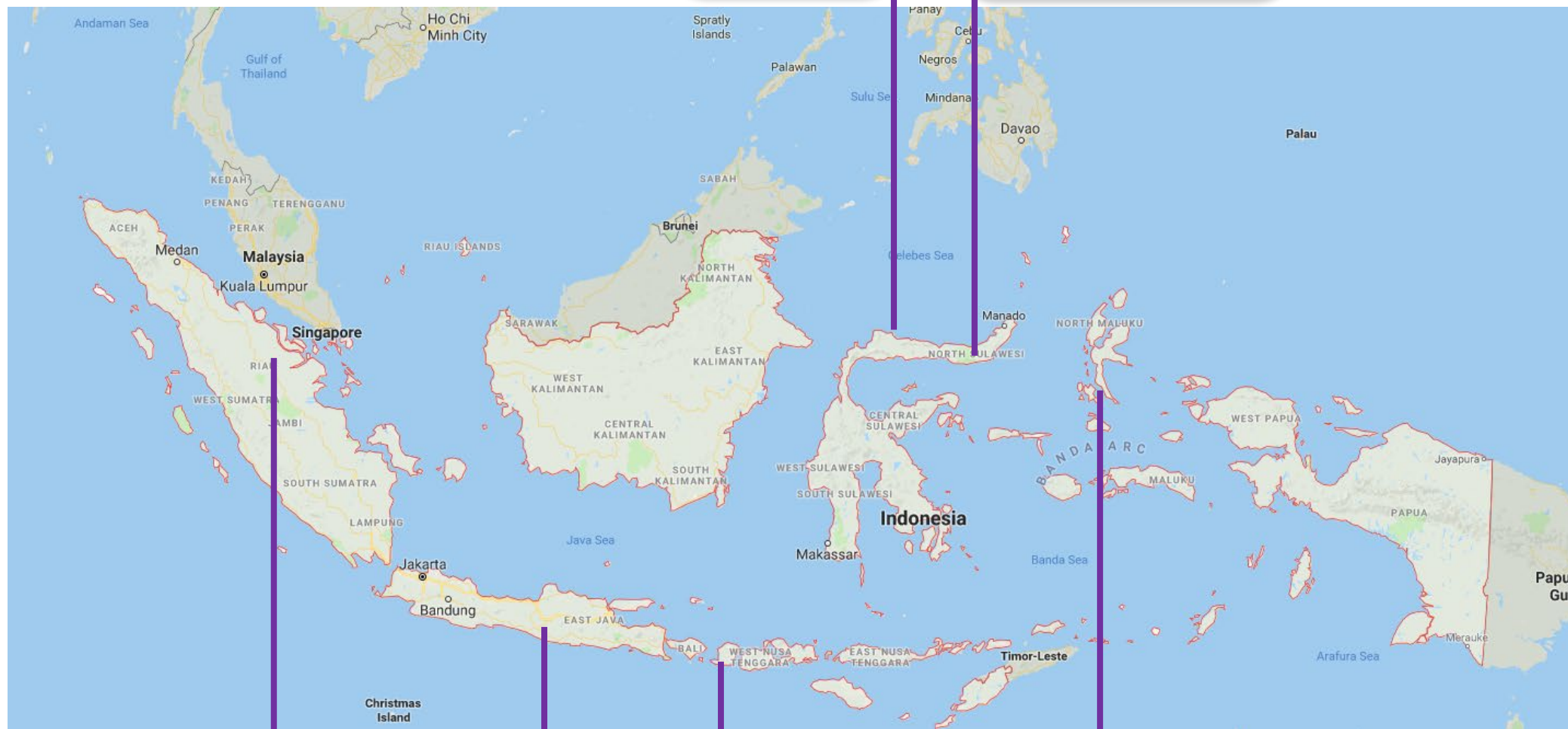
PROJECT TARGET



SIX (6) PROJECT SITES

Gorontalo

Manado
(Tatelu)



Riau
(Kuantan
Sangingi)

Yogyakarta
(Kulonprogo)

West Lombok
(Sekotong)

South Halmahera
(Pulau Obi)

FORMALIZATION

- Formalization of ASGM sector is one of the obligations of the Party under Minamata Convention.
- The process of formalization of ASM activities does not merely focus on the development and existence of legal, regulatory and policy frameworks for ASM, **BUT ALSO** on how it is successfully implemented, enforced, and in line with local context and communities.
- Formalization can be understood in the context of “absorbing existing customary practices--developed informally by miners--into the mainstream of a country's legal and economic affairs.”
- In this regard, formalization does not only involve bureaucratic process, but also technical assistance from government to miners, so that miners can practice more sustainable mining activities.

DEFINE THE FORMALIZATION SUPPORT

FORMALIZATION	LEGAL FRAMEWORK
MINERS COOPERATIVE	Improve the bankability of the sector; the miners' cooperative can be the holder of both IPR and IUI.
WILAYAH PERTAMBANGAN RAKYAT	Spatial Planning and Small-Scale Mining Rights
IPR	Granted for cooperative whose members are local residents
IUI	

LESSON-LEARNED



To expand the project scope by facilitating the establishment of new cooperatives to nearby project village



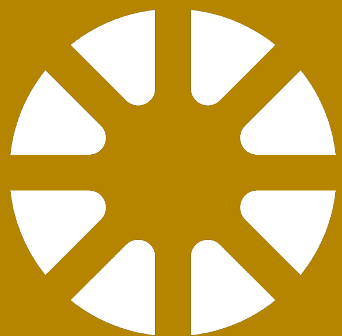
To assist the fulfilment of environmental permit



To support the completion of WPR proposals



Self-reflection and Strategies



THANK YOU



Financial mechanism

Access to finance for
artisanal and small-scale
miners - Ecuador

Competitive fund mechanism



MINISTERIO
DEL AMBIENTE

MINISTERIO DE
ENERGÍA Y RECURSOS NATURALES
NO RENOVABLES



Al servicio
de las personas
y las naciones



ASGM Sector

Mercury



29,097
people in
ASGM



Formal
82%



Informal
18%

COVID-19



30 tons
Hg / year

Small-scale mining:



960

Concessions

contribution from mining

+18 million

Represents

80%

of the production and
activity of the sector

Problems:

- Access to finance
- Low-tech processes
- Use of mercury (illegal)
- Low productivity
- Precarious working conditions
- Reduced formalization

Financial Mechanism



Poverty and gender:

ASGM sectors

Camilo Ponce



33% rural women
5-29 age



76% poverty
33% extreme poverty



Miners
66% men
34% women

Portovelo



17% rural women
5-34 age



60% poverty
19% extreme poverty



Miners
81% men
19% women

Paquisha



31% rural women
1-24 age



90% poverty
43% extreme poverty



Miners
89% men
11% women



Relevant data:

Access to finance

49%
Population over 15 yo



No accounts in the
financial system



52% of the population living in rural areas is
in a situation of financial exclusion



In rural areas, only **7** out of **100**
Ecuadorians have access to credit.



But they would like it...



72%
Miners
surveyed



**Want
financing**



**Credit for machinery
and tools**

Approximate amount:



\$50000

3 - 4 years



Access to

Barriers:

- No financial products for ASGM
- No credit history
- No proper guarantees

Proposed:

- Sector has large cash flows
- Adapt existing products
- Anchor company - “de-risking”

financing

Financing product

PNGQ proposal

Improves productivity and supply gold to BCE



Evaluates mining organization and authorizes loan

Competitive fund mechanism

Aim at women miners





PNGQ

Barriers:

- Lack of access to education
- They are heads of household
- Average monthly profit between \$ 75 and \$ 150
- They are not recognized by the mining law
- They mine in the waste material. Quality is reduced
- They depend on the goodwill of the mine owners

Proposed:

- CFM for projects up to \$50.000
- Projects promote alternatives to mining
- Projects are sustainable, replicable and involve communities

Proposal

Home garden project led by women mineral selectors



Infrastructure:

- Space donated
- 40 grow beds, a nursery garden and a chicken farm

Strengthening knowledge:

- Good agricultural practices,
- Commercialization,
- Marketing,
- Accounting and,
- Leadership.

From mining to goldsmithing



Infrastructure:

- Space donated
- Furniture, equipment, tools and supplies

Strengthening knowledge:

- Good goldsmithing practices,
- Jewelry design
- Commercialization,
- Marketing,
- Accounting and,
- Leadership.

Lecciones aprendidas



Financial product:

- Administrative processes... Time!
- Understand miners needs.
- Understand financial entities risk conception.
- Use existing financing products to design a new one.
- De-risking strategies.



Competitive fund mechanism

- Administrative processes... Time!
- Local IP enhances the results.
- Verify all legal permits.
- All initiatives in the ASGM sector must promote gender equality.
- Enhance the skills of women leaders.

Thank you



MINISTERIO
DEL AMBIENTE

MINISTERIO DE
ENERGÍA Y RECURSOS NATURALES
NO RENOVABLES



Al servicio
de las personas
y las naciones



EXTRACTING EQUALITY: GENDER & MINING

APRIL 21, 2021

KIRSTEN DALES

INDEPENDENT CONSULTANT
NAIROBI, KENYA

 planetGOLD Active Projects

 Burkina Faso

 Colombia

 Ecuador

 Guyana

 Indonesia

 Kenya

 Mongolia

 Peru

 Philippines

 planetGOLD+ Projects in Development

 Bolivia

 Congo

 Ghana

 Honduras

 Madagascar

 Nigeria

 Suriname

 Uganda

A woman wearing a blue headscarf and a red and white patterned dress is pouring water from a yellow jerrycan into a wooden water filter structure. The structure is made of wood and has a mesh screen. The background shows a dirt hill and green trees under a clear blue sky.

Gender is a
socio-cultural norm that is
learned or acquired.

Gender is the socially
constructed difference
between men, women,
boys and girls.

GENDER EQUALITY: WHY IT MATTERS

5 GENDER
EQUALITY



What's the goal here?

To achieve gender equality and empower all women and girls.

Why?

Women and girls represent half of the world's population and therefore also half of its potential. But, today gender inequality persists everywhere and stagnates social progress.



"Gender inequality remains a major barrier to human development".

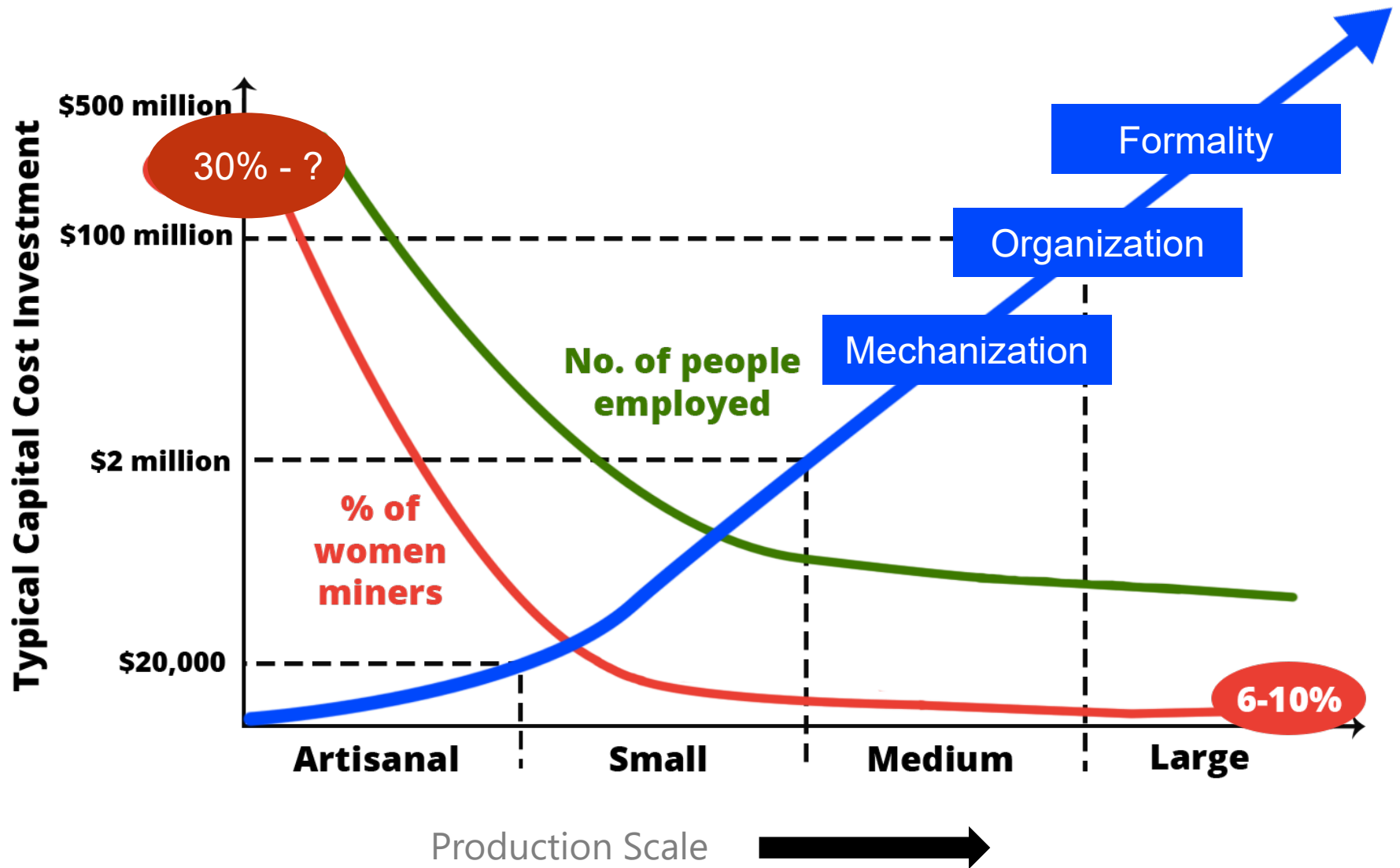
- UNDP (2010)



**Women are over-represented
in informal and vulnerable
employment.**

**Risks extend beyond
chemical exposures.**

Distribution of impacts and benefits: Production Scale



Analyzing Gender Equality in ASGM communities



Gender-disaggregated data can include the percentage of the workforce (male/female), their role in supply chains and salary levels.



Sex-disaggregated data would focus on the sex-specific differences in (e.g. impact of chemical exposures in the workplace).



FORMALIZATION

Efforts to formally regulate artisanal and small-scale gold mining have proliferated in recent years, with state and donor-funded interventions unfolding worldwide.

Engage local stakeholders throughout the formalization process

Geoprospect
and allocate
land for ASGM

Facilitate
miners'
organization

License and
regulate ASGM

Organize the
supply chain

Facilitate access
to finance, markets,
and services

Monitor and
enforce ASGM
regulations

Provide continuous support to ASGM actors

5 GENDER EQUALITY



**What happens if gender
equality is not ensured?**

Investigating identity factors among ASGM actors can help to understand gender-based risks, develop mitigation measures, and identify opportunities for promoting gender equality and women's empowerment.

GENDER DIMENSIONS IN ASGM



Women adopt ancillary roles that undermine or 'negate' their socioeconomic contributions.



Gender disaggregated access to and control over resources and their benefits



Formalization can institutionalize power asymmetries, gender inequalities and gender stereotypes that disadvantage women.



ADVANCING GENDER
EQUALITY IN ASGM
FORMALIZATION

Women represent an emerging economy in the ASGM sector but require safeguards to protect their full human rights and labour market potential.



FINANCIAL INCLUSION

Solution for the unbanked (people/entities who do not have access to affordable financial products/services) that meets local need and is delivered in a responsible way.



Women in ASM

Investing in women's economic empowerment and political participation in development sets a direct path towards gender equality, poverty eradication, and inclusive economic growth in ASM.

**EMPOWER &
PROTECT**





MERCURY-FREE TECHNOLOGIES

Facilitating the transition from mercury use in ASGM production systems through the adoption and diffusion of resource efficient gravity concentration and leaching circuits.



**What are the roles of
women and men in ASGM
villages of Mikei, Osiri and
Kabobo, Migori Kenya?**

**GENDER
ROLES**



In Mikei, Osiri and Kabobo Villages:

Women comprise **38-50% of the workforce** but due to division of labour only receive **11-15% of revenues**.

Women are not allowed to extract ore directly or own processing facilities – especially reprocessing of tailings.

Women form groups to crush, batch process ore in rented mills, sluice and amalgamate concentrated ores.













KNOWLEDGE SHARING & CAPACITY BUILDING

Knowledge sharing, communications and local capacity-building efforts with a decentralized focus of human capital investments to 'leave no miner behind'.



Experience shows that interventions that do not account for gender dimensions can create unintended, damaging impacts on **vulnerable populations...**

leaving artisanal miners behind

5 GENDER EQUALITY



Potential impacts can include:

- Worsening of **power imbalances between men and women** through formalization and organization efforts;
- Loss of **economic opportunities** for women including through mechanization and discriminatory practices;
- Disproportionate **health burdens (i.e., mercury or chemical exposure)**
- Heightened risks of **gender-based violence** for women and girls.
- Unequal access to **training and capacity building** opportunities.

EXTRACTING EQUALITY: GENDER IN ASM



Advance women's equal participation as decision-makers in shaping formalization.



Empower women to realize their full and equal human rights in mineral value chains.



Reduce gender inequalities in access to and control over resources and their benefits.



THANK YOU

STAY TUNED FOR OUR NEXT SESSION
IN MAY