



Mapping Artisanal and Small-Scale Mining to the Sustainable Development Goals

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Access the full report [here](#)



Recommended citation: Jorden de Haan, Kirsten Dales & James McQuilken. "Mapping Artisanal and Small-scale Mining to the Sustainable Development Goals." Mining & the SDGs: ASM and LSM perspectives. Presentation for online webinar by the UN Sustainable Development Solutions Network, Responsible Mining Foundation, Columbia Center on Sustainable Investment, Pact, and University of Delaware. 15 October 2020.

Findings

‘INFORMAL’

FORMALIZATION PROCESS

‘FORMAL’



Positive contributions to nearly all SDGs, but also **negative impacts**

Formalization **mitigates negative impacts** and **amplifies positive impacts** on the SDGs



IMPACTS

POSITIVE



NEGATIVE



POSITIVE & NEGATIVE



Comprehensive formalization *process*

Engage local stakeholders throughout the formalization process

Geoprospect
&
allocate land
for ASM

Facilitate
miners'
organization

License &
regulate ASM

Organize the
supply chain

Facilitate
access to
finance,
assistance &
markets

Monitor &
enforce ASM
regulations

Provide continuous support to ASM actors

UNITAR & UNEP (2018) Formalization Handbook

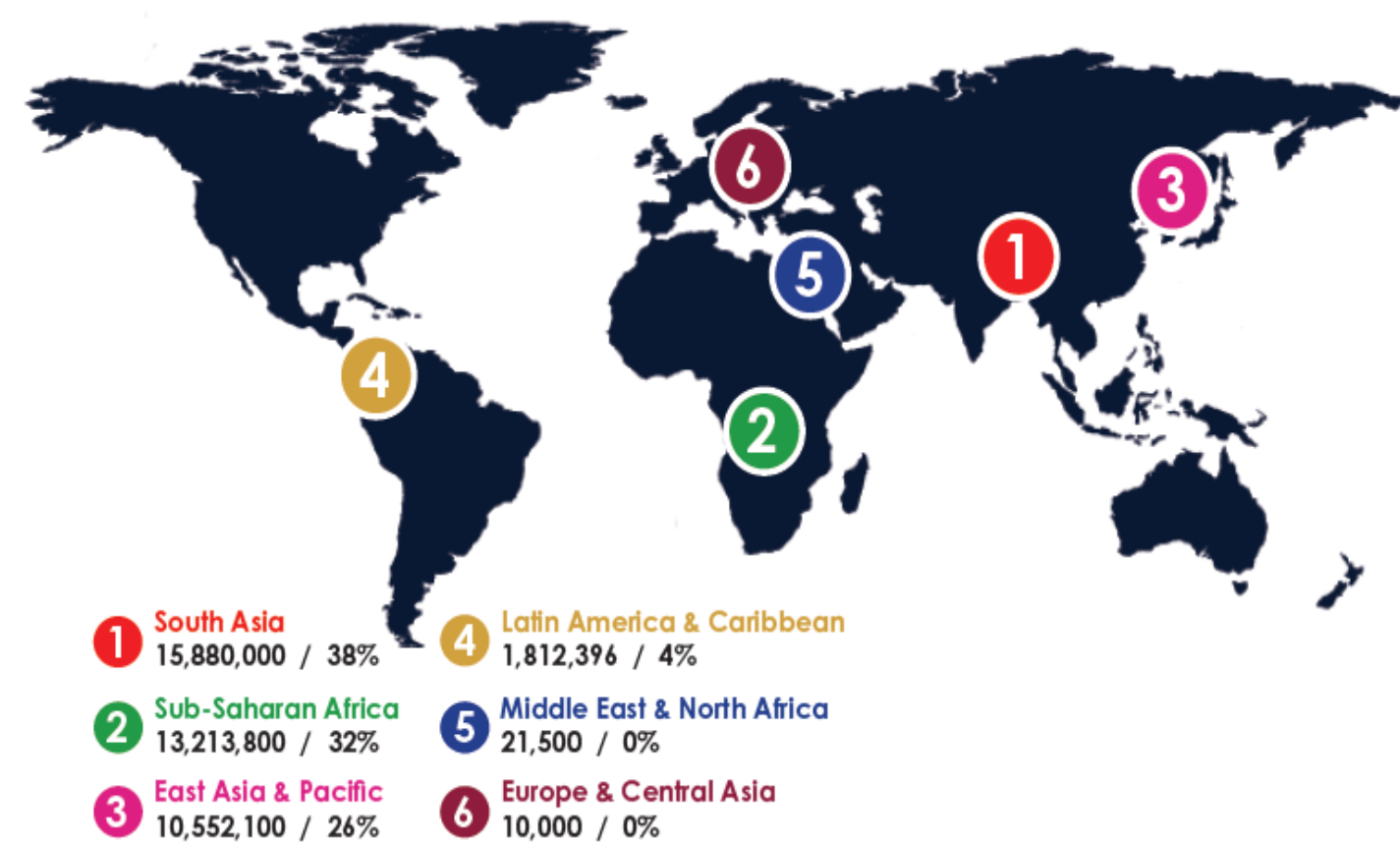
McQuilken & Hilson (2016) ASM in Ghana. Evidence to Inform Action Dialogue. IIED.



Economic development

+ POSITIVE

X NEGATIVE



Global: 41,489,796 (Delve data as of June 2020)

- Job creation in poor areas
- Linkages to local economy
- Youth employment
- Development minerals

- Possible 'poverty trap'
- Poor OHS
- Limited labor rights
- Poor access to govt. services
- Inefficient processing
- Chemical pollution



Economic development



FORMALIZATION IMPACT

- + Facilitates equal rights to land, mineral resources, technology, training, finance
- + Increases govt. revenues
- + Unlocks contribution to GDP
- + Reduces informal labor & child labor
- + Facilitates responsible & sustainable mining practices
- + Circularity: waste & tailings

But...

- X Can prioritize better-connected small-scale miners over artisans, leaving the poorest left behind



Social development



+ POSITIVE

- Revenues for education
- On-the-job learning
- Resilience
- Empower women & marginalized
- Increased incomes for bottom 40%

X NEGATIVE

- School dropouts
- Women confined to secondary roles
- Unequal power relations
- Exploitation & exclusion

4 QUALITY
EDUCATION



5 GENDER
EQUALITY



10 REDUCED
INEQUALITIES



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AND SOCIETY

Social development



FORMALIZATION IMPACT

- + Reduces child labor
- + Supports TVET, apprenticeships, scholarships in ASM and related skills
- + Enhances women's access to resources, productive assets and participation
- + Social, economic, & political inclusion

But...

- ✗ Exclude women & perpetuate inequalities
- ✗ Top-down approaches increase exclusion

4 QUALITY
EDUCATION



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EQUALITY



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INEQUALITIES



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Environmental stewardship

+ POSITIVE

X NEGATIVE



- Critical raw materials for renewable energy
- Resilience & adaption to climate shocks
- Construction materials

- Deforestation
- Environmental degradation
- Biodiversity loss
- Degrades marine & coastal areas
- Can occur in protected areas
- 'Dirty' energy for production



Environmental stewardship

FORMALIZATION IMPACT

Multifunctional Mining Landscapes



- + Climate mitigation strategies
- + Transition to low-carbon economy
- + Facilitates monitoring & enforcement
- + Incentivizes rehabilitation
- + Optimizes multisectoral land use planning
- + Enhances long-term investment in land



Nutrition & healthy lives



+ POSITIVE

- Interlocks with subsistence agriculture
- Supports local markets
- Increases resilience to shocks

X NEGATIVE

- Destruction of farmland & water bodies
- Distorts local food markets
- Occupational health and safety
- HIV/AIDS & infectious diseases

2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



6 CLEAN WATER AND SANITATION



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Nutrition & healthy lives



FORMALIZATION IMPACT

- + Incentivizes investments in agriculture
- + Enhance positive synergies: ASM & agriculture
- + Addresses land use related conflicts
- + Reclamation
- + Reduces health & safety risks
- + Improves long-term health outcomes
- + Resilience to emerging health threats
- + WASH infrastructure

2

ZERO
HUNGER



3

GOOD HEALTH
AND WELL-BEING



6

CLEAN WATER
AND SANITATION



building
local
promise.

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Clean energy, infrastructure, sustainable cities



+ POSITIVE

- Less energy intensive
- Energy infrastructure
- Diversification
- Innovation
- Construction materials
- Invest in housing
- Reduce urbanization & migration

X NEGATIVE

- Uses 'dirty' energy forms
- Poor infrastructure & housing in rush scenarios

7 AFFORDABLE AND
CLEAN ENERGY



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



11 SUSTAINABLE CITIES
AND COMMUNITIES



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Clean energy, infrastructure, sustainable cities



FORMALIZATION IMPACT

- Fees, tax & royalties to fund investment in infrastructure
- Attractive to long-term investment & development
- Source of raw & value add material for energy & infrastructure projects
- Innovation of more sustainable processing & industrialization
- Security of tenure increases investment in housing

7 AFFORDABLE AND
CLEAN ENERGY



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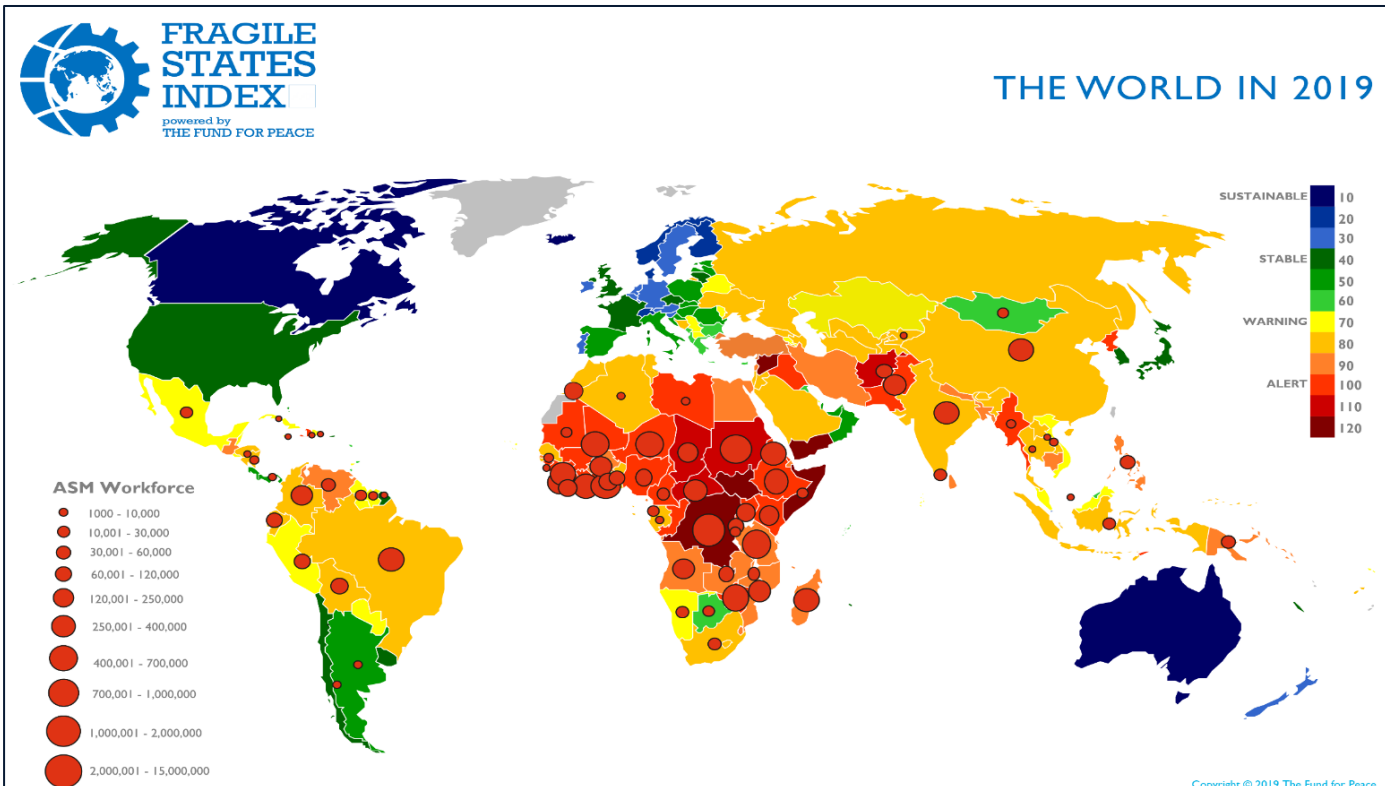
Peace, justice and governance

+ POSITIVE

X NEGATIVE

- Transitions youth & ex-combatants out of armed groups & criminality
- Instills a culture of peace
- Social safety net
- Supports institutions in crises

- Links to organized crime, financing of conflict & terrorism
- Human rights abuses, corruption, bribery, illicit financial flows
- Poor governance



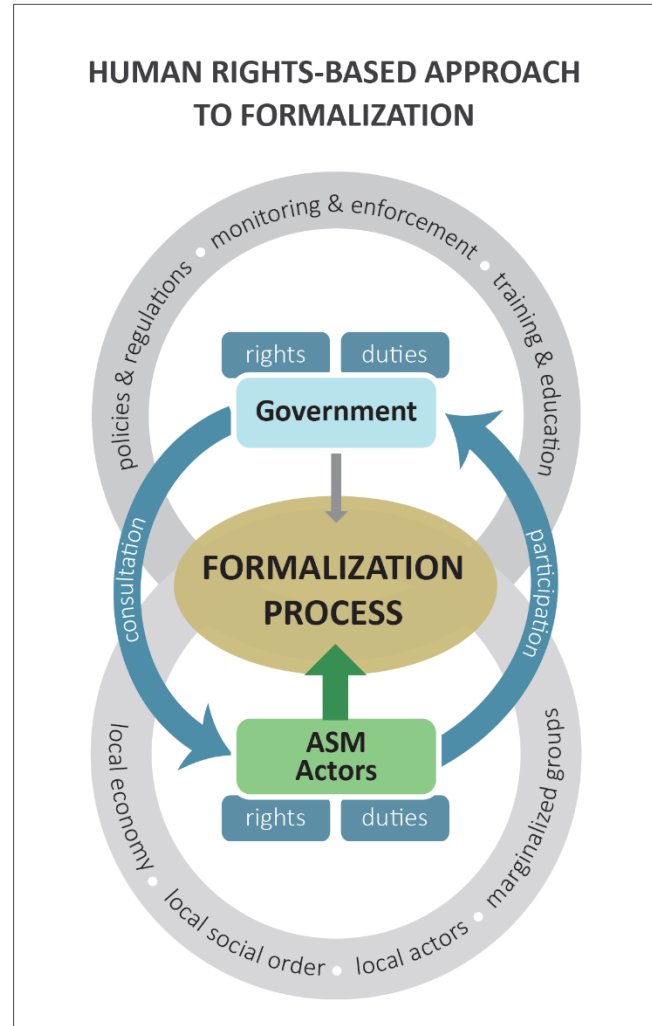
16 PEACE, JUSTICE AND STRONG INSTITUTIONS



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Peace, justice and governance

FORMALIZATION IMPACT



- + Delinks ASM from insecurity
- + Facilitates land tenure, labour rights, protection of human rights
- + Can address the *root causes* of conflict
- + Supports long-term peacebuilding and state-building processes

But...

- ✗ Top-down approaches perpetuate inequalities & cause grievances, possibly leading to conflict

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



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Partnerships



+ POSITIVE

- + Brings together stakeholders from civil society, public & private sector
- + Diversifies development assistance through private sector engagement
- + Knowledge & technology transfer

FORMALIZATION IMPACT

- + Helps to 'de-risk' ASM
- **ASM formalization can revitalize global partnerships for sustainable development**

17 PARTNERSHIPS
FOR THE GOALS



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AND SOCIETY

Conclusion

FORMALIZATION PROCESS

‘INFORMAL’



ASM formalization
needs to be **planned**
and **implemented** in
an **inclusive** and
comprehensive
manner with
all 17 SDGs
in mind.

‘FORMAL’



IMPACTS

POSITIVE



NEGATIVE



POSITIVE & NEGATIVE



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Recommendations

National policymakers:

- Develop SDG-sensitive formalization strategies
- Integrate ASM in national & regional frameworks

Private partners:

- Engage constructively with ASM
- Use ASM-SDG linkages to inform ASM engagement strategies

Multilateral institutions, donors and civil society:

- Integrate ASM in regional & global development frameworks
- Support *holistic* ASM formalization, incl. education & finance

