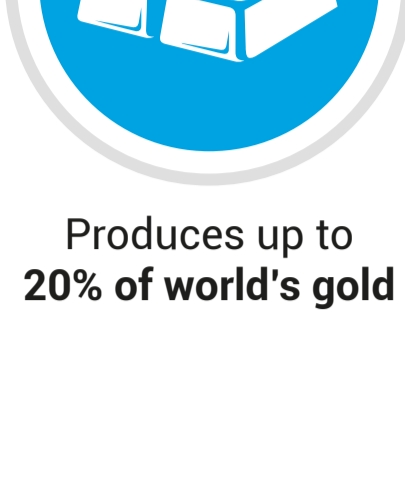
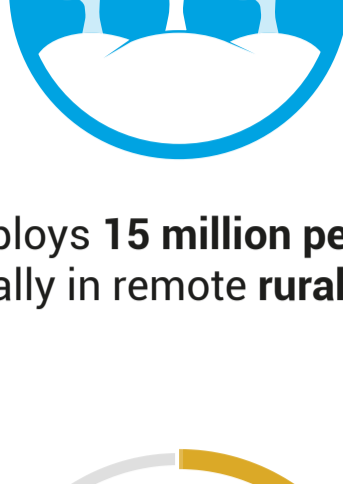


REDUCING MERCURY USE IN ARTISANAL SMALL-SCALE GOLD MINING

ARTISANAL AND SMALL-SCALE GOLD MINING



Produces up to **20% of world's gold**



Employs **15 million people** typically in remote rural areas



Involves **4 to 5 million women and children**



Takes place in **70 countries** and often in areas where there is **limited economic opportunity**



Releases **35% of all mercury** pollution to the environment



Is often considered as **informal sector**

WHY IS IT HARD TO FORMALIZE THE SECTOR?



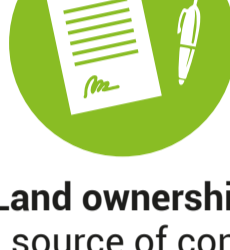
Miners operate in **remote areas**



Mining legislation is not adapted to this sector



Land use is a source of conflict with farmers

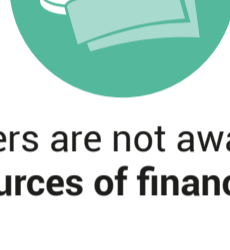


Land ownership is a source of conflict with mining companies

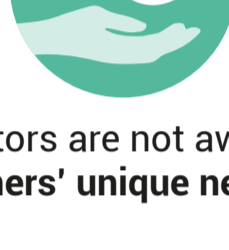


Little or no enforcement of legislation because of **Governments' lack of capacity**

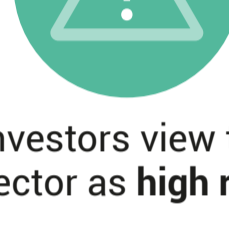
LACK OF ACCESS TO FINANCE



Miners are not aware of **sources of financing**



Investors are not aware of **miners' unique needs**

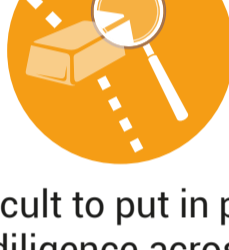


Investors view the sector as **high risk**

SUPPLY CHAIN CHALLENGES



Miners have limited or no access to **international gold market**



Difficult to put in place due diligence across the supply chain because **gold is a fungible commodity** – and difficult to trace

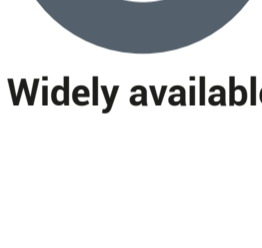


Gold buyers do not know how to buy gold **directly from the sector**

WHY MERCURY IS USED IN ARTISANAL AND SMALL-SCALE GOLD MINING ?



Amalgamation is **cheap, fast and easy** to put in place



Widely available



Little or no awareness of the risks of mercury



Gold traders supply mercury to the miners – miners then sell the gold back to the traders



No formal training

ALTERNATIVES TO MERCURY



GRAVIMETRIC SEPARATION separating the gold from the ore using panning, sluicing, centrifuges



CHEMICAL EXTRACTION of the tailings by the small-scale miners or through external service providers



Alternatives involve **increased technical knowledge** of the gold deposit and mineral processing

HOW THE MINAMATA CONVENTION SAFEGUARDS ARTISANAL SMALL-SCALE GOLD MINING SECTOR (ASGM) ?



Article 7 and annex C of the convention provide binding obligations on ASGM

Countries with "more than insignificant ASGM" have the obligation to develop and implement National Action Plans which:



Establish **inventory** of the sector



Establish **strategy for formalizing** the sector



Set targets for reducing mercury pollution

GOVERNMENTS TO BAN WORST PRACTICES



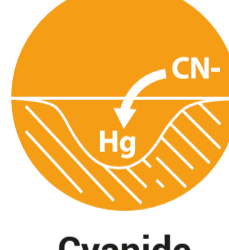
Whole ore amalgamation



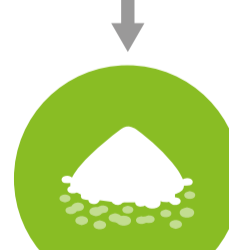
Open burning of amalgam



Burning of amalgam in residential area



Cyanide after mercury has been used



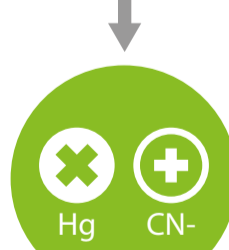
Mill and concentrate ore



Use of mercury vapour tools (retorts)



Process and extract in designated work areas away from the vulnerable population



Ensure mercury is removed before applying cyanide

GOVERNMENTS TO PROMOTE BEST PRACTICES

HOW WILL THE PLANETGOLD PROGRAMME TRANSFORM ARTISANAL SMALL-SCALE GOLD MINING ?



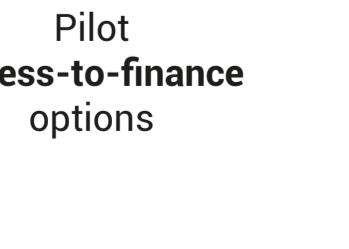
Demonstrate and share **best practices on formalization**



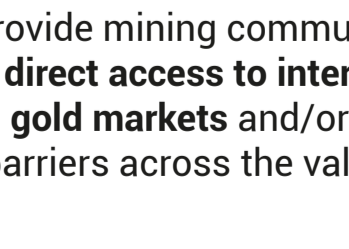
Pilot **access-to-finance** options



Provide mining communities with **direct access to international gold markets** and/or remove barriers across the value chains



Educate gold consumers on the social and environmental benefit of cleaner gold



Show the benefits of more efficient and cleaner non-mercury techniques