



Why?

This PhD project investigates T2S in Artisanal and Small-Scale Gold Mining (ASGM). ASGM has been the subject of many moralising debates and ASGMiners are typically excluded from the decision making processes that concern them.

- Globally 20 million people are active in ASGM and 100 million people live off ASGM.
- Globally and locally, the scales, organisations, technologies and landscapes of ASGM are **diverse**.
- Problematically, the sustainability **burden of proof is put on ASGM**.
- Mercury is emblematic for ASGM as unsustainable. Sustainability research needs to become defragmented and inclusive.
- **Co-labour** with miners as well as diverse local knowledge is key.

What?

Q: How do goldminers in Busia District (Uganda) negotiate in-depth geopolitics with diverse temporalities of sustainability?

Gold lifeways (above ground) are intertwined with embodied knowledge of materialities (underground), including rock, water, soil and gold veins. This requires a '3D' approach.

Busia District miners mine in their residential area & the area has an abundance of NGOs and groundwater.



How?

Both anthropology and industrial ecology informed a combination of 5 methods.

1. Ethnographic fieldwork, semi-structured interviews and transect walks.
2. Life Cycle Assessment: a quantification of 11 environmental impact categories based on Busia's gold supply chain.
3. Scenario Planning: an imagination, in 7 steps, of the edges of uncertain futures (see poster's top-right) plus a strategy assessment.

Duration: 7 months (2019, 2020, 2022).

In co-labour with goldminers of 6 government recognised 'Artisanal and Small-scale Mining Organisations' (ASMOs), goldminers outside ASMOs, Local Council 1 chairpersons and vice-chairpersons of various villages, the Community Development Officer, the Senior Environmental Officer, NGOs, geologists, mining engineers, teachers, farmers and police in Busia District.

Findings

T2S thinking is integral to gold lifeways in Busia District.



Materiality (and more) informs **non-linear mine design**.



Law, land and position are of **key** uncertainty for miners.



Uncertainty affects **miners' plenty and diverse actions on T2S**.