

# The gold supply chain does not exist

How miners' practices force us to  
rethink linearity & sustainability, and  
embrace multiplicity & fluidity

Dr. Sara Geenen

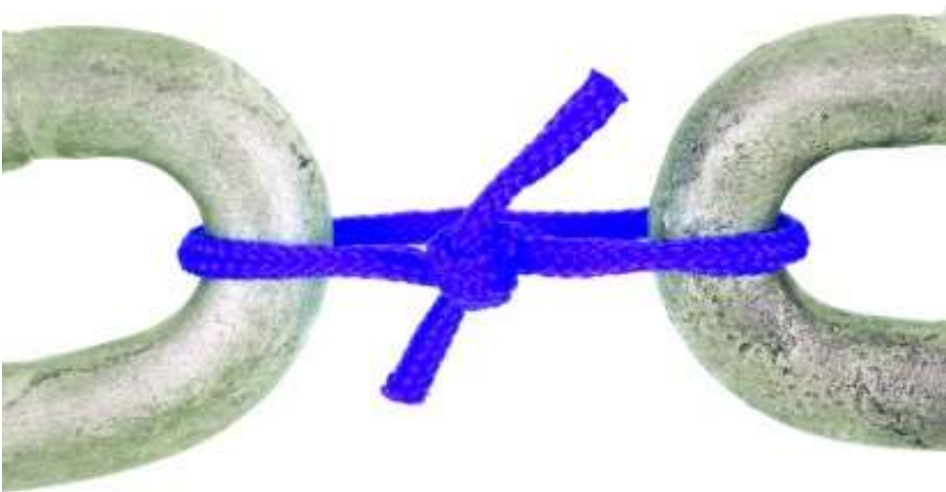
[Sara.geenen@uantwerpen.be](mailto:Sara.geenen@uantwerpen.be)



## Metaphor of the supply chain (Gibb, 2020)

- Linearity
- Responsible consumption
- “Weak links”





“Customers, consumers and governments hold companies accountable not only for their own actions, but for the actions of suppliers, vendors and business partners. **Remember, your organization is only as strong as its weakest link.** Being aware of the risks your organization faces – supply, supplier and price – and adopting a best-practice supply chain management process, building on an accountable, **risk-based approach**, will keep your organization out of trouble. It will also keep you on the right side of **regulators** whilst ensuring supply-chain **sustainability** and allowing you to move forward with confidence”

**Thomson Reuters blog, 2016**

**<https://blogs.thomsonreuters.com/answers-on/the-weakest-link/>**



# What if we rethink sustainability in terms of miners' practices?

- Zero waste?
- Recycling?
- Limits to extraction?



Butwa mining site. Kamituga

Picture: Sara Geenen

# Zero waste



Loutra. Kamituga

Picture: Sara Geenen





Extraction



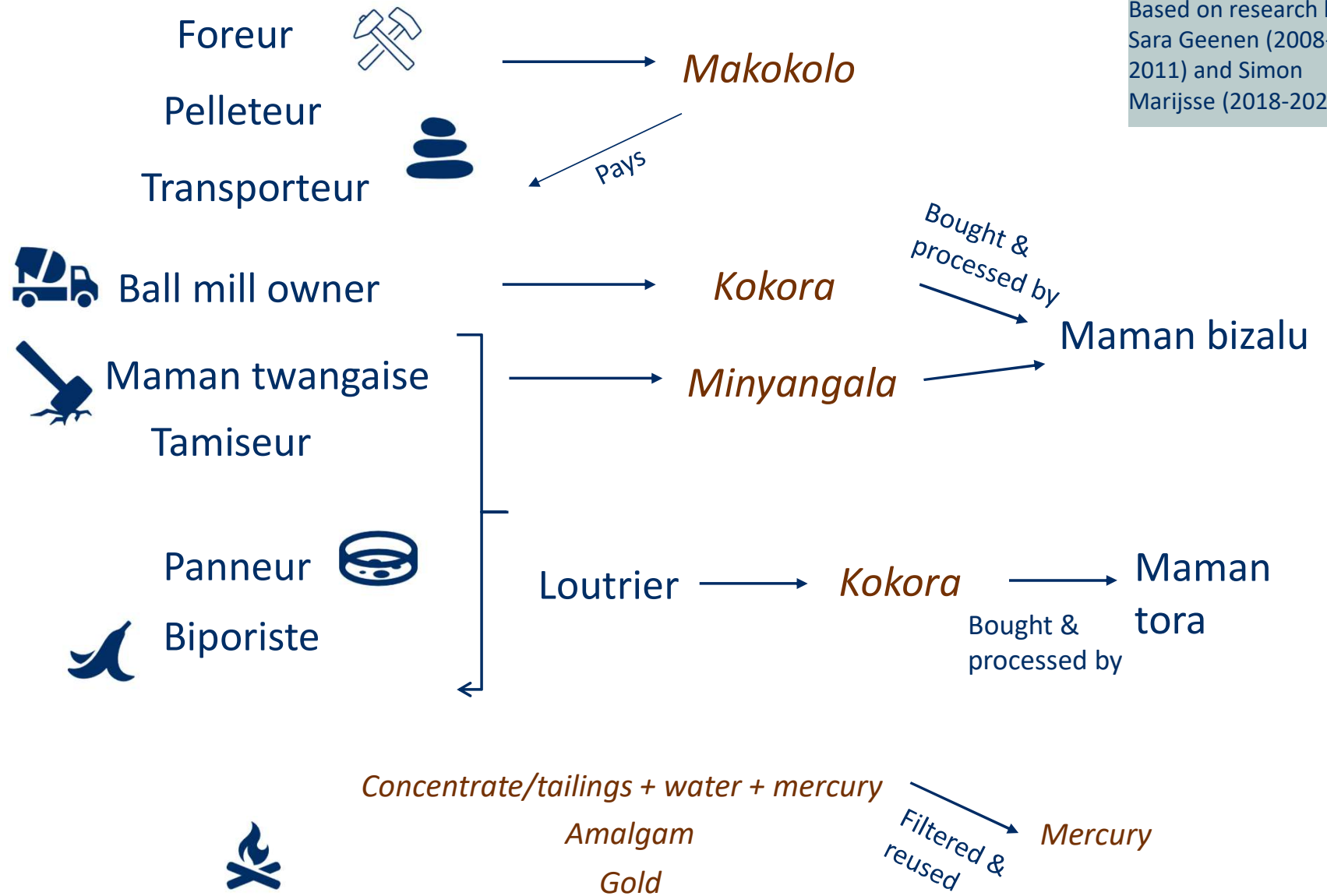
Crushing  
grinding



Separation



Amalgamation



Based on research by Sara Geenen (2008-2011) and Simon Marijsse (2018-2021)



Mamans bizalu. Kamituga

Picture: Sara Geenen





Kokora left in the loutra  
Picture: Sara Geenen





Ball mills in a colonial workshop. Kamituga  
Picture: Sara Geenen

## Recycling

- Technologies: assembly, dis-assembly, re-assembly
- Human bodies and skills
- (Pre) colonial legacies
- Technical fluidity





Ball mill workshop. Kamituga  
Picture: Robert Carrubba





Gold dredges in Ulindi river  
Picture: Simon Marijsse





# E-waste

<https://www.bloomberg.com/news/articles/2019-05-29/the-rich-world-s-electronic-waste-dumped-in-ghana>



## Limits to extraction



Underground pit .  
Kamituga

Picture: Sara  
Geenen





Wooden constructions in the tunnels.  
Kamituga  
Picture: Sara Geenen





## Thank you

Based on research in Kamituga

Sara Geenen 2008-2011

Simon Marijsse 2018-2021

FWO EOS grant G0G4318N



Miner in Kamituga

Picture: Sara Geenen