



## **The Hekima Initiative**



### **HEKIMA TEAM**

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## PROBLEM STATEMENT

- Nearly 62% of Congolese, live on less than 2.15 dollars daily, which can be attributed to illegal mineral trade and zero traceability systems.



## GCGO ASSOCIATED: NATURAL RESOURCES

### WHY THIS PROBLEM MATTERS

- Local communities do not get to benefit from the mining trade.
- Foreign companies export the natural resources in raw form and shift the proceeds to tax havens.



# User persona

Name: Marie Banza

Occupation: Mining Engineer

Gender: Female

Marital status: Married with two children

Education: Bachelor's degree in Mining Engineering from a local university

Language: Fluent in English, French, Lingala

## Personal story

Marie is affected by the current state of the country affected by the mining sector. The working conditions in DRC are really bad and the pay is really bad because of the corrupt leaders and management of the mining stations.

## Challenges (how the problem impacts him):

Infrastructure: Marie faces challenges related to inadequate transportation.

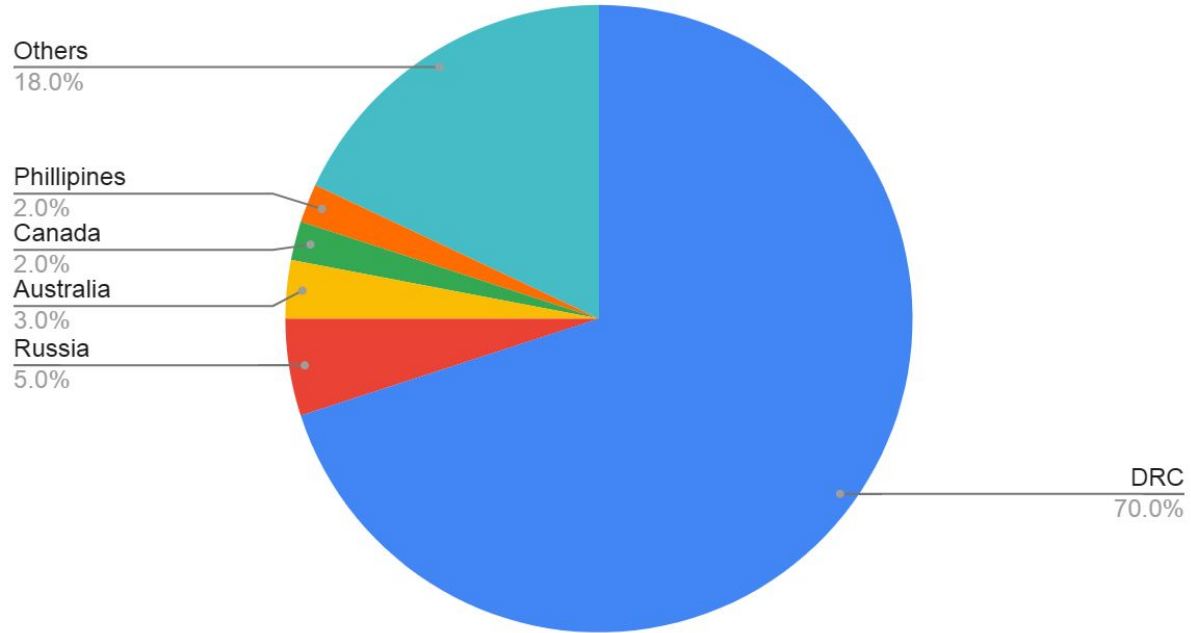
Regulatory Environment: Dealing with complex and evolving mining regulations and compliance requirements poses challenges for Marie to ensure his operations align with legal frameworks.

Security Concerns: The presence of armed groups and conflicts in certain regions of the DRC creates security risks that may affect Marie's work and personal safety.



# COBALT MINING DATA: Global Market shares by countries for cobalt production

Percentage



**Cobalt is in high demand in DRC hence export a high amount of foreign in-flows**

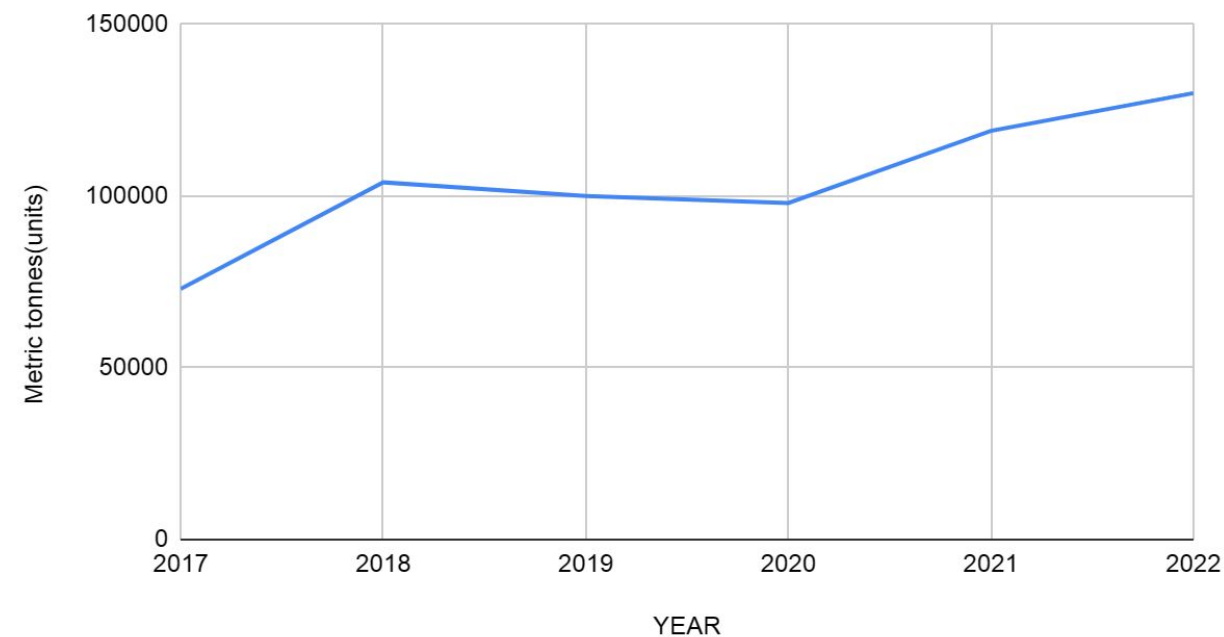
**Majority of residents in Congo still remain poor and do not benefit from export of such high-demand natural resource.**



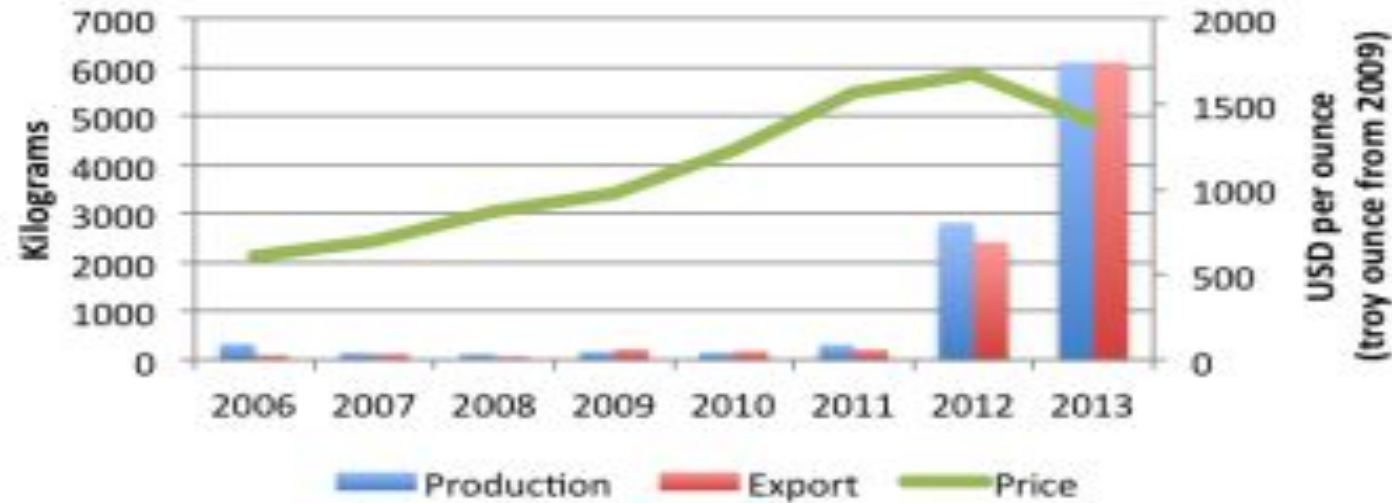
# Cobalt mining production in the DRC from 2017 to 2022

- The livelihoods and per capita of residents is expected to increase but this is not the case as most proceeds are plundered.
- The production of cobalt mining has been on an increase since 2020

Metric tonnes(units) vs. YEAR



**Figure 10: Official gold production and export figures with annual average gold price (Engelhard's average gold price quotation) overlay 2006-2013**



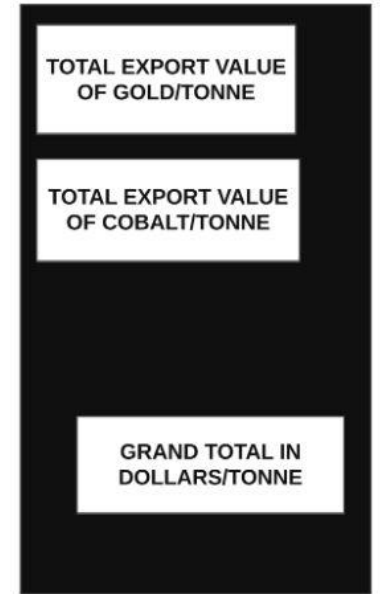
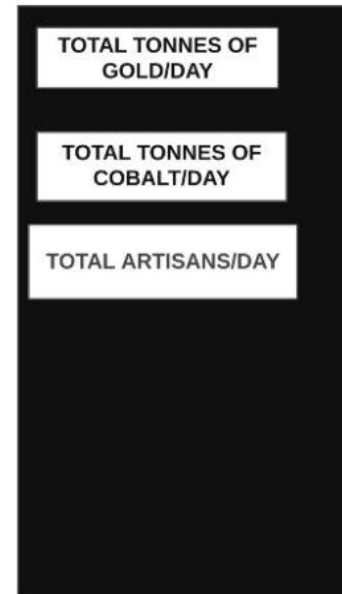
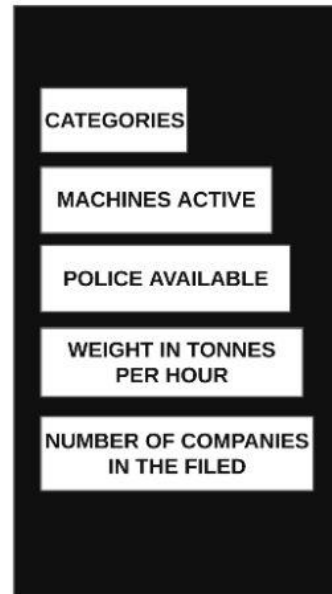
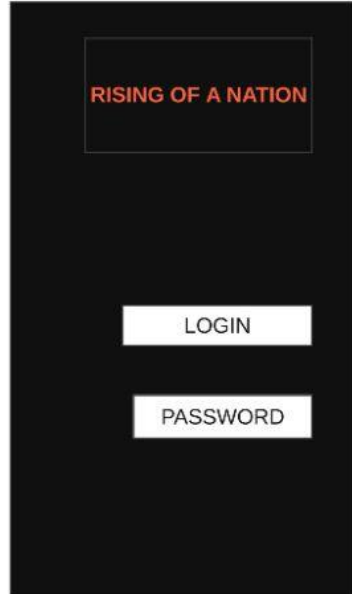
- Official data indicates that 6,111.97 Kg of gold were produced in 2013 and 6109.74 Kg exported.
- Most data was distorted by both access problems and
- underreporting

# Our Solution

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Create a digital system that stores the database from the collected information on the weight ,quantity and quality, and sends information on the exact amount of minerals extracted. This will ensure that there is equitable wealth distribution from the income acquired from the minerals and enhance accountability in the management of natural resources hence ensuring local communities are able to benefit from the great wealth that lies beneath them as well as ensure proportionate taxes and concession rights are paid to the country.

# PROJECT WIREFRAMES





## PAIN POINTS

- The user needs a way to track weights directly from the mining site.
- The user needs a reliable payment system within the mining site.
- The user needs transparency from the mining management to the local community.

## RECOMMENDATIONS

- The database should incorporate a language translation option for French reading users.
- The database should incorporate the company's workforce/employment information with unique identifiable codes for each employee.
- The database should have a page where all information per day, per month, per year is accessible.
- There should be a navigation button that goes back to the previous page/home
- The database should have the functionality to automatically link weights, value, and buyers and generate one document showing all the three.

## WHAT'S NEXT?

Enhance community participation and engagement in matters mining with 1000 app downloads and active.



## WHY?

Creating this system will ensure that there is equitable wealth distribution from the income acquired from the minerals and enhance accountability in the management of natural resources hence ensuring local communities are able to benefit from the great wealth that lies beneath them as well as ensure proportionate taxes and concession rights are paid to the country to enhance it's development.