

Activity 4 Mineral resources assesment gap analysis

Activity 4.2. Artisanal and Small-scale Mining

Leader : Esko Korkiakoski (GTK)

Deputy leaders:

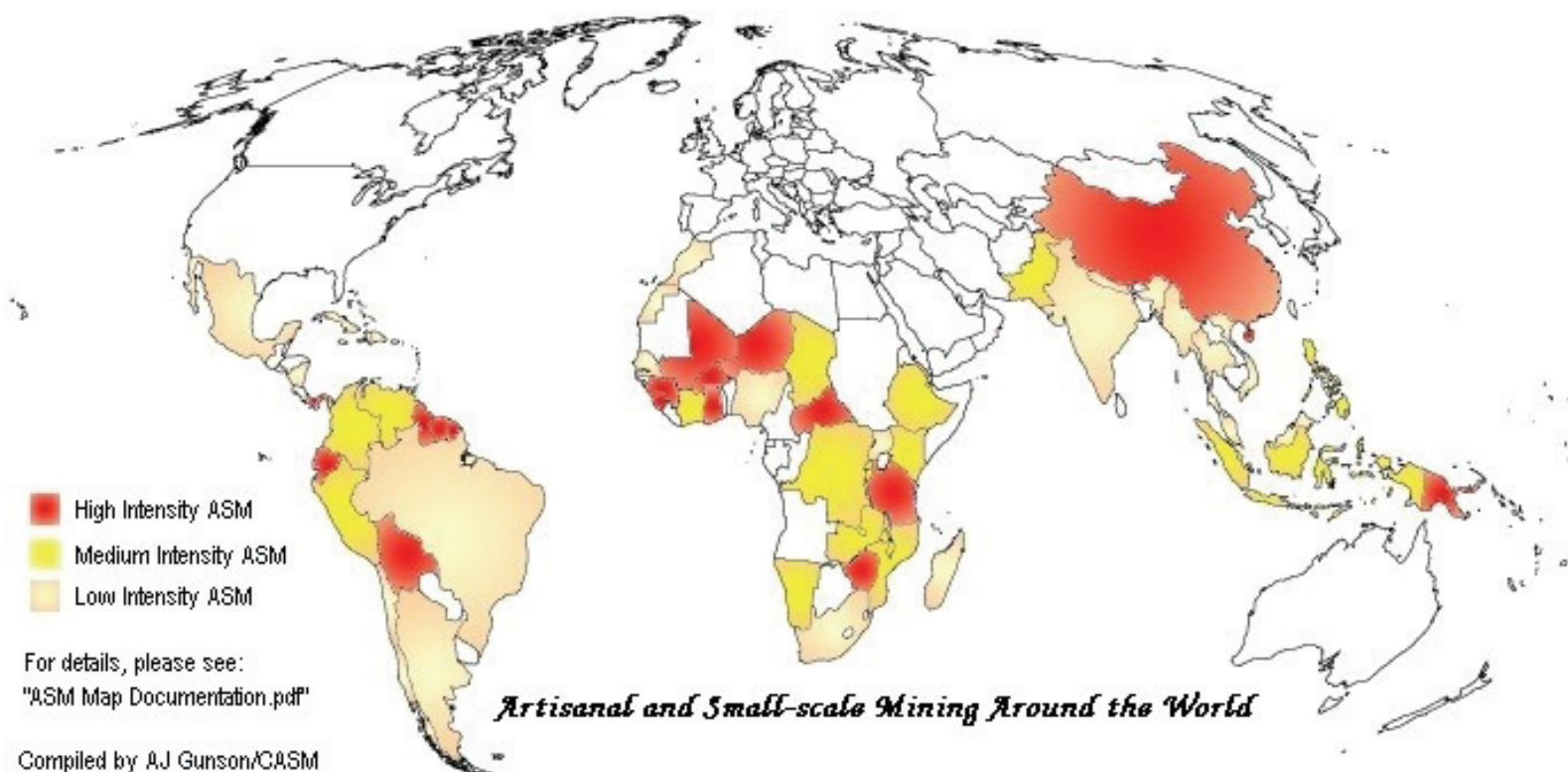
John Tychsen (GEUS)

Duska Rokavec (GeoZS)

Joanna Lindahl (SGU)



Relevance of the Topic



Relevance of the Topic

Estimates of numbers engaged in the ASM sector vary widely. They range between 13 and 20 million men, women, and children from over 50 developing countries.

100 million more dependent on this sector for their livelihood.

Growth in ASM numbers is expected to continue in line with higher prices and increase in population.

People dependent on ASM for their livelihood are highly vulnerable. Life is difficult for the vast majority of people engaged in the ASM sector, where extreme poverty is a common condition.

ASM exists in many diverse settings and forms and, as such, is a complex sector marked by a shifting set of problems for which a one-size-fits-all approach is clearly not the answer.



Relevance of the Topic

ASM is recognized in the new Mining Laws and Mining Policies in African countries.

New Mining Laws in African countries have special types of licenses dedicated for ASM operators - Illegal to legal or informal to formal

Assistance to ASM is integrated into actions for poverty reductions in rural areas

African countries provide assistance to ASM communities

ASM versus LSM



Relevance of the Topic

ASM in Mozambique



EuroGeoSurveys - The Geological Surveys of Europe



Relevance of the Topic

ASM in Ethiopia



EuroGeoSurveys - The Geological Surveys of Europe



Relevance of the Topic

ASM in Nigeria



EuroGeoSurveys - The Geological Surveys of Europe



Relevance of the Topic

Are ASM an economic factor ?

- We do not have any assessments of the economical effect for the BNP in a country.
- ASM is not yet integrated in the EITI process (Nigeria, Tanzania).
- We know that ASM is an important factor in mining Coltan and other minerals in DRC – (The Dodd-Frank Law).
- In Ethiopia has the government established a system to buy the gold from the ASM. Last financial year the amount of gold channeled through the government was more than 10.000 kg of gold.



Relevance of the Topic

What could be the role of an African Survey

- Where are the dyke ?
Structural geological assistance



- Assist mining authorities in appointing special licenses area for ASM operators
- Assist mining authorities in conflicts between LSM and ASM
- Assist environmental and health authorities e.i. lead poisoning, (Zamfala in Nigeria, Kabwa in Zambia, Lupa in Tanzania etc.)



Objectives

The overall objective

is to provide the OAGS members with a better understanding of the ASM operators in respective countries.

The performance target

is that after completing the training, the participants will be able to provide better geological and technical advice to ASM operators and train ASM operators to improve their outcome and through this reduce poverty.

By end of the training the participants shall:

- Have a better understanding of the ASM operations;
- Be aware of ways to assist ASM in the exploration and exploitation phase;
- Be aware of key environmental issues;
- Be aware of key occupational health safety issues related to ASM;
- Be able to evaluate different mining options for optimum development of a mineral deposit and;
- Understand obligation of a Geological Survey to support ASM.



Questionnaires'

Reported numbers of ASM in African countries

Ethiopia: Estimated 1 million AM

DRC: More than a million ASM

Tanzania: 700.000 to 800.000 ASM

Niger: Estimated 400.000 ASM

Zimbabwe. Estimated 250.000 ASM

Nigeria. 200.000 to 250.000 ASM

Mozambique: 150.000 to 200.000 ASM

Zambia: Estimated 150.000 ASM

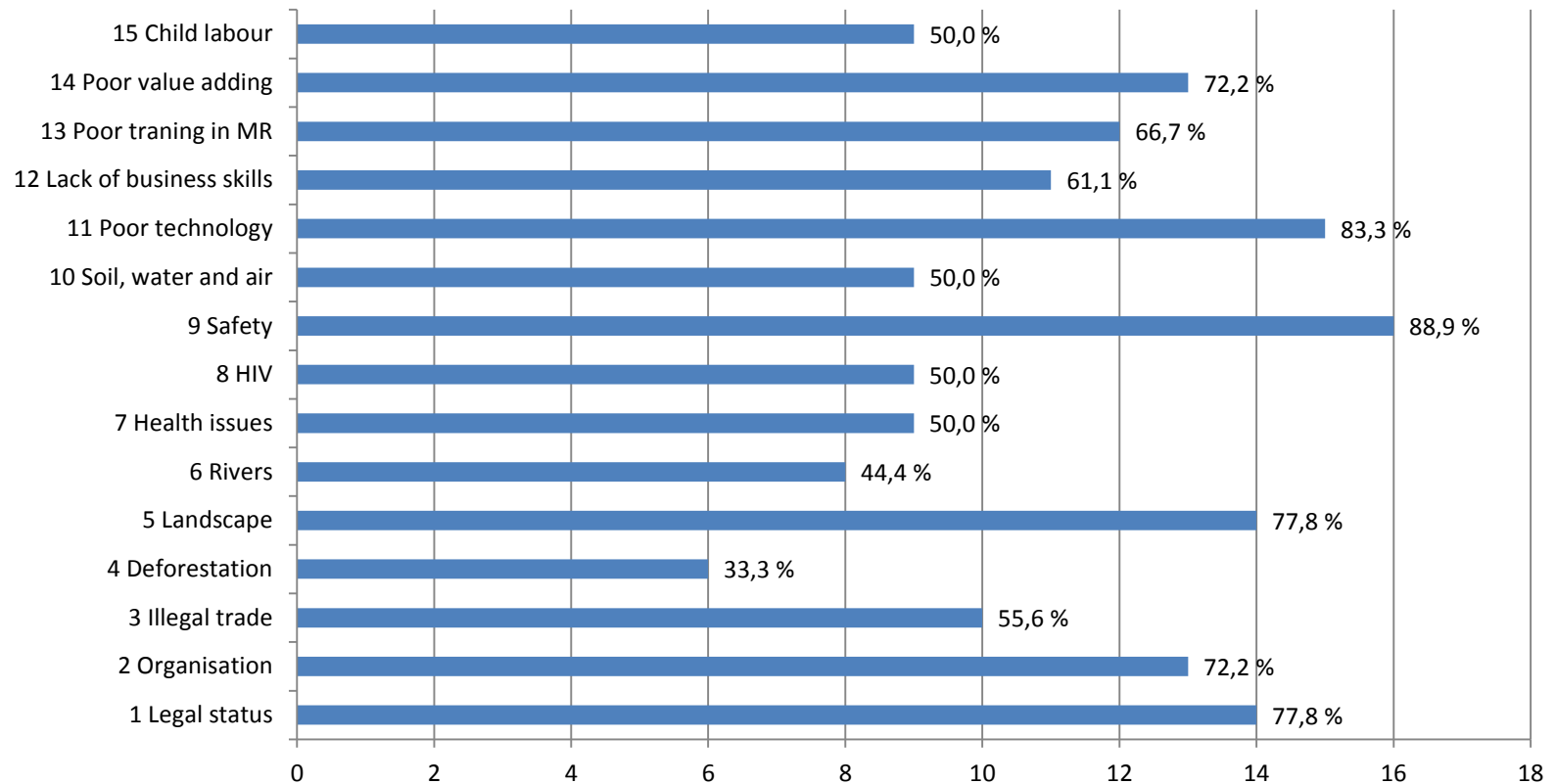
Uganda: Estimated 150.000 ASM

Malawi: Estimated 150.000 ASM



Questionnaires'

Most important subjects related to ASM operators



Questionnaires'

Responders suggested the following case study areas

Rwanda	Gifurwe, Burera district, Northern Province –wolfram;
South Sudan	Central Equatoria State – gold recovery;
Angola	Cunene and Huila provinces – mapping of aquifers;
Cameroun	Kambele near Batouri, east Cameroun –gold;
Tanzania	Musoma and Lupa goldfields at Lake Victoria
Niger	Keita-gypsum;
Nigeria	Ilesa area in Osun state- poor technology used;
Mozambique	Manica province - gold;
Burkina Faso	Bouda in province of Passore-gold.

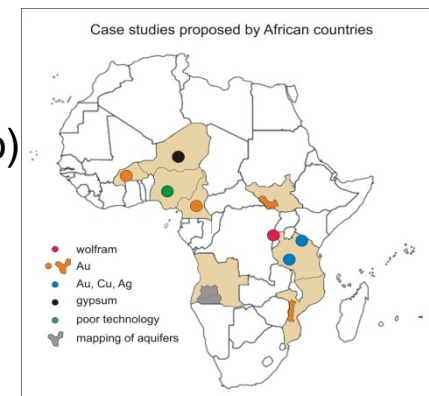
Most of them propose ASM areas of some particular mineral commodities :

Gold (Sudan, Cameroun, Tanzania, Mozambique, Burkina Faso)

Wolfram (Rwanda);

Copper, silver and gold (Tanzania);

Gypsum (Niger).



Recommendations 1

Based on the response in the questionnaires and the experience reported from the EGS members working in the ASM sector in Africa a number of recommendations can be given:

- The OAGS members should be more involved in training of the ASM especially in simple prospecting and geological knowledge of minerals as well as evaluation of gemstone.
- There is a need for general training of trainers in issues related to ASM meaning staff in the OAGS members together with, national mining authority and national environmental authorities.
- The OAGS members could be more involved in development of in the mining processes used by the ASM operators with the aim of improving the outcome and through this reducing poverty.
- The issue of case study areas should be considered to be beneficial for more than one country



Recommendations 2

Based on my personal experience and discussions with African Geological Surveys and African Mining Authorities as well as African Environmental Authorities I would like to provide the following recommendations:

- **A need for regional workshops to share lessons learned in relation to ASM and discussions of ways forward.**
- **A need for development of guidelines for best practise related to ASM.**
- **A need for development of guidelines for organisation of ASM – how to move from ASM operators to SME.**
- **A need for development of guidelines for extension services**



Thank you for your attention



EuroGeoSurveys - The Geological Surveys of Europe

