



# Sustainable Development Indicators and Mineral Industry

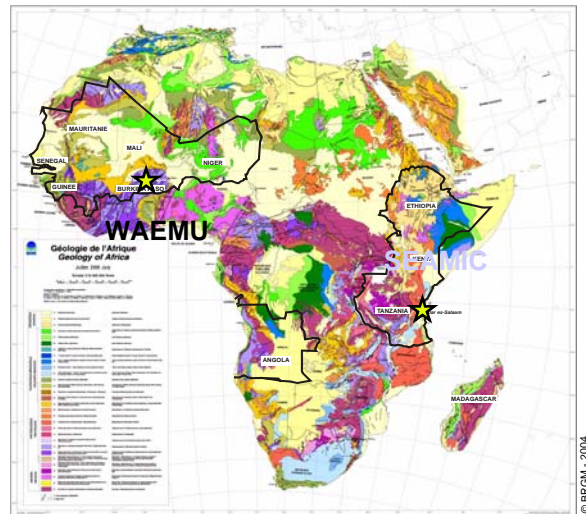
## BRGM's research approach in Africa

The mineral industry raises opposite opinions concerning its contribution to sustainable development issues and particularly for poor countries. Indicators of sustainable development play a crucial role in this debate, be it for communication, performance assessment or deliberation and decision support.

Despite a great number of international initiatives in expressing the contribution of the mineral industry to sustainable development, and the wide range of stakeholders involved in indicator-related research (industries, standardisation organisations, universities, and NGOs), no indicator system has yet been considered as a standard for the whole mineral industry. BRGM aims to advance the collaborative effort by complementary research studies driven by participative and multi-scale approaches.

### A targeted region: Africa

- > The continent's mining potential and the issues it raises for future development make Africa a **priority** for research on sustainable development indicators.
- > No major study on indicators for the mining industry has yet been produced following the initiative of an African organisation or country.
- > For many years now, BRGM has created **strong partnerships** with African countries and institutions : WAEMU (West African Economic and Monetary Union), SEAMIC (Southern and Eastern Africa Mineral Centre), SIGAfrigue Network,...
- > This work on sustainable development indicators is embedded in a BRGM research project (**Africa, Resources and Society**) that combines geoscience information to socio-economic aspects for identification and sustainable management of natural resources and risk forecast of their use.



Geology and major ore deposits of Africa, BRGM, édition 2004  
(Scale : 1/10,000,000)



Hadal Auatib Open Pit  
(Ariab Mining Company, Sudan)

### Indicators based on stakeholders' concerns

- > Our vision is that **indicators should reveal the stakeholders' concerns for being relevant and efficient.**
- > Our work will then **be based on dialogues** with different stakeholders, according to the scale under study, to understand their real concerns about mining and, on that account, define with them which indicators would best convey these issues. This process should deliver sets of indicators that can be **easily understood and adopted** by all the stakeholders.
- > The **strong interest** that participants of the Sustainable Mining Observatory (SMO) showed in our approach in May 2004 reinforces our vision.



SMO workshop in Ouagadougou  
(Burkina Faso), may 2004

### Two scales of study: regional and site-based

- > **Regional scale** : The Sustainable Mining Observatory (SMO) has been initiated by the WAEMU and SEAMIC with support from the French Ministry of Foreign Affairs, the CIFEG (International Centre for Education and Exchanges in Geosciences) and the BRGM. The objective of this survey is to **contribute to poverty reduction** across the African continent by developing its mineral resources on a sustainable basis. SMO intends to **contribute to the development of mining policy guidelines and development programmes** for participating countries, by using reliable indicators and factual data to document and analyse the complex relationships between mining development and the sustainability of the development of a country or region (such as West Africa).
- > **Site-based scale** : the main objective of this second research work is to define indicators to **measure the impacts of a mine site** to the sustainable development issues at the local, regional and national scales. In particular, it aims to check if a standard indicators set is applicable to the whole mineral industry taking into account the large diversity of stakeholders' concerns and the specificities of individual mining site (cultural, geographical, economical, ...).
- > These two approaches should highlight the **differences between local and national stakeholders concerns** related to the mining industry and should thus enable to examine the issue of **indicators aggregation** from the mining site to higher scales (sector, national, regional and even global).

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