



# **MINING DEVELOPMENT PROJECTS AND THE ENVIRONMENT THE AFRICAN EXPERIENCE**

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# **ABSTRACT**

## **➤ Industrial Activities**

- ✓ Depend on natural resources.**

- Mining industry (large and small-scale).**

## **➤ Activities of National and Transnational Corporations in the Mining Sector.**

- ✓ Major impacts made on the economies and employment generation of most African countries.**

- ✓ Technology transfer**

- ✓ Mining ventures**

## ➤ **Institutional Framework**

✓ **EIA**

✓ **Legislations**

✓ **NEAPS**

✓ **Acts**

✓ **ESMP**

✓ **Policies**

✓ **Guidelines**

## ➤ **Role of the African Development Bank**

- ✓ **Preparation of policies**
- ✓ **Preparation of guidelines**
- ✓ **Capacity building and institutional strengthening**
- ✓ **Preparation of procedures (compliance)**

# **INTRODUCTION**

- **INDUSTRIAL ACTIVITIES & THE MINING SECTOR**
- **ACTIVITIES OF NATIONAL AND TRANSNATIONAL CORPORATIONS**
- **ENV. POLICIES, GUIDELINES AND EIAs**
- **THE INTERVENTION OF THE AFRICAN DEVELOPMENT BANK**
  - **DEVELOPMENT OF POLICIES**
    - **ENVIRONMENTAL POLICY**
    - **INVOLUNTARY RESETTLEMENT POLICY**

## oGUIDELINES

- **MINING GUIDELINES**
- **INTEGRATED ENV. AND SOCIAL ASSESSMENT GUIDELINES**
- **STRATEGIC IMPACT ASSESSMENT GUIDELINES**
- **ENVIRONMENTAL AND SOCIAL ASSESSMENT PROCEDURES FOR THE PUBLIC/PRIVATE SECTORS**
- **NGO/CSO GUIDELINES**

## ➤ **HISTORY OF THE MINING INDUSTRY**

### ○ **19<sup>TH</sup> CENTURY**

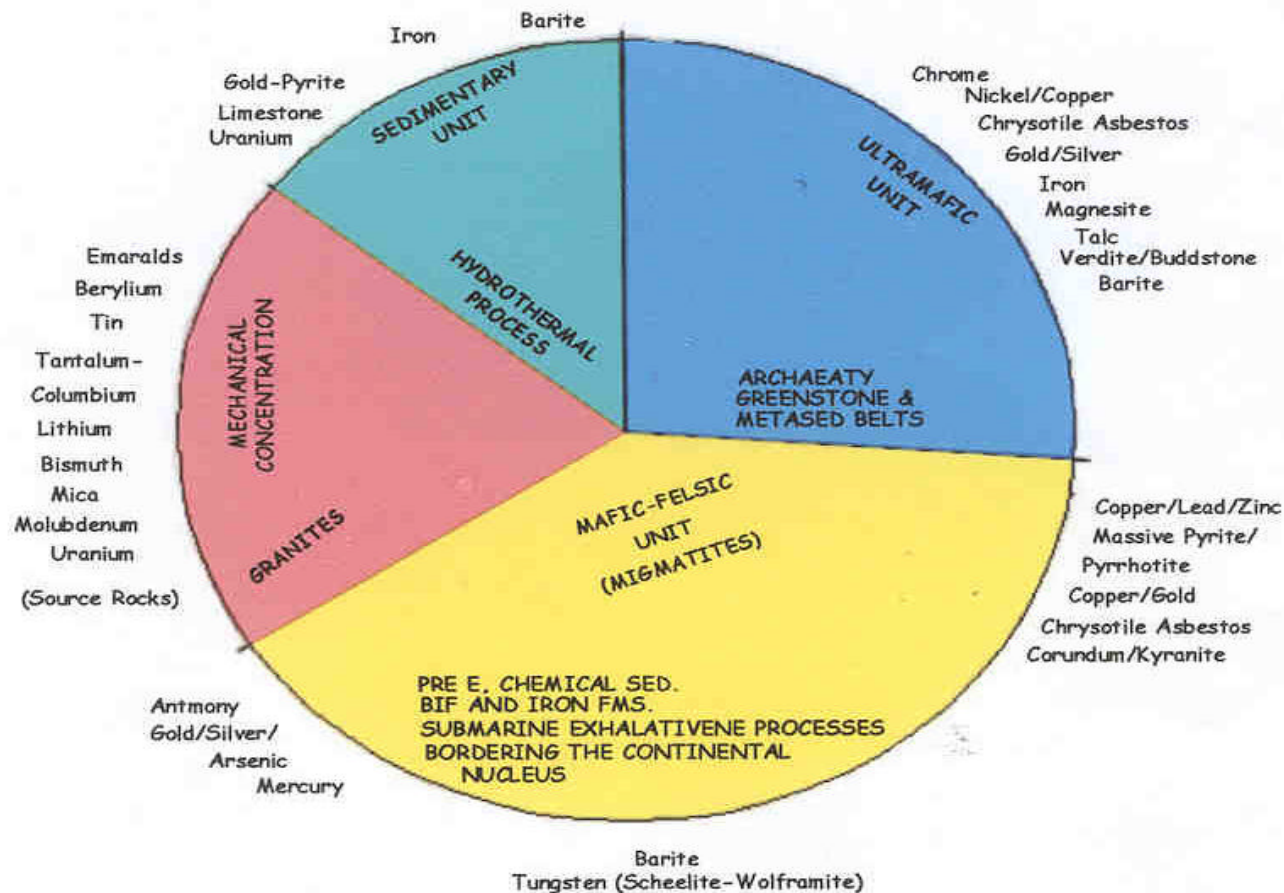
### ○ **INSPIRED BY DISCOVERY OF PETINENT ORE-BEARING BELTS**

- **COPPER BELT OF ZAMBIA**
- **GRET DYKE OF ZIMBABWE**
- **MT. NIMBA OF LIBERIA**
- **ASHANTI GOLD FIELDS**

### ○ **EVOLUTION OF THE BELTS IN 3 PERIODS**

- **PRE-COLONIAL**
- **COLONIAL**
- **POST-COLONIAL**

The Archaean rocks in West, Central and Southern Africa, represent some of the richest mineral provinces in the world. This geologic situation (see figure 1) attracted major investments by transnational and national mining companies that accounted for over 70 % of the export earnings of some states. Mining dominated the economy of many of these states for a long time until the late seventies to eighties when activities declined due to raw material stockpiling in the industrialized countries, recycling of scrap and waste material, and the replacement of metal based parts by plastics.



**Fig.1. Pie chart showing the relationship of Archaean mineralization in Africa South of the Sahara to the four main lithologic components of ancient granite-greenstone terranes (After Anhaeusser, 1986).**



# **SOCIAL/ECONOMIC BENEFITS FROM MINING**

- o MEANS OF LIVELIHOOD FOR WORKERS AND THEIR DEPENDENTS, SUCH AS SCHOOLS, HOSPITALS, HOUSING, AND ROYALTIES TO GOVERNMENT**

## **ENVIRONMENTAL CONCERNS ASSOCIATED WITH MINING**

- oABANDONED MINES**
- oGULLIES**
- oBURROW PITS**
- oDE-VEGETATION**
- oSILT RUNOFF TO SURFACE DRAINAGE**

# **MITIGATION MEASURES AND BEST PRACTICES FOR BUILDING SUSTAINABLE LIVELIHOODS OF COMMUNITIES**

## **o COMPLIANCE AND ENFORCEMENT**

- PERFORMANCE BONDS**
- INSURANCE POLICIES**
- BANK GUARANTEES**
- BANK GUARANTEES**

# **TOOLS FOR GUARANTEEING GOOD AND SUCCESSFUL MINING PROJECTS**

- o**LEGISLATION**

- o**SCREENING**

- o**ESAP (ENVIRONMENTAL AND SOCIAL PROCEDURES FOR THE PUBLIC/PRIVATE SECTORS)**

- o**EIA (ENV. IMPACT ASSESSMENT)**

- MINERAL RESOURCES AND MINE LIFE**

- PUBLIC PARTICIPATION**

- CLEAN-UP RECLAMATION-RESTORATION AND REHABILITATION**

- MONITORING**

oINVOLUNTARY RE-SETTLEMENT

oIESA (INTEGRATED ENV. AND SOCIAL  
ASSESSMENT PROCEDURES)

oSIA (STRATEGIC IMPACT ASSESMENT)

oESMMP (ENVIRONMENTAL AND SOCIAL  
MONITORING PLAN)

# CONCLUSIONS

- **Large and small-scale mining have and do produce adverse environmental effects**
- **Human and environmental costs are great**
- **Developing countries are now paying the cost of health and environmental problems resulting from adverse effects of mining**
- **African countries must protect and improve the quality of their environment through appropriate legislation and an effective monitoring of mining operations**

➤ **A fair share of financial resources must be devoted to the development of trained staff, development of institutional frameworks, compliance and enforcement and cleaner technology**

➤ **Government must ensure adequate compensation by national and foreign corporations for injury to persons or damage to property caused by the effect of operations**

➤ **Government must institute the “polluter pays principal”**