

Activity 6. Capacity building and training concept



Giuseppe Delmonaco (ISPRA)
Bohdan Křibek (CGS)
Marc Urvois (BRGM)
Amadou Hassane (OAGS-Niger)

Relevance of the Topic

- ❑ Need to enhance capacity and role of African national geological surveys
- ❑ Strengthen training capacity involving also the **national education and training systems**
 - ❑ Mining-related activities (i.e. mining exploration, mineral exploitation, small-scale mining, mining-induced hazards)
 - ❑ GeoHazards, GeoHeritage, IT infrastructures and GeoScientific Mapping



Objectives & Actions

- ❑ Analyse the *interests* and *capacity/gaps* of the **OAGS members** in **various forms of education and training** arising from a questionnaire,
- ❑ Analyse the *capacity* of the **EuroGeoSurvey members** to **organize training courses and workshops** (based on the offer of individual work packages of the project),
- ❑ Evaluate the respective analyses and formulation of *priorities* for a capacity building programme and propose a **set of training courses** to the **benefit of OAGS**.



Capacity and Gaps from OAGS

CAPACITY

As a general rule, almost all scientific fields and related expertise dealing with the main objectives of the project are present in the capacity of OAGS.

Most of the topics proposed by PanAfGeo have been deemed as relevant in terms of actual capacity by OAGS (e.g. mapping techniques and GIS, geophysics applied to mining exploration, human and natural-induced consequences on the environment due to mining exploitation, geohazards)

GAPS

- ❑ Lack of funds and adequately skilled expertise
- ❑ Lack of adequate and modern equipment
- ❑ Proper and constant training of the personnel



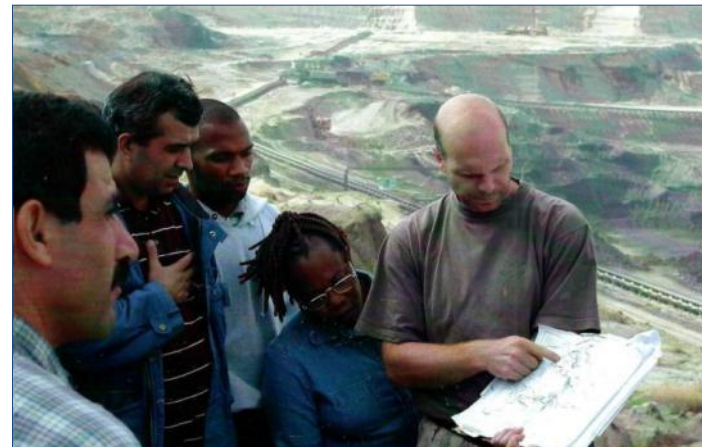
Training Courses/Capacity Building

MAIN DEMAND AND RECOMMENDATIONS

Training and Capacity Building to be addressed considering the fulfillment of institutional mission/responsibilities.

Attention requested from OAGS to:

- ❑ Transfer of standard practices
- ❑ Quality of trainers
- ❑ Applicability of knowledge
- ❑ Quality of materials
- ❑ Fulfilment of expectations
- ❑ On-the-job training delivery mode
- ❑ Case studies on pilot areas in Africa



Example of Training courses

Training courses as a part of the fieldwork within
Activities 3, 4 and 5

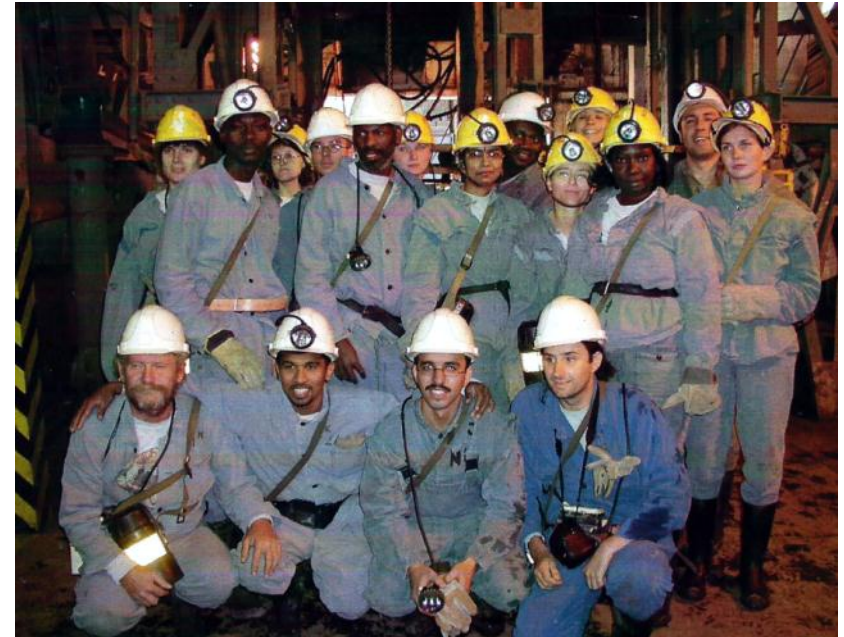


Training courses
organized in Zambia
and Namibia as part
of development and
cooperation projects



Example of Training courses

Training Course in Methods of Geochemical Exploration and their Environmental Applications (Czech Republic)



Duration of the course: 10-14 days

Number of participants: 15-20 per course

Lecturers from Czech Republic and invited lectures from PGI-NRI, GTK, NGR



EGS/OAGS Workshop / 14 August 2014 / Dar-Es-Salaam



Example of Training courses

Training Course in Methods of Geochemical Exploration and their Environmental Applications (Czech Republic)

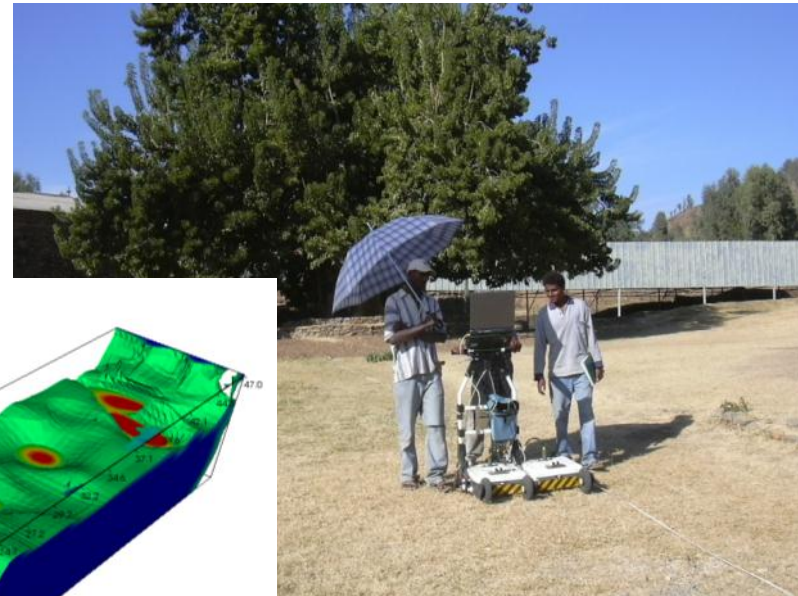
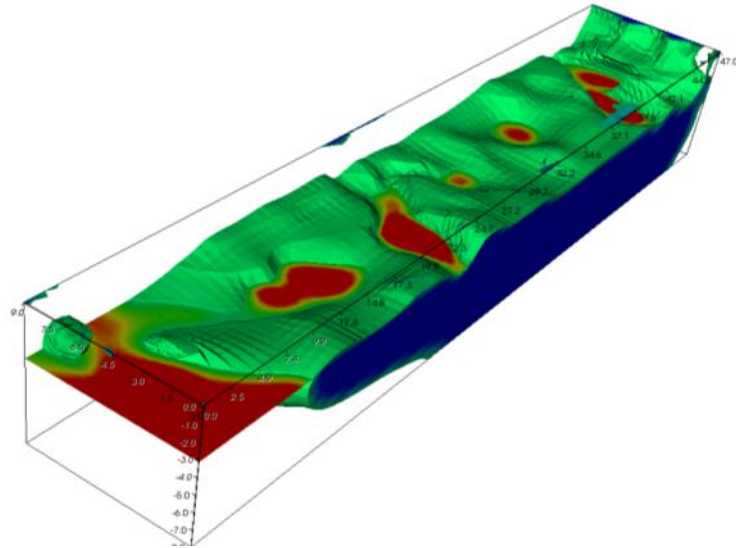
TRAINING COURSE THEMES:

- (1) Introduction to geochemical exploration methods,
- (2) Principles of environmental geochemistry,
- (3) Principles of analytical methods,
- (4) Stream sediment survey and its environmental applications,
- (5) Biogeochemical survey with environmental applications,
- (6) Hydrogeochemical survey with with environmental applications,
- (7) Radon risk assessment,
- (8) Computer modeling in exploration and environmental geochemistry,
- (9) Risk assessment in mining districts,
- (10) The best available remediation techniques,
- (11) Legislation related to environmental issues



Example of Training courses

On-the-job training in Geophysical Investigation for the re-erection of the Roma Stela in Aksum (Ethiopia)



Example of Training courses

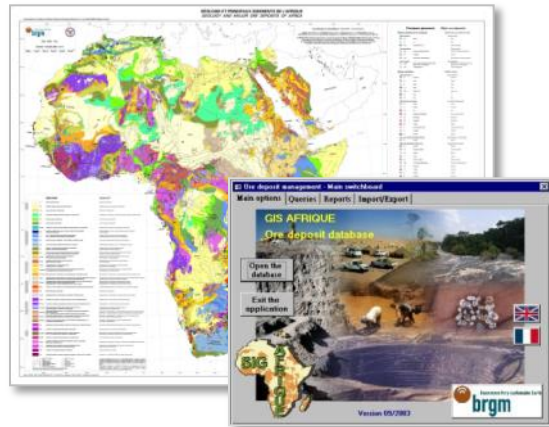
On-the-job training in installation of monitoring systems for rock deformation analysis of the Siq of Petra (Jordan) - UNESCO



EGS/OAGS Workshop / 14 August 2014 / Dar-Es-Salaam

Example of Training courses


On-the-job training in geoscientific database management (geology, mineral resources, hydrogeology, bibliography): SIGAfrique network, BRGM



EGS/OAGS Workshop / 14 August 2014 / Dar-Es-Salaam

WORKSHOPS

Workshops or special sessions organized in the framework of international conferences together with OAGS, GSAf, UNESCO, IUGS, IGCP



24TH COLLOQUIUM OF AFRICAN GEOLOGY (CAG24)
14TH CONGRESS OF GEOLOGICAL SOCIETY OF AFRICA (GSAf14)
40TH ANNIVERSARY OF GSAf

**“40 YEARS OF GSAf (1973-2013): EARTH SCIENCES
 SOLUTIONS TO AFRICAN DEVELOPMENT CHALLENGES”**

JANUARY 8-14, 2013
UNITED NATIONS CONFERENCE CENTRE
ADDIS ABABA, ETHIOPIA

Conference Website: <http://www.CAG24.org.et>



United Nations
Educational, Scientific and
Cultural Organization

**SEPTEMBER 5th PROJECT:
ASSESSMENT OF IMPACTS
OF MINING AND MINERAL
PROCESSING ON THE
ENVIRONMENT AND HUMAN
HEALTH IN AFRICA**




**TRAINING COURSE
THE ASSESSMENT OF IMPACTS
OF MINING ON THE ENVIRONMENT:
THE GEOCHEMIST'S APPROACH**

University of the Witwatersrand
Johannesburg, Republic of South Africa
July 13th - 15th, 2013

TRAINING COURSE THEMES

- Principles of environmental geochemistry
- Methods of environmental monitoring
- Mobility and bioaccessibility of metals in soils
- Applications of geochemical modelling
- Assessment of hazardous properties of mining wastes
- Phytoavailability of metals and metalloids
- Lead and copper isotopes in environmental application
- Modelling of resuspension of dust particles in mining districts



CONTACT
 For more information, please contact Tshani Mwanetsi and Alexander Moko
 University of the Witwatersrand, Johannesburg (e-mail: tshani@wits.ac.za, alexander@wits.ac.za)
 or Bohdan Kribek, Czech Geological Survey, Prague (e-mail: kribek@geology.cz)

**MINING AND
THE ENVIRONMENT
IN AFRICA**

Edited by Bohdan Kribek

PROCEEDINGS OF THE INAUGURAL WORKSHOP
IGCP/SIDA No. 594, KITWE/ZAMBIA, OCTOBER 17th-19th, 2011


EGS/OAGS Workshop / 14 August 2014 / Dar-Es-Salaam





THANK YOU FOR YOUR ATTENTION!



EGS/OAGS Workshop / 14 August 2014 / Dar-Es-Salaam

