



Pan-African Support
to Geological Sciences and
Technology Africa-EU Partnership
Appui panafricain aux géosciences
du partenariat Afrique-UE
Apoio pan-africano às geociências
da parceria África-UF



Ouarzazate, Morocco October 4th, 2024

PanAfGeo - WP-B training session

MINERAL RESOURCES: 23 September-04 October 2024

From 23 September to 4 October 2024, the Kingdom of Morocco hosted in Ouarzazate and Tinghir an international training session of the PanAfGeo project dealing with "*Mineral Resources Assessment*".

PanAfGeo is a pan-African project co-financed by the European Union and a consortium of European geological surveys which started in 2016 and contributes to strengthening collaboration between the Association of European Geological Surveys (EuroGeoSurveys) and the Organisation of African Geological Surveys (OAGS) as well as Africa-EU partnership.

This training, which takes part under the patronage of Mr. Ahmed BENLAKHDIM, Director of Mines and Geology at the Ministry of the Energy Transition and Sustainable Development (MTEDD) of the Kingdom of Morocco, was co-organised by the Geological Survey of Morocco, the Geological Survey of Portugal (LNEG), the Geological Survey of France (BRGM), the Geological Survey of Poland (PGI-NRI) and the Nigeria Geological Survey Agency (NGSA).

This training, held in French, allowed nineteen geoscientists coming from 14 geological surveys* in French-speaking Africa to familiarise themselves with the important challenges linked with mineral resources. The role of geological surveys is to acquire geoscientific data (geology, geophysics or even geochemistry) that governments can use to improve their knowledge of the subsoil and make their mining and quarrying sectors more attractive to investors. It is also a question of creating added value for mining countries throughout the value chain and securing the supply of mineral resources, all within a framework of sustainable development.

The training began on September 23rd, following an opening ceremony in the honoured presence of Mr. Aïssam EL KHLIFI (representing Mr. Ahmed BENLAKHDIM, Director of Mines and Geology at MTEDD), Dr. Julie HOLLIS (Secretary-General at EuroGeoSurveys), Dr. Nicolas CHARLES (Coordination of PanAfGeo, Geological Survey of France-BRGM), Mrs. Maria João BATISTA (WP-B Leader, Geological Survey of Portugal-LNEG), Mr. Umar BATURE (WP-B Co-Leader, Nigeria Geological Survey Agency-NGSA), Pr. Ahmed EL HASSANI (Permanent Member at the Hassan II Academy of Sciences and Technologies), Mr. Hassan BENAISSA (MTEDD, Co-organiser of the training) and Mrs. Céline ANDRIEN (EuroGeoSurveys). Moroccan national television (channel 2M) produced a report at the start of the course, which was broadcast on the national news a few days later.











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Figure 1: Right: Opening of the PanAfGeo session "Mineral Resources" on 23 September 2024 in Ouarzazate, Morocco. Left: Working group with the participants coming from 15 French-speaking African geological surveys.

The training was structured around theoretical sessions describing the main concepts of mineral exploration (technologies and methods, ore-forming processes and occurrences typologies, UNFC/AMREC resources/reserves classification, etc.), mineral economy (critical and strategic commodities, exploration budgets) and governance. These classroom presentations were complemented by field visits, such as to the Imiter silver mine operated by Managem, whose staff we would like to thank for their warm welcome and professionalism. In addition to this industrial mining site, a visit was organised to a semi-artisanal barite mine near Tinghir, under the direction of Pr. Mourad ESSALHI (Mohammed V University in Rabat). Group work was also carried out, in which participants had to prepare two exploration project proposals, one on an industrial scale, the second on a semi-artisanal scale, which were then evaluated by a third group. The exercise addressed technical and scientific issues (mineral deposit model and suitable exploration techniques) as well as legislative, economic and socio-environmental issues.







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Figure 2: Visit of the Imiter silver mine, owned by Managem.









Figure 3 : Visit of a semi-artisanal barite exploitation close to Tinghir.









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This session was moderated by Mrs. Maria João BATISTA (LNEG), Dr. Nicolas CHARLES (BRGM), Pr. Mourad ESSALHI (Mohammed V University in Rabat), Dr. João MATOS (LNEG), Pr. Stanisław WOŁKOWICZ (PGI-NRI), Aïssam EL KHLIFI (MTEDD), Hassan BENAISSA (MTEDD), Abdelmouttaleb EL BOURSOUMI, and Pr. Ahmed EL HASSANI (Hassan II Academy). Following the training session, a cultural visit was organised to the village of Agoulmim near Tazenakht, thanks to the contribution of Mrs. Céline ANDRIEN (EuroGeoSurveys). This was an opportunity for participants to learn more about the culture and crafts of this region, renowned for its tapestry and saffron, and showcasing the host country, Morocco.

The training concluded on October 4th with a ceremony in the presence of trainers, of Mr. Aïssam EL KHLIFI (representing Mr. Ahmed BENLAKHDIM, Director of Mines and Geology at MTEDD), Dr. Nicolas CHARLES (Coordination of PanAfGeo, Geological Survey of France-BRGM), Mrs. Maria João BATISTA (WP-B Leader, Geological Survey of Portugal-LNEG), Mr. Umar BATURE (WP-B Co-Leader, Nigeria Geological Survey Agency-NGSA) and Mrs. Céline ANDRIEN (EuroGeoSurveys), during which certificates were given to each participant before they returned to their respective countries.



Figure 4: Participants and trainers during the closing ceremony of the training session on 4 October 2024 in Ouarzazate, Morocco.





^{*}Benin, Burkina Faso, Cameroon, Congo, Côte d'Ivoire, Djibouti, Gabon, Guinea, Madagascar, Morocco, Niger, Senegal, Togo, et Tunisia.







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About the PanAfGeo Project

PanAfGeo is a pan-African project co-financed by the European Union and a consortium of European geological surveys which started in 2016 and contributes to strengthening collaboration between the Association of European Geological Surveys (EuroGeoSurveys) and the Organisation of African Geological Surveys (OAGS) as well as Africa-EU partnership. The project allows participants to acquire practical tools, methods and knowledge in seven geoscientific fields (geoscientific mapping, mineral resources assessment, small-scale and artisanal mining, geohazards and environmental environment of mines, geoheritage, geoscientific information management, communication and dissemination). The project supports the training of staff in the African geological surveys, strengthening their skills and knowledge.

A brochure describing the objectives of PanAfGeo can be viewed here.

For more information, visit PanAfGeo.

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