

The IUGS COGE Geoscience Education Roadmap for Africa (GEO-ERA)

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The IUGS Commission on Geoscience Education, Training and Technology Transfer (COGE) was established in 2004 to examine and develop programs to assist developed and developing countries to maintain, expand or introduce better Earth Science education, outreach and technology transfer within their country. Despite the numerous science education activities focused on Africa, there is no yet a real "Geoscience Education Roadmap" for the whole continent, which takes into account not only that "*Africa is one*" (*GSAf Chair, Prof. Aberra Mogessie dixit*), but also the diversity of its regions and the idiosyncrasy and specific needs of each African country. Thus, following the IUGS recommendation concerning Africa as a potential location for the development of COGE activities, the need of launching a new, mid-long term (2012-2016) project, named GEO-ERA (GEOscience Education Roadmap for Africa) was proposed and advanced by the COGE Chair during the IUGS meeting in February 2011 in Paris¹. The real origin of this project was, in great part, the result of the fruitful discussion and brainstorming held in Paris with Prof. Aberra Mogessie, during the IUGS EC meeting, about what was the best way to move forward, learning and taking full advantage of other previous geoscience education initiatives (e.g. Earth Science Education Initiative in Africa)².

Basically, GEO-ERA attempts to provide the entire African continent with a mid-long term plan to advance the target of geoscience education, training and technology transfer. In addition to the previous description, two extremely significant aspects regarding the Roadmap are the following:

- GEO-ERA will be developed by Africans by which the participation Geological Society of Africa (GSAf) as one of the partnerships is crucial.
- GEO-ERA will increase the currently still scarce visibility of the contributions linking "Geoscience Education" and "Africa" through the publication of thematic contributions in prestigious journals (i.e. Science, Nature, Journal of African Earth Sciences, Episodes).

In order to accomplish the IUGS recommendations regarding partnership with other institutions and organizations, specific contacts for the joint coordination of GEO-ERA were established with *GSAf*, the *UNESCO Earth Science Education Initiative in Africa*, *AGID*, *CIFEG*, *NSF-Earth Science Literacy Initiative and UNCSTD*. All their responses were positive (although UNESCO is particularly interested on cooperation regarding primary and secondary education). Further collaborations regarding the Roadmap are going on (but in a more preliminary stage), with *NASA Astrobiology Institute Education and Public Outreach*, *Xsci-ESERC and Cosmos Education* and, above all, *AGN and AAWG* (Gender dimension and Geoparks). A second step presenting GEO-ERA was given in the context of the excellent First International Conference on

African and Arabian Geoparks "*Geo-education in Africa - UNESCO & COGE initiatives -*" El Jadida (Morocco)³, as Geoparks are privilege places where field geoscience educational activities can be pursued (and are proposed to be made) in the context of this project. The GEO-ERA was unanimously approved by all members of the IUGS COGE and also was evaluated positively by the IUGS Ad-Hoc Review Committee after its meeting held in Madrid in September/2011.

The development of GEO-ERA, as a specific part of the COGE Annual plan for 2012 and also for the five-years Action Plan of the Commission, was recently approved by the IUGS during the 63th EC Meeting held in San Sebastian, Basque Country (Spain). The first activity in the context of GEO-ERA which will be developed in 2012, in collaboration with other institutions (UNESCO, IGEO), corresponds to a pan-African geoscience education initiative, carried out through the partnership of IUGS-COGE, UNESCO and IGEO. It was also presented in 2012 in Paris in the Workshop organized by UNESCO and IGCP's 40th Anniversary entitled "Earth Science Education globally – connections between research and education"⁴.

On behalf of the IUGS-COGE, I call the collaboration and participation of all interested African institutions, organizations, societies and associations to take part in the development and construction of the GEOscience Education Roadmap for Africa (GEO-ERA), through contacting our Commission and the GSAf.

References

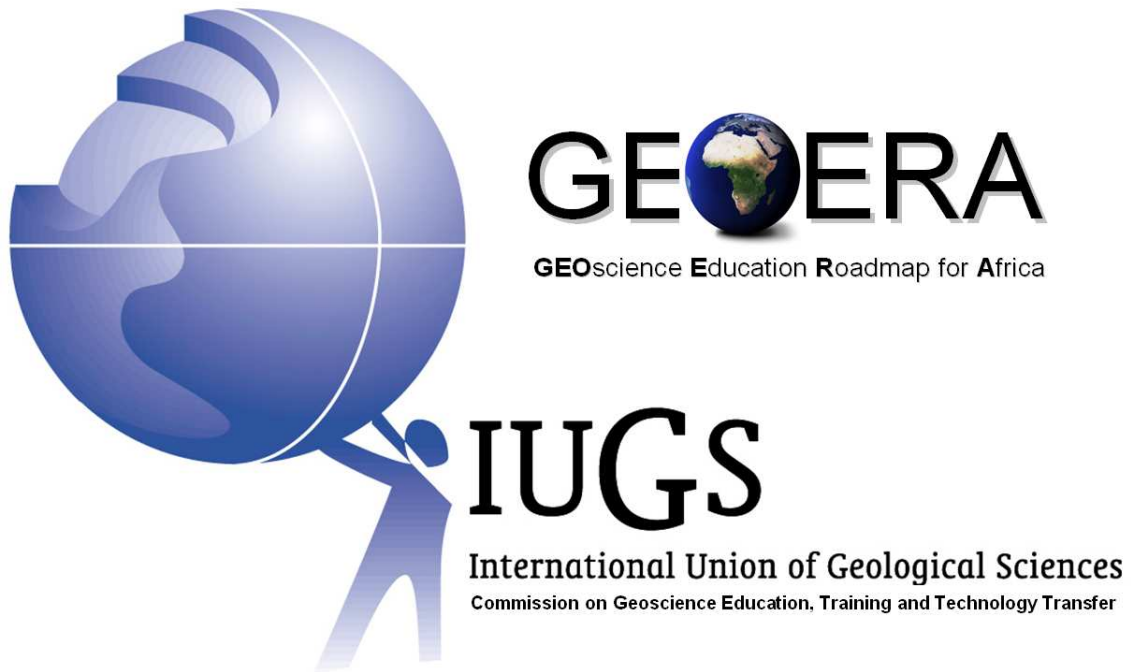
¹ Martinez-Frias, J. (2011) IUGS/COGE: The significance of partnership, capacity building and a multidisciplinary approach in geosciences education. IUGS 50th Anniversary Event. Paris (France).

http://www.iugscoge.com/pdf_files/IUGS_COGE_50th_Paris_JMFrias.pdf

² <http://www.unesco.org/new/en/natural-sciences/environment/earth-sciences/capacity-building/earthscienceeducation/>

³ Martinez-Frias, J. (2011) IUGS-COGE and the significance of Geoparks in Geosciences Education. In Errami, E. & Al-Aawah, M. (2011) First International Conference on African and Arabian Geoparks. El Jadida, Morocco, 21-28 November 2011, 145.

⁴ http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/IGCP40_IUGS%20COGE_Martinez-Frias.pdf



Preliminary logo of GEO-ERA



Presentation of the IUGS COGE plans (including GEO-ERA) in the context of the 63th IUGS EC, San Sebastian, Basque Country, Spain