



Geo-Sciences in Africa (GIA) An Initiative and Action Plan of the Geo-Unions

Uri Shamir, President of IUGG

Geo-Sciences initiative in Africa (GIA) was initiated by the International Union of Geodesy and Geophysics (IUGG) and is carried out as part of the joint action plan with other Geo-Unions of the International Council for Science (ICSU), namely, the International Union of Quaternary Research (INQUA), the International Geographical Union (IGU), the International Union of Photogrammetry and Remote Sensing (ISPRS), the International Union of Geological Sciences (IUGS), and the International Union of Soil Sciences (IUSS). GIA is closely working with the ICSU Regional Office for Africa.

Objectives

The main objective of GIA is to play a complementary role in improving the quality of life in Africa through basic and applied research in earth sciences. To accomplish this GIA aims to do the following:

- (1) To support and facilitate geoscientists in Africa to study and promote the development of African earth resources.
- (2) To support and facilitate geoscientists in Africa to monitor and mitigate natural and human-induced hazards and disasters.
- (3) To promote capacity building through earth science programmes in Africa.
- (4) To aid geoscientists in Africa to develop and utilize their full potential and enhance their professional and public positions in their countries, sub-regions, and in international organizations.
- (5) To support and execute projects and programmes which contribute to the understanding of earth processes at local, regional and global scales, with emphasis on the needs of Africa.
- (6) To generate knowledge and information useful for policy-and decision-making processes that aim at improving the quality of life in Africa.
- (7) To use the activities of GIA and the results it generates for outreach to the political and public arena in African countries, e.g., to demonstrate the importance and value of geo-sciences to society; and to solicit support from national authorities for the development of geo-sciences in their respective countries.

Examples of GIA activities

- To conduct joint projects which are managed by scientists from two or more African countries in collaboration with international experts. A preference will be given to projects with wide participation of scientists and of multi- and inter-disciplinary scope.
- To conduct training workshops and seminars in African countries which are jointly organized by local and international experts.
- To conduct international conferences in African countries which are organized by local scientists in collaboration with international colleagues.
- To initiate and promote study programmes at African universities and research organizations, Geological Surveys, Ministries, Companies; preference will be given to collaborative programmes between two or more African countries.

Examples of GIA Topics

These include topics that are within the priority categories of the ICSU Regional Office for Africa:

- Hazards and Disasters
- Health and Human Well Being
- Sustainable Energy
- Global Change

Additional Topics

Additional topics are linked to those included in the International Year of Planet Earth (IYPE) and Joint Science Programmes of the Geo-Unions, these are:

- Groundwater: recharge, use, management
- Mineral Resources
- Desertification
- Cities and Mega-Cities: effects of geo-forces on the city; effects of the city on the geo-environment; planning and management of urban infrastructure in consideration of these two effects.
- Land based and remotely sensed data: monitoring, interpretation, databases, access, products and their use, inter-operability. This topic brings about collaboration with the eGY – Electronic Geophysical Year.

Support and Funding

GIA is seeking proposals, submitted jointly by African geoscientists and colleagues from around the world. Based on the type of the project proposals, we will be seeking funding from a variety of sources, such as, foundations, private and public companies and institutions, UN and non-governmental organizations. IUGG has availed some seed funding, conditioned on it being used to leverage much larger sums, from external sources.

It has to be noted that some part of the funding for each activity should be provided by the participating African organizations/institutes. This approach is meant to create and display commitment to the activity by the participating scientists, institutions and governments. It intends also to increase the chances that project's products will find their way into useful practice.

Submission of Proposals

African geoscientists are invited to submit preliminary proposals, 2-3 pages in length, which include: topic; proposed activity (project, workshop, etc.); location; duration; participating African scientists and collaborating scientists from elsewhere; planned activities and their expected products (this should take most of the space in the proposal); required budget; and – this is important – the support and the potential supplementary funding that the activity has or is expected to have from the home institution/company/organization.

Proposals should be generated in consultation with the appropriate Geo-Union and/or the disciplinary Association/Committee/Working Group within it, and/or with the ICSU Regional Office for Africa.

**Preliminary proposals should be sent to:
Prof. Uri Shamir, President IUGG, by e-mail: Shamir@technion.ac.il**

N.B. We will initially select a small number of projects, and work with the researchers to generate full proposals which will be used to seek funding.

