In order to start implementing these recommendations, UNESCO will facilitate and help African countries to respond accordingly with three initial activities, to be implemented during the current biennium.

1. Establish an African network of Earth Science Institutions (UNESI) to foster collaboration between Departments of Earth sciences of universities, Earth sciences research institutions and related industries. The project is already endorsed by the Geological Society of Africa and the African Conference of Vice Chancellors and Deans of Science, Engineering and Technology.

2. Develop a Mobile Geologic Field Mapping School which will focus on teaching early career Earth scientists geologic / field mapping as an important geologic tool for their careers, and a vital exercise for countries to identify their resources. This activity could contribute to the Africa Mining Vision.

3. Look at the status of Earth science education at primary and secondary level in schools to forge the future generation of ‘Earth stewards’ and give Earth sciences a status that reflects the importance that this discipline plays in the everyday life of African people. We plan to start with the Government of Djibouti as a showcase.

This Initiative aims to support the development of the next generation of Earth scientists in Africa who are equipped with the necessary tools, networks and perspectives to apply sound science to solving and benefitting from the challenges and opportunities of sustainable development. The opportunities in the Earth sciences are great, starting with traditional mineral extraction and extending into environmental management such as climate change adaptation, prevention of natural hazards, and ensuring access to drinking water.

Regional scoping workshops were organized to assess regional capacities and needs in Earth science education, research and industry. Understanding existing centers of excellence through conversation with relevant and international experts including representatives of Universities, Applied Schools, Geological Surveys, Industry, and Government and plotting the way ahead for Earth science education.
Major Workshop findings

- Engage in outreach exercises directed at decision-makers and the general public on the importance of Earth sciences as a key driver for sustainable development.
- Reinvigorate old networks and build new intra-African ones and between African researchers and the global research community.
- Build strong connections between Industry and Universities.
- Include Earth sciences in the school curriculum at primary and secondary levels.
- Counter the lack of analytical facilities through exchange, identification of networks of expertise and obtaining new equipment through new funding mechanisms.
- Enhance multidisciplinary approaches in research and teaching of Earth sciences.
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- Enhance multidisciplinary approaches in research and teaching of Earth sciences.

Other activities supporting Earth Science Education

The Geopark Initiative expands to Africa. Geoparks raise the importance of geological sites, promote Earth science education, and develop local tourism which supports community development and pride of place. Societal understanding and appreciation of Earth sciences is an important element for Earth science education across the continent.

The International Geoscience Programme (IGCP) with additional support from the Swedish International Development Cooperation Agency is focusing on increasing the African leadership of IGCP projects through supporting research teams and co-funding workshops on developing IGCP project proposals with the UNESCO Nairobi office. IGCP projects encourage focused international collaboration.