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# The Geology and Paleontology of Tanzania: an Overview

Msaky, E.S

Technical Advisor, President's Office, Oil and Gas Advisory Bureau (OGAB), Dar es Salaam, Tanzania

e-mail: emmaeliona2012@gmail.com

Tanzania is a country with remarkable geology, geomorphology and paleontology. The geology of Tanzania includes a series of events that began with the evolution of the Archean Shield, followed by its modification through metamorphism and formation of other continental rocks, which are covered by continentally derived sediments. Archean basement terrain (to the east and west) is bounded by a series of Proterozoic mobile belts.

Phanerozoic succession include series of sedimentary units of Paleozoic to Mesozoic age. The Upper Mesozoic and lower Cenozoic sedimentary formations have been affected by intrusive and extrusive activities that signify active rifting. The younger sedimentary rocks occupy the coastal plains and inland basins with the volcanics filling the rifted grabens. Thus the geology of Tanzania is spread across the geological time era. Also it reflects the geologic history of the whole African continent.

This unique geological setting has rewarded Tanzania with unique sites for paleontological studies. Sites such as the Olduvai Gorge (the cradle of mankind) and the Tendaguru locality (most famous dinosaur locality in Africa) have been studied by various paleontologists/scientists globally. Results of studies of the Olduvai Gorge have provided a good understanding of human evolution while studies on the Tendaguru locality have sharpened our knowledge on dinosaur diversity.

Unlike paleontological and geological works, in Tanzania, little has been done within micropaleontology and palynology, which are branches of paleontology. Supposedly, combined geological, paleontological, micropaleontological and palynological studies in Tanzania are essential for a comprehensive understanding of the geological history of Tanzania and the African continent in general.

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