



## **Earthquake and Volcanic Hazard Mitigation and Capacity Building in Sub-Saharan Africa**

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The East African Rift System (EARS) is a classic example of active continental rifting, and a natural laboratory setting to study initiation and early stage evolution of continental rifts. The EARS is at different stages of development that varies from relatively matured rift (16 mm/yr) in the Afar to a weakly extended Okavango Delta in the south with predicted opening velocity  $< 3$  mm/yr. Recent studies in the region helped researchers to highlight the length and timescales of magmatism and faulting, the partitioning of strain between faulting and magmatism, and their implications for the development of along-axis segmentation. Although the human resource and instrument coverage is sparse in the continent, our understanding of rift processes and deep structure has improved in the last decade after the advent of space geodesy and broadband seismology. The recent major earthquakes, volcanic eruptions and mega dike intrusions that occurred along the EARS attracted several earth scientist teams across the globe.

However, most African countries traversed by the rift do not have the full capacity to monitor and mitigate earthquake and volcanic hazards. Few monitoring facilities exist in some countries, and the data acquisition is rarely available in real-time for mitigation purpose. Many sub-Saharan Africa governments are currently focused on achieving the millennium development goals with massive infrastructure development scheme and urbanization while impending natural hazards of such nature are severely overlooked. Collaborations with overseas researchers and other joint efforts by the international community are opportunities to be used by African institutions to best utilize limited resources and to mitigate earthquake and volcano hazards.