The Geological and Mineral Information System at the Geological Survey of Tanzania - Perspectives for the Development of the Mineral Sector

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Tanzania is endowed with valuable minerals such as diamonds, gold, copper, gemstones, coal and non-metallic minerals. Since the massive development of large gold deposits of the Lake Victoria Gold Field, starting in the late 1990s, the potential of the mineral sector to contribute to the economic and social development of the country became obvious. The Government of Tanzania has identified the mineral sector as one of the key sectors to contribute to further economic growth. The review, systematisation and publication of mineral and geological data is a strategic task to guide both the state and private investors to new discoveries, enhance investment and support national planning activities.

Between 2013 and 2015, in the frame of a World Bank financed project (Sustainable Management of Mineral Resources Project, ID: P096302), the Geological Survey of Tanzania (GST) and Beak Consultants GmbH have developed a modern **Geological and Mineral Information System** (GMIS). The system hosts and manages the main geoscientific information about Tanzania, such as geo-scientific maps, mineral occurrences, boreholes, geochemical and geophysical data, and provides this information to the Government, the private sector, other stakeholders and the general public.

An important part of the project was the integration of the mineral and geological data focusing on the generation of minerogenic models and their presentation in the newly published **Minerogenic Map of Tanzania** (MMT) at a scale of 1:1,500,000 - as the base for targeting mineral potential. Beside the printed version of the map and its explanatory notes (ISBN 978-9987-477-94-4), the data itself is available via the new data access portal of GST at <u>www.gmis-tanzania.com</u> since October 2014.

Based on the data from the MMT and the existing data from airborne geophysical surveys as well as geological maps, country-wide mineral prospectivity maps for different genetic types of Au-mineralisation have been produced using Beak's neural network based **advangeo® Prediction Software**. These maps are useful instruments to further develop the mineral sector of Tanzania, to guide mineral exploration activities and to attract national and international investment to the mineral sector of the country.



