Abstract in English

This Bachelor's Thesis serves as an overview compiled from published literature that is supposed to summarize information regarding geological environment and geodynamic evolution of Precambrian rocks in the Southern Ethiopian Shield, including a broad insight into mineral deposits in this important geological unit.

The Southern Ethiopian Shield was formed during East African Orogeny (ca. 750 to 620 Ma) as a prominent orogenic episode within the Pan-African orogenic processes. The Southern Ethiopian Shield consists of complex rock assemblage including low- to medium-grade metamorphic volcano-sedimentary rocks of the Arabian-Nubian Shield and polyphase high-grade metamorphic rocks belonging to the northernmost part of the Mozambique Belt. These sequences are accompanied by frequent granitoid intrusions emplaced during final stages of the East African Orogeny. In addition, two main regional shear zones with occurrences of hydrothermal alteration and secondary mineralization are identified in the Southern Ethiopian Shield

Numerous deposits of mineral and other resources are present all over Ethiopia. Although there is significant potential for mining fossil fuels and non-metallic resources such as salt or limestone, metallic mineralization found in Precambrian rocks remains the most prominent mineral resource of the country. Examples of that can be platinum extracted from mafic sequences of the Western Ethiopian Shield and tantalum deposit found in pegmatites of the Kenticha Belt in the Southern Ethiopian Shield. The most abundant metallic resource, mined in the largest amounts, is however gold. Gold mining in Ethiopia has been for a long time concentrated in Kenticha and Megado metamorphic belts in the Adola area of the Southern Ethiopian Shield. Gold is generally held here in sulfidic minerals associated with quartz veins and other quartz occurrences. The origin of gold mineralization is connected to low-grade hydrothermal alteration related to regional shear (deformation) zones. Both primary and placer gold deposits are present here, as well as Ethiopia's largest active gold mine in Lega Dembi.

Key words: *Southern Ethiopian Shield, Arabian-Nubian Shield, Tectonics, Mineral deposits, Petrology*