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Natural Stones of Malawi: Key to Economic and Sustainable Development

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A large proportion of Malawi is made up of igneous and metamorphic rocks of the Basement Complex of Precambrian, both Archean and Proterozoic age comprising Archean charnockitic gneiss, granulites, meta-sediments and ultrabasics; Proterozoic sequences are dominated by meta-sediments and older granitoids. The complex geology of the crystalline basement is subdivided into northern and southern domains separated by the Chimaliro Fault. Parts of the country comprise overlying volcano-sedimentary sequences, including coals, of Palaeozoic-Mesozoic Karoo strata and Late Jurassic-Cretaceous alkaline igneous intrusives are found in southern Malawi. Mesozoic and Cenozoic sedimentary rocks are found in narrow belts aligned parallel to Lake Malawi and extensive Quaternary alluvium and superficial deposits occur along the margins of the lake.

Malawi is endowed with different types of natural stone deposits most of which remain unexploited and explored. Over twenty quarry operators supply quarry stone for road and building construction in Malawi. Hundreds of artisanal workers continue to supply aggregate stones within and on the outskirts of urban areas. Ornamental stones and granitic dimension stones are also quarried, but in insignificant volumes. In Northern Malawi, there are several granite deposits including the Nyika, which is the largest single outcrop occupying approximately 260.5 km², Mtwalo Amazonite an opaque to translucent bluish–green variety of microcline feldspar that occurs in alkali granites and pegmatite, the Ilomba granite (sodalite) occurring in small areas within biotite; apatite, plagioclase and calcite. In the Center, there are the Dzalanyama granites, and the Sani granites. In the South, there are the Mangochi granites. Dolerite and gabbroic rocks spread across the country, trending as black granites. Malawi is also endowed with many deposits of marble. A variety of other igneous, metamorphic and sedimentary rocks are also used as dimension stones.

Discovery of more natural stone deposits through research is essential in Malawi. Natural stone exploitation has the potential to generate significant direct and indirect economic benefits for Malawi and contribute to sustainable development. The major direct economic impacts can be measured in terms of contributions to gross domestic product, international trade, foreign exchange, government revenues and job creation.

