

Swaziland

Total population (July 2000 estimate): 1,083,000

Area: 17,363 km²

Annual population growth rate (2000): 2.02%

Life expectancy at birth (1998): 60.7 years

People not expected to survive to age 40 (1998): 20.2% of total population

GDP per capita (1998): US \$3,816



Swaziland is a small landlocked mountainous country in southern Africa, surrounded by the Republic of South Africa and Mozambique. Swaziland consists of well-defined north-south striking landscape regions, (the rugged and mountainous 'high-veld' at altitudes between 1,200-1,800 m in the west, the plateaux of the 'middle-veld' at altitudes between 600 and 1,000 m, and the 'low-veld' at approximately 300-600 m). The Lebombo Mountain range at 'middle-veld' altitudes forms the border with Mozambique. Most farming activities are concentrated in the 'middle-veld' area.

The economic bases of Swaziland are manufacturing, tourism, agriculture and the pulp and paper industries. The agricultural sector accounts for 10% of the GDP and employs approximately 18% of the people. Most farmers cultivate only 2-3 acres for maize, sorghum and vegetables on a subsistence basis and some crops (e.g. cotton) for sale. Swaziland has one of the highest cattle-to-land ratios in Africa, which results in serious erosion problems. Swaziland is the second-largest sugar exporter in Africa but other export crops and products include canned pineapple, cotton lint and cotton seed.

The mining sector accounts for only 2% of the GDP. It is in transition after the exhaustion of high-grade iron deposits and the decline of the asbestos industry. Swaziland holds a substantial resource base of coal.

Geological outline

Geologically, Swaziland can be divided into two distinct units, Archean in the western part of the country and the Permo-Triassic and younger Karoo sediments and volcanics in the eastern part of the country. The Precambrian is made up of Archean gneisses (Ngwane and Mahamba gneisses) and granite greenstone terrane (Swaziland and Pongola Supergroups), and is intruded by various plutons, including the extensive Usushwana gabbro/pyroxenite complex (Government of Swaziland 1982). Karoo sediments and volcanics (basaltic and rhyolitic/rhyodacitic in composition) form the north-south striking Lebombo Mountains.

AGROMINERALS

No phosphates have been found in Swaziland so far.

Small occurrences of siliceous limestone have been reported from Karoo sediments and small calcrete deposits occur in the low-veld, overlying Ca-rich Karoo sediments. The calcrete is restricted in thickness and extent, but can be of local importance.

Calcium-magnesium-rich alumino-silicate talc-carbonate rocks are found at the base of the Swaziland Supergroup in large amounts. The CaO analysis of one sample from near Forbes Reef contains 9.25% CaO, 15.41% MgO, but also 10.39% Al₂O₃ (Lorenz 1996). Obsidians and siliceous fine-grained tuffs but no natural zeolite deposits have been reported in the volcanic sequences of Swaziland. An occurrence of vermiculite is known from north of Manzini (Government of Swaziland 1982).

Agromineral potential

The potential for substantial amounts of agrominerals in Swaziland is low. The potential of applying talc/carbonate rocks on highly depleted and Mg deficient soils should be investigated. The potential for finding natural zeolites in the felsic volcanics of the Lebombo Mountains is good.

References:

Government of Swaziland 1982. 1:250,000 Geological Map of Swaziland.

Lorenz W 1996. Swaziland. In: Bosse H-R, Gwosdz W, Lorenz W, Markwich, Roth W and F Wolff (eds.) Limestone and dolomite resources of Africa. Geol. Jb., D, 420-423.