

MALAWI

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Malawi's macroeconomic performance faced a lot of problems in 2002. The economy declined by 1.5%; donor funding was withheld, causing high domestic borrowing which fuelled a high cost of borrowing (40%); month-on-month inflation was around 18%; and limited foreign currency flows made the foreign exchange rate very unstable.

In order to stabilise the economy and foster economic growth, a 'Malawi Business Plan' aimed at fostering economic growth was conceived in late 2002. The main focus was on agriculture, mining, manufacturing and tourism. Other efforts included economic empowerment programmes within the realm of the Poverty Reduction Strategic Plan, transparent and non-discretionary incentives and a modern land policy that, among other things, offers clear lease durations commensurate with mine life.

Several mining companies were involved in mineral exploration. These included: Millenium Mining Ltd, Allied Procurement Agency Ltd, Paladin Resources, Mchenga Coal Mines Ltd, Albidon Ltd and Maravi Minerals Development Corp.

Millennium Mining continued with its exploration, evaluation and development of heavy minerals sands (HMS) projects. Exploration activities centred on the Nkhota-Kota, Salima, Makanjira and Lake Chilwa areas. Several hundreds of millions of tonnes have been outlined, with commercial grades of ilmenite, rutile and zircon, Makanjira being the largest deposit. Heavy mineral deposits at Makanjira are estimated at around 1,000 Mt, while those at Lake Chilwa are estimated at 15 Mt and rich in zircon (0.5%).

Allied Procurement Agency (APA) and its partner Mineral Sands of South Africa were still awaiting metallurgical test results from Australia on their Chipoka HMS samples. In addition, APA was actively engaged in the procurement of materials for assembling a mining barge on site at Chipoka. Activities pertaining to a bankable feasibility study were also well advanced.

Paladin Resources is still seeking financing for a bankable feasibility study for the development of its Kayelekera uranium project.

Lisungwe Mineral Resources (LMR) continued to hold tenements in the Lisungwe – Kirk Range area for basic mineral exploration. During the period, LMR also engaged the services of ACA Howe International for an integrated interpretation of geological, geochemical and geophysical data. From this exercise, ACA Howe International identified fourteen anomalous target areas for platinum group metals, nickel, copper, chrome and gold, in areas underlain by ultramafic rocks, to be followed up by LMR. This work, which is to include trenching and drilling, classifies targets as high priority (four), high-medium

(three) and medium (seven). Follow-up is to take place during the onset of the dry season in 2003 under a two-phased programme.

Mchenga Coal Mines embarked on infrastructural development work in preparation for development of the Chombe Block coal reserves in Rumphu. The reserves were delineated in earlier exploration work in 2001. Exploration for additional resources within the Livingstonia Coalfield continued.

Albidon, an Australian company, continued to explore four areas in southern and central Malawi. These areas comprise: Bimbili River (Mpemba Hill) and Kapeni River (Little Michiru Hill) both around Blantyre; the Linthipe area in Dedza; and Katakwi in Kasungu. The company conducted extensive geological and geochemical sampling and deposit modelling. The results for nickel, copper and platinum group metals were very encouraging and exciting. Recently, the company has made several visits to Bimbili and Kapeni accompanied by senior representatives of several major mining houses including BHP Billiton and Anglo American. The objective of the field visits was to generate interest in possible joint venture partnerships for further exploration and development. Follow-up work in 2003 includes core drilling.

Maravi Minerals Development holds exploration licences for Thambani Mountain and Chilwa Island in Mwanza and Zomba, respectively, and a reconnaissance licence for a large tract in Mzimba. The company carried out a relatively extensive pitting and sampling programme at Thambani, and made brief sampling visits to Chilwa and Mzimba areas. The company's main interest in the areas is targeted at tantalite- and niobium-bearing minerals, as well as zircon at Thambani and gemstones at Mzimba. By the end of 2002, Maravi was still awaiting sampling results and also retained the services of CSMA Consultants Ltd to review and firm up the mineral potentials of the three areas.

Malawi Development Corp. pursued its phosphate project at Tundulu in Phalombe. Resource drilling company was commissioned to carry out some preliminary percussion drilling over the deposit before the onset of the rains. Bench testing of the phosphate ore was also planned for the period, and in 2003.

Rift Valley Resources Development continued to seek funds for its bankable feasibility study of Kangankunde Hill monazite and strontianite project. The objective is to validate the ore reserves and concentrate on dealing with the technical challenges of producing acceptable concentrates of monazite and strontianite.

Several mineral deposits exist in Malawi which can be mined on a small scale. These are industrial minerals some of which have export potential (Table 1). The Malawi Government has embarked on an economic empowerment programme aimed at promoting and supporting small-scale mining in areas of import substitution and value-adding services. These programmes include gemstone cutting and polishing, gypsum mining and lime production using coal.

Coal and cement production remained Malawi's main source of mineral revenue in the medium-to –large-scale mining sector, and stone aggregate production and gemstone mining dominated small -scale mining activities. Blue agates from Lower Shire constituted the bulk of gemstone production in 2002. Portland Cement Co., controlled by Lafarge, closed its Chungalume clinker factory and opted to import clinker for cement production from Zimbabwe and Zambia. The closure was influenced by an increase in mining costs of limestone at the quarry due to a huge overbudden. The Government of Malawi is encouraging the establishment of mini cement plants (100 t/d) in order to substitute the importation of clinker into the country.

Ilomba Granite and Granite Ltd made a break-through in finding markets in Italy for sodalite syenite and amazonite-granite. Mining of both dimension stones is currently underway.

Table 1: Mineral Reserves, Proven and Probable as at January 2003

Category	Name	Tonnage/grade
Proven Reserves	Kayerekera uranium	2.4 Mt/0.26% U ₃ O ₈
	Mulanje bauxite	28.8 Mt/43.9% Al ₂ O ₃
	Chimwadzulu corundum	8 t/75.6 g/m ³
	Malowa Hill limestone	15 Mt/48% CaO, 1.2% MgO
	Kangankunde rare earth minerals	11 Mt/8%Sr, 2.6% Mzte
	Katengeza graphite	2.7 Mt/5.8% C
	Chipoka heavy mineral sands	210 Mt/5.6% HMS
	Feremu vermiculite	1.5 Mt/4.9% (med+fine)
Probable Reserves	Mwabvi coalfield	4 Mt/30.0% ash
	Tundulu phosphate	2.0 Mt/17% P ₂ O ₅
	Ngana coalfield	15 Mt/21.2% ash
	Chenkumbi limestone	10 Mt/46%CaO, 6.3% MgO
	Chisepo pyrite (Nkhanyu Hill)	34 Mt/8% S
	Linthipe kaolinitic clay	14.1 Mt/ 33.8% Al ₂ O ₃
	Mchinji glass sand	1.6 Mt/ 97% SiO ₂
	Salima heavy mineral sands	250 Mt/5.6% HMS

Table 2: Mineral Production Statistics

Mineral	Unit	1998	1999	2000	2001	2002
Coal	'000 t	54.2	43.8	34.3	36.7	41.9
Cement	'000 t	134.0	186.5	155.1	180.1	180.1
Limestone	'000 t	171.9	171.9	-	-	169.1
Lime	'000 t	2.6	2.9	2.7	2.1 ^r	3.6

^r - Revised