

## BURKINA FASO

*By a special contributor*

One of the world's poorest countries, landlocked Burkina Faso covers an area of some 274,000 km<sup>2</sup> to the north of Cote d'Ivoire and Ghana in West Africa. It is typified by undulating savannah and has a tropical climate but is susceptible to drought, a major concern for the great majority of the country's 13.23 million population who rely mainly on subsistence farming.

Independence from France was achieved in 1960 and two decades of government instability were followed by multi-party elections in the early 1990s. The elected head of state, President Blaise Compaore has been in office since 1987.

During the latter part of 2002, and into 2003, unrest in neighbouring Côte d'Ivoire has undermined the long-established good relations between the two countries and has had a negative impact on the thousands of burkinabe farm workers who migrate south to Cote d'Ivoire each year.

Burkina Faso's GDP in 2003 is estimated to have grown by 5.2% but purchasing power parity per head of population is just US\$1,100. Agriculture, including cattle-breeding, contributes 40% of GDP, with industry and services contributing 20% and 40% respectively.

Mineral resources include manganese, bauxite, copper, nickel, lead, zinc, gold and limestone/marble but there has been little mineral development. In recent years, however, the development of the country's gold resources has assumed greater significance and could become increasingly important because of the current low world price of cotton, the country's principal export commodity.

The Government of Burkina Faso is seeking to accelerate development of the country's minerals sector and significant revisions have been made to the existing mining code in a bid to attract more foreign investment. In particular, the revisions include new tax provisions. The revised code was adopted by the National Assembly in May 2003 and has now passed into law.

The revisions include:

- A clear distinction between licences for large mining operations and licences for exploration and small-scale mines where administrative and tax requirements are less. This is expected to encourage the development of the numerous, small mineral deposits known within the country.

- Encouragement of the activities of small miners and the participation of local communities through the provision of improved financial assistance.
- State ownership is restricted to a 10% shareholding in large mining projects and no ownership participation in small-scale mines.
- The status of semi-mechanised artisanal mining is enhanced by granting the operator the mining title. This type of operation is seen as an alternative solution to waiting for large mining companies to commit major investments.
- As an incentive to mining companies, a distinction is made for tax purposes between the exploration phase and the construction phase of a mining project. This provision recognises the financial commitment made by an investor at the exploration phase when there is no guarantee that a mineral deposit will be discovered or developed into a mine.
- As a tax benefit, mineral title holders are able to deduct at source 20% of any sums paid as remunerations to those people providing services but possessing no established office in Burkina Faso, and the transfer of the aforementioned reserve in accordance with the provisions of the tax code.
- Various tax and customs advantages are envisaged for the preparatory work period ahead of the mine construction phase, eg exemption from VAT and community taxes (for a maximum of three years).
- At the operating stage, the new law also grants many taxes and customs advantages to the investor: an increase from 15% to 25% for industrial and commercial tax benefit; lower tax on income from transferable securities; exemption from registration fees when increasing the authorised capital of companies; and reduced tax on vital imports such as fuel and lubricants.

### **Gold developments**

Resolute Ltd has recently acquired a 100% interest in the Belahouro gold project, and BHP has agreed to convert its equity to a royalty of 2.5% of gross sales. Belahouro, located approximately 225 km northeast of Ouagadougou, contains measured and indicated resources of 7.4 Mt at 2.79 g/t Au (665,206 oz contained). At a gold price of US\$300/oz approximately 350,000 oz are amenable to open-pit mining.

In August 2004, the Canadian junior, Orezone Resources Inc, announced that US\$11.6 million would be spent over the next 12 months on exploration, including US\$5.2 million on the Essakan property that will be financed by joint venture partner Gold Fields Ltd (which is earning up to 60%) and US\$5.8 million by Orezone on its wholly-owned Bondi and Sega projects. On the

1,433 km<sup>2</sup> Essakan property, the focus will be on expanding the resource and moving the project to the feasibility stage by drilling the down plunge extension of the high-grade core in the Essakan Main Zone (EMZ), and drilling the discovery at nearby Falagountou. Indicated resources in the EMZ now total 30.5 Mt at 1.95 g/t (1.9 Moz contained) and inferred resources total an additional 4.4 Mt at 2.0 g/t Au.

At its wholly-owned Bondi project, the company will spend US\$3.8 million and will focus on expanding the resource at depth, along strike and in parallel zones, and on a number of targets within the 1,400 km<sup>2</sup> land package. A further US\$2 million is budgeted for the wholly-owned 168 km<sup>2</sup> Sega project. Initial drilling is described as highly encouraging, and the next drilling campaign will focus on upgrading existing resources in the Gambo Zone to the indicated category, providing sufficient data for an initial resource calculation in the Bakou Zone and following up the high potential RZ discovery. All three zones are located in a relatively small 2.5 km<sup>2</sup> area.

Three reverse circulation drills and one diamond core drill are currently operating on Orezone's properties and three additional rigs will be drilling before the end of the year.

Quebec-based Semafo Inc is completing a feasibility study for the Mana project, with the objective of starting production in 2006. Recently, deep drilling has begun to test the extension at depth of the Wona deposit within its Mana-Kona properties. The programme will comprise a series of 10 diamond drilled holes with RC pre-collars for a total of about 2000 m. The main objective is to test the presence of mineralisation of significant widths and grades at an elevation averaging 50 m below the deepest known intersections on Wona, and over a strike length of 700 m. In this area, the auriferous ore zone averages 25 m in true width. Previous drilling intersections have included 48 m at 4.36 g/t Au, 61 m at 3.87 g/t Au and 40 m at 4.06 g/t Au.

As part of an ongoing feasibility study on the whole Mana permit area, detailed RC and diamond drilling were completed during 2003 and the total mineral resources in the Wona and Nyafe deposits were increased to 10.91 Mt at 2.91 g/t Au. Most of the increase is attributable to the 2.5 km long Wona deposit.

In May 2004, Axmin Inc reported the completion of a bankable feasibility study for the Bouroum Permit which incorporates the reserves of the Bouroum project with that of High River Gold Mines Ltd's Taparko project. The mineable reserves (at a gold price of US\$350/oz) amount to 861,000 t at a grade of 3.97 g/t Au as estimated by SRK (Canada) Inc.

By completing the bankable feasibility study, Axmin earned an undivided 65% interest in the Bouroum Permit from Channel Resources Ltd, from whom it had purchased an 8% interest in October 2003. Axmin then purchased the remaining 27% interest from Channel for US\$445,079. In June 2004, under a separate agreement, Axmin announced the sale of part of Bouroum, comprising ore reserves of 110,000 oz, to a subsidiary of High River Gold for

a total consideration of US\$3.3 million. The sale agreement covers an area of 11 km<sup>2</sup> within the Bouroum Permit.

In addition, Axmin and High River Gold have established a joint venture that will ensure the continued exploration of Axmin's permits in Burkina Faso. These comprise the remainder of the Bouroum Permit plus the two adjacent permits Yeou and Ankouna. High River Gold may earn a 100% interest in the three permits by spending US\$1.5 million on exploration over three years, with a minimum of US\$381,000 in the first year. Axmin retains a back-in right up to the time of completion of a feasibility study for a 50% interest in one or all of the permits by paying High River Gold a multiple of 1.5 times its expenditure on the relevant permit(s).

High River Gold received an exploitation permit for the Taparko mine in July 2004. Construction is under way and commercial production is expected to begin in the final quarter of 2005. The Taparko mill will process ore from both the Taparko gold deposits and the nearby Bouroum gold deposits, located 49 km to the northwest.

The combined operation would mine approximately 1 Mt/y, with gold production averaging more than 90,000 oz/y over an eight-year period, exceeding 100,000 oz in each of the first three years. Based on a US\$350/oz gold price, CIM classified reserves exceeding 600,000 oz of gold have been established for three pits on the Taparko property and ore containing a minimum of 110,000 oz of gold is expected from three pits on the Bouroum property. High River has an 80% interest in the Taparko project; the Burkina Government has a 20% interest (5% of which is participating).

Canadian-based Etruscan Resources Inc completed the first phase of infill and definition drilling at its 90%-owned Youga project in March this year. The company acquired the property from Ashanti Goldfields Co Ltd in September 2003, and the latter had established a measured and indicated resource of 1.4 Moz of gold.

In September 2003, Etruscan acquired the Youga gold deposits and three exploration permits located in southern Burkina Faso from Ashanti Goldfields Co Ltd and Echo Bay Mines Ltd for US\$6.5 million. The Youga gold resources have been reported as 746,000 oz (measured and indicated) and 510,000 oz (inferred). The project is fully permitted for mine development by the Government of Burkina Faso. Etruscan holds a 90% interest in Burkina Mining Co (BMC) which has the rights to exploit the deposits. The remaining 10% of BMC is held by the Government of Burkina Faso.

The geology at Youga is similar to the Birimian gold belts of Ghana, and mineralisation is largely contained in silicified arkosic meta-sediments of Tarkwaian age. The largest deposit, A2 Main, comprises approximately 80% of the total reported gold resources. Much of Etruscan's initial work is focused on providing more detailed information on the high-grade gold zone that exists within the A2 Main deposit. RSG Global (RSG) of Perth, Australia, has been engaged to assist in finalising these updated resource and reserve

estimates. Metallurgical Design and Management (MDM) of South Africa has been selected to oversee the completion of a bankable feasibility study and, subject to project financing, construction could begin by the end of this year. RMB Resources has been selected to arrange the project debt financing for Youga.

Cluff Mining plc's Kalsaka project represents a 600,000 oz gold resource that could support a mine producing about 50,000-60,000 oz/y for four to five years. There are a number of targets in a range of hills extending for 20 km in the area, and a drilling programme is expected to be undertaken to add to the existing resource to see if it can be extended to a larger operation.

Vancouver-based junior, St Jude Resources Ltd, continues to report encouraging drilling results from its 90%-owned Goulagou project where it is attempting to define a mineable bulk tonnage oxide resource. The GG2 zone has been traced along strike for some 1.6 km and at GG1 there now appear to be two parallel zones.

Jilbey Gold Exploration Ltd has exploration permits totalling 3,800 km<sup>2</sup>, in the Taparka area in the northeast, at Bissa Hill in central Burkina Faso and in the Houde area in the southwest. A drilling programme is underway at Bissa Hill.

### **Other minerals**

Apart from gold exploration, there has been little else to report in terms of mining activity in Burkina Faso over the past 12 months. The restart of the Perkoa zinc mine remains a possibility and there is now interest from an Australian junior, Aim Resources Ltd, which has signed a Memorandum of Agreement with BHP Billiton Development BV and Metorex Ltd to purchase Metorex Burkina Faso BV (MBF), the owner of the Perkoa project. In 2001, Johannesburg-based Metorex Ltd signed a MoU with the government as the basis for securing the mining lease. Aim Resources has an option until December 31, 2004, to complete a due diligence study and purchase MBF for US\$1.1 million. Work on a bankable feasibility study could start once the option is exercised. Perkoa possesses indicated resources of 6 Mt averaging 18% Zn, plus an inferred resource of 880,000 t at 14.8% Zn.

No further progress has been reported by Afcan Mining Corp since its announcement in July 2002, that it had been granted a phosphate prospecting permit for the Kodjari property. The three-year permit covers an area of 108 km<sup>2</sup> in the southeast part of the country near the border with Benin. The Kodjari deposit was discovered 20 years ago and has an estimated resource of 65 Mt averaging 28% P<sub>2</sub>O<sub>5</sub> but development has been hindered by the government's ban on imports of sulphuric acid, needed to convert ore into fertiliser. A Canadian company, MetChem has since demonstrated that sulphuric acid could be derived locally by roasting sphalerite.