GHANA

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The year 2000 was difficult for the Ghanaian economy as internal and external problems culminated in a resurgence of domestic inflation, a steep and unprecedented depreciation of the cedi against the major currencies and weak macroeconomic fundamentals. The continued depreciation of the price of primary commodities on the world market constrained the country's foreign exchange earning capacity. This led to an acute shortage of foreign exchange, resulting in the cedi depreciating massively against the major currencies at the central bank. Foreign currency deposits with the commercial banks increased by 95.8% between 1999 and 2000, mainly as a result of the ailing cedi.

Overall Gross Domestic Product (GDP) for 2000, as provisionally estimated, indicated a growth rate of 3.7% which is 0.7% lower than the growth performance achieved in 1999. This was accounted for by growth of 5.4% in the services sector and 3.8% and 2.1% respectively in the industrial and agricultural sectors. As in the previous year, the country's economy in 2000 continued to be dominated by the agricultural sector, which accounted for 36% of total real GDP. There was a strong upsurge in inflationary pressures in the economy during 2000 as compared with the price developments in 1999. Inflation for the year ending December 31, 2000 rose from 13.8% in December 1999 to reach a high level of 40.5%.

Total export receipts for 2000 were provisionally estimated at US$1.9 billion compared with an amount of US$2.0 billion in 1999. Earnings from cocoa exports fell by 21%, from US$552.3 million in 1999 to US$436.8 million in 2000, mainly on account of a fall in prices. The average price of cocoa beans exported fell by 24% from US$1,434/t in 1999 to US$1,092/t in 2000. Proceeds from gold exports amounted to US$702 million compared with US$710.8 million in 1999. The average price of gold exported was US$280.4/oz. as compared with US$278.4/oz in 1999. Gold volume exported, however, declined from 2.6 Moz in 1999 to 2.5 Moz in 2000. Despite a 15.2% increase in the volume of timber exports over that of 1999, the export value was US$175.2 million, about the same level as in 1999. This was as a result of a significant drop in the average prices of about 13% from US$401.7/m^3 in 1999 to US$351.3/m^3 in 2000. Miscellaneous exports (including non-traditional exports) were valued at US$568.7 million as compared with US$680 million in 1999.

Total value of imports (fob) fell by 12.3% to US$2.8 billion in 2000. Non oil imports declined significantly by about 20% due to the sharp depreciation of the cedi. The value of crude oil and refined oil products rose by 56% from US$333.3 million in 1999 to US$520.1 million in 2000. This was due entirely to the increase in crude oil prices from an average of US$18/bbl in 1999 to US$30.8/bbl in 2000.

The mining sector Development and Environment project, which is funded with IDA Credit 273-GH, is supporting the sustainable development of Ghana's mining sector on an environmentally sound basis. It does this through strengthened mining sector institutions and organisational support to small scale miners, by introducing the use of appropriate and environmentally responsible technology. The project, which was due to have ended on December, 31, 2000, has been extended for one year. The extension is to enable an action plan to be implemented, which contains the recommendations of a study relating to the strengthening of the Minerals Commission, the reconstruction of the Geological Survey Department and the restructuring of the Mines Department. Other activities that will be undertaken during the extension period include the drafting of new mining and fiscal laws and regulations, the conclusion of Environmental Impact Statements on the activities related to the small scale miners, and a work programme aimed at addressing the socio-economic impact of mining on the local community.

Gold Mining

As usual, gold exploration and mining continue to be the main focus for mining companies in Ghana. Five reconnaissance/prospecting licences were issued to local and foreign companies during 2000. Valid exploration licences as at the end of the year stood at 178, of which 75 were held by foreign controlled companies. Gulf Coast Resources, a Canadian company, and Abore Mining Co. Ltd, an Australian company, were granted mining leases after having submitted acceptable feasibility studies and environmental impact statements on their proposed mining projects to the government. A local company, Savanna Cement Co., was also granted a mining lease to mine the Buipe limestone deposits for the production of clinker and portland cement.

Activities in the exploration front slowed down considerably due to the slump in the world market price of gold during the year. It had been difficult for almost all the companies to raise capital for their projects. Quite a few companies however managed to weather the storm and showed significant strides in their work. Companies like Normandy Ghana Gold, Chirano Gold Mines, Rank, Shea Gold etc. are in the process of submitting feasibility studies for the granting of mining leases.

Ashanti Goldfields Co. Ltd (AGC)

Obuasi gold production reduced by 13.7% from 743,111 oz in 1999 to 640,988 oz (19,937 kg) in 2000. Cash operating costs were US$205/oz, compared with US$222/oz in 1999, reflecting the closure of the high cost surface operations and improved cost control. A total of 5.3 Mt was processed compared with 7.0 Mt in 1999. The Pompora and Oxide treatment plants were shut down in July and September respectively and are currently on care-and-maintenance to enable them to provide strategic backup processing facilities. The sulphide treatment plant (STP), where recovery increased from 77% to 82% during the year, will remain the key source of Obuasi gold processing. Throughput at the tailings treatment plant was 1.8 Mt, as it was in 1999. Recovery, at 31.1%, was slightly lower than the 33.1% achieved in 1999. Improved grades and higher tonnage enabled gold production to exceed that of 1999, despite the reduced recovery. An underground diamond drilling programme was embarked upon to upgrade the resource status across the mine.

At Ayanfuri, gold production reduced by 18% from 44,424 oz in 1999 to 36,383 oz (1,132 kg) in 2000, as a result of a reduction in mining and the gradual depletion of ore reserves. The cash operating cost increased to US$232/oz from US$202/oz in 1999, reflecting an increase in the strip ratio from 1:2 to 3:4, and the impact of fixed costs on the lower level of gold production. Engineering design work and economic analysis is being carried out on a small new resource block identified in the vicinity of the mine. The life of the mine could possibly be extended to mid-2001, depending upon the outcome of the work. The mine will be closed and an environmental closure plan implemented if there are no further discoveries during 2001.

Gold production from the Iduapriem mine, which is 80%-owned by AGC, was a record 166,892 oz (5,191 kg) in 2000. Cash operating costs were reduced from US$248/oz in 1999 to US$233/oz in 2000. Increased carbon-in-leach (CIL) and heap leach plant throughput grades were the main reasons for this performance. Tonnage throughput at the CIL plant was affected by the harder nature of the fresh rock ore being mined from the Teberebie South pit and mechanical problems with the primary crushing system. Teberebie has added 37.2 Mt at a grade of 1.71 g/t of new ore reserves and has extended the mine life by approximately nine years at current production levels. Given the higher grade ore, Iduapriem's cash operating costs are projected to decrease to around US$200/oz. In addition, analysis of the drilling data within both the Iduapriem and Teberebie properties indicates that there is a large, low grade resource which needs to be explored further and analysed to assess the potential of generating additional reserves to extend the mine life further.

During 2000, Ashanti continued to leach the ore previously stacked on the Teberebie pads and a total of 26,976 oz (839 kg) of gold was recovered at a cash operating cost of US$161/oz.

Bibiani produced a record total of 273,711 oz (8,514 kg) at a cash operating cost of US$152/oz during 2000, compared to 261,899 oz at a cash operating cost of US$162/oz in the previous year. Work on the evaluation of a trackless underground mining operation to exploit extensions of the open pit resources at depth continued during the year and will continue in 2001. Business initiatives to acquire prospective ground within economic haulage distance of the processing plant and extend mine life beyond 2004 will also be progressed further in 2001.

The Siguiri mine, in Guinea, produced a record total of 303,381 oz at a cash operating cost of US$184/oz, compared with 239,218 oz at US$185/oz in 1999. Both production and cash operating costs were adversely affected by lower mined and stacked grades during the year. In addition, operating costs were affected by a 50% increase in the price of diesel fuel. Metallurgical recovery for the year increased to 79.3% from 67.8% in 1999

In Zimbabwe, production for the Freda-Rebecca mine in 2000 was a record 112,164 oz at a cash operating cost of US$206/oz, compared with 109,184 oz at US$174/oz in 1999. During the year, the main focus for the mine was to improve productivity of the trackless mining fleet by improving maintenance and supervision. Processing operations were affected by a strike in February and a number of mechanical failures on the two SAG mills during the year. The problems associated with major mill component failures have been addressed and a programme is in place to upgrade the maintenance service in the processing plant to improve future availability. The economic and political situation in Zimbabwe during 2000 deteriorated significantly and presented a series of difficult problems for the management team. The lack of foreign exchange and the fixed exchange rate, coupled with high inflation, put severe pressure on the supply function and operating costs. Towards the end of the year the foreign exchange problem eased but the situation remained tight. Although the political environment seems to have improved, the labour environment remains uncertain. Notwithstanding these developments, the Freda-Rebecca mine, which had been the first Ashanti mine to be awarded the NOSA four-star rating, in 1999, was upgraded to five-star in 2000. The mine was again recognised by the Zimbabwe Chamber of Mines for its outstanding environmental management programme.

The Geita mine, in Tanzania, which is 50% owned by AGC, was commissioned in June 2000 and produced a total of 176,836 oz during the year at a cash operating cost of US$145/oz. During the commissioning and production build-up period, problems were encountered with the SAG mill liners and the lubrication systems for both the SAG mill and the primary crusher. These aside, there were no significant problems with the processing plant. Metallurgical recovery was in line with feasibility projections. At year end, Geita ore reserves increased to 7.8 Moz (63.5 Mt at a grade of 3.8 g/t), a 41% increase on the previous year, owing mainly to the infill drilling at Nyankanga. On December 15, 2000, Ashanti completed the sale of 50% of its interest in the Geita mine to AngloGold Ltd.

Exploration results from the initial deep drilling programme on the Busulwangili licence (Pangea joint venture) intersected the favourable Bulyanhulu mine sequence but with low grade mineralisation. Meanwhile, differences have arisen between the company and Pangea regarding the operation of the joint venture, and this is now the subject of arbitration under the auspices of the International Court of Arbitration of the International Chamber of Commerce.

In Burkina Faso, additional drilling outlined ore reserves of 5.2 Mt at a grade of 3.3 g/t, equivalent to 0.5 Moz. A number of possible exploitation options are under review.

RAB drilling is in progress in Côte d'Ivoire on the Abradine anomaly, in the Allangoua permit in the south-east of the country. Both quartz veins and zones of silicification of the meta-sediment host rock were intersected in several holes drilled to date. Assay results of all drill hole samples are pending.

In Zimbabwe, a recently-completed phase of diamond drilling on the optioned RAN project claims near Freda-Rebecca produced mineralised intercepts of 26.8 m at a grade of 2.9 g/t, 16.4 m at 13.5 g/t and 18.7 m at 3.8 g/t. Mineralisation remains open along strike and at depth, and further drilling will be undertaken to outline resources.

Bonte Gold Mines Ltd
The company's production for 2000 went up by 41.5% to 68,139 oz (2,119 kg). Bonte mined out its reserves at Esaase and, having met its rehabilitation requirements, continued with its mining operations at Adobewura. The company plans to build up its alluvial portfolio by the acquisition of two prospects at Kwabeng and Pusupusu, both in the Eastern Region, held by Goldenrae Mining Co. and Kibi Goldfields Ltd respectively.

Prestea Gold Resources (PGR)
The initial six-month interim lease granted to the company in 1998 was renewed with the granting of a 15-year mining lease, after the government abrogated Barnex's rights over Prestea during the December 2000 quarter. Under this ruling, PGR has mining rights over both the surface and underground operations. The company's production for 2000 fell by 17% to 23,838 oz (741 kg).

Teberebie Goldfields Ltd (TGL)
AGC acquired 90% of US-based Pioneer Inc.'s shares in TGL during the June 2000 quarter and thus assumed a majority shareholding/controlling interest in TGL. The transaction was opportune, having had the effect of bailing out AGC's adjacent Iduapriem mine from imminent closure owing to the depletion of mineable ore. In a related transaction, portions of Teberebie assets were ceded to Gold Fields (Gh) Ltd. These arrangements have not only ensured the continuous operations of AGC's Iduapriem mine but have also helped significantly in the Gold Fields' expansion programme at Tarkwa. The company produced 29,494 oz (917 kg) during the first two months of the year.

Resolute Amansie
The company's Obotan mine, which was successfully commissioned in 1997 at a capital cost of US$32 million, produced 134,202 oz (4,174 kg) in 2000 at a cash cost of US$237/oz. This compares favourably with 1999 production of 134,169 oz. To ensure the profitability of the mine the following initiatives were undertaken: the installation of a secondary crusher and conversion of the SAG mill to ball mill configuration; the revision of mining designs and schedule; and a review of lower cut-off grades to reflect operating cost. The performance of the plant was above design capacity with a throughput in excess of 1.8 Mt. Recovery rates for the mine were 96%, with an average head grade of 2.4 g/t gold and mill availability of 95.9%. Geological activity during 2000 focused on the delineation of supplemental oxide gold mineralisation within economic trucking distance of the Nkran mill. Geochemical and geophysical programmes identified several anomalies associated with artisanal workings

on the ground to the south and south-west of the Obotan plant. A limited programme of trenching and follow-up RC drilling was completed and auger drilling was planned to test the continuity of mineralisation before further drilling programmes are undertaken.

Abosso Goldfields Ltd (AGL)
The company's Damang open pit was developed into a steady state operation with the capacity to treat 4-4.5 Mt/y of ore depending on the blend of softer oxide and harder primary ore. The company's production increased from 303,693 oz in 1999 to 330,375 oz (10,276 kg) in 2000, an increase of 8.8%. The increase in gold production was primarily due to improvements in the capacity of the plant to treat both primary and oxidised ore.

Construction of the Eastern Tailings storage facility, intended to provide storage for 14.4 Mt, continued during the year. This facility was originally expected to be commissioned before the end of 2000. The company's mining contract with African Mining Services was renegotiated and extended for an additional 1.5 years.

A life-of-mine reclamation plan, submitted to the Environmental Protection Agency (EPA) in late 1999, was finalised in early 2000. The company is now negotiating with the EPA on the mechanisms for implementing reclamation bonding. During the year AGL started progressive site rehabilitation with the contouring, topsoil spreading and planting of large areas of the south-west waste dump. The company's aim is to combine its reclamation efforts with its local affairs programmes to develop sustainable agriculture in the region. Community assistance programmes conducted by the company during the year included small business enterprise training and demonstration farm plots. AGL's community assistance initiatives have received favourable television and printed media coverage in the country. AGL holds prospecting licences covering a total of 349 km^2 in addition to their mining lease. Exploration work continued during the year on prospects within and adjacent to the Damang mining lease.

Gold Fields (Gh) Ltd
Since the company closed its underground mine at Tarkwa in mid-1999, owing to the depletion of underground reserves, operations have been concentrated on the surface at Mantraim, Pepe, Akontasi and Samahoo. The company stepped up its production by 42%, from 255,744 oz in 1999 to 362,370 oz (11,271 kg) in 2000, to take second position after Obuasi. The company's mineable reserves as at the end of June 2000

Ghana's Gold Output (kg)

	1998	1999	2000
Ashanti Goldfields			
Obuasi	27,538	23,114	19,937
Ayanfuri	1,440	1,381	1,132
Iduapriem	4,828	4,976	5,191
Bibiani	4,719	8,146	8,514
Asikam	213	34	-
Teberebie/GAG	-	-	839
Ashanti Total	*38,739*	*37,651*	*35,613*
Teberebie	7,877	8,578	917
Bogoso Gold Ltd.	3,577	4,164	3,380
Small-scale mines	3,992	4,069	4,531
Dunkwa Continental	37	1	-
Bonte Gold Mines	1,092	1,498	2,119
Gold Fields (Ghana)	4,173	7,956	11,271
Prestea Sankofa	465	357	371
Barnex Prestea	478	-	-
Resolute Amansie	5,498	4,173	4,174
Abosso Goldfields	8,424	9,446	10,276
Midras Mining Ltd.			79
Ghana Consolidated Diamond			11
Prestea Gold Resources Ltd.	-	894	742
Satellite Goldfields Ltd.	-	2,709	3,039
TOTAL	***74,352***	***81,496***	***76,522***

stood at 73.9 Mt at an average grade of 1.5 g/t. This excludes the low grade stockpile of 1.6 Mt at a grade of 0.7 g/t.

Bogoso Gold Ltd (BGL)
The company is faced with the problem of ore reserve depletion. In an attempt to find a solution, Bogoso is vigorously acquiring prospects in close proximity to its leases. So far, BGL has been successful in acquiring prospecting licences belonging to the Flagbase, Pampe and Cadenma mining companies which are quite close to its mine. The company's production of 108,663 oz (3,380 kg) in 2000 was 18.8% less than that of 1999.

Prestea Sankofa Gold Ltd (PSGL)
This is the only company solely treating ancient mine tailings. The world-wide assets of the majority partner, Samax Exploration Ltd, were purchased by AGC, which meant that 50.1% shares owned by the company had been passed on to AGC. However in February 1999, AGC relinquished its interest in PSGL and therefore the company is now almost wholly-owned by Ghana National Petroleum Corp., which is a government organisation established solely to explore the country's hydrocarbons and to advise on their exploitation. PSGL's production for 2000 went up by 3.9% to 11,922 oz (371 kg).

Satellite Goldfields Ltd
The company's heap leach project, which commenced in 1999, is located at Subri in the Western Region. The company produced 97,689 oz (3,039 kg) in 2000, representing an increase of 12.2% over 1999 production.

Obenemase Gold Mines Ltd
On May 31, 2000, ministerial approval was given to Resolute Ltd of Australia to acquire 90% of the shares of Obenemase Gold Mines Ltd, which operates the Konongo mine. Resolute operates and manages the Obotan gold mine.

Small-Scale Gold Mining
Periodic training and seminars were organised for miners at District Centres to upgrade their knowledge and skills. In 2000, 219 miners were trained in the areas of environmental management, good mining practices, health and safety, and entrepreneurial skills. In the area of environmental management, emphasis was placed on mercury pollution abatement techniques, of which the main focus was the use of mercury retort. The UNIDO's Mercury Pollution Abatement project, which is aimed at evaluating the extent of mercury pollution caused by small-scale mining, took off during the year. Preliminary results of samples taken to assess mercury levels were analysed at the Noguchi Memorial Centre for Medical Research, before onward transmission to the University of Montpellier, France. Production increased by 11.4% from 130,802 oz in 1999 to 145,662 oz (4,531 kg) in 2000.

Diamonds
Total production for 2000 of 878,011 ct shows an increase of 28.4% over the previous year's total of 684,033 ct. This includes a contribution of 686,551 ct from small and medium-sized mines and 136,561 ct from Ghana Consolidated Diamonds Ltd. Negotiations for the takeover of this state company have reached an advanced stage.

Bauxite
Ghana Bauxite Co's production of 503,824 t shows an increase of 41.8% over 1999 output of 355,262 t. The significant increase in production is as a result of the acquisition of 40 t capacity wagons, repairs to railway tracks from Nsuta to Awaso and the supplementary dumper haulage of ore from the mine site to the port at Takoradi.

Other Minerals

	1998	1999	2000
GCD Diamonds (ct)	235,556	207,289	191,460
Small & Medium mines (ct)	570,186	476,744	686,551
Diamond Total (ct)	*805,742*	*684,033*	*878,011*
Bauxite (t)	341,121	355,263	503,825
Manganese (t)	384,173	611,500	895,339

Manganese

Since the Ghana Manganese Co. took over the Nsuta mine from the erstwhile Ghana National Manganese Corp. in 1995, its production trend has been positive, increasing from 7,542 t in 1995 to 895,339 t in 2000. The railway system has been the real bottleneck to company's production effort. In its efforts to meet production targets, the company has resorted to the expensive road haulage of ore. An additional problem has been inadequate space at the port limiting the amount of saleable ore that can be stockpiled at the port at any given time.

