

# 06

Country Report  
South Africa  
Vaal River



ANGLOGOLD ASHANTI



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## About this report

AngloGold Ashanti is committed to reporting to a broad range of stakeholders on its operational and financial performance as well as its economic, social and environmental performance.

For the 2006 financial year, AngloGold Ashanti's Annual Report comprises:

- the Annual Financial Statements, which are available on request or at ([www.agareports.com](http://www.agareports.com)); and
- the Report to Society, which is available as a printed document, and a more extensive Report to Society on our website ([www.aga-reports.com](http://www.aga-reports.com)) which includes additional information, including case studies and country or operational reports, of which this is one. Together these reports seek to present a fair and balanced reflection of the group's operation and performance, its objectives, values, business principles, and the major issues and challenges that it is facing.

*\* Throughout this report, dollar or \$ refers to US dollars, unless otherwise stated.*

## Introduction

In South Africa, AngloGold Ashanti operates seven underground mines which are located in two geographical regions on the Witwatersrand Basin. The mines are:

- Great Noligwa, Kopanang, Tau Lekoa and Moab Khotsong which make up the Vaal River operations; and
- Mponeng, Savuka and TauTona which comprise the West Wits operations.

This country report focuses on the Vaal River operations which are situated near the towns of Klerksdorp and Orkney in the North West and Free State provinces. The Vaal River complex has four gold plants, one uranium plant and one sulphuric acid plant. The processing plants include crushers, mills, carbon-in-leach (CIL) and electro-winning facilities, and are able to treat between 180,000t and 420,000t of ore per month. Although the Vaal River operations produce uranium oxide as a by-product, the value is not significant relative to the value of the gold produced.

### Letter from Robbie Lazare

A year ago when I wrote this letter, we were looking at a very different picture for the South African operations. The gold price was not what we had hoped it would be, unit costs were increasing and we were planning the orderly downscaling and closure of Savuka in the West Wits region.

Much can happen in a year, and it has – the increases recorded in the spot gold price of gold on global markets and the average gold price received have resulted in a far more optimistic outlook for the gold mining industry than we have had in many years. The higher gold price contributed to increased revenues, record profit and earnings, which together with the cost-saving drive at the South African operations, led to an overall decline in total cash costs of 2% to \$285/oz. This is an excellent achievement.

#### Safety

Safety performance, however, has been disappointing. Regrettably, after a decade of improved safety statistics, the South African operations reported 32 fatalities (12 in Vaal River) in 2006 compared with 17 in 2005.

#### Production

While total production from the South African operations declined by 5% to 2.6Moz, these operations still made up 45% of total group production and are the mainstay of the group. The four Vaal River operations together contributed 23% (1.28Moz) of group output

In particular at the Vaal River operations, Moab Khotsong has begun commercial production and is expected to reach full production by 2011. The feasibility study of Phase 2 of this development is to be submitted to the board in April 2007. There has been a turnaround in cash flows at Tau Lekoa, which also made substantial cost savings. Although Tau Lekoa is still classified as being marginal, the appointment of a dedicated general manager has contributed to the improved operational performance. Tau Lekoa still has nine years life of mine remaining.

#### Capital expenditure

Of capital expenditure of R2.12 billion (\$313 million) in 2006, 60% was committed to the development of ore reserves, in line with our strategy. The gold price and current cost initiatives are also contributing to the extension of reserves and the life of mine of operations by enabling them to access deeper reserves and lower cut-off grades. A team has been set up at each of the two regions at the South Africa operations to investigate, research and propose potential projects for pre-feasibility and feasibility studies. So, rather than the sunset

industry that we were looking at just a year ago, we can look forward to more projects and perhaps even longer operational lives going forward.

#### Highlights

It is difficult in a group such as ours to pinpoint only a few highlights:

- Attendance by employees at voluntary counselling and testing (VCT) has greatly improved with 75% of employees participating in 2006 compared with a target of 40%. The introduction of free anti-retrovirals by AngloGold Ashanti Health has played an important role in both encouraging people to come forward and participate in wellness programmes, and in ensuring that AIDS is no longer a death sentence. I urge more employees to be tested – knowing your status means you can do something about it.
- At the end of January 2007 we formally launched our Bokamoso ESOP. This employee share ownership programme means that every employee will now be a part-owner of this company. We welcome you and hope that you will enjoy the benefits of your labour as shareholders going forward.
- The AngloGold Ashanti Fund and Trust spent some R15.6 million (\$2.3 million) in 2006 on a range of projects. More details on this are provided later in this report.
- Good progress has been made in the implementation of our social and labour plans. We will be reporting on some of the projects that we are undertaking in the months to come. An important step forward for us is that we are now looking beyond the communities around our operations, and are taking projects into the areas from where many of our employees originate so that their families and communities may also benefit from their labour.

#### Looking forward

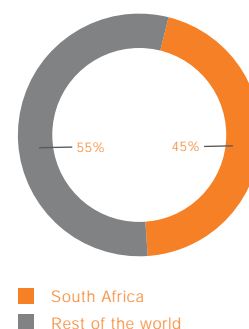
Looking forward to 2007, the current performance of our operations is encouraging as is the continued emphasis on cost control and the establishment of new project teams to develop new areas of growth and opportunity for the South Africa operations. I am positive too that with the significant safety and health programmes we have in place and renewed effort on the part of management, unions and employees, we can make our operations safer places to work.

**Robbie Lazare**

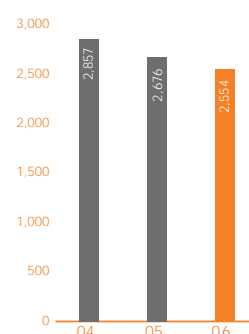
**Executive Officer – Africa: Underground Mining**  
20 March 2007



Contribution to group production – 2006



Gold production (000oz) South Africa



# SOUTH AFRICA – VAAL RIVER

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AngloGold Ashanti is one of the world's leading gold producers, with a varied portfolio of assets and orebody types in key gold-producing regions around the world. At the end of 2006, the company had 21 operations located in 10 countries (South Africa, Argentina, Australia, Brazil, Ghana, the Republic of Guinea, Mali, Namibia, Tanzania and the United States) on four continents, together with a substantial project pipeline and a focused, global exploration programme.

AngloGold Ashanti produced 5.6Moz of gold in 2006, of which 2.6Moz (46%) came from deep level hard-rock operations in South Africa and the balance of 3Moz (54%) from the shallower and surface operations around the world. Greenfields exploration is under way in Western Australia, Colombia and the Democratic Republic of Congo (DRC), and through exploration partnerships and joint ventures in Alaska, Russia, China, the Philippines and Laos. The group employed 61,453 people around the world.

The group's South African operations produced 45% of overall group production in 2006. The Vaal River operations, comprising the Great Noligwa, Kopanang, Tau Lekoa and Moab Khotsong mines produced 1.28Moz. Together these mines employed on average 18,191 people (15,296 employees and 2,895 contractors) during 2006.

AngloGold Ashanti is a values-driven organisation and our values and business principles underpin all that we do. This applies equally to our approach to sustainable development. Thus, our values guide our relations with all those that have an interest in the business – our stakeholders – and inform our business principles that govern those relationships. We measure our performance against our stated values and business principles and report our progress against these in this document.

# our profile





AngloGold Ashanti's mission, values and business principles were developed in consultation with employees and are reviewed as part of an ongoing process to ensure that they more accurately reflect the group's purpose and the way in which it does business.

# Our mission & values

## AngloGold Ashanti's mission

Our business is gold. We consistently strive to create value for everyone with a stake in our company, by finding and mining gold and by developing the market for our product.

## Our values

AngloGold Ashanti consistently strives to generate competitive shareholder returns. We do this by replacing profitable gold reserves and by continuously improving the performance of our key resources – our people, our assets and our product. We conduct ourselves with honesty and integrity.

We provide our employees with opportunities to develop their skills while sharing risks and rewards in workplaces that promote innovation, teamwork and freedom with accountability. We embrace cultural diversity.

Every manager and employee takes responsibility for health and safety; and together strive to create workplaces that are free of occupational injury and illness.

We strive to form partnerships with host communities, sharing their environments, traditions and values. We want communities to be better off for AngloGold Ashanti having been there. We are committed to working in an environmentally responsible way.

## Our business principles

We live our values through our business principles. These principles are applicable across AngloGold Ashanti and in all the countries in which we do business.

They inform the way in which we go about achieving our mission, balancing key economic, social, environmental and ethical values. These business principles which will evolve over time as we interact with our stakeholders, both internal and external, are:

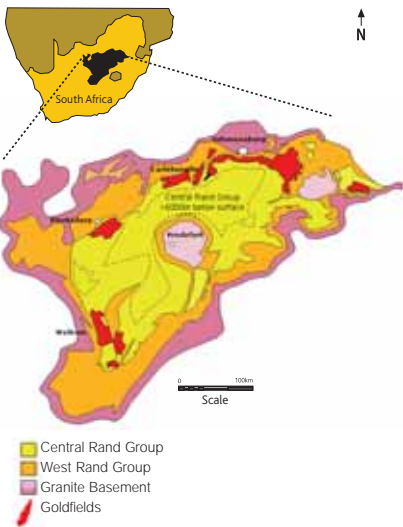
- AngloGold Ashanti – a responsible and ethical corporate citizen
- AngloGold Ashanti and the environment
- AngloGold Ashanti as an employer – safety and health
- AngloGold Ashanti in the community
- AngloGold Ashanti as an employer – labour practice



# SOUTH AFRICA – VAAL RIVER

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## The Witwatersrand Basin



## Geology of the Witwatersrand Basin

The Witwatersrand Basin comprises a 6km-thick sequence of interbedded argillaceous and arenaceous sediments that extend laterally for some 300km north-east/south-west and 100km north-west/south-east on the Kaapvaal Craton. The upper portion of the basin, which contains the orebodies, outcrops at its northern extent near Johannesburg.

Further west, south and east the Witwatersrand basin is overlain by up to 4km of Archaean, Proterozoic and Mesozoic volcanic and sedimentary rocks. The Witwatersrand Basin is late Archaean in age and is considered to be around 2.7 to 2.8 billion years old.

Gold occurs in laterally extensive quartz pebble conglomerate horizons or reefs, that are generally less than 2m thick and are widely considered to represent laterally extensive braided fluvial deposits. Separate fan systems were developed at different entry points and these are preserved as distinct goldfields.

There is still much debate about the origin of the gold mineralisation in the Witwatersrand Basin. Gold was generally considered to have been deposited syngenetically with the conglomerates but increasingly an epigenetic theory of origin is being supported.

Nonetheless, the most fundamental determinant of gold distribution in the basin remains the sedimentary features, such as facies variations and channel directions. Gold generally occurs in a native form often associated with pyrite and carbon, with quartz being the main gangue material.

### Geology of Vaal River operations

In order of importance, the reefs mined at the Vaal River operations are the Vaal Reef, the Ventersdorp Contact Reef (VCR) and the C Reef:

- the Vaal Reef contains approximately 85% of the reserve tonnage with mining grades between 10g/t and 20g/t and comprises a series of oligomictic conglomerates and quartzite packages developed on successive non-conformities. Several distinct facies have been identified, each with its own unique gold distribution and grade characteristic;
- the VCR has a lower grade than the Vaal Reef, and contains approximately 15% of the estimated reserves. The economic portion is concentrated in the western part of the lease area and can take the form of a massive conglomerate, a pyretic sand unit with intermittent pebble layers, or a thin conglomerate horizon. The reef is situated at the contact between the overlying Kliprivierberg Lavas of the Ventersdorp Super Group and the underlying sediments of the Witwatersrand Super Group, which creates a distinctive seismic reflector. The VCR is located up to 1km above the Vaal Reef; and
- the C Reef is a thin, small-pebble conglomerate with a carbon-rich basal contact, situated approximately 270m above the Vaal Reef. It has less than 1% of the estimated reserves with grades similar to those of the Vaal Reef, but more erratic. The most significant structural features are the north-east striking normal faults which dip to the north-west and south-east, resulting in zones of fault loss.

## GREAT NOLIGWA

### Background

**Ownership:** 100% owned by AngloGold Ashanti

**Location:** Great Noligwa is situated on the Free State side of the Vaal River. It adjoins Kopanang and Moab Khotsong.

**Geology:** The reefs mined at Great Noligwa are the Vaal Reef and the C Reef, with the Vaal Reef accounting for by far the largest portion of the mineral resource here. The Vaal Reef has a distinct high-grade zone with an average grade of 23g/t, trending north to south. Mining is steadily moving out of the high-grade zones and grades are expected to decline gradually.

**Mining and processing:** The mine employs a scattered mining strategy owing to the complexity of the ore and operates a twin-shaft system serving eight main levels at an average depth of 2,400m. Access to the reef is from the footwall haulage and return airway development, with cross-cuts developed every 180m to the reef horizon. Raises are then developed on-reef to the level above and the reef is stoped out on strike with an average stope width of 150cm. Approximately 4,000m of development is completed each quarter. As the orebody is narrow and tabular in nature, the production rate is measured in square metres mined and averages 35,000m<sup>2</sup> per month. Panels are on average 26m long.

At the Great Noligwa plant, conventional crushing, screening, semi-autogenous grinding (SAG) and CIL process are followed by milling and treatment. It has a nominal throughput capacity of 230,000tpm.

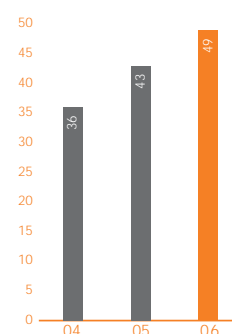
### Economic and financial performance

**Operating performance:** production in 2006 decreased by 11% to 615,000oz owing primarily to a 13% decline in yield from 9.3g/t to 8.08g/t. Total cash costs in local currency terms were R56,390/kg, an increase of 5% due to the lower gold production. Continued focus on cost saving helped to limit the effect of reduced production on the operation's costs and, in dollar terms, total cash costs improved by 1% to \$261/oz.

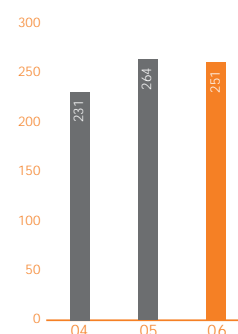
Assisted by lower total cash costs, gross profit adjusted for the effect of unrealised non-hedge derivatives and other commodity contracts increased by 79% to \$156 million (R1.1 billion). This was also as a result of the increase in the price received for the year.

Capital expenditure, at \$49 million (R333 million) was 14% higher than that of 2005, largely caused by the acceleration of the plan to upgrade the operation's uranium plant.

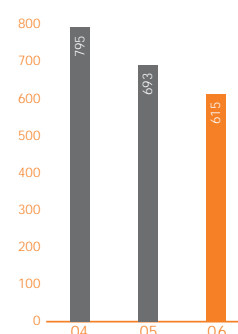
Capital expenditure (\$m)  
Great Noligwa



Total cash costs (\$/oz)  
Great Noligwa



Gold production (000oz)  
Great Noligwa



## SOUTH AFRICA – VAAL RIVER

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| Great Noligwa             |              | 2006   | 2005   | 2004   |
|---------------------------|--------------|--------|--------|--------|
| Pay limit                 | (oz/t)       | 0.28   | 0.39   | 0.43   |
|                           | (g/t)        | 9.57   | 13.24  | 14.36  |
| Recovered grade           | (oz/t)       | 0.236  | 0.271  | 0.303  |
|                           | (g/t)        | 8.08   | 9.30   | 10.38  |
| Gold production           | (000oz)      | 615    | 693    | 795    |
| Total cash costs          | (\$/oz)      | 261    | 264    | 231    |
|                           | (R/kg)       | 56,390 | 53,868 | 47,820 |
| Total production costs    | (\$/oz)      | 342    | 329    | 260    |
|                           | (R/kg)       | 74,041 | 67,024 | 53,781 |
| Capital expenditure       | (\$ million) | 49     | 43     | 36     |
|                           | (R million)  | 333    | 275    | 235    |
| Total number of employees |              | 6,579  | 6,856  | 7,100  |
| Employees                 |              | 5,883  | 5,704  | 6,192  |
| Contractors               |              | 696    | 1,152  | 908    |

**Outlook:** Mining into lower grade areas will continue and production is expected to decline further to around 580,000oz, at a total cash cost of \$295/oz. Capital expenditure during 2007 is anticipated to be \$40 million (R271 million), to be spent mostly on ore reserve development and infrastructure maintenance.



# SOUTH AFRICA – VAAL RIVER

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## KOPANANG Background

**Ownership:** 100% owned by AngloGold Ashanti

**Location:** Kopanang is situated on the Free State side of the Vaal River and adjoins Great Nologwa.

**Geology:** The principal reef mined here is the Vaal Reef with the C Reef, a secondary reef situated around 200m above the Vaal Reef, being mined on a smaller scale.

**Mining and processing:** A scattered mining method is used because of the geologically complex nature of the orebody. Access to the orebody is mainly by footwall tunnelling, raised on the dip of the reef and stoped out on strike.

The Vaal River No 9 plant is a milling and treatment process and uses conventional SAG and carbon-in-pulp (CIP) technology. Kopanang feeds one of the two plant streams with ore predominantly from the Vaal Reef; the other stream is fed exclusively by ore from the VCR from Tau Lekoa (see below). Both streams are augmented by low-grade ore from the waste dumps.

## Economic and financial performance

**Operating performance:** A lower mine call factor and 5% decline in yield resulted in a decrease in production of 7% to 446,000oz for the year. As a result, total cash costs, at R62,908/kg, were 11% higher than those of the previous year. In dollar terms, cash costs increased by 5% to \$291/oz.

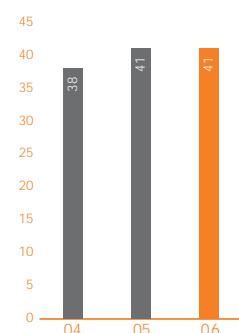
Adjusted for the effect of unrealised non-hedge derivatives and other commodity contracts, gross profit at \$109 million (R744 million) was almost double that of 2005. This increase was mainly the consequence of a 32% improvement in the price received.

Capital expenditure was steady year-on-year at \$41 million (R281 million).

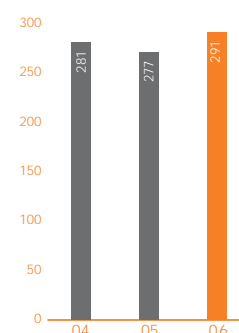
| Kopanang                  |              | 2006   | 2005   | 2004   |
|---------------------------|--------------|--------|--------|--------|
| Pay limit                 | (oz/t)       | 0.32   | 0.39   | 0.43   |
|                           | (g/t)        | 10.92  | 13.25  | 14.52  |
| Recovered grade           | (oz/t)       | 0.204  | 0.215  | 0.215  |
|                           | (g/t)        | 7.01   | 7.38   | 7.37   |
| Gold production           | (000oz)      | 446    | 482    | 486    |
| Total cash costs          | (\$/oz)      | 291    | 277    | 281    |
|                           | (R/kg)       | 62,908 | 56,427 | 58,220 |
| Total production costs    | (\$/oz)      | 355    | 341    | 317    |
|                           | (R/kg)       | 76,906 | 69,594 | 65,460 |
| Capital expenditure       | (\$ million) | 41     | 41     | 38     |
|                           | (R million)  | 281    | 264    | 244    |
| Total number of employees |              | 5,815  | 6,030  | 6,312  |
| Employees                 |              | 5,360  | 5,506  | 5,758  |
| Contractors               |              | 455    | 524    | 554    |

**Outlook:** Grade is expected to increase in 2007 and production is scheduled to improve accordingly to approximately 470,000oz. Total cash costs are expected to decline to around \$260/oz, while capital expenditure is anticipated to increase to \$59 million (R399 million), and will be spent primarily on the construction of a new uranium leach plant as well as on ore reserve development.

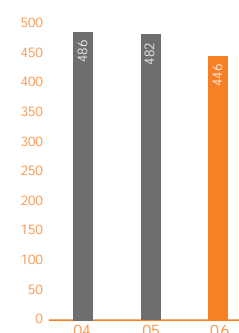
Capital expenditure (\$m)  
Kopanang



Total cash costs (\$/oz)  
Kopanang



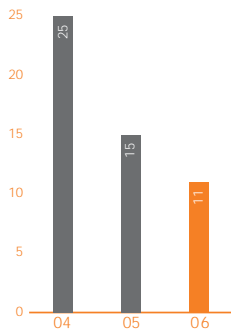
Gold production (000oz)  
Kopanang



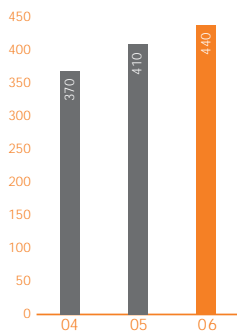
# SOUTH AFRICA – VAAL RIVER

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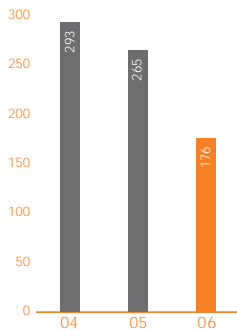
Capital expenditure (\$m)  
Tau Lekoa



Total cash costs (\$/oz)  
Tau Lekoa



Gold production (000oz)  
Tau Lekoa



## TAU LEKOA Background

**Ownership:** 100% owned by AngloGold Ashanti

**Location:** Tau Lekoa is situated north of the Vaal River in North West Province

**Geology:** The only reef mined at Tau Lekoa is the VCR which is part of the Ventersdorp Conglomerate Formation. This unit lies between the underlying Central Rand Group sediments of the Witwatersrand Group and the overlying Ventersdorp Supergroup lavas.

**Mining and processing:** Given the geologically complex nature of the orebody at Tau Lekoa, a scattered mining method is used. Access to the orebody is mainly by footwall tunnelling, with access to the reef being facilitated by raising on the dip of the reef and stoping operations taking place on strike.

Tau Lekoa has a twin shaft system and mines to a depth of 1,650m.

Tau Lekoa uses hydropower which has a centralised electro-hydraulic system as its primary source of energy production. Hydropower has been instrumental in improving labour productivity, which has played a vital role in assisting Tau Lekoa to achieve its business objectives.

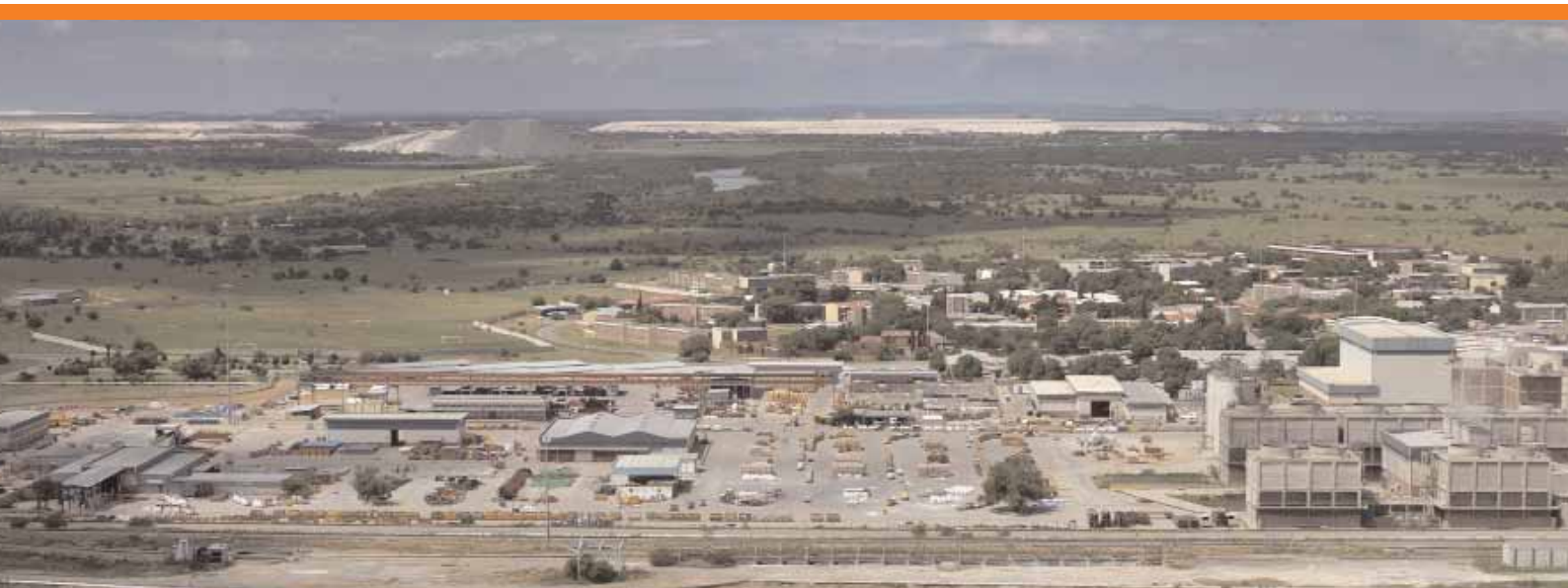
Ore from the VCR from Tau Lekoa feeds one of two streams at the Vaal River No 9 plant, which uses a milling and treatment process and conventional SAG and CIP technology. Ore from the Vaal Reef from Kopanang feeds the other plant stream. Both streams are augmented by low-grade ore from the waste dumps.

## Economic and financial performance

**Operating performance:** Tau Lekoa was downscaled in 2006 in order to return the operation to profitability in a rising gold price environment. As a result, production declined by 34% to 176,000oz, and total cash costs, at R94,730/kg, were 13% higher year-on-year. In dollar terms, total cash costs were \$440/oz, 7% higher year-on-year.

Gross loss adjusted for the effect of unrealised non-hedge derivatives and other commodity contracts improved to \$4 million (R22 million) from a loss of \$14 million (R84 million) in 2005.

Capital expenditure declined by 27% to \$11 million (R75 million).



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| Tau Lekoa                 |              | 2006    | 2005    | 2004   |
|---------------------------|--------------|---------|---------|--------|
| Pay limit                 | (oz/t)       | 0.14    | 0.19    | 0.20   |
|                           | (g/t)        | 4.85    | 6.23    | 6.81   |
| Recovered grade           | (oz/t)       | 0.110   | 0.116   | 0.113  |
|                           | (g/t)        | 3.76    | 3.96    | 3.87   |
| Gold production           | (000oz)      | 176     | 265     | 293    |
| Total cash costs          | (\$/oz)      | 440     | 410     | 370    |
|                           | (R/kg)       | 94,730  | 83,885  | 76,428 |
| Total production costs    | (\$/oz)      | 614     | 509     | 432    |
|                           | (R/kg)       | 132,864 | 103,932 | 89,168 |
| Capital expenditure       | (\$ million) | 11      | 15      | 25     |
|                           | (R million)  | 74      | 93      | 161    |
| Total number of employees |              | 2,893   | 4,105   | 4,252  |
| Employees                 |              | 2,514   | 3,021   | 3,398  |
| Contractors               |              | 379     | 1,084   | 854    |

**Outlook:** Production is expected to decline next year to 160,000oz, at which level it will remain relatively steady for the next several years. Total cash costs are anticipated to be in the region of \$426/oz. Capital expenditure will increase to around \$15 million (R101.6 million) in 2007.



### MOAB KHOTSONG

#### Background

**Ownership:** 100% owned by AngloGold Ashanti. The decision to exploit the mineral resource on the Moab Khotsong lease area was taken in 1989 and development began in 1991.

**Location:** Moab Khotsong, which is still in development, lies to the south of and is contiguous to the lease area of Great Noligwa.

**Geology:** The mineral resource at Moab Khotsong is structurally complex and highly faulted, with large fault-loss areas. The mineral resource lies between 2,100m and 3,700m below surface, with only limited quantities of ore lying above 2,300m. The principal reef is the Vaal Reef of which the gold grade and morphology are considered to be a down-dip extension to the south and south-east of Kopanang and Great Noligwa mines. The main shaft is collared on the hangingwall side of the Jersey Fault, which forms the northern boundary of the reef blocks. Access development towards the reef blocks will be gained through rocks of the West Rand Group, which include shale, siltstone and quartzite.

**Mining and processing:** Given the size of the shaft pillars, and because they are unable to provide the necessary protection against rock pressures at depth, the new Moab Khotsong shaft was sited in Great Noligwa's lease area. This enabled the extraction of the shaft pillar before the shaft was excavated and equipped – though it did require the development of long access tunnels to the reef.

A mid-shaft loading system, consisting of a single skip/cage combination with a hoisting capacity of 1,000t per day, is being used in the excavation of infrastructure and the access development on the first two levels. The spacing between these levels is 300m so as to reduce the distance of the access development to the reef blocks, which are 2,500m away. The development of the infrastructure on the lower three levels is under way.

Stoping is based on a sequential grid system with 5m dip crush pillars between the raise lines. The raise lines are spaced 200m apart on the dip of the reef, with 30m long panels. Backfill is carried to within 4m of the advancing stope faces and 75% of the total area extracted is likely to be backfilled.

Planned optimal production level ranges between 14,000m<sup>3</sup> and 16,500m<sup>3</sup> per month on 66 panels over six mining levels, yielding some 95,000 reef tpm. Development will peak at 2,500m, of which 380m will be developed on reef.



## SOUTH AFRICA – VAAL RIVER

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### Economic and financial performance

**Operating performance:** Moab Khotsong began commercial production in January 2006 and the operation was marked by the high total cash costs and low volumes typical of a deep-level underground operation's start-up phase. For the year, production was 44,000oz and total cash costs were \$655/oz or R141,574/kg. In 2007, production is expected to increase by 82%. Total cash costs will decline as this operation builds up to full production, which is currently scheduled for 2012.

Gross loss adjusted for the effect of unrealised non-hedge derivatives and other commodity contracts was \$22 million (R149 million).

Capital expenditure declined by 12% to \$83 million (R562 million).

| Moab Khotsong             |              | 2006    | *2005 | *2004 |
|---------------------------|--------------|---------|-------|-------|
| Recovered grade           | (oz/t)       | 0.185   |       |       |
|                           | (g/t)        | 6.35    |       |       |
| Gold production           | (000oz)      | 44      |       |       |
| Total cash costs          | (\$/oz)      | 655     |       |       |
|                           | (R/kg)       | 141,574 |       |       |
| Total production costs    | (\$/oz)      | 1,107   |       |       |
| Capital expenditure       | (\$ million) | 83      | 94    | 80    |
|                           | (R million)  | 565     | 600   | 513   |
| Total number of employees |              | 2,904   | 2,521 | 1,874 |
| Employees                 |              | 1,539   | 1,320 | 1,066 |
| Contractors               |              | 1,365   | 1,201 | 808   |

\* Commercial production began on 1 January 2006.

**Outlook:** Moab Khotsong's production is expected to nearly double in 2007 to 80,000oz. Consequently, total cash costs are expected to decline to \$470/oz. Capital expenditure, to be spent mostly on ore reserve development, is anticipated to remain steady at about \$80 million (R542 million).



#### Sustaining operations

As a mining company exploiting a set of finite resources, it is incumbent on AngloGold Ashanti to:

- incur capital expenditure, both to prolong the viability and sustainability of existing operations, and to develop access to new reserves;
- undertake exploration, both greenfields and brownfields, to identify and possibly develop new operations; and
- acquire projects and operations that might extend the production profile of the group in years to come.

A part of the process of sustaining operations is the protection of the company's assets to ensure their profitable and sustainable use and to encourage local economic development. See the case studies on our website at [www.aga-reports.com/06/case-studies.htm](http://www.aga-reports.com/06/case-studies.htm)

### Government remittances

AngloGold Ashanti's operations in South Africa paid an amount of \$77 million (R521 million) in corporate taxes in the 2006 financial year.

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### Mineral resources and ore reserves

Ore Reserves and Mineral Resources are reported in accordance with the minimum standard described by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2004 edition), and also conform to the standards set out in the South African Code for the Reporting of Mineral Resources and Mineral Reserves (the SAMREC 2000 Code). Mineral Resources are inclusive of the Ore Reserve component unless otherwise stated.

AngloGold Ashanti had Mineral Resources of 181.6Moz and Ore Reserves of 66.9Moz in December 2006. Of these, Vaal River accounted for Mineral Resources of 44.9Moz and Ore Reserves of 15.3Moz (the respective numbers for the South Africa region as a whole are 83.5Moz and 27.2Moz).

| Vaal River                                   | Resource Category | Metric         |              |                             | Imperial       |              |                              |
|--|-------------------|----------------|--------------|-----------------------------|----------------|--------------|------------------------------|
|  |                   | Tonnes (000s)  | Grade (g/t)  | Contained Gold Grams (000s) | Tons (000s)    | Grade (oz/t) | Contained Gold Ounces (000s) |
| <b>Ore reserves (as at 31 December 2006)</b> |                   |                |              |                             |                |              |                              |
| Great Noligwa                                |                   |                |              |                             |                |              |                              |
|  | Proved            | 8,812          | 7.61         | 67,027                      | 9,714          | 0.22         | 2,155                        |
|  | Probable          | 8,236          | 7.1          | 58,459                      | 9,079          | 0.21         | 1,880                        |
|  | <b>Total</b>      | <b>17,048</b>  | <b>7.36</b>  | <b>125,487</b>              | <b>18,792</b>  | <b>0.21</b>  | <b>4,034</b>                 |
| Kopanang                                     |                   |                |              |                             |                |              |                              |
|  | Proved            | 1,491          | 8.87         | 13,222                      | 1,643          | 0.26         | 425                          |
|  | Probable          | 16,514         | 8.31         | 137,186                     | 18,204         | 0.24         | 4,411                        |
|  | <b>Total</b>      | <b>18,005</b>  | <b>8.35</b>  | <b>150,408</b>              | <b>19,847</b>  | <b>0.24</b>  | <b>4,836</b>                 |
| Moab Khotsong                                |                   |                |              |                             |                |              |                              |
|  | Proved            | 214            | 8.93         | 1,908                       | 236            | 0.26         | 61                           |
|  | Probable          | 8,153          | 11.86        | 96,716                      | 8,987          | 0.35         | 3,109                        |
|  | <b>Total</b>      | <b>8,367</b>   | <b>11.79</b> | <b>98,624</b>               | <b>9,223</b>   | <b>0.34</b>  | <b>3,171</b>                 |
| Tau Lekoa                                    |                   |                |              |                             |                |              |                              |
|  | Proved            | 2,092          | 4.75         | 9,935                       | 2,306          | 0.14         | 319                          |
|  | Probable          | 8,086          | 3.89         | 31,459                      | 8,913          | 0.11         | 1,011                        |
|  | <b>Total</b>      | <b>10,178</b>  | <b>4.07</b>  | <b>41,394</b>               | <b>11,219</b>  | <b>0.12</b>  | <b>1,331</b>                 |
| Vaal River Surface                           |                   |                |              |                             |                |              |                              |
|  | Proved            | –              | –            | –                           | –              | –            | –                            |
|  | Probable          | 104,763        | 0.57         | 59,475                      | 115,481        | 0.02         | 1,912                        |
|  | <b>Total</b>      | <b>104,763</b> | <b>0.57</b>  | <b>59,475</b>               | <b>115,481</b> | <b>0.02</b>  | <b>1,912</b>                 |

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| Vaal River  | Resource Category | Metric         |              |                             | Imperial       |              |                              |
|---|-------------------|----------------|--------------|-----------------------------|----------------|--------------|------------------------------|
|   |                   | Tonnes (000s)  | Grade (g/t)  | Contained Gold grams (000s) | Tons (000s)    | Grade (oz/t) | Contained Gold ounces (000s) |
| <b>Mineral resources (as at 31 December 2006)</b> |                   |                |              |                             |                |              |                              |
| Great Noligwa                                     | Measured          | 10,374         | 16.41        | 170,226                     | 11,436         | 0.48         | 5,473                        |
|   | Indicated         | 12,141         | 12.10        | 146,866                     | 13,383         | 0.35         | 4,722                        |
|   | Inferred          | 1,205          | 11.21        | 13,506                      | 1,328          | 0.33         | 434                          |
|   | <b>Total</b>      | <b>23,720</b>  | <b>13.94</b> | <b>330,598</b>              | <b>26,147</b>  | <b>0.41</b>  | <b>10,629</b>                |
| Kopanang  | Measured          | 2,745          | 17.00        | 46,669                      | 3,025          | 0.50         | 1,500                        |
|   | Indicated         | 15,911         | 16.65        | 264,842                     | 17,539         | 0.49         | 8,515                        |
|   | Inferred          | 1,948          | 15.35        | 29,906                      | 2,147          | 0.45         | 961                          |
|   | <b>Total</b>      | <b>20,604</b>  | <b>16.57</b> | <b>341,416</b>              | <b>22,711</b>  | <b>0.48</b>  | <b>10,977</b>                |
| Moab Khotsong                                     | Measured          | 593            | 14.62        | 8,671                       | 654            | 0.43         | 279                          |
|   | Indicated         | 14,298         | 18.44        | 263,678                     | 15,761         | 0.54         | 8,477                        |
|   | Inferred          | 4,765          | 18.09        | 86,211                      | 5,253          | 0.53         | 2,772                        |
|   | <b>Total</b>      | <b>19,657</b>  | <b>18.24</b> | <b>358,560</b>              | <b>21,668</b>  | <b>0.53</b>  | <b>11,528</b>                |
| Tau Lekoa   | Measured          | 5,795          | 6.66         | 38,585                      | 6,388          | 0.19         | 1,241                        |
|   | Indicated         | 35,043         | 5.09         | 178,451                     | 38,628         | 0.15         | 5,737                        |
|   | Inferred          | 1,001          | 5.31         | 5,314                       | 1,103          | 0.15         | 171                          |
|   | <b>Total</b>      | <b>41,838</b>  | <b>5.31</b>  | <b>222,350</b>              | <b>46,119</b>  | <b>0.16</b>  | <b>7,149</b>                 |
| Vaal River Surface                                | Measured          | -              | -            | -                           | -              | -            | -                            |
|   | Indicated         | 336,146        | 0.40         | 136,098                     | 370,537        | 0.01         | 4,376                        |
|   | Inferred          | 10,520         | 0.64         | 6,724                       | 11,597         | 0.02         | 216                          |
|   | <b>Total</b>      | <b>346,666</b> | <b>0.41</b>  | <b>142,822</b>              | <b>382,134</b> | <b>0.01</b>  | <b>4,592</b>                 |



# SOUTH AFRICA – VAAL RIVER

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## Occupational safety and health

One of AngloGold Ashanti's core values relates to the safety and health of employees. It states that every manager and employee takes responsibility for health and safety; and all strive to create workplaces that are free from occupational injury and illness.

The company is committed to complying with all relevant occupational health and safety laws, to implementing safety and health systems based on internationally recognised standards, and to providing a working environment conducive to safety and health. While safety and health is regarded as a prime responsibility of management (from executives down to supervisors), AngloGold Ashanti strives for employee involvement and consults with employees to gain their commitment.

All the necessary resources – a system of medical surveillance and the provision of protective equipment, for example – are made available to enable compliance with the company's safety and health principles. Deliberate breaches in standards and procedures are not tolerated and risk assessments are conducted to anticipate, minimise and control occupational hazards.

Performance in terms of safety and health objectives is measured and the effects of the company's operations monitored on a regular basis. AngloGold Ashanti communicates openly on safety and health issues with employees and other stakeholders and ensures that employees at all levels receive appropriate training. Contractors are required to comply with the company's safety and health principles.

Following the liquidation of the National Occupational and Safety Association (NOSA), which was used by a number of operations in terms of specifications for safety management systems and external auditing and certification, the company is moving towards the implementation of an alternative specification, Occupational Health and Safety Assessment Series (OHSAS) 18001. The series provides both a framework for identifying business risks associated with safety and health, and guidelines for implementation and achieving certification. The series has international acceptability which facilitates benchmarking.

### Laws, policies and agreements

The South African operations fall under the Mine Health and Safety Act 29 of 1996 (MHSA), the Mine Works and Minerals Act 50 of 1991, the Compensation for Occupational Injuries and Diseases Act 130 of 1993 and the Mines and Works Act 208 of 1993.

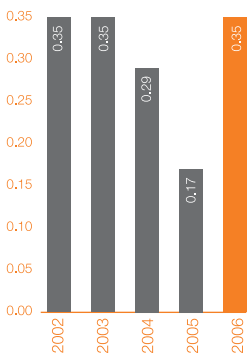
Based on the AngloGold Ashanti policy, each operation has its own safety and health policy, with management and unions involved in its review. Each operation also has its own safety and health agreement with the union representative of the majority of employees, the National Union of Mineworkers (NUM). These agreements, however, are extended to all the unions represented in the company.

### Managing safety and health

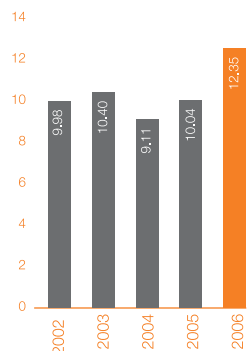
In line with the MHSA, each operation has a joint health and safety committee and all working places are covered by such agreements. There are trained, full-time safety and health representatives in place at each mine.

Internal and external reviews of health and safety performance are undertaken on a regular basis. Every fatal accident is reviewed not only through the required mine-based and statutory review bodies, but also by the corporate Safety and Health Department and a further review at executive level. Given the disappointing safety performance of the South African operations in 2006, high-level external parties (including participants from DuPont and major shareholder Anglo American plc) were asked to review the safety and health strategy.

FIFR: South Africa  
(per million man-hours worked)



LTIFR: South Africa  
(per million man-hours worked)



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AngloGold Ashanti believes that the involvement of employees in safety and health is crucial to success, not only in terms of creating awareness and commitment to standards and best practices, but also of keeping them fully informed of their rights and responsibilities. Communication – through briefings, meetings and safety related events – plays an important part in this.

The emphasis at all operations is on getting every employee to take responsibility for his/her own safety and that of his/her fellow workers. On average, employees at the Vaal River operations spend more than 30 hours a year on safety and health training.

### Safety overview

Regrettably, 32 employees and contractors lost their lives in AngloGold Ashanti's South Africa Region, of these deaths 12 occurred at the Vaal River operations: 7 at Great Nologwa, 2 at Kopanang, at 1 Tau Lekoa and 2 at Moab Khotson. The board and management of the company extend their deepest sympathy to the families and colleagues of those who died. That employees die or become ill during the course of work is an area of great concern to the management and board of AngloGold Ashanti, and a great deal of attention and focus has been placed on ensuring that employees leave the company in good health at the end of their careers.

The Lost Time Injury Frequency Rate (LTIFR) per million man-hours deteriorated year-on-year at all the Vaal River operations, although in the case of Great Nologwa it was a marginal decline.

### Causes of fatal accidents

The primary cause of fatal accidents in South Africa remains falls of ground (78%) with seismically induced falls of ground accounting for 44% of all fatalities in the country (*see case study: A new strategy for managing falls of ground in South Africa on page 21*).

### Health overview

The primary health threats to AngloGold Ashanti employees in South Africa are noise-induced hearing loss (NIHL) and occupational lung disease (OLD), with the latter a particular threat in underground mining environments where silica dust exposure is present. In South Africa, tuberculosis (TB) in silica-exposed employees is a significant occupational disease risk, especially in view of the relationship between HIV/AIDS and TB.

Health care is handled by AngloGold Ashanti Health, which provides health care services to employees and their dependants. The hospital at Vaal River has medical, surgical and maternity wards, an intensive care unit, operating theatres, casualty and outpatient facilities, as well as radiography, occupational therapy and physiotherapy services.

### Medical surveillance

In accordance with the requirements of the MHSA, 50,343 medical surveillance examinations (initial, periodic, transfer and exit) were performed for the South African operations during 2006.

### NIHL

In 2006, 67 new cases of NIHL were identified in South Africa, a rate of 2 per 1,000 employees. This is a significant decrease on the 4 per 1,000 rate reported in 2005. Comprehensive hearing conservation programmes are in place at all the operations and include, among other aspects, noise control engineering (silencing), the provision of hearing protection devices, education and communication programmes, and annual audiometry examinations of employees.

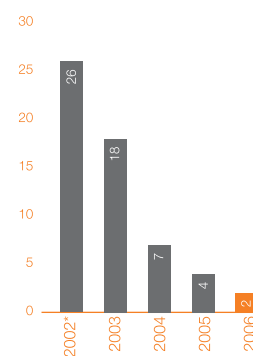
Baseline audiograms were conducted in 2005 in line with new compensation regulations and these have formed the basis of assessments of employees' hearing loss. A major engineering



| FIFR year-on-year for the Vaal River operations per million man-hours worked |      |      |
|--|------|------|
|  | 2006 | 2005 |
| <b>South Africa</b>  |      |      |
| Great Nologwa  | 0.36 | 0.22 |
| Kopanang   | 0.14 | 0.07 |
| Moab Khotson   | 0.27 | 0.16 |

| LTIFR year-on-year for the Vaal River operations per million man-hours worked |       |       |
|---|-------|-------|
|   | 2006  | 2005  |
| <b>South Africa</b>   |       |       |
| Great Nologwa   | 12.21 | 12.13 |
| Kopanang  | 15.22 | 11.58 |
| Moab Khotson  | 15.75 | 12.98 |

NIHL (new cases) South Africa  
Rate per 1,000 employees

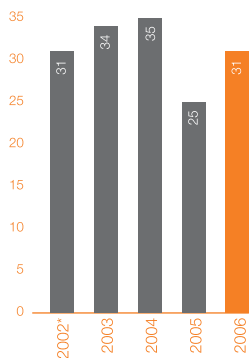


\* Not assured

# SOUTH AFRICA – VAAL RIVER

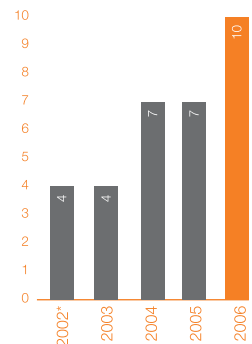
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**TB (new cases): South Africa**  
Rate per 1,000 employees



\* Not assured

**OLD (new cases) South Africa**  
Rate per 1,000 employees



\* Not assured

initiative to reduce noise at source to below 110 decibels (dBA) has resulted in all underground drill and noisy fans having been silenced, with ongoing identification and silencing of other noisy equipment in place.

### OLD

OLD includes TB, TB silicosis and obstructive airways disease. Of these, TB is the most pervasive and is compounded by a high HIV prevalence in the mining population (about 30%) which greatly increases the risk of TB. It is estimated that about 85% of employees diagnosed with TB are HIV-positive.

During 2006, 348 cases of OLD were compensated in South Africa, which reflects a rate of 10 per 1,000 employees, an increase on that reported in 2005 (9). An additional factor contributing to the incidence of OLD is the increasing average age (42) of the workforce which has had a longer, cumulative exposure to silica dust underground.

### Dust control

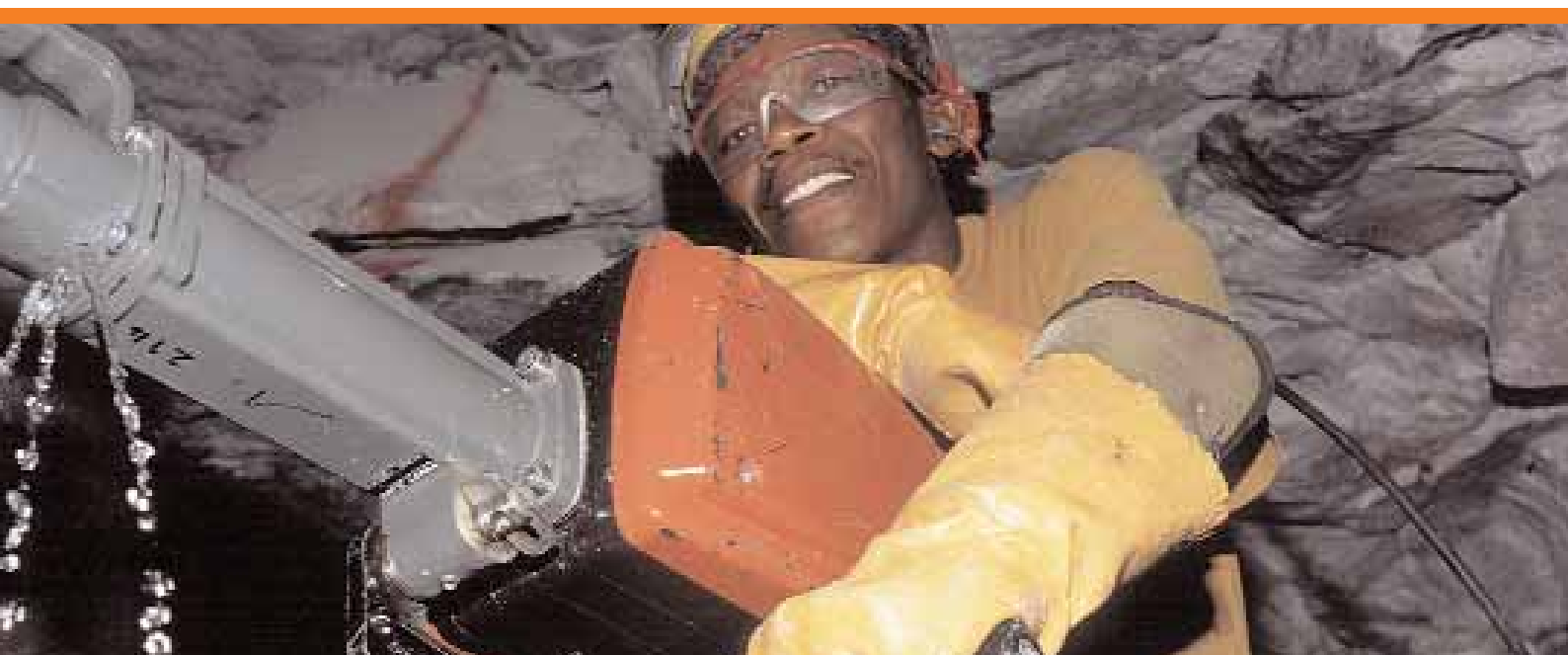
Initiatives to eradicate dust and improve methods of dust control have continued, although the agreed\* industry target, for which 95% of all individual samples must be below the legal limit of 0.1mg/m<sup>2</sup> by 2008, has not yet been achieved. In 2006, the average silica dust concentration was 0.03mg/m<sup>2</sup> (2005: 0.04mg/m<sup>2</sup>). A total of 3,788 personal gravimetric samples were taken during 2006.

*\*Target agreed by Mine Health and Safety Council*

### TB control

Digital diagnostic radiology (DDR) has revolutionised the application of TB examinations in recent years, facilitating earlier detection of the disease. There is a fixed digital radiology unit at the occupational health centre at Vaal River which can handle up to 450 X-ray images per day. Although the capital costs associated with these systems are high, running costs are considerably cheaper and, most important, their technological benefits are proving to be significant.

In 2006 Vaal River acquired a mobile DDR unit for the four mines in the area. This unit was commissioned in the first quarter of the year.



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The benefits of DDR, compared with standard X-ray technology, are that the radiation dose that was present in the mass-miniature X-rays previously used is virtually eliminated; only one image is taken and then digitally manipulated; no developing of film is required as images are stored digitally; and this in turn saves the cost of potentially hazardous chemicals used in the developing process, as well as the cost and space involved in storing conventional X-ray films over time.

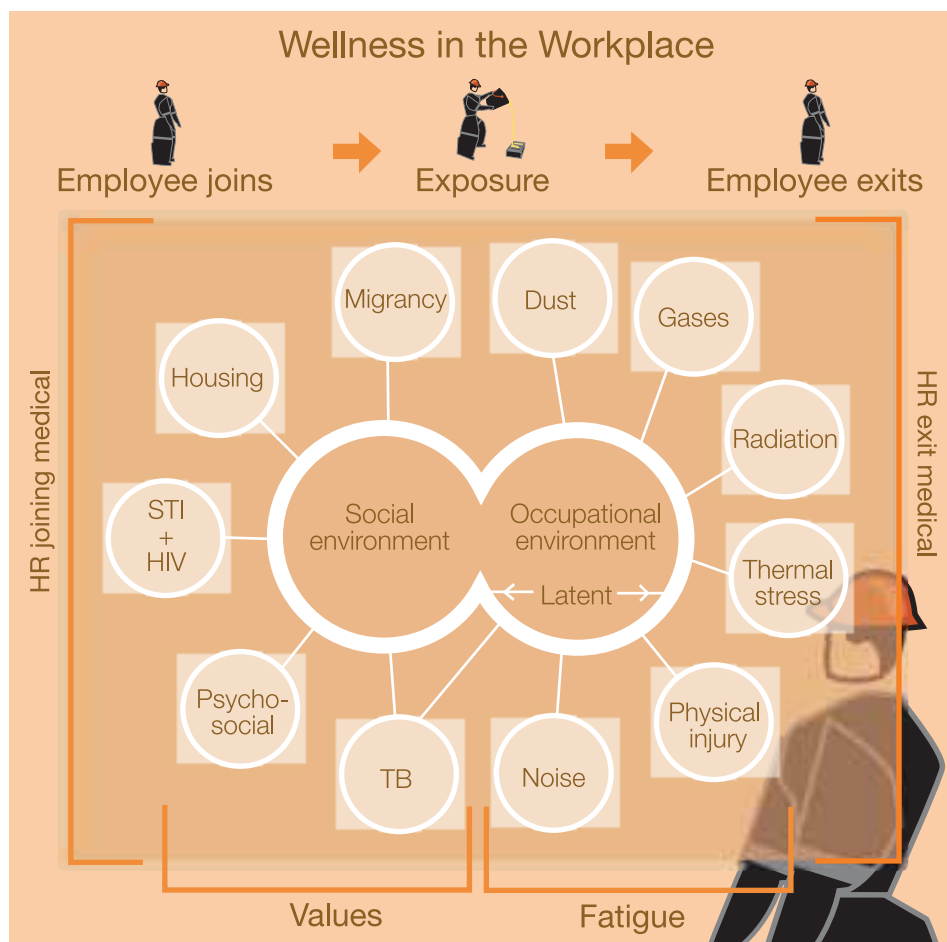
Symptom screening is done on site and the X-ray can be read immediately, speeding up the diagnosis of TB patients who need to be hospitalised. The objective is to detect and treat TB at an earlier stage, thereby preventing the spread of the disease and reducing its impact on the individual and the community.

World Health Organization-aligned TB treatment programmes are made available free of charge to employees and contractors alike by the group's medical services.

### Silicosis

Silicosis is caused by the inhalation of free silica dust present in deeper level mining areas with high quartz concentrations. (A case study on the Legacy of Silicosis may be found on page 118 of the Report to Society 2006.)

The legacy of silicosis remains a significant issue for the company. The current state-led compensation systems are cumbersome and inefficient and, because of this, many silicosis-affected employees of the mining industry have not had access to regular medical examination, substantial medical care or compensation, if found to be due. AngloGold Ashanti, together with Gold Fields and Harmony, is working with the state and unions to identify affected ex-employees in need of care, and to improve access to and use of follow-up treatment and compensation systems. (See case study on the Nongoma project at [www.aga-reports.com/06/nongoma.htm](http://www.aga-reports.com/06/nongoma.htm) –



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and on Worker compensation in South Africa under review – [www.aga-reports.com/06/worker-compensation.htm](http://www.aga-reports.com/06/worker-compensation.htm).) At the same time the company is participating constructively in the debate surrounding the possible combination of the current compensation mechanisms.

### Emergency management

Risk assessments, conducted every year internally and by external parties form an integral part of the emergency management process.

Emergency preparedness plans include preparation for fires, hazardous material accidents, biological threats and high angle rescues. Different emergencies are treated by different response teams. Each of these is trained to be effective within its area of activity. Among others, there are teams for asset protection services, fire and emergency services (both surface and underground), ambulance services, mine-based rescue teams and the Mines Rescue Service (MRS). All employees receive a level of basic training and paramedics are available at the operations to ensure a quick response. Refresher training is held at prescribed intervals, as are emergency drills and review processes. The emergency Asset Protection Emergency Control Centre and the Mponeng Control Centre are the bases from which fire and emergency services are dispatched to the Vaal River and West Wits operations. Vaal River has contracted ISOS to run its ambulance service. This is based at the hospital and manned round the clock by advanced life support paramedics. This service is available to the public in the event of a major disaster in the area, as is the use of the hospital, which has trauma facilities, theatres and ICU.

### In memoriam – the names and details of those who died at work at the Vaal River operations during 2006

| Name                    | Mine          | Date of accident/death            | Agency (cause)    | Occupation             |
|-------------------------|---------------|-----------------------------------|-------------------|------------------------|
| <b>January 2006</b>     |               |                                   |                   |                        |
| Phulankana Qhelane      | Great Noligwa | 3 January                         | Rolling rock      | Multi-skilled          |
| Michael Sekake          | Moab Khotsong | 31 January                        | Inundation        | Underground assistant  |
| <b>February 2006</b>    |               |                                   |                   |                        |
| Nteme Siteti            | Great Noligwa | 25 February                       | Fall of ground    | Machine driller        |
| <b>April 2006</b>       |               |                                   |                   |                        |
| Simon Tirelo Mothobi    | Great Noligwa | 10 April                          | Fall of ground    | Mining team member     |
| Fusi Mangoejane         | Tau Lekoa     | 27 February<br>(Died on 13 April) | Fall of ground    | Water jet operator     |
| <b>June 2006</b>        |               |                                   |                   |                        |
| Julio Chauque           | Kopanang      | 28 June                           | Fall of ground    | Scraper winch operator |
| <b>August 2006</b>      |               |                                   |                   |                        |
| Thomas Khaufa Koele     | Great Noligwa | 7 August<br>(Died on 8 August)    | Tools & equipment | Scraper winch operator |
| <b>September 2006</b>   |               |                                   |                   |                        |
| Ernesto Papel Machavane | Great Noligwa | 11 September                      | Inundation        | Loco driver            |
| <b>October 2006</b>     |               |                                   |                   |                        |
| Kwence Mhlanga          | Kopanang      | 23 October                        | Fall of ground    | Scraper winch operator |
| <b>November 2006</b>    |               |                                   |                   |                        |
| Ishmael Mokete Mofana   | Great Noligwa | 1 November                        | Fall of ground    | Stope driller          |
| <b>December 2006</b>    |               |                                   |                   |                        |
| Thabo Andreas Nonyana   | Moab Khotsong | 2 December                        | Fall of ground    | Stope driller          |
| Shale Simon Nkhooa      | Great Noligwa | 18 December                       | Fall of ground    | Stope driller          |

### Case study

## A new strategy for managing falls of ground in South Africa

Falls of ground accounted for 78% of all fatal accidents at AngloGold Ashanti's South African operations during 2006 (88% in 2005) with 44% of fatalities being caused by seismic falls of ground (47% in 2005). Falls of ground may be related either to seismicity or to gravity: seismic-related falls of rock occur when energy is released in the rock mass, causing ground movement and possible rock falls; gravity-based falls of rock occur when loose ground is not sufficiently stabilised or supported.

While the issue of falls of ground has been a major focus of attention for some years and a major fall of ground management campaign was initiated in 2003, the beginning of 2006 saw a significant increase in falls of ground fatalities. "This regression, after a period of sustained improvement, made us aware that the issue required urgent attention," says rock engineering manager Johan Laas. "We had a fall of ground management strategy in place: what was needed was a new initiative to give it a more consistent focus and close the gaps between its various components."

The existing fall of ground management strategy, initiated in 2002 and implemented since 2003, had five focus areas:

- preventing excess rock damage ahead of the work face (mine design);
- protecting people from rock falls in the workplace (mine support standards);
- promoting safe behaviour and work practices (mindset);
- providing warning of undesired trends (seismic and other monitoring); and
- problem-solving through research and development into new technologies.

In response to the identified need for a revised strategy, a high-level review of fall of ground management in the South Africa Region was held on 28 March 2006, attended by senior production, safety and rock engineering staff from across the company.

"The element we have added as a consequence of the review essentially deals with process," says Laas. "We aimed for full integration of all risk management systems at mine and corporate level and have established a two-tier fall of ground management committee system, convened at corporate level by regional head of mining Mike O'Hare, and at mine level by the respective production managers."

Research, development and technology – the essential precursors to mine layout and design – remain integral to the strategy. Integrated Seismic Systems International Ltd (ISSI), a wholly owned subsidiary of AngloGold Ashanti, was established in 1985 by Anglo American Corporation's Gold and Uranium Division to develop seismic interpretation and monitoring systems. (*See case study in Report to Society 2005: Integrated Seismic Systems International*). Shaun Murphy, an experienced rock engineering manager at the corporate office, has been assigned to work closely with ISSI to combine mine-level practical experience with seismological methods. Together they are developing and integrating numerical simulated mine design with the seismic data that records the response of the rock mass to mining.

AngloGold Ashanti also continues to interact with a number of industry bodies, such as the Council for Scientific and Industrial Research (CSIR) and the Safety in Mines Research Advisory Council (SIMRAC). The unique nature of South African deep-level mining has made the country's operations a focal point for international research into earthquakes and seismicity. The Natural Earthquake Laboratory in South African Mines (NELSAM), a collaborative research project between several universities in the United States, has staff members carrying out research at the TauTona and Mponeng mines in the West Wits region.





### A new strategy for managing falls of ground in South Africa cont.

Further specific outcomes of the review include a revised strategy and an ongoing programme to enhance awareness at workplace level.

“A key aspect of the strategy is a move from lagging to leading indicators. We’re still developing a system for consistent tracking of leading indicators, but the critical point is to identify and mitigate risks before an event happens, rather than analysing causes after the fact,” says Laas. “For example, if one of the mining faces either lags or advances beyond the general line of the longwall, this imposes abnormal stresses on the rock with consequent rock engineering problems.”

In the rock engineering field, leading indicators can essentially be classified into two groups: pre-fall and pre-injury. The first comprises such aspects as mine layout and the seismic monitoring network managed by ISSI, and includes detailed analyses of the geology of each section of the mine.

The second focuses on, for example, detailed workplace-level analyses, again, for example, the analysis of fall of ground data. “When a fall of ground occurs that does not result in an injury, there is a tendency not to analyse it in detail,” says Laas. “It’s important that we capture and analyse that data as thoroughly as if an injury had in fact taken place.”

Another planned initiative arising from the review is the development of a detailed workplace condition register, for every panel or development end in each of the seven South African mines. This will involve monitoring adherence to mining standards through the continued deployment of the ‘Rock Stars’. The Rock Stars, who, as members of the rock engineering department are independent of the mining hierarchy, carry out comprehensive workplace audits, the results of which are fed into the rock engineering database. Statistics relating to minor injuries arising from both seismic- and gravity-related falls of ground are also analysed.

Events that have been predicted as likely by the various simulation systems can then be compared with subsequent actual experience in the workplace.

Another major focus area is the provision of what Laas calls an ‘enabling environment’. “We cannot expect people to work safely in excessive heat, or if they have to walk long distances before reaching the workplace.” Measures to mitigate the impact of the latter are essentially handled on a section-by-section basis, but increased awareness has been factored into all work schedules. At mine level, existing training, coaching and discipline procedures remain in place. To improve hazard identification, a checklist has been prepared for use at shiftboss and mine overseer level, enabling users to determine where special conditions exist that require additional attention or when expert rock engineering assistance is required in specific circumstances.

Finally, ongoing initiatives to enhance awareness and safe behaviour have been put in place. Fall of ground awareness audits are planned every six months. The first cycle has been completed, and results have been discussed with individual mine management teams. Competitions, based on continuous improvement, have been implemented at intra- and inter-mine level.

While it is too early to quantify the impact of the new strategy, the mining industry, through the Mine Health and Safety Council, has been set a target of a 20% annual reduction in the fall of ground-related fatality rate, and AngloGold Ashanti is fully committed to achieving this.

# SOUTH AFRICA – VAAL RIVER

Country Report 2006

## HIV/AIDS

Although an accurate survey of prevalence levels cannot be conducted, it is estimated that prevalence levels of HIV/AIDS have remained stable at around 30% of the workforce in recent years at the South African operations (2005: 30.0%; 2004: 30.24%). These estimates are based on best available information that includes regional antenatal data and extrapolations from comparable reference groups. The provision of anti-retroviral therapy (ART) – which was introduced in November 2002 – will, over time, logically lead to a higher prevalence rate than would otherwise be the case as infected individuals live longer than they would without ART.

### AngloGold Ashanti HIV/AIDS programme

The overall aims of the HIV/AIDS programme are to prevent the spread of infection, to care for those infected or affected by the disease and to provide support to both employees and communities. The programme, which is an integral part of the 'wellness in the workplace' initiative under way at the South African operations, aims to reduce the number of new infections and efficiently manage those already infected.

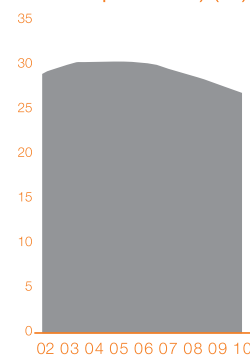
In 2006 the focus remained on the continued implementation of the programme. There was some measure of success and there is an indication that most employees have a clearer understanding of the structure and purpose of the HIV and AIDS programme. The programme model used in the South African operations has been effective in its simplicity in empowering individuals to make the decision to find out about their HIV status.

Each business unit participates in the prevention programme and various VCT initiatives, and now has its own workplace HIV/AIDS programme which it runs and manages. Technical support is provided by AngloGold Ashanti Health and the treatment programmes, including ART, are managed by the health service.

**Prevention:** Although a key aspect of this is VCT, it also includes induction training, peer education, awareness campaigns, information feedback sessions to the business units, condom distribution and the treatment of sexually transmitted infections (STIs).

The most notable achievement of 2006 was the increase in the uptake of VCT. In 2006, 23,389 encounters were recorded at VCT centres which, assuming single annual testing, is equivalent to 75% of the South African employee base. This was an increase of 129% on the 10,219 encounters recorded in 2005, and exceeded the target of 40% set for the year. Given the total anonymity of the administrative system, there is no way of monitoring repeat visits. However, indications of repeat visits are low. While employees are encouraged to attend VCT once a year, those who attend VCT and whose sexual behaviour is considered to be high risk are encouraged to attend more frequently. The 2006 data compares with VCT rates of 32.4% and 10% in 2005 and 2004 respectively. Of those who underwent VCT, 79% were HIV-negative and 21% HIV-positive.

HIV prevalence rate projections (South Africa operations) (%)



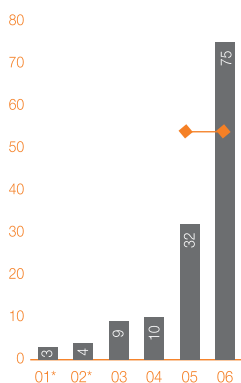
## Awards

- Kopanang received the Department of Minerals and Energy award for achieving 1.5 million fatality-free shifts and the Dick Fisher Award for best safety and improvement in safety management systems during 2006.
- Moab Khotsong received an award from the Mine Health and Safety Council for achieving 1,000 fatality-free production shifts on 30 January 2006.

# SOUTH AFRICA – VAAL RIVER

## Country Report 2006

VCT attendance vs target (South Africa) (%)



The reluctance to be tested by those at higher risk of being HIV-positive is problematic and may explain why the rate of those testing positive is less than the estimated overall prevalence rate (see case study: VCT, key to success of HIV/AIDS programme on page 26).

In all, 265 peer educators were trained in 2006, bringing the total trained over the past two years to 531. This gives a ratio of one peer educator for every 59 employees (compared with 1:115 last year), and compares favourably with the target set for the year of 1:60. The peer education programme is aimed primarily at promoting awareness of HIV, including knowledge of HIV status, and lifestyle and behaviour change.

Condom distribution continued and close on 1.22 million male condoms were distributed during the year (2005: 520,000). Female condoms are now available for distribution at all AngloGold Ashanti operations in South Africa.

**Treatment:** Corresponding with the increased uptake of VCT, there was an increase in attendance at the wellness clinics and in enrolment for ART. A total of 4,513 patients were registered on the wellness programme as at the end of December 2006, with 1,467 (33%) of these on ART. Altogether 1,252 employees enrolled for the first time at a wellness clinic during 2006, and 617 new patients began ART during the year. This compares with new enrolment at wellness clinics of 1,267 and 630 on ART in 2005.

The number of new patients who started ART in 2006 (expressed as a rate per 1,000 employees at the South African operations) has remained stable year-on-year. The cumulative number of employees registered at wellness clinics as at the end of 2006 was 4,513, or 15% of all employees, and the cumulative number of employees maintained on ART was 1,467 or 5%.

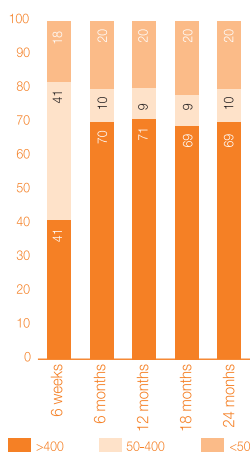
Records show that 66% of patients who begin ART remain on treatment. The most frequently cited reasons given by those who do not remain on treatment are non-adherence to treatment regimes (about a third) and employees leaving the company (another third); the remaining third cease treatment for a variety of reasons including death. AngloGold Ashanti Health provides three months of ART to employees who leave the company, and who could benefit from ART, and endeavours to facilitate the referral of individual patients to a government clinic in their community for ongoing treatment, care and support. The number of employees leaving the company may seem disproportionately high but this has been significantly influenced by the down-sizing at the operations during the year. Reasons for leaving include retirements, retrenchments, resignations, dismissals, and ill-health retirements.

The prognosis for those on ART remains good and monitoring of their progress indicates that viral suppression rates are being controlled by ART. Of those on ART, 80% have viral loads of less than 400 after six months of treatment and these viral suppression rates are maintained after two years on treatment. In addition, once ART has begun, the CD4 count rises steadily from a mean of 148 to a mean of 390 after two years of treatment. Some 80% of patients attending wellness clinics have been declared fit for work by their attending clinician.

The total cost of providing ART is R1,290 per patient per month which includes monthly drug costs of R470 per patient (see case study: Economic impact of HIV/AIDS on the South African operations on page 27).

Provisional results from research being conducted into the economic costs of the HIV/AIDS epidemic indicate that absenteeism has declined significantly with the provision of ART from a mean sick leave rate of seven days per month for employees starting ART, to two days per month after one year on ART. There has also been a similar decline in the use of health care facilities for the majority of those on ART.

Viral load response on ART



## SOUTH AFRICA – VAAL RIVER

### Country Report 2006

With the increase in the participation of VCT and attendance at wellness clinics, there has been an increased workload at clinics. AngloGold Ashanti Health has budgeted to employ four additional members of staff next year – two in the Vaal River region and two in the West Wits region.

Assuming an ideal annual VCT testing rate of 100% of employees, and an HIV/AIDS prevalence rate of 30%, and that 25% of HIV-positive employees require ART, then the actual proportion of employees reached versus expected is 75% for VCT, 50% for the wellness clinic and 63% for ART.

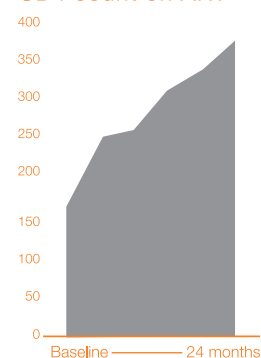
**Support:** In terms of support, the focus is on providing palliative and home-based care for the AIDS-ill who retire from the employment of AngloGold Ashanti. This support extends to families and includes counselling and support groups, assistance with home-based palliative care and, where appropriate, the care of orphans in households headed by children or grandparents.

AngloGold Ashanti has formed partnerships with several home-based care programmes in the areas around its operations in South Africa. Furthermore, a total of 126 former employees receive care from TEBA Home-Based Care which is supported by AngloGold Ashanti and other mining companies operating in Southern Africa.

The death rate of employees in service at the four largest business units at the South African operations has been declining over the past three years. There has also been a decline in medical absenteeism amongst those on ART. A key contribution to these declines has been the increased uptake of ART.

Expenditure related to the chronic disease management of HIV-infected employees (including the provision of ART), VCT, home-based care for terminally ill ex-employees, and certain programme related research, monitoring and evaluation, amounted to R21.5 million in 2006 (2005:R16.45 million). This included R2.6 million which the AngloGold Ashanti Fund contributed to HIV/AIDS-related community projects.

Improvements in CD4 count on ART





**Case studies**

**VCT, key to success of HIV/AIDS programme**

Encouraging and promoting attendance at voluntary counselling and testing (VCT) centres is a vital aspect of AngloGold Ashanti's HIV/AIDS programme, which aims to prevent the spread of infection, to care for those infected or affected by HIV/AIDS and to provide outreach and support to the community. In order to do this effectively, it is vital that people know their HIV/AIDS status – hence the importance of testing for infection with the virus. For those who test negative, the counselling is aimed at helping them ensure that they maintain this status; for those who test positive, it is intended to assist them to cope with the disease in the best way possible so as to ensure that the effect on their quality of life is minimised. It is important that programmes are established which overcome public resistance to testing, since only once a person knows his or her status can they make informed decisions about their behaviour.

**AIDS**

Frequently employees approach the clinics only once they are AIDS-ill with AIDS-related conditions when it may be too late to begin effective treatment. To counter this, it is important that employees attend VCT centres, learn their status and understand how either to prevent themselves from contracting HIV/AIDS in the future or how to deal with the disease should they test positive.

In particular during 2006, a campaign entitled 'SAVE lives' was run to encourage VCT attendance. The 'SAVE lives' message was central to the prevention programme and stands for:

**S** = safe sex  
**A** = access to care  
**V** = voluntary counselling and testing  
**E** = education

A result of this increased focus was the significant increase in uptake of VCT. In 2006, 23,389 encounters were recorded which, assuming a single annual test per person attending, is equivalent to 75% of the South African employee base. This was an increase of 129% on the 10,219 encounters recorded in 2005, and exceeded the target of 40% set for the year. The 2006 data compares with VCT rates of 32.4% and 10% in 2005 and 2004 respectively.

### Economic impact of HIV/AIDS on the South Africa operations

Given the potential for far-reaching economic effects of HIV/AIDS on the company, and in order to plan adequately for future preventative and therapeutic measures, AngloGold Ashanti recognises the importance of quantifying the economic impact of HIV/AIDS as far as this is possible.

Total expenditure on the AngloGold Ashanti HIV/AIDS programme in 2006 amounted to R21.5 million or R694 per employee in the South African operations. This total cost (which amounts to 1.2% of basic pay or in production terms, \$1.24/oz) is broken down as follows:

- prevention programme – R1.1 million
- treatment programme (including the provision of VCT and ART) – R16.63 million
- support programme – R3.8 million

The total direct financial costs to the company include the cost of the entire HIV/AIDS programme (i.e. prevention, treatment, support) as well as the cost of treating the side-effects of medication and the cost of treating opportunistic infections to which people may succumb as a result of having HIV/AIDS.

The economic impact of HIV/AIDS on the company, however, is far more complex than simply taking into account the financial expenditure incurred. The Aurum Institute for Health Research, of which AngloGold Ashanti was the founder and remains a substantial funder, has made significant progress through its Health Economics and Systems Research Programme in data analysis and model building to determine the full economic impact of HIV on AngloGold Ashanti and to estimate the cost and savings associated with having in place a comprehensive programme that includes the provision of ART to HIV-positive employees, in order to combat HIV/AIDS.

This programme of work, begun in 2003, has included the estimation of the potential economic impact of untreated HIV/AIDS on AngloGold Ashanti as part of an independent Anglo American group-wide assessment funded by GlaxoSmithKline and undertaken by Aurum. This study indicated that the economic impact of HIV to AngloGold Ashanti would continue to rise from 2003 (that is the potential impact of not undertaking prevention, treatment or support) and would reach 6% of payroll in 2006. The greatest impacts lie in medical care (47%) and absenteeism (36%).

Early indications from the Aurum research programme suggest that in the medium term, the provision of ART to HIV-positive employees has had cost benefits for AngloGold Ashanti. These benefits include a decrease of more than 50% in deaths in service, a decline in hospital admissions in excess of 70% as well as a decrease in medical absenteeism and, consequently, a fall in the number of lost shifts. These statistics are limited to those on the ART programme and do not represent global statistics for the South African operations. Initial indications are thus that the 'savings' resulting from the provision of ART outweigh the overall cost of the programme over a two- to three-year period. The costs of providing AngloGold Ashanti's HIV/AIDS programme include:

- a comprehensive cost per employee on ART per month of R1,290 declining over the four-year implementation period as a result of a decline in drug and laboratory costs and gaining economies of scale in treatment delivery. At the start of the programme this cost was about R2,000 per employee per month;
- VCT costs of R56 per employee tested; and
- a wellness clinics cost of R280 per patient per month on the programme including the provision of prophylaxis against opportunistic infection and ongoing counselling.

There has been a significant increase in VCT uptake, with a resulting increase in patients attending the wellness clinics (almost 40% increase in 2006) and patients taking ART (57% increase in 2006). Nevertheless efforts to mitigate the economic impact of HIV are constrained by the still relatively low uptake of ART on the part of employees, their reluctance to be tested (although this has improved significantly – by 129% – over the past year) and late presentation for treatment. The more recent increase in VCT uptake is encouraging and has resulted in an increase in patients attending wellness clinics – an increase of almost 40% in 2006 – and in patients taking ART – a 57% increase in 2006. The high number of HIV-positive employees not remaining on ART after starting treatment also exacerbates the situation. However, this gives added impetus to the importance of the prevention aspects of the HIV/AIDS programme and to encouraging employees to attend VCT and the wellness clinics.

The final report of the Aurum research programme is scheduled for release in mid-2007.



# SOUTH AFRICA – VAAL RIVER

Country Report 2006



## Human resources

One of AngloGold Ashanti's core business principles is that employees are provided with opportunities to develop their skills while sharing risks and rewards in workplaces that promote innovation, teamwork and freedom with accountability. The company embraces cultural diversity.

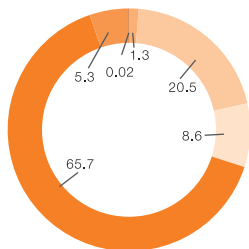
AngloGold Ashanti is committed to upholding the Fundamental Rights Conventions of the International Labour Organization (ILO), ensuring the implementation of fair employment practices by prohibiting forced, compulsory or child labour. It is also committed to creating workplaces that are free of harassment and unfair discrimination.

The company seeks to understand the different cultural dynamics in host communities and adapts work practices to accommodate this where doing so is possible.

All employees are given the opportunity to participate in training that will improve their workplace competency. The company is committed to developing motivated, competent and experienced teams of employees through appropriate recruitment, retention and development initiatives. An emphasis is placed on the identification of potential talent, mentoring and personal development planning.

Remuneration systems reward individual and team effort in a meaningful way. AngloGold Ashanti works with stakeholders to ensure minimum standards for company-provided accommodation; assures access to affordable health care for employees and, where possible, for their families; and is committed to prompt and supportive action in response to any major health threats in the regions where the company operates.

Country of origin of South African employees (%)



- South Africa
- Swaziland
- Botswana
- Lesotho
- Mozambique
- Other

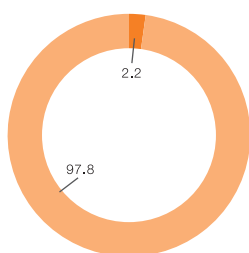
## Employment overview

There were 31,996 employees and 5,806 contractors working in the South Africa Region in 2006, of these 15,296 employees and 2,895 contractors were employed at the Vaal River operations.

Some 97.8% of all South African employees are either represented by unions or catered for by the agency shop agreement. (This agreement exists across the lower level bargaining unit within the company. This means that non-union members contribute 0.75% of their monthly basic pay to a human and industrial relations fund, whereas union members contribute 1% of their monthly basic pay to this cause.) The four unions that are recognised are the National Union of Mineworkers (NUM), the United Association of South Africa (UASA), Solidarity and the South African Equity Workers' Association (SAEWA).

There were no significant disputes or strikes in South Africa during the period, although there were six incidents, of which three were declared formal disputes, that led to brief work stoppages. The formal disputes related to the overtime payment rate for Sundays, transport for employees and the engagement of contractors. These incidents were amicably resolved.

Workforce represented by a recognised union – South Africa (%) 2006



- Not represented by recognised trade union
- Represented by recognised trade union

The employment of historically disadvantaged South Africans (HDSAs) remains a particular priority. Employment targets and achievements are reported annually to the South African Department of Labour (on 1 August) and reporting will also be provided in terms of the Mining Charter from 2007. HDSAs comprise 26% of management (2005:22%). (Managerial employees are defined as those in supervisory and management roles in Paterson job grades D-Lower and above.) HDSAs make up 18% of the board (same percentage as in 2005).

Foreign migrancy is reported in South Africa in line with the spirit of the Mining Charter. Foreign migrants are defined as employees drawn from outside the borders of South Africa but generally from countries within the Southern African Customs Union as well as Mozambique. Many other migrant workers originate from rural areas within South Africa. The percentage of foreign migrant employees was 35.7% as at 31 December 2006 (2005: 36%).

### Employee participation

Emphasis is placed on employee participation at the South African operations, besides the normal meetings and management briefing sessions for regulating the interaction with the unions and associations. The NUM Steering Committee is the body that interacts with management at corporate level on general company level issues. Company level interaction with the other unions and associations also takes place in the form of bilateral meetings on a regular basis, as and when the need arises. Other forums include the HIV/AIDS Committee, the Accommodation Forum and the Skills/Equity Committee. Interaction at operational/ business unit level largely takes place through the Vaal River NUM Branch Committee and NUM Shaft Committees for each of the mines at the Vaal River operations.

An Employee Share Ownership Programme (ESOP) was launched in South Africa in 2006 and is currently being implemented (*see case study: Harvesting for the future: Bokamoso ESOP on page 31*).

### Training and development

In 2006, \$21.20 million (R143.5 million) – 4.64% of payroll – was spent in the South African operations.

#### Five broad areas of training can be identified:

**ABET:** It is AngloGold Ashanti's policy to provide Adult Basic Education and Training (ABET) to ensure that all employees are able to become literate and numerate. At the Vaal River operations more than 60% of employees have a minimum qualification of ABET Level 3 which means that they are functionally literate. Full-time and part-time courses are held at the ABET centre and at the mines.

**Vocational training:** The provision of vocational training is an important part of the company's Social and Labour Plan. AngloGold Ashanti is registered with the Mining and Minerals Sector Education and Training Authority (SETA) and the Mining Qualifications Authority (MQA). The region's centralised training venue provides accredited technical training in mining, mining services, engineering, metallurgy, and occupational environment safety and health.

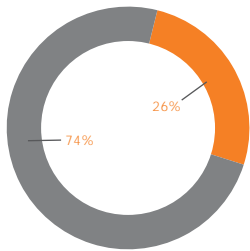
**Talent management:** AngloGold Ashanti's Talent Management Programme identifies and develops management for the future. The programme has three areas of intervention, namely: development; retention; and monitoring of talent, and includes an annual talent review at executive level to monitor succession plans for talented employees. The group runs an Executive



# SOUTH AFRICA – VAAL RIVER

## Country Report 2006

Percentage HDSAs in management (South Africa)



- HDSAs in management
- Non-HDSAs in management

Development Programme (EDP), a Management Development Programme (MDP) and an Intermediate Management Development Programme (IMDP), where younger employees with management potential are identified and given an opportunity to develop their careers.

**Graduate training:** The South Africa region supports students in full-time studies at universities and universities of technology (formerly known as technikons). The bursary scheme is open to employees (in-service bursary scheme) as well as to the general public or so-called 'off-the-street' candidates. The company currently supports 48 students studying towards tertiary qualifications. In respect of the 48 students, 12 are employees while 36 are 'off-the-street' students. A total of \$0.75 million (R5.12 million) was spent on this programme in 2006.

**Training for life:** Training for life equips employees or ex-employees with skills to ensure their continued employability or ability to be self-employed after employment by the company and in preparation of career endings, both as a result of ill health or as a result of mine closure. Employees who are retrenched are offered re-training in a skill that will assist them to remain economically active within their community.

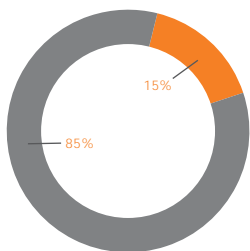
### Housing and health care

In South Africa a wide range of accommodation options is available to employees. These options vary from privately-owned houses to company-owned single accommodation residences. The company provides a housing allowance to assist employees to acquire accommodation.

Historically, the South African mining industry has drawn a large percentage of its workforce from countries around South Africa – Lesotho, Mozambique, Swaziland and Botswana – as well as from rural areas within South Africa, such as the Eastern Cape, KwaZulu-Natal and Mpumalanga. The majority of these employees prefer to retain their homes in their country or region of origin and to return to their homes during weekends, annual leave periods and at the end of their employment.

These employees are accommodated in single accommodation residences which comprise mainly communal rooms (accommodating between four to eight persons per room), catering facilities, visiting families' units and entertainment and recreational facilities. A programme is in place to convert the communal rooms into single room accommodation. To date 1,031 single rooms have been created and the plan for 2007 is to create a further 572 single rooms. AngloGold Ashanti also plans to redevelop under-utilised residences into family accommodation and some 86 family units have been completed. A further 127 family units will be developed in 2007. Meals that are provided in the residence comply with international nutritional standards and are monitored by an independent dietician on a monthly basis.

Contractors vs employees at the South African operations



- Contractors
- Employees



## SOUTH AFRICA – VAAL RIVER

### Country Report 2006

All employees in South Africa not covered by formal medical scheme arrangements have access to health care at company facilities. The service is provided by AngloGold Ashanti Health, a subsidiary of AngloGold Ashanti.

The Vaal River and West Wits areas both have a central hospital providing secondary, and to some extent tertiary level care, surrounded by a network of peripheral primary health care and occupational health clinics. Health care activities which focus on care to employees in these areas and care to immediate dependants, where appropriate, include preventive, occupational, and primary health care; hospital care and the management of trauma; injury on duty; and treatment of HIV/AIDS.

The two occupational health centres are each staffed by two doctors and some 30 support health care practitioners each. The occupational health discipline performs the functions of screening prior to employment, evaluation of baseline health status, surveillance during employment for purposes of early detection of disease (particularly high-risk diseases commonly associated with the mining industry) and directing the management of diseases detected, including the workplace and compensation initiatives required.

Each hospital has about 300 beds with emergency rooms, operating theatres and multi-disciplinary intensive care units. Speciality disciplines include internal medicine; general surgery; orthopaedic surgery; ear, nose and throat surgery; radiology; paediatrics; and obstetrics and gynaecology. These clinical disciplines are supported by the allied clinical disciplines of physiotherapy, occupational therapy and clinical psychology, which together ensure comprehensive patient care and rehabilitation.

#### Case study

### Harvesting for the future – Bokamoso ESOP

In October 2006, AngloGold Ashanti, NUM, Solidarity, UASA and Izingwe Holdings (Pty) Limited jointly announced the launch of an employee share ownership plan (ESOP), together with a black economic empowerment (BEE) transaction. These transactions will result in 1.9% of AngloGold Ashanti's share capital – worth some R1.8 billion – being transferred into the hands of non-managerial employees and a BEE consortium.

Shareholders voted in favour of the transactions at a general meeting in December 2006. Managerial employees currently participate in a share participation scheme.

AngloGold Ashanti CEO Bobby Godsell says that this transaction is intended both to align employee rewards more closely with the company's share price, and simultaneously to give effect to the undertakings made to the Department of Minerals and Energy at the time the company gained its mineral rights conversions in August 2005. The company undertook to establish an ESOP and a BEE transaction equivalent to at least 6% of the value of the company's South African operations.

The establishment of the ESOP involved an in-depth process of consultation between AngloGold Ashanti and the three representative unions making the process adopted unusual in the South African context. These consultations lasted for almost a year and were marked by attempts to reach consensus on all material issues, a goal which the parties believe was achieved.

The structuring of the ESOP in association with the BEE transaction with Izingwe Holdings, a company chaired by Siphon Pityana, is built around a co-operation agreement between Izingwe and the Bokamoso ESOP Trust.



### About the Bokamoso ESOP

The shares issued to the Bokamoso Trust are a combination of ordinary shares (free shares) and a new class of shares (called loan shares). For each of the 30,953 eligible employees, 30 free shares (928,590 in total) have been allocated, and 90 loan shares (a total of 2,785,770) at a 10% discount to market value at the start of the scheme. Both classes of shares effectively have full voting and dividend rights. In practice, this means that each of the eligible employees will receive shares worth R36,000.

The free share element of the Bokamoso ESOP was introduced by agreement between the company and the unions to give greater assurance of value to employees. In terms of this agreement, approximately half the originally envisaged loan shares were converted into free shares on the basis of roughly the same cost to company.

The Bokamoso Trust has been established to acquire and administer the shares. The Board of Trustees who will oversee the trust will consist of two people nominated by the NUM, one by each of UASA, Solidarity and AngloGold Ashanti, and four people not connected to any of these parties but nominated by agreement between them. The elected chair of the Board of Trustees is May Hermanus, Director of the Centre for Sustainability in Mining and Industry at the University of the Witwatersrand.

The ESOP will run for seven years. The right to trade shares will occur annually in five equal tranches to each eligible employee on the so-called vesting dates, with the first portion vesting on the third anniversary of the Bokamoso ESOP launch, and the last on the seventh anniversary.

The ESOP seeks to address potentially conflicting imperatives: on the one hand it aims to promote broad-based share ownership of the company and long-term financial planning on the part of employees, and on the other hand it also aims to provide short-term cash returns to employees.

On each of the five vesting dates, eligible employees will receive the full benefit of the free shares that are due at that time, that is they may sell these shares.

With regard to the loan shares, the benefit due to eligible employees will be calculated on the basis of the difference between the exercise price and the share price on the relevant vesting date, taking into account an escalation factor accruing at 7% a year, and reduced by any applicable dividend flow. For the loan share aspect of the scheme, 50% of applicable dividends will flow directly to employees, and the other 50% will be used as described above.

Says NUM General Secretary Frans Baleni of the employee share ownership plan: "The NUM believes that there are better ways of turning workers into assets than the old traditional view of looking at them as a cost factor. Thus we lay praise to the breakthrough between organised labour and AngloGold Ashanti on the conclusion of the ESOP which should see 6% of South African assets committed to the development of this initiative. In line with the mining charter expectations, our members laud the development of the ESOP. We also wish to acknowledge the stakeholder involvement and participatory approach that underpinned the process, coupled with frank openness to an extent that parties crafted the trust deeds word by word."

Solidarity's General Secretary, Flip Buys, said that the transaction created a blueprint for similar transactions in the future at other companies. "AngloGold Ashanti has taken the lead by investing in its own future and that of its workers. The future will show that this was the right thing to do. Solidarity welcomes the job security that will result from the deal."

The establishment of the ESOP will involve extensive and ongoing education and communication work with employees, which the company and the unions will carry out jointly, as a further indication



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of the level of consensus reached in the consultative process. Each employee received a letter providing information on the ESOP and their participation following a formal launch of the ESOP to employees in late January.

AngloGold Ashanti recognises that, over time, many employees are likely to sell the shares that are due to them to gain immediate financial rewards. While the company will provide education relating to the benefits of being longer term shareholders and the benefits of saving (either in the form of shares or other means), AngloGold Ashanti does not see the long-term holding of the shares as a precondition for the success of the ESOP. The only matter currently left unresolved is whether, and if so how, employee participation in the company will continue in seven years' time following the culmination of this scheme. This will be discussed between the parties in due course.

### **The role of Izingwe Holdings in the transaction**

The acquisition by Izingwe Holdings of 1.4 million AngloGold Ashanti shares (equivalent to an equity interest of 6% in AngloGold Ashanti's South African production) forms an integral part of the overall ESOP/BEE transaction. Izingwe Holdings is a BEE investment company chaired by Siphon Pityana.

Mr Pityana has occupied strategic roles in both the public and private sector. He was formerly a senior executive of Nedbank and is currently a non-executive director of several companies including Bytes Technology Group (BTG), African Oxygen (Afrox), Munich Re and Aberdare Cables. He has had a working relationship over many years with various AngloGold Ashanti executives and trade union leaders, particularly in his previous public sector roles. Given the envisaged co-operative relationship between Izingwe and the ESOP Trust, this was a critical factor in the selection of Izingwe for this role.

Izingwe has said of its relationship with AngloGold Ashanti. "The partnership with AngloGold Ashanti will be more than a shareholding relationship. The shareholding will be a springboard for jointly pursuing other projects. This is in the context of Izingwe's broader commitment to the mining industry. Izingwe has already secured prospecting licences for a range of minerals and it intends introducing various existing and greenfield opportunities to AngloGold Ashanti. The AngloGold Ashanti transaction consolidates and adds significant momentum to Izingwe's interests in the mining sector.

"Izingwe will also be active in other areas of AngloGold Ashanti's business. It will play a strategic role in its transformation initiatives and it will contribute to enhancing supply chain and routes to market, both from a general business perspective and by promoting a strong empowerment presence and culture in these areas."

This transaction has been structured in a similar manner to the loan shares issued in terms of the Bokamoso ESOP. Mr Pityana has been invited to join the Board of Directors of AngloGold Ashanti.

A key feature of this transaction is the intended conclusion of a co-operative agreement between Izingwe Holdings and the Bokamoso Trust following a series of consultations between Izingwe Holdings and the three unions. This will be finalised soon now that the trust has been established. It is envisaged that the agreement could include commitments on shareholder co-operation, with Izingwe Holdings acting as a channel of communication between the Bokamoso Trust and the company's governance structures on transformation and other operational issues.





## Environment

AngloGold Ashanti is committed to working in an environmentally responsible way, recognising that the long-term sustainability of its business is dependent upon good stewardships in both the protection of the environment and the efficient management of the exploration and extraction of mineral resources. The company complies with all the applicable environmental laws, regulations and requirements.

Committed to establishing and maintaining management systems to identify, monitor and control the environmental aspects of its activities, AngloGold conducts audits to evaluate the effectiveness of these systems and makes sure it has the financial resources available to meet its reclamation and environmental obligations. AngloGold Ashanti works continually to improve its environmental performance and to prevent pollution from its operations.

The company ensures that its employees and contractors are aware of its environmental policy and communicates and consults with interested and affected parties on the environmental aspects of its activities, and participates in debate on environmental matters at international, national and local levels.

The group environmental policy guides the broad practices of the company while site-specific policies, which are required to be consistent with group policy, direct and regulate each operation in accordance with local conditions, requirements and regulations.

AngloGold Ashanti has formally adopted ISO14001 certification as the standard for the company's environmental management system. The International Standards Organization (ISO) is a voluntary, not-for-profit network of national standards institutes from 146 countries. ISO14001 focuses on environmental management systems. Certification is based on regular auditing by an appropriately accredited external body.

AngloGold Ashanti was party to the development of the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold and was one of the first signatories to the code in November 2005. Signatories to the code must have their operations audited by an independent third party to demonstrate their compliance by 2008.

### Laws, regulations and requirements

AngloGold Ashanti's South African operations have to comply with a host of national and provincial laws as well as a number of local by-laws. Some of the major laws are: the National Environmental Management Amendment Act 8 of 2004; the National Environment Management: Air Quality Act 39 of 2004; the Atmospheric Pollution Prevention Act 45 of 1965; the National Water Act 36 of 1998; the Water Services Act 108 of 1997; the Environment Conservation Act 73 of 1989; the National Environmental Management: Biodiversity Act 10 of 2004; and the National Environmental Management: Protected Areas Act 57 of 2003.

Although incidents of non-compliance with national and provincial legislative requirements occurred during 2006, these were of no material significance and, therefore, did not result in any fines being imposed on or legal action taken against the company.

### Managing environmental issues

In addition to the AngloGold Ashanti Environmental Policy, every operation in South Africa has its own environmental policy.

The Environmental Management Department in the South Africa region facilitates the implementation of environmental management in each operation in order to achieve legal compliance but each operation takes responsibility for its own environmental management.

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All the operations have approved Environmental Management Programme Reports (EMPRs) in place as required in terms of South African environmental and mining legislation. All policy issues that can be addressed at a business unit level are included in the EMP management actions: radiation management, waste management, air quality management, land management, surface water management and groundwater management. The EMPs are updated every two years.

#### **Environmental risk management and incident reporting**

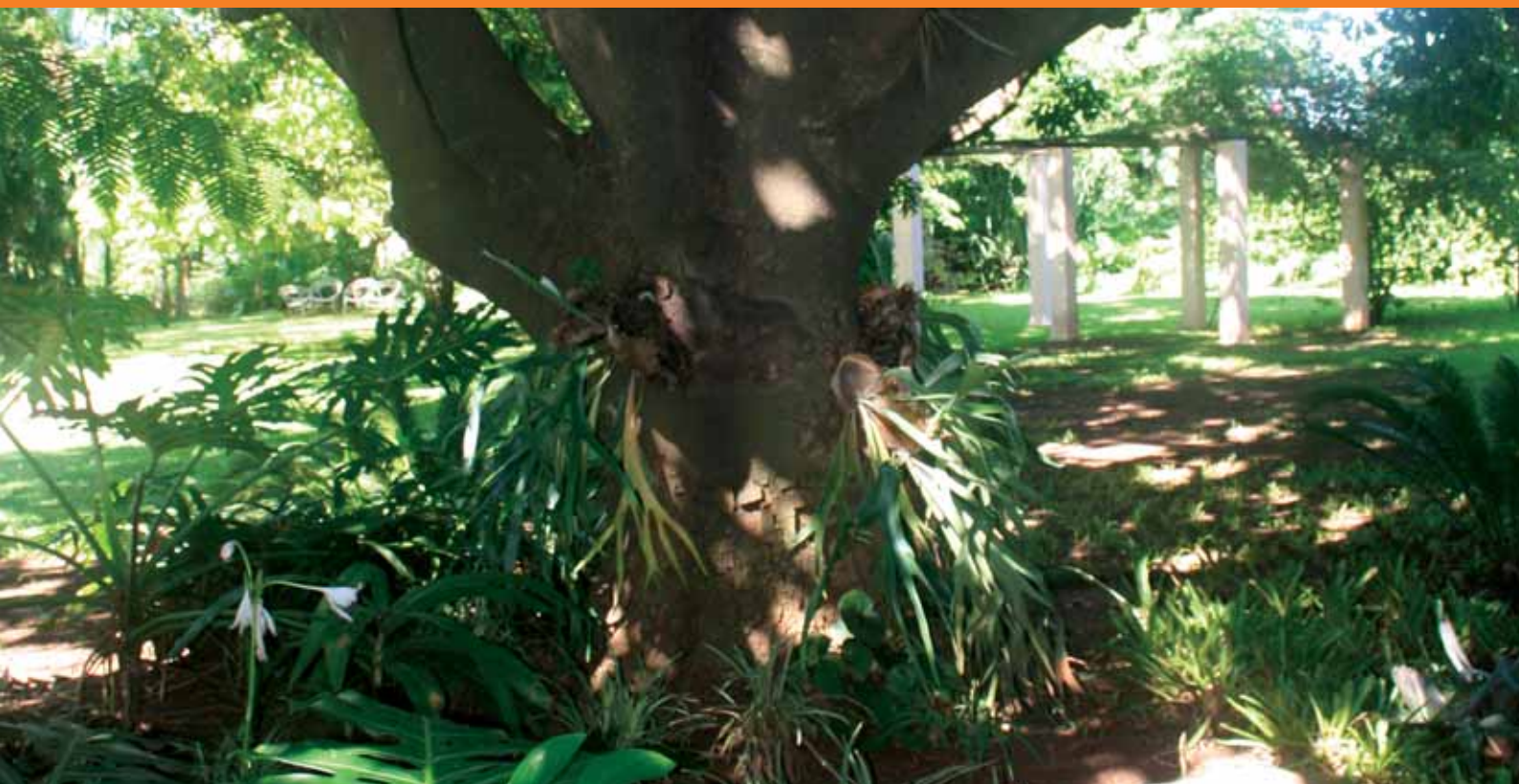
Risk management forms an integral part of AngloGold Ashanti's environmental management systems. Key environmental risks are identified as part of the company's overall risk profile and are reported accordingly.

All environmental incidents are reported to the environmental co-ordinators at operational level. These environmental professionals carry out investigations into significant incidents with the relevant operational staff. Investigations are documented and action plans drawn up.

An environmental incident is defined as 'an event, action or non-conformance with a procedure that results, or has the potential to result, in an adverse impact on the surrounding environment; or any event, action or occurrence which is contrary to the AngloGold Ashanti business principles'.

Should a major environmental incident occur, a report must be made within 24 hours to the corporate office. Also reported to the board, a major incident is defined as one which could affect the company's reputation or which results in a cost to the company exceeding \$100,000 including fines, compensation, clean-up, loss of production, anticipated litigation costs and so forth.

During 2006, seven incidents at Vaal River were reported to the board. All fell under the Metallurgy Department. On five occasions (10 and 24 January; and on 1, 23 and 27 February), the Bokkamp Dam, a process water storage and return water dam, overflowed towards the Vaal River after heavy rainfall. A R40 million project to increase the capacity of storage dams in the area has begun and will be completed in 2008.



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The other incidents concerned the ambient air quality monitoring station near the East Gold Acid and Flotation plant which recorded sulphur dioxide concentration in excess of the SANS daily average guideline in January and in June 2006. Mechanical modifications to the stripper resulted in a drastic reduction in sulphur dioxide emissions. After the June incident, an online stack emission monitor was installed for proactive emissions' management during future plant shutdown and start-up operations.

#### Rehabilitation and closure

In line with its business principle and legislation, AngloGold Ashanti provides for rehabilitation and final closure during the operating life of all of its mines. In South Africa the company maintains a Rehabilitation Trust Fund. The table below presents the rehabilitation and decommissioning liabilities as at the end of 2006 for the South African operations as a whole, as well as for each of the Vaal River operations.

#### Rehabilitation and decommissioning liabilities in South Africa (\$ million)

|                     | 2006           |           |                 |           |            |           | 2005       |           |
|---------------------|----------------|-----------|-----------------|-----------|------------|-----------|------------|-----------|
|                     | Rehabilitation |           | Decommissioning |           | Total      |           | Total      |           |
|                     | \$ million     | R million | \$ million      | R million | \$ million | R million | \$ million | R million |
| <b>South Africa</b> | 58.5           | 396.0     | 96.8            | 655.3     | 155.3      | 1,051.4   | 145.3      | 925.6     |
| <b>Vaal River</b>   |                |           |                 |           |            |           |            |           |
| Great Noligwa       | 2.6            | 17.6      | 15.3            | 103.6     | 17.9       | 121.2     |            |           |
| Kopanang            | 3.1            | 21.0      | 18.6            | 12.6      | 21.7       | 146.9     |            |           |
| Tau Lekoa           | 1.2            | 8.1       | 6.6             | 44.7      | 7.8        | 52.8      |            |           |
| Moab Khotsong       | 3.6            | 24.3      | 15.7            | 106.3     | 19.3       | 130.7     |            |           |
| Legacy projects     | 9.1            | 61.6      | 7.2             | 48.7      | 16.3       | 110.4     |            |           |

All the operations have closure plans which are reviewed and updated on a regular basis to take cognisance of operational conditions and developments, legislative requirements, international protocols, technological developments and advances in good practices.

#### Key indicators

Key indicators of environmental performance for AngloGold Ashanti are:

- the use and management of cyanide;
- efficient use of resources, including water and energy;
- mine closure planning and the rehabilitation of disturbed lands; and
- the prevention of pollution, through proper waste management and hazardous waste management practices

In recent years, increasing attention has also been focused on issues relating to:

- climate change and greenhouse gas emissions; and
- biodiversity

Further information may be found on our website, including a detailed breakdown of environmental performance against the GRI 2002 indicators ([www.aga-reports.com/06/GRI.pdf](http://www.aga-reports.com/06/GRI.pdf)).

#### Efficient use of resources, including water and energy

AngloGold Ashanti has plans in place to improve the efficient use of resources and the company's over-arching philosophy is that this optimisation is best managed at site level where the staff understand the requirements of the operation and can identify needs and reduce wastage. Thus, environmental targets are also established by the individual mines to reflect the priorities and risks unique to each operating unit.

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#### Water management

There are two main themes in water management: water consumption and water quality (which includes issues such as acid rock drainage and discharges from tailings dams). In South Africa, apart from improving and maintaining compliance with water permit conditions, water quality improvements are being driven by the impending Waste Discharge Charge System (WDCS). The WDCS is a pricing strategy designed by the Department of Water Affairs and Forestry (DWA) to improve national water use efficiencies and financially penalise the dischargers of poor-quality water. A number of water quality management challenges are being addressed by the South African operations, perhaps the most significant of which is the separation of clean and dirty water catchments on our older sites, some which date back almost 50 years. This often entails a macro scale redesign of drainage infrastructure that was built when water quality requirements were lax when compared with today's stringent standards.

A second but equally important water quality challenge is the management of groundwater seepage from tailings facilities, where short and long-term engineered solutions, including phytoremediation, are being investigated. (See case study – *Report to Society 2004*).

#### AngloGold Ashanti Vaal River – environmental statistics

|                              | Usage      |            | Efficiency (Usage/oz) |       |
|------------------------------|------------|------------|-----------------------|-------|
|                              | 2006       | 2005       | 2006                  | 2005  |
| Cyanide usage – kg           | 3,845,447  | 3,773,248  | 2.76                  | 2.46  |
| Water usage – m <sup>3</sup> | 18,567,997 | 18,884,489 | 13.32                 | 12.30 |
| Energy use – GJ              | 7,424,668  | 7,329,634  | 5.33                  | 4.78  |





### Case study

## R40 million dam being constructed to avoid contamination of Vaal River

The West Complex tailings storage facility (TSF) is the repository for slurry produced from the gold extraction process at the Vaal River operations. Covering an area of 209.35ha, almost 133Mt of slurry have been deposited on the TSF to date. To ensure dam stability, the water is drawn off and reticulated to a return water dam (RWD), the Bokkamp Dam, from where it is piped to the central spillage RWD before transfer to the Kopanang gold plant for re-use in the gold extraction process.

While the design volume of the Bokkamp Dam is 79,000m<sup>3</sup>, significant overflows from the Bokkamp water system occur annually, mainly owing to high quantities of rain water captured on the TSF during storm events. This excess water from the Bokkamp dam spills into the Vaal River – about 1,500m from the dam – contributing to the degradation of the quality of ground and surface water and results in a breach of the mine's exemption granted by the Department of Water Affairs and Forestry (DWAF) in terms of not allowing water discharges from this facility.

The Bokkamp Dam has been subject to a number of overflow incidents (*See Report to Society 2005*), which continued into 2006, notably between 10 January and 13 March, when overflows occurred following unusually high rainfall levels, and on one occasion measuring more than 140mm overnight.

Although the spills into the Vaal River are limited to the Vaal River lease area, they could potentially affect other land and water users downstream.

Corrective action is now under way to stop the water spillages into the Vaal River, by way of the construction of a new storm water containment dam to provide for excess storm water capacity and to allow for a controlled return water flow from the West Complex to the existing Bokkamp RWD. This follows the completion of an environmental impact assessment (EIA), which is in the process of being revised to address comments received from all relevant government stakeholders, who have been part of the upgrade process from the outset.

Construction of the R40 million project has already started with the delivery of new pipes. Upgrading of the existing pipeline infrastructure was started in January 2007, before construction of the new storm water dam proceeds in May 2007. The bulk of the project should be complete by the end of 2007 in time for commissioning in 2008. Final completion is expected in the latter half of 2009.

### Tenfold reduction in SO<sub>2</sub> emissions at Vaal River Gold Acid Plant

The Vaal River East Gold Acid and Flotation (EGAF) plant, which produces sulphuric acid (H<sub>2</sub>SO<sub>4</sub>) for the uranium leach process, has successfully reduced its sulphur dioxide (SO<sub>2</sub>) emissions tenfold, and, on 1 August 2006, received a permanent registration certificate from the North West Department of Agriculture, Conservation, Environment and Tourism (DACET) for the facility (see box below: *About sulphur dioxide*). SO<sub>2</sub> is produced during the conversion of sulphur from pyrite to H<sub>2</sub>SO<sub>4</sub> in the calcining stage of the acid production process. The spent gases produced during calcining are passed via scrubbing equipment before being vented to the atmosphere.

The production process resulting in the emission of SO<sub>2</sub> is known as a 'scheduled process' (one which is listed in the second schedule of the Act, with the potential of releasing noxious or offensive gases). SO<sub>2</sub> emissions are also regulated by the new Air Quality Act, which came into effect on 11 September 2005, partly replacing the now defunct Atmospheric Pollution Prevention Act of 1965. Through the South African National Standards (SANS), the new Act sets guidelines for ambient air quality management and stipulates limits for common pollutants. Nonetheless, the process of emitting SO<sub>2</sub> is still governed by the Atmospheric Pollution Prevention Act until it is absorbed into the new legislation.

At the EGAF plant, SO<sub>2</sub> emissions have been significantly reduced by modifications to the weak acid SO<sub>2</sub> stripper tower, first reported in the Report to Society 2005 (see case study in *Report to Society 2005: Complying with stringent new air quality legislation in South Africa*). During 2005, a provisional registration certificate was granted by the chief air pollution control officer (CAPCO), on condition that permanent registration is achieved within one year.

Until modifications were made to the weak acid SO<sub>2</sub> stripper tower in July 2006, there had been a number of SO<sub>2</sub> emissions which

exceeded the SANS daily ambient guideline limit of 48 parts per billion (ppb) or an ambient limit of 125 micrograms per cubic metre (µg/m<sup>3</sup>) as determined by the Department of the Environment and Tourism (DEAT). The latter is the individual limit specified in order to receive a registration certificate or permit by the CAPCO. It is calculated by dispersion modelling which stipulates how much SO<sub>2</sub> may be emitted into the environment – this in turn is determined by a number of factors, for example, velocity, stack height, stack diameter, geographical location and atmospheric conditions.

Point source emissions from the stack, which are easier to monitor, have been set by the CAPCO at 40 grams per second (g/s). Fugitive emissions (those which do not emanate from a point source) from the thickener (a tank where water is removed from the slurry) and plant leakages are set at 15g/s.

While there is still concern around fugitive emissions, AngloGold Ashanti's South African operations have brought their total emissions from a high of 491.2g/s in February 2006 to 54.2g/s in October 2006, below the permitted total emissions limits of 55g/s.

Says Wessel Van der Westhuizen, senior safety, health and environment officer for occupational hygiene at Vaal River: "The improved efficiency of the weak acid SO<sub>2</sub> stripper tower has been crucial in reducing emissions. This result has also been complemented by stricter control of plant emissions through a permanent stack monitor that gives continuous readings so that we can regulate and manage our emissions. There is also an internal management procedure that covers all the requirements of monitoring, which means that remedial steps can be actioned immediately when limits are exceeded. Ongoing focus is being placed on the management of fugitive emissions by improving total plant efficiency and minimizing leakages."

### About sulphur dioxide

Sulphur dioxide (SO<sub>2</sub>) is a colourless gas with a sharp odour. It is produced from the burning of fossil fuels (coal and oil) and the smelting or heating of mineral ores that contain sulphur in an oxygenated atmosphere. When sulphur dioxide combines with water, it forms sulphuric acid, which is the main component of acid rain. When acid rain falls it can cause deforestation, acidify waterways to the detriment of aquatic life and corrode building materials and paints. Sulphur dioxide can affect the respiratory system, lung functioning and irritate the eyes, leading to coughing, mucus secretion, aggravation of asthma and chronic bronchitis. Exposure to sulphur dioxide also makes people more prone to respiratory tract infections.



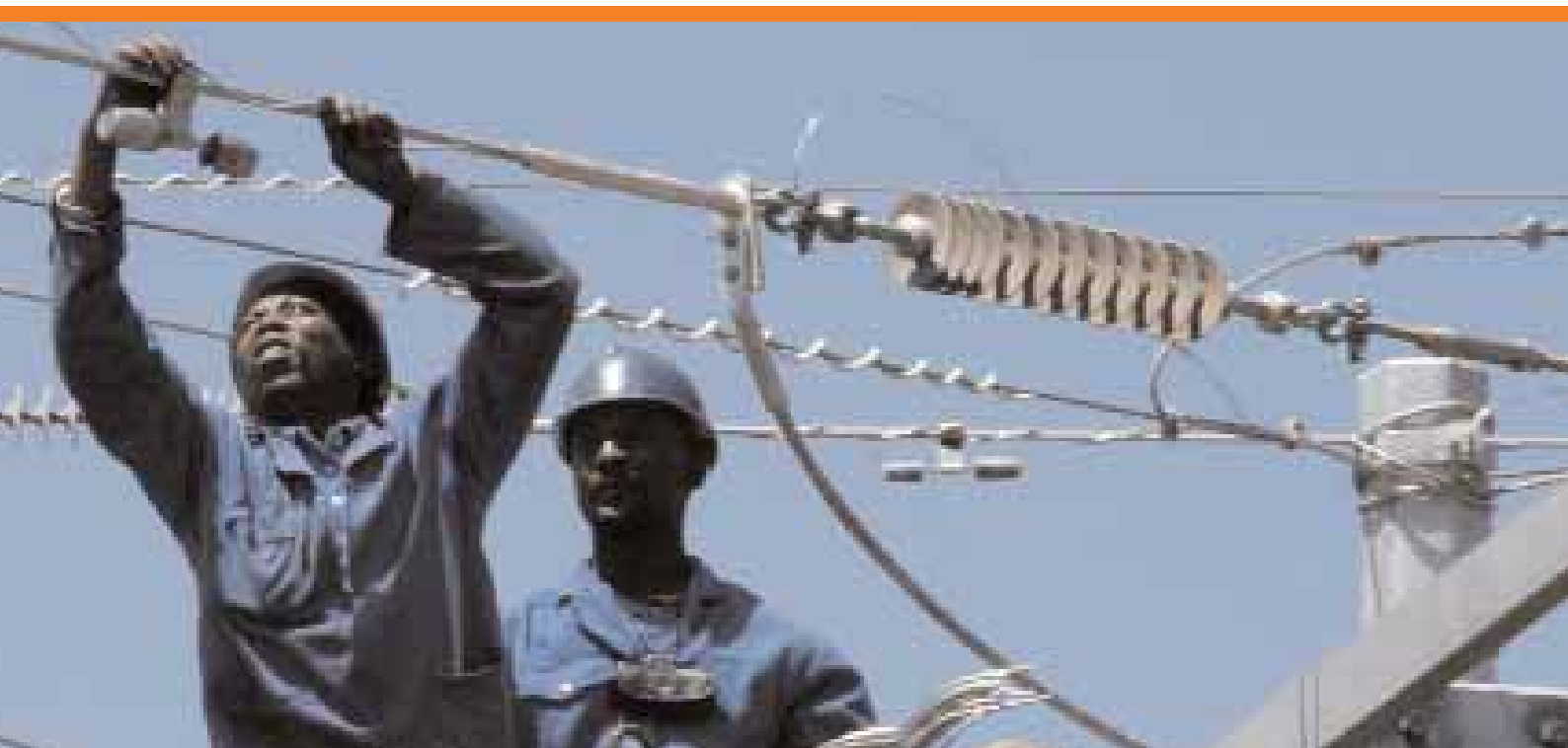
### Community

#### Introduction

One of AngloGold Ashanti's values relates to the communities in which the company does business. This states that the company strives to form partnerships with host communities, sharing their environments, traditions and values; that it wants communities to be better off for AngloGold Ashanti having been there; and that it is committed to working in an environmentally responsible way.

With respect to communities, the company subscribes to the business principles summarised below. AngloGold Ashanti:

- aims is to have a positive impact on the people, cultures and communities in which it operates. The company will be respectful of local and indigenous people, their values, traditions, culture and the environment;
- strives to ensure that surrounding communities are informed timeously of, and where possible are involved in, developments that affect them, throughout the life cycle of the company's operations;
- undertakes social investment initiatives in the areas of need where the company can make a practical and meaningful contribution, in particular to those areas of education and health care relevant to AngloGold Ashanti's business activities, and those most likely to be sustainable after operations have closed;
- encourages its employees to make themselves available for participatory and leadership roles in the community;
- seeks to acquire and use land in a way that promotes the broadest possible consensus among interested people. Where involuntary resettlement is unavoidable, the company will abide by appropriate guidelines for resettlement, where they exist, and will work with the local communities to develop workable plans for any resettlement; and
- strives to contribute to the sustainable economic development of host communities through procurement activities; the contribution of redundant assets to the community; assistance in the establishment and growth of small- to medium-sized sustainable enterprises; and the outsourcing of goods and services from local vendors where appropriate.



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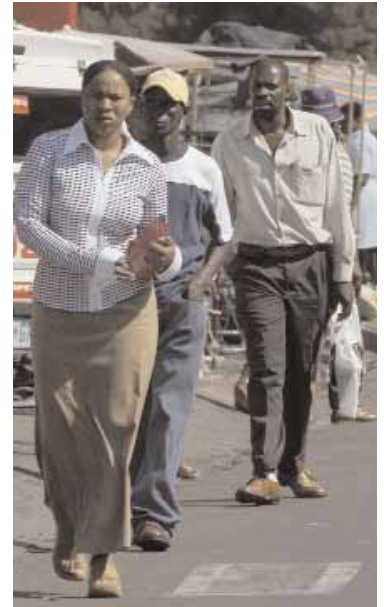
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AngloGold Ashanti is committed to engaging with non-governmental organisations (NGOs) and other stakeholders on issues of mutual concern.

The company has developed a Human Rights policy which it has asked several external agencies to comment on prior to approval by the Executive Committee. It is expected that this policy will be implemented in a phased approach by the end of 2007.

#### AngloGold Ashanti and the community in South Africa

The South African socio-political landscape is governed by a range of legislation: the most important to the mining sector being the Mineral and Petroleum Resources Development Act (MPRDA) which requires that all mining operations submit and adhere to a Social and Labour Plan as a prerequisite to the granting of new order mining rights and report their compliance with the MPRDA in accordance with the Mining Charter. In addition to specific human resources-related issues, the Charter requires mining companies to engage with local communities in which the company's operations are situated and from which it draws its workforce. AngloGold Ashanti was granted these conversions in respect of all its operations in August 2005 and will report on its compliance with the Mining Charter in 2007.



### AngloGold Ashanti's Policy on Human Rights

AngloGold Ashanti is committed to upholding human rights at our operations and to promoting human rights in the communities and countries where we do business in line with the company's business values and business principles, which state that the company supports the Universal Declaration of Human Rights, the Fundamental Rights Conventions of the ILO and the principles and values referred to in the UN Global Compact.

In 2006, AngloGold Ashanti developed a draft Policy on Human Rights which, following internal consultation, was put to a number of interested external parties. Once we have received and considered their comments, the policy will be formally reviewed by AngloGold Ashanti's Executive Committee and Board of Directors and it is anticipated that it will be adopted and implemented during 2007.

The policy builds on the commitments made in the values and business principles and is in line with the company's commitment to adhere to the Voluntary Principles on Security and Human Rights of which it has applied to become a signatory.

The Voluntary Principles (<http://www.voluntaryprinciples.org/>) were developed out of a multi-stakeholder process involving governments, extractive companies and NGOs in late 2000 as a means of helping companies in the extractive sector to improve performance in relation to security-risk assessment and the control of security operatives, and to improve relations with communities over security issues. Accordingly, they focus on three main areas: risk assessment, interactions between companies and public security, and interactions between companies and private security. The secretariat to the Voluntary Principles is provided jointly by the International Business Leaders Forum (IBLF) in London (<http://www.iblf.org/>) and Business for Social Responsibility (BSR) in San Francisco (<http://www.bsr.org/>).

In addition, work is being done to develop group-wide security and human rights training to be rolled out across the company and we will continue this during 2007.



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### Engaging with the community

Regular meetings are held between AngloGold Ashanti and local councillors and business people – specifically with the Matlosana Local Council and the Matlosana Chamber of Business in the case of the Vaal River operations – and the office of the Premier of North West Province. Sessions are held every quarter to brief the community on the company's operational and financial results and these forums also provide an opportunity for the discussion of other issues.

### Corporate social investment

AngloGold Ashanti spent \$3.13 million (R21.20 million) on corporate social investment in Southern Africa (South Africa and the neighbouring countries in the region from where a number of the company's employees are drawn).

As in previous years, education was the sector that received the greatest support from the AngloGold Ashanti Fund followed by HIV/AIDS, welfare and development, skills training and job creation, and health. In two other respects, however, there have been significant changes.

The first is that there has been a reduction in the number of small grants in favour of channelling larger amounts into projects with the potential to make a bigger impact on their communities. The second is a continuation of the trend where initiatives are generally only considered if they are based in the regions where AngloGold Ashanti has operations (and where Local Area Committees determine some of the projects selected for support) and from which the company draws large numbers of employees (and where the families of many of those employees live). In this respect AngloGold Ashanti is following the requirement of the Charter that mining companies should concentrate on development in their host communities and in the major-labour sending areas.

Fundamental to the philosophy of AngloGold Ashanti is the belief that development works best where people are empowered to work towards their own advancement and where ownership of the initiative rests either with the individuals or with the communities responsible for those initiatives. The aim is to provide constructive support for sustainable projects which will benefit the region concerned in the longer term.

### Ergo model taken to Vaal River

AngloGold Ashanti was aware that the closing in 2005 of its Ergo operation (to the east of Johannesburg) would have a marked impact on the nearby townships of Tsakane and Kwa-Thema. In view of this and in line with the company's commitment to its mining communities both during the life of operations and afterwards, the fund started a three-year project to improve teaching skills in mathematics and science in 14 secondary schools and literacy in 20 primary schools.

The manager of the AngloGold Ashanti Fund, Sipho Mahlangu, says that from the outset the intention was that, if the model proved to be successful, it would be replicated in other areas. Having seen the difference that the interventions have made to pupils in the selected schools in Tsakane and Kwa-Thema, the fund decided to go ahead and introduce similar programmes in the regions of the company's Vaal River and West Wits operations (*for more detail on the latter please refer to the West Wits Country Report*). Preparations started in 2005 and the projects got under way in 2006.

At Vaal River 10 primary schools, in Klerksdorp, Orkney and Stilfontein, were selected for a three-year language and literacy intervention. Mahlangu explains: "Literacy is the key. Studies have shown that many learners entering high school lack the basic literacy skills to cope with their studies at the secondary level. Children who battle to read will struggle to understand the concepts underlying subjects such as maths and science."

The fund has invested close to R2 million in the Vaal River programme which concentrates on the training of subject advisers and teachers and the provision of appropriate resource materials to the schools. It is being run by the Read Educational Trust, a non-profit organisation committed to improving the educational achievements of South African pupils.

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### Employee participation

In South Africa there is a 'give-as-you-earn' and matched volunteerism programme at the corporate office called Hearts of Gold. In 2006, 51 employees participated and volunteered a total of 259 hours of their time. In 2007 this programme will be rolled out to two pilot sites (one in the Vaal River area).

### Encouraging economic development

AngloGold Ashanti believes that its operations and activities should contribute towards the long-term sustainable development of host communities.

The company's Small and Medium Enterprise Development Initiative (SMEDI) continues to identify people with ability and potential, and enters into a partnership with them to provide education, training and funding with the long-term aim of creating sustainable business. The raising of venture capital is managed through Masakhisane Investments limited, which was established in 1999, with an initial capital of R10 million (then worth approximately \$1.6 million). To date, jobs have been created for 3,800 people.

Through a project to formalise mining villages, AngloGold Ashanti is making an important contribution to the sustainability of the Vaal River and West Wits areas. *(See case study overleaf).*





**Case study**

**Formalisation of mine villages to outlast mining**

AngloGold Ashanti’s South Africa Region has initiated a process of formalising the mine villages near its Vaal River and West Wits operations. What this means is that the company is going through the necessary technical procedures and getting the approval of the relevant authorities to have the villages proclaimed public townships. Currently the property within these areas falls under the jurisdiction of the Department of Minerals and Energy. The table below spells out the changes that occur when these mining villages become proclaimed townships.

| Mining Village   | Proclaimed township   |
|--|---|
| Mining villages, property and land use rights vest with AngloGold Ashanti and are aimed at supporting the core mining function.                          | The villages have the characteristics of a normal town where residents have access to land with a variety of defined uses in line with the standards approved by the provincial planning authorities. |
| Residents and businesses merely lease the land. Third-party ownership is not possible.   | Various tenure and upgrading options become available.  |
| The development and sustainability of the community is not considered as part of the strategic planning and budgeting priorities of the local authority. | The village areas are included in the social, infrastructural, health, economic and developmental (including housing) planning of the local municipalities.   |
| The use of the land is managed through a system of permits and consents from the Department of Minerals and Energy.                                      | Land use is managed by the local authority in terms of its zoning policies, municipal by-laws and Integrated Development Plans (IDPs).  |
| AngloGold Ashanti attends to the needs (in terms of the provision of municipal services) of its workforce.   | The local council is responsible for attending to these needs for its citizens and those living in surrounding communities.   |

One aspect that does not change is the responsibility for environmental rehabilitation and the safety of mining operations which remains with AngloGold Ashanti.

The goal of the formalisation process is to hand over control and management of these residential areas to the local municipalities in order to ensure self-sustainable communities when mining operations cease.

Formalisation brings a number of benefits to the residents including:

- the upgrading of services (including bulk water supply, sewage, storm water and solid waste management) and roads to bring these in line with the requirements of the local authority;
- the registration of individual erven with approved rezoning rights with the office of the Surveyor General and the National Deeds Office. This will give people the chance to own their homes and will open the way for expanded business development; and
- access to any social services that the municipality may provide, for example, clinics, libraries and pension payout points.

AngloGold Ashanti properties manager Jacques Wessels says that before embarking on the formalisation process the company appointed a team of specialists to investigate if, from a technical perspective, there were any 'fatal flaws' in the plan for the Vaal River/Umuzimuhle and West Wits villages. No impediments were found but anticipated development parameters were formulated. The local authorities were approached to enlist their support in principle for the intended process and their sanction was received for the inclusion of the villages into their area of jurisdiction.

### **Vaal River/Umuzimuhle Village**

Vaal River/Umuzimuhle Village is situated 12km south-south-east of Klerksdorp, 7km to the east of Orkney and 9km south of Stilfontein in North West Province. Some 407 hectares in size, the proposed township will comprise 1,403 erven: 1,292 residential erven, 10 erven with high-density accommodation and an additional 101 erven relating to economic and other land uses related to support services. The plan makes provision for a centrally situated mixed land use zone for municipal facilities and commercial activities. Control and management of this village will fall under the Matlosana Local Municipality when it becomes a proclaimed township. *(For further detail on the West Wits Village, refer to the West Wits Country Report.)*

### **Public participation**

AngloGold Ashanti is involved in an extensive public participation process to give people who may be affected by the proposed formalisation ample opportunity to comment, to raise concerns or to make suggestions that may result in the enhancement of the project.

The first invitations to participate were issued in mid-November 2006 and, in addition to briefing documents, newspaper advertisements, notices and fliers, a series of public interaction meetings are being held (these started in mid-January 2007). Draft town planning layouts are available for public viewing at central venues in both villages.

Comments and issues raised during the public participation process will be fed into the Environmental Assessment Report which forms the basis on which the environmental and planning authorities will base their decision to approve or decline the formalisation. Responses to the town planning aspects (layout, conditions and so forth) will be submitted to the local authority for evaluation.

### **Progress to date**

Independent environmental consultants were appointed by AngloGold Ashanti to assess the impact of the proposed townships on the surrounding environment. The study was submitted to the North West Department of Agriculture, Conservation, Environment and Tourism (NWDACET) in May 2006.

Site layout plans, prepared with inputs from geotechnical, engineering and environmental consultants, are being reviewed by the Matlosana and Merafong municipalities.

### **Towards completion**

Once the public participation process (outlined above) has been completed a Scoping Report will be submitted to NWDACET which will then decide, on the basis of environmental considerations, whether the project can proceed and, if so, on what conditions.

When approval is given by the Planning Tribunal at the local authority concerned, conditions will be set regarding the establishment of the township and its layout. The role and responsibilities of the service providers as well as the services handover programme would also be finalised.

The next step would be the final survey and approval of the overall plan by the Surveyor General. This would be followed by the opening of a register at the Deeds Office, the obtaining of clearance certificates for the upgrading of all services and, finally, the proclamation of the township. It is expected that the township will be proclaimed by the end of 2007.

### **Conclusion**

Jacques Wessels points out that the basic motivation for the establishment of the townships is to "normalise" the existing situation. "Formalisation acknowledges the urban nature of the area and makes land uses, engineering services and the legal basis of the erven compliant with the standards of the authorities who control land development."

He adds: "By providing the legal and technical basis for the allocation of land for non-mining activities and for the transfer of property, growth and integration will be facilitated and, ultimately, sustainability achieved."

## Contact details

Steve Lenahan

Tel: +27 11 637 6248

Fax: +27 11 637 6400

E-mail: [slenahan@anglogoldashanti.com](mailto:slenahan@anglogoldashanti.com)

General e-mail enquiries:

[investors@anglogoldashanti.com](mailto:investors@anglogoldashanti.com)

Website:

[www.anglogoldashanti.com](http://www.anglogoldashanti.com)

## Feedback

We welcome your feedback on our Report to Society 2006 and this country report. A feedback form may be found on our website at [www.aga-reports.com](http://www.aga-reports.com).