ANGLO AMERICAN PLC SUBMISSION TO THE WORLD BANK EXTRACTIVE INDUSTRIES REVIEW

1. ANGLO AMERICAN, SUSTAINABLE DEVELOPMENT AND THE ALLEVIATION OF POVERTY

Anglo American plc with its subsidiaries, joint ventures and associates, is a global leader in the mining sector. It has significant and focused interests in gold, platinum, diamonds, coal, base and ferrous metals and industrial minerals. The Group is geographically diverse, with operations and projects in Africa, Europe, North and South America and Australasia. The Group retains significant assets in Africa, especially in South Africa, and is planning a number of major new investments in the continent over the coming years.

Anglo American is committed to making a positive contribution to sustainable development and believes that its operations in the developing world help to alleviate poverty. Our approach to the economic and social issues involved is set out in 'Good Citizenship: Our Business Principles' (www.angloamerican.co.uk). Our first concern is to be a good neighbour to the communities in the vicinity of our mines. We take this to mean that we should have regular engagement with local communities on the issues that concern them and to be responsive to their concerns as far as we can. We recognise that mining can have both positive and disruptive impacts on local communities and we aim to understand these possible impacts at the project planning stage. At any new mine project we conduct a Social Impact Assessment, in conjunction with, or as part of, the Environmental Impact Assessment, where we profile the local community and identify the ways in which the project might disrupt lives and livelihoods. In consultation with the local community and other interested parties, we seek to minimise disruption by adapting the mine plans to accommodate these concerns where possible. Where disruption cannot be avoided we compensate those affected.

Beyond limiting the negative impacts of mining, Anglo American also seeks to enhance the capabilities of the local communities associated with our operations. We are aiming progressively to formalise the ways in which our social and economic contribution may be enhanced in consultation with communities, and intend to introduce Sustainable Development Plans at future mines. We have developed a new methodology for Rapid Socio-Economic Assessments to help existing operations to understand and better manage their impacts (both positive and negative) so as to maximise the enhancements to human capital and the local economy and to act as a benchmark for the social dimension of closure planning. One area in which we have gained valuable experience over the last decade is in local business development and we have a specialised small business development unit in South Africa, called Zimele, which assists small business to tender for procurement to our operations. The methods that Zimele has used in South Africa have also been used by IFC-related projects in Zambia and Kazahkstan.

As regards the environmental dimension of sustainability, the Anglo American policy covers Safety, Health and Environment (SHE) which states our vision, aims and management principles. Adopted in 2000, this policy (which is available at www.angloamerican.co.uk) is being progressively implemented across the Group. The management standards stated in the policy document (which are in substantial conformity with ISO 14001) ensure that environmental risks are assessed and managed, that appropriately qualified personnel are employed, that performance is evaluated and reported and that performance improves over time. Stakeholder engagement is specifically mandated and both operations and the centre report publicly on performance. Perhaps the most important aspect of our SHE management system is that targets for management are increasingly being set.

Anglo American has been a partner with the IFC for a number of years in a number of projects. We believe that the experience has been a positive one and we are interested in continuing to work together. Case studies for the Anglo American operations in which there has been IFC participation are given in an appendix to this document.

2. KEY QUESTIONS CONCERNING THE EXTRACTIVE INDUSTRIES, SUSTAINABLE DEVELOPMENT AND POVERTY ALLEVIATION

The following questions are sometimes asked of the mining industry and clearly need to be addressed as part of the Extractive Industries Review:

(i) Are the extractive industries necessary?
(ii) Can the extractive industries contribute to poverty alleviation?
(iii) Can the extractive industries contribute to sustainable development?
(iv) What should be the nature of the WBG's involvement within the extractive industries?

Are the Extractive Industries Necessary?

All economic activities are to a greater or lesser extent interconnected. The outputs of one industry frequently form the inputs of another. For example, even the most basic forms of subsistence agriculture entail the use of implements made from metal. Similarly, eco-tourism projects require materials for the construction of the infrastructure and manufacture of the vehicles that are required. These simple examples highlight that resources are a necessary input into all human activities and that the extractive industries exist because of this demand. Therefore, it is not feasible merely to substitute one activity for another, as suggested by those who believe mining to be unnecessary, as at least on a global scale the choices are interconnected.

It is suggested by some that we should by now have a sufficient stock of metals and minerals for our needs and that energy should be supplied from renewable sources. While efforts to encourage recycling and re-use of materials to prevent depletion of the existing stock should be encouraged, there are no plausible scenarios whereby existing stocks of above ground metals and minerals will be adequate. By far the largest source of increased demand for minerals and metals will come from developing countries. A large number of these countries are entering the materials-intensive stage of their growth, whereby minerals and metals are required for infrastructure and a range of basic products that are taken for granted in developed countries. For example, the growth of demand for steel and copper in China is set to grow rapidly as vehicle ownership and electrification spread. Those who demand a halt to new mining projects are essentially implying that such growth of demand should be prevented and their route to improved living standards blocked.

Can the Extractive Industries Contribute to Poverty Alleviation?

The only long-term solution to the poverty of whole communities (as opposed to that of individuals) is the creation of sufficient sustainable employment or other income-generating opportunities. Mines create a range of employment opportunities, some of which call for technical skills whilst others can be filled by low- or semi-skilled workers. Mines have become increasingly capital intensive and the requirement for workers to be able to manage and maintain increasing amounts of technically sophisticated machinery has increased the need for workers with a good basic education and some technical aptitude. The spread of basic educational provision has helped ensure that potential workers are often available but the labour requirements for modern mines are such that additional training is usually necessary. For instance, in a survey of Chilean mines the ratio of employees with 'intermediate, technical or higher education' rose from 71% in 1990 to 90% in 1998[1].

Mining companies recognise the need to train workers, especially in remote areas, and increasingly prefer to do so in order to benefit the local population and to diminish the number of workers that need to move into the locality. For example, the coal mines operated by Capricorn Coal (an Anglo subsidiary) with a total workforce of about 1100 in Australia have a budget of A$1.1m a year to spend on apprenticeships and traineeships, and at any time there are around 30 students on the programme, which includes attendance at technical colleges at regional centres (over 200km distant). Although mine oriented, most of the skills learned (such as fitting and electrical maintenance) are readily transferable and give the holder the ability to earn an income elsewhere. We also have a policy of seeking to use nationals of the countries in which we invest where they have the necessary skills. Hence at our new Skorpion zinc mine in Namibia – due to open later in 2003 – we anticipate that 93% of the workforce will be Namibians. Achieving this level has involved a significant commitment to training so as to resolve skills gaps.

Mines require a range of products and services that can in many cases be supplied by local contractors. With a little effort by mine management, the procurement of items such as food, clothing, civil engineering services, building construction, security, plant and equipment maintenance can be locally focused. Usually the labour-intensity of the locally sourced product or service is higher than would be the case from in-house provision or 'mainstream' contractors[2]. Anglo American has been active in ensuring that local procurement-based business opportunities are increased. In South Africa this initiative is linked with black economic empowerment and during 2001 our operations obtained some $151m of procurement from SMEs, comprising businesses with an annual turnover of less than $3.5m and under 200 employees, with at least 40 per cent black shareholding and where the owners are also managers of the enterprise. As previously noted, Anglo American also has a specialist SME support unit and venture capital fund, Zimele, that offers assistance, including finance, training and advice, to the development of SMEs associated with our operations.

[1] 'El Trabajador en la Gran Mineria', Mineral Council of Chile, 2000.
[2] As is indicated by the World Bank study,'Large Mines and the Community', edited by Gary McMahon and Felix Remy, 2001.

Zimele currently has a portfolio of 21 black empowerment ventures with a collective turnover of $17m and employing over 1200.

The location of mines is more constrained by geography than for most other industrial activities. Self-evidently, they have to be located where there are economically minable orebodies. Sometimes this results in remote locations that would not attract other industries. One consequence of remote location is the need for the mine to provide its own infrastructure – roads, rail, power, water – that may offer potential for other businesses to access inputs and markets. For example, Anglo Platinum played a leading role in the establishment of the $18.5m Lebalelo water supply scheme in South Africa. The pipeline carries water from the Olifants River to a series of new mines in the area and in the process it supplies water to 86 local villages. Apart from its developmental benefits, access to water is usually also required for business development.

Remote location also means that mines are at the forefront of development challenges as social infrastructure often needs to be provided – education and health in particular – if the mine is to function well. The health of the workforce is often linked to the health of the local communities and measures to improve the one are inevitably linked to improvement in the other. For example, the incidence of malaria on the Zambian Copperbelt had increased from 5 per thousand in the 1970s to over 300 per thousand in 2000 when Anglo American acquired a stake in Konkola Copper Mines. The disease at that time was the principal cause of death. In co-operation with the Zambian government's national malaria control programme, KCM launched a $1.25m spraying programme aimed at reducing malaria cases in the vicinity of the operations. The programme reduced the incidence of new malaria cases by 38 per cent between January 2000 and January 2001. As another example of corporate leadership in tackling a major health problem, Anglo American has for over a decade taken a proactive position on the AIDS epidemic in Southern Africa. This has frequently involved not only education and prevention work within the ambit of company operations but also outreach schemes in the local community and providing capacity and leadership in the formation of multi-stakeholder partnerships. Most recently, we have announced our intention to supply anti-retroviral therapy, where clinically indicated, to affected members of our workforce. Keeping the key wage earner of potentially thousands of households alive and healthy for several more years is an important contribution to combating poverty.

The conditions for poverty alleviation are also set through public programmes for capacity building in the local population. Mining can contribute powerfully to such programmes in developing countries through its ability to provide revenues to governments. Mines represent a significant source of income to governments in many poor countries where alternative sources of revenue are harder to find or to exploit for domestic political reasons. The periodic generation of 'rent' (ie, mine income in excess of the costs incurred to bring the mine into existence and to operate it), due to the price volatility of most mined commodities, offers an easy source of government revenue that can fund social programmes.

Regrettably these revenues have in a number of cases become associated with corruption, misappropriation and poor governance. These outcomes are not the fault of mining per se, as there are many more cases where these outcomes do not occur, but do serve to highlight the need to ensure that efforts are made to improve governance in many developing countries. The volatility of mining revenues (a characteristic also of agricultural revenues) for developing country governments does present a challenge for good management. However, there are well-recognised and effective solutions for limiting the macroeconomic disruption caused by such volatility. Chile, Botswana and South Africa have all managed their mineral revenues well in recent years and solutions to the problem of revenue volatility are available to any government with the political will to implement them. The Extractive Industries Transparency Initiative, in which Anglo American is closely involved, is an attempt by industry to work with governments, the IFIs and civil society to improve governance and accountability and to reduce the scope for the misuse or embezzlement of revenues generated by the extractive industry.

Can the Extractive Industries Contribute to Sustainable Development?

Our answer to Question 1 indicates that no single economic sector can be viewed in isolation. This is truer for mined products than for most as mineral products are used in virtually all other sectors, indeed civilised life is inconceivable without metals and minerals. Given the aspiration for better living standards amongst the populations of developing countries, the imperative is for more minerals and metals to be made available, not less.

It is sometimes asserted that metals are 'non-renewable' resources, but this is not a meaningful description. Metals are elements that cannot practically be destroyed and so the majority of all the metals that have ever been mined remain theoretically, and increasingly practically, available. Moreover, the amounts of all the metals in the Earth's crust that are currently in demand exceeds the conceivable requirements of any likely future population. The only question relevant to their global economically sustainable extraction is the costs of doing so. These costs have been declining since the nineteenth century, despite the much greater inclusion of environmental and social costs (and taxation) of recent decades. Given the rate of continued technological development in mining, we have no reason to believe that the costs of extraction will not continue to fall.

We do of course recognise that individual mines are not 'sustainable' in the sense that they do not involve the exploitation of a renewable resource and have finite lives (as do all other industrial operations). We also acknowledge that mine closure can have a traumatic effect on local economic activity unless alternatives are available or have been developed. Sometimes this is not possible or desirable when the location is very remote or otherwise economically unattractive for other activities. Often however mines can act as a catalyst for both further mining activities and unrelated economic activity. Anglo American is attempting to increase the chances of sustainable alternative economic activities at its mine sites as already outlined. Such initiatives in appropriate circumstances can be seen as part of responsible mining and as a further contribution to sustainable development.

More serious questions than those above can be asked about the environmental sustainability of mining. Although the environmental consequences of mining are often less significant than those of some other sectors, such as commercial agriculture, mining practices of the past have left a legacy of environmental problems that need to be addressed. However, it is undeniable that standards have risen and responsible mining companies do not allow their operations to follow problematic past practices. Mining is increasingly conducted by major mining companies in a way that reduces the demands made on environmental assets – water supplies, land area and biodiversity – and ensures that pollution is reduced to acceptable levels. Responsible practice is to ensure that potentially harmful substances are not released in the normal course of business to the environment from processing or waste facilities in quantities that can harm human or ecological health. Accidents and unforeseen events can result in such releases, but responsible mining companies design and manage their facilities to reduce the chances of such events to acceptable levels and have in place procedures to limit any damage caused. We believe that even a larger mining industry can act within the carrying capacity of the environment if time and incentives are given to adjust to particular constraints. For instance, mines can be designed to use very little water and technologies are being developed that can drastically reduce the emission of greenhouse and acid-forming gases from minerals processing. Moreover, the use of land by mining is small compared to other activities (agriculture, urban development, protected areas) and increasingly the land is 'borrowed' and returned to other productive uses. Very little land is truly "lost" to modern mining.

Social sustainability refers to a range of practices that are seen as necessary conditions for human development. For example, the provision of safe working environments, support for the human rights of employees and those affected by mine operations, acquisition of land in ways that respect the rights of those who occupy the land and make provision for alternative livelihoods when required. All these are important to human development and responsible mining companies act in ways which ensure that the social conditions required for development are not degraded. As with corruption and poor governance, there is no inevitability about the relationship between mining and negative social and political outcomes. Responsible companies can and do act in ways that enhance the probability of positive social and political outcomes; irresponsible companies do not. This is a reflection of human choices to act responsibly or not; it is not a reflection on mining per se.

What should be the Nature of the WBG Involvement with the Extractive Industries?

In responding to the previous questions it has been argued that the extractive industries are necessary, that they are able to contribute to poverty alleviation and that they are integral to the overall pursuit of sustainable development. On this basis we argue that it is quite appropriate for the WBG to support and participate in the mining sector as a way for it to meet its mandate on poverty and sustainable development.

Mining has the ability to catalyse development in the poorest and most risky countries where development options are limited. As already noted, mining has to locate in the countries where orebodies are located. It therefore has to accept the costs and risks of so doing. However, the need to supply both physical and human infrastructure and the costs that this entails for the mining industry can be seen as a boon for the poorest countries that lack these facilities (power, water, transportation and communications, education, health provision, security, etc). The costs of this infrastructure represents a transfer from the consumers of mined products (who live largely in the developed countries and who pay the price that incorporates these costs) to the producers of the mined product (who in the case of Anglo American live largely in developing countries). The flows of funds for such infrastructure can rival official aid flows in magnitude. For instance, Anglo American pays over $40m a year in health costs (which include health insurance, hospital / clinic provision and specific community health initiatives such as our malaria programme in Zambia and our HIV / AIDS programmes in South Africa) at its African operations alone.

Mining does not represent a large share of FDI flows to developing countries as a whole[3], but for certain regions is highly significant. For instance, for the Southern African Development Community (SADC), mining represents about 23% of FDI[4]. Mining FDI has been higher in Africa and South America than in Asia and constitutes a generally higher proportion of FDI in the poorest countries where the need for FDI is greatest and alternative sources of investment most limited.

Should the WBG withdraw its support for the mining industry, it is precisely these countries that would be likely to suffer disproportionately. There are many examples in history of extractive investment acting as an initial stimulus to development. In the absence of such a stimulus, it is far from clear that investors from other sectors will step forward to fill the void. The Bank's withdrawal may reduce the number of other players in the capital markets willing to take the risks associated with lending to large-scale extractive projects in developing countries. Moreover, the Bank's involvement as an investor is often perceived to reduce the political risk attaching to a project; its absence is likely to increase already high costs of capital and, thereby reduce the number of projects that are deemed viable. In addition, since the WBG's guidelines have acted as a source of 'best practice' guidance across the extractive sector, its withdrawal may well lead to a loss of momentum behind continuing to raise social and environmental standards and possibly cause some reversal of the progress made. This must be contrary to the wishes of responsible extractive companies, many of the industry's critics and to the interests of the inhabitants of the developing countries concerned. Increasing the currently low level of FDI directed towards the poorer developing countries is crucial if the Millennium Development Goals are to be achieved. Investment by responsible mining companies could be one of the most effective ways of attaining these goals in the poorest countries.

We suggest therefore that far from withdrawing from the sector, the WBG should increase its mining activities as part of its strategy for poverty alleviation. However, this is not to say that improvements cannot be made to the way in which the WBG works in this sector. Our recommendations to the WBG fall under two headings.

1. *Improving Governance*

   Poor governance is perhaps the critical difficulty that limits the contributions to poverty alleviation and sustainable development that responsible mining can make. There is considerable evidence (for instance as documented in the MMSD report) that many of the countries in which we operate have problems of governance and our operations can be accused of indirectly helping to sustain such practices through the taxes and official payments made to government. This of course is not a criticism of mining per se, but rather of the legitimacy and effectiveness of some governments.

[3] The UN's World Investment Report for 1999 indicates that mining accounts for a 4% share of FDI to developing countries. However, the coverage of the report is very incomplete, with for example the inclusion of only a few African countries.

[4] DPRU Industrial Strategy Project.

Hitherto, the WBG's mining policy advisory work, capacity building and project financial support have not been well co-ordinated and have not been related to the overall WBG approach to the country in question. The greater co-ordination of mining industry support with overall 'Country Assistance Strategies' could help ensure that mining investment in countries is supported only where there is an appropriate and effective policy framework in place. Such a policy framework can help ensure that mining projects are properly regulated and that the revenues from mining are used effectively to the benefit of the population. In short, only where the WBG is confident that governance is of sufficient quality to ensure that mining can contribute effectively to poverty alleviation and sustainable development should it support individual mining projects. The unrivalled leverage that the WBG has through its ability to influence financial flows (both public and private) could be more effectively harnessed thereby as a 'force for good'.

2. *Implementation of Good Practices*

The WBG already has a suite of 'Safeguard Policies' that apply to all sectors and, if properly implemented, offer assurance that projects to which these policies are applied will 'do no harm'. Indeed, these policies are regarded in many quarters as 'best practice' and are widely used by financiers and companies even when there is no direct IFC or MIGA involvement. The IFC's evaluation of projects against rigorous technical, environmental, and social criteria is a significant source of reassurance to other potential investors.

Whilst there is scope further to refine and develop the Safeguard Policies, the principal problem with these policies concerns their implementation rather than their content. Although the requirements of the Safeguard Policies may be written into agreements at the time of project approval, there is not always sufficient enforcement of the requirements both through effective monitoring and by extension over the life of the operation. In regards to the first concern, the greater use of third-party monitors and greater transparency of their findings would help improve the effectiveness of the policies. Regarding the second concern, the IFC and MIGA can only monitor the implementation of their standards for as long as they retain a financial interest in an operation. Once a loan is repaid, equity is sold or insurance cover lapses, effective influence over the management of an operation is much reduced. Consideration should be given to means for extending the influence of the WBG over the life of an operation and in particular during the critical closure and post-closure periods.

Any changes made to the operation of the Safeguard Policies should be applicable to all sectors. We believe that mining can make as great, if not a greater, contribution to poverty alleviation and sustainable development than other sectors and therefore should not be singled out for a special set of guidelines that do not apply to other sectors.

Summary of Conclusions

- The extractive industries have an unrivalled ability to generate wealth rapidly, which is one of the key requirements for poverty alleviation.
- Mines are able to provide sought-after employment and both physical and human infrastructure in areas where few other sectors would be willing or able to operate.
- The WBG is uniquely placed to influence the activities of governments and to promote good governance via its assistance programmes.
- The IFC and MIGA are important providers of finance and risk cover in environments that are not attractive to other players.
- The IFC/ WBG environmental and social guidelines are regarded as best practice.
- The WBG can improve the integration of its operations to better ensure good governance.
- Better monitoring and extension can improve the implementation of WBG Safeguard Policies over the life of the mine.

The Appendices to this document set out short case studies of projects where Anglo American and the World Bank have worked together and the social and developmental benefits that have flowed from such investments.

ANGLO AMERICAN OPERATIONS WITH IFC PARTICIPATION

The IFC currently has equity interests in the following Anglo American Group companies:

Loma di Niquel in Venezuela (2.47%)
Codemin in Brazil (10%)
Quellaveco in Peru (20%)
Sadiola Hills in Mali (6%)

Quellaveco is still at the project stage and Sadiola Hills is managed by our independent subsidiary, AngloGold. In the past, Anglo American has been partners with the IFC at Konkola Copper Mines in Zambia (7.5%) and at Mantos Blancos (15%) in Chile. Case studies are presented below on aspects of the operations that Anglo American has managed.

1. CODEMIN AND THE CHC STORY: FROM COMPANY TOWN TO SUSTAINABLE COMMUNITY

Codemin was developed to mine nickel from a deposit near Niquelândia in Brazil and to process it to produce ferronickel for the stainless steel and special alloys international market. From the total US$102 million project investment, IFC contributed a US$ 5 million loan and subscribed to 10% of the equity capital, amounting to US$ 4.3 million. The IFC also coordinated a group of bankers to advance a US$ 54 million loan which made the mine feasible.

The city of Niquelândia, 45 km from the mine, was at the begining of the 1980s a very small town of 8 000 inhabitants. There were practically no houses available for sale or rental, and this became a critical constraint by the end of construction, since many of the future 600 employees had to move to the city. Local government had no resources to build them. As a result, Codemin planned to build the CHC – Codemin's Residential Complex - for its future employees' families .

Location of the houses was decided by the end of 1979 and the company bought the "Águas Claras" settlement approximately 3 km from the centre of Niquelandia. IFC's participation enabled Codemin to contract a financing loan with the Construction Credit Financial Agent (BNH) amounting to approximately US$ 5 million. By the end of 1982, 418 houses were built – varying from one-room to three-room units – distributed in 25 blocks on a total area of 24.3 ha, including the infrastructure for water supply, sewage, electricity, telephone cables, TV tower, garbage collection, gardens and security protection finalised by fencing around the whole site.

The company also built a commercial centre and a social club for sports and community activities. As Niquelandia's business activities grew over the last twenty years, the shops and market in the commercial centre were closed and the area was also used for entertainment activities.

A Community centre was built to manage the CHC and provide integration of the new families – of various regions and socio-economic levels – helping them adapt to the local culture; a special staff was contracted for this. Other centres were then established: one for 4-5 year-old children (where presently a small confection factory employs 12 direct workers) and a 850-m^2 educational centre, equipped with 11 classrooms for the 8-year basic formal school programme, support and recreation facilities included, which started in 1983 by means of a partnership between Codemin and Viçosa Federal University. In 1987 the pedagogical guidelines were contracted with a specialist educational system, but teachers continued to be directly employed by the company until 1990 when this activity was also outsourced. This school has since been considered the best in Niquelândia - it has currently 458 students, 392 children from the company's employees – with 90% of the cost payed by Codemin - and the remaining from the local community.

The CHC stimulated further development in Niquelandia: 208 other houses were built around it as well as 3 supermarkets, a day-nursery, a health centre, a drugstore, a bakery, paper shop, some butchers, several schools and churches, beside many other small commercial houses.

In 1996, a long planned vision began to materialize with the removal of the external fence and the opportunity presented to the inhabitants to buy their houses at affordable prices, over a 60-month period, which finally occurred in 2000. After 405 of the houses were sold, the collective areas and facilities were transferred to the township thus concluding the integration of the CHC into the local community. The town of Niquelandia has grown to 35 000 and other commercial and agricultural enterprises have developed in the locality. The expectation is that Niquelandia will have further diversified its economy by the time of the mine's closure.

2. THE MANTOS BLANCOS MINE: INVESTMENT DURING TIMES OF HIGH RISK

Anglo American is the sole owner of the Mantos Blancos copper mine in Chile. This mine was initially identified and developed by the Hochschild Group, a locally-based mining company, in 1954. Initial purchase was from a landowner who worked the outcrops of ore in a primitive fashion and who had neither the technology nor the capital to develop the mine. There were a number of challenges that Hochschild faced in bringing a rather risky project to account. These risks included proving a sufficiently large orebody for commercial exploitation, inventing a new metallurgical process to treat the ore, piping water from 335km distance and establishing a tax regime with the Chilean government that recognised the risk profile to which mining finance is exposed.

The project required finance of about $23m, which at the time was equivalent to the net worth of the Hochschild Group; a not untypical situation for a medium-sized developing country mining company. Apart from the project risks, there was a clear political risk, made evident in the minds of investors by the nationalisation of the Bolivian tin mines in the previous year.

Perhaps unsurprisingly, the overseas banks were reluctant to lend and imposed demanding loan conditions. The IFC on the other hand was prepared to support Hochschild and lent funds on more reasonable terms. More importantly, the presence of the IFC was perhaps critical to reassuring some of the other investors of the wisdom of lending at all. In 1981 Anglo American purchased the Hochschild interest in Mantos Blancos and assumed management control. The IFC was to play a key role again in 1983 when finance was being sought for a 100,000t per year expansion. This was a time of economic crisis In Chile, when the authorities had to sever the pegged currency link with the US dollar, and thus of high perceived risk. The IFC provided $16.5m of the required $71m and its participation was again critical in persuading vendors and other banks to support the project.

The project went ahead and was very successful in growing into a major mining operation. Mantos Blancos continues to be a large-scale copper producer nearly fifty years after its inception. It has provided a steady stream of income to the government over the decades (the government has owned a varying stake, at one time as much as 12 per cent of the equity) and has contributed to the development of the Antofagasta region, which has become a major mining service centre. In particular, Mantos Blancos (along with Codelco) played and important role in growing the pool of mining skills. The availability of skilled labour was an important factor that underlay the rapid expansion of the largely foreign-owned mining operations during the 1990s. The mine has an exemplary safety record, has in recent years greatly economised on its water consumption (which are now at world class levels of 0.3 m3 per tonne of ore) and has provided infrastructure to enable greater water availability to Antofagasta municipality.

3. Local Business Development At Konkola Copper Mines

By the early 1990s, the state-owned Zambian mining industry was facing a serious decline and was placing an unsustainable strain on the finances of the government. Given the tightening constraints on the further use of government resources, it was imperative for the survival of the industry that private investment be attracted. The World Bank played an active role in supporting the government's privatisation programme by making available the finance needed by the Zambian authorities for the separate management of many of the non-mining responsibilities and environmental liabilities that had been assumed and incurred by the state-owned mining company, ZCCM. In particular, the redundancy packages required to reduce the size of workforce in a socially responsible manner, the Asset Holding Company formed to ensure the provision of water, sewerage and refuse services and a Copperbelt Environmental Programme designed to allow the implementation of priority environmental and social measures were all partially or wholly underwritten by World Bank funding. This preparatory work was essential for attracting private investment into the industry.

Konkola Copper Mines (KCM) (consisting of the Nchanga open pit and underground, Konkola underground and Nampundwe pyrite mines) was acquired[5] by Anglo American and a consortium of other investors (including the IFC, the Commonwealth Development Corporation and ZCCM) in March 2000. Anglo assumed management control with the intention of using the existing operations (which had estimated mine lives of less than 10 years) as a base from which to develop the Konkola Deep Mine Project (KDMP). The mines had deteriorated due to a lack of capital investment, which led to a decline in production and profitability. Despite the preparatory work of the WBG, KCM still represented a high risk venture and were it not for the participation of the IFC it is highly unlikely that Anglo American would have

[5] Via Zambia Consolidated Investments.

proceeded to invest. In the absence of new private investment, the ability of KCM to continue operations would have been short-lived.

During the period of Anglo American's management of KCM every effort was made to manage the operations responsibly. Great improvements were made in most areas of environmental performance and social obligations were fulfilled according to WBG standards. For instance, the resettlement of two villages as required for the extension of tailings impoundments was effected with the involvement of a major international NGO, CARE, in order to enhance the living standards of the villagers and to improve their access to sustainable livelihoods. It was clear, however, that the greatest challenge lay in the area of ensuring sustainable employment generation in the Copperbelt. Considerable retrenchment of the workforce took place before vesting (3844 employees lost their jobs between July 1998 and December 2000) and it was expected that some further job losses would be necessary before the KDMP would stabilise employment levels. Given the low living standards of the Zambian population and the lack of alternative income generating possibilities, thought was given to non-mining employment creation.

Following stakeholder consultation on how best to encourage local business development, four themes for activity were identified.

- Mapping of SME facilitation and capacity-building services.
- A feasibility study for SME development in the agricultural sector.
- The securing of a 'champion' in central government.
- The establishment of a fund for SME development.

Objectives were identified by stakeholders and were formalised in the KCM Social Management Plan (SMP). In particular, the KCM Board took the decision in principle in late 2001 to contribute $3.6m to the SME fund. The SMP included other elements directed towards the creation of complementary income –generating opportunities for retrenched mineworkers, including multi-skilling and training programmes and a procurement strategy to maintain and develop the local supplier base. The approach to local business development taken by Anglo American during the period that it managed KCM was seen by Business Partners for Development[6] as having resulted in the start of a cultural shift whereby a more active responsibility for the development of alternative livelihoods has been assumed by both the mines and other stakeholders.

Unfortunately, whilst the SMP was being developed the outlook for the copper market declined and KCM was unable to secure limited-recourse finance for the KDMP. This failure destroyed the strategic rationale for external shareholders' involvement. Moreover, KCM's losses, caused by the legacy of long-term lack of capital investment and record low prices for copper became untenable and the external shareholders made clear that they were unwilling to commit additional funds.

This outcome was a great disappointment for all parties, but underlines the need for commercial success as a necessary condition for wider sustainable development initiatives. The withdrawal of Anglo American, the IFC and the CDC was accompanied

[6] BPD was a World Bank programme of action research aimed at finding best practice in business, government and civil society partnerships (www.bpd-naturalresources.org).

by an agreement to inject further funds into KCM in order to keep the mines operating and a transfer of shares to enable the endowment of a foundation to support projects aimed at diversifying the Copperbelt economy. KCM, during the period of Anglo American management, contributed to the Zambian economy in several ways:

- The Government of Zambia was released from the financial burden of supporting the mines.
- $174m was invested in rehabilitation between March 2000 and December 2001, which left the operations performing much better than prior to acquisition.
- $146m was spent on local business procurement in the period April 2000 to March 2001, which constituted a substantial boost to the Copperbelt economy.
- Wages were increased in real terms and occupational training programmes were maintained.

4. ENHANCING HUMAN CAPITAL AT LOMA DE NIQUEL

Loma de Niquel is a nickel mine and smelter producing ferro-nickel for export that was commissioned in 2001. Venezuela is regarded as a high-risk country, with little pre-existing mining activity. The participation of the IFC therefore provided a degree of reassurance to the other investors (principally Anglo American).

Loma de Niquel is situated in a fairly urbanised part of the country and, although the immediate locality is rural, has effective access to a wide labour pool. In line with the increasing technological sophistication of mining, most of the permanent staff of 545 had to be recruited from the wider labour market. More than 99% of employees are Venezuelan nationals. 38% of the workforce has received tertiary vocational education and the rest of the workforce is high school graduated. Contractors, who are required to recruit locally, supply the unskilled workforce.

For a number of reasons, Loma de Niquel is likely to result in an enhancement of the region's human capital:

1. Workforce Benefits

- Wages above local norms.
- Education and health benefits as part of the employee's package.
- 25 apprentices trained annually.
- Scholarships offered to permanent employees and their children.

2. Local Business Development

Efforts have been made to encourage local businesses. A Small Entrepreneurs Training Programme offers both business and technical training to local communities in order to enable greater outsourcing of procurement. A number of businesses that have the potential to outlive the mine have been fostered, in particular a clothing factory and a nursery to re-afforest part of the mine property. Local procurement currently amounts to over $700 000 a year.

3. The Revitalisation of Public Services

The public services that existed prior to the development of Loma di Niquel were in a run-down state due to the inability of the authorities to maintain adequate funding. The arrival of the mine has led to the revitalisation and extension of these services: two rural hospitals and a clinic (epidemiological camp?), an elementary school, a police station, 19 km of new road and the renovation of existing roads, a dam to regulate the uneven flow of the River Mesia, a new well and water infrastructure, and an electrical substation that has some spare capacity for communal needs (and that has the capacity to serve a population of 300 000 on mine closure).

Loma de Niquel is not exceptional in demonstrating the benefits that a modern mine can bring to the people of a developing country, indeed it typifies the approach that any responsible mining company would take in a similar situation. However, without the partnership of the WBG there would be fewer projects of this kind.