

Ghana

Country Case Study

The challenge of mineral wealth:
using resource endowments to foster
sustainable development

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The findings, interpretations, conclusions and recommendations expressed in this report are entirely those of the authors and do not necessarily reflect the views of the Government of Ghana, the United Nations Conference on Trade and Development, the World Bank, its Executive Directors, or the countries they represent.

PREFACE

In the past five years, the economic, social and environmental dimensions of mining and minerals have been the subject of wide-ranging consultation, critical comment, research and analysis. The Mining Minerals and Sustainable Development Project (MMSD) and Extractive Industries Review (EIR) respond to the unprecedented focus of public attention on the sustainable development challenges for extractives in general and mining in particular.

In May 2004, ICMM¹ initiated its **Resource Endowment**² initiative³ to better understand how large scale mining activity in low and middle income countries can enhance the socio-economic development of host countries. The initiative aims to isolate the drivers of development effectiveness in the mining and metals sector and to document the policy frameworks, operational practices, and partnership arrangements that deliver sustainable outcomes on the ground. This action-research project is being done together with UNCTAD and the World Bank Group. ICMM also consulted stakeholders such as mining companies, governments, donor agencies, labor and non-governmental organizations (NGOs).

Much of the “resource curse” literature has focused on problems rather than solutions. Consequently it is not of much practical help in designing improved policy or filling gaps in knowledge. For example, how have apparently “successful” countries avoided problems now so widely perceived? Can such outcomes be repeated in other developing economies endowed with an abundance of mineral resources? How should the main stakeholders work together to enhance positive socio-economic outcomes from mining investments?

To help bridge these gaps, some of the specific questions the Resource Endowment initiative attempts to address are:

- How the mining sector overall contributes to national development?
- What strategies have been effective in managing revenues generated by natural resources for sustainable development and poverty reduction?
- How an individual mining project contributes to development at national, regional and local levels?
- What are the practical and policy implications for mining companies, host country governments, development institutions, and NGOs?
- What might the distinct responsibilities of these development partners be to support implementation of findings and recommendations?

The three distinct phases of the initiative and related products are outlined below.

1 The International Council on Mining and Metals.

2 The Challenge of Mineral Wealth: using resource endowments to foster sustainable development.

3 The initiative is managed by Kathryn McPhail, Principal, ICMM.

Phase 1: Analytical Framework and Tools

The initial phase of the project concentrated on the development of an analytical framework focusing on governance processes, including the underlying factors and rules of the game that affect social and economic interactions and outcomes. These aspects were incorporated into a practical Toolkit to assess local, regional and national socio-economic impacts of mining. The Toolkit also deals with how mining operations impact on governance structures, institutions and policy changes at different levels of government. Phase 1 involved an extensive literature review, and a 'coarse-sift' comparative analysis of the relative economic and social well-being of 33 countries with a high dependence on minerals. Initial findings were critiqued in a multi-stakeholder workshop which helped to shape a revised approach.

Phase 1 Published reports:

- Analytical Framework: Executive Summary
- Resource Endowment Toolkit

Phase 1 Additional Online Resources:

- Analytical Framework: Main Report
- Literature Review
- November 2004 Workshop proceedings

Phase 2: Testing, Synthesis and Emerging Lessons

This involved applying the Toolkit to two main and two comparator countries, Peru (with Chile as a comparator) and Ghana (with Tanzania as a comparator). In all four countries, mining had shown some evidence of having successfully contributed to economic and social improvements. The purpose was to test the Toolkit, to assess whether it could be applied to a broader set of mining countries, and to propose refinements. The findings were reviewed by a second multi-stakeholder workshop which provided valuable feedback.

Phase 2 Published reports:

- Four country case study executive summaries
- Synthesis report of findings of the four case studies

Phase 2 Additional Online Resources:

- Ghana, Tanzania, Peru and Chile country case studies
- October 2005 Workshop proceedings

In addition, a number of other publications summarize the process or findings of both Phases 1 and 2 and signal ICMM's approach to Phase 3.

- A Spotlight series that summarizes key aspects of Phases 1 and 2 (The Prize; The Challenge; Ways Forward; and Process and Feedback)
- Resource Endowment Guide to Phases 1, 2 and 3

Phase 3: Action Learning through Partnerships

The activities of Phase 3 will include a number of 'pilot projects' in partnership with others to encourage uptake of the Phase 2 recommendations and, as a consequence, enhance the contribution of mining to social and

economic development. Phase 3 will also focus on dissemination and outreach.

For the latest information on Phase 3, including details of pilot activities and partners visit www.icmm.com.

EXECUTIVE SUMMARY

This report provides an objective assessment of the positive and negative socio-economic impacts of mining projects in Ghana. The report has been prepared by Environmental Resources Management (ERM) and Oxford Policy Management (OPM) on behalf of the International Council on Mining and Metals (ICMM).

The aim of the Resource Endowment project is to establish how mining activities can contribute to the socio-economic development of host communities and countries. As a part of the project, country case studies have been undertaken in Chile, Ghana, Peru and Tanzania. This report presents the results of the Ghana case study.

The objective of the report is to identify the socio-economic impacts of mining at the national level, and at the local and regional level. For the examination of local and regional level impacts we used AngloGold Ashanti's Obuasi mine as a case study. Obuasi is the oldest mine, and one of the largest in Ghana.

The report was prepared using an agreed methodology. One of the objectives of the case studies is to test the robustness of this method, and a revised approach will be presented as one of the outputs of this Phase of the Resources Endowment study. A key part of the methodology was wide ranging discussions with stakeholders at the local and national level.

Background Information on Ghana

Ghana is a West African country with a population of about 21 million. There is a very long history of settlement and mining in the region. In particular, there is evidence of gold mining and a gold trade with North Africa going back to the middle ages. A number of European powers had interests in Ghana, culminating in the establishment of the British "Gold Coast" colony in the nineteenth century. Ghana was one of Britain's most successful and prosperous colonies in Africa, and became the first African colony to achieve independence, in 1957.

After independence Ghana suffered economic and political turbulence for some three decades. However, in the 1980s economic and political reforms were commenced, culminating in a successful return to democracy in the 1990s and a marked improvement in economic fortunes. Ghana is now considered one of the more successful African economies, with several years of strong and stable growth supported by improved private investment, including in the mining sector. However, the growth has come from a low base, and Ghana remains a very poor country with widespread poverty (although poverty levels are clearly falling).

The economy remains dominated by agriculture and cocoa in particular is a very important crop. In the majority of years since independence, Ghana's cocoa crop has been the main source of export revenues. Despite its long

history mining, in contrast, has typically been a small part of the economy (although a much bigger portion of exports). During the years of economic collapse, mining suffered along with other industrial sectors. Indeed, from independence in 1957 to the early 1990s not a single new gold mine was opened.

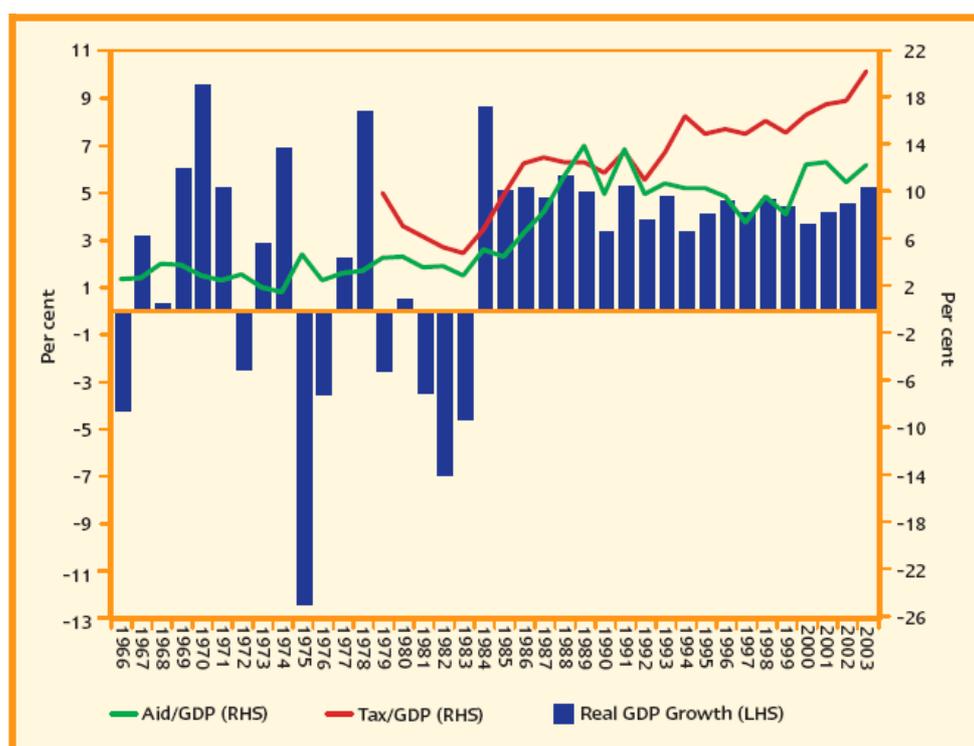
Administratively, Ghana is a centralized country – in part a legacy of its history of colonial rule and, more recently, of military dictatorship. There are several regions, but no strong regional government, and at the local level there are districts and municipalities, plus traditional “Stools”, presided over by traditional chiefs. Neither the municipalities nor districts have adequate capacity, resources or revenue raising powers to address local development issues. Therefore, such measures tend to be led by national government bodies and donor institutions.

Impacts of Mining on National Economic Performance

To assess the impacts of mining at the national level, this project has examined the way in which the economy was performing in the earlier years from just after independence in 1957 until the Economic Recovery Programme (ERP) was launched in 1983. This period can be compared with the later period after 1986, when mining enjoyed its resurgence. The relevance of this juxtaposition of the two periods is clearly apparent from Figure A below. In the earlier period both the Ghanaian economy and the mining sector were essentially stagnant. In the latter period both have performed much more strongly.

The poor performance of Ghana’s economy in the early post-independence years is striking, with decline in both relative and absolute terms. For example, at the time of independence Ghana had a real per capita GDP of over US\$450 (in 1995 prices). This was, for example more than 40 percent higher than in Botswana. By 1985 Ghana’s per capita GDP had declined to only US\$313 and Botswana was substantially richer. Botswana recorded annual per capita GDP growth rates of about 7.9 percent a year whilst Ghana’s incomes declined disastrously – by about 1.4 percent.

Figure A Ghana: Economic Performance in Two Different Eras



Source: World Bank African Development Indicators, 2004

Since 1986, as Figure A shows, economic growth has been both higher and more stable. Mining has been an important element of this. The economic reforms of the 1980s and 1990s included a new, investor friendly minerals code. Since 1986 over US\$5 billion has been invested in new mining projects and mining is neck to neck with cocoa as the leading export earner (although reforms in the cocoa sector are now also leading to increased exports there). Mining has also been the biggest source of foreign direct investment, is now a significant contributor to the government's budget, and is a provider of well paid, skilled jobs.

Can it be said that mining contributed to Ghana's economic decline? The evidence for such an assertion appears to be very weak, not least because the period of national economic decline through 1983 was also a period of ongoing demoralization for the mining sector, and because other commodities, notably cocoa, were far more important economically. Conversely, can it be said that mining was a driver for or a catalyst of the post-1983 economic growth? A direct cause and effect is difficult to prove categorically. What is more likely is that the fortunes of mining have been closely linked with those of the economy at large – i.e. the economic policies and improved governance that have stimulated the general economic improvement have also been extremely important to the renaissance of the mining industry.

Indeed, the Ghana case suggests that mining, and gold mining in particular, may be one of the first sectors that can sustain growth in a previously failing economy once some minimum package of economic and institutional reforms

have taken place (assuming, of course, that there are economic reserves). In some ways this is logical – unlike many other productive sectors gold mining needs quite a limited institutional and infrastructural base to be able to prosper. Key requirements include sound security and property rights, a realistic real exchange rate and taxation that is not punitive. Conversely, gold mining does not need:

- a robust domestic market, as the output is exported;
- sophisticated transport, communications and distribution infrastructure, because gold is not perishable and is typically flown to refineries given the high value and low volume of bullion;
- efficient domestic capital markets, as there are many potential foreign investors; and
- a large, well qualified workforce, as most mines use a range of relatively standard skills (e.g. construction) and expatriates can fill gaps until local staff can be trained (although Ghana does in fact have a highly skilled mining workforce, and use of expatriate labor is limited).

The chronology of mining investment in Ghana lends support to this thesis. The study concludes that the “resource curse” did not apply to mining in Ghana in the years after 1983. However, the World Bank has noted that the national economic benefit in Ghana is not as large as might be expected. This is because of the high import content of the mining sector, and as new mine projects come on stream, the repatriation of profits.

Ghana has established mechanisms to capture local benefit, for example a royalty on minerals revenues (in addition to the normal employer and profits tax regime), but there is an active debate in the country about ways of increasing the national benefits of mining. These can essentially be characterized as those seeking to increase benefit by “increasing the size of the cake” – i.e. promoting further investment in the sector, or by increasing Ghana’s share of existing activities, for example by promoting local procurement and higher royalties.

Whether some of the latter measures might deter further investment is also under consideration, as many African countries are vying for mining investment and Ghana is perceived by some commentators to be slipping in terms of its competitiveness (the authors would like to note that AngloGold Ashanti did not express any such opinion to the study team).

The Impacts of Mining of Local Socio-economic Performance

The national impact of mining can probably be summed up as positive, but perhaps not yet as positive as it could be. The narrowly local impacts of mining are obviously harder to generalize about, not least because company operating practices and the activities of unregulated (and illegal) artisanal mining will have a major bearing on socio-economic outcomes. As noted above, for this study we focused our study of local economic impacts on AngloGold Ashanti’s Obuasi mine. However, we begin our analysis by examining national data on poverty incidence.

Ghana has very good household survey data, including very good data on the prevalence of poverty in the country. Since 1991 household poverty has declined substantially, suggesting that economic growth has been benefiting a wide cross-section of the economy. Moreover, those regions that have a high level of mining activity have both lower absolute levels of poverty, and have experienced faster declines in poverty levels than other regions. This ties in with another finding that households whose head is engaged in private sector formal employment are experiencing faster rates of poverty reduction than other sectors – especially traditional non-export agriculture. However, the data also show that although broad progress has been made, the poorer northern regions (where there is very limited mining activity) are lagging behind the rest of the country as they have done even since pre-Independence years.

Obuasi was a Greenfield site when the mine was established in the nineteenth century, but today a town of 150,000 to 200,000 has grown up around the mine, often in close proximity to mine sites. Although in many ways a “company town”, Obuasi has mostly grown organically. However, there are large estates provided by the company in the second half of the twentieth century that have been formally planned and landscaped, and which contain most of the better accommodation in the town. Other areas have been developed more informally, although houses built of proper construction materials are the norm.

However, perhaps because of the unplanned nature of Obuasi’s growth, most stakeholders interviewed said that it was not a very attractive town, and many commented that it didn’t have the appropriate level of “grandeur” for a successful gold mining town. There are also problems with infrastructure, for which the government, in the form of the municipal council, rather than the mine is formally responsible. For example, many roads are unmade or in poor condition and water and sewerage infrastructure are inadequate in many parts of town.

If the mine were to close it is very clear that impacts on the town would be disastrous. The mine employs about 6,700 employees and contractors, almost all of whom earn well over national average wages. There is very little other large-scale formal employment, but no reliable basis on which to estimate indirect and induced employment. Our best estimate is that total employment generated by the mine in the area is between 29,000 and 72,000, although it is acknowledged that a high degree of uncertainty is inherent in the estimates.

The mine also provides housing for a large proportion of its employees, and runs good quality schools and a hospital for its employees and their families. Even though the Obuasi mine was unprofitable in 2004 (because of investment activity to refurbish mine equipment and exploit new resources), the mine also paid US\$15 million in taxes, royalties and other charges. The area where impact is relatively modest is in procurement, with less than ten percent of spend (by value) being sourced with the area local to Obuasi, although about half is procured from Ghana (this is partly a reflection of the very concentrated

nature of the international mining supply industry). In addition, value added to the Ghanaian economy (i.e. contribution to GDP) is of the order of US\$70 million per annum (just under a half of total turnover). There will also be value added contributions to the Ghanaian economy from companies in AngloGold Ashanti's supply chain, although we have not been able to calculate this.

AngloGold Ashanti has a long track record as an active supporter of community projects. For example, it built the municipal hospital and gave it to the government, and also admits more complex cases to its own (better equipped) hospital when referred by local doctors. Other contributions include constructing local schools, providing free power to relocated communities in the Sansu area, building the town's football stadium, supporting the provision of water infrastructure and electrification, building rural schools and support for technical apprenticeships. The company is also piloting rural livelihoods initiatives at closed mine sites. At the national level, AngloGold Ashanti, as one of Ghana's leading companies, has also been involved in a number of economic diversification initiatives. These have included support for establishing: the major locally owned merchant bank in the region; Ghana's first five star hotel; the country's only lime production business; and agricultural enterprises. Overall, the Obuasi mine spends about US\$0.7 million per annum on social investment⁴.

Although the mine is a major contributor to the economy and community in Obuasi, the case study team found that very few consultees had a good understanding of the range of activities funded by AngloGold Ashanti and, perhaps as a consequence, there was criticism from many that the mine did not do enough. However, it is likely that an element of the dissatisfaction is related to the lack of basic infrastructure in some parts of Obuasi (for example running water). Although this is a government responsibility there is evidence that, in the absence of action from the Municipal Council, residents have turned to the mine for assistance. As such, there is evidence of dependency on AngloGold Ashanti for community development projects, and a lack of local capacity to relieve the company of some of these expectations.

Finally, there is an active artisanal mining population in Obuasi. Artisanal miners or galamsey, as they are known in Ghana, are common across Ghana's goldfields. In Obuasi galamsey cause relative minor disruption to AngloGold Ashanti operations (although several staff have been violently assaulted by galamsey, and galamsey have made similar claims about security personnel in the past). However, their environmental impact is considerable, not least because of their inadequately controlled use of mercury. Certain social problems have also been attributed to galamsey, including use of child labour and social order problems associated with large groups of itinerant male workers.

(4) This figure is for the 2004 calendar year, the last year for which audited figures were available when the case study was undertaken.

Summary of Issues Raised by Stakeholders in Ghana

The stakeholders we consulted for this project had a generally positive impression of the impacts of mining in Ghana (although it has to be noted that there were more trenchant criticisms and those that are documented are reflected in the report). The preceding sections suggest a number of key questions with respect to mining in Ghana and governance more generally that are summarized below:

- Is the tax take too low, and in particular why is the share of royalties at the bottom end of the permissible 3-12 percent range?
- Why does so little of the tax generated by mining find its way back to mining communities, in spite of the formal system (the Mineral Development Fund) set up to address this matter?
- How can the traditional and formal governance systems be made to work more effectively to promote development at the local level?
- Are communities affected by new mining developments, particularly those that are resettled, adequately compensated for any negative effects?
- How can the galamsey issue best be managed?
- How can mine closure be managed?

Case Study Conclusions

This case study has identified a range of issues relating to the socio-economic impacts of mining in Ghana, and to economic management and governance in Ghana more generally. In the conclusions section, we focus on those relating to the mining sector.

The first, and perhaps the most important conclusion, is that there is little evidence that mining contributed in any way to the period of economic decline in Ghana in the three decades after independence. There is a strong presumption that mining played a key role in the recovery after 1983 but direct cause and effect are hard to establish. Instead, the evidence seems to suggest that mining declined in tandem with other private sector activities during the years of the growth collapse, and for the same reasons linked to poor economic policies and weak governance. Mining then benefited along with other sectors from the economic reforms of the 1980s and especially after the radical reform of mining legislation in 1986.

There is certainly evidence that mining was able to respond more quickly to the economic and governance reforms started in 1983, than most other private sectors. The reasons for this are complex, but the fact that gold mining in particular needs relatively little in terms of social and economic and infrastructure and domestic demand may explain why mining was able to enjoy such a strong renaissance and grow relatively quickly in the last twenty years.

There is also evidence that mining is contributing substantially to economic development and poverty alleviation in mining areas. Mining is both a provider of an increasing number of well paid jobs, and mining companies have long been active in supporting community infrastructure and

development, as our case study of Obuasi shows. General poverty has fallen faster than the national average in the two major mining Districts of Wassa West and Adansi West. However, it would seem that some rural sub-groups in the broader catchment areas of those districts have benefited less.

Criticisms of mining in Ghana reflect these exceptions to the generalized local gains and several related points also have legitimacy. For example, the mechanism for redistributing a portion of mining taxes back to host communities does not appear to be working as intended, and the very large procurement budgets of mining firms do not appear to be benefiting local suppliers as much as they might. There is also evidence that some social investment could be targeted more effectively on poverty alleviation; and that in Ghana more generally, some resettlement projects have been poorly handled. At a national level, environmental degradation (much of it linked to galamsey activity) is an ongoing source of concern, in part because of recent well publicized spillages of toxic chemicals and physical degradation by some large scale mining companies (these were not at AngloGold Ashanti mines).

There are also difficult issues for government institutions to address. Our analysis has suggested that the capacity to translate Central Government disbursements, including a portion of mining royalties, into consistent development at the local community level is at best work in progress. Recent general improvements in budget management have not filtered down adequately to resolve these problems, and nor have the donor sponsored highly-indebted poor country (HIPC) and Ghana Poverty Reduction Strategy (GPRS) initiatives. In the absence of the more substantial governance reforms and effective institutions in these areas, mining companies will continue to face requests and expectations with respect to the provision of public services that they are not best placed to meet. They consequently run the risk of disappointing host communities, and will need to devise increasingly sophisticated communications and social investment strategies to manage these concerns.

Finally it is our conclusion that the governance and policy reforms that jump-started Ghana's economic recovery in the 1980s were necessarily incomplete given the severely dysfunctional state of the country and its administration at that time. In spite of some progressive further improvements since then, the remaining gaps in governance and institutions help to account for a major part of the ongoing dilemmas facing mining's contribution to broad based development.

1 INTRODUCTION

1.1 BACKGROUND

This report is one of four country case studies prepared for *The Challenge of Mineral Wealth: Using resource endowments to foster sustainable development* initiative, also referred to as the Resource Endowment initiative. The aim of the Resource Endowment initiative is to establish how, and under what conditions, mining activities contribute to the socio-economic development of host communities and countries. In order to inform this debate, four case studies have been undertaken in Ghana, Tanzania, Peru and Chile – these are countries that are both heavily dependent on mining and which have performed relatively well in recent years.

This report has been prepared to provide an objective assessment of the positive and negative socio-economic impacts of mining projects in Ghana. It was prepared by Oxford Policy Management (OPM) and Environmental Resources Management (ERM) on behalf of the International Council on Mining and Metals (ICMM).

It should be noted that the selection of countries and mines studied is not intended to be representative of the whole of the mining sector. Rather they are intended to provide interesting cases from which lessons can be learned.

1.2 OBJECTIVES

The objectives of this report are to present findings about the positive and negative socio-economic impacts of mining in Ghana at:

- the national level; and
- the local/regional level.

There is extensive mining activity in Ghana, with active exploration and mine development programs as well as a number of operational mines. There are also many closed mines. To examine impacts at the local level, this case study uses the Obuasi gold mine as an example. Obuasi is one of the largest operational mines in Ghana, and also the oldest. The mine is owned and operated by Ashanti Goldfields Company Limited, a part of AngloGold Ashanti.

1.3 METHODOLOGY

All of the country case studies have been undertaken in accordance with an agreed methodology. The methodology was developed from June 2004 to January 2005 and has been extensively peer reviewed by social development specialists and economists in academia, non-governmental organizations and

government. The methodology has also benefited from the inputs from a wide range of stakeholders at a workshop held in London in November 2004. Importantly, many of the stakeholders have been critical of aspects of mining company performance in the past, and their views have actively been sought to ensure the concerns of a wide range of interested stakeholders are addressed by the Resource Endowment initiative.

A key objective of the case studies is to test the methodology to ensure that it provides a comprehensive and workable means of assessing socio-economic impacts. The methodology will be revised to take account of case study experiences. The methodology is designed to be a more rapid assessment of impacts than would be required for *ex-ante* assessments (for example, Social Impact Assessments). This report has therefore been produced with approximately ten person weeks of time from international and Ghanaian consultants. The case study has been based on about three weeks' of stakeholder consultations and on a review of secondary data sources.

1.4

CONSULTEES

A wide range of stakeholders was consulted during the preparation of the case study.

- AngloGold Ashanti management in Accra, Obuasi and Johannesburg
- Trade Union leaders and the Senior Staff Association
- Ghana Chamber of Mines
- Ghana Minerals Commission (the government agency responsible for regulating and promoting investment in the mining sector)
- Ghanaian Environmental Protection Agency (EPA)
- Ministry of Finance
- Ghanaian Central Bank
- International Finance Corporation (IFC) country office staff
- International Monetary Fund staff
- World Bank country office staff
- Traditional Chiefs for Obuasi and other areas
- Obuasi Municipal Chief Executive
- A member of the Municipal Assembly for Obuasi
- Representatives of the Select Committee on Energy and Mining of the Ghanaian Parliament
- The Member of Parliament for Obuasi
- Leaders of the Christian churches in Obuasi (several denominations)
- Leaders of the local Muslim community
- A community that has been resettled due to an expansion of the Sansu mining area
- Leaders of local NGOs: Calvary Needy Club (a children's welfare group) and Ukaf (focusing on development and health), Social Support Fund (also focusing on development and health)
- National NGOs: TechnoServe (an NGO that provides private sector solutions to rural development problems) and the Wassa Association of Communities Affected by Mining (WACAM)
- The Chief Executive of Ashanti Goldfields Football Club (the local premiership soccer club, which was founded by Ashanti Goldfields);

- A representative of the Market Women's Association
- Local businesses, including suppliers and non-suppliers
- The management of the mine's own hospital and the Bryant Mission Hospital
- Communities benefiting from alternative livelihoods projects sponsored by AngloGold Ashanti.

It should be stressed that agreeing to be consulted should not be taken as endorsement of the objectives of the study, or of the findings of this report.

1.5

REPORT STRUCTURE

This case study report presents the following:

- background information on Ghana and its mining sector (*Section 2*);
- an assessment of the contributions of mining to economic growth and poverty reduction at the national, regional and local level (*Section 3*);
- an analysis of the links between mining investment and economic growth and poverty reduction (*Section 4*);
- reasons behind the success factors, challenges and constraints (*Section 5*);
and
- conclusions and a synthesis of the case study findings (*Section 6*).

Annexes 1-5 provide additional extensive supporting information.

2.1 BRIEF HISTORY OF GHANA

Archaeological evidence suggests that central present-day Ghana was inhabited as early as 3,000 to 4,000 years ago. From the eighth century AD onwards, the area derived most of its power and wealth from gold mining and from related trading along the trans-Saharan trade routes with Arab merchants from North Africa⁵.

From the late fifteenth century, European powers, and particularly Portugal, Denmark and Great Britain, became increasingly interested in the region. Europeans were initially attracted by gold, but Ghana subsequently became a major slaving centre, with European powers working with local kingdoms to bring slaves from Ghana's interior. Britain eventually gained control of Ghana, giving it the name of the Gold Coast, reflecting the importance of the country's mineral resources.

Ghana was one of the most prosperous of Britain's African colonies and was identified as an early candidate for independence in the years after World War II. This culminated in the Gold Coast and the neighboring British trust territory of Togoland (formerly part of the German colony which was divided between Britain and France after World War I) achieving independence in 1957. The new country was named Ghana, after an ancient West African Empire, and was the first African colony to achieve independence.

2.2 OVERVIEW OF GHANA'S ECONOMY

Although a relatively prosperous country at independence, economic misrule (largely in the form of inappropriate development policies) began to impoverish Ghana after independence. At the same time, a series of coups replaced democratic government. By the mid-1980s, Ghana had reached crisis point and began an Economic Reform Program (ERP), under IMF guidance. The ERP has had significant benefits (as will be seen in more detail later in this report), and was followed by governance reforms, culminating in the restoration of multi-party democratic elections in 1991.

Ghana is now one of the best performing economies in Africa again. The economy has traditionally depended on primary production, much of it exported⁶. This dependence, especially on cocoa and timber, changed little in the thirty years after independence and livelihoods remained

⁵ Thomas Pakenham reports that two-thirds of the world's total gold supply in the Middle Ages came from that region. One of the main aims of the Portuguese navigators of the 15th century was to tap this gold. However, it was overshadowed in importance by the greater early discoveries in South America and also by the larger riches involved in sugar and cotton plantations and the large supply of African slaves needed to man these (Pakenham, T. 1991, page 17).

⁶ Exports of cocoa, timber and various metals, such as gold, have for many years accounted for the bulk of total merchandise exports.

disproportionately dependent on agriculture and other rural activities. Table 1 presents some simple data on Ghana's economy.

Table 1 Overview of Ghana's Economy

GDP @ purchasing power parity (2004 estimate)	\$48 billion
GDP real growth rate 2004	5.4 per cent
GDP per capita @ purchasing power parity	\$2,300
Gross fixed investment as percent of GDP (2004 estimate)	19.7 per cent
Population below the poverty line (2004 estimate)	31.4 per cent
Structure of production (2004 estimates):	
• agriculture	34.3 per cent
• industry	24.2 per cent
• <i>Mining and Quarrying</i>	5.2 per cent
• services	41.4 per cent
Labor force (2004 estimate)	10.24 million
Structure of employment (1999 estimates):	
• agriculture	60 per cent
• industry	15 per cent
• services	25 per cent
External debt (2004 estimate)	\$7.4 billion
Economic aid received (1999)	\$6.9 billion
Currency	Cedi (GHC)

Source: CIA World fact book: www.cia.gov/cia/publications/factbook/geos/gh.html

The ERP has achieved notable successes, but Ghana remains a poor country facing many development challenges, including high levels of poverty, high indebtedness and a dependency on a relatively limited number of commodities for most export earnings and much of output. This incomplete and fragile reform has in turn provided the backdrop to Ghana's early application for debt relief under the HIPC program⁷. The Ghana Poverty Reduction Program (GPRP) that accompanied the HIPC debt relief puts greater focus than before on ways to raise the living standards of poorer households, improving the targeting of public expenditures, improving governance and reducing income disparities.

2.3

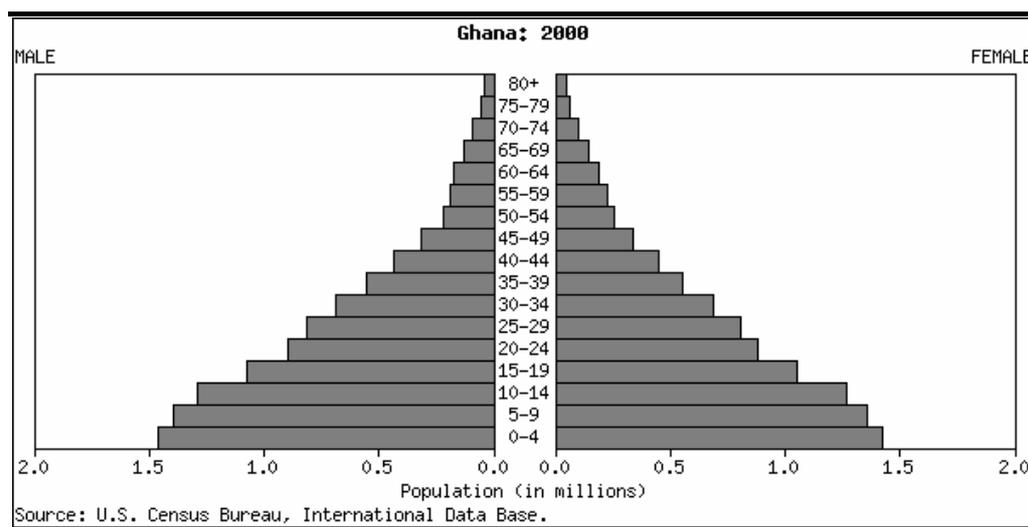
OVERVIEW OF GHANA'S DEMOGRAPHY

In 2005, Ghana had an estimated population of 21,029,853⁸. The life expectancy for males was 55.04 years and for females was 56.99 years. The population growth rate is estimated to be 1.25% per annum. In common with many developing countries, Ghana has a very young population, as illustrated in Figure 1.

⁷ Ghana reached its "decision point" in late 2003

⁸ CIA World Fact Book, retrieved from www.cia.gov/cia/publications/factbook/geos/gh.html

Figure 1 Ghana Population Pyramid, 2000



2.4 OVERVIEW OF MINING IN GHANA

As noted above, there was a gold trade with North African merchants from as early as the Middle Ages, and the country's mineral resources were recognized by European powers. However, in the 25 to 30 years immediately following independence in 1957, mining in Ghana faced major new constraints that undermined its profitability and deterred new investment⁹. Indeed, from the end of World War II until the mid-1980s, not one new mine was opened in Ghana (Aryee, 2001).

Mining and minerals were a specific and integral part of the ERP¹⁰ and a substantially revised Minerals and Mining Law was promulgated in 1986¹¹. Ghana now has a straightforward and investor friendly climate for mining investment. In the 15-year period after 1986:

- Total cumulative private investments in mining exceeded \$5 billion¹².
- The number of active gold mining companies doubled to 14.
- Mining exports overtook cocoa as the country's leading export activity.
- Mining had come to account for at least eight per cent and as much as 17 per cent in some years of total government revenue.

Figure 2 illustrates the output of mining in Ghana.

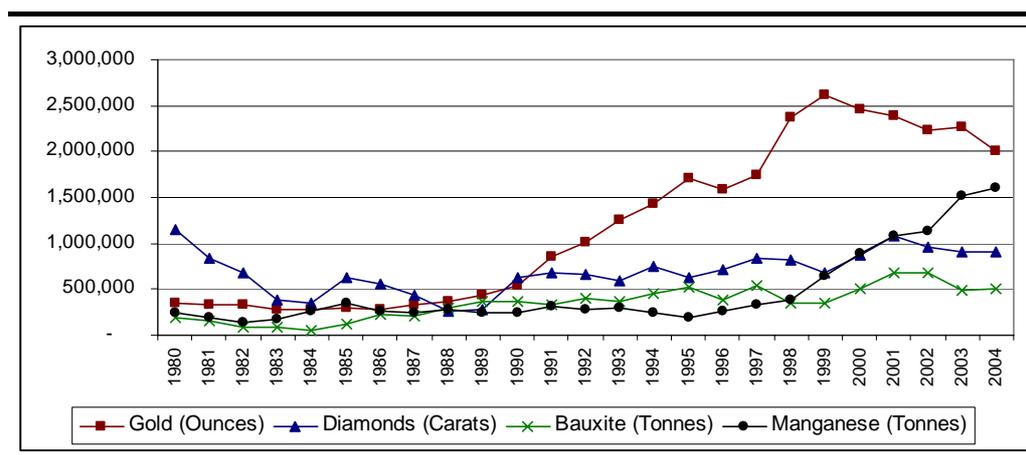
⁹ These included high levels of taxation and active state participation in the mining sector. On the basis of the criteria used for the Phase 1 study, Ghana in that period would have been only on the margin of qualifying as a mining-dependent economy.

¹⁰ Bank of Ghana, Report on the Mining Sector, November 2003.

¹¹ Other supporting legislation that backed up the intent of the main law followed in the years 1987 and 1989.

¹² Aryee (2001) shows the breakdown of the investment totals as between mining and prospecting for the period 1983 to 1998. The ratio was approximately 44:56.

Figure 2 Mining Output in Ghana



Source: Ghana Minerals Commission

Current mining activity in Ghana is focused in the south-west of the country. Operational gold mines are¹³:

- Obuasi, owned by AngloGold Ashanti and located in the Ashanti Region;
- Iduapriem, another AngloGold Ashanti mine (Western Region);
- Bibiani, also an AngloGold Ashanti mine (Western Region);
- Tarkwa, owned by Gold Fields Ghana, which is a subsidiary of South Africa's Gold Fields (Western Region);
- Damang, also owned by Gold Fields Ghana (Western Region). Both Tarkwa and Damang are under the same management;
- Bogoso (incorporating the adjacent Prestea property), owned by Golden Star Resources of the US (Western Region); and
- the recently reopened Wassa gold mine, which is also owned by Golden Star Resources (Western region).

There are also three new mines being developed:

- Chirano, owned by Red Back Mining of Canada, due to open September 2005)¹⁴ (Western Region);
- Yamfo, owned by Newmont of the US, due to open 2006 (Brong Ahafo Region); and
- Akyem, owned by Newmont, due to open 2007 (Eastern Region).

Most of these mines are open cut/cast mines rather than underground mines, Obuasi is the exception in having underground mining (although it also has surface operations). However, there is potential for underground development at some of the surface mines.

¹³ Unless stated otherwise, the source of these data is African Mining, 2004, Vol 9 No. 4 Jul-August. Details correct at time of writing (2005).

¹⁴ Source: www.redbackmining.com

3 *THE CONTRIBUTIONS OF MINING TO ECONOMIC GROWTH AND POVERTY REDUCTION*

3.1 *OVERVIEW*

This section of the report addresses Stages 3 and 4 of the Resource Endowment Toolkit as developed in Phase 1 of this initiative. It first examines the outcomes of Ghana's mining activity in two dimensions, namely:

- economic outcome at both the national and local level; and
- social outcomes (including poverty reduction and other social changes), again, at national and local levels.

Sections 4 and 5 go on to probe more deeply, but selectively, into various dimensions of the explanations of these outcomes. Some of the detailed argument has been suppressed in the interest of brevity but is available in a full version in Annexes 2-4.

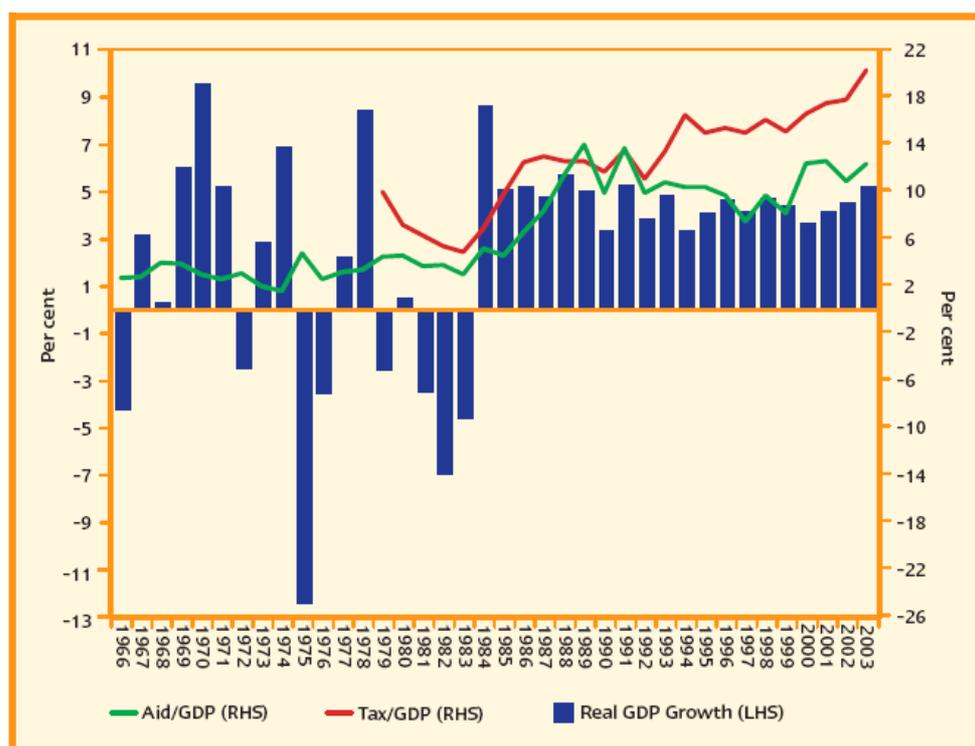
3.2 *MACRO-ECONOMIC PERFORMANCE*

3.2.1 *Introduction*

This section looks first at the way in which the economy was performing in the earlier years from just after independence in 1957 until the Economic Recovery Program (ERP) was launched in 1983. This period can be compared with the later period after 1986 when mining enjoyed its resurgence. The relevance of this juxtaposition of the two periods is clearly apparent from Figure 3 below, which is extracted from the report of the Commission for Africa. In the earlier period, both the Ghanaian economy and the mining sector were essentially stagnant. In the latter period, both have performed much more strongly.

The contrasts pointed up by the graphic are striking – even dramatic. In the later period after about 1985, GDP growth has always been positive. Equally important, growth has been pretty stable. The earlier period before 1983, by contrast, was characterized by a huge volatility of growth rates and by growth that more often than not was negative after 1974.

Figure 3 Ghana: Economic Performance in Two Different Eras



Source: World Bank African Development Indicators, 2004

3.2.2 The Growth Collapse, 1960-1983

The economy of Ghana from just after independence to the start of the ERP (1960-1983) has been described in various ways by different commentators. One way to describe this disastrous record is “growth collapse”.

In brief, Ghana at the time of independence had a real per capita GDP of over US\$450 (in 1995 prices). This was, for example more than 40 per cent higher than in Botswana (per capita of US\$313). By 1985, Ghana’s per capita GDP had declined to only US\$313. Botswana recorded annual per capita GDP growth rates of about 7.9 per cent. Ghana’s living standards as measured by incomes declined disastrously – by about 1.4 per cent annually over the same period.

Table 2 The External Sector and Importance of Minerals in Ghana's economy, 1960 – 1985

Item	1960	1966	1971	1977	1982	1985
Terms of trade ⁽¹⁾ (1990=100)	189.95	130.83	112.3	190.1	125.29	121.46
NER (Cedi/\$)	0.71	0.71	1.03	1.15	2.75	60
EER (Cedi/\$) ⁽²⁾	0.71	1.14	1.10	3.72	24.10	Na
Exports: GDP (%)	26.7	23	20.3	31.8	21.7	13.7
Cocoa: GDP (%)	13.9	7.7	8.1	6.1	1.2	8.9
Cocoa: Exports (%)	49.29	52.74	51.39	58.13	35.95	65.1
Ores and Metal: GDP (%)	----	3.4	3.0	4.0	5.5	----
Ores and Metals: Exports (%)	----	14.9	15.0	12.4	25.6	----
Gold: GDP (%)						1.96
Gold: Exports (%)						14.3
Imports: GDP (%)	29.8	16.6	17.7	32.5	17.5	19.2
GDP per capita	450.3	427	483.7	385.7	322.1	313.3

Source: Adapted from Auty (2000) and updated with Bank of Ghana and WDI, (2004) data. EER is the equilibrium exchange rate as calculated by Frimpong, A. (1991).

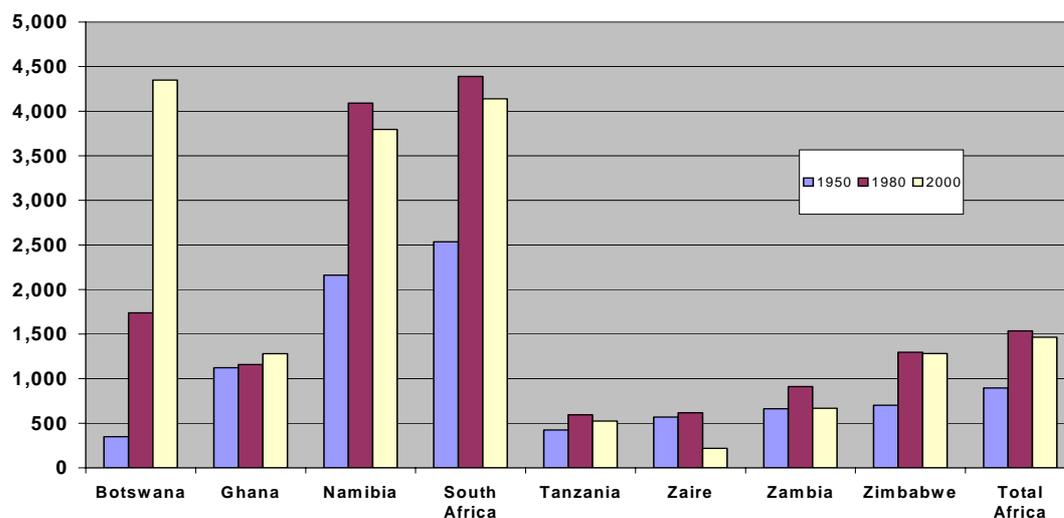
- (1) "Terms of trade" is the commodity terms of trade (ie the ratio of prices of imports and exports - the ratio being indexed on 1990=100).
- (2) "EER" this is the Equilibrium Exchange Rate, which is the rate that would have been needed to achieve the same competitive position for exporters as they enjoyed in 1960, when the Nominal and Equilibrium rates are assumed to have been the same.

3.2.3 *Economic Recovery, 1986-2004*

Ghana's record in terms of economic growth saw a radical improvement soon after the launch of the ERP (1983) and the associated World Bank/IMF supported reforms. Specifically, from 1986 to 2003 real GDP growth averaged about 4.5 per cent annually. Real per capita GDP grew at about 1.9 per cent annually, which meant that the average Ghanaian started to see gains in living standards once again. Ghana's growth performance in the post reform period also compares favorably with the average for the sub-Saharan region - where real GDP growth averaged about 2.4 per cent annually over this same period.

Figure 4 shows the evolving contrasts with other major mining countries in Africa and with Africa generally.

Figure 4 Per Capita Incomes in African Mining Economies: 1950, 1980 and 2000 (PPP basis in \$ and 1990 prices)



Source: Maddison, A. (2000). Data use PPP accounts and so are not directly comparable with earlier data in this section. Zaire is now the Democratic Republic of Congo.

Table 3 and Table 4 below provide data that illustrate some of the characteristics of growth during the recovery phase. This is discussed more fully in Annex 2. Improved growth has definitely been associated with a much higher level of investment. It is also known that a much-increased level of mining investment has been an important part of this aggregate change, and that mining accounts for easily the largest single element in the big rise in FDI seen in the 1990s.

Table 3 Selected Macroeconomic Indicators, 1986-2003

Indicator	1986-2002	1986-1990	1991-1995	1996-2000	2001	2002	2003
Real GDP Growth	4.5	4.8	4.3	4.3	4.2	4.5	5.2
Real GDP per capita Growth	1.9	1.8	1.5	2.0	2.4	2.8	
Real per capita GDP	386	331	361	391	417	429	
Inflation	27.7	32.1	31.3	24.6	21.3	15.2	23.6
Gross Dom. Savings (% of GDP)	6.8	5.2	7.7	7.3	7.0	7.4	
Gross Nat. Saving (% of GDP)	13.5	9.3	13.7	14.3	23.1	20.0	
Gross Investments (% of GDP)	18.3	11.7	19.2	22.0	27.1	18.8	

Source: World Bank, World Development Indicators (WDI 2004) and Bank of Ghana

Table 4 Structure of the Ghanaian Economy, 1986 – 2003

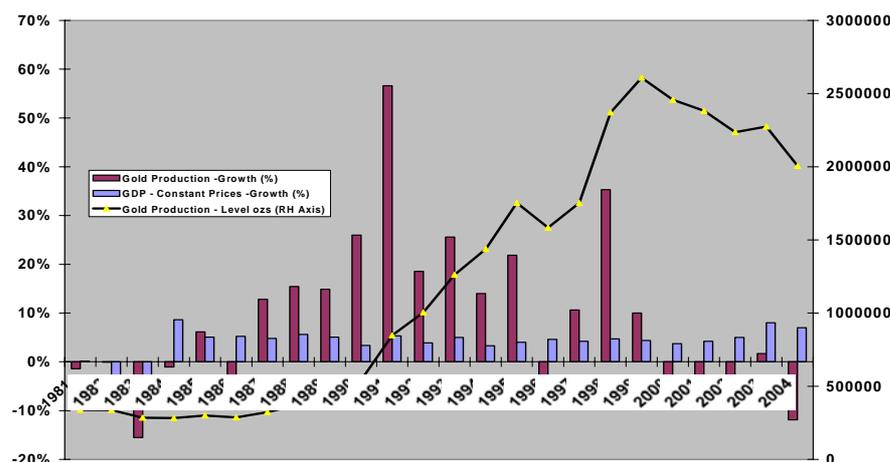
	1986-2002	1986-1990	1991-1995	1996-2000	2001	2002	2003
Agriculture value added: GDP (%)	43.3	48.4	43.3	40.7	39.3	38.8	40.2
Industry value added: GDP (%)	23.6	16.7	23.3	28.1	28.1	27.9	27.8
Manufacturing value added: GDP (%)	10.0	10.1	9.9	10.0	10.0	10.0	9.9
Services value added: GDP (%)	33.1	34.9	33.4	31.2	32.5	33.2	32
Agriculture (Annual % growth)	3.1	1.8	2.5	4.1	4.0	4.4	6.1
Industry (Annual % growth)	4.3	7.2	1.0	4.6	2.9	4.7	5.1
Manufacturing (Annual % growth)	1.8	6.5	-7.4	4.7	3.7	4.8	4.6
Services (Annual % growth)	6.5	7.9	7.4	5.4	5.1	4.7	4.7

Source: World Bank, World Development Indicators (WDI 2004) and Bank of Ghana

3.2.4 A Closer Look at the Rising Contribution of Mining

In order to put the gains in mineral production into perspective with the overall increase in GDP levels, Figure 5 below compares Ghana’s GDP growth on a constant price basis with the growth of gold mining production, also on a constant price basis.

Figure 5 GDP Growth and Gold Production: 1981-2004



Source: Ghana Minerals Commission

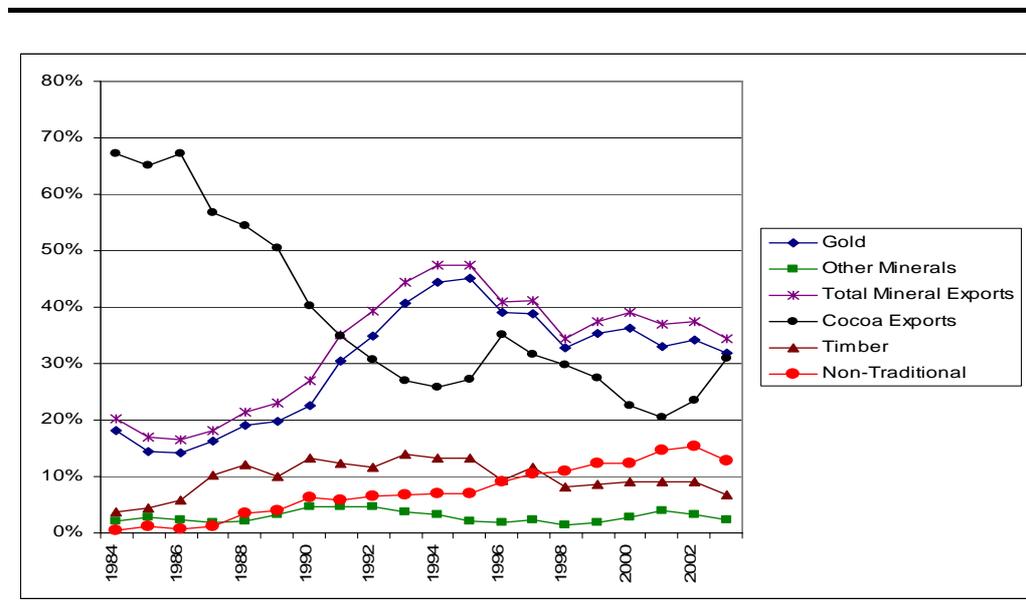
It is clear that the growth rate of mining production in most years since 1987 has outdistanced the overall growth rate of GDP by a very considerable margin. This has contributed to a large cumulative increase of mineral production as indicated on the right-hand scale of the figure.

Taking the period as a whole, there is a strong presumption that the generally high rates of mineral production and mineral revenues have been a significant contributor to the impressive sustained GDP growth that Ghana has achieved¹⁵. The share of minerals in total GDP has changed relatively little (from 4% in the late 1970s to 5.2% in 2004). However, the sustained growth in output in the ten years from 1986 to 1996 meant that in mechanical numerical terms, mining contributed just about 0.3 percentage points (five percent of the total growth) to the overall impressive GDP growth of 5.5% in that same period¹⁶. This may seem small but must be read in the context of the frequently negative growth that Ghana experienced before 1983.

However, it is certainly recognized that this study has not incorporated detailed modeling of the interactions between mining's resurgence and the generally improved performance of the economy as a whole. Hence there is no objective basis on which to ascribe a cause and effect link from the one to the other. The general policy reforms that favored mining, especially the ending of the severe exchange rate over-valuation of the 1970s and the more realistic taxation of other natural resource sectors, such as cocoa, clearly played complementary roles in the economic recovery after 1983.

Figure 6 similarly shows how, through the mid-1990s, mining exports gradually rose to become Ghana's largest single export. Both total mineral exports and the dominant gold mining component of this overtook cocoa as the leading export around 1992.

Figure 6 The Changing Share of Mining Exports



Source: Ghana Minerals Commission

15 A formal regression for GDP growth reveals a small (plus 0.0418) but statistically significant coefficient for the growth of mineral production as an explanation of overall GDP growth. However, given the variability in the former series it is difficult to infer causality from this.

16 This indicative calculation has been made by taking out the mining sector and recalculating GDP growth.

Finally, the contribution over time of mining to government revenues shows a rising share through 1995 when the contribution (of mineral to total taxes) peaked at 17.9. In spite of some subsequent volatility, there has not been a single year since 1995 when mineral revenues to the government have actually fallen. Any volatility has been in the size of the annual increases.

3.3 *THE MINING INDUSTRY'S CONTRIBUTION TO NATIONAL GOVERNMENT REVENUES*

Table 5 below provides a summary of the contributions to the Ghana Internal Revenue Service Collections for all mining companies for the period 1993 to 2002¹⁷. The table shows the contributions to be substantial and indicates the contribution of mining royalties in particular to be six per cent of the total. The table also shows that the mining sector contributions to IRS collections have kept abreast of the growth in total IRS collections. The mining sector contribution to overall tax revenues when VAT, Excise and Customs Duties are included is estimated at 10 per cent but the figure has gone as high as 17 per cent in the mid-1990s.

Mining is characterized by operations that are typically located around rural communities with a direct impact at the local level; as well as having significant national consequences in a country such as Ghana where its contribution to GDP is now 5.2 per cent (2004). Over half of all mining revenue is derived from two out of a total of 110 districts. These are Wassa District West, which includes mines at Tarkwa, Prestea, Nsuta and Bogosu; and the Obuasi Municipality, which has the only operational underground mine in Ghana. Obuasi's contribution to the totals shown in Table 5 is a substantial proportion of the total.

3.4 *SOCIAL OUTCOMES*

3.4.1 *Introduction*

This section addresses the question of how the growth recovery after 1983 affected Ghana's social situation, and the position of its poor. This analysis has used the Ghana Living Standards Surveys (GLSSs) for 1991 and 1999, and the more recent Core Welfare Survey (CWIQ) results published in 2003. The analysis looks sequentially at the following:

- overall poverty levels and trends in Ghana;
- poverty by region;
- poverty by sector (of the main income earner in each family);

17 Note that this table does not include contributions from VAT payments or from Customs and Excise duties.

Table 5 Summary of Mining Sector Contributions to Ghana IRS Collections

Year	Corporate Tax (Billion Cedi)	Royalties (Billion Cedi)	Income Tax (PAYE) (Billion Cedi)	Reconstruction Levy (Billion Cedi)	Total Mining Contribution (Billion Cedi)	Total Mining Contribution (US\$ Million)	Total IRS Tax Collection (Billion Cedi)	Per cent Mining Contribution
1993	4.4	7.5	2.7	-	14.6	17.7	113.2	12.9%
1994	7.2	12.8	4.8	-	24.8	23.6	166.6	14.9%
1995	20.4	20.9	8.0	-	49.3	34.0	275.5	17.9%
1996	9.2	5.5	16.8	-	31.5	17.8	424.5	7.4%
1997	9.9	34.6	25.0	-	69.5	30.6	605.8	11.5%
1998	14.5	49.8	31.0	-	95.3	41.0	785.4	12.1%
1999	31.1	48.6	27.8	-	107.5	30.4	901.7	11.9%
2000	15.8	118.7	59.2	-	193.7	27.5	1,409.5	13.7%
2001	24.8	127.4	76.1	4.3	232.6	31.8	1,950.2	11.9%
2002	23.5	153.5	101.5	26.5	305.0	36.1	2,843.0	10.7%
Total	160.8	579.3	352.9	30.8	1,123.8	290.5	9,475.4	11.9%
					Standard Deviation:			2.6%

Source: Ghana Living Standards Surveys for 1991 and 1999, Core Welfare Survey (2003)

- poverty by occupation (of the main income earner);
- poverty levels in the main mining regions and districts; and
- social outcomes in the main mining regions and districts.

The principal results are as follows:

1. In the period from 1992 to 1999, the national poverty headcount index reduced by about 12 percentage points (from 52 per cent in 1992 to 40 per cent in 1999¹⁸. This suggests a strong link from the national income growth described above to the reductions in poverty that are analyzed here.
2. Five of Ghana's ten regions have poverty levels above the national average. Given their location, poverty in Ghana can reasonably be described as a 'Northern' phenomenon. This perpetuates the regional inequality that pre-dates Ghana's independence in 1957. It also shows that even though mining may not have caused this pattern, neither has its renaissance served to ameliorate it. This is of course a comment about the government's redistributive policies and not about mining's influence *per se*.
3. The sectoral analysis shows that the lowest levels of poverty are in families where, in descending order, the head of household is engaged in:
 - formal mining;
 - transport and communication;
 - finance and business services; and
 - public administration.
 Poverty is at its worst in families where the head is engaged in:
 - agriculture; and
 - forestry and fishing.
4. The data on poverty and occupation show that a household is less likely to be in poverty if the head of household is in private formal employment. The second best employment in this regard, but a distant second, is public sector employment. Although export-based farmers have greatly improved their lot since 1991, they are still absolutely much more prone to poverty than are most other employment categories. Food crop and subsistence farmers remain, as in 1991 the most likely group to face poverty. Unlike the export-based farmer, they have seen only a very modest improvement in that situation in the decade covered by the GLSS results.
5. In the four of Ghana's 110 districts that account for most of the mining activity, poverty levels are generally lower than in other districts within the same region, as well as in the country as a whole.

¹⁸ Mackay and Aryeetey (2004) using the GLSS data estimated the growth elasticity of poverty incidence for Ghana at 0.98, a figure that compares closely with the results for many other sub-Saharan countries.

6. However, that poverty advantage is not general across all occupational groups in those four districts. For example, there still seems to be a strong residue of a high incidence of poverty in some rural parts of these districts, especially in the two Ashanti districts¹⁹.
7. Finally, the CWIQ results suggest that the main mining districts are doing generally better than the country as a whole. This is particularly the case for the Wassa West and Adansi West districts – the two most mining dependent districts in Ghana²⁰.

The analysis generally confirms the presumption that the favorable growth record since the mid-1980s has improved the country's poverty profile and its social indicators. Although there has been a persistence of serious cross-regional inequalities in this period, the inequalities that are seen today are largely those that were already evident when Ghana gained independence back in 1957. Equally, in the small number of districts that are heavily dependent on mining, both the high-level poverty indicators and the specific welfare indicators that can be measured at the local level show generally superior performance on the average to that achieved at the national level.

3.5 *SOCIO-ECONOMIC IMPACTS OF MINING AT THE LOCAL LEVEL*

3.5.1 *Introduction*

This section presents a complementary picture of the socio-economic impacts, from a "bottom-up" perspective, which is based on a visit to AngloGold Ashanti's Obuasi mine. The mine is based in the Ashanti region of Ghana, about 200 km North-west of Accra, the capital. The following sections present:

- an overview of Obuasi;
- some background on the mine;
- the level and type of procurement;
- the employment generated by the mine including direct, indirect and induced employment;
- the taxes and payments made to public authorities by the mine;
- a summary of contributions to the national economy; and
- an analysis and description of AngloGold Ashanti's social investment activities.

3.5.2 *Overview of the Town of Obuasi*

Obuasi is located in the Ashanti region of Ghana. Although Obuasi is now a town of 150,000 to 200,000 people, before the mine's development there was no significant population in the immediate area. The mine is over 100 years

¹⁹ It should be noted that most mining is in or near urban areas, not least because substantial settlements often develop around mines, as has happened at Obuasi over the last century.

old, so the town is well established. An aerial image of Obuasi is presented in Figure 7.

Figure 7 Aerial View of Obuasi



Photo credits: consulting team

The town's layout is a mixture of AngloGold Ashanti mine sites, several of which are to be found in and around the centre of town (reflecting the evolutionary development of the town around the original mining activities), other commercial and public buildings, formally planned company residential areas and other residential areas that have been developed in a more organic, informally planned manner. Figures 8, 9 and 10 show three types of residential area that are broadly typical of their type within the town.

As demonstrated in Section 3.3, Obuasi is a relatively prosperous town by Ghanaian standards (in common with the other main gold mining towns in Ghana), with lower levels of poverty than are commonly experienced elsewhere in the country.

20 For example, the proportion of households with improved water sources, waste disposal and sanitation in the Wassai West districts are respectively about 86 per cent, 81 per cent and 82 per cent, compared to the national average levels of 74 per cent, 66 per cent and 55 per cent respectively. The statistics are even better for the Adansi West district.

Figure 8 AngloGold Ashanti Housing Provided for Junior Workers



Figure 9 AngloGold Ashanti Housing Provided for Middle Management



Figure 10 A Non-company Residential Area Near the Sansu Mine



The only large formal employer in town is AngloGold Ashanti, and locally-based suppliers. There is also a smaller public sector workforce (for example, in schools, the municipal council, police and healthcare). Although this was not quantified, the town also has a high level of small-scale entrepreneurial activity, with a busy market area and numerous small businesses in areas such as personal services, mobile phone sales and repair, leisure services, vehicle repair etc.

Despite this apparent prosperity, a common list of complaints about the town emerged during stakeholder consultations, which can be summarized as follows:

- The condition of most of the roads in town is poor, and dust and litter nuisance is a problem. Only in recent years has the main road through the town been surfaced properly, and most side streets are either not tarred or are in a poor state of repair.
- Many other aspects of municipal infrastructure provision are inadequate, for example, water supply and waste management.
- With the exception of the mine buildings, there are few attractive or imposing buildings in town that might demonstrate a history of successful mining (many stakeholders sought to make comparisons with Johannesburg).
- It was noted that mine employees and their families had much better access to quality housing, education and healthcare than the majority of the community, which was resented by some.

Some of these issues, and AngloGold Ashanti's role in addressing them, are discussed later in this section.

3.5.3 *The Obuasi Mine*

Overview

The Obuasi mine is both the oldest mine in Ghana and the first deep mine to be developed in the country. The mine is also one of Ghana's largest private sector employers. Basic statistics for Obuasi are shown in Table 6.

Table 6 Basic Statistics for the Obuasi Mine

Recovered grade (g/t)	3.08
Gold production (ounces)	392,000
Total cash costs (US\$ per ounce)	305
Total production costs (US\$ per ounce)	426
Capital expenditure (\$ million, first eight months of the year only)	32
Total number of employees, of which:	6,747
• employees	6,029
• contractors	718

* Following the creation of AngloGold Ashanti, Obuasi switched to the calendar year for financial reporting purposes. Figures marked with a star represent figures for eight months that have been annualized by ERM.

Source: AngloGold Ashanti Annual Report, 2004 and ERM calculations.

The mine is located in an active mining area, and within 100 km there are a number of operational and closed mines (see Annex 2 for more details).

Projected Mine Life and Future Investments

Exploration activities to date have revealed economically recoverable deposits that would give the mine at least 20 further years of operation. It is likely that further exploration and development could substantially extend this life. A five-year exploration and feasibility study program began in 2005 to test the ore body at depth. The investment would cost \$44 million over the five-year term. At present, AngloGold Ashanti is investing heavily in the mine, with approximately \$70 million capital expenditure earmarked for 2005, intended for new capital equipment, improved infrastructure and developing new, deeper levels for future mining (these deeper deposits are included in the existing mine life estimate).

Further deep level investments are currently being investigated. If developed, this project would cost a reported \$570 million and extend the mine's life to beyond 2040²¹.

21 Personal communication with AngloGold Ashanti.

Obuasi is primarily a deep mine, although there is one open pit operation (the last remaining open cut operation is visible in the top centre of Figure 7).

Figure 7).

In recent years, there has been a number of open pit sites operated by AngloGold Ashanti around Obuasi, but all but one are in the process of closure and rehabilitation. Some of these are being returned to open space, whilst alternative uses are being considered for others. New uses being considered include using flooded pits for commercial fish farming and re-engineering a pit to provide a modern landfill site to improve waste management in Obuasi. Information on the geology of the Obuasi deposit is presented in Box 1.

Box 1 Geology of the Obuasi Deposit

The gold deposits at Obuasi are part of a prominent gold belt of Proterozoic (Birimian) volcano-sedimentary and igneous formations, which extend for a distance of approximately 300 kilometers in a northeast southwest trend in southwestern Ghana. Obuasi mineralization is shear zone-related, and there are three main structural trends hosting gold mineralization: the Obuasi trend, the Gyabunsu trend and the Binsere trend. Two main ore types are mined:

- quartz veins, which consist mainly of quartz with free gold in association with lesser amounts of various metal sulfides, such as iron, zinc, lead and copper. The gold particles are generally fine-grained and occasionally are visible to the naked eye; and
- sulfide ore, which is characterized by the inclusion of gold in the crystal structure of a sulfide material. The gold in these ores is fine-grained and often locked in arsenopyrite. Higher gold grades tend to be associated with finer-grained arsenopyrite crystals. Other prominent minerals include quartz, chlorite and sericite.

Source: AngloGold Ashanti Annual Report, 2004

3.5.4 Procurement

The Obuasi mine has a very large procurement budget – \$110 million in 2004 according to company figures. This covers a very wide range of items including:

- new plant and process equipment;
- construction materials;
- process chemicals;
- fuel and electricity;
- vehicles;
- spare parts for vehicles and machinery;
- work clothing and personal protective equipment;
- catering supplies; and
- office supplies.

Procured items range in value from several million dollars to just a few, and a great many are highly specialized for mining applications. As a part of the study, AngloGold Ashanti was asked to provide information on its suppliers. To assess the local contribution, we have estimated Ghanaian content (based on our knowledge about AngloGold Ashanti's supply chain and Ghana's industrial capacity) for each item over \$0.5 million in value. As can be seen, the \$0.5 million plus items account for \$93 million, or 84 per cent of total procurement at Obuasi. Table 7 presents this information

Table 7 AngloGold Ashanti Procurement Information

Procurement Item	US\$	Ghanaian Content
Electric Power	24,590,236	High
Fuel	7,637,359	Low
Buying Agent	5,985,684	Low
Banking Services (1)	5,029,112	High
Cyanide	4,869,046	Low
Mining Contractor	4,668,721	High
Mining Equipment	4,243,599	Low
Grinding Media	4,211,232	Low
Lime	3,599,593	High
Transport	3,058,370	High
Ore Haulage Contractor	2,771,161	High
Clearing	2,377,778	High
Drilling	1,869,102	Medium
Housing for Company Employees	1,642,116	High
Mining Machinery Spares (1)	1,377,460	Low
Mill and Crusher Spares	1,343,576	Low
Banking Services (2)	1,199,109	High
Construction Company for BSVS Project	1,178,602	Medium
Mining Machinery Spares (2)	1,119,892	Low
Chemicals	1,080,066	Low
Engine Spares	1,067,923	Low
Tires	1,031,897	Low
Activated Carbon	956,250	Low
Pumps and Spares	888,949	Low
Insurance Services	759,073	High
Safety Equipment	668,320	Low
Supplier of Food Items	661,571	High
Explosives	648,174	Low
Diesel	629,236	Low
Motor Spares	591,191	Low
Cement	560,165	High
Transport of Cyanide	500,943	High
Total	92,815,506	

Source: AngloGold Ashanti

The totals were added up under high, medium and low definitions using the following assumptions:

- high content meant, on average, 75 per cent Ghanaian input by value;
 - medium content meant, on average, 50 per cent Ghanaian input by value;
- and

- low content mean, on average, 10 per cent Ghanaian content by value²².

Adding up these categories using the above weightings gives the following totals (see Table 8).

²² A low figure was adopted given the preponderance of fuel, explosives and mechanical spares in this category.

Table 8 Estimates of Ghanaian Content (US\$)

Category	Total in Category	Weighted Ghanaian Content
High	51,417,947	38,563,460
Medium	3,047,704	1,523,852
Low	38,349,855	3,834,985
Total	92,815,506	43,922,298

These estimates, whilst necessarily somewhat rough, suggest that about half of procurement is retained in Ghana. However, it is likely that very little of this is spent (or retained) in the Obuasi area. This is typically because local (as opposed to national) procurement is rarely possible. For example, the largest item is electric power, and this is sourced at a national level from power stations far from Obuasi. Similarly, banking, transport and lime (other major items in this category) are also known to come from outside the Obuasi area as they are not available locally. Therefore, the proportion being sourced from the local area is likely to be low.

Whilst some may regard the proportion of Ghanaian content as low, it should be noted that for many of the procurement categories, there are a very limited number of companies supplying the industry at the international level. For example, with respect to mining machinery, there are a handful of international equipment providers (who are largely based in Scandinavia, North America, Australia and South Africa).

However, developments in mining at Obuasi and in Ghana more generally have had an influence on the local supply base in a few sectors. Examples include:

- The growth in mining operations in the mining sector also opened many opportunities in local construction. Taysec, now Ghana's largest construction company²³, along with a host of other companies provided mining construction services as well as building houses and infrastructure for mining staff. Many mining companies have outsourced their surface mining operations to sub-contractors, and this has had a further big effect on local construction firms.
- The transport sector is another area that has seen significant growth since the mid 1980s. Taking a lead from the largest mining company, AngloGold Ashanti, a number of mining companies chose to sub-contract all of their trucking operations to private operators.
- The creation of the lime production industry to service the mining industry, with the start up of Ghana Lime Products Ltd in 1994. Companies in the mining sector provided a significant part of the start up equity for this company.

²³ Taysec is owned by Taylor Woodrow of the UK.

- Mining has also contributed to the development of local financial capabilities through its own demands. A significant extension from short-term financing products to medium-term lending was achieved with the introduction of three financial leasing companies in the nineties. Opportunities for these services arose with the growth in the mining sector and their demand, as well as the demand of the support mining contracting firms, to finance plant and equipment.
- A further boost to local financial markets was given when the Ashanti Goldfields Company went public in 1994. The shares were floated on the New York Stock Exchange, the London Stock Exchange and the Ghana Stock Exchange. With the Ashanti Goldfields Company flotation the market capitalization of the Ghana Stock Exchange grew almost five-fold. The national promotion efforts led in turn to a marked increase in the number of Ghanaians investing in the Ghana Stock Exchange, and today the exchange is the second largest in Africa, after Johannesburg. This was also the impetus for a number of stock brokerage houses to begin trading as the market capitalization grew.

3.5.5 *Direct, Indirect and Induced Employment*

Direct Employment

Table 9 presents data for direct employment at the mine. For this study direct employment is classified as employment by AngloGold Ashanti and other on-site employment by contractors.

Table 9 Direct Employment (May 2005)

Category	Total Number	Percent Expatriate	Percent Female
Obuasi mine employees:			
• senior staff	754	2.3	5.4
• junior staff	5,201	-	-
Total mine employees	5,955	0.3	0.7
Contractors	718	Not known	Not known
Total	6,673	-	-

Source: AngloGold Ashanti.

Note: there was a small change in employment between the end of the 2004 calendar/financial year (which are the same for AngloGold Ashanti) and May 2005, when case study data were provided.

As can be seen from Table 9, Obuasi is a large employer. The scale of operations has reduced slightly in recent years, as many of the open pit operations have closed, and capital investment and staffing reviews have also trimmed staff levels slightly. The current total number of mine employees is down slightly from the number in 2000, when the mine employed 6,340 (about 400 more than at present).

The low proportion of expatriate workers is also clearly evident, even at senior levels, which is a clear benefit to the local and national economy. The proportion of female staff, particularly in mining activities, remains low. As in many other countries in sub-Saharan Africa (and elsewhere), mining has generally been seen as a male occupation in Ghana. However, this is changing slowly. For example, the mine appointed its first female mine captain in 2004. Mine captain is an important grade as captains supervise underground shifts. This is an important step on the career track to senior management. It was reported to the case study team that having a female mine captain is something of a psychological breakthrough – they manage large teams of miners underground, so gaining acceptance for a female in the role is an important step in getting more female senior managers.

Indirect Employment

Indirect employment is what is created through the purchases of AngloGold Ashanti in Ghana. AngloGold Ashanti estimated that about five per cent of procurement was retained in the local area (this appears consistent with the analysis of procurement presented above). If this is the case, it suggests that approximately \$5 million (of a total procurement budget of about \$110 million) is retained in the local economy. This will be spent on a range of goods and services, including:

- locally sourced products with no foreign content;
- locally sourced products with an element of foreign content;
- local professional services; and
- the sales/overhead/management costs and profits of local companies that supply nationally- or foreign-sourced goods (eg fuel, vehicles).

Although a small proportion of the total procurement, \$5 million still represents a substantial cash injection into an economy such as Obuasi's. It is very hard to estimate what employment this might generate, particularly as many of the procurement items listed above include a high level of input from local professional and managerial occupations, which will have financial turnover through full-time job levels well above the national average.

Given this, it is possible to estimate what employment might be generated within ranges. This is done below:

- If sales of \$1,000 generate one local job, then about 5,000 jobs would be created locally.
- If sales of \$2,500 generate one local job, then about 2,000 jobs would be created locally.
- If sales of \$5,000 generate one local job, then about 1,000 jobs would be created locally.

Whilst accepting that these estimates are, of necessity, somewhat rough, it would be reasonable to expect AngloGold Ashanti's procurement to generate

between 1,000 and 5,000 jobs in Obuasi, with a midpoint estimate being about 3,000 jobs.

At a national level, it is likely that the procurement will generate much higher levels of employment. Using the same assumptions, and excluding the estimated \$5 million spent locally, residual Ghanaian procurement of about \$40 million would produce the following employment estimates:

- If sales of \$1,000 generate one local job, then about 40,000 jobs would be created in Ghana but away from Obuasi.
- If sales of \$2,500 generate one local job, then about 16,000 jobs would be created in Ghana but away from Obuasi.
- If sales of \$5,000 generate one local job, then about 8,000 jobs would be created in Ghana but away from Obuasi.

Induced Employment

There is no econometric evidence available for Obuasi to indicate what the level of induced employment is in the town or region. Such modeling is beyond the scope of this study, and the case study visit indicated that, because Obuasi is essentially a “company town”, standard multipliers would be unlikely to be appropriate.

In particular, there is no evidence of any other large-scale private sector employer in Obuasi (other than that which is in the mine’s supply chain), nor is Obuasi a significant administrative, educational transport or trading hub (the capital of the Ashanti region, Kumasi, provides those services for the region).

These findings would suggest that the majority of the balance of employment in town is dependent on the spending of AngloGold Ashanti employees and the employees of AngloGold Ashanti contractors. As population estimates vary for the town (from 150,000 to 200,000, excluding surrounding rural areas included in the municipal district), this suggests induced employment creation of 50,000 to 100,000 (assuming that AngloGold Ashanti derived spending generates employment for a substantial proportion of a working age population of about 100,000 to 150,000). Whilst the high wages paid by AngloGold Ashanti would support a higher multiplier value than would normally be the case, a local multiplier of 7 to 14 does seem excessive, particularly given the presence of large numbers of galamsey (ie illegal informal miners) in the town (estimates of whose numbers ranged from 2,000 to 20,000).

Based on these findings, it is likely that induced employment associated with AngloGold Ashanti’s operation in Obuasi is likely to be between 20,000 and 50,000 (see Table 10). However, it should be recognized that, because of data limitations, such estimates are, in reality, educated guesses.

Issues and Observations

As noted above, a high degree of uncertainty must be acknowledged when estimating employment figures, and it is therefore safest to present estimates in broad ranges. The mid-point value of the total estimate is about 50,000.

Table 10 Summary of Employment Estimates for the Obuasi Area

Direct	Indirect Estimate		Induced Estimate		Total Estimate	
	Lower	Upper	Lower	Upper	Lower	Upper
6,673	1,000	5,000	20,000	50,000	~28,000	~72,000

Whilst it is not possible to calculate total employment generation accurately, an important finding is clear: the Obuasi mine is a large generator of the employment on which the economy of Obuasi depends.

AngloGold Ashanti was clearly the preferred employer in the town because of the high salary and good benefits provided, relative to other employment opportunities. There was some discussion during the stakeholder meetings about non-locals filling many positions. Obuasi employs workers from all over Ghana, particularly at more senior levels. However, this reflects Obuasi's character as a mining town, and large flows of in- and out-migration appear to have been a constant part of the town's history. It is also a reflection of the increasing skill levels in the mining industry, in Ghana and abroad. It is no longer a low-skill, labor intensive activity, and often the skills required need to be drawn from all over the country.

The local proportion of procurement identified by the data supplied by AngloGold Ashanti suggests a low employment contribution from local firms. Two historic factors may explain this:

- for a long time the Obuasi mine was one of very few in Ghana, so there may well have been inadequate demand to stimulate a local supply chain; and
- the economic turbulence of the post independence period up until the 1990s would have acted as a disincentive to investors considering entering the mining supply chain.

Perhaps reflecting these past realities, AngloGold Ashanti has no formal local procurement policies or initiatives. However, with over a decade of economic stability and a rapidly growing mining sector in Ghana, there is now an opportunity for mining companies to jointly consider the feasibility of local and national procurement in a more structured way than in the past.

It is likely that the supply chain will respond to increased local demand in certain ways (for example, suppliers of machinery are more likely to set up service bases in Ghana following the boom in mining investment), but

experience from elsewhere shows that industry leadership could yield additional local procurement opportunities. Such initiatives would achieve most if undertaken as an industry rather than at the mine level. Initiatives that might be beneficial include:

- more prominent advertising of procurement opportunities within mining areas and Ghana more generally;
- investing in local technical capacity, through skills development and even financial support;
- repackaging procurement contracts to split out those elements that can be sourced locally;
- joint buying of common items in order to achieve local critical mass; and
- working with third parties (such as the Government of Ghana and bilateral and multilateral donors) on supply chain development initiatives.

At present, it appears that the economic benefit associated with procurement is smaller than it could be and, in partnership with the Minerals Commission and other mining companies in Ghana, there is scope to expand this in the future.

3.5.6 *Taxes and Payments to Public Authorities*

AngloGold Ashanti's Payments to Public Authorities

AngloGold Ashanti is a significant contributor to Ghana's tax base. Table 11 summarizes payments made to public authorities.

The table shows the mine generates taxes in a variety of ways, with royalties and labor-related taxes being the largest component. In total, just over \$15 million dollars was paid to the government, even though the mine was not profitable in the financial year (due to production constraints associated with the on-going capital investment program).

Table 11 AngloGold Ashanti Payments to Public Authorities (2004)

Item	Value (US\$)⁽¹⁾
Profits taxes ⁽²⁾	-
Royalties	\$4,822,000
License fees	\$107,000
Signing and production bonuses	\$782,000
Income taxes paid by employees	\$3,644,000
Social security contributions to public agencies	\$3,892,000
Import and export duties	\$2,354,000
Natural resource use charges	\$12,000
Total	\$15,613,000

(1) All figures rounded to nearest \$1,000.

(2) Because of the capital investment program the mine was not profitable in the last financial year, and hence no profit-related taxes were paid.

Source: AngloGold Ashanti

Issues and Observations

Even in a year where no profit was made, AngloGold Ashanti appears to have been a significant taxpayer. However, it is interesting to note that, whilst royalty payments represent almost a third of total taxes paid in 2004, labor-related charges are a much larger element of taxes paid by the Obuasi mine.

However, this is not mirrored in the national data. These show that royalties are the most important source of taxes from the mining sector. The difference between the industry generally and Obuasi in particular is probably because as a deep level mine, Obuasi is a much more labor intensive operation than open pit mines. It may also reflect the fact that miners at Obuasi are likely to be better paid, in general, than at some of the less skill intensive and potentially less unionized new mines.

3.5.7 *Human Capital Development*

The mine runs a wide range of training courses for its own employees. The formal training budget for employees is about \$1.5 million per annum, which equates to about \$250 per employee. This funds a wide range of courses and training programs, ranging from technical mining skills and health and safety through to courses with a more administrative and management skills focus.

3.5.8 *Contribution to the National Economy*

The contribution of the Obuasi mine to the national economy of Ghana is presented in Table 12.

Table 12 AngloGold Ashanti Value Added Statement for Obuasi

Value Added	\$'000
Turnover	160,441
Other Income	61
Cost of materials and services	89,186
Value Added by operations:	71,316
Value Added Contributed by:	
Employees – Salaries, wages and other benefits	31,170
Government – Royalties and other taxes	8,218
Providers of Capital: Finance costs	1,406
Re-investment:	
Amortization	30,041
Retained earnings for the year	481
Total Value Added:	71,316
Value Added Repatriated Abroad:	
Repatriation of expatriate salaries (70 per cent of total)	930
Finance costs to foreign institutions	1,623
Earnings taken out of country (95 retained in Ghana)	457
Value Added Retained in Ghana	68,306

Source: AngloGold Ashanti

As Table 12 shows, almost half of the turnover is retained value added to the economy of Ghana. In addition to AngloGold Ashanti's value added, there will also be value retained within the Ghanaian element of the supply chain (for example power purchases will mostly be value added to Ghana). Therefore, it is reasonable to expect that about half of the turnover of the mine in any one year represents net value added to the Ghanaian economy.

Within this assessment we have not been able to calculate the opportunity cost of resources used by the mine. However, it is estimated the opportunity cost is small. The biggest area where opportunity cost might be expected to apply is labor. However, with high unemployment among unskilled and semi-skilled workers, and high out-migration of skilled workers from Ghana, it is unlikely that employment at Obuasi has a significant opportunity cost to the Ghanaian economy.

3.5.9 *Social Investment and Infrastructure Provision*

Overview of Social Investment Activities

Because of AngloGold Ashanti's central role in the community, it has long had an active role in providing both essential services and other types of assistance to the community. The company has also been involved in initiatives at the national level which have had a significant impact on the development of the country.

It is probably fair to say that this involvement has developed and evolved over time, and in response to opportunities and pressures as they arose. The engagement was certainly started well before most companies began to adopt more consistent and strategic approaches to social investment and corporate responsibility, although elements of a structured approach are now clear from the latest initiatives with respect to social investment activity at Obuasi.

National Level Social Investments

There have been a number of significant developments in the private sector arising as a reasonably direct consequence of the growth in the mining sector since 1986.

In many instances the mining sector, and in particular AngloGold Ashanti, was vital to the establishment of some private sector activities in Ghana. In some cases AngloGold Ashanti provided financing for new companies. It is notable that many of the most important initiatives have significance in terms of national economic development. They were not conceived primarily as a response to local or community economic needs.

(a) Financial Services

In the financial sector, Ecobank has been a major success story in Ghana. Ecobank is a merchant bank that was started in the early 1990s and was partially financed by AGA. Ecobank is now the pre-eminent domestic bank in the West African financial sector, and is the only locally owned bank to offer a broad range of merchant banking services. As well as providing financing, AngloGold Ashanti has also seconded financially trained staff, and some senior managers in Ecobank are ex-AngloGold Ashanti employees.

(b) Tourism

Tourism began to grow rapidly in the early nineties. The tourism market in Ghana has always had a high percentage of business travelers, as opposed to holidaymakers. The mining sector, and the opportunities it provided by way of support services and supplies, was a large part of the driving force for the growth in business tourism. Since Lonrho (the London and Rhodesia Mining and Land Company) was the strategic private investor in Ashanti Goldfields Company after privatization, which also had significant holdings in hotels, Ashanti contributed significantly to the development of Ghana's first five star hotel – the Labadi Beach Hotel. This contribution took the form of a significant starting equity position, project management of the hotel's construction and secondment of senior staff.

Social Investment Activity at Obuasi

In addition to housing a large proportion of its workforce and providing education and healthcare for workers and their families, AngloGold Ashanti makes numerous contributions to the community in Obuasi. These can be grouped under the following categories:

- transport;
- utilities;
- education;
- healthcare; and
- more general community development.

(a) Transport

Unlike most mining operations, gold mines do not require large amounts of supporting transport infrastructure. This is because the gold ore is generally processed on site to a relatively high purity (about 85 per cent). The final product, whilst highly valuable, is therefore not bulky (unlike, for example, coal or iron ore). At Obuasi, AngloGold Ashanti flies the partly refined gold (or doré) to final refining in South Africa.

The Obuasi mine therefore has no need for extensive rail, conveyor or road infrastructure. However, there is a need for transport within the town, particularly between mine sites and where the ore is crushed and processed, and the company has been active in mending roads and funding the improvement of streets. The company also makes a major financial contribution towards street cleaning in Obuasi.

(b) Utilities

AngloGold Ashanti has supported the government water supply project in Obuasi with money and electricity power when the project started about six years ago. The mine's contribution was in the region of \$250,000. Some 60,000 people are currently benefiting from the project.

Obuasi also currently supplies two major communities with direct power – Sansu and Anyinam villages. The reasons for supply are largely historical, and tend to relate to previous resettlement activity. The villages have a total population of 20,000 and pay nothing for power. The company pays \$120,000 annually to the Electricity Company of Ghana on behalf of the two villages.

Power availability in these villages attracted a host of small businesses, like shoemakers, bakers, vehicle mechanics, hairdressers, restaurants, nightclubs, shops etc. Indeed, so many businesses have been set up to take advantage of the free power that the company now rations power during the day (before this the company was paying over \$500,000). This has been a cause of significant discontent in the communities affected, but AngloGold Ashanti believes that it should not be subsidizing firms that were not affected by the resettlement activities.

The mine also assists some communities annually with electrification poles. The total amount spent on these last year was about \$25,000.

(c) Education

The biggest school in the Obuasi Municipality, Obuasi Mine School, was initially built for children whose parents work for the mine, but now some 10 per cent of total enrolment comes from the general public (typically the children of senior business people and public servants, who would otherwise send their children away to boarding schools). The mine heavily subsidizes the school (80 per cent of costs) as the company pays all the teachers. School transport is also provided by the mine. AngloGold Ashanti provides \$240,770 for teachers' pay annually while almost \$20,000 goes to other educational expenses.

The mine also offers bursaries to children of its employees for secondary school and university level education. More than 4,000 students benefit annually. The cost of this is on average is about \$52,000 a year.

The mine has also built 10 schools in the municipality. For example, the Adubriem Junior Secondary School was financed with a \$35,000 donation from AngloGold Ashanti. Finally, AngloGold Ashanti constructed a dormitory block for Komfo Anokye Medical School in Kumasi, about 60 km from Kumasi, which is used annually by 120 medical students.

(d) Health

AngloGold Ashanti's Arthur Cade Hospital is the biggest and best-equipped hospital in the municipality. Its budget is \$80,000 a month and it caters for workers and their immediate families free of charge. About \$930,000 is paid for medical supplies and medicines. The hospital is open to the public via a referral system from doctors at public clinics when these are unable to provide treatment. These patients are charged, but only if they can afford to pay. Otherwise treatment is free, and these subsidies account for about 20 per cent of the hospital budget.

The 85-bed hospital also offers community programs (for example on HIV/AIDS and malaria) via local radio stations to the general public, in addition to ambulance and laboratory services.

Last year, AngloGold Ashanti provided a mission hospital in Obuasi with funds to set up a specialized eye clinic at a cost of \$15,000. It is the only eye clinic in the municipality and other districts around. The eye clinic treats about 70 patients a day. In addition to these on-going contributions, the company also paid for the construction of the public hospital in Obuasi, although it never operated it.

In autumn 2005, AngloGold Ashanti was due to begin a multi-million dollar malaria control program in Obuasi. The town is in a very active malarial area, and an estimated 90 per cent of admissions at the two hospitals in Obuasi are malaria-related.

(e) Sport and Recreation

The company built and owns the most modern stadium in Ghana (35,000 seats), which is located in Obuasi. The stadium is the home of a premier division league football club, Ashanti Football Club, with a strong following throughout the country. Municipal, regional and national sports and political events, such as celebration of Independence Day, are held in the stadium. The company also owns a soccer academy, which is related to the club.

The company also runs three clubhouses, which are open to the public and the community as a whole every weekend and on public holidays for very low charges. They were initially set up for employees and their dependents. These are patronized mainly by the youth in the municipality.

(f) Community Development

AngloGold Ashanti also makes a number of contributions to other activities in Obuasi. For example, it donates about \$9,000 per annum to local charities. The company is also starting to provide assistance with local economic development, although not yet at Obuasi. At the closed Ayanfuri mine, about 40km from Obuasi, AngloGold Ashanti is funding a series of rural livelihood initiatives, which consist of:

- Edible snail cultivation for domestic and export markets. Villagers are given a \$20 assistance package that provides them with two snail-growing pits, breeding snails and training.
- Grass cutter breeding. Grass cutters are a type of guinea pig regarded as a delicacy in Ghana and much of West Africa and an important source of protein. Again, villagers are given cheap starter kits to enable them to start breeding the animals.
- Aquaculture, using flooded open pit gold mines. AngloGold Ashanti is now investigating the feasibility of introducing fish stock to the flooded pits. Ghana is a major importer of fish, and there is a strong local market for fish products.

These are pilot projects and are being done with support from the Center for Bio-Diversity Utilization and Development of Kwame Nkrumah University of Science and Technology, Kumasi. The company is now considering doing similar projects in Obuasi.

Issues and Observations

Because of AngloGold Ashanti's central role in the development of Obuasi, the mine has long made significant contributions to community infrastructure in Obuasi. The mine continues to be an active participant in the community. Table13 presents a summary of AngloGold Ashanti's main social investment spending.

Table 13 Summary of Obuasi Social Investment Activity (2004)

Item	Cost in 2004 (US\$)
Power	145,000
Schools	296,000
Apprenticeships	52,000
Health	192,000
Community Donations	9,000
Total	694,000

Source: AngloGold Ashanti

The table does not capture the mine's entire social contributions (for example, it excludes healthcare provided to workers and their families, plus smaller items that are hard to cost, such as mine staff helping with street sweeping), nor does it reflect the value of past infrastructure provision (for example, schools, the stadium). However, it does reveal a generous level of support.

Interestingly, discussions with stakeholders revealed a very low level of awareness of the level of social investment spending by the company, and also a generally low level of satisfaction. Indeed, despite the amount of spending, complaints were heard about a number of items. The following comments were common:

- if the municipal council can't pay for upkeep of roads, the mine should;
- the mine should pay for the upkeep of water and other infrastructure it has funded (this is particularly the case in the resettled community at Sansu);
- free power should be provided throughout the day at Sansu and Anyinam villages;
- the company has turned down requests for donations; and
- the company hospital should treat all members of the community, not just those referred by the public hospital.

Most of these concerns were related to issues that affected the respondent directly. It is likely that satisfaction levels would have been higher if the full extent of social investment were known. However, a common thread running through these comments is the perception the mine should be paying for or providing services that should, in reality, be the responsibility of government. It appears that the expectations of AngloGold Ashanti have been heightened because local government institutions lack the capacity to provide basic necessities.

These matters are explored much more fully in Section 5, where the main weaknesses in the present arrangements for ensuring the financial viability and capacities of local authorities are discussed. Clearly to the extent that these capacities can be improved, the expectations placed on the mining companies would be reduced. This it is argued would be the first step in establishing coherent structures for better strategic planning for local communities based on partnerships between government and the companies.

In the absence of such structures:

- AngloGold Ashanti faces difficulties because it is expected to provide far more than it could possibly afford, and because it gets little credit for the extensive effort invested on an on-going basis; and
- the community is frustrated because no institution is able to meet its basic development needs.

Therefore, both the company and public sector partners may require a more holistic approach to community development. This should be focused on building local capacity, and also on helping the local economy to diversify away from mining. An illustration of the dependency culture is presented in Box 2.

Box 2 Case Study: Expectations of AngloGold Ashanti and Possible Responses

The problems associated with over-dependence on the mine to solve local problems are illustrated by a proposed cassava-processing factory, which would produce starch and other by-products, mainly for export. Feasibility studies have indicated the viability of such a scheme. It is projected that up to 10,000 factory and farm jobs could be created by the project, thus bringing substantial socio-economic benefits to the Obuasi area. However, an estimated US\$3 million capital support is required to enable the project to proceed. AngloGold Ashanti was asked for this money, but declined on the basis that it did not have that level of funds available.

If the proposed factory's business plan is robust, it is likely that a number of development agencies or private sector investors would consider supporting the project. However, after the approach to AngloGold Ashanti failed, at the time of the case study visit no further enquiries about funding had been made²⁴. This problem may be symptomatic of broader problems of the local capacity for organizing and implementing economic development.

The Issue of Artisanal Mining

Finally, a discussion of the impacts of mining in Obuasi would be incomplete without mentioning the activities of artisanal miners, or *galamsey* as they are called in Ghana. Informal mining has a very long history in Ghana, and the development of surface deposits in the Obuasi area led to an increase in informal mining activities in the area. Galamsey mining is illegal, as mining is not permitted without appropriate consents from the Ministry of Lands, Forestry and Mines and other government agencies. Whilst galamsey mining undoubtedly provides employment for a large number of workers (estimates for the Obuasi area range from 2,000 to 20,000 – perhaps because their numbers vary over time), many problems are also attributed to the galamsey:

- Galamsey make extensive use of mercury, but do this in an uncontrolled manner, leading to significant health risks and environmental pollution.

²⁴ Following the case study visit, AngloGold Ashanti has offered to assist the project's proponents in exploring other areas of finance.

- Galamsey are also known to rework old pits that are beyond further economic exploitation by formal mining firms. Sometimes this has led to rehabilitated mine sites being reopened, causing significant environmental harm. Galamsey do not rehabilitate areas they work.
- A small minority of artisanal miners interferes with AngloGold Ashanti operations. Galamsey have been known to steal high-grade ore from AngloGold Ashanti's trucks and loading areas, and on one occasion tunneled into an underground shaft to gain access to seams being exploited by AngloGold Ashanti. On this occasion the galamsey were armed and injured a number of AngloGold Ashanti employees.
- There have also been other incidents where AngloGold Ashanti security staff (who are unarmed but who do have guard dogs) have been attacked by artisanal miners.
- In the community, some of the stakeholders consulted attributed higher levels of general lawlessness and prostitution to galamsey (they are typically young and not from Obuasi).
- It is alleged that child labor is common in artisanal mining (the ICMM team witnessed this at one location).

There have also been counter-claims by the Wassa Association of Communities Affected by Mining (WACAM) that AngloGold Ashanti security staff have attacked galamsey. However, this is strenuously denied by AngloGold Ashanti, as well as by unions representing employees, including the security staff, and the police.

It is clear that there is no obvious solution to the galamsey and, as an issue, it applies across the gold mining areas of Ghana. Obuasi is less affected than some other areas, as most of the active workings are deep underground, and are hence harder to exploit without capital equipment and easier to secure than open pit mines (as they have limited access points). In particular, as such mining is illegal, it is not possible for AngloGold Ashanti to enter into partnerships whereby, for example, they could allow galamsey to work out pits that the company can no longer economically exploit. To do so would be to assume the health, safety and environmental liabilities associated with artisanal mining. Nor can AngloGold Ashanti be seen to tacitly permit artisanal mining on its sites, as they themselves are required to secure their concessions.

Steps are now being taken to complement the previous World Bank initiative to address the artisanal mining issue. The European Union is starting a three-year mining sector development strategy for Ghana, and artisanal mining is amongst the list of issues to be considered. At the time of the case study visit, the precise scope of work for the EU project was being finalized, so further details about specific actions with respect to galamsey were not available.

3.6

CONCLUSIONS

Mining has a long and important history in Ghana, and gold in particular has played a key role in the country's development. However, until around 1990,

gold was much less important in the modern era than other commodities, such as cocoa and timber. In the post-independence period, which coincided with Ghana's economic decline, gold mining was not a determining factor in Ghana's performance. Indeed, the mining industry's fortunes have in many ways mirrored those of other private businesses in Ghana.

However, since Ghana's economic recovery began, the mining sector has grown rapidly. This post-1986 renaissance was large in its absolute magnitude, and significant in helping to shape Ghana's present day economic situation. Any test of 'resource curse' propositions is also more relevantly applied to this period than to earlier periods. In much of the period of the "growth collapse" through to 1983, resource rent extraction in general was certainly a driving motivation of Ghana's political system and real exchange rate overvaluation, and excessive taxation of natural resources industries was endemic. However, because mining activity was then of a relatively limited economic significance compared with sectors such as cocoa, it was not a major target for such activity.

At the local level in Obuasi, mining continues to be the dominant economic activity, accounting for a large proportion of jobs and outputs. Mining companies across Ghana, including AngloGold Ashanti in Obuasi, make significant contributions to the communities in which they operate, although there remain problems with issues such as the distribution of economic benefits (via taxation and through procurement) and galamsey activities.

4 LINKS BETWEEN MINING INVESTMENT, ECONOMIC GROWTH AND POVERTY REDUCTION

4.1 OVERVIEW

The assessment so far has revealed a relatively benign relationship between Ghana's mining renaissance after 1986 and the generally good economic and social outcomes achieved since then. At the local level, mining is seen to contribute significantly to employment generation, and the evidence is strongly suggestive of a positive impact on poverty reduction. Companies also have large social investment programs, which seem to be increasingly focused on supporting livelihoods and development in their host communities.

At the macro level, there is little or no evidence in the data of a *national* resource curse linked to mining in any of the conventional senses of that term²⁵. A realistic level of the real exchange rates has been maintained since the late 1980s (see Section 5 for details); periodic bouts of inflationary pressures have been matched in general by nominal exchange rate depreciation; and the growth of non-mineral tradable GDP has been quite strong, which imply that the strength of the mining sector has not obviously undermined performance in other productive sectors. Nor is there any sign that the small number of districts of the country that are heavily mineral-dependent are worse off in either income or in broad social terms as a result of hosting mining activities.

However, these results fail to address some of the questions this report raises about possible *counterfactuals* – how much better should the outcomes have been given the huge volumes of investments that have been concentrated in just a few small parts of the country? They also sit uncomfortably with some of the negative assessments that others have made about mining's contribution²⁶.

This section reviews some of the more critical comments that have been made by authoritative commentators about mining's role in Ghana. The next section uses this critical commentary to assess the reasons behind success facts, challenges and constraints with respect to mining's contribution in Ghana – how to square the positive overall effects with the often strident criticisms that are still very evident? A partial answer is provided in the later sections of Section 5, which reviews some of the institutional weaknesses that still co-exist with the generally improved governance noted earlier.

²⁵ See the initiative's literature review for details of the different resource curse propositions. Local Dutch disease-type problems are of course possible given the pressure on prices (for housing and consumption goods) that are not matched by income rises for non-mine employees. The study has not looked at this possibility in any depth.

²⁶ The strongest critics in the case of Ghana include WACAM (Wassa Association of Communities affected by Mining) and FIAN (Food First Information and Action Network).

4.2.1 Introduction

The discussion in this sub-section is centered on a series of papers produced by various organisations in the past 3-4 years. They include Ghana-specific papers produced as a part of the Extractive Industries Review, and papers by a few of the more critical NGOs that document their criticisms. The World Bank's independent Operation Evaluation Department has recently taken a critical look at many aspects of mining activity in Ghana (including the effectiveness of the Bank's own mining operations). Its comments largely mirror those made by other informed advisers²⁷. Activist groups, such as WACAM and the FoodFirst Information and Action Network (FIAN), have articulated many of the same points earlier and usually with more force. Their comments are also used below. The most important matters raised in these reports are briefly summarized below²⁸. It is stressed that it was beyond the scope of this present study to evaluate independently the conclusions that have been reached by others.

4.2.2 The Mining Tax Take is Low

It was noted by the OED (2003) that mining's contribution to direct tax revenues has averaged 12 per cent of total government revenues (tax and non-tax), and that in 2001 the actual tax payments were \$31.8 million, with more than 50 per cent of this coming from the royalty levied on gold production. It was suggested that this was small for an industry turning over (then) in excess of \$600 million. It can be noted too that although Ghanaian law allows for a royalty of between three and 12 per cent, depending notionally on profit margins, no company seems to have ever paid more than three per cent²⁹.

This is difficult to evaluate without far more detailed work that is beyond the scope of the present study. However, it is significant that the OED (2003) also comments that "...there appears to be little prospect for increasing Ghana's share of earnings from the mining sector through higher taxes and royalties". This comment is based on the judgment that higher tax or royalty rates would undermine the competitive attractiveness of Ghana for mining investment and production and so lead to lower tax revenues from this source. It goes almost without saying that if this proposition was true in 2003 it must have been even more true in 1986, when the basic fiscal arrangements for mining were put in place and when Ghana's economy was still under serious stress.

²⁷ In spite of an involvement in Ghana's mining sector that dates back to World Bank's involvement in the ERP, it was only in the late 1990s that the World Bank started to focus seriously on the socio-economic concerns of mining communities.

²⁸ FIAN (2002) and OED (2003).

²⁹ The proposition about a low overall tax take was supported by the comparison of the after-tax rates of return in Ghana and in 22 comparator countries. Ghana ranked 11th with an after-tax return of 13.6%. Nine of the countries achieved returns of less than 12%. FIAN (2002) also points out that the corporate tax rate was far higher before the 1986 law (50-55% in 1974 for example).

4.2.3 *Flows of Mineral Royalties Back to the Producing Areas are Small*

There is no presumption in the theory of taxation that mineral taxes should be hypothecated in significant amounts for use in mining locations³⁰. However, the OED report did refer to difficulties that seem to arise because of the inadequate volumes of transfer to mining districts via the Mineral Development Fund (MDF). This point is explored more fully in the in-depth review of the Mineral Development Fund (MDF) that is set out in Section 5. The consequences of the possibly inadequate flow of funds are linked in the OED report to serious failures to address a variety of local problems including:

- The poor state of local infrastructure other than that provided directly by the mining companies – (note that the field work on which this comment was based related mainly to Wassa District).
- Local people feeling no perceptible benefit from the resources extracted from “their land”.
- There are few mechanisms whereby the mineral royalties can be used to help create jobs for the unemployed or displaced workers. The OED report refers to attacks by unemployed local youths on local traditional chiefs, including looting and destruction of palaces in two towns in Wassa in late 2001.
- Local mining companies are often blamed for some of these other problems in spite of paying their mineral royalties to government on a regular basis.

Comments on the further issues of inadequate transparency and disbursement processes for the MDF are provided later.

4.2.4 *Other Issues with the Use of Mineral Revenues*

There is an apparently sound recording and reconciliation of the royalty and tax payments made by the companies to the government and a very low likelihood of these being misdirected illegally. However, only 20 per cent of royalties (and almost none of the other taxes) are earmarked to help the mining localities. The balance is paid to the Consolidated Fund where it is available for general public expenditures. Insofar as these general expenditures have failed to result in a rapid increase in living standards (the view of the OED report), then the blame lies with the general system of public financial management and not specifically with the use of the earmarked elements³¹.

³⁰ Hypothecation is the practice of automatically linking revenues raised in one way to a specific expenditure item. It is generally regarded by economists as undesirable as public finance theory suggests that government revenues should be allocated on the basis of greatest need, not because a revenue source has been allocated.

³¹ In the past few years this general systems of fiscal management in Ghana has been much strengthened under the influence of the HIPC and GPRS initiatives and also because of the multi-donor aid coordination that has started to take place (see below and Annex 4).

4.2.5 *Land Use Conflicts*

There is no question that competition for land between large-scale surface mines and agriculture is a serious political and economic issue in Ghana. It is argued that many concessions in Wassu West and elsewhere are far too large – up to 150 sq kms – and that as a consequence the livelihoods of thousands of rural households can be negatively affected. The 1986 Minerals law attempts to deal with this and balance the interests of farmers and mining companies. But its interpretation gives rise to uncertainties and conditions for conflict³².

Another example quoted by FIAN (2002) concerns the Iduapriem Mine of AngloGold Ashanti, in which the International Finance Corporation (IFC) has a 20 per cent stake. FIAN's paper complains this investment resulted in the destruction of villages and the loss of access to clean drinking water for some and that only after protests by WACAM and others was an action plan to help the victims put in place. This is countered by the company, which reports that while there have been challenges, resettlement and compensation have been conducted in line with International Finance Corporation Safeguard Policies.

4.2.6 *Environmental Degradation and Galamsey*

There are well-documented examples in Ghana of environmental damage being caused by mining operations, although most commentary sees these as a legacy of old technologies that have now been phased out. For example, at the Obuasi mine visited by the project team it is clear that environmental standards have improved enormously in the last two decades.

However, the FIAN paper cites three accidental cyanide spills at internationally owned mines in 2001 without, they claim, proper compensation to the communities that suffered a loss of water amenity and illness.

However, in the debate on environmental impacts of mining, it is the large volume of galamsey mining in Ghana that bears the brunt of the criticism. Unregulated artisanal mining has to be seen in part as a symptom of other problems (eg high levels of youth unemployment). But it is also a major contributor to problems in its own right. This sub-sector of mining has a high absorptive capacity for unskilled labor and, with a low import content, it makes a big contribution to the sector's overall net foreign exchange earnings (although not, it should be noted, to government revenues, given the illegal nature of activities). But it is also responsible for massive environmental degradation³³.

³² The OED (2002) provides an example of the displacement of 20,000 rural people from 14 villages that took place in the late 1990s when the new GFGL surface mine at Tarkwa was opened. The resettlement, they argue, was conducted carefully and at very high costs to the company. However, compensation naturally benefited those families who could show that they were losing houses, crops or other specific property. It did not much help single young persons who owned no property. Nor did it help many sharecroppers who lost access to land that they previously cultivated.

³³ The OED (2003) notes that there are thousands of abandoned pits in mineral-rich areas in need of restoration. The stock of such degraded land increases every year and there is every prospect that the scale of artisanal mining, and the damage associated with it, will increase further in future. The working practices are also extremely harmful to the participating miners. This is because few if any precautions are taken against the inhalation of the dust particles that arise from the

Mine Closures

According to the OED (2003), this topic has received very little attention in Ghana in spite of its very considerable importance to local communities. The main experience so far, namely the closure of the Prestea underground mine, is said to “have devastated the local economy of the township and its future is a political “hot potato” for the government” (OED, 2003, page 22). Residents are expecting government assistance and, interestingly, some argue for the mine to be re-opened. The closure is coloring local attitudes to the opening up of surface mining. Similar concerns seem likely in other communities faced by prospective mine closures in the relatively near future. This criticism largely relates to the evident need for the planning for alternative economic activities to begin well in advance of the closures. This is not happening in Ghana.

4.3

UNRESOLVED ISSUES WITH RESPECT TO SOCIAL DEVELOPMENT AND MINING

A number of questions that can not be addressed by the earlier analysis of GLSS and CWIQ data also deserve closer scrutiny including:

- Has the improved economic growth achieved since the mid-1980s been as good as it might have been? Is there a counter-factual in which better use could have been made of the dynamic (and large incomes) coming from mining (including government revenues) to make a much bigger inroad into Ghana’s high rates of poverty and social deprivation (in absolute terms)?
- Are the averages misleading and do they hide particular pockets of severe deprivation (eg, among rural households in the Ashanti region) that may have been aggravated by mining?
- Could the Ghanaian government have provided for more effective redistributive policies for mining revenues that would have helped to deal with the problem of “Northern poverty” rather more decisively?
- Even in the narrow mining districts, poverty indicators are relatively good, but where is the physical evidence of the immense resources that have been extracted in those areas over the last century? In both Obuasi and Tarkwa – the main mining towns – many people still live in ramshackle houses located next to unpaved roads and open sewers³⁴.
- Are the gains sustainable, or will the increase in income of mining families be reversed when mining begins to decline at least in some areas of the country? Are there, at any rate, sufficient instruments available to try to mitigate this danger?

Some of these questions are considered in more detail in Section 5.

crushing of the rock, nor in the handling of the highly toxic mercury that is used to separate gold from the ore.

Furthermore, much of the artisanal mining occurs in unsupported and unsafe mine shafts: the risk of injury and death is much higher than in the formal mining sector. Child labour is reported as “not uncommon”.

³⁴ This might be compared to the city of Tema, which seems to have benefited more visibly from the presence of the port and a number of large industries.

Can it be said that on the basis of the analysis summarized in this report, and especially in Section 3, that mining has been a leading *cause* of Ghana's economic recovery since 1983? No – any such attribution of cause and effect would certainly be far too strong. This is because mining appears to have been a beneficiary of macro- and micro-economic reform, and because mining (even now only 5.2 per cent of GDP) is too small a sector to be able to cause the large changes seen in Ghana's economy. A more realistic proposition is that *mining has been a significant part of the productive base that has been supported by reform and which has, in turn, supported improved growth*, and also made possible some of the social gains that were referred to above.

Could that impact have been greater? It is hard to say, but the Botswana experience provides a comparator that is of possible relevance.

Could it have come earlier in Ghana's post-independence history? Almost certainly *yes* if economic policies had been more appropriate (see below). The natural resources (gold in particular) were in the ground and the basic capacity had been established in Obuasi and elsewhere for many years. A better framework of economic and commercial policies through the 1960s and 1970s would surely have seen some of the income gains from mining arriving much earlier.

Against this are the arguments made in the World Bank's 2003 OED that it is unclear what are the true net benefits to Ghana from large-scale gold mining. When undertaken by formal companies, as is now the case, the high import content and low levels of local procurement are argued to produce only modest amounts of foreign exchange (net) after all outflows have been accounted for. The arguments OED (2002) are that the net benefits are small, but still positive, relative to the high dollar value of the activity.

5 REASONS BEHIND SUCCESS FACTORS, CHALLENGES AND CONSTRAINTS

5.1 THE STANDARD EXPLANATIONS – ECONOMIC POLICIES AND GOVERNANCE

5.1.1 Introduction

This section turns from the analysis of outcomes to the consideration of causes. It first examines only the proximate causes (improved economic policies and governance as conventionally measured without as yet probing into how these improvements came about). This approach enables later sections to consider separately how the political dynamic in the country resulted in important policy change (ie after 1983), but also how that same dynamic may have left important components of necessary reform incomplete. It is this incompleteness in the process, it is contended, that can explain why the economic and social potential of mineral exploitation in Ghana may not have been realized fully.

5.2 ECONOMIC POLICIES

The detailed argument is presented in Annex 2. Here only the main findings are summarized.

Exchange Rate and Trade Policy

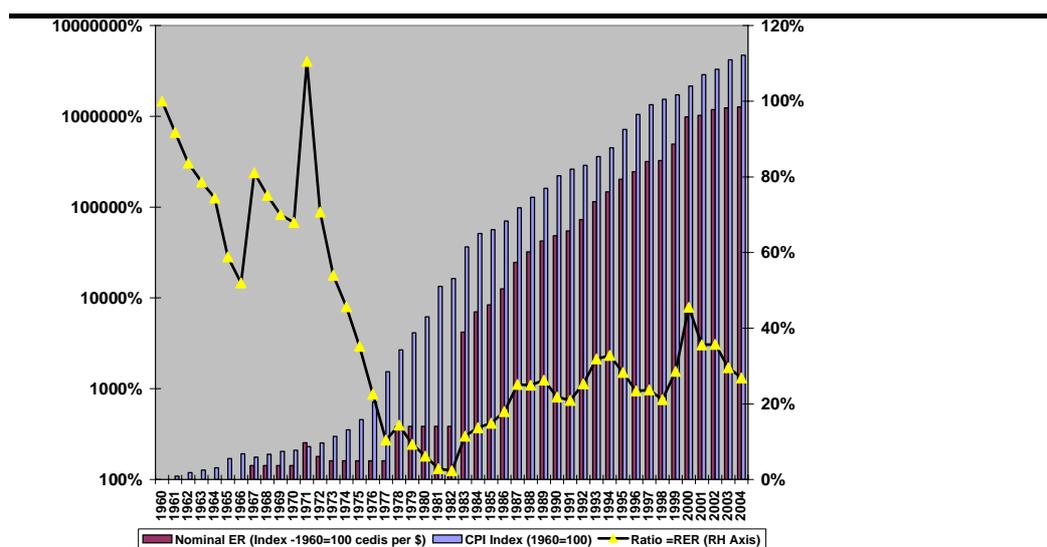
First, as regards economic policies, a central plank of the Economic Recovery Program of 1983 was its reform of trade and exchange rate policy. This reform successfully arrested the significant over-valuation of the Ghanaian currency that had been proceeding with few interruptions ever since 1960 (see Figure 11 below).

Figure 11 reveals that the over-valuation of the cedi was already significant by the mid-1970s (see the line chart which is calibrated against the right-hand scale of the diagram), and then got progressively worse until 1982 when the large ERP devaluation took place. The reforms have meant that, since about 1988, producers of tradable goods, including mining products, have enjoyed a realistic conversion rate on their foreign currency earnings in most goods – a far cry from the wholly unrealistic rates seen in the 1970s.

Inflation and Government Deficits

Also following the reforms, while inflationary pressures have occasionally been significant they have normally been short-lived. The greater flexibility of the exchange rate has meant that these pressures have also had fewer negative effects on the productive sectors than was the case in the 1970s.

Figure 11 Nominal and Real Exchange Rates 1960-2004



Source: Ghana ministry of finance

The ERP also succeeded in bringing some stability to the government budget and achieved this in substantial measure by boosting fiscal revenues relative to GDP (from only 5 per cent to over 27 per cent of GDP). As a result, the overall government balance was in surplus and was also relatively stable through the latter half of the 1980s. Subsequent instabilities have coincided with the electoral cycles of 1992, 1996 and 2000³⁵ and have been periodically criticized by the IMF. Revenue volatility has been one aspect of the problem³⁶. But this limited instability (relative to the 1970s) on the fiscal front did not disrupt the climate or incentives for commercial activity to anything like the extent that it had done in the 1970s.

The ERP's macro reforms have also been associated with a clear re-orientation of the allocation of resources in the economy. This is particularly evident in the balance of credit allocations between the private and public sectors. The data in Annex 2 show how credit flows were progressively re-allocated to the needs of the public sector through the 1970s with the peak share being achieved (like the peak of exchange rate over-valuation) in 1982 (91.7 per cent of the total credit going to the public sector). Since then the liberalization in the financial sector has largely reversed this balance with the public sector share declining to 53 per cent by 2003.

In summary, the fact that the serious over-valuation of the exchange rate predates the period of mining's resurgence after 1986 is inconsistent with the Dutch-disease variants of the resource curse propositions. These would

35 The fiscal slippages that occurred over this period were exacerbated in some years by the wait-and-see attitude adopted by many of Ghana's aid donors. Figure 11 includes donor grant receipts on the revenue side. Since these receipts are typically large in Ghana, the overall effect of delayed payment is itself a cause of fiscal instability. Declining commodity prices in the 1990s were an additional and special factor that was also negative for revenue.

36 These variations were mainly expenditure-related. However, Addison and Osei (2001) also observe that in the election years, revenue mobilisation efforts also declined. This can be ascribed in part to some volatility of the revenues collected from the mining sector. However, these revenues have risen consistently in nominal cedi terms. As a share of total IRS collections, mineral revenues fell from a peak of 17.9% in 1995 to a post-ERP low of 10.7% in 2002 (Source: Minerals Commission) but are only a small part of the explanation of the large overall swings in revenue.

suggest a positive link between the faster rate of exploitation of the natural resource and over-valuation. *Ghana's experience by contrast indicates that a more realistic exchange rate (combined with a reformed trade regime) was one of the necessary conditions for the renaissance of mining after 1986.*

Second, although the condition of Ghana's economy (policies and institutions) was far from ideal in the years after 1986, it would seem from the evidence of greatly enhanced investment in mining that sufficient was done at the policy level to re-establish mining as a serious commercial proposition. Other private sector activities such as agro industry and manufacturing were much slower to see large investments. However this is explained by the more demanding pre-conditions of policies and institutions needed for these sectors to prosper. It does not imply any cause-effect relationship that might run from the mining investments, on the one hand, to the quality of macro and other economic policies, on the other. For example, whilst gold mining needs relatively little infrastructure (for example, supplies could be flown in and product flown out), industries like food processing and manufacturing need sophisticated and reliable logistics infrastructure, including good roads, appropriate warehousing and large, modern port and airport infrastructure.

This section now turns to the other standard explanation of improved performance, namely "governance". Again the full details of the analysis are in Annex 3.

5.3

GOVERNANCE, LEGAL AND INSTITUTIONAL DEVELOPMENT

5.3.1 *Governance Before and After 1983*

The materials in Annex 3 provide a narrative account of the state of Ghana's governance in the early post-independence years. This can be compared with an assessment for the present day based on the six standard composite indicators of governance that are now routinely compiled by the World Bank for most countries, including Ghana. These indicators, which are explained more fully in Annexes 3 and 4, would most likely appear in the governance conditionality if the proposals of the Extractive Industries Review (EIR) were to be adopted by the World Bank and other donors.

Table 14 below depicts Ghana's performance on the World Bank governance indicators from 1996 to 2002. The numerical values that are shown range in value from -2.5 (worst) to +2.5 (best).

Table 14 Ghana's Governance Indicators 1996 – 2004

	1996	1998	2000	2002	2004
Voice and Accountability	-0.33	0.53	0.00	0.01	0.39
Political Stability	-0.06	-0.07	-0.10	-0.11	-0.06
Government Effectiveness	-0.15	-0.13	0.08	0.01	0.17
Regulatory Quality	-0.17	0.21	0.11	0.29	-0.28
Rule of Law	-0.11	-0.06	-0.16	-0.15	-0.16
Control of Corruption	-0.44	-0.44	-0.41	-0.40	-0.17

Source: World Bank Governance Indicators

With the exception of the control of corruption, Ghana's six indicators have hovered close to zero. This implies that Ghana has moved a long way from the chronic failures of governance in the 1970s. Some crude calculations based on the narrative account of the pre-1983 period suggest that since around 1983, Ghana has seen an improvement that averages about 0.7 points across the six indicators. However, scores that are close to zero certainly suggest that today's system of governance and institutions is still characterized by weaknesses that undermine performance, recognizing that + 2.5 is the best obtainable score.

It is also informative to examine Ghana's performance in relation to sub-Saharan Africa as a whole. Data in Annex 3 show that in relation to all six indicators, Ghana's performance now ranks higher than the African average. On some indicators, such as government effectiveness, Ghana is comfortably situated in the top half of countries. The two indicators where this is not true are those relating to regulatory quality and corruption.

In summary, it is a further reasonable presumption that improved governance has played its part in helping to achieve the improved outcomes in both economic and in social terms seen since the mid-1980s. But again the story is similar to that found for economic policy. It is *limited and incomplete* improvements in governance that seem to have been involved in the improvements in outcomes (both economic and social), which have been seen. It is still necessary to examine the consequences that arise from the reforms that have failed to be made or completed.

5.4

EXPLANATIONS USING THE GOVERNANCE FRAMEWORK FROM THE TOOLKIT

The taxonomy proposed in Stage 6 of the Toolkit from Phase 1 of this initiative can be used to extend the explanations that have just been provided and also to make some sense of some of the criticisms that were summarized in Section 4. The taxonomy describes different aspects of "governance" and their interactions with crucial drivers of development (eg a strong state). It is reproduced as Table 15 below. It is noted that this taxonomy goes well beyond the simple set of aggregative governance indicators that were assessed in the previous section (and are the measuring rods used in most international comment about "governance"). This section makes selective use of this structure to try to make sense of the inconsistencies that have so far been unveiled.

There is an important paradox. Both mining companies and national policy-makers observe (reasonably in most cases) that they have done a sound job to establish and support a thriving industry in a difficult environment (Ghana before 1983 was almost a failed state). In doing so they have contributed to a significant improvement in both macroeconomic growth and in the country's overall social and poverty situation. And yet their efforts confront the criticisms (many of them strident in tone) summarized in the previous section. What should they do differently in order to satisfy a larger set of constituencies so that the successes that they themselves perceive can indeed become broadly accepted as such? How should they plan for and evaluate the actions they must take in opening new mines in order to avoid similar complaints in future?

The answer, it is suggested, lies in a fuller understanding of the governance structures that link the large commercial mining investment on the one hand with the wide range of affected parties mainly in localized communities on the other. The improved governance that could and did produce the mining renaissance after 1986 was not complete, nor was it sufficient to cater for, or empower, the interests of all affected parties. Nor has it necessarily provided for the sustainability of the good performance seen so far either in an environmental or in an economic growth sense. So what were the deficiencies, how did they arise and how might they be corrected? The taxonomy provides at least partial answers to this question.

5.5 *INCOMPLETE GOVERNANCE AND INSTITUTIONS*

5.5.1 *Efficient Government (Column 1)*

Looking at the first column of Table 15, it can be asserted with reasonable confidence that the very weak governance in Ghana pre-1983 was definitely characterized by deficiencies in almost all the areas of "efficiency of governance" listed there. The ERP reform did not instantly change this reality. On the contrary, all that happened initially was that Ghana acquired a "strong state" in the form of the second government of Flt Lt. Rawlings and the various reform commitments that it took on from 1983³⁷. To achieve the economic turnaround against the objections of the numerous established and powerful vested interests of the old system, the new power, almost by definition, needed to be *highly centralized*: power being located in the hands of a small number of politicians in addition to Rawlings.

37 The strength of his government came from its military control and not from any popular mandate proven in elections. Few objective observers would dispute that the strength of the state at that time was crucial to putting an end to the "vampire state" attitudes that had ruined the economy in the preceding decade.

Table 15 Taxonomy Linking Common Features of Good Governance and the Operational Issues

<i>Cross-cutting taxonomy of efficient governance</i>	<i>Legal and Regulatory Framework</i>	<i>Political-Administrative System</i>	<i>Fiscal Regime & Economic Policies</i>	<i>Private Sector Development</i>	<i>Social Cohesion and basic Public Service Delivery</i>
<ul style="list-style-type: none"> • <i>State strength</i>: Legitimate and capable states at all levels (national, regional, and local); a government whose policy decisions are credible and broadly accepted and an administrative apparatus that can implemented these; • <i>Limits to state strength</i>: Institutional checks and balances that support the legitimacy of government and the administrative apparatus and guard against abuse of state power at all levels (national, regional and local); • <i>Compatibility of formal and informal institutions, rights and rules</i>; • <i>Legitimacy of formal economic institutions</i> guarding essential necessities of a stable economy (eg exchange rate, fiscal sustainability) ; • <i>Technical capacity</i> of the public sector/civil service and decision makers at all levels. 	<ul style="list-style-type: none"> • Basic constitutional set-up, general legal framework and legal mechanisms of consensus building and conflict resolution at all levels of government and the state; • Consistency within the regulatory framework for public sector management and with regard to the interface between public and private sector at all levels of government and state-society relations; • Compatibility of mining-sector specific legislation with general constitutional and legal framework; • Legitimacy of property rights and ability to enforce these peacefully at all levels (national, regional, local); • Company legislation and ownership structures: Regulatory framework that supports economic activities of different sized enterprises (large, medium, small and micro). 	<ul style="list-style-type: none"> • Political system: <ul style="list-style-type: none"> - Process by which government (at the national, regional and local level) is selected, monitored and replaced; - Institutional channels through which political interest groups have 'voice' at the different levels; • Political representation at different tiers of government: Credibility and stability of legislative outcomes; • Policy decision making process: Relationships between the Legislature, government and the civil service. • Capacity of the 'state' to formulate and implement policies down the vertical chain of public authority from central government to the very local level; 	<ul style="list-style-type: none"> • Sound aggregate macroeconomic management: exchange rate regime and monetary policies; • Legitimacy and dynamics of fiscal (revenue) regime: taxation, royalties, tax exemptions; • Public expenditure management capacity: allocative and operational efficiency at different tiers of government (national, regional, local) • Non-conflicting fiscal accountability relationships between the electorate, the legislature and the executive and within the executive at different levels; • Public administrative system & capacity at all levels (national, regional and local) 	<ul style="list-style-type: none"> • Regulatory framework for economic activities for different sized enterprises (large, medium, small and micro enterprises); • Supportive public services at the national and sub-national level; In particular: <ul style="list-style-type: none"> ○ <i>Infrastructure</i>: National and regional regulatory policies, coverage, collaborative funding and financing arrangements at different tiers of government; ○ <i>Utilities</i>: national and regional regulatory policies, coverage, collaborative funding and financing arrangements at different tiers of government; ○ <i>Human capital and labour market institutions</i>: Supportive educational policies at different tiers of government and different educational levels; 	<ul style="list-style-type: none"> • Community development, and local organisational capacity: Orderly organisational rights and opportunities; • Industrial/labour market relations that are conducive to consensus building; • Institutional mechanisms for consensus building and management of different socio-economical interests; • Political representation with structured institutional channels for interest representation at all levels; • Basic welfare and social system across all geographical areas; • Equal opportunities in access to primary and secondary education across all geographical areas;

Centralized power was also important in at least two other ways:

- it meant the government could more easily reach agreement with the IMF and the World Bank than had been possible in the more democratic era at the beginning of the 1970s;
- it meant it was easier for the government to put in place selected legal reforms favorable to particular productive activities that were deemed important to help kick-start the economy.

The Legal and Regulatory Framework (Column 2)

It is significant that among the first reforms in relation to the legal and regulatory framework that the new administration undertook sought to improve property rights and the specific regulatory regimes in key sectors, including mining. A centralized government almost by definition has to be selective in the legal reforms it can undertake. The fact that the new mining laws, including the reduction in the corporate tax rate, came early in the program reflects an important proposition. Mining had the capability to generate foreign exchange earnings even in advance of the numerous other reforms that Rawling's advisers at that time would have known to be necessary. Similarly, the reform of the foreign exchange regime was obviously sufficient to get a quick turnaround in cocoa export revenues (via the reversal of smuggling through the Cote d'Ivoire) without too many other reforms being necessary.

In short, the legal and regulatory changes pursued in the early years of the ERP were arguably those deemed essential to get the "quick wins" from reform that the leadership knew to be necessary. In a non-democratic and centralized regime there was far less concern initially about most other issues in column 2, such as political access for different types of stakeholders and basic constitutional rights – including human rights (see Box 3).

Nor was there much political need in the early reform years to push for legal reforms that would enhance power at the local level or give real voice to disadvantaged communities or special interests within them. This applies equally to the traditionally disadvantaged (the arable farmers of the North) as it does to any disadvantaged in mining areas.

If it comes to looking for the origins of the problems at local level emphasized by activist groups such as WACAM and FIAN, then many of them can probably be found in the political mindsets of the early reforming government. Were those governments right to have such attitudes? Obviously it would have been better for many groups in society if they had thought and acted differently. Could the governments have acted differently and still "succeeded" given the political mess that they inherited? Regrettable as it may be, excessive centralization is probably a price that a weak state (such as Ghana before 1983) had to pay to achieve the economic recovery.

Alleged human rights abuses by the post-independence government started in Ghana very soon after independence. In 1958, President Nkrumah promulgated the *Preventive Detention Act* that led to many reported cases of abuse. Both the NLC and the Busia governments also used harsh methods against political opponents. But the matter worsened further with the military government of Col Acheampong and subsequent military governments under which respect for the state and its laws withered. Jerry Rawlings' mutiny in 1979 resulted in several executions, including those of three former heads of state. His second coup in December 1981 was accompanied by the suspension of the constitution, the banning of political parties and the arrest of numerous party leaders. In 1983, the government promulgated PNDC Law 42, which gave the PNDC and its chairman Rawlings wide and apparently arbitrary powers over Ghanaian citizens. Amnesty International shortly afterwards voiced its concern about the establishment of public tribunals to try political criminals, detention without trial of government opponents, the unfair trial of the same persons, and reports of arbitrary killings and beatings of political opponents by armed forces personnel.

Significant restrictions on personal freedoms continued in the 1990s, and in 1991 the PNDC arrested several opposition leaders for criticizing the Rawlings' regime. The new Constitution in 1992 had as one of its key objectives the restoration of a broad-based improvement in this situation. It sought to achieve this by guaranteeing basic human rights and setting up an autonomous Commission on Human Rights and Administrative Justice. By late 1994, this commission had received some 2500 complaints and petitions from Ghanaians, of which 1000 had been dealt with. The Commission in a preliminary report issued in 2001 has reviewed several cases of alleged human rights violations linked to mining activities in Wassa West and, according to FIAN, has found some of these allegations to be well-founded³⁸.

5.5.2 *Fiscal Regimes and Administrative Capacity (Columns 3 and 4)*

Similarly, in the early years of reform, several factors worked against major fiscal and public administrative reform. Of course the new regime needed a larger tax base but that was relatively easily achieved once the main tax bases (cocoa, minerals and other exports and petroleum and other imports) started to rise once again by the late 1980s. But a centralized regime also needs to have a reasonably centralized control of expenditures because it is through the discretionary allocation of public expenditure that political support can be achieved or retained. So any real decentralization of expenditure control was low on the agenda of reform.

It is noticeable that ten years on, when the system began to edge its way towards greater democracy with the elections in 1992, the administration felt the need to spend heavily to ensure its ability to retain power. Hence the large swings of the budget into deficit in 1992, but also in the later election years of the 1990s, as criticized by the IMF.

There was no assurance at that time that the money was spent well or directed to the needs of the country's most vulnerable. Centralized power was still in place and the voice of local communities had no systematic way to be heard. Even the enforcement of greater accountability and control of expenditure at the national level has only really been prominent on the reform agenda in the

³⁸ Commission on Human Rights and Administrative Justice (2001)

past five years. And this has happened mainly because of the donor pressure associated with the introduction of HIPC debt relief and the need to monitor more closely the poverty impacts of expenditure in the framework of the GPRS³⁹.

Arguably this donor pressure is also centralizing in nature. The anxiety of the donor community to achieve a strong anti-poverty effect from the debt relief drives them to want more effective control of expenditures.

Again Ghana's post-independence history explains how an over-centralized fiscal control came about. Initially this was associated with lax control of, and accountability for, expenditures even at the national level. Although this laxity has been significantly reformed (see Annex 4), the pressures for the reforms seem to be perpetuating an inherently centralist approach and de-emphasizing local community pressures. This is something of a paradox given that poverty-reduction is now so high on the agenda⁴⁰.

5.5.3 *Private Sector Development (Column 5)*

Ghana's reforms have shifted the balance of incentives sharply towards greater private sector involvement in the economy. But the legacy of weak institutions and governance has meant that it has been a very slow process to achieve the new private sector investment and production in manufacturing and more modern forms of agriculture. Mining, as was suggested earlier, achieved its investment recovery much sooner than most other sectors because that involved less demanding policies, infrastructure and institutions as its pre-requisite. For example, gold mining does not require an extensive highway network, an advanced logistics infrastructure or modern ports and airports to handle bulk or perishable cargoes.

As was explained in the review of Obuasi in Section 3, mining companies have played an important role in catalyzing new private sector activities in other sectors. Examples from tourism, construction and financial services are referred to elsewhere. As catalysts, the companies have also helped to create jobs and livelihoods beyond those that they create in the mainstream business areas.

However, a very substantial part of this – and the areas where most impact has been visibly seen – relates to nationally important new activities. Examples include Labadi beach in tourism; Ecobank in financial services; and Taysec in construction. Important as these new activities have been, they do not respond directly to the concerns about the need for job creation in the vicinity of mines, as articulated by many local communities and as transmitted by the NGOs, such as FIAN. They relate more obviously to the perceived responsibilities of the mining companies to contribute to national economic

³⁹ As was mentioned earlier, even the 1990s were characterized by significant politically motivated expenditures (and large deficits) linked to the three general elections in that decade.

⁴⁰ The past few years, with the evolution of the GPRS, have seen a huge emphasis on poverty reduction. But the response has been nationally delivered. Ideas for poverty reduction that originate locally still seem to be relatively under-developed.

development rather than to local and community development. This is again consistent with the essentially centralist view that has emerged from Ghana's incomplete systems of governance.

To be fair to the companies, several mining companies (including AngloGold Ashanti) have funded alternative livelihood projects in their respective regions, including support for particular new industries such as fish farming, piggeries, bakeries, and soap making. In most cases these initiatives seem to have been *ad hoc* in nature and not part of any concerted diversification strategy of the type that Ghana's mining areas ideally need. It is in any case questionable whether it is reasonable to expect mining companies to originate regional and community strategies. They should be expected to contribute to such strategies where they exist. However, with a centralized fiscal system the capacity for locally driven regional planning is poor.

5.5.4 Overall

In brief, the contention of this report is that many of the specific problems in mining areas arise systematically from the manner in which governance in Ghana has evolved since 1983. The reforms that political imperatives dictated at that time placed power in a very limited number of hands (in government, in international agencies and in a few areas of the private sector). There was little pressure, incentive and apparent need to share this power systematically with local communities. Those local pressures that were politically significant could be addressed by selective but nationally determined expenditures or by explicit schemes such as the payments to traditional councils from the Minerals Development Fund but with very weak accountability attached. In this way traditional councils could be funded but without too much formal obligation to use their funds for community development. When poverty moved up the agenda with the HIPC initiative this too was largely addressed through national, rather than local initiatives.

The approach has been broadly successful. Ghana has turned its economy around and in the process has made big inroads on poverty and social welfare concerns. But this process is seriously incomplete and its incompleteness is reflected clearly in the specific problems seen in many local communities: mining and non-mining. So the message is not to reverse those policy reforms that have brought the recovery of economic activity. Rather the need is to shift the balance of empowerment and fiscal resources much more to local level decision makers and away from the centre. This is a shift to which major donors as well as government must make a fundamental commitment in order to build the necessary capacity. If that can happen, the spending power of the mining companies (either via their royalty payments or on a discretionary social investment basis) will be much more likely to help address the serious concerns at local community level that the activist NGOs articulate so forcefully.

Having made these general propositions, this section now tries to defend them by focusing detailed attention on the issues listed in column 3 of Table 15, namely the fiscal dimensions of Ghana's governance and especially of the central: local relationships. The arrangements for accountability at national level and the reforms that have been achieved there are discussed at some length in Annex 4.

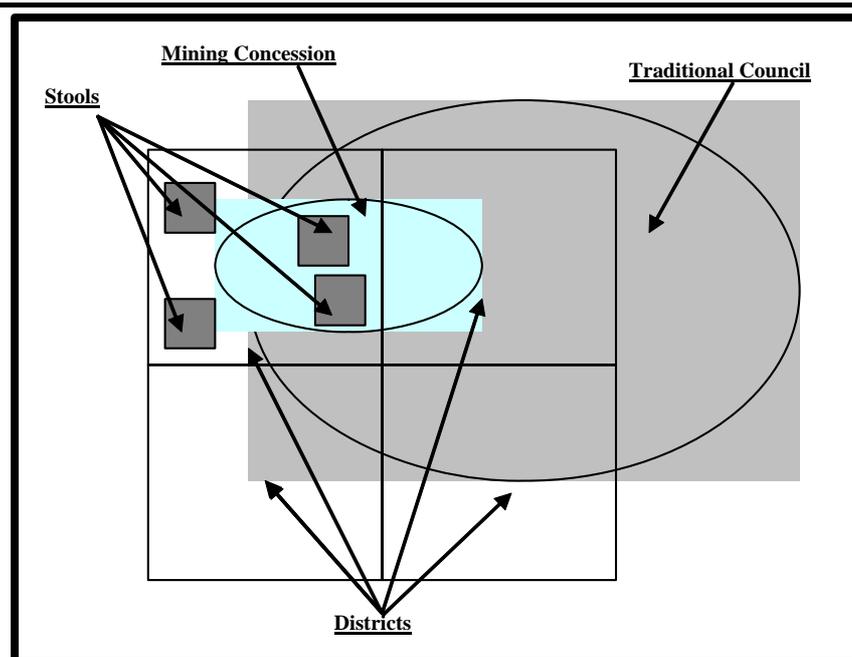
In order to make full sense of the points that have been argued above it is necessary to appreciate the dual governing systems that are operational in Ghana at the local level. The two systems are comprised of the District Assemblies and the Traditional Councils:

- The formal government structure as a whole is made up of a three tier structure: central government, including the Ministry of Local Government; the 10 regions, which coordinate decentralization issues through regional coordinating councils; and the municipal, metropolitan and district assemblies (MMDAs). The administration operating at the local level is made up of the district assemblies, which in turn oversee town, area and zone councils; and
- The second (informal) system of administration is built upon traditional authority. Such authority is deeply grounded in Ghana's history and traditions. There is no clear legal and regulatory framework within which financial management by the traditional councils and stools are managed. Its liaison with the central government is through the Administrator of Stool Lands. It is made up of the traditional councils, which in turn oversee the stools. The stools correspond to a chiefdom: typically comprising a single town or village or cluster of villages. The traditional councils embody a set of peoples, covering a number of towns and villages and often will extend beyond a single district.

Figure 12 presents a schematic representation of the spatial overlap of responsibility of the two systems – formal and informal – at the local level. The most significant point here is that there is no consistent alignment between the two administrative systems. The subsequent complexity that is introduced in respect of financial reporting and monitoring has important consequences with regards to transparency, and accountability applied at the local level. *Who is responsible for dealing with each problem?* This is a particular challenge for designing any system of mineral revenue allocation⁴¹.

⁴¹ In addition, although clear laws and regulations govern expenditure management by the district assemblies, this does not apply equally to the traditional councils. These councils maintain a certain level of independence if not sovereignty. Consequently, while they are accountable to their people, there are no direct oversight systems of modern public finance management applied to them. The missing elements include financial reporting, audit, and mandatory publication of expenditure records. Nonetheless, the two informal parts of the structure do receive a significant part of the total distribution of mining and other royalties. For example, the traditional councils receive a 20 per cent share and the stools a 25 per cent share of all royalty payments paid to the local communities via the Minerals Development Fund (see details of the Minerals Development Fund below).

Figure 12 Schematic Representation of Local Political Administration



As the diagram shows, a mining concession's boundaries can traverse more than a single stool land, district or even traditional council. The upshot of this is that any allocation scheme for disbursing mining royalties, or indeed any system for promoting local economic development, must set up arrangements encompassing a number of stools and possible districts and traditional councils. Even with very strong finance systems (including good accounts and accountability) at each of these levels, it would be difficult to achieve full transparency from such an arrangement. Where the technical financial capacities are weak the problems of transparency are necessarily going to be compounded.

5.7 THE MINERALS DEVELOPMENT FUND (MDF)

Budget funds flow to the local communities in Ghana in various ways. The overall review of the fiscal system (Annex 4) suggests that there is a significant mining contribution to revenue and that much of this revenue flows (via a reasonably well working central government budget release system) back to the communities. Indeed, in the absence of significant local tax capacity, most of the funding for the district assemblies (MMDAs) is from government grants and around 15 per cent of these funds probably arise from mining contributions.

Even in districts such as Wasswa West, which attracts 36 per cent of its total income from the Minerals Development Fund, there would be another 13 per cent or more contribution from mining contributions through government

grants. For other mining districts this parallel source of mining contributions would be dominant over the MDF contributions.

But the so-called Minerals Development Fund is the main specific instrument used to re-distribute mining royalties and the only grant source that has a mandate to deal explicitly with the special problems of mining areas⁴². So it is appropriate to look at this in more detail⁴³. What follows is a brief summary of key issues.

The purpose of the fund is twofold:

- To support sector institutions, including the Department of Mines, the Geological Survey Department and the Minerals Commission, through the funding of special projects.
- To compensate for any detrimental effects mining might have in their areas of operation and to support development in the local communities. Although it is not explicit it is assumed that “compensation” here refers to expenditures to deal with the particular problems of mining areas over and above those that deal with the direct damage that the mining companies themselves contract to address (eg restoring mining land to its original state once mines are worked out).

Half of the MDF (10 per cent of the mining royalties) is used to provide support to the mining sector institutions and is paid in response to applications to the Minister of Finance, through the sector Minister. These funds have been used to pay for such things as computers and printers at the Department of Geology at the University of Ghana. *Significantly no payments are made to the Environmental Protection Agency (EPA), even though this is the main agency to address the physical damage done by mining.* Nor is there real certainty in the amounts received by the other agencies. In practice the disbursements from the MDF are paid on a quarterly basis but payment is typically around six months late. The other half is transferred on a quarterly basis to the Administrator of Stool Lands⁴⁴.

The Minerals Development Fund’s activities are not segregated within the budget structure. *No separate tracking is maintained for these expenditures and so it is not clear whether in practice all the 10 per cent is disbursed. It is known that in*

42 It was established in 1993, in response to a proposal from the Minerals Commission. Significantly, the MDF does not have a basis in any legislative instrument. One unfortunate consequence of this was that in 2001, with the change of government, no disbursements were made to the fund. However, after evaluating the importance and benefits, payments to the fund were resumed in 2002.

43 Under the administrative guidelines 20 per cent of the royalties received from the mining sector would be used to service the MDF. This was not set up as a separate fund, but rather described the allocation of resources out of the Consolidated Fund. From its inception in 1993, until 1998, the Minerals Development Fund was managed by the Minerals Commission. But since 1998, in accordance with the new Constitution, the MDF has been managed by the Administrator of Stool Lands.

44 Article 267 (6) of the Constitution describes how such stool land receipts are to be allocated. Ten per cent of the revenue accruing from stool lands is retained by the Administrator of Stool Lands to cover administrative expenses. For the remaining portion, the distribution of funds is to be disbursed in the following proportions:

- (a) 25 per cent to the stool through the traditional authority for the maintenance of the stool in keeping with its status;
- (b) 20 per cent to the traditional authority; and
- (c) 55 per cent to the district assembly, within the area of authority of which the stool lands are situated.

some years it has not been. Nor is there any tracking of royalty collection within the revenue lines, nor the tracking of disbursements under local government expenditure. Incorporating this in the budget would greatly enhance the transparency of the fund's management. The completion and effective implementation of the EITI review and its recommendations should effectively address this issue in Ghana.

The analysis of the local authority beneficiaries of the MDF shows that far from providing a steady flow of funding on a year-to-year basis, the MDF payments fluctuate dramatically from year to year, with subsequent detrimental impacts on planning, budgeting, expenditure management and subsequently development. *This volatility is far greater than the volatility of aggregate mineral revenues received by the central government*⁴⁵. Recognising too that late payments are common, the usefulness of revenues to the beneficiaries is significantly reduced

The problems of the annual fluctuations shown are amplified further as a consequence of the mechanisms for allocating payments to the stools and traditional councils. As Figure showed, the concessions may cut across district lines; the traditional authority boundaries do not coincide with district boundaries and consequently the allocation of such funds is very complex and far from predictable.

A closer look at the situation in the Ashanti region where the case study Obuasi mine is located, indicates no consistent pattern in the allocation of funds between the traditional councils and between the stools. For example, the traditional councils' share in total varied from 19 per cent of the total in 2000 to 36 per cent in 2004. Individual councils saw even larger year-to-year changes in their allocations and in their shares. Other puzzling features also appear. For example, the capital of the Ashanti region, Kumasi, is included as one of the stools in 2000 but is dropped in subsequent years.

There appears to be rather more consistency in the allocation of funds to the district assemblies. But for individual assemblies, the year-to-year changes are still very large and certainly far larger than the annual swings in aggregate mining revenues received by central government⁴⁶.

Finally, it is useful to explore the question of the ultimate uses of some of these transfers. There is strong evidence that the payments to traditional councils and stools tend to finance expenditures other than those that benefit the local communities involved. This is at least partly because of the genuine uncertainty as to the "appropriate purpose" of this share of the funds. The wording – "Stool Land revenues are to be used to maintain the stool in keeping with its status" – has been interpreted as meaning that it is legitimate to pay for regalia and the trappings of royalty – limousines, jewellery and

⁴⁵ This is a main component of the resource curse literature. The evidence presented here shows that argument in a very different light.

⁴⁶ In discussions with officials it was explained that the deviation from the 55% ratio could be the result of distortions arising from transfers between regions in the allocation of traditional authorities.

ceremony. This interpretation is in contrast to the expectations of the subjects of the stools, who presume that these funds are to be applied primarily to development projects.

But there is no easy way to reconcile or debate these matters since no budgets are prepared, nor are there any accountable systems for procurement, contracting or expenditure management. Further, traditional councils and stools do not prepare publicly available financial statements, nor are they subject to oversight by the Internal Audit Department, the Ministry of Local Government or even the Office of the Auditor General. In summary, there is little or no accountability for these funds⁴⁷.

In summary, the detailed examination of the Minerals Development Fund reveals a variety of reasons why this system cannot yet deliver as effectively as intended on its prime objective, namely: “to compensate for any detrimental effects of mining in their areas of operation and to support development in the local communities”. The principal problems include:

- The size of the allocation to the fund is arguably too small given the variety of special problems that confront the mining areas⁴⁸.
- The payments from the fund to district assemblies and other local communities can be highly volatile from one year to another and are also typically paid late. So the revenue basis for local authorities complying with their mandate to mining areas as just quoted is weak and unreliable.
- At least one part of the allocation of the fund – that to traditional councils and stools – gets used for purposes that have little developmental impact.
- The central government agency mainly responsible for redressing the environmental harm associated with mining, namely the EPA, is not a beneficiary of MDF revenues and is chronically under-resourced.

5.8

LOCAL GOVERNMENT FINANCES MORE GENERALLY

5.8.1 Introduction

In addition to these specific problems with the MDF there is a second set of issues related to the general capacity of local governments to plan effectively for, and to implement strategies for, the longer-term development of the communities that they represent. This includes the capacity to help orchestrate longer-term diversification strategies for communities affected by mining

⁴⁷ In principle and in keeping with the broad aims of the EITI, accountability might be introduced through the use of funding agreements entered into between the government and the traditional councils, whose conditionalities would include the preparation of budgets, financial statements, the application of standard set of procurement regulations and independent audits. This though would require a new legal and regulatory framework for the disbursement and management of land revenues and royalties including the Minerals Development Fund. Whether such changes are feasible is another matter. Officials see this as a very sensitive political issue that raises questions pertaining to the undermining of traditional rights and the sovereignty of chiefdoms.

⁴⁸ It is recognized that there are arguments in tax theory that no part of the minerals royalties should necessarily be hypothecated for the use of the mineral areas. However, as discussed earlier, as there are such complex special problems in these areas, the practicality of eliminating special arrangements such as the MDF is low – certainly it is the expectation of local communities that they should receive some visible benefits for allowing “their land” to be used for mineral exploitation.

activity. To probe this set of problems, this report looks briefly at Ghana's system of local government finance.

The legal basis for decentralization is now reasonably well established and is summarized in Annex 4. The main problems relate to the *execution* of the functions that are assigned downwards. In particular, the MMDAs although formally responsible for the overall development of the district⁴⁹, are often poorly equipped – with people and funds – to discharge such responsibilities effectively.

In discussing the funding received by MMDAs in Ghana it is important also to place it in the context of other countries. Performance in the developed countries shows local government revenues to vary between 10 per cent and 15 per cent of total national revenues. In middle-income countries, such as Thailand, that ratio is five per cent of GDP. In Ghana the figure is approximately two per cent of GDP. In short, only trivial amounts of money are under the direct disposal of the local authorities.

The fiscal resource base of the MMDAs is nonetheless diverse. The main sources of funding are as follows:

1. self-generated revenues;
2. transfers from the central government and donors;
3. borrowing; and
4. private sector participation.

5.8.2 *Self-generated Revenues*

Of the total of 110 MMDAs, three are metropolitan assemblies, five municipal assemblies and 102 are district assemblies. On average, between 1995 and 1998 the metropolitan assemblies generated 76 per cent, municipals 20 per cent and the districts only four per cent of the total revenues raised by local governments. In practice the self-generated funds are heavily concentrated in just three large urban areas.

Rural areas, generally including those where mining activities are located, usually have a very low independent revenue-raising capacity. Furthermore, the local tax (and non-tax revenue) bases show very low rates of elasticity⁵⁰ and so grow slowly even when the area in question is prospering and gaining population. Apart from the insignificant contribution from the head tax, there is no single significant source of revenue that increases directly with the growth in population. Actual revenue collections also show high rates of variability over time.

⁴⁹ Specifically, they have responsibility for formulating and executing development plans, programs and strategies for the effective mobilization of resources necessary for the overall development of the district. They are supposed to promote and support productive activity and social development in the district; initiate programs for the development of basic infrastructure and provide municipal works and services in the district.

⁵⁰ In other words, the MMDAs' productive taxes do not vary significantly with population, income or price level: they are inelastic.

These various problems together severely limit the ability of the district assemblies to generate sufficient revenues to meet their needs and make it extremely difficult for them to forecast cash flows and manage their budgets.

Transfers from, and so dependency on, central government are the only realistic method of financing the large and often growing needs of sub-national governments.

5.8.3 *The Implications for Mining Areas*

The implications of this system of local government finance have been assessed by examining how it works out in practice in the main mining districts of the country. That task is made easier by the fact that two regions presently dominate the distribution of mining activity in Ghana. These are the Western and Ashanti regions, which are responsible for over 90 per cent of all of the mining activity in Ghana⁵¹.

The main findings are as follows:

- The earlier critical comments made in general terms about the Minerals Development Fund are clearly of great relevance to the two most important mining districts (Wassa West and Obuasi), given their very high levels of dependence on this source of funding.
- In particular, the unpredictable nature of the amounts to be received must make it extraordinarily difficult for those two administrations to plan for their longer-term development. The gap between budgeted and actual receipts is merely one more obvious manifestation of this point (see Annex 4).
- In other significant mining districts, such as Bibiani and Akim North, the revenue receipts from the MDF appear to be small both in absolute terms and as a share of total revenues. So it is hard to see the sense in which the MDF is complying with its mandate in these districts (and by likely implication in other mining districts). Irrespective of the merits of a hypothecated fund such as the MDF, if one exists, allocation should be applied consistently.
- The self-generated revenues from revenue sources, such as rates, fees, fines and license fees, are absolutely small in all four of the identified mining districts shown in the tables. These are the equivalent of only around \$120,000 of actual receipts in the two main mining districts. This amount is extremely small as each of the two regions generated total mining revenues of around \$250,000,000. It means that the communities in question only receive in their own right less than half of one per cent of the total revenues generated by the mining activity that they host. All other revenues come to them on a partly discretionary basis from central government and donors.

⁵¹ There are currently 15 operating mines in Ghana. With plans to start operations in seven new mines, including the first large gold mine in the Brong Ahafo region, the regional distribution of significant mineral producing districts is expected to increase over the next few years. This will mean that the challenges described here will apply to several more districts.

This present section has shown that Ghana's local public finance system is less well attuned to deal with the issues raised by the presence of significant mining activities. With a prospective increase in mining in the next few years, this is a problem that goes way beyond the specific problems in Obuasi.

The essence of the problem is that mining creates many new challenges for the local communities in which the mines locate. Population numbers increase and give rise to the need for new infrastructure to meet the extra demands on housing, water supply and sanitation. Mining, and certainly open pit mining, will produce physical damage however carefully it may be conducted. Large numbers of people seem likely to be displaced from traditional activities in farming. That needs to be corrected and compensated if mining is to be accepted by all stakeholders. But most important, mines have a finite life and so the local communities need to be able to take steps to use current prosperity (based on mining) to build the economic capacity that can mitigate the loss of livelihoods and other benefits once the mines close. All of this requires both an adequate capacity for analysis and planning in the relevant local authorities. But it also calls for an assured revenue stream to finance the demands placed upon the communities by the presence of mining.

Our analysis suggests that there is a major disconnect between, on the one hand (a) the needs of the local communities and (b) their capacity – human and financial – to develop appropriate responses.

The lack of local fiscal capacity arises from two main factors. Initially it is because of the relatively small scale and unpredictable nature of the revenues from the Minerals Development Fund – notionally the key instrument to respond to the problems caused by mining. The mining companies contribute to the MDF in reasonable amounts, but the MDF's failure to deliver appropriately to the affected areas creates a shortfall in the provision of services that the companies then feel obligated to help fill through additional but discretionary contributions (to schools, hospitals etc). This arrangement seems to have inverted responsibilities quite fundamentally.

But the inadequacies in the MDF would not matter quite so much if it were not for the second point. This is that the general system of local finance fails to provide a basis for local financial self-sufficiency, even where the local communities are hosting industries generating several hundreds of millions of dollars of income every single year. The result of this failure is that the bulk of local funding comes from various grant sources that themselves depend on centralized decisions (by government and donors) over which local communities exercise little apparent control. This in turn can be argued to stem back to the incomplete reforms of governance and the centralizing influences that began with the broadly successful reforms initiated in 1983.

The main consequence is that the capacity to translate central government disbursements, including a portion of mining royalties, into consistent development at the local community level is at best a work in progress.

HIPC funds are beginning to arrive in very substantial amounts. They are explicitly targeted to “poverty alleviation”; and have “environmental sustainability” as an important subsidiary objective. But there are no explicit mechanisms in the Ghana Poverty Reduction Strategy that connect these funds in any reliable manner to the special needs of the mining-affected communities. Indeed in the most recent GPRS *Annual Progress Report* it is difficult to find any mention of mining as an issue⁵². Given this, it is likely that local communities where mines operate will continue to see the mining companies as an important if not the dominant development partner.

Reform of these present arrangements requires a broad vision of how things should ideally be arranged, and to invert the present assignment of responsibilities. Some aspects of these are discussed further in Section 6. Ideally *the mining companies ought to be able to fit their corporate social responsibility initiatives into an agreed local strategic framework*. So they would be absolved of the responsibility for devising that framework themselves or responding to *ad hoc* requests. However, they would be heavily engaged in partnerships with the strategic planners in the local communities⁵³.

Any new set of arrangements would need to rely more on a “bottom-up” approach than is currently the case. It would place the responsibility for the longer-term prosperity and viability of the local communities where it belongs – with the communities themselves.

Figure 12 above makes it clear that this assigning of local responsibility would not be easy in the Ghana case. Mineral concessions invariably cut across a number of different jurisdictions and each of these would have some claim to be the “planning authority” for the new set of arrangements. Although district assemblies are presently required to prepare integrated and rolling medium-term development plans in accordance with guidelines issued by the National Development Planning Commission, their capacity to prepare effective plans is curtailed for the reason already mentioned. It is in any case not clear that the district is the right level at which the planning function should take place. It would seem better in principal to assign the responsibility at a somewhat higher regional level that could embrace a number of district assemblies as well as traditional councils. Consideration might be given to enhancing the capacities of the existing regional coordinating councils for this purpose.

⁵² That report does acknowledged that the districts have found HIPC funds very timely and useful for development because they are readily available in district HIPC accounts so that projects can be executed rapidly and contractors paid promptly. However, it also acknowledges that the whole process could be significantly enhanced to increase the developmental impacts.

⁵³ Similar comments apply to donors. While well intended, there are a number of donors and NGOs that provide direct assistance to MMDAs without consideration for (or benefit of) a comprehensive district development plan with a budget that incorporates all of the districts activities and is in sync with the national poverty reduction strategy.

6.1 OVERVIEW

This report on Ghana has shown that the impact of mining on economic and social development is a complex business involving interactions between a number of different influences: economic, political and cultural. This is particularly true given that Ghana started its mining renaissance period in 1986 from a position of severe economic and commercial distress, and with a seriously flawed political and governance structure. While it is possible for NGOs to highlight, from the present vantage point, some “better” things in that pre-1986 environment (eg a higher corporate tax rate imposed on the companies), the fact remains that both the economy and the mining industry were on their knees at that time. The minimal basket of economic and governance reforms achieved from 1983 had the effect of (i) restoring a reasonable rate of stable economic growth, and (ii) stimulating new mineral investments after a 40-year period during which no new mines were opened.

Mining companies met the challenge in a significant way once a reasonable commercial basis for mining activity was restored (the liberalization of the trading regime, a basically sound real exchange rate and a governance structure that guaranteed the protection of property rights). Although cause and effect are difficult to prove, there is little doubt that the renaissance of mining and the huge foreign investment inflows were a significant positive influence (one of the more important of several) on Ghana’s macroeconomic recovery, and its impressive post-1986 growth.

It is also quite clear from the aggregate data from 1983 to the present that Ghana has seen an overall significant reduction in poverty levels and positive changes in most, but not all social welfare indicators. Residents in mining-affected areas on average have benefited more than others in these respects. There is no evidence in the post-1986 years of either a macro resource curse or of a general poverty-aggravating effect on mining-affected areas associated with the new mining investments.

However, there is evidence both nationally and in mining regions that the benefits of higher investment and growth have failed to be shared evenly. Ghana’s poor northern regions – which have very limited, if any mining activity – remain very poor. Within the main catchments of mining activity in the Western and Ashanti regions, families dependent on traditional agricultural activities have fared relatively badly. There is also a major counter-factual question. Given the huge revenues extracted from a relatively few districts of the country in the past two decades, could the socio-economic benefits as well as the distribution of these benefits not have been better than they were?

This report has thrown some light on these issues and the next few sub-sections attempt to capture the most important issues that arise.

6.2

MINING AS A LEAD SECTOR IN ECONOMIC RECOVERY

Ghana seems to have done just enough in the mid-1980s to attract and keep certain types of investment, including investments in gold and other mining products. Mining was arguably particularly critical in kick-starting the economy in the mid 1980s after a twenty-year period of drastic decline. This was because it could survive commercially in a still incompletely reformed environment by virtue of certain of its key characteristics namely:

- Its relatively low dependence on a broad based national infrastructure that was for the most part non-existent (at least in the late 1980s). The industry did require clear access to one of the country's two ports for the importation and transport of equipment and ore processing consumables, and possibly connection to the national electric grid, but it did not require a vast network of roads to support a local market, for instance. Contrast this to say an agri-business that might depend upon a broad infrastructure of feeder roads, warehousing and storage, marketing capacity, financing etc.
- Its potential as a foreign exchange earner as well as its independence of the constraints of the local markets, which of course were very weak at the time. This required only a reasonably fair deal as regards the foreign exchange regime. That regime was broadly in place well before the big upsurge in mining investment at the end of the 1980s.
- With only 12 locales, mining's concentration of activity offered no special challenges to tax and non-tax collection by government agencies, which helped in the highly productive collection in what has constituted between 10 to 17 per cent of government tax revenue.
- While capital intensive and dependent on hi-tech equipment, mining continues to employ large numbers but is not dependent on a local, large, highly skilled or educated work force (although such a workforce is available in Ghana). As such, it did not need to wait for the improvement in these areas, which came much later than 1986.

In short, the Ghana experience seems to suggest that a mining industry may be a good productive driver of development in a country that is emerging from a situation of serious economic distress, as was the case in Ghana in 1983. This is a conclusion of some significance because there are many low-income countries under stress (LICUS) in today's world – several of these are also HIPC's and some are mineral rich economies. The Ghanaian experience of what might be termed an incomplete or second-best package of economic and governance reforms (as in the late 1980s) may well be a good model for these countries to be aware of. The alternative of seeking the best package of

reforms in these two areas may well close off exactly those productive possibilities that can achieve “quick wins”, help to pull significant numbers out of poverty and provide the funding and stability necessary to support further reforms.

6.3 *CORPORATE SOCIAL INVESTMENT IS GENEROUS BUT COULD BE TARGETED MORE ON POVERTY ALLEVIATION*

The in-depth review of the practices of one mining company – AngloGold Ashanti – has indicated that it provides a significant contribution to the overall success just described. The commercial activity of mining in Obuasi has directly created a significant number of well-remunerated jobs, as well as a spillover of indirect employment and new businesses in the neighborhood. The development efforts of the company at the national level have also been significant in establishing new businesses for Ghana in tourism, finance and construction.

The company’s social spending has played an important part in providing good quality housing, education and health services in the area of impact of the mine, which benefit both its employees and some others.

At the same time, it is clear that local communities do not believe the current high level of social investment is “enough”. The reasons for this are complex, but include:

- expectations that, in practice, are beyond the ability of AngloGold Ashanti to meet (largely because of the scale of investment that would be required);
- the high expectations are, in turn, partly a function of local governance structures that do not have the capacity to meet the basic local development needs – in the absence of public delivery residents look to the company, as it is perceived to have the necessary skills and resources;
- a lack of understanding amongst the community about the full scope of actual social investment spend, which in turn calls for better communication by the company; and
- a degree of misalignment between existing social investment spending and local development needs, which calls for a collaborative approach to rethinking social investment spending.

In addition, as a part of AngloGold Ashanti’s social responsibility commitments, there is scope for leadership on increasing the proportion of local and national content in the supply chain, particularly given the recent boom in mining investment, which should help to achieve critical mass for some products and services.

Even today, Ghana's system of governance is still far from ideal and it still scores relatively poorly on some of the World Bank indicators. But the analysis shows that it is very much better than it was in the 1970s. In addition, the incomplete improvements that were achieved in the 1980s do seem to have played a part in the recovery of mining activity specifically and the economy more generally. One significant point suggested by this study is that governance needs to achieve a minimum critical level in some areas only in order to allow an economic recovery based on sectors such as mining.

In the Ghana case, the minimum package that seems to have been required included a strong state (but regrettably not initially a fair one with a deep respect for human rights); reforms that gave stronger protection to private property rights (but certainly not for all); an economic policy package that made it commercially viable to invest and trade in international markets; and a system of public administration and budgeting that was able to collect the revenues associated with the more realistic taxation of economic activity once the recovery began.

Many of the dimensions of "good governance" as reflected in Table 15 above were undoubtedly absent in Ghana during its successful recovery through the 1980s and 1990s. Here are just a few examples of what was missing.

- a) *Political system*: established and effective institutional access points for different stakeholders.
- b) *Public expenditure management*: established arrangements at different tiers of government (national, regional and local).
- c) *Infrastructure*: national and regional policies in place for public-private partnerships, cooperation arrangements at different tiers of government (municipalities, regional, national).
- d) *Regulatory systems*: frameworks for public sector management established to support contact between the public and the private sectors.
- e) *Public administration*: systems and capacity established at different tiers of government (national, regional and local).

The absence of these and other important parts of a complete system of good governance created a vacuum that necessitated *ad hoc* behaviors in response to particular problems as they emerged.

The mining companies, such as AngloGold Ashanti, faced and still face the problem of dealing responsibly with the communities in their areas of impact and influence (in accordance with their own company codes). In the absence of some of the institutions that might be expected to help develop coherent and broadly informed responses to these problems, the companies have had to develop their own *ad hoc* responses and hope that these will succeed. Some of the inefficiencies mentioned above derive from this reality. If the governance system of the county has no mechanism for hearing the views of particular stakeholders (point 'a' above) the guidance provided to the companies will be incomplete at best. If the infrastructure for assisting public private

partnerships is missing (point 'c' above) the companies' responses will need to manage without such any such framework. If the systems of local administration are missing or are deficient in terms of their capacity (point 'e' above), then the company may need to substitute some of its own capacity (and funding) for the parts that ideally are provided by local or regional authorities, or face adverse stakeholder comment (however unfair).

In short, a large and well-regarded mining company, such as AngloGold Ashanti, has little choice but to compensate in part for those aspects of governance that are missing.

If this diagnosis of the governance problem in Ghana and other initially weak states is correct, then it poses two important questions for policy. Specifically:

- Should mining investments go ahead in an environment of incomplete governance (especially when the gaps may include some basic lack of attention to human rights)?
- What are the likely consequences of mining investments going ahead with only the minimal governance package in place?

The Ghanaian evidence in relation to the second question is that the successes that have been achieved since 1986 (both for economic and social outcomes) do justify the decision to go ahead. Incomes and wealth for many people, and not just those directly employed by mining, have been greatly improved by this decision.

On the first question, the Ghanaian evidence seems to suggest that the incomplete system of governance can and does undermine the effectiveness of the actions taken by companies to try to respond to their social mandate. The social and economic pay-off for a given corporate outlay could have been much higher *if* the supporting systems listed above had been more fully in place or had had greater capacity. However, despite this constraint, the analysis clearly shows that significant benefits have been generated at Obuasi, even with an incomplete governance framework.

The policy message for both the companies and the government (and possibly donors) is that these gaps in governance are important and that they should be explicitly addressed, to the extent possible, as part of any package of future development in the sector. But readers should not be too sanguine about achieving major change in this area. The incomplete and highly centralized governance reforms of the early 1980s were inherent in Ghana's political structure and problems at that time. There is no assured way in which the slow process of democratization and improved governance can be speeded up.

A particular aspect of this problem of missing dimensions from governance is associated with the manner in which central government in Ghana relates to regional and local government. The analysis has shown that the capacity to translate central government disbursements, including a portion of mining royalties, into consistent development at the local community level is at best a work in progress. The large royalty payments extracted from local activity follow a circuitous route, but with only a very limited return of funds to the mining areas. This may be the “correct” theoretical solution in tax theory (ie the non-hypothecation of tax revenues). But for perceptions at the local level it is a public relations disaster. It certainly helps to account for comments, such as those made by the World Bank’s OED report, that people feel no perceptible benefits from the resources taken from “their land,” and that the mechanisms for dealing with displaced and other unemployed workers are weak.

The alternative to present arrangements will be elaborated more fully in the Synthesis Report being prepared as part of this initiative. However, in essence, it calls for a broad vision of how things should ideally be arranged, and for an inversion of the present assignment of responsibilities. Ideally the local governments in the areas affected by mining (or indeed by other exhaustible forms of livelihoods) should be provided with their own more reliable revenue base. The local communities should then use this sound basis of own revenues to support a planning function of good quality, with the capacity to design appropriate strategic responses to the infrastructure and longer-term diversification needs created by the presence of mining. These strategies should in turn be capable of being presented to donors, to mining companies and to banks with requests for financial and technical support .

This new set of arrangements above all relies on a “bottom-up” approach. It places the responsibility for the longer-term prosperity and viability of the local communities where it belongs – with the communities themselves.

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Annex 1

Background Information on Ghana and the Country's Mining Sector

7 ANNEX 1 BACKGROUND INFORMATION ON GHANA AND THE COUNTRY'S MINING SECTOR

7.1 INTRODUCTION

This section provides a brief introduction to Ghana and is presented as follows:

- Section 1.2 presents a brief history of Ghana;
- Section 1.3 outlines the institutional and governance arrangements for the country;
- Section 1.4 provides an overview of the Ghanaian economy and details recent performance;
- Section 1.5 presents an outline of the demography for Ghana;
- Sections 1.6 and 1.7 present an overview of mining in Ghana, including employment and output trends and a history of AngloGold Ashanti.
- Finally, Section 1.8 presents a summary and conclusions.

7.2 BRIEF HISTORY OF GHANA

Archaeological evidence suggests that central present-day Ghana was inhabited as early as 3,000 to 4,000 years ago. From the eighth century AD onwards, the area derived most of its power and wealth from gold mining and from related trading along the trans-Saharan trade routes with Arab merchants from North Africa⁵⁴.

In the late fifteenth century, the Portuguese arrived in West Africa attracted by the prospect of controlling the gold trade. The Portuguese subsequently built a series of forts along what became known as the Gold Coast, to allow export of gold ingots to Europe. Slavery also became an increasingly important trade during this period. By the late sixteenth century, the British, Dutch and Danes had also been attracted to West Africa for the slave trading potential it offered.

In the early nineteenth century, following Great Britain's decision to abolish slavery in its Empire, and to enforce a ban on slave trading on the high seas, the British took control of many of the old slave ports. These were converted into customs posts and used to control the growing trade in cocoa, which was supplemented by exports of gold, timber and manganese. There were, however, tensions between the Ashanti people and the British over the abolition of the slave trade (which had been a mainstay of the Ashanti Kingdom's economy) and British territorial ambitions inland.

⁵⁴ Thomas Pakenham reports that two-thirds of the world's total gold supply in the Middle Ages came from that region. To tap this gold was one of the main aims of the Portuguese navigators of the C15th. However, it was overshadowed in importance by the greater early discoveries in South America and also by the larger riches involved in sugar and cotton plantations and the large supply of African slaves needed to man these (Pakenham, 1991, p.17).

During the early part of the twentieth century the Gold Coast developed the most prosperous colony in Africa. At this time modern, industrial mining techniques were also introduced, including at Obuasi. Some British governors were responsible for instigating large-scale public works and education programs.

From the late 1920s onwards, a series of political parties began to promote African independence. In the years after World War II, Britain recognized these legitimate demands, and adopted a proactive policy of decolonization, with the Gold Coast and the neighboring Togoland Trust Territory (part of a formerly German colony that was administered by Britain after World War I) being identified as early candidates. The two colonies were formed into one country on independence – Ghana. Following elections in 1957, Ghana became the first African country to gain independence from European rule.

7.3 *INSTITUTIONAL AND GOVERNANCE ARRANGEMENTS IN GHANA*

Following independence, Ghana experienced a series of corrupt and incompetent governments, five of them military, resulting in the suspension of the constitution in 1981 and a ban on all political parties. In 1992, a new constitution was approved, restoring multi-party politics. Flight Lieutenant Jerry Rawlings, head of state since 1981, won presidential elections in 1992 and 1996. President Rawlings oversaw a substantial economic reform program, which rapidly brought results. This coincided with a stronger commitment to democratic government, with increasing free and fair elections.

President Rawlings was constitutionally prevented from running for a third term in 2000. John Kufour of the New Patriotic Party succeeded him in a free and fair election in January 2001. President Kufour is seen as a popular president who is continuing Rawlings' liberal economic policies. President Kufour was re-elected, again peacefully, at the end of 2004.

The in-depth analysis presented in Section 4 shows that the political changes of the past 10-15 years have established systems of governance in Ghana that (i) represent a significant improvement on the earlier years and (ii) compare well with those found in much of the rest of Africa.

7.4 *GHANA'S ECONOMY*

7.4.1 *Overview*

Ghana is a medium-sized and mainly agrarian economy (population: 21 million) located on the West Coast of Africa. The economy has traditionally depended on primary production, much of it exported⁵⁵. This dependence, especially on cocoa and timber, changed little in the thirty years after

55 Exports of cocoa, timber and various metals, such as gold, have for many years accounted for the bulk of total merchandise exports.

independence and livelihoods remained disproportionately dependent on agriculture and other rural activities. Some simple data on Ghana's economy are presented in Table A1.1.

Ghana's economic history of the past 50 years is a story involving great variety and many ups and downs in terms of both political and economic developments. At independence, President Nkrumah certainly had big ambitions for the country and the first years of independence were characterized by high rates of investment and an extremely high profile for the country and its leader.

Table A1.1 Overview of Ghana's Economy

GDP @ purchasing power parity (2004 estimate)	\$48 billion
GDP real growth rate 2004	5.4%
GDP per capita @ purchasing power parity	\$2,300
Gross fixed investment as percentage of GDP (2004 estimate)	19.7%
Population below the poverty line (2004 estimate)	31.4%
Structure of production (2004 estimates):	
• agriculture	34.3%
• industry	24.2%
• services	41.4%
Labor force (2004 estimate)	10.24 million
Structure of employment (1999 estimates):	
• agriculture	60%
• industry	15%
• services	25%
External debt (2004 estimate)	\$7.4 billion
Economic aid received (1999)	\$6.9 billion
Currency	Cedi (GHC)
Source: CIA World fact book: www.cia.gov/cia/publications/factbook/geos/gh.html	

But those early years – through to 1966 – also embedded for Ghana (and much of Africa more generally) a radical style of economic policy involving significant state control of economic activity. Although the political regimes that followed Nkrumah when he was deposed in 1966 espoused a variety of different philosophies, their collective efforts to promote development failed. Indeed it was more than twenty years before a modicum of political and economic stability was restored. In those 20 years to the mid-1980s, Ghana saw some of the worse cases of failed governance ever seen on the continent⁵⁶. It also went from being one of the most prosperous of the African economies to being one of the poorest (more detail is provided in *Section 4* of the main report).

Matters improved with the Economic Recovery Program (ERP) of the second government of Flt Lt Rawlings after 1983, and for 10 years thereafter Ghana began to be seen as one of the better examples in Africa of a reformist and broadly liberal approach to economic development. Incomes rose after several

⁵⁶ Ghana's record on governance is discussed in more detail in Section 4 of the main report.

years of decline and many of the poverty and other social indicators began to show improvement. Although these gains have faced periodic threats that have compromised and delayed some aspects of targeted reforms, a reformist attitude has largely been sustained until today. One temporary blip was in late 1999 when a further economic crisis struck with falling export earnings, rising import prices, a rapid fall in the external value of the currency (the 'cedi') and a resurgence of inflation: but not to anything like the levels of pre-1983. Due to shortcomings and delays in economic management the budget deficit (including a sizeable quasi-fiscal deficit) ballooned at this stage to 23 per cent of GDP. This situation necessitated a further intensive program of macroeconomic stabilization, under which borrowing was drastically cut and the exchange rate stabilized. However, growth in broad terms was not interrupted for long.

This context of incomplete and fragile reform has in turn provided the backdrop to Ghana's early application for debt relief under the HIPC program⁵⁷. The Ghana Poverty Reduction Strategy (GPRS) that accompanied the HIPC debt relief puts greater focus than before on ways to raise the living standards of poorer households, improve the targeting of public expenditures, improve governance and reduce income disparities. Data generated by the GPRS process is beginning to provide a richer basis for researching income and social discrepancies across the nation and so is of particular relevance to this present study. Also of relevance is a substantial GPRS-inspired reform agenda in public sector management and civil service reform, in public enterprise divestiture, and in the enabling environment for private sector development.

The economic developments just described mainly took place in a single party and largely undemocratic environment. The military-political character of the country only began to change significantly after 1992 when a nationwide referendum led to the promulgation of a new constitution. In the same year, multi-party presidential and parliamentary elections were held, restoring democratic processes. A subsequent election in 1996 achieved even fuller political participation⁵⁸. In January 2001, democratic elections resulted in political power being transferred away from the Rawlings regime and to a new government: the first peaceful transfer of power in nineteen years.

7.5

OVERVIEW OF GHANA'S DEMOGRAPHY

This section presents a brief overview of demographic information for Ghana.

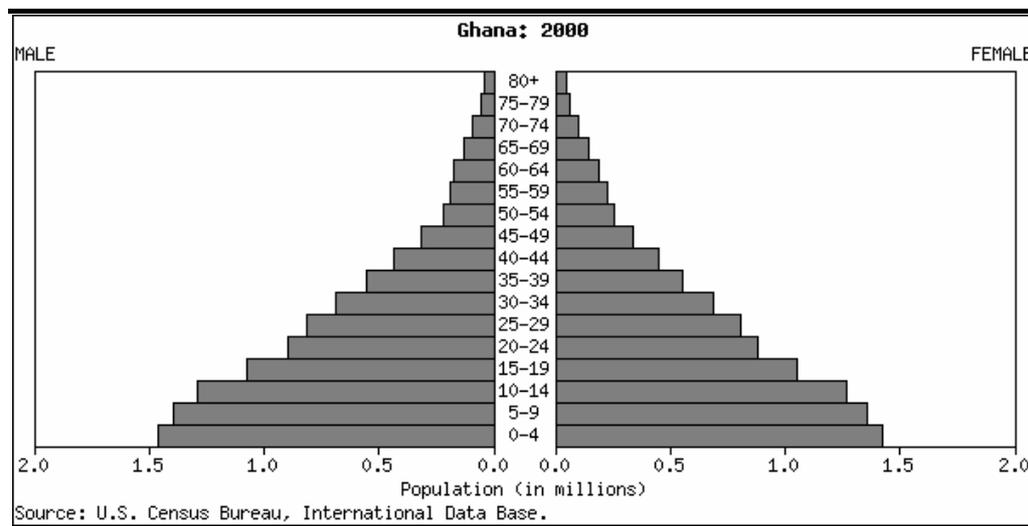
⁵⁷ Ghana reached its "decision point" in late 2003.

⁵⁸ Local assemblies were also mainly elected (some members are appointed) in all 110 districts and assumed a greater role in service delivery. A program of fiscal decentralization has been in the planning stage for some time. In 1998, community elections were held for the first time, thus assuring popular representation at the sub-district and village levels.

In 2005 Ghana had an estimated population of 21,029,853⁵⁹. At birth, the life expectancy for males was 55.04 years and for females was 56.99 years. The population growth rate is estimated to be 1.25% per annum.

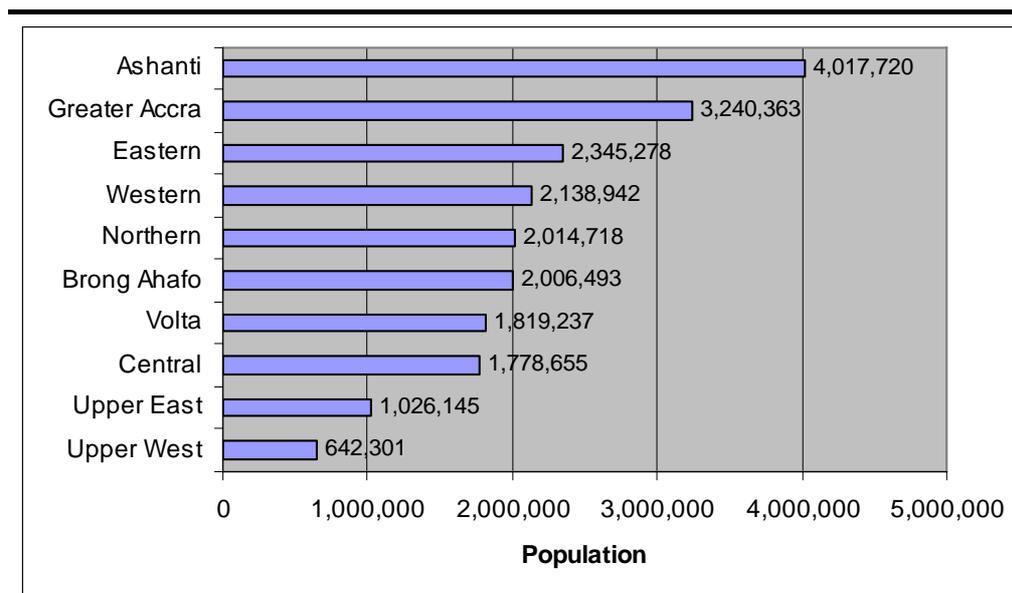
The age and gender distribution of Ghana's population is detailed in the population pyramid in Figure A1.1.

Figure A1.1 Ghana Population Pyramid 2000



Ghana is divided into 10 regions. The distribution of Ghana's population by region is detailed in Figure A1.2 below.

Figure A1.2 Distribution of Ghana's Population by Region



Source: Based on 2005 CIA population estimates applied to 2000 population distributions
www.citypopulation.de/Ghana.html

⁵⁹ Data are from the CIA World Fact Book, retrieved from www.cia.gov/cia/publications/factbook/geos/gh.html

There are 10.84 deaths per 1,000 people. In common with much of Sub-Saharan Africa, a major cause of death is HIV/AIDS. The adult prevalence rate is 3.1 per cent and it is estimated by the CIA that 350,000 people were living with HIV/AIDS in 2003.

With regard to ethnicity, the overwhelming majority of the population, over 98.5 per cent, are black Africans. There are also small expatriate communities, mainly centered in Accra.

7.6

OVERVIEW OF MINING IN GHANA

7.6.1 *Brief History of Mining*

As noted above, there is evidence of a gold trade with North African merchants from as early as the Middle Ages, and the country's mineral resources were recognized by European powers.

Following the abolition of slavery, gold resumed its importance as one of Ghana's major exports. This importance is reflected in the name Britain gave colonial Ghana – The Gold Coast. During the twentieth century gold mining became increasingly industrialized, as deeper and less accessible deposits were exploited. However, informal artisanal mining has continued to be an important part of output. In Ghana, these miners are referred to as *galamsey*.

Today, gold mining in Ghana is experiencing somewhat of a boom. New mines have opened in recent years, extensive investments are being made at existing mines and more mines are planned to open in the near future.

7.6.2 *Mining in the Post-independence Years*

Although commercial mining in the Ashanti region goes back to the latter part of the nineteenth century, mining was neither a particularly large part of GDP in the first 30 years after independence, nor a particularly dynamic element in overall change⁶⁰. Specifically, for most of the 1960s and 1970s, ores and minerals contributed only about 3-5 per cent of GDP and around 12-15 per cent of exports (as compared with over 50 per cent in many years for cocoa). So Ghana was not a highly mineral dependent economy in the sense in which that term is used in the resource curse literature.

7.6.3 *Mining in the Context of Post-1983 Developments*

In the 25 to 30 years immediately following independence in 1957, mining in Ghana faced major new constraints that undermined its profitability and

⁶⁰ The agricultural sector is today remains the dominant sector, employing some two-thirds of the labor force and accounting for nearly half of total gross domestic product (GDP). Agricultural production, which is primarily small scale, is concentrated in cocoa and staple food crops. However, mining has grown enormously in significance as a source of export earnings and is now equal with cocoa as the number one export sector. The manufacturing sector remains quite small despite the early aspirations of President Nkrumah.

deterred new investment⁶¹. Indeed, from the end of World War II until the mid-1980s, not one new mine was opened up in Ghana (Aryee, 2001).

The Economic Recovery Program (ERP) of 1983 represented a shift in economic paradigm as profound as any seen in Africa in the past fifty years. The earlier failings of the economy have not been addressed fully and some of the institutions of sound governance are still absent or embryonic. But between 1983 and the mid-1990s, the authorities succeeded in creating a much sounder environment that has created the improved economic and social outcomes that are discussed fully in Sections 3 and 4 of the main report.

7.6.4 Regulatory Environment

Mining and minerals were a specific and integral part of the ERP⁶². The improved general environment inculcated by the ERP worked in tandem with specific improvements in the legal and institutional structure for mining activity. The landmark date was 1986, when a radically new *Minerals and Mining Law* (PNDCL 153) was promulgated⁶³. Regulations are now relatively straightforward:

- All mineral deposits are owned by the state, regardless of existing land ownership.
- All exploration and mining activity is regulated by the Minerals Commission, the government regulator, which issues exploration licenses, assigns mining leases and agrees royalties.
- Although the Commission is the lead authority, other relevant agencies, such as the Environmental Protection Agency, are responsible for issues such as environmental management.
- Mining leases are granted to companies giving them exclusive access to mine specified concessions. It is illegal to undertake any mining in Ghana without a lease from the Minerals Commission. Compensation is given to existing landowners and land users.
- The length of a lease is determined by expectations of what a reasonable mine life would be for that concession. Leases are easily extendable if there are good reasons.
- Mines must pay a royalty to the Minerals Commission. The Minerals Commission retains 20 per cent of this royalty to fund development of the sector and to support economic development initiatives in mining areas.
- On cessation of mining, the lease is surrendered and the land returned to the previous owner.

This new regulatory climate was crucial to establishing Ghana as a significant mineral economy following forty years of infrequent investment. These specific changes were supported by the radical reform of the interventionist and distorting foreign exchange regime that prevailed through 1983, with its

61 Indeed, on the basis of the criteria used for the Analytical Framework, Ghana in that period would have been only on the margin of qualifying as a mining-dependent economy.

62 Bank of Ghana (2003)

63 Other supporting legislation that backed up the intent of the main law followed in 1987 and 1989.

overvalued exchange rates, dual rates and ubiquitous and corrupt control of import licensing.

7.6.5 Trends in Output and Employment

Overview

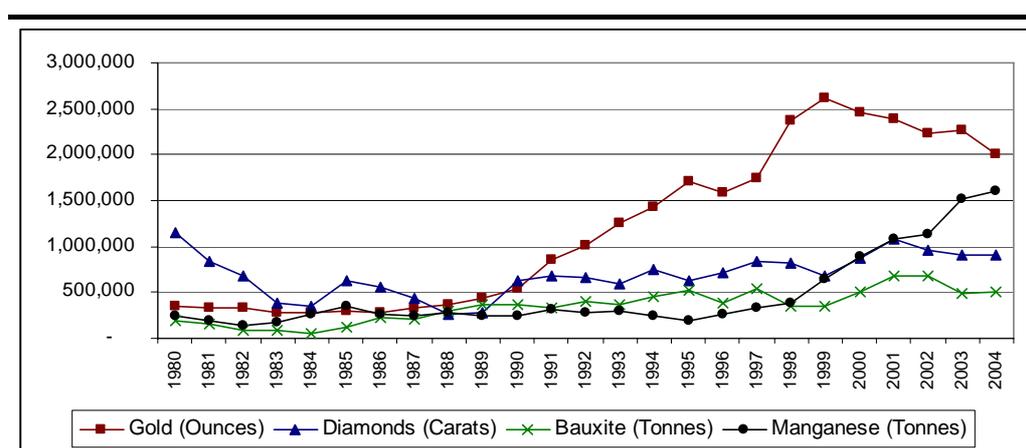
The results of this change of stance were extremely positive for the industry. Specifically, in the 15-year-period after 1986:

- Total cumulative private investments in mining exceeded \$5 billion⁶⁴.
- The number of active gold mining companies doubled to 14.
- 154 local and over 80 foreign companies had been issued prospecting licenses. There are now almost 200 active prospecting licenses.
- Outputs of all four of Ghana's main mining products – gold, diamonds, bauxite and manganese – rose sharply.
- Mining exports overtook cocoa as the country's leading export activity (by 1992) with 40 per cent of the total of merchandise exports.
- Mining had come to account for at least eight per cent and as much as 17 per cent in some years of total government revenue.

All Mining in Ghana

Although the Ghanaian mining sector is dominated by gold, it is not the only mineral resource the country has. Figure A1.3 illustrates the output for all commodities tracked by the Mineral Commission.

Figure A1.3 Mining Output in Ghana



Source: Ghana Minerals Commission

One important point to note is that galamsey miners produce all diamond production. Galamsey miners also make an increasingly important contribution to gold output (see below).

⁶⁴ Aryee (2001) shows the breakdown of the investment totals as between mining and prospecting for the period 1983 to 1998. The ratio was approximately 44:56.

Gold Mining in Ghana

As noted above, by the mid-1980s the Ghanaian gold sector was generally considered to be moribund. However, since the enactment of the new mineral law in the 1980s the output of the sector has increased substantially. Trends in production are shown in Table A1.2.

Although there has been a decline since 1992, the high levels of investment in the industry seen in recent years are likely to raise production up to and beyond previous peaks.

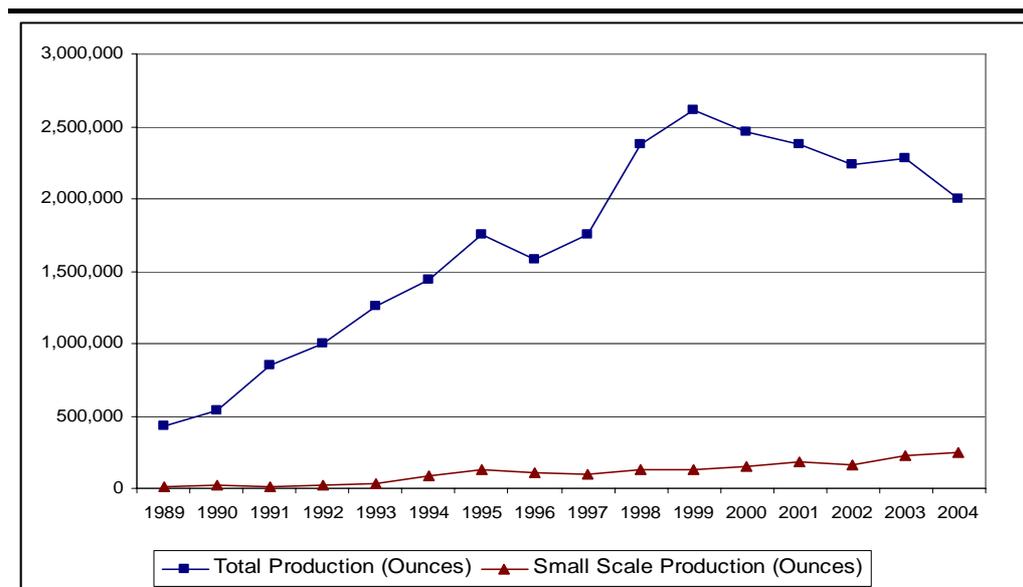
One of the striking aspects of production trends is the rapid increase in production from the small scale and informal sector (which includes galamsey miners). Figure A1.4 illustrates the increasing importance of small scale and galamsey mining.

Table A1.2 Trends in Gold Production in Ghana - 1989 to 2004

Year	Total Production (Ounces)	Small Scale Production (Ounces)	Small Scale as Percentage of Total by Volume	Total Production (US \$ million)	Small Scale Production (US \$ million)	Small Scale as Percentage of Total by Value
1989	429,476	9,272	2.2%	160	3	2.1%
1990	541,147	17,234	3.2%	202	6	3.1%
1991	847,559	15,601	1.8%	304	5	1.7%
1992	1,004,625	17,297	1.7%	343	6	1.8%
1993	1,261,890	35,145	2.8%	434	12	2.6%
1994	1,438,483	89,520	6.2%	549	35	6.3%
1995	1,752,452	127,025	7.2%	647	49	7.5%
1996	1,583,830	112,349	7.1%	612	36	5.9%
1997	1,752,452	99,545	5.7%	579	28	4.9%
1998	2,371,108	126,293	5.3%	688	37	5.3%
1999	2,608,102	132,829	5.1%	711	35	5.0%
2000	2,457,152	147,663	6.0%	702	41	5.8%
2001	2,381,345	185,596	7.8%	618	39	6.4%
2002	2,236,833	160,879	7.2%	695	49	7.0%
2003	2,274,627	221,063	9.7%	823	80	9.7%
2004	2,004,561	246,570	12.3%	833	101	12.2%

Source: Ghana Minerals Commission

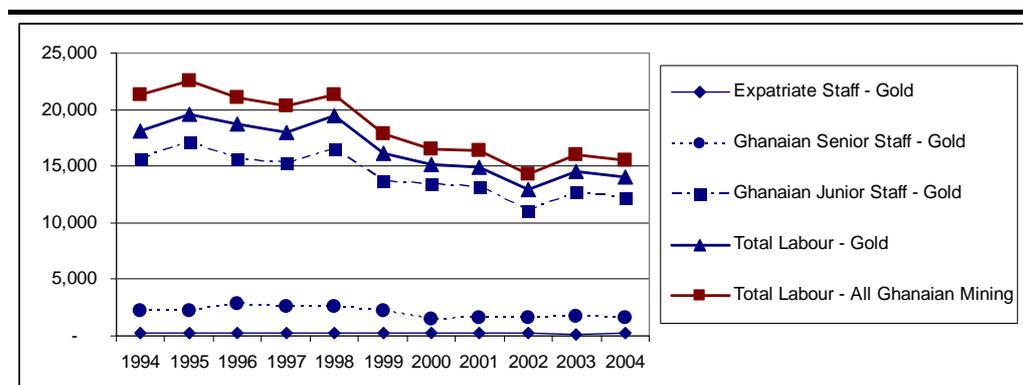
Figure A1.4 Gold Production Trends in Ghana



Source: Ghana Minerals Commission

Although output has risen, employment in the formal mining sector has shown a relatively consistent decline. This is partly due to increasing labor productivity, caused by mechanization and new technologies, but also the move towards to open pit mining in recent years (which is much less labor intensive). Trends in employment are shown below in Figure A1.5.

Figure A1.5 Trends in Employment - Excluding Small Scale and Galamsey (Artisanal) Mining



Source: Ghana Minerals Commission

As can be seen from the figure, gold has long accounted for the great majority of employment in the formal mining sector. Expatriate staff are a very small proportion of total employment, and generally represent about 10 per cent of senior staff.

As noted, these estimates exclude employment in the small scale (which in Ghana is regarded as semi-formal) and informal (galamsey) sectors. Estimates of employment in these sectors are, by definition, very hard to calculate. The Minerals Commission estimates that at present there are between 80,000 and

300,000 artisanal miners in Ghana. The non-formal sector is therefore a very important source of livelihoods, despite the fact that all galamsey mining activity is illegal (because these miners do not have licenses).

7.7

BACKGROUND ON ANGLOGOLD ASHANTI

7.7.1 Introduction

The Obuasi mine has a long history. A brief overview is presented in Box A1 below. The mine is owned by AngloGold Ashanti, which was formed from the merger of AngloGold of South African and Ashanti Goldfields of Ghana in 2004.

7.7.2 Overview of the Obuasi Mine

Overview

Obuasi is located in the Ashanti region of Ghana. Although Obuasi is now a town of 150,000 to 200,000 people, before the mine's development there was no significant population in the immediate area. The mine is one of Ghana's largest private sector employers.

Table A1.3 shows basic statistics for Obuasi.

Table A1.3 Basic Statistics for the Obuasi Mine

Recovered grade (g/t)	3.08
Gold production (ounces)*	382,500
Total cash costs (US\$ per ounce)	305
Total production costs (US\$ per ounce)	426
Capital expenditure (\$ million)*	48
Total number of employees, of which:	6,747
• employees	6,029
• contractors	718

Source: AngloGold Ashanti

* Following the creation of AngloGold Ashanti, Obuasi switched to the calendar year for financial reporting purposes. Figures marked with an asterisk therefore represent eight-month figures that have been annualized by ERM. Source: AngloGold Ashanti Annual Report, 2004 and ERM calculations.

The Obuasi mine is primarily an underground mine, although since 1996 there have been extensive open pit workings (all but one of which is now closed).

Projected Mine Life and Future Investments

Exploration activities to date have revealed economically recoverable deposits that would give the mine at least 20 further years of operation. It is likely that further exploration and development could substantially extend this life.

At present, AngloGold Ashanti is investing heavily in the mine, with a capital program of approximately \$70 million under way. This investment will

improve existing capital equipment and develop new, deeper levels for future mining (these deeper deposits are included in the existing mine life estimate).

Further deep level investments are currently being investigated. If developed, this project would cost a reported \$570 million and extend mine life to beyond 2040⁶⁵.

⁶⁵ Personal communication with AngloGold Ashanti .

In March 1890, two Fante merchants from Cape Coast, Joseph E Ellis and Chief Joseph E Biney, along with their accountant, Joseph P Brown negotiated the mining concessions for 25,900 hectares of land in the Obuasi District. Their new property was named Ellis Mine. It was, and continues to be, one of the world's richest goldfields. Through their London-based mining equipment supplier, Smith and Cade, Edwin Arthur Cade became interested in the firm's operations. Ellis and Biney, believing that a sale would be financially beneficial, agreed the transfer of the mining concession to Cade in 1895.

Cade originally named his purchase the Cote d'Or Mining Company but this was later transferred in 1897, along with its assets and liabilities, into a newly registered company, the Ashanti Goldfields Corporation (AGC) Ltd. On the same day this new company was listed on the London Stock Exchange. Using adit mining the hills around Obuasi proved to be very lucrative for Cade whilst the Anglo-Boer conflict in South Africa allowed vital mining equipment to be diverted to the area. To manage this increased output the partners persuaded the government to extend rail links to Obuasi.

The Ashanti uprising of 1900 caused operations to temporarily halt. In 1905, amid dissatisfaction from shareholders about the reduced dividends, the Board commissioned WR Feldtmann to provide an independent assessment. He was to remain involved with the company for the next 20 years, introducing a new, more scientific approach to the business.

The two World Wars caused stagnation in the gold mining industry, affecting AGC considerably. Concurrently, as the political situation in Ghana became more fraught, the contribution of AGC to the local economy was questioned. With this, the then chairman threatened to flood the mines. The government responded by looking for alternative investors in the mining industry. Coincidentally, the London and Rhodesia Mining and Land Company (Lonrho) was becoming interested in AGC, and in 1969 Lonrho successfully acquired AGC. Throughout the 1970s the company went through many changes, including nationalization of the majority of the company's stock in 1972. Meanwhile, production peaked in 1972 but then, amid a difficult political and economic environment, rapidly declined for the rest of the decade.

It was not until the 1980s, under the Rawlings military regime, that the situation began to improve. This was aided by a substantial loan and the passing of a new Minerals and Mining Law allowing a greater retention of export earnings. On the back of this expansion and modernization continued through into the 1990s, culminating with the company listing on the London, Ghana and New York stock exchanges in 1994.

In 2003, AngloGold, the South African-based gold producer, which is majority owned by Anglo American plc, and AGC agreed merger terms. This followed a period of financial instability at AGC caused by falling gold prices and growing investment requirements. As a part of the deal, the Ghanaian government retains a three per cent equity stake in the new company, AngloGold Ashanti, and also a "Golden Share" with respect to operations at Obuasi, which gives it certain rights in connection with the sale or closure of the mine.

7.7.3 Status of Mining Activity in Neighboring Areas

The Obuasi mine is located in an extremely active gold mining area in South West Ghana. There is also more limited mining activity in the far north of Ghana.

The South-western area of Ghana is currently experiencing a significant upturn in investment in new mines, complemented by extensive investments at existing mines (including Obuasi). Other operational gold mines are⁶⁶:

- Iduapriem, another AngloGold Ashanti mine (Western Region);
- Bibiani, also an AngloGold Ashanti mine (Western Region);
- Tarkwa, owned by Gold Fields Ghana, which is a subsidiary of Gold Fields (Western Region);
- Damang, also owned by Gold Fields (Western Region). Both Tarkwa and Damang are under the same management;
- Bogoso (incorporating the adjacent Prestea property), owned by Golden Star (Western Region);
- the recently reopened Wassa gold mine, which is also owned by Golden Star Resources (Western region).

There are also three new mines being developed in the Ashanti region:

- Chirano, owned by Red Back Mining, due to open September 2005)⁶⁷ (Western Region);
- Yamfo, owned by Newmont, due to open 2006 (Bong Ahafo Region); and
- Akyem, owned by Newmont, due to open 2007 (Eastern Region).

Most of these mines are open cut rather than underground, with Obuasi being the exception in having underground mining (although it also has surface operations). However, there is potential for underground development at some of the surface mines, and this is being explored at some sites, such as AngloGold Ashanti's Bibiani.

Three gold mines have also closed in recent years:

- Dunkwa alluvial mine closed in 2000 (Central Region);
- Amansi Gold Resources was closed in 2002 (Ashanti Region);
- Ayanfuri, an AngloGold Ashanti mine about 40km from Obuasi which was closed once worked out (Central Region); and
- the Bonte alluvial mine, which was run by Akrokeri-Ashanti Gold Mines, which is reported to have closed in 2004 because of technical/resource quality problems (Ashanti Region).

In addition to mines in development and operational mines, there is extensive exploration activity going on in Ghana at the moment. Approximately 200

⁶⁶ Unless stated otherwise, the source of these data is African Mining (July-August 2004).

⁶⁷ Retrieved from www.redbackmining.com

exploration licenses are extant, although it should be noted that the proportion of exploration projects that lead to viable developments is generally very low.

7.8

SUMMARY AND CONCLUSIONS

Mining has a long and important history in Ghana, and gold in particular has played a key role in the country's development. However, in the modern era, gold has been much less important than other commodities, such as cocoa and timber. In the post-independence period, which coincided with Ghana's economic decline, gold mining cannot be said to have been a determining factor in Ghana's performance. Indeed, as this report shall show, the mining industry's fortunes have in many ways mirrored those of other private businesses in Ghana.

However, since Ghana's economic recovery began, the mining sector has grown rapidly. This renaissance after 1986 was large in its absolute magnitude, and of great significance in helping to shape Ghana's present-day economic situation. Any test of resource curse propositions is also more relevantly applied to this period than to earlier periods. In much of the period of the "growth collapse" through to 1983, resource rent extraction in general was certainly a driving motivation of Ghana's political system. However, because mining activity then was of a relatively limited economic significance as compared with today, it was not a major target for such activity.

Annex 2

Inter-relationships Between Mining and National Development

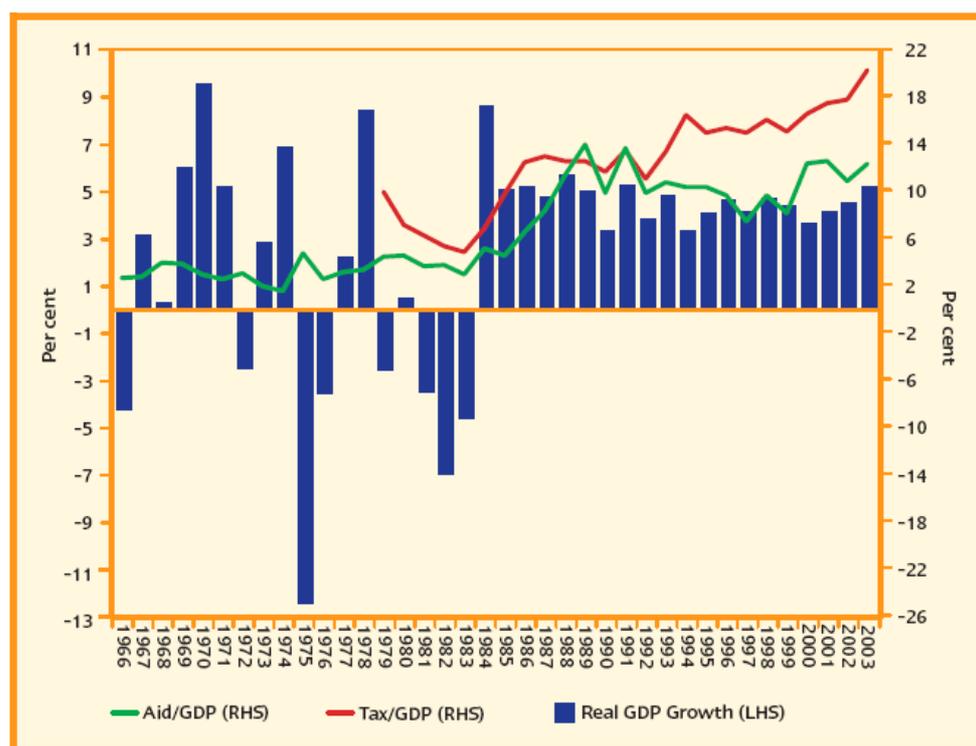
8 *ANNEX 2 INTER-RELATIONSHIPS BETWEEN MINING AND NATIONAL DEVELOPMENT*

8.1 *OVERVIEW*

This annex looks in greater detail at the economic and social impact of mining on Ghana's economic and social performance since mining activity re-established its importance after 1986. In accordance with the methodology of the Toolkit, it assesses both outcomes (economic and social) and some of the most obvious causes (governance and economic policy) that may have contributed to those outcomes. Subsequent sections look in more depth at the elements of governance and economic policy that seem to be most closely implicated in the effects that mining can have and the failures that are still apparent.

This subsection looks first at the way in which the economy was performing in the earlier years from just after independence in 1957 until the Economic Recovery Program (ERP) was launched in 1983. This is then compared with the later period after 1986 when mining enjoyed its resurgence. The relevance of this juxtaposition of the two periods is clearly apparent from Figure A2.1 below, which is extracted from the report of the Commission for Africa. In the earlier period both the Ghanaian economy and the mining sector were essentially stagnant. In the latter period both have performed much more strongly.

Figure A2.1 Ghana: Economic Performance in Two Different Eras



Source: World Bank African Development Indicators, 2004

The contrasts pointed up by the graphic are striking – even dramatic. In the later period after about 1985, GDP growth has been always positive (in spite of the problems of the 1990s referred to later). Equally important, growth has been pretty stable and has shown little year-to-year volatility. The earlier period before 1983, by contrast, was characterized by huge volatility of growth rates and by growth that more often than not was in negative territory after 1974. Also in the later period, the rising incomes in the economy and the improved quality of public administration enabled the authorities to increase the tax take of GDP from a disastrous six per cent in 1984 to over 20 per cent at the present time. This rise has encountered a few negative blips along the way, but has nonetheless sustained an ongoing increase over the period.

The mining sector contribution to that revenue gain has been significant but not huge – the equivalent of three percentage points of GDP in the better years⁶⁸.

8.2 THE GROWTH COLLAPSE, 1960-1983

The economy of Ghana from just after independence to the start of the ERP (1960-1983) has been described in various ways by different commentators. Killick (1978) describes the initial post-independence years when Nkrumah's

⁶⁸ The figure also shows that success has bred success – the third data set included in Figure A2.1. Specifically, donors have responded to Ghana's generally better performance in the later period – and more recently to its clear focus on poverty reduction – by increasing their net transfers from a low of around three per cent of GDP in 1983 to between 8-12 per cent of GDP in the more recent past.

grandiose plans were launched as a 'period of investment without growth'. Osei (2001) describes the next years from around 1966 to 1983 period as one of 'economic despair'. A common theme that runs through these descriptions is that the change in the structure of the economy that was required for a South Korean or Malaysian type take-off – and that was anticipated by Nkrumah⁶⁹ – never got close to materializing. Indeed although the country's economic structure at independence was considered fragile (Killick, 2000), that structure had actually been weakened further by 1983.

Ghana at the time of independence had a real per capita GDP of over US\$450 (in 1995 prices). This was, for example more than 40 per cent higher than in Botswana (per capita of US\$313). Over the next 15 years whilst Ghana's per capita GDP experienced volatility and a general decline, that of Botswana experienced significant growth. By 1985 Ghana's per capita GDP had declined to only US\$313. Botswana recorded annual per capita GDP growth rates of about 7.9 per cent. Ghana's living standards as measured by incomes declined disastrously – by about 1.4 per cent annually over the same period.

The language to describe this disastrous record is hard to find – but “growth collapse” seems as good as any.

⁶⁹ Two of Nkrumah's main policy agendas were first, a considerable increase in industrial production sustained through a gamut of protectionist measures and second, a very substantial increase in the role of the state both through major public investments, such as the Akosombo dam and the Tema harbour, and through a variety of direct state involvements in agriculture.

The following main points can be made about this period.

1. The period of the growth collapse was associated with an extraordinarily bad overall record on physical capital accumulation – in spite of the initial Nkrumah-led policies for huge public investments in various fields. Given the commitments of funds to large public investment projects, private sector investments bore the brunt of this overall decline. The very low level of investment in mining was merely one example of this more general tendency.
2. The growth collapse did not have natural resources, and certainly not mineral resources, as its primary cause. Mining at this time was a relatively minor source of incomes and prospective economic rents relative to cocoa and forestry. So the resource curse if there was one, was focused broadly on all Ghana's natural resources sectors but mainly on cocoa.
3. The period was characterized by the very limited structural change that was achieved, notwithstanding the huge and ambitious political plans to achieve "industrialization" and other related changes. The label "fragile" that Killick attached to Ghana's economic structure at independence was justified (i) by agriculture being the dominant sector – agriculture's share of GDP in 1960 was about 44 per cent and (ii) by agriculture in turn being very dependent on the cocoa sub-sector (as much as 30 per cent of total agricultural production in the early post-Independence years). By 1985, agriculture's share of GDP had actually increased, but only slightly to about 45 per cent, whilst industry's share had decreased slightly to about 17 per cent. The share of the services sector in GDP remained unchanged. So to all intents and purposes, there was no structural change of the type that one normally associates with a developing economy.
4. Ghana's exports generally declined in the period of the growth collapse both absolutely (in some years) and certainly as a share of GDP. Specifically, they decreased from about 26.7 percent of GDP in 1960 to about 13.7 percent in 1985, with the occasional large blips as observed, for example, in 1977 (see Table A2.1 below). Imports also declined over this period as a share of GDP, although the rate of decline was slower. So overall, and by 1985, the country's trade deficit had widened sharply, even though the import and export components had both shrunk relative to GDP.

Table A2.1 The External Sector and Importance of Minerals in Ghana's economy, 1960-1985

	1960	1966	1971	1977	1982	1985
Terms of trade (1990=100)	189.95	130.83	112.3	190.1	125.29	121.46
NER (Cedi/\$)	0.71	0.71	1.03	1.15	2.75	60
EER (Cedi/\$)	0.71	1.14	1.10	3.72	24.10	Na
Exports: GDP (%)	26.7	23	20.3	31.8	21.7	13.7
Cocoa: GDP (%)	13.9	7.7	8.1	6.1	1.2	8.9
Cocoa: exports (%)	49.29	52.74	51.39	58.13	35.95	65.1
Ores and metal: GDP (%)	----	3.4	3.0	4.0	5.5	----
Ores and metals: Exports (%)	----	14.9	15.0	12.4	25.6	----
Gold : GDP (%)						1.96
Gold: exports (%)						14.3
Imports: GDP (%)	29.8	16.6	17.7	32.5	17.5	19.2
Non-mineral tradable GDP per capita	417.9	464.5	380.2	300.5	307.4	321.5
GDP per capita	450.3	427	483.7	385.7	322.1	313.3

Source: Adapted from Auty (2000) and updated with Bank of Ghana and WDI, (2004) Data. EER is the equilibrium exchange rate as calculated by Ansah, F. (1991)

5. Arguably, as in 1977, the movements in exports followed the terms of trade movements (see rows 1 and 4 of Table A2.1). For this reason, some commentators have generalized from short periods such as 1977 to 1982, when commodity prices fell sharply after the large earlier increase, to suggest that the growth collapse from the trade side was largely driven by external factors beyond Ghana's direct control. This is true for some short periods but represents only a small part of the story for the period as a whole.
6. In addition, inappropriate domestic policies over the full period from 1965 to 1983 undoubtedly played a major role in undermining export activity. In particular, a severe and worsening over-valuation of the domestic currency played a crucial part in the collapse of the export sector. Table A2.1 (rows 2 and 3) clearly shows the widening gap between the nominal official exchange rate (at which most legal exports needed to be sold) and the hypothetical equilibrium exchange rate needed to compensate exporters for the prevailing high rates of price and cost inflation. Specifically, that gap increased from 0.43 cedis per \$ in 1966 to about 21.35 in 1982⁷⁰. This increased misalignment of the exchange rate represented a massive disincentive to legal export activity in favor of smuggling as well as imports. However, since imports at the official rate were increasingly non-available because of falling export earnings, legal imports too were dragged down in the manner indicated in Table A2.1.

⁷⁰ To put the point more dramatically: by 1982, a typical exporter would have needed to receive cedis 24 per \$1 earned in order to have broadly the same return as was achieved in the early 1960s (assuming that local currency costs were rising broadly in line with general inflation). In fact they received only cedis 2.75 per \$1 earned (see Table A2.1). Under these conditions most exporters who acted legally would have made huge losses by 1982.

7. Cocoa was particularly affected by this policy failure. At the time of independence the major contributor to Ghana's export earnings was cocoa (Table A2.1, row 6). That contribution to exports rose further in the period to 1977 but then fell sharply in the period to 1982. The possible explanations of this are (i) the declines in production provoked by the uncompetitive exchange rate and (ii) the increased incidence of smuggling, especially after 1977 when that over-valuation offered a huge incentive to act illegally.
8. The export share of *minerals and ores* fell in the period of cocoa's rise to 1977 (Table A2.1, row 8). They were discouraged by the same policy factors that impacted exports generally and many old mines were pushed to the point of financial collapse. However, their export share then rose as the cocoa share fell sharply to 1985. Given the very limited investment in mining at that time, this later rise was not so much a reflection of a volume increase (see later analysis) but rather the arithmetic consequence of export price movements and the demoralization of cocoa exports^{71, 72}. It is noteworthy too that, even in 1982 when cocoa output fell as a result of the major drought of that year, cocoa output's contribution to GDP was still over 10 percentage points higher than that of ores and metals.

Within the overall fragile and static structure, the contribution of ores and metals to the macro economy was relatively low and also largely static over this period: a share of GDP of between three and five per cent. (Table A2.1, row 7).

8.3

ECONOMIC RECOVERY, 1986-2004

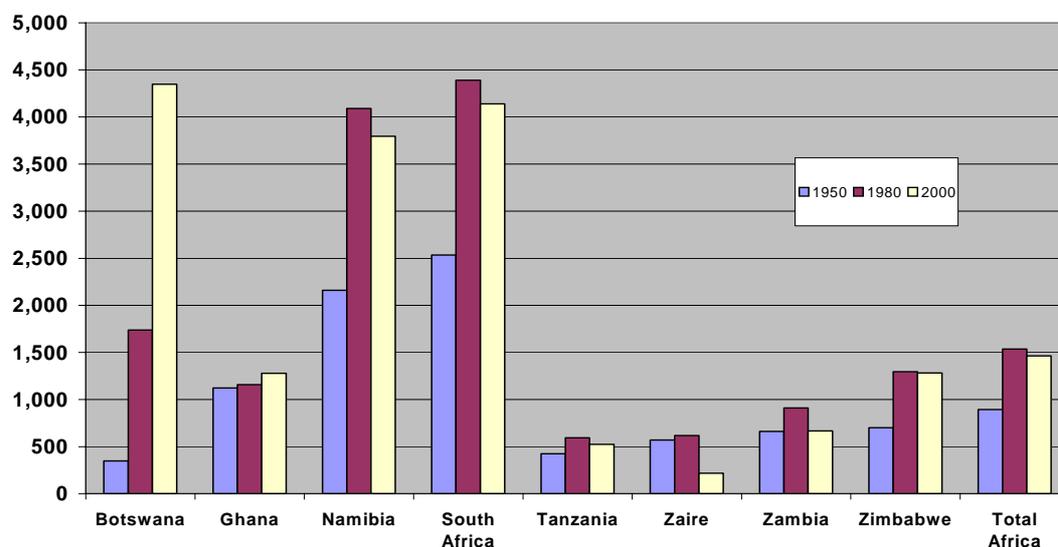
As Figure A2.1 above has already shown, Ghana's record for economic growth saw a radical improvement from soon after the launch of the ERP (1983) and the associated World Bank/IMF supported reforms. Specifically from 1986 to 2002 real GDP growth averaged about 4.5 per cent annually. Real per capita GDP grew at about 1.9 per cent annually, which meant that the average Ghanaian started to see gains in living standards once again. Ghana's growth performance in the post reform period also compares favorably with the average for the sub-Saharan region – where growth averaged about 2.4 per cent annually over this same period. However, the gains in that period could not fully make up for the wasted years of the growth collapse.

The evolving contrasts with other major mining countries in Africa and with Africa generally are shown in Figure A2.2. This records per capita incomes in purchasing power parity (PPP) terms and in the prices of 1990. It can be seen that in the early 1950s, Ghana enjoyed a substantially higher per capita income than all the other African mining economies except South Africa and Namibia. It then lost ground massively to these two countries but also to Botswana and,

⁷¹ Although it is true that Ghana's non-cocoa exports suffered a bit less from currency over-valuation because of the lower burden of export taxation imposed on them. See Roe and Schneider (1992, page 44).

to a lesser extent, Zambia and Zimbabwe in the 30 years to 1980. However, after 1980 and through to 2000 it was one of only two African countries in the graph to gain in terms of per capita income (the other being Botswana⁷³).

Figure A2.2 Per Capita Incomes in African Mining Economies: 1950, 1980 and 2000 (PPP basis in \$ and 1990 prices)



Source: Angus Maddison (2000). Data use PPP accounts and so are not directly comparable with earlier data in this chapter.

Table A2.2 and Table 4A2.3 below provide some details that spell out some of the characteristics of growth during the recovery phase.

72 It is known that new plantings of cocoa became negligible from an early part of this period, as did the replanting of aged trees (Leith, 1974).

73 Specifically, the average annual per capita GDP for Ghana over this period was about US\$368 (in 1995 prices) compared to the SSA average of about US\$570. However, the annual growth in real per capita terms of about 1.9 for Ghana compared to the negative rates recorded for the region as a whole, have meant that Ghana's per capita GDP has converged back towards the SSA average.

Table A2.2 Selected Macroeconomic Indicators, 1986-2003

	1986-2002	1986-1990	1991-1995	1996-2000	2001	2002	2003
Real GDP growth	4.5	4.8	4.3	4.3	4.2	4.5	5.2
Real GDP per capita growth	1.9	1.8	1.5	2.0	2.4	2.8	
Real per capita GDP	386	331	361	391	417	29	
Inflation	27.7	32.1	31.3	24.6	21.3	15.2	23.6
Gross dom. savings (% of GDP)	6.8	5.2	7.7	7.3	7.0	7.4	
Gross nat. saving (% of GDP)	13.5	9.3	13.7	14.3	23.1	20.0	
Gross investments (% of GDP)	18.3	11.7	19.2	22.0	27.1	18.8	

Source: World Bank, World Development Indicators (WDI 2004) and Bank of Ghana

Table A2.3 Structure of the Ghanaian Economy, 1986-2003

	1986-2002	1986-1990	1991-1995	1996-2000	2001	2002	2003
Agriculture value added: GDP (%)	43.3	48.4	43.3	40.7	39.3	38.8	40.2
Industry value added: GDP (%)	23.6	16.7	23.3	28.1	28.1	27.9	27.8
Manufacturing value added: GDP (%)	10.0	10.1	9.9	10.0	10.0	10.0	9.9
Services value added: GDP (%)	33.1	34.9	33.4	31.2	32.5	33.2	32
Agriculture (Annual % growth)	3.1	1.8	2.5	4.1	4.0	4.4	6.1
Industry (Annual % growth)	4.3	7.2	1.0	4.6	2.9	4.7	5.1
Manufacturing (Annual % growth)	1.8	6.5	-7.4	4.7	3.7	4.8	4.6
Services (Annual % growth)	6.5	7.9	7.4	5.4	5.1	4.7	4.7

Figure A2.3 and Figure A2.4, which are taken from the Analytical Framework Report (part of ICMM's 'Resource Endowment' series), elaborate further by showing Ghana's growth rates of non-mineral GDP against various comparators⁷⁴.

⁷⁴ Since these figures cover the period from 1980, which includes the last years of the "collapsed growth" period, they will if anything understate the quality of Ghana's performance for the post-1983 period.

Figure A2.3 GDP Per Capita Average Absolute Percentage Growth 1980 to 2002

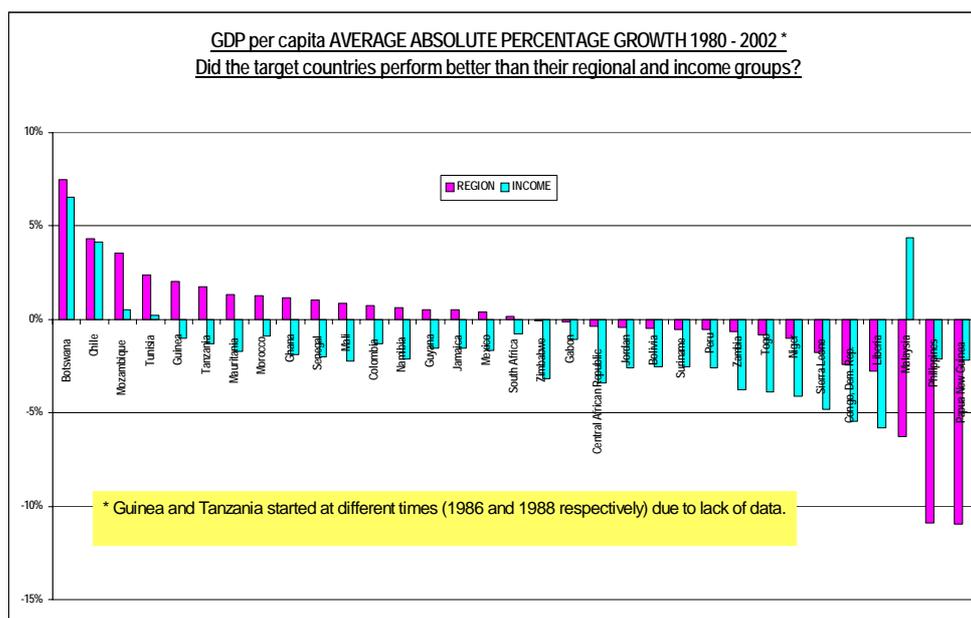
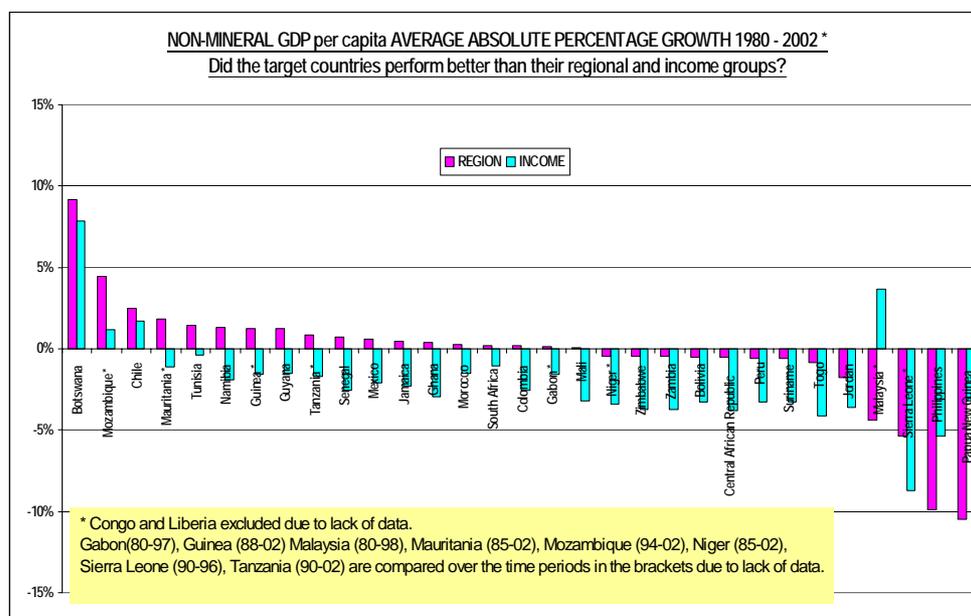


Figure A2.4 Non-mineral GDP Per Capita Average Absolute Percentage Growth 1980 to 2002



Several important propositions emerge from these two tables and the two graphics:

- There was a marked increase during the period shown in Table A2.2 in both the rate of domestic savings and the rate of investment. The average investment rate of 11.4 per cent of GDP in 1986 to 1990 gave way to an average rate of 22 per cent in the period 1996 to 2000. So improved growth has definitely been associated with a much higher level of investment. It is also known that a much-increased level of mining investment has been an important part of this aggregate change, and that mining accounts for the largest single element in the big rise in FDI seen in the 1990s.
- Table 4A2.3 shows some signs of a structural change away from agricultural production and towards industrial production (manufacturing plus mining plus construction): a shift that was wholly absent in the years through 1983.
- However, since the GDP share of manufacturing output is flat throughout the later period, the whole of the large structural shift in favor of industry is associated with construction and mining.
- Figure A2.3 shows that Ghana's GDP growth rate from 1980 is around two percentage points per annum better than countries in the Sub-Saharan region generally, although this record is shared with Tanzania. Botswana is in a league of its own for growth performance in the years since 1980.
- Figure A2.4 shows that Ghana's growth record for non-mineral GDP is also better than that of Sub-Saharan Africa generally but by a much smaller margin (than is the case for total GDP). This indicates that mining has been a key driver of the high growth rate of total GDP and that the non-mineral components of that aggregate have done well but not so absolutely well as mining.

8.4 *A CLOSER LOOK AT THE RISING CONTRIBUTION OF MINING*

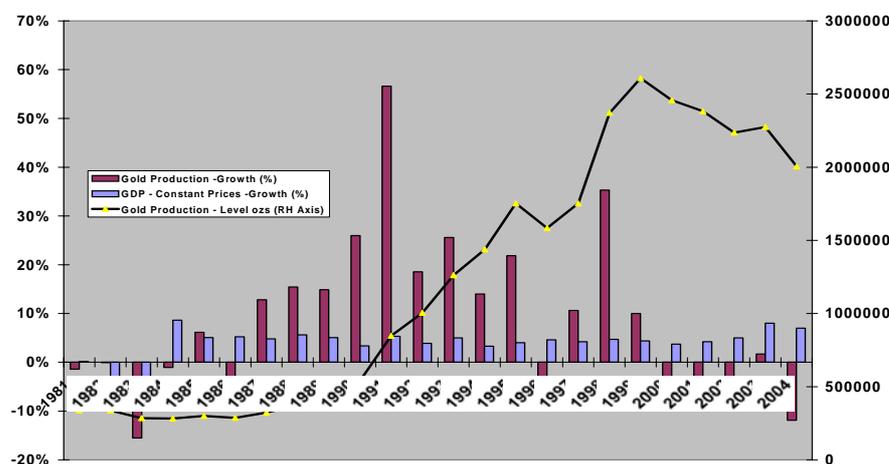
The generally more favorable environment for private sector activity, and the removal of some of the more egregious governance failures of the years through 1983 (see also Section 4.2), definitely helped the resurgence of mining activity. This resurgence, however, also depended on the radical reform of the legal and regulatory basis for such activity as embodied in the Minerals and Mining Law (PNDCL 153) of 1986, which was also given substantial World Bank technical and financial support. It led to a massive transformation involving high investment in the sector and a flow of foreign direct investment of some \$5 billion in the 1990s: more than in all other sectors of activity combined⁷⁵. This financed the establishment of some 14 new mines between 1988 and the end of the 1990s.

The impact on mining investment and production took place after a lag of a further two to three years after 1986, but from around 1989 the increase was dramatic, as figure A2.5 below clearly indicates. The increase was particularly large in the case of gold mining – the most important of the mining sectors – but was also very significant in the case of diamonds and, at a later stage, manganese.

⁷⁵ World Bank (October 2003)

In order to put the gains in mineral production into context with the overall increase in GDP levels, Figure A2.5 below compares Ghana's GDP growth on a constant price basis with the growth of gold mining production also on a constant price basis.

Figure A2.5 GDP Growth and Gold Production: 1981-2004



Source: Ghana Minerals Commission

The growth rate of mining production in most years since 1987 has clearly outdistanced the overall growth rate of GDP by a very considerable margin. This has contributed to the cumulative increase of mineral production already discussed, and as indicated on the right-hand scale of the figure. However, there has also been substantial year-to-year variation in the absolute size of the growth rate and in six of the 17 years since 1987, the growth of mineral production has actually been negative. Most of these years have been since 2000. This instability does not appear to have much affected the stability of GDP growth. As can be seen from the chart, this has been pretty consistently in the range of four to six per cent.

Box A2.1 The Effects of Mineral Price Changes

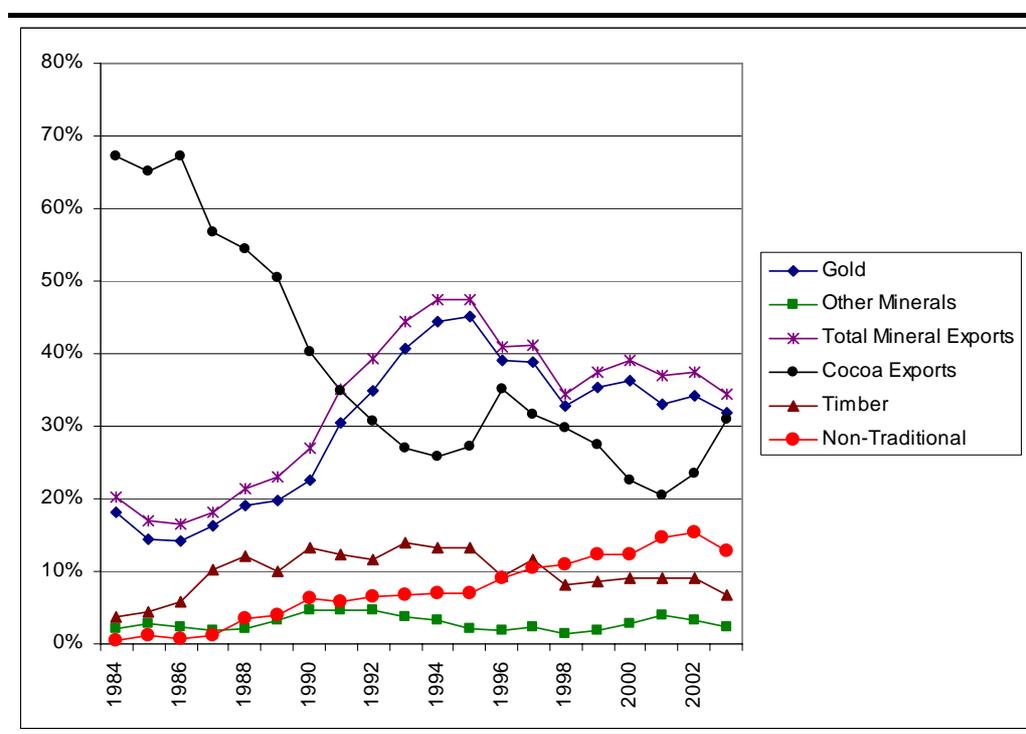
There have been two sustained periods of price falls for gold in the period covered by Figure A2.. In the first of these, from around January 1988 to January 1993 when the London price fell from around \$500 to less than \$350, the growth of production was strong and so largely compensated in revenue terms for the price decline. In the second period from around January 1996 to the end of 1999 (when the price fell from just over \$400 to \$250), production growth was less strong and as a result total revenues actually fell in two years in that period. Since 2000, the pattern has been somewhat different with the actual falls in production as shown in Figure A2.5 contributing to revenue decline in two of the five years⁷⁶.

⁷⁶ Price data are from Aryee (2001)

Taking the period as a whole, there is a strong presumption that the generally high rates of mineral production and mineral revenues have been a significant driver of the impressive sustained GDP growth that Ghana has achieved.

A formal regression for GDP growth reveals a small (plus 0.0418) but statistically significant coefficient for the growth of mineral production as an explanation of overall GDP growth. However, given the variability in the former series and other statistical problems it is difficult to infer causality from this. Figure A2.6 below shows that through the mid-1990s, mining exports gradually rose to become Ghana's largest single export. Both total mineral exports and the dominant gold mining component of this overtook cocoa as the leading export around 1992. In the past ten years, this situation has been somewhat reversed (partly through the periodic falls in the world price and more recently due to reductions in production). However, gold mining is still on a par with cocoa as the country's single most important export.

Figure A2.6 The Changing Share of Mining Exports



Finally, the contribution over time of mining to government revenues has reflected the patterns of production and price movements just described. Through the mid-1990s, when mineral production and revenues were still growing strongly, the sector became an ever more important source of government revenues with that contribution peaking at 17.9 per cent of tax revenues in 1995. Since then the picture has shown some volatility with the revenue contribution fluctuating between 14.5 per cent of the total and 10.7 per cent. However, it is relevant to note that there has not been a single year since 1991 when mineral revenues to the government have actually fallen. Any volatility has been in the size of the annual increases.

On the basis of the findings in this present section, could mining be described as a leading cause of Ghana's economic recovery? No – any such attribution of cause and effect would certainly be far too strong. A more realistic proposition is that mining has been a very significant part of the productive base that has supported improved growth and also made possible some of the social gains that have also been seen and that are analyzed more fully below. Could that impact have been greater? It is hard to say, but the Botswana experience provides a comparator that is of possible relevance. Could it have come earlier in Ghana's post-independence history? Almost certainly *yes* if economic policies had been more appropriate (see below). The natural resources of gold in particular were in the ground and the basic capacity had been established in Obuasi and elsewhere for many years. A better framework of economic and commercial policies through the 1960s and 1970s would surely have seen some of the income gains from mining arriving much earlier.

In the growth collapse between 1965 and 1983, mining activity suffered demoralization similar to that of most private sector activities in Ghana. A standstill in new investment, the financial collapse of old mines and the failure to open any major new mines were the consequences. However, the relatively limited importance of mining at this time (typically around 3-4% of GDP) meant that this standstill was not of itself a primary cause of Ghana's overall economic malaise.

In the years of economic recovery after 1983, mining investment has clearly responded positively to the improved investment and regulatory climate and the greater level of political stability. This in turn has resulted in rates of growth of production and exports that have made mining a leading driver of overall economic growth and exports. Its share of both GDP and export earnings has risen and its rapid growth has helped Ghana to achieve a rate of overall economic growth that has caught up some – but not all – of the ground that it lost on comparator countries in Africa in the earlier period of negative growth.

Against this are the arguments made in the World Bank's OED report (1993) that it is unclear what are the true net benefits to Ghana from large-scale gold mining. When undertaken by foreign companies as is now the case, the high import content is argued to produce only modest amounts of foreign exchange (net) after all outflows have been accounted for. Surface mining, the OED report admits, produces greater national benefits (in the form of royalties) on much higher production volumes but over a shorter span of time because of the fast rates of extraction. It also comes burdened with higher social costs for local communities. The OED's argument is that the net benefits are small relative to the high dollar value of the activity. There is no suggestion that these benefits are negative in general.

Has the symbiotic relationship between mining activity and general socio-economic development been as good as it could be? Again the answer is no – many things in that relationship have gone wrong. Analysts and activist NGO

groups alike are quite correct to be worried about some aspects of this. As shown below, the income gains that have been enjoyed in the specialist mining areas of the country have been above average but have possibly been disappointing relative to the very large mining investments that have taken place in those same areas. Nor has this production spread very obvious benefits to the more impoverished parts of the country, especially in the north. There are also doubts about the sustainability of reasonable living standards in some mining communities as major mines come to the end of their lives.

In particular, the administrative and fiscal arrangements to ensure a logical distribution of mineral royalties around the country and to deal with the longer-term needs of mining communities are insufficient to deal with the rising importance of mining in overall economic activity. This is argued in detail in Section 5 of the main report.

At this stage of assessing mining's contribution to macroeconomic outcomes, it is possible to conclude this contribution has been broadly positive and that the mainstream "resource curse propositions" cannot really be said to apply to mining in Ghana over its rapid growth since the mid-1980s.

8.6 SOCIAL OUTCOMES?

8.6.1 Introduction

How did the growth recovery after 1983 affect Ghana's social situation and the position of its poor? In this sub-section the analysis starts with the overall changes in *poverty incidence* in Ghana: a high level indicator of the social condition. It then focuses onto more specific aspects of that social condition, namely educational and health status, life expectancy and child mortality⁷⁷. Where the survey data permits it looks in detail at the situation in the *four* of Ghana's 110 administrative districts where mining is most heavily concentrated, including the Obuasi area.

8.6.2 Overall Poverty Trends

The discussion of poverty that follows is based on trends and patterns of "income" poverty as measured by various rounds of the Ghana Living Standards Survey, GLSS⁷⁸. In general, this shows that poverty in the country remains high in absolute terms, although levels of poverty have declined steadily in most recent years.

⁷⁷ The population that is the focus of this analysis has changed significantly in the post-independence period. The first post-independence census conducted in 1960 indicated a population of 6.7 million. The 1970 census recorded a population of 8.6 million implying an intercensal growth rate of 2.4 per cent. The population then rose further to 12.3 million in 1984 and 18.9 million in 2000 respectively. So the average growth rate between 1984 and 2000 was 2.7 per cent. Over the longer period from 1970 to 2000, a period of 30 years, the population of Ghana doubled. This has meant a large rise in population density from 52 persons per square kilometer in 1984 to 79 persons in 2000. The brunt of this rise has been seen in the Greater Accra region and in other urban areas. Specifically, the urban population of about 32 per cent of the total in 1984 increased to about 44 per cent in 2000.

⁷⁸ This survey was started in 1991 and has become one of the most useful and well analyzed of all such surveys in Africa. The results from Round 5 were not available at the time of writing.

Drawing on the latest available rounds of the Ghana Living Standards Survey (GLSS Rounds 3 and 4) helps to identify some of the main trends in income measures of poverty between 1992 and 1999⁷⁹. Between the two surveys average income recorded an increase of 3.1 per cent per annum (see Table A2.4 below)⁸⁰.

In the same period, the poverty headcount index reduced by about 12 percentage points (from nearly 52 per cent in 1992 to 40 per cent in 1999⁸¹). Mackay and Aryeetey (2004) using the GLSS data estimated the growth elasticity of poverty incidence for Ghana at 0.98, a figure that compares closely with the results for many other Sub-Saharan countries (See Figure A2.7 below). This suggests a very strong link from the national income growth described above to the reductions in poverty incidence that is analyzed here.

Table A2.4 Income Poverty and Inequality

Survey Finding	1991/92	1998/99	Changes, between survey periods
Average income standard of living measure (from survey; millions of cedis per year, constant prices)	1.44	1.78	3.1% p.a
Change in real consumption per capita (national accounts)			2.9%
Gini coefficient	0.373	0.388	
Poverty head count index (per cent)	51.7	39.5	-12.22
Growth elasticity of poverty headcount index			0.98

Source: Mackay and Aryeetey, 2004

Even though poverty in Ghana generally decreased over the 1990s, there were mixed fortunes with respect to households, regions and economic activities and these are analyzed next.

8.6.3 Poverty Trends by Region

Figure A2.7 below shows the 40 per cent poverty incidence for Ghana as a whole (the last column). It also shows how this poverty is spread over the ten administrative regions of the country. On a regional basis the 'three northern regions' – Upper East, Upper West and Northern, which have traditionally had the highest incidence of poverty, were also the poorest regions in the two data periods (1991 and 1999) shown in the figure. The Upper East and Upper West have the highest levels of poverty with incidence rates of 88 and 84 per cent respectively in 1999. They are followed by the Northern region with a poverty rate of 69 per cent. *By any standards these are all very high levels of poverty in absolute terms.*

⁷⁹ 1992 and 1999 are used conveniently to describe the survey periods 1991/92 and 1998/99 respectively.

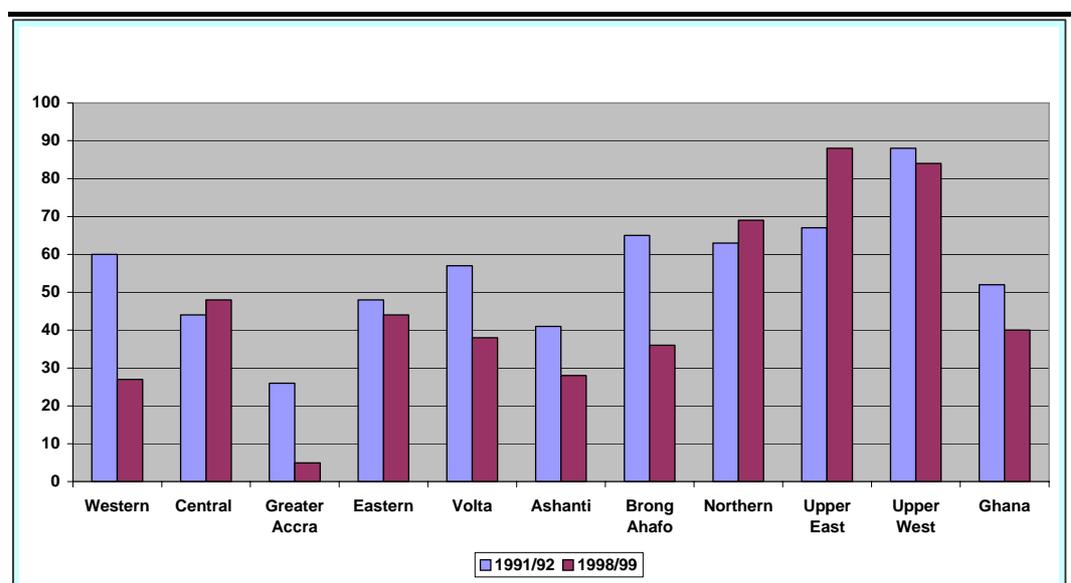
⁸⁰ The 2.9 per cent growth in real consumption per capita captured in the national accounts data lends credence to the observed increases in average income of 3.1 per cent shown in the survey evidence.

⁸¹ However, income inequality as measured by the Gini coefficient widened slightly (from 0.373 to 0.388).

Two other regions, Central and Eastern also had poverty rates above the 1999 national average of 40 per cent.

Overall five regions have poverty levels above the national average and, given their location, poverty in Ghana can reasonably be described as a 'Northern' phenomenon. In that regard what has been experienced in the period of the 1990s merely continues a pattern of relative neglect of that part of the country that goes back to colonial days if not before (see Box A2.2).

Figure A2.7 Trends in Poverty Incidence by Administrative Regions, 1991-1999



Source: Ghana Statistical Service, GLSS 3 and 4.

The three northern regions of Ghana account for 40 per cent of the country's land area but only about 14 per cent of its production. Rainfall patterns restrict the north to only one cropping cycle each year, and food crops dominate its agriculture far more than that of the south. The south has the bulk of the country's export crops and most major manufacturing, as well as the bulk of mining activity. Although the north is generally sparsely populated, some sub-divisions such as Upper East region diverge from this pattern. This results in pressure on land and difficulties in providing sufficient food for many families in this region.

These patterns of economic activity have also led historically to the south having the majority of the country's major towns. For many years it has also been disproportionately served by infrastructure. In relation to public services, it is well established that the British colonial administrations paid far less attention to the north. This imbalance was addressed during the Nkrumah years and has been the subject of government concern more recently (see the GPRS) but the relative deprivation still remains.

The other seven regions in Ghana all have poverty rates below the national average of 40 per cent. Greater Accra records the lowest incidence with poverty levels around five per cent. But Ashanti region (28 per cent) and Western region (27 per cent) – the two regions where most major mining activity is located – are the next lowest in terms of poverty incidence on the basis of the 1999 data.

It is notable that Ghana's overall national reduction in poverty incidence after 1991 was enjoyed by seven of the 10 regions. But three of the five most impoverished regions saw further deterioration in that period: Central, Northern and the Upper East regions. This would seem to indicate some serious failings in the systems available to distribute the benefits of higher incomes in a regionally equitable manner: an issue that is dealt with at greater length below.

8.6.4 Poverty Trends by Activity and Locations

The examination of poverty levels and trends by reference to the main activities of heads of households reveals some of the underlying sources of the gains just described and the causes of their differing magnitudes. This is done initially in Table A2.5 below.

Table A2.5 Tends in Poverty Incidence by Industry of Main Occupation of Household (National Accounts Classification), 1991/92 and 1998/99.

Main Economic Activity	Population Share		Incidence of Poverty	
	1991/92	1998/99	1991/92	1998/99
Agriculture	53.3	49.3	65.8	54.7
• Agriculture and livestock	51.6	46.9	66.8	55.8
• Forestry and logging	0.8	0.2	20.0	34.4
• Fishing	0.9	2.2	48.6	33.6
Industry	11.4	13.9	41.4	27.2
• Mining and quarrying	0.8	1.2	29.2	7.1
• Manufacturing	8.7	10.5	42.6	28.8
• Electricity, water & gas	0.2	0.3	13.0	23.7
• Construction	1.6	1.9	45.0	31.8
Services	33.3	34.8	35.2	23.8
• Trading	17.0	18.6	32.6	26.7
• Transport, storage and communication	2.8	3.4	16.6	10.8
• Finance, real estate and business services	0.7	1.0	34.8	14.7
• Public admin., defense and others	12.8	11.9	34.4	23.6
Non-working	2.0	2.0	24.1	21.0
All	100.0	100.0	51.7	39.5

Source: Ghana Statistical Service, GLSS 3 and 4.

The lowest *absolute* levels of poverty in 1999 are (in order) in families where the head of household is engaged in:

1. formal mining;
2. transport and communication;
3. finance and business services; and
4. public administration.

The worst poverty is to be found in families where the head is engaged in:

1. agriculture;
2. forestry and fishing.

With the exception of public administration, the sectors characterized as low poverty sectors – including mining – all employ a quite small proportion of the country's population. But despite this, mining easily ranks first for the *absolute decline* in poverty from 1991 to 1999 (the 29.2 per cent incidence in 1991 fell to only 7.1 per cent by 1999). Forestry and logging was the worst performing sector in this regard, with a big increase in poverty over the same period.

Those insights are further clarified by next examining the poverty levels and trends on the basis of the types of employment of the heads of households. These are set out in Table A2.6 below.

Table A2.6 Trends in Poverty Incidence by Main Economic Activity of Household, 1991/91 and 1998/99

Main Economic Activity	Population Share		Incidence of Poverty	
	1991/92	1998/99	1991/92	1998/99
Public sector employment	13.5	10.7	34.7	22.7
Private Formal employment	3.9	4.9	30.3	11.3
Private informal	3.1	2.9	38.6	25.2
Export farmers	6.3	7.0	64.0	38.7
Food crop farmers	43.6	38.6	68.1	59.4
Non-farm self employment	27.6	33.8	38.4	28.6
Non-working	2.0	2.1	18.8	20.4
All	100.0	100.0	51.7	39.5

Source: Ghana Statistical Service, GLSS 3 and 4.

These data show that a household is less likely to be in poverty if first the head of household is in private formal employment. The second-best employment in this regard, but a long way back, is in the public sector. The biggest gains by far since 1991 have been in the poverty status of privately employed heads of households. Back in 1991, similarly high levels of poverty characterized private and public employment – a job in government was the main route to escape poverty. But since that date, the gains associated with private employment status have been radically more impressive than those associated with public employment, although the latter still employs a larger proportion of the population.

Although export-based farmers have greatly improved their lot since 1991, they are still absolutely much more prone to poverty than are most other employment categories. Food crop and subsistence farmers remain, as in 1991, the most likely group to face poverty. Unlike the export-based farmer they have seen only a very modest improvement in that situation in the decade covered by the GLSS results.

A number of basic propositions can be put forward based on this admittedly partial evidence about poverty in the period 1991-1999 presented in these various results.

- General levels of poverty have certainly fallen rapidly in this period.
- The improved economic climate and the new incentives put in place by the reforms of the mid-1980s have clearly led to significant improvements in poverty in almost all activity areas involving *formal* employment, with particularly large gains being seen in *private formal* employment.
- Similar but smaller gains have been seen in the export (ie more commercialized) areas of agriculture.
- But poverty improvements have lagged in smaller scale and subsistence farming. Unfortunately this activity represents the largest single source of livelihoods in Ghana (39 per cent in 1999). Hence the very limited

poverty gains enjoyed by families engaged in such activities have seriously slowed the overall poverty improvements for the country as a whole. Indeed in some of the geographical regions of Ghana where dependence on small scale and subsistence farming is particularly high, poverty levels have actually risen in the ten-year-period since 1991 (Northern region and Upper East) or have fallen only very slightly (Upper West).

- Within the commercial areas of activity, *mining-related employment* has seen very substantial improvements in poverty incidence, albeit applied to a very smaller proportion of the total population (1.2 per cent in 1999). However, there remains a major unresolved problem as regards displaced farmers and sharecroppers.

8.6.5 Poverty within Key Mining Areas in Ghana

The focus of this analysis can sharpen just a bit further by looking at the poverty tendencies at the district level, with a special focus on *mining-dependent districts*. This makes use of the data and classifications used in the most recent update (2003) of the Ghana Poverty Reduction Strategy (GPRS), which classifies all 110 of Ghana's administrative districts by:

- region;
- whether they are urban or rural; and
- on a three-way poverty scale of non-poor (NP), poor (P) or very poor (VP).

The summary results of this exercise are in Table A2.7 below.

Table A2.7 Distribution of Poverty Within Regions

Region	No of Districts	Overall			Rural			Urban		
		NP	P	VP	NP	P	VP	NP	P	VP
Accra	5	3	2	0	2	3	0	5	0	0
Western	11	8	3	0	8	3	0	11	0	0
Ashanti	18	4	14	0	1	17	0	17	1	0
Brong Ahafo	13	2	10	1	0	7	6	11	2	0
Volta	12	1	11	0	1	11	0	9	3	0
Eastern	15	6	8	1	5	7	3	12	3	0
Central	12	1	11	0	0	12	0	3	6	3
Northern	13	0	1	12	0	0	13	0	8	5
Upper East	5	0	0	5	0	0	5	5	0	0
Upper West	6	0	0	6	0	0	6	3	3	0
Total	110	25	60	25	17	60	33	76	26	8

Source: Compiled from the GPRS Update, February 2004.

All 110 districts have both urban and rural components. However, in the country as a whole, the incidence of serious poverty (VP) is predominantly a rural rather than an urban phenomenon (33 VP cases in rural areas versus only eight for the urban areas). Indeed only two of Ghana's 10 regions have any very poor urban districts at all (Central region and Northern region – last

column of the table). Note too that four of the 10 regions have a zero incidence of serious poverty in both rural and urban components of all their Districts – Accra, Western region, Ashanti, and Volta.

Two of the four better performing regions in poverty incidence are Western Region and Ashanti where most of Ghana’s mining activity is located. A third is the capital region, where incomes would be expected to be higher anyway.

Finally, to examine the incidence of poverty in the four districts in those two regions where mining mostly locates. This information, as based on the 1999 GLSS, is set out in Table A2.8 below. Mining in the Ashanti region is concentrated in the Adansi West (location of the Obuasi mine) and Ashanti Akim districts. In the Western region, mining activities are fairly dispersed – the districts of Tarkwa, Prestea, Nsuta, Bogosu and Aboso are all affected by mining.

Table A2.8 Incidence of Poverty in Key Mining Districts in Ghana

Region	Overall	Rural	Urban	Region	Ghana
Wassa West (Western Region)	16	18	11	27	40
Bibiani-Anwhiaso-Bekwai (Western Region)	23	25	19	27	40
Adansi West (Ashanti Region)	25	47	10	26	40
Ashanti Akim (Ashanti Region)	37	52	25	26	40

Source: GPRS Update, February 2005

In the four main mining districts of Ghana the incidence of poverty is generally below the national as well as the regional averages. This is particularly the case for the main mining districts in the Western region. The overall incidence of poverty in the Wassa West district is about 16 per cent and that for the Bibiani-Anwhiaso-Bekwai district is about 23 per cent. This compares to the regional and national averages of about 27 per cent and 40 per cent respectively. Hence these two districts are classified as “Not Poor” (NP) on the basis of the GPRS categories.

In the two main mining districts in the Ashanti region, namely Adansi West (Obuasi) and Ashanti Akim, the poverty incidence is again low: 25 per cent and 37 per cent respectively, compared with the national average of 40 per cent. However, the incidence in the Ashanti Akim district is higher than the regional average at 37%. In both the Ashanti districts rural poverty is obviously a major problem.

Three interesting observations can be made based on the pattern of distribution of poverty in these mining districts.

- First, as Table A2.8 confirms, poverty levels in these districts are generally lower than in other districts within the same region as well as in the country as a whole.

- Second, even within these mining districts, poverty averages are lower in those that have a larger number of dispersed mines (Wassa West district) compared with those that have a relatively high concentration, such as the Adansi West (Obuasi area).
- Third, that poverty advantage is coming from the much lower incidence of poverty in the rural areas of the Wassa West district. In both Ashanti districts rural poverty is high.

So despite the harm that mining is perceived to be doing to rural activities in Ghana, the facts seem to suggest that income poverty is benefitted, rather than harmed, by the presence of mining.

8.6.6 Social Indicators Performance, 1986-2004

Overview

The strong growth of GDP in the past twenty years seems to have made a significant impact on overall poverty levels in Ghana, at least in the period since 1991 for which there is comparable data. Although the reductions in poverty have not been evenly spread, a better than average performance has been seen in mining districts, and amongst those families that rely on mining as their main source of income. But does this broadly positive result carry over to other more detailed social indicators? A broad overview is provided in Table A2.9.

Table A2.9 Selected Social Indicators for Ghana, 1986-2002

Region/Period	Sub-Saharan Africa				Ghana			
	1986-2002	1987	1995	2002	1986-2002	1987	1995	2002
Primary school enrol. rates (Gross)	76.8	----	75.7	----	76.7	----	72.4	----
Adult literacy rates	63.8	----	----	64.9	63.6	54.0	65.2	73.8
Public spending on education (% GDP)	3.7	3.3	4.3	----	3.8	3.3	4.7	----
Life expectancy at birth	48.6	49.9	49.2	45.8	57.5	56.0	59.2	54.9
Infant mortality (per 1000 births)	106.8	----	109.7	103.1	67.3	----	69.0	60.0
Under five mortality (per 1000)	180.3	----	184.9	173.9	108.0	----	110.0	97.0
Health expenditures (% GDP)	6.2	----	----	----	4.3	----	----	----

Source: WDI, 2004

First, when the broad changes over time in Ghana are compared using the most recent and the most distant available dates from World Development Indicators as the comparators there are clear improvements in:

- adult literacy rates;
- public spending on education; and
- infant mortality (total and under five mortality).

However, in common with most of Africa, it shows that life expectancy, which increased through 1995, has more recently shown a four-percentage point fall (through 2002)⁸².

Second, comparing Ghana with Africa as a whole suggests superior Ghanaian performance in the areas of:

- adult literacy rates (Ghana having an almost 10 percentage point advantage over Africa as a whole);
- public spending on education;
- life expectancy (Ghana having an almost 10 year advantage over Africa as a whole); and
- infant mortality (both measures) – a 40 per 1000 advantage for Ghana and much more than this for the under-five measure.

Somewhat surprisingly the data in the table suggest that Ghana may be lagging behind Africa in relation to rates of primary school enrolments (the 1995 comparison), although the 1986-2002 averages indicate something close to parity.

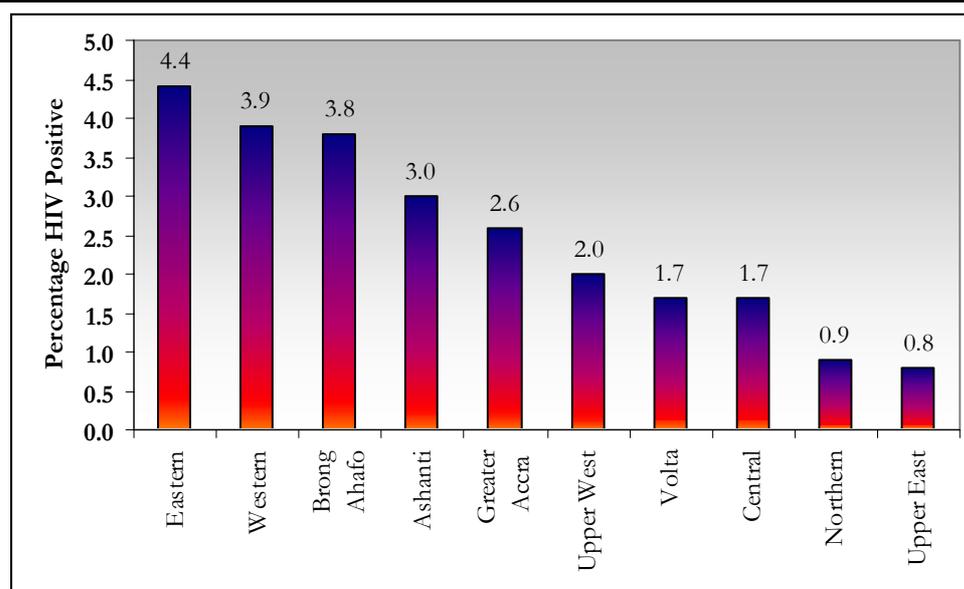
HIV/AIDS Prevalence

The HIV prevalence rate within the 15-49-age bracket in Ghana was estimated at 2.2 per cent (GSS, NMIMR/ORC Macro, 2003). The data are illustrated in Figure A2.48. Eastern region was the hardest hit (not a main mining area), where there was a prevalence rate (4.4 per cent) that was fully twice the national average. Other regions with prevalence rates higher the national average included the two main mining regions of Western (3.9 per cent) and Ashanti (3.9 per cent also). The others were Greater Accra (3.0 per cent) and Brong Ahafo (3.8 per cent). Upper East region had the least prevalence rate of 0.8 per cent. The prevalence rate in women of the 15-49 age group is reported to be nearly as twice as that of men in most of the regions of Ghana. This phenomenon of HIV incidence clearly underscores the high vulnerability of women in the country.

The location of highest incidence rates confirms that mining areas may figure amongst these. However, the far higher incidence elsewhere, and the similarly high incidence in non-mining regions, suggests that mining alone is merely one of several explanations.

82 Two factors may account for this. First, there is an increasing prevalence rate for HIV/AIDS in Ghana – the rate increased from about 3% to about 3.6% between 2001 and 2003 (Source: Ghana Health Service). Second, there has been some recent increase in the infant mortality rate. Ghana health service reports that mortality levels increased from about 57 (per 1000 births) over the period 1994-1998 to about 64 for the period 1999-2003.

Figure A2.4 HIV Prevalence by Region



Source: Ghana Health Service

8.6.7 Social Outcomes in Key Mining Areas

The last evidence reviewed on the social situation in Ghana relates to the district-level measures of certain core welfare indicators. These have become available only very recently from the new Core Welfare Indicator Questionnaire (CWIQ) that was instituted in 2003. Table A2.10 sets out the education and health indicators from this survey. It compares the numbers for the nation as a whole with those in the two main mining regions (Ashanti and Western) and within those regions for each of the four main mining-affected districts.

Table A2.10 Education and Health Indicators for Selected Areas

Area	Net Primary enrolment	Adult Literacy	Access to health Within 30 minutes of residence
<i>National Average</i>	69.9	53.7	57.7
<i>Western Region</i>	74.9	56.7	46.9
Wassa West	77.0	62.3	70.5
Bibiani-Anwhiaso-Bekwai	71.9	50.5	38.8
<i>Ashanti Region</i>	78.9	60.9	69.1
Adansi West	77.8	60.7	75.3
Ashanti-Akim North	81.3	59.1	69.1

Source: Core Welfare Indicator questionnaires (CWIQ) (2003)

The results show that the education indicators are generally better for the two mining regions than for the country as a whole. Net enrolment and adult literacy are respectively about 70% and 54% for Ghana. The comparable

indicator levels for the Western region are respectively about 75% and 56%, whilst those for the Ashanti region are about 79% and 61%. It is also observed that about 58% of households in Ghana have access to health within 30 minutes of their residence. Ashanti region does much better than this (69%) but Western region does generally worse (47%). This indicator shows that whilst the Ashanti region has better access to health, the same cannot be said of the Western region, when compared with the national average.

Within these two mining regions the social outcomes in the selected mining districts show mixed results for how they compare with the regional averages. The net enrolment rates and the health access in the highly mine-dependent Wassa West district (77%) are both much better than for the region as a whole. Bibiani-Anwhiaso-Bekwai district fares less well with a net primary enrolment rate of about 71.9 and relatively poor health access. A similar pattern is also observed for the Ashanti region with Ashanti-Akim North district having a slightly higher rate than for the region's average whilst the Adansi-West district has a slightly lower rate. But on both the health and the education indicators both these districts perform much better than the national average.

Adult literacy generally follows a similar pattern – the rate for Wassa West is higher than that for the Western region as a whole, while that for the Bibiani-Anwhiaso-Bekwai districts shows a lower rate. Both districts in the Ashanti have lower rates than the regional average, albeit being higher than the national average.

Table A2.11 provides a similar set of comparisons for household access to safe water and sanitation.

Table A2.11 Percentage of Households with Access to Safe Water and Sanitation

<i>Area</i>	<i>Improved water sources</i>	<i>Improved Waste Disposal</i>	<i>Safe Sanitation</i>
National Average	74.2	65.9	55.0
<i>Western Region Average</i>	71.3	71.4	52.9
Wassa West	86.4	81.4	61.5
Bibiani-Anwhiaso-Bekwai	76.4	84.5	42.7
<i>Ashanti Region Average</i>	85	89.2	65.7
Adansi West	90.5	93.6	71.1
Ashanti-Akim North	82.7	80.1	58.9

Source: Core Welfare Indicator questionnaires (CWIQ) (2003)

These statistics again suggest that the main mining districts are doing better than the country as a whole. This is particularly the case for Wassa West and Adansi West – the two most mining dependent districts in Ghana. The proportion of households with improved water sources, improved waste disposal and improved sanitation in the Wassa West districts are respectively

about 86%, 81% and 82%, compared to the national average levels of 74%, 66% and 55% respectively. The statistics are even better for the Adansi West districts with 91%, 94% and 71%.

Finally Table A2.12 shows comparisons for the availability of less crucial amenities.

Table A2.12 Percentage Distribution of Households Owning Assets

<i>Area</i>	<i>Refrigerator</i>	<i>TV</i>	<i>Radio</i>	<i>Vehicle</i>
National	21.3	27.1	69.4	4.3
Western Region	18.4	24.4	70.3	4.0
Wassa West	25.3	41.3	77.6	5.2
Bibiani-Anwhiaso-Bekwai	20.0	21.5	79.4	2.2
<i>Ashanti</i>	27.3	33.8	74.3	4.4
Adansi West	33.6	40.0	80.9	6.8
Ashanti-Akim North	23.3	25.2	69.6	3.6

Source: Core Welfare Indicator questionnaires (CWIQ) (2003)

Table A2.12 shows that asset ownership is higher in these mining areas than it is for the country as a whole. This is particularly the case for the Wassa West and Adansi West districts. In the Wassa West district the percentage of households with a refrigerator, TV, and radio are respectively about 25%, 41% and 78%. These proportions are much higher than the national averages of 21%, 27% and 69% respectively. For the Adansi West district the proportions that own these assets are respectively about 34%, 40% and 81%. Additionally it is noted that whereas about 4.3% of households in Ghana own a vehicle, the proportions are much higher for Adansi West and Wassa West with 6.8% and 5.2% respectively

In summary, generally, and on average, the social outcomes in the mining districts are comparable with, and generally significantly better than, the regional and national outcomes. It is particularly noted that Wassa West and Adansi West, which are the two main mining districts in Ghana, have very positive social outcomes. Not only are the income poverty averages low in these areas, the non-income poverty measures are much better than the averages for the nation as a whole. It is also important to mention that these two districts are doing much better than the remaining two districts in the sample (Bibiani-Anwhiaso-Bekwai and Ashanti Akim North). However, there are significant differences in the importance of mining in these areas. For instance, in the Wassa West and Adansi West districts, mining (and quarrying) employs about 16.7% and 10.9% respectively of the labor force, compared to the national average of about 0.9%. By contrast in the Bibiani-Anwhiaso-Bekwai and Ashanti Akim North districts, mining employs about 1.2% and 0.9% respectively.

8.6.8 Key Issues and Conclusions

The analysis in this subsection confirms the general presumption that the favorable growth record since the mid-1980s would be expected to feed through to improve the country's poverty profile, and to some of its social indicators. Although there has been a persistence of serious regional inequalities in this period, the inequalities that are seen today are largely those that were already evident when Ghana gained independence in 1957. So there is no real likelihood that the rapid upsurge in mining activity seen since 1987 can have caused these inequalities and the ongoing social deprivation that is associated with it. Equally in the small number of districts of the country that are heavily dependent on mining, both the high-level poverty indicators and the specific welfare indicators that we are able to measure at the local level show superior performance on the average to that achieved at the national level.

If there are anxieties about the social record, including its link with mining, they are not that mining has failed to improve incomes and welfare in the narrow local areas where the mines actually operate. That proposition is clearly rejected by the evidence available. Rather, the concerns that do deserve closer scrutiny include the following:

- Has the improved economic growth achieved since the mid-1980s been as good as it might have been? Is there a counter-factual in which better use could have been made of the dynamic (and large incomes) coming from mining (including government revenues) to make a bigger inroad into Ghana's still absolutely high rates of poverty and social deprivation? Is there any good reason why Ghana has lost its initial income advantage over a country such as Botswana?
- Are the averages misleading and do they hide particular pockets of severe deprivation (eg among rural households in Ashanti region) that may have been aggravated by mining?
- Could the mining revenues have provided for somewhat more effective redistributive policies that would have helped to deal with the problem of "northern poverty" and pockets of residual poverty in mining districts rather more decisively.
- Even in the narrow mining districts, poverty indicators are *relatively* good, but where is the physical evidence of the immense resources that have been extracted in those areas over the last century? In both Obuasi and Tarkwa – the main mining towns – many people still live in ramshackle houses located next to unpaved roads and open sewers⁸³. Are the superior welfare indicators in these districts commensurate with the high investment seen in those districts?
- Are the gains sustainable, or will the increase in income of mining families be reversed when mining begins to decline at least in some areas of the country? Are there, at any rate, sufficient instruments available to try to mitigate this danger?

⁸³ This might be compared to the city of Tema, which seems to have benefited more visibly from the presence of the port and a number of large industries.

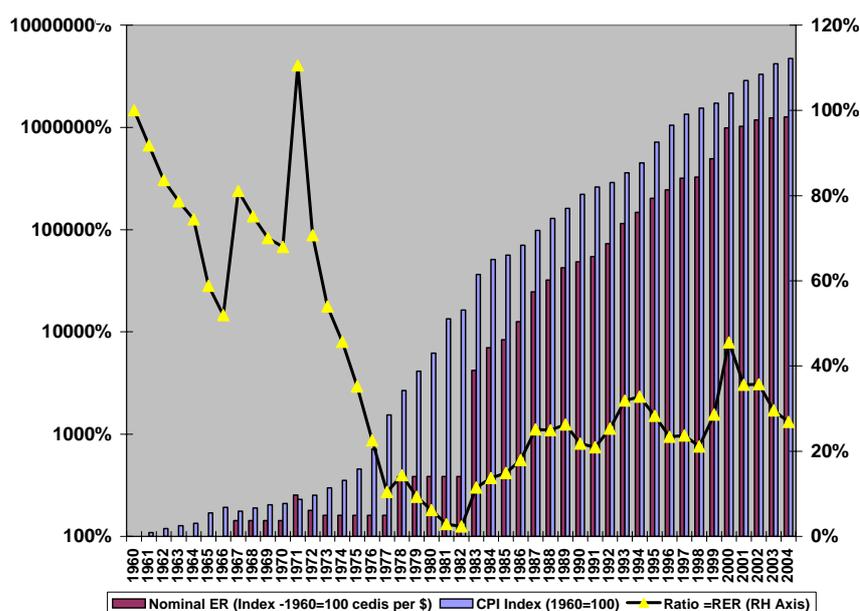
Some of these questions are considered in more detail in section 5 of the main report.

8.7

THE CAUSES OF IMPROVED PERFORMANCE

This section turns from the analysis of *outcomes* to the consideration of *causes*. Specifically, it examines some of the standard explanations of why Ghana achieved the significant turnaround of its fortunes after 1983 as just described. But in doing so it is important to try to pinpoint not only some of the drivers of the reforms but also their incompleteness. By drawing attention to both the successes and the failures it can begin to be seen how strong economic performance in some sectors, such as mining, can co-exist with unsatisfactory social and poverty indicators for such a large part of the country.

Figure A2.9 Nominal and Real Exchange Rates



Source: Ghana Ministry of Finance

8.7.1 Key Economic Policies After 1983

Exchange Rate and Trade Policy

An absolutely critical central plank of the Economic Recovery Program was its reform of trade and exchange rate policy. The ERP managed to arrest the significant over-valuation of the Ghanaian currency that had been proceeding with few interruptions ever since 1960. Figure A2.9 above provides a graphical account of the results of this very important change of policy.

Figure A2.9 reveals that the over-valuation of the cedi was already significant by the mid-1970s (see the line chart that is calibrated against the right-hand scale of the diagram) and then got progressively worse until 1982 when the large ERP devaluation took place. The significance of the Busia government's devaluation of 1971 is also apparent from the figure. That devaluation was sufficient to restore temporarily the real exchange rate parity at about its 1960 level and so to compensate fully for all the accumulated inflation up until that date. But the governance in Ghana at that time (trade unions, political opposition, the military) could not absorb that large devaluation and the austerity and wage cuts that went along with it. Hence the new military governments that took over from Busia quickly reversed the devaluation, and these governments in turn pushed the real exchange rate even further away from the 1960 parity.

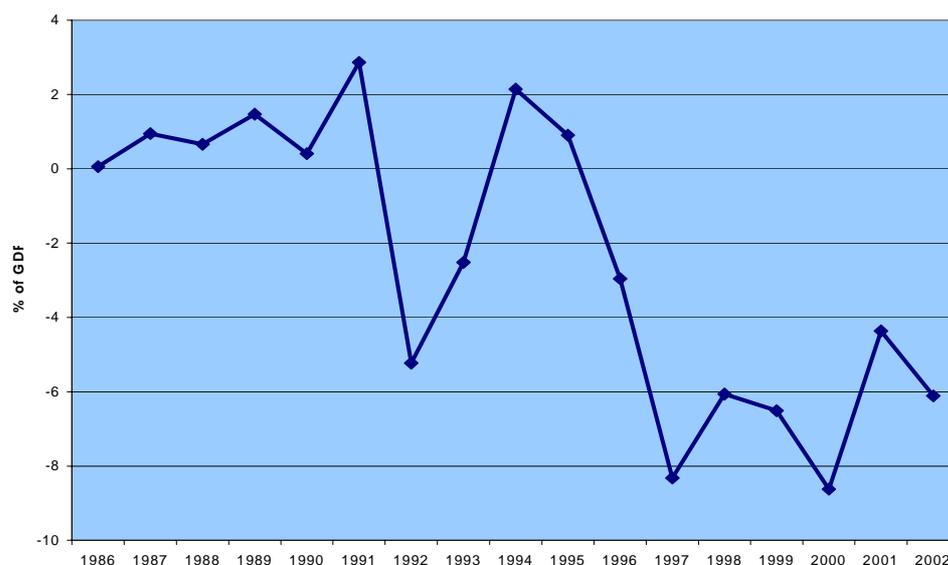
1982 represented the nadir of this severe over-valuation. The ERP of 1983, as the figure shows, clearly did re-instate a different order. By 1988, a greater realism was gradually put in place. Although the more realistic real exchange rate thereby established has been under regular threat since then from external shocks as well as domestic policy shifts, including the periodic loss of fiscal control (see below), the real exchange rate (RER) established by 1988 has been broadly preserved taking one year with another until the present time. Through the 1990s, the system has in most years managed to produce a nominal exchange rate that has kept broadly in line with inflation even though price level movements have from time-to-time been large.

Overall the inflationary pressures since the ERP have been significant but normally short-lived. The greater flexibility of the exchange rate has meant that these pressures have also had fewer negative effects on the productive sectors than was the case in the 1970s. The recovery of mining and other export activity has clearly reflected this greater level of realism in the pricing and the availability of foreign exchange.

Government Budgets

The ERP also succeeded in bringing some stability to the government budget and achieved this in substantial measure by boosting fiscal revenues relative to GDP. As a result the overall government balance was in surplus and was also relatively stable through the latter half of the 1980s (see Figure A2.10 below).

Figure A2.10 Overall Budget Deficits Including Grants, 1986-2002



Source: Ghana Ministry of Finance

As was noted earlier, Ghana's enhanced ability to mobilize fiscal revenues has been one of the most significant aspects of its improved policy performance since 1983⁸⁴. But in spite of this improvement, a significant source of inflationary pressure, especially in the 1990s, has still come from unstable fiscal deficits. Since the 1990s, the country has recorded large deficits in some years as well as large year-to-year variations in the size of those deficits. Most of the larger swings into deficit coincided with the electoral cycles of 1992, 1996 and 2000⁸⁵ and have been much criticized by the IMF. Revenue volatility has been one aspect of the problem⁸⁶.

However, the evidence of sustained high investment in the mining sector through the 1990s suggests that this instability on the fiscal front did not disrupt the climate or incentives for commercial activity to anything like the extent that it had done in the 1970s. There are possibly two main reasons for this. First, the instability of the 1990s was not severe enough to discourage a useful recovery of private international capital flows. Second, the deficits did not affect the domestic financial markets to anything like the same degree as they had in the earlier years. There are three main reasons for this.

First the deficits have been generally smaller (especially if properly measured to capture the quasi fiscal obligations of government) and revenues relative to GDP have been much higher. It is far easier to absorb a swing of 2-3% of GDP

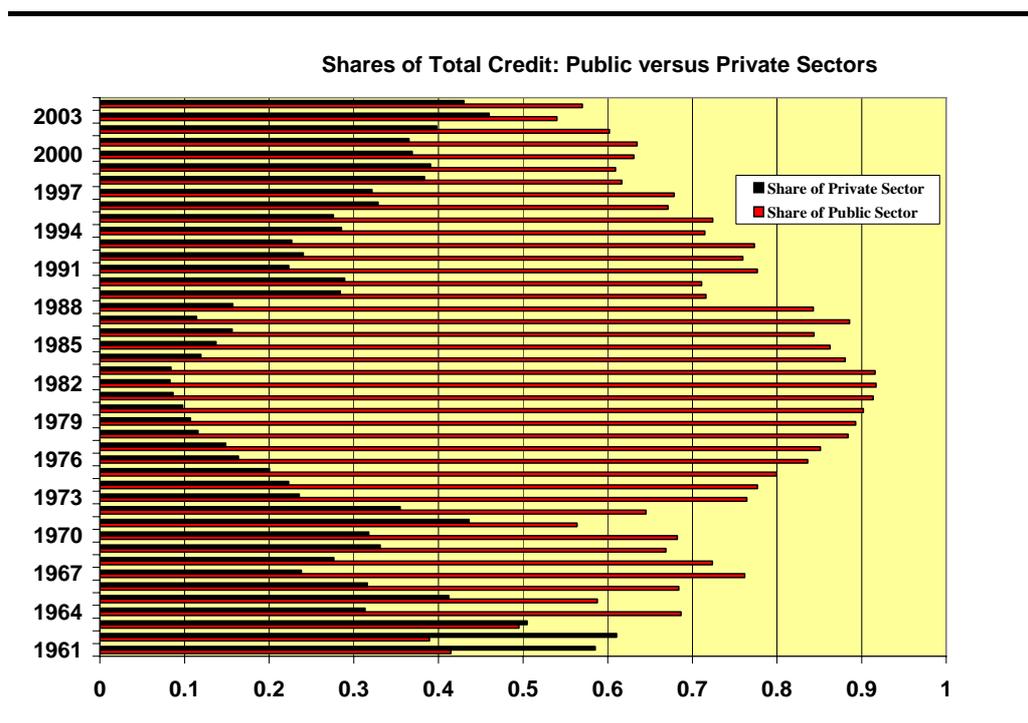
⁸⁴ Revenues relative to GDP recovered from the minuscule levels of only about 6% in the early 1980s to around 15% on average over the 1986-1992 period. There was then a further increase with revenues reaching a peak of about 27% of GDP in 2001.

⁸⁵ The fiscal slippages that occurred over this period were exacerbated in some years by the wait-and-see attitude adopted by many of Ghana's aid donors. Figure A2.10 includes donor grant receipts on the revenue side. Since these receipts are typically large in Ghana, the overall effect of delayed payment is itself a cause of fiscal instability. Declining commodity prices in the 1990s were an additional and special factor that also had negative effects on revenue.

⁸⁶ These variations were mainly expenditure related. However, Addison and Osei (2001) also observe that in the election years, revenue mobilization efforts also declined. This can be ascribed in part to some volatility of the revenues collected from the mining sector. However, these revenues have risen consistently in nominal cedi terms. As a share of total IRS collections, mineral revenues fell from a peak of 17.9% in 1995 to a post-ERP low of 10.7% in 2002 (Source: Minerals Commission) but are only a small part of the explanation of the large overall swings in revenue.

in the fiscal balance when the revenue take is around 25% of GDP than when that revenue take is only around 6%. Second, the rate of monetization in Ghana has risen significantly from the perilously low levels attained by the early 1980s (only around 4% of GDP). Hence the inflationary implications of the monetization of any deficit have been significantly lower than before. Third, the government has backed away from most of the direct control policies (preferential credit allocations etc.) that previously steered available credit into the hands of the government and to government agencies. As evidence for this general set of propositions, a long time series of credit allocations to different sectors is shown in Figure A2.11.

Figure A2.11 Credit Allocations



This figure clearly shows how credit flows were progressively reallocated to the needs of the public sector through the 1970s with the peak share being achieved (like the peak of exchange rate over-valuation) in 1982 (91.7% of the total credit going to the public sector). Since then the situation has largely reversed itself with the public sector share declining to 53% by 2003.

8.8 OVERALL

This brief summary of some important policy areas indicates (i) a significant improvement in the conduct of the main macroeconomic policies after the ERP but (ii) continuing serious weaknesses that might have been expected to hold back the growth of the economy. Several insights emerge from what we can see in the record.

First, the fact that the serious over-valuation of the exchange rate predates the period of mining's resurgence is inconsistent with the Dutch-disease variants

of the resource curse propositions. These would suggest a positive link between the faster rate of exploitation of the natural resource and that overvaluation. Ghana's experience by contrast indicates that a more realistic exchange rate was one of the necessary conditions for the renaissance of mining after 1986.

Second, although the condition of Ghana's economy (policies and institutions) was far from ideal in the years after 1986, it would seem from the evidence of greatly enhanced investment in mining that sufficient was done at the policy level to re-establish mining as a serious commercial proposition. The fact that other private sector activities (agro industry and manufacturing) were much slower to get off the ground probably says more about the more demanding preconditions (of policies and institutions) needed in these sectors than about any cause-effect relationship that might run from the mining investments on the one hand to the quality of macro and other economic policies on the other. This proposition about the differential policy needs of different sectors is explored in more depth below.

Now to the other mainstream explanation of improved performance, namely governance.

8.9 *GOVERNANCE, LEGAL AND INSTITUTIONAL DEVELOPMENT*

8.9.1 *Governance Before 1983 - a Narrative Account*

Eliot Berg (1971) in his study of the early years of Ghana's independence has attached considerable significance to the "dynamics of administrative breakdown". This idea is based on the view that Nkrumah's attempted transformation program was far too large and complex to be properly designed, managed and supervised by an inexperienced and, at that time, poorly qualified civil service. Nkrumah's response to the initially disappointing and slow delivery of results was to entrust more tasks to newer and hopefully more responsive administrative units on the fringes of government- what we might now term 'quangos'.

But this merely spread Ghana's limited administrative capacity even more thinly and, more importantly, it eliminated many of the colonial checks and balances that might have been able to spot some of the errors made, and also arrest the rising tide of corruption. One well-documented results was the proliferation of white elephant investment projects that were accompanied by a rising, but largely deadweight, burden of external debt that quickly ate up Ghana's previously abundant stock of foreign reserves.

After 1961, when exchange controls were introduced and progressively tightened, the administration was handed the further task of allocating import licenses and the, by then, scarce foreign exchange. Lacking the necessary information base to do this job properly as well as the resources to establish one, the administration of this system rapidly became highly politicized and

corrupt. Indeed, Leith (1974) uses the label “massively corrupt” to describe the system. The negative consequences for the economy were huge and are encapsulated in facts such as that, by the late 1960s, 70 per cent of the country’s manufacturing capacity was underutilized and one-third of the country’s fleet of trucks was immobilized because of the lack of spare parts.

Although the National Liberation Council government that replaced Nkrumah in 1966 renounced many aspects of his socialist orientation, their policies too added fuel to many interventionist and inherently corruptible practices. In particular, the fiscal austerity forced on them in the early years of their leadership resulted in a more than 10 per cent reduction in formal sector employment, and then in strong political lobbying for help to particular Ghanaian victims of these job cuts. One manifestation of this was the revision of business licensing and import licensing procedure to favor indigenous Ghanaians and the expulsion of tens of thousands of West African traders and laborers in the early months of 1970 (Nelson, 1983).

The country returned to civilian rule, albeit briefly in August 1969 with the election of the Progress Party headed by Dr Kofi Busia – an active opposition leader during Nkrumah’s early years. His generally liberalizing policies were reasonably well received in the West, but were extremely unpopular with powerful domestic lobbies and especially with the trade unions. Strikes during the early part of 1971, led to Busia banning the Trade Unions Congress. Then at the end of that year a necessary but unpopular large devaluation of the cedi, helped to crystallize the rising opposition to Busia’s administration. In January 1972 a second *coup d’état* established a new military government headed this time by Colonel Acheampong. Within a few months this new government had reversed two-thirds of the Busia devaluation (see Figure A2.11) and had reinstated most of the controls that had been temporarily liberalized.

The next seven years from January 1972 to June 1979 represent what most commentators see as the low watermark of Ghana’s political and economic fortunes. The quality of its governance in most of the main dimensions of that term now recognized, became increasing bad. In brief, the period involved three military governments. Economically it was characterized by negative growth, an average annual decline of three per cent in per capita incomes and a further decline in revenues from cocoa of 50 per cent. Politically it was characterized by a thin veneer of socialist and anti-imperialist sentiments overlaying what some have perceived as the real motivation of those governments, namely a devotion to greed and corruption that was achieved through a fundamental disregard for democratic principles⁸⁷.

8.9.2 Governance Improvements to the Present Day

This assessment is based on the six standard composite indicators of governance that are now routinely compiled by the World Bank for most countries, including Ghana. It would be some or all of these indicators that

⁸⁷ This is a summary of various studies as synthesised in Roe and Schneider (1992).

would most likely appear in the governance conditionality if the proposals of the Extractive Industries Review (EIR) were to be adopted by the Bank and other donors.

The first indicator “voice and accountability” refers to the extent to which citizens of the country are able to participate in the selection of governments and includes sub-indicators that measure various aspects of the political process, civil liberties and political rights.

“Political stability and absence of violence” is the label for indicators measuring perceptions of the likelihood that the government in power will be destabilized or overthrown, possibly by unconstitutional and/or violent means⁸⁸. The next two indicators describe the government’s ability to implement sound policies.

The indicators labeled “government effectiveness” summarize perceptions of the quality of public service provision, the quality of the bureaucracy, the competence of the civil servants, the independence of the civil service from political pressures and the credibility of the government’s commitment to policies.

The indicator “regulatory quality” focuses on the policies themselves including the extent to which the government intervenes in the market (wage/price controls, trade barriers, import/export regulations).

The final two sets of indicators say something about the respect of citizens and the state for the institutions, which govern their interaction. The indicator “rule of law” is made up of variables measuring the extent to which agents have confidence in, and abide by, the rules of the society. These include perceptions of the incidence of violent and non-violent crime, the predictability of the judiciary and the enforceability of contracts.

The last composite indicator measures the perceptions of corruption defined as the exercise of public power for private gain. The presence of corruption often represents a lack of respect of both the corruptor (typically a private citizen or firm) and the corrupted (typically a public official or politician) for the institutions and is thus treated as a failure of governance according to the framework.

Annex 3 lists the six governance indicators and the underlying concepts taken from various sources from which the composite indicators are constructed.

Table A2.13 below depicts Ghana’s performance on the World Bank governance indicators from 1996 to 2002. The numerical values that are shown range in value from -2.5 (worst) to +2.5 (best).

⁸⁸ This cluster of indicators is subject to some ambiguity as countries such as North Korea are ranked highly for political stability by some sources, mainly due to the longevity of the government in power.

Table A2.13 Ghana's Governance Indicators 1996-2002

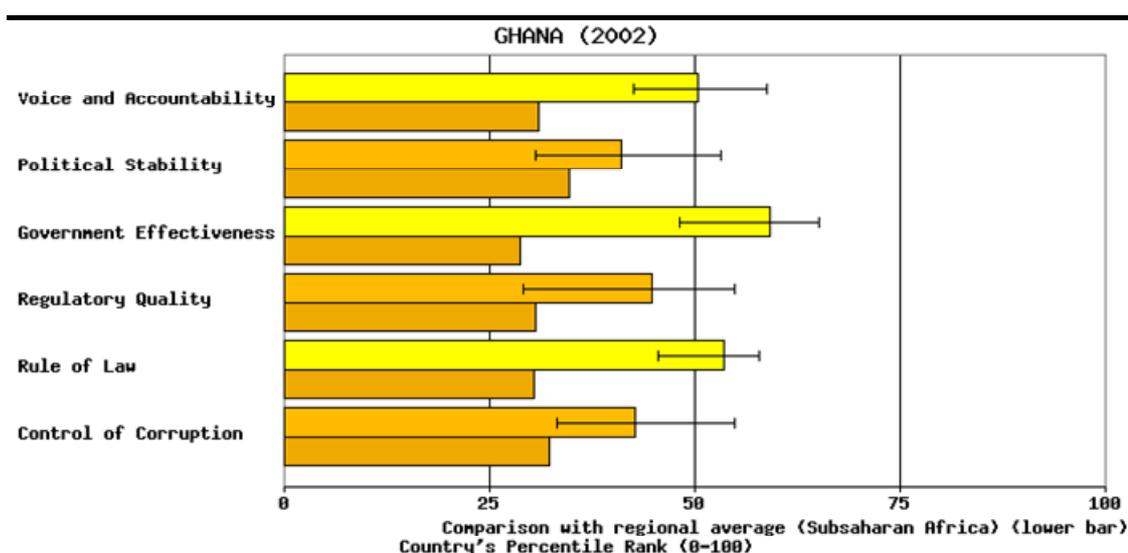
Indicator	1996	1998	2000	2002
Voice and accountability	-0.33	0.53	0.00	0.01
Political stability	-0.06	-0.07	-0.10	-0.11
Government effectiveness	-0.15	-0.13	0.08	0.01
Regulatory quality	-0.17	0.21	0.11	0.29
Rule of law	-0.11	-0.06	-0.16	-0.15
Control of corruption	-0.44	-0.44	-0.41	-0.40

Source: World Bank Governance Indicators

With the exception of control of corruption, Ghana's six indicators have hovered close to zero. This implies that Ghana has moved a long way from the chronic failures of governance of the 1970s. However, scores at this level suggest that today's system of governance and institutions is still characterized by weaknesses that undermine performance, recognizing that +2.5 is the best obtainable score.

It is also informative to examine Ghana's performance in relation to sub-Saharan Africa as a whole. This is done in Figure A2.12 below, which shows that in relation to all six indicators, Ghana's performance now ranks higher than the African average. Additionally it shows that on four of the six indicators Ghana's performance is in the top half of countries ranked by performance. On some indicators, such as government effectiveness, Ghana is very comfortably situated in the top half of countries. The two indicators where this is not true are those relating to regulatory quality and corruption.

Figure A2.12 Governance: Ghana and Africa Compared



Source: D. Kaufmann, A. Kraay and M. Mastruzzi, 2003: Governance Matters III: Governance Indicators for 1996-2002 (<http://www.worldbank.org/ubi/governance/pubs/govmatters3.html>)

Unfortunately there is no basis for comparing quantified indicators of governance for the period of the 1970s with the more recent years for which data are shown in Table A2.13. However, the earlier narrative description of the abysmal quality of government in the 1970s allows some plausible statements about each of the six indicators. This is based on a mixture of logical deduction combined with the hard facts on governance from a small sample of other African state that today seem to have some of the features that characterized Ghana before 1983. These states are a sample of 12 from 48 African states for which there are 2002 governance data. The 12 are selected as the third quartile of the distribution of the 48 states ranked by their overall quality of governance. This procedure screens out the basket cases, such as the Democratic Republic of Congo, Somalia and Liberia, and provides a sample of states with moderately weak governance.

Table A2.14 below presents the results of the comparison and the associated calculations. The deduction to be drawn from this admittedly crude piece of numbering is that since around 1983, Ghana has seen an improvement that averages about 0.7 points across the six indicators.

Table A2.14 Quantifying the Improvement in Governance in Ghana – 1983-2002

Country	Voice & Acc'ability	Political Stability	Government Effectiveness	Reg 'ory Quality	Rule of Law	Control of Corruption	Governance Overall
A. GHANA 2002	0.01	-0.11	0.01	-0.29	-0.15	-0.4	-0.93
Djibouti	-0.69	-0.69	-0.88	-0.76	-0.51	-0.73	-4.26
Togo	-1.2	0.01	-1.17	-0.63	-0.67	-0.68	-4.34
Eritrea	-2.05	-0.25	-0.44	-1.17	-0.51	0.04	-4.38
Uganda	-0.77	-1.46	-0.41	-0.01	-0.84	-0.92	-4.41
Kenya	-0.58	-0.86	-0.85	-0.5	-1.04	-1.05	-4.88
Ethiopia	-1.13	-1.2	-0.89	-1	-0.44	-0.35	-5.01
Guinea-Bissau	-0.74	-0.47	-1.35	-0.86	-1	-0.61	-5.03
Cameroon	-1.1	-0.5	-0.62	-0.88	-1.28	-1.1	-5.48
Guinea	-1.19	-1.78	-0.78	-0.83	-0.75	-0.58	-5.91
Rwanda	-1.41	-1.35	-0.82	-0.94	-1.01	-0.58	-6.11
Chad	-0.95	-1.78	-0.75	-1.11	-0.93	-1.02	-6.54
Côte d'Ivoire	-1.25	-2.04	-0.89	-0.36	-1.21	-0.86	-6.61
B. Average = ESTIMATED GHANA (pre-1983)	-1.09	-1.03	-0.82	-0.75	-0.85	-0.70	-5.25
Difference (A-B) = Estimated Ghana Improvement 1983	1.10	0.92	0.83	0.46	0.70	0.30	4.32

Then this overall improvement in terms of the following comments drawn from the earlier narrative account of the pre-1983 situation can be considered:

- Indicator 1: “voice and accountability” – there was no democratic system in place in the 1970s and indeed through much of the early 1980s. It is likely that Ghana’s pre-ERP score on this indicator would have been substantially negative as indicated in the table.

- Indicator 2: “political stability and absence of violence” – governments in the 1970s were mainly military regimes that gained power through violent means or the threat thereof. It is likely that Ghana’s pre-ERP score on this indicator would again have been substantially negative.
- Indicator 3: “government effectiveness” – the narrative description suggests that, at least at their worst, the Ghanaian governments pre-ERP were extremely ineffective and largely unconcerned to achieve real effectiveness in the sense used here. Given also the fact that this is today one of the strongest areas of Ghana’s governance (see Table A2.13), there is little doubt that the rating has improved radically since the pre-ERP period. The pre-ERP score would again have been likely to be substantially negative.
- Indicator 4: “regulatory quality” – this indicator refers to the quality and nature of the policies. Although there were periodic bouts of liberal enthusiasm (for example during the NLC and the Busia regimes), the general stance of policy, certainly after 1972, was one of intense interventionism and control. So again the likely pre-ERP score would be more likely negative than positive.
- Indicator 5: “rule of law” – it is somewhat harder to assess this indicator because military governments do have some ability to establish a predictable system and to enforce it. Since the indicator also relates to perceptions rather than to hard realities, it is a conservative proposition that this indicator was no better than is the case today (ie a score somewhat below zero).
- Indicator 6: “corruption” – although corruption is still widespread in Ghana today, the qualitative evidence is that it is far less insidious and far less focused on the most senior government officials and politicians than was the case before the ERP. Hence a further conservative proposition is that the score would have been a bit worse in the pre-ERP period than is so today: probably around minus 1.0 as indicated in the table.

Although the above line of analysis is somewhat speculative, the narrative descriptions of Ghana’s pre-1983 situation leads to the relatively strong conclusion *that governance in recent years has probably been better in all six dimensions identified in World Bank indicators, and substantially better in at least the first three areas of governance as indicate above.*

It is a further reasonable deduction that improved governance has played its part in helping to achieve the improved economic and social outcomes seen since the mid-1980s. But again the story is similar to that found for economic policy. If quite limited improvements in governance can effect the radical improvement in outcomes (both economic and social), then: (i) where is the threshold of governance improvements to be found?; (ii) which aspects of the governance reforms have really served to create Ghana’s improved situation?;

and (iii) are the missing governance reforms at all relevant to the poor situation of some groups in mining districts that is still observed?

The greatly increased investment in the mining sector since 1986 has obviously benefited from governance improvements in the areas of the legislative and regulatory frameworks for private sector activity; from greater protection of private property rights; and from the assurance that foreign trade and payments can be made in a reliable manner. But there is no guarantee that the governance improvements that have achieved this positive result will carry over to ensure a favorable outcome for all stakeholders. Indeed as Section 5 of the main report has shown, there is good evidence that this has not been achieved in Ghana.

8.9.3 Overview - The Special Characteristics of Mining in Weak States

The previous two sub-sections have discussed the changes that Ghana has achieved in the past twenty years in both the quality of its *governance* and the quality of its *economic policy*. The evidence in broad terms indicates that both are very likely to have played a significant part in the improved economic and social outcomes that have characterized this same period of time.

As is explained in the *Toolkit*, it is much more difficult to be clear about the nature of the causes and effects and interactions between governance, economic policy and outcomes. However, the sharp contrast between 1971 (the Busia reforms) and 1983 (the Rawlings reforms) indicate that stakeholder pressures had changed markedly between those two dates. Ghana did not merely discover “good governance” in 1983, and indeed was still working to establish that in 2005. Rather, by 1983 there was sufficient consensus for the key power brokers to go along with the major reforms that were initiated in the ERP. They did so under the guidance of a non-democratic and centralizing regime that was able to bang heads together and push through reforms that would still have been deeply unpopular with, and damaging to, many vested interests in the country. A few individuals and institutions were critical.

The influence of external power brokers, such as the IMF and the World Bank, over the non-democratic domestic regime was of central importance in helping to protect the interests of important commercial interests that had suffered under the earlier regime. But that same external influence was also present in 1971 and proved ineffective at that stage: so it is not all-powerful.

Of critical importance for the mining sector and its renaissance was the centrality in the ERP reform package of actions to establish a more realistic trade and foreign exchange regime. This provided the baseline commercial conditions for successful new mining investments in the country and for the very substantial growth of mining output and exports that resulted through the 1990s. The supporting action was the specific new legislation for mining, which created a reliable fiscal and regulatory framework to support the new investments.

But this having been said there are two puzzles about the subsequent pattern of broadly successful development that followed the events of 1983–1986.

First, as the mining industry was so relatively small in 1983 (3-4% of GDP), and also heavily state-owned, it seems unlikely to have had much major lobbying influence in the early years of the reforms. The presence of articulate mining managers probably did *not* make the difference in the 1983 period (after all they were also around in 1971). So it is more credible to argue a slightly softer point. This is that the influence of the mining industry has come more by lobbying to sustain the main reform actions and the gradual improvements in governance through 2005 (as these actions proved successful and mining's importance in the economy gradually grew) rather than in initiating these reforms back in 1983. But this argument works both ways. As mining has become more influential in the economy, it can probably exert a greater influence on taxation and other aspects of the environment that directly affects its bottom line. So notwithstanding Ghana's impressive record on revenue mobilization, there is no reason to suppose that the level of mining taxation is necessarily ideal. Certainly one of the 2003 World Bank OED assessment's comments is that the sector is potentially under-taxed.

Second, in spite of very significant improvements in both governance and the conduct of economic policy, an objective analysis reveals that Ghana still suffers significant weaknesses in both of these areas. Remember that its governance score is still well short of the +2.5 maximum on all six of the World Bank's indicators; and the fiscal policy and inflation record has shown serious deficiencies in many recent years. As this report's analysis shows, it is only in the past few years that Ghana has established a reasonably sound system of public expenditure management. These improvements came far too late to explain the big improvements in economic and social performance from the late 1980s onwards.

A possible explanation of this second puzzle is that Ghana did just enough in the mid-1980s to attract and keep certain types of investment, including investments in gold and other mining products. Mining was arguably particularly critical in kick-starting the economy in the mid-1980s after a twenty-year-period of drastic decline. This was because it could survive commercially in a still incompletely reformed environment by virtue of certain of its key characteristics, namely:

- Its relatively low dependence on a broad-based national infrastructure that was for the most part non-existent (at least in the late 1980s). Of course the industry did require clear access to one of the country's two ports for the importation and transport of equipment and ore processing consumables, and possibly connection to the national electric grid, but then it did not require a vast network of roads to support a local market. Contrast this to say an agri-business that might depend upon a broad infrastructure of feeder roads, warehousing and storage, marketing capacity, financing etc.
- Its potential as a foreign exchange earner as well as its independence of the constraints of the local markets, which of course were very weak at the

time. This required only a reasonably fair deal as regards the foreign exchange regime. As we saw above (Figure A2.9) this was broadly in place well before the big upsurge in mining investment at the end of the 1980s.

- With only 12 mining locales, its concentration of activity offered no special challenges to tax and non-tax collection by government agencies and so facilitated highly productive collection for what has constituted between 10 and 17 per cent of government revenue.
- While capital intensive and dependent on massive equipment, mining remains labor intensive and it is not dependent on a highly skilled or educated work force. So its early renaissance did not need to await the improvement in these areas, which came much later than 1986.

In short, the Ghana experience seems to suggest that a mining industry may be a good productive driver of development for a government to encourage when it is emerging from a situation of serious economic distress as was the case in Ghana in 1983. The next section considers whether a more complete economic reform might have produced a bigger positive benefit as the World Bank assessment, among others, suggests. Here, it should be noted, there seem to be certain basic preconditions that are needed to ensure that mining can (a) work effectively in commercial terms and also (b) make a reasonable contribution to overall economic performance. But these conditions, based on the Ghana experience, may stop far short of those sometimes articulated by, for example, the EIR for countries in general.

This is a conclusion of some significance because there are many low-income countries under stress (LICUS) in today's world – several of these are also HIPC's and some are mineral-rich economies. The Ghanaian experience of what might be termed an incomplete or second-best package of economic and governance reforms (as in the late 1980s) may well be a good model for these countries to be aware of. The alternative of seeking a first-best package in these two areas may well close off exactly those productive possibilities that can achieve "quick wins" and help to pull significant numbers out of poverty. Similarly, studies of weak states that have some mining activity over a limited time period may well fail to pick up the economic recovery effects that seem to have been important in the Ghanaian case.

Annex 3

World Bank Governance Indicators

The six aggregate⁸⁹ governance indicators used in the main report are compiled on the basis of grouping several hundred individual variables. These measure different perceptions of governance drawn from 25 separate data sources and constructed by 18 different organizations into six government dimensions. These six indicators are based on a broad definition of governance as the traditions and institutions by which authority in a country is exercised. This includes:

- Indicator 1 (“voice and accountability”) and indicator 2 (“political stability and absence of violence”): the process by which governments are selected, monitored and replaced.
- Indicator 3 (“government effectiveness”) and indicator 4 (“regulatory quality”): the capacity of the government to effectively formulate and implement sound policies.
- Indicator 5 (“rule of law”) and indicator 6 (“control of corruption”): the respect of citizens and the state for the institutions that govern economic and social interactions among them.

The first two dimensions – “voice and accountability” and “political stability and absence of violence” – are constructed to measure the first part of the definition of governance: the process by which those in authority are selected and replaced.

- The first indicator “voice and accountability” refers to the extent to which citizens of a country are able to participate in the selection of governments and includes indicators measuring various aspects of the political process, civil liberties and political rights.
- “Political stability and absence of violence” is the label for indicators measuring perceptions of the likelihood that the government in power will be destabilized or overthrown by possibly unconstitutional and/or violent means. This cluster of indicators is subject to some ambiguity as countries such as North Korea are ranked highly for political stability by some sources, mainly due to the longevity of the government in power.

The next two indicators describe the government’s ability to carry out sound policies.

- The indicator “government effectiveness” summarizes perceptions of the quality of public service provision, the quality of the bureaucracy, the competence of the civil servants, the independence of the civil service from political pressures, and the credibility of the government’s commitment to policies.
- The indicator “regulatory quality” focuses on the policies, including the extent to which the government intervenes in the market (wage/price controls, trade barriers, import/export regulations).

The last two indicators summarize the respect of citizens and the state for the institutions, which govern their interaction.

- The indicator “rule of law” is made up of variables measuring the extent agents have confidence in and abide by the rules of the society. These include perceptions of the incidence of violent and non-violent crime, the predictability of the judiciary and the enforceability of contracts.
- The last indicator measures the perception of corruption defined as the exercise of public power for private gain. The presence of corruption often represents a lack of respect of both the corrupter (typically a private citizen or firm) and the

⁸⁹ Refer to Kaufmann, Kraay and Zoido-Lobón (1999) for details on the aggregation procedure.

corrupted (typically a public official or politician) for the institutions and is thus treated as a failure of governance according to the framework.

Table A3.1 lists the six government indicators and the underlying concepts from various sources.

Table A3.1 Concepts Measured by the Six Governance Indicators

Indicator	Concepts measured /1
Voice and accountability	<p>Change in government, orderly transfer Legal system, transparency, fairness Civil liberties: freedom of speech, of assembly and demonstration, of religion, equal opportunity, of Political rights: free and fair elections, representative legislative, free vote, political parties, no dominant Free press: laws and practice, independence, and violations Military in politics: reduces accountability Democratic accountability: responsiveness of the government to its people, free and fair elections Business is kept informed of important developments in rules and policies Business has a voice to express its concerns over changes in laws or policies</p>
Political stability and absence of violence	<p>Risk reduction of GDP by 1-4% due to: major urban riot, major insurgency/rebellion, military coup, political terrorism, political assassination, civil war Armed conflict, war Social unrest Terrorist threat, political violence Internal conflict: political violence and governance, from no tolerance of arbitrary violence to civil war torn countries (from best to worse score) Ethnic tensions: based on intolerance and prone to conflict Terrorism as an obstacle to business development Likelihood of unconstitutional government changes</p>
Government effectiveness	<p>Government policy (pro-business) Government/Institutional efficacy Red tape / bureaucracy Institutional failure: Institutional rigidities that hinder bureaucratic efficiency Government ineffectiveness: Quality of the government's personnel Government instability: High turnover that lowers the quality of the government's personnel Government stability: Its ability to carry out programs Bureaucratic quality: Civil service's institutional strength, free from political influences Likelihood that when a government official acts against the rules, one can go to another official or a superior Management time spent with bureaucrats The efficiency customs The general condition of roads you use The efficiency of mail delivery The quality of public health care provision Government efficiency in delivering services Predictability of changes in rules and laws Credibility of government's commitment to policies</p>
Regulatory quality	<p>Regulation (regulations that impose a burden on business) Government intervention in economy Wage/Price control Trade policy (tariff and no-tariff barriers to trade) Capital flows and foreign investment (financial regulations for foreigners) Banking (free from government intervention, financial regulations domestic) Export regulations Import regulations Other regulations (regulatory burden) Legal restrictions on ownership of business by non-residents Legal restrictions on ownership of equity by non-residents Regulations of starting new business as an obstacle to business development Price controls as an obstacle to business development Regulations on foreign trade as obstacle for business development Foreign currency regulations as obstacle for business development General uncertainty about the of costs of regulations as an obstacle to business development</p>
Rule of law	<p>Losses and Costs of Crime Kidnapping of Foreigners Enforceability of private contracts Enforceability of government contracts Corruption in banking Crime Black Market Property Rights Law and order tradition Theft and crime (now) Confidence in authority to secure property (now) Unpredictability of the judiciary (now) Crime and theft as obstacles to business</p>
Control of corruption	<p>Corruption among public officials, effectiveness of anticorruption initiatives Corruption among public officials Corruption in the political system as a "threat to foreign investment" Frequency of "additional payments" to "get things done" Corruption as "obstacle to business"</p>

/1 Representative sources

Annex 4

Status of Public Finance Management at the National Level

10 ANNEX 4 STATUS OF PUBLIC FINANCE MANAGEMENT AT THE NATIONAL LEVEL

10.1 OVERVIEW

All of the mining sector revenues collected in Ghana⁹⁰ are deposited, with other tax revenues, in the central Government's Consolidated Fund, from where they are allocated through the national budget (which includes responsibilities to the local communities) and through statutory funds. The Government of Ghana has volunteered to participate in the Extractive Industries Transparency Initiative (EITI) and in this connection is preparing a revenue collection reporting format consistent with the EITI guidelines.

The allocation of government revenues in Ghana may be segregated into two main public finance management structures, each governed by overlapping but separate legal and regulatory frameworks. They are:

- i. Centralized Government Public Expenditure Management Framework, and
- ii. Decentralized Local Community Expenditure Management Framework.

This annex focuses on the central or national aspects of the problem. The issues at the local level are in the main text of the report.

Over the last few years, Ghana has undertaken a number of significant fiscal reforms aimed at improving public expenditure management and financial accountability. This has involved significant cooperation with and pressures from cooperating partners, such as the IMF and the World Bank. While there has been some progress made, significant weaknesses still remain in the areas of budget planning, preparation and implementation, budget execution and procurement, financial reporting and audit.

The government policy paper, the Ghana Poverty Reduction Strategy (GPRS) has become the key development policy framework used to develop budgetary decisions at the national and district levels. This in turn has enabled the IMF to approve a new three-year program under the Poverty Reduction Growth Facility. The GPRS identifies improvements in public expenditure management and financial accountability as key elements in the campaign to achieve faster economic growth and poverty reduction. Many of the

90 The government of Ghana receives contributions to public revenue from the mining sector through a variety of mechanisms. These are corporate taxes, mining royalties, customs duties, excise duties, and taxes on salaries (PAYE). In 1998, value added taxes were introduced and these applied without exemptions to the mining companies. Since 2001, the government has imposed a reconstruction levy. It also receives dividends from its holdings in mines. Under Legal Instrument 1349, all holders of mining leases must pay royalties on their mining operations at a rate fixed by license that in principle can vary between 3% and 12%. The actual rate applied is based upon the operating margin (value of minerals won less the total operating cost) expressed as a ratio of the value of the minerals won. In practice all of the mining companies operating in Ghana have a standard 3% royalty rate applied. Only one minor exception to this has been identified - an extra 0.6% levy on a company operating in a forest reserve.

cooperating partners have expressed support for the GPRS and have backed their support in part by agreeing to the multi-donor budget support system described in the next sub-section.

10.2 *MULTI DONOR BUDGET SUPPORT (MDBS)*

The government of Ghana has successfully negotiated with nine bilateral donors external funding based on increased use of direct budgetary support. Direct budgetary support, from the government's perspective, is the most desirable mechanism for the application of development aid. The advantages include:

- It ensures the application of resources in a way that is in direct conformance with government policy and whose flows integrate directly through the principal instrument for policy implementation, the national budget.
- It facilitates a more coherent implementation of the budget, since all budget releases become centralized.
- It permits greater consistency in fund flows and allows a more comprehensive approach to the development objective.
- It strengthens public expenditure management both through the dialogue promoted with the cooperating partners as well as providing a greater stability of funds to facilitate better operational and financial management and thus improve service delivery to the people of Ghana.

The cooperating partners accepting to provide support in this way may be seen as indicative of the progress that Ghana has made towards the achievement of sound public finance management, full transparency and accountability. Their shift to direct budgetary support is predicated on a public finance management system that has achieved an acceptable level of fiduciary risk. However, this should be interpreted as the system having achieved a minimum threshold from which, through continuing support and dialogue with the cooperating partners, internationally acceptable levels of fiduciary risk can be achieved eventually and then maintained.

The MDBS provides an opportunity, beyond possibly improving public finance management to acceptable levels, for detailed engagement in all aspects of the budget process (as a comprehensive program) and this helps to develop a greater appreciation and discernment of the complex issues involved in the budget process. The basis for continuing the MDBS is the continued adoption of the GPRS and the adequate allocation of resources within the Medium Term Expenditure Framework in line with priorities set out in the GPRS. Specifically, (i) benchmarks shall be agreed against which performance is to be assessed; and (ii) improved arrangements for dialogue shall be pursued with the cooperating partners:

The level of direct budgetary support will be subject to the achievement of agreed targets. The requirement of an improved budgeting, financial management and expenditure reporting regime is critical to the MDDBS.

The introduction of the MDDBS puts a mechanism in place that, if fully taken advantage of, can be employed to steadily increase economic growth and reduce poverty through a process of continual improvements in public finance management.

10.3

TRANSPARENCY

There have been a number of initiatives that Ghana has also undertaken in recent years to significantly improve fiscal transparency in respect of its legal and regulatory framework and in respect of the budget process and financial reporting. These include:

- *The Financial Administration Act, 2003;*
- *The Procurement Act, 2003;*
- *The Local Government Services Bill, 2003;*
- The creation of the Internal Audit Committee;
- The monthly gazetting of financial statements showing actual expenditure against budget estimates; and
- The government of Ghana's decision to participate in the Extractive Industries Transparency Initiative (EITI).

The laws and regulations relating to public financial accountability are readily available and can be purchased at the government printer in Accra. The budget is a public document, and the improvements in budget presentation have greatly enhanced transparency.

Most of the achievements in transparency though have been in the front end – planning, budgeting and fund releases. It is quite a different picture when it comes to *actual* expenditure. Because of the weaknesses in expenditure management, controls and reporting the availability on information regarding actual expenditure is inaccurate and not available on a timely basis. The Constitution deems audited appropriations accounts should be available within six months of the close of the fiscal year, in practice they are not available two to three years later. By signing up with the cooperating partners for direct budgetary support, the EITI and the HIPC Relief Fund program should improve over time the transparency in respect of tracking actual expenditure.

The cultural context in which a public expenditure management system operates is relevant to the level of fiduciary control it can achieve, especially with regards to the level of corruption. If the fiduciary risks in a given public expenditure management system are high, it is unlikely that even large fund contributions to the government will have a development benefit.

Ghana has put in place a number of institutions to combat corruption, which are listed below. However, these institutions have not curbed corruption to the extent that might have been expected.

- There is a Commission for Human Rights and Administrative Justice (CHRAJ).
- There is also a Serious Fraud Office, which is modeled on that of the UK.
- There are codes of conduct governing the behavior of officials, and other codes for ministers and parliamentarians.
- The criminal code, civil service rules and financial regulations are sufficiently explicit for corrective action to be taken when there is corruption.
- Ghana has a long history of commissions of inquiry, and other anti-corruption efforts and rhetoric.
- Ghana has a watchful media.

Further, Ghana's public life is characterized by a peaceful transfer of power, an active party choice, rules governing conduct of public officials, parliamentary oversight of budget and accounts, office of the Auditor General, an anti-corruption agency, an ombudsman, formal judicial independence, developed rules on public procurement, an independent and vigorous news media and active civil society.

In spite of these achievements, corruption continues to be a prominent feature of the Ghanaian public sector. It is a way of life, and much corrupt behavior would not be characterized as such by many Ghanaians. As a matter of course 'facilitation' payments are made as firms interact with service providers, license issuers, or payments clerks. A small 'gift' in an envelope to a procurement officer from a vendor is more indicative of the vendor's sensitivity to the procurement officer's family difficulties, a sign of his 'goodness' rather than a mechanism for influencing vendor selection. Such a 'Christian impulse', it is argued, is surely separate from corruption.

In Ghana, admission to the better schools often enough requires a cash payment to highly placed school official; treatment at government hospitals, even emergencies, must be accompanied by a private side payment. A simple encounter with the police results in extortion, court decisions are influenced

by bribes and firms that have supplied goods or services to government have to pay officials in order to get paid.

Where does Ghana stand as regards its corruption in comparison to other countries? Out of 91 countries listed on Transparency International's Corruption Perceptions Index Ghana is ranked 59. This, while poor, is in comparison with other developing countries, such as India, Vietnam and Nicaragua. It may be a matter of time before the institutional arrangements put in place begin to curb corruption. This coupled with the increase in a more professional cadre of public servants, with a greater sophistication and a different ethical standard that comes with socio-economic development, may be more beneficial. Whatever the precise mechanics of attitudinal change, this is an area that can only be slowly improved.

10.5 *THE LEGAL AND REGULATORY FRAMEWORK FOR PUBLIC FINANCE MANAGEMENT*

The legal and regulatory framework underpins the practice and performance of the public finance management in any given country. Consequently a review of the legal and regulatory framework must be an important element for assessing public expenditure management and financial accountability achievement. Ghana's legal and regulatory framework for public finance management has undergone extensive reform over the recent past, especially in the last four years. Laws, and the ensuing regulations, have come into force in the areas of financial management, procurement, internal audit, external audit and local government. Overall the legal and regulatory framework may be described as comprehensive and promotes fiscal transparency well. It provides a basis for the practice of public expenditure management in Ghana to be more transparent and accountable, and permits the definition of clear audit standards against which to measure the quality of expenditure management, and where necessary to establish the breach of law.

In Ghana, the Constitution is the basic legal and regulatory framework document, with respect to public financial management. The constitution empowers the parliament to enact laws. The laws on public finance in turn empower an officer of the government to issue regulations consistent with the law. While not strictly part of the regulatory framework, the practice and administrative procedures adopted and implemented by the institutions of public finance effectively constitute a further extension of the regulatory framework.

The Constitution entered into force in January 1993. It provides for a democratic, multi-party republic. A system of checks and balances provides for power-sharing between a president, a unicameral parliament, a council of state and an independent judiciary. The Supreme Court has broad powers of judicial review. The President appoints a Vice-President and nominates a Council of Ministers, including a Minister of Finance and Economic Development, subject to approval by Parliament. Ten regional ministers, one for each region, are each assisted by a regional co-coordinating council.

The President is Head of State, Head of Government, and Commander in Chief of the Armed Forces. He is elected by universal suffrage for a maximum of two four-year terms. Executive authority is established in the Office of the Presidency. More than half of the ministers of state chosen by the President must be members of parliament. Legislative functions are vested in a parliament, which has 200 members. Members of parliament are popularly elected by universal adult suffrage for a term of four years. It calls for the creation of an independent Auditor-General.

The legal and regulatory framework in Ghana pertaining to public finance management comprises the following main elements:

The Constitution – enacted in 1993

- *The Laws, including:*
 - *The Financial Administrative Act, 2003*
 - *The Internal Audit Agency Act, 2003*
 - *The Audit Service Act, 2000*
 - *The Procurement Law, 2003*
 - *The Local Government Services Bill, 2003*
 - *The Appropriations Act*
 - *National Development Planning Systems Act, 1994*
 - *Bank of Ghana Act*
 - *The District Assemblies Common Fund Act, 1993.*

- *The Regulations, including*
 - Financial regulations
 - Store regulations
 - Procurement regulations
 - Financial memorandum for municipal and urban councils
 - Civil service guidelines.

- *The Operating Manuals, including*
 - The Accounting manual
 - The Internal Control and Audit manual
 - Standard bidding documents.

- *The Financial Circulars including*
 - Circulars issued by the Minister of Finance
 - Circulars issued by the Controller and Accountant General.

In particular:

- *The Financial Administrative Act, 2003* provides for an annual budget that is based upon a consistent and thus meaningful quantitative macroeconomic framework as well as a strengthened system for controlling expenditure. It guarantees the independence of the Auditor-General by funding the office external to the budget process.

- *The Internal Audit Agency Act, 2003* calls for the creation of a centralized internal audit agency body.
- *The Procurement Act, 2003* provides for clear and comprehensive procurement procedures and regulations; transparency and fair competition; clear guidance on record maintenance; a complaints redress mechanism, and sanctions and mechanisms for the enforcement of rules.
- *The Local Government Services Bill, 2003* clearly defines the institutional arrangements that govern the relationships between the central government and the local governments. It also spells out the financial administration requirements and procedures.
- *The Audit Service Act, 2000* provides for the establishment of audit report implementation committees in ministries, departments and agencies (MDAs) to ensure follow-up of audit findings; establishes an Audit Services Board. This board determines the technical expertise required for carrying out audits, appoints audit staff other than the Auditor-General and determines auditors' terms and conditions of employment; and substantially increases the independence of the audit service and the powers and responsibilities of the Auditor-General. It should greatly increase the effectiveness of audit findings through the requirement that responses to audit observations be made within 30 days and empowers the AG to penalize those who do not comply.

10.6

BUDGET PREPARATION WITHIN AN EXPENDITURE

FRAMEWORK

Substantial improvements have been made in recent years to the presentation of the budget. It now includes a detailed account of recent economic performance and the future outlook. The budget documentation provides a reasonably transparent and acceptably comprehensive presentation to parliament of the government's recent fiscal performance, future strategies and policies as well as detailed expenditure estimates. The accuracy of the expenditure data though still remains a concern. The MTEF process still remains highly centralized and does not include developing a bottom-up cost projection capability at the district and regional levels.

A medium-term expenditure framework (MTEF) was first effected in 1999. However, it is only since the MTEF was incorporated into law in 2003 that a more fully functional process has been set up. This process still falls short of its potential and is not yet established as a tool for the rational allocation of resources, prioritization mechanism and strategic decision-making.

The intent of the MTEF is to:

- Provide for improved linkages between the overall macro-economic framework, multi-year development plans (GPRS) and annual budget policies.
- Improve stakeholder participation and commitment, including donors and civil society within the budget process.
- Facilitate a more comprehensive, integrated and better-classified budget.
- Incorporate improved costing of activities, a more performance-based orientation, as well as strengthening the link between outputs and activities.
- Facilitate consistency/predictability/transparency of resource flows to executing agencies.

It would seem that even under the MTEF approach, budgets are developed more on the basis of the inertia of the previous year's expenditure (incremental method) than on an activity-costing basis. The medium-term expenditure projections are mostly at an aggregate level and do not reflect detailed budget adjustments arising from policy analysis or changing priorities. The objectives associated with activities are so broad that it is not clear how they might factor in a strategic analysis. The two largest components of the budget's expenditure, the personnel emoluments and non-salary administrative costs, are not included in the MTEF prioritization schedule.

There is clearly a unique challenge to budgeting in an environment of economic uncertainty, with a general lack of managerial and technical capacity, and with a corresponding shortage of accurate, regular and relevant financial information. In an environment where uncertain donor flows, even though there can be expected greater stability under the MDDBS program, finance large parts of a government's budget, where the inflation rate is high and the exchange rate is unpredictable within the time scale of the budget, budgeting becomes difficult to say the least. Poor budgets have no credibility by the users, and so are in turn not used, which in turn leads to poor expenditure controls, and consequently poor accounting. In short, poor budgeting leads to poor financial accountability.

The budget preparation process must envisage a living document to be used as a financial management and accountability assessment tool, which incorporates a constant feedback system that corrects and adjusts for deviations from the original assumptions of the budget, such as fluctuating exchange rates, increased interest rates, delayed donor disbursements, droughts etc.

Such a feedback system requires accurate, timely ongoing reporting systems that traverse the entire financial administrative network, feeding back from the MDAs to the Ministry of Finance and Economic Planning (MoFEP) to inform on the correct status, and the information flows back to the line ministries instructing on adjustments to be made to compensate for shifted

environmental factors and budget implementation drifts. Only then can the implemented budget closely reflect the intent and targets of the prepared budget.

10.7

BUDGET RELEASES

Budget releases form the first and most critical step in budget implementation. Poorly managed cash releases can undermine the intent and effectiveness of a budget plan in two ways -- first, by introducing uncertainty and delay, and second, by distorting the allocation of releases to the different budget lines.

The cash budget adopts a fundamental principle of limiting allocations to the actual cash available. Simply put, the principle states that the government does not spend money it does not have. The question then arises – why are there persistent and growing budget deficits in Ghana? The answer rests in the realization that it is not enough to limit the cash availability constraint to cash releases but also to procurement, contracting and expenditure transactions in general. Ghana has inadequate revenues and weak expenditure control. Consequently cash management is a particular challenge. This has especially important ramifications with respect to the management of such disbursements as the Minerals Development Fund. Disbursements are often late, and many times short of the actual requirements. It is expected though that with the debt relief program under HIPC and the signing up to the MDDBS program there should be substantial improvement in Ghana's cash management.

There has been a significant recent development with regards to cash management with the formation of a Cash Management Committee, but its success will require the cooperation of central agencies (MoFEP, Bank of Ghana) at the aggregate level and the MDAs at the agency-level.

In assessing the full impact of poorly managed budget releases, there are two important levels of release to consider. The first is global, which tracks the releases from the Budget Office, MoFEP, to the line ministries, and the second is local, which tracks the releases within the line ministries over the financial administration network. This network spans headquarters and regions, and subsequently between regions and districts, and finally between the districts and the implementing units, such as district schools or clinics. In order to achieve a degree of predictability and stability in the cash releases, the principles adopted by the central ministry to mitigate fluctuations would in turn need to be implemented within the line ministries. Unless both levels of releases are addressed the achievement of uniform and predictable disbursements from the Ministry of Finance to the line ministries does not necessarily mean that uncertainty may not be introduced within the line ministries at the regional and district levels.

In Ghana such intra-ministry releases are fraught with difficulty and are much more difficult to track. There are no clear guidelines or allocation strategies for the disbursement of funds to the districts. Procurement is highly centralized.

Significant protection at the district level is provided through the district basket funding mechanism, where cooperating partners pool funds targeted at pharmaceuticals and medical supplies. The expenditure of these funds is carefully tracked. Of course this has a bearing on service delivery at the district office level.

Through the fiscal decentralization effort an eventual shift in roles and responsibilities from the district offices of central government line ministries will be made, and all of the delivery of services at the district levels shall be through metropolitan, municipal and district assemblies (MMDAs). In which case, there are clearly defined disbursement regulations and institutional arrangements. But such a transfer of responsibilities should not be accelerated ahead of the development of capacity within the metropolitan, municipal and district assemblies to ensure the effective financial management, procurement controls, accounting and reporting at the district level.

Implementing a zero deficit cash budget as adopted in Ghana creates particular challenges: it introduces an element of unpredictability in the budget releases to the line ministries. Such unpredictability, not actively mitigated, greatly undermines expenditure control and contributes to the accumulation of arrears. It has its effects felt at the district assembly levels where disbursements are not only delayed but actual payments cannot be predicted.

An important requirement for the successful implementation of the cash budget is to adopt mechanisms to mitigate the fluctuations in monthly releases. Such mechanisms would include:

- Adopting pro-forma cash flows fully informed by revenue projections and expenditure profiles based upon regular, on-going, comprehensive, accurate and timely reporting from the revenue agencies and line ministries respectively. The financial reporting in Ghana is far from adequate and so this will remain a difficulty in the management of budget releases for a while yet.
- Adopting a more pro-active stance to cash management in meeting revenue targets. A more pro-active stance would include actively pursuing the necessary agencies responsible for achieving conditionalities necessary to initiate donor disbursements for example. With the introduction of the MDDBS program, this particular pressure should ease off significantly.
- Providing regular, accurate and timely forecasts to the spending agencies of cash releases.

Cash management has very important impacts on the government's ability to enact an effective commitment control system, since expenditure must be kept within available cash limits rather than budget provisions. Without a clear indication on a pro-forma basis of available cash, it is almost impossible to set up an effective commitment control system. It also has negative impacts in respect of contracts management. Late payments result in higher prices from

vendors serving government and provide rent-seeking opportunities to government officials to decide which vendors get paid and which do not.

10.8 *BUDGET EXECUTION – PROCUREMENT AND CONTRACT ADMINISTRATION*

Procurement and contract management in any environment is a high-risk activity. Given the amounts involved in public procurement, the practice and culture of private sector contractors, their profit motives and the temptations for those with influence over project decisions, this should not be a surprise. In spite of a recently enacted set of comprehensive procurement regulations and procedures, which conform well with the objectives of sound procurement practice, there is little evidence of marked improvements in procurement practice and contract expenditure management. While it is an important first step towards addressing the weaknesses, it will require a development of the capacity and a change in attitudes. In Ghana the systems designed to monitor expenditure management performance (the contract itself, measurement of work performed, contract extensions, variation orders, analysis of claims, price escalation clauses and payments on account) are weak. The main areas of procurement anomaly that occur in Ghana are:

- The abuse and mismanagement of contract variations.
- The inappropriate application of the requisite procurement method. Sole sourcing is used far more often than can be reasonably justified. With the shopping method, often the same sets of firms are used repeatedly. There is much evidence of fake competition.
- The inappropriate authorizations applied in the procurement process.
- The incomplete evidence of the full receipt of goods and services paid for.
- Embezzlement under the pretext of Low Value Procurement.
- The poor filing of procurement and related expenditure documentation.
- The inappropriate use of arbitrary compliance criteria to eliminate bidders in order to justify the choice of a particular bidder.

No reliable system seems to be in place for assessing the exact amounts due under such contracts. In addition, overpayments and corrupt practices benefiting both contractors and government staff are known to have occurred, even though the total losses from such causes are largely unknown.

Contractors and suppliers often complain of delayed payments. This is due partly to inefficient and lengthy payment procedures and partly to lack of funds. It is exacerbated by the increase of costs once a contract has been started due to inflation and variation orders. Awarding contracts without due consideration of the availability of funds creates over-commitment and payment delays. Significant payment arrears exist, particularly regarding

roads contracts. Such events reflect low civil service attention to procurement issues and lack of relevant skills. If MoFEP provided a more active oversight role, and the Auditor-General carried out appropriate audits in this area, the stage would be set for better management.

The poor procurement practice in Ghana raises questions about whether even if MTEF delivers the best allocation of resources to achieve the policy objectives set out in the GPRS, will it be undermined by the ineffective budget execution through poor procurement practice and contracts expenditure management?

10.9

INTERNAL CONTROLS AND AUDIT

Internal audit has a critical role to play in improving the quality of procurement and expenditure management in Ghana. The Internal Audit Department resides within the Ministry of Finance. It has the authority to audit all of the government ministries, departments, agencies, and regional as well as district offices. A program has started to establish internal audit units throughout the public sector and also to develop capacity and improve upon the availability of resources necessary for their effective function. It is intended to have an internal auditor assigned to each district assembly.

The internal audit function is a necessary requirement for achieving high quality of expenditure management. The internal audit and control function should properly address the operation of the system controls within the public financial management system in general, including public procurement. A poor Internal Audit Department is the principal contributor to poor quality of procurement and expenditure management. A public procurement management system that views procurement control and budget execution procedures passively, presuming that simply issuing regulations, circulars and administrative guidelines will result in a well functioning public procurement management system, is mistaken. In fact a well functioning public procurement management system requires an active continuous review of the adherence to controls by procurement and finance officers within the implementing agencies. Indeed the greatest opportunities for corruption and mismanagement arise as a result of weakly established internal controls.

While the Government of Ghana well recognizes the role and importance of internal audit in the procurement and broader expenditure cycle, in practice capacity limitations have constrained the effectiveness that internal audit has had in ensuring acceptable quality of procurement and expenditure responsibility. Under the Internal Audit Act, each spending unit is to establish an Audit Report Implementation Committee to ensure that corrective measures are set up. While the new regulations and institutional arrangements could go a long way towards improving the effectiveness of internal audit in Ghana and hence the quality of expenditure management, it is still too early to judge if the capacity strengthening will be sufficient to achieve significant improvements.

The internal audit function in Ghana is typically carried out in a pre-audit role. Checks and controls are performed as steps within the expenditure cycle. Therefore, in principle they offer an opportunity to correct procedures gone wrong before payment execution. Consequently the internal audit function can lead to delays in payment and thus give rise to rent-seeking opportunities. There has been a shift therefore to internal audit being applied using sampling methods, and thus identifying risk factors rather than checking each procurement and expenditure transaction.

Internal control and internal audit are weak in the Government of Ghana due to a permissive work environment, persistent failure to insist on financial discipline and managers who do not understand their responsibility for ensuring that internal control systems operate effectively. Internal auditors lack adequate training; they also lack skills and status. For the new law to be effective the Government of Ghana needs better-qualified internal auditors and more informed managers. The latter must be held to account for the integrity of the control systems for which they are responsible

The role of internal audit in Ghana is primarily pre-audit. Internal audit relies on the line ministries for their equipment and their field trips, both with regards to authorization and funding. The budget does not identify internal audit as a separate line item and so there is no opportunity to protect their funding and in some way assure a certain level of independence in their operation.

10.10

FINANCIAL REPORTING AND ACCOUNTING

Beyond meeting regulatory requirements, the requirement for timely, accurate accounting and reporting is fundamental to sound public expenditure management. The Constitution in Ghana requires fully audited appropriation accounts to parliament to be submitted no later than six months after the end of the budget year. More than just satisfying legal requirements, public expenditure management requires an on-going assessment of the financial status to provide useful timely feedback on management decisions and the effectiveness of expenditure controls. Carrying out effective reform is best served by a mechanism of fast and accurate feedback with appropriate corrective measures taken to compensate for results that may be less than satisfactory. Reconciliation is an important tool for ensuring accuracy.

A review of the public expenditure management in Ghana reveals an absence of regularly applied systematic reconciliation schemes at all levels of reporting. This has resulted in inaccurate accounting and financial documents, which have contributed to undermining the overall confidence in public expenditure management in Ghana. An attempt at reconciling budget releases to appropriation accounts reveals discrepancies that are largely unexplainable. Apart from ensuring more reliable financial reporting, reconciliation would inform the critical areas to track and would promote transparency.

The reporting function in Ghana involves information and reporting flows over a financial administration network that has to overcome inadequate communications, a limited banking infrastructure and considerable distances between the administrative headquarters and many district capitals.

10.10.1 The Accounting System

The Government of Ghana, as is the case for most developing countries, uses a cash-based accounting system. It still experiences considerable difficulty in maintaining its existing cash-based accounting system and so is unlikely that it will move to full accrual accounting for the foreseeable future. Ghana has recently introduced an integrated financial management system (BPEMS), which is capable of generating accrual-based information but it will generate only limited accrual-based information (eg on payables, receivables, financial assets and liabilities). Full accrual accounting has always been the norm for the accounts of public enterprises and in Ghana this is required for these entities.

The budget structure and financial reporting distinguishes four main items of expenditure:

1. Budget Item 1: Personnel Emoluments;
2. Budget Item 2: Administration;
3. Budget Item 3: Services; and
4. Budget Item 4: Investment.

Personnel Emoluments take up approximately 20 per cent of government expenditure. They are tracked using the IPPD system and expenditure, other budget items are tracked using a mix of computerized and manual systems. BPEMS is the integrated financial management system that has been distributed to a number of line ministry headquarters, while comprehensive and permitting real time integration is not expected across all regional and district level spending agencies. The Controller and Accountant General uses the ACCPAC computer-based accounting system to consolidate MDA submittals and generate financial statements.

- Although some MDAs have developed their own accounting systems, Ghana's main government accounting systems are only partially computerized. Accounting records are largely manual, paper-based, systems. They rely for their effectiveness on the skills of those who enter data and the discipline imposed by supervisors. The integration of manual and computerized systems is a huge challenge and an obstacle to achieving the timely and meaningful consolidation of financial reports.
- Reconciliation systems in Ghana are weak. For instance, it should be possible to prove that the aggregate of cash expenditure authorizations reported by Treasury and the cash expenditures reported by MMDAs are one and the same. This has not been demonstrated in Ghana. It results from untimely and inaccurate accounting, failure to prepare and submit

accounts, failure to carry out periodic proofs of accuracy and the flow of aid directly to MMDAs.

- The new National Archives location and the provision of modern equipment should assist in records management. Ghana has also created a Public Records Administration Department and a professional cadre of records management specialists, thereby ensuring that the foundation of good records management is in place. Nevertheless, skills and records management have been neglected with the result that standards for keeping of accounting records have declined.

10.10.2 The Controller and Accountant General's Department

Preparation of the annual Appropriations Accounts and financial reports is the responsibility of the Controller and Accountant General. The Controller and Accountant-General's Department (C&AGD) has a nationwide staff of about 4,750 with approximately 1400 assigned to the MMDAs. No more than about 40 of these staff have full professional accounting qualifications. A significant group of middle management professional staff has sub-professional qualifications. This is especially true in the districts where many accounting staff possess basic educational qualifications between middle school leaving certificate and GCE 'A' level.

Despite the difficulties associated with the integrity of the systems, the C&AGD has been able to develop relatively rapid reporting allowing detailed financial statements and budgetary reports to be produced and gazetted within the required eight weeks. There is also the monthly and cumulative detailed and summary budgetary performance statements for government expenditure and revenue; information for the preparation of Annual Consolidated Fund Accounts; and HIPC tracking reports for monitoring poverty related expenditure.

Currently these constitute the key fiscal reports available to MoFEP decision-makers for overall analysis of government operations, as well as providing information to other stakeholders (ie parliament, development partners). It is this system that is used to generate specific-purpose reports such as those to be used for HIPC tracking. It is clear that the existing part manual/part computerized systems present a trade off between accuracy and timeliness in the production of fiscal data.

10.10.3 Tracking Personnel Emoluments Expenditure

The Personnel Emoluments expenditure is fraught with difficulties pertaining to the presence of "ghosts". This is an expression used to describe the presence of names that do not correspond to active civil servants, but are introduced as a method of fraud. It would appear that in spite of the awareness of this problem, a concerted effort to remove or at least reduce the level of "ghosts" in a sustainable way has eluded all past efforts.

The Government of Ghana uses a centralized personnel management and payroll system IPPD, based upon the SIGAGIP payroll software operated by the Controller and Accountant-General's Department. This system provides for the centralized processing of changes to a master file held on a central IPPD server at the C&AGD. Master file changes (promotions, new appointments, deductions, etc.) are input by individual MMDAs and a set of change reports produced that enable MMDAs to validate their data input.

The main difficulties in respect of personnel emoluments are primarily the result of:

- A poorly designed and set up personnel management and payroll system that is devoid of any meaningful controls.
- A lack of workable and useful reconciliation schemes.
- No regular analysis of the data integrity of the master personnel database that serves as a control file to payroll processing.
- The personnel records unit that has not been able to maintain accurate and up-to-date records of line ministry personnel, due in part to their lack of adequate capacity and resources.

10.10.4 Tracking Investment and Other Recurrent Expenditure

Ghana uses a mix of manual and computerized systems for financial reporting. It has recently undertaken to implement and a real time, integrated financial management system. In theory this should permit on-line financial controls with a potential for achieving a marked decrease in expenditure anomalies. In practice its success has been limited by cost, the extent data network in Ghana and the technical expertise to operate the system. Financial reporting has had an additional obstacle as computerized reporting systems must be consolidated with manual systems.

BPEMS is based upon Oracle Financials. There are five modules: accounts receivable, accounts payable, general ledger, cash management and budget execution. The system is transaction-based and intended to operate in real time. It aims to strengthen budget formulation, improve budget execution and compliance, provide stronger controls and more timely, accurate and complete financial information, strengthen reporting and enable line managers to focus on outputs and results. System architecture consists of a central facility (application and database software and equipment), a series of nodes corresponding to MDAs, each of which would have remote a local area network, and a wide area network linking the central and distributed components.

Government's consolidated accounts have not been finalized for several years. This means that a critical link in the chain of public accountability is broken. Members of the public are denied timely and relevant information about the

use of public funds. The current content of the annual accounts is such that it is difficult to gain any meaningful insight into the financial performance of Government operations or its financial position. This is compounded by limited narrative explanation of the accounting policies, procedures and compliance with standards as well as incompleteness.

10.11

PUBLIC OVERSIGHT AND BUDGET

10.11.1 Office of the Auditor-General

The Auditor-General function originates from the Constitution, which provides for an Auditor-General (AG) with operational independence. The Auditor-General is appointed by the President, acting in consultation with the Council of State. Conditions for his/her removal are also stipulated. Under the Constitution the Auditor-General is not "subject to the direction or control of any other person or authority in the performance of his functions under the constitution or any other law" (Clause 187 of the Constitution).

In practice that independence is further guaranteed by the AG's salary and allowances not being subject to the annual budget process, and the tenure of office is similar to that of a superior court judge.

The role of the Auditor-General is to examine and certify public accounts and the accounts of all public offices (including the courts, central and local government, universities, public institutions, public corporations, traditional councils etc). The audit mandate is therefore very extensive. Auditors are given access to all books, records, returns and other documents relating or relevant to the audit of the accounts. The AG must submit an audit report to parliament within six months of the end of the financial year, which parliament must debate.

Parliament has established a Public Accounts Committee to assist it in considering the AG's report. The AG has the right of approval of the form in which the public accounts of the Government of Ghana are kept. The relevant legislation also gives to the AG the power of surcharge (ie to impose financial penalties on government staff). This is supplemented by powers to withhold emoluments and allowances of a person who fails to respond to audit findings within thirty days. The Constitution provides for the Audit Service and for an Audit Services Board, which determines terms and conditions of service of audit service staff, in consultation with the Public Service Commission. Government audit is regulated by the *Audit Service Act (2000)*.

The audited final accounts are publicly available but are produced well after the limits set by the Constitution. The accounts for 2001 and 2002 were still being audited in 2005. Parliamentary oversight is limited by access to only provisional figures provided by the budget documentation.

Ghana Audit Service (GAS) has a staff of over 1300, including about 700 auditors. It has branches throughout the country (eg 10 regional offices, 35 district offices, 16 offices in Accra, three commercial offices and one special

audit office). Given the constitutional position and privileges of the AG, the Ghana Audit Service can be regarded as independent, especially now that the Audit Service Board has been established (see below). GAS carries out audits under the direction of the AG. Regional and district auditors are stationed in the ten regions and in 64 of the 110 districts.

Amongst GAS professional staff, only one person has a formal professional qualification. Ten others are yet to pass their final professional exams. GAS is a member of the International Organization of Supreme Audit Institutions (INTOSAI) and applies audit standards based on internationally recognized standards.

Lack of audit staff and delays in some cases in finalizing public accounts are responsible for late audits and late audit reports. Currently there are delays of two to three years and rather longer for some audit reports. Given staffing shortages, it is not always possible to carry out audits annually. This is particularly the case for smaller entities. The present capacity of the Audit Service is insufficient to carry out special audits (eg audits of government contracts and procurement, debt, revenue and automated systems).

10.11.2 Public Accounts Committee

The Public Accounts Committee (PAC) is a standing committee of parliament. Currently it has 25 members, all of whom are elected members of parliament. The perception of its independence is enhanced by the fact that its chairman is a member of the opposition. It meets in private to review the report of the Auditor-General on the accounts and financial statements of the government. It can summons accounting officers and other public officials to give explanations. Its report to the speaker becomes a public document. Thus the findings of the PAC are reported in the press.

There are a number of recent PAC reports that have drawn attention to important issues pertaining to failures in public finance management. Some examples have been: including the proceeds from company divestiture as normal rather than other receipts; the practice of keeping separate bank accounts outside of the Consolidated Fund; and inadequacies in the Integrated Personal Payroll Database resulting in salaries being paid to “ghost” workers.

The failure to produce audited financial statements within a reasonable time frame or even within the constitutionally set limits has greatly hampered the operation, and consequently effectiveness of the PAC. Even though the Auditor-General provides technical advice to the PAC, capacity weakness also hinders its effectiveness. Strengthening PAC by giving it improved technical support would have a positive effect on financial accountability.

The documents in this Annex show comments from the Minerals Commission of the Government of Ghana. Please note that the page numbers shown in the government documents below refer to an earlier version of this report.



MINERALS COMMISSION

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Our Ref: MC. 491

18th April 2006

Mr. Ben Hedley
International Council on Mining
& Metal
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Fax: 00 44 (0) 207290 4921

Dear Sir,

ICMM RESOURCE ENDOWMENT PROJECT – PHASE II
GHANA COUNTRY CASE STUDY – DRAFT MAIN REPORT

We refer to the above draft report submitted to the Minerals Commission for our comments.

We have reviewed the report and attach our comments for your necessary action.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Ampomah Tawiah', written over a horizontal line.

(AMPONSAH TAWIAH)
DIRECTOR, MONITORING & EVALUATION
For: CHIEF EXECUTIVE

Attach

**ICMM RESOURCE ENDOWMENT PROJECT PHASE II –
GHANA COUNTRY CASE STUDY**

The above report has been reviewed and found to reflect the situation by and large. However, certain basic statements will need elaborations. Example on the executive summary page vi – “overall, the Obuasi mine spends about \$0.7 million on social investment” – is this annually or over what period?

Page 6: Delete in the Ashanti region at the end of “There are also three new mines being developed”, since none of the new mines is in the Ashanti Region.

“Bong” under the three new mines should be replaced with “Brong”.

Page 16, point 3: The sectoral ranking of the heads of families engaged in various activities may not be wholly true, particularly with regards to ‘finance and business services’ and ‘transport and communication’ with their order to formal mining.

Page 22/23: it is alleged that there is high Ghanaian input for mine procurement. This requires further analysis because from AngloGold statistics, the areas that appear to have high Ghanaian input are just by name but those providing the services are invariably foreign-based companies. Hence what is perceived to be retained in Ghana is largely repatriated. It is also important to authenticate the reference source of the data provided for the analysis.

Page 24: Taysec is erroneously classified as a Ghanaian-controlled company. Though registered in Ghana, it is a subsidiary of Taylor Woodrow of UK.

Page 35: Last paragraph

Replace ‘University of Kumasi’ with “ Centre for biodiversity development of Kwame Nkrumah University of Science and Technology, Kumasi”

Page 37: last paragraph

Insert between ‘the’ and ‘Minerals Commission’ “Ministry of Lands, Forestry and Mines through”.

Page 38

Paragraph 4: Replace 'issue' with "menace" on first line.

Line 4/5: Replace 'and easier' with "which are not easy".

Last paragraph: reword first sentence to read "steps are being taken to complement the previous World Bank initiative to address the artisanal mining issue".

With these corrections effected, the report accurately reflects the subject-matter under discussions.

FURTHER MINERALS COMMISSION COMMENTS ON

ICMM RESOURCE ENDOWMENT PROJECT PHASE II – GHANA COUNTRY CASE STUDY

INTRODUCTION

Having reviewed the report our view is that it reflects the situation by and large. However, we propose a re-cast of some statements to reflect the reality; these we have indicated in the tracked copies of the report attached. Additionally, the following comments are made to help redo portions of the report we think should be looked at again.

COMMENTS

Executive Summary

1. While discussion of impacts of mining on the national economic performance on page ii starts from 1957, the referenced figure, Figure 1 only starts from 1966. It would be a good idea to start a chart from 1957
- 2 Starting from the last paragraph of page iii it is suggested that an economy dependent on mining, particularly of gold, requires only a minimum package of economic and institutional reform to be resuscitated.

Our view is that this is largely the case only where certain underlying factors are already present. In the case of Ghana these factors included the widely known existence of mineral deposits, availability of human capital as well as a fair level of mine development. Bottlenecks in the macro economy like misalignment of foreign exchange rates were therefore all that needed to be addressed to make the sector viable in the short term. Over the medium to long term other structural changes and measures had to be put in place to sustain and make the growth robust.

- 3 In the last but one paragraph of page v, an estimated total of 29,000 – 72,000 of indirect and induced employment is attributed to Obuasi mine. We have no basis to endorse or to disprove this.

4. In the first paragraph of page vi local sourcing of procurement is discussed. The usage is a bit ambiguous (immediate environs of mine or Ghana wide); either way the quantum is small.
5. Paragraph 2 of page vi
 - A statement "... providing free power to relocated communities," is made. These communities would have to be identified.
 - A statement "At the national level, AngloGold Ashanti, as Ghana's leading company," is made. The criteria for this conclusion needs to be specified.
6. In the last paragraph of page vi, it is stated that several staff have been violently assaulted by galamsey. To be objective, a statement like this in the executive summary should be balanced by one which reflects the claim of artisanal miners having been attacked by company security as indicated on page 38 of the main report.

Main Report

1. Pages 22-24 discuss procurement. One gets the impression that there is a high level of local content in procurement. However, the facts are that apart from electricity, the "high local content" elements in procurement are attributable to foreign-owned companies (e.g. Taysec which was cited on page 24) which repatriate most of what is deemed to be retained locally.

CONCLUSION

We trust that the consideration of our proposals in finalizing the report would improve its reflection of reality.

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