ABSTRACT

Since the implementation of Ghana’s national Structural Adjustment Programme (SAP), policies associated with the programme have been criticized for perpetuating poverty within the country’s subsistence economy. This article brings new evidence to bear on the contention that the SAP has both fuelled the uncontrolled growth of informal, poverty-driven artisanal gold mining and further marginalized its impoverished participants. Throughout the adjustment period, it has been a central goal of the government to promote the expansion of large-scale gold mining through foreign investment. Confronted with the challenge of resuscitating a deteriorating gold mining industry, the government introduced a number of tax breaks and policies in an effort to create an attractive investment climate for foreign multinational mining companies. The rapid rise in exploration and excavation activities that has since taken place has displaced thousands of previously-undisturbed subsistence artisanal gold miners. This, along with a *laissez faire* land concession allocation procedure, has exacerbated conflicts between mining parties. Despite legalizing small-scale mining in 1989, the Ghanaian government continues to implement procedurally complex and bureaucratically unwieldy regulations and policies for artisanal operators which have the effect of favouring the interests of established large-scale miners.

INTRODUCTION: GHANA AND THE SAP

When Dr Kwame Nkrumah was elected Ghana’s first president in 1957, he could not have envisioned that, by the turn of the century, some 90 per cent of his country’s people would be straddling the poverty line. Prior to declaring independence, Ghana was considered to be among the most affluent and proficient countries in Africa, boasting one of the continent’s highest per capita incomes, and playing an integral role in the global trade of several important crops and metals (Drafor et al., 2000: 489). Since then, however, it has experienced ten changes in government, including four military *coups d’etats*; failed to improve its depressed GDP per capita income level; and earned a reputation internationally for being ‘un-motorable’ because policy-makers have managed to oversee the paving
of only 25 per cent of its major roads. The governmental regimes that followed Nkrumah targeted primarily short-term economic improvement and failed to adopt long-term plans for restructuring the economy (Jeong, 1998). Since little emphasis was placed on income distribution and social investment, nearly all of the country’s foreign exchange earnings had been depleted by the early 1970s.

High inflation, declining exports, and low GDP growth damaged Ghana even further during the late 1970s and early 1980s. The poor performance of the economy was a direct result of a combination of an overvalued exchange rate, which in turn depressed the volume of exports through official channels; growing fiscal deficits; reductions in external aid; and the accumulation of payment arrears (Anon, 1994: 58). Consequently, between 1970 and 1983, import volumes declined by over 33 per cent, real export earnings fell by over 52 per cent, domestic savings and investments dropped from 12 per cent of GDP to virtually zero, and numerous Ghanaians — including skilled artisans, teachers and medical professionals — fled to neighbouring Burkina Faso and Nigeria in search of better economic opportunities (Konadu-Agyemang, 2000: 473; Tsikata, 1997). The economy began to exhibit permanent signs of deterioration towards the end of the rule of General I. K. Acheampong’s Supreme Military Council (SMC) II in 1978: according to Panford (1997: 81), the ‘corruption and mismanagement of the economy by his regime contributed to the precipitous fall in living standards’.

In what many commentators regard as a desperate attempt to revive the slumping economy, national policy-makers pledged an allegiance with the IMF and World Bank, on which the fate of the country has rested for the past twenty years. The Bretton Woods Institutions drafted an extensive Structural Adjustment Programme (SAP),1 overseeing its implementation during the early years of Jerry Rawlings’ presidential tenure. Structural adjustment, which emphasizes the removal of market imperfections for the purpose of promoting growth, became a mainstream economic term during the late 1970s and early 1980s, largely in an effort ‘to distinguish a set of allegedly efficiency-raising policies from stabilization programs’ (Mosley et al., 1995: 1460). As the principal financiers of SAPs, the IMF and World Bank demand, inter alia, that reforms are made to recipient countries’ agricultural markets and macroeconomic policies as a precondition for the approval of the SAP. This has included demands

1. Adjustment policy in Ghana has evolved through the following three phases: ERP I (1983–86), during which time the government emphasized exchange rate reform and price decontrol, implemented monetary and fiscal policies, and enacted an export sector rehabilitation programme and public sector investment programme; ERP II (June 1987–July 1990), under which the adjustment phase commenced, intended to further ongoing reforms to address the continuing weaknesses of the economy; and ERP III (1993–present), which signified a shift from economic recovery to accelerated growth (Hutchful, 2002).
for fiscal discipline, changes to taxation, new public spending priorities, competitive exchange rates, increased foreign spending, privatization, and deregulation (Crisp and Kelly, 1999). For over twenty years, SAPs have dominated the socioeconomic agenda of sub-Saharan Africa, where some thirty-seven countries have sought varying degrees of adjustment financing. Overall regional SAP lending now exceeds US$ 15 billion (Noorbakhsh and Paloni, 2001: 479).

The adoption of adjustment programmes was expected to catapult economies onto a higher growth trajectory and enable them to make a visible dent on poverty (Kapoor, 1995: 1); however, there is a growing body of evidence which suggests that SAPs have perpetuated economic hardship within the informal, impoverished communities of the developing world (Goldberg and Pavcnik, 2003; Naylor, 1999; Riddell, 1997). Proponents of this argument, which builds upon those first articulated by UNICEF during the mid-1980s, assert that adjustment programmes increase the economic vulnerability of low-income countries overall and, over the long-term, cause permanent internal dislocations and diminish prospects for growth and development (Reed, 1996). More specifically, declining exchange rates, reduced government spending, the removal of price supports, and the loss of public employment resulting from reforms, all affect the poor disproportionately (Demery and Addison, 1987). Subsistence communities have been especially hard hit by the introduction of user fees for social services, the abolition of basic subsidies, and reductions in credit and extension services.

Adjustment efforts in sub-Saharan Africa in particular have failed to yield ‘dynamic results’ because of the fragility of the continent’s markets and states; the generally underdeveloped nature of its societies, which are comprised of weak human resource bases, inadequate infrastructure, and less diverse economies; and the inability of policies to promote reform in a number of important areas, including public services, fiscal policy, marketing, exports, and private investment (Gordon, 1996: 1527–28). In short, critics of SAPs contend that the burden of reform is borne disproportionately by the poor, who are also victimized by the increased prices of goods and services brought about by the removal of subsidies on food, transport and energy (Crisp and Kelly, 1999: 534).

All this notwithstanding, the Ghanaian economy has experienced rapid growth since the inauguration of its SAP. By emphasizing increased export growth and industry privatization, the government, under the guidance of the Bretton Woods Institutions, has stimulated marked increases in production in a number of its industries. For example, annual timber production increased more than three-fold, from 117,000 m$^3$ in 1983 to 545,000 m$^3$ in 1988 (Hutchful, 2002: 79). Moreover, in the past twenty years, annual outputs have increased in a number of branches of the mineral sector (Aryee, 2001), including gold (500 per cent), diamonds (300 per cent) and bauxite (>600 per cent). Prospects have also improved in the agricultural economy, where ‘under the SAP, improved prices for cocoa and maize and
improved credit facilities have been an incentive to expand production’ (Benhin and Barbier, 2004: 340). Proponents of SAPs claim they have ‘rescued Ghana’s economy from complete collapse’ (Konadu-Agyemang, 2000: 474).

However, as Panford (1997: 89) and others explain (see for example Abdulai and Huffman, 2000; Sarris and Shams, 1991; Teal, 2002), as a result of the specific policies implemented to facilitate change, formal sector employment has diminished, as have many of the opportunities for personal fulfilment which existed during the early years of independence. According to Hutchful (2002: 90), total employment in the large- and medium-scale formal sector (enterprises with thirty or more employees) fell from 464,000 in 1985 to 394,000 in 1987 and to 186,000 in 1991, ‘a decline of almost 60% in five or six years’. In the agricultural sector, policy reforms, which have ‘focused preponderantly on rehabilitation of the cocoa industry and reform of its marketing system’ (ibid.: 67), have resulted in the elimination of some 80,000 job positions on the Cocoa Board. Schemes allegedly put in place to improve efficiency in the public sector have also had a devastating effect on job creation and levels of employment. Between 41,000 and 45,000 civil servants were immediately ‘redeployed’ (29,000 were dismissed in 1988, and the remainder in 1989), over 20,000 state enterprise employees were laid off, and hundreds of private sector employees lost textile and manufacturing jobs as a result of import liberalization (Weissman, 1990: 1626).

Experts generally agree that the foreign investors who have been attracted to the country’s business climate have stiffened the competition for many subsistence artisans and entrepreneurs. Chalfin (2000), for example, recalls how the market conditions for nut traders in the Bawku District of Northern Ghana became less reliable during the mid 1990s because of the presence of an increased number of private firms. Similarly, Puplampu (1999) describes how the adoption of SAP policies for agriculture has impacted large- and small-scale farmers differently; in the case of cocoa farming in the Ashanti Region, the net income per acre for the two largest farm size groups is nearly 60 per cent higher than for the two smallest farm size groups. The subsistence rural wage economy has deteriorated in the process, as workers’ salaries have been unable to keep pace with currency devaluation and inflation.2

The purpose of this article is to further the debate about the impacts of Ghana’s lengthy SAP by examining how it has influenced the livelihoods

2. The cedi depreciated from 2.75 cedis = US$ 1 at the beginning of the SAP, to 3,800 cedis = US$ 1 in early 2000. The national inflation rate, which fell during the first decade of the SAP, more than doubled from 24.7 per cent in 1993 to 58.6 per cent in 1995 (Owusu, 2001).
of indigenous artisanal gold miners. Mining has gone virtually unexamined in previous SAP studies on Ghana; this article explores how the artisanal segment has changed as a result of adjustment before going on to assess how its operators have been adversely affected by adjustment policies. The discussion combines evidence from the literature with findings from interviews conducted with government officials and artisanal miners based within the gold mining localities of Tarkwa, Bibiani and Assin Fosu.

FORMALIZATION OF THE ARTISANAL GOLD MINING ECONOMY: THE GHANAIAN EXPERIENCE

Prior to reform, the Ghanaian government held at least 55 per cent of shares in all large-scale mines (Akabzaa and Darimani, 2001), the majority of which were under-producing and using antiquated technology. Since the launch of ERP I, however, considerable effort has been made to decrease the government’s controlling stake in the industry through privatization. To raise the requisite levels of foreign investment, a number of policy strategies were adopted, including improving access to critical inputs through export rehabilitation credits, and recapitalizing funding for mines (Hutchful, 2002: 83). Since Ghana possesses some 70 per cent of West Africa’s proven gold reserves (Utter, 1993), gold mining was a major target of such reforms. Legislatively, the most significant initiative undertaken was the implementation of the Minerals and Mining Law 1986 (PNDCL 153), which further liberalized the sector and extended a series of benefits to prospective investors, including: a reduction in the government’s entitlement (10 per cent) of equity in new mining operations; implementation of a low investment allowance (5 per cent) during the first year of operation; complete capitalization of all pre-production expenses; and provision of favourable amortization levels (75 per cent the first year, 50 per cent thereafter), elimination of import duties on capital equipment, and generous retention allowances on foreign exchange profits. These efforts successfully created an attractive investment climate for mining in Ghana. Since the launch of ERP I, over US$ 4 billion has been invested in the sector (Aryee, 2001); today, an estimated 237 companies (154 Ghanaian and 83 foreign) are prospecting for gold, and an additional 18 companies have operating gold mines.

A decision was also made to legalize small-scale gold mining, which led to the passing of the Mercury Law (PNDCL 217), Small-Scale Gold Mining Law (PNDCL 218), and Precious Minerals and Marketing Law (PNDCL 219) in 1989. During the early 1990s, World Bank monies were used to establish the Small-Scale Mining Project (SSMP), which delegated industry responsibilities to the Geological Survey Department, Minerals Commission, Precious Minerals and Marketing Corporation (PMMC), and Mines
Department.\textsuperscript{3} Although prior to the advent of the legislation and establishment of the SSMP, ‘most small-scale gold and diamond production [was] routinely smuggled’ (Hutchful, 2002: 84), the majority of artisanal miners operated undisturbed, making periodic remittances to local chiefs and landowners. Using rudimentary implements, sediments were scooped from shorelines, stored in bowls or canoes, and later washed repeatedly to separate gold particles from sand; shallow-pit surface mining and deep shaft mining, although less common, also occurred in various parts of the country (Botchway, 1995).

The logic behind the Ghanaian government’s recent decision to bring informal artisanal mining into the legal domain stems from the belief (articulated, for example, by Abrams, 1966; Sanyal, 1996; Turner, 1967) that — in the midst of government harassment, discrimination, and indifference — informal industries perform remarkably well in providing housing and income-earning opportunities to the poor and should therefore perform even better if authorities change their attitudes toward participants, and grant legal recognition and assistance. Proponents of this approach further argue that formalization transforms squatters into citizens, and provides them with a legitimate ‘voice’ in key decision-making processes. In the case of artisanal mining, formalization raises it from ‘an unorganized, unsupervised industry to one that is modernized, monitored, organized, and supported so that specific goals can be set and met’ (Jennings, 1994: 13). In Ghana, through a system of registration, prospective artisanal gold miners are now required to apply for a licence for entitlement to work a 25 hectare plot of land. This process requires the completion of paperwork, the undertaking of an environmental impact assessment (EIA), interviews with government officials, and the payment of fees.

Although the Ghanaian government has collected well over US$ 300 million in gold from artisanal and small-scale miners since instituting a regulatory and policy framework for the industry in 1989, an overwhelming majority continue to operate as illegal galamsey,\textsuperscript{4} without any legal entitlement to land. However, despite the efforts of studies by Aryee (2003), Aryee et al. (2003), Iddirisu and Tsikata (1998) and others to differentiate between

\textsuperscript{3} The Minerals Commission, established by the Minerals Commission Law 1986 as amended by the Minerals Commission Act of 1993 is a policy-making body which helps to formulate government policy in the areas of mineral exploration and exploitation, and handles all public agreements related to minerals. The staff from its Small-Scale Mining Unit award licences to small-scale miners, and assist with associated site assessment and training. PMMC has been assigned all purchasing-related responsibilities in the small-scale mining sector. The Mines Department has been put in charge of the industry’s health and safety issues, and the Geological Survey Department has been commissioned with all prospecting and geo-chemistry related tasks.

\textsuperscript{4} Highly migratory, unregistered (illegal) artisanal gold miners are referred to locally as galamsey.
the *galamsey* and registered small-scale gold miners operating in Ghana, there is little difference either organizationally or technologically between the groups, except that the latter have security of tenure on a demarcated mineralized land plot for a given period of time. Like their registered counterparts, who generally have teams of labourers undertaking specific tasks on designated areas of their concessions, most *galamsey* miners have organized themselves into ‘gangs’, working shallow pits along roadsides and within forested areas. Both groups rely upon local knowledge to pinpoint economic deposits, and deploy such rudimentary techniques as the ‘inner tube method’ to purify gold. 5 Both parties also deal with some 800 migratory licensed gold buyers, as the government does not discriminate over legal status when acquiring gold from mining villages.

The success of the Ghanaian government in securing substantial quantities of gold from indigenous operators has overshadowed a growing body of anecdotal evidence suggesting that, since the implementation of an industry regulatory framework in 1989, the majority of the country’s estimated 300,000 artisanal gold miners have continued to struggle to secure economically-viable land plots. There is also increasing indication that operators experience considerable difficulty attaining legal status, largely because of the government’s prioritization of large-scale mine development. Based on detailed descriptions of the Ghanaian mineral economy provided by Addy (1998), Akabzaa and Darimani (2001), Aryee (2001), Aryee et al. (2003), Tsikata (1997), and others, it appears that the legalization of small-scale gold mining has been an integral component of the government’s strategy to promote foreign investment in large-scale mining and mineral exploration, since control over who can register as small-scale miners and where they can operate puts the authorities in a better position to demarcate concessions to gold exploration and mining companies. As a result, large-scale mining has expanded unabated, often ‘threatening the traditional land rights of indigenous peoples and weakening community control over land and resources’ (SAPRIN, 2002).

The discussion that follows provides an account of how Ghana’s artisanal gold miners have been adversely affected by the changes that have occurred in the mining sector under reform. As ‘poor people’s stories are a testimony to their resilience, their struggles against hopelessness, their determination to accumulate assets, and their will to live for their families’ (Narayan and Petesch, 2002: 1), interviews were conducted with artisanal and small-scale gold miners to acquire their perspectives on a range of issues, including the expansion of large-scale mining activity, the increased regulation of small-scale mining, and provision of government support that has occurred.

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5. Artisanal miners remove the inner tube of a car tyre, and use it to separate uneconomic rock fragments from gold particles. The opaqueness of the black tube makes it easier to differentiate between particles with the naked eye.
since the launch of the country’s SAP. Semi-structured interviews were conducted in the towns of Tarkwa, Bibiani and Assin Fosu (see Figure 1), three of the country’s seven most significant artisanal and small-scale gold mining regions. Data were drawn from the verbatim transcripts of interviews with respondents, supplemented with material from the literature. All quotations represent word-for-word transcriptions from tapes; pseudonyms are not used for respondents because in every case, it was indicated that the

Figure 1. Map of Ghana showing Artisanal Gold Mining Regions visited in this Study
‘operating’ or ‘field’ name of the interviewed miner was not provided. Here, these data are combined with selected feedback obtained from a series of semi-structured interviews conducted with government officials in Accra during July 2001 and April–May 2002. In total, thirteen officials were interviewed from SSMP agencies and the Environmental Protection Agency (EPA). The names of the interviewed officials are not disclosed here, however, because of their desire to remain anonymous.

THE IMPACT OF GHANA’S NATIONAL SAP ON ARTISANAL GOLD MINING ACTIVITY AND THE LIVELIHOODS OF ITS OPERATORS

The legalization of small-scale mining coincided with the launch of an ambitious programme aimed at improving the organization of existing artisanal and small-scale gold mining operations, and future projects. Using World Bank monies, representatives from government, with assistance from the German technical co-operation organization, GTZ, allegedly undertook extensive geo-prospecting for the purpose of demarcating land plots to registered small-scale mining parties. They then oversaw the construction of seven district support centres, intended to provide decentralized support to grassroots mining parties; implemented equipment for operators; and further refined sector-specific policies and regulations (World Bank, 1995). The following section describes some of the ways in which these policy initiatives have affected indigenous artisanal gold miners, and the character of the industry as a whole.

Unemployment and Artisanal Gold Mining

‘Artisanal and Small-scale Mining (ASM) is typically practiced in the poorest and most remote rural areas by a largely itinerant, poorly educated populace, men and women with few employment alternatives’ (Labonne, 2003)

As is the case in the majority of developing countries, the rapid growth in Ghana’s artisanal and small-scale gold mining sector can be attributed to the acute lack of jobs and accompanying poverty nationwide. In a country where annual per capita income in rural areas is as low as US$ 151 (Dordunoo and Sackey, 1997), it is not surprising that artisanal gold mining provides an important source of income to tens of thousands of people. The record levels of production achieved in the industry over the past ten years testifies to the increasing popularity of artisanal mining as a profession (see Table 1 and Figure 2). The inability of Ghana’s rapidly shrinking public and manufacturing sectors to provide new high school graduates with employment has made artisanal gold mining increasingly important in the domestic labour market. Yakubu (2002: 7) explains the situation in greater detail:
### Table 1. Small-scale Gold Mine Production in Ghana, 1989–2003 (based on official statistics)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (US$ millions)</th>
<th>Ounces</th>
<th>% Small-scale to Total Ghana</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>3.4</td>
<td>9,272</td>
<td>2.2</td>
</tr>
<tr>
<td>1990</td>
<td>6.3</td>
<td>17,233</td>
<td>3.2</td>
</tr>
<tr>
<td>1991</td>
<td>5.3</td>
<td>15,601</td>
<td>1.8</td>
</tr>
<tr>
<td>1992</td>
<td>6.1</td>
<td>17,297</td>
<td>1.7</td>
</tr>
<tr>
<td>1993</td>
<td>11.5</td>
<td>35,144</td>
<td>2.8</td>
</tr>
<tr>
<td>1994</td>
<td>34.7</td>
<td>89,520</td>
<td>6.2</td>
</tr>
<tr>
<td>1995</td>
<td>48.7</td>
<td>127,025</td>
<td>7.4</td>
</tr>
<tr>
<td>1996</td>
<td>36.0</td>
<td>112,349</td>
<td>7.1</td>
</tr>
<tr>
<td>1997</td>
<td>28.4</td>
<td>107,094</td>
<td>5.9</td>
</tr>
<tr>
<td>1998</td>
<td>36.6</td>
<td>128,334</td>
<td>5.4</td>
</tr>
<tr>
<td>1999</td>
<td>35.2</td>
<td>130,833</td>
<td>5.2</td>
</tr>
<tr>
<td>2000</td>
<td>40.9</td>
<td>145,662</td>
<td>6.2</td>
</tr>
<tr>
<td>2001</td>
<td>39.3</td>
<td>185,596</td>
<td>8.7</td>
</tr>
<tr>
<td>2002</td>
<td>48.9</td>
<td>160,879</td>
<td>7.2</td>
</tr>
<tr>
<td>2003</td>
<td>79.8</td>
<td>211,414</td>
<td>9.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>461.1</strong></td>
<td><strong>1,593,253</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Sources: Amankwah and Anim-Sackey (2004); Yakubu (2002).*

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### Figure 2. Value of Small-scale Gold Mine Production in Ghana, 1989–2003 (based on official statistics)

*Sources: Amankwah and Anim-Sackey (2004); Yakubu (2002).*
The rush of our youth into illegal mining or *galamsey* can partly be attributed to the unemployment in the country. According to the Ministry of Labour and Employment (1997), between 150,000 and 200,000 school leavers enter the labour market every year... In view of the low capacities of the public and private sectors to absorb their numbers, illegal mining becomes the most attractive alternative because of perceived remuneration they expect to get.

This reality was confirmed during personal visits to *galamsey* sites, where large groups of youths were performing a wide range of gold mining activities, including sieving, extraction, amalgamation and panning. Fusekni Aruna, who is married with three children and works a number of shallow gold pits with six fellow artisans, recalled how appalling the job market was when he completed his A-levels: ‘OK, there was no job, and the land was there, so I started mining. I now get something for *chop,* so that is all that matters’. Raphael Kudzo also opted to join the artisanal mine labour force, instead of pursuing further school studies. ‘When I finished my O-levels’, explained the thirty-year old Kudzo, ‘I moved from Volta Region to Tarkwa. I basically began mining right when I finished my studies’. Many youngsters were initially driven to mining because of the need to finance their studies but were drawn back upon completion of schooling because of a shortage of work. Elements of such a pattern can be discerned from the story of seventeen-year old Benjamin Andoe, who has recently found work as an artisanal gold miner in Tarkwa:

I am a student but because of money I am at work here. That is why I have been transferred by my brothers. I need money to continue my BASS levels. I finished my basic education but because I want to continue I need money... the work is so hard for me too. I needed money for schooling like I said, so I asked a friend in Cape Coast where I could earn some extra money and he said to become a gold miner. So I travelled here to Tarkwa and looked into registering but was shown by another friend that this area was a good place for gold, so I joined the gang here and now I am making enough money for school but it is hard work.

It is likely that Andoe will continue working as an artisanal gold miner when he has completed his studies due to a lack of employment opportunities nationwide.

However, a declining standard of living has not only attracted recent school graduates but has also persuaded a wide range of former professionals, semi-skilled labourers, and retrenched large-scale mine workers to relocate to the many rural reaches of the country where artisanal gold mining can be readily carried out. Whilst government officials often maintain that the clandestine and informal habits of the industry’s operators are a reflection of a lack of education, conversations with many miners revealed otherwise. One notable example was fifty-two year old James Mensah, a *galamsey* based in Tarkwa, who, during a personal interview, described his extensive educational background and experiences:

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6. ‘Chop’ refers to a daily ration of food. A miner who uses the term is generally referring to his subsistent state.
I am originally from the Ashanti Region and have three years at the polytechnic course, two years in general engineering, and one year in a chemical technician course. I have been operating as a small-scale miner four years now . . . Before then, I taught briefly in Liberia . . . physics and mathematics . . . I thought about accruing capital to start my own business. My grandfather was a gold dealer some time ago . . . some time around the nineteenth century. At the moment, I thought about stretching out to some business, that is why I am here. I have never worked in a large-scale mine but this [artisanal gold mining work] can be good money.

John Cowbinh, another Tarkwa-based operator, described how retrenchment at a local large-scale mine led to his participation in artisanal gold mining:

First I was working at a company, as a driver, as a rigger . . . I have been a [artisanal] miner for one year. When I was made redundant, I was forced to come here. Where I used to work, we could not get any jobs. The money was better where I was before but because I can’t get any job there, I’m here now. I was given three million cedis as compensation [for severance from the company]. This was not good, because I was there for five years.

Francis Aryee, an artisanal miner based in Assin Fosu, who earned A-level honours before turning to a life of seasonal farming, told a similar story: ‘At first, I was with a gold mining company in Prestea Goldfields, where I was a blastman and a machine man but my job collapsed because of the world gold market around 1998 . . . this drove me to small-scale gold mining’.

The image that Ghana’s artisanal gold miners are both uneducated and uncivilized has been perpetuated by government officials — particularly those employed in mining divisions — who generally maintain that the unstructured nature of artisanal works is a major impediment to the development and financing of large-scale mines. This, in turn, has led to the publication of a number of defamatory commentaries about artisanal gold miners in the local press.\(^7\) Similarly, the website of the Ghana Chamber of Mines, the representative body of the country’s mining sector, describes the galamsey as a ‘menace’, as has the Bank of Ghana, which, in its recent publication Report on the Mining Sector (Bank of Ghana, 2003), refers to the existence of widespread artisanal gold mining activity as ‘The Menace of “Galamsey” Operations’.

The language used in these and related articles suggests that Ghana’s artisanal gold miners pose a threat to society, when, in fact, the majority have been driven to the industry because of a lack of alternative employment nationwide. The individuals who have engaged in artisanal mining include former farmers, skilled machine operators, recent graduates, teachers, and, in all likelihood, retrenched public-sector employees. The government is not faced with a growing artisanal mining population

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\(^7\) Prime examples include: ‘Galamsey operators on the rampage’ (Ghanaian Runner 14 March 1996); ‘Minister launches attack on galamsey child labour’ (Chronicle 30 January 2002); ‘Illegal miners invade Teshie’ (GRI Newsreel 22 April 2002).
comprised exclusively of illiterates, but rather a group of marginalized people of varying skill, education, and levels of training.

**Implementation of Bureaucratic Licensing Schemes**

‘Small-scale mining is bedeviled with too many regulations that are mostly designed to constrain it and too few inspectors to ensure that they do’ (Jennings, 1998)

When regularizing informal sector operations, ‘the issue is not one of regulation *per se* but of the form of regulation’ (Roberts, 1994: 8). Lagos (1995: 112) describes how inappropriate regulation can impede the formalization of such operations:

Supporters of the illegality-approach argue that the institutional and legal framework constitutes an obstacle to the formalization of the informal sector. They maintain that the formalization or legalization of micro-enterprises is virtually impossible because of government interventions through disproportionate regulation and bureaucracy which are not only excessively time-consuming, but also impose high financial costs.

However, in the case of artisanal mining, despite the efforts made by a number of governments in recent years to implement appropriate regulations and simplified registration systems for operators (Suttill, 1995), in the majority of cases, the process of securing a licence to mine on a small scale is associated with excessive paperwork, costly procedures, and lengthy waiting periods. The expense and delay in registering operations, combined with the complexity of administrative procedures and the inappropriateness of regulations, have long deterred micro-entrepreneurs from formalizing their enterprises (Maldonado, 1995). Thus, if small-scale miners are to be encouraged to operate legally, ‘legislation must be (at least) even-handed in allowing small-scale miners access to suitable land for prospecting and mining activities . . . [and] must be “user friendly” as far as the issuing of permits and the granting of licenses are concerned — permits that provide clear security of tenure for a reasonable period so that small-scale mining can become established’ (Jennings, 1998: 3).

Despite benefiting substantially from the output derived from resident artisanal and small-scale gold mining activity, the Ghanaian government appears to be further ostracizing its participants by repeatedly implying that their unregistered operations are in breach of legislation. In accordance with *The Small-Scale Gold Mining Law*, a prospective operator is required to register a concession with the authorities *prior* to engaging in mining activity. However, the lengthy delays and bureaucratic procedures associated with securing a small-scale mining licence are bound to be problematic to the subsistence operator, who relies on a daily wage to purchase, amongst other things, supplies of food, water and clothing. In short, whilst the policies of the SAP have established an enabling operating environment for large-scale mining companies, they have created exceptionally difficult operating conditions for artisanal gold miners.
Aryee et al. (2003) provide a detailed overview of this licensing procedure, which begins with prospective licensees — who must be Ghanaian nationals aged eighteen years or older — submitting ten copies of a completed small-scale mining application form along with accompanying site plans of the proposed mining area, to a local small-scale mining district centre. An inspection report is then forwarded to the District Chief Executive of the relevant political district. Following the issuance of an environmental permit from the Environmental Protection Agency (EPA) and payment of the required fees, the application is forwarded to the Minister of Mines for assessment. If approved, an agreement is forged between the applicant and the Government of Ghana, after which the signed documentation is taken to the Chief Inspectorate of Mines, who awards the official licence to work on the allocated parcel of land. Licences are subject to renewal after three to five years, depending on the concession size.

The insertion of what many feel is an unnecessary EIA stage by the EPA has significantly delayed the process of issuing licences. During a personal interview, one government official acknowledged how the EIA process has hampered the effectiveness of the small-scale licensing procedure overall:

If you want to get a licence for small-scale mining, normally, it would take a month. You must inform the district officer first, and then the District Administration forwards it to Accra; when we didn’t need an environmental permit, it took no time at all . . . but now, you have to go to the EPA and get an environmental permit, which at times can take more than a month. In fact, when I was travelling in the north in Bolgatanga, I was speaking to someone who said it has taken eight months and the environmental permit was not there, so I went to the environmental officer and asked him why his work should determine a miner’s efficiency and so they phoned Accra.

Many interviewed miners also complained about the length of time associated with licensing, arguing that it is a major deterrent to registering. Raphael Kudzo, a galamsey miner in Tarkwa, spoke of a delay of several months regarding a friend’s application: ‘it is too long . . . luckily, he owned a drink stand in town, which provided him the money while waiting’. Similarly, Peter Jubea, a Bibiani-based operator argued: ‘instead of having to go to Accra, the district officers (in the field) should be able to give us the licence . . . we have to go to Accra, and do all these things . . . it is too much and causes so much delay’.

Contrary to the views of the government and the press regarding artisanal gold miners’ attitudes toward the registration process, many prospective operators appear keen on acquiring a licence, largely because of a fear of being prosecuted and thrown into prison. For example, Bibiani-based operator Francis Banoh, whilst acknowledging that obtaining a licence can take a considerable amount of time, maintained that it also ‘decreases your worries’ of government and police:

The licensing is good . . . it is a good process because if you go to some of these places around Bibiani, some of them doesn’t have enough planning . . . so if you get a licence you are free and legal. It is good to go through the steps. You just follow the procedures but it takes time
we have to wait. I do not know how the process works but I know it goes to Accra for evaluation. We have to come and give them the map, and we make the research here, and then it goes to Accra, and then we find out if the place is free [available]. All I see it is as a good thing, so I do not get arrested. The thing takes a long time but it takes one month according to my estimates but that is if things do not go wrong. I registered in about 1990 and have been operating at the current site for about five years.

Since the launch of the SAP, the Ghanaian government has tended to favour the awarding of land concessions to large-scale mining and mineral exploration companies, making it even more challenging for artisans to legally secure productive land. A great majority of the plots awarded to mining companies to date are exceedingly large, and although vast portions often go unused — and are even unsuitable for mechanized mining activity — they have proven difficult to extract from companies for redistribution. As Yakubu (2002: 7) explains, ‘exploration and mining lease concessions stretch for several square kilometers without [a] break, thereby encompassing many towns and villages . . . residents of these areas do not have access to land to acquire legally for small scale mining’. As one miner in Bibiani noted, ‘I do not have a licence because there is no land that I know of’, whilst galamsey John Yaw, referring specifically to how Goldfields has been awarded the vast majority of the gold mine concessions around Tarkwa, explained, ‘we know the government can license the place for them [large-scale mining companies] or, if they want to get a licence, they can, but this is [Goldfields] land . . . how can we be licensed here?’. Another Government official also recognized the severity of the problem:

Most of the (artisanal) miners do not register not because of the scheme but because the areas are incumbent. If you get to an area like Dunkwa, there are hundreds of [licensing] applications now flying down. They are working illegally but they want to register but because the place is incumbent, it cannot be done. The process is slow, too. And the place has been given to someone else.

Another major deterrent to registering is the cost associated with securing the small-scale gold mining licence, which appears to be beyond the limited financial means of the subsistence artisan. As Tarkwaian galamsey James Mensah put it, ‘we encountered some officials . . . and we were told that we had to pay 80,000 cedis but at that time we were not having that amount’. Similarly, neighbouring galamsey Benjamin Andoe explained: ‘I cannot wait the time for a license nor do I have the money to pay . . . if I was given the land to mine legally, I would mine it and happily pay the fees later, but that will never happen’. Other miners seemed reluctant to pay a registration fee upfront because of their lack of confidence in the government to provide a productive, adequately gold-mineralized plot. As Rolland Kyei, a Tarkwa-based galamsey operator put it: ‘If we prospect the place, and we know it is ok, then we will be willing to get a licence, because we know that the money spent is not wasted . . . we need to know the extent of the ore . . . the licence costs money, which we do not have much of at the moment’.
Perhaps more significantly, the few who have registered continue to be denied access to many of the services which formal sector operators arguably should be entitled to. According to Levenson and Maloney (1998), by formalizing industry practices, businesses generally increase accessibility to social relationships and services, improve access to capital through credible financial institutions, and gain access to public risk pooling mechanisms such as workers’ compensation and health insurance. However, unlike their counterparts in the agricultural and fisheries sectors, Ghana’s small-scale miners — even if registered — are ineligible for any form of loan support from an indigenous financial institution. Moreover, in contrast to countries like Zimbabwe and Zambia, which have established small-scale mining associations, in Ghana there is no longer a credible representative union or body for artisanal miners. The once-reputable Association of Small-Scale Miners no longer receives funding, and many of its executives have been sacked.

Numerous Ghanaians have thus been drawn to artisanal gold mining to escape poverty. Few have registered because they claim they are unable to readily mobilize the funds needed to obtain a licence and secure productive land plots. Both the local press and government continue to ostracize illegal artisanal gold miners over their selection of work, despite the constraints of the licensing process and the acute shortage of alternative employment or job re-skilling programmes nationwide. More significantly, and contrary to popular opinion, the problem does not appear to be an unwillingness on the part of the artisanal mine operators to engage in the registration process and become law abiding citizens — rather it is due to the cumulative actions of the Ghanaian government, which make it difficult to operate within the newly-established legal framework.

Heightened Tension between Large-scale and Artisanal Gold Mining Parties

‘The structural adjustment policy framework has allowed large-scale mining to expand unabated, threatening the traditional land rights of indigenous peoples and weakening community control over land and resources’ (SAPRIN, 2002: 145)

A number of studies provide examples of artisanal and large-scale miners sharing land resources (see, for example, ILO, 1999; UN, 1996, 2002). More often, however, the relationship between these competing parties is one of ‘tension and mistrust’ (MMSD, 2002: 324). As Jennings (1999: 3) explains: ‘There is often a clash of interest between small-scale and large mines. In the eyes of many large miners, small-scale mining is synonymous with illegal mining. Small-scale miners often accuse large mining companies of tying up large tracts of land with speculative mineral rights, denying them their rightful access to mineral resources’. Failure on the part of companies to
relinquish unused and unsuitable portions of their concessions exacerbates these uneasy relations.

In Ghana, where hundreds of exploration and excavation licences have been awarded to large-scale mining companies since the launch of the SAP, numerous conflicts have occurred between the management of large-scale mining operations and the artisanal mining parties occupying portions of awarded land plots. For example, in 1997, when Goldfields acquired a previously state-owned mine in western Ghana, 5000 *galamsey* were found operating within the boundaries of the awarded concession; security forces were called to remove the miners (ILO, 1999). Ashanti Goldfields’ Obuasi site, Ghana’s largest operating gold mine, has been ransacked regularly by *galamsey*. During an attack in 2000, the mine’s poultry farm was raided by a band of displaced artisanal miners and multiple buildings were burned; three *galamsey* operators lost their lives, and another seventeen were arrested. Awudi (2002) reports that incidences of human rights violations, arbitrary arrests and physical molestations are also rampant ‘in the areas usually administered by armed men on behalf of mining companies’. For example, in August 1996 and May 1998, two farming villages in Atuabo and Nkwantakrom were destroyed by security forces to create space for incoming mining activities.

Another factor behind many of the land use disputes that have occurred between Ghana’s artisanal miners and its large-scale mining operators has been the careless approach of the government in awarding land plots to prospective small-scale miners: specifically, there has been a tendency for the government to demarcate unproductive land plots to artisans, which has forced many to encroach onto neighbouring large-scale concessions. As Yakubu (2002: 6–7) explains:

> Small scale miners acquire their concessions without knowing the mineral content of the areas. When the miners realize that the areas contain no mineral after several pits and trenches have been dug, they abandon their concessions and resort to encroaching on nearby large scale mining concessions . . . Most . . . have been abandoned because of non-viability. Miners who work on such concessions either find other small scale concessions to work on or resort to illegal operations.

Paragraph 31, Section IV of the Ghanaian *Minerals and Mining Law* (PNDCL 153) states: ‘Where any dispute arises between a holder of a miner right and the Government in respect of any matter under Part IV of this Law all efforts shall be made through mutual discussion to reach an amicable settlement’. In reality, however, there are innumerable instances of artisanal miners being forced from lands awarded to large-scale mining and mineral exploration companies; in most cases, little, if any, compensation is awarded.

Certain artisanal and small-scale gold miners who have endured long delays in registering their operations with the government (that is, obtaining a licence to mine on a small scale) have also been forced from their lands, which have been awarded to large-scale mining companies or foreign investors.
One notable example is Mieza Kyi, a sixty-five year old gold miner operating in Bibiani; despite being illiterate, he elected to go through legal channels to obtain a concession, but later found he was unable to renew his licence after its expiry because his concession had been absorbed by a large-scale operator:

I was registered. I did not want to violate the law. I wished to avoid troubles . . . it prevents you from getting arrested . . . because (the work) was manual, and difficult to take the hard rock from the ground and feed into the mortar. In the long run, the production was not so encouraging. We had a lot of people doing this, so at the end we had to share out the earnings, and it was just peanuts that everybody got . . . And just at the time the gold price was going up, at a time for us to make it big, the Ashanti Goldfields took over the concession, and therefore, we could not go further, and that resulted in where I am now . . . and the little we have left has been what we have been feeding on. I was supposed to get investment support from Wisinski Associates in the US, who confirmed with the Minerals Commission that I was a legitimate miner, but it was at that time the Ashanti Goldfields took over my concession. All I received in compensation was a small pump, which no longer works.

Francis Banoh, another artisanal gold miner operating in Bibiani, told a similar story:

I have been in jail . . . I was having our concession . . . a licensed concession . . . a big large-scale company AGB . . . they started prospecting our concession because they had a bigger area . . . they wanted to include ours’ in their concession, so they came to our sites to prospect, and we would not allow them . . . and this resulted in a brawl, and we were thrown in jail for refusing to allow them to come on the land . . . they had a prospecting license, but we were registered to be there but we were the ones thrown in jail. Also . . . during the times in which I had the concession . . . I was kicked off by Ashanti Goldfields, which became interested in my concession one year before its renewal. They approached me and asked to prospect it, and I said ‘no’ but they went to the government. Pretty soon, we were taken to the police station, while Goldfields’ staff prospected, then we came back and when it came time for renewal, I was not renewed and therefore booted off of the land.

The tension between Ghana’s artisanal and large-scale mining parties has escalated in recent years, as productive gold-mineralized land has become an increasingly scarce commodity. For example, in Tarkwa, six large-scale mine concessions have been granted since 1990, and local statistics indicate that at least 32.56 per cent (766.1 km\(^2\)) of the 2354 km\(^2\) mining town has been awarded to large-scale mining companies (Aubynn, 1997). The properties of Goldfields alone occupy 220 km\(^2\) of the demarcated area, all of which was once the fertile homeland of local farmers (Anon, 1998); the Bogoso-Dumasi surface mines have alienated an additional 390 ha of land. A recent article published in *Drillbits & Tailings* states that ‘two thirds of all Ghanaian land is under concessions [and] everywhere you go, you see huge cavities in the ground, discarded pits where thriving villages once stood and where nothing now grows’ (Anon, 2001).

Harkinson (2003) tells the story of Dumasi. When Bogoso Gold Limited acquired the concession from the government in 1990, it pledged to mine the gold-mineralized hills of the village using modern mining techniques. At the time, the chief of Dumasi, Nana Kofi II, agreed to the plan, expecting that the company would employ locals in well-paying jobs. However, the
capital-intensive, highly mechanized operation required few labourers overall, and of those hired, most were higher educated individuals recruited from areas outside of Dumasi. Of the thousands of galamsey who once worked in Dumasi undisturbed, many fled when police raided their camps to force them from their lands; others defied warnings outright, even removing the signposts erected by Bogoso to indicate that the place ‘they have invaded is a no-go area’ (Akli, 2004). Tensions between Bogoso staff and galamsey have escalated in recent months, after the company bulldozed numerous trees, destroyed cultivated slopes on which local farmers depended, and polluted groundwater resources.

Again, a major culprit in the land use dispute has been the government, which, in the process of promoting large-scale mining and mineral exploration under its SAP, has seriously overlooked the needs of displaced indigenous artisanal miners. Its small-scale mining licensing scheme appears to have done little to provide the artisanal operator with mineral rights, as the interests of large-scale mining and exploration companies continue to take precedence in national industrial, development and investment policies. In promoting large-scale mining at the expense of the artisan, the government is exercising what it perceives as its constitutional right under Article 257(6), which states: ‘Every mineral in its natural state in, under or upon any land in Ghana, rivers, streams, water courses throughout Ghana, the exclusive economic zone any area covered by the territorial sea or continental shelf is the property of the Republic of Ghana and shall be vested in the President on behalf of, and in trust for the people of Ghana’ (Kasanga, 2001: 57).

**Environmental and Associated Socioeconomic Impacts**

‘Reforms have allowed large-scale mining to expand without effective environmental controls, thereby polluting local and regional environments and degrading sensitive, biologically rich zones’ (SAPRIN, 2002: 153)

Under the SAP, the Ghanaian government has not only implemented policies that have marginalized many indigenous artisanal miners but has also provided rural communities with little protection from the large-scale operators who have rapidly replaced them. A recent report published by the Structural Adjustment Participatory Review International Network (SAPRIN) argues that ‘reforms have allowed the expansion of large-scale mining without safeguards, causing adverse effects on the health of local populations’ (SAPRIN, 2002: 145). Furthermore, according to the Mining Division of the World Bank Group, ‘most developing countries either lack transparent and enforceable environmental regulations, or have a weak institutional capacity to monitor and enforce these regulations’ (World Bank, 2003).
Despite the Ghanaian government’s diligent efforts to establish a sound environmental regulatory framework for large-scale mining, legislation remains piecemeal. As one Minerals Commission official explained during a personal interview, the EPA ‘is still very much trying to land on its feet’ after ten years. Compounding the problem is the government’s highly centralized model of regulation, which has made the monitoring of individual large-scale mine sites exceedingly challenging. In short, ‘the zeal which supports the policy reforms to attract foreign investment to the mining sector has not been matched with the desired environmental legislation to address the inevitable environmental impacts of mining’ (Awudi, 2002: 6).

One of the greatest threats to livelihoods has come in the form of cyanide spillages from large-scale gold mining activities, which have contaminated many of the freshwater sources, fish populations and crops that local people depend on for their survival. In October 2001, two major spills occurred in the Wassa West District of the Western Region. The first involved the release of a large volume of mine wastewater — contaminated with cyanide and heavy metals — from a ruptured tailings pond belonging to Ghana Goldfields, leading to significant damage to the aquatic life in the River Asuman and its tributaries. A second spill occurred some two weeks later, contaminating a swamp area that provides local people with supplies of mud fish, medicines and bamboo. A number of transient artisanal gold miners, such as Fusekni Aruna of Tarkwa, were affected by this chemical pollution:

We have had some negative experiences with large-scale mining. We were harassed by them to get off their land but when I told them that their cyanide spills had killed the fishes we eat from the stream and caused skin rashes, they stopped bugging me. The spillage which occurred some time ago, some fishes in the stream died . . . sometimes, the water we use to drink causes rashes. We also drink the same mine water and get sick . . . the chemicals were harmful . . . ingested by our children. First, they were bugging us . . . they did not want to employ us, so we told them about the problems they were causing, and told them to stop bugging us, they did, and said they would allow us to make our own money even if they could not employ us. We were then told not to encroach on the large-scale plot, but we could mine the outer parts of the concession instead.

A neighbouring miner commented on the extensive rashes contracted by his children, who had ‘played in the contaminated pools with their friends’. Large-scale mines have also introduced sediment, additional mining reagents and spent chemicals into rural villages (Awudi, 2002).

Many of the artisanal gold miners forced from their land by mining companies have since secured employment in local farming channels but continue to be adversely affected by the environmental pollutants released by local large-scale mines. For example, in Tarkwa, because considerable quantities of land and vegetation ‘have been cleared to accommodate surface mining activities . . . [agricultural lands] are not only generally degraded, but the decrease in land for agricultural production has also led to a shortening of the fallow period from 10–15 years to 2–3 years’ (SAPRIN, 2002: 46). As previously explained, some 70 per cent of Tarkwa has been awarded to
mining companies, between 40 and 60 per cent of which is being used for heap leaching, waste tailings disposal and mine camps. The degradation caused by large-scale mining operations has forced many galamsey and seasonal farmers off the lands which provide ‘their only source of income’ (Anon, 2001). Consequently, there is now a frantic ‘scramble for farmlands in Atuabo and Dumasi’ (SAPRIN, 2002: 47).

In an effort to appease displaced galamsey populations, some large-scale mining companies have negotiated resettlement and compensation packages. However, the procedure for obtaining compensation for land is often cumbersome and subject to considerable delays and, generally, ‘the amount involved is considered inadequate and the system is accused of unfairness’ (Andoe, 2002: 7). For example: a farmer who loses land to a mining project at a time when no crops are planted does not receive any compensation; payment for tree crops is given as a one-off payment without taking into consideration the gestation period of the trees; and ‘landless’ hunters and palm wine tappers who have lost their means of livelihood as a result of mine expansion are often discounted in the compensation.

One notable example is Teberebie Goldfields, a former American-Ghanaian gold mining company, which, in 1990, obtained a concession in Tarkwa. Between 1990 and 1998, the company uprooted some 30,000 indigenous farmers and galamsey from fourteen villages to accommodate its expanding mining operations (Awudi, 2002). Despite having been relocated from the land which had sustained their livelihoods for generations, the displaced people of Teberebie were deemed unemployable by the company, and each individual was provided a paltry compensation package amounting to no more than US$ 2. The people now ‘blame the government of Ghana’ for what was clearly unjust treatment, and contend that the government ‘does nothing to protect people like them from large companies who want their land’ (Brand, 1998).

Unable to secure work on many farms, several subsistence rural dwellers have resorted to processing gold from the waste tailings of large-scale mining activities. As Bibiani-based operator Francis Banoh explained:

Before we were working at our site, the mining people, the engineer came from the Ashanti Goldfields, because we were working parts of their land that they were not using . . . we were working their pits and their wastes just so we could take food . . . so then they called the officers and they arrested us . . . all we were doing was reprocessing their tailings — their waste — and they kicked us off and tried to arrest us.

The number of artisanal gold miners operating in Ghana has increased significantly since the launch of the SAP. At the same time, the government has sought to promote large-scale mine development through increased foreign investment; consequently, there is now stiff competition between

8. Teberebie Goldfields’ Tarkwa property was acquired by Ghana Goldfields in 1999, and by Ashanti Goldfields Ltd. in 2000.
mining parties over land resources. The authorities continue to marginalize artisanal miners, despite the limited availability of employment alternatives. Moreover, they have failed to provide suitable protection from the pollution emanating from large-scale mines and from the displacement induced by expanding large-scale mineral extraction and exploration activities. As a result of the severe decline in formal employment brought about by the SAP, the Ghanaian government now faces the challenge of controlling an artisanal gold mining segment that is expanding rapidly.

CONCLUDING REMARKS

In a recent Oxfam publication, Ross (2001) argues that most sub-Saharan mineral-dependent states, including Ghana, are not performing well, with eleven of them categorized by the World Bank as ‘highly-indebted poor countries’. It is further argued that increased large-scale mining activity fails to benefit the impoverished because of its propensity to function with a small number of highly-skilled workers, many of whom are expatriates from more developed states; the tendency for the growth of ‘upstream’ industry activity (manufacturing, services, etc.) to be suppressed by taxation and tariff schemes in place in industrialized countries; and the ‘Dutch Disease’ phenomenon whereby, as a result of mineral resource booms, labour and capital is drawn away from other sectors of the economy such as agriculture and manufacturing which could potentially provide greater benefits to the rural poor. This appears to be the case in Ghana: as a result of the increased foreign investment in large-scale mining that has occurred throughout the adjustment period, gold has become the country’s highest foreign exchange earner. However, ‘while large companies and to a lesser degree the central government reap the benefits, the mining communities particularly enjoy little benefit but bear a greater part of the negative impacts’ (Awudi, 2002: 5–6). The empirical evidence provided in this article suggests that Ghana’s SAPs have further marginalized indigenous artisanal gold mine operators, both procedurally and through its general policy stance.

The SAPRIN Report (SAPRIN, 2002) highlights the kinds of problems which Ghana’s artisanal gold miners are facing as a result of the growth of large-scale mining activity that has occurred since the launch of the SAP: ‘Liberalization, deregulation and privatization of the mining sector have enabled transnational corporations to remove resources and profits from countries while failing to generate sustainable economic growth that is of net benefit to national or local economies’ (ibid.: 153); ‘The unregulated expansion of large-scale mining has negative social impacts’ (ibid.: 154); ‘The increased cost of living in communities near mines, which has compounded the loss of traditional sources of livelihoods’ (ibid.: 154); ‘The growing displacement of communities has pushed youth into towns, where frustration over unemployment has often resulted in problems’ (ibid.: 154).
A number of other influential documents, including the *Structural Adjustment Participatory Review Initiative* (Britwum et al., 2001) and the *Impact of Mining Sector Investment in Ghana: A Study of the Tarkwa Mining Region* (Akabzaa and Darimani, 2001), also imply that the national SAP has had a plethora of adverse impacts upon the indigenous artisanal gold mining community. As explained at the outset of this article, there is mounting evidence that Ghana’s adjustment policies have induced major unemployment in the country’s public, agricultural and manufacturing sectors, and have delivered few benefits to the country’s poor overall (Adedeji, 1999; Adei, 1990; Konadu-Agyemang, 2001; Lall, 1995; Owusu, 2001; Sahn et al., 1996). Konadu-Agyemang (2000: 474–5) summarizes the wide-ranging impacts of adjustment in Ghana:

The implementation of SAPs . . . has also led to unprecedented cuts in state expenditures on public services and social welfare and the introduction of user fees for health and education. Thus access of the poor to health and educational services has been reduced. The effective devaluation of the cedi, from 2.75 = US$1 in 1983 to 2,300 = US$1 in 1998 (approximately 80,000% devaluation) has raised the cost of imported machinery, drugs, school supplies, and other essential items. Ghana’s total debt more than quadrupled from $1,398 million in 1980 to $5,874 million in 1995, while external debt as a percentage of GDP also rose from 31.6% to 95% over the same time period . . . Debt services, now 62% of export earnings, is diverting resources from local needs on a massive scale, thus depriving Ghanaian children of their right to education, health and adequate [nutrition].

A significant number of the retrenched have pursued employment in the artisanal gold mining sector, which appears to have interfered with the government’s plans for promoting increased foreign investment in the resident large-scale mining circuit. However, few empirical investigations effectively describe how Ghana’s SAPs have affected indigenous *galamsey* miners, and none provide feedback from the marginalized artisanal gold mining community itself. This article has attempted to address these issues.

The findings from this study further reinforce claims that SAPs in sub-Saharan Africa are, in fact, fuelling the rapid growth of the region’s informal economy, in this case, artisanal gold mining. Adjustment has often facilitated the expansion of the informal economy by progressively weakening the ability of the state to restrict its activities. Thus, in many countries in sub-Saharan Africa in particular, it has quickly become the mainstream and most dynamic area of the economy (Gordon, 1996). In Ghana, ‘while these SAPs-derived improvements in the national economy are recorded at the macro level, their benefits at the micro level are a matter of considerable debate’ (Konadu-Agyemang, 2000: 474).

To offset the adverse impacts of adjustment policies on the artisanal gold mining industry, the Ghanaian government must provide its operators with increased security of tenure. As Brasselle et al. (2002: 374) argue, when small-scale industrialists are granted security of tenure, they are generally more accepting of government polices, and more committed to investment and improving operating conditions. When individuals feel more secure in their right or ability to maintain long-term use of their land, the return on
land improvements and conservation strategies is generally higher, providing greater incentive to undertake the appropriate investments. Moreover, when land is more readily convertible into liquid assets through sale, the improvements achieved through investment can be realized. The resulting increased value of land, in turn, facilitates improved access to credit and markets.

The issue of security of tenure in artisanal and small-scale mining was raised in a recent UN conference document, *The Compendium on Best Practices in Small-Scale Mining in Africa* (UN, 2002). This document points out that ‘the duration of tenure for most small-scale mineral rights is usually very short with no guarantee for renewal [which] is unattractive to prospective investors, financiers and developers’ (ibid.: 25). This appears to be the case in Ghana, where licences are granted for just three to five years. Our interviews with miners on the ground confirmed that this period is seen as short — especially in view of the bureaucratic procedures and costs associated with obtaining a licence — and fails to provide sufficient security of tenure. This could be another factor behind the widespread illegality in the artisanal and small-scale gold mining circuit. As Maldonado (1995: 706) puts it, ‘whether they realize it or not, small-scale entrepreneurs make an economic calculation along the lines of cost–benefit analysis, in that the extent to which they comply with legislation is based on considerations linked to opportunity cost’.

Extending small-scale miners’ entitlement to land plots could go some way towards restoring confidence in the regulatory and licensing system. With the initial registration period for large-scale mining and mineral exploration lasting upwards of thirty years, it is recommended that the Ghanaian government extends the small-scale mining licence to a minimum of ten years. This has already been done in both Ethiopia and Zambia, where a small-scale mining licence *guarantees* an operator entitlement to mine a demarcated plot for as much as a decade (UN, 2002). Another means of providing miners with increased security of tenure would be through entitlement to transfer and mortgage rights, an option pursued in Tanzania. According to the ‘Transfer of Minerals Rights’ under the *Tanzanian Mining Act*, small-scale miners are permitted and encouraged to sell their properties through outright sale or through development agreements. This, in turn, facilitates partnerships with small- and large-scale operators; the latter are, moreover, forced to pay prices dictated by the small or artisanal mining party if they are interested in acquiring his land. Legislation currently in place in Ghana (as well as in Namibia, Cote d’Ivoire and Senegal) prohibits artisanal and small-scale miners from transferring and mortgaging their mineral rights.

Throughout Ghana, there continues to be a negative public perception of artisanal and small-scale gold miners, an image that is being perpetuated by the local press and government officials. When probed about why artisanal miners continue to receive minimal attention and support from government,
an SSMP official replied, ‘small-scale gold miners are contributing to the eco-

omy, yes but why isn’t the government freeing up money to help them? . . . The government views this activity as “low down”’. Authorities have clearly turned a blind eye to the needs of artisanal miners, openly willing to collect (and benefit from) their products, but unwilling to either institute an appropriate legislative framework for the industry or award productive land plots to prospective operators. As long as the Ghanaian government adheres to the policies implemented since the launch of its SAP, artisanal gold miners will themselves continue to be marginalized in a country where most mineralized land is now in the hands of large-scale mining companies and foreign multinationals.

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REFERENCES


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