# Foreign direct investment and poverty alleviation in Tanzania: a case of Bulyanhulu and Geita Gold Mines Limited in Kahama and Geita districts

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**Publication date**
2012

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# Socio-economic impacts of mining industries on local neighbourhoods

## Overview

Mining projects are usually located in remote rural areas, and companies have to make considerable investments in physical and social infrastructure, such as roads, schools, hospitals, power lines and water supplies. Mining communities enjoy the benefits from some of these facilities and suffer the negative consequences, due to air and water pollution as well as other forms of environmental degradation. Mining also requires considerable land alienation; therefore, while mining projects may have weak links with the national economy, they have decisive impact on surrounding communities. This chapter intends to discuss the perceived gains and losses from mining FDI in local communities, based on multiple data gathering approaches: informal interviews, focus group discussions, and conversations with key informants, analysis of existing documents, a questionnaire survey and observations. The cost-benefit analysis of the impact of mining sector investment on local communities includes consideration of both economic and social effects. The analysis compares the economic gains and losses since the introduction of neoliberal reforms (net foreign exchange earned, extent of linkages with other sectors) and the negative social and cultural impact of mining investment in Lake Victoria Greenstone Belt (in particular GGML and BGML).

## Economic impacts

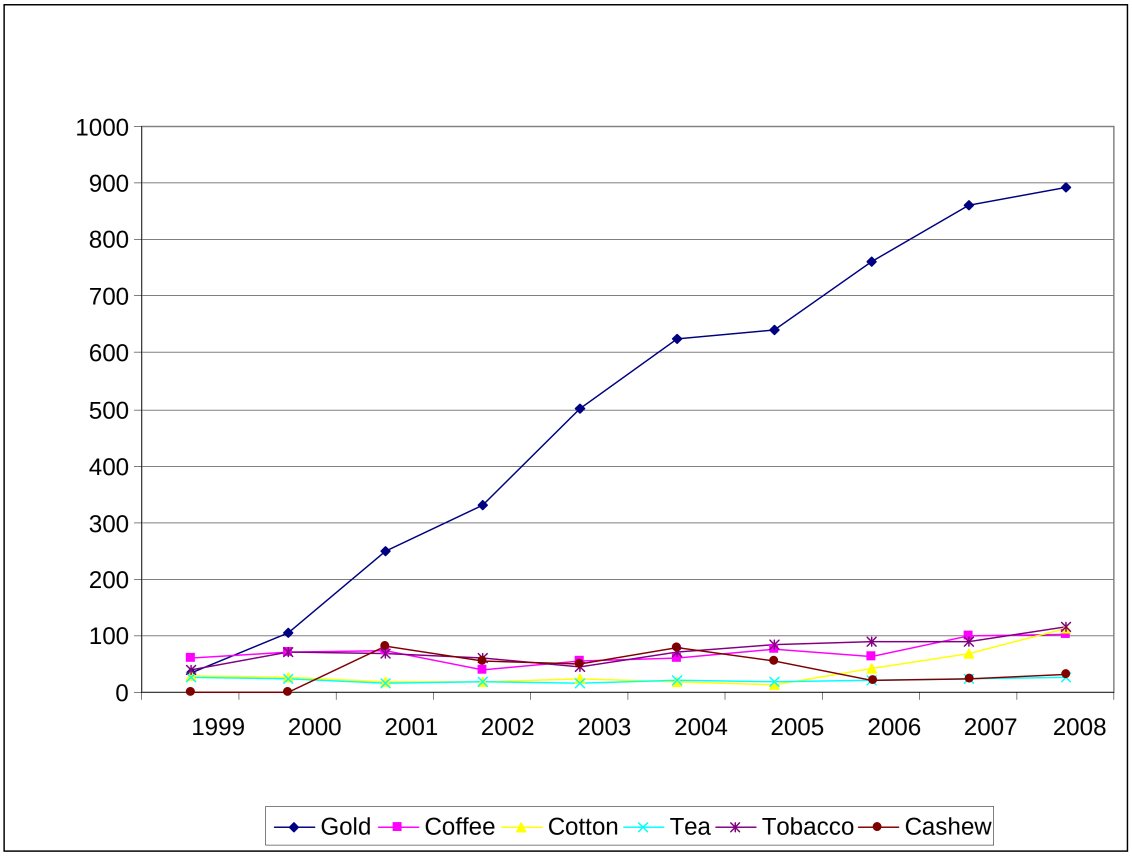
According to the September 2009 joint survey by the Oxford Policy Management (OPM), conducted on behalf of the International Council on Mining & Metals (ICMM) and World Gold Council (WGC), Tanzania has recorded significant macroeconomic growth in terms of FDI inflow. The literature places Tanzania in the upper middle-ranking for African countries according to FDI inflows. Before reforms and the accompanying gold mining development of the 1990s, Tanzania was among the bottom of FDI recipients. With the exception of South Africa, all countries currently ranked higher are oil and gas producers. UNCTAD data showed that nearly two-thirds of the surge in FDI flows after 1998 can be credited to investment in gold mining, with FDI stocks increasing from $2.78 billion in 2000 to $5.94 billion in 2007 (UNCTAD, 2007).

*Foreign exchange earnings*

Increased investment in the mining sector also increased output and the total export value of all major minerals, with gold enjoying the strongest growth. The sector's contribution to foreign exchange earning progressively increased between 1999 and 2008. Tanzania's exports after independence were dominated by agricultural products: coffee, tea, tobacco, cashew and sisal. This pattern continued up to 1999 when gold exports exploded; today they greatly surpass agricultural exports (Figure 5.1). Between 1999 and 2008, agricultural crops grew by 4% annually while non-agricultural exports (such as mined products and manufactured goods) grew by 31% per annum. According to OPM (2009), gold exports outpaced all other manufactured goods by eight to one in the peak year of 2004 and still do so by a factor of two to one. Without gold earnings Tanzania would have lost an estimated $750 million per year in foreign exchange earnings--more than total annual aid flows into Tanzania prior to 2006 and higher than the value of Heavily Indebted Poor Countries (HIPC)[1] debt relief in most years.

[1] Heavily Indebted Poor Countries **(**HIPC**)** are a group of 40 least developed countries with high levels of poverty and debt overhang which are eligible for special assistance from the International Monetary Fund (IMF) and the World Bank. The HIPC programme was initiated by the International Monetary Fund and the World Bank in 1996. It provides debt relief and low-interest loans to cancel or reduce external debt repayments to sustainable levels. To be considered for the initiative, countries must face an unsustainable

*Figure 5.1* Foreign exchange earnings from gold and traditional export crops 1999-2008 ($ million)




Source: Extracted from OPM (2009).

*Generating government revenue*

The mining sector generates revenue for the national economy through the following sources: salaries, wages and other payment made to employees and contractors; corporate income taxes, royalties, concession rents, services, customs and harbour duties; taxes on salaries of employees and social security contributions from employees and their employers; dividends to shareholders; as well as locally purchased equipment and consumables. Other sources include import duties and purchase taxes on vehicles; electricity and water charges as well as sale of state mining companies and sale of

debt burden which cannot be managed with traditional means. Assistance is conditional on the national governments of these countries meeting a range of economic management and performance targets.

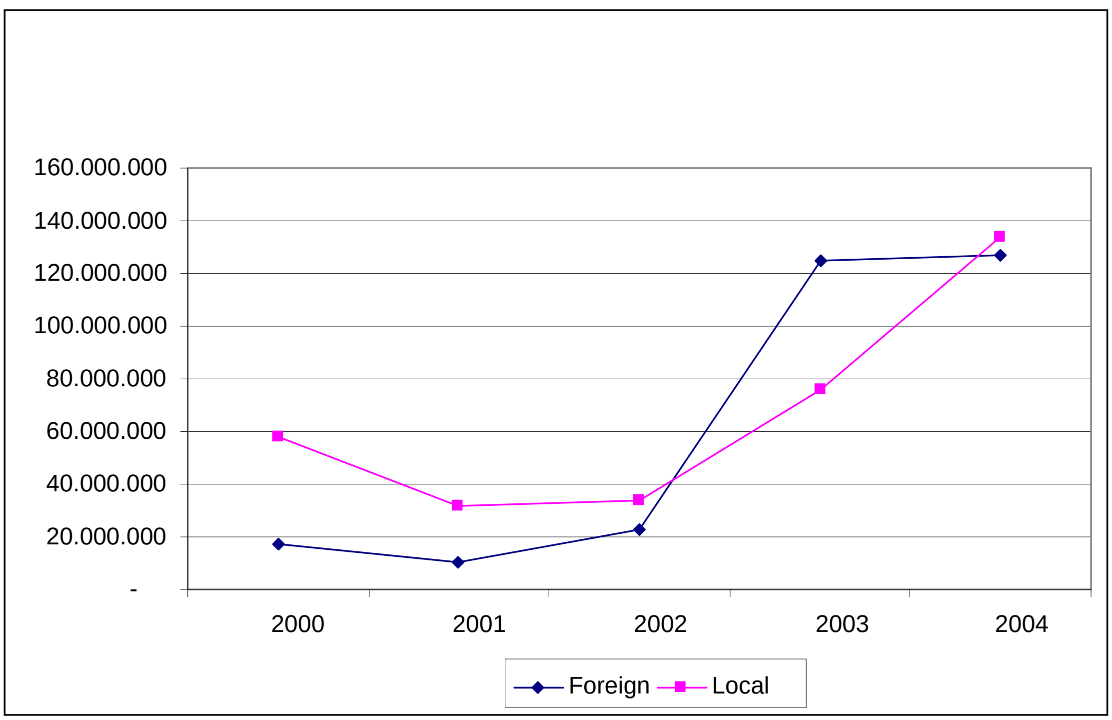
government shares. Tanzania's economy has accrued about $1,636.1 million in ten years (1997-2007) from the mining sector, of which $428.5 million were statutory taxes and other contributions (Sebastian [2009] quoting the government's chief secretary, Mr. Philemon Luhanjo). The breakdown of government revenue is indicated in Table 5.1.

*Table 5.1* Government revenue accrued from the mining sector, 1997-2007 ($ million)

| Revenue | |
|---|---|
| Statutory tax | 428.5 |
| Salaries | 394.0 |
| Training of personnel | 21.0 |
| Infrastructure | 15.6 |
| Local procurement | 741.0 |
| CSR | 36.0 |
| Total revenue | 1,636.1 |

Source: Sebastian (2009). *The Guardian*, Thursday 11 June 2009.

*Figure 5.2* Value Mining services and equipment procurement 2000-2004 (in $)




Source: Tanzania Chamber of Minerals and Energy.

The mining industry is increasingly turning towards local supply chains, procuring various services and equipment from local suppliers and contractors (Figure 5.2). These contractors include Caspian (Tanzania), Prime Fuels (Tanzania), Tanzania Railways Authority, Tanzania Harbours Authority, shipping agencies, various cargo freighters and food supply agents, such as ATS and Sodexho (and in turn employ many Tanzanian men and women around mine sites).

*Foreign exchange and generating government revenue*

In gross terms, mining is the country's leading foreign exchange earner; even though its net foreign exchange contribution has been minimal before 1999. Critics argue that investment incentives and tax breaks given to investors, compounded by the fact that mining companies retain large share of their export earning in offshore accounts, are major reasons behind the sector's minimal contribution to net national foreign exchange receipts (Curtis & Lissu, 2008; SARW, TWN Africa, TJN Africa, Actionaid & Christianaid, 2009). Similarly, the sector's contribution to government revenue has been minimal, despite the fact that it had attracted significant FDI stocks. The mining sector's contribution to overall national GDP is still less than 5%, despite the sector's impressive growth (Table 5.2). This minimal contribution is attributed to the capital intensive nature and relatively low workforce needs in the large-scale mining industry. The contribution to the gross national product (GNP) is likely to be even smaller compared to the GDP because of the outflows of the mining companies' dividends and interest on debts, which represent part of the difference between GDP and GNP.

*Table 5.2* Mining sector contribution to overall national GDP 2000-2008

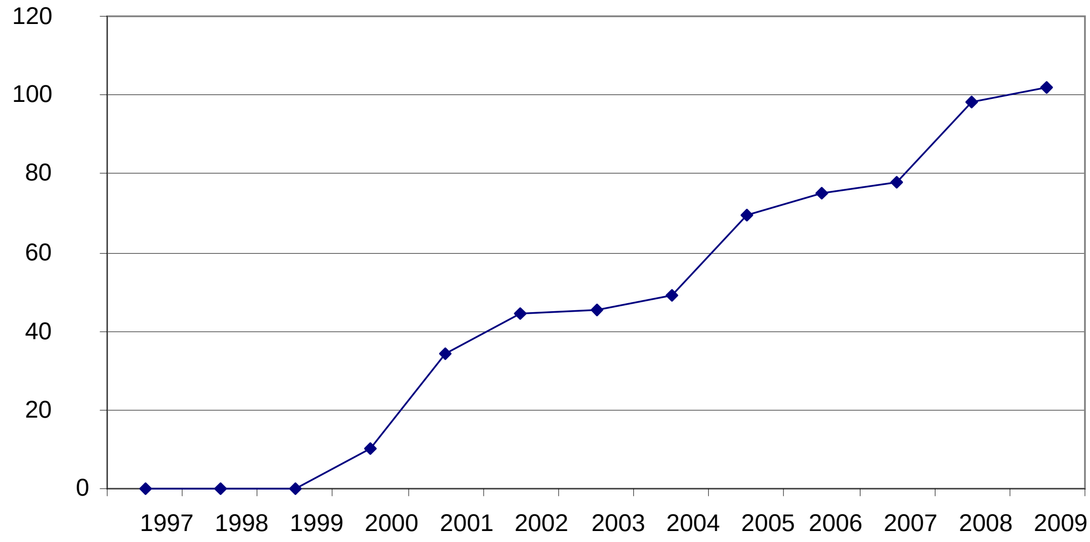
| Details/year | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|---|---|---|---|
| Mining sector contribution to GDP (%) | 1.5 | 1.6 | 1.8 | 2.1 | 2.5 | 2.8 | 3.2 | 3.6 |
| Mining sector growth rate (%) | 13.9 | 13.5 | 15.0 | 18.0 | 15.4 | 15.7 | 16.0 | 18.4 |

Source: Economic Surveys (2000-2007).

The bulk of mining revenue is expected to accrue from royalties and income taxes collected from local employees. Due to the typical pattern of large-scale mining development, tax payments are lower early on, as companies depreciate the extensive capital equipment purchases and construction costs. As the depreciation unwinds, government revenue from the mine increases. Gathering accurate tax collection data for Tanzania is problematic, but this situation is expected to improve with the country's entry (from February 2009) into the Extractive Industries Transparency Initiative (EITI).

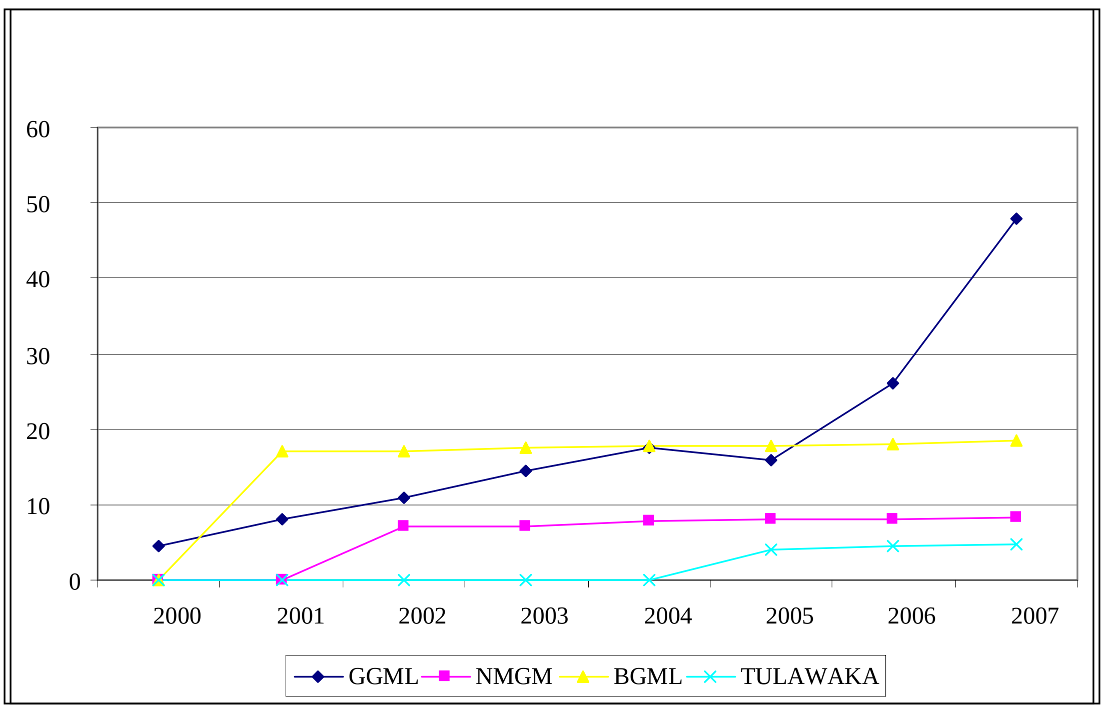
Data from the Ministry of Finance does not indicate any revenue from large-scale mining for 1997/98; however, by the 2003/04 budget this revenue increased to $44 million. Despite this amount being relatively small compared to other sectors (the mines are all at early stages of exploitation) it already accounted for 3.7% of all domestic revenue. Despite the absence of up-to-date tax collection records, OPM's (2009) conservative estimates indicated that Barrick Gold Tanzania (owner of BGML) and AngloGold Ashanti (owner of GGML) paid in total $76 million in taxes in 2007, with the possibility of surpassing $100 million in 2009 (Figure 5.3). Furthermore, the IMF country report for 2006/07 put the revenue paid by major gold mining companies in Tanzania at $2,490 million, which is 3.1%-4.3% of total tax revenues. This is approximately equal to one-third of all receipts from import duties and more than HIPC debt relief. Thus, Barrick Gold Mines (BGML, NMGM and Tulawaka) and AngloGold Ashanti's GGML are recognised as the highest single tax payers in Tanzania (Figure 5.4). It should be emphasised that both companies have mines in early stage of mine exploitation and thus still enjoy substantial tax breaks. Their major contributions to tax revenues are yet to materialise.

*Figure 5.3* Total mining taxes paid to the Government of Tanzania for a period of 1997-2009 ($ million)




Source: Extracted from OPM (2009).

*Figure 5.4* Taxes paid to the Government of Tanzania by four major mines for a period of 2000-2007 ($ million)




Source: Extracted from OPM (2009).

## Social impacts

The social organisation of every community is guided by defined principles. The introduction of large-scale mining operations in remote rural areas, such as Geita and Bulyanhulu, had substantial adverse effects on social organisation and cultural values. The expressions of these impacts include inadequate housing, youth unemployment, disturbance of the family unit as well as prostitution and drug abuse. Large-scale mining operations have triggered substantial in-migration: the population growth rate is above many urban places and could be even twice the national average. According to URT (2002), Geita is the third most populated district, after Kinondoni and Temeke. Apart from the mining and exploration companies, other mining support companies have also swarmed the area: contract miners, security companies, catering and restaurant services, transporters, explosives experts, equipment leasing groups as well as road and construction contractors.

*Inadequate housing*

Mining companies induce relocation and the growing displacement of communities and persons has led to increased migration of youth to the towns in search of alternative forms of employment. The massive influx into townships has created major problems with housing and rising living costs. For example, rents have doubled (20,000–40,000 TZS per month, an equivalent of $15-$30 per month) in Geita and Kahama towns, and unemployed youths and job seekers (*wasoteaji*) cannot afford rooms in the township. Residents of mine neighbourhoods face additional problems. The majority are living in makeshift houses, and overcrowding gives rise to multiple social ills, such as prostitution, drug abuse and crime (Photo 5.1).

*Photo 5.1* Makeshift shelters at BGML neighborhood (Kakola village)

*Prostitution*

A major social ill made worse by large-scale mining operations is prostitution. In informal communication, a majority of the persons complained about the increase in prostitution and cited it as a sign that the social values of the Sukuma people were eroding. A majority of respondents (213 persons or 70% of total surveyed) perceived prostitution as the number one social ill (Table 5.3). In the words of Masanja Ndaki (age 56, from Kakola village),

> There are both mobile and resident sex workers in the mining neighbourhood. The mobile sex workers commute to and from Mwanza, Shinyanga, Kahama, Nzega, Geita, Biharamulo and Musoma, targeting mainly expatriate staff of the mining companies and some well-to-do business operators. The resident sex workers service mostly local miners of large-scale mining companies as well as small-scale miners and the local communities.

*Table 5.3* Perceived ranking of prostitution as social ill

| Rank | Frequency | % |
|---|---|---|
| 1 | 213 | 70.1 |
| 2 | 61 | 20.1 |
| 3 | 20 | 6.6 |
| 4 | 0 | 0.0 |
| 5 | 10 | 3.3 |
| Total | 304 | 100.0 |

Source: Survey, 2007-2010.

‘Some of these sex workers migrated into mining neighbourhoods with an intention of trading or getting a job in the mine. Failing to achieve their objective, they resorted to prostitution; an easy but risky survival strategy’, assert Masala Kulangwa (36 years old, focus group discussion, Nyamalembo village). There is also sharp increase in reported cases of sexually transmitted diseases (STDs) and HIV/AIDS in BGML and GGML neighbourhoods in the past decade (Table 6.7). It is believed that the growing incidence of HIV/AIDS and STDs in large-scale mining neighbourhoods is to blame on the increases in prostitution.

### *Drug abuse*

Observations revealed a strong culture of drug addiction in the mining neighbourhoods. Table 5.4 illustrates the perception of drug use as the number two social ill in mining neighbourhoods, preceded by prostitution and followed by crime. It is particularly common among miners and sex workers who migrate to these areas. The drugs most commonly used are hashish, marijuana (*bhang*) and other addictive substances like alcohol. Drug use is on the increase due to superstitious beliefs: miners think that it gives them stamina to work hard and for longer hours, while sex workers feel that it boosts their confidence in dealing with customers. Drug abuse has a direct relationship with other types of social ills and crime. The survey revealed that crime is perceived as the number three social ill, behind prostitutions and drug use (see Table 5.5).

*Table 5.4* Perceived ranking of drug use as social ill

| Rank | Frequency | % |
|---|---|---|
| 1 | 81 | 26.6 |
| 2 | 143 | 47.0 |
| 3 | 60 | 19.7 |
| 4 | 20 | 6.6 |
| Total | 304 | 100.0 |

Source: Survey, 2007-2010.

*Table 5.5* Perceived ranking of crime as social ill

| Rank | Frequency | % |
|---|---|---|
| 1 | 20 | 6.6 |
| 2 | 40 | 13.2 |
| 3 | 164 | 53.9 |
| 4 | 50 | 16.4 |
| 5 | 30 | 9.9 |
| Total | 304 | 100.0 |

Source: Survey, 2007-2010.

### *Disruption of family unit*

The relocation and compensation measures implemented by the government in collaboration with the mining companies had adverse effects on the family, disrupting its value as a closely-knit social unit. New settlements for the communities also disrupted long-established social networks, commonly known as *nzengo* among the Sukuma. As the Bomani Commission reported, 'in many instances the compensation process is neither clear nor fair. Valuation for compensation is usually done without heeding key issues identified in the law (i.e., disturbance, transport and the value of the properties depending on location). Many people have been displaced without receiving compensation or being allocated alternative places'. The focus groups also confirmed that the failure to provide adequate compensation was seen as a key government weakness (Box 5.2).

*Box 5.1*: Governance weaknesses concerning compensation for land allocated for mine development

Mzee Mganga (48 years old and longtime staffer on the district council) explained how the compensation process was carried out:

…[G]overnance weaknesses at regional and local level are behind the tensions and endless cries about compensation…first before the establishment of GGML activities in 1990s… there was a team of GGML workers that were visiting the area of potential mining sites in Geita… the team offered an option to the people…local community to elect some delegates to represent them in Ghana to learn how the compensation exercise was carried out in that country…with a proposition that each family which is to be shifted to be compensated a house and a goodwill amount of money to enable them to start afresh (amount not specified)…so they called a community meeting together with the District Commissioner and other District Council delegates…the community at first elected their representatives that could go on their behalf…but on actual implementation those that went to Ghana were the district officials; party leaders and some few influential members of the community (party cadres) and none of the targeted people…

The outcome of this visit went well, but the new delegates were scheming how they could become part of the compensation exercise…When they arrived from Ghana… they start convincing the community that neither of the plans proposed by GGML was good for them….The good option for the peoples' properties was to be valued and paid accordingly, i.e. tree by tree, stone by stone, grass, house and everything on that land….After a successful campaign the community agreed with their representatives…Then other people in Geita town, mostly businessmen and district officials, started buying land/plots from the local communities in potential mine areas…and developing the plots by planting permanent crops and constructions…so the targeted people were left with small plots and during compensation…they were paid peanuts….Those that benefited were those that came later and bought plots of land either under false names or with new identity….The local communities did not benefit from the exercise…

*High living costs*

Mining neighbourhoods have been hit with high living costs. All necessities (e.g., food, accommodation, garments, health and water) have a price tag beyond the reach of the average person. At the same time, all sources of recreation and livelihood of the people are seriously impaired by mining activities, a situation which aggravates other social problems. Observations revealed two major causes for high living costs in mining neighbourhoods (GGML and BGML). First, the salaries of the local staff (miners) working in large-scale mining companies are too high (minimum monthly wage starts at

$1,160, equivalent to 1,546,300 TZS) compared to their counterparts working in the public service (with monthly salaries of less than $200, most fall between 80,000 and 160,000 TZS). In addition, the expatriate staff of the mine are paid internationally competitive salaries ($6,000-$8,000 per month, equivalent to 8,000,000-10,000,000 TZS), which further widens the income gap in most mining neighbourhoods. This group of high income earners has had an inflationary effect on prices for goods and services, such as housing, food and other amenities.

However, several groups of mine workers expressed dissatisfactions with their monthly pay. For instance, security guards are highly valued and paid high salaries, compared to dump truck drivers, technicians, operators and other jobs. The feeling of unfairness is expressed through petty crimes, such as *kupiga nyoka*—the act of siphoning fuel from machines and dump trucks for resale in the neighbourhood (October 2008, focus group discussion with mine workers). Also, the mining industry has removed a significant portion of the labour force from agriculture and other income generating activities, by taking farmland and small-scale mining squares/plots away. The fall in food production in these mining areas, which are densely populated and suffer from high unemployment, are another key cause behind high prices for foodstuffs and other goods and services. According to the 2007 HBS findings, average expenditures per household at BGML and GGML neighbourhoods are higher than rural areas in Tanzania's mainland and even higher than Dar es Salaam and other urban centres (Table 5.6).

*Table 5.6* Mean expenditure per capita by category of item (nominal figures, 28 days, TZS)

| Category | Dar es Salaam | Other urban | Rural | BGML/ GGML** |
|---|---|---|---|---|
| Food expenditure | 19,149 | 14,367 | 10,556 | 25,518 |
| Durables | 2,738 | 2,090 | 767 | 14,537 |
| Medical expenditure | 816 | 490 | 286 | 15,238 |
| Education expenditure | 2,387 | 1,059 | 248 | 20,500 |
| Other non-durables | 14,003 | 8,217 | 4,368 | 26,930 |
| Telecommunications | 2,980 | 877 | 194 | - |
| Total expenditures | 42,074 | 27,100 | 16,418 | 102,723 |

Source: NBS 2008 and **Survey, 2007.

These hash conditions have pushed children to participate in child labour by peddling petty commodities (water, cigarettes and bread), which has increased truancy and dropout rates in primary schools in both neighbourhoods (BGML and GGML). Similar findings were reported by George (2003): 12.5% of the workforce in mining areas of Geita was children, and most of them expressed their readiness to work in small-scale mining. The children were between 14 and 18 years of age and blamed the lack of alternative sources of income generating activities as the compelling factor.

## Summary

This chapter presented the socio-economic impacts of large-scale mining in the neighbourhoods of GGML and BGML. It can be concluded that by introducing liberalising reforms Tanzania put itself in a good position to attract and absorb FDI in the mining sector, in particular gold mining. The exports of mining and manufactured products rose to 31% of total exports of Tanzania, compared to the stagnating 4% agricultural exports, while the country's revenue also increased to a total of $1,636 million in ten years (1997-2007). The number of participants in the mining supply chain increased—contractors, local suppliers, drilling experts, explosive experts, and transporters as well as catering agents—and with it the number of direct and indirect employment opportunities available to Tanzanians in these services. Despite this achievement in FDI growth, the mining sector contribution to the nation's tax revenues is still minimal due to the capital intensive nature of large-scale mining and the associated tax benefits during the initial years of mine operation. The contribution to GNP is less compared GDP because of the outflows of the mining companies' dividends and interest on debts.  The sudden influx of people in mining neighbourhoods created a major housing catastrophe and raised living costs: the majority of people live in makeshift houses, and household expenditures in the area were higher than other rural areas, urban centres and Dar es Salaam. These economic hardships are reflected in increased frequency of social ailments, such as prostitution, drug use and crime. The relocation of people to new settlements disrupted the long established social networks in the area.