

# The impact of Chinese involvement in small-scale gold mining in Ghana



- In brief**
- Small-scale mining contributes about 30% of Ghana's total gold output and provides livelihoods for many people. This study examines the impact of Chinese involvement in the sector, much of it illegal and controversial.
  - The authors found extensive collaboration and collusion between Chinese miners/companies and Ghanaian miners, as well as with Ghanaian traditional leaders and government officials, who use their position for private financial gain.
  - Chinese involvement has transformed the small-scale mining sector through the introduction of new technology and machinery, replacing traditional methods of pick axe, shovel and pan
  - The economic impact of Chinese involvement in the sector has been highly significant – indicated by the fact that total gold production from small-scale production has increased 7-fold from 2005 to 2013. The percentage of total gold production from small-scale mining has also increased from 11% in 2005 to a remarkable 36% in 2013, although Chinese involvement is only one explanatory factor.
  - Policy measures have not kept up with changes in the small-scale mining sector. The authors' policy recommendations include legislative and regulatory changes to regulate foreign involvement in the sector and better strategies to address environmental degradation and corruption.

## Introduction and context

By law, artisanal and small-scale gold mining (ASM) in Ghana is ‘reserved for Ghanaians’ and has long been an indigenous livelihood activity using rudimentary<sup>1</sup> methods. Any foreign presence has been limited to nationals from neighbouring West African countries. Yet from 2010 onwards, the arrival of foreign miners in significant numbers became evident in a new gold rush. Chinese miners in particular were attracted by the high price of gold; but problems of violent conflict between locals and Chinese miners as well as environmental devastation were reported in the media from 2012 onwards. The death of a 16-year old Chinese boy in October 2012 in a police raid on illegal miners in the Ashanti region drew international attention to the issue (BBC News 15.10.12). In the Talensi district of the Upper East region, twelve local people, including a district Assembly member, were arrested in May 2012 while protesting against the activities of a Chinese mining company, Shaanxi Mining Company (Ghana) Ltd. This company is involved in provision of ‘mining support services’ to licensed small-scale miners<sup>2</sup>. Such controversies escalated during 2012 and the first half of 2013, especially in the area of alluvial mining in southern Ghana, with rising violence and increasingly hostile media coverage of ‘illegal Chinese miners’. Eventually the government acted. On 15 May 2013, President Mahama established an Inter-Ministerial Task Force to combat illegal small-scale mining. The military-style Task Force was primarily aimed at ‘flushing out’ of foreign miners, and by mid-July 2013 the Ghana Immigration Service reported that 4,592 Chinese nationals had been deported, as well as small numbers of other foreign nationals<sup>3</sup>.

This study examined the impact of Chinese involvement in small-scale gold mining in Ghana. The Chinese presence introduced irrevocable changes, notably the use of heavy machinery and new technology, such that the sector will never be the same again. The intensification of small-scale gold mining through foreign involvement, much of it illegal, has involved large sums of money, with millions and probably billions of dollars going into private pockets, while little revenue has been gained by the state. The government was slow to respond to these changes, and this is partly because public officials were implicated in the illicit money-making that characterised the gold boom from 2010 onwards. Policy recommendations are made that aim to address the current challenges and regulate the sector in a manner that enhances its ability to contribute to economic growth and development.

1. The Minerals and Mining Act 2006 (Act 703) [Section 83(a)] states that: “A licence for small-scale mining operation shall not be granted to a person unless that person is a citizen of Ghana.”

2. See Ghana News Agency, 11 May 2012, <http://www.modernghana.com/news-thread/394850/1/>

3. Modern Ghana 12.7.13, citing AFP

## Rise of chinese involvement in small-scale gold mining

The research examined two forms of Chinese involvement in small-scale mining in Ghana. The first entailed the influx from 2006 of irregular Chinese migrants into the main area of alluvial gold mining in southern Ghana. These miners came predominantly from Shanglin County in Guangxi province and became known as the ‘Shanglin gang’. They introduced heavy machinery in the form of excavators and large wash plants known as ‘trommels’, vastly increasing the volume of gold that could be extracted. Large amounts of money could be made, especially with the high price of gold from 2008 onwards, and news spread rapidly back in Shanglin County, with large numbers of miners migrating to Ghana. At the height of Chinese involvement in 2012 and 2013, media reports from China stated that almost 50,000 Chinese nationals had migrated to Ghana for purposes of small-scale gold mining<sup>4</sup>.

The other form made use of the legal provision for foreign companies to act as ‘mine support service providers’ to registered Ghanaian small-scale miners, as outlined in Act 703. This was the basis on which Shaanxi Mining Company (Ghana) Ltd entered into an agreement in 2008 with two registered concession holders in the Upper East region. A change in the law in June 2012 banned such foreign service provision, though did not apply retrospectively. Therefore, the example of Shaanxi has remained an isolated one, though highly controversial. On two 25-acre concessions, Shaanxi has constructed a high-tech, state-of-the-art underground mine, with a large, modern processing plant nearby. The whole operation employs 450 staff, as of July 2014<sup>5</sup>. This is not ‘service provision’ nor is it small-scale; it is simply large-scale mining on two small-scale sites, circumventing the law in a highly questionable manner.

## Study methods

Fieldwork was undertaken in the two mining locations in 2014. Data collection methods entailed key informant interviews with governmental, NGO and private sector actors at central, regional and district levels, plus interviews and focus groups at community level. A review of print media sources was also undertaken from January to September 2013. Data collection commenced in April 2014 with interviews in Accra with central government stakeholders, and then in July and August 2014 at the two case-study locations. In the Upper Denkyira East Municipality in the Central region, 21 interviews were undertaken involving 24 respondents. The municipal capital, Dunkwa-on-Offin, was well-known as a centre of Chinese activity during the gold boom period. Focus group discussions were also held in two mining communities. In the Talensi district in the Upper East region, 21 interviews were undertaken involving 35 respondents, and five focus group discussions held in local

4. [www.issafrica.org/iss-today/ghana-takes-action-against-illegal-chinese-miners](http://www.issafrica.org/iss-today/ghana-takes-action-against-illegal-chinese-miners), 23 August 2013. Based on report in South China Morning Post.

5. Interview with Shaanxi Mining Company (Ghana) Ltd, 15.7.14

communities. In both locations, visits were made to the mining sites of registered small-scale miners. Further interviews were undertaken in Accra in August 2014 and January 2015, including with Chinese respondents<sup>6</sup>.

## Findings: Impact of Chinese involvement

### Conflict and collusion

While this research was motivated by a concern about conflicts between Ghanaians and incomers over mineral resources, one key finding was Ghanaian collaboration and collusion at various levels of government and society. The print media review highlighted incidences of violent disturbances between local villagers and Chinese miners from mid-2012 onwards, and Shaanxi's operations led to local conflict. However, the presence of foreign miners (or a foreign company) with capital, technology and expertise in a sector neglected by the state (Hilson et al. 2014) has also led to extensive collaboration with Ghanaian miners, as well as with traditional leaders and government officials, who used their position to derive private financial gain. It was local Ghanaian front men who led foreign miners to the relevant authorities, who in turn enabled foreign involvement in illegal activities through accepting bribes and 'turning a blind eye'. Many local ASM operators, both registered and unregistered, worked with foreign partners irrespective of the law stating that small-scale mining is reserved for Ghanaian citizens and the ban on sub-leasing concessions. In the Upper East, Shaanxi had cultivated relations with local and regional powerholders, including politicians and the police, allegedly through the provision of 'gifts', especially vehicles, and consequently gained support for its operations from the local chief and government officials, despite the questionable legality of its activities.

### Mechanisation and intensification of small-scale mining

Chinese involvement has transformed the small-scale mining sector through the introduction of new technology and machinery, replacing traditional methods of pick axe, shovel and pan. In particular, the Chinese introduced the now widespread use of excavators, wash plants (trommel) and crushing machines (changfa), as well as water platforms and suction equipment for dredging in rivers. Chinese miners also brought in considerable amounts of capital, and the combination of new technology and capital has led to a huge intensification of production on both small-scale concessions and unlicensed land. Areas of land are now mined in weeks that previously would have taken years using traditional methods.

In hard rock mining in the Upper East, the mechanisation and intensification of production is limited to Shaanxi's site, but with legal and policy implications

6. The research did not aim to interview Chinese miners for two reasons. One is that this research was conducted one year after the Inter-Ministerial Task Force had undertaken its operations, and therefore the presence of Chinese miners was much less evident, at least visibly. Secondly, on a practical, financial basis, this was a small research project and the funds did not extend to the engagement of a Chinese translator, essential for any such interviews.

in relation to ‘service provision’. As noted, Shaanxi has constructed a state-of-the-art, underground mine. This is not provision of ‘mine support services’ nor is it small-scale mining. Indeed, it was part of the mandate of the Task Force to tackle this element of illegality of sub-leasing concessions. Yet Shaanxi has had its operational licence renewed, not revoked. The fact that Shaanxi has been allowed to mine in this way with the full knowledge and connivance of Ghanaian government authorities raises further questions about collusion and corruption.

### **Small-scale mining becomes big businesses (for some)**

One common mode of operation that continues post-Task Force involves concession holders sub-leasing their concession to Chinese miners and splitting the value of the gold production, commonly 15 percent to the concession holder(s) and 85 percent to the Chinese miners who do the mining<sup>7</sup>. We were informed by concession holders that a 15 percent stake can amount to an income of 15,000 to 25,000 Ghana cedis per week (approximately £3000 to £5000 per week<sup>8</sup>). One Chinese interviewee, who had Chinese miners as business clients, stated that “in 4 to 5 years, a lot of Chinese millionaires, even billionaires” were produced<sup>9</sup>.

Small-scale gold mining is only lucrative for a few, however. Indeed, the stratification and inequalities amongst Ghanaians involved in small-scale mining have increased, inclusive of a gender dimension. In contrast to the high earnings of licensed male concession holders, women, children and many young people are left to extract remnants of gold by re-washing the gravels that remain in heaps of ‘tailings’ at abandoned pits after intensive mining has been completed.

There are similarities in the Upper East. One concession holder in partnership with Shaanxi acknowledged a 93% to 7% split of the value of gold produced<sup>10</sup>. Shaanxi has made a huge financial investment in the construction of a sophisticated underground mine since late 2008, and clearly they anticipate large profits. However, one puzzling issue emerged. As of July 2014, Shaanxi maintained that no commercial production of gold had been undertaken, some 5-6 years after the company commenced operations. The company’s representative stated that the situation was one of “no gold produced, no gold sold”; and while acknowledging that the large processing plant is “almost complete”, he asserted that “production is yet to begin”<sup>11</sup>. This is not credible. The contract with the concession holders, signed in 2008, is based on a split of gold produced. And evidence from various sources suggested that production is on-going, and has been for some years. For instance, while the underground mine was under construction, the company bought piles of ‘tailings’ from local miners as its small processing plant was more efficient and able extract leftover

7. Interviews with small-scale concession holders 26/7/14 and 29/7/14

8. Interviews with small-scale concession holders 26/7/14 and 29/7/14

9. Interview with Chinese national, resident in Ghana, 12.01.15

10. Interview with owner of Purbotabaa Mining Group, 14.07.14

11. Interview with Shaanxi manager 15.7.14

gold<sup>12</sup>. While small-scale miners can produce gold by rudimentary means on a daily basis, it is simply not credible that a multi-million dollar mine is not producing gold, nor providing some return for the large investment, some 5-6 years after commencement of operations.

### **Environmental degradation (for all)**

Mechanisation and the intensification of production has led to much greater environmental degradation in areas of alluvial mining, inclusive of land and water bodies. Large tracts of arable land destroyed by mining in the Central region are no longer usable for farming activities. Often such degraded land contained abandoned pits left uncovered and now flooded, posing a danger to local residents, especially children, with deaths reported. Loss of farm lands has affected both cocoa production and food crop production, with an adverse effect on both food security and the country's foreign currency earnings.

The destruction of river systems has been a catastrophic form of environmental degradation due to direct mining within rivers introduced by Chinese miners. The river Pra and its tributaries such as the Offin are now severely polluted. Several points arise here. First, river mining is illegal. It is against the law to mine within 100 metres of a river bank, far less in the river<sup>13</sup>. Second, it is not disputed that direct mining in rivers was introduced by Chinese miners. Third, despite its illegality, river mining continues and we observed it being undertaken quite openly by local galamsey in the Dunkwa area. The severe water pollution has very significant consequences, including the destruction of the aquatic eco-system and heavily contaminated water supplies, with an increased cost of chemical treatment to make such water potable (CSIR – Water Research Institute 2013). While private operators have benefited hugely from the wealth generated from gold production, the cost to the state and public finances of dealing with the consequent environment destruction is incalculable.

There is less direct environmental degradation from Shaanxi's underground operations. However, blasting with explosives can cause damage to property and noise nuisance, as has occurred with the Gbane primary school building, within 70 metres of which the company sited one of its mine shafts. The school has suffered structural damage, with heaps of waste debris dumped immediately behind the school toilet block. The school is now to be relocated. In addition, the company's compound and processing plant occupies land lost to local farmers, with compensation only agreed in August 2014.

### **Economic impact**

This is highly significant. Table 1 shows that small-scale gold mining's contribution to total gold production has increased phenomenally over the last decade, especially over the last five years (2010-14). Production has increased 7-fold from 225,411 ounces in 2005 to 1,576,478 ounces in 2013. The percentage of total gold production from small-scale mining has also increased

12. Interview with former Shaanxi employee, Talensi district 16.7.14; interview with former Shaanxi underground workers, 17.7.14, Bolgatanga

13. Interview with Minerals Commission official, 9.7.14

from 11% in 2005 to a remarkable 36% in 2013. Thus the contribution of this informal sector to overall national growth and to foreign exchange earnings has become increasingly significant, despite its relative neglect by the government (Hilson et al. 2014: 294). The large rise in production coincides with the influx of Chinese miners and the introduction of heavy machinery and more sophisticated technology, and must be at least partly attributable to these factors. A sharp rise in production commences in 2007 after the arrival of the first Chinese miners from Guanxi province in mid-2006 and their introduction of excavators and the trommel wash plant. There are then significant increases from 2008 onwards corresponding with the rapid escalation of Chinese miners migrating to Ghana from Shanglin County, culminating in the huge leaps in production during the gold boom in 2012 and the first half of 2013, when tens of thousands of Chinese miners were active in the sector. It is also worth noting that these official figures only capture the gold sold through official channels, with allegations that much of the gold produced by Chinese miners was smuggled out of the country, an issue explored below<sup>14</sup>. Despite the actions of the Task Force in ‘flushing out’ foreign miners, production only dipped slightly in 2014, with Ghanaian miners now having adopted the machinery and techniques initially introduced by the Chinese miners. It will be interesting to see if these levels of production are maintained in subsequent years.

Table 1: Total gold production in Ghana				
Year	Large-Scale Producers (Ozs)	Small-Scale Producers (Ozs)	Total Production (Ozs)	ASM contribution to total gold production (%)
2005	1,913,534	225,411	2,138,945	11
2006	2,090,721	247,063	2,337,784	11
2007	2,239,696	388,594	2,628,290	15
2008	2,378,012	418,943	2,796,955	15
2009	2,564,095	555,737	3,119,832	18
2010	2,624,391	767,196	3,391,587	23
2011	2,697,661	978,611	3,676,272	27
2012	2,856,243	1,481,670	4,337,913	34
2013	2,820,419	1,576,478	4,396,897	36
2014	2,685,399	1,484,793	4,170,192	36

Source: Minerals Commission 2014 (2014 figures are provisional)

### Social impact

In education, the attraction of ‘quick money’ has led to low enrolment and low attendance of pupils in mining villages, including in primary schools.

14. Interview with official from Environmental Protection Agency, 9.4.14; interview with officer from National Association of Small-Scale Miners, 13/8/14



Regarding health, in addition to more injuries from mining accidents, there are increases in mining-related illnesses such as respiratory tract infections, greater incidence of malaria due to abandoned water-filled pits, as well as increased prevalence of HIV/AIDS and other Sexually Transmitted Diseases due to the pervasiveness of prostitution and sexual promiscuity. High rates of teenage pregnancy are also reported, partly due to the sexual exploitation of young girls by foreign miners.

### **Lost revenue**

Mining that is largely unlawful means that significant opportunities for revenue collection by the state are lost. It has become difficult to trace how gold is traded and exported, with suggestions that gold was smuggled out of the country. A knowledgeable respondent at national level stated that this is “a widely-held view<sup>15</sup>”, while informed sources in Dunkwa-on-Offin alleged that “gold was sent direct to China<sup>16</sup>”. Clearly illegal foreign miners pay no taxes, nor do unlawful galamsey operators.

### **Legal impunity**

Despite various elements of illegality in foreign involvement in ASM, the law was not enforced prior to the Task Force: foreign purchase of small-scale concessions from Ghanaians; mining in rivers; gold smuggling; and the basic unlawful nature of non-Ghanaians undertaking mining. While there has been a degree of state tolerance towards galamsey activities, the scale of illegality is greater with foreign involvement. In alluvial mining in the South, the situation prior to the Task Force was described as “out of control” with a “culture of impunity”<sup>17</sup>, with little or no enforcement of the law. Shaanxi’s involvement in the Upper East is also characterised here as illegal, given that they have effectively sub-leased the concessions of two Ghanaian concession holders and constructed a large-scale mining operation with the full knowledge and indeed connivance of those responsible for law enforcement.

### **Institutional failure and corruption**

Why was this culture of impunity allowed to develop? Why did it take so long for government to act? Various authorities failed in their responsibilities, from immigration officials to the Minerals Commission to regional and local government and the police. Why has such pervasive institutional failure occurred? The endemic nature of corruption would seem to be central to any answer. In both fieldwork locations we were constantly hearing allegations of power holders taking bribes to ‘turn a blind eye’. This extended from chiefs and local officials to high-ranking politicians.<sup>18</sup> This appeared to enable irregular Chinese migrants, in collaboration with Ghanaians, to operate with little fear of authorities or the law. Chinese miners spoke little English, but found that “money talks” and they made payments to chiefs and government officials. Revealingly, the view of a well-placed Chinese respondent was that, with the

15. Interview with National Association of Small-Scale Miners, 13/8/14

16. Interview with local journalist, 26/7/14

17. Interview with government official, Accra, 9/4/14

18. Interview with journalist, 23/7/14



establishment of the Task Force, Chinese miners were “no longer protected by the [Ghanaian] government”. Allegations of corruption also extended to the Task Force itself, with reports of payments made in order to avoid arrest. We were told that the Chinese miners arrested and deported were those who “could not pay”<sup>19</sup>. In the Upper East, such government protection did not end with the Task Force. An astonishing discovery of this research was that Shaanxi’s compound and processing plant is continuously guarded by twenty Ghana Police Service officers. This clearly reflects a regional police decision, and maybe political decision, to provide visible state protection to Shaanxi’s operations, despite the dubious legality of the company’s activities. Again, in explaining this misuse of police resources, the reason is suggested by the widespread allegations that various power holders in the district and region had been recipients of ‘gifts’ from Shaanxi.

## Policy recommendations

Policy measures have not kept up with these changes in the ASM sector and thus a number of policy changes are proposed to address the current challenges. These include legislative changes to allow and regulate de facto foreign involvement and service provision taking place in ASM currently; to introduce a more efficient licensing process in the sector; to practice better and more accountable law enforcement; to revise tax laws governing ASM aimed at increasing state revenue; and to develop better strategies to address environmental degradation and endemic corruption.

19. Interview with small-scale miner collaborating with Chinese, 29/7/14