

Leveraging Mineral Value Chains for Broad-Based and Sustainable Development – Policy Options for Ghana

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I. Introduction

Mining is a key economic sector in Ghana. Mining contributes to about 5 per cent of Ghana's gross domestic product (GDP) and accounted for 46 per cent of the country's gross export revenues in 2016¹. In 2014, mining contributed about 16 per cent of government revenues mainly through royalties and taxes. This has fallen from 27 per cent achieved in 2011 (see fig. 1) (GHEITI 2014).

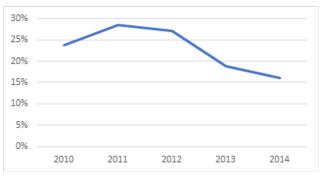


Fig. 1: Contribution of Mining to Government Revenues Source: GHEITI 2014

However, the goal for minerals-driven economic transformation remains an elusive quest for Ghana. Minerals extraction in Ghana remains largely an enclave economy dominated by foreign mining companies and mining service companies. The true value of mineral wealth will come from minerals being a base for wider economic transformation through developing linkages with the wider economy. This will require a broad span of policies that will unlock benefits beyond direct taxes and royalties² through increased local participation. These include:

- i. Indirect benefits from employing local people and also local firms participating in the mineral value chains as suppliers and also as players. This creates jobs, brings in taxes and increases the capacity of the private sector though increased know-how.
- ii. Indirect benefits to the larger economy due to spill overs e.g. the flow of skills and know-how to other sectors³, improved infrastructure like roads that is available to other sectors like agriculture (thus making them more competitive), and increased purchasing power that can stimulate the demand in the economy.
- iii. Local value addition. Note that the level of the other benefits above will depend on how much of the value chain is located in-country and how much is located elsewhere.

The potential of increased local participation to drive sustainable growth is significant. A well-executed local participation strategy can help mining to become a basis for sustainable development. For example, the mining equipment, technology and services (METS) sector has been highly developed and now provides benefits that are higher than those derived from mining itself (OECD 2017). Ghana has made efforts at increasing local participation. The parent law that currently establishes the legal framework applicable to

³For example, electrical installation skills, welding, and plumbing skills acquired in mines can be leveraged in upgrading the skills of the local construction sector.

¹https://www.myjoyonline.com/business/2017/September-18th/ghana-earned-16bn-from-mining-sector-in-2016.php

²APR (2013) estimates that Africa loses close to US\$38 billion to mispricing (transfer prices), an amount equivalent to the total ODA received by African countries. It also loses another US\$25 billion through other illicit flows. Even developed countries are starting to come to terms with IFFs as they seek to raise more from taxes. This is an issue at the top of global development agenda.

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mining activities is the Minerals and Mining Act, 2006 (Act 703)⁴. Section 50 of the act makes provision for a 'localization policy', while section 105 requires preference for local products and the employment of Ghanaians. These provisions have been operationalised through the Minerals and Mining (General) Regulations LI 2173 (GoG 2012a) and Minerals and Mining (Support Services) Regulations, LI 2174 (GoG 2012b)⁵. The two regulations thus aim to give effect to the Minerals and Mining Act 2006 and are the main legal framework for implementing the local participation aspirations of Ghana.

The efforts of making mining a driver of transformation have also been driven by Ghana's adoption of the Africa Mining Vision (AMV)⁶. in 2011 and the promulgation of the Minerals and Mining Policy in 2016. This aims to ensure that mining contributes to sustainable development. Implementing the mining vision has seen new efforts of increasing local participation in mineral value chains largely focused on local content.

II. The Ghana Local Content Approach

As pointed out, Ghana has promulgated the Minerals and Mining (General) Regulations LI 2173 (2012) and Ghana's Local Content Legislation LI 2204 (2013). The two regulations thus aim to give effect to the mining law, which calls for "localization" and are the main legal framework for implementing the local participation aspirations of Ghana. Table 1 provides a summary of Ghana's local content strategy.

Table 1: The Highlights of Ghana's Localisation Efforts

Local Participation Dimension	Mandate
Employment requirements	 Limitation on the recruitment of expatriates to not more than 6 per cent of the workforce. Provisions for the employment and training of Ghanaians in general but specially to replace expatriates.
Procurement requirements	 List of products 'with Ghanaian content' to be procured locally. Initially eight items (in 2013) which were then reviewed to include 19 items in 2015. Mine Support Services Regulations make provision for some services like haulage reserved for Ghanaians or indigenous firms. Local companies to be given preference in the award of tenders if the quote is up to 2 per cent higher. In this context local participation is defined to include ownership or managerial positions offered to Ghanaians.
Ownership	 The parent law already reserves some licenses for Ghanaians. These are artisanal and small-scale mining (ASM). Preference is also given to Ghanaians in the granting of exploration and reconnaissance licenses. Ghanaians are favoured in terms of fees for granting licenses that are open to foreigners. They are being charged lower fees.
Technology transfer requirements	 Not an explicit requirement though implied through the requirement of employment. Also companies are required to support suppliers to access technical assistance.
Government's obligations in support of Local Content (LC) programme	• Appreciates that government has a role, but this role is not explained clearly. In addition, how the various agencies coordinate is not explained clearly.
Supplier Development	No specifics but mining companies are required to support suppliers' develop- ment including the broadening of access to opportunities and helping to access technical and financial assistance.

⁴Prior to 2006, the Mineral and Mining Law 1986 (PNDCL 153), which was amended in 1994, remained in force between 1986 and 2006.

First to 2006, the Mineral and Mining Law 1986 (FNOCL 193), which was antended in 1994, fernance on horse between 1966 and 2006.
Softher key pieces of legislation that give effect to the Minerals and Mining Act,2006 include: Minerals and Mining (Compensation and Resettlement) Regulations, 2012 (LI 2175); Minerals and Mining (Licensing) Regulations, 2012 (LI 2176); Minerals and Mining (Explosives) Regulations, 2012 (LI 2177); Minerals and Mining (Licensing) Regulations, 2012 (LI 2176); Minerals and Mining (Explosives) Regulations, 2012 (LI 2177); Minerals and Mining (Health, Safety, and Technical) Regulations, 2012 (LI 2182); Environmental Assessment Regulations, 1999 (LI 1652) ('Environmental Regulations').
Noting that 'Africa's efforts to transform the mining sector away from its colonially-created enclave features have so far been met with very limited success', the Africa Mining Vision (AMV) was

⁶Noting that 'Africa's efforts to transform the mining sector away from its colonially-created enclave features have so far been met with very limited success', the Africa Mining Vision (AMV) was launched in February 2009 by the African Union. This was done in a bid to change the regime of mining on the continent in such a way to ensure that the extraction of irreplaceable natural resources catalyses inclusive and sustainable growth and development and seeks to change the status quo. The Africa Mining Vision offers a 'framework for integrating the sector more coherently and firmly into the continent's economy and society'.

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The local content regulations have met most of the targets it was set to meet. Though targets are subject to much interpretation,⁷ some of the successes are listed below:

- 1. Ghanaians hold 80 per cent of all prospecting licenses.
- 2. Employment targets have mostly been met.
- 3. Local procurement, as a share of total procurement, has risen from 54 per cent to 76 per cent of purchases. Note that this includes both locally manufactured and imported goods sold by local companies'⁸. With the exception of grinding media and heavy duty electrical (HDE) cables most targets on the procurement list were largely met. This can be attributed to the fact that many suppliers just imported the goods and supplied it to the mining companies. It is noteworthy that the HDE target was largely missed, yet there are a number of cable production companies in Ghana e.g. Tropical Cable and Conductor Ltd. (ACET, 2016).

All the same, there is still significant potential to increase local content. Indeed, mining companies point out that they are unable to purchase more of the consumables locally because the vast majority of small and medium enterprises (SMEs) in Ghana are unable to meet the high-performance standards required of them by the companies (ACET 2016).

III. Rethinking Ghana's Local Content Strategy

The current local content strategy cannot drive Ghana's economic transformation as shown below.

a) The Procurement Strategy

Ghana's procurement strategy aims to increase the procurement of goods produced locally and also goods produced by Ghanaians. However, the current regulations do not distinguish between locally procured goods that are imported and those that are locally manufactured. All that matters is that the supplier is a local person. This creates a situation where companies can fulfil local content compliance by having a local person import on their behalf⁹. This raises a number of issues. First, there are obvious efficiency losses. Mining companies have better know-how and better logistics, so they are better equipped to import according to their needs than a local supplier. This efficiency losses translate to higher costs (and maybe lower production) and thus less taxes (and also royalties). Worse, this scenario can be exploited by mining houses if they offer these lucrative deals to politically connected people with the aim of using them to get favours. If 'tenderpreneurs' are well connected, they can also rig the system and eventually distort the whole programme to their favour.

All the same 100 per cent local procurement will be hard to achieve, even if the law mandated it due to the low capacity of local industry. For instance, meeting the requirement for HDE cables is a challenge, even though Ghana has several cable companies mainly due to its inability to meet the very specific needs of mining companies. Hence, foreign-owned firms manufacturing locally can come to dominate the sector given their access to both capital and know-how. Indeed 15 of the biggest suppliers registered with the Minerals Commission are branches of multinationals¹⁰. Without the support to bridge the finance and know-how gap, true local content will be hard to reach.

b) Link the Local Content Policy to the Broader Government Strategy

Though Ghana's medium-term development policy does underscore the crucial role of minerals in meeting its aspiration and mining policy aim to allow mining to support sustainable development, there is little in terms of the content as to how this will be achieved. There is no explicit attempt to link the local content strategy with Ghana's industrial policy, no explicit link to Ghana's export promotion strategy, and no explicit link with investment promotion efforts. Indeed, the trade policy goes against local content aspirations. Mining companies are allowed duty free imports of supplies, while local manufacturers pay duty on imported inputs as part of the incentives that were given to attract foreign direct investment to the sector in the 1990s (and this is protected by stability clauses in the contracts). This makes locally manufactured products more expensive. For example, grinding media, which is one of the items on the local procurement list, is locally produced by three firms, West Africa Forgeries (WAFO), Tema Steel and Western Forgeries. Yet despite this only 44.5 per cent of the grinding media was sourced locally. The local companies import the key ingredients¹¹ to make the grinding media at US\$600 per tonne and they have to pay VAT and import duties. Yet if mining companies import the media (or even local suppliers registered with MC), they get exemption from duties and taxes. This makes it hard to compete against imported media from China which cost up to US\$800 (ACET 2016).

¹⁰Including Atlas Copco, the Sandvik Group, Liebherr, the Mantrac Group/Caterpillar, Carmeuse Lime Products and African Explosives Ltd.
¹¹Steel is the key input and also some chromium.

⁷For example, regulation (LI 2173) specifies that firms must accord preferential procurement from Ghanaian suppliers to the 'maximum extent possible and consistent with safety, efficiency and economy'. The Minerals Commission has the discretion on what constitutes the 'maximum extent possible'.

The Minerals Commission is unable to discretely on manufactured locally and goods imported and sold by local companies. Interviews with one company indicate that typically between 15 per cent and 20 per cent of local purchases are goods and services produced locally.

IV. Looking Ahead

There is a need to revisit the mining policy document and rewrite it so that the linkage to broader development goals is more explicit. The mention of backward, forward and horizontal integration does imply this broader thinking of linking the sector to the larger economy. All the same, the mining policy needs to operationalise this. Currently, the mining policy is more like a laundry list of aspirations¹² rather than a framework for a mining-led sustainable development strategy. More importantly, mining companies and other value chain players should be provided with a template to develop their local content plans. Local content plans submitted by companies should then be evaluated according to this template. Also, the development of the plans should be more collaborative as it is the government who knows what it wants. Furthermore, mining actors including the mining communities have their needs and constraints that governments might not be aware of. This collaborative approach can point to:

- Which aspect of the mineral value chain should be targeted to develop expertise? This should be guided by: (i) the potential for becoming a regional or global leader so that goods and services can be exported; (ii) the potential for the transfer of skills to other sectors, particularly agriculture and light manufacturing.
- Which aspects of local content development can be implemented by mining companies and which aspects might be better implemented by other players e.g. NGOs that are helping communities, local governments, or central government agencies?

The National Development Planning Commission (NDPC), the Ministry of Trade and Industry, district assemblies and traditional authorities need to be core partners with the Minerals Commission in developing a local content policy. There is a need for a clear road map that creates national champions that can service the mining sector and also the local economy. This will require careful thought on how to build these. It will require the changing of policy so that it does encourage the emergence of entrepreneurs rather than middlemen (or 'tenderpreneurs'). A strategy of how to grow SMEs to national champions that can become regional and global players is needed.

It is important to appreciate that a vibrant local-content-driven industry will have an ecosystem that has local and foreign players. Foreign players can transfer technology to local players through spill overs and also more formally through joint ventures. Therefore, FDI policy needs to be designed to ensure that foreign players of the 'right scale'¹³ are attracted. This will also require well-crafted JVs that enable learning and the transfer of technology. The upgrading of local know-how so that appropriate local technologies can be developed is also key. This may require greater collaboration between the mining industry and the local university, especially when it comes to the funding of research to develop these technologies and also impact skills.

Supplier development programmes will be the other key route to developing local SMEs and moving them to become national champions. The goal should be to upgrade SMEs that show promise.

Figure 2 shows a potential pathway to local national champions. The well-thought use of JVs to match local partners with foreigners of the right scale who will create partnerships that enable technology transfer will be one route. Another route will be supplier development programmes that seek to identify SMEs with potential and support them with know-how and capital. Supplier development programmes can be implemented through a fund where various players, including mining companies, suppliers, universities, vocational institutes, and consultants, can apply to get the funds needed for SME development.

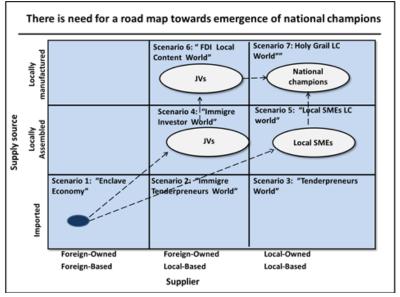


Fig. 2: Pathways to developing local-content-driven industrialisation Source: Author construction

¹²The mining policy has a list of 20 principles and a list of 16 objectives.
¹³Or technological distance.

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a) It is also about Incentives, Sequencing and Collaboration

Incentives are probably the best way to begin, as they can foster the collaboration needed to develop local suppliers. As the capacity is already low, many local companies are unlikely to deliver according to the exacting standards required by the mining sector. Therefore, rather than giving mandates, the focus should be on providing incentives so that the role players in mining can be more proactive in developing suppliers. One way is to create a supplier development fund from which firms can tap to develop suppliers. This can be a specialised fund or, as in the case of Brazil (see box), the fund can be part of a larger fund for implementing an industrial development policy. This can be funded through mandating that a certain percentage of the royalties go to the fund or more appropriately by taxing supplies that are imported.

Box 2: Supplier Development – The Case of Brazil

Brazil provides a good approach to supplier development. One supplier's development initiative aims to build capacity among SME suppliers and provide greater transparency of information about opportunities. It is managed by a business association funded by 15 firms operating in diverse sectors such as mining, energy and agribusiness. This approach has a number of benefits. It is a particularly efficient mechanism for increasing the capacity among potential suppliers, as some inputs and skills are portable across sectors. It also supports a move towards the diversification and adaptability for suppliers (OECD 2017).

This effort also benefits from a number of programmes:

- The 'Bigger Brazil Plan' that allows tax incentives on production factors in order to increase competitiveness, technological innovation and the development of strategic sectors.
- Through its Development Bank BNDES, Brazil has defined an investment maintenance programme to provide loans at lower rates in order to reduce the cost of financing, in particular for the industrial purchases of machinery and equipment. The plan is aimed at promoting technological development, with a particular focus on knowledge and engineering-intensive sectors. To advance this objective, the BNDES also provides loans for investments that promote the technological and production capacity for products not currently manufactured in Brazil.

Source: (OECD 2017)

Export incentives should also be provided so that local suppliers can become regional suppliers. For example, grinding media companies that are doing well in Ghana should be helped to serve the region. An increase in scale will lead towards becoming more competitive with time. As with any incentive, care must be taken so as not to be captured by entrepreneurs. Incentives must be targeted and have a clear exit strategy. Otherwise the country can be caught up in an infant industry syndrome. In addition, the cost of incentives (opportunity cost) must be consistent with the benefits¹⁴. As capacity grows, incentives should be phased out and replaced by mandates.

Conclusion

Local content provides an avenue for local mining to contribute to sustainable development. However, this needs careful consideration in terms of deciding which section of the mineral value chains must be targeted and which technologies must be transferred. In the short to medium term, the objective should as much as possible seek to develop lateral connections so that mining can help to upgrade other sectors. The promulgation of a list of goods which must be procured locally is encouraging as it provides some protection to locally manufactured goods. However, this needs to go further. It must also provide support to develop promising local suppliers further and help them to upgrade their quality so that they can meet the high standards demanded by the mining industry. By having a strong mining supplies sector, there is potential for Ghana to become a mining supplies hub. It can then tap the significant West African market in much the same way in which Ghana supplies skilled labour to the industry in the region. Therefore, suppliers' development should be of a higher priority for the Minerals Commission, as opposed to the current focus on policing mandates. Developing competitive suppliers will require collaboration between the government and mining companies (and also the development partners). Thus, moving from a stance of promulgating mandates to one of creating incentives for closer collaboration will yield better results.

¹⁴Note that currently Ghana is using an incentive to entice global cocoa processors to do more processing locally. The processors get cocoa at a discounted price of 80 per cent of the export value. They are also located in free zones which have many incentives including generous tax holidays, import duty exemptions, fast-track services with customs, good infrastructure and easy access to ports. Though the local processing of cocoa has increased dramatically as a result, this has mainly been low in value with low employment grinding operations. Many have complained that the cost of the incentives is not worth the benefits.

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