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Final Report

Review of Alignment between the Africa Mining Vision (AMV) and Ghana's Policy/ Legal Frameworks for Solid Minerals



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EXECUTIVE SUMMARY

The analysis which has culminated in the diagnosis of gaps between the current status of mining sector governance in Ghana and the injunction imposed by the AMV has been undertaken from a Social, Technological, Economic, Environment, and Political (STEEP) perspectives as gleaned from two stakeholder meetings organised by the Minerals Commission in Sunyani, in the Brong Ahafo Region; and Bolgatanga, in the Upper East Region. A third stakeholder engagement organised by the consultants, and which drew participation from key agencies and actors in the mining sector, including the Ministry of Lands and Natural Resources, Minerals Commission, Environmental Protection Agency, the Chamber of Mines, Association of Small Scale Miners, Precious Minerals Marketing Company, representative of mining companies and civil society provided further insights from the STEEP perspective.

At the Sunyani workshop, the consensus was that the development of the country's mining vision through the processes outlined by the AMV would lead to the establishment of effective linkages between the extractive sector and the rest of the national economy. This linkage development would consider and encapsulate backward, forward and side stream parameters. It also concluded that the social and environmental impacts of mining would be better managed through institutional strengthening and collaborative engagement with citizens, especially those immediately affected by mining activities.

The Bolgatanga meeting on the other hand pinpointed the associated gaps in the current mining sector governance. The compensations for surface rights as prescribed in Act 703 came up as a major short fall. Also needing attention are the procedures for making claims, negotiations, and dealing with disputes. These have underline most of the civil unrest in mining communities. The engagement of all stakeholders in the development of a CMV with a blueprint from the AMV was commended as a step in the right direction for an effective and successful CMV. The inclusion of the provision of resettlement planning and monitoring is expected to ensure application of best standards in the industry.

The Accra meeting focused a bit more on the political economy of mining, with some participants questioning the basis and the principles informing the decision to, for instance, cut down cocoa trees, which are also foreign exchange earners, and which have little or no negative impacts on the environment, to make way for mining. Stakeholders here called for the establishment of a set of core principles, that should inform such decision, and which should include the kind of feasibility studies that considers options. Working in three separate groups on three of the nine clusters in the AMV action plan, participants provided useful feedback that informed this analysis.

The analysis identified the following gaps that must be bridged in order to align the principles underpinning Ghana's mining sector governance with the AMV:

1. **Policy, regulations, regional cooperation and harmonisation:** Irregular sequencing of the policy and legal frameworks; Weak alignment between new policy and current practices; Weak mechanism for the routine exchange of information among mining sector institutions.
2. **Mining revenues and mineral rents management:** Absence of a cost-benefit analysis of tax exemptions to inform policy; Inefficiencies associated with revenue capture; Absence of a clearly defined post- collection policy on spending and/or saving; Absence of strategy to contain the effect of mineral price volatility on the budget.
3. **Geological and mining information systems:** Lack of effective collaboration between the Minerals Commission and the Geological Survey Department, the two agencies mandated to collect and manage the country's geological data and mining information; Absence of a publicly available digitised register or cadastre system(s); Absence of a national audit and mapping of the countries mineral endowment in terms of their quantity, quality, and rate of depletion; Poor spatial planning leading to inefficient allocation of mineral rights.
4. **Building human and institutional capacities:** Weak linkage between academia and industry; Absence of support programmes for young graduates who may want to go into small-scale mining; Absence of obligation on companies to institute internship programme for young graduates; Weak institutional capacity for collecting, managing, disbursing, and spending mining revenues; Need to re-establish the dedicated mining desk at GRA to restore lost capacity; Excessively long stay of customs official at a mine; Absence of affirmative plan to get more women to enter the mining industry.
5. **Artisanal and small-scale mining:** Weak governance regime; Widespread illegal small-scale mining activities; Absence of deliberate policy, strategy and support to make it attractive for those operating illegally to formalise their activities; Absence of standardisation and certification requirements and facilities for ASM practitioners.
6. **Mineral Sector Governance:** Absence of a competitive bidding regime for concession allocation; Absence of a legal mandate for contract disclosure; Unavailability of a beneficial ownership register; Absence of a clear strategy for smoothening out the effect of mineral price volatility on the budget.
7. **Research and Development:** The country currently has no policy or deliberate strategy for promoting STEM skills, technology development, research development and innovation (RDI); There is therefore little or no alignment between R&D and national development plans / strategies.

8. **Environmental and social issues:** Need for cost benefit analysis of mining projects in the context of other options; Establish mechanisms for involving citizens in environmental compliance monitoring; Principles and modalities for assessing compensation appear unsatisfactory.
9. **Linkages and diversification:** Ghana has no strategy for integrating its mineral sector into the rest of the national economy in spite of the passage of a local content regulations; While some progress is being made on backward linkages through procurement of inputs, personnel, and services locally, forward linkages in terms value addition are weak; The country has no plan or strategy for diversifying the economy away from mining.
10. **Mobilising mining and infrastructure investment:** The power sector appears to be riddled with inefficiencies that is often passed on to consumers in the form of higher tariffs; Weak geological and geosciences database management undermines the country's ability to showcase its real mineral potential; Some PPP arrangements lack transparency, and are tainted with corruption.

ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
AMDC	African Mineral Development Centre
AMN	Accra Mining Network
AMSI	African Minerals Skills Initiative
AMV	African Mining Vision
ASM	Artisanal and small-scale mining
ASMAN	Artisanal Small Scale Mining Africa Network
AU	African Union
CASM	Communities and Small Scale Mining
CSIR	Centre for Scientific and Industrial Research
CSO	Civil Society Organisation(s)
ECA	United Nations Economic Commission for Africa
ECOWAS	Economic Community of West African States
EI	Extractive Industries
EIA	Environmental Impact Assessment(s)
EITI	Extractive Industries Transparency Initiative
EMP	Environmental Management Plan(s)
ENRAC	Environment and Natural Resource Advisory Council
ESIA	Environmental Social Impact Assessment
FC	Forestry Commission
FDI	Foreign Direct Investment
FPIC	Free, Prior, and Informed Consent
GCNet	Ghana Community Network
GDP	Gross Domestic Product
GEITI	Ghana Extractive Industries Transparency Initiative
GIPC	Ghana Investment Promotion Centre
GoG	Government of Ghana
GPRSII	Ghana Growth and Poverty Reduction Strategy
GRA	Ghana Revenue Authority
GSGDA	Ghana Shared Growth & Development Agenda
GSR	Golden Star Resources
HRD	Human Resource Development
KNUST	Kwame Nkrumah University of Science and Technology
MDF	Minerals Development Fund
MESTI	Ministry of Environment, Science, Technology & Innovation
MLNR	Ministry of Lands and Natural Resources
MMCP	Making the Most of Commodities Programme
MMDA	Metropolitan Municipal & District Assemblies
MoF	Ministry of Finance
MT	Million Tonnes

NDPC	National Development Planning Commission
NRE	Natural Resources and Environment
NREG	Natural Resources and Environmental Governance
OASL	Office of the Administration of Stool Lands
PNDCL	Provisional National Defence Council Law
PRMA	Petroleum Revenue Management Act
PRPS	Poverty Reduction Strategy Papers
R&D	Research and Development
RDI	Research Development and Innovation
SD	Sustainable development
SDT	Special & Differential Treatment
SESIA	Strategic Environmental Social Impact Assessment
TCC	Technical Coordinating Committee
UDS	University of Developmental Studies
UG	University of Ghana
UMaT	University of Mines and Technology
UNCSD	United Nations Commission on Sustainable Development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
WSSD	World Summit on Sustainable Development

1. INTRODUCTION

Ghana is endowed with significant natural resources which include solid minerals, oil and gas, forestry, wildlife, fisheries, and water resources. The extractive sectors of mining, forestry and wildlife altogether account for about 15 percent of Ghana's GDP and 60 percent of foreign exchange. The sector is also the largest with respect to attracting Foreign Direct Investment (FDI). From US\$1.3 billion in 2005, FDI inflows into Ghana reached US\$3.2 billion in 2012, placing Ghana in an impressive fifth position on the Africa investment league, according to UNCTAD World Investment Report 2013. Total mineral export for 2014 is estimated at US\$ 4.516bn. Mining and Quarrying accounted for about 8% of total GDP in 2014.

Gold mining remains the highest contributor in the sector, with large scale gold mining accounting for over 80% by value of the total income from the sector. The other important minerals are, diamond, bauxite and manganese. The minerals sector accounted for over 16% of fiscal receipts by the Ghana Revenue Authority in 2014.

Ghana is the second African country after South Africa and 9th in the World in the production of gold and to that effect, the country produced 134 MT of gold (4.3 million oz. in 2014).

Despite such evidence of overwhelming natural resources, the country continues to rely heavily on international assistance to achieve its developmental goals, an over reliance that has led to a state of indebtedness.

Mining activities can have great impact on the people and the community. It could create employment opportunities for the youth in the community, introduce better roads and improved communication systems to the hinterlands. For this reason, the mineral wealth of Ghana albeit arguable, must have a strong correlation to economic growth and development. Ironically, rural communities where such minerals are extracted tend to exhibit very little in terms of development. Translating mineral wealth to overall development in such communities has become an arduous task. Sachs and Warner (1999) indicate that natural-resource intensity is negatively associated with both the quality of legal and government institutions in a country and the degree to which an economy is open to international trade. According to them the more dependent a country is on natural-resource exports, the poorer the quality of institutions and the more closed an economy tend to be to international trade (Sachs & Warner, 1999).

1.1. THE AFRICAN MINING VISION

The African Mining Vision (AMV) was conceived as an appropriate response to the governance and management challenges that African countries face in transforming their economies, using natural resources as a catalyst.

It has its origins in a technical task force meeting convened on 22 August, 2008 by the United Nations Economic Commission for Africa (ECA) in preparation for the First African Union Conference of Ministers Responsible for Mineral Resources Development. The taskforce, jointly established by the African Union (AU) and ECA, also included representatives from the African Mining Partnership (the intergovernmental forum of African ministers responsible for mining), the African Development Bank (AfDB), UNCTAD, and UNIDO.

The resultant African Mining Vision document is a set of principles developed under the auspices and political guidance of the African Union. They are based on best practices and lessons from the continent's decades of resource extraction. The AMV is supported by agencies such as the AUC, AMDC and UNDP. Its cardinal objective is to create a "transparent, equitable and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socio-economic development" (AMV 2009).

The African Union requires natural resource-dependent member states of the AU to articulate their respective national visions of what role they expect their mineral resources to play in their economies and the expected contribution of mining to their national development agenda. The essence is to afford member states the opportunity to fashion out strategies to interrogate the current status, and integrate their natural resources into the rest of the national economy and through that, make that critical, sustainable paradigm shift from the enclave nature of resource extraction.

On a schematic resource-based African industrialisation phasing diagram (Figure 1), it is easy and possible for every African country to locate their respective initial or current phase and monitor their progress to the final or target phase, Phase 4, the Lateral migration and diversification phase.

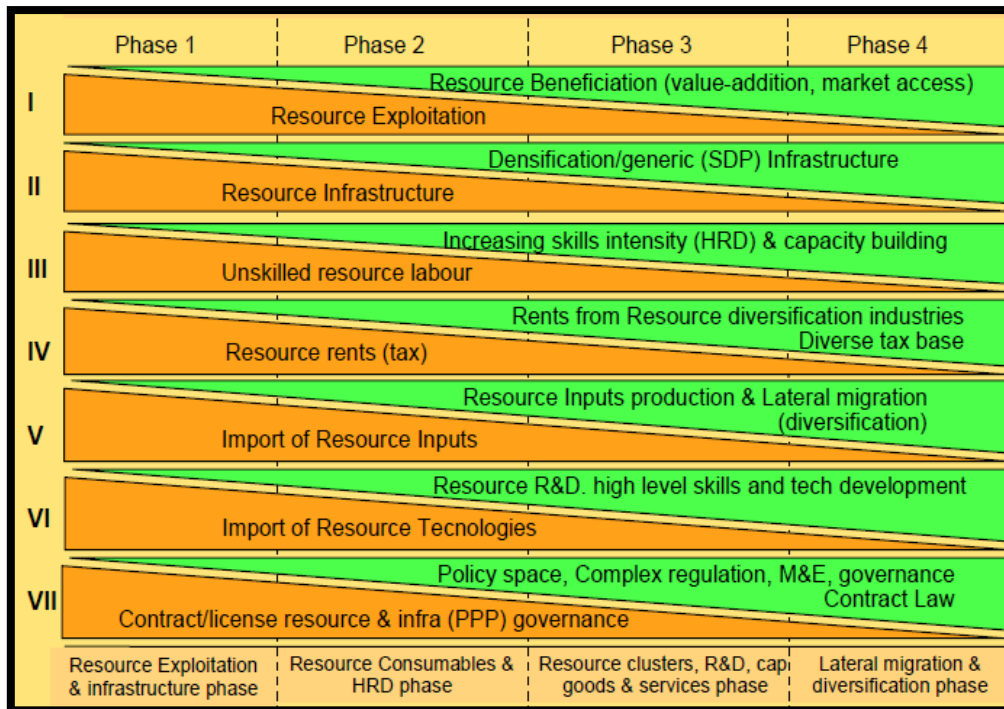


Figure 1 Schematic Resource-based African Industrialisation Phasing (AMV 2009)

1.1.1. Fundamental Pillars of the African Mining Vision

The AMV is founded on the following fundamental pillars:

- Optimizing knowledge and benefits of finite mineral resources at all levels of mining and for all minerals;
- Harnessing the potential of small scale mining to improve rural livelihoods and integration into the rural and national economy;
- Fostering sustainable development principles based on environmentally and socially responsible mining, which is safe and includes communities and all other stakeholders;
- Building human and institutional capacities towards a knowledge economy that supports innovation, research and development;
- Developing a diversified and globally competitive African mineral industry which contributes to broad economic and social growth through the creation of economic linkages;
- Fostering a transparent and accountable mineral sector in which resource rents are optimized and utilized to promote broad economic and social development; and
- Promoting good governance of the mineral sector in which communities and citizens participate in mineral assets and in which there is equity in the distribution of benefits.

1.1.2. The Programme clusters for the Action Plan

These pillars mentioned above, have been used to develop the Action plan. Activities were originally grouped into nine programme clusters based on the exigencies of the AMV as

expressed by the above pillars, but subsequently updated to ten. The suggested programme clusters are as follows:

1. Mining revenues and mineral rents management
2. Geological and mining information systems
3. Building human and institutional capacities
4. Artisanal and small-scale mining
5. Mineral sector governance
6. Research and development
7. Environmental and social issues
8. Linkages and diversification
9. Mobilising mining and infrastructure investment
10. Policy, regulations, regional cooperation and harmonization

1.1.3. Summary Goals of the African Mining Vision

In summary, the Africa Mining Vision seeks a transparent, equitable and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socio-economic development for the continent.

This shared vision comprises:

- A knowledge-driven African mining sector that catalyses & contributes to the broad-based growth & development of, and is fully integrated into, a single African market through:
 - Down-stream linkages into mineral beneficiation and manufacturing;
 - Up-stream linkages into mining capital goods, consumables & services industries;
 - Side-stream linkages into infrastructure (power, logistics; communications, water) and skills & technology development (HRD and R&D);
 - Mutually beneficial partnerships between the state, the private sector, civil society, local communities and other stakeholders; and
 - A comprehensive knowledge of its mineral endowment.
- A sustainable and well-governed mining sector that effectively garners and deploys resource rents and that is safe, healthy, gender & ethnically inclusive, environmentally friendly, socially responsible and appreciated by surrounding communities;
- A mining sector that has become a key component of a diversified, vibrant and globally competitive industrialising African economy;
- A mining sector that has helped establish a competitive African infrastructure platform, through the maximisation of its propulsive local & regional economic linkages;

- A mining sector that optimises and husband Africa’s finite mineral resource endowments and that is diversified, incorporating both high value metals and lower value industrial minerals at both commercial and small-scale levels;
- A mining sector that harness the potential of artisanal and small-scale mining to stimulate local/national entrepreneurship, improve livelihoods and advance integrated rural social and economic development; and
- A mining sector that is a major player in vibrant and competitive national, continental and international capital and commodity markets.

1.2 THE ASSIGNMENT

The execution of the assignment is guided by the following Terms of Reference:

- a) Review of the existing policy, legal, regulatory, and institutional frameworks related to solid minerals and comparing them to the principles of the AMV;
- b) Capture current state of affairs and key issues in solid minerals sector among stakeholders from a multi-disciplinary perspective (STEEP);
- c) Propose a realistic roadmap for implementing the alignment process between national policy, legal, regulatory, and institutional frameworks and the AMV;
- d) Undertake an analysis of Government’s capacity challenges for aligning the policy, legal, regulatory, and institutional frameworks with the AMV;

1.3 APPROACH / METHODOLOGY

The approach to the assignment assumed several phases. The initial phase involved a review of existing policies and legislations with a view to establishing the baseline for Ghana, in the context of aligning the country’s mineral governance principles with the African Mining Vision. Documents reviewed include the recently developed policy for mining, which is yet to be officially launched; the Minerals and Mining Act, 2006 (Act 703) as amended; the Minerals and Mining (General) Regulations, 2012, L.I. 2173; and the CSR Guidelines developed by the Minerals Commission. The African Mining Country Guidebook – “Domesticating the African Mining Vision” also served as a key reference material.

The next phase involved a desk review of medium term development plans, as well as continental and sub-regional protocols and commitments relative to mining and economic development. Particularly, the Ghana Shared Growth & Development Agenda (GSGDA) I and II, Poverty Reduction Strategy Papers (PRPS), Agenda 2063 of the AU, the ECOWAS Directive Principles on Mining Policy, and the SDGs were reviewed to ensure a good alignment between them and the Ghana Mining Vision.

The third level of the methodology involved focus group discussions with key stakeholders / informants in the mining industry. The intent was to create a common understanding,

interest, commitment, and collective ownership of the CMV process by the identifiable stakeholders such as the MDAs, Chamber of Mines, Association of Small Scale Miners, other mining networks, the Environmental Protection Agency, the Ghana Revenue Authority, and opinion leaders, including CSOs and NGOs.

The figure below depicts the thematic focus of the consultations. It is drawn from the AMV domestication guide book.

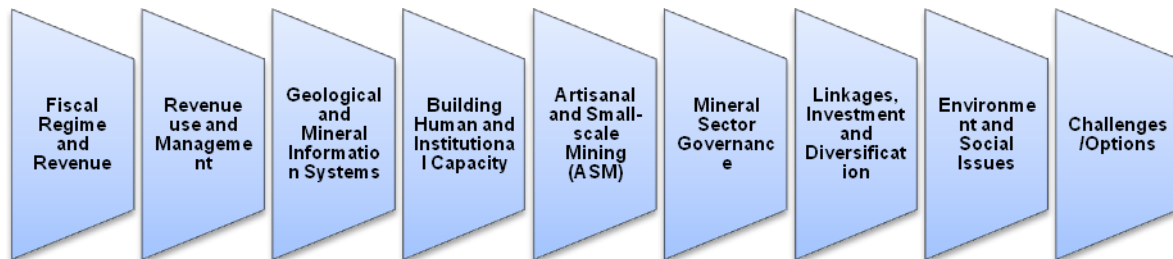


Figure 2 Thematic areas for consultations

The report also analyses information gleaned from stakeholders to establish the current state of affairs and key issues in solid minerals sector, from a Social, Technological, Economic, Environment, and Political (STEEP) perspectives. Such multidisciplinary approach enabled the consultants to obtain a holistic view of the context within which the AMV alignment is to take place.

2. GHANA'S MINING POLICY, LEGAL, REGULATORY, AND INSTITUTIONAL FRAMEWORKS AND HOW THEY COMPARE WITH THE AMV

Ghana's policy, legislation, regulatory, and institutional frameworks are analysed as an overarching cluster that guides all activities along the mining industry value-chain, and determines a country's ability to integrate its minerals and mining industry into its development efforts. A brief historical overview of the evolution of the country's minerals and mining policy is offered to show how as a result of irregular sequencing of the policy, legislative, regulatory, and institutional arrangements, Ghana has failed to maximise its benefits from the minerals and mining sector. Again, the analysis show how the absence of a deliberate policy to integrate mining into the rest of the country's economy, the sector has ended up as an enclave and therefore not delivered its full development potential.

2.1. THE POLICY CONUNDRUM

The historical evolution of Ghana's post-independence Mineral Policy can be categorised into three distinct phases:

1. Immediately after Independence (1957-1983),
2. ERP and Structural Adjustment (1983-2006), and
3. Post-structural Adjustment (2006 to date).

2.1.1. Mineral Policies Immediately after Independence (1957-1983)

Ghana does not appear to have had a written policy to guide the exploitation of its abundant mineral resources. What may count for its policy in the mineral sector is only inferred from practice. For instance, immediately after independence in 1957, the state nationalised all mining companies with the exception of Ashanti Gold Company, and became the sole producer and exporter of its own minerals. The justification for the nationalisation policy was to protect workers' right to employment and for the new government to gain quick and easy access to foreign exchange. The creation of state monopoly in the mineral sector eventually undermined the competition needed to drive the industry forward. As a result, many mining companies, both local and foreign were forced out of business and this further crippled Ghana's mining industry and the eventual downturn of the economy (World Bank, 1992).

In the absence of a well articulated vision for the mining industry in the form of policies, the country passed a law in 1962, Act 126 which regulated mining activities in the 1960s and 70s. The government, through an executive instrument of compulsory acquisition, consolidated all rights to minerals under the sovereignty of the State. But, analysis of the Act and its implementation with its sister acts- (the Concessions Act- Act, 124 and Administration of Lands Act- Act 123) reveal no format for the payment of fair and adequate compensation; and in terms of community development, mineral royalty allocation and disbursement to host or affected communities were non-existent. Although, mention is made of using steps in administering indigenous lands or stool lands under the sister Act, Administration of Lands (Act 123) in cases of compulsory acquisition for mining; the definition of what was deemed as fair and adequate compensation were not clear in the Act. More so, a formula or mechanism of allocating mineral royalties were not fixed and subject to the dictates of what was determined by the Minister. Many scholars allude to the fact that the failure of the mining policy after independence was typically due to the shift to nationalisation and the general fall in prices of primary commodities coupled with the lack of accountability mechanisms of the governance structures during the period of the lost decade of 1960s and 1970s in Ghana and many African countries (Tsikata, 1997; Akabzaa, 2009; , 2011).

2.1.2. Mineral Policies after Structural Adjustment (1983-2006)

After the failures and disadvantages associated with the nationalisation policy, Ghana initiated far-reaching economic reforms especially in the mining industry to revitalise the economy. The country adopted and instituted the Economic Recovery Programme (ERP) at the instance of the World Bank and succeeded in reviving the mining industry. This brought phenomenal increases to its Gross Domestic Product post in 1985 (World Bank, 1992; UNCSO, 2010). During the ERP period, there were reviews of the existing legal frameworks that emphasised a private sector-led development with little governmental intervention. This ushered in the neo-liberalist policy in the mining industry. The main purpose of government was only to promote the mineral industry through implementing policies and

regulations that would create an enabling environment for Foreign Direct Investment (FDI) or foreign capital injection (World Bank, 1992). The reforms led to a 700 per cent increase in gold mine production in the period since 1986 (Bloch & Owusu, 2011). It also strengthened the mineral rights framework for mining companies in Ghana and led to increasing successes for the industry as it became easier for mining companies to obtain mineral rights to mine for minerals, and provided increased security of tenure. The macro-economic reforms in the form of investment incentives such as low royalty rate of 3 per cent, removal of restrictions on transfer of dividends, reduced mining tax and waived import duties, led to an overnight inflow of Foreign Direct Investments in the mining sector by multi-national companies (Aubynn, 1997; Hilson and Clive, 2005; Hilson and Yakovleva, 2007). The mining and minerals law PNDL 153, although novel in Africa, did transform the political stability and environment for mining companies in Ghana. The law was however silent on the issue of mineral royalty disbursement and what should be invested in mining communities that co-existed with mining companies. The percentage of mineral royalties paid by mining companies was scaled down in the old 1962 Mining Act, to between 3% and 12% coupled with payment of additional profit tax by mining companies.

2.1.3. The Prevailing Mineral Policy of Ghana (2006-To Date)

Ghana has continued to operate a neo-liberalist, private sector-led policy in the mining sector, albeit, without a written policy statement on what role the country expects the mining sector to play in the rest of the national economy. The current Minerals and Mining Act, 2006 (Act 703) can therefore be said to have been passed in a policy vacuum. It constitutes the main legal framework governing mining activities in Ghana.

A process to develop a minerals and mining policy for Ghana has been ongoing since the turn of the millennium. It was only in 2014 that the document was finalised and adopted by Cabinet. The Minerals and Mining Policy document provides the requisite written declaration of the framework of principles and policies that will guide Governments in the management of the mining and minerals sector, with key objectives outlined to support the sustainable development of the national economy. The document was developed having regard to the Constitution and with a view to complementing the Ghana Growth and Poverty Reduction Strategy (GPRSII), a fulfilment of Article 36, Section 5 of the Constitution of Ghana, the Draft Medium Term Development Plan, and the Better Ghana Agenda, which set out measures and initiatives for economic growth and improvement in the standard and quality of life of all Ghanaians. Other documents taken into account include: Guidelines and Policies prepared under the Natural Resources and Environmental Governance (NREG) Programme which relates to social & environment issues and sustainability of mining communities after mine closure; the African Mining Vision and Action Plan; the ECOWAS Mineral Development Policy and the ECOWAS Directive on the harmonisation of guiding principles and policies in the mining sector. It again takes into account the outcome of the Rio+20 Summit, which emphasised a development approach involving prudent and strategic

use of natural resources, respect for the environment and equitable distribution of resources.

A review of the policy reveals a conscious effort at addressing almost all the documented challenges that inhibit the country's ability to derive maximum benefit from the exploitation of its rich mineral resources.

It has the following objectives:

- ii. Diversify the country's mineral production base to promote a more sustainable support base for the economy;
- iii. Promote linkages (backward, forward and side stream) to minerals produced locally to the maximum extent possible;
- iv. Generate adequate geo-scientific data to promote investment;
- v. Generate detailed geological information in designated areas for demarcation to artisanal and small scale miners;
- vi. Provide opportunities for artisanal and small scale miners to access financing to upscale their activities;
- vii. Enhance capacity of state institutions and strengthen inter agency collaboration in the management and development of mineral resources;
- viii. Optimize tax revenue generation and ensure transparent and equitable distribution of mineral wealth;
- ix. Assist in the development of skilled human resource and develop local industrial capacity for the mineral industry;
- x. Contribute to infrastructure development in mining areas;
- xi. Use mining as a catalyst for wider investment in the economy;
- xii. Ensure high level of environmental stewardship in the exploitation and use of minerals;
- xiii. Promote social harmony between the mines and adjoining communities;
- xiv. Collaborate in the harmonisation of mineral policy in ECOWAS and in Africa.
- xv. Access the African Development Bank's African Legal Support Facility and the Facility for Fair Exploitation of Extractive Resources in Africa.

2.2. LEGAL AND REGULATORY CONUNDRUM

Ahead of the policy, a minerals and mining Act, 2006 (Act 703) amended in 2015, had existed. It is not clear what policy had inspired its promulgation. What is clear, however, is that the situation defies the logical sequencing of events. Furthermore, regulations that will give proper effect to the law were not developed until 2012; creating undue opportunities for varied interpretations of aspects of the law.

Regulation of mining activities is done by an independent body, the Minerals Commission. Independence here refers to the fact that the Minerals Commission is not a participant in

the extraction of mineral resources in Ghana. The decision to settle for independent regulation is consistent with international best practices, and departs from the practice in Ghana's petroleum sector, where until 2010 the national oil company played an active role in regulating the petroleum sector.

Currently the following Six Mining Regulations are exist for the smooth implementation of the law

- i. Minerals & Mining (General) Regulations 2012, LI2173
- ii. Minerals & Mining (Support Services), Regulations 2012, LI2174
- iii. Minerals & Mining (Compensation & Resettlement) Regulations, 2012 LI 2175
- iv. Minerals & Mining (Licensing) Regulations 2012, LI2176
- v. Minerals & Mining (Explosives), Regulations 2012, LI2177
- vi. Minerals & Mining (Health And Safety) Regulations 2012, LI 2182

2.3. THE INSTITUTIONAL CONUNDRUM

The analysis further revealed a certain lack of inter-institutional collaboration in regulating the mining sector. For instance, the mining companies are required to submit monthly returns to the Minerals Commission. These returns contain both technical (operations) and financial information. For the payments of mineral royalties and corporate taxes, mining companies are required to provide details of the computation to the IRS. In reality some companies do not provide documentation on their computation. There is no formalised collaboration between IRS, Mineral Commission and other relevant agencies on mineral revenue payments. As a result, some mining companies change hands, and they manage to get away with the non-payment of capital gained taxes (Ghana's first EITI audit report; published 2006, covering 2004).

It was apparent from the stakeholder consultation that the situation has since improved but information exchange and inter-agency collaboration will need to be formalised and better structured.

The Minerals Commission again does not seem to work in close collaboration with the Ghana Geological Survey Department which has a mandate for collecting and managing geological data on Ghana, information that the Commission require for its work and some of which it also collects in the course of its work.

2.4. IDENTIFIED GAPS IN POLICY, LEGISLATION, REGULATORY AND INSTITUTIONAL CLUSTER

The key questions the study sought to answer under this additional cluster, which the consultants found key to the efficient management of the mineral sector relate the alignment of the national policy objectives with those of the AMV. But also important to

consider is the proper sequencing of the policy, legislative, regulatory and institutional arrangements for managing extractive activities.

It appears, as already noted, that Ghana has over the years operated its mining industry without a clearly articulated policy. At best the policies can only be inferred from practice, and are pretty ad hoc in nature. The policy orientation has fundamentally related to the role of the state in the industry. Consequently we have seen shifts from private-sector dominance to state dominance; and now back to private-sector dominance of the industry. In terms of strategies for maximising benefits from the sector, there has hitherto not been a deliberate and categorical policy statement.

International best practices drawn from countries such as Canada, Australia, South Africa, Botswana, etc. however suggest that resource-dependent countries should articulate their countries' vision, in terms of what role they expect the industry to play in the national development strategy. The vision then finds expression in policy documents. The objectives set forth in the policy are then pursued through appropriate legislation. Regulations then come in to give stricter and a more detailed interpretation of the provisions in the law; and the relevant institutions are then established to apply / enforce the policies and the attendant laws.

The Ghana situation however appears to deviate slightly from the norm. The country only recently developed a mining policy (still awaiting official launch). Meanwhile its' Minerals and Mining Act has been in existence for nine (9) years. Regulations to the Act itself were developed a good eight (8) years after the passage of the primary law, creating in the process challenges to its full implementation.

The Ghana minerals and mining policy objectives align pretty well with the principles of the AMV. However, given the fact that the policy has been developed after the law, there will be the need to review the law, with the view to aligning it with the policy, and filling any gaps to ensure policy – legislation coherence.

The problem of weak mechanisms for the routine exchange of information between agencies in the mining sector is another gap that must be consciously filled.

3. MINING REVENUES AND MINERAL RENTS MANAGEMENT

This cluster has two elements that must be analysed separately but in a related manner. First has to do with how fair and equitable the fiscal terms for mining are to both the investor and the resource owner. The second element relate to policies, and strategies for ensuring the most efficient and productive use of revenues accruing from mining.

3.1. FISCAL REGIME AND REVENUE

The Minerals and Mining Act 2006 (Act 703) made fundamental changes to the fiscal terms provided in the 1986 Act and its accompanying amendments. The new Act abolished the additional profit tax which existed in the 1986 Act, reduced the range of royalty from 3% to 12% to a new range of 3% to 6%. By a 2010 amendment (Act 794) royalty has now been fixed at 5%. The issue with prescribing fiscal terms for mining is that, they must be balanced in a way as not to be too high to scare investors; and at the same time, not bring them too low to unduly reduce government take. The prevailing fiscal regime in Ghana's mining sector is presented in the table below:

Table 1: Mining Fiscal Regime

Items	2006	2012	2014	Remarks
Incentives and Taxes				
Mineral Right(Mining lease)	One-time payment	Annual payment		<i>Minerals & Mining Licences Regulations 2012; LI 2176; Effective September 2013.</i>
Initial Capital Allowance	80%	20% ; Straight line	20% ; Straight line	<i>Act 839; Third schedule to IRA, Act 592 amended.</i>
Upliftment Allowance	5%	0%		
Carried forward Losses for purposes of taxation	5yrs	5yrs	<i>5yrs</i>	
Corporate Income Tax Rate	25%	35%	<i>35%</i>	
Mineral Royalty	3%-6%	5%	<i>Based on prescribed regulations</i>	<i>On Gross Revenue</i>
Gov't Equity Participation	10% free carried interest.	10% free carried interest.		

3.1.1. Current Efforts at Addressing Some of the Fiscal Issues

Currents efforts at reforming Ghana fiscal regime for solid minerals have been inspired by the findings and recommendations of the Ghana Extractive Industries Transparency Initiative (GHEITI).

Launched at the World Summit on Sustainable Development, in Johannesburg, in 2002, EITI has served to increase transparency over payments by companies and revenues to governments in the extractive industries. Ghana signed on to the initiative in 2003, and implemented it first in its mineral sector, and later (2010) extended it to its oil and gas sector.

Available literature on the Ghana Extractive Industries Transparency Initiative (GHEITI) shows some progress in reforming fiscal regime in the mining sector. The reforms, which were largely, inspired by recommendations from the Ghana's EITI audit reports include:

1. The staggering of capital allowance redemption over a 5-year period at 20 per cent a year to bring mining companies into tax-paying positions early in the mine life;
2. Variation of the royalty rate from a range of 3 per cent to 6 per cent, to a fixed rate of 5 per cent;
3. Upward review of corporate income tax from 25 per cent to 35 per cent;
4. Upward review of ground rent;
5. Renegotiation of stability agreements with Newmont and AngloGold Ashanti, all with a view to enhancing government take from mine operations.
6. An attempt to introduce an additional profit tax in 2014 was resisted by industry and has since been put on hold.

3.1.2. Identified Gaps in the Fiscal Regime

Incentives continue to characterise the fiscal regime, but there is no evidence of a cost benefit analysis of the incentives being offered in the natural resource sector in Ghana. Such a study will help determine whether or not Ghana should continue along the path of inducement through incentives as a way of attracting foreign direct investment.

The Ghana EITI has also revealed inefficiencies associated with revenue capture. There are no robust protocols to be followed in the reporting of mineral revenue. There is currently no way to tell whether the declaration and costs from mining companies are exactly what they say. GRA personnel sent to the mining companies to supervise smelting of the gold dores are normally housed by the mining companies and stay at one station for rather too long and run the risk of being compromised by the mining companies. There is the need to regulate their roster, insist they are part of lifting the bullions all the way to the ports of exit and *voir dire* and ascertain that the initial pre-lifting documentation are same at the final ports of exit. It would also be prudent to administer periodic refresher courses for them. A panacea is to have a refinery in Ghana, however, till such a time when this becomes feasible, an assay laboratory at the point of exit would suffice. Such a laboratory would

serve as the final authority to define the purity and quantum of mineral leaving the country for the exact revenue to be exacted. This would put an end to the practice of allowing minerals to leave the country, and then wait for the mining companies' refineries outside the country to report on purity before revenues are finalised.

A transfer mispricing unit has been established at the Ministry of Finance to track transactions and ensure that the arms-length principle is observed and that the country does not get short-changed. But there are no protocols to ensure that the unit is privy to procurements and other related transactions in the natural resource sector.

3.2. REVENUE USE AND MANAGEMENT

Ghana has no clearly defined post- collection policy, on spending and/or saving. The revenues derived from mining in any given year, are disbursed in accordance with an administrative fiat issued in 1999 by the then government of Jerry John Rawlings (letter no. AB.85/156/01), with 80 percent going to the Consolidated Fund to be spent through the budget; 10 percent to a Minerals Development Fund to support the industry's development, and another 10 per cent to the Office of the Administrator of Stool Lands (OASL) for distribution according to a prescribed formula borrowed from the constitutional provision in respect of Stool Land Revenue.

The practice of spending all the revenues every year as they come in, often on recurrent expenditure items, with no provision for savings, amount to treating mineral revenues as income for consumption rather than for investment; and this partly explains why after over a hundred years of mining, Ghana has little to show by way of development outcomes.

There is also no policy directing specific use of the mineral revenues accruing to the Mineral Development Fund. Again, because there are no guidelines for the use of the share of royalty disbursed to host communities, the practice as revealed by Ghana's EITI, has been to focus most of the expenditures on recurrent items. There are, as a result, no tangible references especially in the affected communities to represent what the mineral revenues collected over the years have been used for. Consequently, Ghana has seen sustained contestations over the issue of how mining revenues should be distributed and used at the national level, and how the development needs of indigenes of mining communities would be addressed under the sustainable development framework.

Furthermore, the current mineral revenue management practice doesn't consider market volatility. The result is that, Ghana's budget is easily thrown off balance in times of downturn in the industry, creating in the process revenue shortfalls that bring governments under pressure to look for money to address the resultant fiscal deficit. On the converse, during periods of boom, the additional revenues are usually used up without regard to the need to hedge against a 'rainy day'.

Table 2: Ghana’s Mineral Revenue Distribution at a glance

Mineral Revenue		Distribution/Long Term Investment	Key Institutions	Accountability
Royalty Rate	Govt 80%	80% to lower levels of Government	District Assembly Traditional Authorities OASL	Auditor’s General Department GRA
	MDF 10%	2.25% to local communities		
	OASL 10%	1.8% to Traditional authorities		
Dividends Profit Share				

3.2.1. Ongoing Efforts to Address Some of the Revenue Use and Management Issues

Ongoing efforts to address some of the challenges associated with mining revenue utilisation and management are:

1. The development of a Minerals Development Fund bill to establish a legal framework for managing and spending the 20 per cent share of royalty that is allocated to support the industry, and to distribute to mining host communities;
2. The development of draft guidelines for the utilisation of the share of mineral royalties returned to mining districts.

3.2.2. Identified Gaps in Revenue Use and Management

The following gaps have been identified in Revenue Use and Management:

1. Absence of policy/ legal framework for managing and applying mineral revenues - Ghana clearly needs to make a policy shift from treating its mineral revenues as income for consumption, to treating it as opportunity for transforming those assets in the ground into capital assets. This will mean channelling substantial part of the country’s mineral revenues into investments and capital projects. The model for managing and spending Ghana’s petroleum revenues i.e. the Petroleum Revenue Management Act 2011 (as amended in 2015) could serve as a guide. The Petroleum Revenue Management Act provides for spending 70 per cent of total petroleum revenues through the budget on predetermined spending areas (subject to variation every medium term, i.e. 3 years). The rest of the petroleum receipts (30 per cent) is saved (21 per cent for stabilising the budget in times price decline or shortfall in production), and 9 per cent for future generation.
- 1 Benefit transfers to communities - For host communities to feel the real and tangible benefits of mineral extraction, it is important that the legal and institutional

arrangements for utilising their share of royalties eliminate the chances of waste by ensuring an open, accountable and participatory decision-making around issues of revenue management at the district level. The concept of Community-based Planning, which is consistent with the spirit and letter of the National Development Planning Act 480 of 1994 must be re-activated and pursued in all earnestness, perhaps through the guidelines being developed for the utilisation of the share of royalties returned to the districts.

- 2 Undue delay in remitting host communities' share of mineral royalty - The Ghana EITI audit reports have again, revealed several instances where transfers of communities' share of benefits have been unduly delayed. Such delays in disbursements inhibit district development planning, and adversely affect the social licence between communities and the operating companies.

4. GEOLOGICAL & MINERAL INFORMATION SYSTEMS

This cluster of the AMV action plan, relates to information that forms the basis of attracting investment into the mining sector, and on the basis of which mining contracts are negotiated. The capacity challenge that plague many African countries, including Ghana in this aspect of the industry value-chain has long been recognised, but very little has been done to address it. The World Bank and the African Development as far back as in 2006 proposed to jointly conduct geological studies to map out oil, gas and mining reserves on the African continent. By creating a geological data bank, African countries are expected to gain access to more accurate information about their natural resource wealth and the associated costs of exploration, and thereby considerably strengthen their negotiating positions in the award of concessional agreements and contracts.

The two banks also agreed to set up a Rapid Response Advisory facility, which would provide funding for pre-qualified advisors to assist Regional Member Countries (RMCs), on a short-term basis, with contract negotiations and other urgent legal and regulatory issues related to the EI sectors; and to support artisanal mining activities through a Communities and Small Scale Mining (CASM) initiative (AfDB/World Bank Joint communiqué, Tunis, February, 2007).

While the initiatives of the two multilateral banks are welcome, it will be desirable for the natural resource owners themselves to lead the process of mapping and auditing their resource potential. In Ghana two agencies have been identified as playing various roles in the collection and management of geological data – the Geological Survey Department, and the Minerals Commission.

The Geological Survey Department (GSD) was founded in 1913 and has since been the main repository of the country's geosciences database. The department is responsible for the study of the country in detail to assess its resource potential. It is said to be the third oldest in Africa after Egypt and South Africa, however, most of its data are not in the format to attract current customer interest and usage. An archive rehabilitation unit has therefore been established to retrieve all such data and computerise them.

The Minerals Commission is a statutory body established under Article 269 of the 1992 Constitution and the Minerals Commission Act. Its main purpose is to promote and regulate mining activities in Ghana. It has among its functions a mandate to secure a firm basis of comprehensive data collection on national mineral resources and the technologies of exploration and exploitation for national decision making. Its promotional mandate makes it imperative to work closely with the Geological Survey Department in building an up-to-date body of digitised data to support its efforts at attracting investments into the industry.

4.1. IDENTIFIED GAPS IN THE GEOLOGICAL & MINERAL INFORMATION SYSTEMS

An analysis of the status of the country's management of geological and mineral information systems reveals a certain lack of coordination between the two agencies

mandated to collect and manage the country's geological data and mining information. The Minerals Commission and the Geological Survey Department appear to work in silos. Collaboration between them would put them in a formidable position to have up to date geological data on Ghana. The poor status of geological information gathering and management has the potential to undermine Ghana's competitiveness as an investment destination, and can negatively affect the country's negotiating power.

The country would be better served if the two collaborate and generate potential prospectivity maps, as well as collect and maintain data on rate of depletion of the country's mineral resources.

Also apparent is the fact that Ghana does not have a publicly available, digitised register or cadastre system(s) with the following timely and comprehensive information regarding the various licenses issued:

- i. License holder(s);
- ii. Coordinates of the license area;
- iii. Date of application, date of award and duration of the license; and
- iv. In the case of production licenses, the commodity being produced.

Mining companies generate a great deal of data in the course of the exploratory activities, but in the absence of a legal mandate to share this data with the regulator, many companies keep these data away from the Commission, thereby deny the country the opportunity of improving on the quality of data it keeps. Proper collaboration between the Minerals Commission and mining companies would facilitate access to more current data.

Again, poor spatial planning was identified as a major factor accounting for inefficient allocation of mineral rights. For example, the Atuabo Gas Plant is said to be sited on the best silica reserve, and on a gold bearing belt. A successful best practice from Australia which is recommended for Ghana is for the Geological Survey Department to be subsumed under the Minerals Commission or for the two institutions to be made to work in an integrated manner in order to develop a common geological Information System or portal.

The objective here is to develop a comprehensive knowledge of Ghana's mineral endowment by a unified mandated 21st Century governmental body serving as a one stop shop for all and most current geological data, and giving it out freely to attract investment.

5. BUILDING HUMAN AND INSTITUTIONAL CAPACITY

Evidence of a deliberate policy and strategy to develop and promote a knowledge-driven competitive minerals economy can be found in the establishment of several mining and engineering training institutions in the country. These include distinguished academic institutions such as University of Mines at Tarkwa (UMaT), University of Ghana (UG), Kwame Nkrumah University of Science and Technology (KNUST), University of Development Studies (UDS), etc. Each of the four major universities produces 100 graduates on the average annually for the core technical sectors of the mining industry. This translates into 400 graduates on the average annually.

The industry in Ghana however appears to suffer from weak absorptive capacity because most of the mining companies in the country undertake surface mining operations which are capital-intensive with relatively low labour requirements. As a result finding entry level opportunities in the industry has become an uphill task for most graduates. This has contributed to the creation of an accumulating pool of disillusioned work force that eventually becomes unemployable after years of unemployment.

It is often argued that expatriate staff take up opportunities that otherwise could be seized by locals but the statistics rather show a decline in the use of expatriate staff by mining companies in Ghana ostensibly as a result of strict enforcement of local content provisions and their attendant immigrant quotas. According to the Chamber of Mines Report 2014, there were 12,148 Ghanaians and 234 Expatriates in employment in large scale operations in 2014.

Table 3: Employment levels (Expatriate/Locals) in Major Mining Companies

Company	2014		2013	
	Total Staff	Expatriate	Total Staff	Expatriate
AngloGold Ashanti Obuasi	3430	41	4250	45
AngloGold Ashanti Iduapriem	652	4	670	4
Goldfields Ghana Tarkwa	2909	38	2250	48
Goldfield Ghana Damang	933	11	2000	16
GSR Prestea/Bogoso	881	11	920	19
GSR Wassa	688	6	n/a	n/a
Newmont Ahafo	1679	63	660	66
Newmont Akyem	769	41	n/a	n/a
Adamus Resources	226	3	250	4
Perseus Mining	358	16	450	23
Chirano Gold Mines	1073	2	1116	8
		7		
Ghana Manganese Co. Ltd	639	7	673	8
Ghana Bauxite Co, Ltd	227	4	230	4

Source: Minerals Commission

The use of expatriate staff, if guided by appropriate policy, can be used to transfer knowledge and skills to Ghanaian workers in the industry. The companies could also be encouraged to institute internship programme for young graduates as part of efforts to equip them with practical experience and to make them internationally competitive. As part of the international Initiative called the African Minerals Skills Initiative (AMSI) which is managed under the auspices of the United Nations, some mining firms in Ghana invested in the education and training of their operational workforce. Such initiatives should be supported.

At the institutional level, the country undoubtedly has the requisite institutions to ensure the minerals and mining policies promote and strategically develop a knowledge-driven competitive minerals economy. The Mineral Commission, the Ghana Geological Survey Department, the Centre for Scientific and Industrial Research (CSIR), National Development Planning Commission (NDPC), The Environmental Protection Agency (EPA), Forestry Commission (FC), Ghana Revenue Authority (GRA), CSOs, etc. are all strategic institutions mandated or positioned to work to ensure that Ghana remains a knowledge bastion in the minerals economy.

5.1. IDENTIFIED GAPS IN THE BUILDING HUMAN AND INSTITUTIONAL CAPACITY CLUSTER

Among the gaps identified in this cluster are:

1. Weak linkage between academia and industry for which reason training of personnel does not always take into account technological advancement and contemporary needs of industry.
2. Absence of support programmes for young graduates who want to go into small-scale mining. Such support can come in the form of venture capital fund, tax incentives, subsidized access to plants and equipment, and business advisory services.
3. Absence of obligation on companies to institute internship programme for young graduates. This could offer the graduates practical experience and increase their competitiveness internationally.
4. One key lesson that can be drawn from Ghana's EITI in the mining sector relates to the institutional capacity for collecting, managing, disbursing, and spending mining revenues.

A process audit undertaken by GHEITI revealed that substantial revenues are lost to the state as a result of a lack of collaboration between the Ghana Revenue Authority (GRA) and the Minerals Commission, the regulatory agency for the sector. According to the findings of the first three EITI audit reports spanning 2004 and 2005, even though mining companies had changed hands over the period, none had paid capital gained tax on the profits they presumably made. This is currently being addressed by encouraging the two agencies to exchange information on regular basis to forestall such occurrences. However there is still the need to automate information sharing among agencies in the sector, similar to the GCNet to support institutional collaboration among them.

5. The Ghana Revenue Authority again has suffered from an erosion of its capacity to follow closely and appreciate the financial intricacies of mining operations, following the abolition of the special mining desk and replacement by the Large Tax Payers Unit. Ghana's EITI audit reports have also revealed that in some instances customs officials stationed at the mines to observe the smelting of the gold dores and to authenticate the production certificates have been at post for close to a decade, a situation that can compromise the integrity of the monitoring function of these officials.
6. Women are more than 50% of the workforce in Ghana but less than 5% are in the mainstream mining industry. Gender affirmative action and encouraging females to seek positions in the industry would help address the current imbalance, and would facilitate a process of inclusiveness in the sector.

6. ARTISANAL AND SMALL-SCALE MINING (ASM) CLUSTER

Globally, countries that have managed to enhance the contribution of natural resource extraction to their national development are those that are themselves active participants in the exploitation of their resources. The resource owner's participation in mineral exploitation can take diverse forms from direct involvement, through equity holding, to creating opportunities for the indigenes to take part directly in extracting the resources. Artisanal and Small-scale Mining (ASM) usually reserved for locals, is one way in which a resource owner may participate in the mining enterprise. It is one way to retain a greater portion of foreign exchange earnings in the country.

ASM is an age-old business in Ghana. It produced about 36 per cent of total world gold output between 1493 and 1600, making Ghana the largest gold producer at the time. However, there have been growing concerns about the absence of properly defined guidelines and regulations to minimise the toll of these activities on society and the environment. As a result ASM conjures images of illegality, tax evasion and avoidance, unsafe operations and negative environmental impacts: from pollution and destruction of water bodies and farm lands to increased use of firearms, increased number of foreigners illegally involved in ASM and mine accidents.

Up until the late 1980s, small-scale mining activities in Ghana remained largely unregulated and received little, if any, support from government. This, however, changed with the implementation of the national Economic Recovery Programme (ERP). The government at the time recognised the potential contribution ASM could make to the country's revenue mobilisation efforts, and so pursued a policy to regularise the small-scale mining sector through a series of policies and regulations.

Since the enactment of the Small Scale Mining Law (PNDC L 218) in 1989, which formalised small-scale gold production, Ghana has seen a surge in licensed small-scale producers of gold. At the same time, illicit mining activities known as *galamsey* have soared. The liberalisation of the mining laws, which allowed for gold and diamonds to be carried in public, engendered the proliferation of ASMs throughout the country's mineral rich areas.

The current legal framework for regulating small-scale mining activities is provided in sections 81 to 99 of the Minerals and Mining Act, 2006 (Act 703) and its accompanying regulations. However, it is widely perceived that the prevailing governance regime is weak and unable to optimise the potential of the sector (while addressing the various challenges it portends).

According to the 2013 Ghana EITI audit report, ASMs contribute as much as 34 per cent of Ghana's total gold export (2013 Mining Reconciliation Report, GHEITI, 2014). Again, the findings of a scoping study on ASM, undertaken by the Ghana EITI suggests that in 2013 about GHS 0.5 million was collected as Mineral Rights fees from ASM and Industrial Minerals operators, GHS 2.2 Million for royalties excluding payments to MMDAs. The report posits

that EITI Implementation would possibly unearth other payments made by ASMs, which hitherto remains unpublished (SRC Consulting, Report of scoping study on the incorporation of artisanal and small-scale mining in Ghana's Extractive Industries Transparency Initiative, 2015).

6.1. ONGOING EFFORTS TO STREAMLINE ASM ACTIVITIES

Because most ASM operators are not formalised, it becomes difficult to regulate their activities and to identify them for tax purposes. A special presidential taskforce established to stem the menace of unregulated mining, though made some significant progress, proved unsustainable in the long run. A lot of foreigners had gotten involved in the illegal activities, supplying capital and technology for the operations. The government was therefore compelled to seek amendment to Act 703 to criminalise the involvement of foreigners in small-scale and artisanal mining (reserved for locals only) and unlicensed mining activities by Ghanaians. The previous provision dealt only with locals.

The Minerals Commission has embarked on an exercise to re-categorise and benchmark ASMs in terms of investment levels. This will help to evaluate and design appropriate support programmes for the various categories of ASMs.

6.2. IDENTIFIED GAPS IN THE ARTISANAL AND SMALL-SCALE MINING (ASM) CLUSTER

The AMV action plan seeks as an outcome for the ASM sub-sector, a viable and sustainable ASM sector that contributes to growth and development.

This requires a deliberate policy, strategy and support to make it attractive for those operating illegally to properly formalise their activities. These currently remain as gaps in the country's approach to incorporating ASM into its overall national development strategy.

Other gaps identified are difficulties and delays in processing licenses, the need to upgrade the knowledge and skills of small-scale and artisanal miners, provide information and geological services to address their traditional lack of access to such services; facilitate their access to financial services through, for example, the establishment of a venture capital fund, establish, possibly through a PPP arrangement, a plant pool, and equipment hire purchase facilities.

Through such support programmes it will become attractive for those operating illegally to formalise their activities, and it will be possible to nurture and grow ASMs to transition into medium scale enterprises, increasing their contribution to gold exports, domestic tax mobilisation, and mainstreaming them into poverty reduction strategies.

Again, the absence of standardisation and certification requirements and facilities for ASM practitioners lags behind large scale producers.

7. MINERAL SECTOR GOVERNANCE

Mineral sector governance refers to the outlay of policies, laws, and institutions for managing the mining sector. In the context of Ghana, the Ministry of Lands and Natural Resources is responsible for policy formulation. The Minerals Commission is responsible for implementing the policies through the enforcement of laws and regulations. It is supported by the Environmental Protection Agency (EPA) in managing the environmental fallouts of mining. A parliamentary committee on mines and energy exists to exercise public oversight over the institutions mandated to formulate policies and to regulate the industry. Ghana therefore has the full complement of policies, laws, regulations, and institutions to govern the mining sector.

The hallmarks of good mineral sector governance are however, transparency and accountability. Transparency in resource governance is important for the following reasons:

- It empowers citizens to effectively exercise their right to participate in decision-making;
- Their participation ensures that the policies, laws, regulations, and institutional arrangements for managing resources return optimum benefit to the majority of the people;
- It reduces the incentive for corruption, eliminates waste & inefficiencies that undermine the country's development efforts;
- It fosters democratic debate and promotes national ownership of development initiatives;
- It promotes accountability.

Regrettably, Ghana's mineral sector governance cannot be said to be completely transparent. Contracts are negotiated on first-come-first served basis, and most of the contracts are not publicly disclosed. There is indeed, no legal requirement to disclose contracts. This could potentially create a cover for rent-seeking behaviour on the part of public office holders in the mining industry.

Information on beneficial owners of licenses is also not disclosed, creating opportunities for fronting and transfer mispricing in transactions between related entities.

Some progress has however been recorded in the area of revenue disclosure, thanks to the Ghana Extractive Industries Initiative. Armed with revenue data, citizens are beginning to demand reforms to the fiscal regime and to insist on prudent use of mineral revenues. However, budgetary information relating to expenditure of mineral revenues is unavailable.

7.1. EFFORTS AT ADDRESSING SOME OF THE ISSUES IN MINERAL SECTOR GOVERNANCE

The Natural Resource and Environmental Governance Programme (NREG) and the Ghana Extractive Industries Transparency Initiative (GHEITI) represent Ghana's most ambitious approach to dealing with the governance challenges in the mining and environment sector. The main policy reforms being pursued under the NREG are:

- a) Ensuring predictable financing and sustainable management of the forest and
- b) wildlife resources and effective forest law enforcement;

- c) Improving mining and forestry sector revenue collection, management, and transparency;
- d) Addressing social issues in forest and mining communities; and
- e) Mainstreaming environment into policies for economic growth.

The programme objectives include reduction in social conflicts in mining communities and improvement in support to Artisanal and small scale miners (ASMs) as evidenced by (a) design of a survey tool and carrying out of at least one survey, (b) ASMs established through three co-operatives in mining areas with improved performance.

It also seeks to improve mining sector revenue collection, management, and transparency as evidenced by: (a) fiscal model applied to three mines, resulting in improved overview of revenues due to the Government of Ghana and a reduction of the revenue gap; (b) up to date data on mining incomes, royalties and local revenues and their distribution published at the district level; and (c) survey tool to track perception of use of mining revenues at district and municipal level designed, and at least one survey undertaken.

Again, it seeks to promote investment in climate change adaptation and mitigation as evidenced by the preparation of one long-term investment plan; strengthen national environmental impact assessment system through: (a) updated legislative instrument on Strategic Environmental Assessment, including sector guidelines for oil, mining, forestry, energy, transport sectors and consultation and disclosure procedures for environmental assessment; and (b) 60% of EIA applications processed within the prescribed time frame and with the requested consultation and disclosure procedures (World Bank Report No. 48656-GH, 2009).

On the other hand, GHEITI, an initiative Ghana acceded to in 2003, has over the years afforded the country deeper insights into some of the policy and institutional weaknesses in the mining sector, and have inspired substantial institutional and tax policy reforms in the sector. GHEITI is currently championing a bill, which if passed into law will make contract disclosure, including information on beneficial ownership mandatory in all the country's extractive industries.

7.2. IDENTIFIED GAPS IN THE MINERAL SECTOR GOVERNANCE CLUSTER

The following gaps have been identified in the Mineral Sector Governance cluster:

1. Absence of a competitive bidding regime for concession allocation;
2. Absence of a legal mandate for contract disclosure;
3. Unavailability of a beneficial ownership register;
4. Absence of a clear strategy for smoothening out the effect of mineral price volatility on the budget.

8. RESEARCH AND DEVELOPMENT

Technology and innovation which are rooted in Research and Development have become the key determinants of cost efficiency and environmentally safe mining. This makes it an imperative to interface the industry with research, academic, and technology development institutions. While most large scale mining companies allocate substantial part of their operations budget to Research and Development, it is apparent that without state policy intervention the Artisanal and Small-scale miners will miss out on the opportunities that Research and Development affords.

Though there is no structured interface between ASMs and research institutions, some academic and research institutions address themselves to providing technological solutions to some of the challenges in the industry. For instance UMaT has developed a direct smelting method for small scale gold producers to help reduce and eliminate mercury usage. Which means, with a purposeful intervention and support, local research and technology development institutions could develop appropriate technology to minimise the negative impact of ASM on the environment, as well as on the health and safety of ASM operators.

At the level of the state (public research and academic institutions), financial constraints have been a major drag on research and Development.

8.1. CURRENT EFFORTS TO ADDRESS RESEARCH AND DEVELOPMENT ISSUES

The country has developed a Minerals Development Fund bill, currently before Parliament, and which when passed into law will leverage some resources from the 10 per cent share of royalties allocated to the Fund to support some level R&D in the universities, and other research institutions.

8.2. IDENTIFIED GAPS IN THE RESEARCH AND DEVELOPMENT CLUSTER

The following have been identified as gaps between the current state of affairs and the AMV with respect to Research and Development how it feeds into the sustainable development strategy of the mining industry, and the economy as a whole:

1. The country currently has no policy or deliberate strategy for promoting STEM skills, technology development, research development and innovation (RDI);
2. There is therefore little or no alignment between R&D and national development plans / strategies.

9. ENVIRONMENTAL AND SOCIAL ISSUES

The insidious contest between mining and agriculture threatens food security. This is exacerbated by the unbridled activities of ASMs and has caused the environment to deteriorate drastically in recent times due to the heavily mechanised nature of these small scale miners. Government regulatory bodies seem ill equipped to carry out their mandates. For example, only two people with the requisite technical knowledge constitute the Monitoring and Evaluation Department of the Minerals Commission. As a result there isn't effective monitoring and gathering of information across the nation by this mandated body. The results are seen in the wanton destruction of water bodies and the environment as well as the livelihoods of the inhabitants of mining towns. These have led to several hazardous labour conditions as well as sicknesses and diseases related to air pollution, water and environmental pollution with pronounced adverse effects.

The EPA is also ill resourced to monitor the mercury use by ASM operators as well as effectively and rigorously implementing environmental impact assessment policies. The mercury pollution in certain mining communities are so high but are not periodically measured for remedial steps to be initiated.

Objective eleven of Ghana's new minerals and mining policy commits the country to ensure a high level of environmental stewardship in the exploitation and use of minerals; while objective twelve commits to the promotion of social harmony between the mines and adjoining communities. These commitments resonate with the final outcome of the Rio+20 Summit, which emphasised a development approach involving prudent use of natural resources, respect for the environment and equitable distribution of benefits. This development approach promotes green economy in the context of sustainable development and poverty eradication, while maintaining the healthy functioning of the earth's ecosystems.

In Ghana, the main tools for managing the environmental fallouts of natural resource exploitation are the Strategic Social and Environmental Impact Assessment (SESIA), and the Environmental and Social Impact Assessment (ESIA) requirements. Arising out of the ESIA processes are Environmental Management Plans (EMPs), which are often not publicly disclosed. Opportunities for citizens participation in the ESIA processes come in the form of public hearings, where host and fringe communities are invited to discuss the project's potential impacts, proposed remedial measures, and socio-economic benefits to the state and the communities. However, given the highly technical nature of the ESIA reports, the public hearings are often reduced to discussions on just the job opportunities and economic benefits the project promises.

As a result of the poor quality of ESIA consultations land use contestations have become commonplace in most mining communities after concessions and environmental permits have been granted.

Again, issues of compensation for denying landowners their surface rights have been particularly contentious. The manner in which the compensation is calculated does not take into consideration the cultural and emotional attachment to the land. It also tends to consider just the present net economic value of the land and crops. Furthermore, the payment to beneficiaries does not take into account the inter-generational interest in the land, as a result of which future generations are likely to feel dispossessed by the current generation and may resort to the use of the land illegitimately.

There is also the problem of poorly conceived and badly executed corporate social responsibility projects, aimed at securing the social license of host communities.

9.1. CURRENT EFFORTS TO ADDRESS THE ENVIRONMENTAL AND SOCIAL ISSUES

The government of Ghana recognises the debilitating effect of weak environmental governance on its development efforts, and this motivated the Government in 2008 to sign-on to the Natural Resource and Environmental Governance (NREG) programme. The NREG's primary goal is to ensure sustainable economic growth, poverty reduction, and improved environmental management in the context of natural resource extraction. The programme objectives are to encourage and facilitate policy reforms within the sectors of mining and environmental protection, forestry and wildlife. It is conceived as a sector budget support which provides predictable annual disbursements to implementing agencies. An assessment conducted at the end of its first phase revealed that the programme has contributed to improved management of government revenues and finances in the forestry and mining sectors, reduced illegal logging, reduced social conflict in forestry and mining communities, led to the integration of environmental considerations in policy formulation and implementation, and created opportunities for the active participation of CSOs and non-state actors at all levels in enhancing social accountability in the Natural Resource and Environment (NRE) sector.

For the purpose of providing political leadership and direction the NREG has established at the highest level, the Environment and Natural Resource Advisory Council (ENRAC), which is chaired by the Vice President of the Republic. The Council is mandated to ensure that cross-sectoral issues related to environment and natural resources are addressed. Membership of the body includes the Ministers of Lands and Natural Resources, Food and Agriculture, Local Government and Rural Development, Environment Science and Technology, Finance, Energy, Water Resources, Works and Housing, Representatives of the Private Sector, President of the National House of Chiefs and a Representative of Civil Society.

The NREG Technical Coordinating Committee (TCC) which reports to the ENRAC, provides technical guidance to the NREG programme. It is composed of sector heads and technical directors of the NREG implementing agencies, with the Ministry of Finance serving as the coordinating Ministry. The TCC operates as the hub of dialogue on policies and programme implementation issues. It is a technical policy group which excludes CSOs. However

depending on the policy issues being discussed, CSOs are sometimes called to participate and make inputs.

The Minerals Commission also in response to the issue of poorly conceived and badly executed corporate social responsibility projects, has developed guidelines for companies to follow and to ensure that CSR projects respond to the needs of the intended beneficiaries, and fits within the development plans of host districts.

9.2. IDENTIFIED GAPS IN THE ENVIRONMENTAL AND SOCIAL ISSUES CLUSTER

The AMV advocates linkages between land use, environmental and social impact policies to rural development or district development plans, strategies and policies. The analysis and information gleaned from the stakeholder consultation however suggest that Ghana does not have a clearly articulated land-use policy, a situation which could open up the entire country to mining regardless of the social and environmental costs. The situation also threatens local food sufficiency and security.

Stakeholders have expressed grave concern over the promotion of the mining sector at the expense of agriculture, and the situation where the government acts to support mining firms but does little to support the farmer. Related to this concern, is the fact that when it comes to land for mining, impact assessments do not open up to options, as is the case in the financial sector.

Environmental management plans of mining companies are not publicly disclosed, and also, citizens are not involved in monitoring compliance.

Again, when it becomes necessary to relocate people, a fundamental UN principle, the Right to Free, Prior, and Informed Consent (FPIC) is often taken for granted.

Though, the NREG programme among other things seeks to reduce conflicts in mining areas, variation of the principles forming the basis of calculation of landowners entitlements, and the mode of payment are not issues the programme purports to address.

10. LINKAGES AND DIVERSIFICATION

Countries are usually able to maximise benefits from their natural resources through local content and value addition. Recent trends show a strong tendency for countries to fashion out strategies for getting into the driver's seat in the shortest possible time. Usually, countries make their strategic choices on which links of the industry value-chain they want to focus more attention, but it may be prudent to ensure that no opportunity along the industry value chain is missed.

A weakness of many local content policies is that strong market forces already operate in what is largely a globally-sourced industry. When set in the context of global sourcing in the mining industry, a nation's local content participation and capability development programmes can be undermined by WTO procurement rules even though the 'merit good' - a privilege for citizens and firms within poorer countries can be invoked to discriminate against international competition under WTO Special and Differential Treatment (SDT) measures for developing countries relating to the Agreement on Trade-Related Investment Measures (TRIMS).

Ghana has for decades missed opportunities for integrating its mining sector into the rest of the national economy because it did not have a policy or strategy for achieving that objective. In 2012, the country, for the first time passed regulations to require a systematic inclusion of locally sourced mine inputs, local personnel and services in the procurement and employment activities of mining companies.

The mining companies, through the Ghana Chamber of Mines have declared support for the initiative and claim that, they are willing to assist the government achieve its local content objectives. They are currently working with the Minerals Commission to identify a list of mine inputs that can be sourced locally.

While that is good for the backward linkages, not much appear to be happening in terms of forward linkages. The country is yet to formulate a policy on how to add value to its base metals for exports and for catalysing its industrialisation programme. So, Ghana continues to take its share of gold, bauxite, and manganese production in cash. It does not also make good sense for the country to be exporting all its high grade manganese ore, when it is proven that the country has huge iron ore reserves, for which reason manganese would be needed for a future steel industry.

Diversification of the economy, away from mining could happen at two levels. First, most of the skills set being developed for mining today, such as electricians, plumbers, mechanics, surveyors, dump drivers, caterers, etc. are transferable to other sectors of the economy such as construction, water and sanitation sectors. So, skills acquired in the mining sector today may be useful in other sectors.

Secondly, if the country will take a view of its natural resource endowments as assets in the ground that ought to be transformed into capital for investment, then revenues from mineral exploitation could be used for instance, to develop tourist facilities in and around the towns where the extraction takes place, to tell the story of the indigenes and the industry to the rest of the world. For example, there is no reason why Obuasi should not have a museum to tell the story of the world renowned craftsmanship of Ashanti jewellers. And the government doesn't have to do this all by itself. It could use a PPP vehicle to achieve this end.

Revenue from mining could also be used to support and develop agriculture, which will certainly outlive the mine, and will always constitute the bedrock of the rural communities where minerals are won. This is what the AMV is challenging Ghana and other resource-dependent African countries to do - to look at minerals and development rather than minerals and revenue. We must look at the whole spectrum of possibilities.

10.1. CURRENT EFFORTS AT ADDRESSING ISSUES WITH LINKAGES AND DIVERSIFICATION

Ghana appears to have woken from its slumber and taking some modest steps to integrate the mining sector into its development strategy. In 2012, it passed a local content regulation to mandate the use of local personnel, goods and services available locally, in mine operations. The Minerals Commission is currently working with the industry to develop a list of mining inputs that are to be procured locally.

10.2. IDENTIFIED GAPS IN THE LINKAGES AND DIVERSIFICATION CLUSTER

The following gaps have been identified in the Linkages, Investment, and Diversification cluster of the AMV action plan:

1. Ghana has no strategy for integrating its mineral sector into the rest of the national economy in spite of the passage of a local content regulations;
2. While some progress is being made on backward linkages through procurement of inputs, personnel, and services locally, forward linkages in terms value addition are weak;
3. Almost all mineral revenues go for consumption. Nothing is saved and little is invested;
4. The country has no plan or strategy for diversifying the economy away from mining.

11. MOBILISING MINING AND INFRASTRUCTURE INVESTMENT

Contemporary mining is a capital intensive venture. Given that competition for FDI into the mining sector has become keen in recent times, especially as several relatively new frontiers including Mali, Burkina Faso, Senegal, Cote d'Ivoire, etc. have emerged on the scene.

The unbridled competition of the last two decades saw many African countries racing to the bottom of tax incentives in their bid to attract investments into their mineral sectors.

Thanks to the African Mining Vision, and to the ECOWAS Directive on the harmonisation of the principles of mining policy, mineral rich states on the continent have come to appreciate the destructive nature of the 'race-to-the-bottom' phenomenon to their respective economies, especially as huge potential revenues are lost through these often uncoordinated tax exemptions.

What has also become clear to natural resource endowed African countries is the fact that, other more important factors come into play in attracting FDI, such as the level of a country's infrastructural development.

Mining is highly dependent on infrastructural support such as good roads, stable, reliable, and affordable supply of electricity, port / airport facilities etc. The more of the infrastructure a country has the cheaper it is to operate in that country, and therefore the more attractive it becomes to investors.

Natural resource dependent country therefore needs to strategize to attract investment to develop their infrastructure as a means to attracting mining investments. The added benefit of this strategy is that, the same infrastructure has the potential of supporting other sectors of the economy, and therefore broad socio-economic development.

Ghana was ranked fifth in Africa in terms of the inflow of FDI in 2012, according to the 2013 UNCTAD World Investment Report. While this is an impressive performance, the country could do even better if it is able to improve its road and energy infrastructure.

11.1. CURRENT EFFORTS AT MOBILISING MINING AND INFRASTRUCTURE INVESTMENT

The Government of Ghana recognises the enormity of the required investment to bridge the infrastructure gap and to become an attractive investment destination. It has therefore, as a deliberate strategy, decided to partner both local and international investors to pursue that agenda. The government has therefore proceeded to develop a Public-Private-Partnership policy and a bill to facilitate the use of the PPP vehicle as a means to attracting the needed investments into infrastructure and other vital sectors of the national economy.

PPP arrangements already exists in the power sector, where Independent Power Producers are supplying power to the Electricity Company of Ghana to augment what the Volta River Authority is able to generate on its own.

11.2. IDENTIFIED GAPS IN MOBILISING MINING AND INFRASTRUCTURE INVESTMENT

Even though compared to other African countries Ghana is not doing badly in terms of its ability to attract FDI, the fact remains that, competition is getting keener by the day, and so will have to do more to continue to be an attractive destination. The following gaps have therefore been identified to help the country maintain its spotlight:

1. The power sector appears to be riddled with inefficiencies that is often passed on to consumers in the form of higher tariffs;
2. Weak geological and geosciences database management undermines the country's ability to showcase its real mineral potential;
3. Some PPP arrangements lack transparency, and have been fraught with corruption.

12. SUMMARY OF GAP ANALYSIS

A summary of the identified gaps between Ghana's policy, legal, regulatory, and institutional frameworks and the AMV is presented in the table below:

CLUSTER / ISSUE	AMV BENCHMARK / EXPECTED OUTCOME	GHANA'S BASELINE	IDENTIFIED GAP
Mining revenues and mineral rents management	Optimize the share of mineral revenue accruing to Ghana's economy / Improved management and use of mineral revenue.	<ol style="list-style-type: none"> 1. Mineral royalty clear and fixed in law; 2. Reforms undertaken to improve government take; 3. Introduction of windfall tax put on hold; 4. Total mineral revenue collected spent through the budget. 5. Development of MDF bill to establish a legal framework for managing /spending the 20 per cent share of royalty that is allocated to support the industry, and to distribute to mining host communities; 6 Development of draft guidelines for the utilisation of the share of mineral royalties returned to mining districts. 	<ol style="list-style-type: none"> 1. Absence of a cost-benefit analysis of tax exemptions to inform policy; 2. Inefficiencies associated with revenue capture; 3. Absence of a clearly defined post- collection policy on spending and/or saving; 4. Absence of strategy to contain the effect of mineral price volatility on the budget.
Geological and mining information systems	Improved geological and mining information systems to underpin investment in exploration and mine development	<ol style="list-style-type: none"> 1. Establishment of institutions with mandate to collect and manage geological and geo-science data; 2. A cadastre system exists but only in a manual format, and currently being digitised; 	<ol style="list-style-type: none"> 1. Lack of effective collaboration between the Minerals Commission and the Geological Survey Department, the two agencies mandated to collect and manage the country's geological data and mining information;

			<ol style="list-style-type: none"> 2. Absence of a publicly available digitised register or cadastre system(s); 3. Absence of a national audit and mapping of the countries mineral endowment in terms of their quantity, quality, and rate of depletion; 4. Poor spatial planning leading to inefficient allocation of mineral rights
Building human and institutional capacities	Competitive skill base that is knowledge based and drives the Ghanaian industrial economy	<ol style="list-style-type: none"> 1. Existence of several academic, research, and technical institutions for training mining personnel for the industry; 2. A good pool of graduates specialising in various mining disciplines and ready for practical training / work. 	<ol style="list-style-type: none"> 1. Weak linkage between academia and industry; 2. Absence of support programmes for young graduates who may want to go into small-scale mining; 3. Absence of obligation on companies to institute internship programme for young graduates; 4. Weak institutional capacity for collecting, managing, disbursing, and spending mining revenues; 5. Need to re-establish the dedicated mining desk at GRA to restore lost capacity; <p style="text-align: right;">Excessively long stay</p>

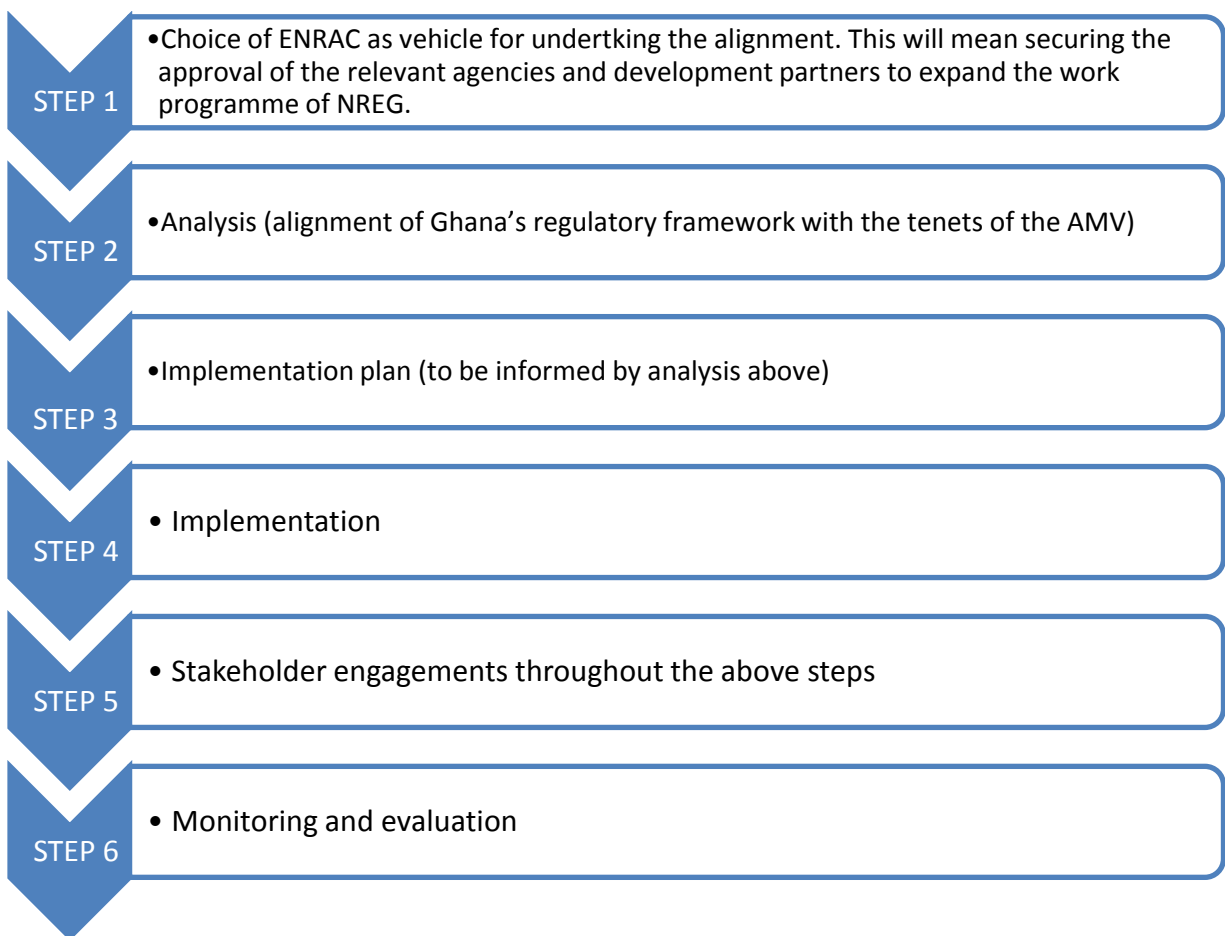
			<p>of customs official at a mine;</p> <p>6. Absence of affirmative plan to get more women to enter the mining industry.</p>
Artisanal and small-scale mining	A viable and sustainable artisanal and small scale mining sector that contributes to growth and development	<ol style="list-style-type: none"> 1. Existence of legal framework for regulating small-scale mining activities; 2. Re-categorisation of ASMs in terms of investment and output. 	<ol style="list-style-type: none"> 1. Weak governance regime, unable to optimise the potential of the sector; 2. Widespread illegal small-scale mining activities; 3. Absence of deliberate policy, strategy and support to make it attractive for those operating illegally to formalise their activities 4. Absence of standardisation and certification requirements and facilities for ASM practitioners; 5. Inadequate oversight of Inspectorate Division to adequately supervise SSM activities
Mineral Sector Governance	A sustainable and well governed mining sector that is inclusive and appreciated by all stakeholders including surrounding communities	<ol style="list-style-type: none"> 1. Existence of a World Bank supported mining, forestry, and environmental governance reform programme – NREG; 2. Ongoing reforms in the mining sector, inspired by the Ghana Extractive Industries Transparency Initiative (GHEITI) 	<ol style="list-style-type: none"> 1. Absence of a competitive bidding regime for concession allocation; 2. Absence of a legal mandate for contract disclosure; 3. Unavailability of a beneficial ownership register; 4. Absence of a clear strategy for

			smoothing out the effect of mineral price volatility on the budget.
Research and Development	A knowledge driven, diversified, and competitive mining sector that is a key component of the Ghanaian economy	<ol style="list-style-type: none"> 1. Existence of research and academic institutions to support R&D; 2. Development of a Minerals Development Fund bill to provide predictable flow of financial resources to support R&D in the mining sector. 	<ol style="list-style-type: none"> 1. The country currently has no policy or deliberate strategy for promoting STEM skills, technology development, research development and innovation (RDI); 2. There is therefore little or no alignment between R&D and national development plans / strategies.
Environmental and social issues	A mining sector that is environmentally friendly, socially responsible and is appreciated by communities	<ol style="list-style-type: none"> 1. Programme of policy reforms underway to improve environmental governance (NREG); 2. Review of guidelines for the conduct of ESIA's. 3. A system of environmental performance rating and disclosure initiative by EPA 4. Existence of principles and modalities for assessing compensation entitlements. 5. Existence of guideline for the design and execution of CSR projects 	<ol style="list-style-type: none"> 1. Lack of cost benefit analysis of mining projects in the context of other options during project feasibilities and EIAs; 2. Lack of involvement of citizens in environmental compliance monitoring; 3. Principles and modalities for assessing compensation appear unsatisfactory.
Linkages and diversification	Enhanced mineral based industrialization and diversification of the Ghanaian economy	<ol style="list-style-type: none"> 1. Local Content Regulations passed; 2. List of inputs to be procured locally being developed. 	<ol style="list-style-type: none"> 1. Ghana has no strategy for integrating its mineral sector into the rest of the national economy in spite of the passage of local content

			<p>regulations;</p> <ol style="list-style-type: none"> 2. While some progress is being made on backward linkages through procurement of inputs, personnel, and services locally, forward linkages in terms of value addition are weak; 3. Inadequate local capital in mining;
Mobilising mining and infrastructure investment	Enhanced investment in mining and infrastructure projects in Ghana	<ol style="list-style-type: none"> 1. PPP policy adopted by Parliament; 2. Draft PPP bill going through process of passage. 	<ol style="list-style-type: none"> 1. The power sector which is key to mining appears to be riddled with inefficiencies that is often passed on to consumers in the form of higher tariffs; 2. Weak geological and geosciences database management undermines the country's ability to showcase its real mineral potential; 3. Some PPP arrangements lack transparency, and are tainted with corruption.
Policy, regulations, regional cooperation and harmonisation		<ol style="list-style-type: none"> 1. Policy harmonised with ECOWAS Directive and AMV; 2. Laws and regulations in place; 3. Full complement of institutions in place. 	<ol style="list-style-type: none"> 1. Irregular sequencing of the policy and legal frameworks; 2. Weak alignment between new policy and current practices; 3. Weak mechanism for the routine exchange of information.

13. ROADMAP FOR ALIGNING THE NATIONAL POLICY, LEGAL, REGULATORY, AND INSTITUTIONAL FRAMEWORKS WITH THE AMV

The Minerals Commission has proposed an indicative road map for aligning the national policy, legal, regulatory, and institutional frameworks with the AMV. At the stakeholder engagement organised by the consultants, the Commission’s Director for Policy, Planning, Monitoring and Evaluation, Mr Richard Afenu hinted of the following proposed road map, with which the consultants are in agreement:



The following summary roadmap proposes the required actions to be undertaken by the various institutions to align the national policy, legal, regulatory, and institutional frameworks with the AMV.

CLUSTER	GAP	REQUIRED ACTION	RESPONSIBILITY
Mining revenues and mineral rents management	<ol style="list-style-type: none"> 1. Absence of a cost-benefit analysis of tax exemptions to inform policy; 2. Inefficiencies associated with revenue capture; 3. Absence of a clearly defined post- collection policy on spending and/or saving; 4. Absence of strategy to contain the effect of mineral price volatility on the budget. 5. Absence of tax on additional profits. 	<p>MoF to initiate a cost benefit analysis of tax exemptions in the mining sector to inform policy;</p> <p>GRA to reinstate a dedicated desk for mining manned by staff with mining background;</p> <p>MoF to initiate process to develop a Mineral Revenue Management law, or better still a natural resource revenue management law to replace the PRMA, and to help deal with the effect of the volatility of prices of such commodities on the budget.</p> <p>MoF should re-introduce proposal on additional profit tax.</p>	MoF (Tax Policy Unit), and GRA (Domestic Tax, and Customs Divisions), in collaboration with MC.
Geological and mining information systems	<ol style="list-style-type: none"> 1. Lack of effective collaboration between the Minerals Commission and the Geological Survey Department, the two agencies mandated to collect and manage the country's geological data and mining information; 	<p>There is the need to re-assess the functions of MC and GSD and streamline them to engender better collaboration;</p> <p>MC to prioritise the further development of</p>	MLNR to prioritise collaboration between MC and GSD at all levels especially where functions and responsibilities seem to overlap;

	<ol style="list-style-type: none"> 2. Absence of a publicly available digitised register or cadastre system(s); 3. Absence of a national audit and mapping of the countries mineral endowment in terms of their quantity, quality, and rate of depletion; 4. Poor spatial planning leading to inefficient allocation of mineral rights. 	<p>its cadastre system to a fully-fledged digitised one. This would add value to the enormous historical geological data at its disposal (especially in exploration);</p> <p>Land use cuts across various ministries. NDPC needs to champion the development of district/regional/national spatial plans.</p>	<p>Funding through NREG and MoF for GSD & MC to undertake identified activities</p> <p>NDPC should take lead role in collaboration with all interfacing sectors in land use.</p>
Building human and institutional capacities	<ol style="list-style-type: none"> 1. Weak linkage between academia and industry; 2. Absence of support programmes for young graduates who may want to go into small-scale mining; 3. Absence of obligation on companies to institute internship programme for young graduates; 4. Weak institutional capacity for collecting, managing, disbursing, and spending mining revenues; 5. Need to re-establish the dedicated mining desk at GRA to restore lost capacity; 6. Excessively long stay of customs official at a mine; 7. Absence of affirmative plan to get more women to enter the mining industry. 	<p>Regular forward-looking interaction between academia and industry;</p> <p>Member companies on the Chamber of Mines should lend more support to local R&D and academic institutions;</p> <p>Other support programmes such as MDF disbursement to such institutions should be timely;</p> <p>Continued skill upgrade and efficient management of human resources of institutions;</p> <p>Affirmative action to support women in mining including girls from mining communities.</p>	<p>R&D and academic institutions;</p> <p>Chamber of Mines and MC to come out with guidelines on internships;</p> <p>CSOs should advocate for institutionalised internship programmes;</p> <p>GRA to take administrative measures to upgrade and reshuffle staff;</p> <p>Mining companies reserve employment</p>

			quotas for women in mining communities.
Artisanal and small-scale mining	<ol style="list-style-type: none"> 1. Weak governance regime, unable to optimise the potential of the sector; 2. Widespread illegal small-scale mining activities; 3. Absence of deliberate policy, strategy and support to make it attractive for those operating illegally to formalise their activities; 4. Absence of standardisation and certification requirements and facilities for ASM practitioners; 5. Inadequate oversight of Inspectorate Division to supervise SSM activities. 	<p>Continued building of capacity of MC (especially at the district offices) to manage and supervise ASM operations effectively;</p> <p>Extension of certification and standardisation procedures of Inspectorate Division of MC to cover ASM/SSM;</p> <p>Establishment of ASM/SSM database to assist remote monitoring of operations and subsequent reclamation/remediation of mined out lands</p>	MC in collaboration with MMDAs, Traditional authority, etc. be more effective in eliminating illegal activities in ASM/SSM
Mineral Sector Governance	<ol style="list-style-type: none"> 1. Absence of a competitive bidding regime for concession allocation; 2. Absence of a legal mandate for contract disclosure; 3. Unavailability of a beneficial ownership register; 4. Absence of a clear strategy for smoothing out the effect of mineral price volatility on the budget. 	<p>Comparative analysis of competitive bidding or what currently pertains in granting mineral licences;</p> <p>Legislation on mandatory contract disclosure and beneficial ownership to improve accountability;</p>	<p>MC to undertake evaluate appropriateness of competitive bidding or otherwise;</p> <p>CSO, MC, MLNR to Legislate the principles and formulae for benefit transfers.</p>
Research and Development	<ol style="list-style-type: none"> 1. The country currently has no policy or deliberate strategy for promoting STEM skills, technology development, research development and 	MESTI should come out with a national policy or deliberate strategy for R&D	MESTI should champion this, with advocacy from CSOs in collaboration with industry and

	<p>innovation (RDI);</p> <p>2. There is therefore little or no alignment between R&D and national development plans / strategies.</p>		<p>academia;</p> <p>NDPC to capture and align such strategies and policies in national development plans</p>
Environmental and social issues	<p>1. Lack of cost benefit analysis of mining projects in the context of other options during project feasibilities and EIAs;</p> <p>2. Lack of involvement of citizens in environmental compliance monitoring;</p> <p>3. Principles and modalities for assessing compensation appear unsatisfactory.</p>	<p>Need for cost benefit analysis of mining projects in the context of other options;</p> <p>Establish mechanisms for involving citizens in environmental compliance monitoring;</p> <p>Principles and modalities for assessing compensation appear unsatisfactory.</p>	<p>MC & EPA to rigorously assess their process for feasibility studies, environmental & social impact assessment studies and monitoring</p>
Linkages and diversification	<p>1. The country has no plan or strategy for diversifying the economy away from mining</p> <p>2. While some progress is being made on backward linkages through procurement of inputs, personnel, and services locally, forward linkages in terms of value addition are weak;</p> <p>3. Inadequate local capital in mining;</p>	<p>There is the need to diversify the minerals production base of the country;</p> <p>Diversification should be promoted to eliminate enclave economy phenomenon, cognisant of engendering integration with other sectors of the economy;</p> <p>Tax and investment incentives for local capital in mining and projects that add value to raw minerals;</p> <p>Continued advocacy for</p>	<p>MC should promote development of other minerals apart from the traditional ones of gold, diamond, bauxite and manganese</p> <p>GRA and MoF to access possibility of tax incentives</p> <p>GIPC in collaboration with MC should constantly deliberate on promotion of</p>

		financial institutions and pension funds to invest in mining projects.	linkages and diversification.
Mobilising mining and infrastructure investment	<ol style="list-style-type: none"> 1. The power sector which is key to mining appears to be riddled with inefficiencies that are often passed on to consumers in the form of higher tariffs; 2. Weak geological and geosciences database management undermines the country's ability to showcase its real mineral potential; 3. Some PPP arrangements lack transparency, and are tainted with corruption. 	<p>The need for further development of general infrastructure including energy as an incentive for mobilising more mining investment;</p> <p>Development and good packaging of the nation's geological database for investment promotion</p>	<p>GoG's infrastructural development in the energy sector should be intensified and targeted to the development of the natural resource base;</p> <p>MC/GSD in collaboration with GIPC in investment promotion</p>
Policy, regulations, regional cooperation and harmonisation	<ol style="list-style-type: none"> 1. Irregular sequencing of the policy and legal frameworks; 2. Weak alignment between new policy and current practices; 3. Weak mechanism for the routine exchange of information among mining sector institutions. 	<p>Best practice is the development of vision, policy, law and regulations;</p> <p>Continual review of policies and amendment of relevant laws and regulations in line with vision and policy</p> <p>Promotion of transparency, trust and collaboration among the mining and related sector institutions for the common good</p>	<p>MC must continue on the path being proactive to effective.</p>

14. ANALYSIS OF GOVERNMENT'S CAPACITY CHALLENGES FOR ALIGNING THE POLICY, LEGAL, REGULATORY, AND INSTITUTIONAL FRAMEWORKS WITH THE AMV

In analysing the potential challenges to the task of aligning Ghana's mining sector policy, legal, regulatory, and institutional frameworks with the precepts of the AMV, it is important to recognise that the issues that lie at the heart of the identified gaps cuts across sectors, mining, macro economy, budgets, development planning, environment, and forestry. For this reason, a convenient vehicle that brings together representatives from the various sectors with specific mandates along the mining industry value-chain ought to be either identified or created.

The Minerals Commission (presently playing the lead role in the processes, leading to Ghana's internalisation of the AMV, has identified an existing arrangement – the ENRAC, under the NREG programme, as its implementation and coordination framework. The decision can aptly be described as a smart one as the NREG programme is already helping to address several governance issues in the natural resource and environment sector.

The Environment and Natural Resource Advisory Council (ENRAC), was created to provide political leadership and direction to the country's ongoing natural resource and environmental governance reforms being supported by the World Bank and other partners, as part of a multi-donor budget support initiative. It is chaired by the Vice President of the Republic. The Council's mandate is to ensure that all the cross-sectoral issues related to environment and natural resources are addressed.

Membership of the ENRAC includes the Ministers of Lands and Natural Resources, Food and Agriculture, Local Government and Rural Development, Environment Science and Technology, Finance, Energy, Water Resources, Works and Housing, Representatives of the Private Sector, President of the National House of Chiefs and a Representative of Civil Society.

At the technical level, the NREG has established a Technical Coordinating Committee (TCC), which provides overall technical guidance to the NREG programme. It is composed of sector leads and technical directors of the NREG implementing agencies, with the Ministry of Finance serving as the coordinating Ministry. The TCC operates as the hub of dialogue on policies and programme implementation issues. It is a technical policy group which excludes CSOs. However depending on the policy issues being discussed, CSOs are sometimes called to participate and make inputs.

At the technical level it seems the challenges to the task of aligning the country's policies and practices in the mining sector have long been identified and being addressed.

For instance, institutional strengthening in the mining sector forms part of the core support under NREG. The objective is to enhance the capacity of the staff of the mineral sector agencies (Minerals Commission, Geological Survey Department, Inspectorate Division of Minerals Commission and the Ministry etc.) to deal with the difficult and complex challenges facing the mining sector.

The Minerals Commission itself has taken note of the need to ensure the requisite skills exist to deal with the wide range of challenges facing the sector, and has included training as part of its action plan.

On the environment side the Ghana Environment Sector Study (GESS) undertaken under the NREG identified priorities and opportunities to strengthen the Environmental Protection Agency (EPA), in terms of its institutional role and organisational development. These are also being addressed.

On the revenue collection side, capacity has been developed to undertake fiscal modeling for large mines. The Mining Revenue Task Force under the initial phase of NREG, developed an action plan that included activities aimed at carrying out joint audits based on the fiscal models; international benchmarking of fiscal regimes to determine Ghana's international competitiveness, and training needs (e.g., on auditing).

A fiscal model for the Chirano Gold mine has already been developed, and is helping the relevant government agencies to project the taxes, royalties, dividends, fees, import duties, etc. that the mine should be generating and compare this with actual revenues/tax payments received.

The major capacity constraint to implementation of the alignment programme is most likely to be financial, especially given the fiscal squeeze the country is going through currently. It is also for this reason that, the choice of NREG as a vehicle for carrying out the alignment becomes very strategic, as NREG already has funding for carrying out similar mandate.

In overcoming the financial challenge, additional resources could be leveraged from the Minerals Development Fund (when it is properly established by law), and multilateral sources such as the AfDB, through the AMDC.

15. CONCLUSION

It is clear from the analysis that, Ghana has not been able to take full advantage of her resource endowment opportunities to make critical linkages in order to underpin diversification, growth & development. Also clear is the fact that, the country has recognised its mistakes and has begun taking steps to change the manner in which it has managed its mineral resources. Pretty encouraging is the fact that the country new minerals and mining policy aligns very well with the ECOWAS Directive on Principles of Mining Policy and the Africa Mining Vision.

One does not however, get the sense that the objectives enshrined in Ghana's new policy align with the established practice in the management of the mining sector. It is therefore expected that the policy would be launched quickly to kick-start a process of aligning the laws, regulations, programmes and strategies with the policy objectives.

The Minerals and Mining Act itself has seen a few amendments in recent times, and it is expected that further amendments will become necessary as the country address itself to aligning the governance principles that currently guide activities in the sector those of the African Mining Vision.

The gap analysis contained in this report, the roadmap to actualising the alignment between the national policy, legal, regulatory, and institutional frameworks with the AMV, and the assessment of institutional capacity for carrying out the exercise should all serve as a reliable compass for making further progress from where the country finds itself today.

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