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AN ANALYSIS OF REGULATORY AND INSTITUTIONAL CHALLENGES IN THE GOLD MINING SECTOR OF GHANA AND THE WAY FORWARD

David Asumda[1]

ABSTRACT

The gold mining sector in Ghana predates independence and has over the years contributed significantly to Ghana's socio-economic development through revenue generation, employment creation and an increase in foreign direct investments. Ghana has the necessary laws, policies and available institutions to effectively supervise and monitor gold mining activities to ensure development and to minimize environmental degradation. However, some of these mining laws and policies which have direct or indirect impact on development and the environment are not adequately complied with due to lack of effective implementation and monitoring to ensure compliance. The regulatory institutions in the gold mining sector are faced with significant challenges. They include lack of adequate human and institutional capacity; dealing with multiple regulations and inter-institutional conflicts; lack of proper coordination between the institutions and political interference in the permit processing among other challenges. For the institutions to be able to perform their roles of effective monitoring and supervision to ensure effective compliance of mining laws and policies, it would require coordination between the relevant regulatory institutions, addressing the issue of multiple regulations and inter-agency conflicts and provision of sufficient staffing and resources for monitoring, regulatory enforcement and community inter-action. The aim of this article is to highlight the significant challenges facing regulatory bodies in the gold mining sector of Ghana, and suggest some solutions to these challenges.

Keywords: Regulatory Institutions, Challenges, Gold Mining, Capacity, Ghana

[1] LLB, MA, MPHIL, PGDIP, BL, (PhD Candidate) Legal Practitioner, Dean and Lecturer of Law Faculty, Zenith University College, Environmental Law Expert.

INTRODUCTION

Ghana is endowed with substantial mineral resources and has a well-established mining sector, particularly gold. For the past three decades, gold mining has contributed significantly to Ghana's socio-economic development through revenue generation, employment creation, and an increase in foreign direct investment.[2] Gold production increased from 59 per cent in 2018 to 65 per cent in 2019.[3] Mining contributions to government revenue increased from 4.9 per cent in 2018 to 7.6 per cent in 2019.[4] However, gold mining has also exacerbated incidences of environmental degradation, including: health and ecological impacts of mercury contamination; environmental impacts of mining on land, water quality, and air quality; effects of noise and vibration on mining communities; depletion of forests; displacement of communities; illegal small-scale mining; pollution of rivers and lakes;[5] and compulsory acquisition of land from indigenous people by Government and awarded as concessions to multilateral mining companies, with little or no compensation to the original land-owners.[6]

Ghana has enacted the Minerals and Mining Act, 2006,[7] as amended in 2010, 2015 and 2019 as the main law that regulates mining; and supported by the Environmental Protection Agency Act, 1994[8] and the Environmental Assessment Regulations, 1999.[9] However, these laws are not being adequately implemented by the regulatory institutions nor complied with by stakeholders. The regulatory institutions and implementing agencies lack adequate logistical, technological and human resource capacity to effectively implement and to ensure compliance by stakeholders of mining laws and policies. This is due mainly to lack of requisite number of personnel, modern equipment and technology to ensure effective supervision and monitoring, resulting in loss of motivation and enthusiasm by the few remaining personnel in those agencies. In addition, they are saddled with poor remuneration and working conditions, and capable personnel being poached by the private and Non-Governmental Organizations (NGOs).[10]

Against this background, the purpose of this article is to find out whether the institutional and regulatory bodies in the mining sector have adequate capacity to ensure implementation and compliance with mining laws and policies. Particularly, this article discusses the challenges facing the regulatory bodies, examines the extent to which these bodies can build capacity to ensure effective implementation and compliance with mining laws, and make suggestions aimed at better implementing and filling gaps which characterise mining law and policy in the mining sector in Ghana.

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[2] FXD Tuokuu and others, 'Challenges and Opportunities of Environmental Policy Implementation. Empirical Evidence from Ghana's Gold Mining Sector' (2018) 59 Resources Policy 435-445.

[3]The Ghana Chamber of Mines, 2019 *Annual Report* (Accra 2019) >http://www.ghanachamber ofminies.org/wp-content/uploads/2020/05/2019-Annual-Report_Complete.pdf> accessed on 17 February 2022.

[4] Ibid.

[5] T Akabzaa, 'Mining in Ghana: Implications for National Economic Development and Poverty Reduction in B Campbell (ed.), *Mining in Africa: Regulation and Development* (Canada 2009) 25-65.

[6] T Akabzaa and A Darimani, 'Impact of Mining Sector Investment in Ghana: A Study of the Tarkwa Mining Region' *Draft Report* for SAPRIN (Washington DC 2000) <http://www.saprin.org/ghana/research/gha_mining.pdf>accessed on 17 February 2022.

[7] Minerals and Mining Act, 2006 (Act 703).

[8] Environmental Protection Agency Act, 1994 (Act 490).

[9] Environmental Assessment Regulations, 1999 (LI 1652).

[10]World Bank, 'Report on Ghana Country Environmental Analysis' (April 2020) < http://www.documents1.worldbank.org/> accessed 22 February 2022.

REGULATORY INSTITUTIONS IN THE GOLD MINING SECTOR

Ghana has built institutional frameworks and organisations to regulate, monitor and ensure compliance in the mining industry. The two main institutions with direct supervisory and oversight responsibilities over the mining sector are the Ministry of Lands and Natural Resources (MLNR) and the Minerals Commission (MC).[11] The MLNR was established under Civil Service Law 1993 (PNDCL 327)[12] and is mandated to ensure the sustainable management and utilization of the nation's lands, forests and wildlife resources, as well as the efficient management of the mineral resources for socio-economic development.[13] The MLNR provides leadership and guidance in the management of the nation's natural resources through effective policy formulation, market regulation and asset management. It is responsible for effective exploration and management of mineral resources, and oversees implementation of mining laws and policy through its sector departments in Ghana. It formulates policies and grants licences for mining and mineral exploration. The Ministry consists of three sub-sectors: Lands, Forestry and Mining.[14] The MC, established under Article 269[15] and the Minerals Commission Act, 1993,[16] is the principal institution for providing regulatory framework for mining in the country. The MC is responsible for the regulation, management and development of mineral resources of Ghana; and the coordination and implementation of policies related to mining. The MC serves as the technical advisory agency to Government.[17] The MC administers the Minerals and Mining Act, 2006[18] making mineral policy and recommendations, promoting mineral development in the country and advising government on mineral related issues. The MC also ensures compliance with the mining and mineral law and regulations. In addition to the broad supervisory role of the MC, the Inspectorate Division of the MC is given the responsibility for enforcing mining laws and regulations.[19] The MC operates under the purview of the MLNR.[20]

Other relevant institutions include the Geological Survey Department (GSD) responsible for geological studies including map production and maintenance of geological records; Environmental Protection Agency (EPA) has overall responsibility for environmental issues related to mining; Land Commission (LC) is responsible for keeping legal records of licences and legal examination of new applications; and the Inspectorate Division of the Minerals Commission (IDMC), responsible for health and safety inspections and maintenance of mining records.[21]

Despite the challenges facing the institutions, particularly, the MLNR and the MC, they have made some notable gains. The MLNR and MC have rolled out a number of programmes to sanitise and streamline the Small Scale Mining (SSM) sector. They include: introduction of technology (MCAS, drones, tracking systems etc.) to regulate SSM activities; training programmes to upscale the skills of small scale miners and; Community Mining Scheme (CMS), among others.[22] The CMS is a policy that has been developed to tackle illegal mining by encouraging locals living in mining communities to undertake responsible, viable and sustainable SSM under the Minerals and Mining Act, 2006 (Act

[11] AK Mensah and others, 'Environmental Impacts of Mining: A Study of Mining Communities in Ghana' (2015) 3 Applied Ecology and Environmental Sciences 81-94.
[12] Civil Service Law 1993 (PNDCL 327) s 11.
[13] Ministry of Lands and Natural Resources <http://www.mlnr.gov.gh> accessed16 May 2022.
[14] Ibid.
[15] Constitution of Ghana 1992.
[16] Minerals Commission Act, 1993 (Act 450).
[17] Ibid s 2.
[18] Minerals and Mining Act, 2006 (Act 703).
[19] Ibid s 102.
[20] Mensah (n 11).
[21] Ibid.
[22] Minerals Commission <http://www.mincom.gov.gh> accessed 22 May 2022.

703),[23] and local participation in SSM. The CSM is aimed at creating jobs, improving livelihoods in mining communities; improving the working condition of mine operators and minimizing environmental degradation that has been associated with SSM for decades.[24]

In addition, the MLNR and the MC in collaboration with the Attorney General's Department have enacted the Minerals and Mining (Amendment) Act, 2019 (Act 995) to administer stiffer penalties to foreigners who engage in SSM[25] and Ghanaians who encourage or assist foreigners to engage in SSM.[26] Further, the MC has successfully established a nationally digitized mineral cadastre system that enables applicants to apply for mineral licences online, thereby improving efficiency and transparency.

KEY REGULATORY CHALLENGES

There are number of regulatory challenges and bottlenecks that need to be addressed if Ghana is to achieve the full benefits of minerals extraction. The four most prominent challenges facing the mining sector are: lack of adequate human and institutional capacity, multiple regulations and inter-institutional conflicts, political will and interference, and, the balancing act of dealing with large-scale and small-scale mining sectors.

Lack of Adequate Human and Institutional Capacity

After over a century of mining, Ghana has relatively good institutions for the training of mining professionals. This is evident in the establishment of several distinguished academic mining and engineering training institutions, namely the University of Mines at Tarkwa (UMaT), University of Ghana (UG), Kwame Nkrumah University of Science and Technology (KNUST) and University of Development Studies (UDS).[27] Ghana can be said to have relatively good-quality human resources in the area of mining.

At the institutional level, Ghana undoubtedly has the requisite institutions to ensure the minerals and mining policies promote and strategically develop a knowledge-driven competitive minerals sector. The MC, GSD, EPA, Centre for Scientific and Industrial Research (CSIR), National Development Planning Commission (NDPC), Forestry Commission (FC), Ghana Revenue Authority (GRA), CSOs, are all strategic institutions mandated or positioned to work to ensure that Ghana remains a knowledge bastion in the minerals economy.[28]

The mining industry, 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.[29]

Weak technical capacity in creating environmental policies has diminished the Ministry of Environment Science and Innovation's (MESTI's) ability to provide effective direction on environmental

[23] Ibid.
[24] Ibid.
[25] Minerals and Mining (Amendment) Act, 2019 (Act 995) s 3.
[26] Ibid s 5.
[27] UNDP 'Review of Alignment between the Africa Mining Vision (AMV) and Ghana's Policy/Legal Frameworks for Solid Minerals' (2015) <http//www.undp.org> accessed16 February 2022.
[28] Ibid.
[29] Ibid.

management issues.[30] The Ministry gives disproportionate attention to science and technology issues to the neglect of environmental aspects. The Ministry's coordination function is also underutilized, with poor alignment of environmental sector stakeholders, partly because the framework delineating stakeholder roles and responsibilities lacks clarity.[31]

Information and knowledge management both within MESTI and with stakeholders is poor and most departments operate in "compartmentalized" units without sharing information. The low level of knowledge and public awareness of environmental issues can be attributed to lack of a coordinated environment program, and often policies are not properly disseminated or communicated to inform decisions at the local level. MESTI suffers from budgetary issues that adversely affect program implementation. Monitoring and evaluation of environmental indicators, both internal and externally, is weak with no comprehensive database available to track inputs, outputs, outcomes, and impacts.[32]

The EPA suffers from institutional weaknesses, which include: a weak policy environment; weak enforcement and compliance system; declining budget and resources for program implementation; limited decentralization and low budget allocations to local levels, as well as poor accountability of resources by departments and field offices in terms of performance (results, outputs, and outcomes); poor staff remuneration and performance management, inadequate planning, monitoring and evaluation, and knowledge management systems; suboptimal coordination with partner organizations; and poor client service orientation.[33] The 2008 Ghana Environmental Sector Study concluded that these weaknesses led to inadequate service delivery, underperformance of the permitting and certification system, low levels of mainstreaming environment across sectors, low staff morale and high turnover, among others.[34] To address these issues, the EPA's Five-Year Strategic Plan (2011-2015) proposed a number of activities covering policies, institutions, legal reforms, and environmental assessment and legal compliance, all of which helped to reduce the magnitude of the challenges but did not fully alleviate them. A few of the more pressing institutional challenges encountered by the EPA are: non-compliance with EIAs, lack of coordination, and poor knowledge management.[35]

Multiple Regulations and Inter-Institutional Conflicts

The mining sector is arguably the most regulated sector in Ghana, and has the largest number of regulatory institutions. The main institution mandated to regulate and manage the utilization of Ghana's mineral resources, including the coordination of policies in the mining sector is the MC.[36] There are currently at least six other institutions - namely, EPA, FC, GRA, Water Resources Commission (WRC), Ministry of Finance (MoF), and the Bank of Ghana (BoG), which exercise additional strong and direct regulatory authority over the mining sector. The numerous regulatory institutions have resulted in the creation of complex regulations and interpretation, and conflicts among institutions. This has in turn resulted in undue delays and bureaucracy in the processing of permits.[37] An example of the institutional conflict is the claim by both the MC (the Inspectorate Division)

[30] Ghana Country Environmental Analysis (n 10).
[31] Ibid.
[32] Ibid.
[33] Ibid.
[34] Ibid.
[35] Ibid.
[36] Minerals Commissions Act 1993, (Act 450) s 2(1); Constitution of Ghana 1992.
[37] T. Aubynn, 'Regulatory Structures and Challenges to Developmental Extractives: Some Practical Observations from Ghana' (2017) <http:www.wider.unu.edu> accessed 22 February 2022.

and the EPA to have ultimate authority to regulate tailings dam construction. The EPA insist on the plastic lining of all tailings, the MC argues for the use of clay lining in lining tailings dams.[38]

These multiple regulations and their attendant inter-institutional conflicts do not only defeat the purpose for which the MC was established - to be a one-stop shop for investment in the mining sector - but they also create needless layers of bureaucracy and institutional tensions. The merger of the former Mines Department, whose duty is largely one of inspection, with the MC as its Inspectorate Division and the subsequent relocation to the same office premises has clearly improved regulatory efficiency and effectiveness. Thus, the original idea of a one-stop shop Commission modelled on the Australian Department of Minerals and Mining is not only achievable, but also relevant today if regulatory efficiency and the effectiveness of the MC are to be enhanced.[39]

Lack of Coordination and collaboration

The absence of coordination and collaboration mechanisms is a significant handicap. The MC allocates mining concessions without regard to current land use, settlements pay compensation and relocation of communities. The situation applies to other commissions established under the Constitution which act without prior regard to the environmental implications of their actions. At the establishment of the EPA, programs were carried out through committees. With implementation of NEAP, however, it was done through inter-sectoral networks that were institutionalized in the EPA's organizational structure. This consultative mechanism between EPA and the sector agencies was discontinued due to the high cost of supporting participation by stakeholders. EPA has realized the value of the networks and intends to reinstate them according to a revised organogram. Such interactions led to establishment of the WRC.[40]

The lack of coordination and collaboration of policies among the institutions, due to complexity of regulations and interpretation, and conflicts among regulators, in many cases has led to functional overlap and undue delays and bureaucracy in permit processing. The consultative mechanisms between the EPA and sector agencies has been discontinued due to high cost of supporting stakeholder participation.[41]

Political Will and Interference

The law gives the minister responsible for mining the ultimate power to grant or terminate any mining title. Yet, the same law ensures that the power is not capriciously exercised. The regulations enjoin the minister to seek the advice of the MC, and the minister's decisions are largely based on this advice.[42] This principle has largely held in Ghana. However, the minister's powers, if exercised capriciously, can result in some instances in which a minister can instruct that specific concessions be processed by the MC for some companies, contrary to the advice offered. Similarly, it becomes an institutional problem where some politicians are unchecked and allowed to use their influence, for example, to intervene in the seizure of equipment used by illegal miners in their operations and processing of mining titles.[43] Even though such practices may not be rampant, it needs to be checked to maintain the integrity of mining laws, regulations and their implementation.

[38] Ibid.
[39] Ibid.
[40] Ibid 125.
[41] Ibid.
[42] Minerals and Mining Act 2006, (Act 703) s 6.
[43] Aubynn (n 35).

The Balancing Act of Dealing with Large-Scale and Small - Scale Mining Sectors

Ghana has two broad categories of mining operations: the large-scale, operated largely by multinational mining companies and a mass of small-scale miners, including many unlicensed operators locally known as *galamseys*. [44]

Regulation of large-scale mining operations has been largely formal and relatively simple.[45] However, the same cannot be said of small-scale mining. The majority of small-scale mining operators are dominated by the *galamseys*, which has been associated with the devastation of the physical environment. The *galamseys* operate substantially in utter defiance of the law.

While large-scale miners are held to strict regulatory standards, the same cannot currently be said of small-scale miners.[46] Reasons for this include: the long and complex application process; lack of finance in an activity that has increasingly become capital intensive; lack of knowledge about the licence acquisition process; and the lack of capacity to fully enforce the law due to the sheer numbers of people (estimated at 1.5 million) involved in small-scale mining in the country vis-à-vis the available resources for policing.[47]

The major challenge, in my view, is the lack of political will by successive governments to resolutely address the challenges posed by illegal small-scale miners. Successive governments have considered enforcing the small-scale mining regulations potentially too costly to their electoral fortunes in view of their numbers as a potential source of significant electoral votes and the lack of alternative employment opportunities.[48] This lack of political will to enforce the laws and regulations on small-scale mining has not only strengthened the hands of these unregistered operators, but has also emboldened them to invade the concessions of some large-scale mining companies and allowed foreigners to engage in SSM with impunity.[49] For instance, on 7th June, 2021, myjoyonline.com reported that four Chinese and their Ghanaian collaborators were arrested whilst mining gold on a disputed site in Obuasi, under the protection of armed guards on land ear marked for a school. The High Court ordered their remand and subsequent deportation on 3rd June, 2021.[50]

HOW TO OVERCOME THE CHALLENGES

To be able to build human and institutional capacity, the following challenges must be addressed: 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; 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, and subsidized access to plants and equipment, and business advisory services; and, absence of obligation on companies to institute internship programme for young graduates.[51] This could offer the graduates practical experience and increase their competitiveness internationally; EITI audit reports have also revealed that in some instances customs officials stationed at the mines to observe the smelting of the gold ores and to authenticate

[44] Ibid 22.
[45] Ibid.
[46] Ibid.
[47] Ibid 23.
[48] This becomes more pronounced during the national elections year as major political parties compete in their tacit or overt declaration of support for *galamsey* and their assurance of assistance to them once they win power.
[49] Aubynn (n 35).
[50] O Tawiah, 'Court Orders 4 Chinese Involved in Illegal Mining' *myjoyonline* (Accra 7 June 2021) <http://www.myjoyonline> accessed 17 May 2022.
[51] Ibid 30.

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; and, 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, would facilitate a process of inclusiveness in the sector.[52]

Multiple regulations and inter-institutional conflicts should be addressed to ensure the Minerals Commission fulfils its purpose of being a one-stop shop, and to avoid creating needless layers of bureaucracy and institutional tensions. This would greatly enhance the regulatory efficiency and effectiveness of the MC.[53]

Coordination between the key agencies and various institutions in mining regulation should be strengthened and ensured to improve natural resource and environmental management between them. A coordination mechanism may be set up at the ministerial and district levels to deal with the types of cross-sectoral issues that individual agencies alone cannot provide, e.g., galamsey. At the agency level, EPA can help re-establish inter-sectoral networks that facilitate dialogues on issues of cross-cutting importance.[54]

To overcome the temptation of political interference and to deepen transparency, as well as to reduce other human intervention in the minerals titling (granting of concession) processes, the establishment by the MC of a digitized mineral cadastre system at both the national and district levels that allows applications for mineral titles to be done online, combined with an open tender system, will hopefully reduce to the barest minimum the incidence of interference and human intervention in the granting of minerals titles and improve efficiency and transparency of the system.[55]

It is important that a common approach is found regardless of the political party in power to ensure the enforcement of Mineral and Mining Law, in order to avoid the devastating environmental consequences of illegal mining. All attempts should be made to fight Illegal mining totally while encouraging and supporting regularized small-scale mining.[56] The establishment of the CMS and enactment of the Minerals and Mining (Amendment) Act, 2019 (Act 995) is a very welcome development, and if properly implemented and enforced, illegal mining will be significantly reduced if not totally eradicated.[57]

CONCLUSION

This article has discussed some significant challenges confronting regulatory institutions in the gold mining sector of Ghana. Even though Ghana has enacted adequate laws, formulated numerous policies and set up the requisite institutions, to implement these laws, the regulatory institutions have significant challenges which hinder proper implementation and proper compliance by stakeholders. The lack of compliance of the prevailing laws is mainly due to lack of effective monitoring by regulatory institutions to ensure compliance and lack of effective and proper supervision or commitment by stakeholders in ensuring compliance with the laws. The regulatory institutions and implementing agencies do not have adequate human and institutional capacity to ensure that mining laws are effectively implemented and monitored, because they suffer from inadequate logistical, technological

[52] Ibid.
[53] Aubynn (n 35).
[54] Ibid.
[55] Ibid.
[56] Ibid.
[57] Ibid.

and human resource constraints, poor working conditions and remuneration for workers, poaching of their personnel by the private and Non-Governmental Organizations (NGOs). Most of the regulatory institutions lack the requisite number of personnel and modern equipment to ensure effective supervision, resulting in loss of motivation and enthusiasm by the few remaining personnel in those agencies.

Despite the efforts of government and sector ministries to deal with some of the challenges, there is the need to increase funding for the key regulatory institutions to be able to build better human and institutional capacity, modernise their electronic systems to promote efficiency, ensure proper coordination by the relevant institutions to avoid institutional and inter-agency conflicts.

THE WAY FORWARD

The article has highlighted the challenges that confront regulatory institutions in the gold mining sector. These challenges are not exhaustive. There are more challenges apart from those that have been highlighted already. These challenges were chosen because they are short term challenges that need to be addressed, and are very relevant to ensuring effective implementation and compliance of mining law and policy; hence, sustainable mining and environmental protection. Some solutions are suggested below.

There is the need to strengthen coordination between the key agencies and various institutions in mining law and regulation to ensure and improve natural resource and environmental management between them. A coordination mechanism may be set up at the ministerial level to deal with the types of cross-sectoral issues that individual agencies alone cannot provide, e.g., galamsey. At the agency level, EPA can help re-establish inter-sectoral networks that facilitate dialogues on issues of cross-cutting importance.[58] Multiple regulations and inter-institutional conflicts should be addressed to ensure the Minerals Commission fulfils its purpose of being a one-stop shop, and to avoid creating needless layers of bureaucracy and institutional tensions. This would greatly enhance the regulatory efficiency and effectiveness of the MC.[59] Sufficient staffing and resources should be provided for monitoring, regulatory enforcement, and community inter-action.[60] Agencies should be trained in use of technologies (e.g. drones, remote sensing) to identify, screen, and target ASGM interventions.[61] EPA and domestic capacity should be strengthened. Continuous professional development programs can be developed for different levels of EPA technical staff in addition to capacity building for other stakeholders. Environmental management skills of EPA staff can be improved through internships by forging links with external agencies such as the Netherlands EIA Commission and the UK Environment Agency, which currently assist the EPA. The human resource capacity of the MC and allied institutions in the mining sector at both the regional and district levels should be built. More staff should be recruited, especially at the district level. Equipment and other resources that technicians need for their work to be effective should be adequately provided. This would ensure sufficient inspection and monitoring of the operating mines. Political influence and interference with the mining licence application and mineral acquisition process; and intervention in seizure of equipment used by illegal miners in their operations, among others should be checked. To overcome the temptation of political interference and to deepen transparency, as well as to reduce other human intervention in the minerals tilting (granting of concessions) processes, the MC should strengthen its digitized mineral cadastre system that allows applications for mineral titles to be done via the internet.[62]

[58] Ghana Country Environmental Analysis (n 10).
[59] Aubynn (n 35).
[60] Ghana Country Environmental Analysis (n 10) 95.
[61] Ibid.
[62] Aubynn (n 35) 21.

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