THE IMPLICATIONS OF THE TANZANIA NEW MINING LEGISLATION IN ENHANCING REVENUE: A CASE OF GEITA GOLD MINE.

Mwesiga, T.R.1, Kaswamila, A. L.2, Mwakipesile, A. E.3

1Vice President Office, National Environmental Management Council, P.O. Box 63154, Dar es Salaam, Tanzania.
2&3Department of Geography and Environmental Studies, University of Dodoma, P.O. Box 259, Dodoma, Tanzania.
1mwesigathobias@gmail.com

ABSTRACT

Purpose: The purpose of this study is to investigate the implications of these reforms from a revenue collection perspective in Geita District using Geita Gold Mine Limited (GGML) as a case study.

Design/Methodology/Approach: This study utilizes a mixed-method approach, by using both qualitative and quantitative approaches. The study population consisted of individuals from sampled households in six wards around GGML with a sample size of 384 respondents. The study used both stratified and simple random sampling methods in selecting respondents. The qualitative data were collected through in-depth interviews, focus group discussion and documentary analysis while the quantitative data were collected through the survey method. Qualitative data were analysed using content analysis and quantitative data from households were analysed using descriptive statistics.

Research Implications/Limitations: This study is limited to GGML and Geita District only, which may not fully capture the diverse range of other mining companies operating outside the district within Tanzania.

Findings: Study findings indicated that the mining legislation helped to improve the quality of institutions as well as resource governance. For instance, due to improvements in resource governance such as the increase in royalty and mining supervision the revenue from mining activities almost tripled to a total of TZS 664 billion as compared to TZS 196 billion that was collected four years back from 2017.

Practical Implications: The findings are expected to have a significant on improving the traceability of gold production and reporting their activities more transparently. Additionally, reforms can lead to more efficient and effective collection of royalties, taxes, and fees related to gold mining operations, resulting in increased government revenue

Social Implications: The social implications of this research are essential, as the increase in mining revenue through taxes, royalties, service levies and other fees can help to improve social services such as education and health services. The mining sector can also contribute to the provision of employment to host communities which has a direct impact on improving social welfare.

Originality/Value: The novelty of this research lies in its holistic and sector-specific examination of revenue collection reforms in the gold mining industry, considering economic, environmental, social, and governance dimensions. It offers a comprehensive understanding of how reforms in this critical sector can impact both individual nations and the global resource landscape.

Keywords: Gold. legislation. mining. revenue. Tanzania.
INTRODUCTION
A country being endowed with abundant natural resources does not guarantee that it will achieve socio-economic development unless strong institutions are in place (Mukiza et al., 2022). According to 2016 statistics, Tanzania was the fourth largest producer of gold in Africa, after South Africa, Ghana, and the DRC (Maliganya & Paul, 2016). However, views from individuals indicated that the sector is characterised by low contribution to local and national income due to low revenue collections (Mushokolwa, 2019). For instance, Geita Gold Mine Limited (GGML) regardless of being the major producer of gold in Tanzania, producing about 43% of the country’s production (Mutagwaba et al., 2018; URT, 2019) experiences resentment and resistance from local communities over little benefits which are accrued compared to negative environmental and social costs incurred, poor community-investor relationship, and environmental degradation (Magai & Marquez, 2011; Kahyarara, 2015; Maliganya & Paul, 2016). Thus, to maximize state revenue, many governments have amended their mining laws to increase taxes, levies, royalties and fees (Poncian, 2021).

Andreasson, 2015 noted that reforms in the mining sector such as resource nationalism are an attempt to increase mining revenue through increasing control of natural resources from foreign and private companies to domestic, often state-controlled companies or by increasing shares in mining investments. For instance, in Burkina Faso, the government introduced Mining regulations that focused on increasing state participation in mining operations and a 20 percent capital gains tax on the transfer of mining titles (Hameau et al., 2019). Zambia is also one of the countries that passed a series of Mining legislations in 2015 which increased royalties on underground mining from 6 to 8% while the royalties on open-pit mining also increased from 6 to 20 percent (Khamsi & Bret, 2017).

Kenya on the other hand, adopted a new Mining Act in 2016 which aimed at increasing socio-economic benefits and helping in mitigating resource conflicts. This was the first major revision of its mining legislation since the 1940s (Deydier et al., 2019) whereby the investors were required to offer a minimum of 20% of equity to the local stock of exchange. In Tanzania, in July 2017 the Parliament of Tanzania passed a series of mining legislations that aimed to protect the country’s natural resources and creation of employment opportunities among Tanzanians (Kinyondo & Huggin, 2019). Moreover, these resource nationalist measures aimed to strengthen the contribution of the mining sector to the national GDP as well as increase the benefits to the local community.

Among other changes introduced by the new law include 16% free carried interest for the government of which its implementation has not yet commenced at GGML since negotiations are in progress with the government and an increase in loyalty from 4% to 6%. The law also introduced 1% for inspection and clearance fees paid annually and made Corporate Social Responsibility (CSR) mandatory for all mineral rights holders (Mining Act, 2019). Based on this background the study intended to assess the impact of these reforms on improving community benefits as well as the national economy at large. Thus, the objective of this paper is to assess the pre and post-new mineral law revenue trends in Geita Town Council and Geita District Council.
THE THEORY UNDERPINNING THE STUDY
This study is guided by the Institutional theory. The theory asserts that for an organization to survive and thrive, it must conform to the rules and belief systems prevailing in the environment (Scott, 1995). According to Scott (1995), institutional theory is a policy-making mechanism that emphasizes the formal and legal aspects of Government directives to be followed. Additionally, the theory asserts that nationalism of natural resources has contributed to economic growth mostly in countries with strong institutions (Mukiza et al., 2022). According to this theory, developing countries do not benefit from natural resources due to weak institutions.

According to the theory of countries with strong supporting institutions model, nationalism of natural resources has been proved to contribute to economic growth. Evidence to justify this claim comes from Botswana, Austria, China, Canada Norway, Korea, Taiwan, Hong Kong, Japan and Singapore which have experienced better rates of economic growth due to good institutions, democracy, less conflict, low level of corruption, transparent, appreciation in the exchange rate, foreign ownership, low level of conflict and accountability (Hameau et al., 2019). In the study, Holden (2013) noted that Norway does experience neither the Dutch Disease nor the Resource Curse due to the high quality of institutions. In line with this notion, Waterworth and Bradshaw (2018) noted that a country can achieve social, economic and environmental benefits through effective and efficient utilisation of its endowed natural resources. In this particular study, Waterworth and Bradshaw identified economic growth, social prosperity and environmental conservation as the key issues that should be considered in formulating natural resource policies. Another study (Ross, 2012) noted that effective implementation of resource policies depends on the existence of strong institutions because poor institutions can lead to poor management of natural resources and generated revenue. According to Kaufmann (2013), strong institutions are characterised by the rule of law, corruption control, regulatory controls, government effectiveness, political stability and absence of violence. Additionally, effective resource governance mechanisms are viewed as a solution towards increasing benefits from natural resources (Kaufmann, 2013). According to Barbier (2010) sometimes over-exploitation of natural resources can lead to economic growth but at the expense of the environment and social welfare. Thus, natural resources should be well-governed to bring inclusive and sustainable growth (Kaufmann, 2013). These studies are relevant to the current study as they provide insights into how strong institutions can enhance social and economic benefits. Generally, the reviewed literature revealed that resource nationalist measures always intend to improve state participation in the mining sector by ensuring that the country’s benefits both social and economic are considered in all investments in the mining sector. The current study has provided detailed information on how resource nationalism can improve resource governance and social and economic benefits.

The current study used the assumptions of the theory to build more understanding of the need for resource nationalism. About Tanzania’s mining sector, 2017 also intended to strengthen the capacity of institutions governing the mining sector such as the establishment of the Mining Commission and the Zone Mines Offices.
METHODOLOGY
The study was conducted in Geita District, Tanzania (figure 1). The district is located at an elevation of 1239 m asl at Latitude -2.8850378 and Longitude 32.2313539 and has a population of 807,619 people (Census, 2012). The study applied the 2012 statistics because, during the data collection assignment, the 2022 statistics were not yet published.

Figure 1: Location of the study area.

The study adopted a mixed research approach. A cross-sectional survey design was applied to collect information in six wards around GGML. Data collection is conducted by using different methods to triangulate the collected information (Creswell, 2014). These methods were household surveys, key informant interviews, focus group discussions, and documentary reviews. The study used a sample of 384 respondents including households, government officials at village, ward and district levels, religious leaders, GGML officials and councillors. The sample size was determined based on the formula developed by Cochran (1963) for a large population (ten thousand and above).

\[
\eta_0 = \frac{Z^2pq}{e^2}
\]

In which, \(n\) is the sample size, \(Z\) is the standard normal deviation, set at 1.96 which is equal to the desired confidence level of 95%, \(p\) is the estimated proportion of an attribute that is present in the population, \(q\) is 1-\(p\). The values for \(Z\) are found in the table of statistics which contains the normal curve and \(e\) is the desired level of precision which is set at 0.05.
Therefore, the sample size for this study was obtained as follows:

Where \(n = \) sample contribution/proportion; \(N = \) sample size; \(P = \) proportional in the target population with particular characteristics, if not known then 50% (0.5) is used; \(Z =\) standard normal deviate at 95% confidence level (1.96), and \(e\) is the marginal of error (precision)

\[
1.96^2 \times 0.50 \times (1 - 0.5) \\
0.05^2 
= \frac{384}{384} 
\]
Qualitative data were analysed using content analysis and quantitative data from households were analysed using SPSS descriptive statistics.

**RESULTS AND DISCUSSION**

**Socio-economic characteristics of the respondents**

The socio-economic characteristics of the study area are presented in Table 1.

<table>
<thead>
<tr>
<th>Name of Ward</th>
<th>Nyankumba</th>
<th>Kalangala</th>
<th>Mtakula</th>
<th>Mgusu</th>
<th>Bugula</th>
<th>Nyamwilolo</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>48</td>
<td>60</td>
<td>34</td>
<td>14</td>
<td>47</td>
<td>39</td>
<td>242</td>
<td>63</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>46</td>
<td>17</td>
<td>10</td>
<td>29</td>
<td>29</td>
<td>142</td>
<td>37</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>59</td>
<td>106</td>
<td>51</td>
<td>24</td>
<td>76</td>
<td>68</td>
<td>384</td>
<td>100</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td>15</td>
<td>21</td>
<td>10</td>
<td>6</td>
<td>27</td>
<td>14</td>
<td>93</td>
<td>24.22</td>
</tr>
<tr>
<td>35-44</td>
<td>19</td>
<td>37</td>
<td>8</td>
<td>7</td>
<td>15</td>
<td>19</td>
<td>105</td>
<td>27.34</td>
</tr>
<tr>
<td>45-54</td>
<td>12</td>
<td>24</td>
<td>18</td>
<td>7</td>
<td>19</td>
<td>16</td>
<td>96</td>
<td>25.00</td>
</tr>
<tr>
<td>54+</td>
<td>13</td>
<td>24</td>
<td>15</td>
<td>4</td>
<td>15</td>
<td>19</td>
<td>90</td>
<td>23.44</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>59</td>
<td>106</td>
<td>51</td>
<td>24</td>
<td>76</td>
<td>68</td>
<td>384</td>
<td>100</td>
</tr>
<tr>
<td><strong>Level of Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informal</td>
<td>5</td>
<td>20</td>
<td>7</td>
<td>2</td>
<td>6</td>
<td>15</td>
<td>55</td>
<td>14</td>
</tr>
<tr>
<td>Primary</td>
<td>32</td>
<td>42</td>
<td>34</td>
<td>18</td>
<td>41</td>
<td>24</td>
<td>191</td>
<td>50</td>
</tr>
<tr>
<td>Secondary</td>
<td>13</td>
<td>23</td>
<td>7</td>
<td>4</td>
<td>17</td>
<td>19</td>
<td>83</td>
<td>22</td>
</tr>
<tr>
<td>Tertiary</td>
<td>9</td>
<td>21</td>
<td>3</td>
<td>0</td>
<td>12</td>
<td>10</td>
<td>55</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>59</td>
<td>106</td>
<td>51</td>
<td>24</td>
<td>76</td>
<td>68</td>
<td>384</td>
<td>100</td>
</tr>
<tr>
<td><strong>Years Stayed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;9</td>
<td>9</td>
<td>19</td>
<td>9</td>
<td>2</td>
<td>7</td>
<td>17</td>
<td>63</td>
<td>16</td>
</tr>
<tr>
<td>10-12</td>
<td>15</td>
<td>20</td>
<td>8</td>
<td>14</td>
<td>23</td>
<td>11</td>
<td>91</td>
<td>24</td>
</tr>
<tr>
<td>13-15</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>13</td>
<td>39</td>
<td>10</td>
</tr>
<tr>
<td>15+</td>
<td>30</td>
<td>59</td>
<td>32</td>
<td>4</td>
<td>39</td>
<td>27</td>
<td>191</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>59</td>
<td>106</td>
<td>51</td>
<td>24</td>
<td>76</td>
<td>68</td>
<td>384</td>
<td>100</td>
</tr>
<tr>
<td><strong>Economic Activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>30</td>
<td>54</td>
<td>31</td>
<td>10</td>
<td>36</td>
<td>39</td>
<td>200</td>
<td>52</td>
</tr>
<tr>
<td>Mining</td>
<td>5</td>
<td>27</td>
<td>16</td>
<td>11</td>
<td>22</td>
<td>30</td>
<td>111</td>
<td>29</td>
</tr>
<tr>
<td>Civil workers</td>
<td>8</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>10</td>
<td>9</td>
<td>38</td>
<td>10</td>
</tr>
<tr>
<td>Business</td>
<td>9</td>
<td>8</td>
<td>1</td>
<td>3</td>
<td>9</td>
<td>5</td>
<td>35</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>52</td>
<td>96</td>
<td>51</td>
<td>25</td>
<td>77</td>
<td>83</td>
<td>384</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1 indicates that among 384 respondents who participated in the study, 142 (37%) were female and 242 (63%) were male. The table also indicates that the majority of respondents...
were in the age group 35-44 years (27%) followed by 45-54 (25%), 18-34 (24%) and lastly age group above 54 years (23%). These results indicate that the majority of respondents who participated in the study were in the productive age groups. The study targeted these age groups because they had experience with the impacts of mining activities on social, economic and environmental issues.

Moreover, the table shows that as per level of education 191 (50%) respondents had primary education followed by 83 (22%) with secondary education. The table also indicates that 55 (14%) of respondents had received tertiary education and lastly, 55 (14%) respondents had informal education. The results are indicative that the majority of respondents had primary education which limits them to be employed in jobs that require academic credentials.

As per participants’ main economic activities, the results show that the main economic activities are mining, farming, small business and civil workers. The results indicate that the majority of respondents engage in farming followed by petty business. The results also indicate that farming and petty businesses are the main economic activities of the communities that participated in the study. Small-scale farming seemed to be the most preferred economic activity by respondents. Observation from field survey indicated that the small farmers engaged in production of maize, cotton, sweet potatoes and vegetables.

The trend of revenue collections from the mining sector in Geita District before and after 2017

This objective intended to assess the contribution of 2017 mining legislation on local revenue collection from the mining sector. The data to address this objective were collected from the Tanzania Mining Commission. Figure 2 presents the revenue collection in Geita district including revenue from GGML, medium and small-scale miners.

![Figure 2 Revenue Collection from Mining 2013/14 – 2020/21 in Geita District.](image)

The results in Figure 2 indicate that for the period of four years after the enactment of mining laws in 2017/18 to 2020/21, a total of TZS 663.66 billion was collected as compared to TZS
196.32 billion that was collected for four years before enactment of mining laws of 2017. Moreover, the figure indicates that in the financial year 2016/17, one year before the enactment of the mining law, the revenue collection was 56.89 billion (54 billion from GGML and 2.89 billion from medium and small-scale miners) and in the 2017/18 financial year it rose to TZS 114.74 billion (109 billion from GGML and 5.74 billion from medium and small-scale miners) an increase of 102%.

Results from the figure also indicate that in the financial year 2018/19, the revenue reached TZS 128.98 billion (110 billion and 18.98 from others) an increase of 12% compared to that of the previous year. In the financial year 2019/20, the revenue increased by 61% (TZS 207.7 billion). This year 168 billion were collected from GGML while 39.7 billion were collected from medium and small-scale miners. All these aspects were introduced by mining legislation in 2017. For the financial year 2020/21, the revenue collection was 212.24 (an increase of 2%). Findings from the study indicated that the increase in revenue was attributed to the implementation of 2017 mining reforms. An interview with government officials from both TRA and Tanzania Mining Commission revealed this increase was due to the effective implementation of regulated tax payments such as royalties, corporate tax, employment tax and customs duties as per mining legislation of 2017. A finding from another interview with the Acting District Executive Director in Geita District Council also confirmed that the revenue has increased as compared with previous years.

“In recent years, we have observed an increase in revenue collection from GGML. Actually, without any doubt, we can say that GGML for us is like a development partner. Even transparency has increased compared with previous years”. (Acting District Executive Director, April, 2022).

In addition, findings from these key informants showed that this increase in revenue was due to improved mining conditions for artisanal miners, the creation of gold trading, effective supervision of mining activities including stopping the smuggling of minerals and collection of previous years’ taxes from mining companies. In support of this trend Poncian (2021) and Mushokolwa (2021), noted that among other things, the mining laws of 2017 have been instrumental in reducing tax to small miners as one way of controlling smuggling, making artisanal miners be recognized in mineral markets, reducing operation costs to artisanal miners and increasing mining revenue. According to Poncian (2021), small-scale mining has created more employment opportunities but also it has created linkages with the local economy. Likewise, Huggins and Kinyondo (2019) also noted that measures addressed in support of small and medium miners such as technical capacity issues have helped to increase revenues. In their findings, Kinyondo and Huggins (2019) further noted that the increase in mining revenue was also due to an increase in transparency that reduced cheating in reporting revenue from mining activities. Furthermore, findings from the other study by Rhee et al., (2018) revealed that the reforms introduced in the mining sector helped to increase revenue at both local and national levels. Therefore, it can be concluded that the changes introduced in 2017 were successful in bringing profits to Tanzania's national budget that can be used to improve the livelihood of the community within the country.
In another study, Mushokolwa (2019) also indicated that the increase in revenues was due to improved institutional capacities dealing with mining sectors such as Mining Commission and Zone Mines Offices. The study further shows that this increase was a result of the establishment of gold markets as well as the establishment of Resident Mining offices at mining premises thus improving supervision of tax and levies. The availability of these officials at the mining sites ensured openness and, thus, reduced the possibility of cheating in values declaration and profits.

CONCLUSION
Findings from the study revealed that the 2017 legislation has brought a significant impact on improving revenue collection from the mining sector at both local and national levels. Findings from the study showed good progress in revenue collection as well as the creation of job opportunities for individuals. The findings indicated that the revenue collection increased from 57 billion in 2016/17 to 212 billion in 2020/21. Moreover, the data show for the period of four years after the enactment of mining laws in 2017/18 to 2020/21, a total of TZS 663.66 billion was collected as compared to TZS 196.32 billion that was collected for four years before the enactment of mining laws of 2017 at Geita District. Likewise, at the national level, the statistics indicate that the revenue increased from 681 billion in 2016 to 1,482 billion in 2021. Thus, the study recommends improving in mining sector to sustain the increase in revenue collection.

Investigating the implications of revenue collection reforms in the gold mining sector in Tanzania is a complex and multifaceted endeavour. Tanzania is one of the countries with significant gold reserves and a growing gold mining industry. Revenue collection reforms in this context can have various implications:

One of the primary expected outcomes of revenue collection reforms is the increase in government revenue. This can come from improved tax collection, higher royalties, and more transparent revenue-sharing arrangements with mining companies.

Reforms may lead to greater transparency in revenue reporting and auditing. This can reduce the risk of revenue leakage and ensure that the government receives its fair share of revenue from gold mining activities. Effective reforms can strengthen governance in the gold mining sector. This includes better regulation, monitoring, and enforcement of environmental and social standards, reducing the risk of negative impacts from mining activities. Revenue collection reforms may help combat illicit activities such as smuggling and illegal mining. By formalizing revenue collection processes, it becomes harder for illegal actors to evade taxes and royalties. Well-designed reforms can lead to increased revenue-sharing with local communities. This can fund development projects, improve infrastructure, and enhance the overall well-being of communities affected by mining operations.

Increased government revenue from gold mining can support economic diversification efforts. Funds can be directed towards other sectors such as education, healthcare, and infrastructure development. Transparent and fair revenue collection practices can boost investor confidence in Tanzania's gold mining industry. This can attract more investment, leading to increased production and economic growth. Revenue collection reforms may
include environmental levies or fees aimed at mitigating the environmental impact of mining. These funds can support environmental protection efforts. Reforms may require mining companies to engage more proactively with local communities and undertake social responsibility initiatives. This can improve the social license to operate for mining companies. With improved data collection and reporting, government authorities can make more informed decisions about resource management and revenue allocation.

Effective revenue collection may require capacity building within government agencies responsible for oversight and regulation of the gold mining sector. Revenue collection reforms may encourage mining companies to adopt more sustainable and responsible mining practices, reducing environmental and social risks. Tanzania's reputation in the global mining industry can benefit from transparent and ethical revenue collection practices, attracting responsible mining companies and ethical supply chain partners. Ethical and responsible mining practices can enhance market access for Tanzanian gold on the global market, potentially leading to better prices and export opportunities.

It is essential to conduct a comprehensive study to assess the specific implications of revenue collection reforms in Tanzania’s gold mining sector. Such a study would involve data collection, stakeholder consultations, and rigorous analysis to provide a nuanced understanding of the effects of these reforms on government revenue, mining companies, local communities, and the broader Tanzanian economy.

REFERENCES


Maliganya, W., & Paul, R. (2016). The impact of large-scale mining on the livelihoods of adjacent communities: The case of geita gold mine, Tanzania


