Natural Resource Charter Case Study

Natural Resource Governance Institute

Improving Mining Revenue Collection: Tanzania's Mineral Audit Agency

Alexandra Readhead

SUMMARY

Challenge	Improving mining revenue collection by effectively monitoring the grade and quality of mineral exports and mining expenditure. (Precept 4 of the Natural Resource Charter)
Country and period of focus	Tanzania, 2009–2016
Objective in country	Increase collection of mining revenues
Core decisions	Whether monitoring and audit of mining companies should be done by the ministry of mines, contracted to a private firm, or assigned to an autonomous government agency
Implications of decisions	Inadequate monitoring of mineral export values and cost deductions contributed to low revenue collection from the mining sector.
Policy decisions, implementation and governance	A semi-autonomous specialized agency, the Tanzania Mineral Audit Agency (TMAA) was established in 2009. TMAA reports to the permanent secretary of the Ministry of Energy and Minerals (MEM).
Did it work?	TMAA monitors the quality and quantity of minerals that mining companies produce and export, and conducts financial audits.
Quantified gains	As a result of TMAA's efforts, at least USD64.8 million in additional corporate income tax has been collected since 2009, accounting for roughly seven percent of mining tax receipts between 2009 and 2015. This amount only includes tax adjustments relating to hedging arrangements and the consolidation of income for tax purposes. The total amount of additional tax revenue attributable to TMAA is likely to be higher.
Lessons learned	A semi-autonomous mineral audit agency equipped with specialized staff and laboratory facilities can significantly improve tax and non-tax revenue collection in the mining sector. Laboratory facilities are critical to independent mineral valuation to prevent under-invoicing of sales. Industry expertise can assist tax officials in identifying and evaluating tax issues in the context of mining. Where a mineral audit agency is empowered to conduct financial audits of mining companies, it is essential that its role and responsibilities vis à vis the tax authority are clearly delineated, and that there are strong inter-agency mechanisms to ensure exchange of information and expertise and limit duplication.

ABOUT THE SERIES

This is one of a series of case studies that illustrates the principles of the Natural Resource Charter. The charter is a tool used by governments and societies seeking to better harness the opportunities created by extractive resources.

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THE CHALLENGE

In the late 1990s, the mining sector in Tanzania began to boom because of a slew of reforms, including the Mineral Code of 1998, aimed at attracting both local and foreign investors. In that year alone, Tanzania attracted USD 58 million in mining exploration, more than any other African country. Despite this success, the ministry of finance and the Tanzania Revenue Authority (TRA) grew concerned that revenues from the sector fell short of the financial returns that companies were enjoying.

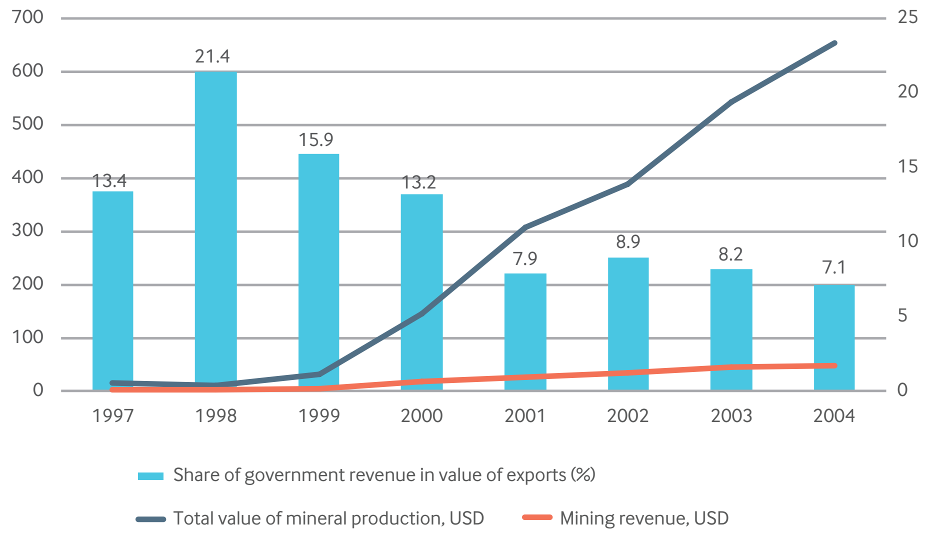

Figure 1. Mining export value and contribution to government revenues

Source: International Centre for Minerals and Metals (ICMM) Tanzania Country Case Study (2007), pg.32 (mining revenue) and pg.27 (value of mineral production)

TRA believed that poor monitoring of the sector led to the gap between mining proceeds and revenue. Reports from the Tanzania Public Accounts Committee to parliament in February 2007 made these concerns public, by revealing that mining companies had declared $1 billion in losses because of generous capital expenditure allowances and weak documentation by MEM and Curtis and Lissu's 2008 report.[1]

The Ministry of Finance tried to improve oversight of the sector by contracting a private firm, Alex Stewart Assayers, to audit four large gold mines. However, this arrangement quickly became untenable. The firm charged 1.9 percent of the market value of exported gold, equivalent to 64 percent of royalties payable to MEM. For 2003 alone, the firm charged Tanzania more than $10 million.[2] The contract was terminated in 2007 and two former government ministers were later convicted over corruption charges related to awarding the gold audit tender to Alex Stewart Assayers.[3] The Ministry of Finance then asked MEM to monitor the sector, through a dedicated gold audit program. However, MEM's pay was too low to attract staff with the required skills.

THE RESPONSE

The government established the Tanzania Mineral Audit Agency (TMAA) in November 2009. TMAA is a semi-autonomous government institution that exists to audit the quality and quantity of minerals produced and exported by mining companies, conduct financial and environmental audits, and monitor smuggling of minerals. MEM expanded TMAA's monitoring activities beyond those previously

1 Mark Curtis and Tundu Lissu, "A Golden Opportunity? How Tanzania is Failing to Benefit from Gold Mining," (2008): 8.
2 Catherine Macdonald and Alan Roe," Tanzania Country Case Study," ICMM (2007): 74.
3 Fumbuka Ng'wanakilala, "Tanzania jails former finance, mining ministers over gold deal ", Reuters, 6th July, 2015, last accessed at 7th Feb, 2017.

undertaken by the gold audit program, to include medium- and small-sized companies, as well as all mineral types, in addition to large-scale gold mines. TMAA reports to the permanent secretary of MEM.

TMAA's contribution to mining revenue collection

TMAA has a number of functions, but the two that relate most directly to revenue collection are mineral testing and financial audits.

TMAA monitors the quantity and quality of all mineral exports of large- and medium-sized mining companies. TMAA staff is stationed at every large-scale mine in the country to observe production and export. Their role involves weighing, documenting and sampling minerals before export. Samples are tested by TMAA's internationally accredited mineral laboratory in Dar es Salaam. TMAA's services include fire assay, X-ray fluorescence analysis, atomic absorption analysis and valuation of gemstone, diamonds and colored stones.[4] Based on its findings, TMAA issues mining companies with a provisional royalty payable to MEM before exports leave the country. Although gold has traditionally dominated the sector, TMAA also monitors copper, silver, sulfur, iron ore, diamonds, and tanzanite. According to TMAA, being able to detect undervaluation of mineral exports has increased voluntary compliance by companies, significantly limiting under-invoicing.

TMAA's financial auditing and analysis department also audits revenue, capital investment and operating expenditure of large- and medium-scale mines. In 2015, TMAA carried out 16 audits: three large-scale mines, and 13 medium-scale mines. TMAA selects companies for audit based on a number of risk areas including exploration and development costs, expenditure on assets, operating expenditure, related party transactions and royalties. While TMAA identifies and documents tax-related audit observations to inform TRA's subsequent audits, it does not have the power to issue tax assessments. Once an audit is complete, the findings are shared with TRA and presented to the ministerial advisory board in a quarterly report. TMAA auditors mostly focus on transactions between companies which are related, as opposed to independent, because related party transactions do not take place in an open market and may be used to avoid tax (for more information see NRGI's transfer pricing primer). The Organization for Economic Co-operation and Development and the former International Mining for Development Centre have trained TMAA staff on transfer pricing, which means they can identify and flag transfer pricing issues for TRA's attention. Should companies fail to comply with TMAA financial audits, TMAA may advise the commissioner for minerals to withhold export permits.

Enabling TMAA

Staffing. TMAA has 114 staff members, including both specialized and support staff. Specialized staff includes 13 financial analysts and tax experts, seven environmental scientists, 11 IT/computer analysts, 41 engineers and mineral process technicians, three gemologists, and one economist. TMAA staff salaries, as is the case for all executive agencies, are slightly higher than those of public servants.

Budget. TMAA's annual budget is approximately $4.8 million, it is funded by the state budget. Between 2012–2014, TMAA received additional funding from the Canadian International Development Agency (CIDA). TMAA does not collect any revenue; all the revenue streams it audits (royalties, mineral rights, annual rent,

4 A full list of TMAA's lab services can be found at http://www.tmaa.go.tz/services/category/laboratory-services.

local service levy, payments to the empowerment fund and taxes) are collected by TRA, MEM and local authorities. TMAA requires more funding to fully cover medium- and small-size mines, and to pay for additional staff training and development.

Access to information: TMAA has subscriptions to the London Metal Exchange (LME) and the London Bullion Market Association (LBMA). TMAA does not have access to a database to benchmark cost deductions. When auditors need to assess particularly expensive mining equipment they often have to search for the brand on the Internet to crosscheck prices against common mining equipment.

THE OUTCOME

Corporate income tax from the mining sector has increased dramatically since TMAA's establishment. From 2008 to 2009, TRA collected $1,251,984. By 2013–14, revenue collection increased to $296 million.

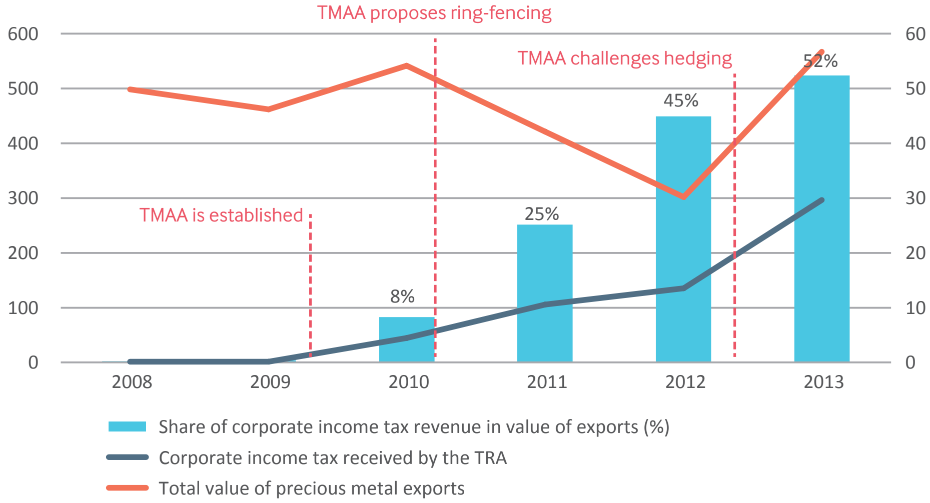

Figure 2. Mineral export value and corporate income tax

Source: UN Comtrade precious metals export data from Tanzania to the rest of the world, 2003–2013, and Tanzania Extractive Industries Transparency Initiative (TEITI) data

It is difficult to isolate TMAA's impact on the increase in tax revenue collection. Its launch coincided with a large increase in mining activity and a period of higher prices. Between 2009–2015, the price of gold increased, on average, by $38 per ton per year (source: LME/LBMA official gold prices). Many companies paid back their investments and started to make profits. Other institutions could also have contributed to better revenue collection, such as a specialized extractive industries audit team established at TRA in 2012.

Experts in Tanzania indicate that TMAA's positive impact on mining revenue collection is clearest in three areas: hedging income, ring-fencing and transfer pricing. (For more information on these terms see NRGI's transfer pricing primer.)

In 2012–13, in the course of a financial audit of one entity's financial and tax records, TMAA found that the sales revenue verified by its mineral auditors was significantly higher than the sales revenue declared in the company's financial statement and tax returns. TMAA alerted TRA, which adjusted the company's taxable income upwards by $86 million and its income tax by $25.8 million. Since then, TMAA has challenged all hedging, stipulating that companies must sell mineral exports at the arm's length price and that any special arrangements that deviate from market prices must first be approved by the ministry of finance.

In 2013, TMAA identified a mining company that was merging income from two projects at different development levels, each with a separate mining development agreement (MDA). The audit covered the financial years between 2007 and 2011. TMAA observed that each MDA had a different fiscal regime. It inferred from this that the income of each project had to be assessed separately. As a result, the company agreed to separate its tax affairs, a step that included an income tax adjustment, and ultimately paid $39 million after deduction of value added tax credits. The entity was subsequently instructed to apply the ring-fencing provisions specified in the Finance Act of 2010.[5]

More recently, TMAA identified a transfer pricing issue involving a mining company selling tanzanite at low prices to a related marketing entity in Mauritius, which then on-sold the gems to India and Hong Kong for a higher price. The mine in Tanzania declared a sales revenue half of that declared by the marketing hub in Mauritius. TMAA has found it particularly difficult to determine the arm's length sale price for tanzanite due to the lack of reference prices. Following an analysis of the marketing hubs functions, assets, and risks, TMAA's financial auditors, with the assistance of a gemologist, made a presentation to TRA regarding a proposed revenue adjustment and the basis thereof. TRA verified the issue, checked with the taxpayer and issued an assessment.

Keeping up with evolving industry practice is a challenge for TMAA. Mining industry practices change quickly, and TMAA struggles to provide ongoing training to staff so that they can progress "hand-in-hand" with industry developments. For example, in mineral accounting, estimating how much of the mineral product is going to be recovered during processing requires particular skills. Additional expertise on gemology valuation is also needed. Relevant training opportunities are available but TMAA lacks the finances to send its staff.

Mining companies have different opinions on the role of TMAA and TRA. TMAA has no formal power of assessment and can only prepare reports for TRA, so some companies feel they are wasting their time by responding to TMAA's inquiries. TMAA has significant mining experience but it has less expertise and resources than TRA in tax matters. According to one company representative, TRA can ensure effective tax revenue collection without a duplicate agency. However, one company suggested that TMAA conducting audits ahead of TRA may actually help companies, alerting them to contentious issues and enabling them to make adjustments before TRA steps in to issue penalties. This same company confirmed that TMAA is trying to focus on mining-specific tax issues, leaving cross-cutting tax issues to TRA, thereby reducing the potential for overlap. Finally, companies appreciate TMAA bringing industry expertise to bear on tax issues; many confirmed that TMAA was the first agency to question hedging arrangements.

TMAA and TRA signed a memorandum of understanding (MoU) in 2010. The MoU clarifies both institutions' roles and responsibilities. In particular, it emphasizes TRA's primacy with respect to assessment and collection of mining tax revenues. As a result of the MoU, the two agencies meet quarterly to discuss challenges within the sector, share findings, give feedback, and develop a common understanding of industry performance in terms of taxation. TMAA and TRA have already conducted one joint audit of a medium-scale mine, and are planning another joint audit, this time a large-scale mine. The MoU has since been amended to reflect this collaboration, formally incorporating the possibility of conducting joint audits.

5 Ring-fencing can broadly be defined as a "limitation on consolidation of income and deductions for tax purposes across different activities, or different projects, undertaken by the same taxpayer."

There is still room for improving coordination between TMAA and TRA. Currently, information is only available on request from either agency. A solution would be to establish an online platform that automatically pools production information, findings from cost audits, mining agreements, financial statements, and tax data (where appropriate). This would strengthen information exchange between TMAA and TRA, and reduce the possibility of companies being asked for information twice. It would also help provide industry "know-how" to TRA.

LESSONS LEARNED

Monitoring the value of mineral exports, and company expenditure, is important to prevent companies from under-invoicing sales and overstating deductions to reduce taxable income. This is particularly important for developing countries that have small revenue bases and are highly dependent on corporate income tax from the mining sector.

In deciding whether to establish an independent mineral audit agency, governments should consider the following:

- **Having access to the facilities and technical expertise necessary to value mineral.** This is critical to improving mining revenue collection. Otherwise it is impossible to verify the grade and quality reported by mining companies, and thus protect against the risk of under-invoicing, particularly in the case of related party mineral sales.
- **Offering a mineral testing service.** The government may be able to do so more cost-efficiently and sustainably than the private sector. TMAA has shown that it is more cost-efficient for a government to own and operate a mineral laboratory, than to outsource it. TMAA has also proven that it is feasible to build local skills and expertise to facilitate mining audits.
- **Establishing a dedicated institution with a specific mineral audit mandate.** It is unlikely that tax authorities will have the appropriate skills, or time, to inspect, audit and review all mining companies' operations over the typically long life of projects. A specialized mineral audit agency can devote its resources to monitoring the sector. TMAA's knowledge of the industry meant it was able to spot both the hedging and ring-fencing issues. TMAA monitors mining projects from start to finish, meaning it can identify and investigate irregularities early on, for example inflated exploration and pre-production costs, which may affect tax payments later on.
- **Delineating clearly roles and responsibilities, and establishing strong inter-agency coordination mechanisms.** TMAA and TRA have signed an MoU that sets out their respective responsibilities and how they intend to work together.

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