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Madini Project: Comparative analysis of the fiscal regimes & implications for mineral trade of ASM 3TGs in Rwanda, Uganda, Burundi and the DRC

FOR THE ATTENTION OF:

Madini Project Consortium (International Alert, Eurac and International Peace Information Service, OGP and Justice Plus)

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Comparative analysis of the fiscal regimes & implications for mineral trade of ASM 3TGs in Rwanda, Uganda, Burundi and the DRC.

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Authors: This report was written by Olivia Lyster and Ashley Smith-Roberts with contributions from Stephen Turyahikayo, Daniel Ngendakuriyo, and Madini project consortium members: International Alert, International Peace Information Service, Eurac, OGP and Justice Plus.

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CONTENTS

1. Explaining the issues 5

Illicit trade of minerals in the Great Lakes Region 5

History of tax harmonisation discussions in the GLR 6

2. Comparing the fiscal regimes in Rwanda, Uganda , Burundi and DRC 8

2.1. Rwanda 8

Mineral fiscal regime 9

Incentives and disincentives for formal trade 11

2.2. Uganda 13

Mineral Fiscal Regime 13

Incentives and disincentives for formal trade 16

2.3. Burundi 18

Mineral fiscal regime 18

Incentives and disincentives for formal trade 20

2.4. DRC 20

Mineral fiscal regime 21

Incentives and disincentives for formal trade 25

2.5. Comparative Analysis 27

Amount of tax levied 28

Institutions that levy tax 30

Recommendations 33

ACRONYMS

3Ts	Tin, tungsten and tantalum
3TGs	Tin, tungsten, tantalum and gold
AGR	African Gold Refinery
ASGM	Artisanal and small-scale gold mining
ASM	Artisanal and small-scale mining
BIF	Burundian Franc
BRB	Burundi Central Bank
CEEC	Centre d'Expertise, d'Evaluation, et de Certification des Substances Minerales Precieuses et Semi-precieuses
CIT	Corporate Income Tax
DGI	DRC General Tax Directorate
DGSM	Directorate of Geological Survey and Mines, Uganda
DRC	Democratic Republic of the Congo
EITI	Extractive Industry Transparency Initiative
EAC	East African Community
ETDs	Decentralized Territorial Entities
GLR	Great Lakes Region
ICGLR	International Conference on the Great Lakes Region
LSM	Large-scale mining
NISR	National Institute of Statistics of Rwanda
OBM	Burundi Office of Mines and Quarries
OBPE	Burundi Office for the Protection of the Environment
OBR	Burundi Revenue Authority
O/SESG-GL	Office of the Special Envoy of the United Nations Secretary-General for the Great Lakes
PAYE	Pay as You Earn
RDB	Rwanda Development Board
RMB	Rwanda Mines Petroleum and Gas Board (RMB)
RRA	Rwanda Revenue Authority
RWF	Rwandan Franc
RCM	Regional Certification Mechanism
SADC	Southern African Development Community
SAEMAPE	Service d'Assistance et d'Encadrement de l'Exploitation Minière Artisanale et a Petite-échelle
UAE	United Arab Emirates
UN GoE	United Nations Group of Experts
URA	Uganda Revenue Authority
USGS	United States Geological Survey
VAT	Value Added Tax
ZEAs	Zone d'exploitation artisanale (Artisanal mining zones)

1. EXPLAINING THE ISSUES

This briefing paper looks at the relationship between mineral fiscal regimes and the smuggling of minerals in the Great Lakes Region (GLR), both within and between countries. It presents an overview and comparative analysis of the fiscal regimes applicable to the artisanal and small-scale (ASM) production of tin, tungsten, tantalum and gold (3TGs) in Uganda, Rwanda, Burundi and the DRC, looking at the principal ways in which the legal and regulatory frameworks of these countries provide incentives and disincentives for the formal production and trade of 3TGs in the region.

Currently, illicit smuggling of minerals is costing the government of the DRC a conservative estimate of $22 million USD per year (See Section 2.4), thereby staunching development and contributing to the destabilization of the national economy. Recognising both that i) fiscal harmonisation has long been heralded as a key strategy to disincentivize mineral smuggling and increase transparency in the GLR, and ii) fiscal regimes likely constitute only one of many factors that incentivise and disincentivise formal trade, the recommendations put forward in this paper are targeted towards facilitating tax compliance for actors who would like to operate formally but for whom the fiscal (financial or logistical) burden is too great. To this end, the study presents recommendations to the Madini project along the following lines: i) a more in-depth understanding of the fiscal environment in the DRC, to build on and complement the findings in this study and provide a further foundation for advocacy on the issue, ii) advocating for a simpler, more harmonised tax regime in the DRC drawing on lessons learnt from neighbouring countries that can promote tax compliance and formalisation in the ASM sector whilst simultaneously boosting government revenues, and iii) advocating for fiscal reform in the GLR more widely, including advocating to the ICGLR to support reforms.

ILLICIT TRADE OF MINERALS IN THE GREAT LAKES REGION

The illicit trade of minerals is one of the key challenges faced by the minerals sector – in particular the ASM sector – in the GLR today. It occurs in a variety of forms: in-country smuggling, where minerals are traded from mine site to point of export without being officially declared to the state, thereby avoiding fiscal and tax costs; and inter-country, or cross-border smuggling, where minerals produced in one country are smuggled across borders to neighbouring countries, where they are often wrongly declared as originating from that neighbouring country and formally exported from there. Both cases can constitute significant tax and fiscal losses to the mineral-producer state.

In the GLR, important quantities of smuggled minerals originate from the DRC. Of the artisanal gold that leaves the DRC undeclared, for example, it is thought that the vast majority is smuggled across the border to neighbouring countries such as Uganda, Rwanda, Burundi and Tanzania, and onto major international gold trading hubs, in particular the United Arab Emirates (UAE). This trade takes place through a complex web of relationships among actors in the DRC and in the wider region. Whilst minerals are also smuggled across other borders—Burundi to Rwanda and Tanzania, for example—this occurs on a much smaller scale. Congolese mineral smuggling is also closely associated with other mineral supply chain challenges such as conflict financing and the involvement of international organised crime groups and illicit actors, who maintain a sustained fiscal interest in the illicit flows of smuggled minerals. Accordingly, the issue of Congolese mineral smuggling is intricately linked to peace and stability efforts in the DRC.

Before the passing of the US Dodd-Frank Act in 2010, tin was considered the largest economic contributor to conflict-financing in the DRC. In 2008, it contributed as much as $115 million USD to armed groups (The Enough Project, 2008). Congolese coltan (tantalum) did not provide as much value to armed groups (an estimated $12 million USD in 2008), but it was of greater criticality to world production, at around 15-20% of the global market share (The Enough Project, 2008, 2009). Tungsten production contributed an estimated $7.4 million USD to armed actors that same year in DRC (The Enough Project, 2008).

Today, post-Dodd-Frank, the situation is markedly different. IPIS researchers have found no armed actors present during almost 80% of tin, tungsten and tantalum (3Ts) sites visited in the DRC between 2015 and 2020 (659 out of 831) (IPIS, 2020). Similarly, ITSCI, which monitors over 1,200 sites across eastern DRC and covers approximately 95% of 3Ts ASM exports originating from the GLR, reports that very few challenges remain in terms of ensuring supply chain integrity. Moreover, global import and export data discrepancies that existed for tin and tantalum before the enforcement of the Dodd-Frank Act have been replaced by more consistent data, correlating with the development of due diligence efforts over this time. The same period has seen an increase in the DRC being reported as the official country of origin for tantalum imports, suggesting that a greater proportion of tantalum ore that may previously have been smuggled from neighbouring countries is now being declared, correctly, as Congolese (Schütte, 2019).

Nonetheless, challenges remain in terms of the illicit trade and taxation of 3Ts, particularly within the DRC. Firstly, whilst the interference of armed groups in 3Ts supply chains has reduced, it has not been eliminated. The presence of armed groups at mine sites has occurred in some areas with particularly significant activity, but they have also been documented in areas where due diligence programmes are in place (IPIS and Ulula, 2019). Roadblocks remain an important source of informal mineral taxation by both state and non-state armed actors, whereby these groups secure a significant source of revenue (IPIS, 2017). Secondly, recent UN Group of Experts reports continue to report i) the contamination of ITSCI supply chains by illegally produced minerals and ii) the smuggling of 3Ts from industrial concessions, either directly across borders or by being "laundered" through nearby sites covered by due diligence and traceability systems (Zounmenou *et al.*, 2020a).

Gold smuggling, on the other hand, still presents an important risk in the region and is responsible for significant losses to government revenues, mostly in the DRC but also in other jurisdictions. Artisanally produced gold in eastern DRC is likely the mineral most utilized to finance armed groups and illicit networks in the region, and most observers confirm many ASM miners and other actors have migrated from the 3Ts to ASM gold. In 2013, it was estimated that up to 98% of ASM gold produced in eastern DRC left the country undeclared (Nelson Alusala *et al.*, 2014, para 171). This paper estimates that this figure may now be as high as 99.5%, although robust data on ASM gold production and trade is scarce, meaning that estimates are rough. Official ASGM exports from the DRC remain negligible, averaging at around 200kg per year (in 2018 they were as low as 56kg) (IMPACT, 2020). Thus, the informal trade of gold results in a significant loss of earnings for the DRC authorities. In 2018, assuming a conservative estimate of 15 tonnes of artisanal gold production, the DRC government would have missed out on $10.82 million dollars in export tax alone (IMPACT, 2020). 2020 figures put the estimated loss as high as $22 million USD[1].

HISTORY OF TAX HARMONISATION DISCUSSIONS IN THE GLR

It was against the backdrop of significant 3TGs smuggling that the conversation on fiscal harmonisation in the GLR arose. Tax harmonisation was touted as a solution to cross-border smuggling at the introduction of the Lusaka Declaration of the ICGLR Special Summit to Fight Illegal Exploitation of Natural Resources in the Great Lakes Region ("Lusaka Declaration"), affirmed by all member states of the ICGLR on 15 December 2010 (ICGLR, 2010).The Lusaka Declaration called for harmonisation of national legislation between member states as the second of six tools developed to curb the illegal exploitation of natural resources (ICGLR, 2010).The other tools included: 1) the Regional Certification Mechanism; 3) a regional database on mineral flows; 4) formalization of the artisanal mining sector; 5) promotion of the Extractive Industry Transparency Initiative (EITI); and 6) a regional whistle-blowing mechanism (ICGLR, 2010). The Declaration called for the support of the international community at large to assist in strengthening the ICGLR regional initiative and supporting such efforts for fiscal harmonisation (ICGLR, 2010).

[1] Present study's calculations (see Section 2.4 for more info)

At an ICGLR-OECD-UN GoE Forum Meeting on Responsible Supply Chains held on 13 to 15 November 2013 in Kigali, there was recognition by member states of the need for greater support towards efforts to "tackle harmful tax competition, tax evasion and transfer pricing" and improve regional mining investments, including through the development of "tax and fiscal harmonisation" (OECD, 2013). Additional recommendations included the seeking out of partnerships to support harmonisation of provincial level mining sector taxes in the DRC (OECD, 2013).

After the Lusaka Declaration and the ensuing convenings, calls for fiscal harmonisation throughout the ICGLR's 3TGs sector became a focus of several NGOs, workshops, and other governmental and civil society efforts over the years. On 5 and 6 July 2017 in Nairobi, Kenya, the ICGLR and the Office of the Special Envoy of the United Nations Secretary-General for the Great Lakes (O/SESG-GL) convened, on the request of the Defence Ministers from the ICGLR and the Southern African Development Community (SADC), to develop recommendations for the ICGLR member states to harmonize tax regimes at the provincial, national, and regional levels, and in tandem, to publicly disclose production and export statistics for natural resources (Abdas, 2017). A special focus here was on statistics concerning the trade of gold (Abdas, 2017). Such recommendations were in the furtherance of the implementation of the Peace, Security and Cooperation Framework for DRC and the region (Abdas, 2017). That same year saw the ICGLR Executive Secretary and regional exporters formally recommend a renegotiation of mineral levy rates paid to mineral tracking service providers and a harmonisation of taxes across the region (ICGLR, 2017). The second edition of the Regional Certification Mechanism (RCM), published in 2019 and approved by the heads of all ICGLR member states, calls for the ICGLR Regional Committee to "[f]acilitate the discussion of Member States to harmonize tax and fee structures to help reduce the incentives for smuggling" and "[w]ork with Member States to reduce inconsistencies within the various regional Member State frameworks."

In spite of the numerous examples of public proclamation regarding regional tax harmonisation, very little progress had been made since the December 2010 signing of the Lusaka Declaration. A joint report by Sofala Partners and BetterChain published in April 2019 describes an outreach goal to support efforts to harmonize mining and mineral taxes across the Great Lakes Region. The report outlines that, although tax harmonisation has been recognized by the governments in the Great Lakes Region, they "to date have largely not implemented necessary changes." The report recognises the complicated political dynamics among GLR states, particularly DRC, Rwanda and Uganda, and that high levels of mineral sector corruption constitute "a structural problem that could only be solved via a combination of domestic business environment reform in the DRC and regional harmonisation of tariff and taxation regimes". Unfortunately, it concludes, "the political will to enact such changes is currently lacking" (Sofala and Betterchain, 2019). Despite these challenges, the issue of fiscal harmonisation continues to be an important talking point today, including at national level in the GLR. As recently as January 2021, Joseph Ikoli Yombo Yapeke, Secretary General of the DRC's Ministry of Mines, advocated for the EU to leverage its political and commercial influence to support tax harmonisation at the regional level among ICGLR member states.[2] Although politically delicate, the issue remains at the forefront of discussions on tackling mineral smuggling in the GLR. The DRC's imminent entry into the East African Community (EAC) (EAC, 2021) may prove a useful platform upon which these discussions can continue.

Against this backdrop, this paper provides some context within which further discussions can take place. This paper recognises the difficulties in achieving fiscal harmonisation in the GLR. As described above, the politically sensitive topic of fiscal harmonisation has solicited much debate and little in terms of action. Therefore, acknowledging the role that fiscal regimes can play in incentivising (or disincentivising) smuggling, this report gives an overview of the fiscal regime applicable to artisanally-produced 3TGs in Uganda, Rwanda, Burundi and

[2] This proclamation occurred during the 13 to 14 January German Federal Ministry for Economic Cooperation and Development (BMZ) and the Responsible Minerals Initiative's (RMI) multi-stakeholder conference for the implementation and impact of the EU Conflict Minerals Regulation.

DRC, with particular focus on the smuggling of Congolese minerals. By comparing the fiscal regimes of each country, this paper also highlights the discrepancies between the fiscal regimes in scope, as well as highlights how the regimes might change in order to further incentivise formal mineral trade and maximise government revenues in the region. The fiscal regimes presented and compared are applicable to both gold and 3Ts. However, given the overwhelming progress the 3Ts sector has made in reducing smuggling (and the limited progress made by the gold sector, which still contributes significantly to lost government revenues), this paper focuses mainly on the challenges posed by the informal production and trade of gold.

2. COMPARING THE FISCAL REGIMES IN RWANDA, UGANDA , BURUNDI AND DRC

This section gives an overview of the fiscal regimes for ASM 3TGs in Rwanda, Uganda, Burundi and DRC, estimated levels of compliance, and the extent to which the regimes incentivise or disincentivise formal mineral trade in the region. The analyses below are a high-level exposition of the main tenets of each fiscal regime. Given the notorious complexity of tax law, each country overview represents a simplification of each mineral fiscal regime in order to allow for meaningful comparison across jurisdictions. In this spirit, only taxes and fees that are directly payable to government entities have been included.

2.1. RWANDA

The minerals sector in Rwanda has become increasingly important to the country's development trajectory. The country's mineral production and exports have been dominated for the past century by 3Ts, gold and gemstones, with the share of mineral exports of total exports fluctuating between 20% and 40%. The sector is likely to increase in importance in coming decades. According to the National Strategy for Economic Transformation (NST1) (2017-2024) Rwanda aspires to become a middle-income country by 2035 and a high-income country by 2050 (Republic of Rwanda, 2017). An ambitious target of annual average growth of GDP 9.1% is needed to achieve such objectives. The mining sector has been chosen among other priority sectors to enable the realisation of NST1 objectives. Over past decades minerals exports have been among the country's top export commodities in terms of foreign exchange revenues. The mineral export revenues are projected to reach a target of USD $1.5 billion by 2024 from $373 million in 2017 with the share of minerals in total exports rising from 32.9% in 2017 to 49.6% in 2024 (Republic of Rwanda, 2017). In 2020 the total mineral exports stood at USD $733 million (RMB, 2021).

In order to realise the minerals sector's potential contribution to the country's economic transformation and prosperity agenda, the government of Rwanda through the Rwanda Mines Petroleum and Gas Board (RMB) reviewed the Mining Policy of 2009. The review process was completed in 2019, but the policy is still pending cabinet approval. According to the proposed Mining Policy of 2019, the vision of the Government of Rwanda is to transform the minerals sector into a vibrant, dynamic and efficient sector through promoting geological knowledge, investments in mining, value addition and linkages, and responsible mining to spur economic transformation, industrialization, growth and development. One of the key thematic areas identified as a priority for change is the fiscal regime and revenues management. The Policy mentions the challenge that the state currently does not gain optimal benefits in terms of mining sector revenues, for a variety of reasons ranging from limited capacity of government monitoring to practices such as transfer pricing and businesses selling to themselves.

Rwanda is a significant producer of ASM 3Ts, with relatively limited gold production. Since a drive towards greater formalisation of ASM in Rwanda – the 2018 Mining Code does away with the word 'artisanal' altogether, issuing only small-scale mining licenses – ASM takes place largely under the umbrella of sub-contracting agreements with mineral license holders. Sub-contractors in turn hire mine workers to work in a particular location, and these miners are recognized as employees of the sub-contractor to the mineral license holder. Regardless of whether license holders use sub-contracting arrangements, they remain liable for all license obligations such as payment of taxes, health and safety requirements, and environmental regulations. Supply

chain simplification has been promoted by the government in recent years, disincentivising middlemen traders in favour of production being sold straight to processors/exporters (The East African, 2016). As of April 2021, a total number of 35 exploration licenses, 32 small-scale mining licenses, 92 medium-scale mining licenses, 15 large-scale mining licenses, 36 mineral trading licenses and 3 mineral processing licenses have been issued by RMB and were still valid. The country has one tin smelter, known as LuNa smelter, and one gold refinery, the Aldango Gold Refinery.

In terms of international trade, Rwanda is a central transit country for 3Ts ore concentrates from its neighbours. Whilst the majority of Rwandan 3Ts exports are likely to be legitimate (either of national origins or official transit goods), shipments from Rwanda may also represent smuggled material (Schütte, 2019). In recent years, Rwanda has made concerted efforts to address mineral smuggling. This is reflected in the creation, for example, of a mineral traceability division within the RMB, and the arrests of a number of illegal traders (see e.g. Rwanda National Police, 2017, 2020, 2021). Rwanda has become an increasingly important gold exporter, with official exports growing significantly in recent years, despite minimal local production.[3] Research into gold supply chains through Rwanda suggests that there are risks of smuggling of Congolese gold into the country (see e.g. IMPACT, 2020).

MINERAL FISCAL REGIME

Rwanda hosts a streamlined and well-established fiscal regime and general operating environment. The country is ranked 38 out of 190 in the World Bank's Ease of Doing Business Rankings in 2020, including a ranking of 38/190 for ease of paying taxes and 88/190 for trading across borders. There are a number of taxes, fees and levies applicable to the ASM 3TG supply chains in Rwanda. An overview of taxes and fees applicable to mineral sector entities can be found in Table 1 below.

Table 1: Taxes and fees payable on ASM production, import and export of 3TGs in Rwanda

Specific to mining and minerals sector
Mineral royalties. The mineral royalty tax was introduced in 2013 as a way of attempting to improve the contribution of the mining sector to government tax revenues. Mineral royalties are governed by the law Nº55/2013 of 02/08/2013 on mineral tax. Mineral classifications are set out in the Prime Minister's Order N° 218/03 of 27/10/2015. A mineral royalty of 4% of the gross sales value is applicable to base metals (including 3Ts), 6% to precious metals (including gold) and 6% to precious stones. Royalties are payable on all minerals to the Rwanda Revenue Authority (RRA) at the point of export.
Mining sector fees. The fees payable by the mining companies are provided by the Regulations of the Chief Executive Officer N° 005/mines/RMB/2019 of 18/07/2019 determining potential mining areas, criteria for categorisation of mines, modalities and requirements for mineral licence application and for tenders. Fees are set for a number of different mineral licenses and differ by scale of operation. All fees are payable to the Rwanda Revenue Authority (RRA). The fees applicable to ASM supply chains in Rwanda are the small-scale mining license, the mineral trading license and the mineral processing license. The small-scale mining license costs $1,800 USD and is valid for 5 years. Annual license fees of $449.50 USD are also levied, as well as annual surface rent of $6.50 USD per hectare. Mineral trading licenses cost $200 in non-refundable application fees and $100 USD in license fees per license, which lasts 5 years. An annual charge of $4,994 USD is also levied in annual license fees. Mineral processing licenses are subject to $100 USD annually for non-refundable application fees, $100 for license renewal fees and $100 for annual license fees.
Mineral traceability levies. Mineral traceability levies are collected by RMB, which charges a levy of USD $180 per ton of coltan exported, USD $130 per ton of cassiterite, and USD $130 per ton of wolfram, applicable

[3] Gold export data was obtained by the authors from the National Bank of Rwanda during an interview in May 2021. High-level export data can be found in the National Bank of Rwanda's Annual Report 2019/2020, which states that gold export receipts increased by 754.6% in the financial year 2019/2020.

at the point of export. That levy is used by RMB for paying mineral traceability services for the mining companies and cooperatives as well as mineral traders. So far RMB has over 120 mineral field officers, based at district level, who offer mineral traceability services in addition to day-to-day mine sites inspections. The levy covers the salaries for mineral field officers as well as the overhead cost for the mineral traceability scheme. These traceability levies are collected in addition to any fees charged by upstream due diligence programmes.

Applicable to mining and minerals sector

General business taxes. Mining businesses, like other commercial operations, are subject to the payment of taxes. The mining companies and cooperatives, as well as mineral traders have the obligation to declare and pay their taxes in accordance with the relevant laws. The general taxes include Corporate Income Tax (CIT), Value Added Tax (VAT), Pay as You Earn (PAYE), Customs Duties, and Withholding Tax. All companies must be registered with the Rwanda Development Board (RDB), and cooperatives must be registered with the Rwanda Cooperative Agency, as well as the RRA. Whilst some fiscal incentives exist in terms of VAT exemption and corporate income tax rates, these are generally only applicable to the large-scale mining sector and require significant investment to come into force. As well as the aforementioned taxes, all employers are required to make a social security contribution of 8.6% of the gross remuneration to their employees, which includes a 6% contribution to the mandatory pension scheme, 2% paid for Occupational Hazards Insurance, and 0.6% paid to the maternity leave and benefits scheme.

Import levies. There are two import levies that are be applicable to the import of minerals into Rwanda. The first is an infrastructure development levy (set out by law N°34/2015 of 30/06/2015) at a rate of 1.5% of the import value and payable at point of import on all goods, from which mineral imports are not exempt. The second is a levy on imported goods for financing African Union activities (set out by law N°19/2017 of 28/04/2017), set at a rate of 0.2% of customs value and collected by the RRA's customs department at point of import.

VAT. Previously, all minerals sold on the domestic market were subject to the payment of 18% in VAT. However, following issues in delayed refunding by the RRA, the government opted in 2015 to classify minerals (among other goods and services) traded on local markets as zero rated, meaning they are exempt from paying VAT. This also applies to mineral exports. It does not, however, apply to mineral imports. According to art. 3 of law N° 37/2012 of 09/11/2012, imported goods and services shall be subject to VAT of 18%, with no exemption made for mineral imports. VAT is of course refundable and can be offset against business costs, meaning that the application of VAT at point of import does not increase the net cost of each mineral trade. It does, however, given historic delays in tax refunds by the Rwandan authorities, constitute a hurdle for mineral importers that may disincentivise legitimate mineral import declarations. (See Spotlight Issues for more details).

Despite having a well-established fiscal regime, implementation of the regime is challenging in Rwanda (as elsewhere), and the contribution of the minerals sector to total tax revenues remains low. According to the RRA, in the fiscal year 2018/19, a total of 4.9 billion RWF (USD $4.9 million) was collected in mineral royalties, and 0.4 billion RWF (USD $0.4 million) in other taxes was collected from mining, compared to 1,400 billion RWF (USD $1.4 billion) for taxes across all sectors. This means an actual contribution of mining sector tax revenues to total tax revenues of only 0.4%. However, tax revenues should be much higher (see Figure 1). In 2019, USD $313 million of gold was exported, which should have generated tax revenues in mineral royalties alone of 18.6 billion RWF (18.6 million USD). However, the fiscal year of 2018/19 saw a collection of only 4.9 billion RWF (USD $4.9 million) for total mineral exports, and the following fiscal year 2019/20 2.8 billion RWF (USD $2.8 million) in mineral royalties (data for total mineral taxes not available). This means that the real value of the minerals sector is not accruing to Rwanda, and suggests high incidences of informal or illicit trade.

Figure 1: Estimated mineral royalties in Rwanda. Source: RRA

It's important to note that mineral royalties, taxes and license fees are not the only way in which an ASM sector can contribute to an economy. A 2018 study on the economic contributions of 3Ts ASM in Rwanda estimated that artisanal and small-scale miners contributed USD $39.5 million in the form of expenditures to the local economies in 2015 (Barreto *et al.*, 2017a). It also found that VAT expenditures on local goods amounted to 63% of paid royalties in 2015 and were almost four times what was likely paid in income taxes, suggesting that even informal ASM contributions can be substantial, yet they are rarely considered (Barreto *et al.*, 2017a). This is an important reminder that the existing local economic contributions of ASM must be properly understood and taken into account in mineral fiscal regimes if these regimes are to appeal to higher tax compliance by ASM.

INCENTIVES AND DISINCENTIVES FOR FORMAL TRADE

Rwanda has emerged alongside Uganda in recent years as one of the major players in gold exports from the region. Despite efforts towards increased measures against illegal mineral trade (for instance, art. 50 of the 2018 Mining Code stipulates that any person caught with minerals without proof of their origin is liable to an administrative fine equal to 10% of the value of the minerals and the minerals are confiscated), it is likely that

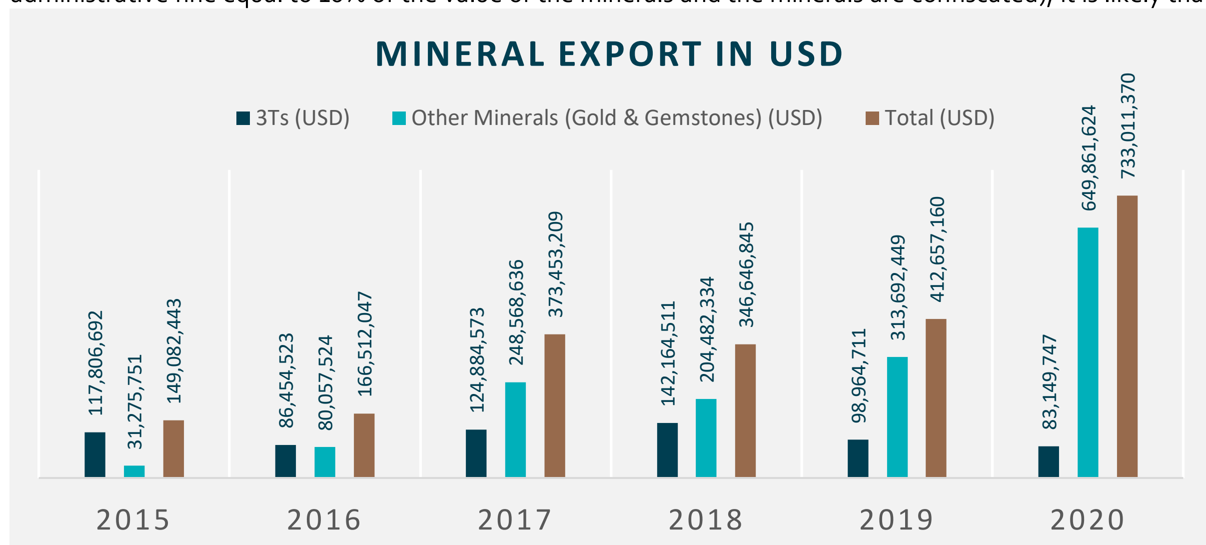

Figure 2: 3TG Exports Rwanda in USD. Source: National Bank of Rwanda, National Institute of Statistics of Rwanda (NISR)

large amounts of the gold exported from Rwanda enters illegally from the DRC. Figure 2 shows exports of 3TGs from 2015-2020. Whilst 3Ts exports have remained relatively stable, gold[4] exports from Rwanda have soared. It is extremely unlikely that this comes from an increase in Rwandan gold production. Whilst statistics on gold production in Rwanda are difficult to come by, the latest United States Geological Survey (USGS) estimates were 319kg and 336kg in 2015 and 2016 respectively. Even at the highest global price in 2016 for 100% purity, the 2016 estimated production would only come to a value of around $15 million USD, well below what was exported that year and over 40 times less than what was declared exported in 2020.

It is possible that increased exports are due to higher levels of legal mineral imports from neighbouring countries – the World Bank reported USD $242 million in gold imports to Rwanda in 2019 (World Bank, 2019b). Rwanda's positioning itself as a hub for value addition in the region, as well as increased gold refining capacity, means that it is likely to encourage increased imports where possible. However, it is likely that there are potentially significant levels of gold smuggling of Congolese gold through Rwanda. Firstly, even gold declared imported into Rwanda may not have been exported legally from the DRC, as seen in Impact's reports of examples where traders created falsified paper trails for minerals in transit through Rwanda that did not exist in the DRC (IMPACT, 2020). Secondly, there remain discrepancies in the amount of gold legally imported and produced, and the amount declared exported in 2019. Imports and production come to a value of at most USD $257 million, leaving USD $56 million unaccounted for. Some of this will be accounted for by the increase in value of the gold between import and export, however some is likely to indicate smuggled mineral flows. Thirdly, gold exports from Rwanda are likely to be significantly underdeclared. The UN Group of Exports found that whilst Rwanda declared 2,163 kg of gold exported in 2018, the United Arab Emirates – a renowned global transit hub for smuggled African gold – officially imported 12,539 kg from Rwanda in the first nine months of the year (Zounmenou *et al.*, 2019). Smuggling operations allegedly use Rwanda as a transit country for smuggled gold to the UAE, including the creation of phantom trading entities that seem to exist only in Rwandan transit documents (IMPACT, 2020). Important smugglers such as Karim Somji, who is linked to smuggling operations according to UN Group of Experts reports, reportedly operate from Rwanda (Zounmenou *et al.*, 2020b). Similarly Aldango LTD, Rwanda's recently established gold refinery, was set up within a corporate network linked to Alain Goetz, who has been associated with significant cross-border smuggling of Congolese gold through the GLR (in particular via Uganda) and into the international market (Zounmenou *et al.*, 2020b). The refinery has also allegedly paid Congolese smugglers in cash, thus enabling the sidestepping of formal declarations that would be subject to tax (Zounmenou *et al.*, 2020b).

In terms of fiscal incentives and disincentives for formal mineral production and trade, it is unlikely that the fiscal regime is the only – or even the primary – disincentive for formal trade of 3TGs (primarily gold) in Rwanda. Illicit trade in high-value goods operates within complex networks of powerful individuals and groups, often linked with organised crime, and are therefore not triggered solely by unfavourable fiscal regimes in producer/transit countries. However, there are some elements of the fiscal regime that are likely to be creating barriers to commercial viability to those who would like to be operating formally. One of these is the issue of uncompetitive mineral imports. Firstly, the issue of VAT levied on mineral imports is likely to constitute a significant barrier to the development of formal ASM 3TG supply chains passing from the DRC through Rwanda. Although VAT is refundable against inputs bought, traders in Rwanda have seen significant delays in receiving VAT refunds, affecting cashflow[5]. This makes the (legal) sourcing of minerals from outside Rwanda for processing and re-export uncompetitive. If the Rwandan government is to achieve the targets laid out in its 2017-2024 National Strategy, the export of high-end, value-added goods and services, including processed minerals, is essential. For the operations of international traders or the major mineral processing entities in Rwanda to be commercially-viable – in a sector where capital is expensive and margins are narrow – the cashflow implications of payment of VAT on imported minerals are likely to provide a disincentive for the formal

[4] Rwanda does not disaggregate gold export statistics. It is, however, safe to assume that gold constitutes the majority of exports categorised as 'other minerals', given that gemstone production in the country is estimated to be negligible (USGS 2016).

[5] Interview with mineral expert. May 2021.

export of minerals from DRC and import into Rwanda. Secondly, the fact that mineral royalties are payable on imported minerals as well as locally-produced minerals means that the import-export of minerals – including by those involved in mineral value addition and processing – would trigger the payment of mineral tax in two separate countries, likely rendering (legal) Rwandan re-exports uncompetitive on the global market. (See Comparative Analysis (Section 2.5) for more details)

Despite these implications, Rwanda's mineral fiscal regime offers important insights into how taxation can be applied well in a sector as informal as ASM. Firstly, charging mineral royalties at the point of export is a relatively simple and cost-effective process for both the state and supply chain actors. Secondly, the fiscal regime in Rwanda is clear, avoiding ambiguities around the legality of certain taxes. This, and the fact that all taxes are payable to one entity – the RRA – reduces the risk of parafiscality[6] along the supply chain by providing clarity to supply chain actors as to whom taxes should be paid. This clarity and simplification are made possible by strong redistribution practices, ensuring that local governments benefit adequately from revenues that are collected centrally. Finally, Rwanda's aim to simplify supply chains by disincentivising traders and middlemen also provides a higher level of simplicity to the gold trade in the country and reduces opportunities for mineral leakage. However, the political economy and livelihoods impacts of this kind of policy need to be taken into account. Firstly, it would not necessarily be applicable in a context such as the DRC where traders and middlemen play an important part in ASM supply chains. Secondly, simplification may result in the consolidation of the mineral supply into the hands of a powerful few exporters, creating disruptions by reducing competition and potentially impacting on prices available to producers.

2.2. UGANDA

Uganda is estimated to host a total ASM population of 300,000 miners, of which there are 40,000 artisanal gold miners and an estimated 1,700 3Ts miners (Barreto *et al.*, 2017b). It has limited artisanal 3Ts production, but is an important transit country with historic trends of ASM 3Ts being smuggled into Rwanda (Schütte, 2019). With the establishment of gold refineries in the country, Uganda has become an increasingly important gold exporter in the region with strong links to the UAE, to whom it exports 99% of its gold. Uganda is an important hub for smuggled minerals from the DRC and South Sudan, constituting a significant source of high-risk gold flows to Dubai (Lezhnev, 2021). Uganda's mineral fiscal regime has been the subject of much debate, with low export taxes assessed as a significant contributing factor in the smuggling of gold out of the DRC. This section looks at the fiscal regime associated with both the production and imports of 3TGs into Uganda, highlighting which aspects of the fiscal regime incentivise or disincentivise formal mineral trade.

MINERAL FISCAL REGIME

Uganda's mineral trade and production is governed through the Mining and Mineral Policy for Uganda, 2018, Mining Act, 2003 and Mining Regulations, 2004. In May 2018, a new Mining and Mineral Policy was approved by the cabinet, aimed at providing a foundation upon which sector legislation could be built in response to gaps in the 2003 and 2004 Act and Regulations. The recent reported passing of the Mining Amendment Act of 2021[7], which came into force on 1st July 2021, is a significant step in the development of the Ugandan minerals regime. It introduces export levies on both processed and unprocessed minerals, significantly shifting the regulatory environment for mineral exports in the country and providing a potential release valve – albeit a costly one – to the reported ban on the export of unprocessed minerals. Although it is still too early to analyse to what extent the 2021 Act will be complied with in practice, it nonetheless constitutes an important shift in regional mineral dynamics that may well have an impact on the illicit flow of minerals in the region. Additional legislative reforms

[6] This study refers to taxes and fees that it considers to be legally ambiguous as 'parafiscal'

[7] Copy seen by research team. We are currently verifying with other government departments as to the veracity of the reported changes passed by Parliament.

are also in the pipeline, including a replacement to the 2003 Mining Act which has already been approved by cabinet to be presented to Parliament (Reuters, 2021).

An overview of the taxes, fees and levies applicable to the ASM 3TGs supply chains in Uganda is given in Table 2 below.

Table 2: Taxes and fees payable on ASM production, import and export of 3TGs in Uganda

Specific to mining and minerals sector
Mineral royalties. Uganda levies a mineral royalty of 5% of the production value of all minerals produced in the country, payable upon declaration (at the point of production) to the Uganda Revenue Authority (URA) through the Directorate of Geological Survey and Mines (DGSM). The method of calculation of payable royalties applies 95% purity for gold and 75% purity for 3Ts. The royalty was raised from 3% to 5% in 2016. If royalty is not paid at point of production, it must be paid by the trader/exporter before export. Royalty revenues are shared between the Central Government (80%); local government and the local administrative jurisdiction where the mining is taking place (17%); and the landowner (3%). The application of royalties does not distinguish between scale of mining operation or type of mineral. In 2017, a Presidential decree was given to lift mineral royalties in order to boost gold flows into the country's recently established refinery, African Gold Refinery (AGR). However, it is unclear to what extent this decree has been implemented, with data from interviews suggesting that it has not been consistently applied to mineral exports across the board.
Mineral production and trade fees. Fees for mineral production and trade in Uganda are collected through DGSM and URA. They include fees for mining licenses, annual mineral rent and trading licenses (trading licenses are categorised for base metals and precious metals). For the ASM sector, it is necessary to obtain a prospecting license for exploration ($140 USD / year), a location license (ASM license) ($224 USD, two years renewable), including fees for the registration ($140 USD) and gazette ($84 USD) of the location license, and an annual fee for mineral rent ($280 USD). Dealers are required to acquire a mineral dealers license ($840 USD annually for base metals, including 3Ts, and $1400 USD annually for precious metals, including gold), as well as fees for the registration ($140 USD) of each license.
Mineral import fees. Minerals imported into Uganda are subject to a mineral import fee of 1% of the imported value and the obtaining of a mineral import application ($280 USD) per import. Mineral imports can only be conducted by those with a mineral dealers license. Imported minerals are not subject to royalty payments.
Mineral export levies. The 2021 Mining Amendment Act reportedly imposes export levies on both processed and unprocessed mineral exports, payable by the exporter to the URA. These amendments, which came into force on 1st July 2021, introduce an export levy of 5% of the value of each kg of processed gold exported, or 10% of the gross value of unprocessed minerals (The Republic of Uganda, 2021).
Applicable to mining and minerals sector
General business taxes. Mining businesses like other businesses are subject to the payment of taxes. The mining companies and cooperatives, as well as mineral dealers, have the obligations to declare and pay their taxes in accordance with the relevant laws. The general taxes include Corporation Tax, Value Added Tax (VAT), Pay as You Earn (PAYE), Contributions to the National Social Security Fund (NSSF), and Local Services tax, payable to local government.

The past ten years have seen Uganda become one of the most important transit hubs for gold from the GLR, which until recently was reflected in its mineral fiscal regime. Gold is the country's leading export, having

overtaken coffee for the first time in 2018 and standing at over 100 times the value of gold exports a decade ago (Biryabarema, 2020). Gold is a front-runner in Uganda's imports from the EAC, constituting a leading import from Tanzania, Kenya and Burundi in the fiscal year 2019/20 (URA Annual Revenue Performance Report 2019/20). However, it has been widely reported that a significant proportion of Uganda gold exports are sourced fraudulently from neighbouring countries (e.g. Behalal *et al.*, 2018). Low export taxes were seen as a primary incentive for the smuggling of gold from the DRC into Uganda (Lezhnev, 2021). However, the countrywide benefits of increased exports over the past ten years are yet to be seen. Despite recent formalisation initiatives, such as biometric registration of artisanal miners, the issuing of identification cards, and the promotion of mining associations, as well as discussions on the lifting of mineral royalties from the ASM sector, the reality appears less than positive. Mineral royalties remain payable at mine site level at a rate that is likely to disadvantage smaller producers. The sector has been plagued by high-profile armed evictions,[8] with LSM exploration activities seemingly prioritised at the expense of artisanal miners. The influx of imported gold is reportedly negatively impacting prices of locally-produced gold, which is uncompetitive against comparatively cheap imports, which are subject to much lower taxes (1% for import compared to 5% mineral royalties) (McCool, 2019). The ASM sector plays an important role in local development, with job creation from the sector estimated at over 1 million direct and indirect jobs in 2018, benefitting approximately 10% of the country's population (Barreto *et al.*, 2017b), yet local ASM production appears relatively neglected at the expense of the promotion of re-exports.

However, recent changes to the fiscal regime may create strong disruptions to the status quo. Before the introduction of the 2021 Mining Amendment Act, Uganda had clearly positioned itself as a hub for regional gold re-exports. Whilst its mineral royalties for locally-produced ASM minerals were comparable with its neighbours (5% in Uganda compared to 6% in Rwanda), its mineral import / re-export regime constituted much lower taxes and fees than others in the region (see Figure 8 in Comparative Analysis (Section 2.5)). Of the reported $1.25 billion USD of gold exports in 2020, the vast majority of which are thought to have been destined for the UAE, only $375,515 are accounted for in DGSM production statistics (although actual value is likely to be higher due to under-declaration). This left up to $1.249 billion USD as presumed re-exports that were benefitting from very low tax rates (1% at point of import and 0% at point of export) when compared to other countries in the region. The introduction of the 2021 Mining Amendment Act, however, may signal significant changes to this system that, if fully implemented, will likely cause important disruptions to ASM mineral supply chains in the region. The new export levies of 5% on processed gold and 10% on unprocessed minerals (there is no provision for processed 3Ts, given the lack of processing capacity in the country) significantly increase the cost of export from Uganda. They are also much higher than the proposed export levy of $200 USD / kg on processed gold and 1% of the export value of unprocessed minerals that was originally proposed by the Minister of Finance, Planning & Economic Development in March 2021 (Minister of Finance Planning & Economic Development, 2021). Whilst the initially proposed changes would have increased re-export costs slightly, costs would have remained lower than Uganda's neighbours, therefore retaining the country's attraction for regionally produced gold. In contrast, the changes within the recently amended law are likely to disrupt this balance (see Incentives and Disincentives for Formal Trade for further discussion).

It is clear from the recent changes that Uganda's aim is to increase state revenues from mineral production. This is reasonable, given that revenue collection in Uganda, both in the minerals sector and in general, is relatively low. Uganda's tax-to-GDP ratio in 2018 (11.8%) was lower than the average of the 30 African countries in the OECD's Revenue Statistics in Africa 2020 (16.5%) by 4.7 percentage points, and it was also lower than the average in Latin America and the Caribbean (23.1%) (OECD, 2020b). However, Uganda has experienced significant growth in its tax register over the past five years, in particular with the registration of individuals onto the tax register (Uganda Revenue Authority, 2020). In an informal sector such as ASM, this broadening of

[8] An example is of the tens of thousands of artisanal miners who were evicted by Ugandan armed forces from long-time ASM sites in Mubende in 2017 by presidential decree in the name of formalisation and better regulation of the ASM sector (Daily Monitor 2017)

the tax base is critical for increased revenue collection. Of total tax revenue, current mining and quarrying contributions are minimal, generally making up less than 1% of total net URA revenue collection (Uganda Revenue Authority, 2020). Mining and quarrying ranked 19 out of 22 sectors for revenue collection in the fiscal year 2019/20 (Uganda Revenue Authority, 2020). Against this backdrop, the introduction of the new export levies could increase the performance of the sector, in particular the gold sector, given the importance of gold as Uganda's most valuable export (Source UBS/URA). Based on 2020 figures, the new levy on processed gold exports alone would generate revenues in the region of $62 million USD, 50% more than the total value of revenues collected for the mining and quarrying sector in 2019 (using export figures from Biryabarema, 2020). Increased revenue collection from gold exports would also help to reduce Uganda's balance of trade, which stood at a deficit of UGX 14,136.22 billion ($4.2 billion USD) at the end of the FY 2019/20.

However, whether the country will see the full benefits of these tax revenues is unclear. Given the alleged ban on unprocessed mineral exports that has been in place since 2013, it is likely that the majority of gold exports from Uganda go through refineries. However, the country may not be benefitting in tax revenues from the activities of these refineries. It has been reported, for example, that African Gold Refinery (AGR) – one of the country's most high-profile refineries – had been exporting millions of dollars' worth of gold under a significant tax holiday, enjoying exemptions for both the import and export of gold for at least ten years (Global Witness, 2017; The Economist, 2019). Despite reported complaints about AGR by the Uganda tax authorities, it is not clear to what extent the refinery contributes to fiscal revenues today (Lewis and Hobson, 2020). Whilst AGR describes itself not as a trading company but as a mineral processing service provider, investigative research has shown links between AGR and other related companies based in the UAE and elsewhere, all with links to Alain Goetz. Goetz, AGR's former CEO, is named in several UN Group of Experts reports as having significant links to mineral smuggling in the region, allegedly including large amounts of gold from Eastern DRC, as well as from other locations, including a reported $300 million USD from Venezuela (despite US sanctions on the country's exports) (McCool, 2019; Biryabarema, 2020).

Revenue from 3Ts is likely to be much lower than from gold, with the majority of 3Ts likely locally produced in Uganda. It is unclear what impacts the 2011 ban on the export of unprocessed minerals have had on the 3Ts sector. Despite there apparently being virtually no (legal) 3Ts exports from Uganda due to the lack of 3Ts processing capabilities in the country, production has continued, with coltan production in particular experiencing a recent upsurge (see Figure 3). Whilst the 2021 Mining Amendment Act theoretically lifts the de facto ban on 3Ts exports by allowing the export of unprocessed minerals, the 10% levy on these is extremely high. This is likely to make the export of unprocessed 3Ts commercially unviable, and by far the most expensive in the region. Monitoring the impacts of this increased taxation on 3Ts sector exports, tax revenues and illicit trade will be critical to understanding the impacts of the amended fiscal regime on Ugandan minerals.

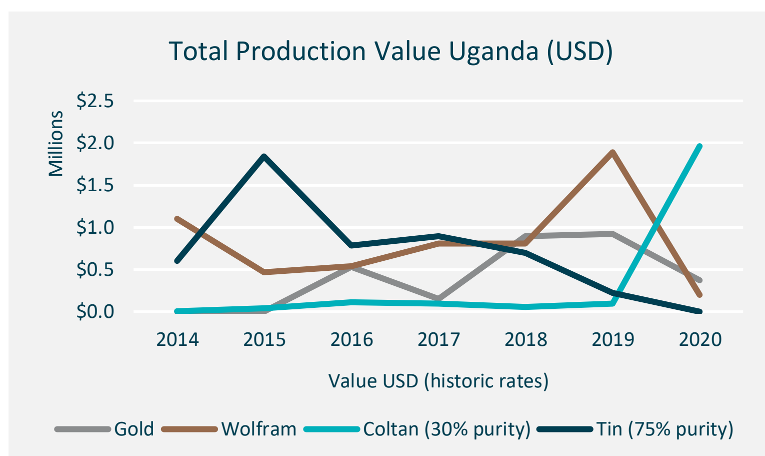

Figure 3: Official production value of 3TGs in Uganda, 2014-2020. Source: DGSM

INCENTIVES AND DISINCENTIVES FOR FORMAL TRADE

The Ugandan government has made a number of commitments towards reducing smuggling and promoting formal production and exports of 3TGs. It was this perspective that was reportedly a factor in President Museveni's commitment to announce the removal of mineral royalties on gold production in 2017 (Daily

Monitor, 2017). However, to what extent measures have i) been implemented or ii) impacted levels of illicit mineral trade in the country remains unclear.

In theory, until this year's amendments, the lower costs associated with mineral imports and re-exports in Uganda allowed for regionally competitive legal mineral imports into the country when compared to its neighbours. Although fee rates were low, given Uganda's success in attracting large amounts of gold from the region for re-export, the fees nonetheless stood to contribute a significant amount to government coffers. In practice, however, the low import fees and zero export fees, combined with a seeming lack of monitoring and enforcement of adequate chain of custody and mineral traceability requirements, have made Uganda a magnet for smuggled gold from around the region. This is not a new phenomenon: in 2007, the Uganda Commercial Impex, a company linked at the time with illegal mineral imports from DRC, was sanctioned by the UN Security Council (UN Security Council, 2007; IMPACT, 2020). A 2020 UN Group of Experts report estimated that in 2019, 95% of Uganda gold exports were of non-Ugandan origin. The report introduced evidence of Congolese smugglers who had reportedly sold gold to AGR and other refineries in the region, although all refineries involved denied knowledge of the sales. (Zounmenou et al., 2020b). The Sentry reported in 2018 that AGR was knowingly refining 100-150 kg of gold from Eastern DRC per week, amounting to an annual total of 5.2-7.8 tonnes (The Sentry, 2018). Alain Goetz, AGR's former CEO, admitted publicly in 2017 that his company worked with 'undocumented gold' from 'small-scale dealers' (Geothals, 2019; IMPACT, 2020). Ugandan government revenues have also suffered from reported tax exemptions given to companies such as AGR, which export vast amounts of gold whilst contributing very little to government revenues.

As a result, although Uganda's fiscal regime was in theory well-placed to contribute to regional mineral value addition by allowing for competitive mineral re-exports, the lack of enforcement of mineral traceability and the proliferation of illicit trade undermined any incentives for formal exports. However, if the reported changes to the regulatory regime do in fact come into place, Ugandan exports will become the most expensive in the region (see Figure 7 in Section 2.5 – Comparative Analysis). This is likely to act as a strong disincentive for formal trade and render legal Ugandan exports largely commercially unviable.

The amendment to the mineral code will disadvantage smaller producers, including ASM, even more so. For locally produced minerals, royalty rates of 5% payable at point of production under the previous law were already likely to disadvantage smaller producers. High royalty rates were likely a disincentive to the formal declaration of production, and they may have been incentivising the mis-declaration of Ugandan produced gold as mineral imports. The fact that the new export levies are payable both on locally produced minerals and on mineral re-exports is likely to further exacerbate this risk. There is some chance the promotion of cooperatives or mining associations, as well as the provision of extension services such as capacity building and access to finance to the ASM sector, may go some way to mitigate these disadvantages. However, given the relatively low levels of mineral production in Uganda (when compared to total export value), it would have made more sense for the Ugandan government to impose the additional levies only on mineral re-exports, thereby mitigating the risk of greater disadvantage to smaller local producers and balancing export costs across the region.

A second risk for gold exports – given the lack of transparency in the relationships between refineries and the state in Uganda – is that refineries may be able to negotiate some sort of exemption from the new export levies, similar to the tax holiday under which AGR was reportedly operating. This risks consolidating Ugandan gold supply in the hands of a small number of actors, at least one of whom has strong reported links with mineral smuggling in the region. The entrenchment and increased power of such a network would no doubt increase the illicit trade of gold from the DRC into Uganda and beyond. In response, Ugandan civil society groups have called for mining act amendments to align mineral sector tax exemptions with the wider protocol for tax exemptions, which require Parliamentary approval (Transparency International Uganda et al., 2016). This would be a first step towards greater accountability and transparency in the sector. Furthermore, unfavourable

fiscal agreements reached with refineries such as AGR hurt Uganda's potential tax collection from mineral exports. Whilst increased export levies will in theory bolster government revenues from the sector, high rates in a largely informal sector with such limited margins are likely to disincentivise compliance, rendering the likelihood of increased revenue capture low. Lower export levies applied only on mineral re-exports may have gone further in broadening the tax base and increasing government revenues from the sector, as well as incentivising the formal trade of minerals from and through Uganda. Actual impacts of the legislation are as yet unknown and should be closely monitored, although preliminary indications suggest that official exports have fallen drastically and that actors face difficulties in obtaining export documents for unprocessed minerals.[9]

2.3. BURUNDI

Despite being rich in mineral resources, economic and political volatility in Burundi in recent years has proved a significant challenge for the country's fiscal performance. The economic downturn that followed an electoral and political crisis in 2015 saw both a decrease in tax and non-tax revenues coupled with a sharp fall in international donor resources (UNICEF, 2017). However, the minerals sector is making increasingly important contributions to the country's economy. In contrast to the situation in 2015 which saw the closure of 30% of Burundi's mines due to low production and lack of market access, mineral exports overtook tea and coffee in hard currency earnings for the first time in 2019 (Reuters, 2019). 3Ts, gold and more recently rare earth production have the potential to make critical contributions to Burundi's economy in the future.

Mineral extraction in Burundi is conducted almost exclusively by ASM, albeit at a much smaller scale than in neighbouring DRC and Rwanda. Whilst it hosts significant tantalum and tin deposits, being part of the "Kibaran Belt" (Schütte, 2019), the limited infrastructure acts as a barrier to higher levels of industrialisation. ASMs in Burundi, where formal, generally work in cooperatives or associations, although high levels of informality remain. 3Ts produced in Burundi are often smuggled into and exported from Rwanda (Schütte, 2019). 3Ts smuggling into Burundi from the DRC, however, tends to be limited, with smuggling routes favouring Rwanda (Schütte, 2019). It has historically been a significant trading route for smuggled gold from DRC, however this appears to be reducing given i) political upheaval in the country disrupting traditional gold trading routes and ii) competition from Rwanda as an increasingly important gold smuggling route alongside Uganda in the region (IMPACT, 2020).

Whilst 3Ts are traded and exported through private buying houses, gold may be legally exported only through the Central Bank. This decision, taken in November 2019 in the name of stabilising the national currency, has been both applauded as a fiscal measure for promoting the repatriation of funds from gold sales, and criticised for increasing the risk of driving existing gold operators underground and thereby increasing the illicit gold trade in the country (Manishatse, 2019; VOA, 2019).

MINERAL FISCAL REGIME

The minerals sector in Burundi is governed mainly by the 2013 Mineral Code and its 2016 amendments, and the 2015 Mining Regulations. The Mining Code addresses both LSM and ASM, although as previously mentioned, the vast majority of mineral activity in the country – and all 3Ts and gold production – is artisanal or small-scale.

Table 3: Taxes and fees payable on ASM production, import and export of 3TGs in Burundi

Specific to mining and minerals sector
Mineral royalties. Mineral royalty rates are set out in the Burundi Mining Regulation of 2015. For ASM, they are set at 3% for base metals (including cobalt), 2% for precious metals and stones (including gold) and 1.5% for other substances, including 3Ts. Royalties are payable at the point of export for each mineral lot and are

[9] Interview with sector expert, October 2021.

payable to the Burundi Revenue Authority (OBR). Since the 2019 decision to allow gold exports to be handled only by the Central Bank, it is unclear to what extent mineral royalties are being collected for the sector.

Mining sector fees. Mining sector fees applicable to ASM include license fees and the surface fees. For ASM producers, the license fee is set at $600 USD for 1 ha for 2 years renewable (payable in BIF to the Office of Mines and Quarries (OBM)). An annual surface fee of $5,000 USD for gold, $1,500 USD for coltan and $1,000 for cassiterite and wolframite, payable to the OBM, is also levied on ASM producers.

Trading houses face relatively high license fees, set at $35,000 per 2 years renewable for gold and $10,000 USD for 2 years renewable for 3Ts. The high level of fixed costs for trading houses (compared with relatively low costs elsewhere in the mineral fiscal regime) suggests a preference towards keeping the number of legal trading houses low. It is unclear to what extent gold trading houses remain operational or open since the 2019 ban on gold exports by private entities.

Other fees. It was reported during the course of the research for this study that two additional taxes are often applied to international mineral trade from Burundi, despite not appearing in either the Mining Code or the Mining Regulations. The first is an export tax of 0.2% for gold, 1% for cassiterite and wolframite and 2% for coltan. The second is a currency repatriation levy of 1% of the value of each transfer. The extent to which these taxes are applied in practice to mineral exports is not known.

Other taxes. 3Ts production in Burundi is subject to a fixed fee local tax, payable to the municipality where the mining occurs. For the ASM sector, the tax is set at 500 BIF / month ($0.25 USD) for coltan, 200 BIF ($0.10 USD) / month for cassiterite and wolframite production and 200,000 BIF ($100 USD) / year for mining cooperatives.

Mineral supply chain actors are also subject to an environmental tax paid annually by trading houses (2 million BIF / $1,019 USD), mining cooperatives (1 million BIF / $509 USD) and transporters of mineral products (0.5 million BIF / $255 USD) to the Burundi Office for the Protection of the Environment (OBPE).

Applicable to mining and minerals sector

General business taxes. Mining businesses, like other commercial enterprises, are subject to the payment of taxes. The general taxes include Corporate Income Tax (CIT), Value Added Tax (VAT) and Pay as You Earn (PAYE). CIT rates are higher for companies with higher turnover and who employ more employees. A number of tax exemptions exist, such as reduced rates for companies operating in the Free Trade Zone and employing more than 100 permanent Burundian employees. However it is unclear to what extent these exemptions apply or are enjoyed by 3TGs sector companies.

Detailed information on revenue collection from the mining sector for Burundi is not available from either the OBM or the OBR, reflecting a lack of transparency in terms of data sharing (Burundi was ranked 165/180 in Transparency International's Corruption Perceptions Index in 2020 (Transparency International, 2021)). However tax compliance countrywide is low, with a tax-to-GDP ratio of 15% as of 2019. This figure is likely to be even lower in an informal sector such as ASM.

Note that the absence of fiscal requirements for mineral imports in the above table is due to the lack of formal mineral imports into Burundi. Given that there is no infrastructure in the country for value-addition, it does not have a formal re-export sector. However, Burundi's role as a transit hub for gold smuggled from the DRC has been well-documented. Land routes from South Kivu to Bujumbura have been reported as key smuggling routes for gold (IMPACT, 2020). Senior Burundian officials have been named in UN Group of Experts reports as early as 2009 in connection with major gold smuggling networks (Mahtani *et al.*, 2009). More recently, the UN Group of Experts has reported discrepancies in international trade data, which suggests a continued pattern of smuggling. In 2018, Burundi officially exported 601.7 kg of gold to Dubai, but the United Arab Emirates statistics indicate that traders in the Dubai market received more than 2,130.57 kg from Burundi in the first 9

months of the year (Zounmenou *et al.*, 2019). However, it appears that the political upheaval and subsequent economic impacts, including a liquidity crunch and shortage of US dollars, have contributed to a reduction in Burundi's role as a hub for smuggled minerals, in particular gold, from the DRC (IMPACT, 2020).

INCENTIVES AND DISINCENTIVES FOR FORMAL TRADE

One of the most striking aspects of Burundi's mineral fiscal regime is the extremely high level of fixed costs associated with operating legally, which is particularly stark for gold. Figure 4 shows an annual average of the fixed costs associated with producing and exporting gold in Burundi, Uganda and Rwanda. Burundi shows much higher fixed costs than either of its neighbours. In a context where all 3TGs production is currently conducted by small operators, these fixed costs seem exorbitant in a country whose GDP per capita was recently ranked as the lowest in the world (World Bank, 2019a). There is no doubt that these high fixed costs act as a disincentive for formal trade. Mineral royalties, on the other hand, are much lower in Burundi than in either Uganda or Rwanda, standing at 2% for gold and 1.5% for 3Ts (compared to 6% and 4% respectively in Rwanda, and 5% for all minerals in Uganda). If fixed costs could, therefore, be brought further into line with mineral royalties rates, this might incentivise higher levels of formalisation and therefore tax compliance in the minerals sector in Burundi.

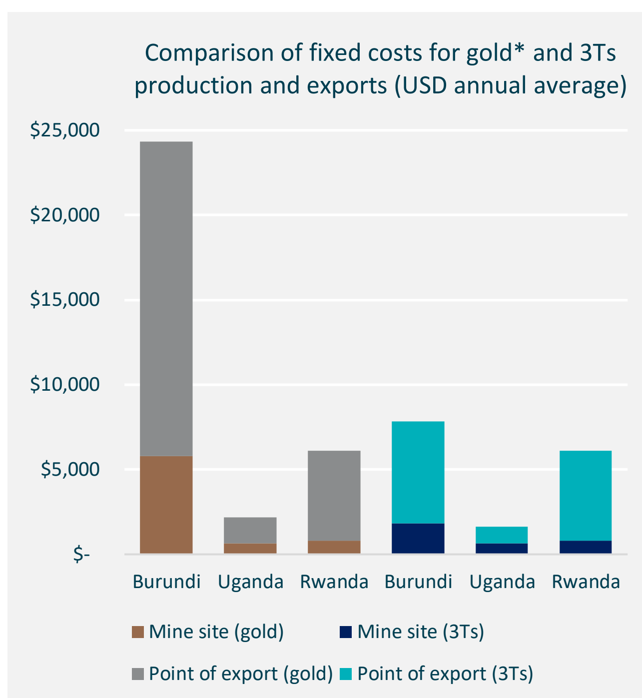

*Figure 4: Fixed costs comparison gold exports. Source: author's calculation. *based on costs levied on gold supply chain before 2019 ban on gold exports by private entities*

Also of note is the existence of taxes that are not registered in the legal texts that govern the ASM sector in Burundi, but that appear to be levied on mineral exports in reality. These include an export tax of 0.2% for gold, 1% for cassiterite and wolframite and 2% for coltan, and a currency repatriation levy of 1% of the value of each transfer. Research conducted for this study found that these taxes elicit some pushback from supply chain actors, given their ambiguous legal status, and they almost certainly serve to undermine trust in the legal regime create confusion for supply chain actors. These taxes should be clarified in the relevant legal texts in order to mitigate these risks.

Finally, albeit not a strictly fiscal matter, the 2019 ban on gold exports by private entities in Burundi no doubt plays a part in incentivising or disincentivising formal gold trade. This study was not able to obtain information on prices paid by the Burundi Central Bank (BRB) to gold traders in the country, although it is unlikely that the bank is able to offer competitive prices in a sector where prices are often high and profit margins are low. This is likely to be driving existing gold trade underground and potentially incentivising the smuggling of gold out of Burundi either directly to international gold trading hubs such as the UAE or across the border to neighbouring Rwanda or Uganda. In the long run, this is not likely to contribute positively to government revenue in Burundi, and will further undermine trust and stability in the sector.

2.4. DRC

The DRC hosts an estimated 2 million artisanal miners extracting a wide variety of minerals (Geenen, Stoop and Verpoorten, 2021). Eastern DRC, this study's area of focus, hosts up to 382,000 artisanal miners, of which 66% work in the gold sector (Matthysen *et al.*, 2019). ASM supply chains in the DRC are often long and complex, involving a large number of actors working all along the chain, including miners, pit owners, service providers

and processors, cooperatives, small traders, large traders, buying houses and processing entities, and others. Unlike other jurisdictions mentioned in this paper, such as Rwanda, these intermediaries play an important part in Congolese mineral supply chains.

The fiscal regime that governs the Congolese ASM sector is notoriously complex and burdensome. If fully complied with, it can render the export of responsibly produced gold virtually unviable, as has been experienced by a number of responsible sourcing pilot projects in the region. The complexity and high costs associated with the regime incentivise informal mineral trade, in particular for gold, which lends itself to smuggling with its high value-to-volume ratio. This section gives an overview of the fiscal regime applicable to ASM in the DRC and the extent to which it is implemented in practice, as well as providing some insight into the aspects of the fiscal regime that act as incentives or disincentives for formal trade.

MINERAL FISCAL REGIME

The minerals sector in the DRC is governed by the 2018 Mining Code, a revision of the previous Mining Code from 2002. The Mining Code stipulates the fiscal requirements for LSM, whilst the fiscal regime for ASM is more decentralised, generally set out in Decrees published by the provincial authorities. The 2018 Mining Code constituted a significant revision of the previous code that had been in place since 2002. The revision saw a number of key changes, including legal and regulatory measures for transparency, traceability and certification of mineral substances (Article 7), the introduction of artisanal mining zones (ZEAs) and the obligation for ASM to operate through cooperatives (Article 111), and the possibility for mineral concession holders to assign part of their concession to artisanal exploitation (Article 30). The Revision of the 2002 Mining Code in 2018 also brought with it significant changes to the fiscal regime. These changes, designed to increase the economic and tax benefits to the country from industrial mining, included new taxes and provisions to simplify tax bases and more effectively share some of the revenue with provincial government entities (Lassourd, 2018). Despite these changes, mineral fiscal regimes in DRC remain onerous when compared to comparable mining jurisdictions (see Figure 5 for comparison of industrial regimes). The LSM regime has been assessed as potentially discouraging to investment due to the total economic impact, especially after *de facto* taxes (collected outside of the strict legal scope of the regime) are taken into account (Lassourd and Okenda, 2018). The ASM sector is no exception, providing a complex and onerous framework within which supply chain actors are expected to operate.

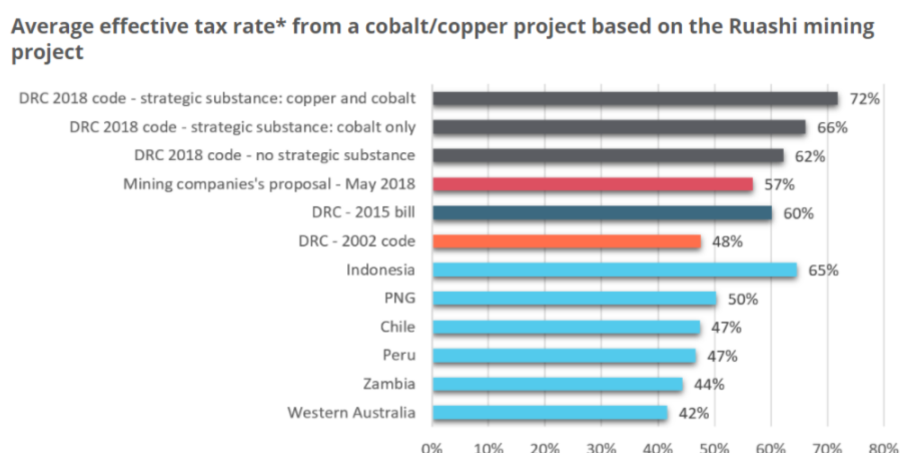

Figure 5: Comparison of fiscal regimes of various mining jurisdictions. Source: NRGI (2018)

Table 4 below gives an overview of the taxes and fees applicable to the ASM 3TGs sector in South Kivu and Ituri (given the Madini project's focus in these geographies). It is worth noting at this point that many of the taxes and fees that are levied on supply chain actors on the ground occupy a legally ambiguous space. Some – such as taxes and fees levied by armed groups or public security services at roadblocks – are clearly illegal, and others are stipulated clearly in specific legal texts that govern the mining sector. Many, however, fall in between clear legality and illegality. Separating the legal fees from the illegal or legally ambiguous ones can be a challenge.

Given the high-level nature of the research presented in this study, a more in-depth study of fiscality (and parafiscality) in the DRC is recommended to corroborate the high-level findings presented here.

Table 4: Taxes and fees payable on ASM production, import and export of 3TGs in DRC

Specific to ASM sector
Mineral production and trade fees. The DRC imposes a variety of fees, taxes and levies all along 3TGs ASM supply chains. At mine site level, taxes and fees generally differ by province and are set by the respective provincial authorities. **Ituri** The relevant taxes on the ASM production and trade of 3TGs in Ituri are clearly set out in the Arrêté Interministeriel des Ministres Provinciaux N.07/EBK/004/CAB/MINPRO/P.I/MPIEE/2021 and N.06/JEN/006/CAB/MINICOFINCEA/P.I/2021. Fees are payable to the provincial mining division and provincial finance authority. They include, amongst others: • artisanal mining card (annual fee of $13.5 USD for gold and $10 USD for 3Ts) • trading card (annual fees between $75-150 USD for gold and $70-$100 USD for 3Ts) • tax on artisanal mining sites ($200 USD for gold and $20 USD for 3Ts annually per site) • annual approval fee for artisanal mining cooperatives (annual fee of $400 USD for gold and $200 USD for 3Ts) • registration tax on mining dredges and motor pumps ($800 USD yearly for a dredge and between $75-$500 USD yearly for pumps, depending on pump capacity) • a tax on the sale of precious ASM materials other than diamonds and gold (2% of the value of each sale for 3Ts, payable for each transaction) • 1% artisanal gold (and diamond) transaction tax levied on transactions between artisanal miners, traders and comptoirs (1% of the value of each sale) • incentive tax for local processing of mineral concentrates in the province ($150 USD per transaction) • tax on authorisation to transport or transfer minerals ($150 USD per transaction for gold and $0.5 USD/kg for 3Ts) For each tax laid out above, there is an administrative fee also laid out in the Arrêté of circa 10% of the value of the tax. **South Kivu** In South Kivu, the majority of the taxes and fees are set out in the Arrêté Interministériel provincial N°…/CAB/MINIPRO/MEE/SK2021 et 08/021/GP/SK/CAB/MIN FIN.ECO.COM&IND/2021 du 29/01/2021 fixant les taux des droits, taxes et redevances à percevoir à l'initiative du Ministère provincial des mines, énergie et Environnement en Province du Sud Kivu. These include, amongst others : • Artisanal mining card ($10 USD / year) • Trading card ($300-$500 USD annually for gold traders and $300 USD for 3Ts traders) • annual approval fee for artisanal mining cooperatives ($300 USD / year) • registration tax on mining dredges, motor pumps and other equipment (ranging from $30 - $1,000 USD depending on the equipment) • tax on artisanal gold mining sites ($250 USD / pit / year) • tax for mitigation and environmental rehabilitation of ASM site (5% of the production of each pit) • a tax on the sale of precious ASM materials other than diamonds and gold ($100 annually for 3Ts) • tax on mineral transport ($10 USD / mineral lot) • tax on mineral transfer to another province (1% of the value of the mineral lot)

The above taxes are normally subject to the charging of administrative fees, but these fees are not included in the legal text that defines them, and as such some pushback against the payment of administrative fees by supply chain actors exists.

Other taxes set out in different legal texts in South Kivu include:

- tax on the production of minerals other than gold and diamonds, payable to the decentralized territorial entities (ETD in French) at the commune and chefferie / secteur level ($0.12 USD / kg)
- fee for service paid to the Service d'Assistance et d'Encadrement de l'Exploitation Minière Artisanale et a Petite échelle (SAEMAPE) at mine site level (FRSR) (5% of the production of a site for gold, $0.15 USD / kg for tin and tungsten, $0.25 USD / kg for coltan). In practice, this is only paid in some territories in South Kivu.
- fee for service paid to SAEMAPE by traders ($10 USD / month for gold, $0.15 USD / kg for tin and tungsten, $0.25 USD / kg for coltan)

Finally, there is a mining cooperative approval fee of $5,000 USD payable to the central government, levied once in the lifetime of a mining cooperative.

Fees that are also levied on mineral processing entities (found in the Arrêté Interministériel N° 0001/CAB.MIN/MINES/01/2019 et N° CAB/MIN/FINANCES/2019/009 du 22 février 2019 portant fixation des taux des droits, taxes et redevances à percevoir a l'initiative du Ministère des Mines) include:

- approval tax for a Category A Processing Entity (Entité de Traitement Catégorie A)[10] ($5,000 USD / 2 years)
- annual advance fee ($50,000 USD / year)

Mineral export fees. Taxes and fees payable at the point of export include those levied on export entities (regardless of no. of exports) and those levied on individual export lots. They are applicable to all mineral exports (regardless of which province the minerals originate in). Those levied on export entities are laid out in Arrêté Interministériel N° 0001/CAB.MIN/MINES/01/2019 et N° CAB/MIN/FINANCES/2019/009 du 22 février 2019 portant fixation des taux des droits, taxes et redevances à percevoir a l'initiative du Ministère des Mines. They include for gold:

- approval tax for a buying and selling office for authorised mineral substances ($5,000 USD / year)
- gold trading house buyer fee ($1,000 USD / year for comptoirs that house 10 or fewer buyers)
- additional buyer fee, where a comptoir has more than 10 buyers ($1,500 USD annually for gold)
- guarantee for the approval of a buying and selling office for authorised mineral substances (gold) ($2,500 USD / at the setting up of the comptoir. In theory this is refundable, but in practice refunds are not given)
- Export licence fee ($200 USD / year for gold)

For 3Ts:

- Category A Processing Entity Licence Fee ($5,000 USD per year)
- Tax on the authorisation to treat or process substances other than artisanal mining products ($300 USD / year)

In addition to the above, a number of taxes and fees are taken at the point of export for each mineral lot. These include for gold:

- Exit fee (in the Arrêté Interministériel N° 0459/CAB.MIN/MINES/01/2011 et N° 295/CAB.MIN/FINANCES/2011 du 11 novembre 2011, the fee is set at 0.5% of the sale value).

[10] The Arrêté ministériel n° 3163/CAB.MIN/MINES/01/2007 du 11 août 2007 portant réglementation des activités de l'entité de traitement et de l'entité de transformation des substances minérales categorises 3Ts processing centres as follows : Category A – any processing entity that engages in mineral processing operations to produce concentrate as a commodity; Category B: Any processing entity that, from mined ores or concentrates, produces refined metal as a marketable product.

However, the research conducted for this study found that in practice, 1.5% is charged due to a reported clause in another piece of legislation. After initial pushback by supply chain stakeholders that stopped exports for a few months, 1.5% has become the accepted amount.

- Community Interest Tax (1% of the purchase value of each lot, payable to the provincial authorities)
- Remunerative tax (0.5% of the sale value, distributed between a number of state entities)

For 3Ts, after the re-establishment of the payment of mineral royalties for artisanal production in 2019 following the revisions of the Mining Code in 2018, the fees applicable to ASM 3Ts exports include::

- Remunerative tax (1% of the sale value, payable to the DGDA)
- Mining royalties (3.5% of the sale value for cassiterite and wolframite and 10% of the sale value for coltan, distributed between the treasury, the province / local authorities and the mining fund)

Applicable to mining and minerals sector

General business taxes. Traders, treatment entities and comptoirs are required to act as a legal entity and must hold an RCCM (Registre de commerce et de crédit mobilier). They are subject to the payment of taxes through a Trade Register. Thus, they must pay to the General Tax Directorate (Direction Générale des Impôt (DGI)) 30% of profits or the equivalent of 1% of annual turnover; personal income tax for their agents; contributions to the national social security fund.

As is clear from Table 5, the Congolese fiscal regime is highly complex. Fiscal provisions relating to artisanal mineral supply chains are laid out in a number of different legal texts and often vary by province. Furthermore, there are large numbers of parafiscal taxes that are in some way related to the fiscal regime, but are not strictly captured in written law – for example, the charging of administrative fees alongside taxes in South Kivu that do not appear in the legal texts that define these taxes. The reality is that comprehending tax legality in the Congolese minerals sector is no simple feat, even for those with significant experience and networks in the sector. It follows that for the average Congolese artisanal miner, or even rural state agent, the exact nature and number of taxes to be levied is likely to remain a mystery.

This study has looked at parafiscality (illegal or legally ambiguous taxation) only in the context of mineral exports, but reports have shown that these taxes exist at every level in the Congolese supply chain. At the point of export some – such as the issuing of a certificate of non-objection to export by the Foreign Trade Division, to take but one example – are supposed to be free, but in practice a fee of $50 USD is normally collected before the issuing of the certificate. Others – such as commissions for various government entities – are taken informally as a percentage of the FOB value[11] of the export. Whilst it is common practice for these to be levied, they are strictly informal and as such there is often pushback against paying them by supply chain stakeholders. It also creates confusion amongst supply chain actors, on whom the responsibility falls of knowing which taxes need to be paid to which entity, which are strictly legal, which are parafiscal but without which export cannot happen, etc. This confusion will in turn have a negative impact on tax compliance in general as well as incentivize corruption, with actors in practice having to navigate the system to reduce (para)fiscal costs and the logistical burden of paying taxes and fees to a number of different agencies.

There are a number of factors that influence the high levels of parafiscality in the DRC. One, which occurs mostly at mine site level, is the issue of unpaid or underpaid state agents. The Congolese ASM Service - SAEMAPE – is charged with assisting and supervising ASM, which includes the collection of tax revenues from the sector. This organizational structure allows for monitoring and enforcement agencies to take ASM-specific issues into account. However, the site level agents who belong to these institutions often lack capacity and are not registered, meaning that they do not receive a state salary. According to civil society reporting, out of 128

[11] Market value of the goods at the point of uniform valuation (i.e. at point of customs at export) (OECD 2003)

SAEMAPE agents in Ituri in 2018, only 7 were registered and therefore paid by the state (Bulongo, 2018). This results in the levying of informal taxes by state agents in order to fill this salary gap.

Calculating tax compliance in the Congolese artisanal mining sector is difficult given the lack of data on tax revenues collected. Whilst some data is collected at various local government levels, understanding the contribution of minerals sector tax revenues to total revenues collected was not possible under the scope of this study due to lack of access to data. However it is safe to assume that, given the very low tax-to-GDP ratio of 7.5% – well below the Africa average of 16.5% (OECD, 2020a) – and the informality of the ASM sector, it is likely that tax compliance is very low, and that losses from informal mineral trade are great. This is corroborated by anecdotal data from the sector: a recent civil society report from South Kivu reported for example that the 1% tax on mineral transaction payable by traders is almost never paid (Bulongo, 2019).

Part of the reason for low revenue collection in the ASGM sector comes from the fact that taxes on mine site production are collected at the point of the mining cooperative (where there is an active cooperative). Production is declared in the presence of a SAEMAPE / Division des Mines agent, and tax is calculated accordingly. However, supply chain fragmentation in the Congolese ASM sector is very high. The use of gold as currency, both for the repayment of debts and pre-financing, and for the payment of worker's salaries, means that often only a small proportion of the gold that is produced at a particular site will pass through the hands of the cooperative, with the rest distributed amongst other actors. This means that the proportion of gold that reaches the cooperative – and upon which % value taxes such as the FSFR are calculated – is a significant underreporting of total gold production, likely resulting in significantly smaller formal revenues to the authorities than intended by the fiscal regime, but with a difficult to know level of informal taxation occurring to the benefit of unpaid or underpaid state agents.

Another, more significant reason for low revenue collection in the 3TGs ASM sector is a result of high levels of informality and illicit trade in ASM supply chains, in particular for gold. In 2012, EITI estimated the losses to the DRC from ASM gold alone to be $8 million a year, a figure which is likely to have increased in the time since. In 2020, total ASM exports of $2.3 million USD were declared. Actual figures are much higher. In 2013, the UN Group of Experts estimated that 98% of ASM gold was smuggled out of the DRC. If this still holds true, it would put 2020 ASM production up to a value of $119 million USD. If we take BGR's more recent estimate that 15-22 tonnes of ASM gold are produced per year in DRC the value is even higher, reaching at least $742 million USD at today's prices[12] (Neumann *et al.*, 2019). This would mean that 99.5% of gold that leaves the DRC is not accounted for in official exports. In terms of lost tax revenues, the discrepancies are significant. Even taking into account only the 3 export taxes amounting to 3% of export value[13], we would see revenues accruing to the state of $22.2 million.

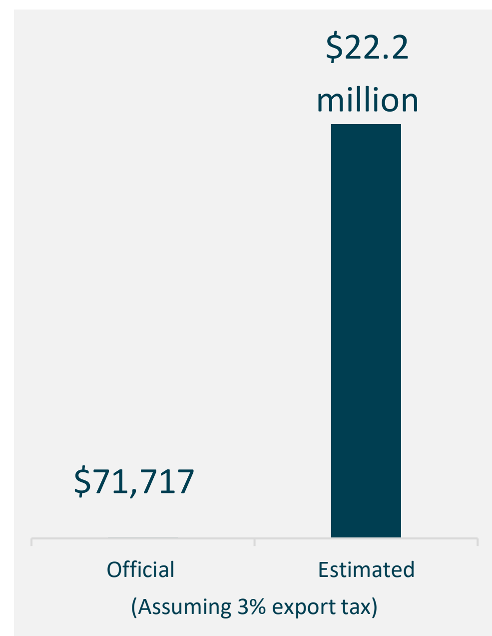

Figure 6: Potential revenue capture on estimated actual gold production

INCENTIVES AND DISINCENTIVES FOR FORMAL TRADE

The existence of separate fiscal regimes for ASM and LSM in the DRC, as well as institutions that are mandated specifically to monitor and regulate the ASM sector, is a strength of Congolese ASM sector governance and

[12] Price of $55 USD/g, assuming 90% purity

[13] Exit fee, assumed at 1.5% as is paid in practice; Community Interest Tax (1%); Remunerative tax (0.5%)

could in theory pave the way towards higher levels of formal mineral trade in the country. However, various implementation factors undermine these governance structures, providing strong disincentives for the informal or illicit trade of ASM minerals within and out of the country.

Firstly, the legal ambiguity within which many taxes and fees stand is a strong disincentive for formal trade. Due partly to the decentralised nature of ASM sector governance and partly to overlapping or conflicting legal texts, understanding which taxes are fully legal and which are not is a complex process. Furthermore, the fact that these taxes are payable to a number of different institutions puts the onus on the supply chain actor to know which taxes should be paid, how much and to whom. In a complex legal environment this may lead to confusion and disincentivise fiscal compliance. The clarification of taxes and fees payable by ASM supply chains in each jurisdiction would be a first step in providing a greater incentive for fiscal compliance. The Province of Ituri has already moved in this direction with the development of an Arrêté that lays out all the taxes and fees (including administrative fees) applicable to ASM minerals sector production and trade in the province. Whilst the number of fees and taxes has not decreased, the clarification of which fees are payable will no doubt provide a legal basis for supply chain actors to i) push back against any fees not mentioned in the Arrêté and ii) build awareness amongst both supply chains actors and state agents as to what the legal fiscal regime constitutes in the province. Whilst this will not in itself address the issue of the levying of parafiscal taxes on the ground, it is a step in the right direction.

Secondly, the number of taxes and entities that levy tax are a disincentive for formal trade, given the administrative burden it places on supply chain stakeholders to ensure that high numbers of taxes and fees are payable to different agencies in different locations and at different points along the supply chains. As discussed further in the Comparative Analysis (Section 2.5), this acts as a significant barrier to ease of compliance for supply chain stakeholders and is likely to be contributing to mineral smuggling as well as the underpaying of taxes and fees.

Thirdly, the cumulative burden of the ASM fiscal regime can result in elevated costs for supply chain actors, undermining commercial viability in a sector with narrow margins. Take, for example, the disproportionately high costs associated with the production of gold in South Kivu. The 5% tax payable to SAEMAPE on gold production and a further 5% for environmental rehabilitation of mine sites alone amount to 10% of the value of production, likely rendering any operations unviable. Whilst it is unclear to what extent these taxes are levied in practice, their existence is likely to incentivise actors to find ways of navigating the system to avoid them.

The high costs levied on cooperatives are also likely to disadvantage smaller players. This supports – as has been discussed in literature – in the consolidation of power of ASM cooperatives into the hands of an elite group of actors (de Haan and Geenen, 2016). The $5000 needed to obtain approval to form a cooperative, for example, precludes small producers with limited access to investment. High rates of taxation on production - in South Kivu 10% of the production value is theoretically taken (5% by SAEMAPE and 5% for environmental rehabilitation) – mean that cooperatives need significant cashflow to be able to pay them, again disadvantaging those with fewer means, or pushing those with less financial capacity into informality.

The same is true at the point of export, especially if legally ambiguous taxes and fees are taken into account. In a case study from 2018, Bulongo analysed all the tax and fee costs (including legally ambiguous) reportedly paid by a Bukavu-based comptoir for its export of 4 kg of gold that year (Bulongo, 2019). Assuming that the export took place in one lot, Bulongo estimated that the comptoir would have paid over USD $17,000, making up 11% of the purchase value of the gold exported. If other taxes, such as Corporate Income Tax, were taken into account, the value would be even higher. Similarly Impact estimated that an ASM gold export from the DRC is likely to pay 8-11% of its volume in export taxes, charges and fees, a share that goes up to 18-22% if transport is also taken into account (Katho *et al.*, 2021). This example shows the fiscal pressures faced by comptoirs looking to operate formally and highlights how the high costs are likely to contribute to higher levels of illicit gold exports from DRC. Anecdotal evidence supports this. It is common practice for traders to trade only a small

percentage of their gold to registered comptoirs. This provides them with a legitimate paper trail to justify their license, whilst smuggling the majority of their production in order to avoid the high costs associated with the formal regime. Comptoirs are reported to behave in a similar way, officially exporting only a small proportion of the gold they buy.

In the case of ASM in a context of widespread informality, the purpose of a fiscal regime should be to incentivise more mineral producers, traders and exporters to sell their minerals through legal channels. In the context of Eastern DRC, the main disincentives for formal trade identified within the ASM fiscal regime are i) the high taxation costs payable along the supply chain, ii) the ambiguities that exist in what constitutes a legal or formal tax and iii) the high number of entities entitled to levy tax at different points in the supply chain. Adding the extremely high levels of parafiscal fees levied on the supply chain, the overall effect is a fiscal regime that is burdensome, making it extremely difficult for actors to fully comply with it whilst retaining commercial viability in their operations. This points towards the need to drastically simplify the tax regime in DRC in order to incentivise formal exports. The introduction of a single tax at the point of export, such as a mineral royalty, could go a long way in facilitating greater formalisation. This would have the advantage of being easier and more efficient for both supply chain actors and the DRC government. For supply chain actors, it would reduce confusion as to which costs needed to be paid at which point in the supply chain. For the state, it would reduce the burden of tax collection for the majority of entities. This would free up ASM monitoring bodies such as SAEMAPE and provincial Division des Mines agents to promote better chain of custody practices and working conditions in the ASM sector without having to track and tax production. If the principal mandate of site-level authorities was to support ASM (and not collect any taxes), it would also likely improve trust between the authorities and the ASM.

Table 5: Estimated revenue generated from improved formalisation

	Export (USD)	Estimated revenue (export tax)[14]
50% formal exports	$259,875,000	$7,796,250
25% formal exports	$185,625,000	$5,568,750
5% formal exports[15]	$37,125,000	$1,113,750
2020 (estimated official)	$2,390,581*	$71,717

Source: [CTCPM (2020) Statistiques Minières]

Acknowledging the fact that formalisation takes time, Table 6 shows that even an achievement of 25% formal exports of gold would generate significant revenue for the state. It also shows the importance of concentrating on the formalisation of gold exports. In 2020, officially reported ASM 3Ts exports are estimated to have generated a revenue from export tax alone (4.5%[16]) of $5,500,349 USD, far more than the estimated $71,717 USD for gold. However, given the much higher levels of formal 3Ts exports[17], there is less room for growth of revenues from the sector. Conversely, if only 25% of gold exports were to take place legally, the value of export tax alone would exceed the current revenue generated by 3Ts exports.

2.5. Comparative Analysis

The following section provides a comparative analysis of the fiscal regimes described in the sections above. Whilst all findings are based on this study's research as to the fiscal regimes applicable to ASM 3TG production and export in each of the four target countries, it should be noted that tax law is notoriously complex, and that

[14] Based on 3% total (Exit fee, assumed at 1.5% as is paid in practice; Community Interest Tax (1%); Remunerative tax (0.5%))
[15] Based on lower end of BGR estimate (15 tonnes annually), valued at $742 million (assuming $55/g at 90% purity)
[16] Mining royalty (3.5%) and remunerative tax (1%)
[17] According to ITSCI, 95% of ASM 3Ts production in the Great Lakes region is covered under their initiative

the below findings are based on simplified models and estimations designed to best reflect the complex situations on the ground.

AMOUNT OF TAX LEVIED

In order to compare the actual costs associated with the fiscal regimes of Uganda, Rwanda, Burundi and the DRC, we have estimated the amount of tax levied on a 3kg export of gold (worth an estimated USD $148,500[18]) and a 1 tonne export of cassiterite (worth an estimated USD $25,065[19]) from each of the respective jurisdictions.[20] In order to achieve this, the study created simplified models based on a number of assumptions: i) a simple supply chain, comprising only of two groups of actors (production/import and export), ii) including only payments that are made directly to a government entity, iii) assuming the same price for import and export (for consistency across geographies and given the very narrow margins that characterise the sector), iv) assuming that the entities involved are exporting 1 mineral lot monthly (in order to avoid a bias towards high fixed costs such as licensing) and v) that no mineral processing takes place (to allow for comparisons in countries where mineral processing facilities are not available), amongst others.

Figure 7 and Table 1 show the costs associated with these exports. Costs have been calculated separately for Ituri and South Kivu in the DRC, given their different fiscal regimes at point of production.

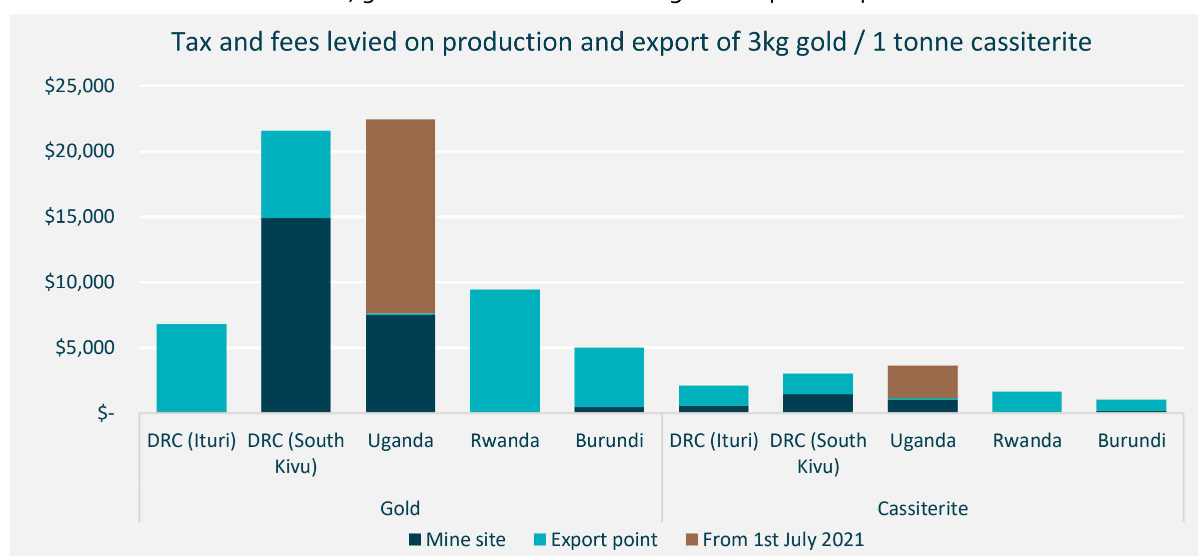

Figure 7: Estimated taxes payable on export of unprocessed cassiterite and gold

The results show the discrepancies that exist in the fiscal regimes for each country. In Rwanda and Burundi, mineral royalties are payable at the point of export, whilst in Uganda mineral royalties are payable at the point of production, according to monthly declaration of value of production. Whilst this does not necessarily mean that in Uganda the burden of the costs is always shouldered by the miners, as it is likely that costs are taken into account in mineral sale prices, significant royalties at point of production are likely to disadvantage smaller actors, especially given high capital costs often associated with the sector. Exporters on the other hand tend to act as aggregators and are therefore less likely to experience serious cashflow constraints.

The Figures show the fiscal burden that will be created by the planned amendments to the Ugandan fiscal regime, which comes into force on 1st July. Our model estimates taxes payable in the range of $22,457 – or 15% of the total estimated sales value – for an export of 3kg Ugandan-produced gold (unprocessed) according to the new legislation. Even processed gold – which is in reality more likely to be exported from Uganda – would

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[18] Assuming $55/g at 90% purity

[19] Assuming $33/kg at 75% purity

[20] The values of 3kg and 1 tonne were chosen as reasonable monthly production values for an ASM site. Exports normally take place in larger quantities (e.g. 25 tonnes for cassiterite), but it was deemed reasonable to keep the same values for consistency, in order to compare between the 4 chosen jurisdictions.

trigger estimated tax payments of USD $15,032, which amounts to 10% of the estimated sales value of a 3kg locally-produced export. These figures seem unreasonably high, and no doubt put into question the commercial viability of exporting gold from the country. As discussed in Section 2.2, refineries may be able to negotiate some sort of exemption from the new export levies. However, this would i) undermine the planned increase in government revenues from the sector and ii) consolidate gold exports into the hands of a powerful elite, risking entrenching existing alleged links with mineral smuggling from neighbouring countries.

Table 6: Estimated tax payable on export of unprocessed gold or cassiterite

Country	Mine site	Import point	Export point	From 1st July 2021	Total	% of export value
Gold (3kg)						
DRC (Ituri)	$ 109		$ 6,691		**$ 6,801**	5%
DRC (South Kivu)	$ 14,90		$ 6,691		**$ 21,59**	15%
Uganda	$ 7,478		$ 128	$ 14,850	**$ 22,457**	15%
Uganda (imported)		$ 1,76	$ 128	$ 14,850	**$ 16,74**	11%
Rwanda	$ 67		$ 9,351		**$ 9,419**	6%
Rwanda (imported)		$ 2,52	$ 9,351		**$ 11,875**	8%
Burundi	$ 484		$ 4,513		**$ 4,997**	3%
Cassiterite (1 tonne)						
DRC (Ituri)	$ 550		$ 1,569		**$ 2,120**	8%
DRC (South Kivu)	$ 1,441		$ 1,569		**$ 3,011**	12%
Uganda	$ 1,056		$ 82	$ 2,506	**$ 3,645**	15%
Uganda (imported)		$ 531	$ 82	$ 2,506	**$ 3,120**	12%
Rwanda	$ 67		$ 1,573		**$ 1,641**	7%
Rwanda (imported)		$ 426	$ 1,573		**$ 1,999**	8%
Burundi	$ 150		$ 877		**$ 1,02**	4%

DRC results differ significantly between South Kivu and Ituri. This is largely due to two taxes payable in South Kivu but not in Ituri: a 5% tax levied on the production of each site by SAEMAPE, the artisanal mining administration, and a further 5% levied on production for the rehabilitation of mine sites and mitigation of environmental impacts. The latter came into law this year, replacing a previous cost of $1 USD per ASM miner per year at a mine site, a value that represents a much smaller financial burden. It is clear that the levying of these taxes would far exceed what is commercially viable for the production of gold. Given the recent introduction of the environmental rehabilitation tax, our research was not able to ascertain to what extent it is levied in practice. However, compliance is likely very low. For the 5% levied by SAEMAPE, compliance is reported to differ by territory. Insufficient numbers of SAEMAPE and Division des Mines agents mean that a large amount of actual production likely goes unreported, and taxes remain uncollected.

Estimated import costs were also calculated according to the same assumptions described above for Rwanda and Uganda (Burundi and DRC were excluded due to a lack of formal mineral imports). Figure 8 estimates the relative costs of legally importing 3kg (unprocessed) gold from Ituri into Rwanda and Uganda. The impact of the Rwandan system of paying royalties on all minerals – produced and imported – becomes clear, with elevated tax costs for imported minerals. High costs and likely higher royalties compliance in Rwanda, therefore, are likely to incentivise the smuggling of gold from the DRC in order to avoid the payment of taxes in both countries.

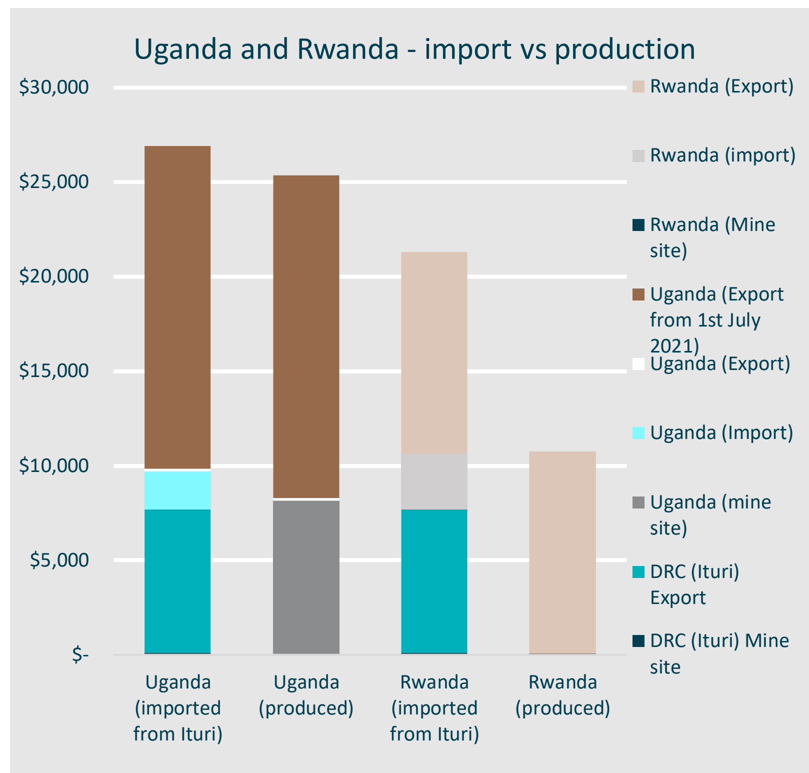

Figure 8: Relative costs of legal re-exports of gold from Rwanda and Uganda

Conversely in Uganda imports have historically been cheap – importing from Ituri costs little more in terms of tax than local Ugandan production. This in theory could have incentivised formal trade by avoiding the Rwandan situation of high costs in both the producer and importer countries. However the reality is that some traders used the low import (and virtually no export) costs to smuggle gold from the DRC (thus avoiding formal tax altogether) to Uganda and then export it at almost no cost. This reality is reflective of the fact that misaligned regional fiscal regimes are not the only incentive for smuggling. Rwanda and Uganda's fiscal regimes were very different, and yet levels of regional smuggling remained high, with reports of extensive illicit trade through both countries. From July 2021, however, the implementation of high export levies on both processed and unprocessed minerals will make Ugandan exports the most expensive in the region. It is unclear to in what way these changes will i) be implemented or ii) disrupt existing illicit trade routes. Given the high levels of smuggling that already occur in Uganda and the region, strengthening chain of custody information and compliance for exports will be more critical than ever to stemming the flows of smuggled gold.

INSTITUTIONS THAT LEVY TAX

The number of taxes that need to be paid, and the number of institutions that levy tax on a particular good or service are part of the non-fiscal factors that can impact on tax payment compliance. This is true of the minerals sector in the Great Lakes region. Figure 9 shows a comparison of the number of entities that levy tax on a typical ASM gold supply chain in DRC, Rwanda, Uganda and Burundi. Ituri and South Kivu have been represented separately given the variations in their fiscal regimes for ASM.

In Rwanda, the Rwanda Revenue Authority is the only tax collecting entity for artisanal and small-scale gold supply chains (for 3Ts the RMB also levies a small mineral traceability levy). In Uganda, the Uganda Revenue Authority collects 99% of taxes levied, with the Uganda Printing and Publishing Corporation collecting a small fee for the gazetting of mineral licenses. In Burundi, tax collection is split between the Mining Office (OBM), the revenue authority (OBR) and the environment office (OBPE).

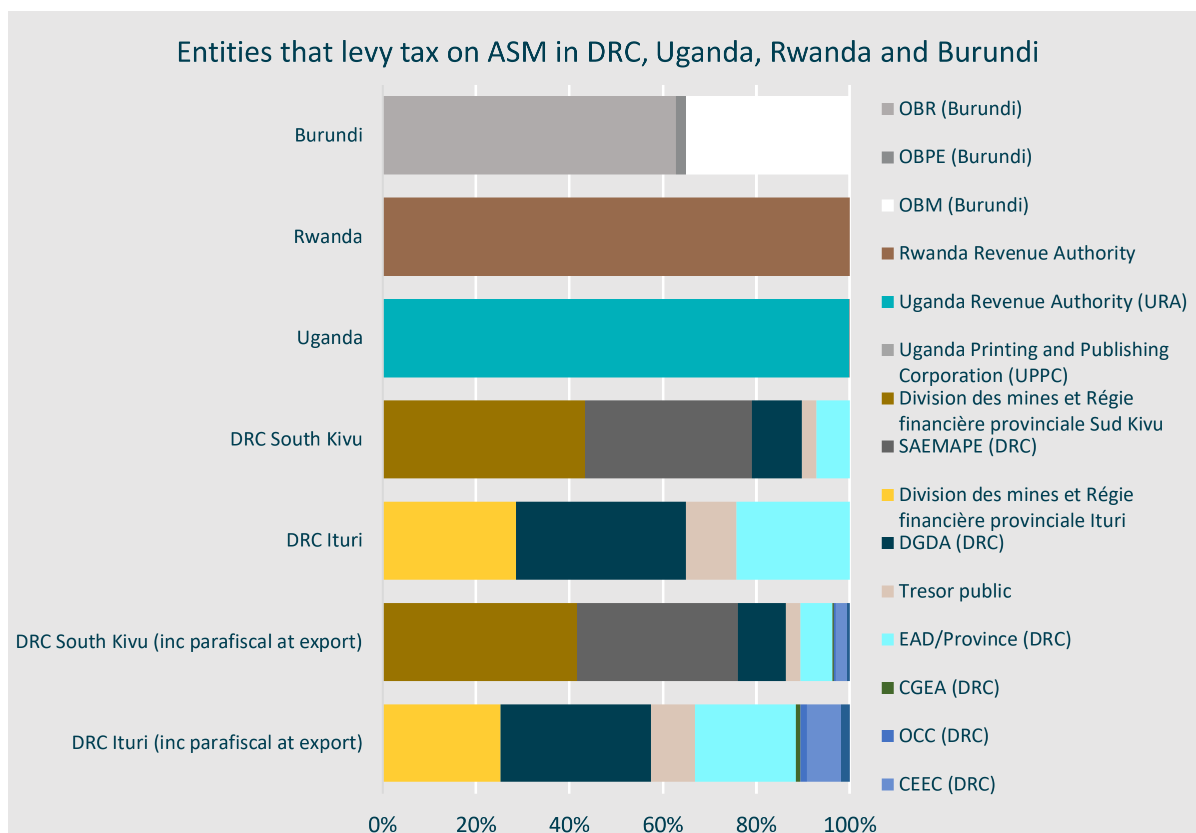

Figure 9: Entities that levy tax on ASM 3TGs production, import and export

The DRC, however, has a plethora of entities collecting (official) tax along mineral supply chains. The bars 'DRC South Kivu' and 'DRC Ituri' below show the entities that are involved in collecting official tax revenues, as laid out in tax legislation, in Ituri and South Kivu. The bottom two bars, however, show the entities involved in collecting tax if the other parafiscal fees taken at the point of export are taken into account. These parafiscal fees at the point of export are not necessarily illegal, as they appear in various government department documents. Whilst they are not strictly part of the tax regime, they are obligatory payments at the point of export, and it is therefore important that they are considered. Figure 9 only takes into account parafiscal payments that are taken at the point of export. There are also numerous payments – formal, informal and legally ambiguous – that are commonly taken at other points along the supply chain. A 2017 report by civil society groups in Ituri mapped 46 different taxes and fees that were payable along the gold supply chain, constituting a significant barrier to legal trade ((CdC/RN), 2017). Civil society have reported that actors all along

the supply chains object to the numerous formal and informal taxes to which they are subjected (Bulongo, 2019).

Looking only at parafiscal fees at the point of export, this study shows that they do not add a huge amount to the total value of fees levied on the supply chain (see Figure 10). It is not necessarily the expense of the parafiscal fees (at the point of export) that poses the barrier to compliance, rather the number of fees levied at different points and by different institutions. This also creates confusion as to what is legal and what is illegal. Ituri, for example, has recently legalised in an Arrêté the payment of 'frais techniques' (administrative fees) alongside each tax and fee, clarifying what remains a legally ambiguous structure in South Kivu. Whilst this does not serve to reduce the number of taxes paid or entities levying tax, transparency is the first step towards removing the obstacles to tax payments along the supply chains.

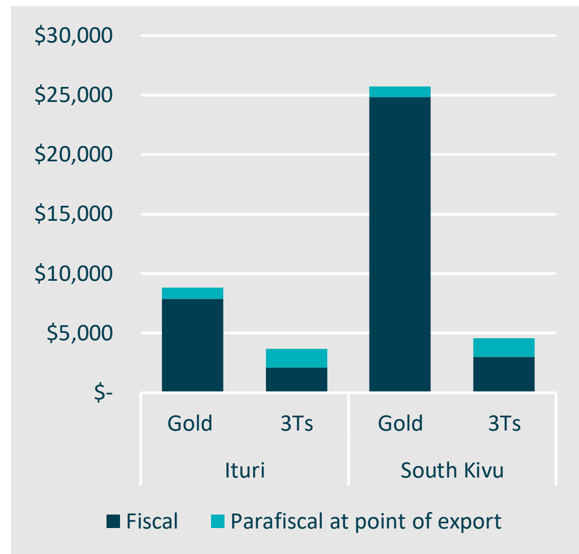

Figure 10: Value of parafiscal fees (point of export only) compared with total fees. Source: Present study findings

It is clear, therefore, that there is an urgent need in the DRC for a simplification of the fiscal regime applicable to ASM 3TGs (and other minerals). One cheap and efficient solution (for both the state and supply chain stakeholders) would be the imposition of a single tax at the point of export that replaces all other variable taxes and fees payable for each mineral lot. This would serve to i) avoid the payment of small taxes and fees to many different entities, ii) clarify which taxes need to be paid for both supply chain actors and state entities, iii) facilitate the monitoring of tax compliance with one single proof of payment, iv) create stability in the sector by avoiding unexpected fees and taxes levied on supply chain actors that they didn't know about and v) reduce the risk of parafiscality and facilitate identification of informal taxation.

However, whilst simplification appears a logical solution, successful implementation relies on a number of parallel factors. Firstly, centralised collection of tax revenues relies on effective distribution of these revenues to the entities and services that require them. Uganda has seen an improvement in the redistribution of mining revenue to local governments in recent years (Natural Resource Governance Institute and UNDP, 2016), due in part to increased sensitisation of local governments. Whilst redistribution of mining sector revenues such as royalties in the DRC has not always been effective, it has improved slightly in recent years, in particular with the introduction of the 2018 Mining Code (Toroskainen, Malden and Okenda, 2020). In a country as large, geographically diverse and politically decentralised as the DRC, collecting revenue at provincial level and redistributing locally is likely to be the most logical approach, especially given the already existing system of taxation on mineral transfer between provinces to mitigate for the loss of mineral value that occurs when minerals are exported from a different province than where they are produced. Secondly, policy changes must be accompanied by an in-depth understanding of the political economy of taxation at the local level. For example, the levying of taxes by SAEMAPE at mine site level is important for many state agents to supplement revenues in the face of unpaid salaries. Issues like this would have to be assessed and rectified to avoid the risk of further entrenching parafiscality in the Congolese ASM sector. If this could take place, it would free up entities such as SAEMAPE to focus on monitoring and providing support to the ASM sector, which would in turn benefit supply chain stakeholders.

RECOMMENDATIONS

This briefing paper has provided a high-level overview of the fiscal regimes of Uganda, Rwanda, Burundi and the DRC in order to shed light on the relationship between mineral taxation and illicit mineral trade in the Great Lakes Region. It provides an overview of the main fees and taxes associated with the production and trade of 3TGs in each country, as well as an assessment of implementation. It has shown the huge losses that are accruing to governments – in particular from the ASM gold sector – even in relatively efficiently-governed and simplified fiscal environments in the region. It has looked at both the strengths and weaknesses of each fiscal regime with relation to incentivising mineral smuggling in the region, showing how the regimes compare to one another and highlighting the weak spots that might be incentivising smuggling, misdeclaration of mineral origins and low levels of tax compliance. However, it is important to note that it is unlikely that a country's fiscal regime is the only – or even the primary – disincentive for formal trade of 3TGs in the Great Lakes Region. Illicit trade in high-value goods operate within complex networks of powerful individuals and groups, often linked with organised crime, and are therefore not triggered solely by unfavourable fiscal regimes in producer/transit countries.

Against this backdrop, the table below puts forward concrete recommendations to the Madini project and associated actors for promoting fiscal policy changes in the region that better incentivise the formal trade of minerals within and beyond the region, maximise government revenues from the sector and facilitate tax compliance for supply chain actors. Whilst fiscal regimes may not be the primary cause of illicit mineral trade in the region, there are areas in which fiscal policy presents an obstacle to commercial viability to those who would like to operate formally but for whom current fiscal requirements are too burdensome. It is with these actors in mind that the below recommendations have been developed.

Recommendation	Main actors
1) Develop a more in-depth understanding of the fiscal environment in the DRC, to build on and complement the findings in this study and provide a further foundation for advocacy on the issue	
a) Conduct further research – as already planned – on taxes and fees levied along 3TG supply chains in the DRC. The research should focus on areas including: - Understanding to what extent the 'fully legal' taxes and fees are levied in practice. Are they being collected in all mining areas? Are they being collected by the right people? Are the correct amounts being collected? How much production escapes taxation, and which taxes are least / most commonly paid? - Understanding to what extent parafiscal fees and levies are applied to supply chain stakeholders – who levies informal taxes, how much is levied, what is the total fiscal burden on supply chain actors, how does this differ according to geographical area, to what extent is parafiscality opportunistic or entrenched/institutionalised, etc. An important topic to be covered in this research is the political economy of taxation in the project's focus areas. Who currently benefits from informal taxation? To what extent will the project's activities be disrupting these dynamics, and what might the implications of these disruptions be? From an advocacy point of view, who would be the 'blockers' and who would be the 'champions' of a simplified and more transparent fiscal regime for ASM? How can the support of the champions be leveraged to ensure long-term positive impact and sustainability of the project's aims?	✓ Supply chain actors, inc mine site actors, traders (of all levels), investors / financers, transporters, processors, aggregators and exporters (formal and informal) ✓ Civil society ✓ Customary authorities ✓ Upstream Due Diligence programmes ✓ Provincial Ministries of Mines, Division des Mines, Police des Mines, CEEC, SAEMAPE
b) Conduct a consultative review of the findings of the research described above at Provincial level. Use the review as a chance to garner support for simplification, as well as understand better the incentives and disincentives of different groups (and potential competition between them) to support a simplification of the fiscal regime.	✓ Provincial Ministries of Mines, Division des Mines, Police des Mines, CEEC, SAEMAPE ✓ Civil society ✓ Supply chain actors, esp aggregators and exporters
2) Advocate for fiscal reform in the DRC	
a) Advocate for the simplification and clarification of the fiscal regime at Provincial level. i. Advocate for clarification of the legal basis of frais techniques in South Kivu, following the example taken by the provincial government of Ituri this year.	✓ Provincial Ministries of Mines ✓ Civil society ✓ Supply chain actors, esp aggregators and exporters

ii. Advocate for the clarification of other legally ambiguous taxes and fees, e.g. whether the droit de sortie is 0.5% or 1.5%. iii. Advocate for the harmonisation of fiscal regimes across Eastern DRC, to avoid situations in which it is much more expensive to produce legally in one province than in another (e.g. environmental rehabilitation fees in South Kivu)	
b) Advocate for a simplification and harmonisation of the fiscal regime at a national level i. There seems to be political will for this already. Start a dialogue with the new mining administration to understand the barriers and opportunities for simplification. ii. Advocate for less overlap between national regulations, provincial regulations and local government (ETD) regulations, e.g. cooperative set up fee	✓ National mining authorities ✓ Provincial mining authorities ✓ Civil society ✓ ICGLR ✓ East African Community – regional pressure (and contingencies on approval?) ✓ Due diligence programmes and international standards setters
c) Base advocacy on inclusive dialogue with relevant actors i. In order to build trust among agencies (which is required if a more simplified tax collection system is to work) begin dialogues that include all agencies involved with ASM supply chains, from the mine site level to the Provincial level. This should also include customary authorities. ii. Look to link with likeminded actors such as the National Business Chamber at national and provincial levels (FEC Mines) in EDRC who can support advocacy efforts and provide greater knowledge about the difficulties of compliance in practice.	✓ Provincial Ministries of Mines, Division des Mines, Police des Mines, CEEC, SAEMAPE ✓ ETDs ✓ Customary authorities ✓ Supply chain actors inc mine site actors, traders (of all levels), investors / financers, transporters, processors, aggregators and exporters (formal and informal) ✓ Civil society
d) Collaborate with actors who have already worked on the issue. i. Collaborating with likeminded partners, such as the FEC described above as well as the provincial monitoring committees (CPS) who will present a stronger collective voice to the GoDRC. Learn from what worked and didn't work from those who have advocated before. ii. High-level DRC government officials have told The Sentry that they now recognize the issue and are working to lower taxes, coordinating with provincial governments. iii. IMPACT have been advocating for lower taxes, fiscal reform and harmonisation as part of their Just Gold project for the past 8 years. iv. The Zahabu Safi project is currently facing similar challenges and looking for solutions. v.	✓ FEC Mines in South Kivu, Ituri ✓ CPS in South Kivu and Ituri ✓ IMPACT / Just Gold ✓ Zahabu Safi project ✓ The Sentry ✓ Peace Direct ✓ Due diligence programmes ✓ Other likeminded actors
3) Advocate for fiscal reform in the Great Lakes Region	

a) Advocate for fiscal reform in Rwanda, Uganda, Burundi and Tanzania. Whilst Tanzania was not a specific focus for this study, it is thought to be an important route for smuggled minerals from the Great Lakes Region. The Madini project should also seek to better understand the flow of minerals through Tanzania and the current incentives and barriers to formal mineral trade. Specific policy measures that will support and incentivise formal mineral trade within and from the Great Lakes region include, for example: i. Increased transparency of public reporting in mineral production and exports, disaggregated by mineral. Good and easy-to-access data is critical for enabling supply chain transparency, allowing for collaboration between actors on mineral flows and the identification of discrepancies that may reflect mineral smuggling. Information sharing should be improved both within and between GLR countries. The sharing of information on mineral trade, export and revenue collection between relevant agencies (geological survey, ministry of mines, revenue authorities, customs) in each country is essential for the obtaining of an accurate picture of (formal and informal) mineral production and trade in that jurisdiction. This understanding will in turn enable the facilitation of legal trade. The provision of accurate data on mineral production and trade internationally is also critical. One way of improving reporting may be through the regular sharing of disaggregated mineral export data with the United Nations Statistics Division (UNSD) for inclusion in the UN COMTRADE database. Another may be through the effective implementation of the ICGLR's Mineral Tracking Database, which has been designed but is not yet operational. Another may be greater efforts to include ASM data in EITI reporting. ii. Promote value addition in the region by reducing barriers to legal re-exports of 3TGs, in particular gold. These barriers look different in each country. In Rwanda, for example, VAT is payable on all imports, causing cashflow problems for importers. A VAT exemption should be considered for mineral imports. Countries in the Great Lakes Region may also assess the merit of fical incentives for the trade of unprocessed minerals within the region in order to facilitate value addition in-region. iii. In order to increase state revenues from ASM, which are minimal across the region, prioritise expansion of the tax base rather than increasing tax rates. Each country has a significant ASM sector, which has the potential to provide important revenues to the state. State should focus on an *inclusive* expansion of the tax base, whereby the ASM sector is supported through a formalisation process whereby benefits can accrue both to supply chain actors (through taxes being channeled back into support to the sector at a local level) and the state (through increased	✓ In Rwanda, Uganda, Burundi and Tanzania: ○ Ministry of mines ○ Revenue authority ○ Ministry of Trade ✓ ICGLR Secretariat

revenues). States could consider training and capacity building for revenue authority agents in mineral taxation and taxing informal sectors. iv. Promotion of cooperation between GLR member states in the form of bilateral trade, specifically agreements that aim to avoid the double-taxation of minerals that are traded within the region.[21] The DRC's planned entry into the East African Community may facilitate the putting in place of these types of agreements. b) Advocate for increased collaboration and transparent communication between GLR states. A healthy and formal minerals trade through the GLR will benefit all states. Increased sharing of data, collaboration of between each country's authorities including customs, mining police, border control, etc will enable a more transparency in mineral supply chains and better monitoring of regional mineral flows. This includes encouraging collaboration between the DRC, a major producer of informal ASM gold, and neighbouring countries to minimise discrepancies between export figures (out of DRC) and import figures (into neighbouring countries). c) Advocate to the ICGLR to promote the above reforms, including: i. Encouraging transparent and effective communication and collaboration among member states ii. Facilitate data sharing through implementation of the Mineral Tracking Database iii. Advocate for better inclusion of ASM who are often informal and unlikely to be able to shoulder the burden of onerous mineral fiscal regimes	
4) Advocate for a fiscal pilot for the Madini project	
a) Use the platform of dialogue built when advocating for simplification to approach the issue of a potential fiscal pilot for the Madini project, in order to pilot a more simplified tax structure This can only take place once the space for constructive dialogue has been opened. It may not happen in the Madini project's lifetime, but can present a good opportunity for the continuation of this work into the future by supply chain actors. Conduct capacity building with project partners and supply chain actors to bolster their ability to continue advocating for this issue and similar issues after the Madini project is finished. b) Collaborate with other likeminded projects to a) strengthen advocacy for such a pilot and b) add scale to the pilot if appropriate	✓ National mining and fiscal authorities ✓ Provincial Ministries of Mines, Division des Mines, Police des Mines, CEEC, SAEMAPE ✓ Customary authorities ✓ Supply chain actors, inc mine site actors, traders (of all levels), investors / financers, transporters, processors, aggregators and exporters (formal and informal) ✓ Fiscal simplification 'champions' identified over course of project to support advocacy

[21] Some movement has already occurred here, with for example the signing of a double taxation avoidance agreement between the DRC and Rwanda earlier this year (AllAfrica 2021). The extent to which this applies to minerals is unclear, and more of such agreements at a regional level are needed to facilitate the legal trade of minerals within the region.

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