



# **The Effects of COVID-19 Pandemic on the Government Revenue in the Extractive Industry in Tanzania**

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## **Author's contribution**

*The sole author designed, analyzed, interpreted and prepared the manuscript.*

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## **ABSTRACT**

Tanzania has not been unique amid the COVID-19 pandemic in terms of economic impact. Since the first case was announced in March 2020, several thousand cases have been confirmed with several hundred deaths (real-time data). There were a number of transmitting factors and effects that exposed Tanzanian national revenue systems to great economic risk if COVID-19 was not well managed. The paper assesses the level of risks on the total government revenue resource systems, government revenue collections from the extractive industries and national expenditure budget performances. This descriptive paper uses results from the HakiRasilimali field research survey, 2020. The paper found high and increasing levels of negative and perceived risks on the government revenue mobilization, collection and utilization due to the existence of the COVID-19 pandemic. The majority perceived that the COVID-19 pandemic has high levels of risks and negative effects on the national budget expenditure frameworks in medium- and long-term periods. In the short run it is not easy to cut down and stop major recurrent government expenditures in

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developing economies. The public expenditure resources allocated to the Ministry of Minerals have been increasing during the COVID-19 pandemic to support the on-going mining reforms in Tanzania. Also, the government was compelled to allocate more financial resources to the health sector in order to fight against the COVID-19 pandemic and the aftermath, as well as support other most affected sectors. The paper recommends that the best way of preventing and combating the COVID-19 risks and related public health threats or possibilities is to protect and give capacity to socio-economic entities, sectors and actors' abilities in achieving their desired short-, medium- and long-term objectives. To support a robust health and economic policy response, Tanzania has in its potential fiscal space relative to other East African countries, stable political environment, high international reserves, larger domestic market and favorable mineral commodity price movements. Tanzania has enhanced political preparedness and containment capacity through measures to strengthen detection, surveillance and combating the current COVID-19 pandemic.

*Keywords: COVID-19; risks; Extractive Industries; Tanzania.*

## 1. INTRODUCTION

The COVID-19 pandemic has spared no nation or economic sector of society. It has gravely impacted the livelihoods of millions, small and large public and private businesses across the world [1]. The COVID-19 pandemic is present 2021 and perhaps in the future and continues posing economic and social challenges [2-6]. In the public health, it is likely to cause health crisis and that is negative, detrimental and asymmetric with all countries' socio-economic sectors, actors and activities being hardest hit by the pandemic [7]. Like other nations, Tanzanian socio-economic sectors, activities and actors have not been spared amid the COVID-19 pandemic in 2020. Since the first cases were announced in March 2020, a few thousand COVID-19 cases have been confirmed with about a few hundred deaths (real-time data) [7]. Both urban and rural areas have been reporting on increasing COVID-19 cases. This comes with a subsequent negative impact on health, social and rural livelihoods. Under the current circumstances, the business environment such as the extractive sector-comprised the mining, oil and natural gas in Tanzania were too expected to be at risk mostly due to globally imposed lockdowns and travel bans. The global economy is contracting, markets and storage facilities are being overwhelmed and the stock markets are crashing.

With no lockdowns formally imposed by the Tanzanian government in year 2020, the formal extractive sector started to observe layoff cases and suspension of extraction activities, something that had or will disrupt the lives of hundreds of mining workers in the sector. There are a number of factors that expose Tanzania

to great socio-economic risks; if COVID-19 is not well managed. These included total government revenue resources, government revenue collections from the extractive industries and national expenditure budget performances.

The objective of this was paper is to present preliminary assessment on the level of risk of COVID-19 for the total government revenue resources, government revenue collections from the extractive industries and national expenditure budget performances given COVID-19 in Tanzania in year 2020 and 2021 [8].

## 2. METHODOLOGY AND APPROACHES

The initial preliminary assessment was done by HakiRasilimali (HR) in 2020 with the overall objective of conducting a situational analysis of the extractive industry sector amid COVID-19 in Tanzania. HR is a platform of Civil Society Organizations (CSOs) working on strategic issues around minerals, oil and gas extraction in Tanzania. In conducting the study on the extractive industry sector amid COVID-19 in Tanzania, the HakiRasilimali (HR) research used strategic methodologies, approaches and methods [8]. These included [1] the HR consultative workshop; [7] intensive desk studies or /and literature review, [8] conducting mini field research surveys, key stakeholder consultations, covert and overt observations; [9] data management and policy analysis, and [10], internal consultations and presentations.

## 3. CONCEPTUAL FRAMEWORK

COVID-19 risks are conceptualized as a public health threat or are a set of possibilities that the pandemic (and its related events) will adversely affect socio-economic entities, sectors and

actors' ability to achieve their desired objectives [8] These COVID-19 health risks are considered as public health risks anticipated through surveillance; monitoring, evaluation, controls of systems, operations and procedures, which are carried out by the national public health systems, resources and infrastructural facilities [9,10,8]

The viruses that cause COVID-19 have risks of infecting and affecting people as investors, producers, traders, distributing agents, consumers and savers [7] and [8]. These human resources in their different capacities may be older people and people with pre-existing medical conditions such as asthma, diabetes, and heart disease. These appear to be more vulnerable to becoming severely ill with the virus. Also, it is important to note that producing extractive sector workers (e.g., miners) are at the risk of developing the lung disease called pneumoconiosis because of their regular exposure to airborne gases and dusts. Many years of working in the sector have increased the risk of dying from lung cancer. These risks producing extractive workers have higher risks of being affected by COVID-19 risks. There are several and many socio-economic entities such as owners, managers, operators, auxiliary workers and others in the extractive industries face COVID-19 risks in different environments. Their risk factors; such as age, cannot change. But there are measures and actions they can do to minimize their risks of catching and getting very sick with the virus, [7] [11].

WHO (2020) defined the COVID-19 pandemic as a viral infection negatively affecting human resources, status and turned into a global, regional and national epidemiological risk. The epidemiological risk is concerned with the high and increasing rates of morbidity and mortality among populations (WHO, 2020) When talking about epidemiological risk, 'the health outcomes of populations are subject of risk calculation' [12]. Regarding public health risks, we can talk about risk rationality as a way of thinking about and representing events, which happen through calculations [12]. Underneath the emphasis of the population as a subject of risk, the calculation is the historical shift from a family to the population as a re-centering concept of the economy. Many have been arguing that 'human resources or population have their regularities, its rate of deaths and diseases [12]. Health population comes to appear above all else as the ultimate end of all societies and nations [13].

All diseases have a negative effect on the status, capacity and effectiveness of human resources in their socio-economic activities. That is, diseases may cause low production, distribution, consumption, savings, incomes and economic losses in feedlots through mortality, treatment cost, or effects on productivity. In turn, it is also clear that while low income contributes to poor health status, poor health can also contribute to lower income. Poor health can limit one's ability to work, reduce economic opportunities, inhibit educational attainment, and lead to medical debt and bankruptcy. That is, like other diseases, COVID-19 may deprive human resources of their health, social and productive potentials. The burden of diseases may invariably challenge individual or household income and savings, and compete with investment activities. From countries' perspective, chronic diseases reduce life expectancy and ultimately economic productivity, thereby depleting the quality and quantity of the countries' labor force. This may result in reduced revenue incomes and transfers from the productive sectors to the government [14] [8].

The COVID-19 diseases may reduce current human resource efforts, capacities, intergenerational skills and wealth transfer. The schooling of the children is affected, propagating the spiral of ill family health and poverty [15]. The COVID-19 health risks and the fear and panic that accompany them—map to various income-revenue risks. *First*, and perhaps most obviously, there are costs to the health system, both public and private, of medical treatment of the infected and of outbreak control. A sizable outbreak can overwhelm the national health system, limiting the capacity to deal with routine health issues and compounding the problem. Beyond shocks to the health sector, epidemics force both the ill and their caretakers to miss work or be less effective at their jobs, driving down and disrupting productivity [14].

*Second*, fear of infection has resulted in stress, social distancing or closed schools, enterprises, commercial establishments, transportation, and public services—all of which limit freedom of movement, engagement, optimal utilization of human resource capacities and thus disrupting socio-economic activities and sectors [11]. The socio-economic activities include investments, production, distribution, marketing, trade, consumption and savings. The socio-economic sectors affected include agriculture, industries and services. Travel and tourism services to

and from other nations and regions have been limited and negatively affected by COVID-19 pandemic.

*Third*, the consequences of outbreaks and pandemics are not distributed equally throughout the economy, [7,14,15]. Some socio-economic sectors and activities may even benefit financially, while others will suffer disproportionately. Pharmaceutical companies that produce vaccines, antibiotics, or other products needed for outbreak response are potential beneficiaries. Health and life insurance companies are likely to bear heavy costs, at least in the short term. Vulnerable populations, particularly the tax payers, are likely to suffer disproportionately, as they may have less access to incomes, health care and lower savings to protect against financial catastrophe.

Several factors complicate the prevention, management and containment of the COVID-19 pandemic. COVID-19 may reoccur, expand and get transmitted rapidly, both within and across countries. That means timely responses to current and projected outbreaks are essential. In addition to being exacerbated by globalization, COVID-19 pandemic potential is elevated and complicated by other factors. Climate change, rain and cold weather accelerate speed and intensity of the COVID-19 pandemic. Non-communicable diseases such as overweight, high blood pressure and others hosts of COVID-19 increase chances of health complexities [15].

## **4. RESULTS AND DISCUSSION**

### **4.1 The High Risks at the Government Financial Resource Systems**

This section analyzes current levels of risks for the financial resource systems of the government amid COVID-19, [8]. The HR data and information derived from both secondary data and information from other public and private scientific studies for risk exposure and risk management, particularly risk exposure to COVID-19, [8]. That is according to primary data and information generated from field research surveys.

The COVID-19 pandemic has interfered with the basic economic fundamentals necessary for economic planning, budgeting and expenditures for the 2020/21 financial year. According to the Ministry of Finance and Economic Planning,

Tanzania's economy was projected to grow at 6.9 per cent which translates into an increase in tax revenue (United Republic of Tanzania, [16]. The period between July 2019 and January 2020 witnessed revenue collection targets hitting high levels with TZS 10.62 trillion, which was about 97 per cent of the target for that period which was Tanzania Shillings (TZS) 10.96 trillion. The revenue collection starting the 4<sup>th</sup> quarter of 2019/20 experienced significant decreases as a result of COVID-19 impact in the economy [17].

The budget ceilings for the financial year 2020/21 indicate a 5 per cent increase of the national budget from TZS 33,105.4 billion in 2019/20 to TZS 34,879.8 billion in 2020/21. The budget proposals presented in March 2020 by the Minister of Finance and Planning for 2020/21 projected raising domestic revenue collection from TZS 23.05 trillion in 2019/20 to TZS 24.07 trillion in 2020/21 which will be equivalent to 69 per cent of the total budget estimates. However, the evidence from the economic shocks encountered so far with the closure of global businesses, transport restrictions and exports. This is despite the clear indications that the 2020/21 budget experiencing serious shortfalls never experienced before and the country was negatively affected by the Covid-19 pandemic [16].

### **4.2 The High Risks for the Government Revenue Collections**

There are two major government revenue resources mobilized, generated and earned by the government from the extractive sector operations and activities in Tanzania. These are tax related and non-tax government revenue sources. Both government revenues are at high risk since there are complex functions of taxation systems, infrastructures, market prices and product quantity variations given the COVID-19 pandemic. These government revenue sources include the complex functions of systems, ownership, management and operations of public extractive companies such as STAMICO (in mining) and TPDC (in oil and gas sectors).

Tanzania has many taxes related and non-tax government revenue sources based on current fiscal policies, laws, regulations and institutional systems and regimes [8]. The current fiscal system applicable to the mining sector in

Tanzania is set out in the Mining Act 2010, the Income Tax Act of 2004 and indirect taxation laws. The basic income components from mining activities include; royalties, license fees, income taxes such as PAYE, corporate tax, special skilled levy, withholding taxes and Value Added Tax (VAT).

Taxes in Tanzania are administered by the Tanzania Revenue Authority while other fees, such as royalties and license fees are administered through the Ministry of Minerals as well as Local Government Authorities (LGAs). The Tanzanian Finance Act 1997, the Financial Laws (miscellaneous amendments) Act 1997 and other Government Notices and Orders provided the instruments for enforcing a distinct regime applicable to the extractive sector. The Government has been collecting a significantly large amount of employment tax followed by corporate tax as well as withholding tax.

The total taxes paid by the major mining companies in Tanzania have been increasing over time but with cyclical rate of growth [8]. The positive upswings and increasing amount of tax collection in mining has been linked to the increasing good performance of the mining taxation systems, operations and markets [8]. The reforms and establishment of the current institutional framework, namely Tanzanian Mining Commission with a specific mineral audit mandate is of utmost importance. Increased revenue collection from the mining sector provides a room for the government to have more financial resources and hence meet the growing financial capacities, expanding expenditure systems and financial risks management operations.

In Tanzania, the level of COVID-19 risks interferences and effects on the government resources originating from the extractive sector industry may be viewed from several aspects and levels. At the market levels, the Government opened the Tanzania Mineral Trading Centers, (TMTCs) in 2019 as part of

the market facilitation initiatives to minimize the levels of risks for the government revenue resources. These efforts promoted benefits of mineral businesses to the government, small-scale miners, dealers, and brokers. The TMTCs serve as a valuable source of data and information of miners, brokers and dealers in a respective region and for the industry in general. The information from TMTCs allows the government and other stakeholders to monitor, control and evaluates tax revenue collections as well as design interventions for promoting the mineral business [8].

Table 1 presents the perceived views of the major consulted stakeholders on the level of risks on the government revenue mobilization and collection due to the existence of COVID-19 [8]. The majority, that is, about 80 percent pointed out that the level of risk for resources on the government to collect revenue is high and is increasing.

The increasing risks are associated with lack of effective health sector management and public financial risk systems [18] [9]. Management of the government financial risks and government tax revenue in the extractive sector are the complex functions of management and operational activities, changing institutional framework, capacities, technologies and increased coordination of Tanzania Revenue Authority, the Mining Commission; Bank of Tanzania, government ministries, departments and agencies and local government authorities.

High level of risk on decreasing revenue collection implies that the government may end-up failing in implement the strategic long term development programmes and providing services to the citizen. This is because it shall in the short run devote the financial resources to build and renovate health care facilities. This includes the relocation of the fund to fight against the outbreak. This is evidenced by the closure of businesses and other likely sources where the government depends on to earn its income through tax.

**Table 1. The level of risk on the revenue collection due to COVID-19**

<b>Ratings</b>	<b>Frequency</b>	<b>Percentages (%)</b>
Very low	1	6.7
Moderate	2	13.3
High	7	46.7
Very High	5	33.3
Total	15	100

Source: HR Field Work Survey, 2020.

The emphasis for establishing immediate risk management measures to overcome if not to mitigate the consequences likely to happen as the level of risk on the revenue collection is progressively high is inevitable. Others may stain that if the existence of the COVID-19 pandemic persists, then these measures including provision of loan and grants should be emphasized for the prosperity of the businesses and income of the citizens of Tanzania. Notably, these risk management measures are not independent but interrelated because they require collaboration between different government agencies at different administrative levels to ensure the level of risk is minimized. This, in turn, helps to strengthen management coordination. Also, effective implementation of fiscal policies requires appropriate guidance from the government (top-down approach). Therefore, to deal with the high level of risk for resources on the government, the systematic approach needs to fully consider the interaction between different agencies and actors [8] [1].

### 4.3 Government Revenue Collections (Income trend) from the Extractive Industries

Tanzania is predominantly a mining country with both small and large-scale operations. The mining sector is diversified with rich mineral resources; such as gold, diamonds, tanzanite and coal. Tanzanian soil also contains iron ore, base metals, uranium and gemstone. Tanzania is Africa’s sixth largest gold producer in Africa and accounts for 1.3% of total global production. Tanzania is also the only country in the world

which produces tanzanite. Gas production is concentrated in the south in the Songo Songo and Mnazi bay fields. The past few years 2010 – 2015 have seen a big increase in exploration for gas and oil along the coast. The country currently produces natural gas from proven reserves from Mnazi Bay and Songo Songo Island. With significant offshore gas discoveries, the country is planning to become an exporter of liquefied natural gas (LNG) in the future. However, future revenues are severely threatened the current lower prices for natural gas.

The Tanzanian GDP contribution of the mining sector has been increasing over time from about 1% in early 1980s to about 5.3% in 2020. The increasing growth of mining industry in Tanzania has been attributed to the increasing investments, explorations activities and extraction of various many minerals. The booming mining sectors have been increasing incomes and employment creation both in large scale mining sector and to small scale artisanal mining. Extractive sector revenues were about US\$314m. Mineral royalty was the largest revenue stream in fiscal year 2019/2020 (48.5%) of government revenues from extractives), while corporation tax was the second largest contributor (21.50%).

#### 4.3.1 Gold mining revenue

Fig 1 presents government revenue collections (Income trend) from the extractive industries during the last five years from 2015/16 to 2019/20.

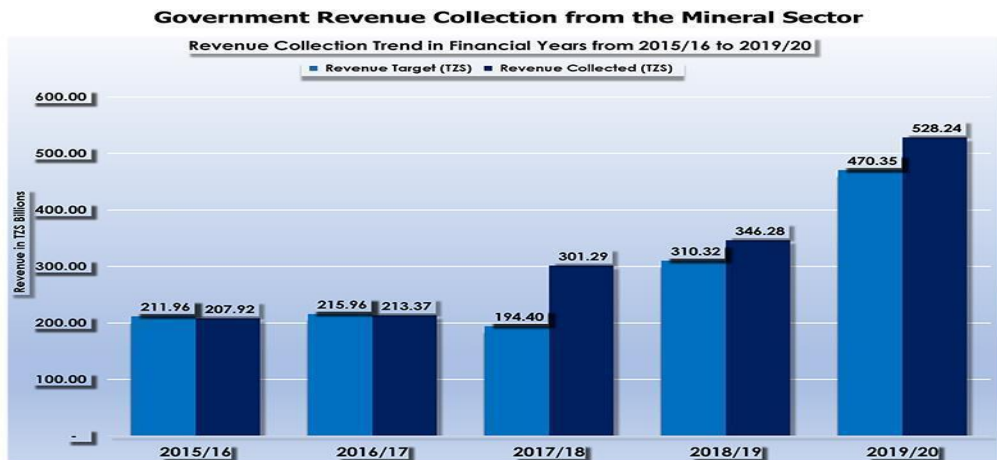


Fig . 1.

Data Source: Tanzania Mining Commission, 2021

The Fig. 1. suggests that the government revenue collections (income trend) from the extractive industries have been increasing during the sample period. It can be noted that there was a slight and moderate increase during the first two years, 2015/16 and 2016/17 and then there was an exponential increases in the government revenue collected during the last three years from year 2017/18 to 2019/2020. It is interesting to note that the actual government revenue collections exceeded the planned revenue collections. This may suggest increasing and high performance in mobilization and collection of government revenues from the mining sector due to increased mining sector revenue management and operational efficiencies.

Gold export accounts for a larger share of the total mining exports in Tanzania and contributes significantly in revenue generation from the extractive sector. Tanzania is Africa's fourth-largest gold producer and accounts for 1.3% of total global production [19]. The country has taken some initiatives to boost revenue collection and their benefits from mineral extraction including the establishment of minerals trading centers which has significantly boosted revenue collection.

The patterns of revenue collection from gold are shown in Fig. 1.1 portrays that, the trend of revenue collection from gold has been increasing in a fluctuating trend from June 2019 up to June 2020. The data shows that the highest revenue collection was recorded in June 2020 with about 10.4 billion while the least collection of 2.7 billion was recorded in June 2019. Furthermore, the revenue collection was increasing up to October 2019 followed by a decreasing trend which hits minimum in February 2020 and an increasing trend was observed. This pattern indicates the revenue collection was not negatively affected by the pandemic Covid-19 as the Government revenue was increasing during the period of spread of COVID-19 in Tanzania (March-May 2020).

The observed behavior has been attributed to factors including changes of the mining sector operation systems i.e., policies and legislation governing the mining sector in the country, establishment of mineral trading centers which has boosted mineral sales and control revenue collection in mineral producing regions and both volume and price of gold in the world market.

The inception of COVID-19 pandemic has significantly affected investment, production, trading and business worldwide. However, its short-term effects have not been realized in the country's revenue from gold trading, [8].

#### **4.3.2 Decreasing revenue collection from diamond**

Tanzania is among the top ten producers of diamond in Africa with both small and large-scale operations. Fig. 2 describes the trend of revenue collection by the government from the diamond for the selected study period. According to the data and information in Fig. 2, Government revenue collection in diamond has been dramatically increased from Tshs 20.8 million in September 2019 to 86.2 Tshs million in February 2020. This is the increase of about 314.53 growth rate. However, the collection experienced a notable decrease of about 20.08 per cent growth rate from March to May 2020 due to the interruption of the COVID-19 pandemic. On average, the revenue collection in this type of mineral has been stable whereby the Government managed to collect the total average of Tshs 37.8 million for thirteen months regardless of the effects of the pandemic.

The country recorded a historical total mineral revenue collection of Tshs 86.2 million in February where the world was intensively attacked by the COVID-19 pandemic. This situation has been attributed to the establishment of the new laws and regulations in 2017/18 that assisted to curb smuggling and ensure closer supervision of the industry and establishment of mineral exchange centre in each region followed by the subjection of the Government on the buying of mineral products from producers.

#### **4.3.3 General decreasing trend of government revenue collection from Tanzanite**

Tanzania continues to benefit from mining sector reforms whereby the sector's contribution to GDP in 2018/19 increased to 5 per cent up from 4.8 per cent the previous year. In the 2019/20 financial year, the government targets Tshs 470.9 billion (\$205.5 million) in revenue from minerals, compared with a projected income of Tsh310.6 billion (\$134.5 million) in the fiscal year ending June 30 [20]. This part of the report presents the distribution of Government revenue collection from tanzanite for the selected study period.



**Fig. 1.1. Government revenue collection from Gold in TZS (Billions)**  
 Source: Tanzania Mining Commission, 2021



**Fig. 2. Government revenue collection from diamond in TZS (Millions)**  
 Source: Tanzania mining commission, 2021

Fig. 3. Shows that the government collect revenue above hundreds million for seven consecutive months from July 2019 to January 2020 with the largest amount being Tshs 294.4 million in August 2020 and the lowest amount being Tshs 155.8 million in January 2020. On the other hand, for all the study period, the Government collected the least amount of revenue at about Tshs 14.6 million in April 2020. On average, the Government has collected significant revenue from Tanzanite at about Tshs 141.6 for the selected period of the study.

There have been notable achievements in the mining sector including amendment of various mining investment laws that strengthening mineral control by the completion of One Stop Centre at Mererani; strengthening of mineral

control and reduction of mineral smuggling mainly due to construction of 24.5 Km wall around the Tanzanite mine at Mererani, and increase in mineral revenue collection from 196.0 billion shillings in 2015/16 to 470 billion shillings from July 2019 to April 2020 [20] [16]. These laws and regulations assisted the Government to curb smuggling and ensure closer supervision of the industry. Hence, there was increase in government revenue from this kind of precious mineral all over the world [20] [16]

**4.3.4 General decreasing trend of government revenue collection from gemstones**

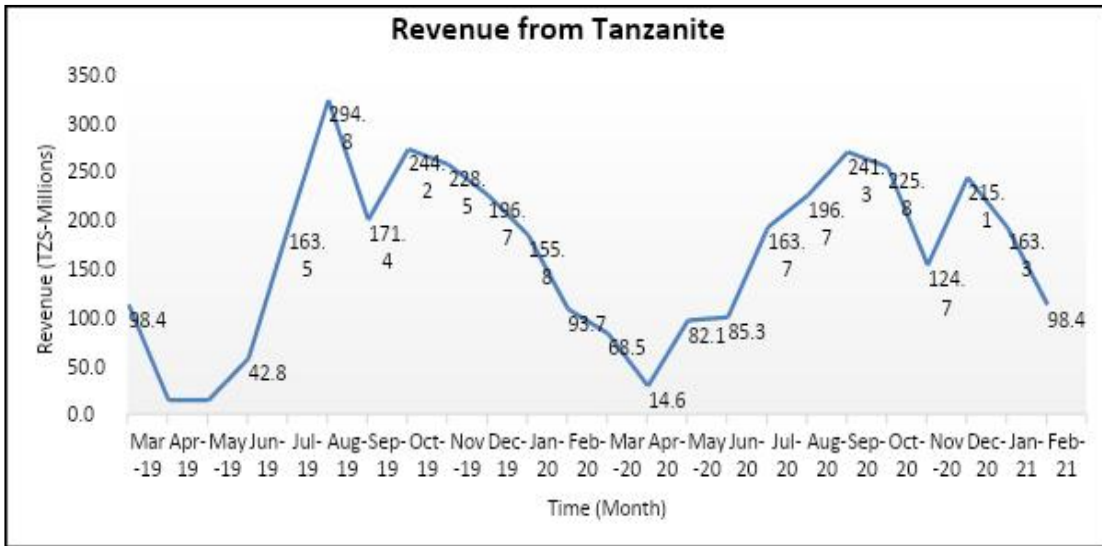
Tanzania is predominantly a mining economy country with both small and large-scale operations. The mining sector is diversified with



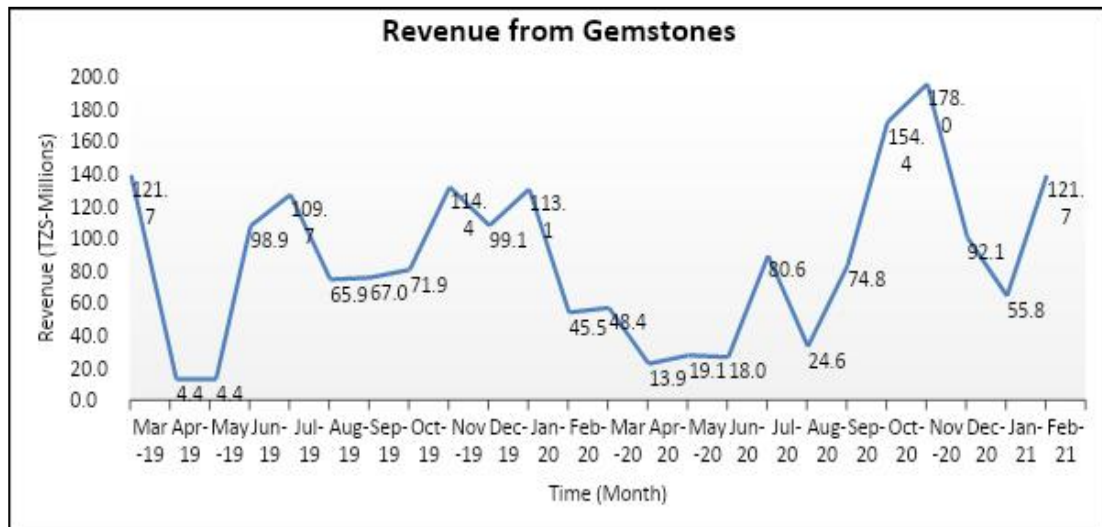
gold, diamonds and tanzanite mining and contributes greatly to the increase in government revenue under the current amended mineral laws and regulations [19]. Fig. 4. presents the trend of government revenue collections from gemstones for the study period of thirteen months.

Regarding the data in Fig. 4. the government has been experiencing fluctuations in the revenue collection from gemstones whereby in

November 2019 and January 2020 the collection was high at about Tshs 114.4 and Tshs 113.1 million while in April 2020 the government experiences the lowest collections at about Tshs 14 million. Specifically, the collection in this type of mineral has been above Tshs 50 million between June 2019 to January 2020 whilst below Tshs 50 million from February to June 2020 due to the investment shock from the emerging covid-19 in the country between March and April.



**Fig. 3. Government revenue collection from Tanzanite in TZS (Millions)**  
 Source: Tanzania Mining Commission, 2021



**Fig. 4. Government revenue collection from gemstones in TZS (Millions)**  
 Source: Tanzania mining commission, 2021

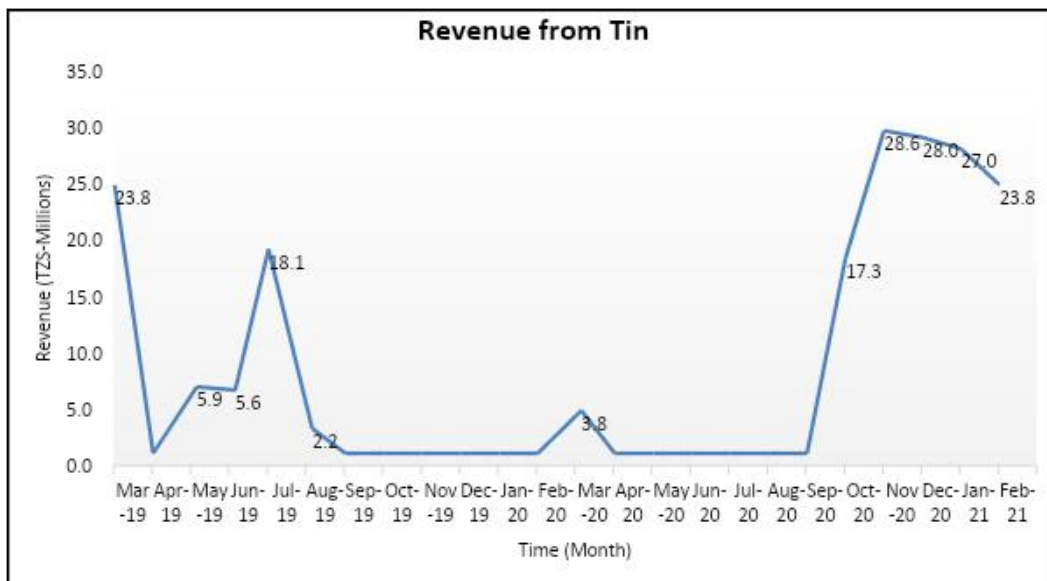
Regardless of challenges caused by coronavirus outbreak that continues to rock the world, Tanzania recorded a historical total minerals revenue collection of Tshs 58bn/- in April 2020. This wonder has been contributed by the establishment of mineral exchange/market centers in each region. Moreover, during July 2019 to April 2020, the monthly revenue collected by TRA increased by 13.6 per cent and reached the highest monthly revenue collection in the mineral sector at about Tshs 43bn/ compared to the same period in 2018/19. The growth was attributed to strengthening enforcement of tax laws and proper management of Electronic Fiscal Devices (EFDs) to curb tax evasion; provision of taxpayers' education and taxpayer services; and strengthening mineral control systems in the production and selling points [16].

**4.3.5 Low and fluctuating government revenue collections from Tin**

Mining is increasingly important in Tanzania for the development of the country's economy through revenue collection, employment opportunities as well as stimulation of various socio-economic developments such as industrialization, health, education and agriculture. While the mining of gold, gemstones (mainly tanzanite), tin and diamond dominates the sector. Tanzania is endowed with a variety of other minerals like

ruby, uranium, salts and sand. The mining sector involves both large-scale mining (LSM) and artisanal and small-scale mining (ASM) operations. The former is highly mechanized with the active participation of multinational enterprises, whilst ASM is undertaken by individuals or groups with limited equipment and often informally without mineral rights [21].

Fig. 5. presents the status of Government revenue collections from tin for the period of thirteen months from June 2019 to June 2020. Regarding the trend of production being recorded for only four months (June, July, September 2019 and March 2020), the Government has also recorded its revenue collection in those months. Fig. 5. shows there is a significant fluctuation of revenue collections generated from tin; with the high collection being Tshs 18.1 million in July 2019 and the lowest amount being Tshs 2.2 million in September 2019. In March 2020 where COVID-19 pandemic was officially declared in the country, the Government experienced a significant increase in revenue collection at about 75.8 growth rate from Tshs 2.2 million in September 2019 to Tshs 3.9 million in March 2020. This implies that there are no well-established correlations between tin productions in the country with its revenue collection due to the existence of COVID-19 pandemic.



**Fig. 5. Government revenue collection from Tin in TZS (Millions)**  
 Source: Tanzania Mining Commission, 2021

Effective implementation, monitoring, controls and improvements in mineral policies, legal and regulations; revenue collection systems and procedures in the extractive sectors; mineral protection and security/controlling systems; establishment of mineral buying and selling centers/points as well as the subjection of the Government in the process of buying of extractive products have and will continue to contribute greatly in the increase of production and revenue collections at both individual and national level [16].

#### **4.3.6 Negative effects of COVID-19 to the Government Revenue Collection**

According to Loayza et al. (2020), the COVID-19 pandemic will cause a major decline in tax revenue in most countries. This is, caused both directly by the economic slowdown and indirectly by tax policy and administration measures taken in response. The implications for households and businesses cause a disruption of socio-economic activity in ways that are unique to this crisis. For instance, the practice of physical distancing has distinct effects on the tax base, tax administration, and taxpayer compliance. Furthermore, the pandemic may affect the structure of economies more permanently. In some economies, the external sector is also likely to come under pressure resulting in depreciation or devaluation, which may also affect tax revenues, with the sign of such effect dependent on the economic structure.

Until recently, Tanzania had the lowest number amongst East African countries although this is not the case currently, having increased from less than five (5) patients in the third week of March 2020 to 254 patients and ten (10) deaths five weeks later by mid-April 2020. The country's stance has all along been to encourage the application of personal hygiene, physical distance and wearing protective facial masks where appropriate [22].

Table 2.a and 2.b present the opinions of selected study respondents on the total effects of COVID-19 in the Government revenue. Tables 2.a & b, suggest that majority of respondents, at about 93.3 per cent have the view that the COVID-19 has affected the Government revenue at about 92.8 per cent. People have the views that there is a correlation between the existence of COVID-19 and the decrease in Government revenues generated in extractive industries.

The noticeable situation has been also contributed by the fact that the main economic activities that the government depends on the generation of its revenue have been affected to the high extent by the COVID-19 pandemic. These social-economic activities are tourism, agriculture, wholesale and retail trade, mining and transportation. The implication of this is that the virus has highly affected the main economic activities which are the main source of government revenue. Furthermore, this decrease of government revenue is a result of the closure of several companies following the existence of COVID-19 in Tanzania. This implies that the existence of the virus has affected the government revenue collection negatively due to the fact large part of the market is originated from foreign dealers [16].

Given a shock concentrated on a few sectors, a sectorial breakdown would already allow more precise revenue forecasts. The brunt of the pandemic in Rwanda was felt by its tourism and mining sectors. Tourism is affected by travel restrictions and physical distancing, with all borders in Rwanda closed, whilst a slowdown in the importation of intermediary and capital goods (particularly from China) has affected mining (Carmody, 2013).

As increased pressure on public expenditure on health sector mounts, the cash flows in government revenues are expected to decline due to decrease in a variety of direct and indirect taxes, levies, etc., following compression in business margins, the slowdown of business activities, retrenchments, salary losses, closure of income-generating avenues in the informal economy as propounded in the above sections (Chu et al., 1991).

#### **4.4 High Levels of Risk on the Expenditure Budget Performances**

Tanzanian government expenditures have been in form of purchases of goods and services from the private sectors, which included public consumptions and public investments, and transfer of payments consisting of income transfers (pensions, social benefits) and capital transfers. The fifth government regime has been switching from current expenditures to capital expenditure. Capital or development expenditure is the money spent in the investment and development of machinery, equipment, building, land, infrastructure facilities, and productive sector investment that gives

profits or dividend in future. The government expenditures have a risk and or may be affected by COVID-19 through many and different forms or ways [23]. The government expenditure risks are one form of fiscal risks. The other fiscal risks include government revenue and system risks [2]. The fiscal risks—deviations of fiscal outcomes from what was expected at the time of the budget or other forecast—arise from macroeconomic shocks and the realization of contingent liabilities. That is, the government expenditure risks are complex functions of systems, natural and human resources. COVID-19 has both direct and indirect negative effects on human resources and in turn these have an effect on macroeconomic variables.

Sources of fiscal risk include various shocks to macroeconomic variables (economic growth, commodity prices, interest rates, or exchange rates) as well as calls on several types of contingent liabilities (obligations triggered by an uncertain event: including both explicit liabilities—those defined by law or contract, e.g., debt guarantees—and implicit liabilities—moral or expected obligations for the government, based on public expectations or pressures, e.g., bailouts of banks or public sector entities [23].

Fig. 6. presents perceived views by the consulted stakeholders on the level of risk on the national budget expenditure. The majority, i.e., about 86.6 per cent of the respondents suggested that the high levels of risks on the national budget expenditure frameworks. Fig. 7.1 suggests that Tanzanian's total government

expenditure has been increasing during the sample time from year 2016/17 to 2020/21. The 2020/21 budget focused on compelling the Government to ensure enabling environment for investment and business. In particular, it includes improvement in economic infrastructure and enhancing mobilization of domestic revenue to facilitate construction and rehabilitation of infrastructure and financing of other priority expenditure and Government operations. The Government expenditure remained at 22.1 per cent of GDP in 2020/21 suggesting that the government adopted a "Business as usual Attitude" by continuing the implementation of development policies and strategies consistent with the Governments' development plans based on the political party election manifesto 2020/2021.

The current major and strategic infrastructure development projects known as flagship projects are the construction of central railway line to the standard gauge; construction of Julius Nyerere Hydropower Project; strengthening Air Tanzania; facilitating the construction of Crude Oil Pipeline Project from Hoima (Uganda) to Tanga (Tanzania); the construction and rehabilitation of railways, roads, bridges, airports, ports, ships in major lakes and ferries; strengthening of electricity and gas production, transmission and distribution infrastructure including expediting rural electrification; strengthening Special Economic Zones; and mass training of professionals in the field with specialized skills.

**Table 2.a. Opinions of extractive industries on the effect of Covid-19 to the Government revenue collection**

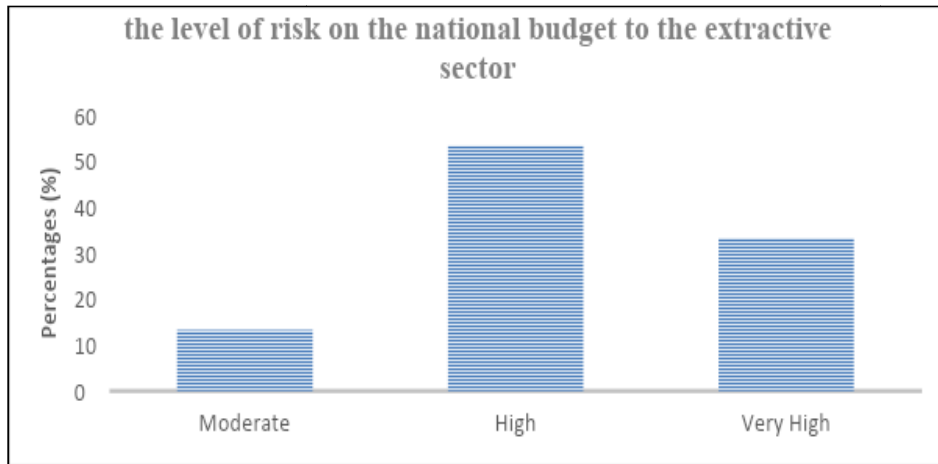
<b>For your opinions, does the existence of Covid-19 affects the Government revenue collection?</b>		
	<b>Frequency</b>	<b>Percentages (%)</b>
Yes	14	93.3
No	1	6.7
<b>Total</b>	<b>15</b>	<b>100</b>

*Source: HR Field Work Survey, 2020*

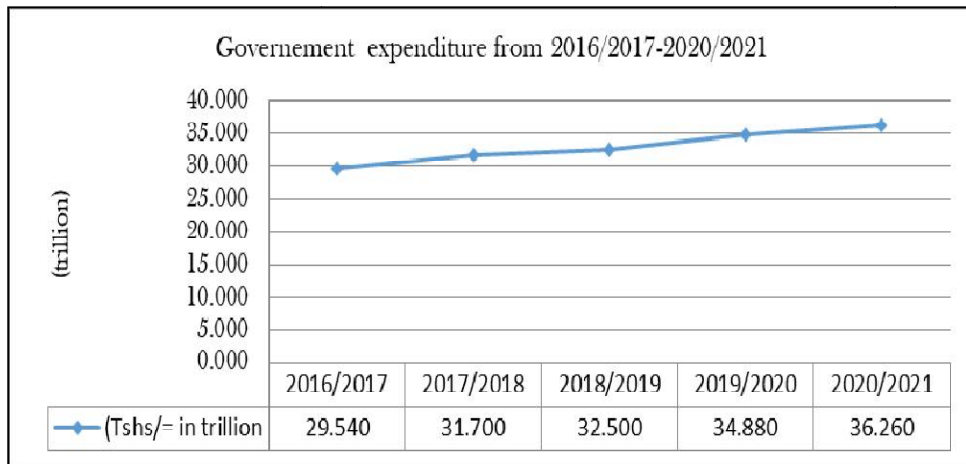
**Table 2.b. The extent to which the existence of COVID-19 have affected the Government revenue collection**

	<b>Frequency</b>	<b>Percentages (%)</b>
Low	1	7.1
High	8	57.1
Very high	5	35.7
<b>Total</b>	<b>14</b>	<b>100</b>

*Source: HR Field Work Survey, 2020*



**Fig. 6. The level of risk on the National Budget Expenditure**  
 Source: HR Field Work Survey, 2020



**Fig. 7. 1. Total Government expenditure Trend from 2016/17 to 2020/21 in Trillion TZS**  
 Data Source: Ministry of finance and economic planning, Dodoma, Tanzania

Fig. 6 and Fig. 7.1 suggest that effects of COVID-19 on the government expenditure cannot be felt in the short run. However, there are immediate and long-term effects of COVID-19 on the government expenditures [2]. It may not be easy to cut down and stop the major recurrent government expenditures.

Rather, it is anticipated that the major recurrent budget expenditures such as salaries, wages, operational and other charges will change due changes induced by extra expenditures associated with prevention, treatments and handling of COVID-19 patients. Costs of health care and treatment will significantly increase, drawing away resources from locating in other economic, social and development sectors.

Fig. 7.2 suggests that the public health expenditure has been increasing during the sample period 2016/17 - 2020/21. In fighting against COVID-19 and poverty; the government was compelled to allocate more resources to the health sector in order to fight against the COVID-19 pandemic and its aftermath, as well as support of other most affected sectors. Part of additional funding has been used for traditional health services such as procurement and distribution of medicine, medical equipment and reagents; construction of regional and zonal referral hospitals, district hospitals, health centers and dispensaries; improving access to health services through universal health coverage and employing various health professionals. Also, funds were

target at controlling multiple competing public health priorities, such as increasing public health funding to local health centers to implement community testing, enforcing social distancing and sanitation measures, and investing in small-holder farmers to produce for the rural economies.

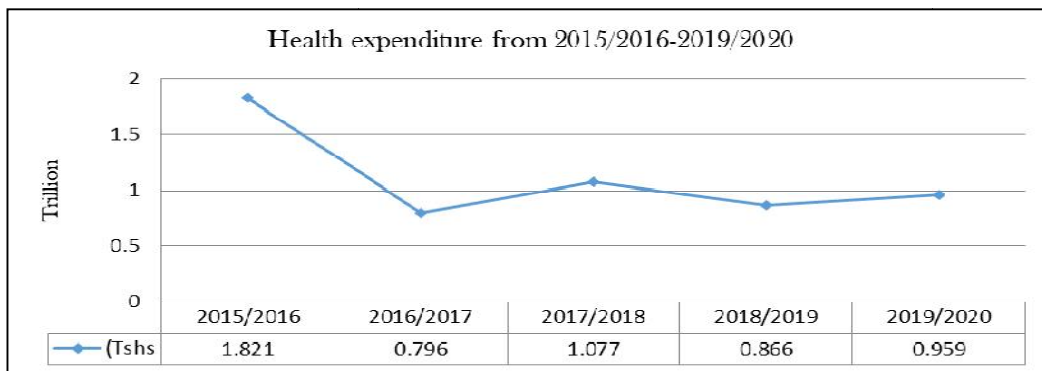
According to public health experts, COVID-19 is one of the most expensive diseases to treat as it draws a lot of resources as it requires specialized facilities, expertise and treatment to deal with per capita patient [15]. It is expensive for both private and public institutions and individuals. Borrowing will be inevitable and the financial sector will be distressed. The government will be a net loser too as socio-economic entities, sectors and individuals' experience financial squeeze, fall back in tax payments and dealing with financial matters such as the purchase of government fiduciary instruments, such as treasury bills, [8].

The impact of COVID-19 on health financing in Tanzania depended not only on the public health risks, extent, duration and severity of the socio-economic and political contraction, but also on the revenue bases and financial mobilizations, on health's share of public expenditure, and how well that those financial resources are handled. Broad-based, collaborative, transparency and social inclusive health policies have been helping Tanzania to guarantee for sustainable health financing system. Many development partners have been motivated and encouraged in supporting Tanzania for additional financial resources. Encouraging that additional financial resources are to be made available by major development partners and additional domestic budgets have

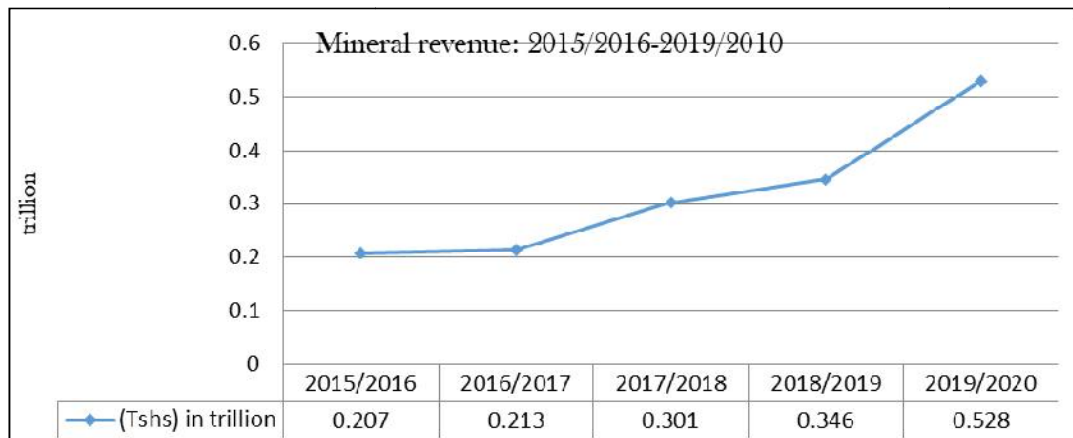
meant help health. That has appeared to continue in 2021/22.

Fig. 7.3 suggests that public expenditure resources allocated to the Ministry of Minerals have been increasing during the sample period 2016/17 - 2020/21. Mining is among the strategic natural resource sectors that had been touched by the reforms and which contributed to the growth of the Tanzania's economy during the first phase of the administration of President Dr. John Pombe Magufuli. It is estimated that the mining sector recorded the growth rate of 15.3 per cent in the first quarter of 2020 compared to the growth rate of 10 per cent recorded during the similar quarter of 2019. This led to an increase in the GDP contribution of the mining sector from 4.7% in 2019 to about 5.1% in 2020.

The government of United Republic of Tanzania has been investing in development expansion of the mining sector so as to maximize natural resource and wealth. Tanzania is diversifying into producing more metal, energy and development minerals than in the past. It vastly increases the exploration of rare earth metals and uranium production. Changes in the global mineral commodity prices started inducing Tanzania to diversified mineral production systems. The current increase in budget allocations has at most provided incentive for artisanal and small-scale mining development and transformation. In this 2020/2021 budget proposals, measures like reduction in taxes, establishment of regional markets and easy mining license may give some immediate benefits to locals in owning, managing and operating formal small scale mining firms.



**Fig. 7.2. Ministry of Health Expenditure Trend 2016/17 - 2020/21 in Trillion TZS**  
 Data Source: Ministry of finance and economic Planning, Dodoma, Tanzania



**Fig. 7.3. Ministry of minerals expenditure Trend 2016/17 - 2020/21 in Trillion TZS**

Data Source: Ministry of finance and economic Planning, Dodoma, Tanzania

These dramatic increases during the COVID-19 pandemic are product of continued domestic mining sector reforms whereby the transformation and empowerment of artisanal and small-scale miners have been taking place, regional mineral market reforms and enacting of a law designed to relieve small-scale miners of the burden of paying the withholding tax of 5 per cent and 18 per cent value added tax. These internal moves attracted more small-miners to the business with the Government issue at least 78 mining licenses in 2019 alone. The Government also continued educating small-scale miners on better ways that they could play in the mining sector.

## 5. CONCLUSION

### 5.1 Main Findings

This paper has assessed levels of risks of COVID-19 for total government revenue resources, government revenue collections (income trend) from the extractive industries and national expenditure budget performances in Tanzania. It has been shown that COVID-19 risks public health threats or the possibilities that the pandemic (as a series of events) will adversely affect socio-economic entities, sectors and actors' abilities to achieve their desired objectives. The paper found that there are high and increasing levels of perceived risks on the government revenue mobilization, collection and utilization due to the existence of COVID-19 pandemic in Tanzania. The increasing risks are associated with lack of effective public financial risk systems and health sector management.

The inception of COVID-19 pandemic has significantly affected investments, productions, trading and businesses worldwide. However, its short-term effects have not been realized in the country's revenue from gold trading.

Tanzania is among the top ten producers of gold, diamond, tanzanite in Africa with both small and large-scale operations. The collection of government revenue from gemstones business experienced a notable decrease growth rate from March 2020 to May 2020 due to the interruptions of the COVID-19 pandemic. On average, the revenue collections from all minerals have been increasing and stable during the sampled period.

The majority of the respondents suggested that COVID-19 pandemic have high levels of risks on the national budget expenditure frameworks. The secondary data suggests that the Government expenditure remained at 22.1 percent of GDP in 2020/21 suggesting that there was a "Business As Usual Attitude, that the government continued the implementation of development policies, strategies and projects consistent with Governments' development plans. This suggested that the effect of COVID-19 on the government expenditure cannot be felt in the short run as it may not be easy to cut down and stop major recurrent government expenditures in developing economies.

The public expenditure resources allocated to the Ministry of Minerals have been increasing during the COVID-19 pandemic to support ongoing mining reforms. Mining is considered the strategic sector, with high rate of growth at about



15.3 per cent, dominated by gold mining (95%) and increasing in the GDP contribution from 4.7% in 2019 to about 5.1% in 2021.

The government was compelled to allocate more resources to the health sector in order to fight against the COVID-19 pandemic and its aftermath, as well as support of other most affected sectors. The impact of COVID-19 on health financing in Tanzania depended not only on the public health risks, extent, duration and severity of the social, economic and political contraction, but also on the revenue bases and financial mobilizations, on health's share of public expenditure, and how well those financial resources are handled.

## 5.2 Policy Implications and Recommendations

The paper recommends that the best way and method in prevention and combating the COVID-19 risks and related public health threats or possibilities is to protect and capacitate socio-economic entities, sectors and actors' abilities in achieving their desired short-, medium- and long-term objectives [14]. Tanzania has also been guided by core twin socio-economic goals of minimizing poverty and optimizing natural resource wealth in the fight against the COVID-19 pandemic [1]. To support a robust health and economic policy response, Tanzania has in its potential fiscal space relative to other East African countries, stable political environment, high international reserves, larger domestic market and favorable mineral commodity price movements. Tanzania has enhanced political preparedness and containment capacity through measures to strengthen detection and surveillance of COVID-19 [1]. The Government has been implementing local fiscal policy actions to boost liquidity in the financial sector while additional policies to protect households and businesses in significantly affected sectors, such as those in tourism, mining and social sectors are being evaluated. Other specific measures include the following.

*First and foremost*, there is a need to ensure that the government revenue mobilization, collection and utilization systems are robust and consistent by having effective public financial risk systems and effective health sector management. The government must minimize risks related tax and non-tax government revenue sources given COVID-19 and to ensure effective public financial management risk systems, improved

institutional framework, capacities; technologies and to enhance coordination of government ministries, departments and agencies.

*Secondly*, the government fiscal systems must be protective, supportive and facilitating private sector investments, production, trading and businesses both in the short and long term perspectives. For example, there is a need for protecting jobs and medium, small and micro-enterprises in all productive sectors such as manufacturing, mining and agriculture sectors. Additional measures will be needed to help avoid use of Tanzania Revenue Authority measures which destroy productive capacities due to potential bankruptcy of firms that would have been financially viable without the pandemic, particularly in sectors most affected by the crisis and affected global supply chains, [1].

*Thirdly*, there is a need to ensure there are functional sector policies and support to strategic socio-economic transformational sectors such mining, industry, agriculture and social services. Specifically, there is a need for effective implementation, monitoring, controls and improvements in mineral policies, legal and regulations; revenue collection systems and procedures in the extractive sectors; mineral protection and security/controlling systems; establishment of mineral buying and selling centers/points as well as the subjection of the Government in the process of buying extractive products in a way that will ensure that the sector continues to contribute greatly in the increase production and revenues collections at both individual and national level.

*Fourth*, Tanzania has to adopt more flexible and considerable national budget framework that takes into account short, medium and long term perspectives. The government has to establish fiscal policies, laws, regulations and set resource limitations. All government ministries, departments and agencies minimize risks associated with the national budget expenditure systems given COVID-19. There is a need to ensure consistent capital and recurrent budget expenditure allocation for all government ministries, departments and agencies are disbursed on time. Allocate sufficient finance resources for unanticipated, important extra expenditures associated with prevention, treatments and handling of COVID-19 patients.



Lastly, and most importantly, there is a need to consider people's interests and their health risks. These include public health risks, extent, duration and severity of the social, economic and political contraction. Also, it is important to consider the revenue bases and financial mobilizations, on health share of public expenditure, and how well those financial resources are handled.

The above articulated policies will restore Tanzania's confidence, support jobs, and boosted economic growth. As Tanzania is in transitional political system, after the death of President Dr. John Pombe Magufuli; the nation has to tackle different stages of the health, political and economic challenges. Notwithstanding, national policies need to remain consistent, supportive and effective and they should go together with appropriate health measures. They should bolster confidence, employment, and growth. Sustaining political stability and lifelines is necessary interim steps to mitigate economic scarring, limit workers' exit from the labor force, minimize poverty and prevent bankruptcies of viable firms [3]. As lifelines unwind, fiscal efforts should be targeted toward workers' retraining and investment, including in national strategic infrastructure systems.

## COMPETING INTERESTS

Author has declared that no competing interests exist.

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