

**UNIVERSITY OF DAR ER SALAAM  
DEPARTMENT OF ECONOMICS  
ECONOMIC RESEARCH BUREAU**



**Economic Governance and Transparency  
In Extractive Industries in Tanzania**

**By**

**By Semboja Haji Hatibu Haji**

**Background to be presented at the Policy Dialogue Seminar on  
“Governance and Transparency in Extractive Industries and Natural  
Resources Management” to held in Addis Ababa, Ethiopia**

**Date Thursday, August 25 & 26, 2010**

## **1.0. Introduction:**

### **1.1. Background**

#### *1.1.1. Extractive industries*

According to the World Investment Report (2007) extractive industries (EI) are defined as primary activities involved in the extraction of nonrenewable resources. Extractive industries can yield benefits for countries through tax revenues, foreign exchange earnings, debt payments, production sharing and rents, the provision of jobs and infrastructure. For many *resource endowed countries*, extractive industries are a major economic driver: creating jobs directly or indirectly, revenue, and opportunities for growth and development. With good governance the exploitation of these resources can generate large revenues to foster economic growth and reduce poverty. This is usually possible with proper stewardship of revenue from extractive industries which help in lifting people out of poverty and contribute to sustainable development. When projects are well implemented and preserve the rights of affected people, and if the benefits they generate are well-used, then EI provide the ground for development.

However, the scope for local capture of such value depends on how the extraction activity is *owned, managed organized*, as well as on the level of domestic capabilities, (Semboja 2006). How to create value from the mineral deposits; how to capture that value locally; and how to make the best use of revenues created from the extractive activities in a sustainable manner are major challenges. In many cases, large-scale mineral extraction is highly capital-intensive in nature, which limits the potential for employment creation. The magnitude of profits depends on such factors as economic organization, the quality of the mineral deposit, the cost of extracting the minerals, the productivity of the operations and global output price developments.

There are also risks associated with EI, in terms of social and economic upheaval and environmental harm, when not organized properly. Mining projects may create jobs, but may also consume farming land for their use, changing the livelihoods of communities and limiting access to water, food, and firewood. While new roads may be built and communities may become electrified, water sources may become polluted. Markets may boom, but prices may rise steeply. Specifically, extraction of resources can have profound social, environmental and health impacts near a project site and in surrounding areas, as well as at the global level. It may also be associated with deforestation, soil erosion and mine tailings, etc.

Therefore the ability and capacity of mineral-rich developing countries to address economic, political, social and environmental challenges associated with the extractive industry is a key determinant of their development outcome. Whether a country can cope successfully with all these important challenges (economic, environmental, social and political) depends in large part on its governance system. The economic, environmental and social challenges noted above underline the importance of governance in ensuring maximum development gains from resource extraction.

However, structural, long term beneficial solutions – such as administrative capacity-building, realignment of existing policies, and human capital accumulation – take time to evolve, and provide few immediate rewards. Thus the quality of institutions prior to the discovery of mineral wealth, and the capacities of a country to regulate, monitor and enforce activities in extractive industries are essential.

### ***1.1.2. Status of Tanzania EITI***

Tanzania, like other resource endowed development country is aware of above and joined other international community to organize optimal utilization of EI for the benefit of all stakeholders. Tanzania was accepted as an EITI candidate country on 16 February 2009. Tanzania has until 15 February 2011 to undertake validation. The Minister of Energy and Minerals, Hon William Mganga Ngeleja MP, will lead the EITI process in Tanzania. On 17 November 2009, the Deputy Minister of Energy and Minerals officially inaugurated Tanzania's EITI Multi-Stakeholder Working Group. The Group consists of five members each from government, companies, and civil society, plus a chairperson, Judge Mark Bomani and Mr. Benedict Mushingwe is the Tanzania EITI National Coordinator.

## **1.2. Objective of the paper**

The objective of this paper is to examine economic governance and transparency in extractive industries in Tanzania focusing on the mining sector. The paper is expected to contribute to the *Sub Regional Public Dialogue Workshop on Extractive Industries and Natural Resource Management*; which is expected to lead to important policy messages on the operation and governance of extractive industries and natural resource management in the sub region. The paper will also examine the economic, environmental, social and political challenges that have been brought by Extractive Industries (EI) in Tanzania. Lastly, it will provide an input into developing a plan of action that will enhance country level initiatives and sub-regional networking among multi-stakeholders.

## **1.3. Research Team, Approach and Methodology**

The study used three generic approaches and methodologies. These included [1] major desk study, i.e., review of literature, [2] mini field research survey in Dar es Salam, [3] data and policy analysis and report writing.

## **2.0. Conceptual framework of economic governance**

### **2.1. Basic premises**

Economic governance centres on sound economic organization, management and performance of an economy overtime. The concept of sound entails participatory, transparent and accountable systems. It is also effective and equitable. The sound economic organization and management, (*SOEM*) must result in sustainable economic growth and development. *SOEM* includes the provision of sound macroeconomic policies, laws and regulations that create a stable environment for economic activity. Furthermore, the provision of an efficient regulatory regime the absence of corruption, consistent policies for sustainable social economic development and the provision of appropriate institutions to support human existence come under the subject of economic governance. It is important to state up front that political and economic governances are inseparable. They both underpin growth and sustainable social economic development.

### **2.2. Neo-classical and neo-Keynesian Theory**

There is no doubt that a modern state must be one that theorizes and implements good governance; leaders and policy-makers in such a state must demonstrate transparency, accountability and comprehensiveness in the management of the economy. It is important to state that the concept of economic governance as enunciated above derives from neo-classical and neo-Keynesian theorizing on how an economy should function. Neo-classical orthodoxy assumes that markets do clear and that competition with all its tenets drives an economy. Under this classical paradigm, the major function of the state is to ensure law and order; the state has no business in direct economic activities. The neo-Keynesian paradigm believes in *government management of the economy because of the inherent instability of the input and output market systems*. For this school of thought, national public management of the resource endowed developing economy is crucial if social, economic and political crises are to be averted.

### **2.3. A short-run phenomenon**

The above paradigm has influenced the argument that government must intervene in the economy on behalf of its people in order to accelerate growth and development. However, the neo-classical, monetarists and new classical economists accept government intervention in the economy as, a short-run phenomenon. In the long-run, if all economic agents are rational, the economy will operate at its natural rate/full employment output and stable social economic system. Hence, government intervention will make sense only in the short-run; managing an economy in the long-run will result in distortions. That is, as long as the forces of demand and supply are allowed to operate, managing an economy deals with short-run shocks/disturbances. Conceptually, within conventional economic theory, it is the Keynesians and their cohorts (neo-Keynesians, Post-Keynesians and new Keynesians) *that favor government continuous management of the economy through the conceptualization, formulation and implementation of appropriate economic policies, laws and regulations*.

### **3.0. Tanzania experience in the governance and transparency of extractive industry operation**

#### **3.1. Extractive Industries in Tanzania**

Tanzania can be generally be categorized as a *mineral resource endowed economy*, with the mining sector accounting for approximately 4% of GDP and close to half of the country's exports in year 2009, (URT, Economic Surveys (*Several Issues*)). Like South Africa, Tanzania is blessed with an exceptionally large and varied minerals resource base. The country possesses a considerable portion of the world's reserves Tanzania is widely recognized in the international mining community for its highly prospective geology. The geological environments described above from which commercial mineral prospects can be established, remain under-explored. The under-explored geological formations with high potential for economic mineralization extend over 800,000 square kilometres.

As known, the Tanzanian Craton is one of the potential prospective geological structures. It occupies over one third of the country and contains the "greenstone belts" that are internationally known for their potential gold prospects. The gold prospects found in countries like Canada, Australia and most of West Africa, are found in similar greenstone belts. Tanzania also possesses widespread Proterozoic formations that are comparable to geological environments hosting gold deposits in South America and West Africa.

Apart from gold potentials, Tanzania is also endowed with world class diamond ferrous kimberites which has been mined for over 65 years. There over 300 known other kimberites pipes extending from Mwanza through Shinyanga to Tabora and Singida, 20% of which are estimated to be diamondiferous. The Usagaran and Ubendian systems have been known to host unique colored gemstones, some of which can only be found in Tanzania. Within the Proterozoic environment, potential graphite deposits have been established, e.g., those at Merelani in Arusha. Potentials for nickel and cobalt have been established within an extensive belt of the Kibaran Fold System extending into Uganda and Burundi. Tin and tungsten have been mined in the Karagwe area within the Karagwe-Ankolean System (See Annex 1).

Base metals like Copper and Lead have been mined in the Mpanda Mineral Field. Other metals are also known to occur within the Proterozoic formations and can be potentially present in the greenstone belts. More than 20 carbonitites have been identified in the northern part of the Eastern Rift and the Western Rift between Lakes Rukwa and Nyasa.

The sector has gone through different transformations which have been mainly necessitated by shifts from private-led to public-led and back to private-led economic policies, (URT, 1998 and 1999). Institutionally, the sector was prior to 1965 being managed by independent departments of Geology and Mines. In 1965, the two were merged to form the Mineral Resources Department, MRD. The MRD which has often found it under several ministries is headed by a Commissioner who is the advisor of the Government on all mining related matters. The department has zonal, resident and district offices spread around the country in the management of the sector.

## **3.2. The current performance of the Tanzanian economy**

### **3.2.1. Overall macroeconomic performance**

The global financial crisis in 2008-2009 brought a period of relatively high economic growth in Africa to a sudden end: Africa's GDP growth was slashed from an average of about 6% in 2006-2008 to 2.5% in 2009. Given the pace of population growth this means that growth of per capita GDP came to a near standstill. Average growth is expected to rebound to 4.5% in 2010 and 5.2% in 2011, although the recession will leave its mark.

There is an uneven recovery across the continent. Southern Africa, which was hardest hit in 2009, will recover more slowly than other regions with an average growth of almost 4% in 2010/2011. East Africa, which best weathered the global crisis, is projected to again achieve the highest growth with more than 6% on average in 2010/2011. North and West Africa should both grow at around 5% and Central Africa at 4% during the same period.

Given the impact of the global economic recession from early 2008, Tanzania real GDP growth in 2009 was estimated to have reached about 5.5 percent, slightly above the initial projection of 5.0 percent but below 7.4 percent recorded in the past year. The estimate is based on real GDP growth rates registered during the first three quarters of 2009 of 5.6 percent, 5.2 percent and 7.1 percent, (BOT, Economic and Operation Reports (*various issues*)). The relative good domestic economic outturn emanated from strong performance in agriculture, construction, manufacturing, transport and communication, fishing and real-estate. The Tanzania economy is forecasted to grow at 6.2 percent in 2010 partly driven by the progressive recovery of the world economy from the global financial crisis of which has signaled slightly improve of exports demand in the past few months (URT, Budget Speech 2010/2011). The economic recovery is strongly attributed by ongoing government efforts to optimize domestic resources, increased private sector participation and slight changes in global oil prices in the world market. In specific, the relative good economic outturn emanated from strong performance in agriculture, construction, manufacturing, transport and communication, fishing and real-estate.

The rate of expansion of agricultural activity moderately increased, and hydropower generation stabilized, with attendant increase in power dependent activities especially manufacturing has among other things attributed to slightly increase of economic growth to 5.5 percent in 2009 progressive stability of global economy and the continuing rainfall in most of in most region of the country is likely to increase food production in the and thus ease food demand pressure(hence inflationary pressure) and power stability establishing the base for further increase of real GDP to 6.2 percent in 2010.

Table 1.1 shows that in terms of contribution to real GDP, agriculture remained dominant by accounting for 25.9 percent in 2009 an increase from 24 percent in 2008. This is largely because of the availability of enough rains in most parts of the country however high cost of production still poses a significant drawback for sector development. Manufacturing and construction sector has been persistently increased over the past three

years and thus increase its contribution in real GDP however global economic recession is expected to reduce growth pace of the sector in 2009 and subsequent year.

**Table 1.1: Tanzania: Real Output Performance**

	2005	2006	2007	2008	2009p
<b>Real GDP growth by Economic Activities (In percent)</b>					
Agriculture	4.3	3.8	4	4.6	4.2
Mining and Quarrying	16.1	15.6	10.7	2.5	11.2
Manufacturing	9.6	8.5	8.6	8.7	8.9
Electricity and Water	6.8	2.2	8.7	5.4	5.8
Construction	10.1	9.5	9.7	10.5	10.0
Trade, Hotel and Restaurants	6.2	6.9	7.1	10	8.6
Transport and Communication	12.7	12.3	13.3	6.9	11.3
Financial and Business Services	9.2	9.3	8.6	11.9	9.8
Public Administration and Other Services	6.5	11.8	6	7	7.8
GDP at market price	7.4	6.7	7.1	7.4	5.5
<b>Contribution to Real GDP by Economic Activities (In percent)</b>					
Agriculture	27.7	26.2	25.8	24	25.9
Mining and Quarrying	2.9	3.2	3.5	2.6	3.1
<b>Manufacturing</b>	<b>8.9</b>	<b>9</b>	<b>7.8</b>	<b>7.8</b>	<b>8.5</b>
Electricity and Water	2	2.4	2.5	2	2.2
Construction	6.2	7.8	7.8	6.7	7.1
Trade, Hotel and Restaurants	15.6	15.9	14.2	14.1	15.0
Transport and Communication	6.1	6.4	6.5	6.6	6.4
Financial and Business Services	11.2	11.3	11.1	10.9	11.1
Public Administration and Other Services	12	12	11.7	11.5	11.8

### 3.2.2. The Mineral Sector Performances

The social economic reforms have had a remarkable impact on investment in the mining sector. It is fastest growing also in terms of its contribution to the economy and export activities. Between 1997 and 2008, this sector grew at an average annual rate of 12.5 percent, (URT, Economic Surveys (*Several Issues*)). Table 1.2 shows that the annual mining sector contribution to the GDP raised from 1.7 percent in 1997 to 3.6 percent in 2008, (URT, 1998, 2009).

Various studies suggest that the formal mining sector is dominated by gold, diamond, tanzanite, silver, copper and few gemstones (URT, 1998 and 2009). The production of all mineral, expect diamond has been increasing over time, reflecting an increasing importance of mining investments and developments in the mining sector. It is interesting to note that consistent data and information on formal tanzanite mineral production started in year 2000. This suggests importance of formalization and role of large scale mining in the development of mining sector and government revenue collection.

There are many interesting mineral policy issues to discuss. Many Tanzanians believe that, enough has been done to attract, promote and develop the gold mining sector. Many investors are showing interests and the current operations are enjoying both international market environment and domestic fiscal incentives, (Semboja, 2006).

**Table 1.2 Contribution of Mining Sector as Percentage of GDP (1990 as base year)**

Year	Value (%of GDP)	Year	Value (%of GDP)
1988	0.80	1999	2.00
1989	1.80	2000	2.4
1990	0.91	2001	2.50
1991	1.00	2002	2.81
1992	1.12	2003	2.89
1993	1.12	2004	3.12
1994	1.30	2005	3.26
1995	1.38	2006	3.3
1996	1.50	2007	3.45
1997	1.70	2008	3.6
1998	1.91		

### 3.2.3. General and Mineral Exports

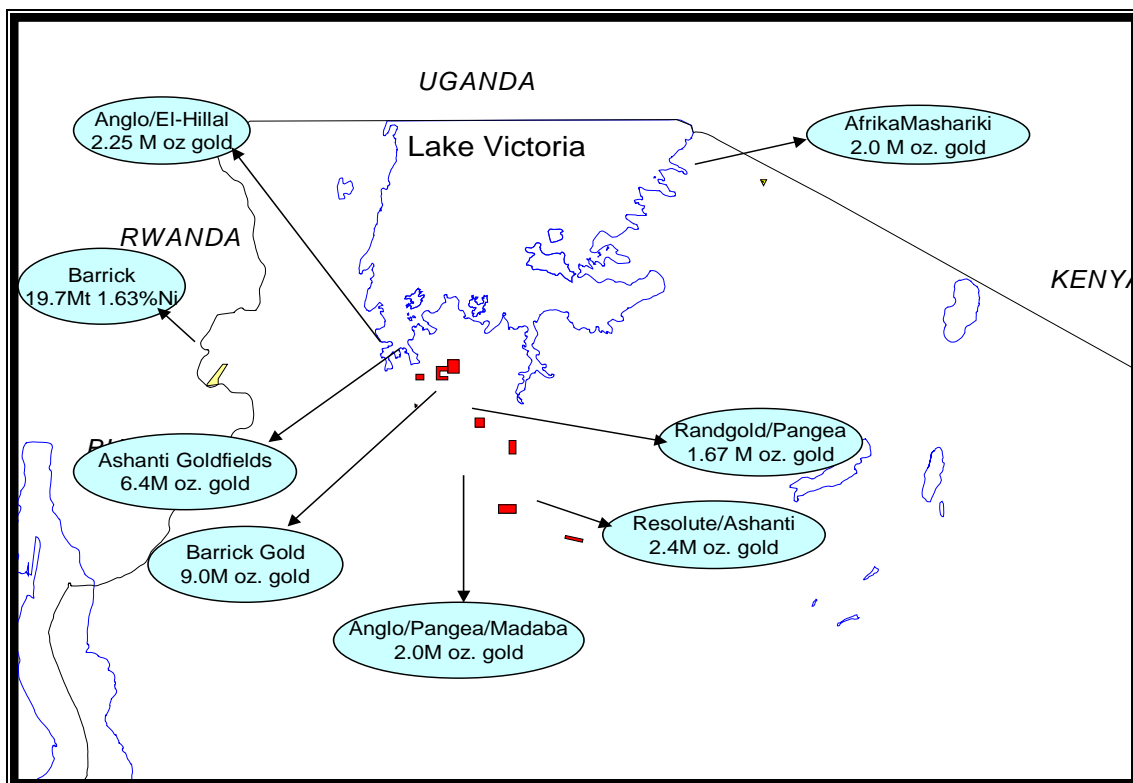
The current trade statistics suggest that total mineral production and exports have been increasing during the last fifteen years, (URT, Economic Surveys (*Several Issues*)). *The first important issue to note is that*; the mineral production values in US Dollar terms; have been increasing throughout the sample period. *The second important point to note is that*, year 2000 marks the switching point and changing Tanzania mineral production composition. Table 1.3 suggests that gold is the major dominating mineral and now contributing to about 90.89 percent and followed by diamond by about 6.4 percent of total mineral production values during the sample period 1997 – 2008.

**Table 1.3 Mineral Production Composition by major types, 1999 -2008**

Type of Mineral	Percentage Contribution in %
Gold	90.68
Silver	0.33
Copper	1.49
Diamonds	6.40
Tanzanite	1.10
Total Contribution	100.00

Figure 1.1 shows that Tanzania has significant number of large scale major mining projects in north western Tanzania. These include 1, *The Golden Pride Mine of Resolute (T) Ltd* (The mine is located at Lusu village in Nzega district. The mine commenced production in November 1998 with an estimated resource of 2.4 million troy ounces of gold); 2, *Williamson Diamond Mine Ltd* (The mine is located at Mwadui in Shinyanga and it commences production in 1940 but since 1994 it is being managed by De Beers of South Africa); 3, *Geita Gold Mine Ltd*, (Ashanti Goldfields Ltd in partnership with Anglo Gold are operating Geita Gold mine located at Nyankanga village close to Geita town); 4, *Kahama Mining Corporation Ltd*, (The Barrick Gold Corporation is the operator of the Bulyanhulu Gold Mine located in Kahama District); 5, *Africa Mashariki Gold Mine Ltd* (Africa Mashariki Gold Mine is located in Tarime District north west of Lake Victoria Goldfields) and 6, Kabanga Nickel Project (Anglo-American Corporation Ltd operates Kabanga Nickel Project located in Ngara district of Kagera region:

**Fig. 1.1: Advanced Mining Projects around Lake Victoria**



The good performance of exports in the recent period as compared to the late 1990s was largely caused due to increased non-traditional exports, (URT, Economic Surveys (*Several Issues*)). The increase in non-tradition export was mainly. Table 1.4 shows general and mineral exports in Tanzania

**Table 1.4 General and Mineral Exports in %**

	2003	2004	2005	2006	2007	Averages
Mineral exports as % of total exports						
Gold exports as % of total exports	41.3	42.7	39.1	45.3	38.0	41.3
Diamond as % of total exports	2.4	1.8	1.5	1.3	1.4	1.7
Other minerals% of total exports	1.7	1.7	1.9	1.6	4.7	2.3
Gold as % of total non-traditional	50.5	53.5	49.6	53.5	44.4	50.3
<u>Total Minerals as % of total exports</u>	<u>45.4</u>	<u>46.2</u>	<u>42.4</u>	<u>48.2</u>	<u>44.2</u>	<u>45.3</u>
Total Minerals as % Non-traditional	55.5	57.9	53.8	57.0	51.7	55.2

**Source: Tanzania Revenue Authority (TRA) and Bank of Tanzania (BOT)**

Table 1.4 suggests that mining has recently emerged as a significant sector for export. The share of mineral exports in total exports has been increasing reaching the peak of 48.9 percent in 2003, whereby gold itself accounting for about 44.5 percent share. Gold produced by large-scale mining companies are exported in raw form, implying that total production is equal to total export in terms of volume. As large-scale gold mining companies started production in 1999, the country has recorded a good mineral export performance. Tanzania is now on the world record as gold exporting developing country. The total mineral export as percentage of total exports increased and on average is about 45.3 percent during the last five years, (URT, Economic Surveys (*Several Issues*)). Table 1.4 suggests that gold contributes to about 41.3 percent of the total exports and contributes to about 50.3 percent of the total non-traditional exports.

### **3.3. General policy environment**

Tanzania has, in the past 15 years been undergoing social economic and political reforms, which have re-oriented the economy from a government-led to a private-sector-led one (URT 1997, 1998 and 2009). Tanzania has made significant progressive in the formulation, implementation and performances of social economic policies. The reforms and changes in policies have resulted in the shrinking of a formal public sector, which used to be the main employer in the formal sector. Having been guided by socialist policies since the late 1960s, re-orienting the economy has meant making deliberate effort to promote private sector development, although barriers still remain. The first and second generation reforms that were pursued since early 1980s up to day will be examined and linked to performance of the mining investment and development activities in Tanzania. Consistent with the reforms, the role of the Government has shifted from sole owner and operator of mines to remain the regulator, formulator of policy, guidelines and regulations; promoter and facilitator of private investments in the mineral sector. These reforms brought about changes in the mineral sector, which included formulation of the Mineral Policy of 1997, enactment of the Mining Act, 1998 and amendment of financial laws which created conducive environment for private investment.

### **3.3.1. *The Old Mineral Policy of 1997***

The formulation, planning, preparation and implementation of the Mineral Policy of 1997 witnessed a number of achievements from 1997 to 2007, which included:-increased investments in the mineral sector from US\$ 1.3 billion to US\$ 2.5 billion through exploration and mining projects, (URT, Economic Surveys (*Several Issues*)). Commissioning of six large scale gold mines which produce an average of 50 tonnes of gold compared to less than 1 tonne, which was produced by small scale miners. In addition, a medium tanzanite mine producing an average of 1.4 million carats per annum was commissioned in 2002; increase in the value of mineral exports from US\$26.66 million to US\$1,003.21 million; Growth of the mineral sector from 7.7% to 10.7% (at 2001 prices); Increase in employment in large scale mines from 1,700 to 13,000 workers; Increase in Government revenue from large scale mining from US\$ 2 million to US\$ 78 million; and Increase in the contribution of the mineral sector to the GDP from 1.4% to 2.7% (at 2001 prices), (URT, 2009).

Despite these first generation reforms and achievements, the mineral sector has continued to face governance issues challenges, particularly low integration with other sectors of the economy; low contribution to the GDP compared to the sector growth; slow development of small scale mining; low capacity of the government to administer the sector; low level of value addition of minerals; and environmental degradation during 2000- 2008, (Semboja, 2006 and URT, Economic Surveys (*Several Issues*)). This necessitated revision and formulation of the new Mineral Policy of 2009.

### **3.3.2. *The New Mining Policy 2009***

The new Mineral Policy of 2009 seeks to address among others the governance and challenges of the mineral sector and concerns raised by Mark Curtis and Tundu Lissu, 2008 (URT, 2009). The Government will continue to attract and enable the national private sector to take the lead in exploration, mining, mineral beneficiation and marketing. Its purpose is to increase the mineral sector's contribution to the GDP and alleviate poverty by integrating the mining industry with the rest of the economy. The specific governance objectives include:-

- (a) To promote economic integration between the mineral sector and other sectors of the economy, so as to maximize the contribution of the mineral sector to the economy;
- (b) To strengthen the legal and regulatory framework for the mineral sector and enhance the capacity for monitoring and enforcement;
- (c) To strengthen the institutional capacity for effective administration and monitoring of the mineral sector;
- (d) To participate strategically in viable mining projects and establish an enabling environment for Tanzanians to participate in ownership of medium and large scale mines;
- (e) To support and promote development of small scale mining so as to increase its contribution to the economy;

- (f) To facilitate, support and promote increased participation of Tanzanians in gemstone mining; [Toc208936598](#)
- (g) To establish transparent and adequate land compensation, relocation and re-settlement schemes in mining operations;
- (h) To strengthen involvement and participation of local communities in mining projects and encourage mining companies to increase corporate social responsibilities;
- (i) To promote and develop a marketing system of minerals to ensure that miners get right values of minerals traded in formal markets;
- (j) To promote and facilitate value addition activities within the country to increase income and employment opportunities;
- (k) To develop local base technical capacity;
- (l) To improve communication on the mineral sector to the public through education and provision of accurate and timely information;
- (m) To strengthen cooperation with the regional and international bodies to take advantages of facilities, resources and information provided by the organisations;
- (n) To promote safety and maintain hygiene conditions and protect the environment in mining areas; and
- (o) To encourage and promote women participation in mining activities and strengthen enforcement of laws and regulations against child labour in mining activities.

### **3.4. Legal and Regulatory Environment**

Tanzania has put in place a legal and regulatory environment that is conducive to modern mining investment, production and trade, (Semboja 2004, URT 1999 and 2009). It is widely acknowledged that the legal and regulatory framework is an important policy instrument in realising the national development policy objectives, and in particular governance issues and challenges. The substantial growth of investment flows in the mineral sector has been clearly associated with the reforms in mining legislation, which embraced the leading role of the private sector in development of the mineral sector. The reformed legal and regulatory regime also encouraged large-scale mining operations, and mainstreaming the small-scale mining operations into the formal mining sector.

#### ***3.4.1. Mining Acts 1998 and 2009***

In addition to extending the spirit of economic reforms to the mineral sector, enactment of the Mining Act, 1998 and now Mining Act 2009 came at a time when significant exploration and mining activities in other countries had gained momentum. Cognizant of the competition that Tanzania faced from other African countries in developing the mineral sector, Tanzania has put in place supportive competitive and transparent legislative framework, (Semboja 2006, URT 1999a, 1999b and 2009). This remains an important factor in the design of the legislative framework for mining activities in the country. External factors will remain relevant as Tanzania grapples with issues related to development of the mineral sector.

The new Mining Act 2009 make comprehensive provision for prospecting for minerals, mining, processing and dealing in minerals, for the granting, renewal and termination of mineral rights, for payment of royalties, fees and other charges and for any other relevant matters. This new Mining Act 2009 is a response to challenges faced and experience gained during twelve years of the implementation of the Mining Act. Cap. 123; that was enacted in the year 1998. The Act incorporates some major recommendations of the Tanzanians during consultative meetings and it is hoped that law would benefit the Tanzanians in the mining sector. The Act is divided into Eleven Parts. Part I deals with preliminary provisions such as short title and commencement, application and interpretation.

Part II deals with general principles and it contains provisions on control of minerals, authority required for prospecting or mining; mineral rights and exclusivity, restriction on grant of mineral rights, mineral rights transferable, transfer fee, development agreement, validity of development agreement, joint and several obligations, applications for mineral rights by tender, exclusive areas for primary licences, specified gemstone and offences relating to unauthorized trading of minerals.

Part III deals with administration matters such as appointment of Commissioner for Minerals, performance and delegation of functions of the Commissioner, appointment of Zonal Mines Officer, geological survey, mapping; and prospecting, conduct of Mining Advisory Board and Technical Committee of the Board. There also provisions on the prohibition against the disclosure of information and indemnity of persons who administer the proposed law.

Part IV which is sub-directed in five divisions, namely Division A, Division B, Division C, Division D and Division E, deals with matters on mineral rights. Division A addresses prospecting licence and retention licence; whereby provision on application for prospecting licence, prospecting by tender, minimum expenditure, condition for grant of prospecting licence, grant, renewal and relinquishment of prospecting licence; notification of grant, contents of prospecting licence and obligations of holder of prospecting licence can be found. Division B is on Special Mining Licence and Mining Licence. Under this Division, provisions on applicants, effects of application on prospecting licence, application of special mining licence, grant of special mining licence, duration of special mining licence, contents of special mining licence, renewal of special mining licence, rights of holder of special mining licence, obligation of holder of special mining licence, amendments of special mining licence, application of mining licence, grant of mining licence, rights of holder of mining licence, obligation of holder of mining licence and renewal of mining licence are contained.

Division C relates to primary mining licences and it contains provisions on application for primary mining licence, grant of primary licence, renewal of primary mining licence, allocation of primary mining licence to mine exclusive primary area and conversion of primary mining licence to mining licences.

Division D is on processing, smelting and refining licences and provision of mineral right holder to set aside minerals for processing, smelting or refining; application and grant of licence for processing, smelting or refining minerals are therein. Last in the roll is Division E which contains supplementary provisions affecting mineral rights. There provisions providing for surrender of land subject to mineral rights, suspension and cancellation of mineral rights, abandonment of land subject to mineral rights, appeals, penalty and failure to pay royalty, extension of mineral rights during application, enlargement of mineral rights, holder of certain mineral right suspending mining operations, minimum area for mineral rights, allocation of mining licence by tender and termination of mining licence where production is insufficient.

Part V deals with licences for dealing in mineral or minerals. Under this Part, provisions on application for dealer licence, grant of dealer licence, duration and renewal of dealer licence, rights of holder of dealer licence, holder to keep records and accounts, minimum turnover requirements, termination of dealer licence for default, application for broker licence; grant of broker licence, duration and renewal of broker licence, rights of holder of broker licence, holder of broker licence to keep records and accounts; termination of broker licence for default and prohibition against dealing in certain minerals are embodied.

Part VI deals with royalties, fees and other charges. Provisions which are contained under this Part are on royalties, payment *in lieu* of royalties, provisional assessment of royalties, sorting fees, prohibition on disposal of minerals, charges in respect of mineral rights and licences and prohibition against dealing in certain minerals.

Part VII deals with restrictions, reports and the rights of entry. This Part has provisions on security of gold and gemstones mining operations, restriction of rights of entry of holder of mineral rights, rights under a mineral right to be exercised reasonably, compensation, relocation and resettlements, removal of minerals, wasteful practices, reports, records and information, and authorized officer's power of entry.

Part VIII deals with disputes whereby provision on Commissioner to decide disputes, enforcement of Commissioner's orders, appeal to High Court and Rules are contained. Part IX deals with general provision on registration of mineral rights and it contains provision on registers of mineral rights and evidentiary provisions.

Part X deal with general provisions whereby provision on radioactive minerals, registration with stock exchange, transfer of control over company, insurance and indemnities, power to make regulation, obstruction of holder of mineral rights, miscellaneous offences and offence committed by body corporate are contained.

Part XI is on repeal and savings. It is proposed to repeal the Mining Act, Cap. 123 and make savings on various matters made, issued or directed under the provisions of the law which would be repealed.

### ***3.4.2. The Mining Regulations***

The regulatory framework promulgated by the Minister of Minerals and Energy under the provisions of the Mining Act, 1998 consists of four main subsidiary legislations. These are the Mining (Provisional Licenses) Regulations, 1999; the Mining (Mineral Trading) Regulations, 1999; the Mining (Salt Production and Iodations) Regulations, 1999; the Mining (Mineral Rights) Regulations; the Mining (Environmental Management and Protection) Regulations, 1999; and the Mining (Safe Working and Occupational Health) Regulations, 1999.

The Mining (Provisional Licenses) Regulations, 1999 provide for recognition of holders of licenses prior to the commencement of the Mining Act. The regulations further provide for the modality and manner under which such holders would be recognized. The regulations set out the conditions and particulars required for the license holders for grant of provisional licenses under the Mining Act, 1998 to allow for continuity of operations of mining companies holding a claim in minerals, prospecting right, prospecting, mining, special mining and reconnaissance licenses.

The focus of the Mining (Mineral Trading) Regulations lie on procedures for grant of permits and authorizations for dealing in minerals, and renewals of such permits and authorizations. Dealing in minerals includes purchase, import and export of such minerals. Import, export and sale of minerals require permission of the Commissioner, which may be issued under the provisions of these regulations. The regulations further set out the fees applicable in respect of grant of dealer's license and export or import permit. Under these regulations, dealers are required to keep register of entries of all minerals in their custody a copy of which must be furnished to the Commissioner for Minerals.

Regulation 11 contains a requirement for dealers to ensure safe custody of minerals in their possession at all times. In addition to the place of business as specified in the license, other places where minerals could be safely kept include a bank and safe deposit or such other secure locations. The Commissioner may direct any person having custody, control or possession of precious minerals to have the minerals stored at such place and manner indicated in the directive. Perhaps equally important are the provisions of regulation 16 which require the Minister and license holder to agree on appointment of an independent expert for the purpose of determining the market value of minerals in the event of dispute in that regard.

The Mining (Mineral Rights) Regulations, 1999 provide for the mode of application of mineral rights and renewal of such applications, accompanied with various relevant forms in the schedule. The regulations relate to the grant of prospecting, primary mining, mining, and primary prospecting licenses. Applications may be received by Zonal Mines Officers but the final determination lies with the Commissioner or the Minister. Zonal Mines Officers are supposed to give recommendations on the basis of which the Commissioner makes final decision. Where the Minister makes final determination of an application, the Commissioner for Mines provide recommendations. The regulations also

give details with regard to the manner of demarcating every area of land subject to a mineral right.

Minimum expenditure requirements are covered under regulation 8. These are expressed in terms of square kilometre or hectare used for prospecting operations in the license area. For instance, for every square kilometre in the case of initial prospecting, a holder of a prospecting license must spend US dollars 300.000. Administration of these requirements by the relevant authority requires intensive monitoring of the operations of the licensees. Both human and financial resources are essential for effective monitoring of these requirements.

Suspension of operations by a holder of a primary mining license requires the authorization by the Commissioner. There is no ceiling to the period of suspension that the Commissioner may authorize. It is therefore within the full discretion of the Commissioner to allow for any period in light of reasons adduced by the applicant. These provisions however do not cover the operations by large mining companies because they fall under the regime of special mining licenses. Regulation 18 deals with overlapping applications for mineral rights. Under such circumstances the Minister may use tender system to determine which application to grant a mineral right for overlapping areas. In case of applications for licenses under category D over the overlapping area, the principle of “first come first served” applies.

The Mining (Environmental Management and Protection) Regulations, 1999 and the Mining (Safe Working and Occupational Health) Regulations, 1999 may not be directly relevant to the study. However, there are some provisions in those regulations, which have financial and operational impact on the mining companies. It is worth noting that grant of mining licenses are contingent upon obtaining environmental authorizations as provided under the Mining (Environmental Management and Protection) Regulations. *These authorizations entail financial implications and monitoring and evaluation of taxation regime. The country has significant regulations without an independent, credible and effective regulatory authority.*

#### **3.4.3. Development Agreement**

The Government has executed agreements with major mining companies in relation to development of mining operations in Tanzania. Most of these agreements date as far back as the pre-1998 period when the new Mining legislation was passed by the Parliament. The agreements vary in size and contents but most key provisions remain substantially similar. These agreements have the following major common features:

- (i) All agreements contain provisions for fiscal stability particularly with respect to taxes, royalties and other imposts chargeable to mining companies;
- (ii) The agreements also contain provisions that seek to provide a measure of comfort in respect of other facilities necessary for investment flows into the gold mining sector e.g. banking facilities within and outside Tanzania;

- (iii) They also provide for certain obligations to mining companies particularly with regard to environment management, reporting and compliance to prevailing legislations;
- (iv) They provide for arbitration through ICSID in the event of irreconcilable differences between the Government and mining companies.

It has been noted that most large mining companies, which have invested in the sector take these agreements as a key feature in the regulatory framework governing their operations, including rights and obligations and protecting taxation regime and financial viability, (URT, 2000). They expressed the view that development agreements constitute a reasonable assurance on the stability of the fiscal regime, and applicable legislation. These agreements have also facilitated the mining companies in accessing international financing for their projects as financiers have invariably insisted on submission of the agreements as one of the conditions precedent for financing. They associate the adequacy of the incentives for investments and re-investments in the sector with adherence to the tenets of the development agreements. They further point to the unfamiliarity of the some of Government officials with the provisions of the development agreements as a source of some uncertainties and problems they face in their operations.

### **3.5. Tanzanian Mining Tax Systems**

This section attempts to generate a discussion on whether taxes are the best modes of compensation for their use of valuable non-renewable assets. Like other resource-based industries, mining is typically subjected to substantial taxation. In addition to conventional profits or corporate taxes, mining companies are required to pay royalties, revenue taxes, and excess profit taxes and like other economic entities are subjected to a variety of other forms of taxations<sup>1</sup>. In many cases these are heavily burdened. It is known that there are negative effects of various revenue-raising taxes, and in particular, the extent to which the imposition of such taxes changes the patterns of resource use, (Semboja 2006). The bias or distortion introduced by these tax measures may include fast depletion of mineral resources with no long term positive economic benefits to nationals.

As the Tanzanian government has realized the potential for greater contribution of the mining sector to the economic growth, it has made serious efforts to rationalize the tax system and reduce the tax burden in this sector. As in many resource producing jurisdictions, incomes earned in Tanzania from the mining of gold and gemstones has historically been subject to complex taxation regime. This taxation regime has been stipulated under the investment and mining policies and acts, (Phillips *et al* 2001). In a nutshell there were considerations to facilitate recovery and promotion of mining activities by having more friendly taxation region. The important features of the main taxes applicable to the Mining Sector are briefly described below.

---

<sup>1</sup> Dasputa, P.S. and Heal, G.M., (1978), *Economics Theory and Exhaustible Resources*. Cambridge Economic Handbooks, Cambridge University Press, UK.

### **3.5.1. Corporate income tax**

The corporate income tax is the most important levy on the mineral sector although it is levied as part of the government's general tax power. Generally, the income tax system comprises a basic rate structure (usually one rate), provisions for deduction of certain items from the tax base, supplementary levies, tax incentives and withholding provisions. The corporate income tax in Tanzania is administered according to the current Income Tax Act (2004).

The corporation income tax is one of the potential form of profit tax that affect the pace of resource depletion and affecting business behaviour of almost all mining companies. Currently some of gold mines are enjoying tax incentives, and are yet to generate taxable corporate income. Thus presently they are not affected by the corporate income tax. The diamond company and the gemstone dealers and exporters are the ones who are currently paying corporate income tax. There seems to be a variety of problems both with the law and its administration. The laws or the rules do not matter so much, what matters is the past practices and traditional customs followed in the tax department. This creates uncertainty for taxpayers and makes the conduct of business very difficult. This is also partly due to the fact that the laws and rules are often unclear.

### **3.5.2. Value Added Tax (VAT)**

The Value Added Tax Act was passed in 1997 and became effective from the fiscal year of 1998-99. It replaced the Sales Tax Act No 13 of 1976. The main features and problems with the VAT are known. The VAT is a consumption type VAT and is based on the destination principle. The credit or invoice method is used for computing tax liability. Tax rate is 18% and exports are zero-rated<sup>2</sup>. Virtually all products of the mining industry are exported, and hence they are subject to a zero-rated VAT. In general, the producers of zero-rated commodities ultimately do not have to pay any taxes; they are either exempted from VAT on their inputs, or if they have paid VAT on their inputs, they are entitled to claim VAT refunds. To relieve the burden of delay in VAT refund, The VAT Act provides an incentive to the mining industry in the form of VAT exemption of selected inputs. However, the procedures for exemption of VAT input, and a VAT refund is complex and cumbersome. The whole process often involves several different authorities and takes a lot of time.

According to many mining firms, the level of taxes is not a problem; it is the poor administration that is driving the existing business and new investments away. Dasputa and Heal, (1978) have demonstrated that imposition of specific sales taxes (e.g., VAT) introduces no alteration in the pattern of extraction, since the consumer prices schedules remain the same and adjust accordingly to the general price movement. To put it more general terms, the entire tax is absorbed by the final resource owners. It can be noted that such taxes introduces no distortion and is equivalent to proportional tax on the value of deposits.

---

<sup>2</sup> This may be compared to rates in Kenya (15%), Uganda (17%), and Zambia (20%). Clearly Tanzania has chosen a rate that is one of the highest in the region.

### **3.5.3. Withholding taxes**

The issue of withholding taxes is especially relevant for tax harmonization across countries. Many countries tax the worldwide income of their companies and allow a foreign tax credit in the domestic tax liability. Investors from these countries would like to have the host country's income tax system harmonized with their systems to keep the administration simple. High withholding taxes on expatriated profits severely affect the viability of investment decisions. Double taxation agreements mitigate the burden to some extent. Withholding taxes are applicable to all forms of income but the rates differ according to the nature of income. The rate applicable for interest payments is different from that on dividends remitted abroad and salaries and fees paid to foreign consultants.

### **3.5.4. Import Tariff**

The Customs Tariff Act of 1976 has been recently amended by the Financial Laws (miscellaneous amendments) Acts of 1997. Some of the main features of this new law as applicable to the mining sector are briefly described below.

For mining operations, after the first anniversary of the commencement of commercial production, the rate of import duty on items to be used in carrying out of mining operations is capped at 5%. If the company is not yet at the operating stage, imports are exempted from customs duties. However, like the VAT on inputs, the exemption from import duties is not automatic and the company has to claim exemption in every transaction, (Phillips *et al* 2001). Import duty on capital goods imported by the holder of a certificate of incentives issued by the Tanzania Investment Center is import duty free.

### **3.5.5. Road Fund and Fuel Tax**

Like other economic entities, the mining firms contribute to the road fund tax. The road toll has been renamed Road and Fuel Tax. According to the amended Roads Tolls Act 1985, the Roads Fund will receive all monies collected as road tolls imposed on petrol and diesel, or from any other sources at rates to be determined by parliament from time to time. At present the mainstay of the Road Fund is the road toll of Tshs 100 charged, at source, on every litre of petrol and diesel sold. Effective July 1999, the money collected by the Tanzania Revenue Authority from such activities are submitted to the Treasury for specific allocation to the Fund. The money is then allocated and used exclusively for construction, rehabilitation, maintenance and repair of trunk and core roads, in accordance with proposals for design survey or other requirements related to roads.

Government Notice No 22 of 5/2/99 states that Road Toll on imported gas oil for any sum exceeding US \$ 200,000 per year is exempted. The letter with references No TRA/CE/C/1.20/1/GN22 from the Commissioner of Customs and Excise clarifies and set institutional mechanisms for implementation and control systems. The remission of road toll shall be for entire period from mine development to the end of the mine life. That means for large-scale mining firms, it's economic to pay US\$ 200,000 per year and

continue importing and use gas oil as much as needed during one-year period and this is applicable throughout lifetime of the mine.

Studies suggest that it is only Tanzania that is providing this fiscal stability, (Semboja, 2004 and 2006). These studies suggest existence of misuse by some operating firms. The losses incurred due to this facility may be greater than amount of funds received from royalties.

### **3.5.6. Royalty**

Almost as ubiquitous as profit taxation is the requirements that, mining companies pay royalties to the government of the country in which they operate. Royalties are either specific levies (based on volume of minerals extracted) or ad valorem levies (based on the value of minerals extracted). They secure revenue for the government as soon as production commences, are considerably easier to administer than most other fiscal instruments, and ensure that companies make a minimum payment for the minerals they extract.

Royalties raise the marginal cost of extracting minerals, as they are based on the volume or value of production. A royalty set too high may discourage development of marginal deposits and lead to early closure of productive mines. Nevertheless, a regular minimum payment is usually necessary to justify extraction of the resource in the public mind, to assure stability of the fiscal regime, and to broaden the tax base. Investors are resistant to the use of substantial royalties, even on potentially rich deposits, on the grounds that a royalty is a deductible rather than a creditable item for tax purposes in the home jurisdictions of investing companies. The provisions for royalty in Tanzania are specified under Part VI in the Mining Act (1998).

The royalty is collected by the MEM. Every authorized miner pays a royalty on the “net back value” of minerals produced under his/her license. “Net back value” means the market value of minerals FOB at the point of export from Tanzania, or in the case of domestic consumption, at the point of domestic delivery minus the cost of transportation including insurance and handling charges from the mining area to the point of export or delivery, minus cost of smelting and refining or other processing costs unless such other processing costs relate to processing normally undertaken in Tanzania in the mining area.

The rate of royalty is 5% in the case of diamonds and 3% in the case of gold and other minerals including gemstones. Cut and polished gemstones are not subject to royalty. If, however, the authorized miner of raw gold or gemstones sells his production to another licensed dealer or licensed broker, the royalties will be paid by the latter.

Every licensed dealer has to pay in lieu of royalty on the net back value of any raw gold or gemstones which is (a) exported by him or (b) in the case of gold sold to a gold refinery in Tanzania; or (c) in the case of gemstones, sold to an authorized lapidary or gemstone cutter and polisher. To avoid double royalty, the Mining Act specifies that this payment does not apply where the licensed dealer is an authorized miner who has paid

royalty on those minerals produced by him. A provisional royalty may be applied if it is impractical to assess the exact amount of the royalty or any payment in lieu of the royalty,

Dasputa and Heal, (1978) have demonstrated that high royalty introduces distortion and in particular, results in higher product prices and consequently greater conservation. It is noted that effect of high royalty is to reduce the value of the deposits. In order to facilitate investment, incentives other than tax incentives are necessary. These are called non-fiscal incentives. These are incentives that are necessary and facilitated by the government, people, and other investment-support institutions to assist the investors, developers, and operators of gold mining activities. The various non-fiscal incentives are outlined as follows, (Phillips *et al* 2001).

### **3.5.7. *The Finance Act, 1997 (The Financial Laws (Miscellaneous Amendments)***

The Financial Laws (Miscellaneous Amendments) Act, No. 27 of 1997 was aimed at amending specific financial laws to address the glaring potential conflicts of those legislations with the Tanzania Investment Centre Act. The Financial Laws contains specific provisions relating to the fiscal regime applicable to the gold mining sector. This legislation amended the provisions of the Income Tax Act, No. 33 of 1973, the Customs Tariff Act, 1976 the Sales Tax Act, 1976 (repealed) and the Immigration Act, 1995 and other financial laws with a view to introducing fiscal incentives for the gold mining sector.. The Financial Laws (Miscellaneous Amendments) Act provides for fiscal stability of mining operations/activities in the following ways:

- Contains stability provisions relating to rates of duties, fees, royalties, taxes and other fiscal imposts and the manner of calculating those liabilities of mining companies;
- Contains provisions (section 12) which guarantee stability of the corporate tax payable by a mining company in line with Agreement with the Government;
- The provisions of the Act may be implemented through execution of the Development Agreements as provided under section 10 of the Mining Act.

Part III is about deductions in respect of mining operations. Section 17 of Part III, articulate that, subject to the specified schedule, where a person carrying on mining operations incurred expenditure in the year of income there shall be made, in computing his gains or profits such year of income, a deduction equal to the amount of such expenditure. Section 18 of Part III states that for the purpose of deduction of development capital expenditure in ascertain the income of a person derived from mining operations, an additional capital allowance of fifteen per centum shall be applied to balance of unredeemed qualifying capital expenditure forming part of any deficit brought forward and allowable as deduction for such person at the commencement of each year of income.

All major mining companies have accessed the stability provisions of the Financial Laws (Miscellaneous Amendments) Act through Development Agreements with the Government. The effect of this approach is to entitle the mining companies to the tax

rates envisaged in the Development Agreements, irrespective of subsequent legislative changes.

As noted above, the fiscal incentives offered under the Finance Act for exploration and mining activities include:

- (i) Exemption of import duty and value added tax on capital goods and essential materials (explosives, fuel, spare parts) up to one year after the start of production. Thereafter a cap of five per cent customs duties on imports of capital goods and supplies apply;
- (ii) Depreciation allowance of 100 per cent on capital expenditure;
- (iii) Withholding tax on technical services at 3 per cent

Tax legislation is one of the most dynamic statutes, as it keeps changing every year. These changes notwithstanding, the Development Agreements make it difficult for the Government to extend their application to large-scale mining companies. This underscores the need for specific recognition of the exclusivity of the mineral sector while introducing changes. This may be necessary to avert application of such changes by tax administration officials against large mining companies.

On the other hand, changes introduced may not have a very big impact on the financials of mining companies. Under such circumstances, and consistent with the spirit of the provisions of the Development Agreements, there may not always be a case for non-application of the changes across the board including mining companies. It should not be borne in mind that the Development Agreements do not nor are they intended to fetter the Government's inherent powers to impose or change tax regimes. Rather, they are intended to give mining companies a measure of stability in terms of their tax obligations over a period of time. It is therefore important to strike a balance that addresses the contradictory status of the Development Agreements and the state's powers to take legislative measures.

### ***3.5.8. Current mining tax performance 1999/2000 – 2009/2010***

Table 1.5 shows contributions of these taxes to the total mining statutory taxes and other contributions during 1999/2000 to 2009/2010 by percentage. The analysis defines labor taxes to include all employment related taxes. We noted that, there are multiple types of employment taxes applicable to all businesses including the mining activity.

Labour taxes constituted the largest component of mineral taxes contributing to about 54.5 percent of taxes paid by mining companies to the government machinery. The second largest and most important for the government and development of the sector is the royalty, contributing to about 34 percent during the sample period. Import duty is the third and this contributes to about 4.8 percent.

The national corporate income tax is the most important tax revenue in the economy. The initial corporate income tax rate was 30%. No windfall tax or additional profits tax is applicable to the mining sector. Table 1.4 suggests that large scale mining firms have not

been paying corporate income tax at the initial stage of exploration and development. Table 1.4 the percentage contributions of corporate income tax as percentage of national total tax revenue has been on average around 1.1 percent. This is very low and unexpected suggesting either those gold mining companies in Tanzania are not making profit or they have consistently declared losses, (Mark Curtis and Tundu Lissu, 2008).

**Table 1.5: Contributions of major taxes 1999/2000 to 2009/2010 by percentage**

<b>Type of Tax</b>	<b>Average</b>
Labor Taxes	54.5
Stamp Duty	0.3
Road Toll	2.0
Mining Lease	0.9
Royalty	34.0
Import Duty	4.8
Income Tax	1.1
Others	2.5

**Data Source: TCME, 2005, 2008 and 2009**

There are views that the uncertainty and cyclical income flows are results of systematic and transitory implementation of investment and fiscal policies, laws and regulations. Many new gold mining private investments had to be protected and supported during infancy stages, (exploration, constructing and development and initial operations). These are inward looking policies aimed to support and protect incumbent multinational corporations, (Semboja, 2006).

### ***3.5.9. Other Mining Taxation Issues***

#### ***Transfer Pricing***

A multinational mining firm will typically have tax liabilities in both its home country and host country. This provides fertile ground for attempts at minimizing the overall tax liability through transfer pricing and other means of tax avoidance by seeking to minimize income and maximize deductible expenditures in high- tax jurisdictions and vice versa in low- tax jurisdictions. Some transfer pricing mechanisms that affect revenues are:

- The sale of export proceeds at below-market prices to an affiliated company located in low- tax jurisdictions.
- The creative use of price hedging mechanisms perhaps involving transactions between related parties.
- Measures to maximize expenditure deductions include:
  - The provision by related parties of debt finance at above-market interest rates perhaps leading to highly leveraged projects.
  - Claiming excessive management fees, deductions for headquarter costs, or consultancy charges paid to related parties.

- The provision of capital goods and machinery in leasing arrangements with above-market leasing costs charged by a related-party less or.
- If the mining tax rate is above the standard corporate income tax there may be an incentive to establish a domestic shell firm that will on-lend finance from related parties to the mining firm giving rise to an interest deduction that may be applicable at a higher tax rate than is charged on the interest earnings in the shell company.

The tax legislation includes safeguards requiring that transactions between related parties will be assessed on an arms-length basis. Some countries also (for tax purposes) impose a cap on the allowable debt-leverage of a project (Phillips *et al* 2001). However, for some specialized goods and services it can be difficult to determine what exactly is a fair market price. There is often also a case of asymmetric information between the tax administration and the taxpayer in this regard. One way to overcome this is to seek cooperation with the tax authorities in the home countries of the mining companies' treaties in place. However, a tax paid in the producing country that in nature resembles a home country tax is most likely to qualify for a tax credit.

### ***Ring-fencing” of tax accounts***

All countries have some considerations on ring-fencing of tax accounts. Some specialized mining taxes, such as a resource rent tax may be deemed to differ in nature from a standard corporate tax and, therefore, could face difficulties in qualifying for a tax credit. It is important to determine the extent of “ring-fencing” of tax accounts. Ring fencing means a limitation on consolidation of income and deductions for tax purposes across different activities, or different projects, undertaken by the same taxpayer. Some countries are ring-fence mining (and petroleum) activities and others ring-fence individual contract areas or projects. This can become complex if a project incorporates extraction, processing and transportation activities, (Phillips *et al* 2001). If the mining tax regime is more onerous than the standard tax regime, the taxpayer will seek to have these projects related activities treated as down-stream activities outside the ring fence. If they are treated as separate activities, the taxpayer through abusive transfer pricing may shift profits to the lightly taxed downstream activities.

Ring-fencing rules matter for two main reasons:

- Absence of ring fencing can seriously postpone government tax revenue because an investor who undertakes series of projects will be able to deduct exploration or development expenditures from each new project against the income of projects that are already generating taxable income.
- As a mining (or petroleum) area matures, absence of ring fencing may discriminate against new investors who have no income against which to deduct exploration or development expenditures.

On the one hand, very loose ring fencing may be misused. On the other hand, despite these considerations a very restrictive ring-fence is not necessarily in the government's interest. More exploration and development may occur if taxpayers can obtain a

deduction against current income, generating more government revenue over time by increasing the taxable base. The right choice is a matter of balance within the fiscal regime and the degree of government's preference for (modest) early revenues over (greater) revenues later on.

### **3.5.10. Major mining tax policy issues**

#### ***Tanzanian taxation system is comparable to other countries***

The Tanzanian taxation system is comparable to many mining countries in the world. Tanzania ranked 12th out of 23 (base metal) and 14th out of 23 (gold) and in the second highest taxing quartile, (James Otto, *et al*, 2000). Consultations with some stakeholders suggest that Tanzania does not have very generous taxation regime and is not competitive in terms of internal rate of return and levels of profitability, (Semboja, 2006). Tanzania has some form of acceptable mining stability agreements. However, there are some pertinent taxation administrations issues. There are many tax policies (Mining, Investment and Fiscal), laws, regulations and thus many implementing institutions. This makes administration of taxation regime to be complex.

#### ***Not perfect taxation regime***

Although the current Tax regime is reasonable, most of the mining companies have significant concern with the manner in which various taxes are administered by TRA. The mining companies have been subjected to aggressive tax audits primarily in three areas; VAT, stamp taxes and PAYE. Dealing with these tax audits has been frustrating, time consuming and very expensive (i.e. professional fees). Other principal problems with tax administration in Tanzania are:

The tax laws (including, although to a lesser degree than previously, the new Income Tax Act) contain few ambiguities and inconsistencies. In some cases there is considerable uncertainty as to what the precise rules are due to the lack of interpretive guidance. Both the taxpayers and the government would benefit from guidance such as published regulations, gazette notices, and interpretation bulletins. Additional guidance would provide taxpayers with greater certainty improve tax compliance and simplify and expedite the audit process.

Regional offices of the TRA appear to administer the tax laws inconsistently and in an uncoordinated manner. This may, in part, be a consequence of the lack of interpretive guidance as discussed above. However, we believe the tax laws would be administered more fairly and consistently if there were greater central control and oversight of the activities of the regional TRA offices. For instance, there are concerns as to the administration of VAT where demands for output tax and no credit given for the related input tax (on the basis that out of time) result in a punitive and disproportionate cost, which cannot be justified, (Semboja, 2006).

There are no clear administrative procedures for taxpayers with fiscal stability agreements to protect and enforce the rights in those agreements when tax disputes arise. For example, some mining's fiscal stability agreements permit them to use U.S. dollar accounting, permitting it only at the discretion of the Commissioner. Fiscal stability agreements should be given clear legal effect, so that the tax provisions of those agreements are respected by the TRA and enforceable by the taxpayer.

There should be a clear right for foreign investors to elect to prepare accounts for tax and other purposes in a stable foreign currency (e.g., U.S. dollars), rather than merely permitting foreign currency accounting at the discretion of the Commissioner. Managing foreign exchange risk is of great importance to multinational mining companies.

The mining companies have signed different loan agreements outside Tanzania for purpose of financing mining operations. These include short-term lines of credit and long-term loan agreements with a syndicate of foreign banking institutions as well as with company's affiliates. Access to foreign exchange by mining companies is important for repayment of debts, payment of salaries and dividends and purchase of essential inputs for mining operations such as equipment, machinery and accessories.

### ***Inefficient taxation administration issues***

TRA has established Large Tax Payers, (LTP) Division as a part of internal institutional restructuring reforms. The LTP Division has limited staff trained on mining operations and tax administration. All large scale mining firms are under the LTP Division. LTP division has one year experience in handling, managing and administrating mining taxation regime.

Large scale gold mining is a new economic activity with complex operational issues. There are few government officials with adequate knowledge and information about gold mining operations. Frequent political and institutional changes weaken capacity of the government system in proper handling of mining taxation regime. There is lack of adequate and shared data and information on mining operations. Some of key government institutions, (TRA and BOT) and officials are not aware of *strategic details* on licenses, agreements, contracts and mining operations, (*type, number, nature, applications, effects and impacts*), (Semboja, 2006).

There is lack of adequate, efficient and transparent institutional arrangement for monitoring and evaluation of mining operations, production, outsourcing, costs, and sales of gold, (Phillips *et al* 2001). It is very difficult to establish when and how corporate incomes will be paid by firms engaging in multiple licensing, ring fencing and continuous investments under uncertainties.

The current taxation regime is discriminatory, (Semboja, 2006). [1] It makes domestic production to be costly and favors importation of goods and services into mining sector; [2] Reduce incentives for use of share capital, [3] Maximizes Production Costs (Transfer Pricing), [4], Minimizes Revenue Flows (Hedging) and [5], Optimizes Losses. The fiscal

stability arrangement guarantee stable revenue flows for the private firms. Firms accept fiscal changes which ensure positive and increasing net income revenues, and (commercial profits).

### ***Taxes as fiscal incentives***

There is a wide spectrum of fiscal or tax incentives granted to large scale mining operators, (URT, 2009). Tax incentives may take various forms including tax exemptions and reductions intended to encourage private investment in the mining sector. The fiscal regime was developed taking into consideration the needs of the investors in the mining sector to recover exploration and development costs and achieve a rate of return commensurate with risks, assure repatriation of dividends, and to meet financial obligations with creditors and suppliers.

The country's interests have been balanced with those of investors to ensure a mining taxation system, which is not only equitable, but also stable, predictable, and internationally competitive. The fiscal incentives granted to investors in the mining sector, particularly for large-scale gold mining operators include, exemptions from Income Taxes; Relief from Value Added Tax; Withholding tax on dividends and interest; Royalty; Capital and Depreciation Allowances; Infrastructure Allowances; Indirect taxes - Import tariff; Road Fund Tax and Employment taxes. In Tanzania, losses incurred by the mining companies are carried forward for an unlimited period of time and there is no windfall gain tax or additional profits tax is applicable to the mining sector

### ***Not Best Mode of Compensation***

Moreover, it is acknowledged that mineral resources are intrinsically valuable because they are non-renewable, (Naito, Koh *et al*, 2001). As a result, an opportunity cost, or what economists call user costs, is incurred when such resources are exploited now rather than saved for the future. We may argue that taxes are not the best modes of compensation for their use of valuable non-renewable assets (Semboja, 2006).

### **3.6. Revenue Distribution**

This paper takes projected long term final distribution of revenues as one of the indicators for good corporate governance and fair treatment of key stakeholders, (Semboja, 2006). Table 1.6 shows the distribution of revenues from large scale gold mining companies in Tanzania. The following are major observations and findings. The table 1.6 shows that about 11 percent of revenue is to be paid to the government in form of statutory taxes and fees; while about 57 percent will be used to cover basic operational and production costs. The major shareholders and investors are expected to get about 11 percent. The table may suggest there is a fair distribution of revenues and a sound national economic dealing.

We have noted that most large scale gold mining firms have been in the fore front in supporting rural and community development programmes. However, the table 1.6 suggests that this is nothing compared to the total cake available to be shared. Table 1.6 shows that about 0 percent goes to social and community programmes suggesting that

these large scale firms have “little interest” or contributions to general economic development of Tanzania is very small and have little or no economic linkages with the Tanzanian economy. As a result, table suggest that significant amount of the wealth created by gold mining is shared as cost components for operations, management and financing of companies, and too little to the domestic economy, and the people

**Table 1.6: Distribution of Revenues from the Mines**

<b>Responses</b>	<b>Average</b>
Government taxes	11%
Royalties	3%
Loans & interests	10%
Production costs	57%
Share holders	11%
Capital reinvestment	8%
Social & community programs	0%

**Data Source: TCME, 2005 – 20010**

Studies revealed that poverty reduction or social and community programs received less attention despite many claims by all large scale companies (Semboja 2006). Many suggest that few people get access and there are minimum benefits for the transfer of funds (URT, 2009). Most of funded community programs are not synchronized and linked to national, regional, district and ward development policy efforts and have less impact on poverty reduction at village levels.

### **3.8. Use of Labour Force**

The use of labour force is one of EI good governance indicators. Social and economic development effort in Tanzania is founded on the premise that the development of human resources plays a major role as a vehicle for social progress; and for building a strong, diversified, resilient and competitive economy. Tanzania has a liberal community development policy, which encourages all stakeholders to use wealth to improve their social economic welfare through active participation in the ownership, management, engagement and sharing of benefits. All large-scale mining firms are free or at liberty of providing different forms of social services in consultations and collaboration with mining and rural communities.

#### **3.8.1. Status of Employment**

As the large scale gold mining industry in Tanzania is growing there is need to put into place strategies that will promote quantity and quality of employment levels and harmonious labour relation in the mines. Mineral development has historically caused conflicts between the various stakeholders involved. These are artisanal miners and workers, and owners, management and staff of small, medium and large-scale operators. There were about 550,000 – 950,000 between 2000/1 – 2009/10 people are directly involved in mining activities as artisanal miners, traders and workers in Tanzania.

The formal or large-scale mining industry is not a large employer compared with artisanal and small-scale mining sectors in Tanzania. Studies by the UN's trade body, UNCTAD show that the 'employment effects [of large-scale mining] are negligible' and that 'large-scale mineral extraction generally offers limited employment opportunities, and hence has little impact on employment, at least at the macro level', (Mark Curtis and Tundu Lissu, 2008). Some estimates are that mining in Tanzania has created around 10,000 jobs in the past decade. Yet UNCTAD's latest estimate is that mining employs just 0.2 per cent of Tanzania's workforce

Studies suggest that there are few people employed in the formal private owned large-scale mining industry in Tanzania. These workers enter into formal employment contracts and or agreements, (Mark Curtis and Tundu Lissu, 2008). The capital-intensive nature of the large-scale mining only requires a few workers to man the highly mechanized extracting machinery. However, large-scale firms in the mining sector often represent one of the few opportunities for formal employment. However, any single mining worker in these companies supports often-large numbers of dependents. From another perspective forward linkages into other parts of the economy are also important, (Semboja, 2004).

The number of foreign employees was increasing in number since 1997. By 1997 they were just 12 foreign employees but by year 2002 the number of total foreign employees increased to 1197 of which amounted to 16.9 percent of the total number of employees. Similar trend of increasing in employment creation has also been experienced with Tanzania employees, on site contractors as well as professional's employee. This is result of outward looking policies encouraging free movement of labour and people. By 1997 they were 927 Tanzania who were employed in the mining sectors but the number declined in 1998 and from 1999 the number of employees was steadily increasing up to 1973 in 2002. There were about 5500 jobs in the large-scale gold mining companies in Tanzania up to 360 people in gemstone AFGEM and about 1030 Williamson Diamond by 2002. In turn, because of the high levels of capital investment, recouping exploration, construction and start-up costs is a high priority. This invariably requires that skilled personnel be recruited from where ever they are available internationally.

Unfortunately, the supply of local mining professionals in Tanzania has been limited and does not meet the requirements of the unprecedented rapid development of mines that is occurring in new mining sites, (URT, 1996 and 2009). There has been a significant demand' for technologically capable graduates to meet the needs of an increasingly sophisticated gold mining industry. The demand has increased progressively since 1998 because these industries have experienced high growth, averaging 20-35 per cent a year. While professionally skilled expatriates have been employed to cover deficiencies in Tanzania, there are efforts to prepare local to replace them. On the whole, expatriates may not represent a large proportion of the mining workforce, but they dominate the skilled and managerial position in Tanzania.

Developing new mining projects in Tanzania has been a challenge for the large-scale mining companies involved in Mwanza, Shinyanga, Tabora and Kagera regions. The

country's previously inaccessible topography has not been successfully opened up by the current government efforts on road and railway transport systems

Large-scale modern mining operations in Tanzania have been fraught with structural employment problems. At the beginning of each mine's operation, employment and recruitment have been problematic. As the mines settled, issues of training and localization have come to the fore. In general the demand for labour was more intensive some eighteen years ago than today. A significant portion of the Lake Regions mine's labour force had to be brought in from other parts of Tanzania. Some came as sub-contractors who arrived along with their entire labour force. A relatively small number of skilled Tanzanians are employed in these large-scale mining companies.

### ***3.8.2. Human Resource Capacity Building Training***

On the supply side facilities and programs for training in mining has been increasing over time. In general, there exists no short falls in the supply of mining local professionals or human capital in many large-scale mining companies. Apart from creation of employment opportunities among mining firms also made a meaningful contribution towards supporting social services that includes education and health services. A number of Tanzania personnel who were involved in mining activities benefited from attending training by being imparted with necessary skills and best practice in mining sectors so that they would operate effectively and efficiently.

### ***3.8.3. Use of Expatriate Labour***

The obvious corporate strategy, aired in the employment debates, has been to import expatriate labour from countries where these companies originate such as South Africa, Canada and Australia. This created a few problems, which were not, however, envisaged by government. One labour relation issue was that the recruitment of expatriate labour was inconsistent with the inward looking policies and optimistic localization programmes advocated in the mining, employment and other development policies. Sometimes labor conflicts arise due to inadequate consideration to the social requirements and differences in wages for local and foreign workers. The experience in all new mine sites has invariably been local pressure from Tanzanians to have locals hired where ever possible so as to maximize the benefits of the mine to those whose lives and culture are disrupted by the mining activity. Additionally, the isolation of the site and high costs of the employment packages and repatriation provided an incentive to employers to recruit local labour and thus meeting minimum inward looking policy requirements.

As noted, responsiveness to the aspirations of the indigenous has become a priority for the mining companies. At the same time the managements of these developments experience considerable tension between maintaining a viable mine and responding to the expectations of the indigenous. Ideally, mine operators should develop unique employment policies in order to cater for local aspirations. The systematic recruitment of workers starting with the local area (adjacent to the mine), then moving to the regional

level, may be viable. The central government has acknowledged the concerns of the local people and has not hindered such recruitment and employment policies.

It is not surprising that the training of workers has become a major responsibility for mining enterprises in Tanzania has given the small labour market. Further, when the mines are invariably in remote locations, accompanied by imposing and advanced technological equipment and when a significant number of the workforce has just commenced working and has no previous industrial work experience, then there is no choice but to give training a high priority. Management has been under considerable pressure to train, especially to train a significant portion of its green workforce. In fact, training has become an integral part of management's functions in the context of mining for minerals in Tanzania. Depending on the size and other features of the mine there are usually significant number of employees engaged in various capacities (as training supervisors and training instructors) in the training department in the mines.

#### **4.0. Government and civil society governance and social accountability initiatives in the sector.**

There are concerted efforts to integrate, consult and involve all stakeholders such as civil society, private and public sector institutions in the policy processes and economic organization and management as part of good governance practices. The good governance ensures that political, social and economic priorities are based on broad consensus in society and that the voices of the poorest and the most vulnerable are heard in policy decision making over the allocation of development resources.

Experience suggests that without a well-developed governance framework, there is an increased risk that benefits from extraction will not materialize, that fiscal systems will lead to uneven sharing of revenues that lack of a coherent and concerted development strategy will lead to their misuse, that local populations will be left disappointed, and that environmental damage, health risk and conflicts will occur. Thus the quality of institutions prior to the discovery of mineral wealth, and the capacity of a country to regulate, monitor and enforce activities in extractive industries are essential (Word Investment Report, 2007).

#### **4.1. Corporate social responsibility**

This paper will not provide detail analysis on issues related with infrastructure and corporate social responsibility, (CSR) in the mining sector in Tanzania. However, it is sufficient to point that all large scale gold mining firms operating in Tanzania have explicit or implicit policy statements on codes of conduct for all of its directors, officers and employees, (URT 2000 and 2009). These companies are committed to being good corporate citizens. The company policies are to conduct their business affairs honestly and in an ethical manner. These company policy goals cannot be achieved unless staff as individuals accepts their responsibilities to promote integrity and demonstrate the highest level of ethical conduct in all of all activities. The key to compliance with the business codes is exercising good judgment. This means following the spirit of the company codes

and the laws, doing the "right" thing and acting ethically even when the laws are not specific.

Managers in the modern large scale gold firms are expected to set examples for other employees and are often responsible for directing the actions of others. Many managers and supervisors are expected to take necessary actions to ensure compliance with the company codes, to provide guidance and assist employees in resolving questions concerning the codes and to permit employees to express their concerns regarding compliance with codes. In theory, no one has the authority to order another employee to act contrary to the established company codes. Codes are self imposed management system to ensure that individuals in the organization operate as good corporate entities for the interest of all.

#### **4.2. Liberal social community development policies**

Social and economic development policies in Tanzania are founded on the premise that the development of human resources plays a major role as a vehicle for social progress; and for building a strong, diversified, resilient and competitive economy (URT, 1998 and 2009). Tanzania has a liberal community development policy, which encourages all stakeholders to use wealth to improve their social economic welfare through active participation in the ownership, management, engagement and sharing of benefits. All large-scale mining firms are free or at liberty of providing different forms of social services in consultations and collaboration with mining and rural communities.

#### **4.3. Strengthening Community Participation and Involvement in Mining**

Most large scale mining firms have been negotiating on ad hoc basis with both central and local government authorities on how strengthening community participation and involvement in mining. Experiences in Tanzania show that greater community participation and involvement in mining projects contributes significantly to their (projects) sustainability.

Both the current National Mining Policy (1997), NMP-1997 and draft National Policies 2009 have clear policy strategies on this issue. The NMP-1997 included [1] sensitizing the local communities on the advantages of utilizing advanced technology, and large scale investment in mineral production; [2] Requiring companies involved in large projects to undertake social impact analyses on the communities and project areas and explicitly incorporate results in the project viability and draw up programmes for addressing negative impacts; [3] Establishing a framework for timely promotion of good relations with the population of mining localities; [4] Encouraging mining companies to contribute to local economic development by using local inputs whenever this is economically feasible; [5] Facilitating the establishment of strategic partnerships between mining companies and the local community; and [6] Fostering arrangements which promote collaboration between large scale mining companies and small-scale miners for mutual benefit.

## 5.0. Conclusion

While the Tanzanian mining sector reform in the late 1990s resulted in the attraction of substantial exploration and development investment and the subsequent increase in mineral production and exports, key policy issues have limited the local private sector participation, competitiveness and quality of insertion of mining with foreign investors and local society, and particularly with the local communities. The mining reforms brought about the effective opening of the private sector to direct foreign investment and the shift of the role of the state from owner-operator to policy maker and lesser regulator. While the first and second generation reforms, policy, legal, and institutional, have been widely considered successful three economic governance issues remain controversial and foundations for the current reviews, (Semboja, 2004 and 2006).

*First*, the taxation regime is still unstable and potential dangerous to current gains of investment competitiveness and may retard, delay or stop future foreign direct investments into the mining sector. To the extent that it affects rates of return on investment, the effective tax rate in a given country is a major factor influencing foreign investors' decision as to where to invest their capital in other mining sub-sectors. We all understand that countries whose mining fiscal systems impose unstable and high levels of overall taxation should expect to see lower levels of foreign investment in their mining sectors than countries with sustainable and lower tax levels. Thus, as the world moves forward into the new century, there is a clear trend for mining taxation systems to become increasingly harmonized. *Second*, poor or non-transparent fiscal governance is limiting mining sector linkages and eroding the national economic development efforts. The highly centralized and non-transparent nature of the government fiscal system has created an issue of credibility with the local population's use of mining resources for national, regional and community development purposes.

*Third*, the principal concern for many poor Tanzanians with current mining developments is how to split the pie of revenues and profits in such a way that the interests of nationals are satisfied. It is common practice to discuss taxation pertaining to mining in the light of an analysis of the relationships between the two major stakeholders, which is government of Tanzania and private mining companies. Both must acknowledge that the addition of a third stakeholder - local communities' active in the social and environmental field - would provide a more accurate picture of interests division. It is important to cross check the divergent objectives as regard to government-preference, company-preference and community-preference, then explore how the hypothetical triangle approach reconcile the interests of stakeholders closely affected, paying particular emphasis on the community benefits. There are suggestions that an increase in the percentage of government revenue from mining activities during the last five years may not be sustainable without paying attention to poverty reduction efforts. Both governments and companies are considering in *ad hoc manner* the interests of local communities. It is necessary to ensure *systematic distribution* of tax incomes and other revenues from mining activities is seen as equitable not only by the central government and the mining company involved, but also by lower levels of government authorities and local communities.

## Reference List

Dasputa, P.S. and Heal, G.M., (1978), *Economics Theory and Exhaustible Resources*. Cambridge Economic Handbooks, Cambridge University Press, UK.

James Otto, Maria Luisa Batarseh, and John Cordes, (2000), *Global Mining Taxation Study Comparative Study* (2<sup>nd</sup> Edition), Colorado School of Mines, Golden: 2000. Distributed to all developing economy governments by UNCTAD, July

Naito, Koh; Felix Remy, and John P. Williams. (2001), “*A Comparative Review of Legal and Fiscal Frameworks for Exploration and Mining Best Practices*” Forthcoming. World Bank. Washington

Phillips, L. C., Semboja, H. and Shukla, G. P. (2001), “Tanzania’s Precious Mineral Boom: Issues in Mining and Marketing”, African Economic Policy Paper No. 68, *Equity and Growth through Economic Research*, 34 p.

Mark Curtis and Tundu Lissu, (2008), “*Golden opportunity: How Tanzania is failing to benefit from gold mining*” Report published by the Christian Council of Tanzania CCT, the National Council of Muslims in Tanzania BAKWATA, and the Tanzania Episcopal Conference TEC.

Sarma, J.V.M and Naresh, G. (2001), “Mineral Taxation around the World: Trends and Issues”. *Asia Pacific Tax Bulletin*,

Semboja Haji Hatibu Haji, (2004), “A policy Analysis of The Tanzania Mining Sector”. *Tanzania Economic Trend*. A Biannual Review of the Economy. Vol. 17 No 1 June 2004. Published by the Economic Research Bureau, University of Dar es Salaam, Tanzania

Semboja Haji Hatibu, (2006), *Tax Systems for the Mining Sector: Focusing on Gold Mining in Tanzania*”. Paper prepared and presented at the MINING STAKEHOLDERS MEETING on 1<sup>st</sup> July 2006, at Kunduchi Beach Hotel in Dar es Salaam.

Sunley E. Emil and Ismayilov Jamal, (2005). *Some Aspects of Mining Taxation*. An official IFM report prepared for the Minerals Policy Review Committee, Ministry of Energy and Mineral, URT, Dar es Salaam.

United Republic of Tanzania, (1996), “Baseline Survey and Preparation of Development Strategy for Small Scale and Artisanal Mining Program”. Report prepared for the Ministry of Energy and Minerals, Dar es Salaam, Tanzania

United Republic of Tanzania, (1997), “Mineral Sector Development Strategy”. Final Draft. Final draft report prepared by the Economic and Social Research Foundation (ESRF) in collaboration with Tan Discovery) for the Ministry of Energy and Minerals, Dar es Salaam, Tanzania

United Republic of Tanzania (1998), “*Tanzania Mining: a New Engine for Growth*”; Ministry of Energy and Minerals United Republic of Tanzania 1998.

United Republic of Tanzania, (1999a). “*The Mineral Policy of Tanzania*”; October 1997, the Mining Act, 1998 and Regulations 1999; Ministry of Energy and Minerals, United Republic of Tanzania.

United Republic of Tanzania, (1999b). “*The Mining Act, 1998 and Regulations 1999*”; Ministry of Energy and Minerals, United Republic of Tanzania.

United Republic of Tanzania (2000): “*Tanzania: Opportunities for Mineral Resources Development*”, Third Edition Ministry of Energy and Minerals.

United Republic of Tanzania, (2009). “*The Mineral Policy of Tanzania*”; Ministry of Energy and Minerals, Dar es Salaam, United Republic of Tanzania.

United Republic of Tanzania, “*Economic Survey*” (*various issues*), President Office, Planning and Privatization, Dar es Salaam, Tanzania

# ANNEX 1: GEOLOGICAL MAP OF TANZANIA

