

“Islands of Prosperity” in the Sea of Poverty: A Critical Reflection on the *Peripheral* Mineral Sector in Ethiopia

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Abstract

Artisanal and Small-scale Mining has been a rampant phenomenon as an economic activity across the world. This activity has also continued to alarmingly increase particularly in developing countries because of poverty and globalization. Being a strong predictor of large-scale mining or gold rush at any rate poor resource management lies at the center of this nomadic economic sector. Human security problems are also among the adverse effects across all mineral “resource blessed” countries which sooner becomes “resource curse”. This paper focuses on the cause-effect patterns and searches for remedies in the context of resource lootability, poor resource governance, and absence of policy intervention. It views the transformational dilemma in lieu of local livelihood variables as issues of opportunity or necessity strongly linked into the “context matters thesis”. And finally suggests alternative points of entry. So far, there exist little or no studies on the sector mainly because it has gained little or no policy attention in Ethiopia. Yet a few available findings indicate that the sector is primitive, excluded in periphery, inefficient, conflict and insecurity-ridden, occupied by ever broadening hostile actors. It is mediated by necessity, seldom materializing opportunity, steep market demand, and legal and institutional loopholes. The motivation of this paper is therefore to analyze the existing problem in the context of the nature of the sector itself, the characteristics of the mining practice and miners involved, and the state policy and legal machinery which are absent.

Keywords: Periphery, Lootable Mineral, ASM, Human Security, Policy Attention, Miners, Affected Community, Market Price.

1. Introduction

So far, there exist little or no studies on the sector mainly because it has gained little or no policy attention in the country. The focus of this paper is thus to discuss the status of the artisanal and small-scale gold mining (ASGM) sector in the context of *peripheralization* and *lootability*. It gives a particular emphasis to the northern tip of the country where for natural and historical reasons the wider potential deposit, practice and historically devastated physical environment exists. This paper thus brings concrete issues to the fore for theoretical and empirical considerations giving special emphasis to the evolution of the sector in brief, the nature and characteristics of miners and the mining practice, its actual and potential effects so far, the predictable scenarios, and conclusions drawn.

At country level, *artisanal* mining has been practiced for long since the old Ethiopian civilization where heritages are carved by thousands of artisanal miners. Today the artisanal mining sector is the main producer. Precious minerals (gold, platinum, tantalum, opal, ruby, etc) semi-precious gemstones and other construction minerals are produced alike and in combination with large-scale mined contribute about 5% to the national economy (AMTCCP, 2009).

Excluding Harari and SNNP Regional States, the people engaged in the ASGM range from about ½- 1 million artisanal miners to 4-6 million informal artisanal mining communities in respective order. They engage in the sector as source of livelihood in remote rural areas. These mining communities are characterized, according to the AMTCCP source, as uneconomic, unproductive, uncontrolled and working in conventional and haphazard environment.

At its very primitive stage, the evolution of the *artisanal gold mining* (or ASGM) practice in rural western Tigray Regional State, Ethiopia, is traced back to the early 1990s. Except by few farmers who bartered gold for agricultural tools which they fortunately found while walking, plowing, or harvesting, comparatively at very lower values, the sector was unknown (Gezaey 2010).

Later, few intermediaries have introduced buying accidentally found gold at a “very lower price” (about 15 birr or so per amount of gold) by only negotiation with no balance to measure it accurately. In the early 2000s, both ASGM mining, with negative images as occupations of *destitute* and lazy men, and monetary transactions using balance system began to develop.

Gradually, raising awareness on income generation with very *low* or *no* legal or moral concern for the resource tragedy, ASGM began to exponentially spur as an activity. Consequently, many, old and new, rural *townships* began to mushroom stimulated by this mineral economy. However, the local mineral market has been a price-taker not a price setter, obviously predatory *market*.

The legal and policy mechanisms have been *naïve* as the government has ever since remained reluctant towards ASGM considering this sector as insignificant and non-policy matter. Consequently, its contribution for sustainable development and revenue generation by and large remained with no or less optimism (Gezaey 2010; Mehari 2013; Hadush 2014).

In other words, the predominance of rudimentary extractive techniques, and absence of training, associations/cooperatives, awareness, legal responsibility, alternative sources of income, policy mainstreaming, and especially the reluctance of relevant stakeholders to transform the sector continue to add fuel to the fire in a cross-cutting manner(*ibid*).

2. Theoretical and Conceptual Background

This section briefly summarizes the conceptual and theoretical background of the mining sector. Conceptually, it is impossible to define the Artisanal and Small-scale Mining (ASM) according to any universally accepted parameters. According to the MMSD Global Report on ASM (2002:15) (see also Avila 2003; CBNRMNET 2003) ASM is characterized as an *artisanal* activity by a range of parameters: mostly working without legal mining titles; lack of social security; insufficient consideration of environmental issues; low level of occupational safety and healthcare; great amount of physically demanding work/no or very reduced degree of mechanization; deficient qualification of the personnel on all levels of the operation; inefficiency in the exploitation and processing of production (low recovery of values); exploitation of marginal and/or very small deposits; *unexploitable* by mechanized mining; low level of productivity; low level of salaries and income; seasonal operation by local peasants or according to the market price development; chronically lack of working and investment capital.

2.1. Abundance of Lootable Mineral Resources: *Easy but Complex?*

There are divergent views about the implications of precious natural resources among scholars. For some, they are more of *curse* than *blessing* while for others remain subject to contexts prevailing in societies. For them, the differing types and characteristics of natural resources, both

renewable as well as non-renewable, may cause deterministic implications whether and how socio-political and economic phenomena are affected by resource scarcity, dependence and abundance (Basedau 2005).

Rick Auty (2001) and P. Le Billon (2001) contend that resource *concentration or dispersion* and distance from central government, easily *accessible and easy to control resources* have differing effects. Also, Ross (2003) (in Basedau 2005 and Samset n.d.a) argues that “obstructability”, legality and “lootability” matters significantly. Specifically, P. Lujala (2003) develops a list of criteria in explaining what makes a given natural resource *lootable* as diffused, easy to explore/mine/store/and smuggle/transport, no need to refine before export/transport, high-value-to-weight-ratio and strategic mineral.

Here, the issue of *lootability* and its effects is critical. According to Collier and Hoeffler (1998, 2004) and De soysa (2000) cited in Snyder and Bhavnani (2005), recent studies of contemporary civil war have found a *strong and positive relationship* between *lootable* wealth and conflict. Snyder and Bhavnani (2005) in their *revenue-centered* framework conclude that lootable resources generate *large* artisanal miners and sector, low economic *barriers* to entry, *hard-to-tax* artisanal miners, *difficulty of monopoly* over these resources, internal *discipline* problems and *costly security* and *monopoly investment* over *such* resources due to high-value-to weight-ratio.

2.2. Debates of Resource “Curse” vis-à-vis “Blessing” Thesis

What is the role of mineral resources for peace and development in Africa? For many scholars, it is timely and pertinent, particularly in the post-cold war era. The issue of “resource curse” (Auty 1993) and the “paradox of plenty” (Karl 1997) is, unlike resource scarcity, gaining prominence over time and linked to violent conflicts and development particularly in countries with resource dependent economy, abundant and poor governance (Basedau, 2005). In fact, it is undeniable that the relevance of natural resources to a country’s socio-economic and political development is *contextualized* by country-and-resource-specific conditions like resource type, level of abundance, revenue management and involved stakeholders (ibid). This author argues that natural resources in sub-Saharan Africa continued to spur its relevance pointing new indicators for its ever-growing concerns.

According to empirical and theoretical studies (Tadjoeddin, 2007; Samset n.d.a; Basedau 2005; Le Billon, 2008; Ross, 2006; Pedro 2004, Snyder and Bhavnani 2005), the debate on natural resources and adverse effects in poor third world countries is likely to endure with gaining momentum. Even though cases from Botswana, Canada, Australia, Norway and Namibia find no automatic linkage that turns resource abundance in to “curse”, mineral rich Sub-Saharan African countries have been locked in the category of *highly-indebted-countries*. The political economy of these resources is far complex.

According to Basedau and Mehler (2003), there exist three *potential* characteristics of natural resources which *give birth to their strategic aspect*: as *lucrative, survival and externally sensitive resources*. These strategic resources are arguably linked to scarcity that cause social problems though scholars continue to contend that abundance rather than scarcity is more likely to engender and endure violence more detrimental to socio-economic and political development. It is also argued that *abundance do not produce the expected blessings*. The “resource curse” thesis does not strike overnight nor its detrimental effects are independent; and entail direct and indirect, potential and actual, short, mid and long-term effects offering a motive and means (Basedau 2005).

Scholarly literatures indicate that *mineral wealth can also prolong old conflict(s)*. Here, Basedau, among others, mentions four principal cases: (1) the intervention of neighboring countries forces to DRC was primarily political. But later these forces (Rwanda, Uganda and Zimbabwe) acted like multinational companies or mercenaries to take “their return in the form of prospecting rights for diamonds, gold and coltan,” (2) the North -South Sudan political conflict forged a new resource dimension since the 1994 oilfields development, (3) until 1997, in Liberia tropical timber prolonged the conflict, and (4) sales of diamonds financed the civil war in Angola and Sierra Leone by funding UNITA and RUF rebel operations for a long time. The “greed” over natural resource *at regional or international levels* is also noted for causing and/or sustaining violent conflict. For instance, especially in the post-cold war era, actors within (as well as into) the African continent (from (a) the border conflicts over natural resource rich regions between Nigeria and Cameroon- Bakassi Peningula, (b) ‘the first African world war’ in DRC motivated by its huge minerals, to (c) the cold war era and beyond, western countries and MNCs supported

pro-western regimes and warring factions) to gain or continue control over *externally sensitive* raw resources in Africa.

Secondly, natural resources *wealth* (1) *damages other tradable sectors impeding of economic development* (2) *stimulate poor economic policies* and (3) *expose the economy to external shocks* (Tadjoeddin, 2007). Accordingly, (1) the decline of other sources of development effect of natural resource abundance is argued that *natural capital crowds-out human capital* as resource-rich countries are made “blinded” by resource abundance they neglect developing their human capital and the low skilled labor requirement for this resource sector reinforce it, (2) unlike manufacturing sectors, natural resources based sectors, *lacks positive side effects (externalities)* or economies of scale; have an *enclave character* (no linkages to the rest of the economy) which gives birth to poverty, (3) a “Dutch disease”-where a *resource boom accompanied by real appreciation* which causes manufacturing and tradable sectors to shrink whereas non-tradable ones to expand finally with negative long-term effects on economic growth, (4) resource-rich economies develop *no diversification but dependence* resulting in high *macroeconomic vulnerability*, (5) *declining terms of trade shocks* -such resources exhibit lower income elasticity of demand (demand and prices fall with rise in income), suffer from *boom and bust cycles* and steadily declining prices that (6) might be worsened by *inadequate policy responses*.

Thirdly, the effect of natural resource abundance *on human rights, and the prospects for democracy* deal with Mickael Ross’ (2001) distinguishing aspects between a modernization effect, a rentier effect and a repression effect.

- a) *Modernization* involves a range of *social changes* (occupational specialization, higher level of education and urbanization) that are lacking in natural resource rich countries for the source of wealth in such countries spring from a small and isolated economic sector and the absence of such socio -cultural changes impedes the formation of social capital as well as a vibrant civil society on which human right promotion and democracy lies (Pedro 2004; Samset n.d.a; Basedau 2005; Switzer 2001).
- b) With the *rentier effect* (Tadjoeddin 2007; Basedau 2005) argue that, broadly speaking, natural resources revenue *reduces accountability of state elites* with a “taxation effect”-government becomes less likely to tax the public with sufficient revenue from raw materials sale and the citizens in turn in a situation of “no representation without taxation”.

c) According to the *repression effect* elites use sticks and their huge *spending on military and security apparatus may be due to natural resource induced civil unrest*. This phenomenon further *deteriorates human rights and democracy*. Finally, externally sensitive natural resource capture the national interests of both domestic and external powers making human rights and democratization less realistic amidst external rivalries in zones of influence (conducive to war) (see also Tadjoeeddin 2007; Basedau 2005).

A fourth effect of natural resource abundance or wealth views the *quality of political institutions*, such as property rights, *and state bureaucracy* (Tadjoeeddin 2007; Pedro 2004; Samset n.d.a; Basedau 2005; Lujala 2003). In line with this institutional and bureaucratic explanation, Matthias Basedau (2005) citing Lay /Mahamoud (2004) and M. Ross (2003) contends that the fact that *resource wealth exists might negatively fashion the evolution of institutional arrangements*.

A *historical explanation of experiences in world politics* also looks at the *post-cold war era* where *new wars* tend to emerge primarily *on economic agendas* linked to the globalization process and advent of China and India as a new economic power that enhanced fierce global competition over certain raw materials. Conclusively, Lujala et al (2005) pointed out that *diamond in the post-cold war era strongly linked to conflicts than earlier and similarly Ross (2006) found that oil fuelled civil war more importantly in the late 1990s than the early 1970s*.

3. Nature and Status of the Mining Sector in Ethiopia

This section presents the vulnerable, hazardous, marginal and informal nature of the sector. Gezaey (2010:55-60) views that the sector is primitive, excluded in periphery, inefficient, conflict and insecurity-ridden, occupied by ever broadening hostile actors. It is mediated by necessity, seldom materializing opportunity, steep market demand, and legal and institutional loopholes. Interventions and responses are absent or miss the points of concern and are misguided. In crude sense, the physical variables, involvement conditions and policy factors underlay the anomaly and transformation impasse.

3.1. Too Poor for Transformation? Nature and Characteristics of Miners

Findings show that *illegally* operating miners in individual as well as groups (*jiwa*) basis exploit gold deposits over diffused area employing very archaic, rudimentary and primitive techniques (Gezaey, 2010; Mahari and Amaha 2013; Hadush, 2014). In their language the gold miners are

called 'werako'. They are *inefficient and unproductive* for they are engaged in informal economy being disorganized and excluded from the state policy machinery. There are two types of miners. The first category of miners is *permanent*. These types of miners operate throughout the year in a *nomadic* manner from one river area to another. The *key drivers* for their movement include fluctuation of volume of water, exhaustion or discovery of gold deposit prospects and inaccessibility to regulatory bodies and expulsion. Sometimes these permanently operating in a nomadic behavior are also forced back by bandits in the very remote jungles like the jungle of *Meesere* surrounding the monastery of *Waldba*. These bandits claim that the mining areas around the Monastery are holy and the practices are unholy. However, the victimized nomadic miners believe that though the bandits in the aforementioned forest area seem to articulate the issue of the holiness of the monastery, they rather are very concerned with the fear of leaving necked in the midst of dwindling forest coverage and their need is to preserve themselves by defending any access to their safe-haven corridors. Besides, the declining trend of these actors is an emergent opportunity even though the monastery might push their role and position stating its holiness. Moreover, the conflict with the monastery of *Waldba* is inevitable as these *nomadic* gold miners disregard the foundations of the religious (ethical) principles. In relation to this, bandits and criminal gangs attribute the issue of the Monastery to rob the miners in an anarchic fashion in the mid-night times.

The second category of miners is the *seasonal* ones. According to recent research findings, these seasonal miners can further be subdivided into *home-based* and *jungle-based* gold miners. "Jungle" is *contextualized* as mining away from home areas for days, months, seasons or more. The *home-based* gold miners travel from home to the mining sites in the morning. They work the whole day using simple tools and techniques and in the evening they return back home. These *home-based* gold miners are characterized by children, women and elderly groups who cannot travel to remote jungle areas because they are weak and vulnerable. Majority are barehanded or ill-equipped. They neither have technical knowledge of exploitation of gold deposits nor are physically capable. Obviously, their gold production or income is very unviable with less than \$1 per day and almost absent in the dry season. But they incur incalculable environmental loss. The conflict over resource, resource area or impacts of production is relatively rare for the fact that their operation is conflict-aware and concerned to their local community.

The second sub-division is the *jungle-based seasonal* gold miners. This group of miners is dominated by young men at the age of 20s to 30s, and children and seldom women under the strict leadership of parenthood. These *jungle-based seasonal* miners are relatively far better equipped with mining equipments, knowledge and skill of exploiting potential deposits than the *home-based* ones but are also relatively less compared to the whole-year/*permanent nomadic* operators. The income and investment among these groups is different accruing to the later group. On average, their daily income is about \$ 7. The *jungle-based seasonal* miners are overwhelmingly subsistent farmers operating to supplement the income for survival. Their number rises in the July- August months. These farmers out-migrate to the mining sites along with their family members to one or more gold site area(s) based on the information spread across about where the gold rush is taking place. This type of operation stays only for less than a month ranging from a week to two or so. The hurry return is because they are farmers. This type of miners may become semi-permanent miners in the dry season staying from a month to three or so in the jungle to repay their farm inputs indebted in the wet season.

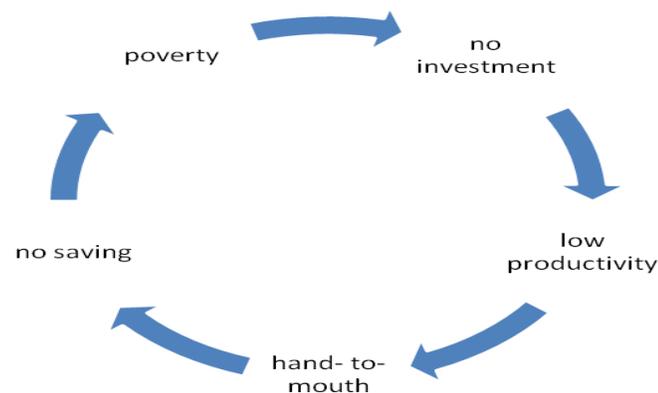
Research findings reveal that the common denominator which causes them engage in the sector is *necessity not opportunity*. The *seasonal* miners indicate that the income generated from gold mining is to supplement their livelihood necessities mainly for debt repayment and *daily consumption* such as salt, coffee, sugar, clothes and teaching expenses. Students (esp. grade 7 and above) work in the break season primarily to ensure their education in the coming new academic year and secondly to support their family or dependents.

Another group of gold miners (*seasonal* as well as *permanent*) is full of younger group. Most of them are with farming and 8th/10th/ 12th grade complete background. The majority are 10th grade complete but failed to pass the national examination. This is an alarmingly rising phenomenon. Previously, the miners were predominantly illiterate but recently with the expansion of universal education they are being outbalanced by new literate young batch.

Facts show that majority of the seasonal, semi-permanent and permanent gold miners are those with farming and educational background who have no alternative source of livelihood. Those from farming family have no alternative source of income due to land shortage and/or over fragmentation. Those educated gold miners are similarly grieved against the government for they find neither employment opportunity nor land plot as citizens. Despite such grievances, they

intend and work permanently to save money so that become traders: shops, gold intermediary, etc. Yet almost all young miners operate in an extravagant environment and mentality.

A common concern for almost all miners is that except for some *fortune makers*, the income generated from gold mining especially for who have dependent families is only from *hand-to-mouth* and for all is uncertain. Very archaic and primitive way of extraction of gold, extreme poverty, influx of mass *fortune seekers* (congestion of miners) and precarious working environment all make the income less and uncertain (*see poverty cycle below*).



Another *intermediate factor* that makes the sector complex is *absence of entry barriers*. With the recently spurring gold price in the market, it is lucrative compared to the rest of rare alternative sources of livelihood in the rural areas. ‘Get rich quick’ mentality, tendencies and trends of *de-agriculturalization* among some young male-headed households has become deeply observable. Indebtedness throughout the gold supply chain is commonly a bold feature. Most miners, especially seasonal farmers are highly-indebted for mining expenses and hence are tied exploitatively to local intermediaries and the intermediaries in turn are similarly tied to others in a hierarchical manner until the capital city in Addis Ababa and beyond.

3.2 Constraints: Nature of the Sector and Characteristics of Mining Practice

The nature of miners and the sector as well as the mode of production are reinforcing one another. A critical emphasis of this paper is that the sector is *lootable*. Delineated and traditionally identified gold reserve sites are *diffused*, *distant* and *unobstructable* (for production and smuggling). To this effect, *home-based* as well as *jungle-based* miners operate in a nomadic behavior. All over and ever since, there is no permanent mining site, people move across

multiple sites derived by fresh discoveries, prospects, news spread about *fortunes made* and water access.

This factor made the sector complex and difficult to control and formalize. Another nature of *lootability* is the *ease to explore, ease to mine, ease to store and ease to transport/smuggle*. Potentials areas are easily differentiated without technical skill and knowledge through experience. No need for *geologists* and heavy machineries. More often than not, *unskilled labor and simple techniques* of exploitation make mining easy.

Even in some areas minerals usually occur on the surface and are spotted with minimal effort or found by accident. Thus, the sector is *100%* labor intensive and cost for entry is *almost zero*. The labor force range from *child to elders* predominantly *illiterates* and the tools of extraction include those used in agricultural households.

Gold is not perishable resource and *requires no special storage place*. It only needs secure and *hidden* place before sale due to its extremely high value. And every miner put the gold in his/her *secure pocket- well locked and frequently visited*. The *ease to transport/smuggle is another factor of its lootability*. The storage and transportation issues also consider for buyers. Gold is often transported by individuals placed in their pockets, in their socks/shoes, bag/baggage, plunged in liquid and powder items such as butter, honey, etc. Smugglers (non-miners) often use the later two items to hide and deliver to potential buyers. Although gold can be smuggled using multiple modes of transportations, it can also be looted during the transportation. Gold fields are “distant”, inaccessible and *unobstructable* by authorities, especially, in the rainy season.

Gold is *refined* by panning using running water available in the mining sites. Refining gold does not need beyond simple methods and locally available resources and this has made the sector to remain extremely vulnerable to *looting*. The *strategic/rareness* of the mineral resource at the global market has similarly made it sensitive and inherently secrete in market chains. The resource witnessed price stability, an ever-rising high *value-to-weight ratio* due to widening export consumption. As a result of this, stakeholders to this gold supply/ value chain are broadening.

Another significant aspect of the sector is the integration of the sector to *policy mainstreaming, its legality and formality*. Government authorities and local experts that influence the policy

formulation and execution state that ‘no’ one has adequate and accurate statistical data about the sector. Even some others *disregard* the sector as ancillary, periphery, nomadic occupied by ‘wild-men’. One local government security officer, in the year of 2010, argues that “the sector is as difficult as detecting and regulating the birds and wild rats across the jungles”.

According to the local government, the sector is *extensively* occupied by different stakeholders but has been less known and less policy issue. In other words, it has been excluded, neglected, marginal and informal. Its legal status is undetermined. Yet the activities are found to be “illegal” inflicting clear dangers on the mining communities: invasion of farmlands, watershed pollution and health problems, deforestation and soil degradation, security problems; and conflict over the resource area. Since every able bodied operate freely across the mining areas, it has been pressing to label gold miners “illegal”.

This is because there is *no legal framework* put in place to differentiate *legal* ones from *illegal* miners. Thus, three distinct views are presented. *Firstly*, the sector is less known, denied, misperceived and hence excluded from the policy arena. “No knowledge, no policy, no budget, no law, no license, no tax but we are getting the headway” – one local government official says, four years ago. The sector has been less known because it is very remote and inaccessible, insignificant, serving a poverty-relief and secrete in destination. But recently, the sector has begun to be a headache due to high gold price stimulating fierce influx, competition, *greed-and-grievance* and conflict among large number of stakeholders. Mining affected communities/farmers begun to demonstrate violently. This scenario posed huge transformational or intervention assignment to the government from the federal down to the local level.

Secondly, mining affected communities and farmers whose farmlands are invaded by *fortune seekers* view mining on their land as well as on their community is neither tolerable nor negotiable. They cannot allow them whatever legal status the miners might achieve. *Thirdly*, artisanal gold miners believe that they are “legal” *because* they are “not illegal”. For them, the *legal vis-a-vis illegal* distinction on the account of gold mining is new or emergent. They do not know what and why license is (issued). There is no special owner of gold reserve. No one has fixed mining site. Everyone is *nomadic* miner even *unethical and irresponsible*. For miners, gold is very *greed-inherent mineral* that makes ethical miners unethical and irresponsible. Even it is too often not unusual looting gold rich soils from farmlands at night time.

In such uncertain environment, miners have no time for rest due to the get rich quick mentality, *making a big fortune at every digging and panning steps*. After rain, every miner as well as most family members from the *home-based* ones move across the plain and river areas to make such fortunes. This is also another mode of gold mining via picking gold exposed to the surface during rainy occasions.

In most mining operation sites in common, two factors continue to occur as *windows of opportunity* in *de-escalating* the negative side-effects of the activity. One is *season*. During rainy season people who have *any* size of farmland engage in cultivating it. During that time, size of miners in affected communities reduces considerably. However, in the mid-of August, farmers continue to influx into mining sites for two reasons. One reason is *religious* that agricultural activities are quitted for about two weeks-called “*Baalat Maria*”. Secondly, since the *lootable* gold deposit is *diffuse* in nature, the *heavy* rainfall in July and August promotes gold discovery prospects high and with lucrative return. Negative effects also tremendously increase. However, nowadays since huge non-agricultural force has been trapped in this mining sector, this premise (role of farming) is becoming tenuous and rather the rainy season lit fire into the problem.

The second factor is river and ponds *water volume*. Artisanal gold panning or washing is *fully water dependent*. The volume of water and number of gold miners is *directly as well as inversely* linked. In the dry season is difficult to dig and pan. The prospects for gold discovery and return are *tenuous*. Accordingly, nomadic miners decrease in number and out-migration for fierce competition among *nomadic* miners who inevitably remain less secure on source of their livelihood. The *victims of this season* are the *homeless permanent nomadic* miners: landless, unemployed educated youth and rural-urban migrants in origin. In some mining sites gold mining is inherently “*rain-fed*” while in others it is both “*rain-fed*” as well as relatively *year-round* river water are available.

4. The Mineral Sector in Periphery: Elixir or Poison to the Poor?

In this section, the paper addresses whether the sector is an elixir or poison to the poor and how? In other words, it also reveals whether the mineral sector is in transformation or in *impasse* and why? In fact, since the sector is neglected and *peripheralized*, we may see its incomplete view.

4.1. Problems and Threats Incubated by the Sector

In the context of passive state involvement, it has been clearly experienced that miners and affected communities have faced acute actual and potential human insecurities in terms of health, political, economic, community, food, environmental, and personal dimensions(see Gezaey, 2010; Yrga, 2011; Mahari and Amaha 2013; Hadush, 2014)

Health problems have been rampant. For instance, only those who see doctors in the far distant and ill-equipped health centers, in the rainy season of 2006, 116 citizens were affected by water and food pollution and contaminations diseases. Besides and in effect, 36-50 local citizens (miners and residents) were died due to such pollution between 2006 and 2007. It goes similar for livestock too.

Environmentally it has been devastating. Soil losses are directly linked to the rudimentary extraction techniques applied where fortune seeking gold miners search gold deposits only via “testing and re-testing” the surface soil. Incalculable soil loss is made during both when panning results in promising returns being made as well as when panning results in “zero/yet no fortune made”, in miners’ functional language *bado*. All miners spent the day regularly operating in this fashion. The extraction technique incurring huge damage to the environment and its resource base is always a gravely missed concern. Another factor for busy soil loss is in their language called “lottery” that is when irregularly sizable or relatively bigger gold is found- inevitability of fortune making is ascertained, after many unavoidably “null- fortunes” are made.

In such events, inherently a kind of *gold rush* is rampant and when some “lotteries” are found it escalates for restless backbreaking “fortune re-testing cycle” where environmental tragedy deeply enthrones.

In line with this, a crude estimation of fertile soil loss in Quintals within only three months (June to August) is drawn to be an average miner dumps 0.4Q soil per “dolla” –the bowl for carrying and panning/washing soil and on average 25 times/*dolla* per day and 28 days per month. In other words, one miner dumps 280Q/month, 840Q/June- August, and 33.6 -42 million Q fertile soil only in the (June to August) rainy season by the 40 -50 thousand miners. In a linear calculation, according to the local government police and security officer, the estimated figure, in March 2010, of miners was over 90 thousand excluding the *home- based* gold miners causing over 70

million Q loss of fertile soil from June to August only (Gezaey 2010). The diagram below summarizes the factors responsible for environmental tragedy.



(Adapted from Gezaey 2010)

As miners rely on forests cut down for cooking food and ever –renewable (short living as miners occasionally shift sites with gold rush) resting camps, huge deforestation and related land degradation are massive.

Miners work completely unsafe. Land wall collapse related death and injuries are common and traumatic. For instance, in 1997, 41 miners died from land collapse on the spot in *Rahwa/Debresahle* site. To such common traumatic incidences of summary death the miners ironically coined “adey kbetsni” (in Tigrinya referring to the state of stepping to land of turn).

Only in three years (1997 – 2000) sudden land collapse in the *woreda*, river areas is crudely recorded to consume not less than 66 miners.

Conflict and security problems are rooted. The main conflict actors are local farmers *vs-a-vis* nomadic miners; intra-mining affected (based on resource proximity claims); miners *vs-a-vis* security forces; loosely established cooperative unions *vs-a-vis* private gold buyers; mere attempted “licensees” *vs-a-vis* non-licensees etc.

The *context* of the conflict conditioning areas and factors among others are nature dependent subsistent economy, overpopulation to land resource proportion ratio, rising mineral market price, nature of the sector as lootable and excluded, greed-and-grievance mediating champions into spoilers, historically marginalized environmental resource base. *Moreover, conflict and insecurity issues* in brief involve resource control and use, effect of production process, absence of affected communities’ right to decision-making and benefit-sharing such as conditions of compensation, rehabilitation, free, prior and informed consent (dialogue and consultation),

conflict sensitive business practice, environmental as well as conflict impact assessments and monitoring, accountability and transparency issues in the sector. *Consequently, violent actions by local government and affected communities against miners are common and traumatic.*

Social problems are pervasive. These crudely include proliferation of child labor, school drop outs, alcoholism, prostitution and weakly integrated shift of economic activity from farming to mining. Today, this shanty gold site townships hosts the poor and illiterate section of the society with “no” HIV/AIDS & STD awareness and protective facilities.

In general, all the causes and effects of human security threats discussed above are structurally embedded in the status, nature, participants and stakeholders of the artisanal mineral sector.

4.2. Trends and Scenarios

About five years earlier, however, the federal government in cooperation with the local stakeholders has begun to formalize and transform the sector which continued to cause other fresh constraints among multiple actors (buyers, producers, natives) at individuals and cooperatives levels due to mainly license and certificate of competence procedural challenges that has complicated further the problem for bad. Here, two *scenarios* are predictable.

In the *worst-case scenario*, the influxes of fortune seekers are rising in number. The market price is spurring. The sector is expanding and issues are broadening. However, acquisitive desires and feeling of local harm is deepening. The reconciliatory legal and transformative machinery is absent or misapplied. The interventions attempts by the state are of *cosmetic* and flimsy which lacks the responsible and transparent mining standards and principles. Hence the size of needy, greedy and grieved actors seems to keep on rising concomitantly with exacerbating human security menaces. *Middle-case scenario* or relatively *little better* situation may prevail with, entrance of large-scale mining companies formalization. Yet this is not full remedy because except streaming benefits to affected people and revenues for government, the rest dangers are existent in most mineral rich countries. That is why the *best-case scenario* remains to be *unpredictable*.

5. Concluding Remarks

The *excluded lootable* mineral sector in Ethiopia has remained to be an *ideal island of prosperity* in the *real sea of poverty* and it is plausible to draw a conclusion that the sector in consideration is rather a *poison than an elixir for the poor*. However, this doesn't mean that the so-called *resource curse thesis* is conclusively relevant here. This conclusion is subject to the prevalent *contexts* in the sector, the *context matters thesis*. The function of lootability, nature of miners and mining practice and the reluctance of the state are responsible for detrimental status of the sector. All these three factors are yet quite irreconcilable because the lootability is conducive for the poor yet both in turn difficult for the state. In fact, the state has been indifferent towards it since long.

Therefore, the problem has to be understood in a distinct but interdependent three ways. First, the nature of the sector (or lootability) poses real constraints on the ability and commitment of the state. Second, the nature of mining participants perpetuates poverty. This is because they are poor at the same time poorly-equipped,-educated,-skilled,-organized, and,-formalized. Miners are unknown, unrecognized, unsupported, untrained, and not-legalized by the government. Thus, their nature and characteristics makes them neither capable of nor supportive to poverty eradication. It rather complicates. Third, there is little or no response and commitment from the state to the sector and its participants. And if any it is either inadequate or an on-and-off policy pattern.

From these perspectives, the lootable mineral sector in Ethiopia, particularly the northern tip, has remained complex and uncontrollable, an endangered and unsustainable economic activity, and an unattractive and excluded from government policy. Thus, the state has the duty to avert the *status quo* into an opportunity for sustainable alternative sources of livelihood and pro-poor development programs by incorporating into and devising an appropriate national policy.

Accordingly, it is a clarion call to facilitate ASGM sector transformation from a transitory shock coping responsive activity into a serious business venture and to change affected and mining communities from vulnerable and marginal enclaves of individual-based *not-legalized nomadic* miners into integrated, sustainable and resilient ones. *Secondly*, ASGM should be *people-centered*. *Thirdly*, revenue and benefit-streaming to affected communities/people and infrastructural provision to both miners and mining affected areas are needed. *Fourthly*, gathering relevant data (sector profile) about poverty impacts, risks, hazards and opportunities of the ASGM sector; identifying (and mapping) *champions/spoilers* at all levels, priorities and mechanisms for intervention; set clear and feasible objectives in constructive, consultative and participant approach in the sector. *Fifthly*, *diversifying* the local economic activities; enhancing the ASGM capacity to holdback the rural-

urban migrants by fostering local economic multipliers. *Sixthly*, adopt pluralist and holistic to reduce its isolation and sub-optimal resource exploitation. *Seventhly*, the transformation process should go beyond mere legalization and formalization. It should broaden source of income in off-mining sectors. *Eighthly*, the necessity to shift mentality and mechanisms towards resource management is crucial. *Ninthly*, promoting STDs awareness creation, adopting Conflict Sensitive Business Practice and establishing early warning system and proactive mechanisms across the sector is vital. *Tenthly*, two well renowned frameworks are relevant in searching for remedy of the ASGM sector. One is the *Yaoundé Vision (2002)* (in Pedro 2004) which underlines the mainstreaming of the artisanal mining in *poverty reduction strategic papers* (PRSPs) of African governments. The second framework is *CASM's Vision* on ASM provides, in its strategic plan (2004-06) (in Pedro 2004), essential ways: advance integrated rural and regional development, effective and equitable legal framework, local infrastructure and services, fair markets and credits, complying with international standards on child labor and occupational safety, use environmental friendly techniques and establish positive and productive relations with all stakeholders including local communities, artisanal miners, Cooperatives and (any emerging) “large-scale gold mining”. A final “all” encompassing recommendation by Jon Hobbs, CASM chairman (World Bank/CASM 2005) in seeking to achieve a productive, profitable and self- sustaining, artisanal mining sector, I assume a conduit to transform the sector in consideration, envisions **5Rs**: **R**investment of income to improve performance; **R**ights protection; **R**esponsibilities, both social and environmental, that complement those rights; **R**evue generation within the sector; **R**egulatory measures to ensure formal ASM structures. For this purpose, the sector needs to be formalized with a Free, Prior and Informed Consent laying Conflict Sensitive Business Practice on the heart of *legal* mining.

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