

Youth and Women Participation in Extractive Industries: A Cooperatives Approach to Artisanal and Small-scale Mining (ASM)

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Abstract

Small scale mining largely remains an informal and unexplored economic sector. Mining is generally dominated by big players in the form of multinational corporations (MNCs) who are characterised by large scale for profit production at the expense of smaller players. In particular, the participation of youth and women in extractive industries is usually restricted to either illegal or small-scale mining. Whilst artisanal and small-scale mining (ASM) is promising and has a potential in terms of employment creation and enterprise development, this sector remains at the periphery of options and is deemed the sector of last resort for most youth and women. The sector is marked by lack of government regulation and neglect with regards to issues of safety, health and environmental protection. Observations from across the African continent and the rest of the developing world indicate that ASM is a formidable source of employment and economic development for poor communities. It could therefore be argued that for youth and women on the continent ASM proffers opportunities and thus needs to be formalised and promoted as a viable option for economic participation especially within poor communities. Using secondary data sources, this paper foregrounds the cooperatives approach, as championed across sectors in South Africa, as a tried and tested model that could be replicated across the Southern African Development Community (SADC) region to complement existing policy instruments such as the SADC mining protocol and the African Union (AU) Mining Vision. This paper



contends that cooperatives offer a low entrance barrier type of formalisation of ASM initiatives for youth and women whereby legal entities within the extractive industries could be established.

Keywords: Artisanal and small-scale mining (ASM), Extractive Industries, Youth and Women, Cooperatives, SADC.

1. Introduction

Small scale mining has been in existence for some time across the globe. It is asserted that activities of the artisanal and small-scale mining (ASM) sector are largely poverty driven, and there is a correlation between the human development index (HDI) position of countries and the proportion of the total workforce involved in ASM (Hoadley and Limpitlaw 2004, 1). The trend is for countries with low HDI positions to have a high proportion of workers employed in ASM (Hoadley and Limpitlaw *ibid.*). With the advent of modernity and mechanised extraction of mineral resources, participation for the poorest communities in the mining industries has been via established private mining companies which operate at large scale production. For African countries in particular, multi-national corporations (MNCs) have been the most dominant actors as proponents and beneficiaries of colonialism and uneven socio-economic relations between the African continent and the west. Studies of the mining industry in South Africa point out that one of the negative legacies of the apartheid era is a markedly skewed mining sector that favours the established companies, and almost completely neglects small-scale mining enterprises (Mkubukeli and Tengeh 2015). Though a major source of revenue for South Africa, the current state of the mining sector does not directly benefit the previously disadvantaged who dominate small scale mining (Mkubukeli and Tengeh 2015).

These skewed power relations have certainly structured the mining landscape such that for countries such as South Africa and others within the region, the institutionalisation of the migrant labour system has sustained the sector at the expense of indigenous small and big players not least the youth and women. Ledwaba and Nhlengethwa (2015) note that in South Africa the mining industry in South Africa is dominated by (large) transnational mining houses as opposed to local companies – 90 per cent of the mining houses are large scale. Whilst the industry contributes significantly to the nation's economic growth as well as social development (that is, employment of locals), there is still an exclusion of locals from participating, benefiting, and having direct access to the sector. Thus, the mining sector is yet to benefit Africans in particular from the country's mineral endowment (Ledwaba and Nhlengethwa 2015). In recent years, small scale mining has been noted as a bed for criminal activity and environmental damage. Whilst marred by negativities, small scale mining has nevertheless continued to attract many amongst the poor as viable option for creating livelihoods. Amongst African governments and regional bodies such the

Southern African Development Community (SADC) and the African Union (AU) the move has been towards formalising and providing resources for the promotion of artisanal and small-scale mining (ASM).

In February 2009 the African Union (AU) adopted the African Mining Vision (AMV) (AU 2009). The vision has been conceived as “Transparent, equitable and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socio-economic development” (AU 2009). The AMV further articulates that the African mining sector should be knowledge-driven and catalyse and contribute towards broad-based growth and development of the continent leading to a fully integrated single African market (AU 2009). With regards to artisanal and small-scale mining (ASM), the goal is establishing a sector that harnesses the potential of small-scale mining to stimulate local/national entrepreneurship, improve livelihoods and advance integrated rural social and economic development (AU 2009). The vision arguably accommodates the participation of youth and women as it strives for the objective of a mining sector that is safe, healthy, gender and ethnically-inclusive, environmentally friendly, and socially responsible (Ruzvidzo 2015). Organisations such as the African Union Commission and the United Nations Economic Commission for Africa (UNECA) put the figures of the artisanal mining workforce at about 8 million across the continent with women constituting more than 50% of this informal industry (Ruzvidzo 2015).

The phenomenon of artisanal and small-scale mining (ASM) has accordingly been previously neglected as a conduit towards economic participation and prosperity for the poor within countries in the region. Illegal mining has on the other hand burgeoned and become an option for making livelihoods in countries such as South Africa. This type of small-scale extraction of mineral resources formally known as illegal artisanal mining (IAM), has been declared a serious environmental and social problem in countries particularly in South Africa (Mkhize 2017). Illegal miners commonly known as ‘*zama zamas*’ or those who hustle to make a living, have especially received a lot of media attention in recent years. In Ghana, IAM is referred to as *galamsey*, in Mongolia it is referred to as ninja mining, while in South Africa illegal miners are referred to as *zama zamas* which literally means to ‘try and try again’ in the Nguni languages but figuratively and colloquially refers to ‘hustling’ or just getting by to earn a living (Mkhize 2017).

Whilst it remains illegal, (IAM) is believed to have a critical role to play and contributes to rural economic development (Mkhize *ibid.*). The goal of African governments within the mining sector should thus be facilitating the participation and legalisation of many smaller local players in order to transform extractive industries which are currently

characterised by big multinationals which continue to benefit through the exploitation of poor communities. It is, however, worth noting that member states of the SADC and the AU have made efforts towards formalising ASM as a sector with a potential for employment creation and small enterprise development for communities within the region. It is imperative for SADC member states to invest more resources towards ASM and further support the SADC mining protocol which aims at improving, regularising, and regulating small scale mining within the region.

Through formalisation, ASM should accordingly be situated within the broader spectrum and value chains of the mining industry as well as the national economies in their entirety. Within the taxonomy of extractive industries in general, ASM should feature as a sub-sector that is specifically targeted by governments of the SADC region for both technical and financial assistance in order for the sector to flourish for the sustainability of both urban and rural livelihoods. Learning from numerous successful South African cases from the field of trade and industry, SADC and the African continent broadly should consider the co-operatives approach in forming legal entities within the ASM sector. Cooperatives as voluntary and democratic organisations that are led by their own autonomous members should thus be promoted as a legal form of establishing ASM businesses for youth and women in the region. For a number of developing countries cooperatives as an organisational form have been successfully implemented by poor communities especially in agriculture.

The gender dimension of ASM reveals that the sector is a critical component of the mining industry as a whole and women in particular form a large portion of this informal field with a workforce estimated at 40-50% across the African continent (Ruzvidzo 2015). Thus, women typically play a substantial part of the ASM as a sector and most of them are found in this artisanal aspect of the industry compared to large scale mining (Ruzvidzo 2015). This paper argues that youth and women participation in ASM could be promoted and accelerated through the establishment of legal entities such as cooperatives which have been explored and utilised across a number of sectors within South Africa. Youth and women led ASM co-operatives could thus be established and replicated across the SADC region borrowing from the successful cases which have been gleaned across industry sectors in South Africa.

Defining Artisanal and Small-Scale Mining (ASM)

At face value, small scale mining could be confused with numerous peripheral economic activities such as recycling of materials, selling scrap metal, subsistence agriculture, and other features of the informal economy. The latter assertion is confirmed by Kramcha (2004, 4) where it is contended that a key observation about the ASM sector is its huge diversity (e.g. between and within countries, type of mineral, modes of extraction and processing, marketing arrangements, political economy, socio-economic organisation, etc.). ASM is “*broadly understood to refer to mining activities that are labour-intensive and capital-, mechanisation- and technology-poor*” (Chamber of Mines 2017, 4). ASM incorporates both formal and informal activities, where informal activities include those operating outside the legal framework of the host country (that is, illegal mining) (Chamber of Mines 2017).

The illegal dimensions of small-scale mining further stigmatise the sector as high risk and an extension of the criminal world. There seems to be a thin line between illegal and informal small-scale mining such that other commentators define informal ASM as including the absence of any permit to undertake mining, minimal use of safety equipment, and the selling of minerals informally (Jinnah and Tafirah 2017). It has been further posited that ASM activities often cause extreme environmental and social impacts and seldom contribute to government revenues (Hoadley and Limpitlaw 2004). The South African Chamber of Mines (2017) highlights that in the case of South Africa illegal mining costs industry and fiscus more than an estimated R20bn/year in lost sales, taxes and royalties. Further social, economic, and environmental impacts include theft of copper, electricity cables, dragline cables, diesel, and materials prejudice economic viability of companies and pose risks to mine infrastructure, amongst others. Therefore, in their current status, ASM activities cannot be arguably regarded as contributing to sustainable livelihoods, but they provide emergency poverty relief and daily sustenance (Hoadley and Limpitlaw 2004).

Some commentators have highlighted how rural communities can be negatively impacted by mining (Spiegel 2013). A closer look at the sector however uncovers enormous potential and complexity of the ASM field in general. Studies conducted in Asia reveal that very little research has focused on the diversities of rural socioeconomic challenges among populations of small-scale miners or on institutional options for regulating mining groups that have long operated outside regulatory frameworks (Spiegel 2013). Considering a predominantly tainted history for small scale mining, it

becomes inconceivable to look up to the sector as a potential employment creation and enterprise development option for poorest people in both rural and urban communities. Dire economic conditions however compel fractions of the poor to partake within the sector despite the listed challenges.

ASM is often defined by the use of rudimentary mineral extraction technologies and practices, and most ASM activity around the world is unlicensed (Hinton 2006 cited in Spiegel 2013). Although widely thought of as “illegal” and portrayed as a “rural problem,” such mining activity provides livelihoods to growing numbers of rural people (Telmer and Veiga 2008 cited in Spiegel 2013). What is notable is that small scale mining in general occurs at the margins of the mainstream economy. Others contend that ASM relates to mining by individuals, groups, families or cooperatives with minimal or no mechanisation, largely in the informal (illegal) sector of the market (Hentschel et al. cited in Mkhize 2017). It has also been observed that ASM is practiced extensively as an alternative economic activity in times of stress (Hoadley and Limpitlaw 2004). Therefore, ASM is largely informal and unregulated, short of finance, technologically backward, and a significant proportion of the sector’s activities are illegal. Up to 50% of artisanal miners are women and, in some countries, the proportion rises to three-quarters (Borla 1997 cited in Hoadley and Limpitlaw 2004). It is important to note the differences ‘artisanal mining’ that is purely manual/informal and very small in scale from ‘small scale mining’ involving mechanisation and somewhat larger scales (Mkhize 2017). However, the end products of ASM immediately find their ways into the broader avenues with other mainstream mineral products.

Situating Artisanal and Small-Scale Mining (ASM) within the Broader Mining Sector

It has been observed that the mining industry is the biggest employer after agriculture in countries such as South Africa (Mkhize 2017). In South Africa for example, the mining industry is responsible for 500 000 direct and 800 000 indirect jobs and in total it accounts for 16% of the nation’s gross domestic product (GDP) (Mkhize 2017). A decline in the formal mining industry has been noted over the past few decades and this has consequently resulted in the increase in illegal activities. The rise in illegal mining is directly linked to the global developments within the sector as a whole. In their study of illegal mining in South Africa, Jinnah and Tafirah (2017, 3) report that over the last decade, there has been a lowering of the international gold price and global

demand, coupled with rising national labour costs, making gold mining less profitable in the country. For example, within South Africa there were 65 active gold mines in the company in 1987; this dropped to 15 in 2015 (Geocouncil 2016 cited in Jinnah and Tafirah 2017).

In their study of small-scale mining in South Africa, Mutemeri et al. (2010) discovered that the sector is quite diversified with operators active across a broad range of minerals and not just diamonds and gold. Mutemeri et al. (2010) reported in their study that the commodities (for example, precious stones, base metals, industrial minerals, construction materials, and coal) in which small organisations are involved in are quite varied if one considers participation in the whole mining value chain, i.e. from exploration to producing and marketing a finished product.

The informal extraction of diamonds and gold has been known to have serious environmental challenges, but this remains unquantified as there is scant research information on small scale, legal and illegal, mining (Mkhize 2017). According to the *UNECA 2013 Economic Report for Africa* the continent owns about 12% of the world's oil reserves, 42% of its gold, 80-90% of chromium and platinum group metals, and 60% of arable land, in addition to vast timber resources (Manuh 2015). However, this dominance of the extractive industries in many African countries coexists with an excessive focus on capital-intensive growth sectors, fragile institutions and unequal redistribution policies that result in the exclusion of large swathes of populations – particularly women and youth – from reaping the benefits of growth and development (Manuh 2015). The dearth of research into ASM within the continent masks the complete picture of the diversified activities that occur within the ASM sector. There is thus a need for concerted programmes that will locate ASM within the broader value chains of the mining industry such that wide range of products and opportunities proffered by the sector are uncovered. In the case of South Africa, one may argue that besides the activities of ASM operators within the diamond and gold sector, not much attention has been paid towards clay, coal, slate, and building sand mining which are also mined illegally with a devastating environmental impact.

In 1998 the International Labour Organization (ILO) estimated that 13 million people are directly employed in ASM, and up to 100 million depend on it (Hoadley and Limpitlaw 2004, 1). From an African context, governments such as those of South Africa identified ASM as a vehicle for social and economic development, particularly for disadvantaged communities that were excluded from participating in the national mining economy (Ledwaba and Nhlengethwa 2015). Consequently, ASM offered

alternative economic opportunities for the majority that reside in rural parts of the country and living in severe poverty (Ledwaba and Nhlengethwa 2015). The latter perception of ASM is further accentuated by the SADC Mining Protocol where it stipulates that

Introducing Artisanal and Small-Scale Mining (ASM) Cooperatives

As already indicated, this paper argues for the formalisation of ASM entities via the usage of the cooperatives approach. Historically cooperatives have been used in a number of sectors with agricultural cooperatives being the most prominent. Wanyama et al. (2009) contend that cooperatives have long been recognized to play important roles in society that translates into the improvement of living conditions of their members, particularly the low-income earning cadres of the population, as well as the society at large. Being voluntary, democratic and self-controlled business associations, cooperatives offer the institutional framework through which local communities gain control over the productive activities from which they derive their livelihoods (Ofeil 2005 cited in Wanyama et al. 2009).

In essence, a cooperative is thus a user-owned and user-controlled business that distributes benefits equitably on the basis of use or patronage (Barton 1989 cited in Ortmann and King 2006). In this regard for example a farmer member who accounts for 5% of the volume of corn delivered to the cooperative would receive 5% of the net earnings derived from the handling, processing and marketing of that corn or related products (Ortmann and King 2006). The logical and systematic nature of cooperatives as an organisational form applied in agriculture could therefore serve as a template that could be replicated in the formation of ASM cooperatives across the region with the support of national governments and SADC as a regional body.

Again the lessons that could be gleaned by the ASM cooperatives emanate largely from the agricultural sector due to its long history of implementing this organisational form. There is accordingly a long history of the application and practice of the cooperatives model within the farming sector across the continent. It is also worth mentioning that cooperatives are a worldwide phenomenon. Cooperative development started among white farmers as a means of improving their productivity and the initial legal framework that guided the formation of these organizations excluded African participation until after the Second World War when African nationalism gained momentum (Hyden 1973 cited in Ortmann and King 2006). In the colonial and

apartheid periods due to segregation, the usage of cooperatives did not accommodate the practices of African farmers and business practitioners. African farmers lost from both the technical assistance and financial injection fronts. As exclusive enterprises of the white farmers and largely functioning under the whims of the colonial government that envisaged separate development in the colonies, cooperatives were then at variance with African interests (Ortmann and King 2006).

According to Ortmann and King (2006) the International Cooperative Alliance (ICA 2005) defines a cooperative as “an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise”. This paper particularly advocates for the application of cooperatives within the ASM sector particularly based on their simplified model which exhibits low entry barriers for easy access by youth and women. The guiding principles of cooperatives arguably provide an empowerment element for youth and women as they enhance, they autonomy and decision making. The seven internationally recognized cooperative principles are: voluntary and open membership; democratic member control; member economic participation; autonomy and independence; provision of education, training and information; cooperation among cooperatives; and concern for the community (Ortmann and King 2006). The latter principles have been acquired in their entirety in the case of South African legislation, the Cooperatives Amendment Act of 2013, which governs the founding of this legal entity. There seems to be indigenisation of these principles in a number of countries which employ the cooperatives model. In the formation of ASM cooperatives across the SADC region it would therefore be only logical to follow a similar definition and principles in establishing cooperatives.

Conclusion: Harmonisation and Institutional Framework for ASM Cooperatives

Harmonisation entails the vertical alignment of national legislation within member states of SADC as a regional body with its Mining Protocol. It is thus imperative for SADC member states to formulate policies that are consonant with the overarching regional policy instruments in the governing of ASM cooperatives. The SADC Mining Protocol should thus advocate for a regulatory framework for ASM cooperatives as well as the operating conditions for miners within the sector. The formulation of ASM cooperatives legislation should accordingly also be gender sensitive as it attempts to

create an enabling environment for the participation of youth and women within the mining sector.

Within the SADC region, the implementation of the mining protocol is as a matter of course a responsibility of mining and mineral resources ministers. Through the SADC Committee of Mining Ministers, a proposal for the formulation of a regional ASM Cooperatives Plan could be broached onto the agenda and the policy formulated. It is these executive heads and their technocrats who serve as policy custodians who should champion the establishment of ASM cooperatives across the region. Countries such as South Africa have already established a directorate of small-scale mining within the Department of Mineral Resources and these institutional arrangements could provide valuable lessons for other governments in the region. Youth and women led ASM cooperatives are a viable option towards broader economic participation and enterprise development within the region. The diversified nature of the extractive industries should be considered and there should be a paradigm shift from the parochial perception of small-scale mining as high risk and only focused on diamonds and gold. A shift in focus into building sand, coal, clay, granite, slate and other mineral resources should be promoted. This move should however be invariably accompanied by an environmental protection plan. The diversification of small-scale mining should further not compromise agricultural production. ASM cooperative should thus form part of a broader plan which incorporates, people, environment, economy and land reform where necessary.

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